

Appendix C: Accessories

Accessory	Gentner Part Number
Tabletop Omni Microphone	910-103-160 (with cable)
Tabletop Uni Microphone	910-103-161 (with cable)
Tabletop Omni Microphone	910-103-162 (black button)/910-103-163 (white button)
Tabletop Uni Microphone	910-103-164 (black button)/910-103-165 (white button)
Ceiling Microphone	910-103-166 (XLR)/910-103-167 (panel mount)
Delta Microphone	910-103-340
Acc. Kit, Side Trim	860-150-002
Ceiling Speaker	910-103-004 (4")/910-103-006 (pair, 6")
Wall Mount Speaker	910-103-010

Future Availability Accessories

Optional Select Control Panel	910-155-050 (see page 86 for more information)
Volume Control Panel	910-155-051 (see page 86 for more information)

Appendix D: Serial Port Commands

The PSR1212 accepts serial commands through the serial port. The commands are then channeled along the Expansion Bus network to all interconnected PSR1212 units. The following commands pertain only to the PSR1212.

RS232 serial port protocol is 9,600, 19,200, or 38,400 baud (default); 8 bits, 1 stop bit, no parity.

The structure of serial commands is as follows:

(indicating the start of a command line), device ID, command, then any additional options in the order that they appear in the command descriptions on the following pages.

Commands can be either UPPER CASE or lower case. Return values are always in upper case. In order for a command to be recognized by the serial port, the command must be terminated by a carriage return.

For example, a command to disable Automatic Gain Control for Mic 2 on a PSR1212 device "0" would have the command line: #40 AGC 2 0. In this command line, 4=PSR1212, 0=unit 0, AGC=command, 2=mic channel, 0=off state). If a command calls for a "null" value, leave a blank in the command line (for example "#40 AGC 2" would return the current AGC state of Mic 2 on device 40).

PSR1212 Serial Commands

Command	Function	Command	Function
AAMB*	Selects/reports Adapt Ambient setting	LMO*	Selects/reports Last Mic On mode
AMBLVL*	Selects/reports Ambient Level	LVL	Reports in, out, or processor level
AGC*	Enables/disables AGC	LVLREPORT	Selects/reports level status rept frequency
BAUD	Sets/reports RS232 port baud rate	LVLRRATE	Sets the level report rate for the unit
COMPRES*	Sets/reports comprsr on audio proc. ch.	MACRO*	Executes macro or reports last macro executed
COMPSEL*	Selects/reports comprsr activ. for procs.	MASTER*	Reports the mode of the unit
CGROUP*	Selects/reports comprsr grp setting	MDMODE	Enables/disables modem mode
CHAIRO*	Selects/reports chairman override settng	MINIT	Sets/reports modem initialization string of serial prt
DECAY*	Sets/reports decay rate	MLINE	Selects/reports coarse gain adj. on inputs 1-8
DELAY*	Sets/reports delay rate	MMAX*	Selects/reports max # of mics for each mixer
DELAYSEL	Selects/reports procsr channel delay	MPASS	Sets password setting when using modem mode
DFLTM	Sets/reports default meter	MTRX*	Selects/reports matrix routing of an input to output
DID	Selects/reports device ID	MTRXLVL*	Selects/reports matrix level at the cross point
EREF*	Selects output/reports Exp. Bus out. ref.	MUTE*	Sets/reports mute status
FILTER*	Selects/reports inpt/proc chnnl filter sett.	NOM*	Selects/reports the NOM setting on output chnnls
FILTSEL*	Enables/disables filters on inpt/proc chnl	OFFA*	Selects/reports Off Atten. mode for inputs 1-8
FLOW	Selects/reports flow control of serial port	PAA*	Selects/reports PA Adapt mode for specified mixer
FMP*	Sets/report First Mic Priority for a mixer	PP	Selects/reports phantom power setting
FPP	Sets/reports current passcode setting	PRESET*	Executes preset or reports last executed preset
GAIN*	Changes/reports gain for in, out, or proc	PRGSTRING	Sets/reports a programmed string
GATE	Reports gate status of channels 1-8	REFSEL*	Selects/reports outpts for mixer(s) for amp adapt
GHOLD*	Selects/reports hold time setting	SERECHO	Selects/reports the serial echo of the RS232 port
GMODE*	Selects/reports gating mode setting	SERMODE	Selects/reports the serial mode of the RS232 port
GOVER*	Selects/reports gating override setting	SIGGEN	Selects/reports signal generator activation
GRATIO*	Selects/reports gate ratio setting	STRING*	Sends the specified string out the serial port
GREPORT	Selects/reports gate status report freq.	TOUT	Selects/reports the title screen inactivity time-out
GRPSEL*	Sel/rprts input gating group assignments	UID	Reports unit ID
LABEL	Selects/reports label of chnnl specified	VER	Reports unit version
LFP	Sets/reports status of front panel access		

* Command available for macro use.

Error Codes

The following lists possible error messages and their explanations:

ERROR 1	The address is not valid/out of range or an invalid character.
ERROR 2	Could not extract a command from the string received.
ERROR 3	Serial overrun.
ERROR 4	Reserved.
ERROR 5	Invalid parameter.
ERROR 6	Unrecognized command.

Note: Commands can be upper or lower case. Also, extra spaces or tabs between arguments in text commands is allowed. For a command to be recognized by the serial port, the command must be terminated with a carriage return.

The command string will then be explained (where necessary), followed by the returned values and (where necessary) an example.

Conventions

This definition uses the following typographic conventions used in this document:

<u>Convention</u>	<u>Description</u>
<X>	Parameters enclosed in < > indicate and mandatory parameter.
[X]	Parameters enclosed in [] indicate and optional parameter.
1-8	Parameters separated by a - indicate a range between the values.
4,7,9	Parameters separated by a , indicate a list of available values.
MREF	Words in uppercase bold indicate command text.
DEVICE	Indicates the device type and device number on the Expansion Bus network. It is composed of a device type character and a device number. The device type for the PSR1212 is always 4 and the device number will always be 0 - 7.

Command Summary

Two formats of commands are available in the PSR1212: Text and Binary. All commands are supported in a binary format and are intended to be used with the software provided with the unit. Commands that are primarily used to control the unit are available in text format to support easy interfacing with an external control system such as those provided by Crestron or Panja.

The RS232 Serial Port Protocol is 9,600, 19,200, or 38,400 baud (default), 8 bits, 1 stop bit, no parity.

General Binary Command Form Description

The PSR1212 product accepts serial commands through the RS-232 serial port. The commands are then channeled along the Expansion Bus network to all interconnected PSR1212 products. The commands provide the same control as the LCD menu structure, plus many other additional controls.

The RS232 Serial Port Protocol is 9,600, 19,200, or 38,400 baud (default), 8 bits, 1 stop bit, no parity.

The PSR1212 accepts the commands outlined in the Command table. The binary command structure is defined in Hexadecimal. The structure of serial commands is as follows: <Header><Argument 1>[ARGUMENT N] – in binary format without characters or spaces.

Word 0 (32 bits)

<u>Command Type</u>	<u>Port</u>	<u>Flags</u>
0x40	16 bits	8 bits

Word 1 (32 bits)

<u>Type ID</u>	<u>Device ID</u>	<u>Command ID</u>
8 bits	8 bits	16 bits

Word 2 (32 bits)

<u>Word Count</u>	<u>Check Sum</u>
16 bits	16 bits

The port bits are arranged as follows:

Bit	Port
15 (msb)	Serial (RS-232)
14	Expansion Bus
13	Front Panel
12	Command Execution
11	Wall Unit
10	GPIO
9 – 1	Reserved (must be zero)
0 (lsb)	Reserved (must be zero)

The flag bits are arranged as follows:

Bit	Port
7 (msb)	Response
6	Query
5	Absolute
4 - 1	Reserved (must be zero)
0 (lsb)	Reserved (must be zero)

When the Response bit is set, the unit will return a response only to the port that generated the command unless that port is the serial port, in which case no response is sent at all.

When the Query bit is set, the unit will report the current state of the command. It will not execute the command.

When the Absolute bit is set, the value portion of the command is interpreted to be absolute to the current value. When cleared, the value portion of the command is interpreted to be a relative setting. For example, if the current value of the gain for a specific group and channel is -20dB and a gain command for that group and channel is sent as 5 with the absolute bit cleared, the gain would change to -15dB. If the same command were sent with the absolute bit set, the gain would change to 5dB.

The Type ID and Device ID have the following definitions:

Type ID	Unit type	Device ID Range
0x4	PSR1212	0x0 - 0x7, 0xff
0x3	AP400	0x0 - 0x7, 0xff
0x2	AP10	0x0 - 0xf, 0xff
0x1	AP800	0x0 - 0x7, 0xff

If the number 0xff is placed in the Type ID or Device ID fields, the command is to apply to all units or all devices respectively. For example a command with the Type ID of 4 and a Device ID of 0xff would mean that the command is to be applied to all PSR1212 units. A command with a Type ID of 0xff and a Device ID of 6 would mean that the command is to be applied to all #6 devices of all unit types.

The Command ID is a unique number identifying the command. These IDs are specified in the detail section for each command.

The word count is the number of 32-bit words that follow the header—that is the number of arguments.

The checksum calculation is the checksum of the entire command, both header and all arguments. The calculation formula is the unsigned sum of all 16-bit words in the command.

The ARGUMENT(s) are also 32-bit words. Their contents are command dependent and are specified in the detail section for each command. All of the fields in the argument for a binary command are required. There are no optional fields in a binary command.

As part of the argument, floating-point numbers are represented as a signed or unsigned integer with an implied decimal point before the next to last digit. For example, the number 1234 in the binary command field would be interpreted as 12.34. The field can be either 16 or 32 bits long, but always has this implied decimal point. Whether the number is to be interpreted as

signed or unsigned is indicated in the specific command definition. For example, a command to enable Phantom Power on Mic 1 (Input channel #1) on PSR1212 device "5" would have the following three words on the command line: (data shown in hex format)

Word 0: 40000000

Word 1: 04050025

Word 2: 00010000

General Text Command Form Description

The RS232 Serial Port Protocol is 9,600, 19,200, or 38,400 baud (default), 8 bits, 1 stop bit, no parity.

The PSR1212 accepts the commands outlined in the Serial Commands table. The structure of serial commands is as follows:

(indicates the start of a command line), Unit ID, Device ID, Command, then any additional options in the order that they appear in the command descriptions on the following pages. Commands can be either UPPER CASE or lower case. Return values are always in upper case. For a command to be recognized by the serial port, the command must be terminated by a carriage return.

For example, a command to disable mute for Mic 2 (input channel 2) on PSR1212 device "0" would have the command line: #40 MUTE 2 I 0. In this command line, 4=PSR1212, 0=unit 0, MUTE=command, 2=channel 2, I=input channel, 0=off state.

If a command calls for a "null" value, leave a blank in the command line (for example "#40 MUTE 2 I" would return the current mute state of Mic 2 on device 40).

Designations

The following tables define the relationship between alpha and numeric representations. Text commands use the alpha designation and binary commands use the numeric. In addition, different groups have different allowable channel ranges.

Table 1. Group and Channels

Group	Alpha	Numeric	Channel Range
Inputs	I	1	1-12
Outputs	O	2	1-12
Mic Input	M	3	1-8
Mixer	X	4	1-8
Processing	P	5	1-8
Ambient	A	6	1-8
Line Inputs	L	7	9-12
Expansion Bus	E	8	1-16
Unit	U	9	0
GPIO	G	10	0
Matrix	R	11	0
Wallplates	W	12	0
Presets	S	13	1-32
Macros	C	14	1-255
Unknown	N	0	N/A

If a channel has a numeric value of 0xff or an alpha value of "*", the command is to be applied to all channels. For example, a group value of 0x3 and a channel value of 0xff would mean that the command is to be applied to all channels of group 3 (mic inputs).

Table 2. Gating Channel Definitions

Alpha	Numeric
1	1
2	2
3	3
4	4
A	5
B	6
C	7
D	8

Table 3. Processing Channel Definitions

Alpha	Numeric
A	1
B	2
C	3
D	4
E	5
F	6
G	7
H	8

Table 4. Expansion Bus Audio Channel Definitions

Alpha	Numeric
O	1
P	2
Q	3
R	4
S	5
T	6
U	7
V	8
W	9
X	10
Y	11
Z	12

Table 5. Expansion Bus Reference Channel Definitions

Alpha	Numeric
1	13
2	14
3	15
4	16

Adaptive Ambient Mode

DESCRIPTION:

This command selects/reports the setting of adaptive ambient.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 1

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Mic Input in Group and Channels (Table 1, p. 93)	3 (Mic input)	0-2
Units	N/A	N/A	N/A

RETURN VALUES:

Unit always returns the last executed adaptive ambient selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> AAMB <Channel> [Value]

Where:

DEVICE:	See General Text command form Description
AAMB	Text Command
Channel	See Mic input in Group and Channels (Table 1, page 93)
Value	
0	adaptive ambient off
1	adaptive ambient on
2	adaptive ambient to toggle
Null	return the current mode

RETURN VALUES

The command will return the updated condition of adaptive ambient in the same format as the command.

If	Command Returns
Adaptive ambient is to be set on channel 1	DEVICE AAMB 1 1

Ambient Level Adjust

DESCRIPTION:

This command selects/reports the setting of the ambient level.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 3

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Signed Float
Range	See Mic Input in Group Channels (Table 1, p. 93)	3(Mic)	-80.0 to 0
Units	N/A	N/A	dB

RETURN VALUES:

Unit always returns the last executed ambient level on selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> AMBLVL <Channel> [Value]

Where:

DEVICE: See General Text command form Description

AMBLVL Text Command

Channel See Mic Input in Group and Channels(Table 1, page 93)

Value

-80.0 - -0	Ambient level in dB
Null	return the current level

RETURN VALUES

The command will return the updated condition of ambient level in the same format as the command.

If

The ambient level of channel 1 is -50 dB

Command Returns

DEVICE AMBLVL 1 -50

Automatic Gain Control

DESCRIPTION:

This command selects/reports the setting of automatic gain control.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 2

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Group and Channels (Table 1, page 93)	1, 3, 7 (I, M, L)	0 – 2
Unit	N/A	N/A	N/A

RETURN VALUES:

Unit always returns the last executed automatic gain control selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> AGC <Channel> <Group> [Value]

Where:

DEVICE:	See General Text command form Description
AGC	Text Command
Channel	Depends on Group. See Group and Channels (Table 1, page 93)
Group	I, M, L, See Group and Channels
Value	
0	automatic gain control off
1	automatic gain control on
2	automatic gain control to toggle
Null	return the current mode

RETURN VALUES

The command will return the updated condition of the automatic gain control in the same format as the command.

If	Command Returns
Automatic gain control is set to be on for input channel 1	DEVICE AGC 1 1

Baud Rate

DESCRIPTION:

This command selects/reports the baud rate of the serial port on the unit.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 4

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Value
Size	32 bits
Type	Unsigned integer
Range	9600, 19200, 38400
Unit	baud

RETURN VALUES:

Unit always returns the last executed baud rate selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> BAUD [Value]

Where:

DEVICE: See General Text command form Description

BAUD Text Command

Value

9600	Select baud rate of 9600
19200	Select baud rate of 19200
38400	Select baud rate of 38400
null	Return the current baud rate

RETURN VALUES

The command will return the updated condition of baud rate in the same format as the command.

If	Command Returns
Baud rate is selected to be 38400	DEVICE BAUD 38400
Baud rate of current unit is returned.	BAUD

Chairman Override Mode

DESCRIPTION:

This command selects/reports the setting of chairman override.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 6

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Mic Input in Group and Channels (Table 1, page 93)	3 (Mic input)	0 - 2

RETURN VALUES:

Unit always returns the last executed chairman override selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> CHAIRO <Channel> [Value]

Where:

DEVICE:	See General Text command form Description
CHAIRO	Text Command
Channel	See Mic Input in Group and Channels (Table 1, page 93)
Value	
0	select chairman override off
1	select chairman override on
2	select chairman override to toggle
Null	return the current mode

RETURN VALUES

The command will return the updated condition of chairman override in the same format as the command.

If

Chairman override is set to be on for channel 1

Command Returns

DEVICE CHAIRO 1 1

Compression Select

DESCRIPTION:

This command selects/reports the compressor activation of each assignable processing channel.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 8

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Processing in Group and Channels (Table 1, page 93)	5 (processing)	0 - 2

RETURN VALUES:

Unit always returns the last executed compressor selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> COMPSEL <Channel> [Value]

Where:

DEVICE: See General Text command form Description

COMPSEL Text Command

Channel See Processing in Group and Channels

Value

0 Parameter to disable the compression on specified channel

1 Parameter to enable the compression on specified channel

2 Parameter to toggle the compression on specified channel

Null Parameter to return the current state

RETURN VALUES

The command returns the current or updated compressor selection of the channel

If	Command Returns
Compressor selection for channel A is enabled	DEVICE COMPSEL A 1

Compressor Adjust

DESCRIPTION:

This command selects/reports the setting of the compressor on audio processing channels.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1><Argument 2>

COMMAND ID: 7

ARGUMENT SIZE: 3 words

ARGUMENT FORM:

Name:	Channel	Group	Threshold	Ratio	Attack	Release	Gain
Size	8 bits	8 bits	8 bits	8 bits	16 bits	16 bits	32 bits
Type	Unsigned intgr	Unsigned intgr	Signed intgr	Unsigned intgr	Unsigned Float	Unsgnd intgr	Unsgnd float
Range	See Processing in Group and Channels, p. 93	5 processing	-60 – 20	1 - 20 0.	0 – 100.0	0 - 2000	0 - 20
Unit	N/A	N/A	N/A	N/A	milliseconds	milliseconds	dB

RETURN VALUES:

Unit always returns the last executed compressor adjustment in the same form as above.

TEXT FORM DETAILS

COMMAND FORM <DEVICE>COMPRESS<Channel> [Threshold Ratio Attack Release Gain]

Where:

DEVICE: See General Text command form Description

COMPRES Text Command

Channel See Processing in Group and Channels (Table 1, page 93)

Threshold

30 to 20 Select the threshold value

Null Return current compression

Ratio

1-20 Select the ratio between 1 and 20

Attack

0 to 100 Select the attack time between 0ms and 100ms in 0.5ms intervals

Release

100 to 2000 Select the release time between 100ms and 2000ms in 5ms intervals

Gain

0 to 20 Select the post gain between 0 and 20dB

RETURN VALUES

The command will return the updated condition of the compressor in the same format as the command.

If

The compressor on channel A is set to have a threshold of 5, ratio of 5, attack time of 20ms, a release time of 200ms, and a gain of 0

Command Returns

DEVICE COMPRESS A 5 5 20.00 200 0.00

Compressor Group Select

DESCRIPTION:

This command selects/reports the setting of the compressor group on each assignable processing channel.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 5

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Processing in Group and Channels (Table 1, page 93)	(processing)	0 - 4

RETURN VALUES:

Unit always returns the last executed compressor group selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> CGROUP <Channel> <Value>

Where:

DEVICE: See General Text command form Description

CGROUP Text Command

Channel See Processing in Group and Channels (Table 1, page 93)

Value

Value =0	select compressor group disabled
Value =1	select compressor group 1
Value =2	select compressor group 2
Value =3	select compressor group 3
Value =4	select compressor group 4
Value =Null	return the current mode

RETURN VALUES

The command will return the updated condition of compressor group in the same format as the command.

If

Assignable processing channel A
is desired to be in the compressor group 2

Command Returns

DEVICE CGROUP A 2

Decay Adjust

DESCRIPTION:

This command selects/reports the setting of the decay rate for a specified input.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 9

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Mic Input in Group and Channels (Table 1, page 93)	3 (Mic input)	1 – 3

RETURN VALUES:

Unit always returns the last executed decay rate selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> DECAY <Channel> [Value]

Where:

DEVICE:	See General Text command form Description
DECAY	Text Command
Channel	See Mic Input in Group and Channels (Table 1, page 93)
Value	
1	set decay rate to slow
2	set decay rate to medium
3	set decay rate to fast
Null	return the current decay rate

RETURN VALUES

The command will return the updated condition of decay rate in the same format as the command.

If	Command Returns
The decay rate of channel 1 is slow	DEVICE DECAY 1 1

Delay Select

DESCRIPTION:

This command selects/reports the delay activation of each assignable processing channel.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 69

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Processing in Group 5 and Channels (Table 1, page 93)	(processing)	0 - 2

RETURN VALUES:

Unit always returns the last executed delay selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: [DEVICE] DELAYSEL <Channel> [Value]

Where:

DEVICE: See General Text command form Description

DELAYSEL Text Command

Channel See Processing in Group and Channels (Table 1, page 93)

Value

0	Parameter to disable the delay on specified channel
1	Parameter to enable the delay on specified channel
2	Parameter to toggle the delay on specified channel
Null	Parameter to return the current state

RETURN VALUES

The command returns the current or updated delay selection of the channel

If	Command Returns
Delay selection for channel A is enabled	DEVICE DELAYSEL A 1

Default Meter

DESCRIPTION:

This command selects/reports the setting of the default meter.

The position values are:

Alpha	Numeric	Level position
I	1	input level
A	2	after gain adjustment, but before filter
N	3	after filter but before gate (non-gated level)
G	4	after gate (gated level)

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 11

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Position	Group	Value
Size	8 bits	8 bits	16 bits		
Type	Unsigned integer	Unsigned integer	Unsigned integer		
Range	See Group and Chnnls	1, 2, 3, 7 (I, O, M, L)	1 (ch 1-8) (ch 9-12)		1-4
			2		1-2
			3		1-4
			7		1-12

RETURN VALUES:

Unit always returns the last executed default meter selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> DFLTM [Channel] [Group Position]

Where:

DEVICE:	See General Text command form Description
DFLTM	Text Command
Channel	See Group and Channels (Table 1, page 93)
Group	'I', 'O', 'M', 'L'. See Group and Channels (Table 1, page 93)
Position	Position in the channel of the meter. See the tables above.

RETURN VALUES

The command will return the updated condition of the default meter in the same format as the command.

If	Command Returns
Default meter is selected for input channel 1 position 2	DEVICE DFLTM 1 I A

Delay Adjust

DESCRIPTION:

This command selects/reports the setting of delay adjust on the assignable processing channels.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 10

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned Float
Range	See Processing in Group and Channels (Table 1, page 93)	5 (processing)	0.0 – 500.01
Unit`	N/A	N/A	milliseconds

RETURN VALUES:

Unit always returns the last executed delay selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> DELAY <Channel> [Value]

Where:

DEVICE: See General Text command form Description

DELAY Text Command

Channel See Processing in Group and Channels (Table 1, page 93)

Value

0.00 to 500.01

delay in milliseconds

Null

return the current delay in milliseconds

RETURN VALUES

The command will return the updated condition of the delay in the same format as the command.

If

Command Returns

Delay is set to be 140ms on audio processing channel A
DEVICE DELAY A 140

Device ID**DESCRIPTION:**

This command selects/reports the device ID.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 12

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Value
Size	32 bits
Type	Unsigned integer
Range	0 - 7

RETURN VALUES:

Unit always returns the last executed device ID selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> DID [Value]

Where:

DEVICE: See General Text command form Description

DID Text Command

Value

0-7 device ID

Null return the current device ID

RETURN VALUES

The command will return the unit ID in the same format as the command.

If **Command Returns**

The device ID is 0 DEVICE DID 0

Expansion Bus Reference

DESCRIPTION:

This command selects an output or reports which output is the Expansion Bus reference.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 24

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	13-16	8 (E)	0-12

RETURN VALUES:

Unit always returns in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> EREF <Channel> [Value]

Where:

DEVICE: See General Text command form Description

EREF Text Command

Channel 1-4; (see Expansion Bus Reference Channels in Group and Channels, Table 1, page 93)

Value Outputs 1 –12; 0 for none

RETURN VALUES

The command will return the updated in the same format as the command.

If	Command Returns
Expansion Bus reference 1 is set to be output 1	DEVICE EREF 1 1

Filter

DESCRIPTION:

This command selects/reports the setting of filters on input and audio processing channels.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1><Argument 2>[Argument 3]

COMMAND ID: 14

ARGUMENT SIZE: 3 words

ARGUMENT FORM:

Name:	Channel	Group	Node	Type
Size	8 bits	8 bits	8 bits	8 bits
Type	Unsigned intgr	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Grp and Chnnls	3, 5 (Mic Processing)	Grp 3: 1-4 Grp 5: 1-15	1-10

Name:	Frequency	Gain / Slope		Bandwidth/SubType	
Size	32 bits	16 bits		16 bits	
Type	Unsigned Float	Float		Unsigned Float	
Range/value	Types 1-3, 6-10 20-20,000	Type	Range	Type	Range
	Types 4-5 2,000-3,000	1-3	N/A	1-3	N/A
		4-5	-15 to +15 dB	4-5	N/A
		6	-15 to +15 dB	6	.05 to 3.0
		7	N/A	7	N/A
		8-9	12, 18, 24 dB/Octave	8-10	2=low pass
		10	12, 18, 24 dB/Octave		3=high pass
Units	Hz	dB/dB per octave		octave	

RETURN VALUES:

Unit always returns the last executed input filter selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM:

<DEVICE> FILTER <Channel> <Group> <Node> [Type Frequency Gain Bandwidth]

Where:

DEVICE:	See General Text command form Description
FILTER	Text Command
Channel	See Group and Channels (Table 1, page 93)
Groups	'M', 'P' See Group and Channels (Table 1, page 93)
Node	
1-4	node of a Mic input filter
1-15	node of an audio processing filter

(filter serial command descriptions on next page)

Type

0	None
1	select All Pass
2	select Low Pass
3	select High Pass
4	select Low Shelving
5	select High Shelving
6	select Parametric Equalizer
7	select CD Horn
8	Bessel Crossover
9	Butterworth Crossover
10	Linkwitz-Riley Crossover
11	Notch
Null	return the current mode

Frequency

Frequency = 20 – 20000 Parameter to select the corner frequency (Hz) of the filter

Gain

Type	Range
1 - 3	N/A
4-5	-15 - +15 dB
6	-80 - +15 dB
7	N/A
8-9	12, 18, 24dB/octave
10	12, 24dB/octave

Bandwidth

Type	Range
1 – 3	N/A
4 - 5	N/A
6	.05 – 3.00
7	N/A
8-10	2 = low pass 3 = high pass

RETURN VALUES

The command will return the updated condition of the filter in the same format as the command.

If

the filter of input channel 1 node 1
is not known and it is set as a high pass filter at 200Hz.

Command Returns

DEVICE FILTER 1 M 1 2 200

<DEVICE> FILTER 1 M 1

The filter of audio processing channel B node 2 is set
for low shelving at 3K with a gain of -10dB

DEVICE FILTER B P 2 4 3000 -10

The filter of input channel 3 node 3 is set to be a PEQ
with center frequency of 5K BW of 1 octave and gain
of -20dB

DEVICE FILTER 3 M 3 6 1 5000 -20

The filter of audio processing channel 2 node 2 is a CD horn
with center frequency of 4K

DEVICE FILTER B P 2 7 4000

The filter of all audio processing channels node 3 is a high
pass Linkwitz-Riley crossover with corner frequency of
12K and slope of 24dB/octave

DEVICE FILTER * P 3 10 12000 24 3

Filter Select

DESCRIPTION:

This command turns on and off the filters on input and audio processing channels.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 68

ARGUMENT SIZE: 1 words

ARGUMENT FORM:

Name:	Channel	Group	Node	Type
Size	8 bits	8 bits	8 bits	8 bits
Type	Unsigned intgr	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Group and Channels (Table 1, page 93)	3, 5 (Mic Processing)	Grp 3: 1-4 Grp. 5: 1-15 0xFF for all	0 for Off 1 for On 2 to toggle

RETURN VALUES:

Unit always returns the last executed filter selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM:

<DEVICE> FILTSEL <Channel> <Group> <Node><On/Off>

Where:

DEVICE: See General Text command form Description

FILTSEL Text Command

Channel See Group and Channels (Table 1, page 93)

Group 'M', 'P' See Group and Channels (Table 1, page 93)

Node

1-4, * node of a Mic input filter (* for all)

1-15, * node of an audio processing filter (* for all)

Type

0,1,2 0 for Off, 1 for On, 2 to Toggle

RETURN VALUES

The command will return the updated condition of the filter in the same format as the command.

First Mic Priority Mode

DESCRIPTION:

This command selects/reports first Mic priority mode for a mixer. There can only be one selection per mixer.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 16

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Mixer in Group and Channels (Table 1, page 93)	4 (mixer)	0 - 2

RETURN VALUES:

Unit always returns the last executed first Mic priority selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> FMP <Channel> [Value]

Where:

DEVICE:	See General Text command form Description
FMP	Text Command
Channel	See Mixer in Group and Channels (Table 1, page 93)
Value	
0	select first Mic priority mode to be disabled
1	select first Mic priority mode to be enabled
2	select first Mic priority mode to toggle
Null	return the current mode

RETURN VALUES

The command will return the updated condition of the first Mic priority mode in the same format as the command.

If	Command Returns
First Mic priority mode is enabled for mixer A	DEVICE FMP A 1
First Mic priority mode is disabled for mixer A	DEVICE FMP A 0

Flow Control

DESCRIPTION:

This command selects/reports the flow control of the serial port on the unit. Hardware flow control is implemented using DTR and DSR.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 15

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	<Value>
Size	32 bits
Type	Unsigned integer
Range/value	0 - 2

RETURN VALUES:

Unit always returns the last executed flow control selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM <DEVICE> FLOW [Value]

Where:

DEVICE: See General Text command form Description

FLOW Text Command

Value

0	disable flow control
1	enable hardware flow control
2	enable Xon/Xoff flow control
Null	return the current flow control setting

RETURN VALUES

The command will return the updated condition of flow control in the same format as the command.

If	Command Returns
Flow control is disabled	DEVICE FLOW 0
Flow control is set to hardware (DTR/DSR)	DEVICE FLOW 1

Front Panel Passcode

DESCRIPTION:

This command sets and reports the current passcode setting for the unit. Each character in the password represents a button on the front panel. See button assignment table below. When the user is requested to unlock the front panel, they must press the buttons in the sequence of the stored password.

BUTTON ASSIGNMENT TABLE:

Value Button represented

1	Up arrow button
2	Enter button
3	ESC button
4	Down arrow button
5	Meter button

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1><Argument 2>

COMMAND ID: 17

ARGUMENT SIZE: 2 words

ARGUMENT FORM:

Name	Char1	Char2	Char3	Char4	Char5	Reserved
Size			— — — — 8 bits each	— — — —		24
Type			— — — Unsigned Integer	— — — —		Unsgnd Int
Range			— — — — 1-4	— — — —		0

RETURN VALUES:

Unit always returns new value of passcode in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> FPP <char1> <char2> <char3> <char4> <char5>

Where:

DEVICE: See General Text command form Description

FPP Text Command

char1 - char5

1 – 4 See button assignment table above for description

CLEAR Parameters to clear the passcode

Null parameter to return current passcode

RETURN VALUES

The command returns the current or updated condition of the front panel passcode

If	Command Returns
Front panel passcode is set to UP, UP, DOWN, DOWN, ENTER	DEVICE FPP 11442

Gain Adjustment

DESCRIPTION:

This command changes or reports back the input gain for an input, output or assignable processing block.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 18

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Signed Float
Range	See Group and Chnlns (Table 1, p. 93)	1, 2, 3, 5, 7 (I, O, M, P, L)	-99.9 to 99.9
Unit	N/A	N/A	dB

RETURN VALUES:

Unit always returns the value of gain adjustment command in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> GAIN <Channel> <Group> [Value A/R]

Where:

DEVICE: See General Text command form Description

GAIN Text Command

Channel See Group and Channels (Table 1, page 93)

Group 'I', 'O', 'M', 'P', 'L' See Group and Channels (Table 1, page 93)

Value

X=-99 to 99 ** Parameter to set the gain

X= Null Parameter to return the current gain

A/R

X=R parameter to indicate relative

X=A parameter to set the gain to an absolute value

X= Null parameter will default to R (relative)

** Note: Values indicate entry range only. Actual internal range of the gain stage is from -65 to 20. Absolute values will be limited to the internal gain range and values below -65 will mute the channel.

RETURN VALUES

The command returns the current or updated condition of the gain adjustment command.

If

The gain is to be lowered by 3dB on input channel 2 and the actual gain is at -3dB

The gain is to be set to 12dB on output channel 4

Command Returns

DEVICE GAIN 2 I -6 R

DEVICE GAIN 4 O 12 A

Gate Hold Time Adjust

DESCRIPTION:

This command selects/reports the setting of hold time.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 20

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned Float
Range	See Mic input in Group and Channels (Table 1, page 93)	3 (Mic input)	.10 to 8.00

RETURN VALUES:

Unit always returns the last executed hold time selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> GHOLD <Channel> [Value]

Where:

DEVICE:	See General Text command form Description	
GHOLD	Text Command	
Channel	See Mic input in Group and Channels (Table 1, page 93)	
Value	0.10-8.00	select hold time of 0.10 to 8.00 seconds
	Null	return the current hold time

RETURN VALUES

The command will return the updated condition of the hold time in the same format as the command.

If	Command Returns
Hold time is set for 1 second on channel 1	DEVICE GHOLD 1 1.00

Gate Status

DESCRIPTION:

This command reports the gate status of channels 1-8. This command is read only.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 19

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name: <Value>

Size 32 bits

Type Unsigned integer

Range bits 7 – 0 represent gate on status for Mic inputs 8 – 1 respectively

<u>Bit 7</u>	<u>Bit 6</u>	<u>Bit 5</u>	<u>Bit 4</u>	<u>Bit 3</u>
Mic in 8	Mic in 7	Mic in 6	Mic in 5	Mic in 4
<u>Bit 2</u>	<u>Bit 1</u>	<u>Bit 0</u>		
Mic in 3	Mic in 2	Mic in 1		

RETURN VALUES:

Unit always returns the last executed gate status selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM <DEVICE> GATE

Where:

DEVICE: See General Text command form Description

GATE Text Command

RETURN VALUES

The command will return the updated condition of the signal presence status of line inputs 9-12 and gate status of channels 1-8. Represented as a hex number.

If	Command Returns
Channels 1 and 2 are gated on	DEVICE GATE 03
Channels 1 and 3 are gated on	DEVICE GATE 05
Channels 1, 4 and 7 are gated on	DEVICE GATE 49

Gate Ratio Adjust

DESCRIPTION:

This command selects/reports the setting of the gate ratio.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 23

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Mic Input in Group and Channels (Table 1, page 93)	3 (Mic input)	0-50
Unit	N/A	N/A	dB

RETURN VALUES:

Unit always returns the last executed gate ratio selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> GRATIO <Channel> [Value]

Where:

DEVICE:	See General Text command form Description
GRATIO	Text Command
Channel	See Mic Input in Group and Channels (Table 1, page 93)
Value	
0-50	Parameter to set gate ratio (dB)
Null	Parameter to return the current gate ratio (dB)

RETURN VALUES

The command will return the updated condition of the gate ratio in the same format as the command.

If

The gate ratio of channel 1 is 15dB

Command Returns

DEVICE GRATIO 1 15

Gate Reporting

DESCRIPTION:

This command selects/reports the gate status.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 25

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Mode
Size	32 bits
Type	Unsigned integer
Range	0-2
Unit	0 = Off 1 = On 2 = Toggle

RETURN VALUES:

Unit always returns the current gate status reporting frequency in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> GREPORT <Mode>

Where:

DEVICE:	See General Text command form Description
GREPORT	Text Command
Mode	0 = Off, 1 = On, 2 = Toggle

RETURN VALUES

The command will return the updated condition of the gate status reporting in the same format as the command.

If	Command Returns
The gate status is reported	DEVICE GREPORT 1

Gating Group

DESCRIPTION:

This command selects/reports which gating group each input is assigned. There can only be one selection per input.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 35

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Mic in Group and Channels (Table 1, page 93)	3 (Mic)	1 – 8 See Mixer in Group and Channels

RETURN VALUES:

Unit always returns the last executed gating group selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> GRPSEL <Channel> [Value]

Where:

DEVICE:	See General Text command form Description
GRPSEL	Text Command
Channel	See Mic in Group and Channels (Table 1, page 93)
Value	See Mixer in Group and Channels (Table 1, page 93). If the value is null, the current state is returned.

RETURN VALUES

The command returns the current or updated mixer selection of the channel

If	Command Returns
Mixer selection for channel 1 is A	DEVICE GRPSEL 1 A

Gating Mode

DESCRIPTION:

This command selects/reports the setting of gating mode.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 21

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name	Channel>	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Mic input in Group and Channels (Table 1, page 93)	3 (Mic input)	.10 to 8.00

RETURN VALUES:

Unit always returns the last executed gating mode selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> GMODE <Channel> [Value]

Where:

DEVICE: See General Text command form Description

GMODE Text Command

Channel See Mic Input in Group and Channels (Table 1, page 93)

Value

- 1 select gating mode to auto
- 2 select gating mode to manual on
- 3 select gating mode to manual off
- Null return the current mode

RETURN VALUES

The command will return the updated condition of the gating mode in the same format as the command.

If

Gating mode is set for auto on channel 1

Command Returns

DEVICE GMODE 1 1

Gating Override

DESCRIPTION:

This command selects/reports the setting of gating override.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 22

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Mic Input in Group and Channel (Table 1, page 93)	3 (Mic input)	0-2

RETURN VALUES:

Unit always returns the last executed gating override selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> GOVER <Channel> [Value]

Where:

DEVICE:	See General Text command form Description
GOVER	Text Command
Channel	See Mic Input in Group and Channels (Table 1, page 93)
Value	
0	select gating override to off (does contribute)
1	select gating override to on (does not contribute)
2	toggle gating override
Null	return the current mode

RETURN VALUES

The command will return the updated condition of the gating mode in the same format as the command.

If	Command Returns
Gating override is set for on for channel 1	DEVICE GOVER 1 1

Label

DESCRIPTION:

This selects/reports the label of the specific channel identified in the unit.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1><Argument 2>...[Argument n]

COMMAND ID: 26

ARGUMENT SIZE: 4 words

ARGUMENT FORM:

Name:	Channel	Group	Input/Output to Matrix	
Size	8 bits	8 bits	16	
Type	Unsigned integer	Unsigned integer	Unsigned integer	
Range	See Grps and Chnls (Table 1, p. 93)	1, 2, 3, 4, 5, 7, 8, 9, 14, 15 (I, O, M, X, P, L, E, U, S, C)	Group	Value
			1-7, 9-15	0
			10	0 for Input 1 for Output

Name	Char 1 – Char 4	Char 5 – Char 8	Char 9 – Char 12
Size	8 bits each	8 bits each	8 bits each
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	0 – 255	0 - 255	0 - 255

RETURN VALUES:

Unit always returns the label command in the same form as above.

TEXT FORM DETAILS

COMMAND FORM:

<DEVICE> LABEL <Channel><Group>[In/Out String]

Where:

DEVICE:	See General Text command form Description
LABEL	Text Command
Channel	See Group and Channels (Table 1, page 93)
Group	'I', 'O', 'M', 'X', 'P', 'L', 'E', 'U', 'S', 'C'
In/Out	For Expansion Bus groups specifies input to the matrix or output from matrix. For other groups this parameter is not used
String	String of up to 20 characters representing the label text. NULL to query and CLEAR to clear the label

RETURN VALUES

The command will return the label in the same format as the command.

If

The label for input channel 3 is "Gentner Mic"

The label for the unit is Room 1

Command Returns

DEVICE LABEL 3 I Gentner Mic

DEVICE LABEL Ø U Room 1

Last Mic On Mode

DESCRIPTION:

This command selects/reports last Mic on mode for the specified gating group. There can be only one selection per gating group.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 28

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Mixer in Group and Channels (Table 1, page 93)	4 (mixer)	0 – 8, 0x00ff

RETURN VALUES:

Unit always returns the last executed last Mic on selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> LMO <Channel> [Value]

Where:

DEVICE: See General Text command form Description

LMO Text Command

Channel See Mixer in Group and Channels (Table 1, page 93)

Value

Value =0 Parameter to select last Mic mode to be disabled

Value =1-8 Parameter to select last Mic mode to be enabled on a specified channel between 1 – 8

Value =* Parameter to select last Mic mode to be last Mic

Value =Null Parameter to return the current mode

RETURN VALUES

The command will return the updated condition of the last Mic mode in the same format as the command.

If

Last Mic mode is enabled for mixer A as last Mic

Last Mic mode is disabled for mixer A

Command Returns

DEVICE LMO A *

DEVICE LMO A 0

Level

DESCRIPTION:

This command reports the level of an input, output, processing block or ambient level. This command is read only. The position values are:

Alpha	Numeric	Level position
I	1	input level (mic input); input meter (processor inputs)
A	2	after gain adjustment, before filter (mic inputs); post gain (proc. inputs)
N	3	after filter but before gate, non-gated level (mic inputs); post proc. (proc. inputs)
G	4	after gate, gated level (mic inputs); post gate (processor inputs)

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1><Argument 2>

COMMAND ID: 29

ARGUMENT SIZE: 2 words

ARGUMENT FORM:

Name:	Channel	Group	Position	<Value>
Size	8 bits	8 bits	16 bits	32 bits
Type	Unsigned integer	Unsgnd intgr	Unsigned integer	Float
Range	See Grp and Chnnls (Table 1, page 93)	1, 2, 3, 5, 6, 7, (I, O, M, P, A, L)	Group 1 (Ch 1-8) (Ch 9-16) 2, 7 3 5, 6	Value 1-4 1-2 1-2 1-4 0
				-60 to +20 measured in dB

RETURN VALUES:

Unit always returns the last executed LVL selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> LVL <Channel> <Group> [Position Value]

Where:

<DEVICE>:	See General Text command form Description
LVL	Text Command
channel	See Group and Channels (Table 1, page 93)
Group	'I', 'O', 'M', 'P', 'A', 'L'
Position	Position in audio channel. See position table above.
Value	Returned level value measured in dB

RETURN VALUES

The command will return the updated level of the selection in the same format as the command was issued. All return gain values are absolute and reflect the actual internal gain.

If	Command Returns
The level of Input 9 is desired	DEVICE LVL 9 I -10
The level of the non-gated Input 3 is desired	DEVICE LVL 3 N -6

Level Report

DESCRIPTION:

This command selects level status reporting.

The position values are:

Alpha	Numeric	Level position
I	1	input level
A	2	after filter but before gate (non-gated level)
N	3	after filter but before gate, non-gated level
G	4	after gate (gated level)

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1><Argument 2>

COMMAND ID: 30

ARGUMENT SIZE: 2 words

ARGUMENT FORM:

Name:	Channel	Group	Position	Mode
Size	8 bits	8 bits	16 bits	32 bits
Type	Unsigned integer	Unsigned intgr	Unsigned intgr	Ungnd integer
Range	See Grp and Channels (Table 1, page 93)	1, 2, 3, 5, 6, 7, (I, O, M, P, A, L)	Group 1 (Ch1-8) (Ch 9-16) 2-7 3 5, 6	Value 0-2 1-4 1-2 1-4 0

RETURN VALUES:

Unit always returns the current level reporting frequency in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> LVLREPORT <Channel><Group> [Position Mode]

Where:

DEVICE:	See General Text command form Description
LVLREPORT	Text Command
Channel	See Group and Channels (Table 1, page 93)
Group	'I', 'O', 'M', 'P', 'A', 'L'
Position	Position in audio channel. See position table above.
Mode	
0	Delete level from list of levels to be reported
1	Add specified level to list of levels to be reported
2	Toggle

RETURN VALUES

The command will return the updated condition of the level reporting in the same format as the command.

If

The level of the non gated Input 3 is to be reported

Command Returns

DEVICE LVLREPORT 3 I N 1

Level Report Rate

DESCRIPTION:

Sets the level report rate for the unit and activates/deactivates level repeating.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 60

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name	Value
Size	32 bits
Type	Unsigned Int
Range	0 to stop reporting but leave statuses set, 1 to stop reporting and clear all report statuses, 50 – 1000ms (one meter (IvI) repeated every 50-100ms)

RETURN VALUES:

Unit will return the updated state of the last selection in the same form as the command.

TEXT FORM DETAILS

COMMAND FORM DEVICE LVLRRATE [Value]

Where:

DEVICE: See General Text command form Description

LVLRRATE Text Command

Value 0 to stop reporting but leave statuses set, 1 to stop reporting and clear all report statuses, 50 – 1000ms

RETURN VALUES

Unit will return the updated state of the last selection in the same form as the command.

Example

#40 Lvlrrate 100 repeats a meter every 100ms

Lock Front Panel

DESCRIPTION:

This command sets and reports the status of front panel access for the unit. When the unit is locked, access is not allowed to the unit until the unit is unlocked either by a serial command or by entering in the front panel password.

ARGUMENT TABLE:

Value	Action
0	Unlock Panel
1	Lock panel
2	Toggle value
3	Lock when timeout

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 27

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	<Value>
Size	32 bits
Type	Unsigned integer
Range/value	0 - 3

RETURN VALUES:

Unit always returns the current state in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> LFP [Value]

Where:

DEVICE: See General Text command form Description

LFP Text Command

Value:

Value = 0-3 See argument table for description

Value = Null Parameter to return current passcode

RETURN VALUES

The command returns the current or updated condition of the Front panel lock

If	Command Returns
Front panel is unlocked	DEVICE LFP 0

Macro Execution/Reporting

DESCRIPTION:

This command executes a specified macro or reports the last macro executed. There are 205 macros that can be specified.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 31

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Value
Size	32 bits
Type	Unsigned integer
Range/value	1 – 255

RETURN VALUES:

Unit always returns the last executed macro in the same form as above.

TEXT FORM DETAILS

COMMAND FORM <DEVICE> MACRO <Value>

Where:

DEVICE: See General Text command form Description

MACRO Text Command

<Value>

1-205 Value to execute user macros

RETURN VALUES

The command will return the macro that was executed after completion of the macro.

NOTE: The response indicates execution of the macro, but does not indicate that each command within the macro was executed.

Master

DESCRIPTION:

This command reports the mode of the unit. The mode can be Master or Slave.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 32

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name: <Value>

Size 32 bits

Type Unsigned integer

Range/value 1, 2

RETURN VALUES:

Unit always returns the master command in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> MASTER <Value>

Where:

DEVICE: See General Text command form Description

MASTER Text Command

Value

1 select master unit

2 select slave unit

Null return the current mode of the unit

RETURN VALUES

The command will return the mode of the unit in the same format as the command.

If **Command Returns**

Selection is for a single unit DEVICE MASTER 1

Matrix

DESCRIPTION:

This command selects/reports the matrix routing of an input to an output. The values allowed are:

Alpha	Numeric	Description
0	0	Cross point disabled
1	1	Cross point enabled
2	2	Cross point toggle
N	3	Non- Gated (Mic ch. 1 –8 only)
G	4	Gated (Mic. ch. 1 – 8 only)

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1><Argument 2>

COMMAND ID: 39

ARGUMENT SIZE: 2 words

ARGUMENT FORM:

Name:	SrcChannel	SrcGroup	Dest Channel	Dest Group	Value
Size	8 bits	8 bits	8 bits	8 bits	32 bits
Type	Unsigned integer	Unsigned intgr	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Grp and Chnnls (Table 1, p. 93)	1, 3, 5, 7, 8 (I, M, P, L, E)	See Grp and Chnnls (Table 1, p. 93)	2, 5, 8 (O, P, E)	See Above Table

RETURN VALUES:

Unit always returns the last executed MTRX selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM:

<DEVICE> MTRX < SrcChannel > < SrcGroup > < Dest Channel > <Dest Group> [Value]

Where:

DEVICE:	See General Text command form Description
MTRX	Text Command
SrcChannel	See Group and Channels (Table 1, page 93)
SrcGroup	'I', 'M', 'P', 'L', 'E' See Group and Channels (Table 1, page 93)
Dest Channel	See Group and Channels (Table 1, page 93)
SrcChannel	'O', 'P', 'E' See Group and Channels (Table 1, page 93)
Value	See table at beginning of command. A value of null returns the current mode.

RETURN VALUES

The command will return the updated condition of the MTRX information in the same format as the command.

If	Command Returns
The cross point of Input 9 is selected to be present on Output 4	DEVICE MTRX 9 I 4 O 1
The gated audio of Input 1 is selected to be present on Expansion Bus W	DEVICE MTRX 1 I W E G

Matrix Attenuation Adjust

DESCRIPTION:

This command selects/reports the matrix level at the cross point.

** Note: Values indicate entry range only. Actual internal range of the gain stage is from -60 to 0 and absolute values will be limited to the internal gain range. Absolute levels below -60 will mute the gain stage.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1><Argument 2>

COMMAND ID: 40

ARGUMENT SIZE: 2 words

ARGUMENT FORM:

Name:	SrcChannel	SrcGroup	Dest Channel	Dest Group	Value
Size	8 bits	8 bits	8 bits	8 bits	32 bits
Type	Unsigned integer	Unsigned intgr	Unsigned integer	Unsgnd intgr	Signed Float
Range	See Group and Chnnls (Table 1, page 93)	1, 3, 5, 7, 8 (I, M, P, L, E)	See Grp and Chnnls (Table 1, page 93)	2, 5, 8 (O, P, E)	-99 to 0 use absolute/ relative flag in header

RETURN VALUES:

Unit always returns the last executed MTRXLVL selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM:

<DEVICE> MTRXLVL < SrcChannel > < SrcGroup > < Dest Channel > <Dest Group> [Value A/R]

Where:

DEVICE:	See General Text command form Description
MTRXLVL	Text Command
SrcChannel	See Group and Channels (Table 1, page 93)
SrcGroup	'I', 'M', 'P', 'L', 'E' See Group and Channels (Table 1, page 93)
Dest Channel	See Group and Channels (Table 1, page 93)
SrcChannel	'O', 'P', 'E' See Group and Channels (Table 1, page 93)
Value	Selects the amount of attenuation at cross point in dB. If null command returns current attenuation
A/R	
X=R	parameter to indicate relative
X=A	parameter to set the gain to an absolute value
X= Null	parameter will default to R (relative)

RETURN VALUES

The command will return the updated level of the matrix for the selected source and destination in the same format as the command was issued. All return gain values are absolute and reflect the actual internal gain in the matrix.

If

Input 9 and Output 9 cross point level is desired (level was previously set to -10dB)

Input 3 and Expansion Bus W cross point level is desired to be -6dB

Command Returns

DEVICE MTRX 9 I 9 O -10

DEVICE MTRX 3 I W E -6

Maximum Number of Microphones

DESCRIPTION:

This command selects/reports the maximum number of microphones for each mixer. There can only be one selection per mixer.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 37

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Mixer in Group and Channels (Table 1, page 93)	4 (mixer)	0 - 8

RETURN VALUES:

Unit always returns the last executed maximum number of microphones selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> MMAX <Channel>[Value]

Where:

DEVICE: See General Text command form Description

MMAX Text Command

Channel See Mixer in Group and Channels (Table 1, page 93)

Value

0 select maximum number of microphones to unlimited

1-8 select maximum number of microphones to 1-8

Null return the current maximum number of microphones

RETURN VALUES

The command will return the updated condition of the maximum number of microphones in the same format as the command.

If	Command Returns
MMAX is 4 for mixer A	DEVICE MMAX A 4
MMAX is unlimited for mixer A	DEVICE MMAX A 0

Mic/Line Adjust

DESCRIPTION:

This command selects/reports the setting of coarse gain adjustment on the input channels 1-8. The three settings are 0dB, 25dB, and 55dB.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 36

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned Integer	Unsigned Integer	Unsigned integer
Range	See Mic in Group and Channels (Table 1, page 93)	3 (Mic)	0 -2

RETURN VALUES:

Unit always returns the last executed coarse gain adjustment selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> MLINE <Channel>[Value]

Where:

DEVICE:	See General Text command form Description
MLINE	Text Command
Channel	See Mic in Group and Channels (Table 1, page 93)
Value	
1	select coarse gain adjustment to 55dB
2	select coarse gain adjustment to 25dB
0	select coarse gain adjustment to 0dB (Line Level)
Null	return the current coarse gain adjustment

RETURN VALUES

The command will return the updated condition of the coarse gain adjustment in the same format as the command. If the command sent changes the state for that channel, the new updated state is returned.

If	Command Returns
Coarse gain is set to be 55dB on input channel 1	DEVICE MLINE 1 1

Modem Initialization String

DESCRIPTION:

This command sets/reports the modem initialization string of the serial port when in modem mode.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1><Argument 2>...<Argument 10>

COMMAND ID: 34

ARGUMENT SIZE: 20 32-bit words (80 8-bit characters)

ARGUMENT FORM: each word of form

Name:	Char1	Char2	Char3	Char4
Size		— — 8 bits each — —		
Type		— — Unsigned Integer — —		
Range		— — 0 — 0xff — —		

RETURN VALUES:

Unit always returns the last executed modem initialization string in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> MINIT [String]

Where:

DEVICE:	See General Text command form Description
MINIT	Text Command
String	
String =1-80 characters	Parameter to select string characters to be sent to the modem when the unit is initialized
String=CLEAR	Parameter to clear the modem initialization string
String =Null	Parameter to report the current string

RETURN VALUES

The command will return the updated condition of MINIT in the same format as the command.

If	Command Returns
Modem initialization string is ATZ	DEVICE MINIT ATZ

Modem Mode

DESCRIPTION:

This command enables or disables the modem mode for the unit. When the modem mode is enabled, the modem initialization string is sent out the serial port and the serial port now requires a password before a command is processed. After five minutes of serial inactivity the passcode will be requested to continue serial activity.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 33

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Value
Size	32 bits
Type	Unsigned integer
Range/value	0 - 2

RETURN VALUES:

Unit always returns the last executed modem mode in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> MDMODE [Value]

Where:

DEVICE: See General Text command form Description

MDMODE Text Command

Value

0	select modem mode to off
1	select modem mode to on
2	toggle modem mode state
Null	report current modem mode state

RETURN VALUES

The command will return the updated condition of MDMODE in the same format as the command.

If	Command Returns
Modem mode is enabled	DEVICE MDMODE 1

Modem Password

DESCRIPTION:

This command sets the current password setting for the unit when using modem mode. The password must be entered in twice.

BINARY FORM DETAILS

COMMAND FORM: <Header> <Argument 1> <Argument 2> <Argument 3>

COMMAND ID: 38

ARGUMENT SIZE: 3 32-bit words (12 8-bit char)

ARGUMENT FORM: 3 words, each of the format:

Name:	Char1	Char1	Char1	Char1
Size	8 bits	8 bits	8 bits	8 bits
Type	Unsigned Integer	Unsigned Integer	Unsigned Integer	Unsigned Integer
Range	0 – 0xff	0 – 0xff	0 – 0xff	0 – 0xff

RETURN VALUES:

Unit always returns the last executed modem password in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> MPASS [String]

Where:

DEVICE: See General Text command form Description

MPASS Text Command

String

String =0-12 characters

Parameter to select up to 12 string characters as the modem password

String=CLEAR

Parameter to clear the current password

String =Null

Parameter to report the current password

RETURN VALUES

Once the command is given, the unit responds by echoing back the command followed by "RE-ENTER PASSWORD" string. The command must then be re-entered exactly as entered previously. Then the command will be echoed back followed by an "OK" indicating that password has been changed.

Mute

DESCRIPTION:

This command selects/reports the setting of mute on input, output or processing channels.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 41

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned intgr	Unsigned integer	Unsigned integer
Range/value	See Grp and Chnls (I, O, M, P, L)	1, 2, 3, 5, 7	0-2

RETURN VALUES:

Unit always returns the last executed mute selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> MUTE <Channel> <Group> [Value]

Where:

<DEVICE>:	See General Text command form Description
MUTE	Text Command
Channel	See Group and Channels (Table 1, page 93)
Group	'I', 'O', 'M', 'P', 'L'. See Group and Channels (Table 1, page 93)
Value	
0	select mute off
1	select mute on
2	select mute to toggle
Null	return the current mode

RETURN VALUES

The command will return the updated condition of mute in the same format as the command.

If

Mute is set to be on for input channel 1

Command Returns

DEVICE MUTE 1 | 1

Number of Open Microphones Mode

DESCRIPTION:

This command selects/reports the setting of Number of Open Microphones (NOM) on output channels.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 42

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Output in Grp and Chnls (Table 1, page 93)	2 (output)	0 - 2

RETURN VALUES:

Unit always returns the last executed NOM selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> NOM <Channel> [Value]

Where:

DEVICE: See General Text command form Description

NOM Text Command

Channel See Output in Group and Channels (Table 1, page 93)

Value

0	select NOM off
1	select NOM on
2	select NOM to toggle
Null	return the current mode

RETURN VALUES

The command will return the updated condition of NOM in the same format as the command.

If **Command Returns**

NOM is set to be on for output channel 1 DEVICE NOM 1 1

Off Attenuation Mode

DESCRIPTION:

This command selects/reports the off attenuation mode of input channels 1-8.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 43

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned float
Range	See Mic in Grp and Chnls (Table 1, page 93)	3 (Mic)	0.0 – 60.0

RETURN VALUES:

Unit always returns the last executed off attenuation selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> OFFA <Channel> [Value]

Where:

<DEVICE>:	See General Text command form Description
OFFA	Text Command
Channel	See Mic in Group and Channels (Table 1, page 93)
Value	
0-60	select off attenuation level (dB)
Null	return the current off attenuation level

RETURN VALUES

The command will return the updated condition of the off attenuation level in the same format as the command.

If	Command Returns
Off attenuation mode for channel 1 is set for 15dB	DEVICE OFFA 1 15
Off attenuation mode for channel 1 is set for 0dB	DEVICE OFFA 1 0

PA Adaptive Mode

DESCRIPTION:

This command selects/reports PA adaptive mode for the specified mixer. There can only be one selection per mixer.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 44

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Mic in Grp and Chnls (Table 1, page 93)	4 (Mic)	0 - 2

RETURN VALUES:

Unit always returns the last executed PA adaptive selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> PAA <Channel> [Value]

Where:

<DEVICE>:	See General Text command form Description
PAA	Text Command
Channel	See Mic in Group and Channels (Table 1, page 93)
Value	
0	select PA adaptive mode to be disabled
1	select PA adaptive mode to be enabled
2	select PA adaptive mode to toggle
Null	return the current mode

RETURN VALUES

The command will return the updated condition of the PA adaptive mode in the same format as the command.

If	Command Returns
PA adaptive is enabled for Mic 1	DEVICE PAA 1 1
PA adaptive is disabled for Mic 1	DEVICE PAA 1 0

PA Reference Select

DESCRIPTION:

This command selects/reports which output is used for each mixer as a reference for power amp adaptation mode. There can only be one selection per mixer.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 48

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Mic in Group and Channels (Table 1, page 93)	2, 8 (O, E)	0; see Group and Channels (p. 93) E: see Expansion Bus Reference Channels Group and Channels (p. 93)

RETURN VALUES:

Unit always returns the last executed REFSEL selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> REFSEL < Reference Channel > < Reference Group > [Channel]

Where:

<DEVICE>:	See General Text command form Description
REFSEL	Text Command
Channel	See Mic in Group and Channels (Table 1, page 93)
Reference Group	'O', 'E'. See Group and Channels (Table 1, page 93)
Reference Value	O: see Group and Channels (Table 1, page 93) E: see Expansion Bus Reference channels in Group and Channels (Table 1, page 93)

RETURN VALUES

The command will return the updated condition of the REFSEL mode in the same format as the command.

If

REFSEL is set for output channel 1 for Mic 1

Command Returns

DEVICE REFSEL 1 O 1

Phantom Power

DESCRIPTION:

This command selects/reports the setting of phantom power.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 45

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	See Mic in Group and Channels (Table 1, page 93)	3 (Mic)	0 - 2

RETURN VALUES:

Unit always returns the last executed phantom power selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> PP <Channel> [Value]

Where:

<DEVICE>:	See General Text command form Description
PP	Text Command
Channel	See Mic in Group and Channels (Table 1, page 93)
Value	
0	select phantom power off
1	select phantom power on
2	select phantom power to toggle
Null	return the current phantom power mode

RETURN VALUES

The command will return the updated condition of the phantom power in the same format as the command.

If **Command Returns**

Phantom power is set to be on for channel 1 DEVICE PP 1 1

Preset Execution/Reporting

DESCRIPTION:

This command selects/reports the state of a preset.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 46

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name	Channel	Group	Value
Size	8 bits	8 bits	16 bits
Type	Unsigned integer	Unsigned integer	Unsigned integer
Range	0 to set to none 0 with Query to find last Preset Ran (If query and not zero, will query the state of that channel)	See Group and Channels	0 – 2

RETURN VALUES:

Unit will return the updated state of the last selection in the same form as the command.

TEXT FORM DETAILS

COMMAND FORM: DEVICE PRESET <Channel> [Value]

Where:

DEVICE:	See General Text command form Description
PRESET	Text Command
Channel	NULL to Query Last Preset; See Preset in Group and Channels
Value	
0	Set the preset state to off
1	Execute the preset and set the state to on
2	Execute the preset and set the state to off
Null	Return the current preset state

RETURN VALUES

Unit will return the updated state of the last selection in the same form as the command.

If	Command Returns
Preset 1's state is active (on)	DEVICE PRESET 1 1

Program String

DESCRIPTION:

This command sets/reports a programmed string.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1><Argument 2>...<Argument 11>

COMMAND ID: 47

ARGUMENT SIZE: 21 32-bit words (1 ID word + 80 8-bit characters)

ARGUMENT FORM: each word of form

Name:	ID:	Char1	Char2	Char3	Char4
Size	32 bits		— —8 bits each — —		
Type	Unsigned integer		— —Unsigned Integer — —		
Range	0 - 7		— — 0 - 0xff — —		

RETURN VALUES:

Unit always returns the specified program string in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> PRGSTRING <ID> [String]

Where:

DEVICE:	See General Text command form Description
PRGSTRING	Text Command
ID	string identifier 0 - 7
String	
String = 1-80 characters	Parameter to select string characters to be sent when the execute string command is issued
String= CLEAR	Parameter to clear the current string
String= Null	Parameter to report the current string

RETURN VALUES

The command will return the specified program string

If	Command Returns
Program string #3 is MUTE	DEVICE PRGSTRING 3 MUTE

Serial Echo

DESCRIPTION:

This command selects/reports the serial echo of the RS232 port.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 50

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Value
Size	32 bits
Type	Unsigned integer
Range	0 – 2

RETURN VALUES:

Unit will return the updated state of the last selection in the same form as the command.

TEXT FORM DETAILS

COMMAND FORM: DEVICE SERECHO [Value]

Where:

DEVICE: See General Text command form Description

SERECHO Text Command

Value

0	Select serial echo to off
1	Select serial echo to on
2	Toggle the serial echo
Null	Return current serial echo

RETURN VALUES

Unit will return the updated state of the last selection in the same form as the command.

If

Serial echo is to be set to echo all ports

Command Returns

DEVICE SERECHO 1

Serial Mode

DESCRIPTION:

This command selects/reports the serial mode of the RS232 port.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 51

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Value
Size	32 bits
Type	Unsigned integer
Range	1 - 2

RETURN VALUES:

Unit always returns the last executed serial mode selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> SERMODE [Value]

Where:

<DEVICE>: See General Text command form Description

SERMODE Text Command

Value

1	select serial mode as text
2	select serial mode as binary
Null	return current serial mode

RETURN VALUES

The command will return the updated condition of the serial mode in the same format as the command.

If

Serial mode is to be set for text

Command Returns

DEVICE SERMODE 1

Signal Generator

DESCRIPTION:

This command selects/reports of the signal generator activation.

BINARY FORM DETAILS

COMMAND FORM: <Header> <Argument 1> <Argument 2> <Argument 3>

COMMAND ID: 52

ARGUMENT SIZE: 3 words

ARGUMENT FORM:

Name:	Channel	Group	Type	Amplitude	Frequency
Size	8 bits	8 bits	16 bits	32 bits	32 bits
Type	Unsigned Integer	Unsigned Intgr	Unsigned Intgr	Signed Float	Unsigned Float
Range	See Group and Chnnls (Table 1, page 93)	1, 3, 7 (I, M, L)	0-3	-60 to +20	Type Range 1-2 0 3 20-20,000
Unit	N/A	N/A	N/A	dB	Hz

RETURN VALUES:

Unit always returns the last signal generator activation in the same form as above.

TEXT FORM DETAILS

COMMAND FORM

<DEVICE> SIGGEN <Channel> <Group> [Type Amplitude Frequency]

Where:

<DEVICE>:	See General Text command form Description
SIGGEN	Text Command
Channel	Null to return current setting; See Group and Channels (Table 1, page 93)
Group	'I', 'M', 'L'
Type	
0	Turn signal generator off
1	select pink noise generator
2	select white noise generator
3	select tone generator
Amplitude	
60 - +20	amplitude in dB; NULL for type 0
Frequency	
20 - 20000	frequency in Hz (Only needed when using tone generation)

RETURN VALUES

The command will return the updated condition of the last signal generator activation in the same format as the command.

If

Signal Gen is Pink noise for microphone channel 1 with level of 20dB

Command Returns

DEVICE SIGGEN 1 M 1 20

String Execution

DESCRIPTION:

This command sends the specified string out the serial port.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 53

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name:	Value
Size	32 bits
Type	Unsigned integer
Range/value	0 - 7

RETURN VALUES:

Unit always returns ID of the string in the same form as above.

TEXT FORM DETAILS

COMMAND FORM <DEVICE> STRING [Value]

Where:

DEVICE:	See General Text command form Description
STRING	Text Command
Value	
0 - 7	String to execute
Null	Parameter to return last executed string

RETURN VALUES

The command will return the last string executed. If the command executed a string, the string that was executed is returned.

Time Out Select

DESCRIPTION:

This command selects/reports the inactivity time out before returning to the unit title screen.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 54

ARGUMENT SIZE: 1 word

ARGUMENT FORM: <Value>

Name:	Value
Size	32 bits
Type	Unsigned integer
Range	1 – 15 (minutes)

RETURN VALUES:

Unit always returns the last executed timeout selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> TOUT [Value]

Where:

DEVICE: See General Text command form Description

TOUT Text Command

Value

0	select disable unit time out
1-15	select time out of 1 to 15 minutes
Null	return the current mode

RETURN VALUES

The command will return the updated condition of time out in the same format as the command.

If **Command Returns**

Time out is set to 3 minutes DEVICE TOUT 3

Unit ID

DESCRIPTION:

This command reports the unit ID. This command is read only.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 55

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name	Value
Size	32 bits
Type	Unsigned integer
Range	0 – 0xffffffff

RETURN VALUES:

Unit always returns the last executed unit ID selection in the same form as above.

TEXT FORM DETAILS

COMMAND FORM: <DEVICE> UID [Value]

Where:

DEVICE:	See General Text command form Description
UID	Text Command
Value	UID of box in hex

RETURN VALUES

The command will return the unit ID in the same format as the command.

If Command Returns

UID DEVICE UID XXXXXXXX

Version

DESCRIPTION:

This command reports the version of the unit. This command is read only.

BINARY FORM DETAILS

COMMAND FORM: <Header><Argument 1>

COMMAND ID: 56

ARGUMENT SIZE: 1 word

ARGUMENT FORM:

Name	Value
Size	32 bits
Type	Unsigned integer
Range/value	most significant 8 bits are major version second 8 bits are minor version third 8 bits are release ID

RETURN VALUES:

Unit always returns the version command in the same form as above.

TEXT FORM DETAILS

COMMAND FORM <DEVICE> VER [Value]

Where:

DEVICE: See General Text command form Description

VER Text Command

Value command issued with null, command returns the current version in the form MM.mm.rr where MM is major version
mm is minor version
rr is release ID

RETURN VALUES

The command will return the version in the same format as the command.

If	Command Returns
VER	DEVICE VER 1.0.0