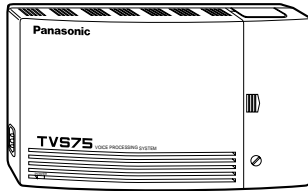


Panasonic

Voice Processing System Installation Manual



<KX-TV575>

KX-TV575

Model No. KX-TV5100 / KX-TV5200



Thank you for purchasing a Panasonic Voice Processing System, Model KX-TV575/100/200.
Please read this manual before installing, customizing, or operating the Voice Processing System.



Important Information

SAFETY REQUIREMENTS

- Read all the information contained in this manual.
- Follow all product warnings, cautions, and instructions.
- Do not install the unit near water or moisture, heating appliances, or electrical noise generating devices such as televisions, monitors, fluorescent lamps, or electric motors.
- Install the unit so that the power cord is not obstructed in any way. Do not connect this unit to an extension cord.
- Mount the unit on a stable wall surface. Do not mount the VPS inside of a separate enclosure unless it is properly ventilated.
- Keep the unit free of dust, moisture, high temperature exposure (more than 40 °C {104 °F}) and vibration. Do not expose the unit to direct sunlight.
- Do not insert wires, pins, or any other material into the unit's vent slots or access points. This could result in electrical shock and serious unit malfunction.
- Do not block the vent slots and openings located on the unit.
- This unit is designed to operate at one specific voltage and current setting. The proper voltage and current required for this unit are listed on the product label.
- This unit is equipped with a 3-wire grounding plug. The plug will only fit into a grounded power outlet. Do not modify this plug in any way. If it cannot be inserted into the outlet, have the outlet replaced by a licensed electrician.
- Do not overload wall outlets. Overloaded outlets could result in fire and/or electrical shock.
- Do not disassemble this product. Dangerous electrical shock could result. The unit must only be disassembled and repaired by qualified Panasonic Factory Service Technicians.
- If the unit malfunctions, disconnect the unit from the telephone line and check the line by reconnecting the telephone. If the telephone operates properly, have the VPS repaired by an authorized Panasonic Factory Servicenter.
- Unplug the unit from its power source before cleaning.
- Do not use solvents, liquid cleaners, water, or abrasive powders to clean this unit. Use only a damp soft cloth for cleaning.
- Handle the unit carefully. Do not drop or otherwise expose the unit to physical shock.
- Unplug and transport the unit to a service technician if the power supply cord is frayed or damaged, if the cabinet is cracked or broken, or when the unit has been exposed to moisture, has been dropped, or is not otherwise operating properly.
- Do not use the telephone during a lightning storm or to report a gas leak in the vicinity of the leak.

WARNING

TO PREVENT FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

When you ship the product

Carefully pack and send it prepaid, adequately insured and preferably in the original carton. Attach a postagepaid letter, detailing the symptom, to the outside of the carton. **DO NOT** send the product to the Executive or Regional Sales offices. They are **NOT** equipped to make repairs.

Product service

Panasonic Factory Servicenters for this product are listed in the servicenter directory. Consult your authorized Panasonic dealer for detailed instructions.

The serial number of this product may be found on the label affixed to the bottom or back of the unit. You should note the serial number of this unit in the space provided and retain this book as a permanent record of your purchase to aid in identification in the event of theft.

MODEL NO.: _____

SERIAL NO.: _____

For your future reference

DATE OF PURCHASE _____

NAME OF DEALER _____

DEALER'S ADDRESS _____

DEALER'S TEL. NO. _____

WARNING

THIS UNIT MAY ONLY BE INSTALLED AND SERVED BY QUALIFIED SERVICE PERSONNEL.

WHEN A FAILURE OCCURS WHICH RESULTS IN THE INTERNAL PARTS BECOMING ACCESSIBLE, DISCONNECT THE POWER SUPPLY CORD IMMEDIATELY AND RETURN THIS UNIT TO YOUR DEALER.

DISCONNECT THE TELECOM CONNECTION BEFORE DISCONNECTING THE POWER CONNECTION PRIOR TO RELOCATING THE EQUIPMENT, AND RECONNECT THE POWER FIRST.

THIS UNIT IS EQUIPPED WITH AN EARTHING CONTACT PLUG. FOR SAFETY REASONS THIS PLUG MUST ONLY BE CONNECTED TO AN EARTHING CONTACT SOCKET WHICH HAS BEEN INSTALLED ACCORDING TO REGULATIONS.

THE POWER SUPPLY CORD IS USED AS THE MAIN DISCONNECT DEVICE, ENSURE THAT THE SOCKET/OUTLET IS LOCATED/INSTALLED NEAR THE EQUIPMENT AND IS EASILY ACCESSIBLE.

CAUTION

Danger of explosion if battery is incorrectly replaced.

Replace only with the same or equivalent type recommended by the manufacturer.

Dispose of used batteries according to the manufacturer's instructions.

Trademarks

- HyperTerminal is registered trademark of HILGRAEVE, INCORPORATED.
- IBM is registered trademark of International Business Machines Corporation.
- Procomm Plus is registered trademark of DATASTORM TECHNOLOGIES, INC.
- Smartcom is registered trademark of Hayes Microcomputer Products, Inc.

TELEPHONE COMPANY AND F.C.C. REQUIREMENTS AND RESPONSIBILITIES

Notify The Telephone Company

Installation must be performed by a qualified professional installer. If required, provide the telephone company with the following technical information:

-
- *The telephone numbers to which the system will be connected.*
 - Make: Panasonic
 - Model: KX-TVS75/100/200
 - FCC Registration No.: found on the bottom or back of the unit.
 - Ringer Equivalence No.: 0.4B
 - Facility Interface Code: 02LS2
 - Service Order Code: 9.0F
 - Required Network Interface Jack: RJ11C

Connection to the Telephone Line

The VPS unit must not be connected to coin operated telephone lines. Contact the telephone company before connecting this unit to a party line.

Telephone Service Problems

The telephone company may temporarily discontinue service if the VPS causes problems with the telephone network. Discontinued service usually occurs after prior notification. When prior notification is not practical, the telephone company must:

- *Promptly notify the customer of the temporarily discontinued service.*
- *Provide the customer with an opportunity to correct the situation or problem.*
- *Inform the customer of the right to bring a complaint to the Federal Communication Commission pursuant to the procedures set forth in Subpart E of Part 68 of the FCC Telephone Equipment Rules.*

Telephone Network and Terminal Equipment compatibility

Availability of Telephone Interface Information

When requested by the customer, the telephone company must provide the following information:

- *technical information concerning interface parameters.*
- *technical information not specified in FCC rules such as the number of ringers that can be connected to a particular telephone line.*

Changes in Telephone Company Communications Facilities, Equipment, Operations, and Procedures

The telephone company may make changes to its communication facilities, equipment, operations, or procedures, when such action is reasonably required in the operation of its business, and is not inconsistent with FCC rules (FCC Telephone Equipment Rules, Part 68).

The customer shall be given adequate notice in writing when changes will:

- *render the customer's equipment incompatible with telephone company communications*
- *require modification or alteration of customer terminal equipment*
- *materially affect customer terminal equipment use or performance*

Adequate notice provides the customer with the opportunity to make any necessary alterations in order to maintain uninterrupted service.

Note

This equipment has been tested and found to comply with the limits specified for a Class A digital device (pursuant to Part 15 of the FCC rules). These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy. To prevent harmful radio interference, this equipment must be installed in accordance with the instructions contained in this manual. Operation of this equipment in a residential area is likely to cause harmful interference. When this occurs, users must correct the interference problem at their own expense.

Ringer Equivalence No. (REN)

Customers, before connecting terminal equipment to the telephone network, shall upon request of the Telephone Company, inform the Telephone Company of the particular line(s) to which such connection is made, the F.C.C. registration number (see the label on the bottom or back of the unit) and ringer equivalence number (REN) of the registered terminal equipment. The REN is useful in determining the quantity of devices you may connect to your telephone line and still have all of those devices ring when your telephone number is called. In most, but not all areas, the sum of the REN's of all devices connected to one line should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the REN, you should contact your local telephone company to determine the maximum REN for your calling area.

CAUTION

Any change or modification made to the terminal equipment, not expressly approved by the manufacturer, could void the user's authority to operate this equipment.

When programming and/or making test calls to emergency numbers:

- *Remain on the line and briefly explain to the dispatcher the reason for the call.*
- *Perform these tests during off-peak hours, such as early morning or late evening.*

Table of Contents

1	VOICE PROCESSING SYSTEM OVERVIEW	
1.1	WHAT THE VPS CAN AND CANNOT DO	14
1.1.1	Why Voice Processing?	14
1.1.2	Basic Operations	14
1.1.3	VPS Limitations	15
1.2	SYSTEM ADMINISTRATION, MANAGEMENT, AND USE	16
1.2.1	System Administration	16
1.2.2	System Management	16
1.2.3	Subscriber Use	16
1.3	SYSTEM BASICS	17
1.3.1	KX-TVS75 vs. KX-TVS100/200	17
1.3.2	System Components	17
1.3.3	Which Phone Systems are Compatible?	22
1.3.4	Installer Equipment and Software Requirements	23
1.3.5	Specifications	23
1.3.6	VPS Configuration	24
1.3.7	Hardware	24
1.3.8	Expansion Capabilities for the KX-TVS100	25
1.3.9	Expansion Capabilities for the KX-TVS200	25
1.3.10	Recommendations for System Configuration	25
1.4	DIGITAL INTEGRATION	27
1.4.1	General - All Models	27
1.4.2	KX-TVS75/100 - Connection Example	27
1.4.3	KX-TVS200 - Connection Example	28
2	INSTALLATION	
2.1	SAFETY PRECAUTIONS	32
2.1.1	Installation	32
2.1.2	Wiring	32
2.2	FRAME GROUND CONNECTION	34
2.3	INSTALLATION STEPS	36
2.4	INSTALLING PORT EXPANSION CARD - KX-TVS100/KX-TVS200	38
2.4.1	General	38
2.4.2	Installing the KX-TVS102 or KX-TVS204 Port Card	39
2.5	CONNECTIONS - KX-TVS75/100	42
2.5.1	Connecting PBX Extensions	42
2.5.2	Connection to DPT Extensions	42
2.5.3	Connection to Non-DPT Extensions	44
2.6	CONNECTIONS - KX-TVS200	46
2.6.1	Modular Plug Connection	46
2.6.2	Port Cards	46
2.7	TERMINAL CONNECTION	50
2.7.1	Requirements For Connecting Programming Terminal	50
2.7.2	Connecting the RS-232C Cable	50
2.7.3	EIA (RS-232C) Signals	52

3 INTEGRATING THE VPS WITH PANASONIC KX-T PHONE SYSTEMS

3.1 GUIDELINES FOR INTEGRATION	54
3.1.1 DPT or Inband Signaling?	54
3.1.2 Why Integration is Important	54
3.1.3 How the VPS and the PBX Communicate	54
3.1.4 PBX Requirements for Integration	55
3.2 PBX PARAMETERS AND PORT SETTINGS	57
3.2.1 General Guidelines and Definitions	57
3.2.2 RS-232C Settings	57
3.2.3 Port Settings	57
3.2.4 PBX Interface Parameters	58
3.3 CONNECTING THE VPS WITH PANASONIC KX-T SERIES PBXs	61
3.3.1 KX-TVS75/100/200 Programming for Inband Integration.....	61
3.3.2 KX-T123211D Software Verification and Programming.....	62
3.3.3 KX-TA624 Programming for Inband Integration.....	64
3.3.4 Programming the KX-TD816, KX-TD1232 and KX-TD308 for Voice Mail Integration with Inband Signaling	66
3.3.5 KX-TD816 and KX-TD1232 for Voice Mail Integration with Inband Signaling via the Operating and Maintenance Tool.....	66
3.3.6 KX-TD308 for Voice Mail Integration with Inband Signaling via the Operating and Maintenance Tool.....	69

4 INTEGRATING THE VPS WITH THE PANASONIC KX-TD DIGITAL PBX

4.1 GUIDELINES FOR DIGITAL INTEGRATION	76
4.1.1 Why Digital Integration is Important	76
4.2 CONNECTING THE KX-TVS75/100/200 WITH THE PANASONIC KX-TD816, KX-TD1232 AND KX-TD308	77
4.2.1 KX-TD1232 Software Verification and Programming for Digital Integration via the Manager's Extension	77
4.2.2 KX-TD1232 Software Verification and Programming via the Operating and Maintenance tool.....	82
4.2.3 KX-TD308 Programming for Digital Integration via the Manager's Extension	85
4.3 COMMON DIGITAL INTEGRATION FEATURES AND SETUP PROCEDURES 90	
4.3.1 Live Call Screening (LCS) Programming	90
4.3.2 Live Call Screening Recording Mode Assignment	90
4.3.3 Live Call Screening Private/Hands-Free Mode Assignment.....	90
4.3.4 Live Call Screening Button Assignment	91
4.3.5 Live Call Screening Cancel Button Assignment	92
4.3.6 Live Call Screening Password Assignment.....	92
4.3.7 Live Call Screening Password Cancellation.....	92
4.3.8 Live Call Screening Password Control.....	93
4.3.9 Two-Way Recording into Mailbox	93
4.3.10 Two-Way Recording Button Assignment.....	93
4.3.11 Two-Way Transfer into Mailbox	94
4.3.12 Two-Way Transfer Button Assignment	94
4.3.13 Voice Mail Transfer Button	95

5 CUSTOMIZING THE SYSTEM

5.1 STARTING UP.....	98
5.1.1 Before Programming	98
5.1.2 Quick Setup	98
5.1.3 Starting the Quick Setup.....	99
5.2 PORT SETTING OPTIONS	107
5.2.1 Custom Service Setting Example	107
5.2.2 Custom Service Features	108
5.2.3 Custom Service Programming.....	110
5.2.4 Recording Menus.....	112
5.2.5 Checking Operation.....	113
5.2.6 Voice Mail.....	113
5.2.7 Mailbox Groups (System Group Distribution Lists)	113
5.2.8 Extension Groups	114
5.2.9 Interview Service	115
5.2.10 Automated Attendant.....	115
5.2.11 Department Dialing Service	116
5.2.12 Operator Service	116
5.3 SETTING PORTS	117
5.3.1 Port Service Menu	117
5.4 AUTOMATED ATTENDANT PARAMETERS	119
5.4.1 Automated Attendant Menu	119
5.4.2 Department Dialing	119
5.4.3 Operator Parameters	119
5.5 SETTING MAILBOXES	122
5.5.1 Mailbox Setting Menu	122
5.5.2 Entering a Mailbox	122
5.5.3 Deleting a Mailbox	125
5.5.4 Password Reset	125
5.5.5 Mailbox Listing	125
5.6 TRAINING THE SUBSCRIBER.....	126

6 FINAL SETUP

6.1 MESSAGE MANAGER'S MAILBOX (Mailbox 998)	128
6.1.1 Accessing the Message Manager's Mailbox (Enter [165 #6*998]).....	128
6.1.2 Message Manager's Main Command Menu	128
6.1.3 Company Greetings (Enter [#6*998,5,1])	129
6.1.4 Custom Service Greetings (Enter [#6*998,5,4])	129
6.1.5 Customizing User Prompts (Enter [#6*998,5,6]).....	129
6.1.6 Recording the Company Name (Enter [#6*998,5,2]).....	130
6.2 SETTING UP MAILBOXES.....	131
6.2.1 Recording Personal Greetings	131
6.2.2 Recording the Owner's Name.....	132
6.3 BACKING UP THE SYSTEM	133

7 SYSTEM MAINTENANCE AND TROUBLESHOOTING

7.1 INITIALIZING THE SYSTEM.....	136
7.2 UTILITY COMMANDS.....	138
7.2.1 Off-line Set (OFLN)	138

7.2.2	On-line Set (ONLN).....	139
7.2.3	Set Password (PASS).....	139
7.2.4	Set Time (TIME).....	140
7.2.5	Print Reports at Specified Time (PSET).....	140
7.2.6	Error Log Display (ELOG).....	141
7.2.7	Saving the System Data to the Backup Device (SAVE).....	144
7.2.8	Loading New or Saved Data to the VPS (LOAD).....	145
7.2.9	Print All of the VPS Parameters (GPRN).....	146
7.2.10	Program Version Display (VERS).....	147
7.2.11	Custom Service Report (CREP).....	147
7.2.12	Custom Service Menu Access Count Clear (CCLR).....	148
7.2.13	Message Waiting Lamp Retry Times (MWL).....	148
7.2.14	Setting Minimum Recording Length (MRL).....	149
7.2.15	Modified Prompt List (MPLT).....	149
7.2.16	Utility Command List (HELP).....	150
7.2.17	Quick Setup (QSET).....	150
7.2.18	Circuit Condition Display (LMON).....	151
7.2.19	DTMF Information Display (PUTD).....	151
7.3	SYSTEM REPORTS.....	153
7.3.1	Mailbox Assignments.....	153
7.3.2	COS (Class of Service) Assignments.....	154
7.3.3	System Service Report.....	155
7.3.4	Call Account Report.....	156
7.3.5	Port Usage Report.....	156
7.3.6	Port Usage Statistics Clear.....	157
7.3.7	Disk Usage Report.....	158
7.3.8	Disk Usage Statistics Clear.....	158
7.3.9	Mailbox Usage Report.....	159
7.3.10	Mailbox Usage Statistics Clear.....	160
7.3.11	Fax Call Report.....	160
7.3.12	Fax Call Statistics Clear.....	161
7.4	TROUBLESHOOTING GUIDE.....	162
7.5	SPECIFICATIONS.....	164

Appendix A SYSTEM FEATURES

A1	SYSTEM FEATURES.....	168
-----------	-----------------------------	------------

Appendix B SYSTEM ADMINISTRATION

B1	SYSTEM NAVIGATION.....	190
B2	SYSTEM ADMINISTRATION - MAILBOXES.....	195
B3	SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS.....	200
B4	SYSTEM ADMINISTRATION - PORT SERVICE.....	210
B4.1	Port Assignment.....	210
B5	SYSTEM ADMINISTRATION - SERVICE SETTING.....	212
B5.1	Automated Attendant Parameters.....	212
B5.2	Custom Service.....	218
B6	SYSTEM ADMINISTRATION - SYSTEM PARAMETER SETTINGS.....	221
B6.1	System Group Assignment.....	221

B6.2	Day Service	223
B6.3	Holiday Setting	224
B6.4	Daylight Saving Time (DST)	226
B6.5	Prompt Setting	226
B6.6	Other Parameters	227
B7	SYSTEM ADMINISTRATION - HARDWARE SETTINGS	238
B7.1	RS-232C Parameters	238
B7.2	Port Setting	239
B7.3	PBX Interface Parameters	240

Appendix C SYSTEM MANAGER'S GUIDE

C1	ACCESSING THE SYSTEM MANAGER'S MAILBOX	248
C2	SETTING UP MAILBOXES	249
C3	SETTING COS (CLASS OF SERVICE) PARAMETERS	251
C4	SETTING THE SYSTEM CLOCK	254
C5	CHECKING SYSTEM USAGE (SYSTEM REPORTS)	255
C6	DELIVERING MESSAGES	257
C7	CUSTOMIZING THE SYSTEM MANAGER'S MAILBOX	259
C8	LISTENING TO SYSTEM MANAGER MESSAGES	260

Appendix D MESSAGE MANAGER'S GUIDE

D1	ACCESSING THE MESSAGE MANAGER'S MAILBOX	262
D2	MANAGING THE GENERAL DELIVERY MAILBOX	263
D3	SETTING UP MESSAGE WAITING NOTIFICATION	265
D4	CUSTOMIZING THE MESSAGE MANAGER'S MAILBOX	267
D5	SETTING THE SYSTEM CLOCK	268
D6	RECORDING COMPANY MESSAGES	269
D7	LIST OF MODIFIABLE PROMPTS	271

Glossary	303
-----------------------	------------

Index	313
--------------------	------------

Section 1

VOICE PROCESSING SYSTEM OVERVIEW

1.1 WHAT THE VPS CAN AND CANNOT DO

1.1.1 Why Voice Processing?

The VPS handles incoming and outgoing calls. When a call comes in, it answers, forwards to appropriate extensions, takes and stores messages, and notifies subscribers when messages are left. Subscribers may send and transfer messages to other subscribers within the system. The VPS is easy to use, helping callers through the system with step-by-step voice prompts.

Unlike handwritten messages or those left with answering services, VPS messages are confidential; they are stored in a mailbox and retrieved only with the subscriber's password. Other advantages of the VPS are clarity and accuracy, which are commonly lacking with written messages. The messages come directly from the caller, in the caller's own voice. To further ensure accuracy, the system allows the sender to correct or change messages before saving them. Messages can be erased, transferred, or saved for future reference by the recipient.

1.1.2 Basic Operations

Greeting Callers:

Callers are greeted by a prerecorded message that includes directions for leaving and editing messages. The VPS can list single-digit numbers for each available extension, mailbox, or department. Callers who know the extension of the person they wish to reach may dial the extension number at any time. Callers with rotary phones are transferred to a pre-programmed destination (which is often an operator or the General Delivery Mailbox) to leave a message.

Sending Messages:

Callers can review and edit messages before leaving them in a mailbox. Subscribers can send messages to an individual or to several mailboxes at once. The message sender can then verify that the other subscriber has received the message.

Receiving Messages:

Subscribers can choose from several different message notification methods. They can be notified by: message waiting lamp, beeper, or a call from the system to another line. System programming determines whether a subscriber will be notified each time that a message is left. (Subscribers can choose to be notified of messages differently depending on the time of day.) Mailbox parameters determine maximum length and accommodate 5-100 messages. If the system is connected using Digital Integration, subscribers can press a button to record conversations in their own mailboxes or other subscribers' mailboxes while talking on the phone. Digital Integration also allows subscribers to screen messages as they are being left or pick up if they choose to take the call.

1.1.3 VPS Limitations

The KX-TVS75/100/200 does not support:

UCD functions

UCD (Uniform Call Distribution) is a service that distributes calls evenly among extensions and returns to callers to say that all extensions are busy. Calls can be forwarded by the KX-TVS75/100/200 to the KX-TD1232/816/308 floating number of a UCD group. The call then rings at the next available phone.

The KX-TVS75/100/200 supports UCD functions with very limited capabilities. Because the incoming call is forwarded as an intercom path and not a DIL (direct in line), the following items will not work:

- *time table*
- *overflow function*
- *DISA message from a DISA card*
- *IRNA*

Integration with the wrong PBX or with certain Key Systems presents limitations to the KX-TVS75/100/200's standard functions. We do not recommend these systems for integration with the KX-TVS75/100/200. The section 1.3.3 Which Phone Systems are Compatible? explains problems with compatibility.

1.2 SYSTEM ADMINISTRATION, MANAGEMENT, AND USE

1.2.1 System Administration

System Administration is accomplished by the installer and is concerned with setting and changing system parameters and diagnosing system problems. System Administration is accomplished using terminal emulation software and VT100, VT100 compatible, or other ASCII terminals.

1.2.2 System Management

Two system functions are performed by the customer — System Management and Message Management. System Management is concerned with changing system parameters through the System Manager's Mailbox.

Message Management is concerned with recording voice prompts through the Message Manager's Mailbox. These messages include company greetings, the company name, department dialing menu messages, customer service menu messages, voice labels for mailbox lists, user prompts, and selection menus.

1.2.3 Subscriber Use

System users are called subscribers. Subscribers are assigned a personal mailbox that they are able to personalize. Subscribers can record their name, record personal greetings, set covering extensions, record questions for an interview mailbox, set the message reception mode, set incomplete call handling status, set call transfer status, enter personal group distribution lists, set the message waiting lamp, and set notification by calling.

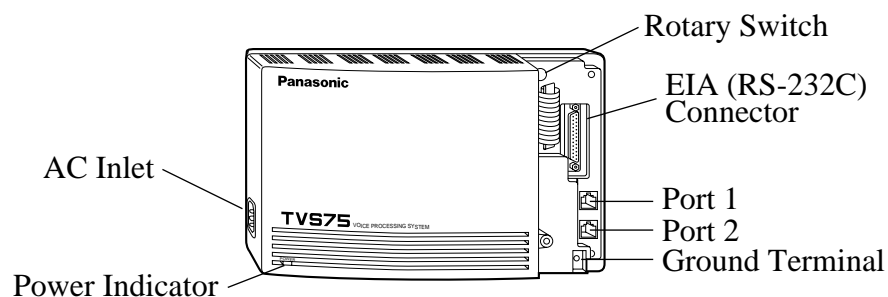
1.3 SYSTEM BASICS

1.3.1 KX-TVS75 vs. KX-TVS100/200

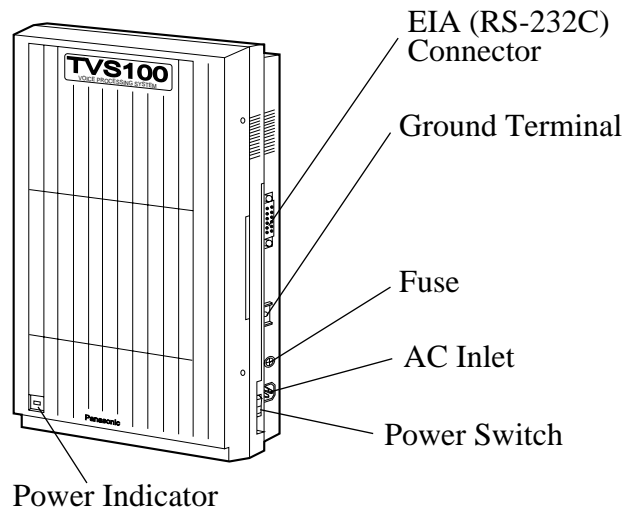
The primary difference between the KX-TVS75 and the KX-TVS100/200 is that the KX-TVS75 is not expandable. The TVS75, 100, and 200 models are programmed identically. The KX-TVS75 is initially configured with 2 ports and 6 h of storage. The KX-TVS100 is initially configured with 2 ports and 18 h of storage. The KX-TVS200 has 12 digital or 6 analog ports and 32 h of storage.

1.3.2 System Components

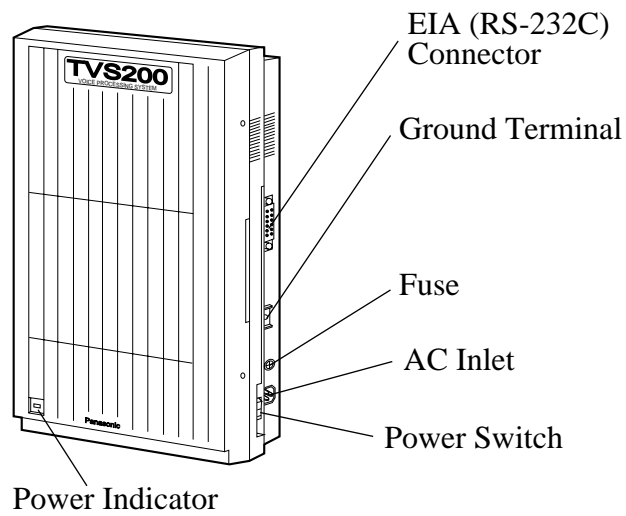
KX-TVS75 Main Cabinet



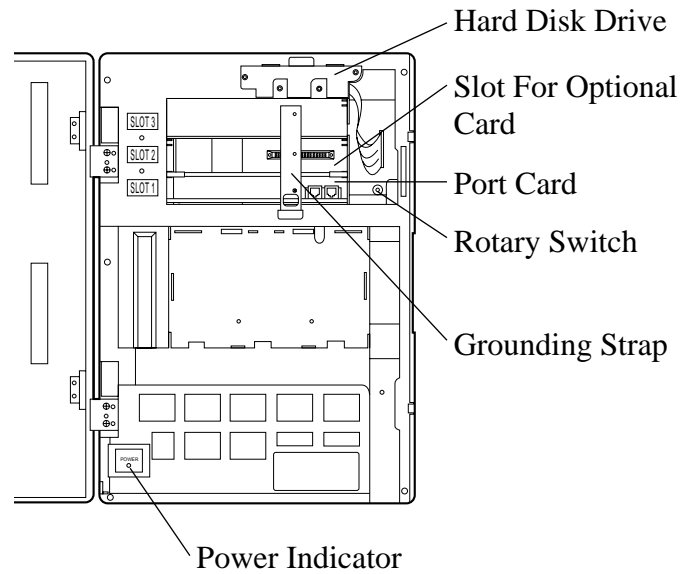
KX-TVS100 Main Cabinet



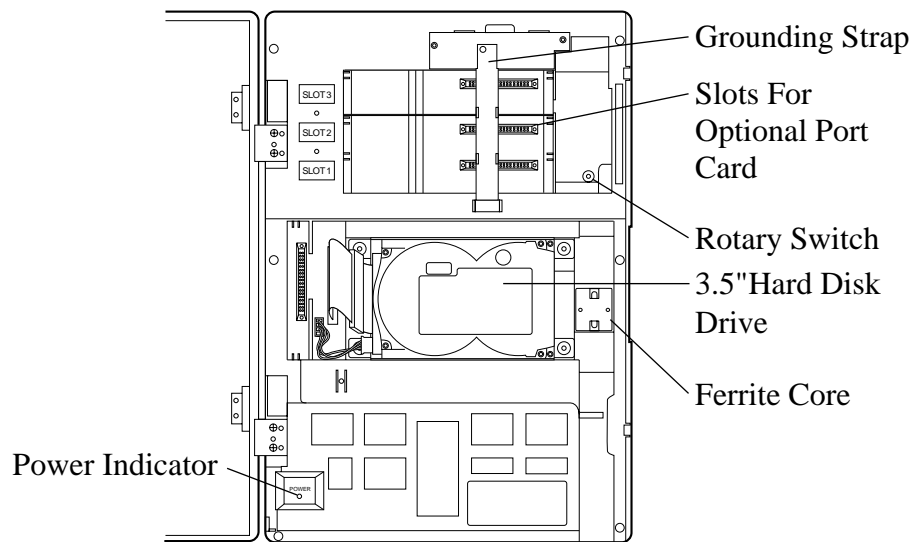
KX-TVS200 Main Cabinet



KX-TVS100 - Inside View of the Main Cabinet



KX-TVS200 - Inside View of the Main Cabinet



System Components

AC Inlet:

Connects the power cable to an AC outlet dedicated for the VPS.

Power Indicator:

Indicates system status — when flashing, the system is offline (not ready to receive calls).

Power Switch:

Starts the system and begins the self-test.

SAFETY PRECAUTION: When making any connections or removing the cover, be sure the power switch is turned off.

Ground Terminal:

This terminal should be connected to a ground source with less than 1 Ω resistance.

Fuse:

Protects the system from power line surges and should only be replaced with the same type.

Hard Disk Drive:

(1/system) Stores the proprietary system program, the system administration table, and the voice prompts (about 40 min worth); has the capacity to record approximately 6 h (TVS75) or 18 h (TVS100) of messages from callers. The TVS200 can record 32 h of messages. (The hard disk is controlled by the central microprocessor.)

Grounding Strap:

Protects the printed circuit board from static electricity.

(Ground) ***SAFETY PRECAUTION: Discharge any body static by touching the metal bar.***

Optional Port Card KX-TVS100:

KX-TVS102 consists of the following 2 cards:

- a) Telephone line interface card
- b) Digital processor (DSP) card

The telephone line interface can transmit and receive analog signals. It can also transmit and receive digital signals with a Panasonic KX-TD Digital PBX. The analog input signal is digitized at a sampling rate of 8kHz to create a 16-bit digital signal.

The DSP has the following features:

- *Voice Compression and Decompression*
- *DTMF Detection*
- *DTMF Generation*
- *Call Progress Tone Detection*

Optional Port Cards KX-TVS200:

The following 2 types of port cards can be installed in the KX-TVS200.

- *4 Digital port expansion card (KX-TVS204)*

- 2 Digital/Analog port expansion cards (KX-TVS102)

No port cards are installed at the factory. These cards must be purchased separately.

KX-TVS102 consists of the following 2 cards:

- *Telephone line interface card*
- *Digital processor (DSP) card*

The telephone line interface transmits and receives analog and digital signals to and from the telephone line. The analog input signal is digitized at a sampling rate of 8kHz to create a 16-bit digital signal.

The DSP has the following features:

- *Voice Compression and Decompression*
- *DTMF Detection*
- *DTMF Generation*
- *Call Progress Tone Detection*

KX-TVS204 consists of a telephone line interface and a DSP. The telephone interface of the KX-TVS204 transmits and receives **ONLY** digital signals with a Panasonic KX-TD Digital PBX. The DSP has the same features as the KX-TVS102.

CPU Card:

(1/system) Main processing unit for the system; comprised of: central microprocessor, ROM, dynamic RAM, system controller, rotary switch, and an RS-232C interface.

EIA Connector:

(RS-232C) Connects an ASCII or VT terminal to the VPS; must be used to program system.

Rotary Switch:

(Check the status of this switch only at start-up.) Provides the following additional functions:

Table 1

Position	Additional Function
0	Normal setting.
1	Initializes RS-232C parameters. RS-232 default parameters: 9,600, N, 8, 1
2*	Auto Configuration is automatically completed and all ports are set for Automated Attendant service.
3*	Auto Configuration is automatically completed and all ports are set for Voice Mail service.
4	Reserved

Table 1

Position	Additional Function
5	Initializes the VPS. Clears all messages and data.
6	Test Mode (Hard Disk Drive Read/Write Test)
7-9	Reserved

* For Panasonic KX-TD series telephone system with DPT Integration.

1.3.3 Which Phone Systems are Compatible?

We recommend integration with the following Panasonic phone systems:

- *Panasonic KX-TD1232*
- *Panasonic KX-TD816*
- *Panasonic KX-T336*
- *Panasonic KX-T123211D, KX-TA Series*
- *Panasonic KX-TD500*
- *Panasonic KX-TD308*

We cannot guarantee adequate integration of the KX-TVS75/100/200 with other PBX systems or with Key Systems. If the customer does not have one of the recommended Panasonic PBX systems, be sure that the system has the features listed below.

The PBX should have the following features for successful integration:

- *Single line (tip/ring) port circuits (Some PBXs need an OPX card to provide this connection.)*
- *Station to station DTMF signaling*
- *Message Waiting Notification from an SLT (single-line telephone)*
- *Screened transfer from an SLT*
- *Message Waiting Notification on proprietary (multi-line) sets (message light accessed by dialing on/off codes)*

If the PBX does not have these features, VPS operation will be limited.

Refer to 3.1.4 PBX Requirements for Integration. You will find the following information about each feature listed:

- *Description*
- *Limitations of the system without the feature*
- *Tests to determine whether the PBX has the feature*

VOICE MAIL

The recommended Panasonic PBX systems have Follow-on ID and Inband Integration. When callers are transferred to an extension that is forwarded to Voice Mail, Follow-on ID sends callers directly to the mailbox. Without Follow-on ID, the caller would have to re-enter the

mailbox number when connected to the Voice Mail.

DTMF Integration enables the VPS to recognize the current state of the call and improve its call handling performance. When enabled, the PBX informs the VPS of the status of the call (busy, answered, ringing, etc.) by sending a code with DTMF tones before sending the normal call progress tones. For example, when a caller hangs up before making a selection, the PBX sends # 9 to the VPS port that answered. This informs the VPS that the caller has hung up. Upon receiving these digits, the VPS goes on-hook and is ready to handle another call.

Digital (DPT) Integration is available when the VPS is connected to a Panasonic KX-TD series PBX (depending on the software version). This digital integration provides the VPS with more information than DTMF integration. This information enables the system to identify the extension number of the caller, know where the call is forwarded from and why, and recognize what the caller wants to do. Some features are available only with DPT integration (Live Call Screening, Two-Way Recording, Two-Way Transfer, Direct Mailbox Access, Intercom Paging, Auto Configuration).

1.3.4 Installer Equipment and Software Requirements

The installer **must** have a laptop computer or data terminal equipped with terminal emulation software. We suggest you use something like HyperTerminal by HILGRAEVE. The computer is used to program the VPS. Terminal emulation software enables the keyboard to be used as a data entry device. The data terminal or terminal emulation software must support ASCII or VT100 type terminals. It is best to use a VT100 type terminal to program the system.

While both the laptop and data terminal will work, the laptop allows screens to be saved in a file throughout the process. It is often helpful to retrieve these files later if technical support is needed.

1.3.5 Specifications

Table 2

Compression Rate:	32 Kbps
Custom Services:	100
Message Retention:	1 to 30 days or unlimited
Number of Mailboxes:	62 (or 1022) subscriber mailboxes 2 manager mailboxes
Number of Messages per Mailbox:	100 maximum (programmable)

1.3.6 VPS Configuration

KX-TVS75/100

- 2 Ports
- 1 Port Card
- 6 h (TVS75) or 18 h (TVS100) of Voice Storage (non-expandable)
- 62 Subscriber Mailboxes, 2 Manager Mailboxes

KX-TVS200

- No Ports
- No Port Card
- 32 h of Voice Storage (non-expandable)
- 1022 Subscriber Mailboxes, 2 Manager Mailboxes

With analog PBXs (e.g., KX-TA624), each port accommodates 1 extension on the PBX. With the KX-TD series, the VPS can handle 2 simultaneous calls.

The KX-TVS75 can not be expanded. The KX-TVS100 expands to 4 ports with an additional Port card. (See 1.3.8 Expansion Capabilities for the KX-TVS100.)

The KX-TVS200 expands to either 12 ports in D-PITS mode using three (3) KX-TVS204 cards or two (2) KX-TVS102 cards and one (1) KX-TVS204 card, or six (6) ports inband using three (3) KX-TVS102 cards. (See "Card Configuration (D-PITS Integration) - KX-TVS200" in 2.6.2 Port Cards.)

1.3.7 Hardware

Table 3

KX-TVS75	KX-TVS100
<ul style="list-style-type: none"> • 1 Hard Disk Drive • 2 Telephone Inputs (RJ-11) • 1 RS-232C Connector • 1 Rotary Switch 	<ul style="list-style-type: none"> • 1 Hard Disk Drive • 2 CO Inputs (RJ-11) • 1 Optional Port Card (KX-TVS102) • 1 Optional Port Card Slot • 1 RS-232C Connector • 1 Rotary Switch

Table 4

KX-TVS200
<ul style="list-style-type: none"> • 1 Hard Disk Drive • 3 Optional Port Card Slots for either KX-TVS102 or KX-TVS204 cards • 1 RS-232C Connector • 1 Rotary Switch

1.3.8 Expansion Capabilities for the KX-TVS100

Expansion requires an additional Port card (KX-TVS102). Because each Port card has 2 ports, ports are increased in increments of 2. The KX-TVS100 can be expanded to 4 ports maximum (to handle 4 simultaneous calls).

1.3.9 Expansion Capabilities for the KX-TVS200

Expansion requires an additional Port card KX-TVS102 or 204. The KX-TVS102 card has 2 ports. Ports are increased in increments of 2. The KX-TVS204 card has 4 DPT ports. Ports are increased in increments of 4. This card can only be used on the KX-TVS200.

1.3.10 Recommendations for System Configuration

General guideline: a ratio of 6/1 (for every 6 lines, 1 port). There are 2 questions to ask when considering how many ports are desirable:

- Are the ports answering all incoming calls or just forwarded/transferred calls?
- If they are answering incoming calls, how busy are the lines?

The guideline above (6/1) usually works well with moderate traffic. This may have to be modified for heavy traffic. These recommendations are outlined in the chart on the next page.

Table 5

CO Lines	Port
1-6	1
7-12	2

One port may not support an Automated Attendant configuration with 5 CO lines. The following recommendations for Automated Attendant ports may have to be modified for heavy traffic.

Table 6

CO Lines	Port
1-4	1
5-8	2

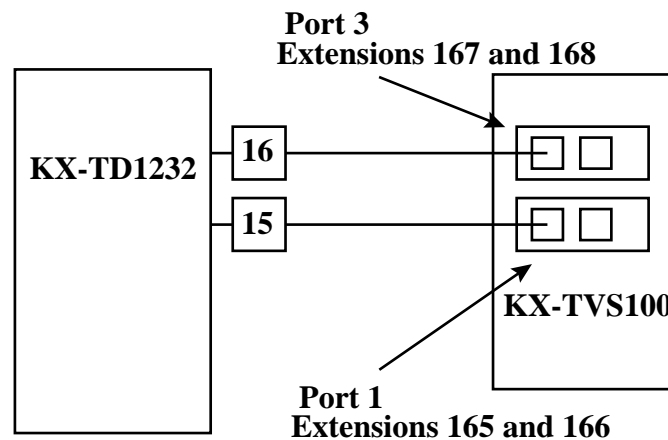
1.4 DIGITAL INTEGRATION

1.4.1 General - All Models

To the Panasonic KX-TD digital PBX, the VPS ports look like digital extensions. The PBX thinks that the VPS is a digital phone, and the VPS mimics all actions of a digital set. Another advantage of digital integration is that the 2B+D communication provides 2 VPS ports for each Digital Station port. Communication between the VPS and the PBX through digital integration requires the proper software level in the PBX and 4-wire connections for each port (TVS75/100/200). To communicate between the VPS and the PBX through DPT Integration, the PBX and VPS must be programmed to work together.

1.4.2 KX-TV75/100 - Connection Example

For example, you can connect jack 15 of the KX-TD1232 to Port 1 of the VPS with a 4-wire connection (see diagram below). This connection creates 2 Voice Mail extensions and can simultaneously answer 2 calls. This means that a fully-configured 4-port system requires only 2 jacks from the PBX.



Note

To use DPT Integration, Port 1 of the VPS must be connected to the lowest number jack assigned as a VPS extension.

When DPT Integration is activated, a single extension jack provides 2 single-line interfaces at the Port card on the VPS. For example, when 1 line cord (4 wire) is connected to Port 1 on the VPS, 2 extensions are provided. When the second line cord (4 wire) is connected to Port 3 (if installed), the other 2 extensions are available.

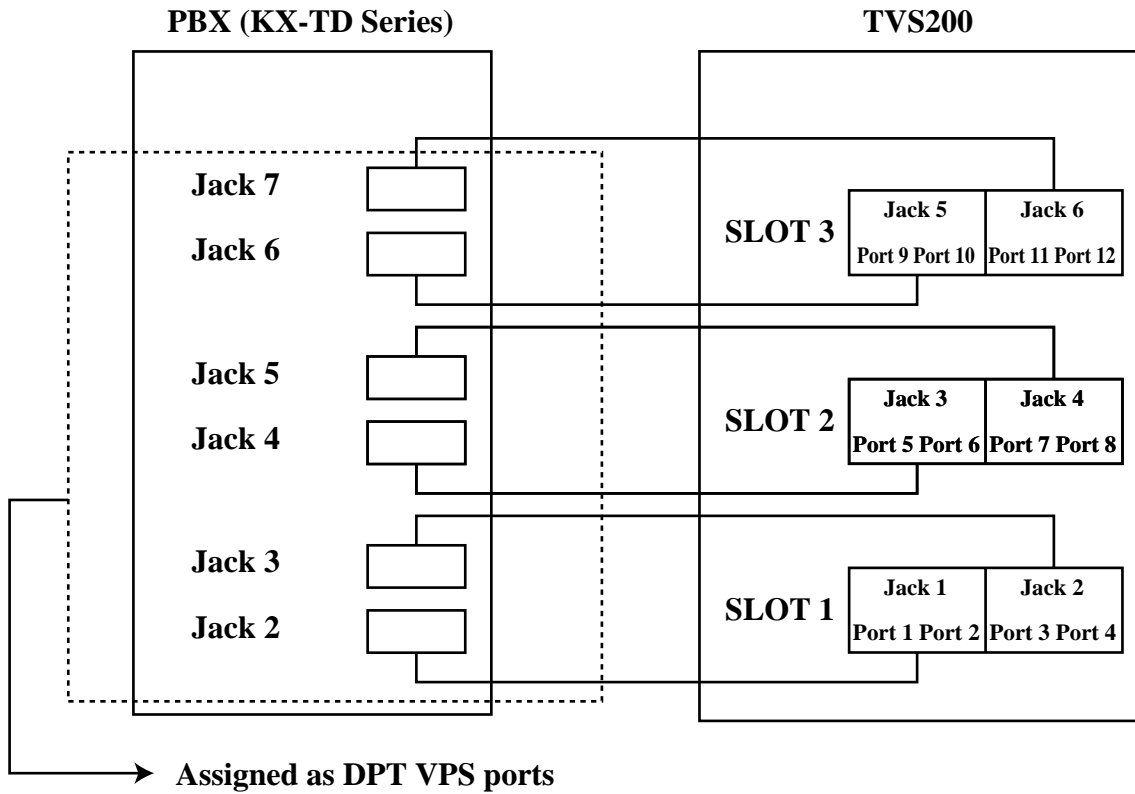
1.4.3 KX-TVS200 - Connection Example

For example, when you mount 2 KX-TVS204 cards, you can use 8 VPS ports in total by connecting 4 jacks of the KX-TD1232 to 4 jacks of the KX-TVS200.

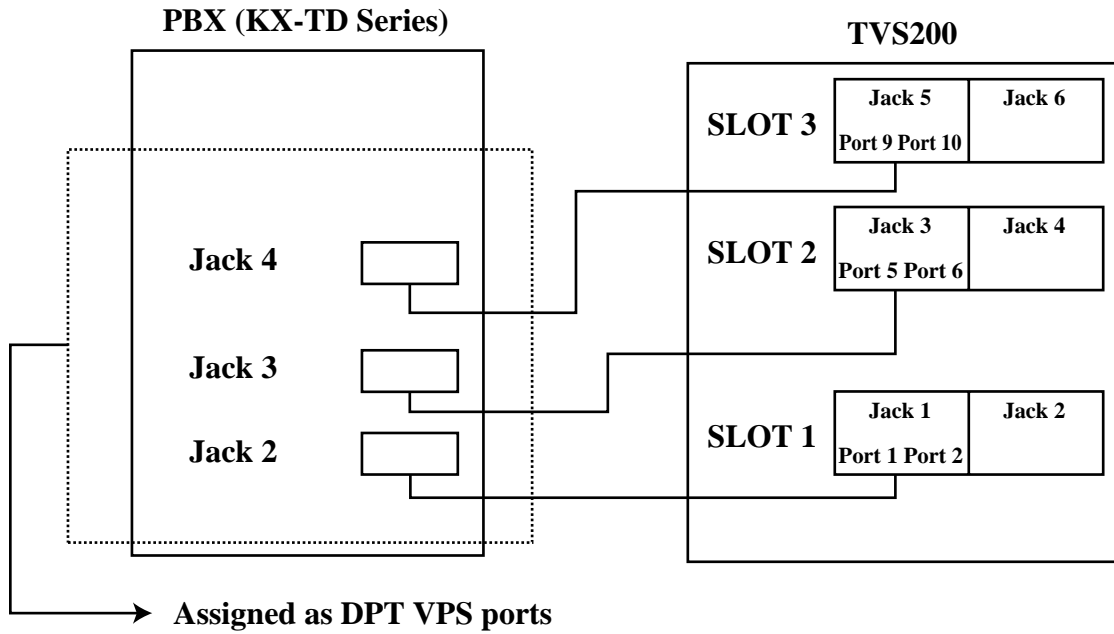
Note

To use DPT Integration, the lowest jack of the KX-TVS200 must be connected to the lowest number jack assigned as a Voice Mail Port Assignment in KX-TD series. See the following connection examples.

Connection Example (KX-TVS204×3)



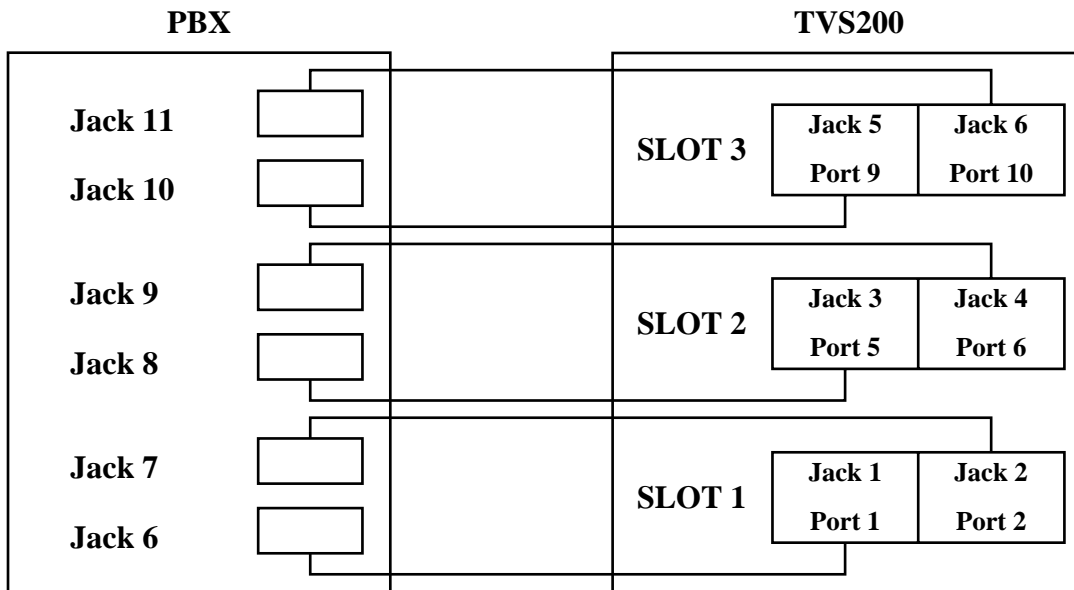
Connection Example (KX-TVS102×3, DPT Integration Mode)



Inband/None Integration

To the PBX, the VPS looks like SLT sets through standard single-line (tip/ring) telephone interfaces.

Connection Example (KX-TVS102×3, Inband/None Integration Mode)



Section 2
INSTALLATION

2.1 SAFETY PRECAUTIONS

Please read the following precautions before installing the VPS.

2.1.1 Installation

The VPS needs to be installed on the wall. Improper placement of the system may result in malfunction, noise, or discoloration. Avoid installing the VPS in the following places:

- *in direct sunlight; in hot, cold, or humid places*
- *in new areas where there are thermal springs, etc. (where sulfuric gas may damage the equipment or contacts).*
- *where shocks or vibrations are frequent or strong.*
- *in dusty places or places where water or oil may come in contact with the unit.*
- *near high frequency generating devices such as sewing machines, elevators or electric welders.*
- *on or near computers, telexes, or other office equipment; near microwave ovens or air conditioners. (Ideally, the VPS should not be in the room with these items and should be at least 1.8m {6 feet} away from televisions.)*

Do not obstruct the areas around the PBX and the VPS. Both require space above for cooling and space on the sides for maintenance and inspection.

2.1.2 Wiring

- *Do not wire the telephone cable parallel to an AC power source, computer, telex, etc. If cables are run near those wires, shield the cables with metal tubing or use shielded cables and ground the shields.*
- *Use protectors if running cables on the floor. Avoid running wire under carpets.*
- *Avoid sharing a 120 V AC power supply for computers, telexes, and other office equipment with the VPS. Induction noise from such equipment may interrupt the VPS operation.*

When making any connections or removing the cover, be sure the power switch is turned off.

When installing telephone wiring, basic safety precautions should always be followed to reduce the risk of fire, electric shock and injury to persons, including the following:

- Never install telephone wiring during a lightning storm.
- Never install telephone jacks in wet locations unless the jack is specifically designed for wet locations.
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface.
- Use caution when installing or modifying telephone lines.

Table 7 Hard Disk Drive Usage Environment

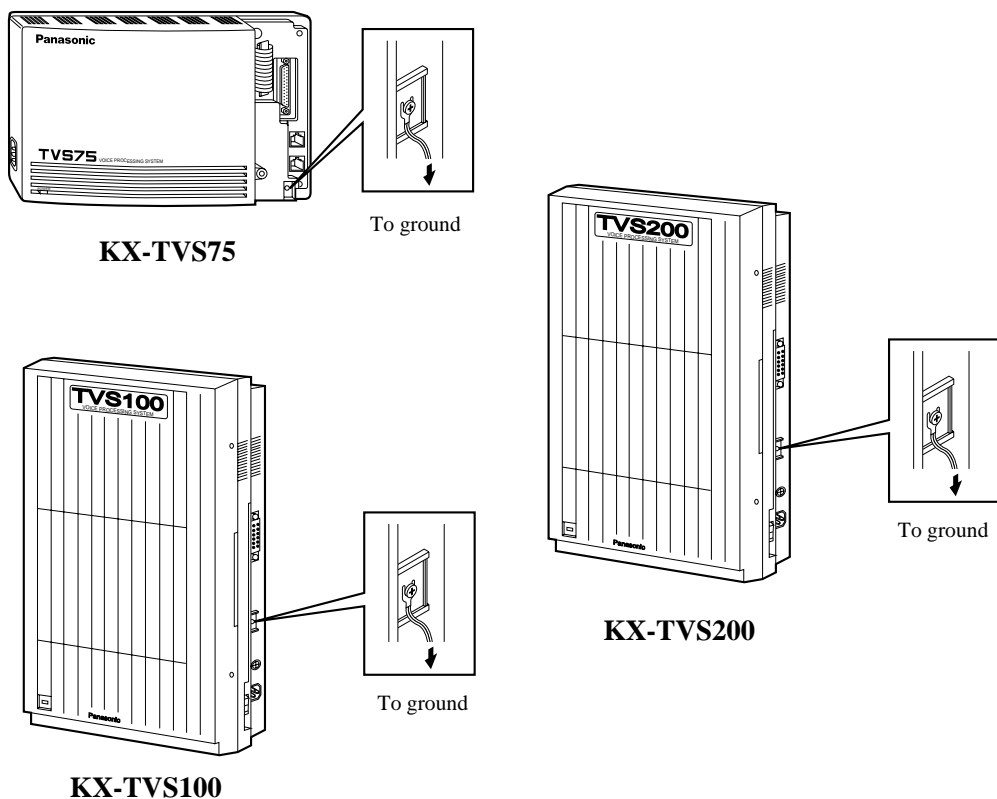
Temperature	: 5° C - 40° C
Relative humidity	: 10% - 50%
Shock	: Under 5 G
Vibration	: 5Hz - 22Hz : 0.0042cm {0.020inch} displacement; double amplitude, 1 octave per minute. 23Hz - 350Hz : Under 0.5G
Magnetic Field	: DC : 6gauss to 700KHz : 7milligauss 700KHz - 1.5MHz : 3milligauss

2.2 FRAME GROUND CONNECTION

IMPORTANT!!!

Connect the frame of the main unit to the ground.

1. Loosen the screw.
2. Insert the grounding wire.
3. Tighten the screw.
4. Connect the grounding wire to the ground.



In most of North America, the ground provided by the "Third wire ground" at the commercial power outlet will be satisfactory. However, in some cases this ground may be installed incorrectly. Therefore, the following test procedure should be performed.

Test Procedure

1. Obtain a suitable voltmeter and set it for a possible reading of up to 250 V AC.
2. Connect the meter probes between the 2 main AC voltage points on the wall outlet. The reading obtained should be 108 V AC-132 V AC.

- 3.** Move one of the meter probes to the third prong terminal (GND).
Either the same reading or a reading of 0 V should be obtained.
- 4.** If a reading of 0 V at 1 terminal and a reading of 108 V AC-132 V AC at the other terminal is not obtained, the outlet is not properly grounded. This condition should be corrected by a qualified electrician (per article 250 of the National Electrical Code).
- 5.** If a reading of 0 V at 1 terminal and a reading of 108 V AC-132 V AC at the other terminal is obtained, then set the meter to the "OHMS/RX1" scale, place 1 probe at the GND Terminal and the other probe at the terminal which gave a reading of 0 V. A reading of less than 1 Ω should be obtained. If the reading is not obtained, the outlet is not adequately grounded. See a qualified electrician.

2.3 INSTALLATION STEPS

The following is an overview of the standard installation process using DPT. When necessary, other sections in this manual have been referenced for more detailed descriptions or instructions.

1. Get a list of current users, their extension numbers, their departments, and the type of systems they use (mailbox, no mailbox, beeper, car phone...).
2. Assess your customers' needs before setting up the system. You will save yourself time later by giving customers what they need up front. Ask the office manager how the VPS will be used. Give examples.

Recommend that your customer use a word processor to log the greetings. You will find these files much more easily than the worksheet pages if you need to make changes down the road.

3. Check the software version (See Section 3 INTEGRATING THE VPS WITH PANASONIC KX-T PHONE SYSTEMS).
 - KX-T123211D (See 3.3.2 KX-T123211D Software Verification and Programming)
4. For the KX-TVS200 - install optional port expansion cards (See "KX-TVS200" in 2.4.1 General).
5. Standard Initialization (For DPT Connection)
 - a) Program the ports of the PBX for voice processing (See 4.2 CONNECTING THE KX-TVS75/100/200 WITH THE PANASONIC KX-TD816, KX-TD1232 AND KX-TD308).

Program the KX-TD1232, the KX-TD816, the KX-TD308 or the KX-TD500 for Voice Mail integration. If possible, use DPT.

- KX-TD816, KX-TD1232, KX-TD308, KX-TD500

Programming may be performed on-site or at the office.

All memory is stored to a hard drive and will be retained when the unit is powered up as long as the red rotary switch has been returned to position [0] prior to turning the unit off.

- b) Turn the power off.
- c) Plug station wire(s) from the PBX into VPS (See 2.5 CONNECTIONS - KX-TVS75/100 and 2.6 CONNECTIONS - KX-TVS200).

- d) Connect the computer to the voice processor with a Null Modem Cable (See 2.7.2 Connecting the RS-232C Cable).
- e) Turn the rotary switch to position 5.
- f) Turn the power on.
- g) Wait until the "warning" appears on the screen.
- h) Turn the rotary switch back to position 0.

CAUTION

If the rotary switch is not returned to position 0 after initialization, all programming will be lost when the voice processor loses power!

6. Perform Quick Setup. (See Section 5 CUSTOMIZING THE SYSTEM.)

7. Check Quick Setup:

- The Power Indicator on the Voice Processor should be solid.
- The screen output should be: [On Line].

If you do not see the "On Line" message, check the following:

- The line cord to the Voice Processor has 4 conductors.
- The programming on the KX-TD816/1232/308 is correctly set in System Program [117].

8. Set up Class of Service (COS) for each user. Customize voice prompts if necessary. (See Appendix B SYSTEM ADMINISTRATION)

9. Perform Administrative Programming through the laptop. (See Appendix B SYSTEM ADMINISTRATION)

2.4 INSTALLING PORT EXPANSION CARD - KX-TVS100/KX-TVS200

2.4.1 General

KX-TVS100

The KX-TVS100 can handle up to 4 calls simultaneously when the following port card is installed.

- KX-TVS102 (2 Digital/Analog port expansion card)

One port card (KX-TVS102) is installed at the factory.

KX-TVS200

The KX-TVS200 can handle up to 12 calls simultaneously when the following port cards are installed.

- KX-TVS102 (2 Digital/Analog port expansion card)
- KX-TVS204 (4 Digital port expansion card)

No port cards are installed at the factory.

CAUTION

Before installing an optional port card, it is very important that the power to the unit be turned off. Before beginning the actual installation and touching the card and any circuitry within the unit, discharge any static electricity from your body by touching the grounding strap. This is a critical step that must be performed to protect the printed circuit board and any other electronic components from static electricity. Refer to the manual accompanying the optional card concerning the precautions that must be taken and the steps for completing the installation.

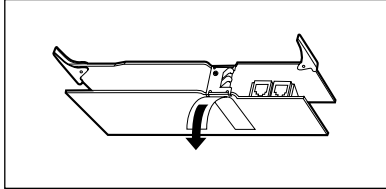
2.4.2 Installing the KX-TVS102 or KX-TVS204 Port Card

Note

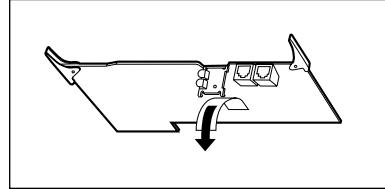
The following five steps are for the KX-TVS200. Please refer to them for the KX-TVS100.

1. Remove the adhesive tape from the card.

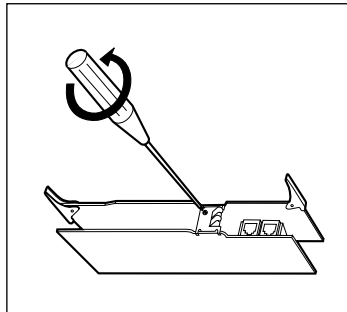
TVS102



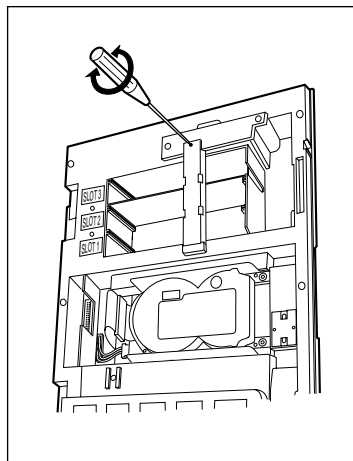
TVS204



2. (KX-TVS102 only) Loosen, remove and discard the screw under the tape with a screwdriver.

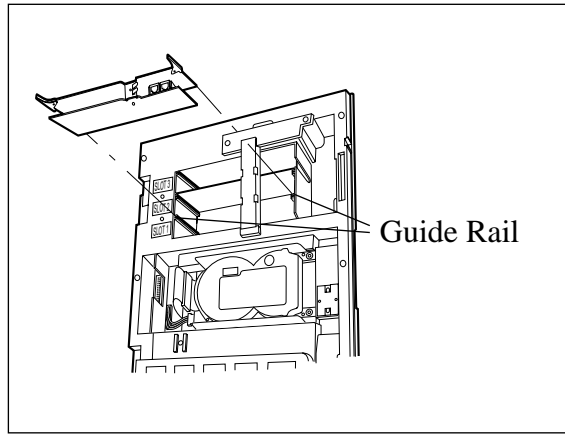


3. Loosen the screw on the grounding strap, then remove the strap from the unit.

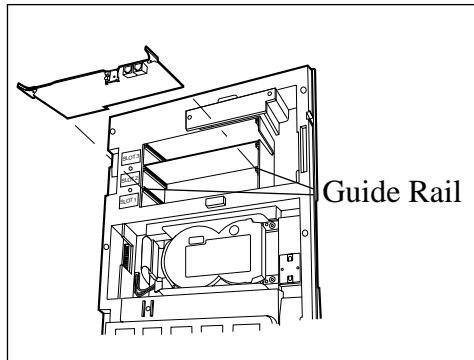


4. Insert the optional port card into SLOT 1 using the guide rails. (for the KX-TVS100, insert the optional port card into SLOT 2.)

TVS102

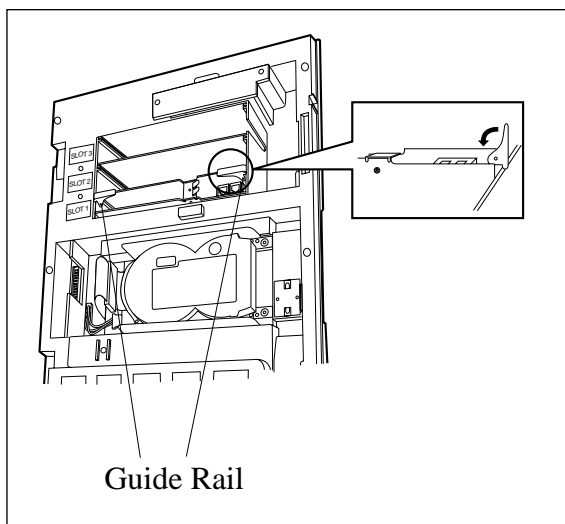


TVS204

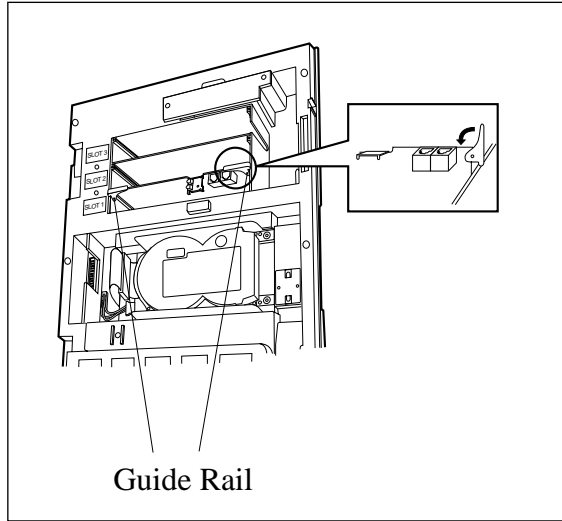


5. Press the left and right card latches firmly, then fix the grounding strap to the unit with a screwdriver.

TVS102



TVS204

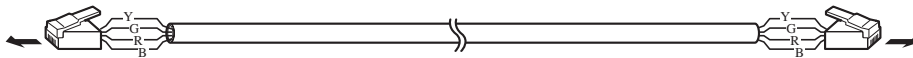


2.5 CONNECTIONS - KX-TVS75/100

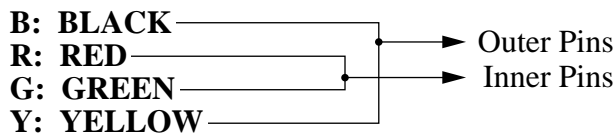
2.5.1 Connecting PBX Extensions

Up to 2 extensions can be connected to the TVS75 and up to 4 extensions can be connected to the TVS100. Use a 4-conductor wire for connection with KX-TD systems that use DPT integration. Use a 2-conductor wire for connections to all other PBXs.

4-Conductor Wire

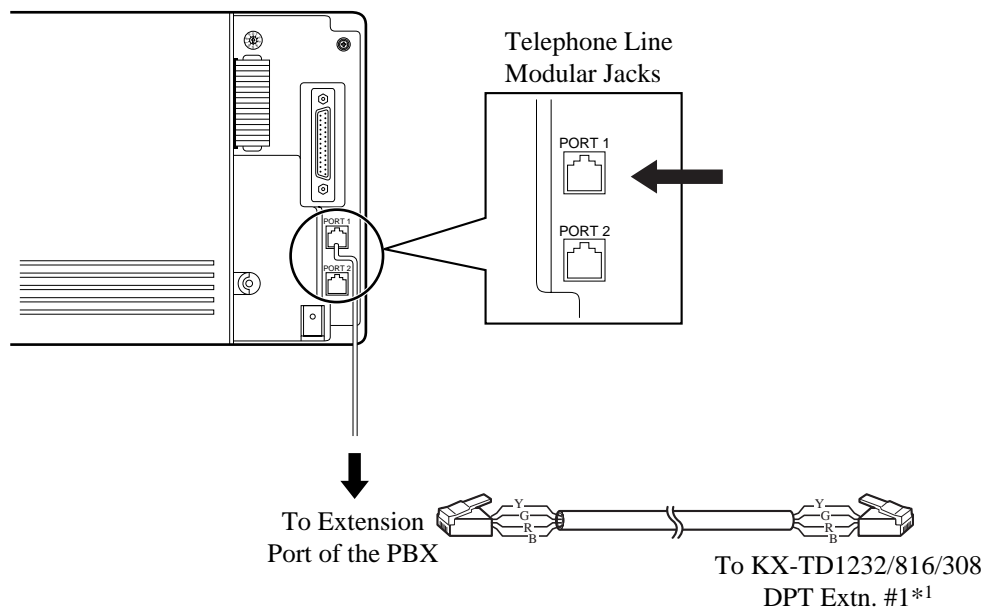


Modular Connection



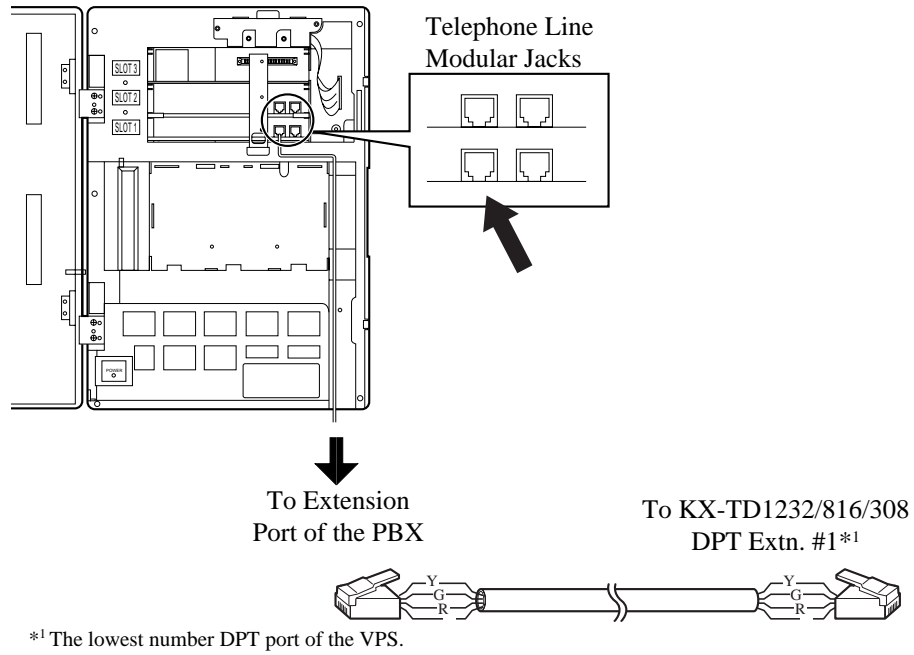
2.5.2 Connection to DPT Extensions

Port 1 of the KX-TVS75

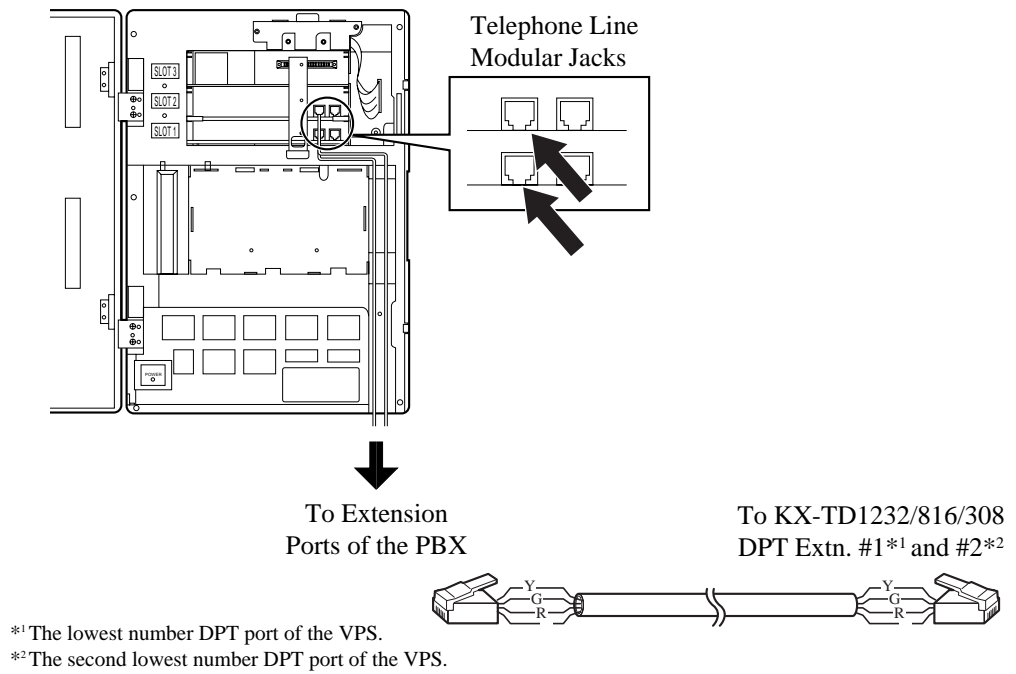


*1 The lowest number DPT port of the VPS.

Port 1 of the KX-TVS100

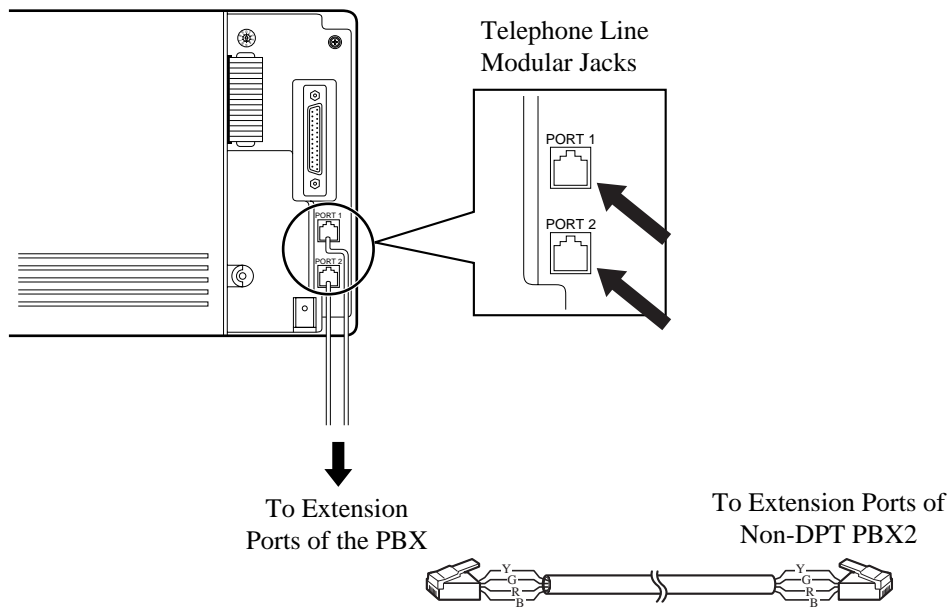


Ports 1 and 3 of the KX-TVS100

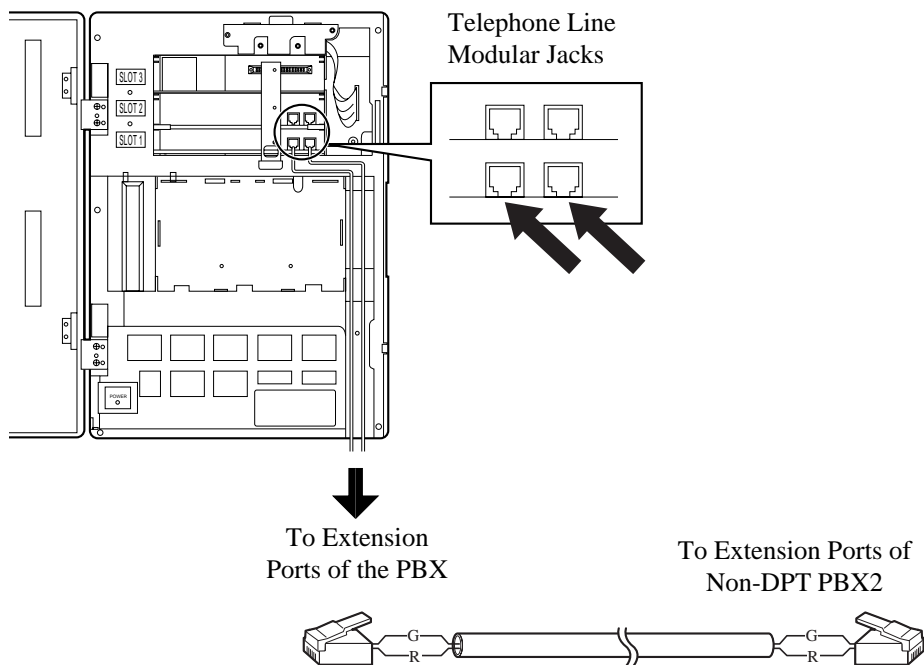


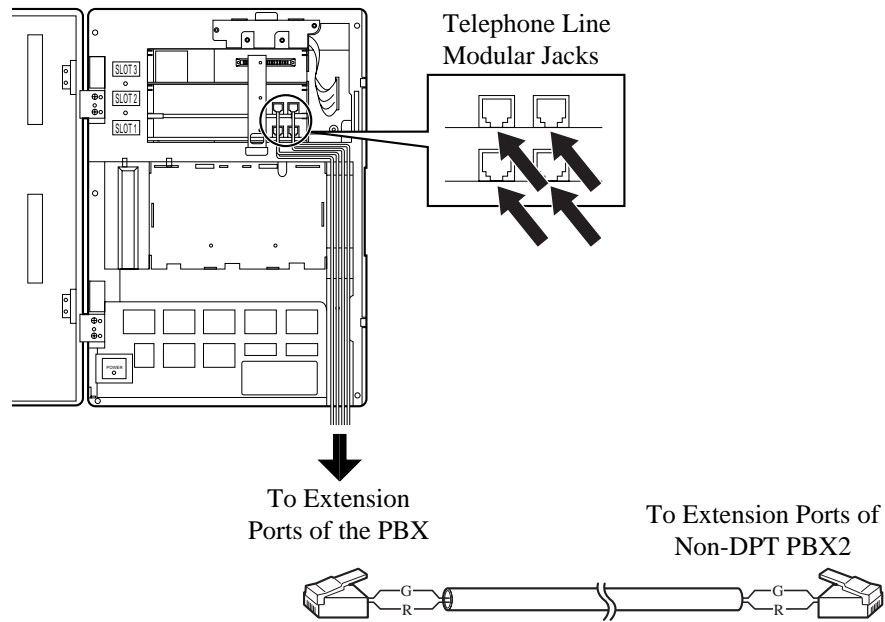
2.5.3 Connection to Non-DPT Extensions

Ports 1-2 of the KX-TVS75



Ports 1-2 of the KX-TVS100

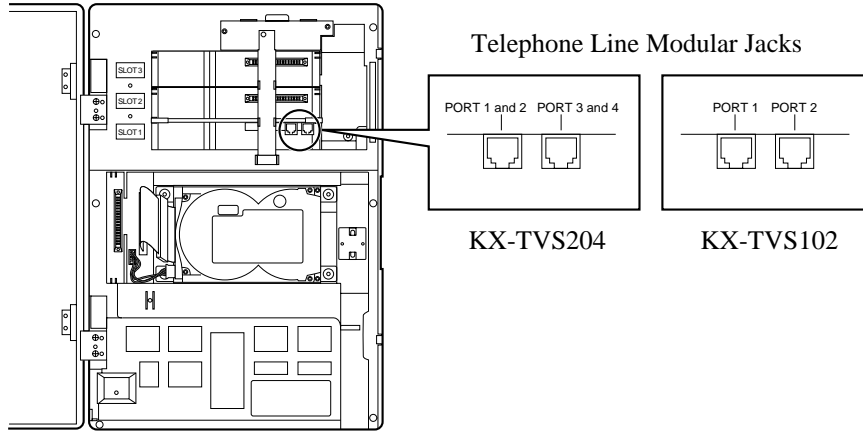


Ports 1-4 of the KX-TVS100

2.6 CONNECTIONS - KX-TVS200

2.6.1 Modular Plug Connection

Insert the modular plug of the telephone cord into the modular jack on the port card. Guide the telephone cord through the ferrite core. Close the ferrite core.



2.6.2 Port Cards

Two different port cards can be installed in the KX-TVS200. (See 2.4 INSTALLING PORT EXPANSION CARD - KX-TVS100/KX-TVS200)

- 4 Digital ports expansion card (KX-TVS204)
- 2 Digital/Analog ports expansion card (KX-TVS102)

One KX-TVS204 card (2 jacks) can support 4 VPS ports using the DPT Integration mode. The KX-TVS204 card does not function with any other integration modes (INBAND Integration, None).

One KX-TVS102 (2 jacks) can support 2 VPS ports under either Inband or DPT.

Table 8 The Number of Ports VPS Cards Can Support

Card Type	Integration Mode	
	DPT	Inband/None
KX-TVS204	4	Not available
KX-TVS102	2	2

Note

Only 1 integration mode among DPT, Inband and None can be used.

There are 3 SLOTS available in the KX-TVS200. Four VPS ports are assigned to each SLOT. Twelve VPS ports are available.

When using a KX-TVS102 card, only the first 2 ports of the 4 available can be used. For example, when you mount the KX-TVS204 in SLOT 1, the VPS supports ports 1-4. When the KX-TVS102 is installed in SLOT 1, the VPS is only able to support ports 1 and 2. When installing, insure that the proper number of VPS ports have been set up and correspond to the port parameters established by the System Administrator.

See the below configuration tables for all card configurations and the available number of ports in each case.

Table 9 Card Configuration (DPT Integration) - KX-TVS200

Pattern No.	SLOT 1 (Port 1, 2, 3, 4)	SLOT 2 (Port 5, 6, 7, 8)	SLOT 3 (Port 9, 10, 11, 12)	Total Number of Ports
1	TVS204 (Port 1, 2, 3, 4)			4
2		TVS204 (Port 5, 6, 7, 8)		4
3			TVS204 (Port 9, 10, 11, 12)	4
4	TVS204 (Port 1, 2, 3, 4)	TVS204 (Port 5, 6, 7, 8)		8
5	TVS204 (Port 1, 2, 3, 4)		TVS204 (Port 9, 10, 11, 12)	8
6		TVS204 (Port 5, 6, 7, 8)	TVS204 (Port 9, 10, 11, 12)	8
7	TVS204 (Port 1, 2, 3, 4)	TVS204 (Port 5, 6, 7, 8)	TVS102 (Port 9, 10)	10
8	TVS204 (Port 1, 2, 3, 4)	TVS102 (Port 5, 6)	TVS204 (Port 9, 10, 11, 12)	10
9	TVS102 (Port 1, 2)	TVS204 (Port 5, 6, 7, 8)	TVS204 (Port 9, 10, 11, 12)	10
10	TVS204 (Port 1, 2, 3, 4)	TVS204 (Port 5, 6, 7, 8)	TVS204 (Port 9, 10, 11, 12)	12
11	TVS204 (Port 1, 2, 3, 4)	TVS102 (Port 5, 6)		6
12	TVS204 (Port 1, 2, 3, 4)		TVS102 (Port 9, 10)	6
13	TVS204 (Port 1, 2, 3, 4)	TVS102 (Port 5, 6)	TVS102 (Port 9, 10)	8

Table 9 Card Configuration (DPT Integration) - KX-TVS200

Pattern No.	SLOT 1 (Port 1, 2, 3, 4)	SLOT 2 (Port 5, 6, 7, 8)	SLOT 3 (Port 9, 10, 11, 12)	Total Number of Ports
14	TVS102 (Port 1, 2)	TVS204 (Port 5, 6, 7, 8)		6
15		TVS204 (Port 5, 6, 7, 8)	TVS102 (Port 9, 10)	6
16	TVS102 (Port 1, 2)	TVS204 (Port 5, 6, 7, 8)	TVS102 (Port 9, 10)	8
17	TVS102 (Port 1, 2)		TVS204 (Port 9, 10, 11, 12)	6
18		TVS102 (Port 5, 6)	TVS204 (Port 9, 10, 11, 12)	6
19	TVS102 (Port 1, 2)	TVS102 (Port 5, 6)	TVS204 (Port 9, 10, 11, 12)	8
20	TVS102 (Port 1, 2)			2
21		TVS102 (Port 5, 6)		2
22			TVS102 (Port 9, 10)	2
23	TVS102 (Port 1, 2)	TVS102 (Port 5, 6)		4
24	TVS102 (Port 1, 2)		TVS102 (Port 9, 10)	4
25		TVS102 (Port 5, 6)	TVS102 (Port 9, 10)	4
26	TVS102 (Port 1, 2)	TVS102 (Port 5, 6)	TVS102 (Port 9, 10)	6

Table 10 Card Configuration (non DPT Integration) - KX-TVS200

Pattern No.	SLOT 1 (Port 1, 2, 3, 4)	SLOT 2 (Port 5, 6, 7, 8)	SLOT 3 (Port 9, 10, 11, 12)	Total Number of Ports
1	TVS102 (Port 1, 2)			2
2		TVS102 (Port 5, 6)		2
3			TVS102 (Port 9, 10)	2

Table 10 Card Configuration (non DPT Integration) - KX-TVS200

Pattern No.	SLOT 1 (Port 1, 2, 3, 4)	SLOT 2 (Port 5, 6, 7, 8)	SLOT 3 (Port 9, 10, 11, 12)	Total Number of Ports
4	TVS102 (Port 1, 2)	TVS102 (Port 5, 6)		4
5	TVS102 (Port 1, 2)		TVS102 (Port 9, 10)	4
6		TVS102 (Port 5, 6)	TVS102 (Port 9, 10)	4
7	TVS102 (Port 1, 2)	TVS102 (Port 5, 6)	TVS102 (Port 9, 10)	6

2.7 TERMINAL CONNECTION

2.7.1 Requirements For Connecting Programming Terminal

The programming terminal must be connected with a serial cable with an RS-232C connector at the EIA port. This must be a null modem cable. This enables system administration (system setup, mailbox setup, and system diagnosis) to be performed. If the DEC VT220 (100) or VT220 (100) compatible terminal is used, the system administrator can set up system parameters and diagnose the system with the menu-driven program. Other RS-232C ASCII terminals can also be used, but it is recommended that a terminal that supports VT emulation be the first choice. The wiring and parameters are the same for either terminal type.

Communication parameters of the VPS have been set to the following values at the factory:

Table 11

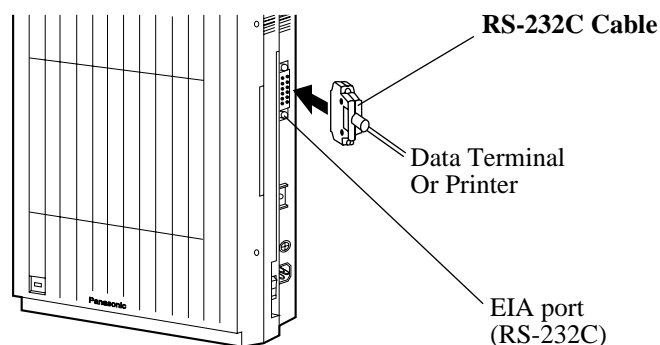
COMMUNICATION PARAMETERS	
Baud Rate:	9600 bps
Word Bit Length:	8 Bits
Parity:	None
Stop Bit Length:	1 Bit

2.7.2 Connecting the RS-232C Cable

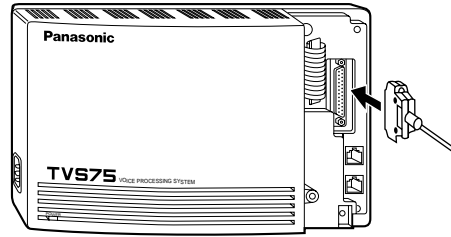
STOP:

Before connecting the cable, make sure the power switches on both the data terminal and the VPS are OFF.

TVS100 & 200



TVS75



Insert the RS-232C cable into the VPS with the connector indicating the same direction.

Cables must be shielded and no longer than 2m {6.5feet}.

Standard IBM 25-Pin Connection

Circuit Type(EIA)	Signal Name	Pin No.	Pin No.	Signal Name	Circuit Type(EIA)
AA	FG	1	1	FG	AA
BA	TXD	2	3	RXD	BB
BB	RXD	3	2	TXD	BA
AB	SG	7	20	DTR	CD
CD	DTR	20	7	SG	AB
			5	CTS	CB
			6	DSR	CC
			8	DCD	CF

Table 12 Pin Configuration of the EIA (RS-232C)

Pin Number	Signal Name		Circuit Type	
			EIA	CCITT
1	FG	Frame Ground	AA	101
2	TXD	Transmitted Data	BA	103
3	RXD	Received Data	BB	104
4	RTS	Request To Send	CA	105
6	DSR	Data Set Ready	CC	107
7	SG	Signal Ground	AB	102
8	DCD	Data Carrier Detect	CF	109
20	DTR	Data Terminal Ready	CD	108.2

2.7.3 EIA (RS-232C) Signals

Frame Ground (FG)

Connects an external ground to the unit frame, usually the ground pin of the AC power cord.

Transmitted Data (TXD) — output

Conveys signals from the unit to the terminal/printer. A "mark" condition is held unless data or BREAK signals are being transmitted.

Received Data (RXD) — input

Conveys signals from the terminal/printer to the unit.

Request To Send (RTS) — output

This lead is held on whenever DSR is on.

Signal Ground (SG)

Connects to the DC ground of the unit for all interface signals.

Data Terminal Ready (DTR) — output

This signal line is turned on by the unit to indicate that it is on line. Circuit DTR ON does not indicate that communication has been established with the terminal/printer. It is switched off when the unit is off-line.

Section 3

***INTEGRATING THE VPS WITH
PANASONIC KX-T PHONE SYSTEMS***

3.1 GUIDELINES FOR INTEGRATION

3.1.1 DPT or Inband Signaling?

There are 2 types of integration available on the KX-TVS75/100/200: Inband Signaling and DPT. The VPS used with any other brand of telephone equipment require inband equipment. KX-TD series PBXs that can use DPT Integration are:

- KX-TD816 version P401A or higher
- KX-TD1232 version P101A or higher

3.1.2 Why Integration is Important

The KX-TVS75/100/200 works well with most PBXs because its connections are made through a standard single-line (tip/ring) telephone interface. However, the VPS operation depends on the capabilities and features provided by the PBX; its performance will vary when connected with different PBX systems. For example, Follow-on (or Called Party) ID is a feature of the PBX. If the PBX does not have this feature, the VPS cannot transfer calls directly to the correct mailbox and play the busy or no-answer greeting for that mailbox.

3.1.3 How the VPS and the PBX Communicate

To the PBX, the VPS looks like SLT sets. The PBX thinks that the VPS is an SLT, and the VPS mimics all actions a live attendant would carry out from an SLT.

For the VPS and the PBX to communicate, proper signaling is important. Like an attendant, the VPS places calls by going off-hook and dialing numbers. It starts call transfers with a hookswitch flash to put callers on hold and then dials the extension number. By recognizing call progress tones from the PBX, the VPS decides how calls should be handled. Inband Integration allows the PBX to send certain digits (DTMF) to the VPS, allowing it to recognize the status of the extension and take the appropriate action.

Table 13

VPS/PBX COMMUNICATION	
<u>PBX to VPS</u>	<u>VPS to PBX</u>
Call Progress Tones	SLT Signals
<ul style="list-style-type: none"> • ring back • busy • reorder 	<ul style="list-style-type: none"> • on/off hook • hookswitch flash • DTMF tones
DTMF Tones	

The VPS must also have access to certain PBX features. For example, if the VPS takes a message, one way it can notify the mailbox owner is by dialing the PBX's Message-Waiting-Lamp-On code. Once new messages are retrieved, the VPS dials the Message-Waiting-Lamp-Off code for that same mailbox owner.

3.1.4 PBX Requirements for Integration

The PBX must have certain capabilities and features to work with the VPS. (Although this section includes tests to help you evaluate the PBX, it may be necessary to refer to the PBX's documentation for detailed capability and feature descriptions.)

Single Line (Tip/Ring) Port Circuits

The VPS can only be connected to a PBX that supports SLT sets. Some PBXs need an OPX card to provide this connection. *However, some OPX cards do not provide all the capabilities listed in this section.*

Following are the minimum current and voltages that the PBX must supply:

Table 14

Minimum Loop Current	20 mA
Minimum Line Voltage	7 V DC
Minimum Ringing Voltage	40 V AC

Station to Station DTMF Signaling

For system users to access VPS services and features, they must be able to send DTMF tones from their telephones to the VPS port. As a general rule, SLT sets can perform station-to-station DTMF signaling; however, many proprietary telephones cannot. Some PBXs need to be programmed to make proprietary sets use DTMF signaling.

If the PBX does not provide station-to-station DTMF signaling, VPS services and features will be limited.

TEST: Call an SLT extension from the telephone in question. When the call is answered, see if the person receiving the call hears DTMF tones when numbers are dialed.

Message Waiting Notification from an SLT

The PBX extensions should light a lamp or receive stutter dial tone when the Message-Waiting-Lamp-On code is dialed by the VPS. The VPS functions best when the extension number of the voice mailbox owner follows the Light-On or Light-Off code. On some PBXs, however, the

extension number is dialed first, followed by a hookswitch flash and then the On code. This presents a problem if the extension is answered before the VPS sends the hook-switch flash.

If the PBX does not provide message waiting notification from an SLT, the VPS can only notify mailbox owners by dialing a beeper number or user-assigned extension.

This process slows down VPS performance as it dials the beeper or extension number and waits to confirm notification. The beeper or user-assigned extension notification is meant to be used for necessity, usually for mailbox owners who are often out of the office (e.g., salespeople or field representatives). The only other option, without message waiting notification, is for mailbox owners to periodically call the VPS to check for messages.

TEST: See if dialing the On code from an SLT can turn on an extension's message waiting indicator.

Screened Transfer from an SLT

The PBX must provide a screened transfer from an SLT for the VPS to function properly.

A screened transfer:

- 1.** *Puts the caller on hold, usually with a hookswitch flash.*
- 2.** *Dials the extension.*
- 3.** *Checks to see if the called subscriber is in, out, or on another line, and whether or not that subscriber accepts the transfer.*
- 4.** *Completes the transfer (by going on-hook) or returns to the caller to say that the party is busy or not available. It then gives the caller an opportunity to leave a message.*

If the PBX does not provide screened transfer from an SLT, the VPS cannot give callers the option to leave a message in a subscriber's mailbox.

TEST: Place an outside call from an SLT. See if you can set up a screened transfer to another extension. Next, try the same test with an internal call. (The VPS may have to transfer both types of calls.)

Follow-on ID or Called Party ID

When forwarding or transferring a call to the VPS, a PBX with Follow-on ID sends the mailbox number of the called subscriber to the VPS before connecting the caller. The VPS responds by playing that subscriber's personal greeting. This operation is sometimes called Call Forward to Mailbox. Without this feature, the VPS cannot immediately play the greeting when the line is busy or there is no answer and allow the caller to leave a message.

3.2 PBX PARAMETERS AND PORT SETTINGS

3.2.1 General Guidelines and Definitions

Optimal performance of the VPS/PBX system relies on proper VPS programming. There are 3 categories of hardware settings: RS-232C, Port Settings, and PBX Interface Parameters. Entering a number sets some of the parameters, while others use sequence codes.

3.2.2 RS-232C Settings

- **Baud Rate (300 - 19200):** Specifies the bits-per-second (the speed at which the data is transferred).
- **Word Bit Length (7 - 8):** Defines the number of bits in each byte or character.
- **Parity (N, O, E):** Specifies the parity used for error detection.
- **Stop Bit Length (1 - 2):** Specifies the number of bits used to signify the end of the byte.
- **Default:** 9600, 8, N, 1

3.2.3 Port Settings

There is no need to change these in a typical installation. Only change these parameters when using a CO (central office) line directly to the KX-TVS75/100/200. Each port on the VPS should be matched to the type of signaling the PBX expects. If you need to change these settings, refer to the PBX manual or customer support office to get the correct values for these settings.

- **Flash Time—100, 300, 600, 900 ms:**
The minimum amount of time that the PBX requires to recognize a hookswitch flash. Choose the amount that is equal to or greater than the PBX's setting.
- **CPC Signal (Calling Party Control Signal)—NONE, 6.5, 150, 300, 450, 600 ms:**
The amount of time allowed for the short break in loop current that is used to indicate that the caller has hung up; usually set to NONE, since most PBXs do not provide this signal to single line ports. If choosing a setting other than NONE, use an amount equal to or less than the PBX or telephone company provided CPC signal.
- **Disconnect Time—1 - 8 s:**
The amount of time that the line is temporarily unavailable after a call has ended.
- **Dial Mode—DTMF, Pulse 10 pps, Pulse 20 pps:**
The type of signaling the PBX single line port expects to receive. (pps = pulses per second)

3.2.4 PBX Interface Parameters

Dialing Parameters

- **PBX Type:**
Specifies the type of PBX which is connected to the VPS.
- **Integration Mode:**
Specifies the method of integration to be used between the VPS and PBX. If PBX type is set to the Panasonic KX-T series, the inband signaling parameters are set automatically and should not be altered. DPT integration is only available when a KX-TD series PBX is connected and the software is upgraded.

Table 15

SEQUENCE CODES	
D:	Disconnect
F:	Hookswitch Flash
R:	Ring Detection
S:	Silence Detection
T:	Dialtone Detection
W:	Wait for 1 Second
X:	Dial Extension
A:	Answer
0-9, *, #:	DTMF Digits

- **Operator Transfer Sequence:**
Tells the VPS how to transfer a call to the operator.
Example: FTX [hookswitch flash—dial tone—dial (operator) extn.]
- **Extension Transfer Sequence:**
Tells the VPS how to transfer a call to an extension.
Example: FTX [hookswitch flash—dial tone—dial extn.]
- **Alternate Extension (Transfer Sequence):**
Tells the VPS how to transfer a call to an extension that is entered into the "Alternate Extension Group." This is useful for extensions that need a special transfer procedure (i.e. blind transfer) such as modem extensions.
Example: FTXD [hookswitch flash—dial tone—dial extn.—hang up]
- **Reconnect Sequence on Busy:**
Tells the VPS how to return to the caller if the extension the caller has dialed is busy. PBXs differ in how they handle this function. Test from an SLT to determine the sequence.

- **Reconnect Sequence on No Answer:**
Tells the VPS how to return to the caller if the extension the caller has dialed does not answer. PBXs differ in how they handle this function. Test from an SLT to determine the sequence.
- **Reconnect Sequence on Refused Call:**
Tells the VPS how to return to the caller if the extension dialed has Call Screening enabled and the subscriber chooses not to take the call. PBXs differ in how they handle this function. Test from an SLT to determine the sequence.
- **Light On Sequence for Message Waiting Lamp:**
This is the dialing sequence that the VPS must use to turn on a message lamp at an extension.
- **Light Off Sequence for Message Waiting Lamp:**
This is the dialing sequence that the VPS must use to turn off a message lamp at an extension.
- **Call Waiting Sequence:**
This sequence is carried out by the VPS to perform call waiting when the extension being called is busy. PBXs differ in how they handle this function. Test from an SLT to determine the sequence.
- **Release Sequence for Call Waiting:**
This sequence is carried out by the VPS to release call waiting. PBXs differ in how they handle this function. Test from an SLT to determine the sequence.

Inband Signaling

These parameters are used when the Integration Mode is set to Inband. If the PBX type is set to a KX-T series system, these parameters will be automatically set. If another type PBX is used, check that system's installation manual for settings.

Table 16

Code (default)	Call State	Sent to the Voice Mail Port When...
1	Ring-back Tone	The extension dialed is ringing.
2	Busy Tone	The extension dialed is busy.
3	Reorder Tone	An invalid extension number is dialed or the call is inadvertently connected to another Voice Mail port (also heard when no DTMF receiver is available to the Voice Mail extension).
4	DND	The extension dialed has set DND feature (Do Not Disturb).
5	Answer	The extension dialed is answered.

Table 16

Code (default)	Call State	Sent to the Voice Mail Port When...
6	Forwarded to Voice Mail (Ringing)	The extension dialed is forwarded to Voice Mail and another Voice Mail port is able to answer. (This lets the first Voice Mail port, usually an Auto Attendant, send the call to the other Voice Mail port.)
7	Forwarded to Voice Mail (Busy)	The extension dialed is forwarded to Voice Mail and no other Voice Mail ports are available to accept the call. (This signals the Voice Mail port [usually Auto-Attendant] to let the caller to leave a message.)
8	Forwarded to Extn.	The extension dialed is forwarded to another, non-Voice Mail extension.
9	Confirmation Tone	The Message Waiting Lamp On or Message Waiting Lamp Off code is dialed successfully.
#9	Disconnect	The caller disconnects. The central office must set a CPC signal to the PBX line for this signal to work for CO calls.

Digit Translation Table Parameters

These parameters allow PBXs that have a fixed Follow-on ID sequence to be used with the KX-TV575/100/200. For example, a Follow-on ID sequence of [* * * 101] can be changed to [#6101] by using these parameters.

- **Inter-Digit Time-Out:** *This parameter defines the interval of incoming signals (Follow-on ID) from the PBX to the VPS. The Digit Translation Table applies the digits received within this time to translation.*
- **Input-Output (up to 8 alphanumeric characters):** *When the system receives digits within the inter-digit time, it checks them against the input table. If they are found, the system utilizes the output digits in their place.*

The remainder of this section consists of step-by-step guides for software verification and programming of the recommended Panasonic PBX systems.
If you have any problems as you go through this section, please call Panasonic Technical Support at (201) 392-4843.

3.3 CONNECTING THE VPS WITH PANASONIC KX-T SERIES PBXs

3.3.1 KX-TVS75/100/200 Programming for Inband Integration

Set parameters from the System Administration Terminal. The table below lists recommended parameters for Panasonic KX-T series PBXs.

Table 17

PBX Type	Other Manufacturers	T308	T616	T1232/ TA series	T96	T336	TD816/ 1232/308	TD500
Integration Mode	None	None	None	None	None	None	None	None
	Inband			Inband	Inband	Inband	Inband	Inband
Operator Transfer Sequence	FX (A)	FTX (A)	FTX (A)	FTX (A)	FTX (A)	FTX (A)	FTX (A)	FTX (A)
Extension Transfer Sequence	FX (A)	FTX (A)	FTX (A)	FTX (A)	FTX (A)	FTX (A)	FTX (A)	FTX (A)
Alternate Extension Transfer Sequence	FX (A)	FTX (A)	FTX (A)	FTX (A)	FTX (A)	FTX (A)	FTX (A)	FTX (A)
Reconnect Sequence on Busy	FWW	FWW	FWW	FWW	FWW	FWW	FWW	FWW
Reconnect Sequence on No-Answer	FWW	FWW	FWW	FWW	FWW	FWW	FWW	FWW
Reconnect Sequence on ReFuse Call	FWW	FWW	FWW	FWW	FWW	FWW	FWW	FWW
Light-On Sequence for Message Waiting Lamp	*	N/A	N/A	T701X#	T#91X	T*9X	T701X	T701X
Light-Off Sequence for Message Waiting Lamp	*	N/A	N/A	T702X#	T#90X	T#9X	T700X	T700X
Call Waiting Sequence	*	N/A	N/A	1	N/A	N/A	1	1

Table 17

PBX Type	Other Manufacturers	T308	T616	T1232/TA series	T96	T336	TD816/1232/308	TD500
Release Sequence for Call Waiting	*	N/A	N/A	F	N/A	N/A	F	F

N/A Not Available

* Check with manufacturer.

(A) Adding "A" for "answer" to the operator and extension transfer eliminates the message: "You have a call" when the AA transfers a call. The VPS disconnects after the line is answered. Adding "D" for "disconnect" creates a blind transfer.

3.3.2 KX-T123211D Software Verification and Programming

1. Check the software version of the KX-T123211D by using System Program [98], which shows the software version number: Y201Z940430(TM3)

The underlined digits represent the software production date code (format YYMMDD). In this example, the date code is April 30, 1994 (year, month, day). For this software version, the software production date of the VPS must be April 30, 1994, or later.

If the software production date of the PBX is earlier than 4/30/94, call National Parts Center (1-800-833-9626) to order a software upgrade.

2. Enable System Program [80] for each extension connected to the VPS.

This parameter is used to tell the KX-T123211D which extensions are connected to the VPS. Ports with this parameter enabled can receive Follow-on ID and DTMF call status signaling (busy, answered, disconnect, etc.) if the Voice Mail integration and DTMF integration features are also enabled.

3. Enable System Program [81] to turn on DTMF Integration. On extensions with the Voice Mail port parameter enabled, the KX-T123211D can send codes (DTMF tones) to indicate call states; this increases VPS efficiency. Codes apply to all transferred calls; CO line calls only indicate disconnect (provided the KX-T123211D is programmed for CPC detection and the CO sends the CPC signal). Refer to the Table 16 in Section 3.2.4 PBX Interface Parameters.
4. Put all extensions connected to the VPS into 1 extension group using System Program [60].
Reserve this extension group for these extensions! Do not mix other extensions into this group.
5. Enable hunting for the VPS extension group using System Program [08].

6. Set the hunting type for the VPS extension group to circular using System Program [09].
7. At every VPS extension, temporarily connect an SLT or butt set, go off-hook and dial 7301# to turn on Data Line Security.
This prevents the KX-T123211D from sending Executive Override or Call Waiting tones to these extensions. We recommend that all Voice Mail port extensions have this feature enabled to avoid interruption of recording.
8. At every user's extension, go off-hook and dial 7192#. This sets the proper Follow-on ID sequences so that forwarded calls go directly to the extension's mailbox. The KX-T123211D automatically sends the extension's digits to the Voice Mail port before connecting the caller.

For Follow-on ID to work:

- *Ports connected to the TVS75/100/200 must be assigned as Voice Mail ports.*
- *Extensions must be forwarded to the first port of the Voice Mail (using the Busy/No-Answer mode or the All Calls mode).*
- *The mailbox number should be the same as the extension number.*

Interaction with other features:

- **Call Forwarding** — *If the extension is forwarded to an extension that is also forwarded, the forwarding will not work.*
 - **Call Hunting** — *Hunting does not interfere with Follow-on ID.*
 - **Call Transfer** — *Calls transferred to an extension with Follow-on ID and call forwarding enabled will be forwarded directly to the mailbox.*
 - **Data Line Security** — *We recommend that all Voice Mail port extensions have this feature enabled to avoid interruption of recording by Executive Override tone or Call Waiting tone.*
9. Select the appropriate CO Line feature settings depending on how your customer plans to use the VPS: A) to answer all incoming calls, B) as an operator backup, or C) to only answer calls not answered by user extensions.

Recommended CO Line feature settings:

a) If the KX-TVS75/100/200 is answering all incoming calls:

CO Mode — Use System Programs [51] and [52] to set this parameter. Program all lines DIL to the first extension of the Voice Mail hunt group. The KX-T123211D will allow incoming CO calls to hunt only if the CO lines are DIL to the first port of the hunt group. Lines programmed as Normal do not hunt.

b) If the KX-TVS75/100/200 is only answering calls not answered by the operator (Operator Backup):

Flexible Ringing Assignment — For each applicable CO line, use System Programs [47] (Day Mode) and [48] (Night Mode) to enable ringing at the operator's extension (jack). Assign CO lines to ring at VPS ports as suggested below.

Table 18 2 CO Lines, 4 Ports

CO Lines	Ports
1	1, 3
2	2, 4

Delayed Ringing Assignment — To give the operator time to answer the call before the VPS picks up, we recommend setting the delay to 3 or 4 rings for each extension connected to the KX-TVS75/100/200. Use System Programs [49] (Day Mode) and [50] (Night Mode).

CO Mode — Set the mode for each applicable CO to Normal. Use System Programs [51] and [52] to set this parameter.

c) If the KX-TVS75/100/200 is only answering calls not answered by user extensions:

Flexible Ringing Assignment — For each applicable CO line, use System Programs [47] (Day Mode) and [48] (Night Mode) to enable ringing on every extension (jack) that you want to have ring. Refer to chart above (9B) for suggested CO line assignments.

Delayed Ringing Assignment — To give users time to answer the call before the VPS picks up, we recommend setting the delay to 3 or 4 rings for each extension connected to the KX-TVS75/100/200. Use System Programs [49] (Day Mode) and [50] (Night Mode).

CO Mode — Set the mode for each applicable CO to Normal. Use System Programs [51] and [52] to set this parameter.

3.3.3 KX-TA624 Programming for Inband Integration

1. Enable System Program [102] for each extension connected to the VPS.

This parameter is used to tell the KX-TA624 which extensions are connected to the VPS. Ports with this parameter enabled can receive Follow-on ID and DTMF call status Signaling (busy, answered, disconnect, etc.) if the Voice Mail integration and DTMF Integration features are also enabled.

2. Enable System Program [103] to turn on DTMF Integration. On extensions with the Voice Mail port parameter enabled, the KX-TA624 can send codes (DTMF tones) to indicate call states; this increase VPS efficiency. Codes apply to all transferred calls: CO line calls only indicate disconnect (provided the TA624 is programmed for CPC Detection and the CO sends the CPC signal). Refer to the Table 16 in Section 3.2.4 PBX Interface Parameters.

3. Put all extensions connected to the VPS into 1 extension group using System Program [600].

Reserve this extension group for these extensions! Do not mix other extensions into this group.

4. Enable hunting for the VPS extension group(s) using System Program [100].
5. Set the hunting type for the VPS extension groups to circular using System Program [101].
6. At every VPS extension, temporarily connect an SLT or butt set, go off-hook and dial 7301# to turn on Data Line Security. This prevents the KX-TA624 from sending Executive Override or Call Waiting tones to these extensions. We recommend that all Voice Mail port extensions have this feature enabled to avoid interruption of recording.
7. Select the appropriate CO Line feature settings depending on how your customer plans to use the VPS: A) to answer all incoming calls, B) as an operator backup, or C) to only answer calls not answered by user extensions.

Recommended CO Line feature settings:

- a) If the KX-TVS75/100/200 is answering all incoming calls:

CO Mode — Use System Programs [414] (Day Mode), [415] (Night Mode), [416] (Lunch Mode) to set this parameter. Program all lines DIL to the first extension of the Voice Mail hunt group. The KX-TA624 will allow incoming CO calls to hunt only if the CO lines are DIL to the first port of the hunt group. Lines programmed as Normal do not hunt.

- b) If the KX-TVS75/100/200 is only answering calls not answered by the operator (Operator Backup):

Flexible Ringing Assignment — For each applicable CO line, use System Programs [408] (Day Mode), [409] (Night Mode) and [410] (Lunch Mode) to enable ringing at the operator's extension (jack).

Assign CO line to ring at VPS ports as suggested below.

Delayed Ringing Assignment — To give the operator time to answer the call before the VPS picks up, we recommend setting the delay to a few seconds for each extension connected to the KX-TVS75/100/200. Use System Programs [411] (Day Mode), [412] (Night Mode) and [413] (Lunch Mode).

Assign CO lines to ring at VPS ports as suggested above.

CO Mode — Set the mode for each applicable CO to Normal. Use System Programs [414] (Day Mode), [415] (Night Mode) and [416] (Lunch Mode) to set this parameter.

Table 19 2 CO Lines, 4 Port

CO Lines	Ports
1	1,3
2	2,4

c) If the KX-TVS75/100/200 is only answering calls not answered by user extensions:

Flexible Ringing Assignment — For each applicable CO line, use System Programs [408] (Day Mode), [409] (Night Mode) and [410] (Lunch Mode) to enable ringing on every extension (jack) that you want to have ring. Refer to chart above for suggested CO line assignments.

Delayed Ringing Assignment — To give users time to answer the call before the VPS picks up, we recommend setting the delay to a few seconds for each extension connected to the KX-TVS75/100/200. Use System Programs [411] (Day Mode), [412] (Night Mode) and [413] (Lunch Mode).

CO Mode — Set the mode for each applicable CO to Normal. Use System Programs [414] (Day Mode), [415] (Night Mode) and [416] (Lunch Mode) to set this parameter.

3.3.4 Programming the KX-TD816, KX-TD1232 and KX-TD308 for Voice Mail Integration with Inband Signaling

Select the station ports to be connected to the VPS. Only use 2 station ports from each station card because there are only 2 DTMF receivers on each card. For example: connect station 107, 108, 215, and 216. Plug each station into a Voice Mail port.

Go into **System Program [602]** and assign the Voice Mail stations to a different extension group. By default, all stations are in Extension Group 1.

Go into **System Program [106]** and assign the new Extension Group to Auto Attendant (AA).

3.3.5 KX-TD816 and KX-TD1232 for Voice Mail Integration with Inband Signaling via the Operating and Maintenance Tool

1. Go to the *Main Menu*. Choose *System Data Programming*.
(BATCH [1] or INTERACTIVE [2]).

- *Before choosing Batch Programming, you must open a file in the DISK File Management Menu (Item 3).*
- *Before choosing Interactive Programming, you must connect with the system in the DSHS Connect/Disconnect menu.*

Main Menu

1. System Data Programming (BATCH)
2. System Data Programming (INTERACTIVE)
3. Disk File Management
4. DSHS Management
5. DSHS Connect/Disconnect
6. Quit

Select the number : []

2. Choose *Station* from the *System Data Programming Main Menu*.

System Data Programming Main Menu

1. Line
- 2. Station**
3. System
4. Toll Restriction
5. ARS
6. Aux. Ports
7. Additional Function

Select the number : [2]

3. Choose *Station Setting 1* from the *Station Menu*.

Station Menu

- 1. Station Setting 1**
2. Station Setting 2
3. Station Setting 3
4. Station Setting 4
5. Flexible Keys 1
6. Flexible Keys 2
7. DSS

Select the number : [1]

4. Enable XDP ports. Place Voice Mail extensions in Extension Group 8.

Station Setting 1

Jack	Et	Name	X	E	Doorphone								LCS Mode
			D	X	Day				Night				
			P	G	1	2	3	4	1	2	3	4	
01-1	[101 ]	[	]N	[1]	Y	Y	Y	Y	Y	Y	Y	Y	Stop Rec
01-2	[201 ]	[	] -	[ 1]	N	N	N	N	N	N	N	N	
02-1	[102 ]	[	]N	[1]	N	N	N	N	N	N	N	N	Stop Rec
02-2	[202 ]	[	] -	[ 1]	N	N	N	N	N	N	N	N	
03-1	[103 ]	[	]N	[1]	N	N	N	N	N	N	N	N	Stop Rec
03-2	[203 ]	[	] -	[ 1]	N	N	N	N	N	N	N	N	
04-1	[104 ]	[	]N	[1]	N	N	N	N	N	N	N	N	Stop Rec
04-2	[204 ]	[	] -	[ 1]	N	N	N	N	N	N	N	N	
05-1	[105 ]	[	]Y	[1]	N	N	N	N	N	N	N	N	Stop Rec
05-2	[205 ]	[	] -	[ 8]	N	N	N	N	N	N	N	N	
06-1	[106 ]	[	]Y	[1]	N	N	N	N	N	N	N	N	Stop Rec
06-2	[206 ]	[	] -	[ 8]	N	N	N	N	N	N	N	N	
07-1	[107 ]	[	]Y	[1]	N	N	N	N	N	N	N	N	Stop Rec
07-2	[207 ]	[	] -	[ 8]	N	N	N	N	N	N	N	N	
08-1	[108 ]	[	]Y	[1]	N	N	N	N	N	N	N	N	Stop Rec
08-2	[208 ]	[	] -	[ 8]	N	N	N	N	N	N	N	N	

5. Return to the *System Data Programming Main Menu*. Select *System*.
6. Choose *Miscellaneous* from the *System Menu*.

System Menu

01. Day/Night
02. Class of Service
03. Speed Dial
04. Absent Message
05. Flexible Numbering
06. Account Code/Special Carrier
07. Timer
08. Voice Mail
09. Voice Mail Integration
- 10. Miscellaneous**
11. System Time
12. Version

Select the number: **[10]** on the KX-TD816 or KX- TD1232

7. Choose the *Call Hunting extension group*. Set the last extension group to **[A]** for Automated Attendant.

Miscellaneous

Password =>	[1234]								
Operator-1 =>	Jack [01]								
Operator-1 =>	Disable								
Manager =>	Disable								
Local Access => Priority =		1	2	3	4	5	6	7	8
TRG No. =		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
Call Hunting => EXG No. =		1	2	3	4	5	6	7	8
		D	D	D	D	D	D	D	<u>A</u>
SPD TRS Override	=>	Disable							
CO Auto-Hold by Push DSS-Key	=>	Enable							
Adjust Time	=>	[01:00] AM							

- Return to the *System Data Programming Main Menu*. Select *Line*. Program all lines DIL to the first extension of the Voice Mail hunt group.

CO Line Setting

CO No	C O N	T R G	D I A L	D I M F	P S	C I D	CPC		DIL 1:1	
							Detection Mode	Out	EXT No Day	EXT No Night
01	Y	[1]	D	80	10	N	400ms	Disable	<u>EXT[205]</u>	<u>EXT[205]</u>
02	Y	[2]	D	80	10	N	400ms	Disable	<u>EXT[205]</u>	<u>EXT[205]</u>
03	Y	[3]	D	80	10	N	400ms	Disable	<u>EXT[205]</u>	<u>EXT[205]</u>
04	Y	[4]	D	80	10	N	400ms	Disable	<u>EXT[205]</u>	<u>EXT[205]</u>
05	Y	[5]	D	80	10	N	400ms	Disable	<u>EXT[205]</u>	<u>EXT[205]</u>
06	Y	[6]	D	80	10	N	400ms	Disable	<u>EXT[205]</u>	<u>EXT[205]</u>
07	Y	[7]	D	80	10	N	400ms	Disable	<u>EXT[205]</u>	<u>EXT[205]</u>
08	Y	[8]	D	80	10	N	400ms	Disable	<u>EXT[205]</u>	<u>EXT[205]</u>
09	Y	[8]	D	80	10	N	400ms	Disable	<u>EXT[205]</u>	<u>EXT[205]</u>
10	Y	[8]	D	80	10	N	400ms	Disable	<u>EXT[205]</u>	<u>EXT[205]</u>
11	Y	[8]	D	80	10	N	400ms	Disable	<u>EXT[205]</u>	<u>EXT[205]</u>
12	Y	[8]	D	80	10	N	400ms	Disable	<u>EXT[205]</u>	<u>EXT[205]</u>

3.3.6 KX-TD308 for Voice Mail Integration with Inband Signaling via the Operating and Maintenance Tool

- Go to the *Main Menu*. Choose *System Data Programming*. (BATCH [1] or INTERACTIVE [2]).
 - Before choosing *Batch Programming*, you must open a file in the *DISK File Management Menu* (Item 3).
 - Before choosing *Interactive Programming*, you must connect with the system in the *DSHS Connect/Disconnect menu*.

Main Menu

1. System Data Programming (BATCH)
 2. System Data Programming (INTERACTIVE)
 3. Disk File Management
 4. DSHS Management
 5. DSHS Connect/Disconnect
 6. Quit
- Select menu Number : []

2. Choose *Station (ALT-S)* from the *System Data Programming Main Menu*.

System Data Programming Main Menu

- AuxPorts (ALT-U)
- Manager (ALT-M)
- System (ALT-Y)
- CO-Line (ALT-L)
- Station (ALT-S)
- TRS(ALT-T)
- TRS (ALT-A)

3. Choose *Settings (1)* in the *Sub Menu*.

Sub Menu

<u>Settings (1)</u>	1
Settings (2)	2
CO Line (O)utgoing	O
(D)il Line : N	D
Flex (C)o Keys : 1-24	C
Flex (P)F Buttons : 1-12	P

4. Choose which single line extensions will be attached to Voice Mail.
If using XDP ports, enable XDP for the connect jacks.
Please Voice Mail extensions in Extension Group 8.

Station Setting 1

jack	Ext.	Name	XDP	EXG	DoorPhone		LCS Mode
					Day	Night	
1-1	[11]	[]	[N]	[1]	[Y]	[Y]	[STOP REC]
1-2	[21]	[]		[1]	[N]	[N]	
2-1	[12]	[]	[N]	[1]	[N]	[N]	[STOP REC]
2-2	[22]	[]		[1]	[N]	[N]	
3-1	[13]	[]	[N]	[1]	[N]	[N]	[STOP REC]
3-2	[23]	[]		[1]	[N]	[N]	
4-1	[14]	[]	[N]	[1]	[N]	[N]	[STOP REC]
4-2	[24]	[]		[1]	[N]	[N]	
5-1	[15]	[]	<u>[Y]</u>	[1]	[N]	[N]	[STOP REC]
5-2	[25]	[]		[8]	[N]	[N]	
6-1	[16]	[]	[N]	[1]	[N]	[N]	[STOP REC]
6-2	[26]	[]		[1]	[N]	[N]	
7-1	[17]	[]	[N]	[1]	[N]	[N]	[STOP REC]
7-2	[27]	[]		[1]	[N]	[N]	
8-1	[18]	[]	[N]	[1]	[N]	[N]	[STOP REC]
8-2	[28]	[]		[1]	[N]	[N]	

5. Select *SAVE(F7)*. Return to the *System Data Programming Main Menu*. Select *System*.

6. Choose *System (ALT-Y)* from the *System Data Programming Main Menu*.

System data Programming Main Menu

AuxPorts (ALT-U)

Manager (ALT-M)

System (ALT-Y)

CO-Line (ALT-L)

Station (ALT-S)

TRS(ALT-T)

TRS (ALT-A)

7. Choose *Miscellaneous* from the *System Menu*.

System Menu

(A)ccount Codes	A
Caller (I)D	I
Class of Se(R)vice	R
(D)ay/Night	D
(E)mergency/Quick Dial	E
(F)loating Extensions	F
Fle(X)ible Numbers	X
(M)iscellaneous	M
P(H)antom Extensions	H
Seria(L) Interface	L
S(P)ecial Carrier	P
(T)imers	T
Add. F(U)unctions - SYSTEM	U
Add. Functions - (C)OS	C
(V)M Status/Command DTMF Set	V
Voice Mail Inte(G)ration	G

8. Choose the *Call Hunting extension group*. Set the last extension group to [AA] for Automated Attendant.

Miscellaneous

Automatic Access => Priority	=>	1	2	3					
CO No.	=>	[1]	[2]	[3]					
Call Hunting => EXG No.	=>	1	2	3	4	5	6	7	8
		[DIS]	[DIS]	[DIS]	[DIS]	[DIS]	[DIS]	[DIS]	[AA]
Automatic Hold By CO Button	=>	[Disable]							
Automatic Hold By DSS Button	=>	[Enable]							
SPD TRS Override	=>	[Disable]							
FAX Transfer Extension	=>	[]					
Caller ID Extension	=>	[]					
Caller ID Modification									
Area Code	=>	[]					
Local Call Del, Add	=>	[3]	[]			
Long Distance Call Del, Add	=>	[0	]	[1]			

9. Select *SAVE(F7)*. Return to the *System Data Programming Menu*.

10. Choose *CO-Line (ALT-L)* from the *System Data Programming Main Menu*.

System Data Programming Main Menu

AuxPorts (ALT-U)
 Manager (ALT-M)
 System (ALT-Y)
CO-Line (ALT-L)
 Station (ALT-S)
 TRS(ALT-T)
 TRS (ALT-A)

- 11.** Choose *Setting (2)* in the *Sub Menu*, and program all lines DIL to the first extension of the Voice Mail hunt group.

Sub Menu

Settings (1) 1
Settings (2) 2
 (I)ntercept/Timers/PBX Access Code I

CO Line Setting

CO	CPC Signal Detection Incoming	CPC Signal Detection Outgoing	DIL 1:1 EXT NO.	
			DAY	NIGHT
1	[400 ms]	[Disable]	[25]	[25]
2	[400 ms]	[Disable]	[25]	[25]
3	[400 ms]	[Disable]	[25]	[25]

Section 4

***INTEGRATING THE VPS WITH THE
PANASONIC KX-TD DIGITAL PBX***

4.1 GUIDELINES FOR DIGITAL INTEGRATION

4.1.1 Why Digital Integration is Important

The KX-TVS75/100/200 works well with most PBXs because its connections are made through a standard single line (tip/ring) telephone interface. However, the communication between the PBX and VPS is best when Digital Integration is used; the KX-TVS75/100/200 is already set up to communicate through Digital Integration.

Once Digital Integration is established, the PBX sends information to the VPS through the data link. This information enables the VPS to identify the extension that is calling, know where a call is forwarded and why it's forwarded, and recognizes what the caller wants to do. This communication allows features that are only available with Digital Integration, several of which are described below.

Table 20

DIGITAL INTEGRATION FEATURES	
Auto Configuration	The VPS knows what extension numbers exist on the PBX and creates mailboxes for each extension automatically. Also sets the VPS clock with data from the PBX clock.
Live Call Screening	Extension users can monitor messages as they are being left in the mailbox and intercept if required.
Two-Way Recording	Extension users can record conversations in their own mailboxes by pressing one button.
Two-Way Transfer	Extension users can record conversations in another mailbox by pressing a button and dialing an extension.
Direct Mailbox Access	The subscriber is entered directly into his mailbox when he calls the VPS. He does not have to dial his mailbox number.
Intercom Paging	Callers can page subscribers through built-in speakers and external paging equipment.

The KX-TVS75/100/200 System comes from the factory already set up for a KX- TD1232 PBX. When the power is turned on for the first time, the VPS will try to communicate with the KX-TD1232 through Digital Integration. For this reason, several things should be done before operating for the first time.

4.2 CONNECTING THE KX-TVS75/100/200 WITH THE PANASONIC KX-TD816, KX-TD1232 AND KX-TD308

Note

Do not use system programs [106] or [602] for DPT. The following 2 Sections (4.2.1 KX-TD1232 Software Verification and Programming for Digital Integration via the Manager's Extension and 4.2.2 KX-TD1232 Software Verification and Programming via the Operating and Maintenance tool) are for the KX-TD1232 as examples. Please refer to them for the KX-TD816.

And the following Section (4.2.3 KX-TD308 Programming for Digital Integration via the Manager's Extension) is for the KX-TD308.

4.2.1 KX-TD1232 Software Verification and Programming for Digital Integration via the Manager's Extension

It is important that the KX-TD1232 have the proper software level to allow Digital Integration with the VPS. Follow the procedures below to confirm the software level, then complete the required programming before starting up the VPS.

Note

Two methods of programming are available on the KX-TD1232. The instructions below show how to program without the operating and maintenance tool. For instructions on programming with the operating and maintenance tool, please see KX-TD1232 Software Verification and Programming via the Operating and Maintenance Tool.

All of the following procedures must be done after entering system programming. Refer to the KX-TD1232 Installation Manual for instructions on how to enter the system programming mode.

Software Verification

1. Verify Software - If you are configuring a 2-cabinet system, remember to check both cabinets. The software must be the same in each. Check the software version of the KX-TD1232 by using System Program [116]. Example: **P101A50508B**

The underlined digits represent the software production date code (for mat YMMDD). In this example, the date code is May 8, 1995 (year, month, day). For Digital Integration, the software production date of the PBX must be May 8, 1995 or later.

(For KX-TD816, the version must be version P401A dated 09-05-96 or higher for Digital Integration to be utilized. For KX-TD308, any version can be used for Digital Integration.)

If the software version of the PBX is lower than this, call National Parts Center (1-800-833-9626) to order a software upgrade.

From the **SYS-PGM NO ?** screen:

- a) Enter **[116]**
- b) Press the **NEXT** button (SP-PHONE).
- c) Enter the system number (**[0]** or **[1]**, master/slave). The system displays the ROM version and date it was created.

This version must be P101A or higher for Digital Integration to be utilized (both systems if system connection is used).

2. Set the date and time using System Program [000].

Date and time are automatically synchronized between the VPS and the Panasonic KX-TD series telephone systems during initial setup.

3. Assign the **Voice Mail Port**. This program tells the PBX which jacks will be connected to the Voice Mail system. This allows the PBX to send the proper Digital Integration information to those ports.
 - *KX-TVS75 (2 ports): assign 1 jack*
 - *KX-TVS100 (4 ports): assign 2 jacks*
 - *KX-TVS200 (12 ports): assign 6 jacks*

Note

If you are configuring a 2-cabinet system, all Voice Mail Ports should be assigned to either the Master or Slave System.

From the **SYS-PGM NO ?** screen:

- a) Enter **[117]**.
- b) Press the **NEXT** button (SP-PHONE).
Screen output: M: # # # #
- c) Enter the jack number of the first port you will use for the Voice Mail (02 - 64).
- d) Press **[TAB]** or **[➡]** to enter the next jack number.
- e) Enter the second jack to be used for Voice Mail.
- f) Repeat 4 and 5 until all jacks are entered.
- g) Press **STORE**.
- h) Press the **NEXT** button to program the slave system (if connected).
- i) Press **END** (HOLD) when finished.

Conditions: *Jack 01 cannot be used as a Voice Mail port. A jack programmed as a Manager Extension (prg. [006]) cannot be used in this program. The jack numbers correspond to Voice Mail port numbers in numerical order. The lowest jack entered here must be connected to the first port of the VPS.*

Example: Jack 02 = Voice Mail numbers 01, 02; Jack 03 = 03, 04 (Each jack entered gives 2 Voice Mail ports.)

4. Skip this step unless setting flexible numbering.

System Program [118] (Voice Mail Extension Number Assignment) is automatically set. This program allows you to assign an extension number to each Voice Mail port. Since each jack connected to the VPS provides 2 extensions, this enables you to assign extension numbers to each port. You can assign any extension number that is not already assigned to another port. To reach the Voice Mail system, users dial these extension numbers. It is not necessary to change the default programming for the extensions 165 through 180.

From the *SYS-PGM NO ?* screen:

- a) Enter [118].
- b) Press the NEXT button (SP-PHONE).
Screen output: VM NO? →
- c) Press the NEXT button (SP-PHONE).
Screen output: VM-01:#_ _ -1: 165
(_ _ = the first port number you entered in program 117)
- d) Enter the extension number that you want this port to have.
(The default extension number for port 1: 165; port 2: 166 ...)
- e) Press STORE.
- f) Repeat c, d, and e until all extension numbers are entered.

Conditions: *No 2 jacks on the system can have the same extension number. If you try to enter a number that is already assigned, you will hear an error tone. Each digital extension connected provides 2 Voice Mail ports and must have 2 different extension numbers assigned.*

5. Unplug or power down the KX-TD1232.
6. Connect the jack(s) assigned in step 3 to the KX-TVS75/100/200. If your VPS is a 2-port system, only one jack will be assigned. If your VPS is a 4-port system, assign 2 jacks from the same cabinet.
7. Connect your laptop computer to the KX-TVS75/100/200 and start your communication software (i.e. HyperTerminal, Procomm Plus, Smartcom, ...).
Communication Parameters: 9600, 8 Bit, None, 1, VT100
8. Turn the rotary switch on the KX-TVS75/100/200 to position 5.
Only perform this step when initially setting up the system.

CAUTION

Turning the rotary switch to position 5 will default the Voice Processing System, resulting in a loss of all user programming and voice messages.

9. Plug in and power up the KX-TVS75/100/200 and wait approximately 90 s while the system initializes.

"System Administration" Start-Up Sequence

Before starting the VPS, make sure all installation and line connections have been done as described in Section 2.

Plug in and **turn** the power switch to **ON** on the KX-TD1232. The calls to the VPS can be processed after the Power Indicator stops flashing.

After turning the power on, the system starts up in the following sequence:

- *The Power Indicator light goes on.*
- *The Power Indicator light begins to flash.*
- *"CARD TEST" is displayed on the screen.*
- *"SYSTEM SETUP" is displayed.*

Screen output:

```
CARD TEST...
SYSTEM SETUP
1... 2... 3...
```

- *The VPS tests the CPU card, the hard disk drive, and the CO cards as "SYSTEM SETUP.." is displayed.*
- *Active ports are displayed on the screen.*

Screen output:

```
Active COs: 1 2 3 4
D-PITS Interface Connection is Established
** ON LINE MODE **
```

The display will alert you if System Setup is not completed successfully.

Screen output:

```
Active COs: 1 2 3 4
D-PITS Interface Connection is not Established
** OFF LINE MODE **
```


This message is shown when the digital (DPT) connection between the VPS and telephone system cannot be established.

Possible causes of the message: "D-PITS Interface Connection is not Established"

Table 21

Cause	Remedy
The PBX is not a KX-TD series system. Since the default PBX type for the KX- TVS75/100/200 is set to KX-TD1232 at the factory, this message will always appear when connecting to another type of PBX.	Change the PBX type by using Quick Setup (see Section 5 CUSTOMIZING THE SYSTEM).
The cabling between the PBX extension ports and the VPS is not 4-wire or is improperly connected.	Confirm the cabling is connected as described in Section 2 INSTALLATION.
The PBX is a KX-TD series but does not have the proper level of software required to support DPT Integration.	Contact National Parts Center at 1-800-833-9626 or use Inband Integration under hardware settings.
The PBX is not programmed properly to support DPT Integration.	Do required integration programming as described in this chapter.

10. Start up completed.

- a) The Power Indicator light stops blinking when the start-up has been successful. (The delay varies according to the system's condition.)
- b) *****ON LINE MODE***** is displayed.
- c) System prompt [**>**] is displayed on the screen. To enter system administration, **Press ENTER.**

When the System Administrator starts operation, the system asks for the terminal type. By choosing VT100 [2], all parameters can be set through the menu-driven program.

Please Select Your Terminal Type.
1. ASCII TERMINAL
2. VT100
Please Enter the Number := _____

Please Enter the Number:= [2]

Select [2] because Quick Setup is only available when using a VT100 terminal.

11. Go to the *System Administration Top Menu*. Select [5] for Quick Setup and follow the Automatic Configuration Instructions.

TEST: Go to intercom Press tone and Press [165]. If the VPS answers, you have a DPT connection.

Turn the rotary switch to position 0 after initialization is complete.

The required programming is complete and the VPS and KX-TD1232 should be able to communicate through Digital Integration.

We recommend that the KX-TD1232 system have any optional extension cards and telephones connected before starting the VPS. When running the Quick Setup command (Section 5 CUSTOMIZING THE SYSTEM) from the VPS, the PBX transmits the station information automatically. This saves time when programming the VPS.

4.2.2 KX-TD1232 Software Verification and Programming via the Operating and Maintenance tool

Follow these steps after communication between the KX-TD1232 and the programming software has been established. Refer to the Operating and Maintenance manual for connection information.

1. Check the software version.
 - a) Go to the *Main Menu*. Press the ALT key and the letter [V] at the same time.
 - b) Verify the Operating and Maintenance version being used.

*Sample display: DB data (PC): Empty
 Version:3.00MUK*

This version must be 3.00 or higher to program the KX-TD1232 for Digital Integration.

Note

If you have an older version of the maintenance tool but have the correct ROM version in the system, you may still program the KX- TD1232 but you must program using the Manager's Extension.

- c) Verify the ROM version of the KX-TD1232.

Example: **P101A 50508B**

This version must be at least version P101A dated 05-08-95 or higher for Digital Integration to be utilized (both systems if system connection is being used). As of October '96, the version is PQKXTD1232EA-1.

In the example above, the underlined digits represent the software production date code (format YMMDD). In this example, the date code is May 8, 1995 (year, month, day). For Digital Integration, the software production date of the PBX must be May 8, 1995, or later.

(For KX-TD816, the version must be at least version P401A dated 09-05-96 or higher for Digital Integration to be utilized. For KX-TD308, any version can be used for Digital Integration.)

If the software version of the PBX is lower than this, call National Parts Center (1-800-833-9626) to order a software upgrade.

2. Go to the *Main Menu*. Choose *System Data Programming*. (BATCH [1] or INTERACTIVE [2]).

Main Menu

1. System Data Programming (BATCH)
 2. System Data Programming (INTERACTIVE)
 3. Disk File Management
 4. DSHS Management
 5. DSHS Connect/Disconnect
 6. Quit
- Select the number : []

3. Choose *System* from the *System Data Programming Main Menu*.

System Data Programming Main Menu

1. Line
 2. Station
 - 3. System**
 4. Toll Restriction
 5. ARS
 6. Aux. Ports
 7. Additional Function
 8. Caller ID
- Select the number : [3]

4. Choose Voice Mail Integration from the System Menu.

System Menu

- 01. Day/Night
 - 02. Class of Service
 - 03. Speed Dial
 - 04. Absent Message
 - 05. Flexible Numbering
 - 06. Account Code/Special Carrier
 - 07. Timer
 - 08. Voice Mail
 - 09. Voice Mail Integration**
 - 10. Miscellaneous
 - 11. System Time
 - 12. Version
- Select the number : [**09**]

5. First, enter the port numbers that will be connected to the VPS. If desired, change the default extension numbers of the Voice Mail ports.

Voice Mail Integration

VM Port No.	Master [] [] [] [] [] [] [] []				Slave [] [] [] [] [] [] [] []				
	VM	Jack	EXT	EXG		VM	Jack	EXT	EXG
Master	01	-1	[165]	[1]	Slave	13	-1	[171]	[1]
	02	-2	[166]	[1]		14	-2	[172]	[1]
	03	-1	[167]	[1]		15	-1	[173]	[1]
	04	-2	[168]	[1]		16	-2	[174]	[1]
	05	-1	[169]	[1]		17	-1	[175]	[1]
	06	-2	[170]	[1]		18	-2	[176]	[1]
	07	-1	[177]	[1]		19	-1	[179]	[1]
	08	-2	[178]	[1]		20	-2	[180]	[1]
	09	-1	[181]	[1]		21	-1	[185]	[1]
	10	-2	[182]	[1]		22	-2	[186]	[1]
	11	-1	[183]	[1]		23	-1	[187]	[1]
	12	-2	[184]	[1]		24	-2	[188]	[1]

6. Step 6 should only be done if the VPS is going to answer all incoming Central Office lines directly.

Return to the *System Data Programming Main Menu*. Select *Line*. Program all lines DIL to the first extension of the Voice Mail hunt group.

7. Follow the Steps 5-11 in 4.2.1 KX-TD1232 Software Verification and Programming for Digital Integration via the Manager's Extension .

CO Line Setting

CO No	C	T	D	D	P	C	CPC Detection Mode	Out	DIL 1:1 EXT No	Day	Night	R
01	Y	[1]	P	80	10	N	Disable	Disable	<u>EXT[165]</u>	<u>EXT[165]</u>		Reg.
02	Y	[2]	P	80	10	N	Disable	Disable	<u>EXT[165]</u>	<u>EXT[165]</u>		Reg.
03	Y	[3]	P	80	10	N	Disable	Disable	<u>EXT[165]</u>	<u>EXT[165]</u>		Reg.
04	Y	[4]	P	80	10	N	Disable	Disable	<u>EXT[165]</u>	<u>EXT[165]</u>		Reg.
05	Y	[5]	P	80	10	N	Disable	Disable	<u>EXT[165]</u>	<u>EXT[165]</u>		Reg.
06	Y	[6]	P	80	10	N	Disable	Disable	<u>EXT[165]</u>	<u>EXT[165]</u>		Reg.
07	Y	[7]	P	80	10	N	Disable	Disable	<u>EXT[165]</u>	<u>EXT[165]</u>		Reg.
08	Y	[8]	P	80	10	N	Disable	Disable	<u>EXT[165]</u>	<u>EXT[165]</u>		Reg.
09	Y	[8]	P	80	10	N	Disable	Disable	<u>EXT[165]</u>	<u>EXT[165]</u>		Reg.
10	Y	[8]	P	80	10	N	Disable	Disable	<u>EXT[165]</u>	<u>EXT[165]</u>		Reg.
11	Y	[8]	P	80	10	N	Disable	Disable	<u>EXT[165]</u>	<u>EXT[165]</u>		Reg.
12	Y	[8]	P	80	10	N	Disable	Disable	<u>EXT[165]</u>	<u>EXT[165]</u>		Reg.

The required programming is now complete and the VPS and KX-TD1232 should be able to communicate through Digital Integration.

We recommend that the KX-TD1232 system have any optional extension cards and telephones connected before starting the VPS.

When running the Quick Setup command (Section 5) from the VPS, the PBX transmits the station information automatically. This saves time when programming the VPS.

4.2.3 KX-TD308 Programming for Digital Integration via the Manager's Extension

It is important that the KX-TD308 has the proper software level to allow Digital Integration with the VPS. Follow the procedures below to confirm the software level, then complete the required programming before starting up the VPS.

All of the following procedures must be done after entering system programming. Refer to the KX-TD308 Installation Manual for instructions on how to enter the system programming mode.

1. Set the date and time using System Program [000].
Date and time are automatically synchronized between the VPS and the Panasonic KX-TD series telephone systems during initial setup.
2. Assign the **Voice Mail Port**. This program tells the PBX which jack will be connected to the Voice Mail system. This allows the PBX to send the proper Digital Integration information to those ports.
 - *KX-TVS75 (2 ports): assign 1 jack*
 - *KX-TVS100 (4 ports): assign 2 jacks*
 - *KX-TVS200 (12 ports): assign 6 jacks*

From the SYS-PGM NO ? screen:

- a) Enter [117].
- b) Press the **NEXT** button (SP-PHONE).
Screen output: M: ##
- c) Enter the jack number of the port you will use for the Voice Mail (2 - 8).
- d) Press **STORE**.
- e) Press **END** (HOLD) when finished.

Conditions: *Jack 01 cannot be used as a Voice Mail port. A jack programmed as a Manager Extension (prg. [006]) cannot be used in this program. The jack numbers correspond to Voice Mail port numbers in numerical order. The lowest jack entered here must be connected to the first port of the VPS.*

Example: Jack 02 = Voice Mail numbers 01, 02; Jack 03 = 03, 04 (Each jack entered gives 2 Voice Mail ports.)

3. Skip this step unless setting flexible numbering.

System Program [118] (Voice Mail Extension Number Assignment) is automatically set. This program allows you to assign an extension number to each Voice Mail port. Since the jack connected to the VPS provides 2 extensions, this enables you to assign extension numbers to each port. You can assign any extension number that is not already assigned to another port. To reach the Voice Mail system, users dial these extension numbers. It is not necessary to change the default programming for the extensions 295 and 296.

From the SYS-PGM NO ? screen:

- a) Enter [118].
- b) Press the **NEXT** button (SP-PHONE).
Screen output: VM NO? →

- c) Press the **NEXT** button (SP-PHONE).
Screen output: VM-1:#_ _ -1: 295
(_ _ = the port number you entered in program 117)
- d) Enter the extension number that you want this port to have.
 (The default extension number for port 1: 295; port 2: 296)
- e) Press **STORE**.
- f) Repeat c, d, and e until all extension numbers are entered.

Conditions: *No 2 jacks on the system can have the same extension number. If you try to enter a number that is already assigned, you will hear an error tone. Each digital extension connected provides 2 Voice Mail ports and must have 2 different extension numbers assigned.*

4. Unplug or power down the KX-TD308.
5. Connect the jack(s) assigned in step 2 to the KX-TVS75/100/200. If your VPS is a 2-port system, only 1 jack will be assigned. If your VPS is a 4-port system, assign 2 jacks from the same cabinet.
6. Connect your laptop computer to the KX-TVS75/100/200 and start your communication software (i.e. HyperTerminal, Procomm Plus, Smartcom...).
Communication Parameters: 9600, 8 Bit, None, 1, VT100
7. Turn the rotary switch on the KX-TVS75/100/200 to position 5.

Only perform this step when initially setting up the system.

CAUTION

Turn the rotary switch to position 5 will default the Voice Processing System, resulting in a loss of all user programming and voice messages.

8. Plug in and power up the KX-TVS75/100/200 and wait approximately 90 s while the system initializes.

"System Administration" Start-Up Sequence

Before starting the VPS, make sure all installation and line connections have been done as described in Section 2.

Plug in and **turn** the power switch to **ON** on the KX-TD308. The calls to the VPS can be processed after the Power Indicator stops flashing.

After turning the power on, the system starts up in the following sequence:

- *The Power Indicator light goes on.*

- The Power Indicator light begins to flash.
- "CARD TEST" is displayed on the screen.
- "SYSTEM SETUP" is displayed.

Screen output:

CARD TEST...
SYSTEM SETUP
1... 2... 3...

- The VPS tests the CPU card, the hard disk drive, and the CO cards as "SYSTEM SETUP..." is displayed.
- Active ports are displayed on the screen.

Screen output:

Active COs: 1 2 3 4
D-PITS Interface Connection is Established
**** ON LINE MODE ****

The display will alert you if System Setup is not completed successfully.

Screen output:

Active COs: 1 2 3 4
D-PITS Interface Connection is not Established
**** OFF LINE MODE ****

This message is shown when the digital (DPT) connection between the VPS and telephone system cannot be established.

Possible causes of the message: "D-PITS Interface Connection is not Established"

Table 22

Cause	Remedy
The PBX is not a KX-TD series system. Since the default PBX type for the KX-TVS75/100/200 is set to KX-TD1232 at the factory, this message will always appear when connecting to another type of PBX.	Change the PBX type by using Quick Setup (see Section 5 CUSTOMIZING THE SYSTEM).
The cabling between the PBX extension ports and the VPS is not 4-wire or is improperly connected.	Confirm the cabling is connected as described in Section 2 INSTALLATION.
The PBX is a KX-TD series but does not have the proper level of software required to support DPT Integration.	Contact National Parts Center at 1-800-833-9626 or use Inband Integration under hardware settings.

Table 22

Cause	Remedy
The PBX is not programmed properly to support DPT Integration.	Do required integration programming as described in this chapter.

9. Start up completed.

- a) The Power Indicator light stops blinking when the start-up has been successful. (The delay varies according to the system's condition.)
- b) ****ON LINE MODE**** is displayed.
- c) System prompt [**>**] is displayed on the screen. To enter system administration, **Press ENTER**.

When the System Administrator starts operation, the system asks for the terminal type. By choosing VT100 [2], all parameters can be set through the menu-driven program.

Please Select Your Terminal Type.
1. ASCII TERMINAL
2. VT100
Please Enter the Number :=

Please Enter the Number := [2]

Select [2] because Quick Setup is only available when using a VT100 terminal.

10. Go to the *System Administration Top Menu*. Select [5] for Quick Setup and follow the Automatic Configuration Instructions.

TEST: Go to intercom Press tone and Press [295]. If the VPS answers, you have a DPT connection.

Turn the rotary switch to position 0 after initialization is complete.

The required programming is complete and the VPS and KX-TD308 should be able to communicate through Digital Integration.
 We recommend that the KX-TD308 system have any optional extension cards and telephones connected before starting the VPS. When running the Quick Setup command (Section 5 CUSTOMIZING THE SYSTEM) from the VPS, the PBX transmits the station information automatically. This saves time when programming the VPS.

4.3 COMMON DIGITAL INTEGRATION FEATURES AND SETUP PROCEDURES

The following features can be used on any KX-T proprietary telephone. (7000 series analog; 7200/7400 series digital)

4.3.1 Live Call Screening (LCS) Programming

LCS notifies subscribers of incoming messages to their mailboxes. The notification method is programmable for hands-free or private. Hands-free allows the user to monitor a recording through the speakerphone and, if desired, intercept the call by lifting the handset. The private mode notifies the user with an alert tone when a message is being recorded. By pressing the LCS button, the user can monitor the message and intercept the call by going off-hook. System Programming also determines whether the mailbox continues to record after the user intercepts the call.

4.3.2 Live Call Screening Recording Mode Assignment

This program allows the VPS to continue recording the conversation in the mailbox after the extension intercepts the call during the Live Call Screening.

1. Enter [610] from system program.
2. Press the **NEXT** button (SP-PHONE).
Screen output: Jack No.? →
3. Enter the jack number.
Screen output: # _ _ Stop Rec
(_ _ = the jack number you entered)
4. Press the **SELECT** button (AUTO-ANSWER) until the desired selection is displayed.
5. Press **STORE**.
6. Press the **NEXT** button (SP-PHONE).
7. Repeat 4, 5, and 6 until all jacks are programmed.

4.3.3 Live Call Screening Private/Hands-Free Mode Assignment

This program assigns a VPS response for when a message is being left in a mailbox. It determines whether an alert tone is sent and whether the recorded message is played through the built-in speaker of the extension. The default mode is hands-free. (This is a station level program and should be done at each individual phone.)

1. Enter Station Programming:
 - a. With the phone on-hook, **Press** the **PROGRAM** button.
 - b. Dial [**99**]. (Display changes to PITS-PGM Mode.)
2. **Press** the code for the mode you want this phone to have.
 Hands-Free = **71**
 Private = **72**
Screen output: Hands-Free or Private
3. **Press STORE.**
4. Exit the program mode by **Pressing** the **PROGRAM** button.
5. Repeat these steps at each telephone.

Conditions: None

A single-line telephone that is connected to the same extension as a proprietary telephone can also be used to monitor an incoming message. Be sure that Live Call Screening on the connected proprietary telephone has been activated. This feature is useful when you are using a cordless telephone. The handset sounds an alert tone to let you know that a message is being recorded. To intercept the call, flash the hook.

4.3.4 Live Call Screening Button Assignment

For the Live Call Screening feature to work at an extension, the extension must have an LCS button on it and the button must be lit at the time of the message. This key must be either a DSS/BLF or CO key (must have a lamp). Follow the procedure below to assign an LCS button on an extension. (This is a station level program and should be done at each individual phone.)

1. Enter Station Programming:
 - a. With the phone on-hook, **Press** the **PROGRAM** button.
 - b. Dial [**99**]. (Display changes to PITS-PGM Mode.)
2. **Press** the desired **FLEXIBLE (CO or DSS/BLF)** button you want to assign as the LCS button.
3. **Press [92].**
Screen output: LCS
4. **Press STORE.**
5. Repeat these steps at each telephone.
6. To exit the Station Programming mode, **Press** the **PROGRAM** button or lift the handset.
7. Repeat these steps for each telephone.

*Conditions: This button must be assigned and lit for LCS to operate.
 To light this, press the button and Press the LCS password (see Password Assignment).*

4.3.5 Live Call Screening Cancel Button Assignment

This button assignment allows you to assign a Flexible (CO, DSS) button as a Live Call Screening Cancel button. (Before setting, be sure that you are in the Station Programming mode; **Press [PROGRAM 99]**).

1. **Press the Flexible (CO, DSS) button** that you wish to assign as a Live Call Screening Cancel button.
2. **Press [93]**.
Screen output: LCS Cancel
3. **Press STORE**. The STORE indicator light turns on.
The display shows the initial programming mode.
4. To exit the Station Programming mode, **Press the PROGRAM button** or lift the handset.

The Live Call Screening Cancel Button Assignment is optional; Live Call Screening can also be canceled by **Pressing the FLASH button**.

4.3.6 Live Call Screening Password Assignment

To allow the Live Call Screening feature to work at an extension, the extension must have the LCS button lit. To light this button on the phone, press the LCS button, then enter the password. This password prevents others from activating the LCS feature and listening to the messages as they are being left. (It is not necessary to enter Station Programming to activate this feature.)

1. **Lift the handset or Press the SP-PHONE button**.
2. **Press the feature number [799]**.
3. **Press any password of 3 digits ([000] - [999]) twice**.
You will hear a confirmation tone, then a dial tone.
Screen output: The three-digit password you entered is displayed.

4.3.7 Live Call Screening Password Cancellation

To cancel the password, follow the procedure below. (It is not necessary to enter Station Programming to activate this feature).

1. **Lift the handset or Press the SP-PHONE button**.
2. **Press the feature number [799]**.
3. **Enter the password of 3 digits ([000] - [999])**. You will hear confirmation tone, then a dial tone.
Screen output: Password Cancel

4.3.8 Live Call Screening Password Control

This feature allows the Operator 1, 2 and the Manager to cancel the password for LCS at any extension. If a user forgets the pre-programmed password, the Operator 1, 2 and the Manager can cancel the LCS password.

1. Enter Station Programming:
 - a. With the phone on-hook, **Press** the **PROGRAM** button.
 - b. **Press** [99]. (Display changes to PITS-PGM Mode.)
2. **Press** [03].
Screen output: Ext No?
3. **Press** the extension number or [*] key to remove all passwords.
4. **Press** STORE.
5. To exit the Station Programming mode, **Press** the **PROGRAM** button or lift the handset.

4.3.9 Two-Way Recording into Mailbox

This feature allows extension users to record conversations into their mailboxes by pressing the Two-Way Recording (TWR) button.

4.3.10 Two-Way Recording Button Assignment

For the Two-Way Recording feature to work at an extension, the extension must have a TWR button on it. This key must be either a DSS/BLF or CO key (must have a lamp). Follow the procedure below to assign a TWR button on an extension. (This is a station level program and should be done at each individual phone.)

1. Enter Station programming:
 - a. With the phone on-hook, **Press** the **PROGRAM** button.
 - b. **Press** [99]. (Display changes to PITS-PGM Mode.)
2. **Press** the **FLEXIBLE** button (**CO** or **DSS/BLF**) that you want to assign as the TWR button.
3. **Press** [90].
Screen output: 2 Way-Rec.:
4. Enter a Voice Mail extension number.
Screen output: 2 Way-Rec: _ _ _
(_ _ _ = The extension number you entered).
5. **Press** STORE.
6. To exit the Station Programming mode, **Press** the **PROGRAM** button or lift the handset.
7. Repeat these steps for each telephone.

Conditions: *This button must be a CO or DSS/BLF button to be programmed as a TWR button. When all Voice Mail ports are busy and this key is pressed, the user will hear reorder tone.*

4.3.11 Two-Way Transfer into Mailbox

This feature allows an extension user to record a conversation into another user's mailbox by pressing the Two-Way Transfer (TWT) button followed by the mailbox number. This is commonly used by a person who is taking a detailed message for someone else and wants the message recorded in the mailbox at the same time.

4.3.12 Two-Way Transfer Button Assignment

For the Two-Way Transfer feature to work at an extension, the extension must have a TWT button on it. This key must be either a DSS/BLF or CO key (must have a lamp). Follow the procedure below to assign a TWT button on an extension. (This is a station level program and should be done at each individual phone.)

1. Enter Station programming:
 - a. With the phone on-hook, **Press** the **PROGRAM** button.
 - b. **Press [99]**. (Display changes to PITS-PGM Mode.)
2. **Press** the desired **FLEXIBLE (CO or DSS/BLF)** button that you want to assign as the TWT button.
3. **Press [91]**.
Screen output: 2 Way-Trans:
4. Enter a Voice Mail extension number.
Screen output: 2 Way-Trans: _ _ _
(_ _ _ = The extension number you entered).
5. **Press STORE**.
6. To exit the Station Programming mode, **Press** the **PROGRAM** button or lift the handset.
7. Repeat these steps for each telephone.

Conditions: *This button must be a CO or DSS/BLF button to be programmed as a TWT button. When all Voice Mail ports are busy and this key is pressed, the user will hear reorder tone.*

4.3.13 Voice Mail Transfer Button

This feature is used to transfer calls directly to a Voice Mailbox. It can be used with DPT or Inband Signaling.

1. Enter Station Programming.
2. Press unused **FLEXIBLE** (CO or DSS/BLF) button.
3. Press **[8]**.
Screen output: VTR.
4. Press Voice Processor Extension.
5. Press **STORE**.

Section 5

CUSTOMIZING THE SYSTEM

5.1 STARTING UP

5.1.1 Before Programming

1. Determine the customer's needs.
 - *Work with the owner, manager, and receptionist to build the Company Greetings, Custom Service Greetings, and Holiday Greetings.*
 - *Figure out which ports are to be answered by which greetings.*
 - *Check the software level of the telephone switch.*
2. Use "System Administration" and your computer for the startup sequence.
3. After the system is "on line," disconnect the CO lines going into the system until the greetings have been completed.
4. Work with the receptionist to record the system greetings.
 - *It's important to spend time training the receptionist. Making sure that the receptionist understands the system and can answer basic questions will save you time in the end.*
 - *Show the receptionist how to transfer "general delivery messages."*

5.1.2 Quick Setup

Quick Setup provides a quick way to set the following programming items. Each of these must be initially set to start the VPS operation.

- *PBX type*
- *Extension numbers of VPS ports*
- *Extension numbers for mailboxes*
- *Creating mailboxes*
- *Port service setting*
- *Password setting*
- *Date and time setting*
- *Activating the Quick Setup*

Depending on your PBX type, some steps will be skipped as shown below.

Table 23

PBX Type	Required Procedures
KX-T308/T616	1→2→3→4→5→6→7→8
KX-T123211D/TA series/ T336/T96 ^{*1}	1→3→4→5→6→7→8
Non-Panasonic System	1→3→4→5→6→7→8
KX-TD816/1232/500/308	1→4→5→6→8

*1 Not available in US

5.1.3 Starting the Quick Setup

Quick Setup is only available to the VT100 mode. The sequence must be followed through to the end to take effect. If you press "\", you will have to start over. Quick setup may be performed again without erasing prior data (for example, when adding a slave system).

At the *System Administration Top Menu*, **Type [5]** and **Press ENTER**.

Screen output:

System Administration Top Menu→5

Quick Setup Utility for connection to Panasonic KX-T series telephone system.

This utility provides a quick way of programming the Voice Processing System to operate in a standard automated attendant or Voice Mail configuration when connected to a Panasonic KX-T series telephone system. The system will prompt you to enter, modify or confirm settings based upon which PBX type you select. By entering the appropriate information in the following screens, the system sets PBX integration parameters, identifies the extension numbers connected to it, creates default mailboxes, sets its ports to handle callers with automated attendant or voice mail service, sets system passwords and sets the time and date. Finally, it confirms that you want to activate the system based on the information you entered, modified, or confirmed.

To proceed, **Press ENTER**. To exit and cancel Quick Setup now, **Press [\\]**.

1. PBX Type

a) Press ENTER.

Screen output:

<p>Quick Setup - PBX type Please select your PBX type.</p> <ol style="list-style-type: none"> 1. KX-T308 2. KX-T616 3. KX-T1232/KX-TA series 4. KX-T96 5. KX-T336 6. KX-TD816 7. KX-TD1232 8. KX-TD500 9. KX-TD308 0. OTHERS
--

Note

The following steps are explained based on the KX-TVS200.

- b) Select your PBX type. The required steps are different for some models. Go to the step indicated below for that type.

Table 24

1. KX-T308, 2. KX-T616	Go to Step 2.
3. KX-T123211D/KX-TA series, 4. KX-T96, 5. KX-T336, 0. Others	Go to Step 3.
6. KX-TD816, 7. KX-TD1232, 8. KX-TD500, 9. KX-TD308	Go to Step 4.

Note

DPT Integration with the KX-TD816, KX-TD1232, KX-TD500 or KX-TD308 will be activated automatically by selecting "6. KX-TD816", "7. KX-TD1232", "8. KX-TD500" or "9. KX-TD308."

2. Extension Numbers of VPS Ports

Screen output:

```

Quick Setup - Assigned extension No. of VPS Port
Please enter extension number of VPS.
  1:          2:          3:
  4:          5:          6:
  7:          8:          9:
 10:         11:         12:
Please enter extension numbers.
(2 digits) : =
              S: Next Screen

```

Enter extension numbers of VPS ports with 2-digit numbers. This improves the VPS integration with the KX-T308 or KX-T616 by allowing the VPS to discriminate between VPS extensions and non-VPS extensions.

Type **[S]** to go to the next screen.

3. Extension Numbers for Mailboxes

Screen output:

```

Quick Setup - Enter Extensions for Mailboxes
What extensions need a mailbox on this system?
  1:110      2:111      3:112      4:113      5:114
  6:115      7:116      8:117      9:118     10:119
 11:120     12:121     13:122     14:123     15:124
 16:125     17:126     18:127     19:128     20:129
 21:130     22:131     23:132     24:133     25:134
 26:135     27:136     28:137     29:138     30:139
 31:140     32:141     33:142     34:143     35:144
 36:145     37:146     38:147     39:148     40:149
 41:150     42:151     43:152     44:153     45:154
 46:155     47:156     48:157     49:158     50:159
 51:160     52:161     53:162     54:163     55:164
 56:165     57:166     58:167     59:168     60:169
 61:170     62:171
Please enter extension numbers.
              : =
              P: Previous menu, N: Next menu, S: Next Screen

```

Enter extension numbers of subscribers who need personal mailboxes (2-5 digits). For example, to enter the extension number 101, **Press [101]** and **Press ENTER**. You can also enter multiple extensions. Enter the extensions from No. 101 to No. 110 by **Pressing [101-110]** and **Pressing ENTER**.

The VPS will create mailboxes with the extension numbers entered. (See Step 4.)

Note

The VPS accepts any extension numbers within a 2- to 5-digit range. Up to 62(TVS75/100)/1022(TVS200) extension numbers can be entered.

4. Creating Mailboxes

To go to the next screen (S) or to change the menu (P or N), the cursor must be in the MBX column.

Screen output:

Quick Setup - Mailbox Editing				Page 1/4
Extension and mailbox list			Assigned 64	Vacant 958
Ext	MBX	Owner (Last Name)	MAKE (Make/Delete)	
•••	:	101	••••••••••••••••	Make
110	:	110	••••••••••••••••	Make
111	:	111	••••••~••••••••••	Make
112	:	112	••••••~••••••••••	Make
113	:	113	••••••~••••~•••••	Make
114	:	114	••••••~••••~•••••	Make
115	:	115	••••••~••••~•••••	Make
116	:	116	••••••~••••~•••••	Make
117	:	117	••••••~••••~•••••	Make
•			•	•
•			•	•

P: Previous menu, N: Next menu, S: Next Screen

- a) To create or discard mailboxes

In the "MAKE (Make/Delete)" field: **Type [M]** (Make) to create the mailbox; **Type [D]** (Delete) to discard the mailbox. If there are more than 1022 mailboxes, the first 1022 of them are displayed with "Make" and the rest are displayed with "Delete." (Screen Output: [Assigned 1022, Vacant 0])

To change the status of a mailbox from "Delete" to "Make," first change the status of a mailbox from "Make" to "Delete." (Screen output: [Assigned 1021, Vacant 1]) Then change the status from "Delete" to "Make."

- b) Owner's last name

Up to 16 alphabetic characters can be assigned as an Owner's Last Name.

Notes

- Mailbox numbers displayed on this screen

Panasonic KX-TD Series System

The same numbers as the extensions of the KX-TD series system that were automatically transmitted to the VPS — Auto Configuration.

Non-KX-TD Series System

The same numbers as that of the extensions entered in **3**.

- ***The length of mailbox numbers***

If both 3 and 4-digit extension numbers exist at one time, the VPS will unify all mailbox numbers to 4-digit length by entering [0] at the end of all 3-digit numbers.

Example:

<i>Extension Numbers</i>	<i>Mailbox Numbers</i>
201	201(0) *
202	202(0) *
203	203(0)*
2000	2000
2001	2001
2002	2002

* The VPS puts [0] at the end of 3-digit numbers.

Note

After mailboxes for subscribers have been created by Quick Setup, the COS parameter "Authorization of Message Notification" (see Table 47 and 48 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS) for COS No.1 will be set to "Yes". It will stay "No" for COS No.2 through No.62.

To program mailbox parameters other than the extension numbers and Owner's Last Name (or First Name), See 5.5 SETTING MAILBOXES. This allows the caller to "Dial by Name" when calling the Auto Attendant.

5. Port Service Setting

Screen output:

Quick Setup- Port Service Setting		
All ports are currently set up to handle callers with standard Automated Attendant operation, day and night mode, using the Custom Service feature (Custom 1). You can change the operation to standard Voice Mail (Custom 2) or leave it as Automated Attendant. If necessary, Custom 1 and Custom 2 can be modified under the menu 'Program -> Service Setting -> Custom Service.'		
	Day Mode	Night Mode
PORT 1	Auto. Attend.	Auto. Attend.
PORT 2	Auto. Attend.	Auto. Attend.
PORT 3	Auto. Attend.	Auto. Attend.
PORT 4	Auto. Attend.	Auto. Attend.
PORT 5	Auto. Attend.	Auto. Attend.
PORT 6	Auto. Attend.	Auto. Attend.
PORT 7	Auto. Attend.	Auto. Attend.
PORT 8	Auto. Attend.	Auto. Attend.
PORT 9	Auto. Attend.	Auto. Attend.
PORT 10	Auto. Attend.	Auto. Attend.
PORT 11	Auto. Attend.	Auto. Attend.
PORT 12	Auto. Attend.	Auto. Attend.
A: Auto. Attend., V: Voice Mail, S: Next Screen Auto. Attend. (using Custom 1), Voice Mail (using Custom 2)		

Incoming Call Services for all ports (Day/Night) can be defined by this setting. Default values for all ports (Day/Night) are "Automated Attendant Service (Custom 1)." To select other incoming call services, go to "Setting Ports."

6. Password Setting

Screen output:

Quick Setup-Password Setting	
System Administrator Password	
(Maximum 8 characters)	
NEW PASSWORD :	=
VERIFICATION :	=
System Reset/Clear Password	
(Maximum 8 characters)	
NEW PASSWORD :	=
VERIFICATION :	=

You can assign the System Administrator Password and System Reset/Clear Password in this screen, if necessary.

To go to the next screen without assigning the password, **Press ENTER.**

7. Date and Time Setting

Screen output:

```
Quick Setup-Time Setting
  Current time is 3:04, PM
    Enter new time (HH:MM, AM/PM) : =
  Current date is SAT 1-JAN- 1994
    Enter new date (DD-MM-YY) : =
```

Enter the time (hour, minute in 2 digits, comma and A or P) and date (day, month, and year in 2 digits).

To go to the next screen, **Press ENTER.**

8. Activating the Quick Setup

Screen output:

```
Quick Setup - Setup
To set up the mailbox and restart, select "Yes."
To cancel and exit, select "No."
1: Yes      2: No
```

To activate the Quick Setup, **Press [1]**. The VPS begins to change system programming data.

Screen output:

```
Quick-Setup
  To set up the mailbox and restart, select "Yes."
  To cancel and exit, select "No."
    1: Yes      2: No
Setup 101
```

Entering "No" in the above screen cancels all changes made to this point.

Then "*CARD TEST...*", "*SYSTEM SETUP...*" and "*1...2...3...*" appear on the screen one by one.

Screen output:

```
CARD TEST ...
SYSTEM SETUP ...
1 ... 2 ... 3 ...
```

Screen output when Quick Setup is finished:

```
**ON LINE MODE**
>
```

Press ENTER.

Screen output:

```
Please Select Your Terminal Type.  
1. ASCII TERMINAL  
2. VT 100  
Please Enter the Number : =
```

To Cancel Quick Setup, **Press [2]**.

Screen output:

System Administration Top Menu

```
1 : Program  
2 : System Reports  
3 : Utility Command  
4 : System Reset/Clear  
5 : Quick Setup  
SELECT ITEM AND PRESS RETURN-KEY
```

Note

"5: Quick Setup" in above screen does not appear in the ASCII TERMINAL mode.

5.2 PORT SETTING OPTIONS

Design each system to suit the needs of the customer. You should be familiar with all options for port assignment so that customers get exactly what they need and expect. Each port can be assigned as Voice Mail, Interview Service, Automated Attendant, or Custom Service. Custom Service is the most flexible of all the services because it allows access to the other services by pressing one key. **We recommend programming all ports as Custom Service for caller convenience.**

5.2.1 Custom Service Setting Example

Custom Service incorporates all features of the Automated Attendant and Voice Mail. Custom Service offers callers a menu of single digits that they may use to reach the desired location quickly and easily.

Sample Company Greeting 1

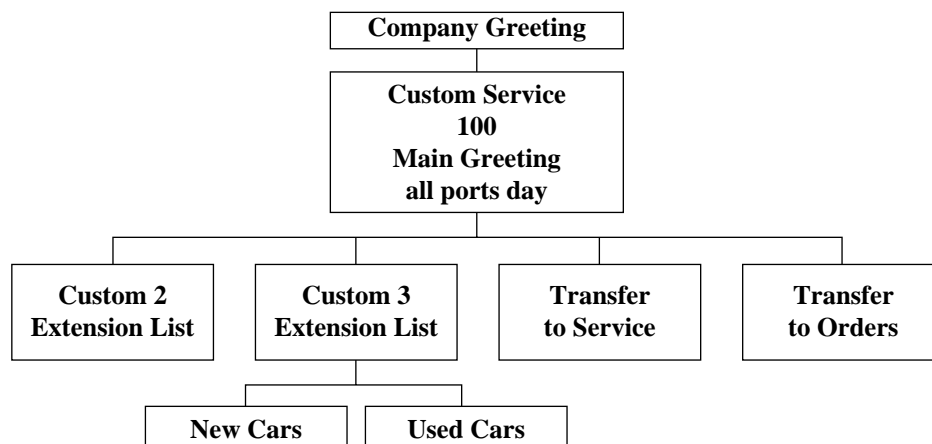
"Thank you for calling the ABC company." (Company greeting should be short!)

Sample Custom Service Message

"If you know the extension number of the person you are calling, you can dial it at any time. For a list of extensions, Press [1]; to reach the sales department, Press [2]; to reach the service department, Press [3]; if you would like to place an order, Press [4]; all other callers, please wait and an operator will be right with you."

Sample Custom Service Tree

Create a tree to design a route leading callers to the desired extension, mailbox, or next menu. This tree should include all available caller options and cannot be deeper than 8 layers. Discuss available options with the customer before programming the system.



The top of the tree should include what callers will hear when they are first connected to the VPS. Then create a branch for each option. This should be done until each caller option has been documented. Next, fill in each box with the action that it represents so you can easily remember what action corresponds to each keystroke.

Remember that it is possible and often necessary to have 1 custom service lead to another custom service. For example, if someone presses [1] for sales, you might want another menu to say *"for new car sales, press [1]; for used car sales, press [2]."* This way, callers are routed directly to the person best suited to handle them.

Sample Custom Service for Foreign Languages

If you are an airline or travel agency, your callers might not be fluent in English. You can easily accommodate several languages with Custom Service. For example, each key on the keypad (there are 12 keys) could be assigned to a language. Record Custom Service Menu 100 so that the caller can select a language with one-touch dialing. For example, the top menu could be: *"For English, press 1. For French, press 2. For Spanish, press 3. For German, press 4. For Japanese, press 5. For Chinese, press 6... etc."* (Of course, selections should be recorded in their respective languages.)

At the next level, create menus in each language for day mode. For example, Custom Service Menu 2 (the one for English callers) might be: *"For departure information, press 1. For arrival information, press 2. For reservations, press 3. To leave a message, press 4. To send a fax, press 5."* Thus at this level (or at an even lower level) a caller can be guided in his native tongue to the right person (extension), the right message-taker (mailbox), or the right device (fax machine).

In parallel, create menus in each language for night mode. For example, Custom Service Menu 16 might be: *"Sorry, we are closed for the day. Our regular business hours are from 9 am to 5 pm, Monday through Friday. If you would like to leave a message, press 1 now. If you would like to send a fax, press 2 now."* Record a similar message for the other languages in night mode.

5.2.2 Custom Service Features

Day Service (1 - 5 - 2)

Set each day for the correct day - night mode. These greetings will work independent of the telephone switch for the various greetings.

Holiday Service (1 - 5 - 3)

A number of company greetings can be recorded at one time. Each holiday location is for 1 day. When the appropriate day arrives, that greeting is played. An example for greeting one on 1/1/98 would be *"Thank you for calling ABC Rental Company. Our office will be closed to*

celebrate the coming of a new and glorious year, however some of our dedicated staff may be in the office." At this time it would go to the regular recording for the custom service.

Rotary Telephone (1 - 5 - 6 - 6)

Assign only when you are using the Voice Mail Service.

A Must! By default, if an end user calls the Voice Mail Service and doesn't dial anything, the call will go to the General Delivery Mailbox. This must be changed to send the call to an operator!

Intercom Paging (1 - 5 - 6 - 7)

Don't forget this screen if you are using the paging feature!!

Set the no-answer time to 30 s, and enter the paging codes for each of the paging groups.

Example: All sales telephones have been placed in extension group 3 in system program [602]. No hunting type assigned in system program [106]. Assign each salesperson's mailbox to a different COS in the TVS75/100/200 and assign the paging group to that COS. (This tells the VPS which paging group to dial). In the Intercom paging section, assign the number "333" to the paging group assigned to the sales dept.

Fax Management (1 - 5 - 6 - 8)

Assigns up to 2 fax machines that can be extensions from the PBX. If the CNG tone is heard, the KX-TVS75/100/200 will automatically forward the call to the first fax machine. If the first fax machine is busy or doesn't answer (is out of paper), the call is forwarded to the second fax machine. Also allows assigning an extension as the fax manager to be notified on incoming faxes.

Disconnect Parameter (1 - 5 - 6 - 9)

Determines how many seconds of silence the KX-TVS75/100/200 allows during a caller's message before disconnecting the call.

RS-232C Settings (1 - 6 - 1)

Allows the system administrator to change the baud, bit, etc.

Port Setting (1 - 6 - 2)

Only to be used if bringing actual CO lines into the VPS. Use the CPC control of the telephone switch for normal disconnect problems.

Dialing Parameters (1 - 6 - 3 - 1)

These parameters are set automatically when Quick Setup is conducted.

Most of the settings will be left alone. The one setting that is changed quite often is the Transfer Sequence for the operator or the extension. By default it is set at FX on DPT integration and

FTX for inband signaling. In other words, the voice processor dials the flash, waits for intercom tone and dials the extension number. By default the KX-TVS75/100/200 will stay on the line to monitor the status of the call. If the extension user answers the voice processor will announce "you have a call" prior to releasing the call. This can be alleviated by adding the letter "A" or "D" to the sequence. "A" stands for answer; the call will be transferred without the "you have a call.." For a blind or unscreened transfer, add the letter "D" for disconnect.

5.2.3 Custom Service Programming

After the tree is complete, enter the *System Programming Custom Service Settings Menu*.

Access the *Custom Service Setting Menu* through the following sequence:

System Administration Top Menu:

Enter The Number: = **1** (Program)
 Enter The Number: = **4** (Service Settings)
 Enter The Number: = **2** (Custom Service)

The system then asks what Custom Service number you want to edit. Enter the desired number (1-100).

The *Custom Service* screen is displayed:

```

Program - Service Setting - Custom Service Setting - Custom 1

Description -----|.....
Prompt Mode(1:Sys 2:User1 3:User2) -----|System
Menu Repeat Cycle (1-3) -----|3 times
Call Transfer Anytime(Extn./Mbx/No) -----|Extn.
Wait for Second Digit (1-5 seconds) -----|1 seconds
No DTMF Input Operation(a-f) -----|c

Keypad Assignment
1:          2:          3:
4:          5:          6:
7:          8:          9:
* : d      0: c        #:

Please choose one of the following functions or services:
a. Transfer to Mailbox          h. Call Transfer Service
b. Transfer to Extension        i. Subscriber Service
c. Operator                     j. Department Dialing
d. Exit                         k. Dial by Name
e. Previous Menu               l. Repeat Menu
f. Custom Service              m. Main Menu
g. Voice Mail Service          n. Fax Transfer
  
```

Enter data into the Custom Service menu; use the table below as a guide.

Table 25

Description	Value Range (Default)	Description/Function
Prompt Mode	1. System 2. User 1 3. User 2 (System)	Specifies the language that the caller will hear when calling this Custom Service.
Menu Repeat	1-3 Times (3)	Specifies the number of times the Custom Service menu is repeated before the No DTMF Input entry is used.
Call Transfer Any Time	Extn./Mbx/No (Extn.)	Specifies where a caller is transferred when dialing an extension or mailbox number during the menu. If this entry is set to "Extn.", the caller is transferred to the corresponding extension. If it is set to Mbx, the caller is sent directly to the corresponding mailbox. If it is set to "No", the caller is sent to an operator.
Wait for Second Digit	1-5 secs (1)	Used when the first digit of an extension is also a menu choice within the Custom Service. If a second digit is not dialed within this time, the menu choice is used.
No DTMF Input Operation	a.-f. (c.)	This is used when a caller does not dial anything when hearing the menu (usually rotary callers).
Keypad Assignment	a.-n. (*=d, 0=c, others=None)	This entry specifies the actions that is performed when a keypad digit is dialed. Callers can access these services by pressing the keys on their telephones.

Keypad Assignment Options

Table 26

Entry	Function
a. Transfer to Mailbox	Sends the caller to the designated mailbox and plays the personal greeting.
b. Transfer to Extension	Transfers the caller to the specified extension.
c. Operator	Transfers the caller to the operator.
d. Exit	Plays the Custom Service exit prompt and disconnects the caller.
e. Previous Menu	Returns the caller to the previous menu.

Table 26

Entry	Function
f. Custom Service	Sends the caller into the designated Custom Service and plays the menu.
g. Voice Mail Service	Activates Voice Mail Service.
h. Call Transfer Service	Activates Automated Attendant Service.
i. Subscriber Service	Allows the caller to enter subscriber service. Digits received after entering this code are assumed to be the subscriber's mailbox number.
j. Department Dialing	Plays the Department Dialing Menu.
k. Dial by Name	Asks the caller to enter the first 3 or 4 characters of the person (last name) they wish to reach, then allows transfer to that extension.
l. Repeat Menu	Repeats the menu prompt.
m. Main Menu	Returns the caller to the top level of Custom Service tree. Plays the menu for that service.
n. Fax Transfer	Transfers the caller to the extension designated as the fax extension in system programming.

5.2.4 Recording Menus

Once you have finished entering the parameters in each menu, the menu messages should be recorded. Menu messages tell the caller what options are available and what keys correspond to those options. For this reason, the prompts must match the programming that has been input.

1. Access the Message Manager's mailbox (998) by dialing an extension connected to the VPS.
2. When the VPS answers, **Press [#6*998]** to enter the Message Manager's mailbox.
3. **Press [5]** to modify messages.
4. **Press [4]** to change the Custom Service Menu.
5. You will hear:

*Enter the Custom Service number [1] through [100].
To record the Custom Service Exit prompt, press [0].*

6. You will hear:

Record menu at the tone...

Follow the instructions until all Custom Service prompts have been recorded, using the tree that you created as a guide.

5.2.5 Checking Operation

After you have entered and recorded all menus, it is important to try the program yourself to see that all functions perform properly. Dial into the system and try all the choices to see if you are routed correctly. Verify that each menu choice works as it should.

5.2.6 Voice Mail

Voice Mail service is a message-taking service that allows non-subscribers to leave messages for subscribers. This service is often assigned when incoming calls are answered by a live person. This person can then send the caller to the Voice Mail service if desired.

Callers can access Voice Mail service by:

- **Voice Mail Port** - This service can be programmed independently of any or all ports of the VPS. Callers reaching these ports immediately access Voice Mail service.
- **Service Access Command** - A caller can switch to Voice Mail service by dialing [#6] during a call.
- **Custom Service** - This service can be assigned to a keypad digit within a Custom Service. After pressing this key, the caller enters Voice Mail service.

5.2.7 Mailbox Groups (System Group Distribution Lists)

This program allows a message to be delivered to several mailboxes at the same time. The message activates the message waiting lights on all of the proprietary telephones. These mailboxes may be assembled into a list called a System Group Distribution List. A voice label can be recorded for each System Group Distribution List; this is done by the Message Manager (See D6 RECORDING COMPANY MESSAGES.) There are 20 group lists available and each group list can have up to 20 entries each.

To establish a mailbox group:

1. From the *System Administration Top Menu*, **Type 1-5-1-1-1**. (Program - System Parameter - System Group Assignment - Mailbox Group - Enter).
2. Assign a list number to the Mailbox Group. This number can be from 2-5 digits (same as mailbox numbers.) It has to be an unused number. In other words, the number assigned to this group cannot be the same as another System group Distribution List number or mailbox number. For example, we'll use the number 250.

There are 2 ways to use a System Group Distribution List:

Option A:

For inside messages: The System Group Distribution List number can be designed so that any subscriber can **Press [2]** to deliver a message, then enter the list number, which is [250] in this example. The message is delivered to all specified mailboxes.

Option B:

For outside messages: The System Group Distribution List number can be designed as a custom greeting for incoming callers. For instance, the greeting might be : *"To leave a message for the parts division, press 3."* The digit "3" would be assigned to System Group Distribution List number 250 in Custom Service Setting.

Each message light will remain on until the message is cleared from the individual station.

5.2.8 Extension Groups

An extension group places several extensions into the same mailbox. These extensions may be assembled into a list called a Extension Group List. The extensions in the group list cannot have a personal mailbox! When a message is left in this mailbox, it lights all of the message waiting lights of the phones that are in this group list. There are 20 groups lists available and each group list can have up to 20 entries each.

When a message is left for the extension group, it will light the message waiting lights on each phone. The first person that retrieves the call cancels the message waiting light on the other phones. Extension groups work well in areas where the call would not be intended for a specific person (for example, a parts counter, or a technical support group).

To establish an extension group:

1. From the *System Administration Top Menu Type [1-5-1-2-1]*.
(Program - System Parameter - System Group Assignment - Extension Group - Enter).
2. Enter a number that hasn't been assigned to another mailbox, System Group Distribution List or Extension Group List. (This must be a vacant number). Enter the extensions that are to be assigned to this group list. Make sure the number has been assigned in the extension numbering plan.

*Example: to assign the number 700 as an Extension Group List number, go into System Administration programming. At the Main Program Menu, type [1-5-6-1].
(Program - System Parameter Setting - Extension Numbering Plan - Enter). Enter [7XX] in the numbering plan.*

3. Enter the station numbers that are to be assigned to the Extension Group List.
4. Return to the *Main Program Menu*.
5. **Type [1-1-1]**. (Program - Mailbox Setting - Enter/Edit).

Assign the Extension Group List number to a mailbox. If you used the number "700" for an Extension Group List number, assign the number "700" as a new mailbox. You must also

enter 700 as an extension.

Messages can be delivered to the new number through normal operation.

5.2.9 Interview Service

The subscriber can leave a series of prerecorded questions (up to 10) for the caller in an Interview Mailbox. As the caller answers questions, answers are recorded in the mailbox. After a caller records the answers, the interview mailbox lights a message waiting light. When retrieving the messages, the subscriber only hears the answers to the questions.

There are 2 ways to access an interview mailbox:

- *Assign an interview mailbox to an existing mailbox (recommended)*
- *Assign a port as an interview mailbox (not recommended)*

To structure an interview mailbox:

1. From the *System Administration Top Menu* **Type [1-1-1-Mailbox number-1]**. (Program - Mailbox Setting - Enter/Edit-Mailbox No.-Mailbox Setting).
2. Enter the mailbox number that is to be assigned to the interview mailbox. This should be an existing mailbox number for the person who responds to the questions.
3. At "Interview Mailbox" parameter, enter a nonexistent mailbox number. This will be the interview mailbox for this subscriber — please make a written note of it for future reference. It will not show up in Mailbox Listing. If, at a later time, you want to delete the interview mailbox, press backspace at "Interview Mailbox".
4. Exit System Administration Programming.
5. Record the questions by entering the subscriber's mailbox. Call the voice processor and **Press [#6 *]+** the extension number assigned to the interview mailbox. From the *Main Menu* **Press [6-1]**.

Note

Calls can be transferred internally to the interview mailbox by using the Voice Mail Button. When using the Custom Service setting, 1 digit can be assigned to go to the mailbox of the Interview Service. The mailbox owner's message waiting light will go on for normal Voice Mail messages and for message left in the separate interview mailbox. Press [1] when finished recording messages.

5.2.10 Automated Attendant

Automated Attendant service answers incoming calls and waits for the caller to input an extension number. The caller is then transferred to the appropriate extension.

Callers can access Automated Attendant Service by:

- **Automated Attendant Port** - This service can be programmed independently of any or all ports of the VPS. Callers reaching these ports access Automated Attendant service.
- **Service Access Command** - A caller can switch to Automated Attendant service by dialing [#8] during a call.
- **Custom Service** - The call transfer service can be assigned to a keypad digit within a Custom Service. After pressing this key, the caller enters Automated Attendant Service.

5.2.11 Department Dialing Service

Callers can access extensions by pressing a key 1 through 9 (one-touch dialing). As a guide for the caller, the Message Manager should record the Department Dialing Menu — for example, "Thank you for calling. For overseas travel, press 1. For domestic travel, press 2. For group travel, press 3."

5.2.12 Operator Service

This service (when enabled) can be accessed via:

- **Voice Mail** - Rotary Telephone Service allows rotary callers to reach the General Delivery Mailbox or Operator Service.
- **Automated Attendant** - Dial 0 and your call will go to Operator Service.
- **Custom Service** - The Operator Service can be assigned to a keypad digit within a Custom Service; after pressing this key, the caller enters Operator Service. Operator Service can also be the destination of "no-DTMF-input".

Operator Service offers callers many chances to reach a human operator. Operator Service can be structured as a cascade so that if Operator 1 cannot take the call, it goes to Operator 2. If that fails, the call goes to Operator 3. If that fails, the caller can record a message. At each stage, there are other options for busy cases and no-answer cases. Operator Service can be programmed differently for day and night mode. Each operator can be assigned a mailbox for message-taking.

5.3 SETTING PORTS

5.3.1 Port Service Menu

Access the Port Service Menu through the following sequence:

System Administration

Top Menu: Enter The Number: = **1** (*Program*)

Program Menu: Enter The Number: = **3** (*Port Service*)

Screen output:

TVS75

```

Program - Port Service Menu
    1. Port1
    2. Port2

SELECT ITEM AND PRESS-KEY
    Day Mode, Night Mode
  
```

TVS100

```

Program - Port Service Menu
    1. Port1
    2. Port2
    3. Port3
    4. Port4

SELECT ITEM AND PRESS-KEY
    Day Mode, Night Mode
  
```

TVS200

```

Program - Port Service Menu
    1. Mailbox Setting
    2. Class of Service
    3. Port Service
    4. Service Setting
    5. System Parameter Setting
    6. Hardware Settings
    Enter the Port Number (1-12)=
    === =Current Card Configuration= ===
    SLOT1:PORT1 PORT2 PORT3 PORT4
    SLOT2:PORT5 PORT6 PORT7 PORT8
    SLOT3:
  
```

from Program - Port Service Menu:

Enter the data using the table below as a guide.

Table 27

Description	Value Range (Default)	Description/Function
Company Greeting No.	1-32 (None)	Specifies the company greeting to be played on the port.
Incoming Call Service	1. Voice Mail 2. Auto. Attn. 3. Interview 4. Custom (Auto. Attn.)	Specifies one of 4 incoming call services. [Notes] <ul style="list-style-type: none"> When you specify the Interview service, one of Subscriber's Interview mailbox numbers should also be specified. When you specify the Custom service, one of 100 (1-100) Custom service numbers should also be specified.
Incoming Call Service Prompt	1. System 2. User 1 3. User 2 4. Selective (User 1)	Specifies the language of voice prompts to be played on this port. [Notes] <ul style="list-style-type: none"> This parameter is not valid if incoming call service is set to "Interview" or "Custom". If "Selective" is specified, you will need to select a prompt available for rotary callers. See "Prompt for Rotary Callers" below.
Prompt for Rotary Callers	1. System 2. User 1 3. User 2 (System)	Specifies in which language rotary callers hear the voice prompts when they cannot enter any digit to select a "Prompt Selection Number" while Multilingual selection menu message is being played.
Delayed Answer Time	0-60 sec. (0)	Specifies whether the port answers immediately (0) or in delay (1-60s).

5.4 AUTOMATED ATTENDANT PARAMETERS

Automated Attendant parameters include: department dialing, operator parameters, and alternate extension. If the VPS needs a special transfer procedure for an extension (such as modem extension), alternate extension should be assigned. (See "Alternate Extension Assignment" in B5.1 Automated Attendant Parameters).

5.4.1 Automated Attendant Menu

From Top Menu:

Enter The Numbers : = **1 - 4 - 1**

Program - Service Settings - Auto. Attn. Menu

1. Department Dialing
2. Operator Parameters
3. Alternate Extension

5.4.2 Department Dialing

Department Dialing numbers (1 - 9) represent department extensions; these numbers are given to the caller in the initial list of prompts.

Return to Program - Auto. Attn. Setting Menu:

Enter The Number : = 1

Program - Auto. Attn. Setting - Department Dialing Menu

1. Department Dialing No.1 [] := 102
2. Department Dialing No.2 [] := 104
3. Department Dialing No.3 [] := 115
4. Department Dialing No.4 [] := 136
5. Department Dialing No.5 [] := 107
6. Department Dialing No.6 [] := 108
7. Department Dialing No.7 [] := 109
8. Department Dialing No.8 [] := 110
9. Department Dialing No.9 [] := 111

5.4.3 Operator Parameters

If you enable operator service, you must set the following parameters: operator extension and mailbox number, coverage modes, and message repeat cycle.

Operator 1:

Cannot have a personal mailbox. The default is set at "0," which coincides with the operator of the PBX. When a message is left in this box, it goes to the General Delivery Mailbox (GDM).

To light Message Waiting Notification at Operator 1's extension: Assign Mailbox 998 to Operator 1's extension. This will notify Operator 1 of messages left in the GDM.

Operators 2 and 3:

In upgraded software (KX-TD816-1/KX-TD1232-1 and above), Operators 2 and 3 can be assigned to a floating number that is assigned to a ring group.

Return to Program - Auto. Attn. Setting Menu:

Enter The Number : = 2
 Program - Auto. Attn. Setting - Operator's Parameters Menu
 2. Day Mode
 3. Night Mode
 SELECT ITEM AND PRESS KEY
 1. Operator 1
 2. Operator 2
 3. Operator 3
 SELECT ITEM AND PRESS KEY

Enter the data using the table below as a guide. The table below is for Operator 1 as example. Please refer to it for Operator 2 and 3.

Table 28

Description	Value Range (Default)	Description/Function
Operator Service	1. Disable 2. Enable (Enable)	Enables or disables operator service.
Operator's Extension	1-5 Digits (0)	Specifies the operator's extension.
Operator's Mailbox Number	2-5 Digits (998)	Specifies Operator 1's mailbox number. Also specifies General Delivery Mailbox.
Operator No Answer Time	10-60 secs. (30)	If a call transferred to Operator 1, 2, or 3 is not answered within this period of time, the VPS uses the No-Answer Coverage Mode.*1

Table 28

Description	Value Range (Default)	Description/Function
Busy Coverage Mode	1. Hold 2. No Answer Coverage 3. Call Waiting 4. Disconnect Message (Hold)	Specifies the treatment of calls when Operator 1 is busy. If "Call Waiting" is chosen, Operator 1 is signaled when another call is waiting using the Call Waiting feature of the PBX.
No-Answer Coverage Mode	1. Caller Select 2. Leave Message 3. Disconnect Message 4. Next Operator (Caller Select)	Specifies the treatment of calls when Operator 1 does not answer. When "Call Select" is chosen, and the operator does not answer, the caller will hear the following menu message: <i>Sorry, no one is available to answer the call. To leave a message, Press 1. To enter another extension, Press 2.</i> "Leave Message" means the caller will be sent to the General Delivery Mailbox.
Message Repeat Cycle	1-3 Times (3)	Specifies the number of times the VPS plays the Automated Attendant top menu to the caller.

*1 If more than 1 operator is assigned, we recommend to reduce the time on the "Operator No Answer Time" to 15 s.

5.5 SETTING MAILBOXES

5.5.1 Mailbox Setting Menu

Access the *Mailbox Setting Menu* through the following sequence:

System Administration

Top Menu: Enter The Number: = **1** (*Program*)

Program Menu: Enter The Number: = **1** (*Mailbox Setting*)

Program - Mailbox Setting Menu

1. Enter / Edit
2. Delete
3. Password Reset
4. Mailbox Listing

5.5.2 Entering a Mailbox

From Mailbox Setting Menu:

Enter The Number : = **1**

Then Enter the Mailbox number:

Program - Mailbox Setting Menu - Enter/Edit

1. Mailbox Setting
2. Notification Setting

Enter The Number : = **1**

Enter the data using the table below as a guide.

Table 29

Description	Value Range (Default)	Description/Function
Extension of the Owner	2-5 Digits (None)	Sets the extension to be used in conjunction with the mailbox. Any valid number can be assigned.
Owners Name First + Last	Up to 16 characters (None)	The Dial by Name feature uses the last name. Both are printed on mailbox report.

Table 29

Description	Value Range (Default)	Description/Function
Class of Service	COS No. 1-62 (1)	Used to define a set of services available to the subscriber. 63 and 64 are fixed to the Message and System Managers. Most subscribers can be placed in the same COS. Anyone who needs unclaimed messages forwarded to a cell phone, beeper, or another mailbox would need to be in a separate COS.
Covering Extension	2-5 Digits (None)	Specifies where a caller will be transferred when Covering Extension is dialed or set under Incomplete Call Handling.
Interview Mailbox	2-5 Digits (None)	Used to permit mailbox owner to have an interview mailbox. Must be unused mailbox.
All Calls Transfer to Mailbox	1. Yes 2. No (No)	If set to Yes, calls coming to the extension through Auto-Attendant go directly to the mailbox and do not ring the extension. (Message lamp will not be turned on).

From Mailbox Setting Enter/Edit Menu:

Enter The Number : = **2**

Enter the notification number : = **1**

Enter the data using the following table as a guide.

Table 30

Description	Value Range (Default)	Description/Function
Number to Dial	Up to 32 Digits of [1-9,0,*,#,P,T,M,X] (None)	<p>Assigns the telephone or beeper number to Device 1, 2 and/or 3.</p> <p>P: Pause T: Dial Tone Detection M: Dial Mode Switching Code (DTMF to Pulse, or Pulse to DTMF) X: Callback Number Entry Code 1-9, 0, *, #: Dial Codes</p> <p>The callback number entry code (X) must be entered if COS is set to enable and set to beeper. Use backspace to delete your entry.</p>
Type	1. Telephone 2. Beeper (Telephone)	Assigns whether device is beeper or telephone.
Use Device	1. Not Use 2. Continuously 3. Scheduled (Continuously)	<p>Not Use: Does not use device.</p> <p>Continuously: The VPS notifies each time a message is recorded in the mailbox.</p> <p>Scheduled: The VPS notifies the subscriber if a message is left during one of the time frames.</p>
Number of Retries	0-9 Times (0)	Specifies the number of times a device should be retried when busy or no-answer.
Busy Delay	0-120 mins. (3)	The time the VPS will wait before retry on busy.
No Answer Delay	0-120 mins. (30)	The time the VPS will wait before retry on No Answer.
Time Frame 1, 2 MON - SUN	1-12: hour 00-59: minute AM/PM: am/pm *: All Day Space: No Use	Weekly Schedule for Message Waiting Notification. The schedule is only used when Use Device is set to Scheduled.

5.5.3 Deleting a Mailbox

From Mailbox Setting Menu:

Enter The Number : = **2**
 Program - Mailbox Setting - Delete
 Enter the Mailbox Number : =
 Are you sure? (Y/N) : =

5.5.4 Password Reset

To reset a subscriber's password, go to the Password Reset Menu. "Enter the Mailbox Number" appears on the screen. Enter the mailbox number you wish to reset. "Enter the Mailbox Number" appears again. Enter a new number.

From Mailbox Setting Menu:

Enter The Number : = **3**
 Program - Mailbox Setting - Password Reset
 Enter the Mailbox Number (3 digits) : =
 Are you sure? (Y/N) : =

5.5.5 Mailbox Listing

This listing is a report of mailbox extension assignments.

From Mailbox Setting Menu:

Enter The Number : = **4**
 Program - Mailbox Setting - Mailbox Listing

```

1: 101   2: 103   3: ----   4: ----   5: ----
6: ----   7: ----   8: ----   9: ----  10: ----
11: ----  12: ----  13: ----  14: ----  15: ----
16: ----  17: ----  18: ----  19: ----  20: ----
                                     (..to 62)
```

System Manager's Mailbox No.: **999**
 Message Manager's Mailbox No.: **998**

5.6 TRAINING THE SUBSCRIBER

The System Administrator should explain the basic functions of the VPS to all the subscribers. He should explain which service (Voice Mail service, Automated Attendant service, Interview service, or a Custom service) will play during the day, and what service will play during night. He should explain that outside callers are called "non-subscribers" because they do not have a mailbox. VPS guidance prompts will assist non-subscribers in reaching the extension or mailbox they need. He should explain the responsibilities of the System Administrator, the Message Manager, and the System Manager — and how each can be contacted (phone number, mailbox number, or email address, or all three).

The System Administrator should also explain the special privileges of VPS subscribers. Subscribers can call from any DTMF telephone in the world and get their messages. To check messages (or change mailbox parameters) from an outside phone, do the following:

As soon as the VPS plays a guidance message, **Press** code [# 6 *] and then **the mailbox number**. For example, a subscriber who has extension 115 and mailbox 115 would press code [# 6 * 115]. If the subscriber has a password enabled, the password must be entered.

If the subscriber forgets his password, he should contact either the System Administrator or the System Manager. Either one can clear the password so that the subscriber can establish a new password.

Explain the purpose of the General Delivery Mailbox. The Message Manager will periodically check it, and forward the contents to the appropriate subscriber.

Explain the purpose of the System Group Distribution Lists. They can be created by the System Administrator to facilitate the distribution of messages to several subscribers. In particular, senior staff members ought to know how to take advantage of System Group Distribution Lists. Twenty lists can be created, with 20 mailboxes in each list.

Finally, if Custom Service menus are used, subscribers should be encouraged to listen to these menus often and make suggestions for improvement. Custom service is a very powerful feature of the Panasonic VPS. Make the most of this feature.

Section 6
FINAL SETUP

6.1 MESSAGE MANAGER'S MAILBOX (Mailbox 998)

The Message Manager is responsible for recording and updating a wide variety of system messages.

Please see Appendix D (D6 RECORDING COMPANY MESSAGES) to see the full array of recording tasks. Follow the instructions below to record Custom Service prompts and user prompts.

6.1.1 Accessing the Message Manager's Mailbox (Enter [165 #6*998])

1. **Enter** an extension number that is connected to the Voice Mail.

You will hear the initial prompt:

Good morning/Good afternoon/Good evening.
Welcome to the Voice Processing System...

2. **Press** [# 6*9 9 8] to access the message manager's mailbox.

You will hear the following prompt if mailbox 998 has a password set:

Please enter the password, followed by a pound sign.

3. Enter the message manager's password (if programmed). Otherwise, you will hear the *Message Manager's Main Command Menu*.

6.1.2 Message Manager's Main Command Menu

You have...messages.
To transfer General Delivery Mailbox messages, press [1].
To set up message waiting notification, press [2].
To customize your mailbox, press [3].
To set the clock, press [4].
To modify messages, press [5].
To end this call, press [*].

6.1.3 Company Greetings (Enter [#6 *998,5,1])

1. Access the *Message Manager's Main Command Menu*.
2. To modify messages, **Press [5]**.
3. To change the company greeting, **Press [1]**.
4. Continue following voice prompts through appropriate menus. Prompts lead you through the choices and recording process.

After you record the company greeting, it may be necessary to enter programming through the terminal and set the company greeting assignment under the *Port Settings Menu*. This tells the system what company greeting to play on each port. A company greeting should be very short.

Example: "Thank you for calling ABC Company." It is not necessary to give any other instruction within the company greeting because instructions will follow the company greeting automatically.

6.1.4 Custom Service Greetings (Enter [#6 *998,5,4])

1. Access the *Message Manager's Main Command Menu*.
2. To modify messages, **Press [5]**.
3. To change the *Custom Service Menu*, **Press [4]**.
4. Continue following voice prompts through appropriate menus. Prompts lead you through the choices and recording process.

Example: Company Greeting: "Thank you for calling ABC Company." Custom Service Greeting: "If you know your party's last name, you may dial it at any time during this message."

Note

This prompt should match the prompt that is selected for each port. The recording will be played directly after the Company Greeting. If the caller doesn't enter a number after the message, only the Custom Service Greeting will repeat, not the Company Greeting.

6.1.5 Customizing User Prompts (Enter [#6 *998,5,6])

The customer may want to enter user prompts in place of the factory-provided system prompts. To change the user prompts:

1. Access the *Message Manager's Main Command Menu*.
2. To modify messages, **Press [5]**.
3. To modify the user prompts, **Press [6]**.

4. To change user prompt 1, **Press [1]**; to change user prompt 2, **Press [2]**.
5. To change specified prompts, **Press [1]**; to change all prompts, **Press [2]**.
6. Enter the prompt number you want to change.
7. Continue following voice prompts through appropriate menus.
Prompts lead you through the choices and recording process.

Note

Prompt 352: Customize for the company. "Thank you for calling ABC company. We are currently closed, however, if you leave your name and phone number, we will return your call as quickly as possible."

6.1.6 Recording the Company Name (Enter [#6*998,5,2])

1. Access the *Message Manager's Main Command Menu*.
2. To modify messages, **Press [5]**.
3. To record the company name, **Press [2]**.
4. Continue following voice prompts through appropriate menus. Prompts lead you through the choices and recording process.

Note

The company name is only played when the External Message Delivery feature is used.

6.2 SETTING UP MAILBOXES

The following steps complete the basic installation of the KX-TVS75/100/200 system. For each mailbox on the system, a no-answer, busy, and after hours greeting should be recorded, as well as the owner's name and password. Please follow the steps below to set up the mailboxes accordingly.

6.2.1 Recording Personal Greetings

- (1) The No-Answer Greeting is played whenever the caller enters your mailbox during business hours.
- (2) The Busy Greeting is played when the caller is told your line is busy and then elects to leave a message in your mailbox.
- (3) The After Hours Greeting is played whenever the caller enters your mailbox during non-business hours.

1. **Enter** an extension connected to the VPS.
2. When the port answers, **Press** [#6✖], then the mailbox number you wish to change.
3. **Enter** your password (if programmed), then the [#] key.
You are now inside the mailbox.
4. For mailbox management, **Press** [5].
5. To change the personal greetings, **Press** [1].
6. To change the No-Answer Greeting, **Press** [1] again.
7. The system will then say: *"No-Answer Greeting is not recorded. Record greeting at the tone."*
8. State your greeting at the tone.

Example: "Hi this is Tom. I am away from my desk right now but please leave a message at the tone and I will return your call as soon as possible."

9. When you finish speaking, **Press** [1].
10. The system gives the options of reviewing, accepting, or erasing the message.
11. To review the message, **Press** [1].
12. If the greeting is acceptable, **Press** [2].
13. The system will then play the menu for changing the No-Answer Greeting, Busy signal Greeting and the After hours greeting. Record the busy signal greeting as you did the No-Answer Greeting.
14. Continue on to the After Hours greeting and hang up when finished.

6.2.2 Recording the Owner's Name

1. **Enter** an extension connected to the VPS.
2. When the port answers **Press [#6✳]**, then the mailbox number you wish to change.
3. **Enter** your password (if programmed), then **Press [#]**.
You are now inside the mailbox.
4. For mailbox management, **Press [5]** .
5. To change the owner's name, **Press [3]**.
6. The system will say: *"The owner's name is not recorded. Record owner's name at the tone."*
7. State the owner's first and last name at the tone.
8. **Press [1]** when finished.
 - The VPS tells you the customer's name.
9. **Press [2]** to accept.

TEST THE SYSTEM

Before backing up the system, call each extension to see that each port functions as it should. Check for proper greetings and call transfers.

6.3 BACKING UP THE SYSTEM

Note

Before saving a file, we recommend that the Call Progression Mode of the VPS be turned off by Typing [OFLN] and then pressing ENTER. This prevents data from changing while it is being saved.

(The system will not answer calls when off-line.)

1. Choose the Utility Command. Type [SAVE], then Press ENTER. See screen output below.

from System Administration Top Menu:

Enter The Number : = 3
Utility Command

TVS75/100

```

$ SAVE
VPS Data Save ( VPS -> PC : Xmodem )
1: Program
2: Parameters
3: System Prompts
4: User Prompts-1
5: User Prompts-2
6: Custom Service Menu
7: Personal Greeting
Select No : = 2

```

TVS200

```

$ SAVE
VPS Data Save ( VPS -> PC : Xmodem )
1: Program
2: Parameters
3: System Prompts
4: User Prompts-1
5: User Prompts-2
6: Custom Service Menu
7: Personal Greeting
8: Company Greeting
Select No : = 2

```

2. To start Press [2] and then ENTER.
3. Press RETURN or ENTER.

Following steps are for HyperTerminal as an example.

4. Select *Receive File* from the *Transfer Menu*.
5. Specify a folder where data is to be saved (if necessary, use "Browse").
6. Select *Xmodem* as the protocol to save data.
7. Click "Receive".
8. Enter desired filename and click "OK".

The file transfer screen appears and shows download progress. Download time will vary depending on the communication speed and file sizes.

"Save Completed" will appear on the screen when the file has been saved. Continue saving the other items as needed. It is not necessary to save the "Program" or "System Prompts" because these are resident on the hard drive and cannot be altered. We do recommend all other data be saved including User Prompt 1 and User Prompt 2 if they have been recorded.

Note

User Prompt files are very large and can take about several hours to save. When you are finished saving files, Type [ONLN] at the \$ prompt. This will turn on the Call Progression Mode of the VPS (calls will be accepted again). Store saved files in a safe area.

Section 7

***SYSTEM MAINTENANCE AND
TROUBLESHOOTING***

7.1 INITIALIZING THE SYSTEM

Initializing the system clears all messages and mailboxes and returns all system parameters to the default setting. Throughout this section, menu selections are indicated as "**System Administration Top Menu - (Selection Number)**." This means that the System Administration Top Menu must first be accessed. On the first menu displayed, make the menu selection corresponding to the first menu displayed. Repeat this process for each subsequent menu when additional selection numbers are listed.

To initialize the system, follow the menu path as shown:

System Administration Top Menu - 4

1. Go to the System Administration Top Menu

```
1 : Program
2 : System Reports
3 : Utility command
4 : System Reset/Clear
5 : Quick Setup
```

SELECT ITEM AND PRESS RETURN-KEY

Note

"5: Quick Setup" does not appear when in the ASCII TERMINAL mode.

2. Type [4] for System Initialization.

```
System Reset/Clear Menu
Mailbox No. Length :3
System Manager's Mailbox No. :999
Message Manager's Mailbox No. :998
```

Will you change the settings ? (Y/N): =

3. Type [Y] (this places the VPS in the off-line mode).

```
System Reset/Clear Menu
Mailbox No. Length :3
System Manager's Mailbox No. :999
Message Manager's Mailbox No. :998
```

Reset System Parameters : Press "\"

4. Type [].


```
*****
* Caution !!!                               *
* Now, System Initialization Starts.         *
*****

Is it all right ? (Y/N): =
```

5. Type [Y] to start the system resetting.

```
System Initializing.
Wait a moment ...
•
•
```

6. When system initializing is complete, the following display will appear:

```
>
```

Note

The execution time for System Reset/Clear may differ each time it is performed because of system capacity and system programs.

Generally, initialization will take a minimum of 3 min to accomplish. To set the system clock (date and time), select the Utility Command (TIME).

7.2 UTILITY COMMANDS

In the Utility Command Mode, the System Administrator can access the functions described below by entering the appropriate command at the "\$" prompt, and **Pressing RETURN**.

To select the Utility Commands Menu, follow the menu path as shown:

System Administration Top Menu - 3

Utility Command (Type 'HELP' for command list.)
\$

OFLN: Sets the system to off-line mode
ONLN: Sets the system to on-line mode
PASS: Sets the System Administrator's password
TIME: Sets the system clock, date, and time
PSET: Specifies the reports printing time
ELOG: Displays device error log
SAVE: Stores a backup of the program or data in the hard disk
LOAD: Restores a backup of the program or data to the system
GPRN: Displays all of the VPS parameters
VERS: Displays the version of hard disk, main ROM and Port card
CREP: Displays the keypad assignments, message recording status and the tree-structure of a Custom service
CCLR: Clears a Custom service menu access count
MWL: Specifies the number of times the VPS attempts to turn on the message waiting lamp on the extensions
MRL: Sets the minimum recording length of a message
MPLT: Displays the user prompt recording status
HELP: Displays brief instructions and a list of Utility Commands
QSET: Set up your VPS roughly so that you can use it quickly
LMON: Line Monitor
PUTD: Display DTMF Information

7.2.1 Off-line Set (OFLN)

The OFLN utility command is used to turn off the VPS Call Progressing Mode. Set the VPS to Off-Line Mode before deleting a mailbox, since this operation involves the updating of a large number of related parameters.

Type OFLN, then **Press RETURN**. If no VPS ports are in use, the VPS will immediately suspend the Call Progressing Service.

\$ OFLN
** OFF LINE MODE **

If any VPS port is in use, the VPS will display the following warning:

```
*** Now Line is used!! *** <WAIT>
```

The VPS will be in the Off-Line Mode when the following message is displayed.

```
** OFF LINE MODE **
```

7.2.2 On-line Set (ONLN)

The ONLN command is used to place the VPS in the Call Progressing Mode.

Type **ONLN**, then Press **RETURN**.

```
$ ONLN
** ON LINE MODE **
```

7.2.3 Set Password (PASS)

The PASS command is used to create, change and clear system passwords. Valid passwords are created using up to 8 characters; any character except [\] can be used.

1. Type **PASS**, then Press **RETURN**.

```
$
1: Administrator Password 2: System Reset/Clear Password :=
```

2. To create a password or change an existing password, go to Step 3.
To clear a password, go to Step 4.

3. To create a password or change an existing password:

a. Type **[1]** or **[2]**.

```
Maximum 8 characters
NEW PASSWORD :=
```

Note

When you press [2] to change the System Reset/Clear password you should type the current (OLD) password before entering a new one.

b. Type the password.

```
Verification: =
```

c. Type the password again for verification.

4. To clear a password:

a. Type **[1]** or **[2]**.

```
Maximum 8 characters  
NEW PASSWORD : =
```

b. Press ENTER. Do not type a password on this screen.

```
VERIFICATION : =
```

c. Press ENTER. Do not type a password on this screen.

Note

The password entered on the screen will not appear. The VPS does not distinguish the capital letter from the small letter.

7.2.4 Set Time (TIME)

The TIME command is used to set the system date and time. A number of system functions require that the system time and date be set correctly. These functions include message waiting notification, external message delivery, call-retries-after initial-failure-to-connect, and automatic deletion of messages.

1. Type TIME, then Press RETURN.

```
$ TIME  
Current time is 12:34, PM  
Enter new time (HH:MM, AM/PM) : =
```

2. Type the current time.

```
Current date is TUE AUG-3-1999  
Enter new date (MM-DD-YY) : =
```

3. Type the current date. For the year, type the last 2 digits.

Note

Enter the exact time and date. This command cannot be used when either the System or the Message Manager is accessing the time setting feature.

7.2.5 Print Reports at Specified Time (PSET)

This command is used to issue system usage reports (Disk Usage Report/Port Usage Report/Call Account Report) at a specified time each day by entering the PSET command. A printer or data terminal must be connected to the VPS at the RS-232C port for the reports to be printed or displayed.

1. Type PSET, then Press RETURN.

```
$ PSET
Report Print Out Service [ Disable ]
    1 : Enable  2: Disable : =
```

2. Type [1] to enable this function or Type [2] to disable it.

```
Enter The Print Out Time (HH:MM, AM/PM) : =
```

3. Type the time to print the reports.**Note**

The reports will be displayed only if the system is in the mode where the ">" prompt is displayed.

7.2.6 Error Log Display (ELOG)

This command is used when diagnosing VPS problems. When selected, this command will display an error log.

```
COM. Communication error between CPU and Port cards
DATA Process error of voice data
MEM. Memory error
PRG. Program error in CPU card
R/W  Read/Write error of Hard disk
```

Type ELOG, then Press RETURN.

```
$ ELOG

DEVICE          ERROR                TIME
-----          -
1. CPU          MEM-GET              JUL-14 14:00 PM
2. CLOCK
3. DISK         DATA R/W (xx:yyyy)  JUL-14 14:00 PM
4. DSP*        SCAN                JUL-14 14:00 PM
5. DSP*        FIFO                JUL-14 14:00 PM
6. CPU         APPLICATION (x)      JUL-14 14:00 PM
```

* = Port number

Note

The errors that can be identified by the system are displayed and explained in the following tables.

Device Error Log Indications

Table 31

Indication	Meaning
CPU MEM-GET	CPU card software memory acquisition error. CPU card is short of memory temporarily because of too much traffic.
CLOCK	Clock access error. Clock IC is out of order. Check the hardware.
DISK DATA R/W (xx:yyyy)	HDD access error. If there is a sector that often causes errors, check the disk. xx : IDE error code yyyy : read/write error sector number
DSP* SCAN	DSP-SCAN error. DSP is out of order. Check the hardware.
DSP* FIFO	DSP/FIFO error. During the system is handing calls, there is wrong with DSP and FIFO memory temporarily.
CPU APPLICATION (x)	Application error. While the system is handling calls, temporary application error occurs. x: port number

* = Port number (TVS75: 1-2, TVS100: 1-4, TVS200: 1-12)

Error Indications at System Startup

Example of a terminal display when errors are generated

Table 32

Indication	Meaning
ROM ERROR : Sum Error!!	ROM checksum error.
DISK ERROR : Initialize Error!!	HDD initialization error.
DISK ERROR : No System!!	No system HDD present.
DISK ERROR : Program Load Error!!	Program could not be loaded from system HDD.
DISK ERROR : Program Sum Error!!	Checksum error in program loaded from system HDD.
DISK ERROR : System Data Error!!	Error Loading of administrator data from system HDD.
SYSTEM ERROR : 1	Administrator data error.
SYSTEM ERROR : 2	Error loading of report data.
SYSTEM ERROR : 3	Clock error.

Table 32

SYSTEM ERROR : 4	Mailbox data error.
SYSTEM ERROR : 5	Message data error (1).
SYSTEM ERROR : 6	Message data error (2).
SYSTEM ERROR : 7	Error loading of control data.
SYSTEM ERROR : 8	Error loading of voice prompt data.
SYSTEM ERROR : 9	Error loading of MWL control data.
SYSTEM ERROR : 10	Error loading of disk identify data.
SYSTEM ERROR : 11	Error writing of VBI chain data.
SYSTEM ERROR : 12	Error writing of BLK chain data.
SYSTEM ERROR : 13	Error loading of user prompt modify data.
SYSTEM ERROR : 14	Error loading of Class of Service data.
No CO line cards are active!!	No Port cards present.
COs are all disabled!!	All Port cards are malfunctioning.
DPITS Interface Connection is not Established.	Port cards are malfunctioning for DPT because telephone lines are disconnected or Integration with PBX is not set to DPT mode.

Error and Warning Indications During System Operation**Table 33**

Indication	Meaning
DISK STORAGE SPACE IS NOW EXCEEDING 80%...	80% or more of the HDD voice message save area is used.
ASCII TERMINAL program Load Error	Error loading of ASCII terminal control program.
VT100 program Load Error	Error loading of VT100 control program.

7.2.7 Saving the System Data to the Backup Device (SAVE)

All system programming data and voice prompts (7 functional areas) can be saved in separate data files. To save this data, a data terminal must be connected to the RS-232C port of the VPS. Files must be saved individually. The SAVE command must be executed for each data file. It will require several minutes to SAVE for all the data selected. When performing this operation, always wait until the process completion indication appears.

WARNING

Never save (back-up) and upload the "Program" without Panasonic Technical support.

The memory required to save each data component is indicated below.

TVS75/100

1. Program - approximately 1 Mbytes (See Warning above)
2. Parameters - approximately 0.3 Mbytes (System Configuration)
3. System Prompts - approximately 15 Mbytes (Do not save - prompts are saved as defaults on the drive)

TVS200

1. Program - approximately 2 Mbytes (See Warning above)
2. Parameters - approximately 0.8 Mbytes (System Configuration)
3. System Prompts - approximately 28.5 Mbytes (Do not save - prompts are saved as defaults on the drive)

Saving items 4-8 below will depend upon the length of the recorded messages.

4. User Prompts-1 (Modified prompts - Modifications to default settings)
5. User Prompts-2 (Modified prompts - Modifications to default settings)
6. Custom Service Menu (Customer service recordings)
7. Personal Greeting (Subscriber greetings)
8. Company Greeting (TVS200 only)

1. Type SAVE, then Press RETURN.

```
$ SAVE
VPS Disk Data Save (VPS -> PC : Xmodem)
1: Program
2: Parameters
3: System Prompts
4: User Prompts-1
5: User Prompts-2
6: Custom Service Menu
7: Personal Greeting
8: Company Greeting
Select No. :=
```


Note

"8. Company Greeting" is available for TVS200 only.

2. Select item to be backed up, then **Press RETURN**. The size of the file will be displayed.

To start press 'RETURN'

3. **Press RETURN**.

----- SAVE Start !!

4. Perform a Standard File Transfer. Set the data terminal to the receiving (Answer) mode (Xmodem) and specify the backup filename. The specified data will be transmitted to the data terminal.

Note

The data terminal used must be equipped with communications software that supports the Xmodem file transfer protocol. The command can be cancelled by Typing [^] before entering the receiving mode. Once the receiving mode has been selected, use the cancel command of the communication software being used. When you are finished saving files, Type [ONLN] at the \$ prompt. This will turn on the Call Progression Mode of the VPS (calls will be accepted again).

7.2.8 Loading New or Saved Data to the VPS (LOAD)

This command is used to install new data or to restore the saved data to the VPS. The LOAD command must be executed for each data file.

When performing this operation, always wait until the process completion indication appears before proceeding.

1. **Type LOAD**, then **Press RETURN**.

```

$ LOAD
Disk Data Load (PC -> VPS : Xmodem)
1: Program
2: Parameters
3: System Prompts
4: User Prompts-1
5: User Prompts-2
6: Custom Service Menu
7: Personal Greeting
8: Company Greeting
Select No.:

```

Note

"8. Company Greeting" is available for TVS200 only.

2. Select the item to be restored to the hard disk, then **Press RETURN**.

To start press 'RETURN'

3. **Press RETURN**.

----- LOAD Start!!

When "CCC" appears, the VPS is ready for loading.

4. Set the data terminal to the sending (Call) mode (Xmodem). Then enter the backup filename. **Press ENTER**. The backup data will be restored to the hard disk.
5. When the parameter load has been completed, power-off and restart the system.

Note

The data terminal used must be equipped with communications software that supports the Xmodem file transfer protocol. The command can be cancelled by Typing [^] before entering the sending mode. Once the sending mode has been selected, use the cancel command of the communication software being used.

7.2.9 Print All of the VPS Parameters (GPRN)

This command is used to print all VPS parameter settings (output to screen).

Type **GPRN**, then **Press RETURN**.

```
$ GPRN
0: All Parameters
1: Mailbox Setting
2: Class of Service Setting
3: Port Service Setting
4: Service Setting - Auto Attn. Setting
5: Service Setting - Custom Service Setting
6: System Parameter Setting - System Group Assignment
7: System Parameter Setting - Day Service, Holiday, Daylight Saving Time
8: System Parameter Setting - Prompt Setting
9: System Parameter Setting - Others
10: Hardware Setting
11: System Reset Clear Parameter

Please select : =
```

Note

This command is only valid when in the "ASCII terminal" mode.

7.2.10 Program Version Display (VERS)

This command is used to display the version numbers of the hard disk, main ROM and port card.

Type **VERS**, then Press **RETURN**.

```
$ VERS
V.P.S. PROGRAM VERSION

MAIN DISK : VC 2200 (2.00)
MAIN ROM : VC 11A (1.00)
```

Note

The numbers are examples only. Your system will show different numbers.

7.2.11 Custom Service Report (CREP)

The CREP command is used to display the custom service menu access count, the keypad assignments, message recording status and the tree-structure of the Custom Service.

Type **CREP**, Press **Space**, Enter the Custom Service number (1-100), and Press **RETURN**.

```
$ CREP 20
Custom [20] (User-1) (Access: 3) (Menu Msg. : None)
| < Custom Service Entry Menu >
[1]- Xfer Mbx (101)
[2]- Xfer Extn. (102)
[3]- Custom [21] (System) (Access: 0) (Menu Msg. : None)
| | < Voice Mail Information Eng. >
| | [1] - Custom [22] (User 2) (Access: 0) (Menu Msg. : None)
| | | < Voice Mail Information Spanish >
| | | [1]- Operator
| | | [2]- Name Dial
| | | [3]- Subscriber
| | | [4]- Dprt Dial
| | | [*]- Main Menu
| | [*]- Main Menu
[6]- Operator
[7]- Exit
[8]- Pre Menu
[*] Exit
[#] Main Menu
```

Custom [20]: Indicates that Custom service No. is "20."

User-1: Indicates a type of voice prompts is "User-1."

Access: 3:	Indicates that this Custom Service was accessed 3 times by callers. This counter can be cleared, See 7.2.12 Custom Service Menu Access Count Clear (CCLR).
Menu Msg.: None:	Indicates that the menu message for a Custom service is "None (not recorded)".
[1]-Xfer Mbx (101):	Indicates that the caller will be transferred to the mailbox 101 by pressing [1]. If menu message is recorded, "Rec" will appear.
[2]-Xfer Extn (102):	Indicates that the caller will be transferred to the extension 102 by pressing [2].
[3]-Custom [21]:	Indicates that the caller will be sent to Custom Service 21 by pressing [3].

7.2.12 Custom Service Menu Access Count Clear (CCLR)

Each Custom Service has an access counter that counts the number times the service has been accessed. This command clears this counter.

Type CCLR, Press Space, and Enter Custom Service Menu (1-100), then **Press RETURN**.

```
$ CCLR 20
Custom Menu <20> Accessing Counter Cleared !!
```

Note

Type CCLR 0 to clear the access counters of all Custom Services.

7.2.13 Message Waiting Lamp Retry Times (MWL)

This command is used to specify the number of times the VPS will attempt to turn on the Message Waiting Lamp of the called extension. This setting is required when a PBX other than the Panasonic KX-T series telephone system is used.

```
$ MWL
Current Setting of M.W.L. Retry Count is 1
Enter M.W.L. Retry Count (1-3) =
```

Note

This setting is not valid if "Message Waiting Lamp for Every Message" is set to "Yes."

7.2.14 Setting Minimum Recording Length (MRL)

This command is used to specify the minimum message recording length (0-3 s). Messages shorter than this setting are discarded from the mailbox.

Note

The minimum recording length can only be set using this command.

1. Type **MRL**, then Press **RETURN**.

```
$ MRL
Current Setting of Minimum Recording Length is 2
Enter Minimum Recording Length (0-3) =
```

2. Type, the message length.

7.2.15 Modified Prompt List (MPLT)

This command is used to display the user prompt recording status — recorded, not recorded, or turned off.

1. Type **MPLT**, then Press **RETURN**.

MPLT —> both prompts

MPLT 1 —> User 1 prompts

MPLT 2 —> User 2 prompts

2. Type **[1]** to display the User-1 prompts. Type **[2]** to display the User-2 prompts. Press nothing to display both User-1 and User-2 prompts.

```
$ MPLT 1

***List of Registered User Prompt 1 No. ([1], [2], . . . , [620])***

, 1,      ,      ,      ,      ,      ,      ,      ,      ,      ,      ,
,      ,      , OFF,      ,      ,      ,      ,      ,      ,      ,
,      ,      ,      ,      ,      ,      ,      ,      ,      ,      ,
,      ,      ,      ,      ,      ,      ,      ,      ,      ,      ,

          •
          •
          •

,      ,      ,      ,      ,      ,      ,      ,      ,      ,      ,
,      ,      ,      ,      ,      ,      ,      ,      ,      ,      ,
,      ,      ,      ,      ,      ,      ,      ,      ,      ,      ,

*** Total number of Registered = 3 ***
*** Total number of TURN OFF = 1 ***
```

Blank: The prompt has not been recorded.

Prompt no.: The prompt has been recorded.

"OFF": The prompt has been turned off.

Note

The "Total Number of Registered" shown at the bottom of the screen, does not include the prompts that have been turned off.

7.2.16 Utility Command List (HELP)

The HELP command displays the list of all available utility commands.

1. Type **HELP**, then Press **RETURN**.

```

$ HELP
OFLN  : System Off-line
ONLN  : System On-line
PASS  : Password setting
TIME  : Time & Date setting
PSET  : Report Print Out Time setting
ELOG  : Device Error Log Listing
SAVE  : VPS Program & Data Save (VPS -> PC : Xmodem)
LOAD  : VPS Program & Data Load (VPS <- PC : Xmodem)
GPRN  : Parameter Global Printing (only 'ASCII Terminal' mode)
VERS  : Program Version Check
CREP [no]      : Custom Menu Information List
                [no] : Custom Menu No. (1-100)
CCLR [no]      : Custom Menu Access Counter Clear
                [no] : Custom Menu No. (1-100/0) (0: Clear All)
MWL [count]    : MWL Retry count set (1-3)
MRL [count]    : Minimum Recording Length set (0-3)
MPLT [opt]     : Registered User Prompt No. List
                [opt] : 1 -> User Prompt 1
                    2 -> User Prompt 2
                    None-> User Prompt 1&2
QSET  : Quick Setup
LMON  : Line Monitor
PUTD  : DTMF Information Display (Don't leave enabled after
        troubleshooting.)
$

```

7.2.17 Quick Setup (QSET)

This command is initially used to setup the VPS very roughly when you use your VPS for the first time or after system initialization.

Type **QSET**, then Press **RETURN**. The same menu as "Starting the Quick Setup" in Section 5.1 STARTING UP.

7.2.18 Circuit Condition Display (LMON)

This command is used to display the circuit condition every 1.5 s. To disable the display in the VT100 mode, **Type** []. When in the ASCII mode, the circuit condition is only displayed once. The command can be turned off by entering [].

The following circuit conditions may be displayed.

"Ready"	: Possible to serve
"Incoming Call Service"	: Processing arrival service
"Outgoing Call Service"	: Processing sending service
"DSP Reset Processing"	: Processing DSP reset disposition
"PITS connect Processing"	: Processing PITS connect disposition
"Error/Not Exist"	: DSP Card is not loaded

```

$ LMON
CO No.:  Status
      1:  Ready
      2:  Ready
      3:  Ready
      4:  Ready
      5:  Ready
      6:  Ready
      7:  Ready
      8:  Ready
      9:  Error/Not Exist
     10:  Error/Not Exist
     11:  Error/Not Exist
     12:  Error/Not Exist

```

7.2.19 DTMF Information Display (PUTD)

This command is used to display the DTMF tones the VPS receives and sends.

In addition to the DTMF tones the following are displayed — the Incoming Call Service (Voice Mail, Automated Attendant, Custom, and Interview) entered by the caller and the time periods that the ports are enabled.

Type PUTD. The VPS will remain in this mode until "PUTD" is entered again. The default setting for this mode for all ports is "OFF."

```

$ PUTD
  Target Port : * * * * *
$

```

To change the mode from "PUTD" to "OFF," **Type PUTD** again.

```

$ PUTD
  Target Port : 0000 0000 0000
  Don't leave enabled after troubleshooting
$
  Note: "*" means "enable" for the port
        "0" means "disable" for the port

```

To set the mode for only 1 port, **Type PUTD** and the port number.

```

$ PUTD 1
  Target Port : 0000 0000 000*
  Don't leave enabled after troubleshooting

                                     Port 1

```

Sample display:

```

$ PUTD
  Target Port for Debug : * * * * *
$
[1] DTMF:3
[1] DTMF:8
[1] A.Attend
[1] DTMF:#
[1] DTMF:6
[1] Voice Mail
[1] DTMF:1
[1] DTMF:0
[1] DTMF:1
[1] NonSub Svc
[1] * * *
[1] DTMF:#
[1] DTMF:9
[1] Thank you

```

WARNING

"PUTD" is a command originally used when troubleshooting. Do not use this command for any other purpose. Do not disconnect the RS-232C connection while the "PUTD" command is enabled. This could cause data overflow.

7.3 SYSTEM REPORTS

The System Administrator is able to generate 8 System Reports to monitor VPS operating status. The reports can be displayed on a data terminal or printed. The terminal or printer must be connected to the RS-232C port. The following 8 report options are available.

To select the System Reports Menu, follow the menu path as shown:

System Administration Top Menu - 2 - 1

System Reports – System Report Menu

1. Mailbox Assignments
2. COS Assignments
3. System Service Report
4. Call Account Report
5. Port Usage Report
6. Disk Usage Report
7. Mailbox Usage Report
8. Fax Call Report

SELECT ITEM AND PRESS RETURN-KEY

The following 4 reports can be cleared of all values and prepared for use again.

To clear the following 4 reports, follow the menu path as shown:

System Administration Top Menu - 2 - 2

System Reports – System Report Clear Menu

1. Port Usage Statistics Clear
2. Disk Usage Statistics Clear
3. Mailbox Usage Statistics Clear
4. Fax Call Report Clear

SELECT ITEM AND PRESS RETURN-KEY

7.3.1 Mailbox Assignments

The Mailbox Assignments report provides information about the applied mailbox authorized features and current parameter settings.

To select the Mailbox Assignments Report, follow the menu path as shown:

System Administration Top Menu - 2 - 1 - 1

** Mailbox Assignments										Jul-28 11:30 AM **
MBOX	Extn	Name (Fir/Lst)	COS	CExtn	IVMBOX	AITrf	MN1st	MN2nd	MN3rd	
510	21	JONE/DELY	2	61	621	-	---	---	---	
511	22	SCHE/-----	2	62	611	-	Bep	Tel	---	
512	23	MAY/-----	16	63	612	-	Tel	Bep	---	
520	310	JONE/-----	1	--	-	X	---	Tel	Bep	
521	320	DAVE/-----	1	--	888	-	---	---	---	
522	4100	CLUS/ALCC	21	--	-	-	---	---	---	
523	4201	WHIT/BLUE	32	--	642	-	---	---	---	

COS: Class of Service IVMBOX: Interview Mailbox
 CExtn: Covering Extension MN1st: Message Notification Device 1
 AITrf: All Call Transfer to Mailbox MN3rd: Message Notification Device 3
 MN2nd: Message Notification Device 2 Tel: Telephone
 Bep: Beeper

Note

An 'X' displayed on the screen indicates that the feature marked with the X is set to "YES."

7.3.2 COS (Class of Service) Assignments

This report provides information concerning all Class of Service numbers.

For a complete explanation of COS parameters, please see Table 45, 46, 47 and 48 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS.

*To select the COS Assignments Report, follow the menu path as shown:
System Administration Top Menu - 2 - 1 - 2*

** COS Assignments																						Jul-29 11:30 AM **
COS	GL	RtN	RtS	Ln	CaN	CaT	RO	SI	SP	CW	MC	DM	PG	Pr	MN	ED	(pr)	AF	(mbox/	dl/	md)	
1	16	10	10	5	10	10	L	N	N	N	N	N	1	U1	X	X	U1	-	-----	00:30	M	
2	16	7	7	3	10	10	L	Y	N	N	N	N	2	U1	X	X	U1	-	-----	00:30	M	
3	8	7	7	3	10	10	F	Y	N	N	N	N	8	S	X	-	U1	-	-----	00:30	M	
.	
63	16	30	6	6	100	100	L	N	N	N	Y	Y	I	U1	X	-	U1	-	-	00:30	M	
64	16	30	6	6	100	100	L	N	N	N	Y	Y	I	U1	-	-	U1	-	-	00:30	M	

COS: Class of Service number GL: Personal Greeting Length

RtN:	New Message Retention	RtS:	Saved Message Retention Time
Ln:	Message Length Time	CaN:	Maximum Message
CaT:	Maximum Message Time	RO:	Message Retrieval Order (L=LIFO, F=FIFO)
SI:	Message Scanning with Information	SP:	Play System Prompt after Personal Greeting
CW:	Use Call Waiting on Busy		
DM:	Direct Mailbox Access	PG:	Intercom Paging Group
Pr:	Prompt Mode (S = System Prompts, U1 = User 1 Prompts, U2 = User 2 Prompts)	MN:	Authorization of Message Waiting Notification
ED (pr):	Authorization of External Message Delivery (Prompt Mode) (SY = System, U1 = User 1, U2 = User 2, SL = Selective)	AF:	Authorization of Auto Forwarding (mbox) = Mailbox No (dl) = Delay Time (md) = Forwarding Mode

Note

An "X" displayed on the screen indicates that the feature marked with the X is set to "Yes."

7.3.3 System Service Report

The System Service Report provides information about the VPS's usable ports. It also indicates the services assigned to each VPS port for Day, Night, and Holiday modes, and all incoming and outgoing call services.

To select the System Service Report, follow the menu path as shown:

System Administration Top Menu - 2 - 1 - 3

To select the Port Usage Report, follow the menu path as shown:
System Administration Top Menu - 2 - 1 - 5

** Port Usage Report					Jan-4 7:46 PM **
FROM : : JAN-3 9:53 AM					
Port	ED	MN	Rcv	Connect Time	
1	8	0	84	02:10:19	
2	4	0	21	00:18:54	
3	---	---	---	---	
4	---	---	---	---	
Total	9	0	105	02:39:13	
Full-line Time 00:36:39					

Table 34

FROM: The date and time of the last clearing of this report

ED: External Delivery MN: Message Notification Rcv: Receive

Full-line Time: The total time that all ports were used simultaneously.

Note

Applicable VPS ports depend upon the models.

7.3.6 Port Usage Statistics Clear

Clears the Port Usage Report for use again.

To clear the Port Usage Statistics Report, follow the menu path as shown:
System Administration Top Menu - 2 - 1 - 1

System Reports - System Report Clear - Port Usage Statistics Clear

May I clear a port usage report data? (Y/N) : =

Type [Y] (yes) or **[N]** (no). If "Y" is entered, the system will clear the data. Wait until "Port Usage Report Data Cleared!!" appears on the screen before proceeding.

7.3.7 Disk Usage Report

The Disk Usage Report indicates the amount of disk storage used and the disk availability in minutes. It also presents the following statistics:

- The number of messages that were recorded by callers since the last clearing of this report.
- The number of messages that were copied since the last clearing of this report.
- The number of messages that were deleted by subscribers since the last clearing of this report.
- The number of messages that expired and were removed by the system since the last clearing of this report.

To select the Disk Usage Report, follow the menu path as shown:

System Administration Top Menu - 2 - 1 - 6

** Disk Usage Report		Jan-4 7:46 PM **			
Drive	Avail	Used	(%)		
1	1958 min.	2min.	(1)		
FROM : : JAN-3 9:53 AM					
	New	Cpy	Del	Exp	
MSGs	64	0	6	1	

Table 35

FROM: The date and time of the last clearing of this report and Removed

Cpy: Copy (Transfer) Del: Deleted Exp: Expired

Note

All report values can be reset to 0 by selecting the Disk Usage Clear command.

The total amount of time available for disk storage depends upon the model.

7.3.8 Disk Usage Statistics Clear

The Disk Usage Report can be cleared of all values and prepared for use again.

To clear the Disk Usage Report, follow the menu path as shown:

System Administration Top Menu - 2 - 2 - 2

System Reports - System Report Clear - Disk Usage Statistics Clear

May I clear a disk usage report data ? (Y/N) : =

Type [Y] (yes) or **[N]** (no). If "Y" is entered, the system will clear the data. Wait until "Disk Usage Report Data Cleared!!" appears on the screen before proceeding.

7.3.9 Mailbox Usage Report

The Mailbox Usage Report provides information about the usage at specific mailbox. It includes the number of recorded messages, the total amount of outgoing calling time, and external message, message notification and group message delivery.

To select the Mailbox Usage Report, follow the menu path as shown:

System Administration Top Menu - 2 - 1 - 7

Enter the Range : = 111

Note

Specify the range or the mailbox number. To obtain information on specific mailboxes from No. 200 to No. 209, Type [20] and Press RETURN, or [200] [,][209] and Press RETURN.*

```

** Mailbox Usage Report                                     Jan-4 7:46 PM **
MBOX:111 [JONE BLUE]
New          MSGs    4
Received    MSGs    6
ED          MSGs    0
FROM : :                               JAN-3 9:53 AM
Subscriber Access Time                00:00:40
MBOX Use Time                          01:21:30
Feature Usage      ED      MN      IM      GM      AF
                   11      31      20      14      22
                   LD      Lcl     Beep     Extn
Outcalling         6      13      0      28
(Time)            00:05:10  00:10:45  00:00:00  00:31:21
                   Rcv     Del     Exp
MSG Received      42      30      11

```

FROM: The date and time of the last clearing of this report

ED: External Delivery

MN: Message Notification

IM: Interview message

GM: Personal/System Group Distribution List

AF: Auto Forwarding	LD: Long distance call (10 digits or more)
Lcl: Local call (less than 10 digits)	Rcv: Received
Del: Deleted	Exp: Expired

Note

New MSGs/Received MSGs/ED MSGs are current status indications. All else are accumulated indications since the last clearing of this report.

7.3.10 Mailbox Usage Statistics Clear

The Mailbox Usage Report can be cleared of all values and prepared for use again.

To clear the Mailbox Usage Report, follow the menu path as shown:

System Administration Top Menu - 2 - 2 - 3

System Reports - System Report Clear - Mailbox Usage Statistics Clear

Enter the Range : =

May I clear a mailbox usage report data ? (Y/N) : =

Type [Y] (yes) or **[N]** (no). If "Y" is entered, the system will clear the data. Wait until "Mailbox Usage Report Data Cleared!!" appears on the screen before proceeding.

7.3.11 Fax Call Report

The Fax Call Report provides information about fax transfer when the VPS receives a fax signal. It includes the fax data receiving date, the port number used, and the fax transfer status for up to 64 fax messages.

To select the Fax Call Report, follow the menu path as shown:

System Administration Top Menu - 2 - 1 - 8

** Fax Call Report		NOV-14 3:50 PM **		
[DATE/TIME]	[PORT]	[FAX-1]	[FAX-2]	
JAN-11 11:15 AM	1	connect	---	
MAR-01 07:58 PM	2	(busy)	(no-ans.)	
MAR-01 10:23 AM	4	(busy)	connect	

FAX-1: Main facsimile machine

FAX-2: Alternate facsimile machine

Connect: Call was answered by the
facsimile machine

no-ans.: No-answer

7.3.12 Fax Call Statistics Clear

The Fax Call Report can be cleared of all values and prepared for use again.

To clear the Fax Call Statistics Report, follow the menu path as shown:
System Administration Top Menu - 2 - 2 - 4

System Reports - System Report Clear - Fax Call Report Clear

May I clear a fax call report data ? (Y/N) : =

Type [Y] (yes) or **[N]** (no). If "Y" is entered, the system will clear the data. Wait until "Fax Call Report Data Cleared!!" appears on the screen before proceeding.

7.4 TROUBLESHOOTING GUIDE

Table 36

PROBLEM	PROBABLE CAUSE	POSSIBLE SOLUTION
<i>The VPS does not operate.</i>	<ul style="list-style-type: none"> • Bad printed circuit board. • Bad connection with PBX. • Card was inserted into the wrong slot. • Incomplete card insertion. 	<ul style="list-style-type: none"> • Change the printed circuit board. • If the phone works properly when the SLT is connected instead of the VPS, change the Port card. If the phone still fails to work properly, check the connection between the VPS and PBX. • Insert the card firmly into the normal card slot. • Insert the card firmly into the back board.
<i>Dialing is not registered.</i>	<ul style="list-style-type: none"> • A pulse phone is being used by mistake. • Improper setting of integration mode. 	<ul style="list-style-type: none"> • Change to a touch tone phone. • Adjust the integration mode properly between the VPS and your PBX.
<i>Line disconnection occurs while transferring an outside call. Outside calls cannot be transferred.</i>	<ul style="list-style-type: none"> • Improper setting of the sequence. • Improper setting of the hooking time. • Improper setting of the CPC signal. 	<ul style="list-style-type: none"> • Adjust the transfer sequence to that of the connected PBX and reset. • Adjust the hooking time to that of the connected PBX and reset. • Adjust the CPC signal to that of the connected PBX and reset.
<i>Unable to make outside calls.</i>	<ul style="list-style-type: none"> • Improper setting of the outside call dial mode. • Improper setting of the outside call dial procedure. 	<ul style="list-style-type: none"> • Reset the outside call dial mode (tone/pulse) properly. • Reset the outside line access sequence of the connected PBX.
<i>Unable to call an extension.</i>	<ul style="list-style-type: none"> • Improper setting of extension numbering plan. 	<ul style="list-style-type: none"> • Adjust the extension numbering plan properly.
<i>Unable to access the mailbox.</i>	<ul style="list-style-type: none"> • Improper setting of the number of digits in the mailbox number. 	<ul style="list-style-type: none"> • Readjust the number of digits in the mailbox number.

Table 36

PROBLEM	PROBABLE CAUSE	POSSIBLE SOLUTION
<i>Connected terminal (RS-232C port) does not operate.</i>	<ul style="list-style-type: none"> • Improper connection. • Improper setting of the parameter. 	<ul style="list-style-type: none"> • Connect the cable firmly. • The terminal and VPS should have the same parameter settings for Baud Rate, Word Bit Length, Parity and Stop Bit Length.
<i>Unable to make reconnection when the line is busy.</i>	<ul style="list-style-type: none"> • Improper setting of the busy signal reconnection procedure. 	<ul style="list-style-type: none"> • Readjust the busy signal reconnection procedure to that of the connected PBX.
<i>Unable to make a no-response reconnection.</i>	<ul style="list-style-type: none"> • Improper setting of the no-response reconnection procedure. 	<ul style="list-style-type: none"> • Readjust the no-response reconnection procedure to that of the connected PBX.

7.5 SPECIFICATIONS

Table 37

Port:	TVS75 - 2 SLT extensions or DPT TVS100 - 2 to 4 SLT extensions or DPT TVS200 - KX-TVS204 (4 digital ports extension card) KX-TVS102 (2 digital/Analog ports expansion card)
Dialing Method:	DTMF/Pulse (10/20 pps)
Flash Time:	100/300/600/900 ms (programmable)
CPC Detection (TVS200):	6.5/150/300/450/600 ms (programmable)
Type of Line:	Loop start minimum Loop Current: 20 mA minimum Line Voltage: 7 V DC minimum Ringing Voltage: 40 V AC
Extension Numbering:	2 to 5 digits (programmable)
Pause Time:	1 to 9 s (programmable)
Message Waiting Lamp:	Programmable DTMF sequence. Data line of DPT interface.
Main CPU:	16-bit microprocessor
Capacity of Hard Disk:	TVS75 - 6 h, TVS100 - 18 h, TVS200 - 32 h
Number of Mailboxes:	TVS75/100 - Max. 64 TVS200 - Max. 1024 (including System Manager and Message Manager mailboxes)
Number of Messages:	Max. 100 per mailbox (programmable)
Personal Greeting Message Length:	8 to 60 s (programmable)
Message Retention Time:	1 to 30 days or unlimited (programmable)
Maximum Message Length:	1 to 6 min (programmable)
Reports:	Mailbox List, Class of Service List, System Service Report, Call Account Report, Port Usage Report, Disk Usage Report, Mailbox Usage Report, FAX Report

Table 37

Connections	Telephone Line:	<p>TVS75 Modular connectors × 2 2-conductor wire × 2 4-conductor wire with DPT interface × 1</p> <p>TVS100 Modular connectors × 2 (max. 4) 2-conductor wire × 2 (max. 4) 4-conductor wire with DPT interface × 1 (max. 2)</p> <p>TVS200 2-conductor wire × 6 4-conductor wire with DPT interface × 6</p>
	Data Port:	RS-232C interface port
Power Source:		120 V AC, 60 Hz
Power Consumption:		<p>TVS75 Approx. 20 W</p> <p>TVS100 Approx. 38 W</p> <p>TVS200 Approx. 57 W</p>
Dimensions (H × W × D):		<p>TVS75 175 × 318 × 65 mm {6-13/16" × 12-1/2" × 2-9/16"}</p> <p>TVS100/200 468 × 327 × 101 mm {18-7/16" × 12-7/8" × 4"}</p>
Mass (Weight):		<p>TVS75 Approx. 1.3 kg {2.9 lb.}</p> <p>TVS100 Approx. 5.3 kg {11.7 lb.}</p> <p>TVS200 Approx. 7.0kg {15.5 lb.}</p>

Appendix A
SYSTEM FEATURES

A1 SYSTEM FEATURES

The Voice Processing System has many features that are available to the system administrator, the system manager, and/or system subscribers. The tables on the following pages list and briefly describe each key VPS system feature. In addition, references to specific sections of this manual and the Subscriber's Guide are provided in the reference column that pertains to each feature listed. The specific procedure steps required to initiate, access, or utilize each feature are detailed at these reference points.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Alternate Extension Group	a group of extensions, which require a different call transfer sequence than normal, into a separate group.	<ul style="list-style-type: none"> • See "Dialing Parameters" in 3.2.4 PBX Interface Parameters. • See "Alternate Extension Assignment" in B5.1 Automated Attendant Parameters. • See "Alternate Extension Group" in Glossary.
Auto Configuration (DPT Only)	creates mailboxes by obtaining extension numbers from the Panasonic KX-TD series telephone system. Also sets the time and date automatically by obtaining time information.	<ul style="list-style-type: none"> • See "Creating Mailboxes" in 5.1.3 Starting the Quick Setup. • See "Auto Configuration" in Glossary.
Auto Forwarding	forwards or copies messages not retrieved from one mailbox to another, after a specified period of time. This service is only available to subscribers. Class of Service programming determines the mailboxes that can use this feature. Messages marked as "private" cannot be forwarded.	<ul style="list-style-type: none"> • See "Private Message" in this table. • See "Authorization of Auto Forwarding" in Table 47 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See C3 SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "Auto Forwarding" in Glossary.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Automated Attendant	answers incoming calls and routes those calls to the desired extension. The service can be assigned on a port-by-port basis, and day/night basis.	<ul style="list-style-type: none"> • See 5.2.10 Automated Attendant. • See 5.4 AUTOMATED ATTENDANT PARAMETERS. • See B5.1 Automated Attendant Parameters. • See "Automated Attendant" in Glossary.
Broadcasting Messages	<p>permit the system manager to deliver the same message to all VPS subscribers at the same time.</p> <p>This feature is only available to the system manager.</p>	<ul style="list-style-type: none"> • See "Delivering Messages to All Mailboxes (Broadcasting Messages)" in C6 DELIVERING MESSAGES.
Busy Coverage Mode	specifies how calls to the operator will be handled when the line is busy. The Busy Coverage options that are available include: Hold, No-Answer Coverage, Call Waiting, and Disconnect Message.	<ul style="list-style-type: none"> • See "Busy Coverage Mode" in Table 28 in 5.4.3 Operator Parameters. • See "Busy Coverage Mode" in Table 51, 52 and 53 in B5 SYSTEM ADMINISTRATION - SERVICE SETTING.
Call Services	<p>include a series of both incoming and outgoing call services.</p> <p>Incoming Call Services - Automated Attendant Service, Voice Mail Service, Interview Service, Custom Service.</p> <p>Outgoing Call Services - Message Waiting Notification, and External Message Delivery.</p>	<ul style="list-style-type: none"> • See "Port Service Setting" in 5.1.3 Starting the Quick Setup. • See "Incoming Call Service" in Table 27 in 5.3.1 Port Service Menu. • See "Incoming Call Service" in Table 49 in B4.1 Port Assignment.
Call Transfer Status	permits subscribers to specify how the VPS will handle calls to their individual extensions. Call Transfer Status options include - Call Screening, Call Blocking, Intercom Paging, and Calling a Beeper.	<ul style="list-style-type: none"> • See "Call Transfer" in Glossary. • See 4.1 Call Transfer Status in the Subscriber's Guide.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Callback Number Entry	enables the caller to leave a callback number in several different ways depending upon which option is programmed into the system. The feature can forward the callback number to a beeper.	<ul style="list-style-type: none"> • See "Notification Setting" in B2 SYSTEM ADMINISTRATION - MAILBOXES. • See "Beeper Callback No. Entry Mode" in Table 47 and 48 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "Other Parameters-Message Waiting Notification" in B6.6 Other Parameters.
Class of Service (COS)	There are 62 COS levels for Subscribers. COS 63 is for the Message Manager and COS 64 is for the System Manager.	<ul style="list-style-type: none"> • See 7.3.2 COS (Class of Service) Assignments. • See B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "Creating and Editing a Mailbox" in C2 SETTING UP MAILBOXES. • See C3 SETTING COS (CLASS OF SERVICE) PARAMETERS.
Company Greeting	is the recorded greeting that is heard by all incoming callers. The greeting is assigned by the system administrator on a port-by-port and day/night basis.	<ul style="list-style-type: none"> • See 6.1.3 Company Greetings (Enter [#6*998,5,1]). • See "Company Greeting No." in Table 49 in B4 SYSTEM ADMINISTRATION - PORT SERVICE. • See step 4: "For the parameter selected, follow the step indicated below:" in D6 RECORDING COMPANY MESSAGES. • See "Company Greeting" in Glossary.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Covering Extension	forwards calls to a second extension when the first extension's subscriber is not available to take the call. Also called when the caller presses 0 during a Personal Greeting.	<ul style="list-style-type: none"> • See "Covering Extension" in Table 43 in B2 SYSTEM ADMINISTRATION - MAILBOXES. • See "Covering Extension" in Glossary.
Custom Service	<p>allows callers to access specific functions by entering numbers or symbols through the telephone keypad.</p> <p>Up to 100 custom service menus can be recorded by the Message Manager. These menus can be recorded in various foreign languages, and help guide outside callers to the desired extension, mailbox, System Group Distribution List, department dialing menu, operator, fax/machine, etc.</p>	<ul style="list-style-type: none"> • See 5.2 PORT SETTING OPTIONS. • See 6.1.4 Custom Service Greetings (Enter [#6*998,5,4]). • See 7.2.11 Custom Service Report (CREP). • See 7.2.12 Custom Service Menu Access Count Clear (CCLR). • See B5.2 Custom Service. • See "Recording Messages" in D6 RECORDINGCOMPANY MESSAGES. • See "Custom Service Setting" in Glossary.
Day Service	is a timer function that initiates the appropriate day, night, or holiday incoming call handling procedure.	<ul style="list-style-type: none"> • See "Day Service (1-5-2)" in 5.2.2 Custom Service Features. • See "Port 1 - Day Mode" in B4 SYSTEM ADMINISTRATION - PORT SERVICE. • See B6.2 Day Service.
Daylight Saving Time Assignment	changes the internal clock of the VPS for the start and end of Daylight Saving Time.	<ul style="list-style-type: none"> • See B6.4 Daylight Saving Time (DST).
Department Dialing	is a speed dialing function that permits the caller to quickly reach the desired extension by dialing a 1 digit number either during or after the playing of the Department Dialing message.	<ul style="list-style-type: none"> • See 5.4.2 Department Dialing. • See "Department Dialing" in B5.1 Automated Attendant Parameters. • See "Recording Messages" in D6 RECORDINGCOMPANY MESSAGES. • See "Department Dialing " in Glossary.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Dialing by Name	allows the caller to reach the intended mailbox/extension (when the number is not known) by entering the first 3 or 4 letters of the mailbox owner's last name. The VPS identifies all subscribers with that letter combination and states each name for the caller. The caller selects the desired subscriber by entering the appropriate number or symbol on the telephone keypad.	<ul style="list-style-type: none"> • See "Owner Name" in table 43 in B2 SYSTEM ADMINISTRATION - MAILBOXES.
Direct Mailbox Access (DPT Only)	allows subscribers to call the VPS and access their mailbox without entering the mailbox number.	<ul style="list-style-type: none"> • See 4.1 GUIDELINES FOR DIGITAL INTEGRATION. • See "Direct Mailbox Access" in Table 45 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See C3 SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "Direct Mailbox Access" in Glossary.
DPT Integration	is the interface data link that permits certain information and command functions to be sent to the VPS by the PBX. The information and command functions include: Auto Configuration, Direct Mailbox Access, Intercom Paging, Live Call Screening, Two-Way Recording and Two-Way Transfer.	<ul style="list-style-type: none"> • See "VOICE MAIL" in 1.3.3 Which Phone Systems are Compatible? • See 1.4.2 KX-TVS75/100 - Connection Example. • See 2.5 CONNECTIONS - KX-TVS75/100, 2.6 CONNECTIONS - KX-TVS200. • See 3.1.1 DPT or Inband Signaling? • See 4 INTEGRATING THE VPS WITH THE PANASONIC KX-TD DIGITAL PBX. • See "DPT Integration" in Glossary.
Extension Group	permits a number of extensions to share information through a single mailbox.	<ul style="list-style-type: none"> • See 5.2.8 Extension Groups. • See "System Group Assignment - Extension Group" in B6.1 System Group Assignment.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Extension Numbering Plan	permits the VPS to recognize an extension number as valid.	<ul style="list-style-type: none"> See "Other Parameters - Extension Numbering Plan" in B6.6 Other Parameters.
External Message Delivery List	<p>allows a subscriber to send a message to outside parties with a single operation. One subscriber can maintain up to 2 lists. Each list is able to support 8 entries.</p> <p>This feature is only available when External Message Delivery has been authorized for the subscriber's COS.</p>	<ul style="list-style-type: none"> See "Class of Service Setting - Special Feature Authorization" in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. See "External Message Delivery Service" in this table. See "External Delivery Message", "External Message Delivery List" and "External Message Delivery Redial" in Glossary. See 3.3 Setting up an External Message Delivery List in Subscriber's Guide.

Table 38

FEATURE	DESCRIPTION	REFERENCE
External Message Delivery Service	allows a subscriber to send a message to several subscribers and non-subscribers at the same time. This feature also permits the receiver to reply to the message without having to specify the mailbox number.	<ul style="list-style-type: none"> • See "Class of Service Setting - Special Feature Authorization" in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "Authorization of External Message Delivery" in Table 47 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "Other Parameters - External Message Delivery Parameters" in B6.6 Other Parameters. • See C3 SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "External Delivery Message", "External Message Delivery List" and "External Message Delivery Redial" in Glossary. • See 3.4 Sending External Delivery Messages in Subscriber's Guide.
External Message Delivery Status	allows the subscriber to check the status of undelivered and pending external delivery messages. This feature is only available when External Message Delivery has been authorized for the subscriber's COS.	<ul style="list-style-type: none"> • See "External Message Delivery Service" in this table. • See "External Delivery Message", "External Message Delivery List" and "External Message Delivery Redial" in Glossary. • See 3.5 Checking and Setting External Message Delivery Status in Subscriber's Guide.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Fax Management	allows the system to automatically route an incoming fax signal to a specific fax machine. Up to 2 fax machines can be assigned using this feature. Outside callers can also reach the fax machine via Custom Service selection, if programmed.	<ul style="list-style-type: none"> • See "Fax Management (1-5-6-8)" in 5.2.2 Custom Service Features. • See 7.3.11 Fax Call Report. • See 7.3.12 Fax Call Statistics Clear. • See "Other Parameters - Fax Management" in B6.6 Other Parameters.
Group Distribution List - Personal	allows a subscriber to simultaneously send a message to several mailboxes using a Group Distribution List. This list is established by the subscriber. Each subscriber can maintain a maximum of 4 lists with up to 20 entries on each list.	<ul style="list-style-type: none"> • See "Group Distribution List - System" in this Table. • See "Personal Group Distribution List" in Glossary. • See 4.5 Personal Group Distribution Lists in Subscriber's Guide. • See 4.6 Deleting Group Distribution Members in Subscriber's Guide. • See 4.7 Deleting Group Distribution Lists in Subscriber's Guide.
Group Distribution List - System	allows a subscriber to send a message to several mailboxes using a Group Distribution List. Using a list also allows a caller to record a message in several mailboxes. The System Administrator must establish this list. Up to 20 lists can be maintained by the VPS with up to 20 entries possible on each list.	<ul style="list-style-type: none"> • See "System Group Assignment - Mailbox Group" in B6.1 System Group Assignment. • See C6 DELIVERING MESSAGES. • See "System Group Distribution List" in Glossary.
Hold	provides the caller with the option of temporarily holding the call when the line is busy. The VPS automatically recalls the extension after a specified period of time. When several callers hold their calls to the same extension, callers are connected in the order in which they originally called.	<ul style="list-style-type: none"> • See "Other Parameters - Call Hold Parameters" in B6.6 Other Parameters.
Holiday Service	permits the system to record, store, and play several different holiday greetings. Up to 20 holidays can be programmed.	<ul style="list-style-type: none"> • See "Holiday Service (1-5-3)" in 5.2.2 Custom Service Features. • See B6.3 Holiday Setting.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Inband Integration	allows the PBX, using Inband Integration, to send information to the VPS using DTMF tones. Inband integration is characterized as Voice Mail Integration and DTMF Tone Integration. Voice Mail Integration works with the Call Forwarding Feature of the PBX to permit a caller to leave a message when the mailbox number of the called extension is not known. DTMF Tone Integration works with the Automated Attendant Service to enable the VPS to immediately recognize the state of the call (busy, answered, ringing, etc.) and improve its call handling performance.	<ul style="list-style-type: none"> • See "VOICE MAIL" in 1.3.3 Which Phone Systems are Compatible? • See 3 INTEGRATING THE VPS WITH PANASONIC KX-T PHONE SYSTEMS. • See "Inband Signaling" in Glossary.
Incomplete Call Handling Service	allows the subscriber to offer callers several service options when the extension is busy or there is no answer: Leaving a Message, Transfer to Covering Extension, Returning to the Automated Attendant Top Menu, Intercom Paging, Calling a Beeper, or Calling Operators.	<ul style="list-style-type: none"> • See "Incomplete Call Handling Service" in Glossary. • See "Intercom Paging (DPT Only)" in this table. • See 4.3 Incomplete Call Handling Status in Subscriber's Guide.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Intercom Paging (DPT Only)	<p>permits callers to page subscribers by PBX paging (there are different kinds of PBX paging, and these can be specified by VPS programming) when the subscribers have set Intercom Paging for Call Transfer or when the subscribers have set Intercom Paging for Incomplete Call Handling. The caller is briefly placed on hold while the VPS announces the page and until the subscriber answers the page. The subscriber can answer the page from any extension using the paging answer code; this code is specified in the PBX User Manual.</p> <p>To utilize this feature, follow the procedure below.</p> <ol style="list-style-type: none"> 1. Go to the System Administration Top Menu, and type 1-2 (Program - Class of Service) and COS No. (1-62). Select an Intercom Paging Group (1-8) for this COS. 2. From the System Administration Top Menu, type 1-5-6-7 (Program - System Parameter Setting - Others - Intercom Paging Parameters). Adjust the "No-Answer Time for Intercom Paging" to your preference (the default is 5 s). For the Intercom Paging Group you selected in Step 1, set the intercom paging access code in "paging Code for Group 1-8". For example, the access code for external paging by a KX-TD1232 PBX is 44. 	<ul style="list-style-type: none"> • See 4.1 GUIDELINES FOR DIGITAL INTEGRATION. • See "Intercom Paging (1-5-6-7)" in 5.2.2 Custom Service Features. • See "Intercom Paging Group" in Table 45 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "Other Parameters - Intercom Paging Parameter" in B6.6 Other Parameters. • See "Intercom Paging" in Glossary.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Interview Service	<p>plays a set of recorded questions when a caller accesses the service. The caller is provided an opportunity to answer each question after it has been asked. Subscribers are able to record questions directly into their own Interview Mailbox.</p>	<ul style="list-style-type: none"> • See 5.2.9 Interview Service. • See "Interview Mailbox No." in Table 43 in B2 SYSTEM ADMINISTRATION - MAILBOXES. • See "Creating and Editing a Mailbox" in C2 SETTING UP MAILBOXES. • See "Interview Service" in Glossary. • See 4.9 Interview Mailbox in Subscribers Guide.
Live Call Screening (DPT Only)	<p>permits the subscriber to monitor incoming calls as messages are being recorded. The subscriber has the option of answering calls during monitoring or allowing the message to be recorded without interruption. Two modes of this feature exist: Hands Free and Private.</p> <p>Hands Free permits the subscriber to hear the caller through the telephone's speaker and answer the call by lifting the handset. The Private Mode alerts by tone and requires the telephone handset to be lifted before the message can be monitored. Two-way communication is established by pressing the feature button.</p>	<ul style="list-style-type: none"> • See 4.1 GUIDELINES FOR DIGITAL INTEGRATION. • See 4.3.1 Live Call Screening (LCS) Programming. • See 4.3.3 Live Call Screening Private/Hands-Free Mode Assignment. • See 4.3.4 Live Call Screening Button Assignment. • See 4.3.5 Live Call Screening Cancel Button Assignment. • See 4.3.6 Live Call Screening Password Assignment. • See 4.3.7 Live Call Screening Password Cancellation. • See 4.3.8 Live Call Screening Password Control. • See C3 SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "Live Call Screening" in Glossary. • See 4.10 Live Call Screening in Subscriber's Guide.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Logical Extension (All Calls Transfer to Mailbox)	is an extension that always receives calls directly into its mailbox. This feature is used by subscribers that are often unavailable or that do not have a telset.	<ul style="list-style-type: none"> • See "All Calls Transfer to Mailbox" in Table 42 in B2 SYSTEM ADMINISTRATION - MAILBOXES. • See "Creating and Editing a Mailbox" in C2 SETTING UP MAILBOXES. • See "Logical Extension" in Glossary.
Mailbox	is a place where all messages to a subscriber are stored. Several mailbox options exist: Subscriber Mailbox, Interview Mailbox, System Manager's Mailbox, Message Manager's Mailbox, and General Delivery Mailbox.	<ul style="list-style-type: none"> • See 5.5 SETTING MAILBOXES. • See 6.2 SETTING UP MAILBOXES. • See 7.3.1 Mailbox Assignments. • See 7.3.9 Mailbox Usage Report. • See 7.3.10 Mailbox Usage Statistics Clear. • See B2 SYSTEM ADMINISTRATION - MAILBOXES. • See Section 1 Mailbox Setup in Subscriber's Guide. • See C2 SETTING UP MAILBOXES.
Message Delivery, Internal	allows the VPS to automatically deliver a single message to multiple mailboxes.	<ul style="list-style-type: none"> • See "Group Distribution List - Personal", "Group Distribution List - System" and "Message Delivery Status" in this table. • See 3.1 Delivering Messages to Other Subscribers in Subscriber's Guide.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Message Delivery Status	<p>allows a subscriber to check the status of messages that have been sent. The sending subscriber has the option of canceling any of the messages after checking their status. If a message has not been received, the VPS will voice report the following: when the message was recorded, the destination mailbox number, and the contents of the message.</p> <p>Message delivery status information is automatically deleted after the message has been received by the subscriber, or when the subscriber cancels the delivery, or when a new message arrives after 84 delivery status messages have been stored in the subscriber's mailbox (the oldest status message is always deleted first).</p>	<ul style="list-style-type: none"> • See 3.2 Checking Mailbox Distribution in Subscriber's Guide.
Message Reception Mode	<p>allows incoming calls to be received by either a subscriber's regular or interview mailbox. This mode is effective only for Incomplete Call Handling Service (when the subscriber's line is busy, or he cannot take the call, or when he has enabled Call Blocking).</p>	<ul style="list-style-type: none"> • See "Interview Service" in this table. • See 4.4 Message Reception Mode in Subscriber's Guide.
Message Scan	<p>permits the subscriber to scan the first 4 s of each message. The subscriber can replay the previous message, play the next message, or play the entire message.</p>	<ul style="list-style-type: none"> • See "Message Scanning with Information" in Table 45 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See C3 SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "Scanning Messages" in Glossary. • See 2.1 Receiving Messages in Subscriber's Guide.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Message Transfer	<p>allows the subscriber to transfer messages to other mailboxes after playing. The subscriber can also add a personal comment at the beginning of the transferred message if desired.</p> <p>One or more individual mailboxes can be specified for message transfer. Messages can also be transferred using either the System or Personal Group Distribution Lists.</p>	<ul style="list-style-type: none"> • See "Transferring Messages" in D2 MANAGING THE GENERAL DELIVERY MAILBOX. • See "Message Transfer" in Glossary. • See 2.3 Message Transfer in Subscriber's Guide.
Message Waiting Notification - Device	<p>automatically notifies the subscriber that a new message has been received. Calling either a specified telephone or beeper number makes notification. The message is automatically played when a telephone number is called and answered. When a beeper is called, the subscriber must call and access the message from the mailbox. Notification can be scheduled either on or off for a maximum of 2 times during any 24 h period.</p> <p>The subscriber can program a maximum of 3 telephones or beepers in sequence. The VPS will recall the number or number sequence for up to 9 times until answered.</p> <p>Notification is terminated when the subscriber has received the message, when the last number has been called 9 times, and at the completion of the programmed time period.</p>	<ul style="list-style-type: none"> • See "Message Waiting Notification from an SLT" in 3.1.4 PBX Requirements for Integration. • See "Authorization of Message Notification" in Table 47 and 48 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "Other Parameters - Message Waiting Notification" in B6.6 Other Parameters. • See D3 SETTING UP MESSAGE WAITING NOTIFICATION. • See "Message Waiting Notification" in Glossary. • See 4.8 Message Waiting Notification in Subscriber's Guide.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Message Waiting Notification - Lamp	automatically illuminates the message waiting lamp on the subscriber's telephone when there are unplayed messages waiting in the mailbox.	<ul style="list-style-type: none"> • See "Message Waiting Notification from an SLT" in 3.1.4 PBX Requirements for Integration. • See 7.2.13 Message Waiting Lamp Retry Times (MWL). • See "MWL Notification for Unreceived Message" in Table 47 and 48 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "Other Parameters - Message Waiting Notification" in B6.6 Other Parameters. • See D3 SETTING UP MESSAGE WAITING NOTIFICATION. • See "Message Waiting Lamp" in Glossary. • See 4.8 Message Waiting Notification in Subscriber's Guide.
Multilingual Service	permits up to 3 languages to be used for prompt options. If the "Selective" mode is selected, callers are able to choose their desired language.	<ul style="list-style-type: none"> • See "Incoming Call Service Prompt" in Table 27 in 5.3.1 Port Service Menu. • See "Recording Messages" and "Recording User Prompts" in D6 RECORDING COMPANY MESSAGES. • See "Multilingual Selection Menu" in Glossary.

Table 38

FEATURE	DESCRIPTION	REFERENCE
No-Answer Coverage Mode	<p>specifies how calls are answered on "Operator 1, 2 or 3" when they are not answered within the specified "Operator No-Answer Time." These options include:</p> <p>Caller Select*¹ - caller may leave a message or call another extension.</p> <p>Leave Message*¹ - caller may leave a message in Operator's mailbox.</p> <p>Disconnect Message*¹ - caller is disconnected from the VPS after hearing "<i>Thank you for calling.</i>"</p> <p>Next Operator*² - caller is transferred to the next operator (Operator 2 or 3) extension.</p> <p>*¹: Assignable for Operator 1, 2 and 3</p> <p>*²: Assignable for Operator 1 and 2</p>	<ul style="list-style-type: none"> • See "No-Answer Coverage Mode" in Table 28 in 5.4.3 Operator Parameters. • See "No-Answer Coverage Mode" in Table 51, 52 and 53 in B5.1 Automated Attendant Parameters.
Operator Service	<p>permits callers to request a live operator by pressing "0" on the telephone keypad. Up to 3 operators can be specified to receive calls in both the day and night modes.</p>	<ul style="list-style-type: none"> • See 5.4.3 Operator Parameters. • See "Operator's Parameters" in B5.1 Automated Attendant Parameters. • See "Operator's Extensions" in D4 CUSTOMIZING THE MESSAGE MANAGER'S MAILBOX.
PBX Integration	<p>allows the VPS and PBX to work together as an integrated unit. Two integration options are available — Inband Integration and DPT Integration.</p>	<ul style="list-style-type: none"> • See 2.5 CONNECTIONS - KX-TVS75/100, 2.6 CONNECTIONS - KX-TVS200. • See 3 INTEGRATING THE VPS WITH PANASONIC KX-T PHONE SYSTEMS. • See 4 INTEGRATING THE VPS WITH THE PANASONIC KX-TD DIGITAL PBX.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Personal Greetings	permit the subscriber to record a personal message greeting when unavailable to answer the call during business hours, when the line is busy, and after hours.	<ul style="list-style-type: none"> • See 6.2.1 Recording Personal Greetings. • See "Personal Greeting Length" in Table 45 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See C3 SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "Personal Greetings" in Glossary. • See 1.2 Recording Personal Greetings in Subscriber's Guide.
Play System Prompt After Personal Greeting	allows the "Guidance for Recording" message to be played for the caller after the "Personal Greeting." The "Guidance for Recording" message instructs the caller in how to terminate the call, access more features, and re-record the message.	<ul style="list-style-type: none"> • See "Play System Prompt after Personal Greeting" in Table 45 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See C3 SETTING COS (CLASS OF SERVICE) PARAMETERS.
Port Service	allows call services to be assigned to each port. The incoming call service determines which service is used when answering incoming calls. These services include: Voice Mail Service, Automated Attendant Service, Interview Service and Custom Service.	<ul style="list-style-type: none"> • See 5.2 PORT SETTING OPTIONS. • See B4 SYSTEM ADMINISTRATION - PORT SERVICE.
Private Message	allows a subscriber to mark an outgoing message as "Private" to prevent its transfer to other mailboxes.	<ul style="list-style-type: none"> • See "Delivering Messages to Specified Mailboxes" in C6 DELIVERING MESSAGES. • See "Private Message" in Glossary. • See 3.1 Delivering Messages to Other Subscribers in Subscriber's Guide.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Receive Message	<p>allows subscribers to access messages left in their mailboxes. Three options are available to subscribers.</p> <p>Reply to Message Sender - permits subscribers to reply to the message sender without specifying the extension.</p> <p>Message Transfer - permits subscribers to transfer their messages to other mailboxes.</p> <p>Message Scan - permits subscribers to listen to the first 4 s of each message.</p>	<ul style="list-style-type: none"> • See "Message Transfer" and "Message Scan" in this Table. • See 2.1 Receiving Messages in Subscriber's Guide. • See 2.2 Replying to Messages in Subscriber's Guide.
Rotary Telephone Service	<p>provides guidance to callers using rotary telephone systems or when several seconds pass without anything being entered by the caller.</p>	<ul style="list-style-type: none"> • See "Other Parameters - Rotary Telephone Service" in B6.6 Other Parameters. • See "Rotary Telephone" in Glossary.
Service Access Commands	<p>allow the caller to directly access several standard features.</p> <p>(0) to repeat the Help Menu or call the operator</p> <p>(*) to return to previous menu</p> <p>(#) (1) to dial by name</p> <p>(#) (3) Department Dialing</p> <p>(#) (6) Voice Mail Service</p> <p>(#) (7) to restart (Subscriber's main command)</p> <p>(#) (8) to call transfer</p> <p>(#) (9) to exit the menu</p>	<ul style="list-style-type: none"> • See 5.2.6 Voice Mail. • See 5.2.10 Automated Attendant. • See 1.5 Service Access Commands in Subscriber's Guide.
Special Feature Authorization	<p>permits subscribers to use the following special features: Message Waiting Notification, External Message Delivery, and Auto Forwarding.</p>	<ul style="list-style-type: none"> • See "Authorization of Message Notification" in Table 47 and 48, "Authorization of External Message Delivery" and "Authorization of Auto Forwarding" in Table 47 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See C3 SETTING COS (CLASS OF SERVICE) PARAMETERS.

Table 38

FEATURE	DESCRIPTION	REFERENCE
System Clock	allows the correct setting of the date and time to be made for proper system operation.	<ul style="list-style-type: none"> • See 7.2.4 Set Time (TIME). • See C4 SETTING THE SYSTEM CLOCK. • See D5 SETTING THE SYSTEM CLOCK.
System Reports	Eight system reports are available to the System Administrator and System Manager, monitor VPS operating status. These reports include: Mailbox Assignments, COS Assignments, System Service Report, Call Account Report, Port Usage Report, Disk Usage Report, Mailbox Usage Report, and the Fax Call Report.	<ul style="list-style-type: none"> • See 7.3 SYSTEM REPORTS. • See C5 CHECKING SYSTEM USAGE (SYSTEM REPORTS). • See "System Report" in Glossary.
Two-Way Recording (DPT Only)	permits a subscriber to record two-way conversations into his/her mailbox.	<ul style="list-style-type: none"> • See 4.1.1 Why Digital Integration is Important. • See 4.3.9 Two-Way Recording into Mailbox, 4.3.10 Two-Way Recording Button Assignment. • See "Two-Way Recording" in Glossary.
Two-Way Transfer (DPT Only)	permits subscribers to record two-way conversations into another person's mailbox.	<ul style="list-style-type: none"> • See 4.3.11 Two-Way Transfer into Mailbox, 4.3.12 Two-Way Transfer Button Assignment. • See "Two-Way Transfer" in Glossary.
Utility Commands	allow the system administrator to access critical system functions.	<ul style="list-style-type: none"> • See 7.2 UTILITY COMMANDS.
Voice Mail Service	permits a caller/non-subscriber to leave a message in any mailbox.	<ul style="list-style-type: none"> • See 5.2.6 Voice Mail. • See B4 SYSTEM ADMINISTRATION - PORT SERVICE. • See "Voice Mail" in Glossary.

Table 38

FEATURE	DESCRIPTION	REFERENCE
Voice Prompts	<p>are announcements that instruct the caller.</p> <p>There are 3 kinds of voice prompts:</p> <ul style="list-style-type: none"> a) System Prompts (recorded at the factory in English), b) User 1 Prompts (foreign language No. 1), and c) User 2 Prompts (foreign language No. 2). 	<ul style="list-style-type: none"> • See 6.1.5 Customizing User Prompts (Enter [#6*998,5,6]). • See "Prompt Mode" in Table 45 and 47 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS. • See B6.5 Prompt Setting. • See C3 SETTING COS (CLASS OF SERVICE) PARAMETERS. • See "Recording User Prompt" in D6 RECORDING COMPANY MESSAGES. • See "Voice Prompt" in Glossary.

Appendix B
SYSTEM ADMINISTRATION

B1 SYSTEM NAVIGATION

System Administration, which includes the setting and changing of system parameters, is performed using either a VT100 or compatible terminal or other RS-232C terminals (ASCII Terminals). This can be a personal computer with emulation software.

Keyboard Use

VT100 or Compatible Terminals

When using a VT100 or compatible terminal, options can be chosen on screen menus by performing either of the following steps:

- *Move the cursor to the desired listed option and **Press RETURN**.*
- ***Type** the number of the option desired and **Press RETURN**.*

Table 39

KEY	FUNCTIONS
↑	<i>Moves the cursor up one line.</i>
↓	<i>Moves the cursor down one line.</i>
→	<i>Moves the cursor to the right.</i>
←	<i>Moves the cursor to the left.</i>
(1) - (9)	<i>Typing any number 1 through 9 will select the corresponding option for that number.</i>
(RETURN)	<i>Also the ENTER key. Selects the number entered.</i>
(\)	<i>Exits the current screen and returns to the previous step within the menu.</i>
(Back space)	<i>Used to correct any mis-typed entry.</i>

Other RS-232C Terminals (ASCII Terminals)

When using RS-232C Terminals, menu options are chosen by **Typing** the number of the option desired and **Pressing RETURN**.

Table 40

KEY	FUNCTIONS
(1) - (9), then (RETURN)	<i>Typing any number 1 through 9 will select the corresponding option for that number. Pressing RETURN will select the number entered.</i>
(\)	<i>Exits the current screen and returns to the previous step within the menu.</i>

Using the Interface

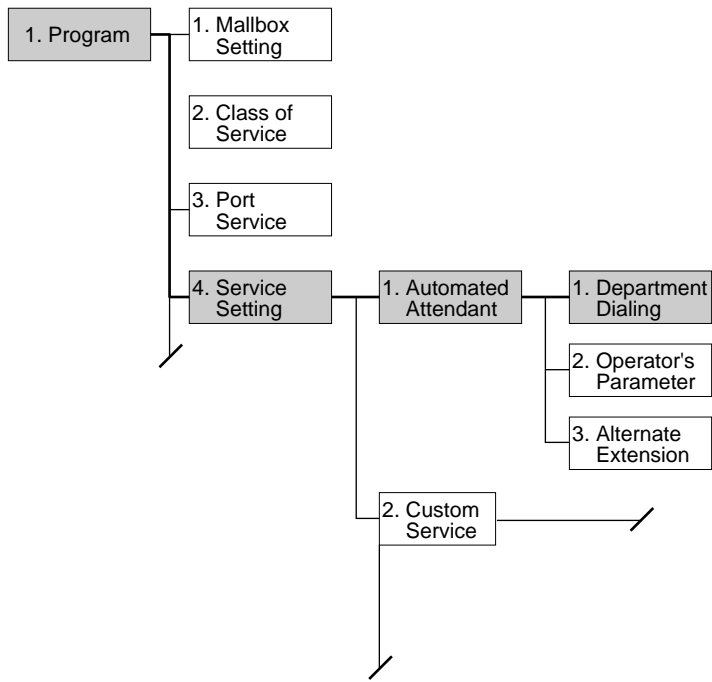
Programming Guidance

Each parameter is accessed through a series of menu screens. The Programming Menu Structure Diagram on the following page depicts this menu flow. A menu flow is shown at the beginning of each section. The menu flow corresponds to the Programming Menu Structure Diagram on the following pages. This flow is designed to guide the user through the appropriate menus to the parameter to be setup or changed. The following example illustrates how the menu flow is used.

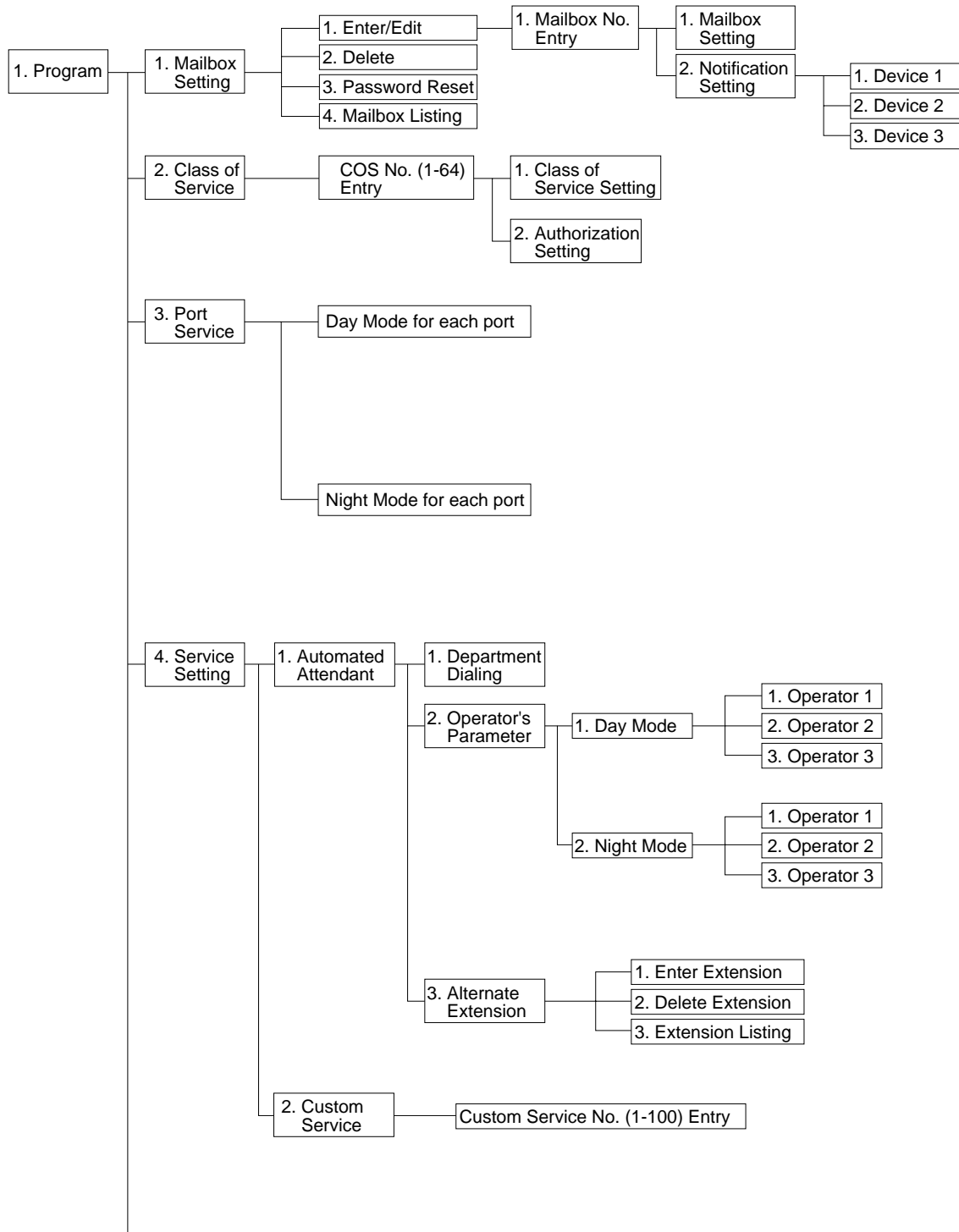
Example:

System Administration Top Menu - 1 - 4 - 1 - 1

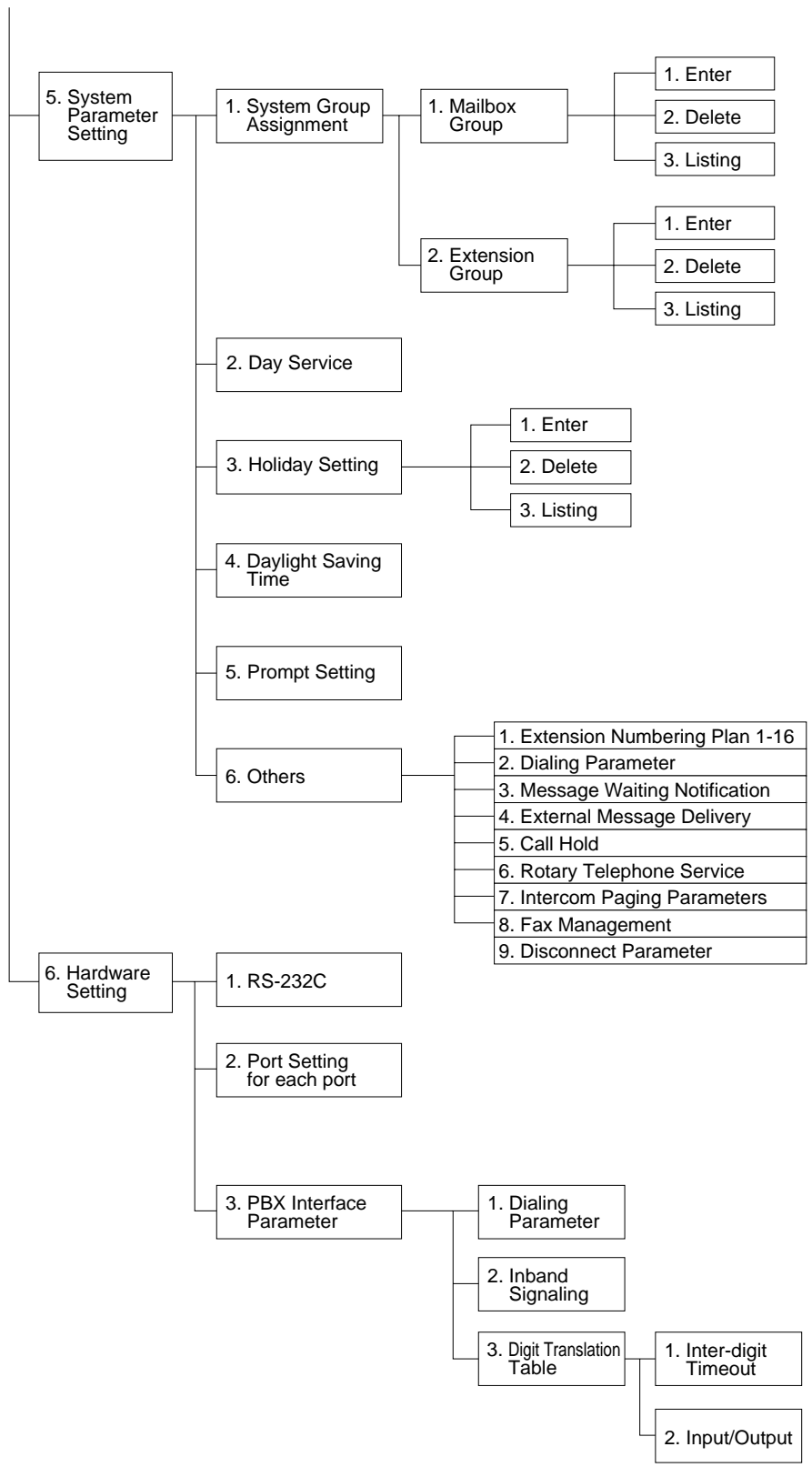
1. Press **1** at the *System Administration Top Menu*. Press **RETURN**.
2. Press **4** at the *Program Menu*. Press **RETURN**.
3. Press **1** at the *Service Setting Menu*. Press **RETURN**.
4. Press **1** on the *Automated Attendant Menu* to select "1. Department Dialing," when selected.
5. Press **RETURN**. *Auto. Attn-Department Dialing Menu* will be displayed on the terminal.



Programming Menu Structure Diagram



Continued Next Page



B2 SYSTEM ADMINISTRATION - MAILBOXES

Up to 62 (TVS75/100), 1022 (TVS200) Subscriber mailboxes can be created or edited by following the correct sequence of steps.

To access the proper menu for mailbox setup, follow the menu path as shown:
System Administration Top Menu - 1 - 1 - 1 - Mailbox No.

Table 41

Parameter	Value Range (Default)	Description/Function
Mailbox Number	2-5 digits (None)	Specifies the Subscriber's mailbox number. Mailbox number length is determined during setup or when initializing the system. Mailbox numbers cannot begin with zero. If the length of the mailbox number has been defined as 3 digits, for example, the valid range for all mailbox numbers would be 100 through 997 (998 and 999 would be reserved for the Message Manager and the System Manager). The length of the mailbox number cannot be changed through the Mailbox Setting screen once it has been specified.

Editing Mailboxes

The parameters of each mailbox can be edited based upon the needs of the Subscriber.

To access the proper menu for mailbox editing, follow the menu path as shown:
System Administration Top Menu - 1 - 1 - 1 - Mailbox No. - 1

Table 42

Parameter	Value Range (Default)	Description/Function
The Extension of the Owner	2-5 digits (None)	Used to transfer calls through the VPS to a Subscriber's mailbox. Any valid extension number including an Extension Group List number can be assigned. Note: If an Extension Group List number is assigned to a mailbox, all group members are able to share the information stored there.

Table 42

Parameter	Value Range (Default)	Description/Function
Owner Name	Up to 16 alphabetic characters (None)	Both the first and last name is printed on the Mailbox Assignments report. The Dialing by Name feature uses the last name.
Class of Service Number	COS No. 1-62 (1)	Used to define the set of services available to the Subscriber. Note 1: Parameters for each COS number must be defined before assigning a Class of Service (COS) number. Note 2: COS No. 63 pertains to the Message Manager while COS No. 64 pertains to the System Manager. These numbers cannot be entered in the COS No. data field.
Covering Extension	2-5 digits (None)	Identifies the extension number that will receive unanswered Subscriber calls. The Automated Attendant Service accomplishes this call transfer. The caller is given the option of transferring the call or leaving a message in the Subscriber's mailbox. The Covering Extension is one of the Incomplete Call Handling Service options that can be enabled or disabled by the Subscriber using the telephone keypad. Note: The Extension Group List or Logical Extension Numbers cannot be assigned as covering extensions.
Interview Mailbox No.	2-5 digits (None)	Permits a mailbox owner to own an interview mailbox. The interview mailbox number must be an unassigned Subscriber mailbox number.
All Calls Transfer to Mailbox	1. Yes 2. No (No)	If this parameter is set to "yes," all calls routed to the extension are automatically forwarded to the extension's mailbox without ringing the telephone. Forwarding is accomplished through the Automated Attendant service. Callers are permitted to leave a message. Note: When this feature is enabled, the mailbox owner's extension does not necessarily need to exist as a phone extension of the PBX.

Notification Setting

The parameters for the Message Waiting Notification - Device feature are set using this procedure. A maximum of 3 destinations (Device 1, 2, 3) can be specified per mailbox.

- *Class of Service programming determines if the Subscriber is able to use this feature.*
- *If the destination device is a telephone, the subscriber will be called when he has message(s), and will have a chance to listen to the message(s).*

- If the destination device is a beeper, the subscriber will be notified when he has message(s). If the beeper has a display, it is possible to send to it a callback number. The callback number can be recorded when a caller leaves a message. If he does not leave a callback number, the System Callback No. will be sent instead.
- The Message Manager (COS No. 63) programs Notification Setting parameters for managers.

To access the proper menu for Message Waiting Notification, follow the menu path as shown:

System Administration Top Menu - 1 - 1 - 1 - Mailbox No. - 2 - Device No. 1, 2, or 3.

Table 43 Notification Setting - Device 1-3

Parameter	Value Range (Default)	Description/Function
Number to Dial	Up to 32 digits consisting of 1-9, 0, *, # P, T, M, X (None)	Assigns a telephone or beeper number to Device 1, 2, or 3. The Subscriber can also specify the dial number from his telephone. P : Pause T : Dial Tone Detection M : Dial Mode Switching Code (DTMF to Pulse, or Pulse to DTMF) X : Callback Number Entry Code 1-9, 0, *, #: Dial Codes Note: The callback number entry code "X" must be included in the number to be called if the Beeper Callback No. Entry Mode is enabled through COS and "Type" is set to "Beeper." The proper number of "Pauses" must be inserted before the callback entry code. The Subscriber can also specify the dial number.
Type	1. Telephone 2. Beeper (Telephone)	Specifies the device to be notified. This is automatically set to "Beeper" when "X" is used in the Number to Dial (above). The Subscriber can also specify the type from his telephone.
Use Device	1. Not Use 2. Continuously 3. Scheduled (Continuously)	Specifies how Device 1, 2, or 3 is to be used. The Subscriber can also specify the use device from his telephone. 1. Not Use - Device 1, 2, or 3 is not used for a notification call. 2. Continuously - Device 1, 2, or 3 is called whenever a message is recorded in the mailbox. 3. Scheduled - Device 1, 2, or 3 is called on a schedule basis when a message has been left in the mailbox.

Table 43 Notification Setting - Device 1-3

Parameter	Value Range (Default)	Description/Function
Number of Retries	0-9 times (0)	Specifies the number of times that a notification call to Device 1, 2, or 3 should be attempted after a busy or no answer condition is received.
Busy Delay	0-120 min. (3)	Specifies the time (in minutes) the VPS must wait after a busy condition is received before making a notification call to Device 1, 2, or 3.
No Answer Delay	0-120 min. (30)	Specifies the time (in minutes) the VPS must wait after a no answer condition is received before making a notification call to Device 1, 2, or 3.
Time frame 1, 2 MON: TUE: WED: THU: FRI: SAT: SUN:	1-12 h 00-59 min AM/PM: a.m./p.m. ×: All Day Space: No Use (None)	Specifies the daily schedule for the Message Waiting Notification service for 1 week for this device. Note: These parameters are active only when "Use Device" is set to "Scheduled."

Deleting a Mailbox

When a mailbox is deleted, the Voice Processing System erases all messages in the mailbox, removes the mailbox from all group distribution lists, deletes the personal group distribution lists assigned to the mailbox, erases the Subscriber's name, and cancels all external delivery messages.

To access the proper menu for Deleting a Mailbox, follow the menu path as shown:
System Administration Top Menu - 1 - 1 - 2 - Mailbox No.

Resetting a Mailbox Password

The parameters for clearing a mailbox password are set using this procedure.

To access the proper menu for clearing a mailbox password, follow the menu path as shown:
System Administration Top Menu - 1 - 1 - 3 - Mailbox No.

Listing Mailboxes

The mailbox number list is displayed using this procedure.

To display the list of all mailbox numbers, follow the menu path as shown:
System Administration Top Menu - 1 - 1 - 4

B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS

The COS - Class of Service parameters define the set of services that are available to Subscribers. A maximum of 64 (1-64) classes can be specified. A class of service number can be assigned for each mailbox. More than one Subscriber can share the same class of service.

- *COS numbers 1-62 have the same values for each parameter by default.*

Note

There is an exception to this. "Authorization of Message Notification" (see Table 47) for COS number 1 will be set to "Yes" after performing Quick Setup.

- *COS number 63 is only available to the Message Manager while COS number 64 is only available to the System Manager.*

To access Class of Service Numbers 1-64, follow the menu path as shown:

System Administration Top Menu - 1 - 2 - COS No. (1-64)

Note

In Tables 47 and 48, sub-parameters are underlined. These sub-parameters can be assigned only when the corresponding parameter is set to "Yes".

Class of Service Setting

COS Nos. 1-62 (for Subscribers)

To access Class of Service Numbers 1-62 for Subscribers, follow the menu path as shown:

System Administration Top Menu - 1 - 2 - COS No. (1-62) - 1

Table 44

Parameter	Value Range (Default)	Description/Function
Personal Greeting Length	8-60 sec in 4 sec increments (16)	Defines the maximum length of the personal greeting message that can be recorded by the Subscriber. This parameter applies to: <ul style="list-style-type: none"> • Personal greeting on No-answer • Personal greeting on Busy • Personal greeting for After Hours
New Message Retention Time	1-30 days (5)	Defines the number of days that an unplayed message will remain in the mailbox. Timing begins the day after the message is received.
Saved Message Retention Time	1-30 days 0: Unlimited (5)	Defines the number of days that a played message will remain in the mailbox. The timing is "refreshed" whenever the message is played back. If "0: Unlimited" is selected, the saved message(s) will remain in the mailbox until erased by the Subscriber.
Message Length	1-6 min. (3)	Defines the maximum message length.
Mailbox Capacity Maximum Messages	5-100 msgs (10)	Specifies the maximum number of both new and saved messages that can be stored in each mailbox.
Mailbox Capacity Maximum Message Time	5-100 min. (10)	Specifies the total number of available minutes in each mailbox for message storage (both new and saved messages).
Message Retrieval Order	1. LIFO 2. FIFO (LIFO)	Specifies the order in which messages are retrieved (played back for listening). 1. LIFO - Messages retrieved from most to least recent. 2. FIFO - Messages retrieved from least to most recent.
Message Scanning with Information	1. Yes 2. No (No)	If set to "Yes," the VPS adds the message sender's name, recording date, and time to the message during message scan.

Table 44

Parameter	Value Range (Default)	Description/Function
Play System Prompt after Personal Greeting	1. Yes 2. No (No)	If set to "Yes," directions for recording a message are given to the caller directly after the personal greeting has been played. You can specify System Prompts (English), or User 1/2 Prompts (foreign languages) if you wish. The system prompts are: [278] <i>"To end recording, hang up or press 1 for more features."</i> [270] <i>"To pause and restart recording, press 2."</i> If you prefer a foreign language, ask the Message Manager to record these 2 prompts and then ask the System Administrator to enable them for your COS.
Use Call Waiting on Busy	1. Yes 2. No (No)	If set to "Yes," the VPS signals the busy extension that another call is waiting.
Message Cancel for Live Call Screening	1. Yes 2. No (Yes)	The Live Call Screening feature permits the Subscriber to monitor incoming messages as they are being recorded and speak to the caller if desired. If the Subscriber chooses to speak to the caller, if not disabled by the PBX beforehand, the VPS will record the two-way conversation. If set to "Yes," the VPS will automatically delete this recording. The two-way conversation may be saved in the mailbox if the PBX allows the conversation to be recorded, and if the Subscriber presses (1) then (2) before terminating the call. If set to "No", the recording will be automatically saved. Note: The Live Call Screening feature is available if DPT Voice Mail Integration is activated with a Panasonic KX-TD series telephone system.
Direct Mailbox Access	1. Yes 2. No (Yes)	If set to "Yes," a Subscriber is able to directly enter the Subscriber Service. This is accomplished by calling a VPS extension directly from the Subscriber's extension. The Subscriber Service Access Code (*+ mailbox number) should not be dialed. Password entry may be required if specified beforehand. Note: The Direct Mailbox Access feature is available if DPT Voice Mail Integration is activated with a Panasonic KX-TD series telephone system.

Table 44

Parameter	Value Range (Default)	Description/Function
Intercom Paging Group	1-8 (1)	Specifies the intercom paging group number available to the Subscriber. Note: The Intercom Paging feature is available if DPT Voice Mail Integration is activated with a Panasonic KX-TD series telephone system.
Prompt Mode	1. SYSTEM 2. USER 1 3. USER 2 (USER 1)	Specifies the language used for voice prompts played for the Subscriber during a Message Waiting Notification Call and Subscriber Service. Note: If User 1 or User 2 is specified as Prompt Mode but not recorded by the Message Manager, the VPS will automatically play the factory recorded system prompts in English. By default, both User 1 and User 2 prompts are not recorded.

COS Nos. 63 & 64 (for Managers)

To access Class of Service Numbers 63 & 64 for Managers, follow the menu path as shown:

System Administration Top Menu - 1 - 2 - COS No. (63-64) - 1

Only the parameters listed below can be assigned for COS numbers 63 and 64.

Table 45

Parameter	Value Range (Default)	Description/Function
New Message Retention Time	1-30 days (30)	Defines the number of days that an unplayed message can remain in the mailbox. The storage period begins the day after the message is received.
Saved Message Retention Time	1-30 days 0: Unlimited (30)	Defines the number of days a played saved message can remain in the mailbox. The storage period begins the day after the message is last played. If "0: Unlimited" is selected, saved messages will remain in the mailbox until erased by the mailbox owner.
Message Length	1-6 min. (6)	Defines the maximum message length that can be received.
Mailbox Capacity Maximum Messages	5-100 msg (100)	Specifies the maximum number of messages (both new and saved) that can be stored in a mailbox.
Mailbox Capacity Maximum Message Time	5-100 min. (100)	Specifies the maximum amount of message time (both new and saved) allowable in a mailbox.
Message Retrieval Order	1. LIFO 2. FIFO (LIFO)	Specifies the order in which messages will be retrieved. 1. LIFO - Messages played from the most to the least recent. 2. FIFO - Messages played from the least to the most recent.
Message Scanning with Information	1. Yes 2. No (No)	If set to "Yes", the system adds the message sender's name and the recording date and time to the message.

Class of Service Setting - Special Feature Authorization

This feature permits Subscribers to utilize the following features on a COS basis.

- *Message Waiting Notification*
- *External Message Delivery*
- *Auto Forwarding*

None of the above features can be programmed when a new mailbox is created. They must all be authorized through this procedure.

- *Message Notification for the message manager can only be enabled or disabled using this procedure. Other parameters cannot be assigned.*
- *If a special feature authorization is set to "No," sub-parameters relating to it cannot be assigned.*

COS Nos. 1-62 (for Subscribers)

To access Class of Service - Special Feature Authorization numbers 1-62 for Subscribers, follow the menu path as shown:

System Administration Top Menu - 1 - 2 - COS No. (1-62) - 2

Table 46

Parameter	Value Range (Default)	Description/Function
Authorization of Message Notification	1. Yes 2. No (No)	If set to "Yes," Subscribers are able to utilize the Message Waiting Notification feature. The sub-parameters to be set include Beeper Callback No. Entry Mode, MWL Notification for Unreceived Message and Device Notification for Unreceived Message. Note: This parameter in COS No. 1 is set to "Yes" when the Quick Setup procedure is used to create Subscriber mailboxes.

Table 46

Parameter	Value Range (Default)	Description/Function
<u>Beeper Callback No. Entry Mode</u>	1. Caller Select 2. Without 3. Before 4. After 5. Disable (Disable)	Permits Subscribers to use the Callback Number Entry feature. Caller Select: After recording a message, callers are asked if they would like to enter a callback number. Without: Without recording a message, the caller is asked to enter the callback number. Before: Before recording a message, the system asks the caller to enter the callback number. After: After recording a message, the system asks the caller to enter the callback number. Disable: Disables the Callback Number Entry feature. Note: To utilize this feature, the callback number entry code must be included in the Subscriber's beeper number. When "Disable" is selected or if the caller does not enter a callback number, "System Callback No." (See Table 64.) is displayed on the beeper's display.
<u>MWL Notification for Unreceived Message</u>	1. Yes 2. No (Yes)	The message waiting lamp will be illuminated when this parameter has been set to "Yes" and when unplayed messages remain after the Subscriber has accessed the mailbox for Subscriber service.
<u>Device Notification for Unreceived Message</u>	1. Yes 2. No (No)	When this parameter has been set to "Yes" and when unplayed messages remain, the system calls the appropriate device in numerical order until all unplayed messages are received.
Authorization of External Message Delivery	1. Yes 2. No (No)	When set to "Yes", Subscribers are able to utilize the External Message Delivery feature.
<u>Prompt Mode</u>	1. System 2. User 1 3. User 2 4. Selective (User 1)	Specifies the language to be used for voice prompts.
Authorization of Auto Forwarding	1. Yes 2. No (No)	When set to "Yes," messages that have not been accessed for a specific length of time are forwarded automatically to another mailbox. The sub-parameters to be set for this feature include Mailbox Number, Delay Time, and Forwarding Mode.

Table 46

Parameter	Value Range (Default)	Description/Function
<u>Mailbox Number</u>	2-5 digits (None)	Specifies the mailbox where forwarded messages are to be sent. Note: System Group Distribution List numbers, and mailbox numbers for System Manager and Message Manager cannot be used for this parameter.
<u>Delay Time</u>	(Hr.) (Min) 00:05 to 99:59 (00:30)	Specifies the length of time in hours and minutes that the system must wait before forwarding messages that have not been retrieved. The maximum delay time is 99 h, 59 min. Note: The delay time must be less than the New Message Retention Time, or else messages will be deleted before being forwarded.
<u>Forwarding Mode</u>	1. Copy 2. Move (Move)	Specifies if forwarded messages are to be retained in the original mailbox. When set to "Copy," a copy of the message is retained in the original mailbox after forwarding. When set to "Move," messages are forwarded to the receiving mailbox and are not retained at the original location.

COS No. 63 (for Message Manager)

Class of Service Number 63 is available only to the Message Manager. Authorization of Message Notification is enabled/disabled through this procedure. External Message Delivery and Auto Forwarding cannot be assigned.

To access Class of Service - Special Feature Authorization Number 63 for the Message Manager, follow the menu path as shown:

System Administration Top Menu - 1 - 2 - COS No. (63) — 2

Class of Service Number 63

Table 47

Parameter	Value Range (Default)	Description/Function
Authorization of Message Notification	1. Yes 2. No (Yes)	When set to "Yes," the Message Manager is able to utilize the Message Waiting Notification feature. The sub-parameters to be set include Beeper Callback No. Entry Mode, MWL Notification for Unreceived Message, and Device Notification for Unreceived Message.
<u>Beeper Callback No. Entry Mode</u>	1. Select 2. Without 3. Before 4. After 5. Disable (Disable)	Permits the Message Manager to use the Callback Number Entry feature. Select: After recording a message, the caller is asked if the message is urgent. If urgent, the caller is asked to enter the callback number. Without: Without recording a message, the caller is asked to enter the callback number. Before: Before recording a message, the system asks the caller to enter the callback number. After: After recording a message, the system asks the caller to enter the callback number. Disable: Disables the Callback Number Entry feature. Note: To utilize this feature, the callback number entry code must be included with the manager's beeper number. When "Disable" is selected or if the caller does not enter a callback number, "System Callback No." (See Table 46.) is displayed on the beeper's display.
<u>MWL Notification for Unreceived Message</u>	1. Yes 2. No (Yes)	The message waiting lamp is illuminated when this parameter has been set to "Yes" and when unplayed messages remain after the Message Manager has accessed the mailbox.

Table 47

Parameter	Value Range (Default)	Description/Function
<u>Device Notification for Unreceived Message</u>	1. Yes 2. No (No)	The system calls the appropriate device when this parameter has been set to "Yes" and when unplayed messages remain after the Message Manager has accessed the mailbox.

COS No. 64 (for System Manager)

Class of Service Number 64 is available only to the System Manager. Authorization settings cannot be assigned.

B4 SYSTEM ADMINISTRATION - PORT SERVICE

One of 4 incoming call services can be assigned to each VPS port: Voice Mail, Automated Attendant, Interview Service, or Custom Service.

Generally speaking, assigning Interview Service to a port should be avoided, See 5.2.9 Interview Service.

The Port Assignment menu allows the company greeting number, prompt mode, and delayed answer time to be programmed.

To access the Port Service Menu, follow the menu path as shown:
System Administration Top Menu - 1 - 3

B4.1 Port Assignment

To select the day or night mode for the selected port, follow the menu path as shown:
System Administration Top Menu - 1 - 3 - 1 (TVS75/100)
System Administration Top Menu - 1 - 3 - Port No. (1-12) (TVS200)

Port 1 - Day Mode

To select the Day Mode Features for Port 1, follow the menu path as shown:
System Administration Top Menu - 1 - 3 - 1 - 1 (TVS75/100)
System Administration Top Menu - 1 - 3 - Port No. (1) - 1 (TVS200)

Table 48

Parameter	Value Range (Default)	Description/Function
Company Greeting No.	1-32 (None)	Specifies which Company Greeting will be used to greet callers to this port.
Incoming Call Service	1. Voice Mail 2. Auto. Attn. 3. Interview 4. Custom (Auto. Attn.)	Specifies which incoming call service will be used at this port. Note: When "Interview Service" is selected, a Subscriber Interview Mailbox must also be specified. When "Custom Service" is specified, one of the 100 (1-100) Custom Service numbers should also be specified

Table 48

Parameter	Value Range (Default)	Description/Function
Incoming Call Service Prompt	1. System 2. User 1 3. User 2 4. Selective (User 1)	Specifies the language to be used at this port for caller voice prompts. Note: This parameter cannot be selected when the incoming call service is set to either "Interview" or "Custom." When "Selective" is selected, the available prompt for Rotary Callers must also be specified. See "Prompt for Rotary Callers" in this table.
Prompt for Rotary Callers	1. System 2. User 1 3. User 2 (System)	If unable to select a "Prompt Selection Number" while the Multilingual selection menu message is being played, the caller will receive voice guidance in the language selected for this port.
Delayed Answer Time	0-60 sec (0)	Specifies if the incoming call will be answered immediately (0) or delayed (1-60 sec).

Port 1 - Night Mode

To select the Night Mode Features for port 1, follow the menu path as shown:

System Administration Top Menu - 1 - 3 - 1 - 2 (TVS75/100)

System Administration Top Menu - 1 - 3 - Port No. (1) - 2 (TVS200)

Note

The port assignment procedure for other ports (TVS75:2, TVS100: 2- 4, TVS200: 2-12) is the same as Port 1.

B5 SYSTEM ADMINISTRATION - SERVICE SETTING

B5.1 Automated Attendant Parameters

The Automated Attendant Service has 3 main functions: Department or Speed Dialing, Operator's Parameters, and Alternate Extension.

To select the Automated Attendant Parameters, follow the menu path as shown:

System Administration Top Menu - 1 - 4 - 1

Department Dialing

Department dialing is a speed-dialing feature that permits a caller to reach the intended extension by dialing a single digit (1 - 9).

To select Department Dialing, follow the menu path as shown:

System Administration Top Menu - 1 - 4 - 1 - 1

Table 49

Parameter	Value Range (Default)	Description/Function
Department Dialing No. 1-9	2-5 digits (None)	Specifies the department extension number. Note: The Message Manager must record the department dialing menu.

Operator's Parameters

Used to specify the operator's (operator 1, 2, 3) extensions and mailboxes and how operator-seeking calls are treated.

Operator's parameters can be individually set for both Day and Night mode.

To select Operator's Parameters, follow the menu path as shown:

System Administration Top Menu - 1 - 4 - 1 - 2

Operator's Parameters - Operator 1 - Day Mode

This parameter is used to enable or disable the Operator Service. It specifies Operator 1's extension and the treatment of the calls transferred to that extension. When Operator service is enabled, operator-seeking calls are first transferred to Operator 1's extension.

To select Operator Parameters - Operator 1 - Day Mode, follow the menu path as shown:

System Administration Top Menu - 1 - 4 - 1 - 2 - 1 - 1

Table 50

Parameter	Value Range (Default)	Description/Function
Operator Service	1. Disable 2. Enable (Enable)	Used to turn the Operator Service feature on or off. Note: All no-DTMF-input calls are transferred to the General Delivery Mailbox when the Operator Service is disabled,
Operator's Extension	1-5 digits (0)	Used to select the extension number for Operator 1. Note: The default setting (0) cannot be used with the Message Waiting Notification Lamp feature. An extension number must be assigned that is included in the Extension Numbering Plan. To assign Operator 1 to a new extension, first delete its mailbox, Operator 1's mailbox is assigned in the next parameter.
Operator's Mailbox No.	2-5 digits (998)	Caller's to Operator 1 are prompted to leave a message in this mailbox depending upon how the Busy Coverage or No-Answer Coverage modes are set.
Operator No-answer Time	10-60 sec (30)	When a call to Operator 1, 2, or 3 is not answered within the time set, the VPS will offer other options as defined by the "No-Answer Coverage Mode." Note: This timer applies to Operator 1, 2, and 3.

Table 50

Parameter	Value Range (Default)	Description/Function
Busy Coverage Mode	1. Hold 2. No-answer Coverage 3. Call Waiting 4. Disconnect Message (Hold)	Specifies how calls are handled when the Operator 1 extension is busy. 1. Hold - The caller is automatically placed on hold and the Operator 1 extension is called again. 2. No-Answer Coverage - The caller is offered one of the options specified by the No-Answer Coverage Mode. 3. Call Waiting - Operator 1 is signaled when another call is waiting using the Call Waiting feature of the PBX. 4. Disconnect Message - The VPS disconnects the call after playing "Thank you for calling."
No-Answer Coverage Mode	1. Caller Select 2. Leave Message 3. Disconnect Message 4. Next Operator (Caller Select)	Specifies how Operator 1 calls are handled when not answered within the time period set through the "Operator No-Answer Time" mode. 1. Caller Select - This selection allows the caller to leave a message or call another extension. 2. Leave Message - The caller is instructed to leave a message in Operator 1's mailbox. 3. Disconnect Message - The caller is disconnected after playing "Thank you for calling." 4. Next Operator - The system transfers the call to Operator 2.
Message Repeat Cycle	1-3 times (3)	Specifies the number of times that the system will play the Automated Attendant top menu.

Note

Extension Call Forwarding to the VPS can override the operator call coverage settings depending on the timing parameters of the PBX and VPS. Even if the operator call coverage parameters are set to "Next Operator" on Busy/ No Answer, the call may go to the VPS (if the Operator has set the call forwarding to the VPS).

Operator's Parameters - Operator 2 - Day Mode

Operator-seeking calls are received at Operator 2 when Operator 1 is busy or does not answer and Operator 1's parameters are set as follows.

- Busy Coverage Mode - No-answer Coverage
- No-answer Coverage Mode - Next Operator

To select Operator Parameters - Operator 2 - Day Mode, follow the menu path as shown:

System Administration Top Menu - 1 - 4 - 1 - 2 - 1 - 2

Table 51

Parameter	Value Range (Default)	Description/Function
Operator's Extension	1-5 digits (None)	Used to select the extension number for Operator 2. Any valid extension number can be assigned.
Operator's Mailbox No.	2-5 digits (None)	Used to specify the mailbox number for Operator 2. Any valid extension number can be assigned. Callers to Operator 2 are prompted to leave a message in this mailbox depending upon how the Busy Coverage or No-Answer Coverage modes are set.
Busy Coverage Mode	1. Hold 2. No-answer Coverage 3. Call Waiting 4. Disconnect Message (Hold)	Specifies how calls are handled when the Operator 2 extension is busy. 1. Hold - The caller is automatically placed on hold and the Operator 2 extension is called again. 2. No-Answer Coverage - The caller is offered one of the options specified by the No-Answer Coverage Mode. 3. Call Waiting - Operator 2 is signaled when another call is waiting using the Call Waiting feature of the PBX. 4. Disconnect Message - The VPS disconnects the call after playing "Thank you for calling."
No-Answer Coverage Mode	1. Caller Select 2. Leave Message 3. Disconnect Message 4. Next Operator (Caller Select)	Specifies how Operator 2 calls are handled when not answered within the time period set through the "Operator No-Answer Time" mode. 1. Caller Select - This selection allows the caller to leave a message or call another extension. 2. Leave Message - The caller is instructed to leave a message in Operator 2's mailbox. 3. Disconnect message - The caller is disconnected after playing "Thank you for calling." 4. Next Operator - The system transfers the call to Operator 3.

Operator's Parameters - Operator 3 - Day Mode

Operator-seeking calls to Operator 3, when Operator 2 is busy or unanswered and Operator 2's parameters are set as follows.

- Busy Coverage Mode - No-Answer Coverage
- No-Answer Coverage Mode - Next Operator

To select Operator Parameters - Operator 3 - Day Mode, follow the menu path as shown:
System Administration Top Menu - 1 - 4 - 1 - 2 - 1 - 3

Table 52

Parameter	Value Range (Default)	Description/Function
Operator's Extension	1-5 digits (None)	Used to select the extension number for Operator 3. Any valid extension number can be assigned.
Operator's Mailbox No.	2-5 digits (None)	Used to specify the mailbox number for Operator 3. Any valid extension number can be assigned. Callers to Operator 3 are prompted to leave a message in this mailbox depending upon how the Busy Coverage or No-Answer Coverage modes are set.
Busy Coverage Mode	1. Hold 2. No-answer Coverage 3. Call Waiting 4. Disconnect Message (Hold)	Specifies how calls are handled when the Operator 3 extension is busy. 1. Hold - The caller is automatically placed on hold and the Operator 3 extension is called again. 2. No-Answer Coverage - The caller is offered one of the options specified by the No-Answer Coverage Mode. 3. Call Waiting - Operator 3 is signaled when another call is waiting using the Call Waiting feature of the PBX. 4. Disconnect Message - The VPS disconnects the call after playing "Thank you for calling."
No-Answer Coverage Mode	1. Caller Select 2. Leave Message 3. Disconnect Message (Caller Select)	Specifies how Operator 3 calls are handled when not answered within the time period set through the "Operator No-Answer Time" mode. 1. Caller Select - This selection allows the caller to leave a message or call another extension. 2. Leave Message - The caller is instructed to leave a message in Operator 3's mailbox. 3. Disconnect message - The caller is disconnected after playing "Thank you for calling."

Note

An operator-seeking call is always first transferred to Operator 1. The call is then transferred to Operator 2 and Operator 3 respectively, depending on system programming.

"Next Operator" cannot be set for "No-answer Coverage Mode" of Operator 3.

Operator's Parameters - Operator 1, 2, 3, - Night Mode

Same as Day Mode.

Alternate Extension Assignment

Used to assign extensions that should be transferred differently from the normal extension transfer sequence. Calls to the extensions in this group will be transferred following the sequence defined by "Alternate Extension Transfer Sequence" (See "Alternate Extension Transfer Sequence" in Table 76 in B7.3 PBX Interface Parameters).

To select the Alternate Extension Assignment Parameter, follow the menu path as shown:

System Administration Top Menu - 1 - 4 - 1 - 3

Alternate Extension Group - Enter

The system can create up to 32 extensions that use the same alternate transfer sequence.

To select the Alternate Extension - Enter Parameter, follow the menu path as shown:

System Administration Top Menu - 1 - 4 - 1 - 3 - 1

Table 53

Parameter	Value Range (Default)	Description/Function
Alternate Extension (1-32)	2-5 digits (None)	Specifies an extension, which requires a different transfer sequence than normal.

Alternate Extension - Delete

The system can delete extension numbers from the alternate extension group.

To select the Alternate Extension - Delete Parameter, follow the menu path as shown:

System Administration Top Menu - 1 - 4 - 1 - 3 - 2

Alternate Extension - Listing

Lists all of the extensions registered in the alternate extension group.

To select the Alternate Extension - Listing Parameter, follow the menu path as shown:

System Administration Top Menu - 1 - 4 - 1 - 3 - 3

B5.2 Custom Service

Custom Service is one of 4 incoming call services. By assigning a function to each key, a customized key operation service can be provided to callers. A maximum of 100 custom services can be established up to 8 layers deep.

To select the Custom Service Parameter, follow the menu path as shown:

System Administration Top Menu - 1 - 4 - 2 - Custom Service No. (1-100)

Table 54

Parameter	Value Range (Default)	Description/Function
Description	Up to 32 alphanumeric characters (None)	The information typed in this field is for reference only. Any ASCII character (except \) can be used.
Prompt Mode	1. System 2. User 1 3. User 2 (System)	Specifies the language of the Custom Service menu message that is played for the caller. Note: This parameter overrides "Incoming Call Service Prompt."
Menu Repeat Cycle	1-3 times (3)	Specifies the number of times Custom Service menu messages are repeated to the caller. Note: "Custom 1" is highlighted at the top of the programming screen, if the menu message for Custom 1 was recorded by the Message Manager. This is available in the VT100 mode only.

Table 54

Parameter	Value Range (Default)	Description/Function
Call Transfer Anytime	Extn./Mbx/No (Extn.)	Specifies the destination to which the call is transferred. The "Extn." setting (enter "E") enables callers to be transferred directly to their intended party by dialing the extension number. The "Mbx" setting (enter "M") enables callers to leave messages in a mailbox by entering the mailbox number of the extension called. The "No" setting (enter "N") disables callers to be sent to an operator.
Wait for Second Digit	1-5 seconds (1)	Resolves the problem when the first digit of the extension or mailbox number is the same as one of the Custom Service menu choices. When selected, the VPS waits the specified period of time for a second digit to be dialed. If the time period expires without a second digit being entered, the system assumes the caller has selected a menu choice. This parameter is used only if "Call Transfer Anytime" is set to "Extn." or "Mbx".
No DTMF Input Operation	a-f (c) *See Keypad Assignment on the next page.	Specifies how a call is treated when there is no response to the menu message. No response usually indicates that the caller is using a rotary phone. The factory setting is "C. Operator", which allows the caller to be automatically connected to an operator after message playback.

Table 54

Parameter	Value Range (Default)	Description/Function
Keypad Assignment 0-9, *, #	a-n (*: d, 0: c Others: None)	<p>Any of the 14 services listed below (a-n) can be assigned to the 0 through 9, * and # keys on the telephone keypad. Callers are able to access these services by pressing the corresponding keys on their telephones.</p> <ul style="list-style-type: none"> (a) Transfer to Mailbox - Allows the caller to leave messages in a specific mailbox. Enter "a" followed by a mailbox number. (b) Transfer to Extension - Transfers the caller to a specific extension. Enter "b" followed by an extension number. (c) Operator - Connects the caller to the operator. (d) Exit - Plays a final guidance message and disconnects. The message must be recorded by the Message Manager. (e) Previous Menu - If programmed, allows the caller access to a previous Custom Service Menu. (f) Custom Service - If programmed, allows the caller access to another Custom Service. (g) Voice Mail Service - Allows the caller access to the Voice Mail Service. (h) Call Transfer Service - Allows the caller access to the Call Transfer Service. (i) Subscriber Service - Allows the caller access to Subscriber Service. Available only when calls are from subscribers. (j) Department Dialing - Transfers the caller to the department dialing menu. (k) Dial by Name - Lets the caller transfer an extension by dialing the first 3 or 4 letters of the extension owner's last name. (l) Repeat Menu - Repeats the Custom Service menu message. (m) Main Menu - Lets the caller return directly to the top Custom Service menu. (n) FAX Transfer - Enables the caller to send a fax message to the appropriate extension where a fax machine is connected.

B6 SYSTEM ADMINISTRATION - SYSTEM PARAMETER SETTINGS

B6.1 System Group Assignment

To access the proper menu for System Group Assignment, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 1

System Group Assignment - Mailbox Group

This parameter allows a Subscriber to send a message simultaneously to several mailboxes. These mailboxes may be assembled into a list called a System Group Distribution List. The VPS is able to maintain up to 20 System Group Distribution Lists. Each System Group Distribution list can have up to 20 destination mailbox numbers. Mailboxes can be added or deleted from these lists and reviewed as needed.

To access the proper menu for Mailbox Group, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 1 - 1 - 1

Mailbox Group - Enter

To access the proper menu for Mailbox Group — Enter, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 1 - 1 - 1 - Group List No.

Table 55

Parameter	Value Range (Default)	Description/Function
Mailbox Group List No.	2-5 digits (None)	Specifies any vacant mailbox number. The Subscriber can specify that the VPS transfer or deliver messages to all members of a group by simply specifying the System Group Distribution List No.
Group Name	Up to 16 alphanumeric characters (None)	Allows a group name to be specified. If a group name is not required, press (RETURN), and specify the mailbox numbers.

Table 55

Parameter	Value Range (Default)	Description/Function
Member 1-20	2-5 digits (None)	Specifies mailbox numbers belonging to this group.

Mailbox Group - Delete

Permits specified mailboxes to be deleted from the list.

To access the proper menu for Mailbox Group - Delete, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 1 - 1 - 2 - Group List No.

Mailbox Group Listing

Displays all System Group Distribution List numbers.

To access the proper menu for Mailbox Group Listing, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 1 - 1 - 3

System Group Assignment - Extension Group

Several extensions can be assembled into a single list. The VPS is able to maintain up to 20 Extension Group Lists. Each list can support up to 20 extensions. Extensions can be added, deleted, and reviewed. Members within a list are able to share the same mailbox and be notified by the message waiting notification lamp (if authorized) when a message is present.

Extension Group - Enter

To access the proper menu for Extension Group - Enter, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 1 - 2 - 1 - Group List No.

Table 56

Parameter	Value Range (Default)	Description/Function
Extension Group List No.	2-5 digits (None)	Specifies any vacant extension number. Note: The Extension Group List number. can be assigned as "The Extension of the Owner" of a mailbox. This permits all group members to share the information in the mailbox. When selected, group members are not able to have another mailbox.
Group Name	Up to 16 alphanumeric characters (None)	For reference purposes.
Member 1-20	2-5 digits	Specifies the extension number belonging to the group. Note: Members are not able to own a mailbox if the group owns its own mailbox.

Extension Group - Delete

Permits specified extensions to be deleted from the list.

To access the proper menu for Extension Group - Delete, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 1 - 2 - 2 - Group List No.

Extension Group - Listing

This parameter displays all Extension Group List numbers.

To access the proper menu for Extension Group List Numbers, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 1 - 2 - 3

B6.2 Day Service

Day Service is a timer function that selects the desired call handling method based upon time of day. Port Assignment and Operator Parameters can be programmed for day and night mode.

To access the proper menu for Day Service, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 2

Table 57

Parameter	Value Range (Default)	Description/Function
Mon (Start/End)	1-12: hour 00-59: Minute AM/PM: a.m./p.m.	Specifies the "Start" and "End" times of the Day Service.
Sun (Start/End)	D: Day Mode N: Night Mode MON-SUN (9:00 AM - 5:00 PM)	Day Mode: 24 h Day mode Night Mode: 24 h Night mode

B6.3 Holiday Setting

A special service mode can be programmed for up to 20 holidays. The VPS provides the specified service according to the Day Service setting of the holiday. When a day is set as a holiday, the starting and ending times specified in the Day Service is ignored.

To provide a special message to callers on a holiday (for example, *"Today is New Year Day and our office is closed. If you wish to record a message, please press 1 now."*), you can create a Custom Service menu. Use this setting to direct calls to this Custom Service on Jan. 1st. Use foreign languages where appropriate.

To access the proper menu for Holiday Setting, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 3

Holiday Setting - Enter

To access the proper menu for Holiday Setting - Enter, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 3 - 1 - Holiday No. (1-20)

Table 58

Parameter	Value Range (Default)	Description/Function
Name of Holiday	Up to 16 characters (None)	For reference.
Date	MM: Month DD: Day (None)	Specifies the date of the holiday.

Table 58

Parameter	Value Range (Default)	Description/Function
Retain Holiday	1. Yes 2. No (No)	Used to store the Holiday Service setting for future use. If set to "Yes," the same setting will be activated automatically on the same day every year. If set to "No," the setting will be canceled automatically after the holiday is over.
Service	1. Voice Mail 2. Auto. Attn. 3. Interview 4. Custom (Auto. Attn.)	Specifies one of 4 incoming call services for the holiday. Note: When Interview Service is specified, one of Subscriber's mailbox numbers should also be specified. When the Custom Service is specified, one of Custom Service numbers (1-100) should also be specified.
Company Greeting Number	1-32 (None)	Specifies a company greeting number (1-32) as a holiday greeting.
Port Affected	Port No. (1, 2, 3, 4)	Specifies the port number on which the Holiday Service setting is activated. At least 1 port must be specified. The unspecified port(s) provide(s) the usual incoming call service. Note: The value range depends upon the model. TVS75: 1-2, TVS100: 1-4, TVS200: 1-12

Holiday Setting - Delete

Cancels the Holiday Service Setting by specifying a holiday number (1-20).

To access the proper menu for Holiday Setting - Delete, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 3 - 2

Holiday Setting - Listing

Used to display all of the specified holiday names and dates.

To access the proper menu for Holiday Setting - Listing, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 3 - 3

B6.4 Daylight Saving Time (DST)

Used to adjust the internal clock of the VPS to the starting and ending date of daylight saving time.

To access the proper menu for Daylight Saving Time, follow the menu path as shown:
System Administration Top Menu - 1 - 5 - 4

Table 59

Parameter	Value Range (Default)	Description/Function
Start Date/ End Date	MM: Month DD: Day (None)	Specifies the starting and ending dates of daylight saving time. The VPS advances 1 h on the starting date of daylight saving time, and restores the time on the ending date. Both the starting date and the ending date must be set. The same date cannot be used for both settings. Note: The VPS changes the internal clock at 2:00 AM on Start Date / End Date

B6.5 Prompt Setting

This setting is required when Multilingual Service is enabled.

To access the proper menu for Prompt Setting, follow the menu path as shown:
System Administration Top Menu - 1 - 5 - 5

Table 60

Parameter	Value Range (Default)	Description/Function
System Prompt Selection Number	1-9 (None)	<p>Assigns a selection number (1-9) to each prompt. Callers use the numbers to select the desired language for their message prompts. This setting is required when either one or both of the following parameters are set to "Selective."</p> <p>Port Assignment - Incoming Call Service Prompt Authorization of External Message Delivery - Prompt Mode</p> <p>Example: <i>For service in English, press (7).</i> <i>For service in Spanish, press (8).</i> <i>For service in Chinese, press (9).</i></p> <p>The Message manager is able to record this message. Note: The Prompt Selection Number and the first digit of the mailbox number should be different from each other.</p>
User 1 Prompt Selection Number		
User 2 Prompt Selection Number		
Position of "AM/PM" in Time Stamp	1. Before 2. After 3. None (After)	<p>This parameter setting is functional only when User 1 or User 2 Prompts are in use.</p> <p>This parameter specifies the following:</p> <ol style="list-style-type: none"> 1. Before - the VPS announces "AM/PM" before the time (e.g., <i>P.M. 3:42</i>). 2. After - The VPS announces "AM/PM" after the time (e.g., <i>3:42 P.M.</i>) 3. None - the VPS announces the time in a 24-h format without "AM/PM" (e.g., <i>15:42</i>) <p>Note: When System Prompts are in use the parameter is set to "After".</p>

B6.6 Other Parameters

To access the proper menu for Other Parameters, follow the menu path as shown:
System Administration Top Menu - 1 - 5 - 6

Other Parameters - Extension Numbering Plan

Used to specify the extension numbers of the PBX so that the VPS is able to recognize the dialed extension as valid. This setting promotes the prompt call handling of the Automated Attendant Service. This setting is recommended to better integrate the PBX into the system.

To access the proper menu for Extension Numbering Plan, follow the menu path as shown:
System Administration Top Menu - 1 - 5 - 6 - 1

Table 61

Parameter	Value Range (Default)	Description/Function
Numbering Plan 1-16	2-5 digits consisting of 0-9, X (None)	<p>Specifies the first 1 or 2 digits of the PBX extension numbers. Up to 16 entries can be added to the list. Each entry can contain 2-5 digits of numeric characters, "0-9", and "X" which matches any digit. Extension numbers cannot begin with "0."</p> <p>Examples:</p> <p>a) If valid PBX extension numbers are to be specified 101 through 164 and 201 through 264, specify the numbers as follows:</p> <p style="padding-left: 40px;">1XX: Indicates any 3-digit extension number starting with "1."</p> <p style="padding-left: 40px;">2XX: Indicates any 3-digit extension number starting with "2."</p> <p>b) If valid PBX extension numbers are to be specified 400 through 450 and 3300 through 3399, specify the numbers as follows:</p> <p style="padding-left: 40px;">4XX: Indicates any 3-digit extension number starting with "4."</p> <p style="padding-left: 40px;">33XX: Indicates any 4-digit extension starting with "33."</p> <p>Note: Auto Configuration will set this parameter automatically. The Automated Attendant will dial any 2-5 digit PBX extension number (except numbers beginning with "0") whether valid or not. If the dialed number is included in the numbering plan, the Automated Attendant will immediately send it to the PBX without waiting for further input. If not included in the plan, the Automated Attendant will wait until the dialed number is recognized as an extension number, the internal inter-digit timer expires, or the caller dials 5 digits.</p> <p>If the number for an outgoing call is not found on the Numbering Plan, the VPS will consider it an outside number. The VPS will then attempt to dial it using the "Outgoing Call Setup Sequence."</p>

Other Parameters - Dialing Parameters

To select Dialing Parameters, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 6 - 2

Table 62

Parameter	Value Range (Default)	Description/Function
Number of Digit to Access Outside Line	0-8 digits (1)	Specifies the number of digits necessary to access an outside line. Example: If the PBX requires callers to dial "9" to access an outside line, this parameter should be set as "1." This enables the system to recognize that an outgoing call setup sequence is completed once the initial "9" has been dialed (9-123-4567). The full sequence is therefore: 9 - (outgoing call setup sequence) - 123- 4567. The VPS can discriminate between local and long distance calls and can report outgoing calls and calling times for billing purposes on periodic port usage reports.
Call Transfer No-Answer Time	10-60 sec (20)	Specifies the amount of time that the VPS must wait before retrieving the transferred call when there is no answer at the destination extension.
Outgoing Call No-Answer Time	10-90 sec (30)	Specifies the amount of time that the VPS must wait before concluding that there is no answer at the outside number called.
Pause Time	1-9 sec (2)	Specifies the pause time between dialed digits.

Table 62

Parameter	Value Range (Default)	Description/Function
Outgoing Call Setup Sequence	Up to 12 digits consisting of 0-9, *, #, F, R, S, T, W (T)	<p>Specifies the sequence of codes used by the VPS when calling an outside line. Up to 12 digits can be set. The default value is "T." "T" indicates that the system will dial the outside phone number only after detecting a dial tone.</p> <p>Example: 9W = (9) - 1-s wait - dial outside phone number. "9" is the CO line access number.</p> <p>F: Hook Flash R: Ring Back Tone Detection S: Silence Detection T: Dial Tone Detection W: Wait for 1 s 1-9, 0, *, # : Dial Codes</p>

Other Parameters - Message Waiting Notification

The following parameters are used to control the handling of message notification calls.

To select the Message Waiting Parameter, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 6 - 3

Table 63

Parameter	Value Range (Default)	Description/Function
Outgoing Call Ports	Port No. (1, 2, 3, 4)	<p>Specifies the port numbers used for the Message Waiting Notification Device feature. The VPS makes outgoing calls using the port specified in this field. At least 1 port must be specified.</p> <p>Note: The value range depends upon the VPS model. TVS75: 1-2, TVS100: 1-4, TVS200: 1-12</p>

Table 63

Parameter	Value Range (Default)	Description/Function
Message Waiting Lamp Ports	Port No. (1, 2, 3, 4)	Specifies the port numbers used for the Message Waiting Notification Lamp feature. The VPS turns on the Message Waiting Lamp of the extension using the port specified in this field. At least 1 port must be specified. Note: The value range depends upon the VPS model. TVS75: 1-2, TVS100: 1-4, TVS200: 1-12
Message Waiting Lamp for Every Message	1. No 2. Yes (No)	When set to "Yes," the VPS will turn on the Message Waiting Lamp of the extension each time a new message is recorded in the mailbox. This will occur even if the Message Waiting Lamp was not turned off from a previous message. When set to "No," the VPS will turn on the Message Waiting Lamp for the first message only. The VPS will not illuminate the lamp for subsequent messages until the Subscriber has accessed the VPS to retrieve the messages stored there. This setting is useful when the first attempt is unsuccessful.
Max. Digits for Callback No.	1-48 digits (20)	Specifies the maximum number of digits the caller can enter as a callback number. This number will be displayed on beepers if the "Beeper Callback No. Entry Mode" is enabled.
Callback No. Entry Interdigit Time-Out	1-10 sec (5)	Sets the maximum allowable time between each digit on Beeper Callback No. Entry. If the caller does not enter any digits within the specified time, the VPS will not accept entry of any additional digits.
System Callback No.	Up to 32 digits (None)	Specifies a telephone number displayed on the Subscriber's beeper as a callback number when "Type" is set to "Beeper." Note: If "Beeper Callback No. Entry Mode" is enabled through COS, the callback number entered by the caller will be displayed on the destination beeper instead of the System Callback No. However, if the caller fails to enter a callback number, the System Callback No. will be displayed.

Other Parameters - External Message Delivery Parameters

Used to control the handling of External Message Delivery calls.

To select the External Message Delivery Parameter, follow the menu path as shown:
System Administration Top Menu - 1 - 5 - 6 - 4

Table 64

Parameter	Value Range (Default)	Description/Function
Retry Times	0-9 times (3)	Specifies the number of times that an external message delivery call should be attempted when the destination is busy or if there is no answer.
Busy Delay	1-60 min. (3)	Specifies the length of time in minutes the VPS must wait after a busy condition is received before trying to deliver the message again.
No-Answer Delay	1-120 min. (60)	Specifies the length of time in minutes the VPS is to wait after a no answer condition is received before trying to deliver the message again.
Outgoing Call Ports	Port No. (1, 2, 3, 4)	Specifies the port numbers used for the External Message Delivery feature. Note: The value range depends upon the model. TVS75: 1-2, TVS100: 1-4, TVS200: 1-12
Message Length	1-6 min. (3)	Specifies the allowable message length of external delivery messages that the Subscriber can record.
Max. Messages for Mailboxes	1-100 msgs (3)	Specifies the maximum number of external delivery messages that can be stored in 1 mailbox at the same time.
System External Message Delivery Duration Time	1-9 min. (3)	Specifies the maximum telephone connect time allowable for an external message delivery call. Used to prevent excessive telephone charges. Time begins when the destination number answers the call. The VPS terminates the call (after playing a prompt) when the specified length of time has been exceeded.
Company's Telephone No.	Up to 32 digits	This telephone number is announced to the recipient (by the callback message) as the telephone number to be called in order to retrieve the sender's message. The VPS plays the callback telephone number to recipients if unable to deliver the message because of an incorrect password.

Other Parameters - Call Hold Parameters

To select Call Hold Parameters, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 6 - 5

Table 65

Parameter	Value Range (Default)	Description/Function
Call Hold Mode	1. Disable 2. Enable (Enable)	<p>If set to "Enable", the VPS gives callers the option of either holding for a specific extension or selecting one of several Incomplete Call Handling service options.</p> <p>While on hold, the VPS periodically gives callers the choice to either continue to hold or select one of the Incomplete Call Handling service options.</p> <p>If set to "Disable," the VPS immediately offers callers the Incomplete Call Handling service.</p>
Call Queuing Announcement Mode	1. Disable 2. Enable (Enable)	<p>If set to "Enable," callers on hold are informed of their current position in the call hold queue.</p> <p>Example: <i>"Sorry, 2 other people are waiting to connect."</i></p>
Call Retrieval Announcement Timing	1-30 sec (2)	<p>Specifies the interval between the voice guidance message that asks whether or not calls are to be retrieved during call holding.</p> <p>Example: <i>"To continue holding, press 1. Otherwise, press 2."</i></p>
Redialing Cancel Timing	1. 15 sec 2. 30 sec 3. 45 sec 4. 60 sec (30)	<p>Specifies the interval duration between the voice guidance messages that ask if continuous redials are to be attempted during call holding.</p> <p>Example: <i>"To cancel holding, press 2 now. Otherwise, I'll try your party again."</i></p>

Other Parameters - Rotary Telephone Service

This parameter defines how callers are treated who are calling from rotary telephones (unable to input DTMF signals) or who are unable to properly respond to VPS guidance.

To select Rotary Telephone Service, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 6 - 6

Table 66

Parameter	Value Range (Default)	Description/Function
Rotary Telephone Call Coverage (Day),(Night)	1. G. D. M. 2. Operator Extension (G. D. M.)	Defines how the VPS treats calls received from rotary telephones or calls from callers that are unfamiliar with the VPS operation in the Voice Mail Service. Note: G.D.M. = General Delivery Mailbox.

Other Parameters - Intercom Paging Parameters

Intercom Paging is a PBX feature that makes it possible to page the caller's party through telephone speakers. To utilize this feature, the PBX must have the Intercom Paging feature available and the VPS must be properly programmed.

To select the Intercom Paging Parameter, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 6 - 7

Table 67

Parameter	Value Range (Default)	Description/Function
Intercom Paging Sequence	Up to 12 digits consisting of 0-9, *, # and special codes (None)	Specifies the intercom paging sequence required by the PBX. It can be programmed using up to 12 of the following 8 letters and 12 dial codes. D: Disconnecting F: Hook Flash R: Ring Back Tone Detection S: Silence Detection T: Dial Tone Detection W: Wait for 1 s X: Pager Dialing A: Answer 1-9, 0, *, #: Dial Codes

Table 67

Parameter	Value Range (Default)	Description/Function
Release for Intercom Paging	Up to 12 digits consisting of 0-9, *, # and special codes (None)	Specifies the intercom paging release code required by the PBX. Up to 12 alphanumeric characters can be set using the same letters and dial codes as specified above.
No-Answer Time for Intercom Paging	1-30 sec (5)	When there is no answer, this parameter specifies the length of time (in seconds) the VPS must wait before concluding Intercom Paging. The VPS will return to the caller if the paged party does not respond before this timer expires.
Announcement Repeat Cycle	1-3 times (1)	Specifies the number of times the intercom page will be announced. Example: <i>"There is a call for (mailbox owner's name)."</i>
Intercom Paging Retry	1-10 times (2)	Specifies the number of times paging will be retried when the paging destination is busy or if there is no answer. Note: This setting applies when the subscriber has set only "Intercom Paging" status to enable in Incomplete Call Handling Status.
Paging Code for Group 1-8	Up to 12 digits consisting of 0-9, *, # for each group (none)	Specifies the intercom paging access code required by the PBX. Note: The Intercom Paging Group Number available for each Subscriber is determined on a COS-by-COS basis.

Other Parameters - Fax Management

The VPS can be programmed to automatically transfer incoming fax calls to a fax extension. A maximum of 2 fax extensions can be specified as the destination for the Automatic Fax Transfer. If the main fax extension is not available to receive a fax, the VPS will transfer the fax transmission to the alternate fax extension.

To select Fax Management, follow the menu path as shown:

System Administration Top Menu - 1 - 5 - 6 - 8

Table 68

Parameter	Value Range (Default)	Description/Function
Automatic Transfer of Incoming Fax Call	1: Disable 2: Enable (Disable)	Used to enable or disable the Automatic Transfer of Incoming Fax Call Service. Note: Auto detection works for only the first 30 s.
Main Fax Extension No.	2-5 digits (None)	Specifies the main fax extension number.
Alternate Fax Extension No.	2-5 digits (None)	Specifies the backup fax extension number used when the main fax extension is busy or if there is no answer within the specified "Fax No-Answer Time." When either of these situations occurs, the VPS transfers the fax call to the backup extension.
Fax No-Answer Time	5-60 sec (10)	Specifies the length of time (in seconds) the VPS must wait before taking other action when there is no answer at either fax extension. Note: This timer applies to the fax call that has been transferred to the main or alternate fax extension.
Fax Manager Mailbox No.	2-5 digits (None)	Specifies the Fax Manager Mailbox Number. The VPS will notify the fax manager of the status of fax calls depending upon the settings of the "Fax No-Answer Coverage Mode" and "Fax Notification Mode" parameters.
Fax No-Answer Coverage Mode	1. No 2. Mbx 3. Ext (No)	If set to "Mbx", the VPS will leave the number of unanswered fax calls in the Fax Manager's mailbox. Example: <i>"The FAX transfer situation is as follows. One attempt was no answer."</i> 1) If set to "Ext", the VPS will call the Fax Manager's extension to specify the number of an unanswered fax calls received. 2) The VPS will leave the number of unanswered fax calls in the Fax Manager's mailbox. 3) If set to "No", the VPS will take no action concerning unanswered fax calls.

Table 68

Parameter	Value Range (Default)	Description/Function
Fax Notification Mode	1. No 2. Mbx 3. Ext (No)	<p>If set to "Mbx", the VPS will leave the number of successfully received fax calls in the Fax Manager's mailbox.</p> <p>Example: <i>"You have 1 FAX message."</i></p> <p>1) If set to "Ext", after a fax extension successfully receives a fax call, the VPS will automatically call the Fax Manager's extension and play a voice prompt - <i>"You have 1 FAXmessage."</i> The VPS will also leave the total number of received fax calls in the Fax Manager's mailbox.</p> <p>2) If set to "No", the VPS will not take any action concerning successfully received fax calls.</p>

Other Parameters - Disconnect Parameter

To select the Disconnect Parameter, follow the menu path as shown:
System Administration Top Menu - 1 - 5 - 6 - 9

Table 69

Parameter	Value Range (Default)	Description/Function
Maximum Silence Time	5-60 sec (10)	The VPS will disconnect the call if silence is detected for more than the specified time.

B7 SYSTEM ADMINISTRATION - HARDWARE SETTINGS

For System Administration (system setup, mailbox setup, and system diagnosis) an RS-232C terminal must be connected to the serial interface of the VPS.

System Administration Top Menu - 1 - 6

B7.1 RS-232C Parameters

To the RS-232C Parameter, follow the menu path as shown:

System Administration Top Menu - 1 - 6 - 1

Table 70

Parameter	Value Range (Default)	Description/Function
Baud Rate	1. 300 bps 2. 600 bps 3. 1200 bps 4. 2400 bps 5. 4800 bps 6. 9600 bps 7. 19200 bps (9600)	Specifies the speed at which the data is transferred (bits per second).
Word Bit Length	1. 7 bits 2. 8 bits (8)	Defines the number of bits in each byte or character.
Parity	1. None 2. Odd 3. Even (None)	Specifies the parity used for error detection.
Stop Bit Length	1. 1 bit 2. 2 bits (1)	Specifies the number of bits used to signify the end of the byte.

B7.2 Port Setting

To select Port Setting, follow the menu path as shown:

System Administration Top Menu - 1 - 6 - 2

Port Setting Menu

To select the Port Setting Menu for Port 1, follow the menu path as shown:

System Administration Top Menu - 1 - 6 - 2 - 1

Table 71

Parameter	Value Range (Default)	Description/Function
Flash Time	1. 100 msec 2. 300 msec 3. 600 msec 4. 900 msec (600)	Specifies the length of time the hook switch must be pressed before the PBX will recognize it as a flash hook signal. See the PBX manual to determine the correct value.
CPC Signal	1. None 2. 6.5 msec 3. 150 msec 4. 300 msec 5. 450 msec 6. 600 msec (None)	Specifies the minimum time necessary to detect an interruption in the CPC (Calling Party Control) signal received from the PBX. The VPS is able to determine that the line has been disconnected when an interruption of the CPC signal has been detected.
Disconnect Time	1-8 sec (2)	Specifies the length of time the line is temporarily unavailable after a call has ended.
Dial Mode	1. DTMF 2. Pulse 10 pps 3. Pulse 20 pps (DTMF)	Specifies the dial mode for DTMF or Pulse. If Pulse is specified, pulse speed (10/20 pps) must be selected. Note: This setting only affects outward dialing from the VPS. The VPS can only receive DTMF signals.

Note

The port assignment procedure for other ports (TVS75:2, TVS100: 2- 4, TVS200: 2-12) is the same as Port 1.

B7.3 PBX Interface Parameters

Three separate parameters are used to program the VPS for optimal signaling and performance with the PBX.

To select PBX Interface Parameters, follow the menu path as shown:
System Administration Top Menu - 1 - 6 - 3

Dialing Parameters

These parameters specify how the VPS will initiate and control call transfers, setup outgoing calls, and control message waiting lamps on extensions. The procedure for verifying the correct code sequences for non-Panasonic KX-T series telephone systems is to manually execute the sequences from a single line telephone (SLT) with the PBX.

To select Dialing Parameters, follow the menu path as shown:
System Administration Top Menu - 1 - 6 - 3 - 1

Table 72

Parameter	Value Range (Default)	Description/Function
PBX Type	1. Other Manufacturers 2. KX-T Series 1. T308 2. T616 3. T1232/TA series 4. T96 5. T336 6. TD816 7. TD 1232 8. TD500 9. TD 308 (TD1232)	Specifies the type of PBX connected to the VPS. In the case of a Panasonic KX-T series telephone system, the model number should also be specified. Note: The Dialing Parameters are set automatically to each PBX default value after selecting the PBX type.

Table 73

PBX Type	Other Manufacturers	KX-T series								
		T308	T616	T1232/ TA series	T96	T336	TD816/1232/ 308	TD500		
Integration Mode	None	None	None	None	None	None	None	*D- PITS	None	*D- PITS
	Inband			Inband	Inband	Inband	Inband			
Operator Transfer Sequence	FX	FTX	FTX	FTX	FTX	FTX	FTX	FX	FTX	FX
Extension Transfer Sequence	FX	FTX	FTX	FTX	FTX	FTX	FTX	FX	FTX	FX
Alternate Extension Transfer Sequence	FX	FTX	FTX	FTX	FTX	FTX	FTX	FX	FTX	FX
Reconnect Sequence on Busy	FWW	FWW	FWW	FWW	FWW	FWW	FWW	F	FWW	F
Reconnect Sequence on No-Answer	FWW	FWW	FWW	FWW	FWW	FWW	FWW	F	FWW	F
Reconnect Sequence on Refuse Call	FWW	FWW	FWW	FWW	FWW	FWW	FWW	F	FWW	F
Light-On Sequence for Message Waiting Lamp	None	N/A	N/A	T701X#	T#91X	T×9X	T701X	—	T701X	—
Light-Off Sequence for Message Waiting Lamp	None	N/A	N/A	T702X#	T#90X	T#9X	T700X	—	T700X	—
Call Waiting Sequence	None	N/A	N/A	1	N/A	N/A	1	1	1	1
Release Sequence for Call Waiting	None	N/A	N/A	F	N/A	N/A	F	F	F	F

* When your KX-TD series telephone system is in DPT Integration mode.

N/A: Not available

—: Not needed

Table 74

Parameter	Value Range (Default)	Description/Function
Integration Mode	1. None 2. Inband 3. D-PITS (D-PITS)	Specifies the method of integrating the VPS with the PBX. <ol style="list-style-type: none"> 1. None - Both PBX and VPS work independently, without accessing information concerning the status of the other. 2. Inband - The PBX sends DTMF tone codes to the VPS to indicate the state of the call (busy, answered, disconnect, etc.). VPS performance is improved with Inband Integration because call state recognition is faster than with standard call progress tone detection. The PBX code for each call state must be set in the Inband Signaling Parameters. If PBX type is set to a KX-T series telephone system, the inband signaling parameters will automatically default to the proper codes. This is available with any of the following Panasonic KX-T series telephone systems: T1232, TA series, T96, T336, TD816, TD1232, TD500, TD308. 3. D-PITS - The VPS communicates with the PBX via the DPT interface. This is available with any of the following Panasonic KX-TD series telephone systems: TD816, TD1232, TD500, TD308.

To program the following 10 Parameters on the following page, use the Special Commands and Dial Codes listed below. Up to 12 digits can be set for each parameter.

- D: Disconnecting
- F: Hook Flash
- R: Ring Back Tone Detection
- S: Silence Detection
- T: Dial Tone Detection
- W: Wait for 1 s
- X: Extension dialing
- A: Answer
- 1-9, 0, *, #: Dial Codes

Table 75

Parameter	Value Range (Default)	Description/Function
Operator Transfer Sequence	(FX)	This sequence is performed by the VPS when transferring calls to the operator's extension.
Extension Transfer Sequence	(FX)	This sequence is performed by the VPS when transferring calls to any extension except the operator's.
Alternate Extension Transfer Sequence	(FX)	This sequence is performed by the VPS when transferring calls to extensions in the Alternate Extension Group.
Reconnect Sequence on Busy	(F)	If an extension is busy, this sequence allows the VPS to reconnect to the caller.
Reconnect Sequence on No-Answer	(F)	If the extension does not answer, this sequence allows the VPS to reconnect with the caller.
Reconnect Sequence on Refuse Call	(F)	This sequence is performed by the VPS to retrieve a call placed on hold after the extension (in the Call Screening mode) has refused to accept it.
Light-On Sequence for Message Waiting Lamp	(None)	The dialing sequence that the VPS must perform to enable the Message Waiting Lamp at an extension.
Light-Off Sequence for Message Waiting Lamp	(None)	This is the dialing sequence that the VPS must perform to disable the Message Waiting Lamp at an extension.
Call Waiting Sequence	(1)	This sequence is carried out by the VPS when performing call waiting if the extension being called is busy.
Release Sequence for Call Waiting	(F)	This sequence is performed by the VPS to release call waiting.

Inband Signaling Parameters

These parameters are used if the PBX sends DTMF tones to the VPS to indicate the state of a call (busy, answered, disconnected, etc.). The integration Mode must be set to "Inband." If PBX type is set to a KX-T series telephone system, the Inband Signaling Parameters will automatically default to the proper codes.

To select Inband Signaling Parameters, follow the menu path as shown:
System Administration Top Menu - 1 - 6 - 3 - 2

The following parameters can be programmed using "0-9", "×", "#", and "A-D."

Table 76

Parameter	Value Range (Default)	Description/Function
Ringback	(1)	Indicates "Ringback Tone." Sent to the VPS when the extension dialed is ringing.
Busy	(2)	Indicates "Busy Tone." Sent to the VPS when the extension dialed is busy.
Reorder	(3)	Indicates "Reorder Tone." Sent to the VPS when an invalid extension number is dialed or when inadvertently connected to another VPS.
DND	(4)	Indicates "Do Not Disturb Tone." Sent to the VPS if the dialed extension has the Do Not Disturb feature enabled.
Answer	(5)	Sent to the VPS when the called extension answers the call.
Forward to VM Ringing	(6)	Sent to the VPS if the called extension is forwarded to a voice mail port and that voice mail port is available to accept the call.
Forward to VM Busy	(7)	Sent to the VPS if the called extension is forwarded to a voice mail port and that voice mail port is not available to accept the call.
Forward to Other Extension	(8)	Sent to the VPS if the called extension is forwarded to another, non-voice mail extension.
Confirmation	(9)	Sent to the VPS when it successfully dialed a Message Waiting Lamp On or Message Waiting Camp Off Code.
Disconnect	(#9)	Sent to the VPS when the other party goes "on-hook."

Note

Default values in the above table vary depending on the settings of "PBX type" and "Inband Integration" (PBX Interface Parameters).

Table 77

Parameter	Other Manufacturers	KX-T series						
		T308	T616	T1232/ TA series	T96	T336	TD816/ 1232/308	TD500
Ringback	N/A	N/A	N/A	1	A1	A1	1	1
Busy	N/A	N/A	N/A	2	B1	B1	2	2
Reorder	N/A	N/A	N/A	3	B2	B2	3	3
DND	N/A	N/A	N/A	4	B3	B3	4	4
Answer	N/A	N/A	N/A	5	A2	A2	5	5
Forward to VM Ringing	N/A	N/A	N/A	6	C1	C1	6	6
Forward to VM Busy	N/A	N/A	N/A	7	C2	C2	7	7
Forward to Other Extension	N/A	N/A	N/A	8	C3	C3	8	8
Confirmation	N/A	N/A	N/A	9	D1	D1	9	9
Disconnect	N/A	N/A	N/A	#9	DD	DD	#9	#9

N/A: Not available

Digit Translation Table Parameters

The Digit Translation Table is used to translate the Follow On ID Signal from the PBX into the proper codes for the VPS. This translation table is only effective for the incoming signal.

To select the Digit Translation Table Parameters, follow the menu path as shown:

System Administration Top Menu - 1 - 6 - 3 - 3

Digit Translation Table Parameters - Inter-Digit Timeout

To select Inter - Digit Timeout, follow the menu path as shown:

System Administration Top Menu - 1 - 6 - 3 - 3 - 1

Table 78

Parameter	Value Range (Default)	Description/Function
Inter-digit Timeout	1-4 sec (1seconds)	This parameter defines the incoming signal interval (Follow on ID). The Digit Translation Table is translated by a series of signals received within the specified time period.

Digit Translation Table Parameters - Input/Output

To select Input/Output, follow the menu path as shown:

System Administration Top Menu - 1 - 6 - 3 - 3 - 2

Table 79

Parameter		Value Range (Default)	Description/Function
Table 1-8	Input digit	Up to 8 digits consisting of 0- 9, *, #, A-D (None)	Do not assign more than 1 code to an incoming signal. If this occurs, the system will take the first assignment.
	Output digit		

Appendix C
SYSTEM MANAGER'S GUIDE

C1 ACCESSING THE SYSTEM MANAGER'S MAILBOX

Three items of information must be known before accessing the System Manager's Mailbox—the telephone number connected directly to the Voice Mail Service, the System Manager's Mailbox Number and the Password for that mailbox (if assigned). The System Manager's Mailbox Number is 99, 999, 9999 or 99999 depending upon the mailbox number length specified in System Programming. The System Manager's password is assigned through the System Manager's Service.

To Access the System Manager's Mailbox

1. **Dial the extension number** connected to the Voice Mail Service. Or **Dial any VPS extension number** and **Press [#] [6]** (Service Access Command).

*Please enter your party's mailbox number.
To enter by name, press [#] and [1].
If you are using a rotary telephone, stay on the line.
To call the operator, press [0].*

2. **Press [∗]**, then **Type the System Manager's Mailbox Number** (99, 999, 9999 or 99999).

Enter your password, followed by [#].

3. **Type the Password** followed by [#]. The Main Command Menu will be played:

*To receive the message, press [1].
To deliver a message, press [2].
To customize your mailbox, press [3].
To check the mailbox distribution, press [4].
For a system report, press [5].
For other features, press [6].
To end this call, press [∗].*

C2 SETTING UP MAILBOXES

The System Manager's primary function is to create mailboxes for new Subscribers and to maintain system organization by deleting unneeded passwords and mailboxes.

Creating and Editing a Mailbox

The System Manager is able to both create and edit Subscriber mailboxes. Mailboxes can be created or edited by following the steps below.

At any step, when editing an assigned mailbox's parameters, change current settings by **Pressing [1]**. To leave the current setting unchanged, **Press [2]**.

When creating a new mailbox, the following parameters can be set:

- *Mailbox Number*
- *Subscriber's Voiced Name - The VPS allows a maximum of 4 s to record the name. The name must be spoken slowly and clearly. Use the Subscriber's last name.*
- *Extension Number*
- *Initial 3 or 4 Letters of the Subscriber's Last Name - Only the first 3 or 4 letters of the owner's last name are entered.*
- *Class of Service Number - Any COS number (1-62) may be entered.*
- *Interview Mailbox Number - Interview Mailbox Numbers must be different from Subscriber Mailbox Numbers.*
- *All Calls Transfer Mailbox*

The steps listed below must be followed when creating, changing or deleting any mailbox parameter.

1. **Log in** to the Main Command Menu.
2. **Press [6]** for Other Features.
3. **Press [1]** for Mailbox Setup.
4. **Press [1]** to Assign or Edit.
5. **Type the mailbox number.**
6. **Press [2]** to accept the entry.
7. As each parameter is played:
 - a) **Press [1]** to enter the new parameter or **[2]** to leave the parameter unchanged.
 - b) Enter the parameter and **Press [1]**.
 - c) Confirm the new parameter is correct and **Press [2]** to accept it.

8. The All Calls Transfer to Mailbox parameter is the last parameter to be entered. When this entry is completed, the prompt at step 4 will appear. Continue assigning or editing other mailboxes by repeating steps 5-7.
9. To return to the Main Command Menu, **Press [*]** twice.

Deleting a Mailbox

When mailboxes are no longer needed, they must be deleted. If the mailbox to be deleted is being used, the action is automatically cancelled and the message "Sorry, cannot delete the mailbox now" is played.

1. **Log in** the Main Command Menu.
2. **Press [6]** for Other Features.
3. **Press [1]** for Mailbox Setup.
4. **Press [2]** for Delete.
5. **Type the mailbox number.**
6. **Press [1]** to delete the mailbox.

Deleting a Mailbox Password

When a password is forgotten the password must be deleted by the System Manager before it can be reassigned by the subscriber.

1. **Log in** the Main Command Menu.
2. **Press [6]** for Other Features.
3. **Press [1]** for the Mailbox Setup.
4. **Press [3]** for reset Password.
5. **Type the mailbox number.**
6. **Press [1]** to delete the password.

C3 SETTING COS (CLASS OF SERVICE) PARAMETERS

Class of Service defines the set of VPS services available to Subscribers. A maximum of 64 Class of Services can be established. Each Class of Service can be set using the telephone. COS No. 63 and No. 64 are assigned to the Message Manager and the System Manager respectively.

For a complete explanation of COS parameters please see Table 45, 46, 47 and 48 in B3 SYSTEM ADMINISTRATION - SETTING COS (CLASS OF SERVICE) PARAMETERS.

The Class of Service parameters listed below are set by following the procedure steps listed:

- **1Personal Greeting Length - Length ranges from 8-60 s.*
- *New Message Retention Time - Maximum time is 30 days.*
- *Saved Message Retention Time - Up to 30 days/0: Unlimited*
- *Message Length - Length ranges from 1-6 min*
- *Number of Messages - The number of messages ranges from 5-100.*
- *Total Message Time - Total message time ranges from 5-100 min.*
- *Message Retrieval Order - Settings are LIFO (last in first out) or FIFO (first in first out).*
- *Message Scanning with Information - Settings are enable or disable.*
- **1Play System Prompt After Personal Greeting Status - Settings are enable or disable.*
- **1Call Waiting on Busy Status - Settings are enable or disable.*
- **1Message Cancel for Live Call Screening Status - Settings are enable or disable.*
- **1Direct Mailbox Access Status - Settings are enable or disable.*
- **1Intercom Paging Group Number 1-8*
- **1Subscriber Service Prompt Mode -*
 1. *System Prompt*
 2. *User 1 Prompt*
 3. *User 2 Prompt*
- **2Message Notification - Settings are enable or disable.*
- **1External Message Delivery - Settings are enable or disable.*
- **1Auto Forwarding - Settings are enable or disable.*

*1 Not available for COS No.63 (Message Manager) and COS No.64 (System Manager)

*2 Not available for COS No.64 (System Manager)

1. **Log in** the Main Command Menu.
2. **Press [6]** for Other Features.
3. **Press [2]** to set the Class of Service.

4. **Type the Class of Service Number (1-64).**
5. For the parameters listed on the previous page - as each parameter is played:
 - a) **Press [1]** to change the current setting.
 - b) Confirm the entry is correct and **Press [2]** to accept it.
6. Enter the Intercom Paging Group Number (1-8).
 - a) The current setting is played. **Press [1]** to change the current number.
 - b) **Type the Group Number (1-8).**
 - c) Confirm the entry is correct and **Press [2]** to accept it.
7. Enter the Subscriber Service Prompt Mode.
 - a) The current setting is played. **Press [1], [2], or [3]** to change the desired mode.
 - *[1] System Prompt*
 - *[2] User 1 Prompt*
 - *[3] User 2 Prompt*
 - b) Confirm the entry is correct and **Press [4]** to accept it.
8. Enter the Message Notification Status.
 - a) The current setting is played. **Press [1]** to change the setting (enable or disable). If the Message Notification Status is [Enable], go to step 8 b) below.
 - b) **Press [1], [2], [3], [4], or [5]** to choose the desired Beeper Callback No.
 - *[1] Caller Select Mode*
 - *[2] Without message mode*
 - *[3] Before message recording mode*
 - *[4] After message recording mode*
 - *[5] Disable All Entry Mode (Caller cannot access beeper)*
 - c) Confirm the entry is correct and **Press [6]** to accept it.
 - d) The current setting of MWL Notification for Unreceived Message is played. **Press [1]** to change the setting (enable or disable).
 - e) Confirm the entry is correct and **Press [2]** to accept it.
 - f) The current setting of Device Notification for Unreceived Message is played. **Press [1]** to change the setting (enable or disable).
 - g) Confirm the entry is correct and **Press [2]** to accept it.
9. Enter the External Message Delivery Status.
 - a) The current setting is played. **Press [1]** to change the setting (enable or disable). If the External Message Delivery Status is enabled, set the prompt mode for Receiving External Delivery Messages.
 - b) **Press [1], [2], [3], or [4]** to choose the desired mode or **Press [5]** to accept it.
 - *[1] System Prompt*

- [2] User 1 Prompt
- [3] User 2 Prompt
- [4] Selective Prompt
- [5] Accept

10. Enter the Auto Forwarding Status.

- a) The current setting is played. **Press [1]** to change the setting or **[2]** to accept. If Auto Forwarding is enabled, go to step 10 b)-h).
- b) **Press [1]** to change the mailbox number.
- c) **Type the mailbox number.**
- d) Confirm the entry is correct and **Press [2]** to accept it.
- e) **Press [1]** to change the delay time. The delay time is the period of time that must pass before the message is automatically forwarded. For example, 1 h and 15 min is 115#, 30 min is 30#.
- f) Confirm the entry is correct and **Press [2]** to accept it.
- g) **Press [1]** to change the current forwarding mode (copy or move).
- h) Confirm the entry is correct and **Press [2]** to accept it.

C4 SETTING THE SYSTEM CLOCK

The system clock is set directly from the telephone. It is important to set the exact time because Message Waiting Notification, External Message Delivery, redialing and rescheduling of External Message Delivery, and Automatic Message Deletion, are all scheduled using this setting. The System Administrator and Message Manager are also able to set this clock.

The system automatically adjusts the time as appropriate when daylight saving time begins and ends.

1. **Log in** the Main Command Menu.
2. **Press [6]** for Other Features.
3. **Press [3]** to set the time and date.

Note

The clock setting menu cannot be accessed if the System Administrator or the Message Manager is editing the time.

4. **Press [1]** to change the current time.
5. **Type the current time** and **Press [#]**.

Note

Press [0] for help. "For example, to enter 5 o'clock, press 5 and # or to enter 5:15, press 5, 1, 5, and #."

6. **Press [1]** for AM or for [2] PM.
7. **Press [2]** to accept the time.
8. **Press [1]** to change the current date.
9. **Type the current month** and **Press [#]**.

Note

Press [0] for help. "For example, to enter January, press 1 and #."

10. **Type the day** and **Press [#]**.
11. **Type the last 2 digits of the year** and **Press [#]**.
12. **Press [2]** to accept the date.

C5 CHECKING SYSTEM USAGE (SYSTEM REPORTS)

Eight System Reports can be generated to help monitor the VPS operating status. The reports are sent from the RS-232C port to either a printer or a terminal. The System Administrator is also able to output system reports.

Obtaining System Reports

1. **Log in** the Main Command Menu.
2. **Press [5]** for the System Report Menu.
3. **Press [1], [2], [3], [4], [5], [6], [7], or [8]** to obtain the desired report.
 - [1] System Service Report
 - [2] Disk Usage Report
 - [3] Port Usage Report
 - [4] Mailbox Usage Report
 - [5] Mailbox Parameter Report
 - [6] Call Account Report
 - [7] Class of Service Parameter Report
 - [8] Fax Call Report

Note

The Mailbox Parameter Report is displayed as "Mailbox Assignments." The Class of Service Parameter Report is displayed as "COS Assignments."

4. For Disk Usage Report [2], Port Usage Report [3], Mailbox Usage Report [4] or Fax Call Report [8], **Press [1]**. To generate the Mailbox Usage Report, go to step 5.
5. Mailbox Usage Report - **Type the mailbox number** of the start of the range.

Note

If a [#] is entered in place of each digit of the mailbox numbers (e.g., ### for 3-digit mailbox numbers), reports for all mailboxes will be printed and the System Report Menu will appear. In this case, step 6 can be skipped.

6. **Press [1]** to specify the mailbox range and **Type** the mailbox number of the end of the range or **Press [2]** to obtain all mailbox usage counts. This mailbox number is the end of the mailbox range. The mailbox number entered in step 5 is the start of the range. For example, to specify the mailbox range 101 through 209, enter 101 in step 5 and 209 in step 6.

Clearing the Reports

The Port Usage, Disk Usage, Mailbox Usage, and Fax Call Reports can be cleared.

1. **Log in** the Main Command Menu.
2. **Press [5]** for the System Report Menu.
3. **Press [2]** to clear the Disk Usage Reports, **[3]** to clear the Port Usage Reports, **[4]** to clear the Mailbox Usage Reports, or **[8]** to clear the Fax Call Report.
4. **Press [2]** to clear the report. To clear the Mailbox Usage Reports, go to the step 5.
5. **Type the mailbox number** of the start of the range.

Note

If [#] is entered, all Mailbox Usage Reports are cleared. In this case, step 6 can be skipped.

6. **Press [1]** to specify the mailbox range, and **Type the mailbox number** of the end of the range.
Press [2] to clear all Mailbox Usage Reports.

C6 DELIVERING MESSAGES

There are 2 methods of delivering messages. The distributions of each message can also be checked.

Delivering Messages to All Mailboxes (Broadcasting Messages)

An identical message can be delivered to all VPS Subscribers at the same time. This procedure is referred to as Broadcasting Messages. The message to be broadcast is recorded in the System Manager's mailbox. This feature is useful when informing Subscribers about the current VPS status such as remaining hard disk capacity, requesting that unnecessary messages be erased, etc.

1. **Log in** the Main Command Menu.
2. **Press [2]** to deliver a message.
3. **Press [1]** to record a broadcast message.
4. Record a broadcast message and **Press [1]**.
5. **Press [2]** to accept the message recorded.

Delivering Messages to Specified mailboxes

Messages can be delivered to more than 1 Subscriber's mailbox by specifying the mailboxes for delivery. Messages can be designated as private or urgent and tagged with the delivery date and time.

1. **Log in** the main command menu.
2. **Press [2]** to deliver a message.
3. **Press [2]** to deliver a message.
4. **Type the mailbox number** of the intended recipient.

Note

Enter by name by Pressing [#] [1] first. Use a System Group Distribution List by specifying its number.

5. **Press [2]** to accept the number if it is correct.

Note

Add mailbox numbers by Pressing [2]. Review the mailing list by Pressing [3] and cancel message transfer by Pressing [].*

6. **Press [1]** to record a message.
7. State the message at the tone and **Press [1]**.
8. **Press [2]** to accept the recording message.

9. Press [1] to specify the delivery time and the private status.

Note

End message delivery and return to the Main Command Menu by Pressing [2].

10. Press [1] to specify the delivery time.
11. Type the time and Press [#].
12. Press [1] for AM or [2] for PM.
13. Type the date (month, day and year) and Press [#].
14. Press [2] to accept the entry made.
15. Press [1] to make this message private; otherwise, Press [2]

Checking Mailbox Distribution

This parameter is used to check if messages have been delivered to recipients.

1. Log in the main command menu.
2. Press [4] to check distribution status.
3. Press [3] to cancel the message or delete verification.

Note

*Listen to messages by Pressing [1]. Check the previous message by Pressing [1] twice
Check the next message by Pressing [2].*

4. Press [1] to delete verification of this message, or [2] to cancel message delivery.

C7 CUSTOMIZING THE SYSTEM MANAGER'S MAILBOX

In order to ensure system security, a password must be established consisting of up to 8 numeric characters. Anyone requesting access to the System Manager's service will be required to enter this password before proceeding.

1. **Log in** the Main Command Menu.
2. **Press [3]** to customize the mailbox. The current setting will be played.
3. **Press [1]** to change the mailbox password.
4. **Type the password** and **Press [#]**.

Note

If a password is not needed Press [#]. It is recommended to set the password to maintain security.

5. **Press [2]** to accept the entry.

C8 LISTENING TO SYSTEM MANAGER MESSAGES

1. **Log in** the Main Command Menu.
2. The VPS plays the number of new messages. **Press [1]** to listen to the messages.
3. The VPS plays each message with the sender identified along with when the message was recorded. Press [0] to listen to the entire help menu.
 - *[1] Repeat this message*
 - *[1] [1] Play the Previous Message*
 - *[2] Replay the Next message*
 - *[3] Erase this Message*
 - *[4] Reply*
 - *[5] Rewind*
 - *[6] Fast Forward*
 - *[7] Transfer*
 - *[8] Message Scan*

Note

End the call by Pressing [#] [9].

Appendix D
MESSAGE MANAGER'S GUIDE

D1 ACCESSING THE MESSAGE MANAGER'S MAILBOX

The Message Manager's Mailbox must be accessed before any Message Manager task can be completed. Three items of information are required before accessing the Message Manager's Mailbox — the telephone number connected directly to the Voice Mail Service, the Message Manager's Mailbox Number, and the Message Manager's Password. The Message Manager's Mailbox Number is 98, 998, 998, or 99998 depending upon the mailbox number length specified in System Programming. The Message Manager's password is assigned through the Message Manager's Service.

To Access the Message Manager's Mailbox

1. **Dial the extension number** connected to the Voice Mail Service. Or **Dial any VPS extension number** and **Press [#] [6]** (Service Access Command).

*Please enter your party's mailbox number.
To enter by name, press [#] and [1].
If you are using a rotary telephone, stay on the line.
To call the operator, press [0].*

2. **Press [✳]**, then enter the **Message Manager's Mailbox Number** 98, 998, 9998, or 99998.

Enter your password, followed by [#].

3. **Type the Password** followed by [#]. The Main Command Menu will be displayed.

*To transfer General Delivery Mailbox messages, press [1].
To set up message waiting notification, press [2].
To customize your mailbox, press [3].
To set the clock, press [4].
To modify message, press [5].
To end this call, press [✳].*

D2 MANAGING THE GENERAL DELIVERY MAILBOX

One of the Message Manager's functions is to check the General Delivery Mailbox for messages and transfer them to the appropriate mailbox. This can be done at any time using the telephone.

Listening to Messages

The status of the General Delivery Mailbox is monitored through the Message Manager's Mailbox. Messages stored there can be listened to and, if necessary, transferred to their intended recipients.

1. **Log in** the Main Command Menu.
2. The VPS plays the number of new messages. **Press [1]** to listen to the messages.
3. The VPS plays each message with the sender identified along with when the message was recorded. **Press [0]** to listen to the entire help menu.
 - *[1] Repeat this Message*
 - *[1] [1] Replay the Previous Message*
 - *[2] Play the Next Message*
 - *[3] Erase this Message*
 - *[4] Reply*
 - *[5] Rewind*
 - *[6] Fast Forward*
 - *[7] Transfer*
 - *[8] Message Scan*

Note

End the call by Pressing [#] [9].

Transferring Messages

Messages left in the general delivery mailbox must be transferred to their intended recipients with any necessary attached voice comments. Once a message has been transferred, the original can be deleted from the General Delivery Mailbox.

1. **Log in** the Main Command Menu.
2. **Press [1]** to transfer messages from the General Delivery Mailbox.
3. The VPS plays the first (next/last) message. **Press [7]** to transfer the message.
4. **Type the destination mailbox number.**

5. **Press [2]** to accept the number.
6. **Press [2]** to transfer with comment.

Note

Messages can be transferred without comment by Pressing [1]. A mailbox number can be added by Pressing [3]. The Mailing List can be reviewed by Pressing [4]. Message Transfer can be canceled by Pressing [5].

7. **Record the comments** and **Press [1]**.
8. **Press [2]** to accept the comments entered.

D3 SETTING UP MESSAGE WAITING NOTIFICATION

The VPS is able to notify the Message Manager that unplayed messages are waiting in the Message Manager's Mailbox. Two types of Message Waiting Notification are available — Notification by Message Waiting Lamp and Notification by Calling.

Setting Message Waiting Lamp Status

The VPS illuminates the message waiting lamp on the extension when a new message is recorded in the Message Manager's Mailbox.

1. **Log in** the Main Command Menu.
2. **Press [2]** to set Message Waiting Notification.
3. **Press [1]** to change the Message Waiting Lamp Notification Status.
4. **Press [1]** to change the Message Waiting Lamp Notification Status, or **[2]** to accept it.

Setting Notification by Calling Status

The VPS calls the preset telephone or beeper when a new message is recorded in the mailbox. Set the following parameters as appropriate.

Setting Device Status

For each device, the notification is enabled or disabled according to a preset schedule. The Message Manager cannot *enable* a device according to a schedule. The System Administrator must accomplish this task. (See "Time frame 1, 2" in Table 44 in B2 SYSTEM ADMINISTRATION - MAILBOXES)

1. **Log in** the Main Command Menu.
2. **Press [2]** to set Message Waiting Notification.
3. **Press [2]** to change the notification method.
 - *[1] Schedule (enabled on the schedule)*
 - *[2] Continuously (enabled whole day)*
 - *[3] Not Use (disabled whole day)*
4. **Type the notification device number.**
5. **Press [1], [2], or [3]** to select the device status.

Assigning Notification Numbers

Up to 3 telephone or beeper numbers can be set for message notification. The 0 to 9 keys, the tone/pulse switch, and the beeper Callback Number Display Entry Code [X] are used to make these assignments.

When the Beeper Callback No. Entry Code is added at the end of a beeper number, the notification is made in a little different way. The VPS will ask the caller to enter the number to be called and will display this number on the beeper. The setting of the Callback Number Entry can be set to before the message, after the message, or with no message depending on System Programming.

It is also possible to have the caller select whether or not enter a callback number. The System Manager must authorize the use of the Beeper Callback No. Entry Code.

- 1. Log in** the Main Command Menu.
- 2. Press [2]** to set Message Waiting Notification.
- 3. Press [3]** to Assign Telephone Number.
- 4. Press [1]** to change the first telephone number, **[2]** to change the second telephone number, or **[3]** to change the third telephone number.
- 5. Press [1]** to set the telephone number.
- 6. Type the telephone number.**
- 7. Press [2]** to accept the entry.
 - *[1] Change the telephone number*
 - *[2] Accept*
 - *[3] Review*
 - *[4] Add more digits*
 - *[5] Insert a pause*
 - *[6] Set dial mode*
 - *[7] Insert a wait for dial tone*
 - *[8] Insert a beeper display command*
- 8. Press [1]** to be notified by telephone or **[2]** by a beeper.

D4 CUSTOMIZING THE MESSAGE MANAGER'S MAILBOX

The Message Manager is able to customize the Message Manager's Mailbox by specifying the password and the extension numbers of Operator 1, 2, and 3.

Message Manager's Password

The password can be specified at any time using the telephone. The password contains up to 8 numeric characters and must be entered to execute the message management operation.

Operator's Extensions

When callers require help they are transferred to an operator extension after **Pressing [0]** on their telephone keypad. Up to 3 operators (Operator 1, 2, 3) can be specified for both Day and Night modes. It is usual to set the Message Manager's extension as *Operator 1*.

1. **Log in** the Main Command Menu.
2. **Press [3]** to Customize Mailbox.
3. The VPS plays the current password setting. **Press [1]** to change the password. Accept the current setting by **Pressing [2]**.
4. **Type** the password and **Press [#]**.
5. The VPS repeats what was entered. **Press [2]** to accept the entry.
6. The VPS plays the current operator's extension setting. **Press [1]** to change the operator's extension. If the operator's extension is unassigned, go to step 7. Accept the current setting by **Pressing [2]**.
7. **Type** the **extension number**.
8. The VPS repeats the extension entered. **Press [2]** to accept the entry.
9. Repeat the steps 6-8 to assign the extension for the day and night modes for each operator.

D5 SETTING THE SYSTEM CLOCK

The system clock is set directly from the telephone. It is important to set the exact time because Message Waiting Notification, External Message Delivery, redialing and rescheduling of External Message Delivery, and Automatic Message Deletion, are all scheduled using this setting. The System Administrator and System Manager are also able to set this clock.

The system automatically adjusts the time as appropriate when daylight saving time begins and ends.

1. **Log in** the Main Command Menu.
2. **Press [4]** to set the time and date.

Note

The clock setting menu cannot be accessed if the System Administrator or the System Manager is editing the time.

3. **Press [1]** to change the current setting.
4. **Type the current time** and **Press [#]**.

Note

Press [0] for help. "For example, to enter 5 o'clock, press 5 and # or to enter 5:15, press 5, 1, 5, and #."

5. **Press [1]** for AM or for [2] PM.
6. **Press [2]** to accept the time.
7. **Press [1]** to change the current date.
8. **Type the current month** and **Press [#]**.

Note

Press [0] for help. "For example, to enter January, press 1 and #."

9. **Type the day** and **Press [#]**.
10. **Type the last 2 digits of the year** and **Press [#]**.
11. **Press [2]** to accept the date entered.

D6 RECORDING COMPANY MESSAGES

The Message Manager is responsible for recording messages or greetings. The maximum message length for all messages is 6 min. The following messages can be recorded using the Recording Messages Procedure:

- *Company Greetings - Up to 32 company business or non-business hour greetings can be selected, recorded, or deleted as necessary.*
- *Company Name*
- *Department Dialing Menu Messages - Only nine department dialing selections can be recorded (1-9).*
- *Custom Service Menu Messages - The VPS accommodates up to 100 custom services that can be either recorded or deleted as necessary.*
- *Voice Labels for Mailbox Lists - Up to 20 mailbox distribution group lists can be created by the System Administrator. The name of each list can be either recorded or erased by the Message Manager.*
- *Selection Menus - Selection Menus support the VPS Multilingual Service and consist of the languages that this service supports.*

Recording Messages

1. **Log in** the Main Command Menu.
2. **Press [5]** to Modify Messages.
3. Select the number of the message to be recorded.
 - *[1] Record Company Greetings*
 - *[2] Record Company Name*
 - *[3] Record Department Dialing Programming Menu*
 - *[4] Record Custom Service Menu*
 - *[5] Record Voice Labels for Mailbox Lists*
 - *[7] Record Selection Menus*
4. For the parameter selected, follow the step indicated below:
 - *1 Record Company Greetings - **Enter the Company Greeting Number (1-32).***
 - *2 Record Company Name - **Go to step 5.***
 - *3 Department Dialing Programming Menu - **Go to step 5.***
 - *4 Custom Service Menu - **Enter the Custom Number (1-100).***
 - *5 Voice Labels for Mailbox Lists - **Enter the Mailbox List Number to be labeled.***
 - *7 Selection Menus - **Go to step 5.***
5. The VPS plays the current message. **Press [1]** to change the message. If a message has not been recorded for this number go to step 7.
6. **Press [1]** to record the message. **Press [2]** to erase the current message.
7. Record the message and **Press [1]**.

8. Press [2] to accept the message.

Note

Review the recorded message by Pressing [1]. Record a new message by Pressing [3]. Add a message by Pressing [4]. Erase a message and exit by Pressing [].*

Note

Other Company Greetings and Voice Labels for Mailbox Lists can be recorded by repeating steps 3-8.

Note

Record Custom Service Menu Messages - The final guidance message for Exit is recorded by Pressing [0].

Recording User Prompts

User Prompts support the VPS multilingual Service (User 1 Prompt and User 2 Prompt). User Prompts are recorded in the personal computer (command SAVE through the RS-232C). Once they have been saved, they can be restored (with the command LOAD) at any time. The list of modifiable prompts and prompt numbers is located at the end of this section.

1. Log in the Main Command Menu.
2. Press [5] to modify Messages.
3. Press [6] to modify user prompts.
4. Press [1] to change User Prompt 1, or [2] to change User Prompt 2.
5. Press [1] to change the prompt specified. The prompt can be recorded in a row without reviewing the current recording by Pressing [2]. You will go to step 9.
6. Enter the prompt number. (The complete list of modifiable prompts is included at the end of this section.)
7. Press [1] to change the prompt. Press [2] to return to step 6. Turn off the specified prompt by Pressing [3].
8. The VPS plays the current recording. Press [1] to change the prompt. To retain the current recording Press [2].
9. Press [1] to record a new prompt. Press [2] to erase the current prompt. Turn off the specified prompt by Pressing [3].
10. State a prompt and Press [1].
11. Press [2] to accept the entry.
12. Record other user prompts by repeating steps 6 to 11.

Note

Review the recorded message by Pressing [1]. Record a new message by Pressing [3]. Add a message by Pressing [4]. Erase a message and exit by Pressing [].*

D7 LIST OF MODIFIABLE PROMPTS

The table below shows the modifiable prompts. Record prompts as User 1 or User 2. Some of the modifiable prompts are listed along with their linked prompt number. In order to make certain sentences in 1 voice, record the related prompts together.

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
1	ZERO	
2	ONE	
3	TWO	
4	THREE	
5	FOUR	
6	FIVE	
7	SIX	
8	SEVEN	
9	EIGHT	
10	NINE	
11	TEN	
12	ELEVEN	
13	TWELVE	
14	THIRTEEN	
15	FOURTEEN	
16	FIFTEEN	
17	SIXTEEN	
18	SEVENTEEN	
19	EIGHTEEN	
20	NINETEEN	
21	TWENTY	
22	TWENTY ONE	
23	TWENTY TWO	
24	TWENTY THREE	
25	TWENTY FOUR	
26	TWENTY FIVE	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
27	TWENTY SIX	
28	TWENTY SEVEN	
29	TWENTY EIGHT	
30	TWENTY NINE	
31	THIRTY	
32	THIRTY ONE	
33	THIRTY TWO	
34	THIRTY THREE	
35	THIRTY FOUR	
36	THIRTY FIVE	
37	THIRTY SIX	
38	THIRTY SEVEN	
39	THIRTY EIGHT	
40	THIRTY NINE	
41	FORTY	
42	FORTY ONE	
43	FORTY TWO	
44	FORTY THREE	
45	FORTY FOUR	
46	FORTY FIVE	
47	FORTY SIX	
48	FORTY SEVEN	
49	FORTY EIGHT	
50	FORTY NINE	
51	FIFTY	
52	FIFTY ONE	
53	FIFTY TWO	
54	FIFTY THREE	
55	FIFTY FOUR	
56	FIFTY FIVE	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
57	FIFTY SIX	
58	FIFTY SEVEN	
59	FIFTY EIGHT	
60	FIFTY NINE	
61	SIXTY	
62	SIXTY ONE	
63	SIXTY TWO	
64	SIXTY THREE	
65	SIXTY FOUR	
66	SIXTY FIVE	
67	SIXTY SIX	
68	SIXTY SEVEN	
69	SIXTY EIGHT	
70	SIXTY NINE	
71	SEVENTY	
72	SEVENTY ONE	
73	SEVENTY TWO	
74	SEVENTY THREE	
75	SEVENTY FOUR	
76	SEVENTY FIVE	
77	SEVENTY SIX	
78	SEVENTY SEVEN	
79	SEVENTY EIGHT	
80	SEVENTY NINE	
81	EIGHTY	
82	EIGHTY ONE	
83	EIGHTY TWO	
84	EIGHTY THREE	
85	EIGHTY FOUR	
86	EIGHTY FIVE	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
87	EIGHTY SIX	
88	EIGHTY SEVEN	
89	EIGHTY EIGHT	
90	EIGHTY NINE	
91	NINETY	
92	NINETY ONE	
93	NINETY TWO	
94	NINETY THREE	
95	NINETY FOUR	
96	NINETY FIVE	
97	NINETY SIX	
98	NINETY SEVEN	
99	NINETY EIGHT	
100	NINETY NINE	
101	HUNDRED	
102	MORE THAN HUNDRED	
103	AM	
104	PM	
105	O'CLOCK	
106	ONE (AM HOUR)	
107	TWO (AM HOUR)	
108	THREE (AM HOUR)	
109	FOUR (AM HOUR)	
110	FIVE (AM HOUR)	
111	SIX (AM HOUR)	
112	SEVEN (AM HOUR)	
113	EIGHT (AM HOUR)	
114	NINE (AM HOUR)	
115	TEN (AM HOUR)	
116	ELEVEN (AM HOUR)	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
117	TWELVE (PM HOUR)	
118	ONE (PM HOUR)	
119	TWO (PM HOUR)	
120	THREE (PM HOUR)	
121	FOUR (PM HOUR)	
122	FIVE (PM HOUR)	
123	SIX (PM HOUR)	
124	SEVEN (PM HOUR)	
125	EIGHT (PM HOUR)	
126	NINE (PM HOUR)	
127	TEN (PM HOUR)	
128	ELEVEN (PM HOUR)	
129	TWELVE (PM HOUR)	
130	ONE (MINUTE)	
131	TWO (MINUTE)	
132	THREE (MINUTE)	
133	FOUR (MINUTE)	
134	FIVE (MINUTE)	
135	SIX (MINUTE)	
136	SEVEN (MINUTE)	
137	EIGHT (MINUTE)	
138	NINE (MINUTE)	
139	TEN (MINUTE)	
140	ELEVEN (MINUTE)	
141	TWELVE (MINUTE)	
142	THIRTEEN (MINUTE)	
143	FOURTEEN (MINUTE)	
144	FIFTEEN (MINUTE)	
145	SIXTEEN (MINUTE)	
146	SEVENTEEN (MINUTE)	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
147	EIGHTEEN (MINUTE)	
148	NINETEEN (MINUTE)	
149	TWENTY ONE (MINUTE)	
150	TWENTY ONE (MINUTE)	
151	TWENTY TWO (MINUTE)	
152	TWENTY THREE (MINUTE)	
153	TWENTY FOUR (MINUTE)	
154	TWENTY FIVE (MINUTE)	
155	TWENTY SIX (MINUTE)	
156	TWENTY SEVEN (MINUTE)	
157	TWENTY EIGHT (MINUTE)	
158	TWENTY NINE (MINUTE)	
159	THIRTY (MINUTE)	
160	THIRTY ONE (MINUTE)	
161	THIRTY TWO (MINUTE)	
162	THIRTY THREE (MINUTE)	
163	THIRTY FOUR (MINUTE)	
164	THIRTY FIVE (MINUTE)	
165	THIRTY SIX (MINUTE)	
166	THIRTY SEVEN (MINUTE)	
167	THIRTY EIGHT (MINUTE)	
168	THIRTY NINE (MINUTE)	
169	FORTY (MINUTE)	
170	FORTY ONE (MINUTE)	
171	FORTY TWO (MINUTE)	
172	FORTY THREE (MINUTE)	
173	FORTY FOUR (MINUTE)	
174	FORTY FIVE (MINUTE)	
175	FORTY SIX (MINUTE)	
176	FORTY SEVEN (MINUTE)	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
177	FORTY EIGHT (MINUTE)	
178	FORTY NINE (MINUTE)	
179	FIFTY (MINUTE)	
180	FIFTY ONE (MINUTE)	
181	FIFTY TWO (MINUTE)	
182	FIFTY THREE (MINUTE)	
183	FIFTY FOUR (MINUTE)	
184	FIFTY FIVE (MINUTE)	
185	FIFTY SIX (MINUTE)	
186	FIFTY SEVEN (MINUTE)	
187	FIFTY EIGHT (MINUTE)	
188	FIFTY NINE (MINUTE)	
189	JANUARY	
190	FEBRUARY	
191	MARCH	
192	APRIL	
193	MAY	
194	JUNE	
195	JULY	
196	AUGUST	
197	SEPTEMBER	
198	OCTOBER	
199	NOVEMBER	
200	DECEMBER	
201	MONDAY	
202	TUESDAY	
203	WEDNESDAY	
204	THURSDAY	
205	FRIDAY	
206	SATURDAY	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
207	SUNDAY	
208	FIRST	
209	SECOND	
210	THIRD	
211	FOURTH	
212	FIFTH	
213	SIXTH	
214	SEVENTH	
215	EIGHTH	
216	NINTH	
217	TENTH	
218	ELEVENTH	
219	TWELFTH	
220	THIRTEENTH	
221	FOURTEENTH	
222	FIFTEENTH	
223	SIXTEENTH	
224	SEVENTEENTH	
225	EIGHTEENTH	
226	NINETEENTH	
227	TWENTIETH	
228	TWENTY FIRST	
229	TWENTY SECOND	
230	TWENTY THIRD	
231	TWENTY FOURTH	
232	TWENTY FIFTH	
233	TWENTY SIXTH	
234	TWENTY SEVENTH	
235	TWENTY EIGHTH	
236	TWENTY NINTH	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
237	THIRTIETH	
238	THIRTY FIRST	
239	STAR (*)	
240	POUND (#)	
241	PAUSE	
242	TONE DIALING MODE	
243	PULSE DIALING MODE	
244	DIAL TONE	
245	CALLBACK NUMBER	
246	Mailbox	
247	and	[536], [537], [247] [547], [247]
248	at	[314], [248] [415], [416], [248] [417], [248], [249], [418] [417], [248], [249], [419] [449], [450], [248] [538], [248] [552], [553], [248] [590], [248] [538], [248], [249], [418]
249	for	[417], [248], [249], [418] [417], [248], [249], [419] [538], [248], [249], [418]
250	Sorry	
251	Thank you	
252	Messages	[258], [252]
253	days	
254	minutes	
255	seconds	[492], [255]
256	Enter your password, followed by #	[256], [302]
257	Incorrect entry	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
258	You have (number)	[258], [259] [258], [252] [258], [608]
259	new messages	[258], [259]
260	You have one new message	
261	You have one message	
262	There are no messages	
263	Sorry, this function is not available	[263], [264]
264	Please inform system manager	[263], [264] [587], [588], [264]
265	Cannot be retrieved	
266	Thank you for calling	
267	Message Manager	
268	Please leave a message at the tone	
269	To end recording, press 1	[269], [270] [391], [269], [270]
270	To pause and restart recording, press 2	[269], [270] [278], [270] [391], [269], [270]
271	Record greeting at the tone	
272	Record the question at the tone	
273	Record the prompt at the tone	
274	Record menu at the tone	
275	Record company name at the tone	
276	Record label at the tone	
277	Sorry, there is no space for recording in this mailbox	
278	To end recording, hang up or press 1 for more features	[278], [270]
279	To end recording, hang up To cancel your message, press *, if you have a touch tone phone	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
280	Recording accepted	
281	To review, press 1	[281], [282], [283], [284], [285] [281], [287], [283], [285] [281], [282], [283]
282	To accept, press 2	[281], [282], [283], [284], [285] [305], [282] [328], [282] [281], [282], [283] [453], [282], [442] [328], [282], [479] [328], [282], [482] [328], [282], [442], [581], [582], [583], [584] [328], [282], [442], [581], [582], [583], [584], [585] [328], [282], [601]
283	To erase and try again, press 3	[281], [282], [283], [284], [285] [281], [287], [283], [285] [281], [282], [283]
284	To add, press 4	[281], [282], [283], [284], [285]
285	To erase and exit, press ✕	[281], [282], [283], [284], [285] [281], [287], [283], [285]
286	Sorry, I cannot add any more	
287	To accept the prompt, press 2	[281], [287], [283], [285]
288	Record the recipient's name at the tone	
289	Sorry, no space for recording	
290	Enter the first 3 or 4 letters of the person's last name For "Q", press 7 For "Z", press 9	
291	Sorry, this name cannot be found	
292	Sorry, there are no more matching names	[292], [295]
293	To call this person, press 1	[293], [294], [295]

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
294	To change to the next person, press 2	[293], [294], [295]
295	To try again, press ✕	[293], [294], [295] [292], [295]
296	Extension (extension number)	
297	Sorry, this mailbox is in use	
298	There were (number of failure)	[298], [299]
299	unsuccessful attempts to enter this mailbox	[298], [299]
300	Password entry failure Check the password	
301	Enter the 4 digits password	[301], [302]
302	To skip setting the password, press #	[301], [302] [256], [302]
303	Password not assigned	
304	This is the General Delivery Mailbox	
305	To set delivery time or make this message private, press 1	[305], [282]
306	To enter your callback number, press 1	[306], [307]
307	Otherwise, press 2	[306], [307] [313], [307] [359], [328], [307] [381], [307] [385], [307] [389], [328], [307] [433], [307] [350], [307]
308	To set delivery time, press 1 For immediate delivery, press 2	
309	Enter the time, followed by #	[309], [310] [309], [461], [310]
310	For help, press 0	[309], [310] [309], [461], [310] [343], [539], [540], [541], [542], [310]

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
311	Enter 1 for AM, or 2 for PM	
312	Enter the day of the month, followed by #	
313	To make this message private, press 1	[313], [307]
314	This message will be delivered on (day)	[314], [248]
315	Good morning	[315], [316]
316	Welcome to the Voice Processing System	[315], [316] [317], [316] [318], [316]
317	Good afternoon	[317], [316]
318	Good evening	[318], [316]
319	Please enter your party's mailbox number	[319], [320] [319], [320], [322]
320	To enter by name, press # and 1	[319], [320] [319], [320], [322] [386], [320] [386], [320], [387] [596], [320] [597], [320]
321	If you are using a rotary telephone, stay on the line	[321], [322]
322	To call the operator, press 0	[321], [322] [319], [320], [322]
323	To accept, press 1	[323], [324], [325], [326]
324	For the next name, press 2	[323], [324], [325], [326]
325	To repeat this name, press 3	[323], [324], [325], [326]
326	To enter a new name or mailbox, press *	[323], [324], [325], [326]
327	The mailbox number entry failure Check the mailbox number	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
328	To change, press 1	[328], [282] [359], [328], [307] [389], [328], [307] [328], [282], [479] [328], [282], [482] [328], [282], [442], [581], [582], [583], [584] [328], [282], [442], [581], [582], [583], [584], [585] [328], [591] [328], [282], [601]
329	There was one unsuccessful attempt to enter this mailbox	
330	Record your name at the tone	
331	Record the group name at the tone	
332	Record Owner's name at the tone	
333	For example, to enter 5 o'clock press five and #, or to enter 5:15 press 5, 1, 5 and #	
334	This message is from (name)	[334], [335]
335	of (company name)	[334], [335]
336	Delivering message to (name)	
337	Company name (name)	
338	Hello, this is the voice processing system	
339	I have a message for (name)	[339], [340], [341] [339], [340], [341], [351]
340	To receive the message, press 1	[339], [340], [341] [339], [340], [341], [351] [340], [572], [573], [574], [575], [576], [345] [340], [572], [573], [574], [575], [345]
341	To hold this call, press 2	[339], [340], [341] [339], [340], [341], [351]
342	To retrieve the call, press 2	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
343	To repeat this message, press 1	[343], [344], [345] [343], [344], [346], [347], [345] [343], [539], [540], [541], [542], [310] [343], [543], [539], [540], [541], [346], [347], [542], [544]
344	To reply, press 2	[343], [344], [345] [343], [344], [346], [347], [345]
345	To end this call, press *	[343], [344], [345] [343], [344], [346], [347], [345] [350], [345] [340], [572], [573], [574], [575], [576], [345] [340], [572], [573], [574], [575], [345]
346	To rewind, press 5	[343], [344], [346], [347], [345] [343], [543], [539], [540], [541], [346], [347], [542], [544]
347	To fast forward, press 6	[343], [344], [346], [347], [345] [343], [543], [539], [540], [541], [346], [347], [542], [544]
348	Please call (telephone number)	
349	Extension number (extension number)	
350	To repeat, press 1	[350], [345] [350], [307]
351	If you want me to call back later, press 3	[339], [340], [341], [351]
352	Welcome to the General Delivery Mailbox	
353	I have a call for mailbox (mailbox number)	
354	Please wait a moment	[370], [354]
355	Please enter your callback number	[355], [356], [357] [355], [356], [357], [358]
356	You can enter up to (number)	[355], [356], [357] [355], [356], [357], [358]

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
357	digits	[355], [356], [357] [355], [356], [357], [358]
358	When you are finished hang up, stay on the line to confirm or change your number	[355], [356], [357], [358]
359	The callback number is (telephone number)	[359], [328], [307]
360	Please hold while I page your party	
361	Sorry, this pager is not available	
362	I have a call for (name)	
363	Sorry, no one is available to answer the call	
364	To leave a message, press 1	[364], [382]
365	To reach the covering extension, press 2	
366	To page your party, press 3	
367	To notify your party's beeper, press 4	
368	To enter another extension, press *	
369	Sorry, this number is not assigned	
370	Calling the operator	[370], [354]
371	Call transferred from the voice processing system	
372	Sorry, this line is busy	
373	Sorry, Operator is not available to answer the call Please call back later	
374	You have a call	
375	You have a call from (name)	
376	To answer the call, press 1 Otherwise, press 2 and hang up	
377	This call is for (name)	[377], [378]
378	from (name)	[377], [378]
379	This call is from (name)	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
380	To cancel holding, press 2 now Otherwise, I'll try your party again	
381	To continue holding, press 1	[381], [307]
382	To enter another extension, press 2	[364], [382]
383	(number) other people are waiting to connect	
384	One other person is waiting to connect	
385	If you would like to hold, press 1	[385], [307]
386	Please enter your party's extension	[386], [320] [386], [320], [387]
387	For department dialing, press ✕	[386], [320], [387]
388	Custom service menu	
389	The callback number is not assigned	[389], [328], [307]
390	Message from the system manager	
391	State your comment at the tone	[391], [269], [270]
392	Beeper access disabled	
393	To set call transfer status, press 1 To set up covering extension, press 2 To set message reception mode, press 3 To set incomplete handling status, press 4	
394	Call blocking enabled	
395	Call screening enabled	
396	Intercom paging enabled	
397	Beeper access enabled	
398	All transfer services disabled	
399	To enable call blocking, press 1 To enable call screening, press 2 To enable intercom paging, press 3 To enable beeper access, press 4 To disable all transfer service, press 5	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
400	Message reception mode is interview mode	
401	Message reception mode is message recording mode	
402	To set leaving a message status, press 1 To set covering extension transfer status, press 2 To set intercom paging status, press 3 To set beeper access status, press 4 To set operator transfer status, press 5 To set returning to top menu automated attendant status, press 6	
403	Leaving a message is enabled	
404	Leaving a message is disabled	
405	Covering extension transfer enabled	
406	Covering extension transfer disabled	
407	Intercom paging disabled	
408	Operator transfer enabled	
409	Operator transfer disabled	
410	Returning to top menu automated attendant service enabled	
411	Returning to top menu automated attendant service disabled	
412	(number) messages to verify	
413	One message to verify	
414	No messages to verify	
415	Message for (name)	[415], [416], [248]
416	received on (date)	[415], [416], [248]
417	Message sent on (date)	[417], [248], [249], [419]
418	has not been received	[538], [248], [249], [418]
419	has been erased, because message retention time expired	[417], [248], [249], [419]

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
420	To play the message, press 1 To check the previous message, press 1 twice To check the next message, press 2	
421	To cancel this message or verification, press 3	
422	No more messages	
423	This is the last message	
424	To delete distribution verification of this message, press 1 To cancel message delivery, press 2	
425	Verification deleted	
426	Message delivery canceled	
427	The message is (message)	
428	Sorry, this group is full	[428], [429] [428], [526]
429	8 members maximum	[428], [429]
430	This list member already exists	
431	To add more members, press 1 To end, press 2	
432	Telephone number is (telephone number)	
433	To delete all group members, press 1	[433], [307]
434	This group has no members	
435	To delete, press 1	[435], [436]
436	To play the next, press 2	[435], [436]
437	Group member deleted	
438	Enter delivery list number 1 or 2	
439	Delivery list number is (number)	
440	To add new member, press 1	[440], [441], [442]
441	To delete members, press 2	[440], [441], [442]

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
442	To review, press 3	[440], [441], [442] [453], [282], [442] [328], [282], [442], [581], [582], [583], [584] [328], [282], [442], [581], [582], [583], [584], [585]
443	Sorry, this list is in use for delivery If this list is edited, all the deliveries will then be canceled	
444	To record a message for external delivery, press 1 To check external delivery message status, press 2 To set up mailing list, press 3	
445	To send to one recipient, press 1 To send by mailing list, press 2	
446	Sorry, you cannot deliver the message The maximum number of delivery has already been reached	
447	Sorry, there is no space for recording	
448	Password is (number)	
449	External delivery message scheduled for (name)	[449], [450], [248]
450	on (date)	[449], [450], [248]
451	External delivery message will be sent to (name)	[451], [452]
452	right away	[451], [452]
453	To change the setting, press 1	[453], [282], [442]
454	No one specified by this number	
455	To change the telephone number, press 1	[455], [456], [457], [458]
456	To change the password, press 2	[455], [456], [457], [458] [497], [456], [498], [499]
457	To change the recipient's name, press 3	[455], [456], [457], [458]
458	To change the time and date, press 4	[455], [456], [457], [458]

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
459	To change the password, press 1	[459], [460]
460	To change the time and date, press 2	[459], [460] [471], [460]
461	To deliver now, press only the pound sign	[309], [461], [310]
462	No external delivery message pending	
463	I was unable to reach (name)	
464	External delivery message for (name)	[464], [465], [466]
465	was erased	[464], [465], [466]
466	because message retention time expired	[464], [465], [466]
467	To reschedule, press 1	[467], [468], [469], [470] [468], [469], [470]
468	To play the next schedule, press 2	[467], [468], [469], [470] [468], [469], [470]
469	To repeat this schedule, press 3	[467], [468], [469], [470] [468], [469], [470]
470	To play the previous schedule, press 4	[467], [468], [469], [470] [468], [469], [470]
471	To cancel external message delivery, press 1	[471], [460]
472	Message to (name)	[472], [473]
473	being delivered now	[472], [473]
474	I'll redial only once	
475	I'll redial (number)	[475], [476]
476	more times	[475], [476]
477	Covering extension is (extension number)	
478	Covering extension is not assigned	
479	To delete, press 3	[382], [282], [482]
480	Enter extension number	
481	Group name not recorded	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
482	To erase, press 3	[328], [282], [482]
483	Owner's name erased	
484	To record the question, press 1 To set the answer length, press 2 To erase the question, press 3	
485	To change the answer length, press 1	[485], [486], [487], [488]
486	To skip to the next question, press 2	[485], [486], [487], [488] [490], [486], [487], [488] [491], [486], [497], [488] [486], [487], [488]
487	To skip to the previous question, press 3	[485], [486], [487], [488] [490], [486], [487], [488] [491], [486], [497], [488] [486], [487], [488]
488	To go directly to a question, press 4	[485], [486], [487], [488] [490], [486], [487], [488] [491], [486], [497], [488] [486], [487], [488]
489	Set the answer length using the following options For 4 seconds, press 1 For 8 seconds, press 2 For 16 seconds, press 3 For 32 seconds, press 4	
490	To change this question, press 1	[490], [486], [487], [488]
491	To erase this question, press 1	[491], [486], [487], [488]
492	Answer length is (number)	[492], [255]
493	Enter question number, followed by #	
494	Question erased	
495	Question number (number)	
496	No question recorded	
497	To change the personal greeting, press 1	[497], [456] [498], [499]
498	To change the owner's name, press 3	[497], [456] [498], [499]

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
499	To set the group distribution lists, press 4	[497], [456] [498], [499]
500	To change the message waiting lamp status, press 1 To change the device status, press 2 To assign the telephone or beeper numbers, press 3	
501	Message waiting lamp notification enabled	
502	Message waiting lamp notification disabled	
503	Enter device number, 1 through 3	
504	Device number is (number)	
505	This device is for continuous use	
506	The device is not to be used	
507	Telephone number is not assigned	
508	First telephone number is (telephone number)	
509	First telephone number is not assigned	
510	Second telephone number is (telephone number)	
511	Second telephone number is not assigned	
512	Third telephone number is (telephone number)	
513	Third telephone number is not assigned	
514	To change the first telephone number, press 1 telephone number, press 1 To change the second telephone number, press 2 To change the third telephone number, press 3	
515	I'll notify by telephone	
516	I'll notify by beeper	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
517	Sorry, you cannot transfer a private message	
518	To change the no answer greeting, press 1 To change the busy signal greeting, press 2 To change the after hours greeting, press 3	
519	No answer greeting is (message)	
520	Busy signal greeting is (message)	
521	After hours greeting is (message)	
522	No answer greeting is not recorded	
523	Busy signal greeting is not recorded	
524	After hours greeting is not recorded	
525	Greeting erased	
526	20 members maximum	[428], [526]
527	Enter the mailbox number	
528	Enter a group number, 1 through 4	
529	Group number (number)	
530	To change the group name, press 1	[530], [531] [530], [531], [532], [533]
531	To add group members, press 2	[530], [531] [530], [531], [532], [533]
532	To delete group members, press 3	[530], [531], [532], [533]
533	To review this group, press 4	[530], [531], [532], [533]
534	Message from the interview mailbox	
535	Message from the message manager	
536	Message recorded by (mailbox number)	[536], [537], [247]
537	and transferred via (mailbox number)	[536], [537], [247]
538	Message recorded on (date)	[538], [248] [538], [248], [249], [418]

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
539	To play the next message, press 2	[343], [539], [540], [541], [542], [310] [343], [543], [539], [540], [541], [346], [347], [542], [544] [550], [539], [551]
540	To erase this message, press 3	[343], [539], [540], [541], [542], [310] [343], [543], [539], [540], [541], [346], [347], [542], [544]
541	To reply, press 4	[343], [539], [540], [541], [542], [310] [343], [543], [539], [540], [541], [346], [347], [542], [544]
542	To transfer this message, press 7	[343], [539], [540], [541], [542], [310] [343], [543], [539], [540], [541], [346], [347], [542], [544]
543	To replay the previous message, press 1 twice	[343], [543], [539], [540], [541], [346], [347], [542], [544]
544	To message scan, press 8	[343], [543], [539], [540], [541], [346], [347], [542], [544]
545	No previous message	
546	All messages erased	
547	Message transferred via (mailbox number)	[547], [247]
548	Message erased	
549	These are the brief segments of your Message	
550	To replay the previous message, press 1	[550], [539], [551]
551	To play the entire message, press 3	[550], [539], [551]
552	Message from (name)	[552], [553], [248]
553	was sent on (date)	[552], [553], [248]
554	To replay the previous message information, press 1 To play the next message's information, press 2 To play the message, press 3	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
555	You can add up to (number)	[555], [556]
556	more members	[555], [556]
557	Sorry, you cannot reply	[557], [558] [557], [560] [557], [561]
558	The message sender is unknown	[557], [558]
559	To call message sender, press 1 To record a message, press 2	
560	This message is from the general delivery mailbox	[557], [560]
561	This is your message	[557], [561]
562	Telephone number deleted	
563	For notification by telephone, press 1 For notification by beeper, press 2	
564	Old message	
565	New message	
566	Message reception mode is set to interview mode	
567	Message reception mode is set to message recording mode	
568	Group name erased	
569	This device is for scheduled use	
570	Owner's name is (name)	
571	Owner's name is not recorded	
572	To deliver a message, press 2	[340], [572], [573], [574], [575], [576], [345] [340], [572], [573], [574], [575], [345]
573	To check the mailbox distribution, press 3	[340], [572], [573], [574], [575], [576], [345] [340], [572], [573], [574], [575], [345]
574	For automated attendant status, press 4	[340], [572], [573], [574], [575], [576], [345] [340], [572], [573], [574], [575], [345]
575	For mailbox management, press 5	[340], [572], [573], [574], [575], [576], [345] [340], [572], [573], [574], [575], [345]
576	For other features, press 6	[340], [572], [573], [574], [575], [576], [345]

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
577	For interview mailbox management, press 1	
578	To set up message waiting notification, press 2	
579	Any digit on the telephone keypad can be used	
580	Enter the telephone number and wait To insert a pause or special command, enter the partial number and wait for the options menu	
581	To add more digits, press 4	[328], [282], [442], [581], [582], [583], [584] [328], [282], [442], [581], [582], [583], [584], [585]
582	To insert a pause, press 5	[328], [282], [442], [581], [582], [583], [584] [328], [282], [442], [581], [582], [583], [584], [585]
583	To set dial mode, press 6	[328], [282], [442], [581], [582], [583], [584] [328], [282], [442], [581], [582], [583], [584], [585]
584	To insert a wait for dial tone, press 7	[328], [282], [442], [581], [582], [583], [584] [328], [282], [442], [581], [582], [583], [584], [585]
585	To insert a beeper display command, press 8	[328], [282], [442], [581], [582], [583], [584], [585]
586	You can not add any more digits	
587	Sorry, I cannot call this number	[587], [588], [264]
588	Only extension call is available	[587], [588], [264]
589	For external message delivery, press 3	
590	External delivery message scheduled on (date)	[590], [248]
591	To add, press 2	[328], [591]
592	To use for scheduling, press 1 To use for continuously, press 2 To use not at all, press 3	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
593	To transfer, press 1	[593], [594], [595] [593], [604], [594], [595]
594	To add new mailbox number, press 3	[593], [594], [595] [593], [604], [594], [595]
595	To review the mailing list, press 4	[593], [594], [595] [593], [604], [594], [595]
596	Enter your party's mailbox number	[596], [320]
597	Enter the destination mailbox number	[597], [320]
598	To cancel, press ✕ To continue, press 1	
599	Mailbox number already specified	
600	This is your mailbox	
601	To repeat, press 3	[328], [282], [601]
602	Sorry, maximum of 20 destinations exceeded	
603	To record a message, press 1 To add new mailbox number, press 2 To review the mailing list, press 3	
604	To transfer with comment, press 2	[593], [604], [594], [595]
605	To cancel mailing list review, press any key	
606	External delivery message will be sent right away	
607	You have one FAX message	
608	FAX messages	[258], [608]
609	The FAX transfer situation is as follows	
610	Transferred one time	
611	Transferred (number)	[611], [612]
612	times	[611], [612]
613	One attempt was successful	
614	One attempt was busy	
615	One attempt was no answer	

Table 80

Prompt No.	Modifiable Prompts	Linked to Prompt No. (s)
616	(number) attempts were successful	
617	(number) attempts were busy	
618	(number) attempts were no answer	
619	Selection menu	

[Linked Prompts List]**Subscriber Service****Table 81**

[258] You have (number)	[298] There were (number of failure)
[259] new messages	[299] unsuccessful attempts to enter this mailbox

Receive Message**Table 82**

[356] Message recorded by (mailbox number)	[547] Message transferred via (mailbox number)
[537] and transferred via (mailbox number)	[247] and (mailbox number)
[247] and (mailbox number)	
[538] Message recorded on (date)	[258] You have (number)
[248] at (time)	[252] Messages

Message Scan**Table 83**

[552] Message from (name)	
[553] was sent on (date)	
[248] at (time)	

Message Delivery**Table 84**

[314] This message will be delivered on (day)	
[248] at (time)	

Personal Group Distribution List
Table 85

[555]	You can add up to (number)	
[556]	more members	

Check Mailbox Distribution**Table 86**

[415]	Message for (name)	[417]	Message sent on (date)
[416]	received on (date)	[248]	at (time)
[248]	at (time)		
[249]	for (mailbox number)	[417]	Message sent on (date)
[418]	has not been received	[248]	at (time)
		[249]	for (mailbox number)
		[419]	has been erased, because message retention time expired

External Message Delivery**Table 87**

[449]	External delivery message scheduled for (name)	[334]	This message is from (name)
[450]	on (date)	[335]	of (company name)
[248]	at (time)	[464]	External delivery message for (name)
[451]	External delivery message will be sent to (name)	[465]	was erased
[452]	right away	[466]	because message retention time expired
[472]	Message to (name)	[475]	I'll redial (number)
[473]	being delivered now	[476]	more times

Message Waiting Notification**Table 88**

[335]	Please enter your callback number	[355]	Please enter your callback number
[356]	You can enter up to (number)	[356]	You can enter up to (number)
[357]	digits	[357]	digits
		[358]	When you are finished hang up, stay on the line to confirm or change your number
[377]	This call is for (name)		
[378]	from (name)		

Interview Mailbox Management**Table 89**

[492]	Answer length is (number)		
[255]	seconds		

Fax Management**Table 90**

[258]	You have (number)	[611]	Transferred (number)
[608]	FAX messages	[612]	times

Alternate Extension Group

If you have extensions (for example, modems) that require a special transfer sequence (Alternate Extension Transfer Sequence) put them into this group and then set the transfer sequence.

Auto Configuration

(Available with DPT Integration only.) The VPS can automatically draw information from the KX-TD816, the KX-TD1232, the KX-TD500 or the KX-TD308. This saves time in the initial setup.

Auto Forwarding

Allows unretrieved messages to be copied or forwarded to another mailbox.

Automated Attendant

An electronic operator capable of transferring a caller to an extension.

Call Blocking

Connects the caller to the Incomplete Call Handling Service without ringing the subscriber's extension.

Call Duration

The maximum time allowed for an external message that is to be delivered by the VPS, specified by the subscriber.

Call Screening

Allows subscribers to screen calls; the caller hears the message: "Please state your name." The VPS records the caller's name, then puts the caller on hold to play the name for the subscriber who decides whether to take the call or not.

Call Transfer

Transfers a call to the requested destination or to an alternative extension.

Called Party ID

(Sometimes referred to as Follow-On ID) Allows the VPS to dial extra digits to bring the caller directly to a specified mailbox, rather than to the General Delivery Mailbox.

Circular Hunting

A search of all extensions in a hunt group to find an open line. For example, if a hunt group includes 241, 242, 243 and 244, and 243 is busy, the system goes to 244, 241, then 242 until it finds a free extension.

Company Greeting

A short greeting that is played prior to the Custom Service Greeting: "Thank you for calling *(Your Company Name)*."

Company Greeting Mode

Determines which greeting is played (day, night, or holiday).

Covering Extension

This can be a destination for Incomplete Call Handling Service. Also, it can be accessed by pressing zero during the playing of a Personal Greeting.

Custom Service Setting

Allows one-touch access to extensions, other custom service groups, ring groups, mail boxes, etc. A greeting can be recorded for each of the 100 menus to give verbal directions to the non-subscriber.

Default Setting

A parameter, which was defined for the system at the factory and can be changed through system programming; i.e. the System Administrator or the System Manager.

Delayed Ringing

There are 2 kinds of delayed ringing applications:

- (1) The VPS is used as the no-answer destination for the Intercept Routing feature of your PBX.
- (2) DIL 1:N (CO line to several extensions) terminates on telephones and VPS ports. To give the telephone users a chance to answer calls, the VPS lines should be programmed for delayed ringing. Otherwise, the VPS will answer the calls immediately.

Delivery Time

The time specified by the subscriber for the VPS to deliver a prerecorded message.

Department Dialing

A number (1 - 9) assigned to transfer an outside caller to a specific extension.

Direct Mailbox Access

(Available with DPT Integration only.) A subscriber can enter his mailbox directly when he calls the VPS from his extension. He does not have to enter any special codes. But his password, if established, must be entered.

DPT Integration

Digital integration between the KX-TD816, the KX-TD1232, the KX-TD500 or the KX-TD308 and the VPS.

Requires upgraded software in the telephone switch.

DTMF

(Dual Tone Multi Frequency) Commonly referred to as touch-tone.

External Call Forwarding

(Available on the KX-TA624, the KX-TD816, the KX-TD1232, the KX-TD500 and the KX-TD308)

Forwards calls to an extension that has call forwarding activated to an outside phone.

External Delivery Message

A message intended for automatic delivery to a party outside of the company.

External Message Delivery List

Allows the subscriber to create 2 lists to deliver messages to outside parties. Each list can have 8 destinations.

External Message Delivery Redial

Allows the subscriber, when making an external delivery, to instruct the VPS to make a maximum of 9 retries when the line is busy or when there is no answer.

Fast Forward

Puts the user 4s ahead in the current message.

Floating Extn. Number

See Logical Extension.

Follow-On ID

See Called Party ID.

General Delivery Mailbox

When the caller does not dial anything (either because he does not want to or he is using a rotary telephone), he can be sent to the General Delivery Mailbox. Periodically (daily is best), the Message Manager should transfer the contents of the General Delivery Mailbox to the appropriate destinations.

HELP

One of the utility commands. It lists all utility commands with a brief description of each.

Immediate Reply

Allows the message receiver to reply to a message without specifying the extension number of the sender.

Inband Signaling

The Follow-On ID (or Caller ID) that integrates the VPS and the telephone switch. Uses intercom paths to light message wait light. Does not give "high end" features such as: Intercom Paging, Two-Way Recording, Live Call Screening, etc.

Incomplete Call Handling Service

Calls are considered incomplete when there is no answer or if the line is busy. The Incomplete Call Handling Service can be set for 6 options:

- (1) to record a message from the caller,
- (2) transfer the caller to a covering extension,
- (3) page the mailbox owner via the PBX,
- (4) notify the mailbox owner via beeper,
- (5) transfer the caller to the operator, or
- (6) let the caller try another extension.

Integration

Required between the VPS and the telephone switch. See Inband signaling and DPT Integration.

Intercept Routing No Answer

When a call is not answered, it can be transferred to another extension, or to the VPS. (This is a PBX feature.)

Intercom Paging

(Available with DPT Integration only.) Allows up to 8 different paging groups. An outside party can reach a subscriber who is away from his/her telephone using either internal or external page groups.

Interview Service

A special type of subscriber mailbox enabling the subscriber to record up to 10 questions. After the answers are recorded the Message Waiting Lamp is turned on at the subscriber telephone. (Good for claims departments, order desks, job applications, etc.)

Keypad

All touch-tone keys on the telephone.

LCD

Liquid crystal display

Live Call Screening

(Available with DPT Integration only.) The proprietary telephone works like an answering machine. The subscriber can hear the caller through the speakerphone while the message is being recorded.

LOAD

One of utility commands. It is used to load new or saved data to the VPS from a personal computer.

Logical Extension

(Sometimes referred to as Floating Extension Number or Virtual Extension) Doesn't go to an actual telephone extension; used for paging devices, mailboxes without telephones, amplifiers connected to paging ports, etc.

Mailbox Capacity (messages)

The number of messages that can be recorded in a subscriber's mailbox; should be set between 5 and 100 messages by the System Administrator or the System Manager.

Mailbox Capacity (recording time)

The total amount of time for messages in a subscriber's mailbox; should be set between 5 and 100 min by the System Administrator or the System Manager.

Mailbox Extension

Normally the same number as the telephone extension number.

Mailbox Management

Allows a subscriber to alter the setting for personal mailboxes.

Menu

A list of choices from which the user can select by using the telephone keypad or the keys from a personal computer.

Message Manager

(Mailbox 998) The person who takes care of the general delivery messages, records company greetings, custom service greetings and changes the original voice prompts. He has limited system programming capabilities.

Message Retention Time

The amount of time the system will store a message before deleting the message.

Message Retrieval Order

The order in which the subscriber retrieves messages: Last In First Out (LIFO) or First In First Out (FIFO).

Message Transfer

Allows a subscriber to reroute a message to another mailbox unless the message was marked "private." Additional comments can be added to this message.

Message Waiting Lamp

Light on proprietary telephones that lights when there are messages in the mailbox.

Message Waiting Notification

The VPS can notify subscribers and the Message Manager when they have received messages (if authorized by the System Administrator or the System Manager).

Notification methods are:

- (1) by Message Waiting Lamp, or
- (2) by external telephone, or
- (3) by beeper.

Multilingual Selection Menu

This menu is recorded by the Message Manager and allows callers to choose the language they want (System, User 1 or User 2 prompts) when they call the VPS.

Non-Subscriber

A caller to the VPS who does not own a mailbox.

Notification Method

(See Message Waiting Notification.)

Operator

Up to 3 destinations can be assigned as operators. This is the extension that receives calls when the calling party is on a rotary phone or dials [0].

Owner's Name

After a subscriber records his name, his name will be announced during transfers, Intercom Paging, and confirmation of Dialing by Name. Independent of this recording is registration of name by System Administrator. This allows callers to dial parties by name (Dialing by Name) rather than by number. For example, a caller can dial "S-M-I-T" (Smith) rather than Smith's mailbox number, which can be hard to remember.

Password

A number chosen by a subscriber or a manager to protect access to the mailbox.

Personal Greetings

A subscriber can personalize his mailbox to greet callers. There are 3 kinds of Personal Greetings:

- (1) No Answer Greeting
- (2) Busy Signal Greeting
- (3) After Hours Greeting

Personal Group Distribution List

Each subscriber can have 4 distribution lists containing up to 20 mailboxes in each list. Used to send the same message to a variety of people.

Port

The point of connection between the telephone switch and the VPS

Pound Sign

The [#] key on the telephone keypad

Private Message

A message, which is delivered to a specific mailbox, cannot be forwarded.

Prompt

A prerecorded list of options or a guidance message played to the user. The English system prompts are prerecorded at the factory and can be changed. Up to 2 other languages can be recorded as user prompts.

Review

Plays back a message.

Rewind

Replays the last 4 s of a message.

Rotary Telephone

A telephone capable of pulse dial only. Callers using a rotary telephone will be automatically forwarded to the operator or the general delivery mailbox.

SAVE

One of the utility commands. It is used to save VPS data to a personal computer.

Scanning Messages

Allows the subscriber to listen to only the first 4 s of each message. Another method is to use the digit [2] while listening to a message; this advises the VPS to skip to the next message.

Station Programming

Programming via the proprietary telephone

Subscriber

A person who has an assigned mailbox.

System Administration

System programming from a personal computer.

System Administrator

Unlike the Message Manager and the System Manager, the System Administrator has full system programming capability. He uses a computer connected to the RS-232C port of the VPS.

System Group Distribution List

The system can maintain an internal list of twenty mailbox groups. Each group can hold twenty mailboxes. Each group is referenced by an System Group Distribution List number and is assigned via System Administration. A recording into System Group Distribution List number will go into the mailboxes of all members of that group.

System Manager

(Mailbox 999) The person who can perform very basic and limited system programming using a telephone. He can create/delete mailboxes; clear subscriber passwords when they are forgotten; set Class of Service parameters; set the system clock; and generate System Reports.

System Report

Eight System Reports can be acquired by the System Administrator or System Manager upon request.

TIME

One of the utility commands. It is used to confirm or set the time and date of the VPS.

Two-Way Recording

(Available with D-PITS Integration only.) Allows a subscriber to record a conversation into his/her mailbox.

Two-Way Transfer

(Available with D-PITS Integration only.) Allows a subscriber to record a conversation into another person's mailbox.

Virtual Extension

See Logical Extension.

Voice Mail

A general term used for messages recorded over the phone from one person to another.

Voice Mail Button

(Available with D-PITS Integration only.) Allows one-touch access to the voice mailbox. Subscribers can use a function or a CO key.

Voice Prompt

Recorded VPS instructions to callers. These are either system prompts or user prompts.

VPS

Voice Processing System (e.g., Panasonic KX-TVS75, KX-TVS100 and KX-TVS200).



INDEX

A

Alternate extension group 58, 168, 217, 218, 243
Auto configuration 23, 76, 102, 168, 172
Auto forwarding 168, 185, 205, 208, 251
Automated attendant 115, 116
Automated attendant-alternate extension assignment 217
Automated attendant-automated attendant parameters 119, 212
Automated attendant-custom service programming 110
Automated attendant-department dialing 119
Automated attendant-menu 119, 120
Automated attendant-operator parameters 119, 212, 213, 215, 216, 223

B

Broadcasting messages 169, 257
Busy coverage mode 121, 169, 214, 215, 216

C

Call blocking 169
Call duration 156
Call progress tone 20, 23, 54, 242
Call screening 59, 169, 172
Call services 104, 118, 169, 184, 210, 211, 218, 225, 227
Call transfer status 16, 169
Callback number entry 170, 206, 231
Called party ID 56
Company greeting 129, 170, 210, 225, 269
Connections-modular plug 46
Connections-PBX 42
Connections-port cards 46
COS(class of service assignments) 154
COS(class of service assignments)-call account report 156
COS(class of service assignments)-checking system reports 255
COS(class of service assignments)-COS Nos. 1-62 for subscribers 205
COS(class of service assignments)-COS Nos. 63 & 64 204
COS(class of service assignments)-disk usage report 158
COS(class of service assignments)-disk usage statistics clear 158
COS(class of service assignments)-fax call report 160
COS(class of service assignments)-fax call statistics clear 161
COS(class of service assignments)-mailbox usage report 159
COS(class of service assignments)-mailbox usage statistics clear 160

COS(class of service assignments)-port usage statistics clear 157
COS(class of service assignments)-setting 200, 205, 251
COS(class of service assignments)-special feature authorization 205, 208
COS(class of service assignments)-system service report 155
COS(class of service) 170, 200, 204, 205, 208, 209, 251
Covering extension 171, 176
Custom service 171
Custom service features 108, 148
Custom service features-custom service report(CREP) 147
Custom service features-day service 108
Custom service features-dialing parameters 109
Custom service features-disconnect parameter 109
Custom service features-fax management 109
Custom service features-general 128, 213
Custom service features-holiday service 108
Custom service features-intercom paging 109
Custom service features-port setting 109
Custom service features-rotary telephone 109
Custom service features-RS-232C setting 109
Custom service programming 110
Custom service programming-automated attendant 115, 116
Custom service programming-checking operation 113
Custom service programming-extension groups 114
Custom service programming-interview service 115
Custom service programming-mailbox groups 113
Custom service programming-recording menus 112
Custom service programming-voice mail 113
Custom service settings 107, 110
Custom service settings-company greeting 107, 108
Custom service settings-service message 107
Custom service settings-service tree 107

D

Day service 108, 171, 223, 224
Daylight saving time assignment 171
Default setting 136, 144, 151
Delivering Messages to All Mailboxes (Broadcasting Messages) 169
Department dialing 119, 171, 185, 212, 220, 269
Device error log indications 142
Dialing by name 172
Digital integration 23, 27, 76, 77, 78, 82, 83,

85, 90
 Direct mailbox access 76, 172, 251
 DPT Integration 23, 27, 42, 46, 47, 48, 58, 81,
 172
 DTMF integration 23

E

Error and warning indications 143
 Error indications at system startup 142
 Expansion capabilities 25
 Extension group 109, 114, 172, 217, 218, 222,
 223, 243
 Extension numbering plan 114, 173, 213, 227,
 228
 External message delivery 169, 173, 174, 205,
 208, 227, 232
 External message delivery service 173, 174
 External message delivery status 252

F

Fax management 109, 175, 235
 Features 22
 Follow-on ID 22, 56, 63

G

General delivery mailbox 14, 109, 116, 120,
 126, 263
 Group distribution list - personal 175
 Group distribution list - system 175

H

Hardware settings-PBX interface parameters
 240
 Hardware settings-port setting 239
 Hardware settings-RS-232C parameters 238
 Help 150
 Hold 121, 175, 214, 215, 216, 233
 Holiday service 108, 175, 225

I

Inband 54, 58, 61, 66, 176, 183, 242
 Inband integration 22, 54, 176, 244
 Inband signaling 54, 59, 66, 242, 243, 244
 Incomplete call handling service 176, 233
 Initializing the system 136
 Integration 58
 Intercom paging 76, 109, 169, 172, 176, 177,
 234, 235
 Intercom paging group 177
 Interview service 115, 178, 210, 225

K

KX-TD1232 for digital integration 77, 82

L

Live call screening 76, 90, 251
 Live call screening- button assignment 91
 Live call screening- cancel button assignment 92
 Live call screening-(LCS) programming 90
 Live call screening-password assignment 91, 92
 Live call screening-password cancellation 92
 Live call screening-password control 93
 Live call screening-private/hands-free mode 90
 Live call screening-recording mode assignment
 90
 Load 145
 Logical extension 179

M

Mailbox 101, 102, 113, 122, 128, 131, 132,
 153, 159, 160, 179, 248, 249, 250, 257, 258,
 259
 Mailboxes-broadcasting 257
 Mailboxes-checking distribution 258
 Mailboxes-creating mailboxes 98
 Mailboxes-delivering messages 257
 Mailboxes-entering 122
 Mailboxes-extension numbers for mailboxes 98
 Mailboxes-listing 222
 Mailboxes-owner's name 132
 Mailboxes-personal greetings 131
 Mailboxes-setting menu 122
 Mailboxes-setting up 131
 Message delivery 251
 Message delivery internal 179
 Message delivery status 179, 180, 252
 Message manager's mailbox-accessing 128, 262
 Message manager's mailbox-company greetings
 129
 Message manager's mailbox-custom service
 greetings 129
 Message manager's mailbox-main command
 menu 128, 129
 Message manager's mailbox-owner's name 132
 Message manager's mailbox-personal greetings
 131
 Message manager's mailbox-recording company
 name 130
 Message manager's mailbox-voice prompts 129
 Message manager-managing the general delivery
 mailbox 263
 Message manager-message waiting notification
 265
 Message manager-notification by calling 265
 Message manager-recording company messages
 269
 Message manager-setting the system clock 268
 Message manager-waiting lamp status 265
 Message reception mode 180
 Message transfer 181, 185, 257, 264

Message waiting lamp 55, 265
Message waiting notification 56, 140, 181, 182,
185, 205, 213, 222, 230, 231, 265
Modifiable prompts 271
Multi-lingual service 182

N

No-answer coverage mode 120, 121, 183, 213,
214, 215, 216, 217, 236

O

Operator service 119, 120, 183, 213

P

Panasonic phone systems 22
PBX integration 42, 46, 47, 48, 54, 55, 58, 59,
61, 62, 66, 76, 77, 78, 81, 82, 83, 84, 85, 90,
183
PBX- interface parameters 58
PBX-connections 42
PBX-interface parameters 240
PBX-parameters and port settings 57
PBX-recommended parameters 61
PBX-requirements for intergration 55
Personal greeting 131, 184, 251
Port 1 - night mode 211
Port card-configuration 47, 48
Port cards-connections 46
Port cards-installation 38
Port service 98, 104, 117, 210
Port service-port assignment 210, 211, 223
Port setting options 107
Port setting options-custom service features 108
Port setting options-custom service
programming 110
Port setting options-custom service settings 107
Port setting options-setting ports 117
Port1-day mode 210
Private message 184
Programming-voice mail integration 66

Q

Quick setup-activating quick setup 105
Quick setup-creating mailboxes 102
Quick setup-date and time 105
Quick setup-extension number for mailboxes
101
Quick setup-extension number of VPS ports 101
Quick setup-password 104
Quick setup-PBX type 100
Quick setup-port service 104, 117, 118, 184

R

Record message 184
Recording messages 171

Reply to message sender 185
Rotary switch 21
Rotary telephone service 185, 234

S

Service access commands 113, 116, 185, 248
Service settings-automated attendant 212
Service settings-custom service 218, 219
Setting system clock 254, 268
Software verification-KX-T123211D 62
Special feature authorization 185, 205, 208
Specification 164
Starting up 98
System administration-hardware settings 238
System administration-port service 210
System administration-service settings 212
System administration-setting COS parameters
200, 251
System administration-system parameter
settings 221
System back up 133
System clock 138, 186, 254, 268
System components 20
System configuration 25
System management 16
System manager-checking system reports 255
System manager-customizing mailbox 259
System manager-delivering messages 257
System manager-listening to messages 260
System manager-setting COS parameters 251
System manager-setting system clock 254
System manager-setting up mailboxes 249
System parameter settings-day service 223, 224
System parameter settings-daylight saving time
226
System parameter settings-holiday setting 224
System parameter settings-other parameters 227
System parameter settings-prompt setting 226
System parameter settings-system group
assignment 221, 222
System reports 153
System reports-mailbox assignments 153

T

Troubleshooting 162
Two-way recording 76
Two-way recording-button assignment 93
Two-way recording-into mailbox 93
Two-way transfer-button assignment 94
Two-way transfer-into mailbox 94

U

Utility commands 138, 150, 186
Utility commands-circuit condition
display(LMON) 151
Utility commands-custom service menu access

count clear (CCLR) 148
Utility commands-custom service report(CREP)
147
Utility commands-DTMF information
display(PUTD) 151
Utility commands-error log display(ELOG) 141
Utility commands-loading saved data to
VPS(LOAD) 145
Utility commands-massage waiting lamp
retry(MWL) 148
Utility commands-modified prompt list(MPLT)
149
Utility commands-off-line set(OFLN) 138
Utility commands-on-line set(ONLN) 139
Utility commands-print all VPS
parameters(GPRN) 146
Utility commands-print reports(PSET) 140
Utility commands-program version
display(VERS) 147
Utility commands-quick setup(QSET) 150
Utility commands-saving system data(SAVE)
144
Utility commands-set password(PASS) 139
Utility commands-set recording length(MRL)
149
Utility commands-set time(TIME) 140
Utility commands-utility commands list(HELP)
150

V

Voice mail 22, 23, 113, 210
Voice mail service 113, 186
Voice mail-transfer button 95
Voice prompt 129, 187
VPS 14, 15, 54, 76

**Panasonic Consumer Electronics
Company, Division of Matsushita
Electric Corporation of America**

One Panasonic Way, Secaucus,
New Jersey 07094

**Panasonic Sales Company (“PSC”)
Division of Matsushita Electric of
Puerto Rico, Inc.**

Ave. 65 de Infantería, Km. 9.5,
San Gabriel Industrial Park, Carolina,
Puerto Rico 00985

COPYRIGHT:

THIS MANUAL IS COPYRIGHTED BY KYUSHU MATSUSHITA ELECTRIC CO., LTD. (KME). UNDER THE APPLICABLE COPYRIGHT LAWS, THIS MANUAL MAY NOT BE REPRODUCED IN ANY FORM, IN WHOLE OR PART, WITHOUT THE PRIOR WRITTEN CONSENT OF KME AND ITS LICENSEE.

© 1999 KYUSHU MATSUSHITA ELECTRIC CO., LTD. ALL RIGHTS RESERVED.

PRINTED IN JAPAN

PSQX1728YA KK0399CM1030