APPENDIX A: APPLICATION PROGRAMMER'S INTERFACE

TYPE AND DEVICE IDS

Device Types and Device IDs by model are as follows:

Model	Device Type	Device ID Range
880	1	0-B
TH20	2	0-F
VH20	E	0-F
840T	3	0-B
8i	A	0-B
880T	D	0-B
880TA	H	0-B
SR 1212	G	0-B
SR 1212A	I	0-B
Beamforming Mic Array	N	0-F
CONNECT CobraNet	P	0-7
CONNECT AVB	Q	0-7

CONVENTIONS

This guide uses the following typographic conventions to describe CONVERGE/CONVERGE Pro serial command syntax:

Convention	Description
<X>	Parameters enclosed in < > indicate a mandatory parameter
[X]	Parameters enclosed in [ ] indicate an optional parameter
1-8	Parameters separated by a '-' indicate a range of allowable values
4,7,9	Parameters separated by a ',' indicate a list of allowable values
EREF	Words in UPPERCASE bold indicate command text
Device	Indicates the device type and device number on the Expansion Bus. It is composed of a device type character and a device ID character.

COMMAND FORM DESCRIPTION

The structure of serial commands is as follows:

 # <Device Type> <Device ID> <Command> [Values] <Carriage Return>

# indicates the start of a command line, the Carriage Return terminates a command.

NOTE: Serial commands can be either UPPERCASE or lowercase. Return values are always in UPPERCASE. In order for a command to be recognized by the RS-232 serial port, the command must be terminated by a carriage return.

For example, a command to disable mute for Mic Input 5 on a CONVERGE Pro 880 with a Device ID of 2 would have the command line **#12 MUTE 5 M 0**.

In this command line, 1 = the **Device Type** for CONVERGE 880, 2 = the **Device ID** for unit 2, **MUTE** = serial command, 5 = the channel **Value**, M = the channel type **Value** for mic input channels, and 0 = the command **Value** that turns mute off.

If an asterisk (*) is placed in the **Device Type** or **Device ID** fields, the command will apply to all units or all devices respectively. For example, a command with a **Device Type** = 1 and a **Device ID** = * would apply the command to all CONVERGE 880 units. A command with a **Device Type** = * and a **Device ID** = 6 would apply the command to all units with a Device ID of 6.

If a command specifies "(Null to query in text)" in its **Value** table, leave a blank in the command line to query the current state of that value. For example, the command **#12 MUTE 5 M <blank>** would return the current mute state of Mic 2 on an 880 unit with a Device ID of 0.

GROUPS AND CHANNELS

All serial commands use common alpha and numeric designators to reference channel groups, channel types, and other command values. Also, different channel groups have different allowable channel ranges, as shown in the following table.

NOTE: CONNECT CobraNet and CONNECT AVB are not applicable in the following table for all rows.

Group	Alpha	CONVERGE Pro 880 and SR 1212 Channel Range	CONVERGE Pro TH20 Channel Range	CONVERGE Pro 840T Channel Range	CONVERGE Pro 8i Channel Range	CONVERGE Pro 880T Channel Range	CONVERGE Pro 880TA Channel Range	CONVERGE SR 1212A Channel Range	CONVERGE Pro VH20 Channel Range	Beamforming Mic Array Channel Range
Inputs	I	1-12	1-2	1-8	1-12	1-12	1-12	1-12	1-2	N/A
Outputs	O	1-12	1-2	1-9 (9 is the power amp)	N/A	1-13 (13 is the power amp)	1-8	1-12	1-2	N/A
Mic Input	M	1-8	N/A	1-4	1-8	1-8	1-8	1-8	N/A	N/A
Beamforming Mic Array	V	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1
Amplifier Output	J	N/A	N/A	N/A	N/A	N/A	1-4	1-4	N/A	N/A
Gating Group	G	1-4, A-F	N/A	1-4, A-F	1-4, A-F	1-4, A-F	1-4, A-F	1-4, A-F	N/A	A-F
Processing	P	A-F	N/A	A-D	A-F	A-F	A-F	A-F	N/A	N/A
Expansion Bus Audio Channels	E	O-Z, I-N	O-Z, I-N	O-Z, I-N	O-Z, I-N	O-Z, I-N	O-Z, I-N	O-Z, I-N	O-Z, I-N	O-Z, I-N
Line Inputs	L	9-12	1-2	5-8	9-12	9-12	9-12	9-12	1-2	N/A
Expansion Bus Reference Channels	A	1-8	1-8	1-8	1-8	1-8	1-8	1-8	1-8	1-8
GPIO	Y	0	0	0	0	0	0	0	0	N/A
Matrix	X	0	0	0	0	0	0	0	0	0
Fader	F	1-4	N/A	1-4	N/A	1-4	N/A	N/A	N/A	N/A
Presets	S	1-32	1-32	1-32	1-32	1-32	1-32	1-32	1-32	N/A
Macros	C	1-255	1-255	1-255	1-255	1-255	1-255	1-255	1-255	N/A
Transmit	T	N/A	1	1	N/A	1	1	N/A	N/A	N/A
Receive	R	N/A	1	1	N/A	1	1	N/A	N/A	N/A
Virtual Reference	B	1 – 4	N/A	1 – 4	N/A	1 – 4	1-4	N/A	N/A	N/A
Timed Events	Q	1-10	1-10	1-10	1-10	1-10	1-10	1-10	1-10	N/A
Web	W	0	0	0	0	0	0	0	0	N/A
PA Virtual Reference	H	N/A	N/A	N/A	N/A	N/A	1-4	1-4	N/A	N/A
VoIP Transmit	K	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	N/A
VoIP Receive	Z	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1	N/A
USB Transmit	D	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
USB Receive	U	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

METER TYPE DEFINITIONS TABLE

ALPHA	Level Position for:								
	Mics	Beam-forming Mic Array	Line Inputs	Outputs	Telco TX	Telco Rx	Faders	Processors	Power Amp.
I	Input level	Input level	Input level	Input level	Post Gain level	Input Level	N/A	Level into Compressor	Input Level Post NOM
A	Level post-gain adjustment, but pre-filter	Level post-gain adjustment, but pre-filter	Post Gain level	Post Gain level	Post Limiter level	Post Gain level	Level Post gain Adjust-ment	Level Post Compressor	Output Level Post Gain
N	Level post-filter but pre-gate (non-gated level)	N/A	N/A	N/A	N/A	Level after Gain Stage	N/A	Level Post Gain Stage	Feedback Max Auto Gain
G	Level post-gate (gated level)	Level post-gate (gated level)	N/A	N/A	N/A	N/A	N/A	N/A	Compressor Attenuation
R	Echo Return Loss (Not SR 1212 / SR 1212A)	Echo Return Loss	N/A	N/A	N/A	N/A	N/A	N/A	Level Pre Compressor
E	Echo Return Loss Enhance-ment (Not SR 1212 / SR 1212A)	Echo Return Loss Enhance-ment	N/A	N/A	N/A	N/A	N/A	N/A	Level Post Compressor
T	ERL + ERLE (Not SR 1212 / SR 1212A)	ERL + ERLE	N/A	N/A	N/A	N/A	N/A	N/A	Adaptive Gain
C	AGC	N/A	AGC	N/A	N/A	N/A	N/A	N/A	Level of Adaptive Gain Noise Floor
Y	Pre AGC peak level meter	N/A	Pre AGC peak level meter	N/A	N/A	N/A	N/A	N/A	Level Post Mute/Gain Pre EQ
Z	Post AGC peak level meter	N/A	Post AGC peak level meter	N/A	N/A	N/A	N/A	N/A	N/A
B	Ambient	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

SERIAL COMMAND INDEX

AA – Auto Answer Enable / Disable . . . 257
AAMB – Adaptive Ambient Mode . . . 257
AARINGS – Number of Rings to Auto Answer On . . . 257
ACONN – Audible Connect / Disconnect Indication . . . 257
ACONNLVL – Audible Connect / Disconnect Level . . . 258
AD – Auto Disconnect Enable / Disable . . . 258
ADCLIP – Audio Clipping . . . 258
ADPRESENT – Audio Presence . . . 259
AEC – Acoustic Echo Cancellation Enable / Disable . . . 259
AGC – Automatic Gain Control . . . 259
AGCSET – Automatic Gain Control Adjust . . . 260
AMBLVL – Ambient Level Adjust . . . 260
AMXDUET – Use AMX Duet Discovery . . . 260
AUDIOMASTER – Expansion Bus Audio Master Mode . . . 260
AV – Adaptive Volume . . . 260
AVBLINK – AVB Link Status . . . 261
AVBMAC – AVB Bridge Board MAC Address . . . 261
AVBNUMRX – Number of AVB Listeners . . . 261
AVBNUMTX – Number of AVB Talkers . . . 261
AVBRESET – AVB Reset . . . 261
AVBRXNUMCHAN – Number of Audio Channels per AVB Listener . . . 262
AVBRXSTATE – State Register of the specified AVB Listener . . . 261
AVBRXSTREAMID – 64-bit Stream ID for each AVB Listener . . . 262
AVBTXNUMCHAN – Number of Audio Channels per AVB Talker . . . 262
AVBTXSTATE – State Register of the specified AVB Talker . . . 262
AVBTXSTREAMID – 64-bit Stream ID for each AVB Talker . . . 262
AVG – Adaptive Volume Gain . . . 263
AVR – Adaptive Volume Reference . . . 263
AVRT – Adaptive Volume Ratio . . . 263
AVT – Adaptive Volume Threshold . . . 263
BAUD – Baud Rate . . . 263
BFBINFO – Beamforming Array Beam Information . . . 264
BFLED – Beamforming Mic LED Mode . . . 265
BFMODE – Sets/Reports Beamforming Mic Mode . . . 264
BFMUTEMACRO – Define Macros that Run When Beamforming Mic Mute Button Is Pressed 265
BFPOS – Beamforming Array Position in Auto Mode . . . 264
BFZONE – Manually Disables/Enables Beamforming Mic Zones . . . 264
CALLDUR – Call Duration . . . 265
CALLERID – Reports Caller ID Information . . . 265
CALLSTATUS – Report the Status of VoIP Channels . . . 319
CGROUP – Compressor Group Select . . . 266
CHAIRO – Chairman Override Mode . . . 266
CLEAREFFECT – ClearEffect Wide Band Telco Emulation . . . 266

CLOCK – Clock Set . . . 266
CNETADDR – CobraNet Board IP Address . . . 267
CNETCONDUCTOR – CobraNet Port Is Conductor . . . 267
CNETCONTACT – CobraNet Board Contact . . . 267
CNETCPRIO– CobraNet Conductor Priority . . . 267
CNETLINK– CobraNet Port Is Linked to a Remote CobraNet Device . . . 267
CNETLOC – CobraNet Board Location . . . 267
CNETMAC – CobraNet Board MAC Address . . . 268
CNETNAME – CobraNet Board Name . . . 268
CNETRXBNUM – CobraNet Rx Bundle Number . . . 268
CNETRXSTATUS – CobraNet Rx Bundle Status . . . 268
CNETTXBNUM – CobraNet Tx Bundle Number . . . 269
CNETTXDEPTH – CobraNet Tx Bundle Bit Depth . . . 269
CNETTXLATENCY – CobraNet Tx Bundle Maximum Unicast . . . 269
CNETTXMAXUNI – CobraNet Tx Bundle Latency . . . 269
CNETTXSTATUS – CobraNet Tx Bundle Status . . . 269
CNETVER – CobraNet Tx Board F/W Version . . . 270
COMPDLY – Compressor Delay . . . 270
COMPDLYEN – Compressor Delay Enable . . . 270
COMPERSIST – CobraNet Persistence . . . 270
COMPRESS – Compressor Adjust . . . 270
COMPSEL – Compression Select . . . 271
CONFCANCEL – Cancels a Conference Call Bridge . . . 319
CONFCOMPLETE – Completes a Conference Call Bridge . . . 319
CONFSTART – Initiates a 3-Way Conference Call . . . 320
COUNTRY – Country Selection . . . 271
CTRLMASTER – Control Master Mode . . . 271
DECAY – Decay Adjust . . . 271
DEFAULT – Default The Unit . . . 271
DELAY – Delay Adjust . . . 272
DELAYSEL – Delay Select . . . 272
DEVICENAME – Argument Identification Label . . . 272
DEVICESUBTYPE – Sets the Subtype of a Connected Device . . . 272
DEVICETYPE – Sets the Type of a Connected Device . . . 272
DFLTM – Default Meter . . . 273
DIAG – Diagnostic Commands . . . 273
DIAL – DTMF Dialing . . . 273
DID – Device ID . . . 273
DTMFLVL – DTMF Tone Level . . . 273
DTONELVL – Dial Tone Level . . . 274
DUPDATE – Download Update . . . 274
DVER – Command Dictionary Version . . . 274
ENETADDR – Ethernet Port IP Address . . . 274
ENETDHCP – Ethernet DHCP Selection . . . 274
ENETDNSA2 – Ethernet DNS Server Address 2 . . . 275

ENETDNSA – Ethernet DNS Server Address . . . 275
ENETDNS – Ethernet DNS Selection . . . 274
ENETDOMAIN – Ethernet Domain Argument . . . 275
ENETGATE – Ethernet Default Gateway Address . . . 275
ENETSUBN – Ethernet Subnet Mask . . . 275
ENETVLAN – Enable VLAN Tagging . . . 275
ENETVLANID – VLAN ID . . . 275
ENETVLANPRI – VLAN Priority . . . 276
EREF – Expansion Bus Reference . . . 276
EVENT – Run Scheduled Event . . . 276
FEB – Feedback Elimination Bandwidth . . . 276
FEDR – Feedback Elimination Dynamic Node Reset . . . 277
FE – Feedback Elimination Enable . . . 276
FEF – Feedback Elimination Fixed Filter . . . 277
FEG – Feedback Elimination Auto Gain Max . . . 277
FEGL – Feedback Elimination Gain Level . . . 277
FELD – Feedback Elimination Lock Depth . . . 277
FEM – Feedback Elimination Mode . . . 278
FEN – Feedback Elimination Nodes . . . 278
FER – Feedback Elimination Node Reset . . . 278
FERNG – Feedback Elimination Ring Elimination Mode . . . 278
FESC – Feedback Elimination Setup Complete . . . 279
FES – Feedback Elimination Setup . . . 278
FILTER – Filter Adjust . . . 279
FILTSEL – Filter Select . . . 280
FLOW – Flow Control . . . 280
FMP – First Mic Priority Mode . . . 280
GAIN – Gain Adjustment . . . 280
GATE – Gate Status . . . 281
GHOLD – Gate Hold Time Adjust . . . 281
GMODE – Gating Mode . . . 281
GPIOSTATUS – General Purpose Status . . . 281
GRATIO – Gate Ratio Adjust . . . 282
GREPORT – Gate Report . . . 282
GRPSEL – Gating Group Select . . . 282
HDAEC – Enables/Disables HD AEC mode . . . 282
HDAECMODE – Set/Report HD AEC mode . . . 282
HDDREFSEL1 – Reference Select for Mono Channel Acoustic Echo Cancellation Block . . . 283
HDDREFSEL2 – Reference Select for Stereo Channel Acoustic Echo Cancellation Block . . . 283
HDNLP – Non Linear Processing Adjust . . . 283
HOLD – Places a Call on Hold . . . 320
HOOKD – Hook Flash Duration . . . 283
HOOK – Hook Flash . . . 283
LABEL – Label . . . 284
LCDCONTRAST – LCD Contrast . . . 284

LMO – Last Mic On Mode . . . 284
LOCALNUM – Local Number . . . 284
LOCBLDG – Location: Building . . . 284
LOCCITY – Location: City . . . 285
LOCCNTRY – Location: Country . . . 285
LOCCOMP – Location: Company . . . 285
LOCREGION – Location: Region . . . 285
LOCROOM – Location: Room . . . 285
LOCSITENAME – Location: Site Argument . . . 285
LOCSTATE – Location: State . . . 286
LOGMASK – Device Log Mask . . . 286
LVL – Level . . . 286
LVLREPORTEN – Level Report Enable . . . 287
LVLREPORT – Level Report . . . 287
MACRO – Macro Execution/Reporting . . . 287
MANUFACTURER – Manufacturer Identification Label . . . 287
MAX – Maximum Gain Setting . . . 287
MCGAIN – Multi-Channel Gain . . . 288
MCMINMAX – Multi-Channel Min and max Gain Setting . . . 288
MC – Multi-Channel Mode . . . 288
MCMUTE – Multi-Channel Min and Max Gain Setting . . . 289
MCRAMP – Multi-Channel Ramp . . . 289
MINMAX – Minimum and Maximum Gain Setting . . . 289
MIN – Minimum Gain Setting . . . 289
MLINE – Mic / Line Coarse Gain Setting . . . 290
MMAX – Maximum Number of Microphones . . . 290
MODEL – Model Identification Label . . . 290
MTRXCLEAR – Clear Matrix . . . 291
MTRX – Matrix Routing . . . 291
MTRXTYPE – Select Pre-AEC Gated or Non-Gated Routing . . . 291
MULTILNEN – VoIP Multi-Line Enable . . . 320
MULTILNSTAT – VoIP Multi-Line Status . . . 320
MUTE – Mute . . . 292
NAME – Unit Name (NETBIOS Name) . . . 292
NCD – Noise Cancellation Depth Adjust . . . 292
NCSEL – Noise Cancellation Select . . . 292
NLP – Non Linear Processing Adjust . . . 292
NOM – Number of Open Microphones Mode . . . 293
NTPSRV – NTP Network Time Server Address . . . 293
NULL – Null the Telephone Line . . . 293
OFFA – Off Attenuation Mode . . . 293
PAA – PA Adaptive Mode . . . 293
PACEN – PA Softclipper Enable . . . 294
PAENERGY – PA Energy-saver mode . . . 294
PAEQEN – PA EQ Filter Enable . . . 294

PAEQRST – PA EQ Filter Reset . . . 294
PAEQSET – PA EQ Filter Set . . . 295
PAFLT – PA Fault . . . 295
PAIMPED – PA Output Impedance . . . 295
PALEN – PA Limiter Enable . . . 295
PALT – PA Limiter Threshold . . . 296
PANGAT – PA Noise Gate Activation Timer . . . 296
PANGEN – PA Noise Gate Enabled . . . 296
PANGF – PA Noise Gate Filter . . . 296
PANGM – PA Noise Gate Mode . . . 296
PANGT – PA Noise Gate Threshold . . . 297
PAPOL – Polarity Switch . . . 297
PARST – PA Reset . . . 297
PASME – PA Sound Mask Enable . . . 297
PASML – PA Sound Mask Level . . . 297
PASMM – PA Sound Mask Mode . . . 298
PASMT – PA Sound Mask Timer . . . 298
PATO – PA Thermal Overload . . . 298
PBDIAL – Dial a PB Entry by Argument . . . 298
PHONEBOOKADD – Adds an Entry to the Phonebook . . . 298
PHONEBOOKCNT – Counts Entries in the Phonebook . . . 299
PHONEBOOKDEL – Deletes an Entry in the Phonebook . . . 299
PHONEBOOKREAD – Queries the Phonebook by Index . . . 299
PP – Phantom Power . . . 299
PRESET – Preset Execution/Reporting . . . 299
PRGSTRING – Program String . . . 300
PROXYSTAT – Proxy Registration Status . . . 300
PROXYTYPE – Set/Get Proxy Type . . . 300
PTTTHRESHOLD – Push to Talk Threshold . . . 300
PUSHTOTALK – Push to Talk . . . 301
RAMP – Ramp Gain Adjustment . . . 301
REDIAL – Redial the Last Number . . . 301
REFSEL – Reference Select for PA Adaptation & AEC . . . 301
REFSET – Reference Channel Set Up . . . 301
RESET – Reset . . . 302
RINGEREN – Audible Ring Enable . . . 302
RINGERLVL – Audible Ring Level . . . 302
RINGERSEL – Audible Ring Melody Selection . . . 302
RINGERTEST – Audible Ring Melody Test . . . 302
RINGMOD – Ring Cadence Mode . . . 303
RINGOFF – Ring Cadence Off Time . . . 303
RINGON – Ring Cadence On Time . . . 303
RING – Ring Indication . . . 302
RXBOOST – Receive Boost . . . 303
RXBSTEN – Receive Boost Enable . . . 304

SERECHO – Serial Echo . . . 304
SFTYMUTE – Safety Mute . . . 304
SIGGENEN – Signal Generator Enable . . . 304
SIGGEN – Signal Generator . . . 304
SIGGENSWEEP – Signal Generator Sweep . . . 305
SIGTOUT – Signal Generator Time Out . . . 305
SLVL – Speech Level Control . . . 305
SMTPSRV – SMTP Mail Server Address . . . 305
SNMPMNGRIP – SNMP Manager Host IP Address . . . 306
SNMPMNGRPORT – SNMP Manager Notification Port . . . 306
SNMPREADCOMM – SNMP Read Community String . . . 306
SNMPWRITECOMM – SNMP Write Community String . . . 306
SPEEDDIAL – Speed Dial a Number . . . 306
STRING – String Execution . . . 306
SYSCHECKS – System Checks . . . 307
SYSRESULT – System Check Result . . . 308
TAMODE – Telco Adapt Mode . . . 309
TELCOLVLCTRL – Telco RX Level Control Enable / Disable . . . 309
TELOVER – Telco Current Overload . . . 309
TE – Telco Enable . . . 309
TIMELOCALE – Time Locale Settings . . . 309
TOUT – Time Out Select . . . 310
TRANSCANCEL – Cancels a Transferred Call . . . 321
TRANSCOMPLETE – Completes a Transferred Call . . . 321
TRANSSTART – Initiate an Attended or Unattended Call Transfer . . . 321
UID – Unit ID . . . 310
VER - Version . . . 310
VE – VoIP Enable . . . 321
XAA – Auto Answer Enable/Disable . . . 310
XAAMB – Adaptive Ambient Mode . . . 310
XAARINGS – Number of Rings to Auto Answer On . . . 311
XACONN – Audible Connect / Disconnect Indication . . . 311
XACONNLVL – Audible Connect / Disconnect Level . . . 311
XAMBLVL – Ambient Level Adjust . . . 311
XCALLDUR – Call Duration . . . 311
XCALLERID – Reports Caller ID Information . . . 312
XCGROUP – Compressor Group . . . 312
XCHAIRO – Chairman Override Mode . . . 312
XCOMPRESS – Compressor Adjust . . . 312
XCOMPSEL – Compressor Enable . . . 313
XDECAY – Decay Adjust . . . 313
XDELAY – Audio Delay . . . 313
XDELAYSEL – Audio Delay Enable . . . 313
XDELAYSEL – Audio Delay Enable . . . 314
XDIAL – DTMF Dialing . . . 314

XDTMFLVL – DTMF Tone Level . . . 314
XDTONELVL – Dial Tone Level . . . 314
XGHOLD – Gate Hold Time Adjust . . . 314
XGMODE – Gating Mode . . . 315
XGOVER – Gating Override . . . 315
XGRATIO – Gate Ratio Adjust . . . 315
XGRPSEL – Gating Group Select . . . 315
XHOOKD – Hook Flash Duration . . . 316
XHOOK – Hook Flash . . . 315
XLOCALNUM – Local Number . . . 316
XOFFA – Off Attenuation Mode . . . 316
XPBDIAL – Dial a PB Entry by Name . . . 316
XREDIAL – Dial the last number again . . . 316
XRINGEREN – Audible Ring Enable . . . 317
XRINGERLVL – Audible Ring Level . . . 317
XRINGERSEL – Audible Ring Melody Selection . . . 317
XRINGERTEST – Audible Ring Melody Test . . . 317
XRING – Ring Indication . . . 317
XSLVL – Speech Level Control . . . 318
XSPEEDDIAL – Speed Dialing . . . 318
XTE – Telco Enable . . . 318

SERIAL COMMANDS

Serial commands are shown in bold, followed by the command form and argument details.

AA – Auto Answer Enable / Disable

This command selects/reports the setting of auto answer.

Command Form: *DEVICE* **AA** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

AAMB – Adaptive Ambient Mode

This command selects/reports the setting of adaptive ambient.

Command Form: *DEVICE* **AAMB** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = toggle (Null to query in text)	-

AARINGS – Number of Rings to Auto Answer On

This command selects/reports the setting of the number of rings to auto answer.

Command Form: *DEVICE* **AARINGS** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	2 - 4 (Null to query in text)	-

ACONN – Audible Connect / Disconnect Indication

This command selects/reports the status of the audible connect / disconnect indication.

Command Form: *DEVICE* **ACONN** <Channel> [Value].

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

ACONNLVL – Audible Connect / Disconnect Level

This command selects/reports the audible connect / disconnect indicator's level.

Command Form: *DEVICE* **ACONNLVL** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Signed Float	2	-12.00 – 12.00 (Null to query in text)	dB

AD – Auto Disconnect Enable / Disable

This command selects/reports the setting of auto disconnect.

Command Form: *DEVICE* **AD** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	0 = Off 1 = Loop Drop 2 = Call Progress 3 = Loop Drop + Call Progress (Null to query in text)	-

ADCLIP – Audio Clipping

This command reports the channels that are currently clipping their audio signals. **This command is read only**. This command is implemented only for inputs.

Command Form: *DEVICE* **ADCLIP** [Values]

Argument	Type	Size	Values
Value	Bit Map of Inputs	2	XXXX XXXX XXXX XXXX |……|→ Input 1 (lsb) to 12 (msb) |…….|→ Reserved (Null to query in text)
	Bit Map of Outputs	2	XXXX XXXX XXXX XXXX |……|→ Output 1 (lsb) to 13 (msb) |….|→ Reserved
	Bit Map of Processors	2	XXXX XXXX XXXX XXXX |……|→ Processor A (lsb) to H (msb) |----------|→ Reserved
	Bit Map of Faders	1	XXXX XXXX |------|→ Faders 1 (lsb) to 4 (msb) |-------|→ Reserved
	Bit Map of Telco	1	XXXX XXXX |→ Telco RX |→ Telco TX |----------|→ Reserved

ADPRESENT – Audio Presence

This command displays the channels that currently have valid audio signals present. **This command is read only**.

Command Form: *DEVICE* **ADPRESENT** [Values]

Argument	Type	Size	Values
Value	Bit Map of Inputs	2	XXXX XXXX XXXX XXXX |.....|→ Input 1 (lsb) to 12 (msb) |.....|→ Reserved (Null to query in text)
	Bit Map of Outputs	2	XXXX XXXX XXXX XXXX |.....|→ Output 1 (lsb) to 13 (msb) |....|→ Reserved
	Bit Map of Processors	2	XXXX XXXX XXXX XXXX |.....|→ Processor A (lsb) to H (msb) |----------|→ Reserved
	Bit Map of Faders	1	XXXX XXXX |------|→ Faders 1 (lsb) to 4 (msb) |-------|→ Reserved
	Bit Map of Telco	1	XXXX XXXX |→ Telco RX |→ Telco TX |----------|→ Reserved

AEC – Acoustic Echo Cancellation Enable / Disable

This command selects/reports the setting of Acoustic Echo Canceller.

Command Form: *DEVICE* **AEC** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

AGC – Automatic Gain Control

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

Command Form: *DEVICE* **AGC** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 3, 7 (I, M, L)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

AGCSET – Automatic Gain Control Adjust

This command selects/reports the settings of the Automatic Gain Control.

Command Form: *DEVICE* **AGCSET** <Channel> <Group> [Threshold Target Attack Gain]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 3, 7 (I, M, L)	-
Threshold	Signed Integer	1	-50 – 0 (Null to query in text)	dB
Target	Signed Integer	1	-30 – 20	dB
Response Time	Unsigned Float	2	0.10 – 10.00	S
Gain	Unsigned Float	2	0.00 – 18.00	dB

AMBLVL – Ambient Level Adjust

This command selects/reports the ambient level.

Command Form: *DEVICE* **AMBLVL** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Signed Float	2	-80.00 – 0.00 (Null to query in text)	dB

AMXDUET – Use AMX Duet Discovery

This command sets and reports the status of AMX Duet Discovery.

Command Form: *DEVICE* **AMXDUET** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 = Off 1 = On 2 = toggle (Null to query in text)	-

AUDIOMASTER – Expansion Bus Audio Master Mode

This command reports the mode of the unit for control of the expansion bus audio.

Command Form: *DEVICE* **AUDIOMASTER** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	1 = Master 2 = Slave (Null to query in text)	-

AV – Adaptive Volume

This command enables/disables adaptive volume tracking on a power amplifier channel.

Command Form: *DEVICE* **AV** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	23 (J)	-
Value	Signed Float	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

AVBLINK – AVB Link Status

This command reports the Link status of the CONNECT AVB Bridge. **This command is Query ONLY and may be sent asynchronously.**

Command Form: *DEVICE* **AVBLINK** [VALUE]

Argument	Type	Size	Values	Units
Value	Integer	4	0 = No Link 1 = Link (Null to query in text)	-

AVBNUMRX – Number of AVB Listeners

This command reports the CONNECT AVB Bridge Number of Listeners.

Command Form: *DEVICE* **AVBNUMRX** [VALUE]

Argument	Type	Size	Values	Units
Link	Integer	4	0 – 4 (Null to query in text)	Value

AVBMAC – AVB Bridge Board MAC Address

This command reports the MAC Address of the CONNECT AVB Bridge board. **This command is Query ONLY.**

Command Form: *DEVICE* **AVBMAC** [VALUE]

Argument	Type	Size	Values	Units
Value	String	20	"xx:xx:xx:xx:xx:xx" NULL terminated MAC address	-

AVBNUMTX – Number of AVB Talkers

This command reports the CONNECT AVB Bridge Number of Talkers.

Command Form: *DEVICE* **AVBNUMTX** [VALUE]

Argument	Type	Size	Values	Units
Link	Integer	4	0 – 4 (Null to query in text)	Value

AVBRESET – AVB Reset

Resets the AVB connection and processor. **There is no query for this command.**

Command Form: *DEVICE* **AVBRESET**

Command Form: N/A

AVBRXSTATE – State Register of the specified AVB Listener

This command reports the State Register of the specified CONNECT AVB Listener. **This command is Query ONLY and may be sent asynchronously.**

Command Form: *DEVICE* **AVBRXSTATE** [LISTENER] [VALUE]

Argument	Type	Size	Values	Units
Listener	Integer	4	1 – 4 Listener Number	-
Value	Hexadecimal	4	0x00 – The Listener is disabled and will not receive. 0x01 – The Listener is enabled and will receive if a talker provides it. 0x02 – The Listener is enabled and receiving. 0x03 – 0xFFFFFFFF (Reserved) (Null to query in text)	-

AVBTXSTATE – State Register of the specified AVB Talker

This command reports the State Register of the specified CONNECT AVB Talker. **This command is Query ONLY and may be sent asynchronously.**

Command Form: *DEVICE* **AVBTXSTATE** [TALKER] [VALUE]

Argument	Type	Size	Values	Units
Talker	Integer	4	1 – 4 Talker Number	-
Value	Hexadecimal	4	0x00 – The talker is disabled and will not transmit. 0x01 – The talker is enabled and will transmit if a listener requests it. 0x02 – The talker is enabled and transmitting. 0x03 – 0xFFFFFFFF (Reserved) (Null to query in text)	-

AVBTXSTREAMID – 64-bit Stream ID for each AVB Talker

This command sets/reports the 64-bit CONNECT AVB Stream ID for the specified AVB Talker.

Command Form: *DEVICE* **AVBTXSTREAMID** [TALKER] [VALUE 1] [VALUE 2]

Argument	Type	Size	Values	Units
Talker	Integer	4	1 – 4 Talker Number	-
Value 1	Hexadecimal	4	First 32 bits of the Stream ID (Null to query in text)	-
Value 2	Hexadecimal	4	Second 32 bits of the Stream ID	-

AVBRXSTREAMID – 64-bit Stream ID for each AVB Listener

This command sets/reports the 64-bit CONNECT AVB Stream ID for the specified AVB Listener.

Command Form: *DEVICE* **AVBRXSTREAMID** [LISTENER] [VALUE 1] [VALUE 2]

Argument	Type	Size	Values	Units
Listener	Integer	4	1 – 4 Listener Number	-
Value 1	Hexadecimal	4	First 32 bits of the Stream ID (Null to query in text)	-
Value 2	Hexadecimal	4	Second 32 bits of the Stream ID	-

AVBRXNUMCHAN – Number of Audio Channels per AVB Listener

This command sets/reports the number of audio channels for the specified CONNECT AVB Listener.

Command Form: *DEVICE* **AVRXNUMCHAND** [LISTENER] [VALUE]

Argument	Type	Size	Values	Units
Listener	Integer	4	1 – 4 Listener Number	-
Value	Integer	4	Number of Channels Valid: 0, 2, 4, 6, 8 ONLY (Null to query in text)	-

AVBTXNUMCHAN – Number of Audio Channels per AVB Talker

This command sets/reports the number of audio channels for the specified CONNECT AVB Talker.

Command Form: *DEVICE* **AVTXNUMCHAND** [TALKER] [VALUE]

Argument	Type	Size	Values	Units
Talker	Integer	4	1 – 4 Talker Number	-
Value	Integer	4	Number of Channels Valid: 0, 2, 4, 6, 8 ONLY (Null to query in text)	-

AVG – Adaptive Volume Gain

This command sets the maximum gain setting that the algorithm will not exceed.

Command Form:

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupsAndChannels	-
Group	Group	1	23 (J)	-
Value	Signed Short	2	0.00 to +18.00 (Null to query in text)	dB

AVR – Adaptive Volume Reference

This command selects/reports the microphone or expansion bus reference channel to be used for adaptive volume tracking on a power amplifier channel.

Command Form: DEVICE **AVR** [CHANNEL] [GROUP]

Argument	Type	Size	Values	Units
Channel	Channel	1	(M) 1-8 (E) 1-18 (Null to query in text)	-
Group	Group	1	3, 6 (M or E)	-

AVRT – Adaptive Volume Ratio

This command sets the ratio at which gain will be automatically applied based upon the ambient level in the reference microphone. Example: A 1:1 setting would apply 1 dB of gain for every 1dB rise in ambient level of the reference microphone up to the Max Gain setting.

Command Form: DEVICE **AVRT** <Channel><Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = 2:1 1 = 1:1 2 = 1:2 (Null to query in text)	Ratio

AVT – Adaptive Volume Threshold

This command sets the level at which the adaptive volume algorithm will be activated. This value is referenced to the noise floor of the channel and the target above ambient for the adaptive volume to reach.

Command Form: Device **AVT** <Channel><Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Value	Signed Short	2	-80.00 to 0.00 (Null to query in text)	-

BAUD – Baud Rate

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

Command Form: DEVICE **BAUD** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	9600, 19200, 38400, 57600, 115200 (Null to query in text)	-

BFBINFO – Beamforming Array Beam Information

This command reports the given Beamforming Array's current active beams. **This command is read only.**

Command Form: DEVICE **BFBINFO** [Value]

Argument	Type	Size	Values	Units
Value	Integer	4	String with binary representation of the status of the eight (maximum future #) beams. 0 = Beam Inactive 1 = Beam Active (Null to Query in Text)	-

BFMODE – Sets/Reports Beamforming Mic Mode

This Sets the Beamforming Mic to Table Top, Wall Mount, Ceiling Mount, or Auto (Let the Beamforming Mic decide).

Command Form: DEVICE **BFMODE** <Channel> <Group> <Value>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	29 (V)	-
Value	Integer	2	1 = Auto (Default) 2 = Table Top 3 = Ceiling Mount 4 = Wall Mount (Null to Query in Text)	-

BFPOS – Beamforming Array Position in Auto Mode

This command reports the given Beam Former Array's Position if the BFMODE is Auto. **This command is read only.**

Command Form: DEVICE **BFPOS** [Value]

Argument	Type	Size	Values	Units
Value	Integer	4	2 = Table Top 3 = Ceiling Mount 4 = Wall Mount (Null to Query in Text)	-

BFZONE – Manually Disables/Enables Beamforming Mic Zones

For each Mode of a Beamforming Mic manually Enable or Disable each of the Mic Zones.

Command Form: DEVICE **BFZONE** <Channel> <Group> [Zone 1] [Zone 2] [Zone 3] [Zone 4] [Zone 5] [Zone 6]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	29 (V)	-
Zone 1	Unsigned Character	1	0 = Zone Disabled 1 = Zone Enabled (Null to Query in Text)	-
Zone 2	Unsigned Character	1	0 = Zone Disabled 1 = Zone Enabled (Null to Query in Text)	-
Zone 3	Unsigned Character	1	0 = Zone Disabled 1 = Zone Enabled (Null to Query in Text)	-
Zone 4	Unsigned Character	1	0 = Zone Disabled 1 = Zone Enabled (Null to Query in Text)	-
Zone 5	Unsigned Character	1	0 = Zone Disabled 1 = Zone Enabled (Null to Query in Text)	-
Zone 6	Unsigned Character	1	0 = Zone Disabled 1 = Zone Enabled (Null to Query in Text)	-

BFMUTEMACRO – Define Macros that Run When Beamforming Mic Mute Button Is Pressed

Define which macros to run on which CONVERGEPro board to Mute and Un-Mute groups of Beamforming Mics when the specified Beamforming Mic's Mute button is pressed. This allows pressing a single button to Mute or Un-Mute multiple Beamforming Mics. If the Macro numbers are zero (default) then ALL Beam Former Mics in the system will be Muted or Un-Muted.

Command Form: *DEVICE* **BFMUTEMACRO** [Type ID] [Device ID] [Mute On Macro] [Mute Off Macro]

Argument	Type	Size	Values	Units
Type ID	Integer	1	Type ID of board where the Mute On and Mute Off Macros are defined (Null to Query in text)	-
Device ID	Integer	1	Device ID of board where the Mute On and Mute Off Macros are defined	-
Mute On Macro	Integer	1	See 14(C) in **Groups and Channels**	-
Mute Off Macro	Integer	1	See 14(C) in **Groups and Channels**	-

BFLED – Beamforming Mic LED Mode

This command sets/reports the mode of the Mute Button LEDs on a Beamforming Mic.

Command Form: *DEVICE* **BFLED** [Value]

Argument	Type	Size	Values	Units
Value	Integer	4	0 = OFF (Always not lit) 1 = Steady Red when Muted – Steady Blue when Un-Muted (Default) 2 = Blinking Red when Muted – Steady Blue when Un-Muted (Null to Query in text)	-

CALLDUR – Call Duration

This command returns current call duration. If no call is active, this command returns 0. At the time of call termination, this command will automatically be sent out to report call duration. **This command is read only**.

Command Form: *DEVICE* **CALLDUR** <Channel> <Duration>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Reserved		2	0	-
Duration	String	8	String of format HR:MN:SS	-

CALLERID – Reports Caller ID Information

This command reports Caller Identification Information. **This command is reportable only. It cannot be queried or set.**

Command Form: *DEVICE* **CALLERID** <Channel> <Number> <Argument>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Reserved	Unsigned Integer	2	0	-
Number	String	16	1 – 16 chars	-
Label	String	16	1 – 16 chars	-

CGROUP – Compressor Group Select

This command selects/reports the setting of the compressor group.

Command Form: *DEVICE* **CGROUP** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	5 (P)	-
Value	Unsigned Integer	2	0 = none 1 – 4 (Null to query in text)	Compressor Group

CHAIRO – Chairman Override Mode

This command selects/reports the setting of chairman override.

Command Form: *DEVICE* **CHAIRO** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

CLEAREFFECT – ClearEffect Wide Band Telco Emulation

This command enables / disables or reports the current status of the ClearEffect.

Command Form: *DEVICE* **CLEAREFFECT** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

CLOCK – Clock Set

This command sets or reports the current time.

Command Form: *DEVICE* **CLOCK** [Date Month Year Hours Minutes Seconds Day]

Argument	Type	Size	Values	Units
Date	Unsigned Integer	1	1 – 31	-
Month	Unsigned Integer	1	1 – 12	-
Year	Unsigned Integer	2	2000 – 2099 (NULL to Query in Text)	-
Hours	Unsigned Integer	1	00 – 23	-
Minutes	Unsigned Integer	1	00 – 59	-
Seconds	Unsigned Integer	1	00 – 59	-
Day of Week	Unsigned Integer	1	1 = Sunday 2 = Monday 3 = Tuesday 4 = Wednesday 5 = Thursday 6 = Friday 7 = Saturday	-

CNETADDR – CobraNet Board IP Address

This command selects/reports the IP address of the Ethernet port on the CONNECT CobraNet Bridge board.

Command Form: *DEVICE* **CNETADDR** [Value]

Argument	Type	Size	Values	Units
Value	IP Address	4	(Null to query in text)	-

CNETCONDUCTOR – CobraNet Port Is Conductor

This command reports if the CobraNet Port is a Conductor. **This command is Query ONLY and may be sent asynchronously.**

Command Form: *DEVICE* **CNETCONDUCTOR** [Value]

Argument	Type	Size	Values	Units
Value	Integer	4	0 = CobraNet Port is NOT a Conductor 1 = CobraNet Port IS a Conductor (Null to query in text)	-

CNETCONTACT – CobraNet Board Contact

This command sets/reports the assigned contact of the CONNECT CobraNet Bridge board.

Command Form: *DEVICE* **CNETCONTACT** [Value]

Argument	Type	Size	Values	Units
Value	String	54	1 - 54 Characters (Null to query in text)	-

CNETCPRIO– CobraNet Conductor Priority

This command sets/reports the CobraNet Conductor Priority.

Command Form: *DEVICE* **CNETCPRIO** [Value]

Argument	Type	Size	Values	Units
Value	Integer	4	0 – 255 (Default = 32) (Null to query in text)	-

CNETLINK– CobraNet Port Is Linked to a Remote CobraNet Device

This command reports if the CONNECT CobraNet Port is currently Linked, Full Duplex, and Receiving Packets. **This command is Query ONLY and may be sent asynchronously.**

Command Form: *DEVICE* **CNETLINK** [Bit Pattern]

Argument	Type	Size	Values	Units
Bit Pattern	Integer	4	Bit 0 = CobraNet Port is Linked Bit 1 = CobraNet Port is Full Duplex Bit 2 = CobraNet Port is Receiving Packets (Null to query in text)	-

CNETLOC – CobraNet Board Location

This command sets/reports the assigned location of the CONNECT CobraNet Bridge board.

Command Form: *DEVICE* **CNETLOC** [Value]

Argument	Type	Size	Values	Units
Value	String	54	1 - 54 Characters (Null to query in text)	-

CNETMAC – CobraNet Board MAC Address

This command reports the MAC Address of the CONNECT CobraNet Bridge board. **This command is Query ONLY.**

Command Form: *DEVICE* **CNETMAC** [Value]

Argument	Type	Size	Values	Units
Value	String	20	"xx:xx:xx:xx:xx:xx" NULL terminated MAC address	-

CNETNAME – CobraNet Board Name

This command sets/reports the assigned name of the CONNECT CobraNet Bridge board.

Command Form: *DEVICE* **CNETNAME** [Value]

Argument	Type	Size	Values	Units
Value	String	54	1 - 54 Characters (Null to query in text)	-

CNETRXBNUM – CobraNet Rx Bundle Number

This command sets/reports the CobraNet Rx Bundle Number. Set to lowest value if bundle type is selected.

Command Form: *DEVICE* **CNETRXBNUM** <Receiver> [Value]

Argument	Type	Size	Values	Units
Receiver	Integer	4	1 – 4 Cobra Net Receiver Number	-
Value	Integer	4	0 = Default 1 – 255 if Multicast 256 – 65535 if Unicast (Null to query in text)	-

CNETRXSTATUS – CobraNet Rx Bundle Status

This command reports the CobraNet Rx Bundle Status (audio presence) for all 8 channels. **This command is Query ONLY and may be sent asynchronously.**

Command Form: *DEVICE* **CNETRXSTATUS** <Receiver> [Value]

Argument	Type	Size	Values	Units
Receiver	Integer	4	1 – 4 Cobra Net Transmitter Number	-
Value	Bit Map Rx Status	4	XXXX XXXX |||| ||||---- Channel 1 |||| |||----- Channel 2 |||| ||------ Channel 3 |||| |------- Channel 4 ||||--------- Channel 5 |||---------- Channel 6 ||----------- Channel 7 |------------ Channel 8 For each bit: 0 = No Signal 1 = Signal (Null to query in text)	Value

CNETTXBNUM – CobraNet Tx Bundle Number

This command sets/reports the CobraNet Tx Bundle Number. Set to lowest value if bundle type is selected.

Command Form: *DEVICE* **CNETTXBNUM** <Transmitter> [Value]

Argument	Type	Size	Values	Units
Transmitter	Integer	4	1 – 4 Cobra Net Transmitter Number	-
Value	Integer	4	0 = Default 1 – 255 if Multicast 256 – 65535 if Unicast (Null to query in text)	-

CNETTXDEPTH – CobraNet Tx Bundle Bit Depth

This command sets/reports the CobraNet Tx Bundle Bit Depth.

Command Form: *DEVICE* **CNETTXDEPTH** <Transmitter> [Depth]

Argument	Type	Size	Values	Units
Transmitter	Integer	4	1 – 4 Cobra Net Transmitter Number	-
Depth	Integer	4	16, 20, or 24 ONLY (Default = 24) (Null to query in text)	-

CNETTXLATENCY – CobraNet Tx Bundle Maximum Unicast

This command sets/reports the CobraNet Tx Bundle Maximum Unicast.

Command Form: *DEVICE* **CNETTXLATENCY** <Transmitter> [Value]

Argument	Type	Size	Values	Units
Transmitter	Integer	4	1 – 4 Cobra Net Transmitter Number	-
Value	Integer	4	0 = 5.33 ms (Default) 1 = 2.66 ms 2 = 1.33 ms (Null to query in text)	-

CNETTXMAXUNI – CobraNet Tx Bundle Latency

This command sets/reports the CobraNet Tx Maximum Unicast.

Command Form: *DEVICE* **CNETTXMAXUNI** <Transmitter> [Value]

Argument	Type	Size	Values	Units
Transmitter	Integer	4	1 – 4 Cobra Net Transmitter Number	-
Value	Integer	4	1, 2, 3, or 4 ONLY (Default = 1) (Null to query in text)	-

CNETTXSTATUS – CobraNet Tx Bundle Status

This command reports the CobraNet Tx Bundle Status (audio presence). **This command is Query ONLY and may be sent asynchronously.**

Command Form: *DEVICE* **CNETTXSTATUS** <Transmitter> [Value]

Argument	Type	Size	Values	Units
Transmitter	Integer	4	1 – 4 Cobra Net Transmitter Number	-
Value	Tx Status	4	0 = No Signal on Bundle 1 = Signal on Bundle (Null to query in text)	Value

CNETVER – CobraNet Tx Board F/W Version

This command reports the firmware version of the CobraNet board. **This command is Query ONLY.**

Command Form: *DEVICE* **CNETVER** [Value]

Argument	Type	Size	Values	Units
CNetVersion	String	12	Version format “MM.mm.rr.ee” (NULL terminated – Major.Minor.Revision.Enineering)	-

COMPDLY – Compressor Delay

This command sets signal compression delay on a Channel for look ahead compression functionality. Delay from 0-20 msec.

Command Form: *DEVICE* **COMPDLY** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Integer	2	0 - 20 (Null to query in text)	msec

COMPDLYEN – Compressor Delay Enable

This command enables signal compression delay on a Channel for look-ahead compression functionality

Command Form: *DEVICE* **COMPDLYEN** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

COMPERSIST – CobraNet Persistence

This command sets/reports the CobraNet Persistence for the CONNECT CobraNet board.

Command Form: *DEVICE* **COMPERSIST** [Value]

Argument	Type	Size	Values	Units
Value	Integer	4	0 - 255 (Default = 32) (Null to query in text)	-

COMPRESS – Compressor Adjust

This command selects/reports the settings of the compressor.

Command Form: *DEVICE* **COMPRESS** <Channel> [Threshold Ratio Attack Release Gain]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	5 (P)	-
Threshold	Signed Integer	1	-60 – 20 (Null to query in text)	dB
Ratio	Unsigned Integer	1	1 – 20	
Attack	Unsigned Float	2	0.00 – 100.00	Ms
Release	Unsigned Integer	2	100 – 2000	Ms
Gain	Unsigned Float	4	0.00 – 20.00	dB

COMPSEL – Compression Select

This command selects/reports the compressor activation.

Command Form: *DEVICE* **COMPSEL** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	5 (P)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

COUNTRY – Country Selection

This command sets / reports the country for telco compliance purposes.

Command Form: *DEVICE* **COUNTRY** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	1 = US / Canada 2 = Europe 3 = Mexico 4 = Australia 5 = South Africa 6 = Japan 7 = Brazil 8 = South Korea 9 = China 10 = Singapore 11 = Taiwan 12 = New Zealand 13 = India 14 = Hong Kong 15 = Malaysia 16 = Argentina (Null to query in text)	-

CTRLMASTER – Control Master Mode

This command reports the mode of the unit for SNMP control.

Command Form: *DEVICE* **CTRLMASTER** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	1 = Master 2 = Slave (Null to query in text)	-

DECAY – Decay Adjust

This command selects/reports the setting of the decay rate.

Command Form: *DEVICE* **DECAY** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Integer	2	1 = Slow 2 = Medium 3 = Fast (Null to query in text)	-

DEFAULT – Default The Unit

Sets the unit to factory defaults. **There is no query for this command.**

Command Form: *DEVICE* **DEFAULT**

No Arguments

DELAY – Delay Adjust

This command selects/reports the setting of delay time.

Command Form: *DEVICE* **DELAY** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	5 (P)	-
Value	Unsigned Float	2	0.00 – 250.00 (Null to query in text)	Ms

DELAYSEL – Delay Select

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

Command Form: *DEVICE* **DELAYSEL** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	5 (P)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

DEVICENAME – Argument Identification Label

This selects/reports the Device Argument identification label of the specific channel.

COMMAND FORM: *DEVICE* **DEVICENAME** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 2, 3, 7 (I, O, M, L)	-
Reserved	Unsigned Integer	2	0	-
Label	String	12	1 – 12 characters CLEAR = clear the label (Null to query in text)	-

DEVICESUBTYPE – Sets the Subtype of a Connected Device

This command enables/disables or reports the current type of device connected to an input or output.

Command Form: *DEVICE* **DEVICESUBTYPE** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 2, 3, 7 (I, O, M, L)	-
Value	Unsigned Integer	2	(NULL to query in text)	-

DEVICETYPE – Sets the Type of a Connected Device

This command enables / disables or reports the current type of device connected to an input or output.

Command Form: *DEVICE* **DEVICETYPE** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 2, 3, 7 (I, O, M, L)	-
Value	Unsigned Integer	2	(NULL to query in text)	-

DFLTM – Default Meter

This command selects/reports the setting of the default meter on the front panel.

Command Form: *DEVICE* **DFLTM** [Channel Group Position]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels** (Null to query in text)	-
Group	Group	1	1, 2, 3, 7, 16, 17 (I, O, M, L, T, R)	-
Position	Meter Type	2	1 – 4, as applicable for group See **Meter Type Definitions**	-

DIAG – Diagnostic Commands

This command is used to return status and diagnostic information. It is intended to be used as a text command only. **This is a query only command.**

Command Form: *DEVICE* **DIAG** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = List of current commands (J) Power Amp 1 = Fan/Temp 2 = Noise Gate 3 = Feedback Nodes	-
Information	String	80	Diagnostic String (ALWAYS NULL IN TEXT)	-

DIAL – DTMF Dialing

This command dials a DTMF sequence or reports back the last sequence dialed.

Command Form: *DEVICE* **DIAL** <Channel> [Number]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Reserved		2	0	-
Number	String	40	1 – 40 Chars of '0' – '9', '*', '#', ',' (Null to query last number dialed in text)	-

DID – Device ID

This command reports the device id. **This command is read only except through the front panel**.

Command Form: *DEVICE* **DID** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	See **Type And Device IDs** (Null sent in text, Value returned)	-

DTMFLVL – DTMF Tone Level

This command selects/reports the DTMF tone level.

Command Form: *DEVICE* **DTMFLVL** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Signed Float	2	-12.00 – 12.00 (Null to query in text)	dB

DTONELVL – Dial Tone Level

This command selects/reports the audible dial tone level.

Command Form: *DEVICE* **DTONELVL** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Signed Float	2	-12.00 – 12.00 (Null to query in text)	dB

DUPDATE – Download Update

This command reports the status of download updates.

Command Form: *DEVICE* **DUPDATE** [Channel Group Status Percent Done Message]

Argument	Type	Size	Values	Units
Channel	Unsigned Integer	1		-
Group	Unsigned Integer	1		-
Status	Unsigned Integer	1	(Null to query in text)	-
Percent Done	Unsigned Integer	1		-
Message	Char	60		-

DVER – Command Dictionary Version

This command reports the version of the command dictionary being used by the unit**. This command is read only.**

Command Form: *DEVICE* **DVER** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	(Sent with a Null in text)	-

ENETADDR – Ethernet Port IP Address

This command selects/reports the IP address of the Ethernet port on the unit.

Command Form: *DEVICE* **ENETADDR** [Value]

Argument	Type	Size	Values	Units
Value	IP Address	4	(Null to query in text)	-

ENETDHCP – Ethernet DHCP Selection

This command selects/reports the use of DHCP of the Ethernet port on the unit.

Command Form: *DEVICE* **ENETDHCP** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

ENETDNS – Ethernet DNS Selection

This command selects/reports the use of DNS of the Ethernet port on the unit.

Command Form: *DEVICE* **ENETDNS** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

ENETDNSA – Ethernet DNS Server Address

This command selects/reports the DNS server IP address of the Ethernet port on the unit.

Command Form: *DEVICE* **ENETDNSA** [Value]

Argument	Type	Size	Values	Units
Value	IP Address	4	(Null to query in text)	-

ENETDNSA2 – Ethernet DNS Server Address 2

This command selects/reports the alternate DNS server IP address of the Ethernet port on the unit.

Command Form: *DEVICE* **ENETDNSA2** [Value]

Argument	Type	Size	Values	Units
Value	IP Address	4	(Null to query in text)	-

ENETDOMAIN – Ethernet Domain Argument

This command selects/reports the Domain Argument of the Ethernet port on the unit.

Command Form: *DEVICE* **ENETDOMAIN** [Value]

Argument	Type	Size	Values	Units
Value	String	64	(Null to query in text)	-

ENETGATE – Ethernet Default Gateway Address

This command selects/reports the default gateway of the Ethernet port on the unit.

Command Form: *DEVICE* **ENETGATE** [Value]

Argument	Type	Size	Values	Units
Value	IP Address	4	(Null to query in text)	-

ENETSUBN – Ethernet Subnet Mask

This command selects/reports the Subnet mask of the Ethernet port on the unit.

Command Form: *DEVICE* **ENETSUBN** [Value]

Argument	Type	Size	Values	Units
Value	IP Address	4	(Null to query in text)	-

ENETVLAN – Enable VLAN Tagging

This command enables/disables VLAN tagging. **Valid on VH20 ONLY.** Change requires reboot to become effective.

Command Form: *DEVICE* **ENETVLAN** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 = VLAN Tagging Off 1 = VLAN Tagging On 2 = Toggle (Null to query in text)	-

ENETVLANID – VLAN ID

This command set/reports VLAN Tag ID for all Ethernet packets (including SIP). **Valid on VH20 ONLY.** Change requires reboot to become effective.

Command Form: *DEVICE* **ENETVLANID** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	1 – 4094 (Null to query in text)	-

ENETVLANPRI – VLAN Priority

This command sets/reports the VLAN Tagging Priority for all IP packets. **Valid on VH20 ONLY**. Change requires reboot to become effective.

Command Form: *DEVICE* **ENETVLANPRI** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 – 7 (Null to query in text)	-

EREF – Expansion Bus Reference

This command selects an output or reports which output is the expansion bus reference.

Command Form: *DEVICE* **EREF** <Channel> [Value Channel Value Group]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Reference Channels in **Groups and Channels**	-
Group	Group	1	8 (A, E)	-
Value	Channel	1	0 = none See 2, 20 (O, B) in **Groups and Channels** (Null to query in text)	-
Value	Group	1	0 for none or 2, 20 (N for none or O, B)	-

EVENT – Run Scheduled Event

This command manually runs a scheduled event on a unit. **There is no query associated with this command.**

Command Form: *DEVICE* **EVENT** <Channel> <Group>

Argument	Type	Size	Values	Units
Channel	Channel	1	1 - 10	-
Group	Group	1	21 (Q)	-
Reserved	Unsigned Short	2	0	-

FE – Feedback Elimination Enable

This command enables or disables feedback elimination on the power amplifier channel.

Command Form: *DEVICE* **FE** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = On 1 = Off 2 = Toggle (Null to query in text)	-

FEB – Feedback Elimination Bandwidth

This command sets the filter bandwidth of the notch filter. Options are a Q = 5 or Q = 10

Command Form: *DEVICE* **FEB** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = 5 1 = 10 Default 0 (5) (Null to query in text)	-

FEDR – Feedback Elimination Dynamic Node Reset

This command will reset only the dynamic filters on the feedback eliminator. There is no query associated with this command.

Command Form: DEVICE **FEDR** <CHANNEL> <GROUP>

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Reserved	Zero	2	Value:0-16 (Null to query in text)	Nodes

FEF – Feedback Elimination Fixed Filter

This command sets the number of fixed filter to use in the feedback eliminator. The fixed filters number will be used during the initialization phase when gain is increased until feedback occurs. A fixed filter will be set at the feedback point during the initialization.

Command Form: DEVICE **FEF** <CHANNEL> <GROUP> [VALUE]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Reserved	Unsigned Short	2	Zero	-

FEG – Feedback Elimination Auto Gain Max

This command sets the target gain for auto setup in feedback cancellation.

Command Form: DEVICE **FEG** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Reserved	Unsigned Short	2	0 - 8 (Null to query in text)	dB

FEGL – Feedback Elimination Gain Level

This command reports the gain value achieved at the end of the feedback automatic setup. The maximum value possible is set in the FEG command. **This is a query only command.**

Command Form: DEVICE **FEGL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Value	Signed Float	2	-99.99 to 99.99 (Sent with Null, value returned)	dB

FELD – Feedback Elimination Lock Depth

This command sets the operation of a fixed filter node to be either locked or unlocked. In locked mode, the fixed filter's depth will remain the same after all the fixed filters are placed. In unlocked mode, the fixed filter's depth can be modified anytime until the maximum depth is achieved.

Command Form: DEVICE **FELD** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Value	Unsigned Float	2	0 = Locked 1 = Unlocked Default 0 (Null to query in text)	-

FEM – Feedback Elimination Mode

This command set the feedback mode to either Music or Voice. This effects how aggressive the reduction is.

Command Form: *DEVICE* **FEM** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Value	Unsigned Float	2	0 = Locked 1 = Unlocked Default 0 (Null to query in text)	-

FEN – Feedback Elimination Nodes

This command reports the total number of filter nodes (fixed and dynamic) currently being used for the feedback cancellation. **This is a query only command.**

Command Form: *DEVICE* **FEN** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	Total Nodes (ALWAYS NULL IN TEXT)	-

FER – Feedback Elimination Node Reset

This command resets both the fixed and dynamic filters on the feedback eliminator. **There is no query associated with this command.**

Command Form: *DEVICE* **FER** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	Zero	-

FERNG – Feedback Elimination Ring Elimination Mode

This command enables/disables the Ring Elimination Mode on the feedback eliminator.

Command Form: *DEVICE* **FERNG** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Reserved	Zero	2	0 = 0ff 1 = On 2 = Toggle (Null to query in text)	-

FES – Feedback Elimination Setup

This command reset the feedback eliminator and initiates an automatic training cycle. When the automatic setup is complete, the FESC (Feedback Elimination Setup Complete) command will be issued. **There is no query associated with this command.**

Command Form: *DEVICE* **FES** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Reserved	Zero	2	Zero	-

FESC – Feedback Elimination Setup Complete

This command reports when the automatic feedback eliminator setup training cycle is in progress. The training cycle is started using the command FES (Feedback Elimination Setup). **This is a query only command.**

Command Form: *DEVICE* **FESC** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = Setup Complete 1 = Setup in Progress (Sent Null, Value Returned)	-

FILTER – Filter Adjust

This command selects/reports the settings of a filter.

Command Form: *DEVICE* **FILTER** <Channel> <Group> <Node> [Type Frequency Gain/Slope Bandwidth/Subtype]

Argument	Type	Size	Values		Units
Channel	Channel	1	See **Groups and Channels**		-
Group	Group	1	3, 5, 23, 29 (M, P, J, V)		-
Node	Unsigned Integer	1	Group 3, 23, 29 Group 5	1 – 4 1 – 15	-
Type	Unsigned Integer	1	0 = None 1 = All Pass 2 = Low Pass 3 = High Pass 4 = Low Shelving 5 = High Shelving 6 = Parametric Equalizer 7 = CD Horn 8 = Bessel Crossover 9 = Butterworth Crossover 10 = Linkwitz-Riley Crossover 11 = Notch (Null to query in text)		-
Frequency	Unsigned Float	4	Type 0 Type 1 – 6, 8 – 11 Type 7	0 (Null in text) 20.00 – 20000.00 500.00 – 5000.00	Hz
Gain/Slope	Signed Float	2	Type 0 – 3, 7, 11 Type 4 – 6 Type 8 – 9 Type 10	0 (Null in text) -15.00 – 15.00 12, 18, 24 12, 24	dB / dB per Octave
Bandwidth/Subtype	Unsigned Float	2	Type 0 – 5, 7 Type 6, 11 Type 8 – 10	0 (Null in text) 0.05 – 5.00 2 = Low Pass 3 = High Pass	Octaves / Type

FILTSEL – Filter Select

This command turns on and off the filters.

Command Form: *DEVICE* **FILTSEL** <Channel> <Group> <Node> [Value]

Argument	Type	Size	Values		Units
Channel	Channel	1	See **Groups and Channels**		-
Group	Group	1	3, 5, 23, 29 (M, P, J, V)		-
Node	Unsigned Integer	1	Group 3, 23, 29	1 – 4 0xFF for all (* text)	-
			Group 5	1 – 15 0xFF for all (* text)	
Value	Unsigned Integer	1	0 = Off 1 = On 2 = Toggle (Null to query in text)		-

FLOW – Flow Control

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

Command Form: *DEVICE* **FLOW** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

FMP – First Mic Priority Mode

This command selects/reports first Mic priority mode.

Command Form: *DEVICE* **FMP** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	4 (G)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

GAIN – Gain Adjustment

This command changes or reports back the gain for a channel.

Command Form: *DEVICE* **GAIN** <Channel> <Group> [Value] [Absol/Rel]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 2, 3, 5, 7, 12, 16, 17, 25, 26 (I, J, O, M, P, L, F, T, R, K, Z, D, U, V)	-
Value	Signed Float	2	-99.90 – 99.90 ** (Null to query in text)	dB
Absol / Rel		0	A = Absolute R = Relative Null = Relative	-

NOTE: Values indicate valid range for entry values only. Actual internal range of the gain stage is from –65 to 20. Absolute values will be limited to the internal gain range.

GATE – Gate Status

This command reports the gate status of Mics. **This command is read only**.

Command Form: *DEVICE* **GATE** [Value]

Argument	Type	Size	Values	Units
Value	Hexadecimal	4	Bits 0 – 7 represent gate status on Mics 1 – 8 (Null sent in text, Value returned)	-

GHOLD – Gate Hold Time Adjust

This command selects/reports the setting of hold time.

Command Form: *DEVICE* **GHOLD** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Float	2	0.10 – 8.00 (Null to query in text)	S

GMODE – Gating Mode

This command selects/reports the setting of gating mode.

Command Form: *DEVICE* **GMODE** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Integer	2	1 = Auto 2 = Manual On 3 = Manual Off (Null to query in text)	-

GOVER – Gating Override

This command selects/reports the setting of gating override.

Command Form: *DEVICE* **GOVER** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

GPIOSTATUS – General Purpose Status

This command sets the state of a General Purpose Status Pin.

Command Form: *DEVICE* **GPIOSTATUS** Pin Port [Value]

Argument	Type	Size	Values	Units
Pin	Unsigned Integer	1	1 – 24 (Only user definable status pins.	-
Port	Unsigned Integer	1	1 – 2	-
Value	Unsigned Integer	2	0 = High 1 = Low 2 = Toggle (NULL to query in text)	-

GRATIO – Gate Ratio Adjust

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

Command Form: *DEVICE* **GRATIO** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Integer	2	0 – 50 (Null to query in text)	dB

GREPORT – Gate Report

This command selects/reports the mode of gate and audio presence status reporting.

Command Form: *DEVICE* **GREPORT** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

GRPSEL – Gating Group Select

This command selects/reports which Gating Group a microphone input is assigned.

Command Form: *DEVICE* **GRPSEL** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Channel	2	See 4 (G) in **Groups and Channels** (Null to query in text)	-

HDAEC – Enables/Disables HD AEC mode

This command enables the HD AEC Mode of a Beamforming Microphone Array.

Command Form: *DEVICE* **HDAEC** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	29 (V)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to Query in Text)	-

HDAECMODE – Set/Report HD AEC mode

This command sets the HD AEC Mode of a Beamforming Microphone Array as Mono or Stereo.

Command Form: *DEVICE* **HDAECMODE** <Channel>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Unsigned Short	1	29 (V)	-
Value	Unsigned Short	2	1 = Mono – One reference per Beamforming Mic 2 = Stereo – Two references per Beamforming Mic (Null to Query in Text)	-

HDDREFSEL1 – Reference Select for Mono Channel Acoustic Echo Cancellation Block

This command Sets/Reports Reference for Mono AEC Block.

Command Form: *DEVICE* **HDREFSEL1** <Channel> <Group> [Ref. Group][Ref. Channel]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	29 (V)	
Reference Group	Group	1	8 (A) (Null to query in text)	-
Reference Channel	Channel	1	See **Groups and Channels**	-

HDDREFSEL2 – Reference Select for Stereo Channel Acoustic Echo Cancellation Block

This command Sets/Reports Reference for Stereo AEC Block.

Command Form: *DEVICE* **HDREFSEL2** <Channel> <Group> [Ref. Group][Ref. Channel]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	29 (V)	-
Reference Group	Group	1	8 (A) (Null to query in text)	
Reference Channel	Channel	1	See **Groups and Channels**	-

HDNLP – Non Linear Processing Adjust

This command selects/reports the setting of the Non-linear processing for each microphone channel. This command can be used to replace the NLP command for the M group.

Command Form: *DEVICE* **HDNLP** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 29 (M, V)	-
Value		2	0 = Off 1 = Soft 2 = Medium 3 = Aggressive (Null to query in text)	-

HOOK – Hook Flash

This command sends a hook flash. **There is no query for this command.**

Command Form: *DEVICE* **HOOK** <Channel>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Reserved		2	0	-

HOOKD – Hook Flash Duration

This command selects/reports the hook flash duration.

Command Form: *DEVICE* **HOOKD** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	50 – 2000 (Multiples of 10 Ms only) (Null to query in text)	Ms

LABEL – Label

This selects/reports the label of the specific channel or the unit.

Command Form: *DEVICE* **LABEL** <Channel> <Group> [In/Out] [Value]

Argument	Type	Size	Values	
Channel	Channel	1	See **Groups and Channels**	
Group	Group	1	1, 2, 3, 4, 5, 6, 7, 8, 12, 13, 14, 16, 17, 20, 25, 26 (H, I, J, O, M, G, P, E, L, A, F, S, C, T, R, B, K, Z, D, U, V)	
Input / Output to Matrix	Unsigned Integer	2	Groups all but 6	0
			Groups 6	0 = output 1 = input
Label	String	20	1 – 20 characters CLEAR = clear the label (Null to query in text)	

LCDCONTRAST – LCD Contrast

This command selects/reports the LCD Contrast Setting.

Command Form: *DEVICE* **LCDCONTRAST** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 (lightest) – 63 (darkest) (Null to query in text)	-

LMO – Last Mic On Mode

This command selects/reports last Mic on mode.

Command Form: *DEVICE* **LMO** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	4 (G)	-
Value	Unsigned Integer	2	0 = Off 1 - 8 = Mic 1 – 8 to be the last mic 0xFF (* in text) = Last Mic to stay on (Null to query in text)	-

LOCALNUM – Local Number

This command sets or reports back the current value of the local number.

Command Form: *DEVICE* **LOCALNUM** <Channel> [Number]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Reserved		2	0	-
Number	String	16	1 – 16 Chars of '0' – '9', '*', '#', ',' (Null to query in text)	-

LOCBLDG – Location: Building

This command sets/reports the location of the unit: Building string.

Command Form: *DEVICE* **LOCBLDG** [Value]

Argument	Type	Size	Values	Units
Value	String	80	CLEAR = Clear current value 1 – 63 Characters (Null to query in text)	-

LOCCITY – Location: City

This command sets/reports the location of the unit: City string.

Command Form: *DEVICE* **LOCCITY** [Value]

Argument	Type	Size	Values	Units
Value	String	80	CLEAR = Clear current value 1 – 63 Characters (Null to query in text)	-

LOCCNTRY – Location: Country

This command sets/reports the location country of the unit.

Command Form: *DEVICE* **LOCCNTRY** [Value]

Argument	Type	Size	Values	Units
Value	String	80	CLEAR = Clear current value 1 – 63 Characters (Null to query in text)	-

LOCCOMP – Location: Company

This command sets/reports the location of the unit: Company string.

Command Form: *DEVICE* **LOCCOMP** [Value]

Argument	Type	Size	Values	Units
Value	String	80	CLEAR = Clear current value 1 – 63 Characters (Null to query in text)	-

LOCREGION – Location: Region

This command sets/reports the location of the unit: Region string.

Command Form: *DEVICE* **LOCREGION** [Value]

Argument	Type	Size	Values	Units
Value	String	80	CLEAR = Clear current value 1 – 63 Characters (Null to query in text)	-

LOCROOM – Location: Room

This command sets/reports the location of the unit: Room string.

Command Form: *DEVICE* **LOCROOM** [Value]

Argument	Type	Size	Values	Units
Value	String	80	CLEAR = Clear current value 1 – 63 Characters (Null to query in text)	-

LOCSITENAME – Location: Site Argument

This command sets/reports the location of the unit Site name.

Command Form: *DEVICE* **LOCSITENAME** [Value]

Argument	Type	Size	Values	Units
Value	String	80	CLEAR = Clear current value 1 – 64 Characters (Null to query in text)	-

LOCSTATE – Location: State

This command sets/reports the location of the unit: State/Prefecture string.

Command Form: *DEVICE* **LOCSTATE** [Value]

Argument	Type	Size	Values	Units
Value	String	80	CLEAR = Clear current value 1 – 63 Characters (Null to query in text)	-

LOGMASK – Device Log Mask

This command sets or reports the device event log mask.

Command Form: *DEVICE* **LOGMASK** [Value]

Argument	Type	Size	Values	Units
Value	Hexadecimal	4	XXXX XXXX XXXX XXXX XXXX XXXX XXXX XXXX |||| |||| |||| |||| |||| |||| |||| ||||> Reset |||| |||| |||| |||| |||| |||| |||| |||> Errors |||| |||| |||| |||| |||| |||| |||| ||> Password Access |||| |||| |||| |||| |||| |||| |||| |> Telco On/Off |||| |||| |||| |||| |||| |||| |||| ||||> Dial |||| |||| |||| |||| |||| |||| |||| |||> Call Duration |||| |||| |||| |||| |||| |||| |||| ||> System Checks |||| |||| |||| |||| |||| |||| |||| |> Firmware Download |||| |||| |||| |||| |||| |||| |||| ||||> (Reserved) |||| |||| |||| |||| |||| |||| |||| |||> Default |||| |||| |||| |||| |||| |||| |||| ||> (Reserved) |||| |||| |||| |||| |||| |||| |||| |> (Reserved) |||| |||| |||| |||| |||| |||| |||| ||||> Safety Mute |||| |||| |||| |||| |||| |||| |||| |||> Macro Execution |||| |||| |||| |||| |||| |||| |||| ||> Preset Execution |||| |||| |||| |||| |||| |||| |||| |> Audio Clipping |||| |||| |||| |||| |||| |||| ||||-> Microphone Gains |||| |||| |||| |||| |||| |||| |||-> Processor Gains |||| |||| |||| |||| |||| |||| ||-> Fader Gains |||| |||| |||| |||| |||| |||| |-> Telco Gains |||| |||| |||| |||| |||| |||| ||||-> Power Amp. Gains |||| |||| |||| |||| |||| |||| |||-> Power Amp. Errors |||| |||| |||| |||| |||| |||| ||-> Caller ID |||| |||| |||| |||| |||| |||| |-> SIP Message Log |-------|-> (Reserved) (Null to query in text)	-

LVL – Level

This command reports the level of a channel. **This command is read only.**

Command Form: *DEVICE* **LVL** <Channel> <Group> <Position> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 2, 3, 5, 7, 12, 16, 17, 20, 25, 26 (I, J, O, M, P, L, F, T, R, K, Z)	-
Position	Meter Type	2	See **Meter Type Definitions**	-
Value	Signed Float	4	-99.99 – 99.99 (Sent with Null in text, Value returned)	dB

LVLREPORT – Level Report

This command selects/reports the status of level reporting for the specified channel.

Command Form: *DEVICE* **LVLREPORT** <Channel> <Group> <Position> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 2, 3, 5, 7, 12, 16, 17, K, Z (I, J, O, M, P, L, F, T, R, K, Z)	-
Position	Meter Type	2	See **Meter Type Definitions**	-
Value	Unsigned Integer	4	0 = Off (Delete from list being reported) 1 = On (Add to list being reported) 2 = Toggle (Null to query in text)	-

LVLREPORTEN – Level Report Enable

Enables level reporting for the unit.

Command Form: *DEVICE* **LVLREPORTEN** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 = Turn off reporting but leave current list 1 = Turn on reporting 2 = Turn off reporting and clear the list (Null to query in text)	-

MACRO – Macro Execution/Reporting

This command executes a specified macro or reports the last macro executed.

Command Form: *DEVICE* **MACRO** [Value]

Argument	Type	Size	Values	Units
Value	Channel	4	See 14 (C) in **Groups and Channels** (Null to query last macro ran in text)	-

NOTE: The response will indicate successful execution of the macro, but it does not guarantee that each command in the macro was executed.

MANUFACTURER – Manufacturer Identification Label

This command selects/reports the model identification label of the specified channel.

Command Form: *DEVICE* **MANUFACTURER** <Channel> <Group> <Reserved>[Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 2, 3, 7 (I, O, M, L, D)	-
Reserved	Unsigned Integer	2	0	-
Label	String	16	1-16 characters CLEAR = clear the label (Null to query in text)	dB

MAX – Maximum Gain Setting

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

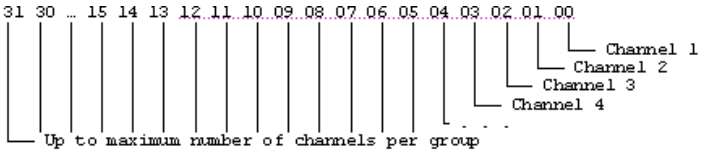
Command Form: *DEVICE* **MAX** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 2, 3, 5, 7, 12, 16, 17, 25, 26 (I, O, M, P, L, F, T, R, K, Z, D, U, V)	-
Value	Signed Float	2	-65.00 – 20.00 (Null to query in text)	dB

MC – Multi-Channel Mode

This command groups audio controls for channels. Audio Controls include Gain, Ramp Gain, and Mute.

Command Form: DEVICE **MC** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	1 – n (Max number of channels in Multi-Channel Group divided by 2)	-
Group	Group	1	128 (No text group)	-
Multi-Channel Group	Group	2	Only 23 (J) accepted for now. See GroupAndChannels	dB
Bitmap	Hexadecimal Integer	4		-

MCGAIN – Multi-Channel Gain

This command that groups adjusts/reports audio gain of the grouped channels.

Command Form: DEVICE **MCGAIN** <Channel> <Group> [Value] [Absol/Rel]

Argument	Type	Size	Values	Units
Channel	Channel	1	1 – n (Max number of channels in Multi-Channel Group divided by 2)	-
Group	Group	1	128 (No text group)	-
Multi-Channel Group	Unsigned Integer	2	Only 23 (J) accepted for now. See GroupAndChannels	-
Value	String	4	-99.90 – 99.90 (Null to query in text)	dB
Absol./ Rel.		0	A = Absolute R = Relative Null = Relative	-

MCMINMAX – Multi-Channel Min and max Gain Setting

This command changes or reports back the minimum and maximum gain setting for a channel

Command Form: DEVICE **MCMINMAX** <Channel> <Group> [Value] [Min Max]

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	128 (No text group)	-
Multi-Channel Group	Group	2	Only 23 (J) accepted for now. See GroupAndChannels	-
Value	Signed Short	2	-65.00 – 20.00 (Null to query in text)	dB
Max	Signed Short	2	-65.00 – 20.00	dB

MCMUTE – Multi-Channel Min and Max Gain Setting

This command performs/reports audio mutes of the grouped channels.

Command Form: *DEVICE* **MCMUTE** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	1 – n (Max number of channels in Multi-Channel Group divided by 2)	-
Group	Group	1	128 (No text group)	-
Multi-Channel Group	Group	1	Only 23 (J) accepted for now. See GroupAndChannels	-
Value	Unsigned Char	1	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

MCRAMP – Multi-Channel Ramp

This command performs audio gain ramps of the grouped channels. **There is no query associated with this command.**

Command Form: *DEVICE* **MCRAMP** <Channel> <Multi-Channel Group> <Rate> <Target>

Argument	Type	Size	Values	Units
Channel	Channel	1	1 – n (Max number of channels in Multi-Channel Group divided by 2)	-
Group	Group	1	128 (No text group)	-
Multi-Channel Group	Group	2	Only 23 (J) accepted for now. See GroupAndChannels	-
Rate	Signed Integer	2	-50 – 50 If value = 0, the ramp will stop. If value < 0, the gain will ramp down. If value > 0, the gain will ramp up.	dB / sec
Target	Signed Integer	2	-65 – 20 If NULL in text or 0x80 in binary, the ramp will use the channel's maximum and minimum for a target.	dB

MIN – Minimum Gain Setting

This command changes or reports back the minimum gain setting for a channel.

Command Form: *DEVICE* **MIN** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 2, 3, 5, 7, 12, 16, 17, 25, 26 (I, J, O, M, P, L, F, T, R, K, Z, D, U, V)	-
Value	Signed Float	2	-65.00 – 20.00 (Null to query in text)	dB

MINMAX – Minimum and Maximum Gain Setting

This command changes or reports back the minimum and maximum gain setting for a channel.

Command Form: *DEVICE* **MINMAX** <Channel> <Group> [Min Max]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 2, 3, 5, 7, 12, 16, 17, 25, 26 (I, J, O, M, P, L, F, T, R, K, Z, D, U, V)	-
Min	Signed Float	2	-65.00 – 20.00 (Null to query in text)	dB
Max	Signed Float	4	-65.00 – 20.00	dB

MLINE – Mic / Line Coarse Gain Setting

This command selects/reports the setting of coarse gain.

Command Form: *DEVICE* **MLINE** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Integer	2	0 = 0 dB 7 = 7 dB 14 = 14 dB 21 = 21 dB 28 = 28 dB 35 = 35 dB 41 = 41 dB 50 = 50 dB 56 = 56 dB (Null to query in text) (No other values are valid and accepted)	-

MMAX – Maximum Number of Microphones

This command selects/reports the maximum number of microphones for a Gating Group.

Command Form: *DEVICE* **MMAX** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	4 (G)	-
Value	Unsigned Integer	2	0 = Unlimited 1 - 8 = Maximum # of Mics (Null to query in text)	-

MODEL – Model Identification Label

This command selects/reports the model identification label of the specified channel.

Command Form: *DEVICE* **MODEL** <Channel> <Group> <Reserved>[Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 2, 3, 7 (I, O, M, L, D)	-
Reserved	Unsigned Integer	2	0	-
Label	String	16	1-16 characters CLEAR = clear the label (Null to query in text)	dB

MTRX – Matrix Routing

This command selects/reports the matrix routing of an input to an output.

Command Form: *DEVICE* **MTRX** <Src. Ch.> <Src. Gp.> <Dest. Ch.> <Dest. Gp.> [Value]

Argument	Type	Size	Values	Units
Source Channel	Channel	1	See **Groups and Channels**	-
Source Group	Group	1	1, 3, 5, 6, 7, 12, 17, 25, 26 (I, M, P, E, L, F, R, K, Z, U, V)	-
Destination Channel	Channel	1	See **Groups and Channels**	-
Destination Group	Group	1	2, 5, 6, 12, 16, 20, 25, 26 (H, J, O, P, E, F, T, B, K, D)	-
Value	Unsigned Integer	4	0 = Cross point off 1 = Cross point on (Not Valid for Mic Sources) 2 = Toggle (Not Valid for Mic Sources) 3 = Non Gated (Mic Sources Only) 4 = Gated (Mic Sources Only) 5 = Pre-AEC (Mic Sources Only) 6 = Routing Prohibited (Cross point is off and may not be turned on) (Null to query in text)	-

MTRXCLEAR – Clear Matrix

Clears the ENTIRE matrix for the unit. **There is no query for this command.**

Command Form: *DEVICE* **MTRXCLEAR**

No Arguments

MTRXLVL – Matrix Attenuation Adjust

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

Command Form:

DEVICE **MTRXLVL** <Src. Ch.> <Src. Gp.> <Dest. Ch.> <Dest. Gp.> [Value] [A/R]

Argument	Type	Size	Values	Units
Source Channel	Channel	1	See **Groups and Channels**	-
Source Group	Group	1	1, 3, 5, 6, 7, 12, 17, 25, 26 (I, M, P, E, L, F, R, K, Z, U, V)	-
Destination Channel	Channel	1	See **Groups and Channels**	-
Destination Group	Group	1	2, 5, 6, 12, 16, 25, 26 (H, J, O, P, E, F, T, K, D)	-
Value	Signed Float	4	-99.00 – 99.00 ** (Null to query in text)	dB
Absol / Rel		0	A = Absolute R = Relative Null = Relative	-

NOTE: Values indicate entry range only. Actual internal range of the matrix attenuation is from –60 to +12dB, and absolute values are limited to the internal gain range.

MTRXTYPE – Select Pre-AEC Gated or Non-Gated Routing

This command selects whether the Pre-AEC routing is Gated or Non-Gated.

Command Form: *DEVICE* **MTRXTYP** <Type>

Argument	Type	Size	Values	Units
Type	Integer	4	0 = Gated (Default) 1 = Non-Gated 2 = Toggle (Null to query in text)	-

MUTE – Mute

This command selects/reports the setting of mute on a channel.

Command Form: *DEVICE* **MUTE** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 2, 3, 5, 7, 12, 16, 17, 25, 26 (I, J, O, M, P, L, F, T, R, K, Z, D, U, V)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

NAME – Unit Name (NETBIOS Name)

This command sets/reports the name of the unit which is also used for its NETBIOS name.

Command Form: *DEVICE* **NAME** [Value]

Argument	Type	Size	Values	Units
Value	String	16	1 – 15 Characters (Null to query in text)	-

NCD – Noise Cancellation Depth Adjust

This command selects/reports the depth setting of the Noise Cancellation.

Command Form: *DEVICE* **NCD** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 17, 26 (M, R, Z, V)	-
Value	Unsigned Integer	2	6 – 15 (Null to query in text)	dB

NCSEL – Noise Cancellation Select

This command selects/reports the setting of the Noise Cancellation for each microphone channel.

Command Form: *DEVICE* **NCSEL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 17, 26 (M, R, Z, V)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

NLP – Non Linear Processing Adjust

This command selects/reports the setting of non-linear processing for each microphone channel.

Command Form: *DEVICE* **NLP** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Integer	2	0 = Off 1 = Soft 2 = Medium 3 = Aggressive (Null to query in text)	-

NOM – Number of Open Microphones Mode

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

Command Form: *DEVICE* **NOM** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	2, 16, 25 (J, O, T, K, D)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

NTPSRV – NTP Network Time Server Address

This command selects/reports the IP addresses of the NTP Time Server the unit's NTP client requests time status from.

Command Form: *DEVICE* **NTPSRV** [Value 1 Value 2]

Argument	Type	Size	Values	Units
Value 1	IP Address	4	(Null to query in text)	-
Value 2	IP Address	4		-

NULL – Null the Telephone Line

This command nulls the telephone line. **There is no query for this command.**

Command Form: *DEVICE* **NULL** <Channel>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Reserved		2	0	-

OFFA – Off Attenuation Mode

This command selects/reports the off attenuation value of a Mic channel.

Command Form: *DEVICE* **OFFA** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Float	2	0.00 – 60.00 (Null to query in text)	-

PAA – PA Adaptive Mode

This command selects/reports PA adaptive mode for the specified Mic.

Command Form: *DEVICE* **PAA** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

PACEN – PA Softclipper Enable

This command changes enables the softclipper function on a power amplifier channel.

Command Form: *DEVICE* **PACEN** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

PAENERGY – PA Energy-saver mode

This command switches the 36-volt rails off and on for the power amplifier. It is intended to be used for a low power or energy saving mode.

Command Form: *DEVICE* **PAENERGY** [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = Energy Saver Mode OFF (Power Amp On) 1 = Energy Saver Mode ON (Power Amp Off) (Null to query in text)	-

PAEQEN – PA EQ Filter Enable

This command enables the EQ filter on a PA Channel

Command Form: *DEVICE* **PAEQEN** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

PAEQRST – PA EQ Filter Reset

This command resets the EQ Level for ALL bands in the filter bank. **There is no query associated with this command.**

Command Form: *DEVICE* **PAEQEN** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Reserved	Zero	2	Zero	-

PAEQSET – PA EQ Filter Set

This command sets/reports the EQ Level for a given band in the filter bank

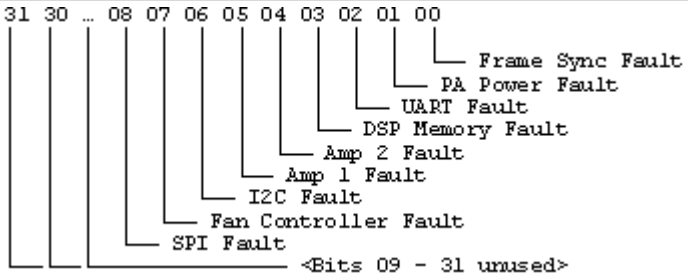
Command Form: *DEVICE* **PAEQEN** <Channel> <Group> <Band> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Band	Unsigned Short	2	1 = 32.25 Hz 2 = 62.5 Hz 3 = 125.0 Hz 4 = 250.0 Hz 5 = 500.0 Hz 6 = 1000.0 Hz 7 = 2000.0 Hz 8 = 4000.0 Hz 9 = 8000.0 Hz 10 = 16000.0 Hz	Hz
Value	Signed Float	4	-12.00 – 12.00 (Null to query in text)	dB

PAFLT – PA Fault

This indicates one of the power amplifier channels is in a FAULT condition. **This is Read-Only, and is automatically generated if a fault occurs.**

Command Form: *DEVICE* **PAEQEN** [Bitmap]

Argument	Type	Size	Values
Bitmap	Hexadecimal Integer	4	

PAIMPED – PA Output Impedance

This command selects the output impedance for the PA channel to be either 8 ohms or 70/100V.

Command Form: *DEVICE* **PIAMPED** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = 8 ohms 1 = 70/100V (Null to query in text)	-

PALEN – PA Limiter Enable

This command changes enables the Limiter on a power amplifier channel.

Command Form: *DEVICE* **PALEN** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

PALT – PA Limiter Threshold

This command sets the Limiter threshold on a power amplifier channel.

Command Form: *DEVICE* **PALT** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Signed Float	2	-65.00 to +20.00 (Null to query in text)	dB

PANGAT – PA Noise Gate Activation Timer

This command sets the Noise Gate activation timer. The noise gate will be activated if the timer conditions are met along with Gate thresholds.

Command Form: *DEVICE* **PANGAT** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	1 -16 (Null to query in text)	Minutes

PANGEN – PA Noise Gate Enabled

This command enables noise gating on a PA Channel.

Command Form: *DEVICE* **PANGEN** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = No Filter 1 = High Pass 2 = Low Pass 3 = Hi **and** Low Pass (Null to query in text)	-

PANGF – PA Noise Gate Filter

This command sets either a High Pass or Low Pass filter to be used in the activation of the noise gate. This will affect the threshold conditions for activation of the gate. A low pass will remove noise floor contributions to gate threshold above **500** HZ. A high pass will remove noise floor contribution to gate threshold above below **2K**.

Command Form: *DEVICE* **PANGF** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

PANGM – PA Noise Gate Mode

This command sets the Noise Gate mode to be either manual or automatic. In manual mode the gate threshold will be used to activate. In auto mode the noise floor will be used to activate.

Command Form: *DEVICE* **PANGM** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = Automatic 1 = Manual (Null to query in text)	-

PANGT – PA Noise Gate Threshold

This command sets the Noise Gate Threshold that will be used when in the manual mode. This represents the level at which the noise gate will activate.

Command Form: *DEVICE* **PANGT** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Signed Float	2	-100.00 to 0.00 (Null to query in text)	dB

PAPOL – Polarity Switch

This command changes audio signal polarity on a power amplifier channel.

Command Form: *DEVICE* **PAPOL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = Normal 1 = Reverse 2 = Toggle (Null to query in text)	-

PARST – PA Reset

This command resets the power supplies on an individual power amplifier circuits. **There is no query associated with this command.**

Command Form: *DEVICE* **PARST** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Reserved	Zero	2	Zero	-

PASME – PA Sound Mask Enable

This command enables the sound mask signal on a PA Channel

Command Form: *DEVICE* **PASME** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = Voice Mode 1 = Wideband Mode (Null to query in text)	-

PASML – PA Sound Mask Level

This command selects/reports the sound mask level on a PA channel.

Command Form: *DEVICE* **PASML** <Channel> <Group> [Amplitude]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Amplitude	Signed Short	2	-60.00 – 20.00 (Null to query in text)	dB

PASMM – PA Sound Mask Mode

This command selects/reports the sound mask mode on a PA channel.

Command Form: *DEVICE* **PASMM** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 = Voice Mode 1 = Wideband Mode (Null to query in text)	-

PASMT – PA Sound Mask Timer

This command selects/reports the timer on sound mask signal on a PA channel.

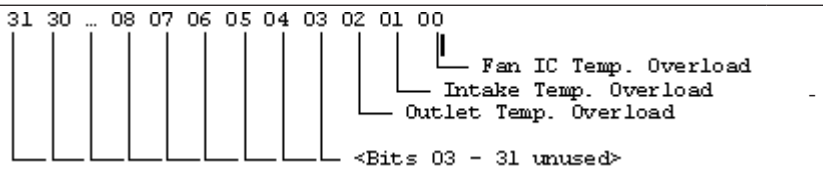
Command Form: *DEVICE* **PASMT** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	23 (J)	-
Value	Unsigned Short	2	0 – 1440 (24 hours) (Null to query in text)	Minutes

PATO – PA Thermal Overload

This indicates if a thermal overload condition is occurring on one of the power amplifier channels. **This is Read-Only, and is automatically generated if a overload occurs.**

Command Form: *DEVICE* **PATO** [Bitmap]

Argument	Type	Size	Values	Units
Bitmap	Hexa-decimal Integer	4		

PBDIAL – Dial a PB Entry by Argument

This command dials a speed dial number by name. **There is no query for this command**.

Command Form: *DEVICE* **PBDIAL** <Channel> <Label>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Reserved	Unsigned Integer	2	0	-
Label	String	16	1 – 16 chars	-

PHONEBOOKADD – Adds an Entry to the Phonebook

This command saves an entry in the phonebook. **There is no query for this command.** No two entries can share the same label. An argument error will be returned if an entry already exists. To change an entry, you must first delete it and then add it again. If label is blank, the first 20 characters of the number will be used as the label. The **Number** argument must not be blank. If an entry already exists with the assigned speed dial it will be overwritten. The entries are alphabetized based on Label.

Command Form: *DEVICE* **PHONEBOOKADD** <ID Number Label>

Argument	Type	Size	Values	Units
Speed Dial	Unsigned Integer	4	0 for not assigned to a speed dial 1 – 20	-
Number	String	44	1 – 44 chars '0' – '9', '*', '#'	-
Label	String	16	1 – 16 chars	-

PHONEBOOKCNT – Counts Entries in the Phonebook

This command queries the number of entries in the phonebook. **This command is query only.**

Command Form: *DEVICE* **PHONEBOOKCNT** <Value>

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 – 20	-

PHONEBOOKDEL – Deletes an Entry in the Phonebook

This command deletes an entry in the phonebook. **There is no query for this command.**

Command Form: *DEVICE* **PHONEBOOKDEL** <Label>

Argument	Type	Size	Values	Units
Label	String	16	1 – 16 chars	-

PHONEBOOKREAD – Queries the Phonebook by Index

This command queries an entry in the phonebook. **This command is query only**.

Command Form: *DEVICE* **PHONEBOOKREAD** <Index> [Speed Number Label]

Argument	Type	Size	Values	Units
Index	Unsigned Integer	2	0 – 19 (Must be less than the Number of Phone Book Entries)	-
Speed Dial	Unsigned Integer	2	0 for not assigned to a speed dial 1 – 20 (NULL to query in text)	-
Number	String	44	1 – 44 chars '0' – '9', '*', '#'	-
Label	String	16	1 – 16 chars	-

PP – Phantom Power

This command selects/reports the setting of phantom power.

Command Form: *DEVICE* **PP** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

PRESET – Preset Execution/Reporting

This command selects/reports the state of a preset.

Command Form: *DEVICE* **PRESET** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	0 (Binary)/Null (Text) = Query Last Preset Ran See **Groups and Channels**	-
Group	Group	1	13 (S)	-
Value	Unsigned Integer	2	0 = Set preset state to off 1 = Set state to on and execute if not already on 2 = Execute and return state to off (Null to query current state in text)	-

PRGSTRING – Program String

This command sets/reports a programmed string.

COMMAND FORM: DEVICE **PRGSTRING** <ID> [Value]

Argument	Type	Size	Values	Units
ID	Unsigned Integer	4	0 – 7	-
Value	String	80	CLEAR = Clear current value 1 – 80 Chars (Null to query in text) Special Characters: \a = alert \b = backspace \f = form feed \n = new line \r = carriage return \t = horizontal tab \v = vertical tab \\ = backslash	-

PROXYSTAT – Proxy Registration Status

This command reports the registration status for the primary or secondary proxy. **This command is only queried, not set, and can be sent asynchronously.**

Command Form: DEVICE **PROXYSTAT** <Index> <Value>

Argument	Type	Size	Values	Units
Index	Channel Index	1	0 = Primary Proxy 1 = Secondary Proxy	-
Group	Group	1	129 (No text group)	-
Value	Signed Float	2	0 = SIP Proxy Disabled 1 = SIP Proxy Registered 2 = SIP Proxy NOT Registered	-

PROXYTYPE – Set/Get Proxy Type

If the proxy server requires specific firmware changes to work with, this setting tells firmware what proxy server type to work with.

Command Form: DEVICE **PROXYTYPE** <Value>

Argument	Type	Size	Values	Units
Const. Channel	Channel Const.	1	1	-
Group	Group	1	131	-
Value	Signed Float	2	0 – Default, means no specific changes required. 1 – Cisco Proxy (CCM7)	-

PTTTHRESHOLD – Push to Talk Threshold

This command selects/reports the setting of the push to talk threshold for a microphone.

Command Form: DEVICE **PTTTHRESHOLD** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Float	2	-100 to 0 (Null to query in text)	dB

PUSHTOTALK – Push to Talk

This command selects/reports the setting of push-to-talk for a microphone.

Command Form: *DEVICE* **PUSHTOTALK** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

RAMP – Ramp Gain Adjustment

This command starts / stops the gain ramp for an input, output or assignable processing block. **There is no query associated with this command.**

Command Form: *DEVICE* **RAMP** <Channel> <Group> <Rate> [Target]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 2, 3, 5, 7, 12, 16, 17, 25, 26 (I, J, O, M, P, L, F, T, R, K, Z, D, U, V)	-
Rate	Signed Integer	1	-50 – 50 If value=0, the ramp will stop. If value< 0, the gain will ramp down. If value>0, the gain will ramp up.	dB / s
Target	Signed Integer	1	-65 – 20 If NULL in text or 0x80 in binary, the ramp will use the channel's maximum and minimum for a target.	dB

REDIAL – Redial the Last Number

This command redials the last number. **There is no query for this command.**

Command Form: *DEVICE* **REDIAL** <Channel>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Reserved		2	0	-

REFSEL – Reference Select for PA Adaptation & AEC

This command selects/reports which output or expansion bus reference is used for a Mic input as a reference for power amp adaptation mode and acoustic echo cancellation where applicable.

Command Form: *DEVICE* **REFSEL** <Channel> [Ref. Group Ref. Channel]

Argument	Type	Size	Values	Units
Channel	Channel	1	See 3 (M) in **Groups and Channels**	-
Group	Group	1	3 (M)	-
Reference Group	Group	1	2, 8, 20 (A, B, E, H, J, O)	-
Reference Channel	Channel	1	See **Groups and Channels** (Null to query in text)	-

REFSET – Reference Channel Set Up

This command selects/reports the output the reference channel tracks.

Command Form: *DEVICE* **REFSET** <Channel> [Reference Output]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	20 (B)	-
Value	Reference Output	2	0 = none See 2 (O) in **Groups and Channels** (Null to query in text)	-

RESET – Reset

Resets the unit. **There is no query for this command.**

Command Form: DEVICE **RESET**

No Arguments

RING – Ring Indication

This command indicates a ringing line. **This command is reportable only. It cannot be queried or set.**

Command Form: DEVICE **RING** <Channel><Value>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	0 = Ring Cycle Ended 1 = Ring Cycle Started	-

RINGEREN – Audible Ring Enable

This command sends/reports the use of an audible ring.

Command Form: DEVICE **RINGEREN** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

RINGERLVL – Audible Ring Level

This command selects/reports the audible ring's level.

Command Form: DEVICE **RINGERLVL** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Signed Float	2	-12.00 – 12.00 (dB) (Null to query in text)	-

RINGERSEL – Audible Ring Melody Selection

This command sends/reports the audible ring melody.

Command Form: DEVICE **RINGERSEL** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	1 – 3 (Null to query in text)	-

RINGERTEST – Audible Ring Melody Test

This command plays the current audible ringer melody. **This command is executable only. There is no query.**

Command Form: DEVICE **RINGERTEST** <Channel>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Reserved	Unsigned Integer	2	0	-

RINGMOD – Ring Cadence Mode

This command sets the ring cadence to either standard mode or custom mode. The cadence can be set using the RINGON and RINGOFF commands. The country code should be set first using the COUNTRY command.

Command Form: *DEVICE* **RINGMOD** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Short	2	0 = Standard 1 = Custom (Null to query in text)	-

RINGOFF – Ring Cadence Off Time

This command sets the ring cadence off time. The country code should be set first using the COUNTRY command.

Command Form: *DEVICE* **RINGOFF** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Short	2	0 = 80 1 = 128 2 = 256 3 = 384 4 = 512 5 = 640 6 = 768 7 = 896 8 = 1024 (Null to query in text)	ms

RINGON – Ring Cadence On Time

This command sets the ring cadence on time. The country code should be set first using the COUNTRY command.

Command Form: *DEVICE* **RINGON** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Short	2	0 = 100 1 = 150 2 = 200 3 = 256 4 = 384 5 = 512 6 = 640 7 = 1024 (Null to query in text)	ms

RXBOOST – Receive Boost

This command selects/reports the receive boost status.

Command Form: *DEVICE* **RXBOOST** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	0, 3, 6, 9, or 12 (Null to query in text)	dB

RXBSTEN – Receive Boost Enable

This command selects/reports the receive boost status.

Command Form: *DEVICE* **RXBSTEN** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

SERECHO – Serial Echo

This command selects/reports the serial echo of the RS-232 port.

Command Form: *DEVICE* **SERECHO** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

NOTE: The unit will return the updated state of the last selection in the same form as the command.

SFTYMUTE – Safety Mute

This command selects/reports the state of the safety mute. Safety mute holds all outputs in a muted state. It used for syncing to a site document to avoid feedback or blown speakers until the unit is in a settled state.

Command Form: *DEVICE* **SFTYMUTE** [Value]

Argument	Type	Size	Values	Units
Value	Channel	4	0 = off 1 = on 2 = toggle (Null to query in text)	-

SIGGEN – Signal Generator

This command selects/reports of the signal generator activation.

Command Form: *DEVICE* **SIGGEN** [Channel Group Type Amplitude Frequency]

Argument	Type	Size	Values		Units
Channel	Channel	1	See **Groups and Channels** (Null to query in text)		-
Group	Group	1	1, 3, 7 (I, M, L)		-
Type	Unsigned Integer	2	1 = Pink Noise 2 = White Noise 3 = Tone		-
Amplitude	Signed Float	4	-60.00 – 20.00		dB
Frequency	Unsigned Float	4	Type 1 – 2 Type 3	0 (Null in text) 20.00 – 20000.00	Hz

SIGGENEN – Signal Generator Enable

This command selects/reports of the signal generator activation.

Command Form: *DEVICE* **SIGGENEN** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

SIGGENSWEEP – Signal Generator Sweep

This command starts the signal generator with a tone and does a sweep. If **Repeat** is 0, the signal generator will turn off after the sweep. If **Repeat** is 1, the signal generator will turn off after signal generator timeout. To stop the sweep, send a SIGGENEN command with a 0. During the sweep, the box will send out updated SIGGEN commands.

Command Form:

DEVICE **SIGGENSWEEP** <Channel> <Group> <Amplitude> <Start Frequency> <End Frequency> <Increment Frequency> <Rate> <Repeat>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	1, 3, 7 (I, M, L)	-
Amplitude	Signed Float	2	-60.00 – 20.00	dB
Start Frequency	Unsigned Float	4	20.00 – 20000.00	Hz
End Frequency	Unsigned Float	4	20.00 – 20000.00 (must be greater than the start)	Hz
Increment Frequency	Unsigned Float	4	1.00 – 20000.00	Hz
Rate	Unsigned Integer	2	10 – 2000 ms	Hz
Repeat	Unsigned Integer	2	0 = repeat off 1 = repeat on	-

SIGTOUT – Signal Generator Time Out

Sets the signal generator time out for the unit.

Command Form: DEVICE **SIGTOUT** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 = Disable 1 – 30 (Null to query in text)	Min

SLVL – Speech Level Control

This command selects/reports the setting of Speech Level Control.

Command Form: DEVICE **SLVL** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3 (M)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

SMTPSRV – SMTP Mail Server Address

This command selects/reports the IP address of the SMTP Mail server, and the Email Address the unit's SMTP client sends messages to.

Command Form: DEVICE **SMTPSRV** [Value Address]

Argument	Type	Size	Values	Units
Value	IP Address	4	(Null to query in text) (0.0.0.0 Clears IP and String)	-
Address	String	40	1 – 40 characters (Null to query in text)	-

SNMPMNGRIP – SNMP Manager Host IP Address

This command selects/reports the IP address of the SNMP Manager.

Command Form: *DEVICE* **SNMPMNGRIP** [Value]

Argument	Type	Size	Values	Units
Value	IP Address	4	IP Address of SNMP Manager to send Traps to (Null to query in text)	-

SNMPMNGRPORT – SNMP Manager Notification Port

This command selects/reports the SNMP Trap port for SNMP Manager.

Command Form: *DEVICE* **SNMPMNGRPORT** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	1-255 (Null to query in text)	-

SNMPREADCOMM – SNMP Read Community String

This command selects/reports the SNMP read community string.

Command Form: *DEVICE* **SNMPREADCOMM** [Value]

Argument	Type	Size	Values	Units
Value	String	30	Read Community validation string (GET data) (Null to query in text: defaults to “public”)	-

SNMPWRITECOMM – SNMP Write Community String

This command selects/reports the SNMP Write Community String.

Command Form: *DEVICE* **SNMPWRITECOMM** [Value]

Argument	Type	Size	Values	Units
Value	String	30	Write Community validation string (SET data) (Null to query in text: Default = “private”)	-

SPEEDDIAL – Speed Dial a Number

This command dials a speed dial number.

Command Form: *DEVICE* **SPEEDDIAL** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	1 – 20 (Null to query in text)	-

STRING – String Execution

This command sends the specified string out the serial port.

Command Form: *DEVICE* **STRING** [ID]

Argument	Type	Size	Values	Units
ID	Unsigned Integer	4	0 – 7 (Null to query last string in text)	-

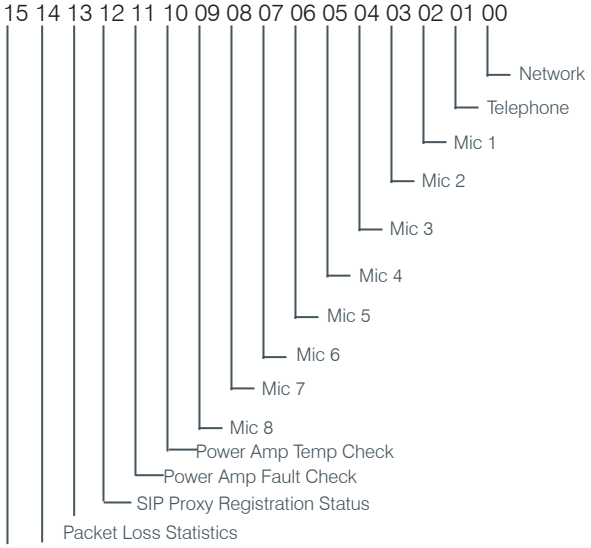
SYSCHECKS – System Checks

Initiates the system checks. **There is no query for this command.**

The **System Check** integer bits determine which tests are run. Each bit set generates a separate SYSRESULT response.

COMMAND FORM: *DEVICE* **SYSCHECKS** <System Check>

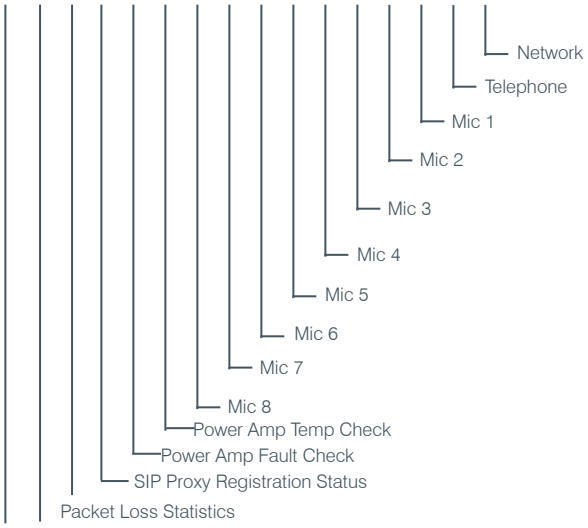
Argument	Type	Size	Values
System Check	Hexadecimal Integer	4	15 14 13 12 11 10 09 08 07 06 05 04 03 02 01 00



All other bits reserved

SYSRESULT – System Check Result

This command reports the results of the system check. **This command is reportable only. It cannot be queried or set.** The **System Check** integer bits determine which test result will be reported. Each test results in a separate SYSRESULT message.

Argument	Type	Size	Values
System Check	Hexadecimal Integer	4	 All other bits reserved
Status	Unsigned Integer	2	0 = Fail 1 = Pass 2 = NULL <Not Tested or Test Disabled in SYSCONFIG>
Message	String	40	For the telephone on hook: the message will report the line voltage, the line current, other results, and if dial tone is detected. For the telephone off hook: the message will report the line current, other results, and if dial tone is detected. The bit mask for the other results is x x x x x x x x | | | | | | | |--> set if switched from CTR21 to FCC because of low current | | | | | | |--> set if used DIAL bit while dialing | | | | | |--> set if switch from Low Voltage to Japan because of current | | | | |--> set if switch from Low Voltage to FCC because of current | | | |--> DAA OVL status | | |--> DAA DOD status | |--> DAA OPD status |--> Not used For the network check: the box will report if no IP address is set. If it is set, the box will ping the gateway. The message will say the ping failed if it is not returned in 5 s. Otherwise, the message will report how many seconds it took to return the ping.

TAMODE – Telco Adapt Mode

This command selects/reports the Telco adapt mode.

Command Form: *DEVICE* **TAMODE** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	0 = Auto 1 = Burst (Null to query in text)	-

TE – Telco Enable

This command selects/reports the hook status.

Command Form: *DEVICE* **TE** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

TELCOLVLCTRL – Telco RX Level Control Enable / Disable

This command selects/reports the setting of Telco Rx level control.

Command Form: *DEVICE* **TELCOLVLCTRL** <Channel> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (T)	-
Value	Unsigned Integer	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

TELOVER – Telco Current Overload

This command reports that the Telco circuitry has experienced a current overload that has forced it to go off hook. This condition can occur because of a connection to a Digital PBX, and is done to protect the Telco Circuitry from damage. The command is a notification only, and cannot be set or queried.

Command Form: *DEVICE* **TELOVER** <Channel><Overload>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17 (R)	-
Value	Unsigned Short	2	0 = Not Overloaded 1 = OVERLOADED	-

TIMELOCALE – Time Locale Settings

This command sets or reports the time locale settings.

Command Form: *DEVICE* **TIMELOCALE** [DaylightSavings TimeZone TimeZoneName]

Argument	Type	Size	Values	Units
Daylight Savings	Unsigned Integer	4	0 = Do not use Daylight Savings 1 = Use Daylight Savings (NULL to Query in Text)	-
Time Zone	Unsigned Integer	4	The number of seconds from UDT. (-86400 – 86400)	-
Time Zone Argument	String	32	Description of time zone	-

TOUT – Time Out Select

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

Command Form: DEVICE **TOUT** [Value]

Argument	Type	Size	Values	Units
Value	Unsigned Integer	4	0 = No Time Out 1 – 15 (Null to query in text)	 Min

UID – Unit ID

This command reports the unit id. **This command is read only**.

Command Form: DEVICE **UID** [Value]

Argument	Type	Size	Values	Units
Value	Hexadecimal	4	(Sent with a Null, value returned in text)	-

VER - Version

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

Command Form: DEVICE **VER** [Value]

Argument	Type	Size	Values	Units
Value	String	8	Version of format MM.mm.rr (Sent with a Null in text, value returned)	-

XAA – Auto Answer Enable/Disable

This command selects/reports the setting of auto answer. This command can be used to replace the AA command for the R group.

Command Form: DEVICE **XAA** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17, 26 (R, Z)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

XAAMB – Adaptive Ambient Mode

This command selects/reports the setting of adaptive ambient. This command can be used to replace the AAMB command for the M group.

Command Form: DEVICE **XAAMB** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 29 (M, V)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

XAMBLVL – Ambient Level Adjust

This command selects/reports the ambient level. This command can be used to replace the AMBLVL command for the M group.

Command Form: *DEVICE* **XAMBLVL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 29 (M, V)	-
Value	Signed Float	2	-80.00 – 0.00 (Null to query in text)	dB

XAARINGS – Number of Rings to Auto Answer On

This command selects/reports the setting of the number of rings to auto answer. This command can be used to replace the AARINGS command for the R group.

Command Form: *DEVICE* **XAARINGS** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17, 26 (R, Z)	-
Value	Unsigned Short	2	2-4 (Null to query in text)	-

XACONN – Audible Connect / Disconnect Indication

This command selects/reports the status of the audible connect / disconnect indication. This command can be used to replace the ACONN command for the R group.

Command Form: *DEVICE* **XACONN** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17, 26 (R, Z)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

XACONNLVL – Audible Connect / Disconnect Level

This command selects/reports the audible connect / disconnect indicator's level. This command can be used to replace the ACONNLVL command for the R group.

Command Form: *DEVICE* **XACONNLVL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17, 26 (R, Z)	-
Value	Signed Short	2	-12.00 – 12.00 (Null to query in text)	dB

XCALLDUR – Call Duration

This command indicates how long a call has lasted. If no call is in session, this will report 0. At the time of call termination, this command will automatically be sent out reporting the duration. This command can be used to replace the CALLDUR command for the R group.

Command Form: *DEVICE* **XCALLDUR** <Channel> <Group> <Number> <Name>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17, 26 (R, Z)	-
Number	String	44	1-44 Characters	-
Name	String	44	1-44 Characters	-

XCALLERID – Reports Caller ID Information

This command reports Caller Identification Information. This command can be used to replace the CALLERID command for the R group. **This command is reportable only. It cannot be queried or set.**

Command Form: *DEVICE* **XCALLERID** <Channel> <Group> <Duration>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17, 26 (R, Z)	-
Reserved	Unsigned Short	2	0	-
Duration	String	8	String of format HR:MN:SS	-

XCHAIRO – Chairman Override Mode

This command selects/reports the setting of chairman override. This command can be used to replace the CHAIRO command for the M group.

Command Form: *DEVICE* **XCHAIRO** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 29 (M, V)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

XCGROUP – Compressor Group

This command sets the compressor group for synchronized operation of the compressor. This command can be used to replace the CGROUP command for the P group.

Command Form: *DEVICE* **XCGROUP** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	5, 23 (P, J)	-
Value	Unsigned Short	2	0 = None 1 = Group 1 2 = Group 2 3 = Group 3 4 = Group 4 (Null to query in text)	-

XCOMPRESS – Compressor Adjust

This command controls/reports the signal compression setting on a Channel. This command can be used to replace the COMPRESS command for the P group.

Command Form: *DEVICE* **XCOMPRESS** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	23 (J, P)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

XCOMPSEL – Compressor Enable

This command enables signal compression on a Channel. This command can be used to replace the COMPSEL command for the P group.

Command Form: *DEVICE* **XCOMPSEL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	23 (J, P)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

XDECAY – Decay Adjust

This command selects/reports the setting of the decay rate. This command can be used to replace the DECAY command for the M group.

Command Form: *DEVICE* **XDECAY** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 29 (M, V)	-
Value	Unsigned Short	2	1 = Slow 2 = Medium 3 = Fast (Null to query in text)	-

XDELAY – Audio Delay

This command controls/reports signal delay on a Channel. This command can be used to replace the DELAY command for the P group.

Command Form: *DEVICE* **XDELAY** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	5, 23 (P, J)	-
Value	Unsigned Short	2	0.0 – 250.00 (Null to query in text)	ms

XDELAYSEL – Audio Delay Enable

This command enables signal delay on a Channel. This command can be used to replace the DELAYSEL command for the P group.

Command Form: *DEVICE* **XDELAYSEL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	5, 23 (P, J)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

XDELAYSEL – Audio Delay Enable

This command enables signal delay on a Channel. This command can be used to replace the DELAYSEL command for the P group.

Command Form: *DEVICE* **XDELAYSEL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	5, 23 (P, J)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

XDIAL – DTMF Dialing

This command dials a DTMF sequence or reports back the last sequence dialed. This command can be used to replace the DIAL command for the R group.

Command Form: *DEVICE* **XDIAL** <Channel> <Group> [Number]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	17, 26 (R, Z)	-
Reserved	Unsigned Short	2	0	-
Number	String	44	1 – 44 Chars of '0' – '9', '*', '#', ',' (Null to query in text)	-

XDTMFLVL – DTMF Tone Level

This command selects/reports the DTMF tone's level. This command can be used to replace the DTMFLVL command for the R group. You can't change level during a call.

Command Form: *DEVICE* **XDTMFLVL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	17, 26 (R, Z)	-
Value	Signed Short	2	-12.00 – 12.00 (Null to query in text)	dB

XDTONELVL – Dial Tone Level

This command selects/reports the audible dial tone's level. This command can be used to replace the DTONELVL command for the R group. You can't change level during a call.

Command Form: *DEVICE* **XDTONELVL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	17, 26 (R, Z)	-
Value	Signed Short	2	-12.00 – 12.00 (Null to query in text)	dB

XGHOLD – Gate Hold Time Adjust

This command selects/reports the setting of hold time. This command can be used to replace the GHOLD command for the M group.

Command Form: *DEVICE* **XGHOLD** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 29 (M, V)	-
Value	Unsigned Short	2	0.10 – 8.00 (Null to query in text)	S

XGMODE – Gating Mode

This command selects/reports the setting of gating mode. This command can be used to replace the GMODE command for the M group.

Command Form: *DEVICE* **XGHOLD** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 29 (M, V)	-
Value	Unsigned Short	2	0.10 – 8.00 (Null to query in text)	-

XGOVER – Gating Override

This command selects/reports the setting of gating override. This command can be used to replace the GOVER command for the M group.

Command Form: *DEVICE* **XGOVER** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 29 (M, V)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

XGRATIO – Gate Ratio Adjust

This command selects/reports the setting of the gate ratio. This command can be used to replace the GRATIO command for the M group.

Command Form: *DEVICE* **XGRATIO** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 29 (M, V)	-
Value	Unsigned Short	2	0 – 50 (Null to query in text)	dB

XGRPSEL – Gating Group Select

This command selects/reports which Gating Group a microphone input is assigned. This command can be used to replace the GRPSEL command for the M group.

Command Form: *DEVICE* **XGRPSEL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 29 (M, V)	-
Value	Unsigned Short	2	See 4 (G) in Group and Channels (Null to query in text)	-

XHOOK – Hook Flash

This command sends a hook flash. This command can be used to replace the HOOK command for the R group. **There is no query for this command.**

Command Form: *DEVICE* **XHOOK** <Channel> <Group> <Reserved>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17, 26 (R, Z)	-
Reserved	Unsigned Short	2	0	-

XHOOKD – Hook Flash Duration

This command selects/reports the hook flash duration. This command can be used to replace the HOOKD command for the R group.

Command Form: *DEVICE* **XHOOKD** <Channel> <Group> <Reserved>

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17, 26 (R, Z)	-
Reserved	Unsigned Short	2	50 – 2000 (Multiples of 10 Ms only) (Null to query in text)	Ms

XLOCALNUM – Local Number

This command sets or reports back the current value of the local number. This command can be used to replace the LOCALNUM command for the R group.

Command Form: *DEVICE* **XLOCALNUM** <Channel> <Group> [Number]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	17, 26 (R, Z)	-
Reserved	Unsigned Short	2	0	-
Number	String	16	1 – 16 Chars of '0' – '9', '*', '#', ','	-

XOFFA – Off Attenuation Mode

This command selects/reports the off attenuation value of a Mic channel. This command can be used to replace the OFFA command for the M group.

Command Form: *DEVICE* **XOFFA** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 29 (M, V)	-
Value	Unsigned Float	2	0.00 – 60.00 (Null to query in text)	-

XPBDIAL – Dial a PB Entry by Name

This command dials a speed dial number by name. This command can be used to replace the PBDIAL command for the R group. **There is no query for this command.**

Command Form: *DEVICE* **XPBDIAL** <Channel> <Group> <Label>

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	17, 26 (R, Z)	-
Reserved	Unsigned Short	2	0	-
Number	String	16	1 – 16 Chars	-

XREDIAL – Dial the last number again

This command redials the last number. This command can be used to replace the REDIAL command for the R group. **There is no query for this command.**

Command Form: *DEVICE* **XREDIAL** <Channel> <Group>

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	17, 26 (R, Z)	-
Reserved	Unsigned Short	2	0	-

XRING – Ring Indication

This command indicates a ringing line. This command can be used to replace the RING command for the R group. **This command is reportable only. It cannot be queried or set.**

Command Form: *DEVICE* **XRING** <Channel> <Group> <Value>

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	17, 26 (R, Z)	-
Value	Unsigned Short	2	0 = Ring Cycle Ended 1 = Ring Cycle Started	-

XRINGEREN – Audible Ring Enable

This command sends/reports the use of an audible ring. This command can be used to replace the RINGEREN command for the R group.

Command Form: *DEVICE* **XRINGEREN** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	17, 26 (R, Z)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

XRINGERLVL – Audible Ring Level

This command selects/reports the audible ring's level. This command can be used to replace the RINGERLVL command for the R group. You cannot change this value while the phone is ringing.

Command Form: *DEVICE* **XRINGERLVL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	17, 26 (R, Z)	-
Value	Unsigned Short	2	-12.00 – 12.00 (dB) (Null to query in text)	dB

XRINGERSEL – Audible Ring Melody Selection

This command sends/reports the audible ring melody. This command can be used to replace the RINGERSEL command for the R group. You can't change the value while phone is ringing.

Command Form: *DEVICE* **XRINGERSEL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	17, 26 (R, Z)	-
Value	Unsigned Short	2	1 – 5 (Null to query in text)	-

XRINGERTEST – Audible Ring Melody Test

This command plays the current audible ringer melody. This command can be used to replace the RINGERTEST command for the R group. **This command is executable only. There is no query.**

Command Form: *DEVICE* **XRINGERTEST** <Channel> <Group>

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	17, 26 (R, Z)	-
Reserved	Unsigned Short	2	0	-

XSLVL – Speech Level Control

This command selects/reports the setting of Speech Level Control. This command can be used to replace the SLVL command for the M group.

Command Form: *DEVICE* **XSLVL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See **Groups and Channels**	-
Group	Group	1	3, 29 (M, V)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

XSPEEDDIAL – Speed Dialing

This command dials a speed dial number. This command can be used to replace the SPEEDDIAL command for the R group.

Command Form: *DEVICE* **XSPEEDDIAL** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	17, 26 (R, Z)	-
Value	Unsigned Short	2	1 – 20 (Null to query in text)	-

XTE – Telco Enable

This command selects/reports the hook status. This command can be used to replace the TE command for the R group.

Command Form: *DEVICE* **XTE** <Channel> <Group> [Value]

Argument	Type	Size	Values	Units
Channel	Channel	1	See Groups and Channels	-
Group	Group	1	17, 26 (R, Z)	-
Value	Unsigned Short	2	0 = Off 1 = On 2 = Toggle (Null to query in text)	-

CALL CONTROL SERIAL COMMANDS

CALLSTATUS – Report the Status of VoIP Channels

This command gives the status of the VoIP channels. **This status can be queried, and will be sent asynchronously. This command / status may NOT be set.**

Command Form Details:

DEVICE **CALLSTATUS** *<Channel> <Group> <Line> [Status]*

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	26 (Z)	-
Line Number	Unsigned Short	2	VoIP Line Number	-
Status	Unsigned Short	4	Status for Channel Status Definition: 0x0001 IDLE 0x0002 DIAL_TONE 0x0004 RING_BUSY 0x0008 CONNECTED 0x0010 LOCAL HOLD (LHOLD) 0x0020 REMOTE HOLD (RHOLD) 0x0040 LOCAL+REMOTE HOLD (LRHOLD) 0x0080 CONFERENCED 0x0100 CONFERENCED + LHOLD 0x0200 CONFERENCED + RHOLD 0x0400 CONFERENCED + LRHOLD 0x0800 INCOMING_CALL 0x0000 NO CALL STATUS	-

CONFCANCEL – Cancels a Conference Call Bridge

This command cancels the 3-Way conference initialization and terminates the call with the 3rd party. **There is no query for this command.**

Command Form Details:

DEVICE **CONFCANCEL** *<Channel> <Group>*

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	26 (Z)	-
Reserved	Unsigned Short	2	0	-

CONFCOMPLETE – Completes a Conference Call Bridge

This command bridges two calls into a 3-way call. **There is no query for this command.**

Command Form Details:

DEVICE **CONFCOMPLETE** *<Channel> <Group>*

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	26 (Z)	-
Reserved	Unsigned Short	2	0	-

CONFSTART – Initiates a 3-Way Conference Call

This command dials a 3rd party to initiate a bridged (conferenced) call.

Command Form Details:

DEVICE **CONFSTART** *<Channel> <Group>[Value]*

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	26 (Z)	-
Reserved	Unsigned Short	2	0	-
Value	String	45	1 – 44 Characters of '0' – '9', '*', '#' and ',' plus NULL (Null to query in text)	-

HOLD – Places a Call on Hold

This command places the current call on hold. State tracking is provided by the CALLSTATUS command.

Command Form Details:

DEVICE **HOLD** *<Channel> <Group>*

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	26 (Z)	-

MULTILNEN – VoIP Multi-Line Enable

This command sets/reports an environmental variable which selects if the VoIP operates in single-line mode or multi-line mode. This command requires a reboot of the unit to take effect. The current state of operation of the unit can be queried using the MULTILNSTAT command.

Command Form Details:

DEVICE **MULTILNEN** *<Channel> <Group> [Value]*

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	26 (Z)	-
Value	Unsigned Short	2	0 = Single Line 1 = Multi-Line 2 = Toggle (NULL to Query in Text)	-

MULTILNSTAT – VoIP Multi-Line Status

This command reports the current mode of operation of the VoIP interface. The current state of operation is set once on boot up. To change the state of operation (single/multi) line, use the MULTILNEN command and reboot the unit. This command is query only.

Command Form Details:

DEVICE **MULTILNSTAT** *<Channel> <Group> [Value]*

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	26 (Z)	-
Value	Unsigned Short	2	0 = Single Line 1 = Multi-Line (NULL to Query in Text)	-

TRANSCANCEL – Cancels a Transferred Call

This command interrupts/stops a transfer. **There is no query for this command.**

Command Form Details:

DEVICE **TRANSCANCEL** *<Channel> <Group>*

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	26 (Z)	-
Reserved	Unsigned Short	2	0	-

TRANSCOMPLETE – Completes a Transferred Call

This command completes/concludes a transfer after the transfer has been initiated. **There is no query for this command.**

Command Form Details:

DEVICE **TRANSCOMPLETE** *<Channel> <Group>*

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	26 (Z)	-
Reserved	Unsigned Short	2	0	-

TRANSSTART – Initiate an Attended or Unattended Call Transfer

This command initiates a transfer of an established call to a new extension (defined by this command).

Command Form Details:

DEVICE **TRANSSTART** *<Channel> <Group>[Value]*

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	26 (Z)	-
Reserved	Unsigned Short	2	0	-
Value	String	44	1 – 44 Characters of '0' – '9', '*', '#' and ',' (Null to query in text)	-

VE – VoIP Enable

This command selects (toggles) the hook status. This command is used to replace the XTE command for the Z group when VoIP multi-line is enabled. See MULTILNEN and MULTILNSTAT. State tracking is provided by the CALLSTATUS command

Command Form Details:

DEVICE **VE** *<Channel> <Group>*

Argument	Type	Size	Values	Units
Channel	Channel	1	See GroupAndChannels	-
Group	Group	1	26 (Z)	-
Reserved	Zero	2	Zero	-

SERIAL COMMAND SUPPORT TABLE

The following table shows serial command support by the CONVERGE/CONVERGE Pro and the Beamforming Microphone Array units by device type. Note that Telco-related commands only work on devices that have telephone interfaces (CONVERGE Pro 880TA, 880T, 840T, TH20); and AEC and NC-related commands do not work with CONVERGE SR 1212 and SR 1212A.

NOTE: None of the CONVERGE or Beamforming Microphone Array commands are used by the CONNECT CobraNet or CONNECT AVB units. Likewise, the commands used by the CONNECT units are not used by the CONVERGE and Beamforming Microphone Array units. Commands that start with "CNET" are for the CONNECT CobraNet and commands that start with "AVB" are for the CONNECT AVB and are not included in this table.

COMMAND NAME	DEVICE									
	Pro 880	Pro 880T	Pro 840T	Pro 8i	Pro TH20	SR 1212	880TA	SR 1212A	Pro VH20	Beam-forming Mic Array
AA		X	X		X		X			
AAMB	X	X	X	X		X	X	X		
AARINGS		X	X		X		X			
ACONN		X	X		X		X			
ACONNLVL		X	X		X		X			
AD		X	X		X		X			
ADCLIP	X	X	X	X	X	X	X	X	X	
ADPRESENT	X	X	X	X	X	X	X	X	X	
AEC	X	X	X	X			X			
AGC	X	X	X	X	X	X	X	X	X	
AGCSET	X	X	X	X	X	X	X	X	X	
AMBLVL	X	X	X	X		X	X	X		
AMXDUET	X	X	X	X	X	X	X	X	X	
AV	X	X	X	X	X	X	X	X		
AVG							X	X		
AVR							X	X		
AVRT							X	X		
AVT							X	X		
AUDIOMASTER	X	X	X	X	X	X	X	X	X	
BAUD	X	X	X	X	X	X	X	X	X	
BFLED										X
BFMODE										X
BFMUTEMACRO										X
BFZONE										X
CALLDUR		X	X		X		X			
CALLERID		X	X		X		X			
CALLSTATUS									X	
CGROUP	X	X	X	X		X	X	X		
CHAIRO	X	X	X	X		X	X	X		
CLEAREFFECT		X	X		X		X			
CLOCK	X	X	X	X	X	X	X	X	X	
COMPDLY							X	X		
COMPDLYEN							X	X		
COMPRESS	X	X	X	X		X	X	X		
COMPSEL	X	X	X	X		X	X	X		

COMMAND NAME	DEVICE									
	Pro 880	Pro 880T	Pro 840T	Pro 8i	Pro TH20	SR 1212	880TA	SR 1212A	Pro VH20	Beam-forming Mic Array
CONFCANCEL									X	
CONFCOMPLETE									X	
CONFSTART									X	
COUNTRY		X	X		X		X	X		
CTRLMASTER	X	X	X	X	X	X	X	X	X	
DECAY	X	X	X	X		X	X	X		
DEFAULT	X	X	X	X	X	X	X	X	X	X
DELAY	X	X	X	X		X	X	X		
DELAYSEL	X	X	X	X		X	X	X		
DEVICENAME	X	X	X	X	X	X	X	X	X	
DEVICESUBTYPE	X	X	X	X	X	X	X	X	X	
DEVICETYPE	X	X	X	X	X	X	X	X	X	
DFLTM	X	X	X	X	X	X			X	
DIAG							X	X		
DIAL		X	X		X		X	X		
DID	X	X	X	X	X	X	X	X	X	X
DTMFLVL		X	X		X		X			
DTONELVL		X	X		X		X			
DUPDATE	X	X	X	X	X	X	X	X		
DVER	X	X	X	X	X	X	X	X	X	X
ENETADDR	X	X	X	X	X	X	X	X	X	
ENETDHCP	X	X	X	X	X	X	X	X	X	
ENETDNS	X	X	X	X	X	X	X	X	X	
ENETDNSA	X	X	X	X	X	X	X	X	X	
ENETDNSA2	X	X	X	X	X	X	X	X	X	
ENETDOMAIN	X	X	X	X	X	X	X	X	X	
ENETGATE	X	X	X	X	X	X	X	X	X	
ENETQOSVAL									X	
ENETQOSDSCP									X	
ENETSUBN	X	X	X	X	X	X	X	X	X	
ENETVLAN									X	
ENETVLANID									X	
ENETVLANPRI									X	
EREF	X	X	X		X	X	X	X	X	X
EVENT	X	X	X	X	X	X	X	X	X	
FE							X	X		
FEB							X	X		
FEDR							X	X		
FEF							X	X		
FEG							X	X		
FEGL							X	X		
FELD							X	X		
FEM							X	X		
FEN							X	X		
FER							X	X		

COMMAND NAME	DEVICE									
	Pro 880	Pro 880T	Pro 840T	Pro 8i	Pro TH20	SR 1212	880TA	SR 1212A	Pro VH20	Beam-forming Mic Array
FERNG							X	X		
FES							X	X		
FESC							X	X		
FILTER	X	X	X		X	X	X	X		X
FILTSEL	X	X	X	X	X	X	X	X		X
FLOW	X	X	X	X	X	X	X	X	X	
FMP	X	X	X	X		X	X	X		
GAIN	X	X	X	X	X	X	X	X	X	X
GATE	X	X	X	X		X	X	X		X
GHOLD	X	X	X	X		X	X	X		
GMODE	X	X	X	X		X	X	X		
GOVER	X	X	X	X		X	X	X		
GPIOSTSTATUS	X	X	X	X	X	X	X	X	X	
GRATIO	X	X	X	X		X	X	X		
GREPORT	X	X	X	X	X	X	X	X	X	X
GRPSEL	X	X	X	X		X	X	X		
HDAEC										X
HDAECMODE										X
HDNLP	X	X		X	X		X			X
HDREFSEL1										X
HDREFSEL2										X
HOLD									X	
HOOK		X	X		X		X			
HOOKD		X	X		X		X			
LABEL	X	X	X	X	X	X	X	X	X	X
LCDCONTRAST	X	X	X	X	X	X	X	X	X	
LMO	X	X	X	X		X	X	X		X
LOCALNUM		X	X		X		X			
LOCBLDG	X	X	X	X	X	X	X	X	X	X
LOCCITY	X	X	X	X	X	X	X	X	X	X
LOCCNTRY	X	X	X	X	X	X	X	X	X	X
LOCCOMP	X	X	X	X	X	X	X	X	X	X
LOCREGION	X	X	X	X	X	X	X	X	X	X
LOCROOM	X	X	X	X	X	X	X	X	X	X
LOCSITENAME	X	X	X	X	X	X	X	X	X	
LOCSTATE	X	X	X	X	X	X	X	X	X	X
LOGMASK	X	X	X	X	X	X	X	X	X	
LVL	X	X	X	X	X	X	X	X	X	X
LVLREPORT	X	X	X	X	X	X	X	X	X	X
LVLREPORTEN	X	X	X	X	X	X	X	X	X	X
MACRO	X	X	X	X	X	X	X	X	X	
MANUFACTURER	X	X	X	X	X	X	X	X	X	
MAX	X	X	X	X	X	X	X	X	X	
MC							X	X		
MCGAIN							X	X		

COMMAND NAME	DEVICE									
	Pro 880	Pro 880T	Pro 840T	Pro 8i	Pro TH20	SR 1212	880TA	SR 1212A	Pro VH20	Beam-forming Mic Array
MCMINMAX							X	X		
MCMUTE							X	X		
MCRAMP							X	X		
MIN	X	X	X	X	X	X	X	X	X	X
MINMAX	X	X	X	X	X	X	X	X	X	X
MLINE	X	X	X	X		X	X	X		
MMAX	X	X	X	X		X	X	X		
MODEL	X	X	X	X	X	X	X	X	X	
MTRX	X	X	X	X	X	X	X	X	X	X
MTRXCLEAR	X	X	X	X	X	X	X	X	X	
MTRXLVL	X	X	X	X	X	X	X	X	X	
MTRXTYPE	X	X		X	X	X	X	X		
MULTILNEN									X	
MULTILNSTAT									X	
MUTE	X	X	X	X	X	X	X	X	X	X
NAME	X	X	X	X	X	X	X	X	X	X
NCD	X	X	X	X	X		X		X	X
NCSEL	X	X	X	X	X		X		X	X
NLP	X	X	X	X			X	X		
NOM	X	X	X		X	X	X	X	X	
NTPSRV	X	X	X	X	X	X	X	X	X	
NULL		X	X		X		X	X		
OFFA	X	X	X	X		X	X	X		
PAA	X	X	X	X		X	X	X		
PACEN							X	X		
PAENERGY							X	X		
PAEQEN							X	X		
PAEQRST							X	X		
PAEQSET							X	X		
PAFLT							X	X		
PAIMPED							X	X		
PALEN							X	X		
PALT							X	X		
PANGAT							X	X		
PANGEN							X	X		
PANGF							X	X		
PANGM							X	X		
PANGT							X	X		
PAPOL							X	X		
PARST							X	X		
PASME							X	X		
PASML							X	X		
PASSM							X	X		
PASMT							X	X		
PATO							X	X		

COMMAND NAME	DEVICE									
	Pro 880	Pro 880T	Pro 840T	Pro 8i	Pro TH20	SR 1212	880TA	SR 1212A	Pro VH20	Beam-forming Mic Array
PBDIAL		X	X		X		X		X	
PHONEBOOKADD		X	X		X		X		X	
PHONEBOOKCNT		X	X		X		X		X	
PHONEBOOKDEL		X	X		X		X		X	
PHONEBOOKREAD		X	X		X		X		X	
PP	X	X	X	X		X	X	X		
PRESET	X	X	X	X	X	X	X	X	X	
PRGSTRING	X	X	X	X	X	X	X	X	X	
PROXYSTAT									X	
PTTTHRESHOLD	X	X	X	X			X	X		
PUSHTOTALK	X	X	X	X			X	X		
RAMP	X	X	X	X	X	X	X	X	X	X
REDIAL		X	X		X		X	X		
REFSEL	X	X	X	X		X	X	X		
REFSET	X	X	X	X		X	X	X	X	
RESET	X	X	X	X	X	X	X	X		X
RING		X	X		X		X			
RINGEREN		X	X		X		X			
RINGERLVL		X	X		X		X			
RINGERSEL		X	X		X		X			
RINGERTEST		X	X		X		X			
RINGMOD		X	X		X		X			
RINGOFF		X	X		X		X			
RINGON		X	X		X		X			
RXBOOST		X	X		X		X			
RXBSTEN		X	X		X		X			
SERECHO	X	X	X	X	X	X	X	X	X	X
SFTYMUTE	X	X	X	X	X	X	X	X	X	X
SIGGEN	X	X	X	X	X	X	X	X	X	
SIGGENEN	X	X	X	X	X	X	X	X	X	
SIGGENSWEEP	X	X	X	X	X	X	X	X	X	
SIGTOUT	X	X	X	X	X	X	X	X	X	
SLVL	X	X	X	X		X	X	X		
SMTPSRV	X	X	X	X	X	X	X	X	X	
SNMPMNGRIP	X	X	X	X	X	X	X	X	X	
SNMPMNGRPORT	X	X	X	X	X	X	X	X	X	
SNMPREADCOMM	X	X	X	X	X	X	X	X	X	
SNMPWRITECOMM	X	X	X	X	X	X	X	X	X	
SPEEDDIAL		X	X		X		X			
STRING	X	X	X	X	X	X	X	X		
SYSCHECKS	X	X	X	X	X	X	X	X	X	
SYSRESULT	X	X	X	X	X	X	X	X	X	
TAMODE		X	X		X		X			
TE		X	X		X		X			
TELCOLVLCTRL		X	X		X		X			

COMMAND NAME	DEVICE									
	Pro 880	Pro 880T	Pro 840T	Pro 8i	Pro TH20	SR 1212	880TA	SR 1212A	Pro VH20	Beam-forming Mic Array
TELOVER		X	X		X		X			
TIMELOCALE	X	X	X	X	X	X	X	X	X	
TOUT	X	X	X	X	X	X	X	X	X	
TRANSCANCEL									X	
TRANSCOMPLETE									X	
TRANSSTART									X	
UID	X	X	X	X	X	X	X	X	X	X
VE									X	
VER	X	X	X	X	X	X	X	X	X	X
XAA		X	X		X		X		X	
XAAMB	X	X		X	X	X	X	X		X
XAARINGS		X	X		X		X		X	
XACONN		X	X		X		X		X	
XACONNLVL		X	X		X		X		X	
XACALLDUR		X	X		X		X		X	
XACALLERID		X	X		X		X		X	
XAMBLVL	X	X		X	X	X	X	X		X
XCALLDUR		X	X		X		X		X	
XCALLERID		X	X		X		X		X	
XCGROUP	X	X		X	X	X	X	X		
XCHAIRO	X	X		X	X	X	X	X		X
XCOMPRESS	X	X		X	X	X	X	X		
XCOMPSEL	X	X		X	X	X	X	X		
XDECAY	X	X		X	X	X	X	X		X
XDELAY	X	X		X	X	X	X	X		
XDELAYSEL	X	X		X	X	X	X	X		
XDIAL		X	X		X		X		X	
XDTMFLVL		X	X		X		X		X	
XDTONETLVL		X	X		X		X		X	
XGHOLD	X	X		X	X	X	X	X		X
XGMODE	X	X		X	X	X	X	X		X
XGOVER	X	X		X	X	X	X	X		X
XGRATIO	X	X		X	X	X	X	X		X
XGRPSEL	X	X		X	X	X	X	X		X
XHOOK		X	X		X		X		X	
XHOOKD		X	X		X		X		X	
XLOCALNUM		X	X		X		X		X	
XOFFA	X	X		X	X	X	X	X		X
XPBDIAL		X	X		X		X		X	
XREDIAL		X	X		X		X		X	
XRING		X	X		X		X		X	
XRINGEREN		X	X		X		X		X	
XRINGERLVL		X	X		X		X		X	
XRINGERSEL		X	X		X		X		X	

COMMAND NAME	DEVICE									
	Pro 880	Pro 880T	Pro 840T	Pro 8i	Pro TH20	SR 1212	880TA	SR 1212A	Pro VH20	Beam-forming Mic Array
XRINGERTEST		X	X		X		X		X	
XSLVL	X	X		X	X	X	X	X		X
XSPEEDDIAL		X	X		X		X		X	
XTE		X	X		X		X		X	
XTELCOLVLCTRL		X	X		X		X		X	

ALL MODELS: RS-232 PORT CONNECTING WITH TELNET

Users can connect to any unit via RS-232 and telnet. Available telnet commands are the same as those used in the Serial Command section of this appendix.

How to Connect with Telnet:

- Use the telnet client of your choice
- Telnet uses port 23
- The user name and password are the same as used by Console. The default username is **clearone** and the default password is **converge**. These are not case sensitive.
- The telnet session will time out after 15 minutes of no receive data. A heart beat to keep the session alive will need to be used. ClearOne recommends using the VER command to establish a heart beat in order to keep the session alive.

ALL MODELS: RS-232 PORT

Pin #	User Definable	Control
1	N	DCD
2	N	TXD
3	N	RXD
4	N	DTR
5	N	Ground
6	N	DSR
7	N	CTS
8	N	RTS
9	N	No connection

NOTE: To avoid communication errors, ClearOne recommends using all nine pins when connecting to the RS-232 port.