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CHAPTER 1

OVERVIEW
Welcome . . .

to the SX-50® System. You will quickly discover just how easy your job can be using the SX-50 Attendant Console.

This book is intended to serve as your guide while you learn about basic Console operation. Soon you will only need the guide for occasional reference tor advanced procedures. Take a few minutes to explore the guide and familiarize yourself with the book and its organization, so that it will be a handy reference tool whenever you need it.

This first section introduces the console hardware. You will learn what each group of keys does, how to make basic adjustments to volume and display contrast, and how to interpret the displays and procedures in this guide.

Throughout this guide . . .

are illustrations of the display which you should see while performing a procedure. Some parts of the display have been shown in **bold type** to draw your attention to specific words. For example, you might see:

```
12:46  2-FEB  CALL BLOCK  NIGHT  BELL  CW1
DIAL0
```

Since there are two kinds of keys . . .

(Feature Keys and Softkeys), two different conventions appear.

**Feature Keys**

Feature keys are indicated by the word shown in bold type. For example:

- **Press** RELEASE

**Softkeys**

Softkeys are indicated between square brackets. For example:

- **Press** [RECALL]
CONSOLE HARDWARE

Before operating the console...

be sure that the display shows time and date, and the handset is plugged in to the left side of the console.

The cable required to connect your console to the PABX is located at the rear of the console. This cable should be connected by a qualified system installation person and should not be adjusted by unauthorized personnel.

If any problem occurs, contact your communications department for assistance.

Your Console consists of...

a moulded plastic unit which features a two-line, 40-character alphanumeric Liquid Crystal Display, a row of five unmarked Softkeys, three rows of Feature Keys, and a standard telephone digital dial pad. A removable handset plugs into the left side for normal Attendant operation.

Figure 1-1 Console Hardware
The Liquid Crystal Display (LCD) . . .

is the two-line screen at the top of the console.

The top line gives information about the extension or trunk to which you are connected, and (during other procedures) may indicate the number of calls waiting, time, date, and other information, such as Alarm Status.

The second line is used to give "prompts" -- instructions for the five "softkeys" directly below.

Figure 1-2 LCD Prompts and Softkeys
The Softkeys are . . .

the row of five unmarked keys right below the LCD. These keys perform different functions at different times, so their identities are shown by the prompts which appear above them on the LCD.

During normal call-handling, the prompts indicate the types of calls ringing in (LDN 1, LDN 2, LDN 3, DIAL0, and RECALL). When you press the softkey directly below the prompt, you will answer that particular type of call. If a softkey does not have a prompt over it, then pressing the key has no effect.

For example, you might see the following display:

<table>
<thead>
<tr>
<th>12:01</th>
<th>2-FEB</th>
<th>CW3</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDN1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIAL0</td>
<td></td>
<td>RECALL</td>
</tr>
</tbody>
</table>

In this example, you have three calls ringing you. If you:

- press the first softkey, you will answer the "Listed Directory Number 1" call -- an outside call;
- press softkey 4, you will answer a call from an extension (Dial 0);
- press softkey 5, you will answer a "Recall" -- a call that you have already put through but which has returned to you when unanswered.
- press softkeys 2 or 3, nothing will happen.

**Note:** If any of these terms are new to you, refer to the Glossary of Terms in the last section of this guide.
The Feature Keys...

provide basic attendant functions. They are the three rows of seven keys on the left side of the console. Four keys in the bottom row (ALARM and the HOLD keys) have small red lamps which flash to draw your attention to the key and indicate its status.

Some of the keys have a fixed function (that is, all systems are the same). However, seven feature keys are programmable to meet your company's special needs, so your system may not appear exactly as illustrated below. These keys are:

- TRUNKS
- CALL BLOCK
- OVERFLOW
- PAGE
- WAKE-UP
- MSG REG
- OVERRIDE

The keys allow you to do whatever their names indicate. For example, ANSWER allows you to answer incoming calls and HOLD lets you place calls on hold. (See next page for details on each).
FEATURE KEYS

Feature Key Functions

FUNCTION
After pressing this key, you perform additional steps using the telephone keypad for operations such as setting the console date and time, performing maintenance functions, and switching to Night Service.

STATUS
With each key press, various features of the system are displayed: the software identity and access to Customer Data Entry functions; the number of busied-out devices by type; the console bell and LED test; and the display test.

Figure 1-3 Feature Keys
FEATURE KEYS

TRUNKS
Shows the number of trunks busied out (removed from service, usually because of trouble) and lets you identify each one.

CALL BLOCK
Allows the Attendant to prevent extensions from speaking to each another.

OVERFLOW
In Night Service, calls to the console are rerouted to one or more alternate answering point(s) (Night Bells for example). Normally, any calls waiting to be answered at the console are automatically rerouted to the designated answering point(s) if the attendant has not answered before a pre-determined time. This feature is called Automatic Overflow. The OVERFLOW key allows the attendant to override the Automatic Overflow timer, thereby rerouting incoming calls immediately to the alternate answering point(s).

PAGE
Allows the Attendant to be connected to the paging system, if provided.

CANCEL
Allows you to clear misdialed information or to cancel a call to a number that is busy.

WAKE-UP
Allows the Attendant to set a time for a Wake-up call to a particular extension.

MSG REG (MESSAGE REGISTRATION)
Allows the Attendant to read out the number of telephone calls or call units made from a particular extension.

OVERRIDE
When pressed and held down, allows the Attendant to override (intrude into) an existing conversation.

MESSAGE
Allows the Attendant to set and remove a message reminder for an extension user.
# FEATURE KEYS

<table>
<thead>
<tr>
<th>KEY</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOTH</td>
<td>Allows the Attendant to speak to two calls at the Console at once.</td>
</tr>
<tr>
<td>SWAP</td>
<td>Allows the Attendant to speak privately with one caller while holding the other when there are two calls at the Console. Successive presses of SWAP allows the Attendant to alternate between the two calls.</td>
</tr>
<tr>
<td>RELEASE</td>
<td>Used for disconnecting and transferring calls.</td>
</tr>
<tr>
<td>BELL</td>
<td>Turns the Console ringer on or off. If the ringer is off, the word “MUTE” appears on the display. Incoming calls are announced by the “BELL” in the display, as well as the ringer, if it is on.</td>
</tr>
<tr>
<td>NIGHT</td>
<td>Puts the SX-50® into Night Service in which calls are routed to specially assigned numbers or to Night Bells. The display shows “NIGHT”. Another press returns it to regular Day Service. This key may also be used to change Night Answer Points for incoming trunks.</td>
</tr>
<tr>
<td>ALARM</td>
<td>If the diagnostic system detects a fault, the bell rings and the ALARM lamp flashes. Pressing ALARM silences the bells and displays the alarm code, which is stored for later examination by the Maintenance Engineer.</td>
</tr>
<tr>
<td>HOLD 1, 2, and 3</td>
<td>Allow the Attendant to place up to three calls to the console on hold. The key lamp lights to indicate a call on hold.</td>
</tr>
<tr>
<td>ANSWER</td>
<td>Allows you to answer single calls or the incoming call which has been waiting longest.</td>
</tr>
</tbody>
</table>
The Dial Pad...

at the right of the console key area has a total of 16 keys, including a standard 12-key dial pad, and two keys each for ringer volume and display contrast adjustments.

Figure 1-4 Dial Pad

To Adjust Ringer Volume and Display Contrast

The keys labeled "Volume \( \wedge \)" and "Volume \( \vee \)" are used to increase or decrease the console ringer volume.

"Contrast \( \wedge \)" and "Contrast \( \vee \)" make the display appear brighter or dimmer.

- Press STATUS repeatedly
- Hold it down when you see:

BELL VOLUME & LCD CONTRAST CONTROL
ADJUSTMENTS

The Console Bell will ring continuously.

- Press Volume \ or Volume \ 
- OR
- Press Contrast \ or Contrast \ 
  until desired level is reached.
- Release STATUS

To Turn Off (Mute) the Console Bell

- Press BELL

12:02  2-FEB          MUTE

When the bell is muted, you are notified of incoming calls by only a
flashing indicator and the softkey prompt. The display shows, for
example:

12:02  2-FEB          BELL CW1
        LDN2

To Turn On the Bell

- Press BELL
Normal operation resumes, with bell ringing to announce incoming
calls.

You will find out more . . .
about these and other "housekeeping" functions (such as setting the
console time and date) later under Attendant Functions.
CORRECTING ERRORS/CLEARING THE CONSOLE

If you make a mistake...

while dialing and need to start over:

- **Press CANCEL**
  The system cancels the misdialed call and returns you to where you were before.

- **Dial the correct number.**

Hanging Up

On a standard telephone, the handset rests on a bar or switch called the "switchhook". When you put the handset down, you depress the switch and the system knows that you've hung up. The console does not have a switchhook, so you need to show the system that you’ve hung up and are free to take new calls.

To Disconnect a Caller and Free the Console

When you are ready to hang up,

- **Press RELEASE**
  The display clears and then shows time and date, indicating that the console is free.

12:02 2-FEB
SOME DEFINITIONS

Before you start . . .
there are a few terms that you need to understand so that you know what the system is doing and what the displays mean.

Access Code
This is a number dialed from the console dial pad or from an extension to activate a particular system feature. For example, you dial an access code to call a Hunt group.

Extension, or Internal Line
Each telephone in the system is called an extension and is given an extension number. These appear on the display as “EXT–123” and so on. Extensions can be either standard rotary dial or push–button phones, or special SUPERSET® feature phones.

Trunk
Trunk is the general name for both Outside Lines and Tie Trunks. It is any line that connects your system to a local exchange or another private system.

Outside, or External Line
This is a line that connects your system to the local telephone exchange, and therefore to the public telephone network.

Tie Trunk
This type of line directly connects your system to another telephone system owned by your company or organization. You do not have to use the public telephone network to dial this location, and the general public usually do not have access to the line.

Incoming Trunk Calls
Depending on what type of call it is, an incoming call is put into one of three possible listed directory numbers (LDN’s) which appear at the console display as LDN 1, 2, or 3. One of your LDN’s could consist of numbers used by the general public, another for trunks connecting your telephone system to several other PABX’s owned by your company. You may have instructions on the specific manner in which to answer calls depending on the LDN on which they appear.

Trunk Equipment Number
Every trunk is given a unique number within your system so that it can be identified from other trunks that may all share the same outside telephone number. The trunk number appears in the display as, for example, “TRK–10”.

1–12 Overview
CHAPTER 2

BASIC CALL HANDLING
In this chapter you will learn...

how to make, answer and extend calls, and what to do when a destination is busy or unanswered. This information will be sufficient for most of your daily tasks.

The basic call handling keys...

that you will need are the following:

- **Softkeys** - used to selectively answer calls from different sources;
- **ANSWER** - used to answer calls on a “first come, first served” basis;
- **BOTH and SWAP** - used to speak simultaneously to two callers, and alternate between them;
- **CANCEL** - used to cancel a misdialed call, invalid function or invalid entry.
- **RELEASE** - used for connecting a call to a destination and for hanging up;
- **Dial Pad** - used to dial telephone numbers and enter access codes.
ANSWERING INCOMING CALLS

When a call comes in...

to the Console, you are alerted to it by either the ringing bell or flashing display. The number of calls waiting to be answered is shown in the upper right corner of the display, and the softkey prompts indicate the kinds of call.

Your display may show, for example:

12:02 2-FEB  BELL CW3
LDN1  LDN2  DIAL0

You can answer a call either by pressing the ANSWER key or by selecting a particular softkey. Your company may have different greetings for different categories and may prefer you to use Selective Answer.

Figure 2-1 Basic Call Handling Keys
ANSWERING INCOMING CALLS

The ANSWER Key...

lets you answer a single call or the longest waiting call in all categories on a "first come, first served" basis.

For instance, if a single internal call is waiting, you will see:

<table>
<thead>
<tr>
<th>12:02 2-FEB</th>
<th>BELL CW1</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIAL0</td>
<td></td>
</tr>
</tbody>
</table>

- Press ANSWER to be connected. The display will show information on the source of the call, such as:

| EXT-213 TALK |

Selective Answer

- Press the desired softkey to be connected to the longest-waiting call of that type. The "CW" display remains to remind you that other calls are still waiting. Information about the caller is displayed, such as:

<table>
<thead>
<tr>
<th>TRK-12 TALK</th>
<th>CW2</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDN3</td>
<td>DIAL0</td>
</tr>
</tbody>
</table>

- Greet the caller
- Extend and RELEASE the call
- Use Selective Answer to handle the remaining calls
EXTENDING CALLS

Once you have answered a call . . .

you will usually connect the caller to an extension. This is known as “extending” the call.

To Connect a Call to a Free Extension

- **Dial the extension number**
  You hear ringing, and the display shows the extension number. Meanwhile, the outside caller is held for you without a speaking connection. For instance, you will see:

  | EXT-252 RING | TRK-12 HELD |

- **Press RELEASE**
  You hear silence and the call is released from your Console and connected to the ringing extension.

Even if an extension is busy . . .

you can release the caller to wait until the line becomes free. This is called a "Camp On". Two short beeps notify the extension user that a caller is waiting. The extension user can then hang up and answer the waiting call.

**Note:** If the extended call is not answered after a programmed period of time, it returns to the console as a **Recall** (see EXTENDING CALLS/RECALLS).
Announcing A Call

When extending a call, you may wish to wait for the extension to answer and announce the caller. Thus, the extension user knows it is an outside call, and you know that the caller has an answer and will not be returned to you as a recall.

However, when you are busy with several calls, you may not wish to announce each one. This is when the recall feature is of benefit.

To Announce a Call

- **Dial the extension**
  You hear ringing

- **Wait until the call is answered**
  The display shows you're talking to the extension user, and the outside call is still held:

  | EXT-252 TALK | TRK-12 HELD |

- **Announce the call**
  Then, if the extension user wishes to take the call,

- **Press RELEASE**
  to release the Console from the connection, leaving the outside caller connected to the extension.
  If the extension user does not wish to take the call,

- **Press CANCEL**
  to hang up the extension and leave you connected to the outside caller.
EXTENDING CALLS/SWAP

Alternating Between Parties

When you reach the called extension, you may be told that the person to whom the caller wishes to speak is absent. You will then want to return to the held caller to find out if there is another person to contact, or to get more information.

- Press SWAP
  You are now talking to the outside caller while the extension he/she asked for is on hold. The display shows:

```
EXT-252 HELD    TRK-12 TALK
```

- Press SWAP again
  to return to the held party.

```
EXT-252 TALK    TRK-12 HELD
```

Each time you press SWAP you reverse the calls. The held party can never hear you or the party to whom you are speaking.

- Press RELEASE
  to leave the conversation and connect the two parties.

Note: If the party to whom you are currently speaking hangs up, you will automatically be connected to the held party.
To Speak to Both Parties (Conference)

You may want to speak to both parties at the same time.

Once you have a connection to one, and the other on temporary hold,

- **Press BOTH**
The display shows you’re speaking to both callers.

| EXT-252 TALK | TRK-12 TALK |

At this point, you may:

- **Press RELEASE**
to remove the Console from the call, leaving the other two connected.

**Or press SWAP again**
to talk to one party only.

**Note:** After pressing SWAP, check the display before speaking to see which party the system has connected to you. You might need to press SWAP a second time to reach the other party.
EXTENDING CALLS/RECALLS

If a call remains unanswered . . .

after you release it, the system returns it to the console after a programmed period of time (typically 20 seconds or six rings). This is known as a "recall".

The display will show, for instance:

12:03 2-FEB BELL CW1 RECALL

Note: Whenever a call recalls your console because the hold timer has expired, the corresponding hold indicator will flash and [RECALL] is displayed. If [RECALL] is displayed without any hold key flashing, the call is returning to your console because the called extension did not answer.

- Press [RECALL]

Or ANSWER
to be reconnected to the caller and reminded that it is a recall.

TRK-12 TALK EXT-252 RECL

- Talk to the caller

You have a number of choices at this point. You may:

- Press RELEASE
to try the same extension again, and release the console from the connection

Or dial a new extension and RELEASE

Or press CANCEL

Or place the caller on Hold (see HOLD)

Or page the person wanted (see PAGE)

Or set a message notification (see MESSAGE WAITING)

Note: These last three procedures are explained in detail in Advanced Call Handling.
OUTSIDE CALLS

So far...

we've dealt with answering calls and extending them to extensions. You can also use the console to make outside calls as described here.

To Call an Outside Number

- **Dial the Trunk Group Access Code**  
  (usually 9 – fill in the code used in your organization below)

The system connects you to an available trunk. You may hear dial tone.

- **Dial the outside telephone number**  
  (including area code, if needed)  
  The display shows the number dialed, preceded by the trunk access code.

```
TRK-19 96135922122
```

The call is routed, and you hear ringing (or busy) when connected.

When the called party answers, the following is displayed:

```
TRK-12 TALK
```

If the Outside Number is Busy...

you will hear busy tone. You cannot "Camp-on" to a busy outside line, so you must hang up and redial later.

- **Press CANCEL**  
  The display clears.

- **Try again or press RELEASE**  
  The system's Last Number Redial feature can be used to save time when you dial later (see next page).
OUTSIDE CALLS

If all the Trunk Group lines are busy . . .
with extension users making and receiving outside calls, you will hear busy tone, and you will see (for instance):

LEV-9 BUSY

In an emergency, you can free a trunk and gain access to it. (See Trunk Emergency Release 4-27.)

Normally, you will just abandon the call:

• Press CANCEL
  Or RELEASE
to hang up

Note: Your company may have Tie Trunks, which are private lines connecting your location to another company location. You do not usually have to dial a separate trunk access code to call over a Tie Trunk. This is because the code has already been incorporated into the numbers you were given for the other location, and the system interprets the code by itself. Normally you will just dial the extension number at the other location.
OUTSIDE CALLS/TIME SAVERS

Save time when dialing outside numbers... by using Abbreviated Dialing or Last Number Redial.

**Abbreviated Dialing...**

Lets you call frequently dialed outside numbers using only 3 to 6 digits.

- **Enter the Abbreviated Dialing number (3-6 digits)**
  While the system dials the number for you, the full number programmed is displayed; you might see, for example:

```
TRK-05 96135922122
```

Contact your communications department for a list of the Abbreviated Dialing numbers you can use, and record them in the Reference section of this guide (page 5-3).

**Note:** You can use the console to enter Abbreviated Dialing numbers into the system memory. For more details, see Abbreviated Dialing (4-3).

**Last Number Redial**

The system stores in its memory the last outside number dialed from the dial pad, and you can save time by having it redial this number.

- **Dial #**
- **OR**
- **Dial the Abbreviated Dial Access Code, followed by “0”**

While the system redials the last outside number, the display shows the number being dialed; for example:

```
TRK-05 96135921234
```
OUTSIDE CALLS/EXTENSION ASSISTANCE

Making an Outside Call for an Extension

Sometimes you may be called upon to place an outside call on behalf of an extension user. This may be for users who do not have direct access to outside lines from their phones; or busy managers may ask you to call someone for them and connect them once you have the caller on the line.

THE CALLER IS WAITING ON THE LINE TO BE CONNECTED TO THE CALLED PARTY

1. Dial the trunk access code and the desired number
   The extension user is now on consultation hold.
   Once you have reached the person you want and have announced your call
   2. Press RELEASE
      to release the extension user to the called party.
      If you hear busy tone after having dialed the external number
   3. Press CANCEL
      You will be automatically connected to the caller. Tell him/her that you will have to try later.

THE CALLER WANTS YOU TO CALL BACK ONCE THE CALLED PARTY IS ON THE LINE

1. Dial the trunk access code and the desired number
   Once you have reached the person you want and have announced your call
   2. Dial the extension user and announce the call
   3. The outside party is now on consultation hold.
   4. Press RELEASE
      to leave the extension connected to the outside call.
      If you hear busy tone after having dialed the external number
   5. Press CANCEL
      Try again later.
OUTSIDE CALLS/EXTENSION ASSISTANCE

THE EXTENSION USER WISHES TO DIAL THE NUMBER AFTER YOU HAVE SEIZED THE TRUNK FOR HIM/HER

With the extension on hold
• **Dial the trunk access code** (see NOTE below)
• **Press RELEASE**

The extension user can now complete the number.

**Note:** If the Automatic Route Selection feature is enabled on the system, your Communications Department will let you know the exact number of digits you will have to dial after the external access code in order to seize a trunk.
CHAPTER 3

ADVANCED CALL HANDLING
Now that you know the basics . . .

of call handling (answering, extending, and making calls), you can go on to more advanced procedures.

These procedures are just as simple to perform as basic call handling. They involve six of the Feature Keys:

- **HOLD 1, 2 and 3** - to put a caller on Hold while you perform another task;
- **MESSAGE** - to set or cancel a "Message Waiting" indication on an extension user's telephone;
- **OVERRIDE** - to intrude into an existing conversation;
- **PAGE** - to use your company's public address system.

Figure 3-1 Advanced Call Handling
HOLD AND RETRIEVE

There will be times . . .
when you will not be able to connect an outside caller immediately. The hold system allows you to deal with situations like this. A caller can remain connected to the console, but not connected to you — leaving you free to do something else such as paging the person the caller wants to talk to.

You use one of the three HOLD keys to both put a call on hold and retrieve it. Each key has a red lamp which indicates the state of the calls held: unlit when no call is held; steadily lit when a call is on hold; flashing when a held call is recalling (has been left beyond a set time).

Up to three calls can be on hold at the console at the same time. While on hold, the caller cannot speak to anyone. Internal callers hear silence while external callers hear either silence or music (if Music-on-Hold is part of your system).

Hold should not be confused with the way a call is held temporarily while you dial another number.

To Place a Call on Hold

<table>
<thead>
<tr>
<th>TRK-12 TALK</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Tell the caller that he or she is being held for a while</td>
</tr>
<tr>
<td>• Press an unused HOLD key</td>
</tr>
<tr>
<td>(the red lamp must be unlit).</td>
</tr>
</tbody>
</table>

| HELD ON-451 |

The held call access code appears while you press the hold key (in our example, the code is the default 451 for HOLD 1). The red lamp above the chosen key lights up, showing that it is holding a call. The lamp remains lit while you,

• Continue call handling until you can deal with the call,

• Or page the extension user to pick up a call on hold at the console. See Console Hold Pickup 3–4.

Note: If you leave a call on hold for longer than the time limit allowed (chosen by your company at installation, and usually 30 to 70 seconds), the held call "recalls" to the console. The hold key lamp starts to flash and the bell rings. A call waiting is

3–2 Advanced Call Handling
To retrieve a call from Hold

- Press the chosen HOLD key
  (with the red lamp steadily lit)

  The red lamp goes out and the held caller returns to the console.

  **TRK-12 TALK**

**Note:** If a held caller hangs up before being retrieved, the red lamp goes out and the system frees the HOLD key for your use again.

To connect a held caller to an extension user

Once the caller is on hold and the lamp is steadily lit,

- Call extension user and announce the held call

  **EXT-321 TALK**

- Press the chosen HOLD key and announce the extension user

  The key lamp goes out, and you can speak with the outside caller.

  **TRK-12 TALK** **EXT-321 HELD**

- Press RELEASE
to connect the two and release the console.

If there is no need to announce the call . . .

- Press flashing HOLD key to retrieve the original held call
- Dial the extension number
- Press RELEASE
to connect the two.
HOLD AND RETRIEVE/CONSOLE HOLD PICKUP

Console Hold Pickup

When you have a call on hold, you can page the extension user, who then dials an access code to retrieve the held call. The access codes are programmable.

If, for instance, you have a caller who wants to speak to Janet Young, but she is not at her extension, you could place the outside caller on hold (HOLD 2) while you page her.

When you pressed the HOLD key, the display showed the access code:

```
HELD ON-452
```

- Press PAGE
- Announce the hold pickup number
  For example, "Janet Young, please dial 452."

When she dials 452, which is the console pickup code for HOLD 2 in our example, the system connects her to the held call and the hold lamp goes out.

If the paged person does not call to pick up the held call, the lamp stays on until the held call recalls to you.
MESSAGE WAITING

You will sometimes have to take a message for an extension user, then set up a message waiting indication on their telephone set. A SUPERSET 4 user is notified by a small "MSG" on the SUPERSET 4 display; on standard telephone sets, the indicator is either a periodic ring or a flashing lamp.

**To Set A Message Waiting Indicator While Connected to the Extension**

1. Remain connected to the busy/unanswered extension
2. Press MESSAGE
   - The display briefly shows that the indicator has been set up:
   
   | EXT-123 | MSG-ON | TOTAL MSG 001 |
   
3. Press CANCEL
   - if you put the caller on Consultation Hold and want to retrieve him/her.
4. OR
5. Press RELEASE
   - Normal operation resumes. The extension receives message waiting notification.

**When you answer a call from an extension with "Message Waiting"...**

you will see the "MSG" reminder instead of the usual "TALK"

| EXT-252 | MSG |

**To Cancel a Message Waiting Indicator while you are Connected to the Extension**

1. Press MESSAGE
   - The display briefly shows that the indicator is off:
   
   | EXT-252 | MSG-OFF | TOTAL MSG 000 |
   
2. Continue the call.

**Note:** If a SUPERSET 4 user cancels the message notification on his/her set, the notification will also disappear at the console.
MESSAGE WAITING

You can also review, set up or cancel . . . any or all message indications while your console is idle.

To Review the Extensions with a Message Waiting

While the console is idle,

- Press and hold down MESSAGE
You will see the number of extensions with messages waiting, and the actual extension numbers. For example, if there were 12 messages set, you might see:

<table>
<thead>
<tr>
<th>EXT-NUMBER ?</th>
<th>TOTAL MSG 0012</th>
</tr>
</thead>
<tbody>
<tr>
<td>201 203 204 211 217 218 229 233</td>
<td></td>
</tr>
</tbody>
</table>

As you can see, this only gives you the identity of eight of the 12 extensions, so to see the rest . . .

- Continue to hold down MESSAGE
- Press FUNCTION if there are more numbers to display.

Now you would see:

<table>
<thead>
<tr>
<th>EXT-NUMBER ?</th>
<th>TOTAL MSG 0012</th>
</tr>
</thead>
<tbody>
<tr>
<td>246 252 253 271</td>
<td></td>
</tr>
</tbody>
</table>

- Release MESSAGE
to return to idle display.

You can set and clear . . .

specific message waiting indications from the idle console by entering 1 to set and 0 to clear.

To Set Up a Message Waiting Indicator

- Press and hold down MESSAGE
to see the list of all current indicators.
MESSAGE WAITING

• **Dial the desired extension number**
  The display shows that the extension does not have a message waiting. For example:

```
EXT-200 MSG-OFF TOTAL MSG 0014
201 203 204 211 217 218 229 233
```

• **Dial 1**
  to turn on the message waiting indicator for that extension.

```
EXT-200 MSG-ON TOTAL MSG 0015
200 201 203 204 211 217 218 229
```

• **Release MESSAGE**

  **To Cancel a Message Waiting Indicator**

• **Press and hold down MESSAGE**
  to see the list of all current indicators.

• **Dial the extension number desired**
  The display shows that the extension has a message waiting. For example:

```
EXT-200 MSG-ON TOTAL MSG 0015
200 201 203 204 211 217 218 229
```

• **Dial 0**
  to turn off the indicator for that extension.

```
EXT-200 MSG-OFF TOTAL MSG 0014
201 203 204 211 217 218 229 233
```

• **Release MESSAGE**
Sometimes you might have an urgent need to speak to an extension user, but when you dial the number, you find the person is already engaged in a call. If absolutely necessary, you can override (intrude into) this conversation and talk to the extension user. When you override, both parties in the conversation can hear what you say.

Let's assume you have an urgent message for an extension user, but you hear busy tone and see this display:

```
EXT-123 BUSY
```

- **Press and hold down OVERRIDE**
  All the parties in the conversation hear a beep (repeated every six seconds), and see:

```
EXT-123 OVRD
```

- **Speak to the extension user**
  Both parties in the conversation hear what you say.

- **Release OVERRIDE**

- **Press RELEASE**
  to disconnect you from the conversation. Normal operation resumes.

**Note:** Some extensions may be protected against Override. When you try to intrude on such an extension, you hear Error/Reorder tone (fast busy tone) and the system does not connect you.
If your organization has a paging system...

you can use it to broadcast announcements through the building. You can also use it to page people to pick up a call on hold at the console.

To use the Paging System

- Press and hold down PAGE
  The display shows you are connected to the paging system and can make an announcement:

  PAGER

- Make the announcement

- Release PAGE
  Normal operation resumes.

Note: If the word "PAGE" appears in your display at any other time, it means that an extension user is using the paging system. If you press PAGE at this time, you will cut the person off from the paging equipment, as you have priority of use. You also cut off any background music if your company has this.
CHAPTER 4

ATTENDANT FUNCTIONS
"Housekeeping" tasks . . .

will occasionally have to be performed using the console. These are tasks that are not directly related to call handling, but concern either your console and its operations or your company's telephone operation. You have already learned how to do some of these tasks, such as turning the console bell on or off. In this chapter, you will learn several other functions. The keys that you will be using are shown below.

![Figure 4-1 Attendant Function Keys](image)

**Function Codes . . .**

need some explanation. Many of the Attendant Functions described in this chapter can be performed using their own Feature Key, but others involve the combined use of the FUNCTION key and a 2-digit access code. (Some functions -- Night Service, Call Block, Wake-Up -- can be performed using either a key or an access code.)

Maintenance personnel also use the FUNCTION key and access codes, but you do not need to know them.

A table of the codes you can use is provided on pages 5-6 and 5-7.
INTRODUCTION

To help you find . . .

what you need quickly, this chapter gives an alphabetical listing of the various functions and procedures.
To save time...

when dialing long or frequently used numbers, both you and extension users can use the Abbreviated Dialing feature. The system is programmed to substitute the full number stored in its memory for the short number you enter.

You can enter and change the numbers programmed in the Abbreviated Dialing memory.

Let’s look at a typical Abbreviated Dialing number so that you will know what you are entering. The Abbreviated Dialing number, “5512”, for example, contains two parts. The first two digits (55) represent the access code that tells the system you want to use the abbreviated dialing feature. The other two digits tell the system which number from its list you want it to dial. The list can have 60 entries, numbered from 10 to 69.

So, if you dial “5512”, your system might show:

TRK-07 96135922122

The system gets the instruction to go to the abbreviated dialing list (“55”), it looks at entry “12” -- which happens to be 9-613-592-2122. Note that if the number is an outside telephone number, the trunk group access code (9) must be included in the entry.

The 60 entries can each have up to 26 digits, which covers even the longest international numbers you are likely to need.

Note: Your company may use an Abbreviated Dialing Access Code other than “55”.

To Look at an Abbreviated Dialing List Entry (Without Changing It)

- Press FUNCTION
- Dial 60

The question mark flashes to prompt you to dial the entry number.
ABBREVIATED DIALING

- Dial the entry number to be viewed
  The entry number appears with the full number entered, or a blank if there is not a number. You might see, for example,

  12-

- Press RELEASE to return the console to its idle state.

To Enter an Abbreviated Dialing Number into the System

- Press FUNCTION
- Dial 65
  The question mark flashes to prompt you to dial the entry number.

  CHANGE ABBREVIATED DIALING ENTRY ?

- Dial the entry number (2-digits, from 10 to 69)
- Dial the full telephone number
  (including access code and area code, if needed)

  Note: If you make an error during entry, press CANCEL to clear, then start over.

Entry number and full telephone number appear:

  12-96135922122

- Press RELEASE to return to idle display. The system has now stored the number in its memory for you and the extension users.

To Delete An Abbreviated Dialing Number from the System

- Press FUNCTION
- Dial 65
  The question mark flashes to prompt you to dial the entry number.

  CHANGE ABBREVIATED DIALING ENTRY ?
• Dial the 2-digit entry number to be erased
  Entry number appears with the rest of the display blank.

  12-

• Press RELEASE
  to return to the idle console. The system has deleted the number from
  its memory. Nothing will happen now if you or an extension user dial
  "5512".

Attendant Functions    4-5
ALARMS

Whenever the system diagnoses a fault...

in its operation, however slight, it gives you warning as an alarm. In some cases, the system takes part of the equipment out of service ("busies-out" the equipment) to minimize the effect of the fault on the operation of the rest of the system.

The types of faults which may occur fall into the following categories:

- Total Power Failure
- Console Faults
- Minor Faults

Let’s look at each of these faults and how to deal with them.

Total Power Failure

If there is an electrical supply failure, the console display goes blank and you will have no response to any key you press. Under these conditions, the system may change, if so programmed, to a mode of operation called "Power Failure Transfer". This means that the system connects a number of preselected extensions directly to outside lines from the local public telephone network. You may have one of these emergency telephones to use to call the maintenance department, for example.

When the power supply returns, the system resumes operation, but the time and date need to be reset. (See Setting Time and Date 4-22.)

Note: If the system exhibits the signs of power failure, but you know that the electricity has not failed, there must be a fault inside the system. Inform your communications department or maintenance personnel immediately.

Console Faults

A fault might occur that would make it impossible to use the console. During system diagnostics, the display will show:

NO COMMUNICATION

In this case, the system goes into Night Service, with trunks routed to the night answer points.
ALARMS

- **Use an extension to report the problem** to your communications department or maintenance personnel.

**Console Reset**

When the console is plugged in, the alarm message

```
CONSOLE RESET
```

appears briefly in the display. If this ever remains more than a few seconds,

- **Pull out handset or headset plug**
- **Plug it in again**
  to see if it clears the fault.

  If not, the system remains in Night Service.

- **Use an extension to report the problem** to your communications department or maintenance personnel.

**When the system is first switched on**

The console displays

```
NO COMMUNICATION
```

during a few seconds, after which the time and date are displayed.

**Minor Faults**

Faults of a minor nature need to be corrected, but generally do not prevent your continued operation of the system.

When the system detects a minor fault it carries out any corrective action, and then sends an alarm to the console. The bell rings (except if you have muted it) and the red lamp above the ALARM key flashes.

You must find out what the alarm is and report the fault.
ALARMS

To Read and Report an Alarm

- **Press and hold down ALARM**
  The bell stops, the lamp stops flashing but remains lit, and the display shows the alarm number and message. For example, you might see:

  | A 11 0017 NO TRUNK SEIZE ACK. 03/01 |

  This message tells maintenance personnel that alarm number 11 has occurred: trunk equipment number 17 (in slot 03, circuit 1) is busied out.

  **Note:** You do not need to know the real meaning of the alarm message. However, you might be asked to record exactly what you see on the display, in the case that your system is not hooked up to a printer.

- **If required, note the complete message displayed**

- **Release ALARM**
  The message disappears but the red alarm lamp remains steadily lit until the fault is corrected. The date is displayed, unless the system has busied-out any part of the equipment, in which case "BUSY OUT" is displayed until the piece of equipment is returned to service.

- **Telephone the alarm message**
  to your communications department or maintenance personnel.

  **Note:** If your system has a printer attached, it can be used to obtain a printed record of the alarm messages. See PRINTER CONTROL/ALARM RECORDS for more details.
If you have a public address system...

set up with links to your telephone system, it is possible for background music to be played through the paging loudspeakers and to be turned on or off from the console.

To Turn Background Music On

- Press FUNCTION
- Dial 17
  The display briefly shows:

  MUSIC-ON

  The display reverts to its idle state and background music is playing.

To Turn Background Music Off

- Press FUNCTION
- Dial 18
  The display briefly shows:

  MUSIC-OFF

  Display reverts to idle, and background music is turned off.
The Console Bell . . .

that announces incoming calls can be turned off, if desired. You will still be advised of incoming calls by the flashing softkey prompts and the word “BELL” in the display.

To Turn Off (Mute) the Console Bell

- Press BELL

MUTE

If a call comes in that would normally ring the bell, it remains quiet, but you see a flashing indicator, and the softkey prompt lights. The display shows, for example:

12:02 2-FEB BELL CW1

DIAL0

To Turn On the Bell

- Press BELL

Normal operation resumes, with the bell ringing to announce incoming calls.
This feature prevents certain extensions... from making calls to other specified extensions. This feature has particular application in Hotels and Motels. A blocked extension can only dial unblocked extensions, the operator, or external numbers.

You cannot change the list of blocked extensions, but you can turn the feature on or off.

To Turn On Call Block

- Press CALL BLOCK
  The display shows blocking to be on, with the rest of the system operating normally.

12:06 1-JAN CALL BLOCK

To Turn Off Call Block

- Press CALL BLOCK
  The message disappears, and all extensions now operate normally.
MESSAGE REGISTRATION

The system keeps track of the number . . .

of local call units made from each extension (or room, as in a hotel/motel operation). The unit information provided by the Message Register can be used to calculate the total cost of outside calls to be charged to the extension/room.

You can read the individual message register while speaking with the extension or while the console is idle, and print out the contents of the register. You can also clear and reset the message register.

To Read the Message Register while Talking to the Extension

- Press and hold down MSG REG
  to display the call units in the register while you speak with the extension user. For example, you might see:

| EXT-252 | 0012 UNITS |

Note: Please note that the display does NOT show the number of calls, but the number of call units. One call may represent several call units.

- Release MSG REG
  to return to normal operation.

To read the Message Register while the console is idle

- Press and hold down MSG REG
  The display prompts you for an extension number:

| EXT-NUMBER | ? |

- Dial the desired extension number
  to see the call units for that message register:

| EXT-252 | 0012 UNITS |

- Release MSG REG
  to return to normal operation.
To Clear and Reset the Message Register

- Press and hold down MSG REG
- Dial the desired extension number
to display the number of units currently used.
- Dial 0
to clear the meter and have it start numbering again from zero.
- Release MSG REG
to return to normal operation.

See MESSAGE REGISTER PRINTOUT (4-16).

The message register may also be used . . .

to prevent individual stations from making external calls, on a temporary basis. If your Class of Service allows you to do so,

- Press FUNCTION
- Dial 22

```
VIEW MESSAGE REGISTRATION FOR EXT- ?
```

- Enter the number of the extension that you want to prevent from making external calls.
- Dial 9

```
2029999
```

In our example, extension 202 is now prevented from making any external call, until you release the restriction.

To release the restriction on external calls for an extension

- Press FUNCTION
- Dial 22
- Dial the number of the extension
- Dial 0

The extension can now make external calls.
NIGHT SERVICE/UNATTENDED OPERATION

When an Attendant is not on duty...

the system is put into Night Service. Outside calls that normally ring at
the console then ring at an alternate answering point. The alternate
destination could be an extension, a hunt group, the ring group or a
night bell. When the system is programmed, each outside line and
extension can be given its own destination, and groups of outside lines
and destinations can share the same destination.

A call to a night bell can be answered by anyone who hears it ringing.
The person dials the night pickup access code (called a TAFAS code:
“Trunk Answer From Any Station”) to be connected to the call.
Depending on the way your system is programmed, any DIAL 0 calls
(to the attendant) may be similarly diverted.

During Night Service, the console can still be used to make outgoing
calls, and for other operator functions.

To Activate Night Service

- **Press NIGHT**
  Incoming calls will now ring at Night Answer Points (extensions, the
  Night Bell or the console). The display shows:

| 12:07 | 2-FEB | NIGHT |

To restore normal daytime operation

- **Press NIGHT**

  The system restores Day service and incoming calls ring the console
  as usual. The normal idle display shows.

  **Note:** Removing the handset or headset plugs from their socket will
  automatically activate Night service. To restore normal
  operation, plug handset in again. "Night" will still show in the
  display, indicating that you are still in Night Service. Press
  NIGHT to return to Day Service.

Flexible Night Service

To cater to changes in operation under unusual circumstances, you
 can alter the night answer points.
To Change the Night Answer Point

- **Press and hold down NIGHT**
  to display the currently programmed Night Answer Point. For instance, you will see:

  | TRK-09 NIGHT ANSWER POINT BELL-57 |

  At this point, you may want to change the night answer point for a different trunk:

- **Dial * until the desired trunk equipment number is displayed**

  **Note:** After you enter the equipment number, the system is in Night Service. Press NIGHT to put the system in day mode.

  The current night answer point flashes, to prompt you to change it.

- **Enter the new answer point**
  (your communications department will give you the necessary number)

  The new Night Answer Point will be displayed:

  | TRK-09 NIGHT ANSWER POINT EXT-201 |
OVERFLOW

Sometimes you have so many incoming calls . . .

that you are overwhelmed trying to deal with them properly. Or you
may need to be away from the console for a short time. Overflow lets
you deal with both these situations by temporarily diverting all calls
from the console to a programmed alternate answering point.

To Activate Overflow

- Press OVERFLOW
  The system is in overflow mode, and extension users are now able to
dial the TAFAS code to answer the calls that are ringing the console.
The display shows:

| 12:05 2-FEB | TAFAS |

Note: During the time the overflow is activated, all calls will still be
displayed at the console, so you can see what is going on. This
allows you to intervene and answer particular calls if you wish.

To Restore Normal Operation

- Press OVERFLOW
  "TAFAS" disappears from the display. The system returns to normal,
  and extension users are no longer able to answer calls ringing your
  console by dialing the TAFAS code.

Note: TAFAS (Trunk Answer From Any Station) is the term for the
special pickup code to be used by extension users answering
overflow calls. Fill in the TAFAS access code used in your
organization in the box below.
If a printer is attached...

to your system, you can obtain permanent records of a number of the system's features. You control the printer by dialing a code after pressing FUNCTION. See Attendant Function Codes in Chapter 5.

The following types of printout are available (but note that your system may not have all these features):

- Alarm Records
- SMDR reports
- Data Dumps
- Message Register
- Wake-up Records

SMDR reports and Wake-Up Records are printed out automatically and do not concern you; however, you might be asked to control the printer to print out message register contents, alarm records or data dumps.

The same printer is used for all types of printout. The system can store printout information in its memory (said to be in the print queue) and send the print command after any current printing has finished.

General Printing Commands

This section tells you how to control the printing process. It does not give instructions for turning the printer on and off, loading paper and changing ribbons, and so on --for these you have to see the manual that came with the printer itself. We assume that the printer is ON, has enough paper and is ready to print as soon as the telephone system gives it the message to begin.

Three commands control printing:

- SUSPEND PRINTING - means stop sending information to the printer, and put this information in a queue instead so that it can be sent when printing is restarted. You might need to do this, for example, when the printer has run out of paper and you need to add more.
- PURGE PRINT QUEUE - removes all information from the print queue so that it stops printing entirely.
- RESUME PRINTING - causes information to be sent to the printer again; if there is anything in the print queue, this information is sent first.
PRINTER CONTROL/MESSAGE REGISTRATION

To Control Printing

- Press FUNCTION
- Dial 75
  The display shows that system is ready to receive a printing command:
  
  PRINT OPTION ?

- Dial * to SUSPEND PRINTING
- Or dial 0 to PURGE PRINT QUEUE
- Or dial # to RESUME PRINTING
  The system carries out the command and returns to idle console.

To Print Message Register Contents

- Press FUNCTION
- Dial 73
  The display briefly confirms that the system has accepted the command:
  
  MESSAGE REGISTRATION AUDIT

  Display then returns to normal operation while the contents of the message register prints.

Note: If the printer does not start to print the message register, try entering the RESUME PRINTING command (#).

The register contents printed out give the extension number, and call units currently registered.
Printing Alarm Records

You can print out a record of minor alarms for use by maintenance personnel.

Three commands control alarm printouts:

- PRINT ALARM RECORDS AS THEY OCCUR - each time the system's diagnostic feature detects a fault, it records the alarm message and the time of the alarm.
- STOP ALARM RECORD PRINTING - alarm records are not sent to the printer, but alarm indications still appear at the console.
- PRINT ALL STORED ALARM RECORDS - all alarm records for uncleared faults still affecting the system are printed out.

To Control Alarm Record Printing

- Press FUNCTION
- Dial 90
  The system waits for a command, showing:

  PRINT ALARM BUFFER OPTION ?

- Dial 1 to PRINT ALARMS AS THEY OCCUR

For example:

  ALARM 04/15 8:48 0 010 0026 NO TRUNK LOOP
  CURRENT 04/03

The alarm record printout gives the date and time, the position of the alarm in the alarm queue, the alarm number, the equipment number on which the alarm occurred, the alarm record itself, and the slot and circuit where it occurred. In our example, the alarm occurred on May 15 (04/15), at 08:48 (8:48), it is the first alarm in the queue (0), the number of the alarm is 10 (10), and it occurred on equipment number 26 (0026), in slot 04 and circuit number 2 (04/03 – no even circuit numbers are displayed).
PRINTER CONTROL/ALARM RECORD

- Dial 0 to STOP ALARM PRINTING
- OR
- Dial # to PRINT ALL ALARMS

For example,

ALARM QUEUE ON 04/15 8:48
0 010 0026 NO TRUNK LOOP CURRENT 04/03
1 012 0028 NO TRUNK LOOP CURRENT 04/07
ALARM PRINT FINISHED

The display returns to idle and the system performs the alarm printing command requested.
Data Dumping

It is possible to print out a record of the information the system contains on the way trunks, extensions, and other devices have been set up. This is known as the system data, and printing it out is called "dumping the data". This function will typically be performed by maintenance personnel.

To Dump Data

- Press FUNCTION
- Dial 97
  The system shows it is ready for the next step:

        DATA DUMP

- Dial a 4-digit access code
  (Maintenance personnel will give you this code)

The display shows a sequence of numbers, from 100 upwards, as the data starts to print.

        DATA DUMP CMD 100

When the system has sent all of the data to the printer, the display returns to normal.

If a call comes in while you are dumping data . . .

you can stop the dump and answer the call.

- Press RELEASE
- Press the appropriate softkey
  After you have dealt with the call,
- Start the dump again from the beginning.
You can set the system's clock...

from the console. The time appears in the console display (and on all SUPERSET 4™ sets in the system) in either 12- or 24-hour format.

The time display shows that the equipment is working and starts at 00:00 when the system is first turned on. For example, if the system had been turned on for two minutes, you would see:

00:02 1–JAN

To Set the 12-Hour Clock

- Press FUNCTION
- Dial 14
  "HHMM" flashes in display, asking you to enter the time.

12–HOUR CLOCK HHMM
- Dial the time IN 24 HOUR FORMAT

Note: You use 24-hour format, even though you want the time to appear in 12-hour format. For example, for 4:07 am, dial 04:07; for 4:07 pm, dial 16:07. The idle display shows the time as set:

4:07 1–JAN

To Set the 24-Hour Clock

- Press FUNCTION
- Dial 15
- Enter time in 24-hour format

The idle display shows the time as set:

16:07 1–JAN
Setting the Date

You can also set the system date. Your console only displays the day and month, but the SUPERSET 4™ sets display the year as well. For this reason, you have to set the full date. When the system is first started, the date always starts at 1-JAN.

To Set the Date

- Press FUNCTION
- Dial 80
  The display prompts you to enter the new date:

  CHANGE DATE FROM 01-01-87 TO DD-MM-YY

- Dial 6 digits - day month year

Note: You must dial a 0 first in cases where the day or month has only one figure. For example, to set the second of February 1987, you would enter 02 02 87.

The idle display shows the date as set:

16:07 2-FEB
SYSTEM STATUS AND IDENTIFICATION

The STATUS key lets you identify and check . . .

some aspects of the system. You can find out, for instance, the
identity of the software operating the system (something you might be
asked by maintenance personnel). Using STATUS you can check:
• system software identity;
• the number of certain device circuits busied out;
• whether the console bell and four key-LEDs (lamps) are working; and
• whether the console display is working.

To check the Status

• Press STATUS once
to see the software identity. The display shows, for example:

| GENERIC 3504A-86 | FP1-M2 |

It is now possible to do Customer Data Entry. Normally this will be the
function of someone from your communications department or
maintenance personnel.

• Press STATUS a second time
to show the total number of circuits currently busied-out, per device
type: tone generators, DTMF receivers, dial tone detectors, conference
lines and trunks in that order, followed by the total number of circuits
that have been busied-out.

| BUSY OUTS 00 00 00 00 04 TOTAL 04 |
SYSTEM STATUS AND IDENTIFICATION

• Press STATUS again
to cause the console bell to ring and the lamps (LEDs) to light. The display will show:

BELL VOLUME & LCD CONTRAST CONTROL

You can now adjust ringer volume and display contrast by pressing Volume \( \wedge \) or \( \vee \) or Contrast \( \wedge \) or \( \vee \) until you reach the desired setting.

• Press STATUS again

A test pattern appears on the display:

<table>
<thead>
<tr>
<th>TEST ! # $%&amp;'() * +,-./0123456789 : ; &gt;=?</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABCDEFGHIJKLMNOPQRSTUVWXYZ[ ] ---abcdefghi</td>
</tr>
</tbody>
</table>

Contact your communications department if you have any problems with any of these procedures.
You can check...

the number of trunks busied out (removed from service, usually because of trouble) and the identity of each. Maintenance personnel might ask you for this information.

- Press TRUNKS
to show the number of trunks busied out, and identity of the first, as in:

<table>
<thead>
<tr>
<th>NUMBER OF TRUNKS BUSIED OUT 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUNK 18 IN SLOT 3</td>
</tr>
</tbody>
</table>

- Press TRUNKS again
to identify the next busied-out trunk.

<table>
<thead>
<tr>
<th>NUMBER OF TRUNKS BUSIED OUT 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRUNK 21 IN SLOT 4</td>
</tr>
</tbody>
</table>

Pressing TRUNKS repeatedly will eventually display all the busied-out trunks.
TRUNK EMERGENCY RELEASE

For emergency use...

you may need to have immediate access to a trunk that is already in use. Since the procedure disconnects callers on the trunk, it should be used with caution.

It does not release a busied-out trunk.

To Release a Trunk for Emergency Use

When no outgoing trunks are available for your use,

- Press FUNCTION
- Dial 20

The display shows:

FORCED RELEASE FOR TRUNK ?

- Dial the trunk equipment number to free the trunk for your use.
- Dial the outside number you require
WAKE-UP

When a Wake-up call is set, the extension automatically rings at the selected time. Either tones or recorded music greet the extension users/guests when they answer.

If the call is not answered, the system tries again twice, at five minute intervals. If a wake-up call remains unanswered after three tries, the system cancels it, and an alarm is printed.

Your system may be equipped with “message notification lamps” on telephones. These will flash after an unanswered Wake-up call (for instance, to alert a guest when a Wake-up call came in).

Wake-Up records will be printed automatically, if the printer is enabled (see 4-17).

To Set Up a Wake-Up Call

- Press and hold down WAKE-UP
- Dial the extension number

The display shows the extension number, and if no Wake-up is currently set, the dashes flash:

```
EXT-NUMBER 252-----
```

- Enter the Wake-up time
  (four digits in 24-hour format)

```
EXT-NUMBER 252-0730
```

- Release WAKE-UP
  to resume normal operation.

Once a Wake-up call has been set, it can be changed or cancelled.

To Change a Wake-Up Call

- Press and hold down WAKE-UP
- Dial the extension number

The following is displayed. The flashing numbers represent the wake-up time.

```
EXT-NUMBER 252-0730
```
WAKE-UP

- Dial the new Wake-up time (24-hour format)

| EXT-NUMBER 252-1315 |

- Release WAKE-UP
to resume normal operation, with the new Wake-up time set.

To Cancel a Wake-Up Call

- Press and hold down WAKE-UP
- Dial the extension number
- Dial 9999
to erase the Wake-up time.
- Release WAKE-UP
to resume normal operation, with no Wake-up now programmed for that extension.
CHAPTER 5

REFERENCE
Once you are familiar...

with basic console operation, you should only need this section for occasional reference to the tables and reference lists provided. Fill in these lists so that you will have the information when you need it.

In Handy Hints you can record your own tips on operating the console to assist yourself and others in the future.

Let the Index help you find the information you need as rapidly as possible.
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<th>NAME</th>
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</thead>
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<tr>
<td></td>
<td>FIRE</td>
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<td></td>
<td>HOSPITAL</td>
</tr>
<tr>
<td></td>
<td>TROUBLE WITH EXTENSIONS OR CONSOLE</td>
</tr>
<tr>
<td>CODE</td>
<td>FULL NUMBER AND IDENTITY</td>
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<td>------</td>
<td>--------------------------</td>
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</tr>
</tbody>
</table>

5-4 Reference
**HUNT AND RING GROUPS**

Your system may have Hunt Groups and a Ring Group . . .

to which to extend some calls. To call them, you use the Access Code listed below in place of a regular extension number. Use this table to record the Access Codes used in your company.

**Up to six Hunt Groups . . .**

may be programmed for your system. A number of extensions, usually in the same department, can be grouped together in such a way that when anyone rings the access number for the group, the system hunts around the members of the group until it finds a free extension that can receive the call.

**There may be a Ring Group . . .**

programmed also. This is a group of extensions that all ring together when anyone dials the access code for the group. As soon as one of the extensions answers, the others stop ringing and the conversation cannot be heard on the other telephones in the group.

Your communications department will tell you what codes to use. Fill in the Access Codes and identities below for Ring or Hunt Groups in your organization.

<table>
<thead>
<tr>
<th>ACCESS CODE</th>
<th>USED FOR . . .</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RING GROUP</td>
</tr>
<tr>
<td></td>
<td>HUNT GROUPS:</td>
</tr>
</tbody>
</table>
A number of Attendant Function Codes... have been referred to in this guide: they are 2-digit codes dialed after pressing FUNCTION. They tell the system what you want to do. Many of the codes mimic the action of the console’s Feature Keys.

Listed below are the Attendant Function Codes you will use, and any related Feature Keys.

<table>
<thead>
<tr>
<th>OPERATOR FUNCTION CODE</th>
<th>FUNCTION PERFORMED</th>
<th>RELATED FEATURE KEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Puts system into Night Service. Displays NIGHT.</td>
<td>NIGHT</td>
</tr>
<tr>
<td>12</td>
<td>Puts system into Day Service.</td>
<td>NIGHT</td>
</tr>
<tr>
<td>13</td>
<td>When held down, displays the number and message of a non-fatal alarm. Bell stops ringing and LED remains lit. Release key to return to operating mode.</td>
<td>ALARM</td>
</tr>
<tr>
<td>14</td>
<td>Sets the time in 12-hour format, but requires entry in 24-hour format. The display is 12 HOUR CLOCK HHMM.</td>
<td>None</td>
</tr>
<tr>
<td>15</td>
<td>Sets the time in 24-hour format, and requires entry in 24-hour format. The display is 24 HOUR CLOCK HHMM.</td>
<td>None</td>
</tr>
<tr>
<td>17</td>
<td>Turns on background music. Briefly displays MUSIC-ON.</td>
<td>None</td>
</tr>
<tr>
<td>18</td>
<td>Turns off background music. Briefly displays MUSIC-OFF.</td>
<td>None</td>
</tr>
<tr>
<td>22</td>
<td>Displays contents of Message Register.</td>
<td>MSG REG</td>
</tr>
<tr>
<td>23</td>
<td>Puts on Call Blocking. Displays CALL BLOCK.</td>
<td>Call Block</td>
</tr>
<tr>
<td>24</td>
<td>Disables Call Blocking. CALL BLOCK is removed from the display.</td>
<td>Call Block</td>
</tr>
<tr>
<td>60</td>
<td>Displays VIEW ABBREVIATED DIALING ENTRY ? and allows you to see the full telephone number that corresponds to the 2-digit list entry code that you have to dial next. Press RELEASE to return to operating mode.</td>
<td>None</td>
</tr>
</tbody>
</table>
# ATTENDANT FUNCTION CODES

<table>
<thead>
<tr>
<th>OPERATOR FUNCTION CODE</th>
<th>FUNCTION PERFORMED</th>
<th>RELATED CONSOLE KEY</th>
</tr>
</thead>
<tbody>
<tr>
<td>65</td>
<td>Displays CHANGE ABBREVIATED DIALING ENTRY ? and allows you to change or delete the telephone number that corresponds to the 2-digit list entry code that you have to dial next. Press RELEASE to return to operating mode.</td>
<td>None</td>
</tr>
<tr>
<td>71</td>
<td>Displays CHANGE WAKE-UP TIME FOR EXT-? and allows you to change or delete the wake-up time for the extension number that you have to dial next. Press RELEASE to return to operating mode.</td>
<td>WAKE-UP</td>
</tr>
<tr>
<td>72</td>
<td>Displays VIEW WAKE-UP TIME FOR EXT-? and allows you to see the Wake-up time set for the extension number that you have to dial next. Press RELEASE to return to operating mode.</td>
<td>WAKE-UP</td>
</tr>
<tr>
<td>73</td>
<td>Sends all of the readouts from the message register to the printer. Displays MESSAGE REGISTRATION AUDIT.</td>
<td>None</td>
</tr>
<tr>
<td>75</td>
<td>Displays PRINT OPTION ? and allows you to dial * to suspend printing, 0 to purge the print queue or # to resume printing.</td>
<td>None</td>
</tr>
<tr>
<td>80</td>
<td>allows you to change the date from the one displayed. Requires six digits in DDMMYY format.</td>
<td>None</td>
</tr>
<tr>
<td>90</td>
<td>Displays PRINT ALARM BUFFER OPTION ? and allows you to dial 1 to print alarm messages as they occur, 0 to stop alarm printing and # to print all of the stored alarm messages.</td>
<td>None</td>
</tr>
<tr>
<td>97</td>
<td>Waits for you to dial a security code and then dumps the system data to the printer (or to a tape recorder). Displays DATA DUMP and the command numbers as they are printed.</td>
<td>None</td>
</tr>
</tbody>
</table>

Reference 5-7
GLOSSARY

Access Code
This is a number dialed from the console dial pad or from an extension to activate a particular system feature. For example, you dial an access code to call a Hunt group.

Busied-out
When a particular part of the system has been removed from service, possibly by the internal diagnostic system because it is giving trouble, it is said to be busied-out.

Camp-on
This is a feature that allows the system to queue calls directed to a busy extension, then automatically connect the waiting party when the extension becomes free. The busy extension hears one beep to indicate that an internal call is waiting, and two beeps to indicate that an external call is waiting.

Central Office (CO)
This is the public telephone switching system and related equipment, which provides telephone service for customers in a geographical area.

Class of Service (COS)
The features provided to each extension as well as the dialing restrictions placed on it are determined by the class of service allocated to the extension. The COS allows you to access certain features. Nine different Classes of Service are available on the system.

Customer Data Entry
This is the process by which your telephone system has been set up with the specific details of your organization. It is performed by dialing in sets of numbers from the console or the test line. If your organization specifies it, the system can be programmed so that you or the system manager can change parts of the data as the needs of your organization change.

Extension, or Internal Line
Each telephone in the system is called an extension and is given an extension number. These appear on the display as "EXT-123" and so on. Extensions can be either standard rotary dial or push-button phones, or special SUPERSET® feature phones.
**Generic**
The Generic number and revision level are numbers that tell which set of system operating instructions (software) is installed in your SX 50® system.

**Hardware**
The physical components of the system are known as hardware.

**Hunt Groups**
A number of extensions, usually in the same department, can be grouped together in such a way that when anyone dials the access number for the group, the system searches, in a pre-determined fashion, for the first free member of the group. It then routes the call to that free member. There can be six of these hunt groups.

**Incoming Trunk Groups**
Depending on what type of call it is, an incoming call is put into one of three possible groups which appear in the console display as LDN 1, 2, or 3. One of your trunk groups could consist of numbers used by the general public, another for trunks connected to another of your company's locations. You may have instructions to answer the two differently.

**Music-on-Hold**
This is music (usually from a tape recorder or radio) that the system plays to external callers while being held while you attempt to connect them. The music reassures them that the connection to the system has not been broken.

**Outgoing Trunk Group**
This is a collection of trunks used for making outside calls.

**Outside, or External Line**
This is a line that connects your system to the local telephone exchange, and therefore to the public telephone network.

**PABX (Private Automatic Branch Exchange)**
This is a telephone switching system for private use by a company or organization.

**Pickup Group**
If the extensions of a department are in a pickup group and one of them rings, someone else can answer the call by dialing the pickup code.

Reference 5-9
GLOSSARY

Recall
A call which returns to the console after being transferred to an unanswered extension is called a recall. The length of time between releasing a call and having it recall is determined by your company at installation.

Ring Group
This is a group of extensions that all ring together when anyone dials the access code for the group. As soon as one of the extensions answers, the others stop ringing and the conversation cannot be heard on the other telephones in the group. Each extension user can still be rung individually by dialing the extension number as usual. A typical application for a ring group is in a sales order or service department.

Software
The routines, programs, and instructions required to run the system are known as its software.

Tie Trunk
This type of line directly connects your system to another telephone system owned by your company or organization. You do not have to use the public telephone network to dial this location, and the general public do not usually have access to the line.

Trunk
Trunk is the general name for both Outside Lines and Tie Trunks. It is any line that connects your system to a local exchange or another private system (See Outside, or external line).

Trunk Equipment Number
Every trunk is given a unique number within your system so that it can be identified from other trunks that may all share the same outside telephone number. The trunk number appears in the display as, for example, "TRK-10".

Trunk Group Access Code
This is the code you dial to tell the system that you want to use an outside line. In most cases, the group of trunks connected to the public telephone network is reached with the access code "9".

5-10 Reference
Your company may wish...

to have you greet different callers in different ways. Fill in your company's preferences below:

<table>
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<tr>
<th>TYPE</th>
<th>GREETING</th>
</tr>
</thead>
<tbody>
<tr>
<td>LDN 1:</td>
<td></td>
</tr>
<tr>
<td>LDN 2:</td>
<td></td>
</tr>
<tr>
<td>LDN 3:</td>
<td></td>
</tr>
<tr>
<td>DIAL 0:</td>
<td></td>
</tr>
<tr>
<td>RECALLS:</td>
<td></td>
</tr>
</tbody>
</table>

Use this space...

to record any helpful hints that you may have to assist you and others in operating the console.
<table>
<thead>
<tr>
<th>Feature</th>
<th>Page References</th>
</tr>
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<td>2-6</td>
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<tr>
<td>Announcing calls</td>
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