



# **MTX3, MTX5-D, MRX7-D, XMV Series, EXi8, EXo8 Remote Control Protocol Specifications**

**Version 3.1.0 rev10**

**Release Jun 19th, 2017**

This specification document applies to MTX3, MTX5-D, MRX7-D, XMV, EXi8, and EXo8 V3.10 and later.

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## 0. Revision History

Version	Date	Section	Description
V1.0.0	Sep. 1, 2013	-	Initial version
V1.0.1	Sep. 25, 2013	7	Added note (*1) to XMV "InputSelect" parameter
		7	Added *2 to XMV "ATT" and "DigitalATT"
		8	Separated Meter List of EXi8 and EXo8
V1.0.2	Jan.14, 2014	3.1	Added Heart beat command
		3.1	Added explanation for escape character
		3.2.4	Added note for "1-10) Time synchronization notification <Old format>"
		3.2.4, 3.4.3	Added time set and get commands
		3.2.4, 3.4.3	Added DST related commands
		3.3.1	Added note for "2-1) Device run mode query"
		3.3.3	Modified description text and added note for "2-9) Keepalive activation setting"
		3.4.3	Added alert event log related commands
		4	Fixed text "devstatus devmode" to "devstatus runmode" in communication start process explanation
		4	Fixed communication start process flow diagram
		6	Added parameter value detail for MY4-AEC (table 12, 13, 14)
		7	Added parameter "MYInsert 16 Channel" to Parameter List
		7	Added MY4-AEC parameters to Parameter List
		7	Amend description for parameter "Power" in XMV Parameter List
8	Added MY4-AEC address to Meter List		
V1.0.3	May 23, 2014	3.3.1, 4	Added clarification of [devstatus runmode] command, which is necessary to establish remote control communication.
V1.3.0	Nov. 1, 2014	1.3.1, 1.3.2	Increased total number of remote controller devices which can simultaneously access the MTX system.
		3.1	Fixed some incorrect values in the "Normalized Value" column of the table, and in the note below the table.
		3.3.5	Added "setr" command, which allows relative inc/dec level control.
		6	Added "value to data" tables for fader parameters.
		7	Added comments in remarks column for when "setr" command is available.
7	Added "DigitalInputSensitivity" parameter for XMV		
V2.0.3	Aug. 25, 2015	1, 3.2.2, 3.3.4 3.3.5, 3.3.6, 6. 7, 8	Added MRX7-D
		1.3.3	Added "MRX7-D and Remote Control Setup List"
		2, 3.2.3.	Added "NOTIFY ssrecall" command
		2, 3.2.4.	Added "NOTIFY sscurrent_ex"command
		2, 3.2.4.	Added "NOTIFY ssrecall_ex" command
		2, 3.3.8.	Added "ssrecall_ex"command
		3.1.	Amended raw value examples for 400Hz and 2kHz
		3.2.2. 1-5) 3.3.4. 2-10) 3.3.4. 2-11) 3.3.5 2-13) 3.3.5 2-14) 3.3.5 2-15)	Amended "Detail"
		6	Fixed MTX5 parameter in "1.Input Patch"
		7	Fixed Category of "INPUT CHANNEL"
		7	Amended to clarify Analog Gain to "Gain"and Digital Gain to "D.Gain"
		7	Fixed "Xpos" in "MATRIX"
		7	Fixed "Uniqueld" in "OUTPUT CHANNEL" of "SPEAKER PROCESSOR"
		7	Fixed "Xpos" in "OUTPUT PORT" of "OUTPUT PORT"
7	Amended "Remarks" in "MY4-AEC"		
V2.1.0	Dec. 22, 2015	3.2.2	Added new 'Important' comment regarding Parameter change notification raw/normalised values in MRX7-D part
		7	Fixed Remark for "Channel Name" parameter in MTX3/MTX5-D part
		7	Fixed ElmNo for "ROUTER" parameter in MTX3/MTX5-D part
		7	Fixed "INPUT CHANNEL LEVEL" & "INPUT CHANNEL MUTE" parameters in MTX3/MTX5-D part
		7	Fixed "INPUT CHANNEL DCA" parameters in MTX3/MTX5-D part
		7	Fixed "MATRIX OUTPUT MASTER" parameters in MTX3/MTX5-D part
		7	Added "ZONE DCA/MUTE" parameters in MTX3/MTX5-D part
		7	Fixed Remark for "EQ/GEQ Gain" parameter in MRX7-D
		7	Added "Acoustic Echo Canceller" parameters in MRX7-D
		7	Added "Revolabs Control" parameters in MRX7-D
		7	Fixed Remark for "ChannelName" parameters in XMV series
		8	Fixed Meter Name for "OUTPUT PORT OUTPUT(SLOT)" in MTX3/MTX5-D part
8	Fixed Meter Name for "Matrix Mixer" in MRX7-D part		

Version	Date	Section	Description
V2.2.0	Jun. 21, 2016	6	Added "B/W(Q)" parameter for PEQ in MRX7-D part
		6	Added "Paging Ducker", "Effect" and "Pitch Shift FBS" parameters in MRX7-D part
		6	Added "B/W(Q)" parameter for Speaker Processor PEQ in MRX7-D part
		7	Fixed Remarks for "GAIN/HPF" of "MIC/LINE INPUT MONO CH STRIP 1-8(16)" in "INPUT CHANNEL" category in MTX3/MTX5-D part
		7	Changed parameter name "DCA Fader 8(16) Channel" to "Fader 8(16) Channel" for "INPUT CHANNEL LEVEL" in MTX3/MTX5-D part
		7	Changed parameter name "DCA Fader 6 Channel" to "Fader 6 Channel" for "INPUT CHANNEL LEVEL" in MTX3/MTX5-D part
		7	Changed parameter name "DCA Mute 6 Channel" to "Mute 6 Channel" for "INPUT CHANNEL MUTE" in MTX3/MTX5-D part
		7	Changed parameter name "DCA Fader 8 Channel" to "Fader 8 Channel" for "INPUT CHANNEL LEVEL" in MTX3/MTX5-D part
		7	Changed parameter name "DCA Mute 8 Channel" to "Mute 8 Channel" for "INPUT CHANNEL MUTE" in MTX3/MTX5-D part
		7	Added "INPUT CHANNEL DCA" and "INPUT CHANNEL MUTE" categories in MTX3/MTX5-D part
		7	Deleted duplicated "INPUT CHANNEL DCA / MUTE" parameters between "MIC/LINE INPUT MONO CH STRIP 1-8(16)" and "LINE INPUT ST/MONO CH STRIP 1L-3R" in MTX3/MTX5-D part
		7	Merged "ZONE DCA/MUTE" parameters into "ZONE" category in MTX3/MTX5-D part
		7	Added "DCA Mute 8(16) Channel" for Zone in MTX3/MTX5-D part
		7	Changed parameter name "DCA Fader 8(16) Channel" to "Fader 8(16) Channel" for "MATRIX OUTPUT MASTER" in MTX3/MTX5-D part
		7	Added "Paging Ducker" parameters for Dynamics in MRX7-D part
		7	Added "Effect" parameters in MRX7-D part
		7	Added "Notch FBS" parameters and "Pitch Shift FBS" parameters in MRX7-D part
		7	Added "Delay Matrix" parameters for Mixer in MRX7-D part
		8	Added "Paging Ducker" parameters for Dynamics in MRX7-D part
		8	Added "Delay Matrix" parameters for Mixer in MRX7-D part

Version	Date	Section	Description
V3.0.0	Feb. 24, 2017	2	Changed command category name "Preset recall processing" to "Preset processing request" in 2. Command List
		3.3.5	Added Notes in "Parameter setting" for "2-14) Normalized value parameter setting".
		3.4.2	Unified term "Snapshot (preset) list" to "Preset list".
		3.4.3 3-27) 3.4.3 3-28)	Simplified command names deleting "(for list)".
		4	Amended detail of "Normal procedure" "snapshot (preset) control" to "Snapshot or Preset" "snapshot (preset) display" to "Preset list display"
		4	Unified term "Snapshot (preset)" to "Preset".
		5	Amended "1.Level Meter, Hold Meter" to "1.Level Meter, Hold Meter, GR Meter".
		6	Changed the command number 22 and bigger number due to modification above "21.Pitch Shift FBS"
		6	Amended "Group(9 - 16 Channel)" to "Group(9 - 24 Channel)" in "23.Dugan Automixer"
		7	Improved parameter name in MTX3/MTX5-D part : "MIC/LINE INPUT MONO CH STRIP 1-8(16)" to "INPUT CH STRIP 1-8(16)" "LINE INPUT ST/MONO CH STRIP 1L-3R" to "STEREO INPUT CHANNEL STIN 1L-3R" "DIRECT INPUT MONO CH STRIP 1-8" to "DIRECT INPUT CHANNEL CH 9 - 16 ( 17 - 24 )" "Ducking 8 Channel" to "PRIORITY DUCKER" "Router 40(48) Input 1 Output" to "PRIORITY SOURCE" "Router 40(48) Input 1 Output" to "ANC SOURCE"
		7	Merged two lines for MTX3 and MTX5-D parameters into one line for simplification in MTX3/MTX5-D part : "STIN 1L-3R 3BAND EQ" "GroupMaster" in "INPUT CHANNEL DCA" "GroupMaster" in "INPUT CHANNEL DCA MUTE" "ZONE OUT GroupMaster" "ZONE OUT MUTE GroupMaster"
		7	Moved "EFFECT" for simplification within MTX3/MTX5-D part.
		7	Added "Dugan Auto Mixer" in MTX3/MTX5-D part.
		7	Amended parameter name in MTX3/MTX5-D part : "MixBus 26(34) Input x 8(16) Output(STEREO) -> (MONO)" to "MATRIX (ZONE OUT MONO) 26(34) Input x 8(16) Output" for "MATRIX" "MixBus 26(34) Input x 8(16) Output (MONO) -> (STEREO) -> "MATRIX (ZONE OUT STEREO) 26(34) Input x 8(16) Output" for "MATRIX"
		7	Added notes about parameters in MTX3/MTX5-D part : "MATRIX(MONO) 26(34) Input x 8(16) Output" in "MATRIX" "MATRIX(STEREO) 26(34) Input x 8(16) Output" in "MATRIX"
		7	Amended parameter name "Matrix Mixer 22(30) Input 2 Output" to "Matrix Mixer 22(30) Input 4 Output" in MTX3/MTX5-D part.
		7	Combined "2nd PRIORITY DUCKER", "1st PRIORITY DUCKER", "ANC" and "SOURCE SELECT" for simplification in MTX3/MTX5-D part.
		7	Added remarks for "Dugan Auto Mixer" in MRX7-D part.
		7	Fixed remarks for "DigitalInputSensitivity" in XMV part.
		8	Amended remarks in MTX3/MTX5-D part.
		8	Fixed UniqueId "20004" to "20024" for "INPUT(YDIF)" in MTX3/MTX5-D part.
		8	Added "Dugan Auto Mixer" in MTX3/MTX5-D part.
		8	Added variation "40 OUT", "48 OUT" and "56 OUT" for "Matrix Mixer" in MRX7-D part.
		8	Fixed Meter Name for "Speaker Processor" in MRX7-D part.
		8	Added meter Type "gr" for "Speaker Processor" in MRX7-D part.
		8	Added channel number in MRX7-D part : "Room Combiner plus Auto Mixer ( Mic 17 - 24 Channel )" "Dugan Automixer 17 - 24 Channel"

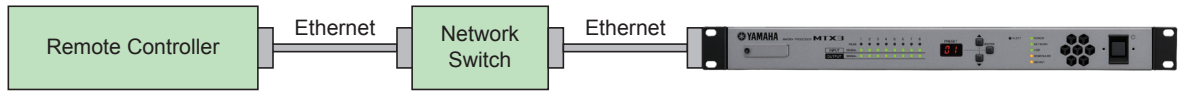
Version	Date	Section	Description
V3.1.0	Jun.19, 2017		Added Table of contents.
		2,3,4,6,7,8	Rearranged format of section number and renumbering.
		2.1. 1-7) 1-8) 1-10) 2.2. 2-5) 2-19) 2.3. 3-10) 3-11) 3-27) 3-28) 3-31)	Modified "Notification detail" and "Request details".
		2.3. 3-31) 3-32)	Added description in Remarks.
		3.2.3 3.2.4 3.2.5 3.2.5 1-10) 3.2.6 3.3.2 3.3.2 2-5) 3.3.5 2-16) 3.3.7 3.3.8 2-21) 3.4.3 3-10) 3-11)	Unified titles in command list of "2. Command List" and section names in command detail of "3. Command Specifications"
		3.3.6 2-17) 2-18)	Corrected references information in "Details:".
		3.4.3 3-16) 3-18) 3-20) 3-22) 3-24)	Added "Details:" for command options.
		3.4.3 3-28) : 3-32) 3-38) 3-41) 3-42)	Added "Notes:" for command option and detail.
		3.4.3 3-16) 3-31) 3-32)	"Added commands "Details:".
		3.4.3 3-28)	Added command "option2" example.
		3.4.3 3-27) 3-28) 3-31) 3-32) 3-37) 3-38)	Amended description in "Details:" and "Example".
		6	Deleted "14. MY4-AEC Digital I/O SRC" parameters in MTX3/MTX5-D part.
		6	Rearranged tables according to the order of "7.Parameter List".
		7	Added "PAGING","OSCILLATOR" and "PILOT TONE" parameters in MTX3/MTX5-D part.
		7	Added "Paging" parameters in MRX7-D part.
		7	Changed maximum value of "Utility/InputSelect" parameter in XMV part.
		7	Added "ChUtility/InputSelect" parameter in XMV part.
		7	Added "Note(*3)" for "Utility/InputSelect","ChUtility/InputSelect" parameters in XMV part.
		7	Amended Block Diagram in XMV part.

# 1. Setup

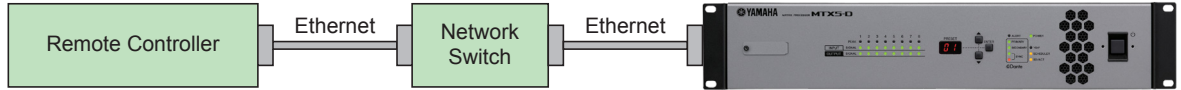
## 1.1. Connection Procedure

Connection when using the NETWORK connector to perform remote control using this protocol

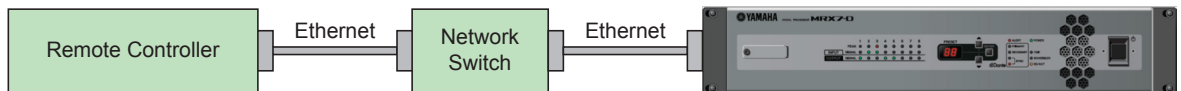
### MTX3



### MTX5-D



### MRX7-D

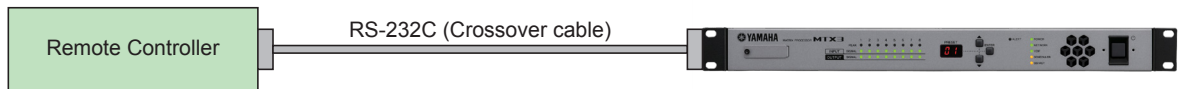


\* Also for XMV, EXi8 and EXo8.

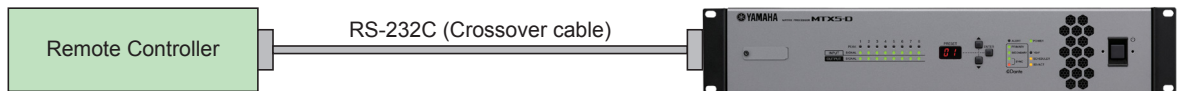
XMV can be controlled with the protocol in this document without MTX3, MTX5-D or MRX7-D.

Connection when using the REMOTE connector to perform remote control using this protocol

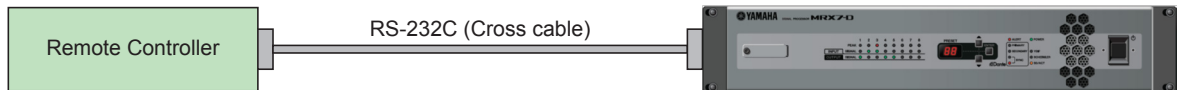
### MTX3



### MTX5-D



### MRX7-D



\* XMV, EXi8 and EXo8 do not have REMOTE connectors



## 1.2. Configuring the Remote Controller

MTX3, MTX5-D and MRX7-D can be controlled from an external controller through the Ethernet (NETWORK) connector and RS-232C (REMOTE) connector.

XMV, EXi8 and EXo8 can be controlled from an external controller through the Ethernet (NETWORK) connector.

The configuration on the remote controller side for each type of connection is shown below.

### Ethernet (NETWORK connector) control

IP Address: Specify the IP address of the device you want to control.

IP Port No.: 49280

### RS-232C (REMOTE connector) control

Bit Rate: The specified bit rate.

Data: 8 bits

Parity: none

Stop bit: 1 bit

Flow Control : none

RS-232C port pin assignment

Pin	Name	In/Out	Pin	Name	In/Out
1	NC	-	6	DSR	In
2	RxD	In	7	RTS	Out
3	TxD	Out	8	CTS	In
4	DTR	Out	9	NC	-
5	GND	-			

\* Pin 4 and Pin 6 are connected internally.

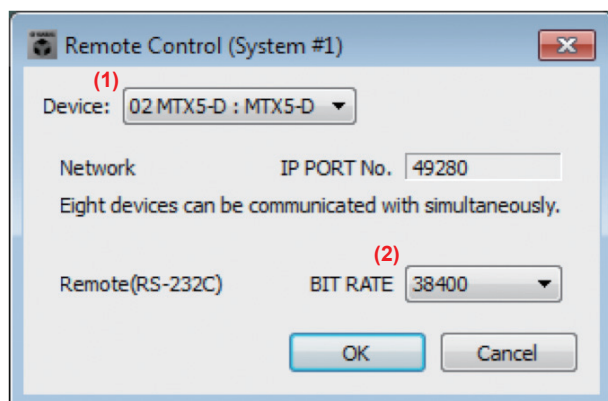
\* Pin 7 and Pin 8 are connected internally.

## 1.3. Device Configuration

### 1.3.1. MTX3, MTX5-D and MRX7-D

MTX3, MTX5-D and MRX7-D can be controlled from an external controller through a NETWORK and RS-232C connector. Up to nine remote controller devices can connect simultaneously to one MTX or MRX device, eight via the NETWORK connector and one via the RS232 connector.

The procedure to configure the second control port of MTX3, MTX5-D and MRX7-D is shown below, this is found in MTX-MRX Editor - System Menu- > Remote control.



(1) Select an MTX or MRX within the MTX/MRX system.

(2) Select BIT RATE of 38400 or 115200 for RS-232C control.

After selecting all the parameters, click OK to complete the procedure.

\* In the case of the MTX5-D NETWORK remote control connection, either network connector (Primary or Secondary) can be used when DANTE Daisy Chain mode is selected.

If using DANTE Redundant mode, only the Primary network connection and/or RS-232C connection can be used for remote control.

### 1.3.2. XMV, EXi8 and EXo8

XMV, EXi8 and EXo8 can be controlled via an external device through a NETWORK connector.

Up to eight remote controller devices can connect simultaneously.

As remote control of XMV, EXi8 and EXo8 is performed via the NETWORK connector only, there is no requirement to configure the port using MTX-MRX Editor for remote control.

When XMV, EXi8 and EXo8 are connected and controlled from MTX3, MTX5-D or MRX7-D, up to seven remote controller devices can be used for these devices.

### 1.3.3. MRX7-D and Remote Control Setup List

Remote Parameter control for MRX7-D is managed via the Remote Control Setup List. This list must first be created in MTX-MRX Editor in order to specify which Parameters can be controlled from an external remote controller. This list will be uploaded to MRX7-D during Synchronisation.

## 2. Command List

### 2.1. Commands from a device sent to a remote controller

No.		Notification details	Reply from device	Remarks
1-1	Device status change notification	Device run mode notification	NOTIFY devstatus runmode ...	"emergency" is invalid on the XMV, EXi8 and EXo8.
1-2		Device error status notification	NOTIFY devstatus error ...	
1-3		Current Fs (sampling frequency) setting notification	NOTIFY devstatus fs ...	
1-4		Current word clock status notification	NOTIFY devstatus lockstatus ...	
1-5	Parameter change notification	Parameter change notification raw value	NOTIFY set ...	
1-6		Parameter change notification normalized value	NOTIFY setn ...	
1-7	Meter information notification	Scheduler on/off change notification	NOTIFY set(setn) MTX:EvtScd_On ...	
1-7	Meter information notification	Meter information notification	NOTIFY mtr ...	
1-8	Preset change notification	Current Preset number change notification	NOTIFY sscurrent ...	
1-9		Preset recall start notification	NOTIFY ssrecall ...	
1-10	Snapshot change notification	Current Snapshot number change notification	NOTIFY sscurrent_ex ...	This command is available only for MRX7-D
1-11		Snapshot recall start notification	NOTIFY ssrecall_ex ...	This command is available only for MRX7-D
1-12	Event processing change notification	Media insertion notification	NOTIFY event MTX:Media ...	This command is invalid on the XMV, EXi8 and EXo8.
1-13		Time synchronization notification <old format>	NOTIFY event MTX:AbsoluteTime ...	This command is invalid on the EXi8 and EXo8.
1-14		Time synchronization notification <new format>	NOTIFY event MTX:SetAbsoluteTime...	This command is invalid on the EXi8 and EXo8.
1-15		DST enable change notification	NOTIFY event MTX:DSTSetEnable...	This command is invalid on the XMV, EXi8 and EXo8.
1-16		DST offset time change notification	NOTIFY event MTX:DSTSetOffset...	This command is invalid on the XMV, EXi8 and EXo8.
1-17		DST start time change notification	NOTIFY event MTX:DSTSetStartTime...	This command is invalid on the XMV, EXi8 and EXo8.
1-18		DST end time change notification	NOTIFY event MTX:DSTSetEndTime...	This command is invalid on the XMV, EXi8 and EXo8.
1-19		DST start/end day change notification (day/week)	NOTIFY event MTX:DSTSetDayWeek...	This command is invalid on the XMV, EXi8 and EXo8.
1-20		DST start/end day change notification (day)	NOTIFY event MTX:DSTSetDay...	This command is invalid on the XMV, EXi8 and EXo8.
1-21		Song play mode notification	NOTIFY event MTX:AudioPlayerSetPlayMode ...	This command is invalid on the XMV, EXi8 and EXo8.
1-22		Play, stop, and other transport operation notification	NOTIFY event MTX:AudioPlayerTransport ...	This command is invalid on the XMV, EXi8 and EXo8.
1-23		Playback song notification	NOTIFY event MTX:AudioPlayerSetCurrentSong ...	This command is invalid on the XMV, EXi8 and EXo8.
1-24		MTX Editor synchronization processing notification	NOTIFY event MTX:SynchronizationSetStatus ...	This command is invalid on the XMV, EXi8 and EXo8.

### 2.2. Commands for controlling a device

No.		Request details	Command string	Remarks
2-1	Device status query	Device run mode query	devstatus runmode	"emergency" is invalid on the XMV, EXi8 and EXo8.
2-2		Device error status query	devstatus error	
2-3		Current Fs (sampling frequency) status query	devstatus fs	
2-4		Current word clock status query	devstatus lockstatus	
2-5	Device run mode change	Device run mode change	devmode normal devmode emergency	"emergency" is invalid on the XMV, EXi8 and EXo8.
2-6	MTX external control protocol run mode setting	Result and change notification character encoding setting	scpmode encoding ...	
2-7		Value notification mode setting	scpmode valuetype ...	
2-8		Normalization resolution setting	scpmode resolution ...	
2-9		Keepalive activation setting	scpmode keepalive ...	
2-10	Parameter query	Raw value parameter query	get ...	
2-11		Normalized value parameter query	getn ...	
2-12		Scheduler status notification	get(getn,gett) MTX:EvtScd_On ...	This command is invalid on the XMV, EXi8 and EXo8.
2-13	Parameter setting	Raw value parameter setting	set ...	
2-14		Normalized value parameter setting (*)	setn ...	
2-15		Relative value parameter setting (INC/DEC level control)	setr...	
2-16		Scheduler setting	set(setn,sett) MTX:EvtScd_On ...	This command is invalid on the XMV, EXi8 and EXo8.
2-17	Meter control	Transmission request	mtrstart ...	
2-18		Stop request	mtrstop ...	
2-19	Preset processing	Preset current number query processing	sscurren ...	This command is invalid on the XMV, EXi8 and EXo8.
2-20		Preset recall processing	ssrecall ...	This command is invalid on the XMV, EXi8 and EXo8.
2-21	Snapshot processing	Snapshot recall processing	ssrecall_ex ...	This command is available only for MRX7-D

\* When value is set "1023" (default:1000), control resolution becomes same as "Raw value" command.  
See "6.1. Fader parameter" for the "Normalised value" vs "Raw value" when the value is set "1023"

## 2.3. Extended commands

No.	Request details	Command string	Remarks	
3-1	Product information query request	MTX external control protocol version query	devinfo protocolver ...	
3-2		Parameter set version query	devinfo paramsetver ...	
3-3		Firmware version query	devinfo version ...	
3-4		Product name query	devinfo productname ...	
3-5		Serial number query	devinfo serialno ...	
3-6		Device ID query	devinfo deviceid ...	
3-7		Device name query	devinfo devicename ...	
3-8	Preset processing request	Number of Preset lists	ssnum ...	This command is invalid on the XMV, EXi8 and EXo8.
3-9		Nth preset information	ssinfo ...	This command is invalid on the XMV, EXi8 and EXo8.
3-10	Event processing request	Time synchronization <Old format>	event MTX:AbsoluteTime ...	This command is invalid on the EXi8 and EXo8.
3-11		Time synchronization <New format>	event MTX:SetAbsoluteTime ...	This command is invalid on the EXi8 and EXo8.
3-12		Time query	event MTX:GetAbsoluteTime ...	This command is invalid on the EXi8 and EXo8.
3-13		DST enable/disable setting	event MTX:DSTSetEnable...	This command is invalid on the XMV, EXi8 and EXo8.
3-14		DST enable/disable query	event MTX:DSTGetEnable...	This command is invalid on the XMV, EXi8 and EXo8.
3-15		DST status query	event MTX:DSTGetStatus...	This command is invalid on the XMV, EXi8 and EXo8.
3-16		DST offset time setting	event MTX:DSTSetOffset...	This command is invalid on the XMV, EXi8 and EXo8.
3-17		DST offset time query	event MTX:DSTGetOffset...	This command is invalid on the XMV, EXi8 and EXo8.
3-18		DST start time setting	event MTX:DSTSetStartTime...	This command is invalid on the XMV, EXi8 and EXo8.
3-19		DST start time query	event MTX:DSTGetStartTime...	This command is invalid on the XMV, EXi8 and EXo8.
3-20		DST end time setting	event MTX:DSTSetEndTime...	This command is invalid on the XMV, EXi8 and EXo8.
3-21		DST end time query	event MTX:DSTGetEndTime...	This command is invalid on the XMV, EXi8 and EXo8.
3-22		DST start/end day setting (day/week)	event MTX:DSTSetDayWeek...	This command is invalid on the XMV, EXi8 and EXo8.
3-23		DST start/end day query (day/week)	event MTX:DSTGetDayWeek...	This command is invalid on the XMV, EXi8 and EXo8.
3-24		DST start/end day setting (day)	event MTX:DSTSetDay...	This command is invalid on the XMV, EXi8 and EXo8.
3-25		DST start/end day query (day)	event MTX:DSTGetDay...	This command is invalid on the XMV, EXi8 and EXo8.
3-26		DST start/end day setting query	event MTX:DSTGetDaySetting...	This command is invalid on the XMV, EXi8 and EXo8.
3-27		Current folder information query	event MTX:AudioPlayerGetCurrentDir ...	This command is invalid on the XMV, EXi8 and EXo8.
3-28		Current folder move query	event MTX:AudioPlayerSetCurrentDir ...	This command is invalid on the XMV, EXi8 and EXo8.
3-29		Folder name query	event MTX:AudioPlayerGetDirName ...	This command is invalid on the XMV, EXi8 and EXo8.
3-30		File name query	event MTX:AudioPlayerGetFileName ...	This command is invalid on the XMV, EXi8 and EXo8.
3-31		Folder name list query	event MTX:AudioPlayerGetDirNameList ...	This command is invalid on the XMV, EXi8 and EXo8.
3-32		File name list query	event MTX:AudioPlayerGetFileNameList ...	This command is invalid on the XMV, EXi8 and EXo8.
3-33		Song play mode query	event MTX:AudioPlayerGetPlayMode ...	This command is invalid on the XMV, EXi8 and EXo8.
3-34		Song play mode setting	event MTX:AudioPlayerSetPlayMode ...	This command is invalid on the XMV, EXi8 and EXo8.
3-35		Song playback status query	event MTX:AudioPlayerGetStatus ...	This command is invalid on the XMV, EXi8 and EXo8.
3-36		Play, stop, and other transport operation	event MTX:AudioPlayerTransport ...	This command is invalid on the XMV, EXi8 and EXo8.
3-37	Currently playing or selected song information query	event MTX:AudioPlayerGetCurrentSong ...	This command is invalid on the XMV, EXi8 and EXo8.	
3-38	Playback song designation	event MTX:AudioPlayerSetCurrentSong ...	This command is invalid on the XMV, EXi8 and EXo8.	
3-39	MTX Editor synchronization processing query	event MTX:SynchronizationGetStatus ...	This command is invalid on the XMV, EXi8 and EXo8.	
3-40	Number of alert event log query	event MTX:EventLogGetLogNumber...		
3-41	Alert event log query	event MTX:EventLogGetLog...		
3-42	Query for alert event log as list	event MTX:EventLogGetLogList...		
3-43	Clear alert event log	event MTX:EventLogClear...		

## 3. Command Specifications

### 3.1. Basic Command Specifications

Below is the syntax of commands exchanged between a device and remote controller.

<command name> <option 1> <option 2> . . . <option n> <new line>

- Each command must end with LF (0x0A).
- LF (0x0A) code can be sent as heart-beat command.  
Refer to section 3.3.3: "2-9) Keepalive activation setting" for description of run mode setting, which describes the use of this heart-beat command.
- Character type letter(s) in command line must be bracketed by double quotations.  
When double quotation itself needs to be included in command line, use "escape character" as shown below.  
Backslash works as an escape character to express following one character for double quotation and backslash.

Syntax	Meaning	Description
\\	\	backslash
\"	"	double quotation

- At least one space is necessary between a command name and an option and between options.
- Commands must be expressed using ASCII characters. Other characters are not allowed.
- Option strings that express parameter values are shown below.

Value	Displayed string	Raw value	Normalized value
-Infinity	"-INFINITY"	-13801	0
-18dB	"-18.00"	-1800	453
-6.5dB	"-6.50"	-650	677
0dB	"0.00"	0	804
10dB	"10.00"	1000	1000
2kHz	"2.00k"	2000000	667
400Hz	"400"	400000	435
Pan L 63	"L63"	-63	0
Pan Center	"C"	0	500
Pan R 63	"R63"	+63	1000
ON	"ON"	0	500
		1	1000
OFF	"OFF"	0	0
		1	1000
INVERTED	"INVERTED"	1	1000
NORMAL	"NORMAL"	0	0

\* For other parameters, see section 6, "Parameter Value Details," provided later.

\* Normalized value is a converted value when minimum value of the parameter is as 0 and maximum value of the parameter is as 1000<sup>\*1</sup>.  
Example: -inf as minimum mapped 0, 10dB as maximum mapped 1000, 0dB mapped 804 for level parameter.

<sup>\*1</sup>: This value is set by 2-8) Normalization resolution setting, default resolution is 1000.

## 3.2. Commands a Device Sends to a Remote Controller

### 3.2.1. Device status change notification

#### 1-1) Device run mode notification

Command	Option 1	Option 2	Description
NOTIFY devstatus	runmode	"emergency"	Emergency run mode
		"update"	Update mode
		"normal"	Normal run mode

Example: Notification: NOTIFY devstatus runmode "normal"  
 Meaning: The run mode was changed to normal mode.

#### 1-2) Device error status notification

Command	Option 1	Option 2	Description
NOTIFY devstatus	error	"flt/xxxx"	Alert fault information
		"err/xxxx"	Alert error information
		"wrn/xxxx"	Alert warning information

Details: "flt/xxxx" = "**flt**/message// xnnn onf (sssss) **ID-xxx** 2012/12/31 23:59:59"  
 "err/xxxx" = "**err**/message// xnnn onf (sssss) **ID-xxx** 2012/12/31 23:59:59"  
 "wrn/xxxx" = "**wrn**/message// xnnn onf (sssss) **ID-xxx** 2012/12/31 23:59:59"  
 The first three characters indicate the alert type.  
 message = Alert message (The section from "/" to "/" after the alert type is the message data.)  
 . . . up to 32 characters (ascii characters)  
 nnn = Alert number (panel display number)  
 . . . 2 or 3 digit hexadecimal notation (The x at the front indicates hexadecimal notation.)  
 onf = Alert on/off  
 . . . Persistent alerts turn on when an alert condition occurs and turn off when they are cleared.  
 Single-shot alerts turn on while an alert condition is true.  
 sssss = Identical alert count (a counter that indicates the number of identical alerts, normally set to 1)  
 . . . Decimal notation  
 xxx = UNIT ID number . . . 3-digit hexadecimal  
 Date  
 Time

Example: Notification: NOTIFY devstatus error "err/DCP[0] communication error// x53 on (1) ID-001 2013/1/22 11:38:23"  
 Meaning: Error alert 53 occurred.

#### 1-3) Current Fs (sampling frequency) setting notification

Command	Option 1	Option 2	Description
NOTIFY devstatus	fs	"unknown"	Fs undefined
		44.1kHz	44.1kHz
		"48kHz"	48kHz

Example: Notification: NOTIFY devstatus fs "44.1kHz"  
 Meaning: Fs was changed to 44.1 kHz.

#### 1-4) Current word clock status notification

Command	Option 1	Option 2	Description
NOTIFY devstatus	lockstatus	"unlock"	Unlock
		"lock"	Lock

Example: Notification: NOTIFY devstatus lockstatus "lock"  
 Meaning: Word clock was locked.

## 3.2.2. Parameter change notification

## 1-5) Parameter change notification raw value

## Parameter change notification normalized value

## MTX3,MTX5-D,XMV,EXi8,EXo8

Command	Option 1	Option 2	Option 3	Option 4	Option 5	Description
NOTIFY set	MTX:mem_MemNo/UniqueId/ElmNo/Xpos/Ypos/ PrmNo/IndexNo	0	0	"(value)"	"(string)"	Parameter change raw value
NOTIFY setn	MTX:mem_MemNo/UniqueId/ElmNo/Xpos/Ypos/ PrmNo/IndexNo	0	0	"(value)"	"(string)"	Parameter change normalized value

Details:

- MemNo* = See section 7, "Parameter List."
- UniqueId* = See section 7, "Parameter List."
- ElmNo* = See section 7, "Parameter List."
- Xpos* = See section 7, "Parameter List."
- Ypos* = See section 7, "Parameter List."
- PrmNo* = See section 7, "Parameter List."
- IndexNo* = See section 7, "Parameter List."
- "(value)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."
- "(string)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Notification: NOTIFY set MTX:mem\_512/60000/0/0/0/0 0 0 -7760 "-77.60"  
 Meaning: DCA Fader 1ch level was changed to "-77.60."

## MRX7-D

Command	Option 1	Option 2	Option 3	Option 4	Option 5	Description
NOTIFY set	MTX:Index_IndexNo	0	0	"(value)"	"(string)"	Parameter change raw value
NOTIFY setn	MTX:Index_IndexNo	0	0	"(value)"	"(string)"	Parameter change normalized value

Details:

- IndexNo* = Index number assigned in Remote Control Setup List
- "(value)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."
- "(string)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Notification: NOTIFY set MTX:Index\_1 0 0 -7760 "-77.60"  
 (V2.02 or earlier NOTIFY set MTX:Index\_001 0 0 -7760 "-77.60")  
 Meaning: Level of the parameter assigned to Index 1 in Remote Control List was changed to "-77.60".

Important: If a parameter is assigned to multiple Index numbers in the Remote Control Setup List, Notification is only provided to the lowest assigned Index number.

## 1-6) Scheduler on/off change notification

Command	Option 1	Option 2	Option 3	Option 4	Option 5	Description
NOTIFY set(setn)	MTX:EvntScd_On	0	0	1	"1"	Scheduler on
				0	"0"	Scheduler off

\* For setn, option 4 is expressed using a normalized value.

Example: Notification: NOTIFY set MTX:EvntScd\_On 0 0 1 "1"  
 Meaning: The scheduler was turned on.

### 3.2.3. Meter information notification

#### 1-7) Meter information notification

##### MTX3,MTX5-D,XMV,EXi8,EXo8

Command	Option 1	Option 2	Option 3	Description
NOTIFY mtr	MTX:mtr_MemNo/Uniqueld/meter	level	(meter)	Level meter value
		gr		gr meter value

Details: *MemNo* = See section 8, "Meters."  
*Uniqueld* = See section 8, "Meters."  
(meter) = See section 5, "Meter Values."

Example: Notification: NOTIFY mtr MTX:mtr\_512/20020/meter level 71 71 71 71 71 71 69 68  
\* The meter value is expressed using a 2-digit hexadecimal.  
Meaning: Output levels for ch1 to 8 Level are sent.

##### MRX7-D

Command	Option 1	Option 2	Option 3	Description
NOTIFY mtr	MTX:Index_IndexNo	level	(meter)	Level meter value
		gr		gr meter value
		hold		Hold meter value

Details: *IndexNo* = Index number assigned in Remote Control Setup List  
(meter) = See section 5, "Meter Values."

Example: Notification: NOTIFY mtr MTX:Index\_2 level 71 71 71 71 71 71 69 68  
(V2.02 or earlier NOTIFY mtr MTX:Index\_002 level 71 71 71 71 71 71 69 68)  
\* The meter value is expressed using a 2-digit hexadecimal.  
Meaning: Output levels for Ch1 to 8 which are assigned to Index 2 in Remote Control list are sent.

### 3.2.4. Preset change notification

#### 1-8) Current Preset number change notification

Command	Option 1	Description
NOTIFY sscurrent	(index)	Current preset number change notification

Details: (index) = Current preset index number

Example: Notification: NOTIFY sscurrent 10  
Meaning: Current preset was changed to index 10 (preset 10).

#### 1-9) Preset recall start notification

Command	Option 1	Description
NOTIFY ssrecall	(index)	Preset recall process started

Details: (index) = Preset index number

Example: Notification: NOTIFY ssrecall 10  
Meaning: Preset recall process for Index 10 preset started.



### 3.2.5. Snapshot change notification

#### 1-10) Current Snapshot number change notification

Command	Option 1	Option 2	Description
NOTIFY sscurrent_ex	list	(index)	Current preset number change notification

Details: (index) = Index number for Snapshot assigned in Remote Control Setup List

Example: Notification: NOTIFY sscurrent\_ex list 5  
 Meaning: Snapshot recall occurred for the Snapshot assigned to index 5 in Remote Control Setup List

#### 1-11) Snapshot recall start notification

Command	Option 1	Option 2	Description
NOTIFY ssrecall_ex	list	(index)	Snapshot recall start notification

Details: (index) = Index number for Snapshot assigned in Remote Control Setup List

Example: Notification: NOTIFY ssrecall\_ex list 5  
 Meaning: Snapshot recall process for Index 5 started.

### 3.2.6. Event processing change notification

#### 1-12) Media insertion notification

Command	Option 1	Option 2	Description
NOTIFY event	MTX:Media	"sdcad=inserted"	An SD memory card was inserted.
		"sdcad=extracted"	An SD memory card was removed.

Example: Notification: NOTIFY event MTX:Media "sdcad=inserted"  
 Meaning: An SD memory card was inserted into an SD memory card slot and was detected normally.  
 \* SD Card should not be removed when the MTX is powered on.

#### 1-13) Time synchronization notification <Old format>

Command	Option 1	Option 2	Description
NOTIFY event	MTX:AbsoluteTime	"yyyy/mm/dd hh:mm:ss"	Time synchronization notification

Details: yyyy = Year (Gregorian)  
 mm = Month (1 to 12)  
 dd = Day (1 to 31)  
 hh = Hour (0 to 23)  
 mm = Minute (0 to 59)  
 ss = Second (0 to 59)  
 \* DST (Daylight Saving Time) is not accounted for.

Example: Notification: NOTIFY event MTX:AbsoluteTime "2013/1/25 10:58:19"  
 Meaning: The time was set to January 25, 2013, 10 hours 58 minutes 19 seconds.

Note: This command's option1 string "MTX:AbsoluteTime" is retained to keep compatibility with previous programming using the previous protocol. The command's function is identical to the new format shown below.  
 Device sends both format commands when time is set in order to keep compatibility with program which done for old format in past.  
 Ignore this command and process new format command in new program.

#### 1-14) Time synchronization notification <New format>

Command	Option 1	Option 2	Description
NOTIFY event	MTX:SetAbsoluteTime	"yyyy/mm/dd hh:mm:ss"	Time synchronization notification

Details: yyyy = Year (Gregorian)  
 mm = Month (1 to 12)  
 dd = Day (1 to 31)  
 hh = Hour (0 to 23)  
 mm = Minute (0 to 59)  
 ss = Second (0 to 59)  
 \* DST (Daylight Saving Time) is not accounted for.

Example: Notification: NOTIFY event MTX:SetAbsoluteTime "2013/1/25 10:58:19"  
 Meaning: The time was set to January 25, 2013, 10 hours 58 minutes 19 seconds

**1-15) DST enable change notification**

Command	Option 1	Option 2	Description
NOTIFY event	MTX:DSTSetEnable	"enable"	DST enable
		"disable"	DST disable

Example: Notification: NOTIFY event MTX:DSTSetEnable "enable"  
 Meaning: DST was enabled

**1-16) DST offset time change notification**

Command	Option 1	Option 2	Description
NOTIFY event	MTX:DSTSetOffset	"offset=hh:mm"	DST offset time change notification

Details: hh = Hour (0 to 2)  
 mm = Minute (0 to 59)

Example: Notification: NOTIFY event MTX:DSTSetOffset "01:00"  
 Meaning: DST offset was set one hour

**1-17) DST start time change notification**

Command	Option 1	Option 2	Description
NOTIFY event	MTX:DSTSetStartTime	"time=hh:mm"	DST start time change notification

Details: hh = Hour (0 to 23)  
 mm = Minute (0 to 59)

Example: Notification: NOTIFY event MTX:DSTSetStartTime "time=12:00"  
 Meaning: DST start time was set to 12:00

**1-18) DST end time change notification**

Command	Option 1	Option 2	Description
NOTIFY event	MTX:DSTSetEndTime	"time=hh:mm"	DST end time change notification

Details: hh = Hour (0 to 23)  
 mm = Minute (0 to 59)

Example: Notification: NOTIFY event MTX:DSTSetEndTime "time=12:00"  
 Meaning: DST end time was set to 12:00

**1-19) DST start/end day change notification (day/week)**

Command	Option 1	Option 2	Description
NOTIFY event	MTX:DSTSetDayWeek	"s_weekindex=xxxx s_day=yyyy s_month=zzzz  e_weekindex=uuuu e_day=vvvv e_month=wwww"	DST start/end day change notification (day/week)

Details: xxxx = Start week (First, Second, Third, Fourth, Fifth, Last)  
 yyyy = Start day (Sun, Mon, Tue, Wed, Thu, Fri, Sat)  
 zzzz = Start month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)  
 uuuu = End week (First, Second, Third, Fourth, Fifth, Last)  
 vvvv = End day (Sun, Mon, Tue, Wed, Thu, Fri, Sat)  
 wwww = End month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)

Example: Notification: NOTIFY event MTX:DSTSetDayWeek "s\_weekindex=Last|s\_day=Sun|s\_month=Mar|  
 e\_weekindex=Last|e\_day=Sun|e\_month=Oct"  
 Meaning: DST start/end days were set as from last Sunday in March to last Sunday in October



### 3.3. Commands for controlling a device

#### 3.3.1. Device status query

##### 2-1) Device run mode query

Command	Option 1	Description
devstatus	runmode	Queries the run mode

##### Response

Response string	Description
OK devstatus runmode "emergency"	Emergency run mode
OK devstatus runmode "update"	Update mode
OK devstatus runmode "normal"	Normal run mode

Example: Command: devstatus runmode  
 Response: OK devstatus runmode "normal"  
 Meaning: Query the run mode.  
 The device is currently in normal run mode.

Note: After device responds with -OK devstatus runmode "normal"-, device starts to send commands.

In order to establish remote control communication, the external controller must send [devstatus runmode] command to the device and await response. When the device responds as [OK devstatus runmode "normal"], the device is ready to receive commands.

##### 2-2) Device error status query

Command	Option 1	Description
devstatus	error	Queries the error status

##### Response

Response string	Description
OK devstatus error "none"	No alerts
OK devstatus error "flt/xxxx"	fault alert
OK devstatus error "err/xxxx"	error alert
OK devstatus error "wrn/xxxx"	warning alert

Details: "flt/ xxxx" = "flt/message// xnnn onf (sssss) ID-xxx 2012/12/31 23:59:59"  
 "err/ xxxx" = "err/message// xnnn onf (sssss) ID-xxx 2012/12/31 23:59:59"  
 "wrn/ xxxx" = "wrn/message// xnnn onf (sssss) ID-xxx 2012/12/31 23:59:59"  
 The first three characters indicate the alert type.  
 message = Alert message (The section from "/" to "/" after the alert type is the message data.)  
 . . . up to 32 characters (ascii characters)  
 nnn = Alert number (panel display number)  
 . . . 2 or 3 digit hexadecimal notation (The x at the front indicates hexadecimal notation.)  
 onf = Alert on/off  
 . . . Persistent alerts turn on when an alert condition occurs and turn off when they are cleared.  
 Single-shot alerts turn on while an alert condition is true.  
 sssss = Identical alert count (a counter that indicates the number of identical alerts, normally set to 1)  
 . . . Decimal notation  
 xxx = UNIT ID number . . . 3- digit hexadecimal  
 Date  
 Time

Example: Command: devstatus error  
 Response: OK devstatus error "err/DCP[0] communication error// x53 on (1) ID-001 2013/1/22 11:38:23"  
 Meaning: Query the alert status.  
 Error alert 53 is occurring.

**2-3) Current Fs (sampling frequency) status query**

Command	Option 1	Description
devstatus	fs	Queries Fs

**Response**

Response string	Description
OK devstatus fs "unknown"	Fs undefined
OK devstatus fs "44.1kHz"	44.1kHz
OK devstatus fs "48kHz"	48kHz

Example: Command: devstatus fs  
 Response: OK devstatus fs "44.1kHz"  
 Meaning: Query Fs.  
 The current Fs is 44.1 kHz.

**2-4) Current word clock status query**

Command	Option 1	Description
devstatus	lockstatus	Queries the word clock lock status

**Response**

Response string	Description
OK devstatus lockstatus "unlock"	Unlock
OK devstatus lockstatus "lock"	Lock

Example: Command: devstatus lockstatus  
 Response: OK devstatus lockstatus "lock"  
 Meaning: Query the word clock lock status.  
 Locked

**3.3.2. Device run mode change****2-5) Device run mode change**

Command	Option 1	Description
devmode	normal	Sets the run mode to normal
	emergency	Sets the run mode to emergency

**Response**

Response string	Description
OK devmode normal	Normal run mode change complete
OK devmode emergency	Emergency run mode change complete

Example: Command: devmode emergency  
 Response: OK devmode emergency  
 Meaning: Change to emergency mode.  
 Run mode was changed to emergency.

## 3.3.3. MTX external control protocol run mode setting

## 2-6) Result and change notification character encoding setting

Command	Option 1	Option 2	Description
scpmode	encoding	ascii	ASCII encoding mode (default setting)
		utf8	UTF-8 encoding mode

## Response

Response string	Description
OK scpmode encoding ascii	ASCII encoding mode change complete
OK scpmode encoding utf8	UTF-8 encoding mode change complete

Example: Command: scpmode encoding utf8  
 Response: OK scpmode encoding utf8  
 Meaning: Change the result and change notification encoding code to UTF-8.  
 The encoding mode was changed to UTF-8.

## 2-7) Value notification mode setting

Command	Option 1	Option 2	Description
scpmode	valuetype	raw	Raw value mode (default setting)
		normalized	Normalized value mode

## Response

Response string	Description
OK scpmode valuetype raw	Raw value mode change complete
OK scpmode valuetype normalized	Normalized value mode change complete

Example: Command: scpmode valuetype normalized  
 Response: OK scpmode valuetype normalized  
 Meaning: Change parameter change notifications to normalized value mode.  
 Parameter change notifications were changed to normalized value mode.

## 2-8) Normalization resolution setting

Command	Option 1	Option 2	Description
scpmode	resolution	(res)	Resolution for normalized value notifications (default setting = 1000)

Details: (res) = Resolution for normalized values

## Response

Response string	Description
OK scpmode resolution xxxx	The resolution for normalized value notifications

Details: xxxx = Specified resolution \* Specified resolution should be more than 100.

Example: Command: scpmode resolution 128  
 Response: OK scpmode resolution 128  
 Meaning: Set the resolution of normalized values for setn commands to 128.  
 The resolution of normalized values for setn commands was set to 128.

**2-9) Keepalive activation setting**

Command	Option 1	Option 2	Description
scpmode	keepalive	(interval)	Maximum interval for a client to send some kind of message, including heart beats (default setting = disabled)

Details: (interval) = Timeout value (msec) \* Timeout value should be more than 1000.  
 \* The actual timeout value will be increased by 1 second.

**Response**

Response string	Description
OK scpmode keepalive xxxx	Keepalive activated notification

Details: xxxx = The specified timeout value (msec)

Example: Command: scpmode keepalive 2000  
 Response: OK scpmode keepalive 2000  
 Meaning: Set the timeout value to 2000 msec (2 seconds).  
 The timeout value was set to 2000 msec (2 seconds).

Note: When unexpected disconnection happens, remote controller can't finish communication with closing process.  
 In such case, device has to keep status "connected" and remote controller can't establish new connection after that.

In order to prevent the situation above, device watches keepalive command if connection with remote controller is still alive.

If device doesn't receive keepalive command within timeout value which is set by this command, device terminates connection by itself.

After the Keepalive activation command has been activated, the Remote controller must send any command or LF(0x0A) code as a heart beat to the device within the timeout value.

## 3.3.4. Parameter query

## 2-10) Raw value parameter query

## MTX3,MTX5-D,XMV,EXi8,EXo8

Command	Option 1	Option 2	Option 3	Description
get	MTX:mem_MemNo/Uniqueld/ElmNo/Xpos/Ypos/PrmNo/IndexNo	0	0	Raw value parameter query request

Details:

- MemNo* = See section 7, "Parameter List."
- Uniqueld* = See section 7, "Parameter List."
- ElmNo* = See section 7, "Parameter List."
- Xpos* = See section 7, "Parameter List."
- Ypos* = See section 7, "Parameter List."
- PrmNo* = See section 7, "Parameter List."
- IndexNo* = See section 7, "Parameter List."

## Response

Response string	Description
OK get MTX:mem_MemNo/Uniqueld/ElmNo/Xpos/Ypos/PrmNo/IndexNo 0 0 (value)	Raw value parameter query response

Details:

- MemNo* = See section 7, "Parameter List."
- Uniqueld* = See section 7, "Parameter List."
- ElmNo* = See section 7, "Parameter List."
- Xpos* = See section 7, "Parameter List."
- Ypos* = See section 7, "Parameter List."
- PrmNo* = See section 7, "Parameter List."
- IndexNo* = See section 7, "Parameter List."
- (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Command: get MTX:mem\_512/60000/0/0/0/0 0 0  
 Response: OK get MTX:mem\_512/60000/0/0/0/0 0 0 -7760  
 Meaning: Query the 1ch level of the DCA fader with raw values.  
 The 1ch level of the DCA fader is -77.60.

## MRX7-D

Command	Option 1	Option 2	Option 3	Description
get	MTX:Index_IndexNo	0	0	Raw value parameter query request

Details: *IndexNo* = Index number assigned in Remote Control Setup List

## Response

Response string	Description
OK get MTX:Index_IndexNo 0 0 (value)	Raw value parameter query response

Details:

- IndexNo* = Index number assigned in Remote Control Setup List
- "(value)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Command: get MTX:Index\_1 0 0  
 Response: OK get MTX:Index\_1 0 0 -7760  
 (V2.02 or earlier OK get MTX:Index\_001 0 0 -7760)  
 Meaning: Query level of the parameter assigned to Index 1 in Remote Control Setup List using raw values.  
 Level of the Parameter that is assigned to Index 1 in Remote Control Setup List is -77.60.



## 2-11) Normalized value parameter query

## MTX3,MTX5-D,XMV,EXi8,EXo8

Command	Option 1	Option 2	Option 3	Description
getn	MTX:mem_MemNo/UniqueId/ElmNo/Xpos/Ypos/PrmNo/IndexNo	0	0	Normalized value parameter query request

Details: MemNo = See section 7, "Parameter List."  
 UniqueId = See section 7, "Parameter List."  
 ElmNo = See section 7, "Parameter List."  
 Xpos = See section 7, "Parameter List."  
 Ypos = See section 7, "Parameter List."  
 PrmNo = See section 7, "Parameter List."  
 IndexNo = See section 7, "Parameter List."

## Response

Response string	Description
OK getn MTX:mem_MemNo/UniqueId/ElmNo/Xpos/Ypos/PrmNo/IndexNo 0 0 (value)	Normalized value parameter query response

Details: MemNo = See section 7, "Parameter List."  
 UniqueId = See section 7, "Parameter List."  
 ElmNo = See section 7, "Parameter List."  
 Xpos = See section 7, "Parameter List."  
 Ypos = See section 7, "Parameter List."  
 PrmNo = See section 7, "Parameter List."  
 IndexNo = See section 7, "Parameter List."  
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Command: getn MTX:mem\_512/60000/0/0/0/0 0 0  
 Response: OK getn MTX:mem\_512/60000/0/0/0/0 0 0 408  
 Meaning: Query the 1ch level of the DCA fader with normalized values.  
 The 1ch level of the DCA fader is 408.

## MRX7-D

Command	Option 1	Option 2	Option 3	Description
getn	MTX:Index_IndexNo	0	0	Normalized value parameter query request

Details: IndexNo = Index number assigned in Remote Control Setup List

## Response

Response string	Description
OK getn MTX:Index_IndexNo 0 0 (value)	Normalized value parameter query response

Details: IndexNo = Index number assigned in Remote Control Setup List  
 "(value)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Command: getn MTX:Index\_1 0 0  
 Response: OK getn MTX:Index\_1 0 0 408  
 (V2.02 or earlier OK getn MTX:Index\_001 0 0 408)  
 Meaning: Query level of a parameter assigned to Index 1 in Remote Control Setup List using normalized values. Level of the parameter which is assigned to Index 1 in Remote Control Setup List is 408.

## 2-12) Scheduler status query

Command	Option 1	Option 2	Option 3	Description
get(getn,gett)	MTX:EvtScd_On	0	0	Queries the scheduler status

\* For getn, the response will contain a normalized value; for gett, the response will contain a text string.

## Response

Response string	Description
OK get MTX:EvtScd_On 0 0 1	Scheduler on
OK get MTX:EvtScd_On 0 0 0	Scheduler off

Example: Command: get MTX:EvtScd\_On 0 0  
 Response: OK get MTX:EvtScd\_On 0 0 1  
 Meaning: Query the scheduler status.  
 Enabled

3.3.5. Parameter setting

2-13) Raw value parameter setting

MTX3,MTX5-D,XMV,EXi8,EXo8

Command	Option 1	Option 2	Option 3	Option 4	Description
set	MTX:mem_MemNo/Uniqueld/ElmNo/ Xpos/Ypos/PrmNo/IndexNo	0	0	(value)	Raw value parameter setting

Details: MemNo = See section 7, "Parameter List."  
 Uniqueld = See section 7, "Parameter List."  
 ElmNo = See section 7, "Parameter List."  
 Xpos = See section 7, "Parameter List."  
 Ypos = See section 7, "Parameter List."  
 PrmNo = See section 7, "Parameter List."  
 IndexNo = See section 7, "Parameter List."  
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Response

Response string	Description
OK set MTX:mem_MemNo/Uniqueld/ElmNo/Xpos/Ypos/ PrmNo/IndexNo 0 0 (value) "(string)"	Raw value parameter setting response
OKm set MTX:mem_MemNo/Uniqueld/ElmNo/Xpos/Ypos/ PrmNo/IndexNo 0 0 (value) "(string)"	

\* If the requested parameter value is outside the range, the value is adjusted within the range and set.  
 If this occurs, the result notification will be OKm instead of OK.

Details: MemNo = See section 7, "Parameter List."  
 Uniqueld = See section 7, "Parameter List."  
 ElmNo = See section 7, "Parameter List."  
 Xpos = See section 7, "Parameter List."  
 Ypos = See section 7, "Parameter List."  
 PrmNo = See section 7, "Parameter List."  
 IndexNo = See section 7, "Parameter List."  
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."  
 "(string)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Command: set MTX:mem\_512/60000/0/0/0/0 0 0 -7760  
 Response: OK set MTX:mem\_512/60000/0/0/0/0 0 0 -7760 "-77.60"  
 Meaning: Set the 1ch level of the DCA fader to a raw value of -77.60.  
 The 1ch level of the DCA fader was set to "-77.60".

MRX7-D

Command	Option 1	Option 2	Option 3	Option 4	Description
set	MTX:Index_IndexNo	0	0	(value)	Raw value parameter setting

Details: IndexNo = Index number assigned in Remote Control Setup List  
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Response

Response string	Description
OK set MTX:Index_IndexNo 0 0 (value) "(string)"	Raw value parameter setting response
OKm set MTX:Index_IndexNo 0 0 (value) "(string)"	

\* If the requested parameter value is outside the range, the value is adjusted within the range and set.  
 If this occurs, the resulting notification will be Okm instead of OK.

Details: IndexNo = Index number assigned in Remote Control Setup List  
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."  
 "(string)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Command: set MTX:Index\_1 0 0 -7760  
 Response: OK set MTX:Index\_1 0 0 -7760 "-77.60"  
 (V2.02 or earlier OK set MTX:Index\_001 0 0 -7760 "-77.60")  
 Meaning: Set the parameter assigned to Index 1 in Remote Control Setup List to -77.60 using raw values.  
 Level of a parameter which is assigned to Index 1 in Remote Control Setup List was set to "-77.60".

2-14) Normalized value parameter setting

MTX3,MTX5-D,XMV,EXi8,EXo8

Command	Option 1	Option 2	Option 3	Option 4	Description
setn	MTX:mem_MemNo/UniqueId/ElmNo/Xpos/Ypos/PrmNo/IndexNo	0	0	(value)	Normalized value parameter setting

Details: MemNo = See section 7, "Parameter List."  
 UniqueId = See section 7, "Parameter List."  
 ElmNo = See section 7, "Parameter List."  
 Xpos = See section 7, "Parameter List."  
 Ypos = See section 7, "Parameter List."  
 PrmNo = See section 7, "Parameter List."  
 IndexNo = See section 7, "Parameter List."  
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List." (\*)  
 \* When value is set "1023" (default:1000), control resolution becomes same as "Raw value" command.  
 See "6.1 Fader parameter " for the "Normalised value" vs "Raw value" when the value is set "1023"

Response

Response string	Description
OK setn MTX:mem_MemNo/UniqueId/ElmNo/Xpos/Ypos/PrmNo/IndexNo 0 0 (value) "(string)"	Normalized value parameter setting response
OKm setn MTX:mem_MemNo/UniqueId/ElmNo/Xpos/Ypos/PrmNo/IndexNo 0 0 (value) "(string)"	

\* If the requested parameter value is outside the range, the value is adjusted within the range and set.  
 If this occurs, the result notification will be OKm instead of OK.

Details: MemNo = See section 7, "Parameter List."  
 UniqueId = See section 7, "Parameter List."  
 ElmNo = See section 7, "Parameter List."  
 Xpos = See section 7, "Parameter List."  
 Ypos = See section 7, "Parameter List."  
 PrmNo = See section 7, "Parameter List."  
 IndexNo = See section 7, "Parameter List."  
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."  
 "(string)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Command: setn MTX:mem\_512/60000/0/0/0/0 0 0 408  
 Response: OKm setn MTX:mem\_512/60000/0/0/0/0 0 0 408 "-20.56"  
 Meaning: Set the 1ch level of the DCA fader to a normalized value of 408.  
 The 1ch level of the DCA fader was set to "-20.56".

MRX7-D

Command	Option 1	Option 2	Option 3	Option 4	Description
setn	MTX:Index_IndexNo	0	0	(value)	Normalized value parameter setting

Details: IndexNo = Index number assigned in Remote Control Setup List  
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."(\*)  
 \* When value is set "1023" (default:1000), control resolution becomes same as "Raw value" command.  
 See "6.1 Fader parameter " for the "Normalised value" vs "Raw value" when the value is set "1023"

Response

Response string	Description
OK setn MTX:Index_IndexNo 0 0 (value) "(string)"	Normalized value parameter setting response
OKm setn MTX:Index_IndexNo 0 0 (value) "(string)"	

\* If the requested parameter value is outside the range, the value is adjusted within the range and set.  
 If this occurs, the result notification will be OKm instead of OK.

Details: IndexNo = Index number assigned in Remote Control Setup List  
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."  
 "(string)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Command: setn MTX:Index\_1 0 0 408  
 Response: OK setn MTX:Index\_1 0 0 408 "-21.50"  
 (V2.02 or earlier OK setn MTX:Index\_001 0 0 408 "-21.50")  
 Meaning: Set a parameter assigned to Index 1 in Remote Control Setup List to 408 using normalized values.  
 Level of a parameter which is assigned to index 1 in Remote Control Setup List was set to 408 "-21.50".

2-15) Relative value parameter setting

MTX3,MTX5-D,XMV,EXi8,EXo8

Command	Option 1	Option 2	Option 3	Option 4	Description
setr	MTX:mem_MemNo/Uniqueld/ElmNo/Xpos/Ypos/PrmNo/IndexNo	0	0	"(value)"	Relative value set command.

Details: MemNo = See section 7, "Parameter List."  
 Uniqueld = See section 7, "Parameter List."  
 ElmNo = See section 7, "Parameter List."  
 Xpos = See section 7, "Parameter List."  
 Ypos = See section 7, "Parameter List."  
 PrmNo = See section 7, "Parameter List."  
 IndexNo = See section 7, "Parameter List."  
 "(value)" = relative value to increase or decrease.  
 (See "Fader Parameter" table in section 6 Parameter Value Details )

Note: This command is available only for fader type parameters. See "Remarks" column in section 7 Parameter List for information regarding which parameters support this command.  
 The Parameter will be set to a new value which equals the sum of the parameter's original value and the relative value given by this command.  
 The parameter value range is 0 - 1023 as shown in the "Fader Parameter" table in section 6 Parameter Value Details.  
 For example, when the relative value is set to 64, 16 level steps can be achieved from the remote controller.  
 (1024/64 = 16)

Response

Response string	Description
OK setr MTX:mem_MemNo/Uniqueld/ElmNo/Xpos/Ypos/PrmNo/IndexNo 0 0 (value)	Relative value set command response.
OKm setr MTX:mem_MemNo/Uniqueld/ElmNo/Xpos/Ypos/PrmNo/IndexNo 0 0 (value)	

\* When the sum of current value and relative value is outside of parameter value range (0-1023), a limiting process is automatically applied.  
 In such case, "OKm" response will be sent back, instead of normal "OK" response.

Details: MemNo = See section 7, "Parameter List."  
 Uniqueld = See section 7, "Parameter List."  
 ElmNo = See section 7, "Parameter List."  
 Xpos = See section 7, "Parameter List."  
 Ypos = See section 7, "Parameter List."  
 PrmNo = See section 7, "Parameter List."  
 IndexNo = See section 7, "Parameter List."  
 "(value)" = relative value to increase or decrease.  
 (See "Fader Parameter" table in section 6 Parameter Value Details )

Example: Command: setr MTX:mem\_512/60000/0/0/0/0 0 0 100  
 Response: OK setr MTX:mem\_512/60000/0/0/0/0 0 0 -1900  
 Meaning: Set DCA-A Fader to+100 step increase.  
 The level of the DCA-A fader was set to "-19.00"dB.

**MRX7-D**

Command	Option 1	Option 2	Option 3	Option 4	Description
setr	MTX:Index_IndexNo	0	0	"(value)"	Relative value set command.

Details: *IndexNo* = Index number assigned in Remote Control Setup List  
 (value) = relative value to increase or decrease.  
 (See "Fader Parameter" table in section 6 Parameter Value Details )

Note: This command is available only for fader type parameters. See "Remarks" column in section 7 Parameter List for information regarding which parameters support this command.  
 The Parameter will be set to a new value which equals the sum of the parameter's original value and the relative value given by this command.  
 The parameter value range is 0 - 1023 as shown in the "Fader Parameter" table in section 6 Parameter Value Details. For example, when the relative value is set to 64, 16 level steps can be achieved from the remote controller. (1024/64 = 16)

**Response**

Response string	Description
OK setr MTX:Index_IndexNo 0 0 (value)	Normalized value parameter setting response
OKm setr MTX:Index_IndexNo 0 0 (value)	

\* If the requested parameter value is outside the range, the value is adjusted within the range and set. If this occurs, the result notification will be OKm instead of OK.

Details: *IndexNo* = Index number assigned in Remote Control Setup List  
 (value) = relative value to increase or decrease.  
 (See "Fader Parameter" table in section 6 Parameter Value Details )

Example: Command: setr MTX:Index\_1 0 0 100  
 Response: OK setr MTX:Index\_1 0 0 -1900  
 (V2.02 or earlier OK setr MTX:Index\_001 0 0 -1900)  
 Meaning: Set the parameter assigned to index 1 in Remote Control Setup List to 100 step increase. Level of the parameter which is assigned to index 1 in Remote Control Setup List was set to "-19.00".

**2-16) Scheduler setting**

Command	Option 1	Option 2	Option 3	Option 4	Description
set(setn,sett)	MTX:EvntScd_On	0	0	1	Scheduler on
				0	Scheduler off

\* For setn, specify a normalized value; for sett, specify option 4 with a character string.

**Response**

Response string	Description
OK set MTX:EvntScd_On 0 0 1 "1"	Scheduler enabled response
OK set MTX:EvntScd_On 0 0 0 "0"	Scheduler disabled response

Example: Command: set MTX:EvntScd\_On 0 0 1  
 Response: OK set MTX:EvntScd\_On 0 0 1 "1"  
 Meaning: Enable the scheduler.  
 The scheduler was enabled.

## 3.3.6. Meter control

## 2-17) Transmission request

## MTX3,MTX5-D,XMV,EXi8,EXo8

Command	Option 1	Option 3	Description
mtrstart	MTX:mtr_ <i>MemNo/Uniqueld</i> /meter	(interval)	Requests that the specified meter data be transmitted.

Details: *MemNo* = See section 8, "Meter List."  
*Uniqueld* = See section 8, "Meter List."  
(interval) = Minimum transmission interval (msec)

## Response

Response string	Description
OK mtrstart MTX:mtr_ <i>MemNo/Uniqueld</i> /meter	Meter data transmission setting complete

Details: *MemNo* = See section 8, "Meter List."  
*Uniqueld* = See section 8, "Meter List."

Example: Command: mtrstart MTX:mtr\_512/20020/meter 1000  
Notification: OK mtrstart MTX:mtr\_512/20020/meter  
NOTIFY mtr MTX:mtr\_512/20020/meter level 71 71 71 71 71 71 69 68  
NOTIFY mtr MTX:mtr\_512/20020/meter level 71 71 71 71 71 71 69 68  
\* The meter value is expressed using a 2-digit hexadecimal.  
Meaning: Send the meter data of ch1 to 8 output levels at 1000 msec intervals.  
A request for the ch1 to 8 output levels was received, so the data will be transmitted.

## MRX7-D

Command	Option 1	Option 2	Option 3	Description
mtrstart	MTX:Index_ <i>IndexNo</i>	level	(interval)	Requests specified level meter data be transmitted.
		gr		Requests specified Gain Reduction meter data be transmitted.
		hold		Requests specified Hold meter data be transmitted.

Details: *IndexNo* = Index number assigned in Remote Control Setup List  
(interval) = Minimum transmission interval (msec)

## Response

Response string	Description
OK mtrstart MTX:Index_ <i>IndexNo</i> level	Level meter data transmission setting complete
OK mtrstart MTX:Index_ <i>IndexNo</i> gr	Gain Reduction meter data transmission setting complete
OK mtrstart MTX:Index_ <i>IndexNo</i> hold	Hold meter data transmission setting complete

Details: *IndexNo* = Index number assigned in Remote Control Setup List

Example: Command: mtrstart MTX:Index\_2 level 1000  
Notification: OK mtrstart MTX:Index\_2 level  
NOTIFY mtr MTX:Index\_2 level 71 71 71 71 71 71 69 68  
NOTIFY mtr MTX:Index\_2 level 71 71 71 71 71 71 69 68  
(V2.02 or earlier OK mtrstart MTX:Index\_002 level  
NOTIFY mtr MTX:Index\_002 level 71 71 71 71 71 71 69 68  
NOTIFY mtr MTX:Index\_002 level 71 71 71 71 71 71 69 68)  
\* The meter value is expressed using a 2-digit hexadecimal.  
Meaning: Send the meter data of ch1 to 8 which are assigned to Index 1 in Remote Control Setup List using 1000 msec intervals.  
A request for Ch1 to 8 which are assigned to Index 1 in Remote control Setup List was received, data will be transmitted.

**2-18) Stop request****MTX3,MTX5-D,XMV,EXi8,EXo8**

Command	Option 1	Description
mtrstop	MTX:mtr_ <i>MemNo/Uniqueld</i> /meter	Requests that the specified meter data be stopped.

Details:        *MemNo* = See section 8, "Meter List."  
                   *Uniqueld* = See section 8, "Meter List."

**Response**

Response string	Description
OK mtrstop MTX:mtr_ <i>MemNo/Uniqueld</i> /meter	Meter data stop setting complete

Details:        *MemNo* = See section 8, "Meter List."  
                   *Uniqueld* = See section 8, "Meter List."

Example:        Command: mtrstop MTX:mtr\_512/20020/meter  
                   Notification: OK mtrstop MTX:mtr\_512/20020/meter  
                   Meaning: Stop the meter data of ch1 to 8 output levels.  
                   The request to stop the meter data of ch1 to 8 output levels was received.

**MRX7-D**

Command	Option 1	Option 3	Description
mtrstop	MTX:Index_ <i>IndexNo</i>	level	Requests that the specified level meter data be stopped
		gr	Requests that the specified Gain Reduction meter data be stopped
		hold	Requests that the specified hold meter data be stopped

Details:        *IndexNo* = Index number assigned in Remote Control Setup List

**Response**

Response string	Description
OK mtrstop MTX:Index_ <i>IndexNo</i> level	Level meter data stop setting complete
OK mtrstop MTX:Index_ <i>IndexNo</i> gr	Gain Reduction meter data stop setting complete
OK mtrstop MTX:Index_ <i>IndexNo</i> hold	Hold meter data stop setting complete

Details:        *IndexNo* = Index number assigned in Remote Control Setup List

Example:        Command: mtrstop MTX:Index\_2 level  
                   Notification: OK mtrstop MTX:Index\_2 level  
                   (V2.02 or earlier OK mtrstop MTX:Index\_002 level)  
                   Meaning: Stop the meter data of ch1 to 8 which are assigned to Index 2 in Remote Control Setup List.  
                   The request to stop the meter data of ch1 to 8 which are assigned to Index 2 in Remote Control Setup List was received.

## 3.3.7. Preset processing

## 2-19) Preset current number query processing

Command	Description
sscurrent	Queries the current preset number (index)

## Response

Response string	Description
OK sscurrent (index) unmodified	Current preset number queried (There is no parameter change after recalling.)
OK sscurrent (index) modified	Current preset number queried (There is a parameter change after recalling.)

Details: (index) = Current preset number

Example: Command: sscurrent  
 Notification: OK sscurrent 10 unmodified  
 Meaning: Query the last index number (preset number) that was recalled.  
 The index number (preset number) is index 10 (preset 10), and no parameter has changed after recalling.

## 2-20) Preset recall processing

Command	Option 1	Description
ssrecall	(index)	Recalls the preset at the specified index from the preset list.

Details: (index) = Snapshot (preset) number

## Response

Response string	Description
OK ssrecall (index)	Requested index

Details: (index) = Snapshot (preset) number

Example: Command: ssrecall 1  
 Notification: OK ssrecall 1  
 Meaning: Recall the preset at index 1 (preset 1).  
 The preset at index 1 (preset 1) was recalled.

## 3.3.8. Snapshot Recall processing

## 2-21) Snapshot recall processing

Command	Option 1	Option 2	Description
ssrecall_ex	list	(index)	Recall Snapshot or SnapshotGroup assigned in Remote Control Setup List.

Details: *Index* = Index number assigned in Remote Control Setup List

## Response

Response string	Description
OK ssrecall_ex list (index)	Index number assigned in Remote Control Setup List

Details: *Index* = Index number assigned in Remote Control Setup List

Example: Command: ssrecall\_ex list 3  
 Notification: OK ssrecall\_ex list 3  
 Meaning: Recall the Snapshot assigned to index 3 in Remote Control Setup List.  
 The Snapshot assigned to Index 2 in Remote Control Setup List was recalled.



### 3.4. Extended commands

#### 3.4.1. Product information query request

##### 3-1) MTX external control protocol version query

Command	Option 1	Description
devinfo	protocolver	Queries the MTX external control protocol version

##### Response

Response string	Description
OK devinfo protocolver "xxxx"	MTX external control protocol version

Details:            xxxx = Version

Example:        Command: devinfo protocolver  
                   Notification: OK devinfo protocolver "1.0.0"  
                   Meaning: Query the protocol version.  
                   Protocol version = V1.0.0

##### 3-2) Parameter set version query

Command	Option 1	Description
devinfo	paramsetver	Queries the parameter set version

##### Response

Response string	Description
OK devinfo paramsetver "xxxx"	Parameter set version

Details:            xxxx = Version

Example:        Command: devinfo paramsetver  
                   Notification: OK devinfo paramsetver "MTX:1.2.0"  
                   Meaning: Query the parameter set version.  
                   Parameter set version = V1.2.0

##### 3-3) Firmware version query

Command	Option 1	Description
devinfo	version	Queries the firmware version

##### Response

Response string	Description
OK devinfo version "xxxx"	Firmware version

Details:            xxxx = Version

Example:        Command: devinfo version  
                   Notification: OK devinfo version "1.0.0"  
                   Meaning: Query the firmware version.  
                   Firmware version = V1.00

##### 3-4) Product name query

Command	Option 1	Description
devinfo	productname	Queries the product name

##### Response

Response string	Description
OK devinfo productname "xxxx"	Product name

Details:            xxxx = Product name

Example:        Command: devinfo productname  
                   Notification: OK devinfo productname "MTX3"  
                   Meaning: Query the product name.  
                   Product name = "MTX3"

**3-5) Serial number query**

Command	Option 1	Description
devinfo	serialno	Queries the serial number

**Response**

Response string	Description
OK devinfo serialno "xxxx"	Serial number

Details:           xxxx = Serial number

Example:        Command: devinfo serialno  
Notification: OK devinfo serialno "ZA37640CHNET101001"  
Meaning: Query the serial number.  
Serial number = "ZA37640CHNET101001"

**3-6) Device ID query**

Command	Option 1	Description
devinfo	deviceid	Queries the device ID

**Response**

Response string	Description
OK devinfo deviceid "xxxx"	Device ID

Details:           xxxx = Device ID  
                      \* 3-digit hexadecimal

Example:        Command: devinfo deviceid  
Notification: OK devinfo deviceid "001"  
Meaning: Query the device ID.  
Device ID = "001"

Note:        The device ID corresponds to the UNIT ID.

**3-7) Device name query**

Command	Option 1	Description
devinfo	devicename	Queries the device name assigned by the user

**Response**

Response string	Description
OK devinfo devicename "xxxx"	Device name assigned by the user

Details:           xxxx = Device name

Example:        Command: devinfo devicename  
Notification: OK devinfo devicename "MTX3"  
Meaning: Query the device name.  
Device name = "MTX3"

Note:        The character encoding for the device name conforms to the setting specified by the scpmode encoding command.

## 3.4.2. Preset processing request

## 3-8) Number of Preset lists

Command	Description
ssnum	Queries the number of preset lists

## Response

Response string	Description
OK ssnum (num)	The number of preset lists

Details: (num) = Quantity

Example: Command: ssnum  
 Notification: OK ssnum 51  
 Meaning: Query the number of presets.  
 The number of presets is 51.

## 3-9) Nth preset information

Command	Option 1	Description
ssinfo	(index)	Queries the preset information at the specified index in the preset list.

## Response

Response string	Description
OK ssinfo (index) "xxxxxx" (attrib) "yyyyyy" "zzzzzz"	Preset information at the specified index in the preset list.

Details: (index) = Requested index number  
 "xxxxxxx" = Text expressing the relevant preset number  
 (attrib) = Relevant preset attribute  
 preinst = preinstalled preset  
 reserve = reserved area  
 user = user preset available  
 empty = empty  
 "yyyyyy" = title text of the relevant preset  
 "zzzzzz" = comment text of the relevant preset.  
*(reserved for future use. MTX does not currently use comments. "" will be returned.)*

Example: Command: ssinfo 10  
 Notification: OK ssinfo 10 "10" user "Preset 10" ""  
 Meaning: Query the contents of the preset at index 10 (preset 10).  
 The preset at index 10 contains  
 display number = "10"  
 title = "Preset 10"  
 comment = ""  
 and is a stored preset.

Note: The character encoding for preset titles and comments conforms to the setting specified by the scpmode encoding command.

## 3.4.3. Event processing request

## 3-10) Time synchronization &lt;Old format&gt;

Command	Option 1	Option 2	Description
event	MTX:AbsoluteTime	"yyyy/mm/dd hh:mm:ss"	Changes the time

Details:            yyyy = Year (Gregorian)  
                       mm = Month (1 to 12)  
                       dd = Day (1 to 31)  
                       hh = Hour (0 to 23)  
                       mm = Minute (0 to 59)  
                       ss = Second (0 to 59)  
                       \* DST (Daylight Saving Time) is not accounted for.

## Response

Response string	Description
OK event MTX:AbsoluteTime "caught"	Time change complete

Example:        Command: event MTX:AbsoluteTime "2013/1/25 11:56:14"  
                       Notification: OK event MTX:AbsoluteTime "caught"  
                       Meaning: Set the time to January 25, 2013, 11 hours 56 minutes 14 seconds.  
                       The time was set.

## 3-11) Time synchronization &lt;New format&gt;

Command	Option 1	Option 2	Description
event	MTX:SetAbsoluteTime	"yyyy/mm/dd hh:mm:ss"	Changes the time

Details:            yyyy = Year (Gregorian)  
                       mm = Month (1 to 12)  
                       dd = Day (1 to 31)  
                       hh = Hour (0 to 23)  
                       mm = Minute (0 to 59)  
                       ss = Second (0 to 59)  
                       \* DST (Daylight Saving Time) is not accounted for.

## Response

Response string	Description
OK event MTX:SetAbsoluteTime "caught"	Time change complete

Example:        Command: event MTX:SetAbsoluteTime "2013/1/25 11:56:14"  
                       Notification: OK event MTX:SetAbsoluteTime "caught"  
                       Meaning: Set the time to January 25, 2013, 11 hours 56 minutes 14 seconds.  
                       The time was set.

## 3-12) Time query

Command	Option 1	Option 2	Description
event	MTX:GetAbsoluteTime	""	Time query with absolute time

## Response

Response string	Description
OK event MTX:GetAbsoluteTime "yyyy/mm/dd hh:mm:ss"	Current time info with absolute time

Details:            yyyy = Year (Gregorian)  
                       mm = Month (1 to 12)  
                       dd = Day (1 to 31)  
                       hh = Hour (0 to 23)  
                       mm = Minute (0 to 59)  
                       ss = Second (0 to 59)  
                       \* DST (Daylight Saving Time) is not accounted for.

Example:        Command: event MTX:GetAbsoluteTime ""  
                       Notification: OK event MTX:GetAbsoluteTime "2014/1/25 11:56:14"  
                       Meaning: Get current time with absolute time  
                       Current time is January 25 2014, 11 hours 56 minutes 14 seconds

## 3-13) DST enable/disable setting

Command	Option 1	Option 2	Description
event	MTX:DSTSetEnable	"enable"	Set DST enable
		"disable"	Set DST disable

## Response

Response string	Description
OK event MTX:DSTSetEnable "enable"	DST was enabled
OK event MTX:DSTSetEnable "disable"	DST was disabled

Example: Command: event MTX:DSTSetEnable "enable"  
 Notification: OK event MTX:DSTSetEnable "enable"  
 Meaning: Set DST enable  
 DST was enabled

## 3-14) DST enable/disable query

Command	Option 1	Option 2	Description
event	MTX:DSTGetEnable	""	DST enable/disable query

## Response

Response string	Description
OK event MTX:DSTGetEnable "enable"	DST is enable
OK event MTX:DSTGetEnable "disable"	DST is disable

Example: Command: event MTX:DSTGetEnable ""  
 Notification: OK event MTX:DSTGetEnable "enable"  
 Meaning: Get DST setting  
 DST is enable

## 3-15) DST status query

Command	Option 1	Option 2	Description
event	MTX:DSTGetStatus	""	DST status query

## Response

Response string	Description
OK event MTX:DSTGetStatus "on"	Working with DST
OK event MTX:DSTGetStatus "off"	Not working with DST

Example: Command: event MTX:DSTGetStatus ""  
 Notification: OK event MTX:DSTGetStatus "on"  
 Meaning: Get DST working status  
 Working with DST

## 3-16) DST offset time setting

Command	Option 1	Option 2	Description
event	MTX:DSTSetOffset	"offset=hh:mm"	Set DST offset

Details: hh = Hour (0 to 2)  
 mm = Minute (0 to 59)  
 (Up to 2 hours can be set)

## Response

Response string	Description
OK event MTX:DSTSetOffset "offset=hh:mm"	DST offset was set

Details: hh = Hour (0 to 2)  
 mm = Minute (0 to 59)

Example: Command: event MTX:DSTSetOffset "offset=1:00"  
 Notification: OK event MTX:DSTSetOffset "offset=1:00"  
 Meaning: Set DST offset to 1 hour  
 DST offset was set to 1 hour

**3-17) DST offset time query**

Command	Option 1	Option 2	Description
event	MTX:DSTGetOffset	""	Get DST offset

**Response**

Response string	Description
OK event MTX:DSTGetOffset "offset=hh:mm"	DST offset

Details:           hh = Hour (0 to 2)  
                   mm = Minute (0 to 59)

Example:    Command: event MTX:DSTGetOffset ""  
               Notification: OK event MTX:DSTGetOffset "offset=01:00"  
               Meaning: Get DST offset  
                   DST offset was set to 1 hour

**3-18) DST start time setting**

Command	Option 1	Option 2	Description
event	MTX:DSTSetStartTime	"time=hh:mm"	Set DST start time

Details:           hh = Hour (0 to 23)  
                   mm = Minute (0 to 59)

**Response**

Response string	Description
OK event MTX:DSTSetStartTime "time=hh:mm"	DST start time was set

Details:           hh = Hour (0 to 23)  
                   mm = Minute (0 to 59)

Example:    Command: event MTX:DSTSetStartTime "time=12:00"  
               Notification: OK event MTX:DSTSetStartTime "time=12:00"  
               Meaning: Set DST start time to 12:00  
                   DST start time was set to 12:00

**3-19) DST start time query**

Command	Option 1	Option 2	Description
event	MTX:DSTGetStartTime	""	Get DST start time

**Response**

Response string	Description
OK event MTX:DSTGetStartTime "time=hh:mm"	DST start time

Details:           hh = Hour (0 to 23)  
                   mm = Minute (0 to 59)

Example:    Command: event MTX:DSTGetStartTime ""  
               Notification: OK event MTX:DSTGetStartTime "time=12:00"  
               Meaning: Get DST start time  
                   DST start time is 12:00

3-20) DST end time setting

Command	Option 1	Option 2	Description
event	MTX:DSTSetEndTime	"time=hh:mm"	Set DST end time

Details:               hh = Hour (0 to 23)  
                           mm = Minute (0 to 59)

Response

Response string	Description
OK event MTX:DSTSetEndTime "time=hh:mm"	DST end time was set

Details:               hh = Hour (0 to 23)  
                           mm = Minute (0 to 59)

Example:     Command: event MTX:DSTSetEndTime "time=12:00"  
               Notification: OK event MTX:DSTSetEndTime "time=12:00"  
               Meaning: Set DST end time to 12:00  
                           DST end time was set to 12:00

3-21) DST end time query

Command	Option 1	Option 2	Description
event	MTX:DSTGetEndTime	""	Get DST end time

Response

Response string	Description
OK eventMTX:DSTGetEndTime "time=hh:mm"	DST end time

Details:               hh = Hour (0 to 23)  
                           mm = Minute (0 to 59)

Example:     Command: event MTX:DSTGetEndTime ""  
               Notification: OK event MTX:DSTGetEndTime "time=12:00"  
               Meaning: Get DST end time  
                           DST end time is 12:00

3-22) DST start/end days setting (day/week)

Command	Option 1	Option 2	Description
event	MTX:DSTSetDayWeek	"s_weekindex=xxxx s_day=yyyy s_month=zzzz e_weekindex=uuuu e_day=vvvv e_month=wwww"	Set DST start/end days by day and week

Details:               xxxx = Start week (First, Second, Third, Fourth, Fifth, Last)  
                           yyyy = Start day (Sun, Mon, Tue, Wed, Thu, Fri, Sat)  
                           zzzz = Start month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)  
                           uuuu = End week (First, Second, Third, Fourth, Fifth, Last)  
                           vvvv = End day (Sun, Mon, Tue, Wed, Thu, Fri, Sat)  
                           wwww = End month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)

Response

Response string	Description
OK event MTX:DSTSetDayWeek "s_weekindex=xxxx s_day=yyyy s_month=zzzz e_weekindex=uuuu e_day=vvvv e_month=wwww"	DST start/end days by day and week was set

Details:               xxxx = Start week (First, Second, Third, Fourth, Fifth, Last)  
                           yyyy = Start day (Sun, Mon, Tue, Wed, Thu, Fri, Sat)  
                           zzzz = Start month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)  
                           uuuu = End week (First, Second, Third, Fourth, Fifth, Last)  
                           vvvv = End day (Sun, Mon, Tue, Wed, Thu, Fri, Sat)  
                           wwww = End month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)

Example:     Command: event MTX:DSTSetDayWeek "s\_weekindex=Last|s\_day=Sun|s\_month=Mar|e\_weekindex=Last|e\_day=Sun|e\_month=Oct"  
               Notification: OK event MTX:DSTSetDayWeek "s\_weekindex=Last|s\_day=Sun|s\_month=Mar|e\_weekindex=Last|e\_day=Sun|e\_month=Oct"  
               Meaning: Set DST start/end days as from last Sunday in March to last Sunday in October  
                           DST start/end days was set as from last Sunday in March to last Sunday in October

**3-23) DST start/end days query (day/week)**

Command	Option 1	Option 2	Description
event	MTX:DSTGetDayWeek	""	Get DST start/end days by day and week

**Response**

Response string	Description
OK event MTX:DSTGetDayWeek "s_weekindex=xxxx s_day=yyyy s_month=zzzz e_weekindex=uuuu e_day=vvvv e_month=www"	DST start/end days by day and week

Details:            xxxx = Start week (First, Second, Third, Fourth, Fifth, Last)  
                       yyyy = Start day (Sun, Mon, Tue, Wed, Thu, Fri, Sat)  
                       zzzz = Start month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)  
                       uuuu = End week (First, Second, Third, Fourth, Fifth, Last)  
                       vvvv = End day (Sun, Mon, Tue, Wed, Thu, Fri, Sat)  
                       www = End month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)

Example:        Command: event MTX:DSTGetDayWeek ""  
                       Notification: OK event MTX:DSTGetDayWeek "s\_weekindex=Last|s\_day=Sun|s\_month=Mar|e\_weekindex=Last|e\_day=Sun|e\_month=Oct"  
                       Meaning: Get DST start/end days by day and week  
                       DST start/end days is set as from last Sunday in March to last Sunday in October

Note:        When DST is set not by "day and week" but by "day", error returns.

**3-24) DST start/end days setting (day)**

Command	Option 1	Option 2	Description
event	MTX:DSTSetDay	"s_month=xxx s_date=yyyy e_month=zzzz e_date=www"	Set DST start/end days by day

Details:            xxxx = Start month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)  
                       yyyy = Start day (1 ~ 31)  
                       zzzz = End month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)  
                       www = End day (1 ~ 31)

**Response**

Response string	Description
OK event MTX:DSTSetDay "s_month=xxx s_date=yyyy e_month=zzzz e_date=www"	DST start/end days by day was set

Details:            xxxx = Start month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)  
                       yyyy = Start day (1 ~ 31)  
                       zzzz = End month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)  
                       www = End day (1 ~ 31)

Example:        Command: event MTX:DSTSetDay "s\_month=Mar|s\_date=10|e\_month=Nov|e\_day=3"  
                       Notification: OK event MTX:DSTSetDay "s\_month=Mar|s\_date=10|e\_month=Nov|e\_day=3"  
                       Meaning: Set DST start/end days as from March 10 to November 3  
                       DST start/end days was set as from March 10 to November 3



**3-25) DST start/end days query (day)**

Command	Option 1	Option 2	Description
event	MTX:DSTGetDay	""	Set DST start/end days by day

**Response**

Response string	Description
OK event MTX:DSTGetDay "s_month=xxxx s_date=yyyy e_month=zzzz e_date=wwww"	DST start/end days by day

Details:        xxxx = Start month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)  
                   yyyy = Start day (1 ~ 31)  
                   zzzz = End month (Jan, Feb, Mar, Apr, May, Jun, Jul, Aug, Sep, Oct, Nov, Dec)  
                   wwww = End day (1 ~ 31)

Example:        Command: event MTX:DSTGetDay ""  
                   Notification: OK event MTX:DSTGetDay "s\_month=Mar|s\_date=10|e\_month=Nov|e\_day=3"  
                   Meaning: Get DST start/end days by date  
                               DST start/end days is from March 10 to November 3

Note:        When DST is set not by "day" but by "day and week", error returns.

**3-26) DST start/end days setting query**

Command	Option 1	Option 2	Description
event	MTX:DSTGetDaySetting	""	Get DST start/end days format, "day and week" or "day"

**Response**

Response string	Description
OK event MTX:DSTGetDaySetting "setting=dayweek"	DST start/end days are set by "day and week"
OK event MTX:DSTGetDaySetting "setting=day"	DST start/end days are set by "day"

Example:        Command: event MTX:DSTGetDaySetting ""  
                   Notification: OK event MTX:DSTGetDaySetting "setting=dayweek"  
                   Meaning: Get DST start/end days format, "day and week" or "day"  
                               DST start/end days were set by "day and week"

**3-27) Current folder information query**

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerGetCurrentDir	""	Queries the current folder information.

**Response**

Response string	Description
OK event MTX:AudioPlayerGetCurrentDir "dirpath=xxxx dirname=yyyy subdirname=zzzz filenum=wwww"	Current folder information
OKm event MTX:AudioPlayerGetCurrentDir "sdcard is not inserted"	There is no SD memory card inserted.

\* OKm is returned if there is no SD memory card inserted.

Details:        xxxx = Directory path (index expression)  
                               0 : Root Folder Number(the root folder number is always fixed at 0)  
                               0/nnnn : Root Folder Number/Sub Folder Number  
                   yyyy = Directory name (name of the folder)  
                   zzzz = The number of sub folders in the current directory  
                   wwww = The number of files in the current directory

Example:        Command: event MTX:AudioPlayerGetCurrentDir ""  
                   Notification: OK event MTX:AudioPlayerGetCurrentDir "dirpath=0|dirname=|subdirname=4|filenum=2"  
                   Meaning: Query the current folder information.  
                               The current folder contains four directories and two files.

**3-28) Current folder move query**

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerSetCurrentDir	"dirpath=0"	Moves the current folder(To root folder)
		"dirpath=0/n/n/n/n"	Moves the current folder(To sub folder)

Details: Directory path (index expression)  
 0 : Root Folder Number(the root folder number is always fixed at 0)  
 0/n/n/n/n : Root Folder Number/Sub Folder Number

Note: The range of sub folder is "0" to "total number of sub folders - 1".  
 Use "3-27) Current folder information query" to get total number of sub folders  
 Song files in root folder of SD card and song files in sub folders of root folder are supported. Files placed in "deeper" folders are not supported.

**Response**

Response string	Description
OK event MTX:AudioPlayerSetCurrentDir "dirpath=xxxx dirname=yyyy subdirname=zzzz filenum=wwwwww"	Current folder information
OKm event MTX:AudioPlayerSetCurrentDir "sdcard is not inserted"	There is no SD memory card inserted.

\* OKm is returned if there is no SD memory card inserted.

Details: xxxx = Directory path (index expression)  
 0 : Root Folder Number(the root folder number is always fixed at 0)  
 0/n/n/n/n : Root Folder Number/Sub Folder Number  
 yyyy = Directory name (name of the folder)  
 zzzz = The number of sub folders in the current directory  
 wwwwww = The number of files in the current directory

Example: Command: event MTX:AudioPlayerSetCurrentDir "dirpath=0/1"  
 Notification: OK event MTX:AudioPlayerSetCurrentDir "dirpath=0/1|dirname=songs|subdirname=0|filenum=3"  
 Meaning: Make the 0/1 (index expression) directory the current directory.  
 The 0/1 (index expression) directory was made the current directory. This folder contains no sub directories and three files.  
 \* "0/1" expresses the root folder number/sub folder number (the root folder number is always fixed at 0).

**3-29) Folder name query**

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerGetDirName	"dirindex=xxxx"	Folder name query

Details: xxxx = Folder index number

Note: The range of index numbers is "0" to "total number of sub folders - 1".  
 Use "3-27) Current folder information query" or "3-28) Current folder move query" to get total number of sub folders.  
 This command is valid only when current folder is "route", otherwise (when current folder is sub folder) error will return.

**Response**

Response string	Description
OK event MTX:AudioPlayerGetDirName "dirname=xxxx"	Folder name
OKm event MTX:AudioPlayerGetDirName "sdcard is not inserted"	There is no SD memory card inserted.

\* OKm is returned if there is no SD memory card inserted.

Details: xxxx = Folder name

Example: Command: event MTX:AudioPlayerGetDirName "dirindex=1"  
 Notification: OK event MTX:AudioPlayerGetDirName "dirname=songs"  
 Meaning: Query the directory name of folder index number 1 (index expression).  
 The directory name is "songs".

**3-30) File name query**

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerGetFileName	"fileindex=xxxx"	File name query

Details:               xxxx = File index number

Note:       The range of index numbers is "0" to "total number of files - 1".  
Use "3-27) Current folder information query" or "3-28) Current folder move query" to get total number of files.

**Response**

Response string	Description
OK event MTX:AudioPlayerGetFileName "filename=xxxx"	File name
OKm event MTX:AudioPlayerGetFileName "sdcard is not inserted"	There is no SD memory card inserted.

\* OKm is returned if there is no SD memory card inserted.

Details:               xxxx = File name

Example:       Command: event MTX:AudioPlayerGetFileName "fileindex=1"  
Notification: OK event MTX:AudioPlayerGetFileName "filename=xxxx.mp3"  
Meaning: Query the file name of file index number 1 (index expression).  
The file name is "xxxx.mp3".

**3-31) Folder name list query**

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerGetDirNameList	"dirindex=XXXX-xxxx"	Folder name list: Multiple folder name query

Details:               XXXX = the first index number of desired range for list (index expression)  
                          xxxx = the last index number of desired range for list (index expression)  
                          → Cannot be set to a value greater than the number of folders.  
                          → The first number cannot be greater than the last number.  
                          → By changing the first and last numbers, you can query the list of folder names in that range.

Note:       "XXXX" should be 0 or greater.  
              "xxxx" should be smaller total number of sub folders - 1 or smaller.  
Use "3-27) Current folder information query" or "3-28) Current folder move query" to get total number of sub folders.

**Response**

Response string	Description
OK event MTX:AudioPlayerGetDirNameList "dirindex=XXXX-xxxx dirname0=yyyy  ... "	Folder name list
OKm event MTX:AudioPlayerGetDirNameList "sdcard is not inserted"	There is no SD memory card inserted.

\* OKm is returned if there is no SD memory card inserted.

Details:               XXXX = the first index number of desired range for list (index expression)  
                          xxxx = the last index number of desired range for list (index expression)  
                          yyyy = Directory names

Example:       Command: event MTX:AudioPlayerGetDirNameList "dirindex=0-1"  
Notification: OK event MTX:AudioPlayerGetDirNameList "dirindex=0-1|dirname0=Folder #1|dirname1=Folder #2"  
Meaning: Query the directory names of folder list number 0 and 1 (index expression).  
The directory name of folder list number 0 is "Folder #1", and that of folder list number 1 is "Folder #2".

## 3-32) File name list query

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerGetFileNameList	"fileindex=XXXX-xxxx"	Folder name list: Multiple file name query

Details:           XXXX = the first index number of desired range for list (index expression)  
                       xxxx = the last index number of desired range for list (index expression)  
                       → Cannot be set to a value greater than the number of files.  
                       → The first number cannot be greater than the last number.  
                       → By changing the first and last numbers, you can query the list of file names in that range.

Note:            "XXXX" should be 0 or greater.  
                       "xxxx" should be smaller total number of sub folders - 1 or smaller.  
                       Use "3-27) Current folder information query" or "3-28) Current folder move query" to get total number of files.

## Response

Response string	Description
OK event MTX:AudioPlayerGetFileNameList "fileindex=XXXX-xxxx filename0=yyyy  ... "	File name list
OKm event MTX:AudioPlayerGetFileNameList "sdcard is not inserted"	There is no SD memory card inserted.

\* OKm is returned if there is no SD memory card inserted.

Details:           XXXX = the first index number of desired range for list (index expression)  
                       xxxx = the last index number of desired range for list (index expression)  
                       yyyy= File names

Example:        Command: event MTX:AudioPlayerGetFileNameList "fileindex=0-1"  
                       Notification: OK event MTX:AudioPlayerGetFileNameList "fileindex=0-1|filename0=xxxx.mp3|filename1=xxxx2.mp3"  
                       Meaning: Query the file names of file list number 0 and 1 (index expression).  
                                   The file name of file list number 0 is "xxxx.mp3", and that of file list number 1 is "xxxx2.mp3".

## 3-33) Song play mode query

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerGetPlayMode	""	Queries the play mode

## Response

Response string	Description
OK event MTX:AudioPlayerGetPlayMode "playmode=one"	One song play mode
OK event MTX:AudioPlayerGetPlayMode "playmode=repeat one"	One song repeat
OK event MTX:AudioPlayerGetPlayMode "playmode=all"	All song play
OK event MTX:AudioPlayerGetPlayMode "playmode=repeat all"	All songs repeat
OK event MTX:AudioPlayerGetPlayMode "playmode=shuffle"	Shuffle repeat
OKm event MTX:AudioPlayerGetPlayMode "sdcard is not inserted"	There is no SD memory card inserted.

\* OKm is returned if there is no SD memory card inserted.

Example:        Command: event MTX:AudioPlayerGetPlayMode ""  
                       Notification: OK event MTX:AudioPlayerGetPlayMode "playmode=one"  
                       Meaning: Query the play mode.  
                                   The play mode is set to one song play mode.

## 3-34) Song play mode setting

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerSetPlayMode	"playmode=one"	One song play mode
		"playmode=repeat one"	One song repeat
		"playmode=all"	All song play
		"playmode=repeat all"	All songs repeat
		"playmode=shuffle"	Shuffle repeat

## Response

Response string	Description
OK event MTX:AudioPlayerSetPlayMode "playmode=one"	One song play mode
OK event MTX:AudioPlayerSetPlayMode "playmode=repeat one"	One song repeat
OK event MTX:AudioPlayerSetPlayMode "playmode=all"	All song play
OK event MTX:AudioPlayerSetPlayMode "playmode=repeat all"	All songs repeat
OK event MTX:AudioPlayerSetPlayMode "playmode=shuffle"	Shuffle repeat
OKm event MTX:AudioPlayerSetPlayMode "sdcard is not inserted"	There is no SD memory card inserted.

\* OKm is returned if there is no SD memory card inserted.

Example: Command: event MTX:AudioPlayerSetPlayMode "playmode=one"  
 Notification: OK event MTX:AudioPlayerSetPlayMode "playmode=one"  
 Meaning: Set the play mode to one song play mode.  
 The play mode was set to one song play mode.

## 3-35) Song playback status query

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerGetStatus	""	Song playback status query

## Response

Response string	Description
OK event MTX:AudioPlayerGetStatus "status=stop"	Stop
OK event MTX:AudioPlayerGetStatus "status=play"	Play
OK event MTX:AudioPlayerGetStatus "status=pause"	Pause
OKm event OK event MTX:AudioPlayerGetStatus "sdcard is not inserted"	There is no SD memory card inserted.

\* OKm is returned if there is no SD memory card inserted.

Example: Command: event MTX:AudioPlayerGetStatus ""  
 Notification: OK event MTX:AudioPlayerGetStatus "status=stop"  
 Meaning: Query the song playback status.  
 Stopped

**3-36) Play, stop, and other transport operation**

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerTransport	"operation=stop"	Stop
		"operation=play"	Play
		"operation=pause"	Pause
		"operation=prev"	Beginning of the previous song
		"operation=next"	Next song

**Response**

Response string	Description
OK event MTX:AudioPlayerTransport "operation=stop"	Stop
OK event MTX:AudioPlayerTransport "operation=play"	Play
OK event MTX:AudioPlayerTransport "operation=pause"	Pause
OK event MTX:AudioPlayerTransport "operation=prev"	Beginning of the previous song
OK event MTX:AudioPlayerTransport "operation=next"	Next song
OKm event MTX:AudioPlayerTransport "sdcard is not inserted"	There is no SD memory card inserted.
OKm event MTX:AudioPlayerTransport "song is not set up"	The playback song is not specified.

\* OKm is returned if there is no SD memory card inserted or the playback song is not specified.

Example: Command: event MTX:AudioPlayerTransport "operation=stop"  
Notification: OK event MTX:AudioPlayerTransport "operation=stop"  
Meaning: Stop playback.  
Playback was stopped.

**3-37) Currently playing or selected song information query**

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerGetCurrentSong	""	Queries the currently playing or selected song information

**Response**

Response string	Description
OK event MTX:AudioPlayerGetCurrentSong "dirpath=xxxx dirname=yyyy fileindex=zzzz filename=www"	Currently playing or selected song information
OKm event MTX:AudioPlayerGetCurrentSong "sdcard is not inserted"	There is no SD memory card inserted.
OKm event MTX:AudioPlayerGetCurrentSong "song is not set up"	The playback song is not specified.

\* OKm is returned if there is no SD memory card inserted or the playback song is not specified.

Details:            xxxx = Directory path (index expression)  
                          0 : Root Folder Number(the root folder number is always fixed at 0)  
                          0/nnnn : Root Folder Number/Sub Folder Number  
                          yyyy = Directory name (name of the folder)  
                          zzzz = File index number  
                          www = File name

Example: Command: event MTX:AudioPlayerGetCurrentSong ""  
Notification: OK event MTX:AudioPlayerSetCurrentSong "dirpath=0/1|dirname=Folder #1|fileindex=2|filename=xxx.mp3"  
Meaning: Query the information of the song currently being played.  
The song that is being played is index number 2 "xxx.mp3" in the "Folder #1" folder of directory path 0/1 (index expression).  
\* "0/1" expresses the root folder number/sub folder number (the root folder number is always fixed at 0).



## 3-40) Number of alert event log query

Command	Option 1	Option 2	Description
event	MTX:EventLogGetLogNumber	""	Number of event log query

## Response

Response string	Description
OK event MTX:EventLogGetLogNumber "lognum=xxxx"	Number of event log

Details:                xxxx= number of event log

Example:        Command: event MTX:EventLogGetLogNumber ""  
Notification: OK event MTX:EventLogGetLogNumber "lognum=6"  
Meaning: Query the number of event logs  
Number of event log is 6

## 3-41) Alert event log query

Command	Option 1	Option 2	Description
event	MTX:EventLogGetLog	"logindex=xxxx"	Event log query

Details:                xxxx= Index number of event log

Note:        The range of index numbers is "0" to "total number of event logs - 1".  
Use "3-40) Number of alert event log query" to get total number of event logs.

## Response

Response string	Description
OK event MTX:EventLogGetLog "logxxxx=(AlertData)"	Event log

Details:                xxxx= Index number of event log  
(AlertData)= "**flt**/message// xnnn onf (sssss) **ID**-xxx yyyy/mm/dd hh:mm:ss"  
"**err**/message// xnnn onf (sssss) **ID**-xxx yyyy/mm/dd hh:mm:ss"  
"**wrn**/message// xnnn onf (sssss) **ID**-xxx yyyy/mm/dd hh:mm:ss"  
First 3 letter describes type of event ( i.e. flt = fault, err = error, wrn = warning)  
message = Alert message string - Maximum 32 letter (ascii character)  
nnn = Alert number (same as number displayed on front panel of device)  
- 2 or 3 digit hexadecimal.  
onf = alert ON/OFF  
Event of status change (e.g. wordclock unlock) sends ON when the remarkable  
event starts, sends OFF when the event ends.  
Momentary event (e.g. SD card player error) sends only ON when it happens.  
sssss = counter of alarm ( Count up same Alert, normally as 1) as decimal counter.  
xxx = UNIT ID as 3 degit hexadecimal.  
yyyy = Year (Gregorian)  
mm = Month (1 to 12)  
dd = Day (1 to 31)  
hh = Hour (0 to 23)  
mm = Minute (0 to 59)  
ss = Second (0 to 59)

Example:        Command: event MTX:EventLogGetLog "logindex=2"  
Notification: OK event MTX:EventLogGetLog "log2=err/DCP[0] communication error// x53 on (1) ID-001  
2013/1/22 11:38:23"  
Meaning: Query of event log at index number 2.  
Event log of index no.2 is error alert no. 53.





### 3.5. Command Errors

#### 3.5.1. Command Error Notifications

Error notification that indicates errors in commands.

If an error is found when the command is sent, this notification is returned instead of the normal successful notification.

[Notification syntax]      ERROR <command name> <error code>

Command name	Alphanumeric	Name of the command that caused the error
Error code	Alphanumeric	Error description * See the error codes below.

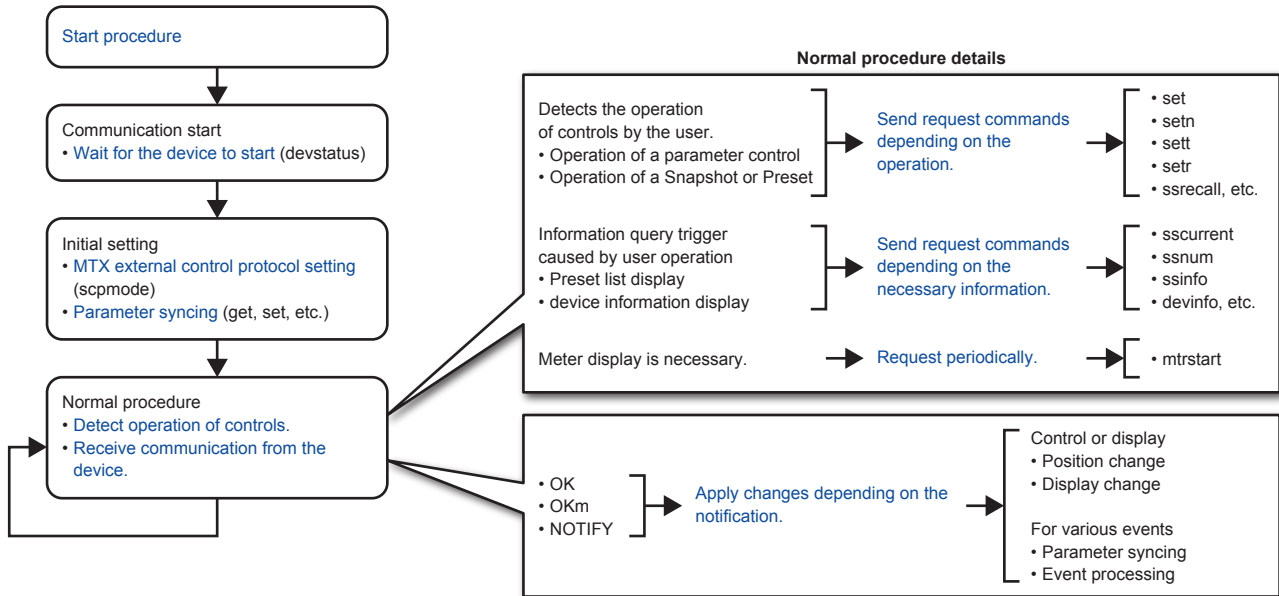
#### Error code

Error code	Description
UnknownCommand	Ignored because it was an unknown command.
WrongFormat	Ignored because the command parameter format was wrong and could not be interpreted. Examples:     The number of parameters is wrong. The parameter syntax is wrong.
InvalidArgument	Ignored because the command parameter content was outside the appropriate range and could not be interpreted. Examples:     The parameter value is outside the range. The parameter syntax does not comply with the specifications. The letter case of the parameter is wrong.
UnknownAddress	Ignored because the specified address does not exist.
UnknownEventID	Ignored because the specified event ID does not exist.
TooLongCommand	Could not be interpreted because the command was too long.
AccessDenied	Procedure rejected because the peer device is not in a normal running state. Examples:     Rejected because an ssrecall command was received in emergency run mode.
Busy	The device is busy processing; it can't receive commands.
ReadOnly	Ignored because an attempt was made to set a parameter at a read-only address.
NoPermission	Ignored because you do not have access permission.
InternalError	An internal error may have occurred. Examples:     Failed to process the command. Attempted to query or change the value of a parameter that does not exist in the device.

## 4. Command Sequence

Below are examples of how to process remote control.

When viewed from the controller, the following major phases exist in order to perform remote control.



The controller designer needs to design and implement the blue items in the above figure. The detailed sequences of various procedures are provided below.

### 4.1. Communication start sequence

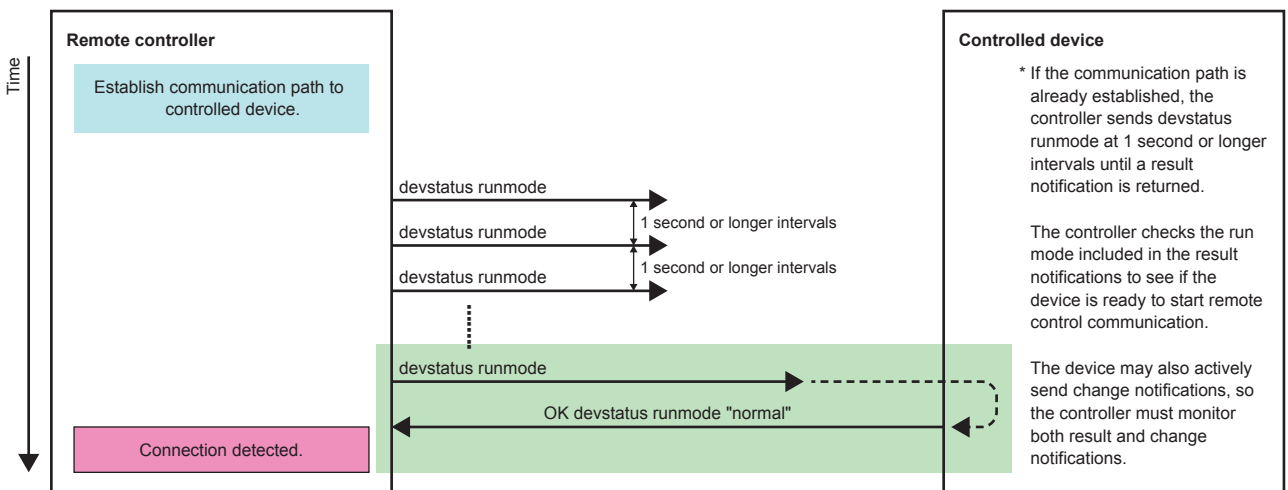
The amount of time for the controller and the controlled device to start is different.

Remote control is an act of controlling the controlled device from the controller, so the controller must wait for the controlled device to become ready.

The controller needs to wait using the sequence below.

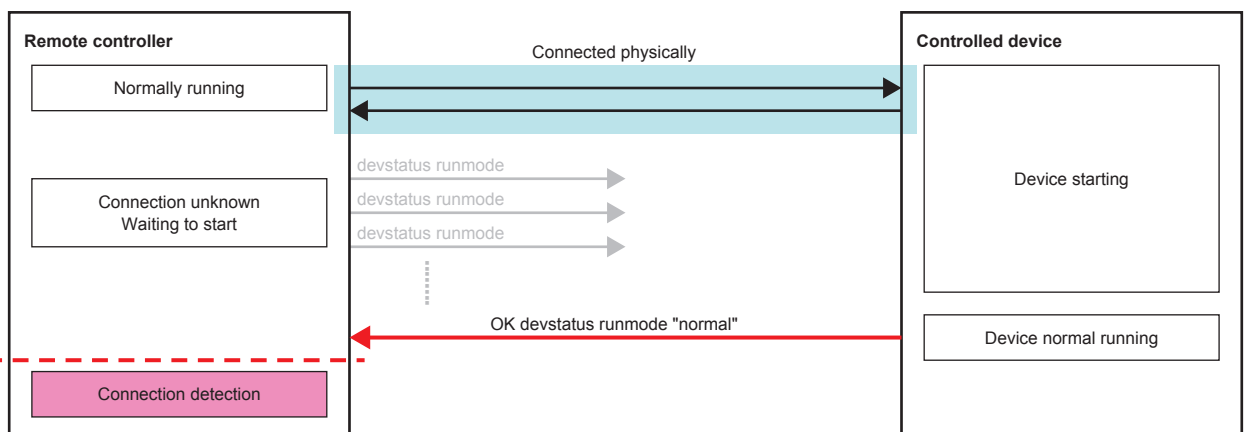
1. If an Ethernet connection is required, the remote controller needs to establish a logical session, with the MTX device(s) based on IP address(es) and port number.  
(This is not necessary for a connection that only needs to be connected physically, as in RS-232C.)
2. After the session is established, the controller sends devstatus commands at 1 second or longer intervals.
3. If "OK devstatus runmode" is returned, the controller should check the information.
4. If the controller determines that the controlled device is in normal running mode, the controller can start sending command strings to change parameter value and preset etc. If the controlled device is not in normal running mode, the controller continues trying.

Note: In order to establish remote control communication, the external controller must send [devstatus runmode] command to the device and await response. When the device responds as [OK devstatus runmode "normal"], the device is ready to receive commands.

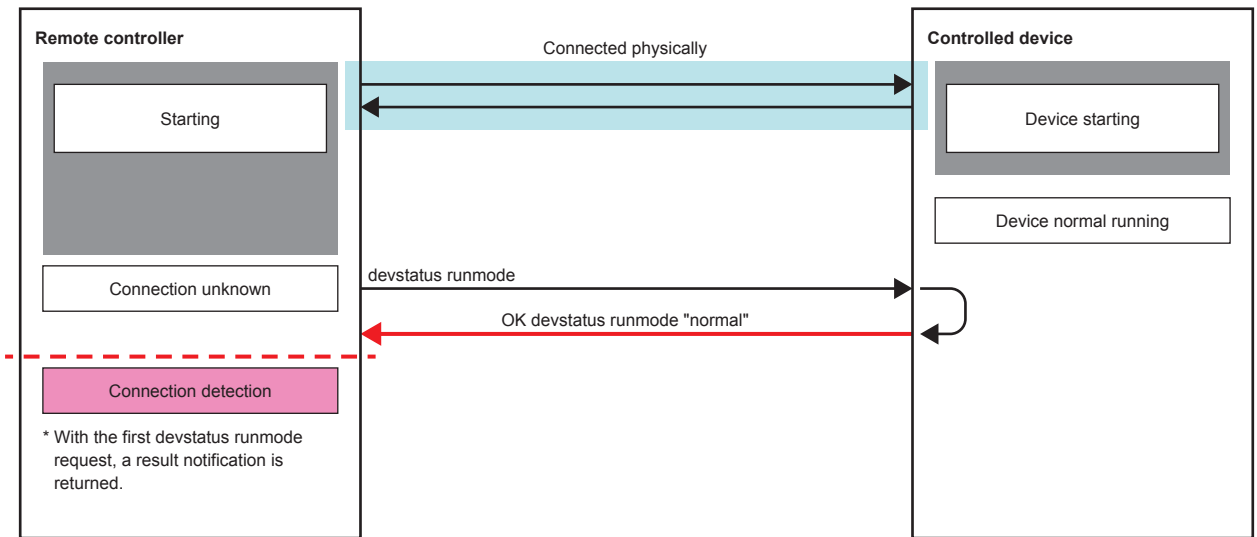


The reason for using such a sequence is provided below.

Example when the controller starts earlier than the controlled device



Example when the controlled device starts earlier than the controller



Controller can recognize that Controlled device is ready to receive commands when there is response for "devstatus runmode" command.

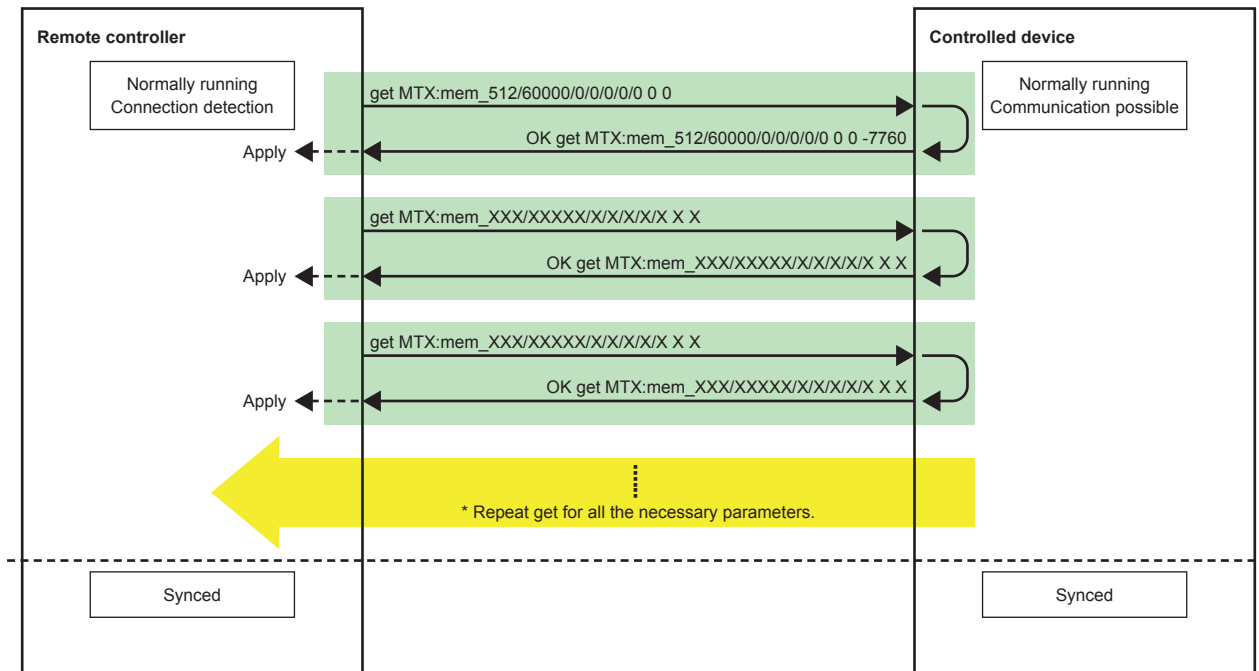
In case of Ethernet connection, Ethernet logical session (e.g. port open) should be established before sending "devstatus runmode".

## 4.2. Parameter sync sequence

Immediately after communication starts, the controller does not know anything about the most recent status of the controlled device. Therefore, the controller must query all parameters that it plans to handle.

This also applies for when preset recall is executed, because the controller does not know how the device has changed.

Querying the most recent status of the controlled device or when a snapshot recall occurs



Example 1: Query the DCA fader value.

```

get MTX:mem_512/60000/0/0/0/0 0 0
Query the 1ch level of the DCA fader with raw values.
OK get MTX:mem_512/60000/0/0/0/0 0 0 -7760
The 1ch level of the DCA fader is -77.60.
  
```

Example 2: Set the DCA fader value.

```

set MTX:mem_512/60000/0/0/0/0 0 0 -7760
Set the 1ch level of the DCA fader to a raw value of -77.60.
OK set MTX:mem_512/60000/0/0/0/0 0 0 -7760 "-77.60"
The 1ch level of the DCA fader was set to "-77.60".
  
```

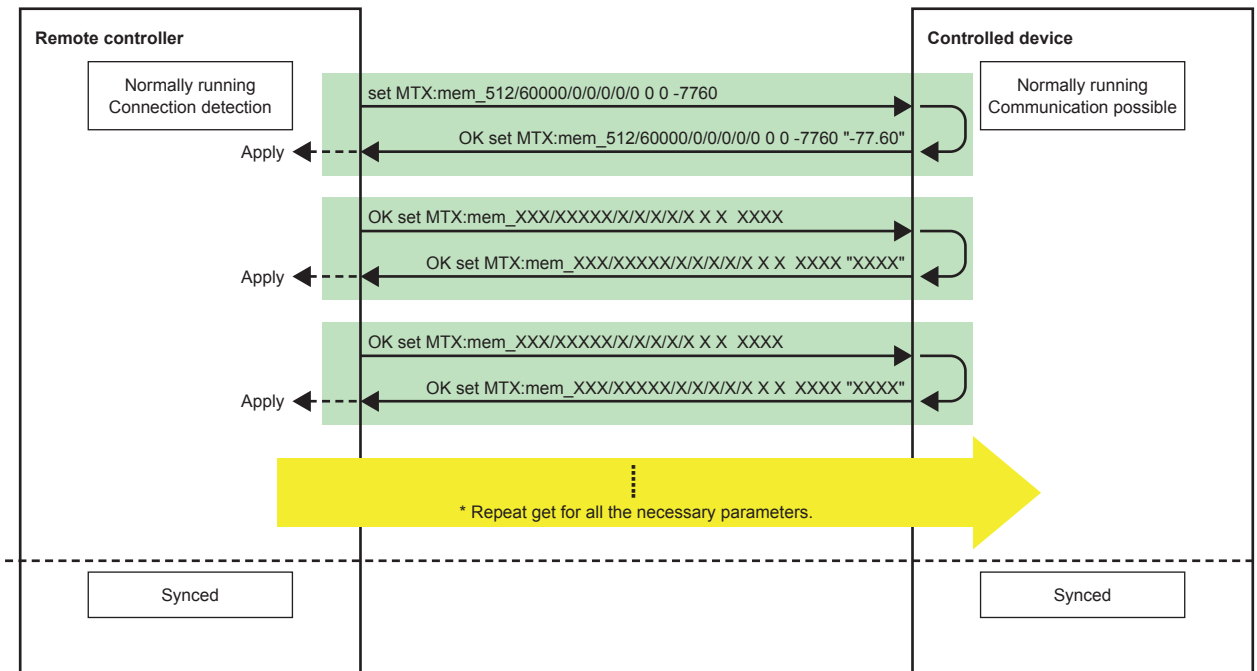
Executing this sequence synchronizes the status with the controlled device.

However, if the controller receives a change notification from the controlled device during this query sequence, the controller needs to query again.

Note that, as with a GPI controller made by user, if you want to apply the physical positions of the controller to the device, there is no need to execute the above sequence.

If you want to apply the physical positions of the controller to the device immediately after a connection is established, without any user interaction, simply use set commands to do so.

Applying the most recent status of the controller to the device



Depending on the controller specifications, the above two sequences may be used in combination.

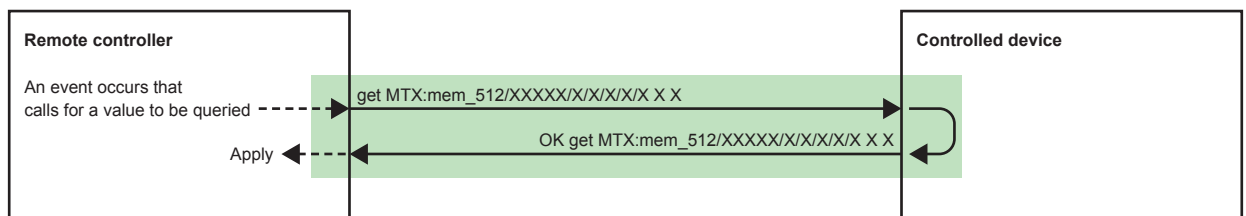
Example: The GPI fader uses the status of the controller, but other parameters use the status of the controlled device.

4.3. Parameter query sequence at any given time

LEDs and displays on the GUI

Indications are updated on the basis of the result notifications returned after the processing of the set commands.

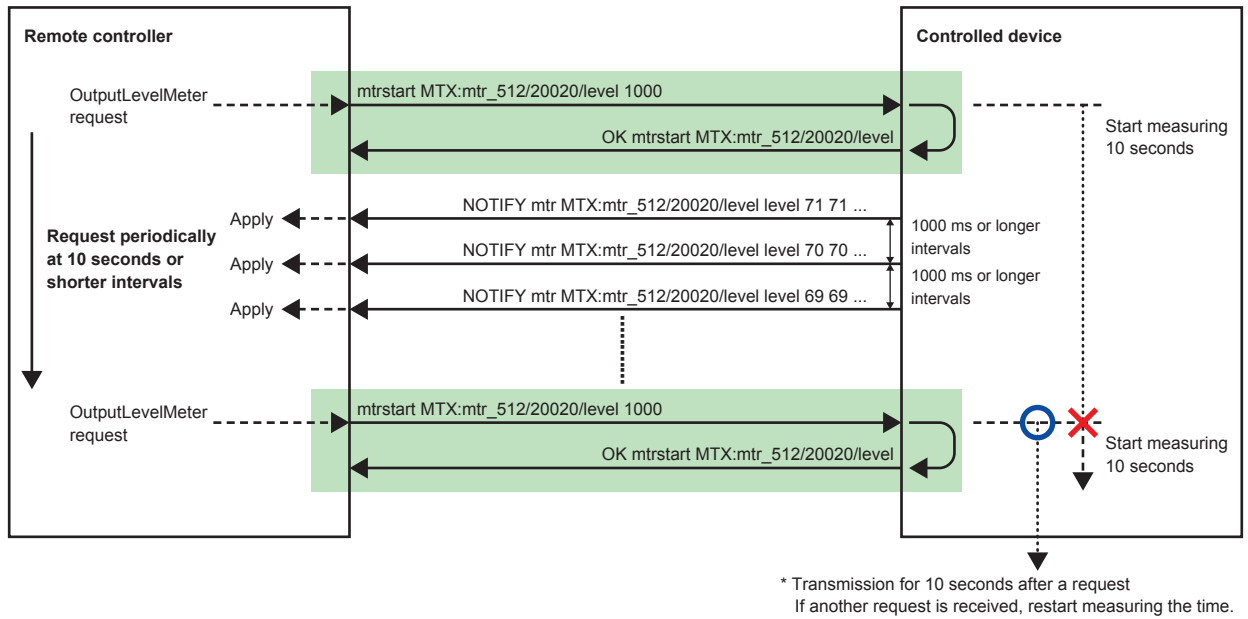
Alternatively, send an explicit get request and apply the result to the indications, as shown below.



One example of using this sequence would be for refreshing the UI after boot-up or after changing tabs.

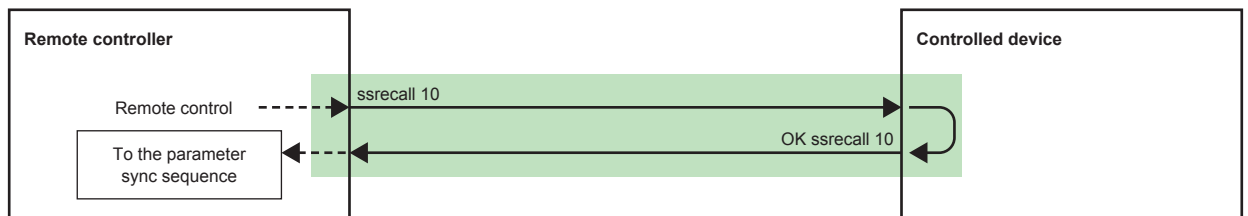
#### 4.4. Meter data request/query sequence

The controller requests meter data by specifying the meter data address and the minimum transmission interval. The meter transmission stops after 10 seconds. To continue receiving data, make another request before the 10 seconds pass.



#### 4.5. Preset recall request sequence

Upon receiving a result notification in response to a Preset Recall request, you need to execute the parameter sync sequence.



In addition, if a Preset recall occurs internally in the controlled device (e.g. by front panel button press) or when such a request is received from another controller, the controller receives a change notification that indicates that all parameters have changed (see the next section). If this occurs, the controller needs to execute the parameter sync sequence.

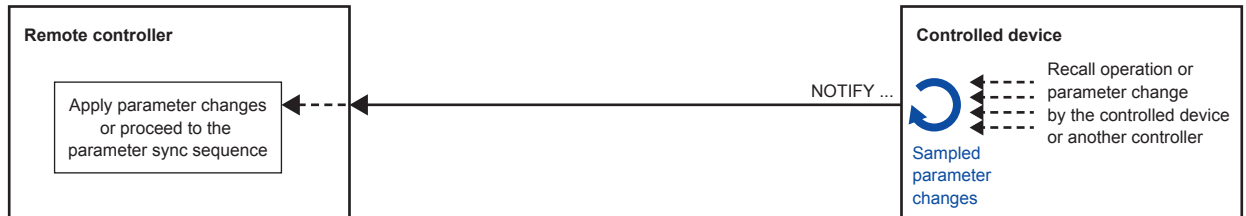


#### 4.6. Sequence when parameters are changed by another controller

If the controller sends a parameter set request, a change notification is returned immediately.

However, if parameters change internally in the controlled device (this includes changes in parameters that occur as a result of a controller operation on another parameter) or due to a request from another controller, a parameter change notification is received, as shown below.

The controller receiving a parameter change notification updates its own status if necessary.



The way in which parameter change notifications are sent varies depending on the value notification mode specified in the MTX external control protocol mode.

##### **Advice for choosing normalized/raw value mode.**

If you want to handle a value with a given range, such as in an MIDI controller,

- Set the value notification mode to normalized value notification mode, and specify the required resolution.
- Use setn/getn to perform processing from the controller.
- Apply changes to the controller according to NOTIFY setn.

Conversely, for a highly functional PC application where you want to use all the internal parameters,

- Set the MTX external control protocol mode to raw value mode.
- Use set/get to perform processing from the controller.
- Apply changes to the controller according to NOTIFY set.
- Use setn/getn for certain parameters when necessary.

## 5. Meter Value

### Level Meter, Hold Meter, GR Meter

Value	Data	Value	Data	Value	Data	Value	Data
00	-126dBFS or less	20	-94dBFS	40	-62dBFS	60	-30dBFS
01	-125dBFS	21	-93dBFS	41	-61dBFS	61	-29dBFS
02	-124dBFS	22	-92dBFS	42	-60dBFS	62	-28dBFS
03	-123dBFS	23	-91dBFS	43	-59dBFS	63	-27dBFS
04	-122dBFS	24	-90dBFS	44	-58dBFS	66	-26dBFS
05	-121dBFS	25	-89dBFS	45	-57dBFS	65	-25dBFS
06	-120dBFS	26	-88dBFS	46	-56dBFS	66	-24dBFS
07	-119dBFS	27	-87dBFS	47	-55dBFS	67	-23dBFS
08	-118dBFS	28	-86dBFS	48	-54dBFS	68	-22dBFS
09	-117dBFS	29	-85dBFS	49	-53dBFS	69	-21dBFS
0A	-116dBFS	2A	-84dBFS	4A	-52dBFS	6A	-20dBFS
0B	-115dBFS	2B	-83dBFS	4B	-51dBFS	6B	-19dBFS
0C	-114dBFS	2C	-82dBFS	4C	-50dBFS	6C	-18dBFS
0D	-113dBFS	2D	-81dBFS	4D	-49dBFS	6D	-17dBFS
0E	-112dBFS	2E	-80dBFS	4E	-48dBFS	6E	-16dBFS
0F	-111dBFS	2F	-79dBFS	4F	-47dBFS	6F	-15dBFS
10	-110dBFS	30	-78dBFS	50	-46dBFS	70	-14dBFS
11	-109dBFS	31	-77dBFS	51	-45dBFS	71	-13dBFS
12	-108dBFS	32	-76dBFS	52	-44dBFS	72	-12dBFS
13	-107dBFS	33	-75dBFS	55	-43dBFS	77	-11dBFS
14	-106dBFS	34	-74dBFS	54	-42dBFS	74	-10dBFS
15	-105dBFS	35	-73dBFS	55	-41dBFS	77	-9dBFS
16	-104dBFS	36	-72dBFS	56	-40dBFS	76	-8dBFS
17	-103dBFS	37	-71dBFS	57	-39dBFS	77	-7dBFS
18	-102dBFS	38	-70dBFS	58	-38dBFS	78	-6dBFS
19	-101dBFS	39	-69dBFS	59	-37dBFS	79	-5dBFS
1A	-100dBFS	3A	-68dBFS	5A	-36dBFS	7A	-4dBFS
1B	-99dBFS	3B	-67dBFS	5B	-35dBFS	7B	-3dBFS
1C	-98dBFS	3C	-66dBFS	5C	-34dBFS	7C	-2dBFS
1D	-97dBFS	3D	-65dBFS	5D	-33dBFS	7D	-1dBFS
1E	-96dBFS	3E	-64dBFS	5E	-32dBFS	7E	0dBFS
1F	-95dBFS	3F	-63dBFS	5F	-31dBFS	7F	OVER

NOTE: A device may not be able to send all the values depending on how precise the device processes values internally.

## 6. Parameter Value Details

### 6.1. Fader parameter

#### 6.1.1. Fader with "-Infinity to 0dB" range

Value	Data	Value	Data	Value	Data	Value	Data	Value	Data	Value	Data	Value	Data	Value	Data
0	-InfdB	64	-87.50dB	128	-69.00dB	192	-56.20dB	256	-46.70dB	320	-40.30dB	384	-33.90dB	448	-28.75dB
1	-138.00dB	65	-87.00dB	129	-68.80dB	193	-56.00dB	257	-46.60dB	321	-40.20dB	385	-33.80dB	449	-28.70dB
2	-136.00dB	66	-86.50dB	130	-68.60dB	194	-55.80dB	258	-46.50dB	322	-40.10dB	386	-33.70dB	450	-28.65dB
3	-134.00dB	67	-86.00dB	131	-68.40dB	195	-55.60dB	259	-46.40dB	323	-40.00dB	387	-33.60dB	451	-28.60dB
4	-133.00dB	68	-85.50dB	132	-68.20dB	196	-55.40dB	260	-46.30dB	324	-39.90dB	388	-33.50dB	452	-28.55dB
5	-132.00dB	69	-85.00dB	133	-68.00dB	197	-55.20dB	261	-46.20dB	325	-39.80dB	389	-33.40dB	453	-28.50dB
6	-131.00dB	70	-84.50dB	134	-67.80dB	198	-55.00dB	262	-46.10dB	326	-39.70dB	390	-33.30dB	454	-28.45dB
7	-130.00dB	71	-84.00dB	135	-67.60dB	199	-54.80dB	263	-46.00dB	327	-39.60dB	391	-33.20dB	455	-28.40dB
8	-129.00dB	72	-83.50dB	136	-67.40dB	200	-54.60dB	264	-45.90dB	328	-39.50dB	392	-33.10dB	456	-28.35dB
9	-128.00dB	73	-83.00dB	137	-67.20dB	201	-54.40dB	265	-45.80dB	329	-39.40dB	393	-33.00dB	457	-28.30dB
10	-127.00dB	74	-82.50dB	138	-67.00dB	202	-54.20dB	266	-45.70dB	330	-39.30dB	394	-32.90dB	458	-28.25dB
11	-126.00dB	75	-82.00dB	139	-66.80dB	203	-54.00dB	267	-45.60dB	331	-39.20dB	395	-32.80dB	459	-28.20dB
12	-125.00dB	76	-81.50dB	140	-66.60dB	204	-53.80dB	268	-45.50dB	332	-39.10dB	396	-32.70dB	460	-28.15dB
13	-124.00dB	77	-81.00dB	141	-66.40dB	205	-53.60dB	269	-45.40dB	333	-39.00dB	397	-32.60dB	461	-28.10dB
14	-123.00dB	78	-80.50dB	142	-66.20dB	206	-53.40dB	270	-45.30dB	334	-38.90dB	398	-32.50dB	462	-28.05dB
15	-122.00dB	79	-80.00dB	143	-66.00dB	207	-53.20dB	271	-45.20dB	335	-38.80dB	399	-32.40dB	463	-28.00dB
16	-121.00dB	80	-79.50dB	144	-65.80dB	208	-53.00dB	272	-45.10dB	336	-38.70dB	400	-32.30dB	464	-27.95dB
17	-120.00dB	81	-79.00dB	145	-65.60dB	209	-52.80dB	273	-45.00dB	337	-38.60dB	401	-32.20dB	465	-27.90dB
18	-119.00dB	82	-78.50dB	146	-65.40dB	210	-52.60dB	274	-44.90dB	338	-38.50dB	402	-32.10dB	466	-27.85dB
19	-118.00dB	83	-78.00dB	147	-65.20dB	211	-52.40dB	275	-44.80dB	339	-38.40dB	403	-32.00dB	467	-27.80dB
20	-117.00dB	84	-77.80dB	148	-65.00dB	212	-52.20dB	276	-44.70dB	340	-38.30dB	404	-31.90dB	468	-27.75dB
21	-116.00dB	85	-77.60dB	149	-64.80dB	213	-52.00dB	277	-44.60dB	341	-38.20dB	405	-31.80dB	469	-27.70dB
22	-115.00dB	86	-77.40dB	150	-64.60dB	214	-51.80dB	278	-44.50dB	342	-38.10dB	406	-31.70dB	470	-27.65dB
23	-114.00dB	87	-77.20dB	151	-64.40dB	215	-51.60dB	279	-44.40dB	343	-38.00dB	407	-31.60dB	471	-27.60dB
24	-113.00dB	88	-77.00dB	152	-64.20dB	216	-51.40dB	280	-44.30dB	344	-37.90dB	408	-31.50dB	472	-27.55dB
25	-112.00dB	89	-76.80dB	153	-64.00dB	217	-51.20dB	281	-44.20dB	345	-37.80dB	409	-31.40dB	473	-27.50dB
26	-111.00dB	90	-76.60dB	154	-63.80dB	218	-51.00dB	282	-44.10dB	346	-37.70dB	410	-31.30dB	474	-27.45dB
27	-110.00dB	91	-76.40dB	155	-63.60dB	219	-50.80dB	283	-44.00dB	347	-37.60dB	411	-31.20dB	475	-27.40dB
28	-109.00dB	92	-76.20dB	156	-63.40dB	220	-50.60dB	284	-43.90dB	348	-37.50dB	412	-31.10dB	476	-27.35dB
29	-108.00dB	93	-76.00dB	157	-63.20dB	221	-50.40dB	285	-43.80dB	349	-37.40dB	413	-31.00dB	477	-27.30dB
30	-107.00dB	94	-75.80dB	158	-63.00dB	222	-50.20dB	286	-43.70dB	350	-37.30dB	414	-30.90dB	478	-27.25dB
31	-106.00dB	95	-75.60dB	159	-62.80dB	223	-50.00dB	287	-43.60dB	351	-37.20dB	415	-30.80dB	479	-27.20dB
32	-105.00dB	96	-75.40dB	160	-62.60dB	224	-49.90dB	288	-43.50dB	352	-37.10dB	416	-30.70dB	480	-27.15dB
33	-104.00dB	97	-75.20dB	161	-62.40dB	225	-49.80dB	289	-43.40dB	353	-37.00dB	417	-30.60dB	481	-27.10dB
34	-103.00dB	98	-75.00dB	162	-62.20dB	226	-49.70dB	290	-43.30dB	354	-36.90dB	418	-30.50dB	482	-27.05dB
35	-102.00dB	99	-74.80dB	163	-62.00dB	227	-49.60dB	291	-43.20dB	355	-36.80dB	419	-30.40dB	483	-27.00dB
36	-101.50dB	100	-74.60dB	164	-61.80dB	228	-49.50dB	292	-43.10dB	356	-36.70dB	420	-30.30dB	484	-26.95dB
37	-101.00dB	101	-74.40dB	165	-61.60dB	229	-49.40dB	293	-43.00dB	357	-36.60dB	421	-30.20dB	485	-26.90dB
38	-100.50dB	102	-74.20dB	166	-61.40dB	230	-49.30dB	294	-42.90dB	358	-36.50dB	422	-30.10dB	486	-26.85dB
39	-100.00dB	103	-74.00dB	167	-61.20dB	231	-49.20dB	295	-42.80dB	359	-36.40dB	423	-30.00dB	487	-26.80dB
40	-99.50dB	104	-73.80dB	168	-61.00dB	232	-49.10dB	296	-42.70dB	360	-36.30dB	424	-29.95dB	488	-26.75dB
41	-99.00dB	105	-73.60dB	169	-60.80dB	233	-49.00dB	297	-42.60dB	361	-36.20dB	425	-29.90dB	489	-26.70dB
42	-98.50dB	106	-73.40dB	170	-60.60dB	234	-48.90dB	298	-42.50dB	362	-36.10dB	426	-29.85dB	490	-26.65dB
43	-98.00dB	107	-73.20dB	171	-60.40dB	235	-48.80dB	299	-42.40dB	363	-36.00dB	427	-29.80dB	491	-26.60dB
44	-97.50dB	108	-73.00dB	172	-60.20dB	236	-48.70dB	300	-42.30dB	364	-35.90dB	428	-29.75dB	492	-26.55dB
45	-97.00dB	109	-72.80dB	173	-60.00dB	237	-48.60dB	301	-42.20dB	365	-35.80dB	429	-29.70dB	493	-26.50dB
46	-96.50dB	110	-72.60dB	174	-59.80dB	238	-48.50dB	302	-42.10dB	366	-35.70dB	430	-29.65dB	494	-26.45dB
47	-96.00dB	111	-72.40dB	175	-59.60dB	239	-48.40dB	303	-42.00dB	367	-35.60dB	431	-29.60dB	495	-26.40dB
48	-95.50dB	112	-72.20dB	176	-59.40dB	240	-48.30dB	304	-41.90dB	368	-35.50dB	432	-29.55dB	496	-26.35dB
49	-95.00dB	113	-72.00dB	177	-59.20dB	241	-48.20dB	305	-41.80dB	369	-35.40dB	433	-29.50dB	497	-26.30dB
50	-94.50dB	114	-71.80dB	178	-59.00dB	242	-48.10dB	306	-41.70dB	370	-35.30dB	434	-29.45dB	498	-26.25dB
51	-94.00dB	115	-71.60dB	179	-58.80dB	243	-48.00dB	307	-41.60dB	371	-35.20dB	435	-29.40dB	499	-26.20dB
52	-93.50dB	116	-71.40dB	180	-58.60dB	244	-47.90dB	308	-41.50dB	372	-35.10dB	436	-29.35dB	500	-26.15dB
53	-93.00dB	117	-71.20dB	181	-58.40dB	245	-47.80dB	309	-41.40dB	373	-35.00dB	437	-29.30dB	501	-26.10dB
54	-92.50dB	118	-71.00dB	182	-58.20dB	246	-47.70dB	310	-41.30dB	374	-34.90dB	438	-29.25dB	502	-26.05dB
55	-92.00dB	119	-70.80dB	183	-58.00dB	247	-47.60dB	311	-41.20dB	375	-34.80dB	439	-29.20dB	503	-26.00dB
56	-91.50dB	120	-70.60dB	184	-57.80dB	248	-47.50dB	312	-41.10dB	376	-34.70dB	440	-29.15dB	504	-25.95dB
57	-91.00dB	121	-70.40dB	185	-57.60dB	249	-47.40dB	313	-41.00dB	377	-34.60dB	441	-29.10dB	505	-25.90dB
58	-90.50dB	122	-70.20dB	186	-57.40dB	250	-47.30dB	314	-40.90dB	378	-34.50dB	442	-29.05dB	506	-25.85dB
59	-90.00dB	123	-70.00dB	187	-57.20dB	251	-47.20dB	315	-40.80dB	379	-34.40dB	443	-29.00dB	507	-25.80dB
60	-89.50dB	124	-69.80dB	188	-57.00dB	252	-47.10dB	316	-40.70dB	380	-34.30dB	444	-28.95dB	508	-25.75dB
61	-89.00dB	125	-69.60dB	189	-56.80dB	253	-47.00dB	317	-40.60dB	381	-34.20dB	445	-28.90dB	509	-25.70dB
62	-88.50dB	126	-69.40dB	190	-56.60dB	254	-46.90dB	318	-40.50dB	382	-34.10dB	446	-28.85dB	510	-25.65dB
63	-88.00dB	127	-69.20dB	191	-56.40dB	255	-46.80dB	319	-40.40dB	383	-34.00dB	447	-28.80dB	511	-25.60dB

## 6. Parameter Value Details

Value	Data	Value	Data	Value	Data	Value	Data	Value	Data	Value	Data	Value	Data	Value	Data
512	-25.55dB	576	-22.35dB	640	-19.15dB	704	-15.95dB	768	-12.75dB	832	-9.55dB	896	-6.35dB	960	-3.15dB
513	-25.50dB	577	-22.30dB	641	-19.10dB	705	-15.90dB	769	-12.70dB	833	-9.50dB	897	-6.30dB	961	-3.10dB
514	-25.45dB	578	-22.25dB	642	-19.05dB	706	-15.85dB	770	-12.65dB	834	-9.45dB	898	-6.25dB	962	-3.05dB
515	-25.40dB	579	-22.20dB	643	-19.00dB	707	-15.80dB	771	-12.60dB	835	-9.40dB	899	-6.20dB	963	-3.00dB
516	-25.35dB	580	-22.15dB	644	-18.95dB	708	-15.75dB	772	-12.55dB	836	-9.35dB	900	-6.15dB	964	-2.95dB
517	-25.30dB	581	-22.10dB	645	-18.90dB	709	-15.70dB	773	-12.50dB	837	-9.30dB	901	-6.10dB	965	-2.90dB
518	-25.25dB	582	-22.05dB	646	-18.85dB	710	-15.65dB	774	-12.45dB	838	-9.25dB	902	-6.05dB	966	-2.85dB
519	-25.20dB	583	-22.00dB	647	-18.80dB	711	-15.60dB	775	-12.40dB	839	-9.20dB	903	-6.00dB	967	-2.80dB
520	-25.15dB	584	-21.95dB	648	-18.75dB	712	-15.55dB	776	-12.35dB	840	-9.15dB	904	-5.95dB	968	-2.75dB
521	-25.10dB	585	-21.90dB	649	-18.70dB	713	-15.50dB	777	-12.30dB	841	-9.10dB	905	-5.90dB	969	-2.70dB
522	-25.05dB	586	-21.85dB	650	-18.65dB	714	-15.45dB	778	-12.25dB	842	-9.05dB	906	-5.85dB	970	-2.65dB
523	-25.00dB	587	-21.80dB	651	-18.60dB	715	-15.40dB	779	-12.20dB	843	-9.00dB	907	-5.80dB	971	-2.60dB
524	-24.95dB	588	-21.75dB	652	-18.55dB	716	-15.35dB	780	-12.15dB	844	-8.95dB	908	-5.75dB	972	-2.55dB
525	-24.90dB	589	-21.70dB	653	-18.50dB	717	-15.30dB	781	-12.10dB	845	-8.90dB	909	-5.70dB	973	-2.50dB
526	-24.85dB	590	-21.65dB	654	-18.45dB	718	-15.25dB	782	-12.05dB	846	-8.85dB	910	-5.65dB	974	-2.45dB
527	-24.80dB	591	-21.60dB	655	-18.40dB	719	-15.20dB	783	-12.00dB	847	-8.80dB	911	-5.60dB	975	-2.40dB
528	-24.75dB	592	-21.55dB	656	-18.35dB	720	-15.15dB	784	-11.95dB	848	-8.75dB	912	-5.55dB	976	-2.35dB
529	-24.70dB	593	-21.50dB	657	-18.30dB	721	-15.10dB	785	-11.90dB	849	-8.70dB	913	-5.50dB	977	-2.30dB
530	-24.65dB	594	-21.45dB	658	-18.25dB	722	-15.05dB	786	-11.85dB	850	-8.65dB	914	-5.45dB	978	-2.25dB
531	-24.60dB	595	-21.40dB	659	-18.20dB	723	-15.00dB	787	-11.80dB	851	-8.60dB	915	-5.40dB	979	-2.20dB
532	-24.55dB	596	-21.35dB	660	-18.15dB	724	-14.95dB	788	-11.75dB	852	-8.55dB	916	-5.35dB	980	-2.15dB
533	-24.50dB	597	-21.30dB	661	-18.10dB	725	-14.90dB	789	-11.70dB	853	-8.50dB	917	-5.30dB	981	-2.10dB
534	-24.45dB	598	-21.25dB	662	-18.05dB	726	-14.85dB	790	-11.65dB	854	-8.45dB	918	-5.25dB	982	-2.05dB
535	-24.40dB	599	-21.20dB	663	-18.00dB	727	-14.80dB	791	-11.60dB	855	-8.40dB	919	-5.20dB	983	-2.00dB
536	-24.35dB	600	-21.15dB	664	-17.95dB	728	-14.75dB	792	-11.55dB	856	-8.35dB	920	-5.15dB	984	-1.95dB
537	-24.30dB	601	-21.10dB	665	-17.90dB	729	-14.70dB	793	-11.50dB	857	-8.30dB	921	-5.10dB	985	-1.90dB
538	-24.25dB	602	-21.05dB	666	-17.85dB	730	-14.65dB	794	-11.45dB	858	-8.25dB	922	-5.05dB	986	-1.85dB
539	-24.20dB	603	-21.00dB	667	-17.80dB	731	-14.60dB	795	-11.40dB	859	-8.20dB	923	-5.00dB	987	-1.80dB
540	-24.15dB	604	-20.95dB	668	-17.75dB	732	-14.55dB	796	-11.35dB	860	-8.15dB	924	-4.95dB	988	-1.75dB
541	-24.10dB	605	-20.90dB	669	-17.70dB	733	-14.50dB	797	-11.30dB	861	-8.10dB	925	-4.90dB	989	-1.70dB
542	-24.05dB	606	-20.85dB	670	-17.65dB	734	-14.45dB	798	-11.25dB	862	-8.05dB	926	-4.85dB	990	-1.65dB
543	-24.00dB	607	-20.80dB	671	-17.60dB	735	-14.40dB	799	-11.20dB	863	-8.00dB	927	-4.80dB	991	-1.60dB
544	-23.95dB	608	-20.75dB	672	-17.55dB	736	-14.35dB	800	-11.15dB	864	-7.95dB	928	-4.75dB	992	-1.55dB
545	-23.90dB	609	-20.70dB	673	-17.50dB	737	-14.30dB	801	-11.10dB	865	-7.90dB	929	-4.70dB	993	-1.50dB
546	-23.85dB	610	-20.65dB	674	-17.45dB	738	-14.25dB	802	-11.05dB	866	-7.85dB	930	-4.65dB	994	-1.45dB
547	-23.80dB	611	-20.60dB	675	-17.40dB	739	-14.20dB	803	-11.00dB	867	-7.80dB	931	-4.60dB	995	-1.40dB
548	-23.75dB	612	-20.55dB	676	-17.35dB	740	-14.15dB	804	-10.95dB	868	-7.75dB	932	-4.55dB	996	-1.35dB
549	-23.70dB	613	-20.50dB	677	-17.30dB	741	-14.10dB	805	-10.90dB	869	-7.70dB	933	-4.50dB	997	-1.30dB
550	-23.65dB	614	-20.45dB	678	-17.25dB	742	-14.05dB	806	-10.85dB	870	-7.65dB	934	-4.45dB	998	-1.25dB
551	-23.60dB	615	-20.40dB	679	-17.20dB	743	-14.00dB	807	-10.80dB	871	-7.60dB	935	-4.40dB	999	-1.20dB
552	-23.55dB	616	-20.35dB	680	-17.15dB	744	-13.95dB	808	-10.75dB	872	-7.55dB	936	-4.35dB	1000	-1.15dB
553	-23.50dB	617	-20.30dB	681	-17.10dB	745	-13.90dB	809	-10.70dB	873	-7.50dB	937	-4.30dB	1001	-1.10dB
554	-23.45dB	618	-20.25dB	682	-17.05dB	746	-13.85dB	810	-10.65dB	874	-7.45dB	938	-4.25dB	1002	-1.05dB
555	-23.40dB	619	-20.20dB	683	-17.00dB	747	-13.80dB	811	-10.60dB	875	-7.40dB	939	-4.20dB	1003	-1.00dB
556	-23.35dB	620	-20.15dB	684	-16.95dB	748	-13.75dB	812	-10.55dB	876	-7.35dB	940	-4.15dB	1004	-0.95dB
557	-23.30dB	621	-20.10dB	685	-16.90dB	749	-13.70dB	813	-10.50dB	877	-7.30dB	941	-4.10dB	1005	-0.90dB
558	-23.25dB	622	-20.05dB	686	-16.85dB	750	-13.65dB	814	-10.45dB	878	-7.25dB	942	-4.05dB	1006	-0.85dB
559	-23.20dB	623	-20.00dB	687	-16.80dB	751	-13.60dB	815	-10.40dB	879	-7.20dB	943	-4.00dB	1007	-0.80dB
560	-23.15dB	624	-19.95dB	688	-16.75dB	752	-13.55dB	816	-10.35dB	880	-7.15dB	944	-3.95dB	1008	-0.75dB
561	-23.10dB	625	-19.90dB	689	-16.70dB	753	-13.50dB	817	-10.30dB	881	-7.10dB	945	-3.90dB	1009	-0.70dB
562	-23.05dB	626	-19.85dB	690	-16.65dB	754	-13.45dB	818	-10.25dB	882	-7.05dB	946	-3.85dB	1010	-0.65dB
563	-23.00dB	627	-19.80dB	691	-16.60dB	755	-13.40dB	819	-10.20dB	883	-7.00dB	947	-3.80dB	1011	-0.60dB
564	-22.95dB	628	-19.75dB	692	-16.55dB	756	-13.35dB	820	-10.15dB	884	-6.95dB	948	-3.75dB	1012	-0.55dB
565	-22.90dB	629	-19.70dB	693	-16.50dB	757	-13.30dB	821	-10.10dB	885	-6.90dB	949	-3.70dB	1013	-0.50dB
566	-22.85dB	630	-19.65dB	694	-16.45dB	758	-13.25dB	822	-10.05dB	886	-6.85dB	950	-3.65dB	1014	-0.45dB
567	-22.80dB	631	-19.60dB	695	-16.40dB	759	-13.20dB	823	-10.00dB	887	-6.80dB	951	-3.60dB	1015	-0.40dB
568	-22.75dB	632	-19.55dB	696	-16.35dB	760	-13.15dB	824	-9.95dB	888	-6.75dB	952	-3.55dB	1016	-0.35dB
569	-22.70dB	633	-19.50dB	697	-16.30dB	761	-13.10dB	825	-9.90dB	889	-6.70dB	953	-3.50dB	1017	-0.30dB
570	-22.65dB	634	-19.45dB	698	-16.25dB	762	-13.05dB	826	-9.85dB	890	-6.65dB	954	-3.45dB	1018	-0.25dB
571	-22.60dB	635	-19.40dB	699	-16.20dB	763	-13.00dB	827	-9.80dB	891	-6.60dB	955	-3.40dB	1019	-0.20dB
572	-22.55dB	636	-19.35dB	700	-16.15dB	764	-12.95dB	828	-9.75dB	892	-6.55dB	956	-3.35dB	1020	-0.15dB
573	-22.50dB	637	-19.30dB	701	-16.10dB	765	-12.90dB	829	-9.70dB	893	-6.50dB	957	-3.30dB	1021	-0.10dB
574	-22.45dB	638	-19.25dB	702	-16.05dB	766	-12.85dB	830	-9.65dB	894	-6.45dB	958	-3.25dB	1022	-0.05dB
575	-22.40dB	639	-19.20dB	703	-16.00dB	767	-12.80dB	831	-9.60dB	895	-6.40dB	959	-3.20dB	1023	0.00dB

## 6.1.2. Fader with "-Infinity to 10dB" range

Value	Data	Value	Data	Value	Data	Value	Data	Value	Data	Value	Data	Value	Data	Value	Data
0	-InfdB	64	-71.80dB	128	-59.00dB	192	-46.20dB	256	-36.70dB	320	-30.30dB	384	-23.90dB	448	-18.75dB
1	-138.00dB	65	-71.60dB	129	-58.80dB	193	-46.00dB	257	-36.60dB	321	-30.20dB	385	-23.80dB	449	-18.70dB
2	-135.00dB	66	-71.40dB	130	-58.60dB	194	-45.80dB	258	-36.50dB	322	-30.10dB	386	-23.70dB	450	-18.65dB
3	-132.00dB	67	-71.20dB	131	-58.40dB	195	-45.60dB	259	-36.40dB	323	-30.00dB	387	-23.60dB	451	-18.60dB
4	-129.00dB	68	-71.00dB	132	-58.20dB	196	-45.40dB	260	-36.30dB	324	-29.90dB	388	-23.50dB	452	-18.55dB
5	-126.00dB	69	-70.80dB	133	-58.00dB	197	-45.20dB	261	-36.20dB	325	-29.80dB	389	-23.40dB	453	-18.50dB
6	-123.00dB	70	-70.60dB	134	-57.80dB	198	-45.00dB	262	-36.10dB	326	-29.70dB	390	-23.30dB	454	-18.45dB
7	-120.00dB	71	-70.40dB	135	-57.60dB	199	-44.80dB	263	-36.00dB	327	-29.60dB	391	-23.20dB	455	-18.40dB
8	-117.00dB	72	-70.20dB	136	-57.40dB	200	-44.60dB	264	-35.90dB	328	-29.50dB	392	-23.10dB	456	-18.35dB
9	-114.00dB	73	-70.00dB	137	-57.20dB	201	-44.40dB	265	-35.80dB	329	-29.40dB	393	-23.00dB	457	-18.30dB
10	-111.00dB	74	-69.80dB	138	-57.00dB	202	-44.20dB	266	-35.70dB	330	-29.30dB	394	-22.90dB	458	-18.25dB
11	-108.00dB	75	-69.60dB	139	-56.80dB	203	-44.00dB	267	-35.60dB	331	-29.20dB	395	-22.80dB	459	-18.20dB
12	-105.00dB	76	-69.40dB	140	-56.60dB	204	-43.80dB	268	-35.50dB	332	-29.10dB	396	-22.70dB	460	-18.15dB
13	-102.00dB	77	-69.20dB	141	-56.40dB	205	-43.60dB	269	-35.40dB	333	-29.00dB	397	-22.60dB	461	-18.10dB
14	-99.00dB	78	-69.00dB	142	-56.20dB	206	-43.40dB	270	-35.30dB	334	-28.90dB	398	-22.50dB	462	-18.05dB
15	-96.00dB	79	-68.80dB	143	-56.00dB	207	-43.20dB	271	-35.20dB	335	-28.80dB	399	-22.40dB	463	-18.00dB
16	-95.00dB	80	-68.60dB	144	-55.80dB	208	-43.00dB	272	-35.10dB	336	-28.70dB	400	-22.30dB	464	-17.95dB
17	-94.00dB	81	-68.40dB	145	-55.60dB	209	-42.80dB	273	-35.00dB	337	-28.60dB	401	-22.20dB	465	-17.90dB
18	-93.00dB	82	-68.20dB	146	-55.40dB	210	-42.60dB	274	-34.90dB	338	-28.50dB	402	-22.10dB	466	-17.85dB
19	-92.00dB	83	-68.00dB	147	-55.20dB	211	-42.40dB	275	-34.80dB	339	-28.40dB	403	-22.00dB	467	-17.80dB
20	-91.00dB	84	-67.80dB	148	-55.00dB	212	-42.20dB	276	-34.70dB	340	-28.30dB	404	-21.90dB	468	-17.75dB
21	-90.00dB	85	-67.60dB	149	-54.80dB	213	-42.00dB	277	-34.60dB	341	-28.20dB	405	-21.80dB	469	-17.70dB
22	-89.00dB	86	-67.40dB	150	-54.60dB	214	-41.80dB	278	-34.50dB	342	-28.10dB	406	-21.70dB	470	-17.65dB
23	-88.00dB	87	-67.20dB	151	-54.40dB	215	-41.60dB	279	-34.40dB	343	-28.00dB	407	-21.60dB	471	-17.60dB
24	-87.00dB	88	-67.00dB	152	-54.20dB	216	-41.40dB	280	-34.30dB	344	-27.90dB	408	-21.50dB	472	-17.55dB
25	-86.00dB	89	-66.80dB	153	-54.00dB	217	-41.20dB	281	-34.20dB	345	-27.80dB	409	-21.40dB	473	-17.50dB
26	-85.00dB	90	-66.60dB	154	-53.80dB	218	-41.00dB	282	-34.10dB	346	-27.70dB	410	-21.30dB	474	-17.45dB
27	-84.00dB	91	-66.40dB	155	-53.60dB	219	-40.80dB	283	-34.00dB	347	-27.60dB	411	-21.20dB	475	-17.40dB
28	-83.00dB	92	-66.20dB	156	-53.40dB	220	-40.60dB	284	-33.90dB	348	-27.50dB	412	-21.10dB	476	-17.35dB
29	-82.00dB	93	-66.00dB	157	-53.20dB	221	-40.40dB	285	-33.80dB	349	-27.40dB	413	-21.00dB	477	-17.30dB
30	-81.00dB	94	-65.80dB	158	-53.00dB	222	-40.20dB	286	-33.70dB	350	-27.30dB	414	-20.90dB	478	-17.25dB
31	-80.00dB	95	-65.60dB	159	-52.80dB	223	-40.00dB	287	-33.60dB	351	-27.20dB	415	-20.80dB	479	-17.20dB
32	-79.00dB	96	-65.40dB	160	-52.60dB	224	-39.90dB	288	-33.50dB	352	-27.10dB	416	-20.70dB	480	-17.15dB
33	-78.00dB	97	-65.20dB	161	-52.40dB	225	-39.80dB	289	-33.40dB	353	-27.00dB	417	-20.60dB	481	-17.10dB
34	-77.80dB	98	-65.00dB	162	-52.20dB	226	-39.70dB	290	-33.30dB	354	-26.90dB	418	-20.50dB	482	-17.05dB
35	-77.60dB	99	-64.80dB	163	-52.00dB	227	-39.60dB	291	-33.20dB	355	-26.80dB	419	-20.40dB	483	-17.00dB
36	-77.40dB	100	-64.60dB	164	-51.80dB	228	-39.50dB	292	-33.10dB	356	-26.70dB	420	-20.30dB	484	-16.95dB
37	-77.20dB	101	-64.40dB	165	-51.60dB	229	-39.40dB	293	-33.00dB	357	-26.60dB	421	-20.20dB	485	-16.90dB
38	-77.00dB	102	-64.20dB	166	-51.40dB	230	-39.30dB	294	-32.90dB	358	-26.50dB	422	-20.10dB	486	-16.85dB
39	-76.80dB	103	-64.00dB	167	-51.20dB	231	-39.20dB	295	-32.80dB	359	-26.40dB	423	-20.00dB	487	-16.80dB
40	-76.60dB	104	-63.80dB	168	-51.00dB	232	-39.10dB	296	-32.70dB	360	-26.30dB	424	-19.95dB	488	-16.75dB
41	-76.40dB	105	-63.60dB	169	-50.80dB	233	-39.00dB	297	-32.60dB	361	-26.20dB	425	-19.90dB	489	-16.70dB
42	-76.20dB	106	-63.40dB	170	-50.60dB	234	-38.90dB	298	-32.50dB	362	-26.10dB	426	-19.85dB	490	-16.65dB
43	-76.00dB	107	-63.20dB	171	-50.40dB	235	-38.80dB	299	-32.40dB	363	-26.00dB	427	-19.80dB	491	-16.60dB
44	-75.80dB	108	-63.00dB	172	-50.20dB	236	-38.70dB	300	-32.30dB	364	-25.90dB	428	-19.75dB	492	-16.55dB
45	-75.60dB	109	-62.80dB	173	-50.00dB	237	-38.60dB	301	-32.20dB	365	-25.80dB	429	-19.70dB	493	-16.50dB
46	-75.40dB	110	-62.60dB	174	-49.80dB	238	-38.50dB	302	-32.10dB	366	-25.70dB	430	-19.65dB	494	-16.45dB
47	-75.20dB	111	-62.40dB	175	-49.60dB	239	-38.40dB	303	-32.00dB	367	-25.60dB	431	-19.60dB	495	-16.40dB
48	-75.00dB	112	-62.20dB	176	-49.40dB	240	-38.30dB	304	-31.90dB	368	-25.50dB	432	-19.55dB	496	-16.35dB
49	-74.80dB	113	-62.00dB	177	-49.20dB	241	-38.20dB	305	-31.80dB	369	-25.40dB	433	-19.50dB	497	-16.30dB
50	-74.60dB	114	-61.80dB	178	-49.00dB	242	-38.10dB	306	-31.70dB	370	-25.30dB	434	-19.45dB	498	-16.25dB
51	-74.40dB	115	-61.60dB	179	-48.80dB	243	-38.00dB	307	-31.60dB	371	-25.20dB	435	-19.40dB	499	-16.20dB
52	-74.20dB	116	-61.40dB	180	-48.60dB	244	-37.90dB	308	-31.50dB	372	-25.10dB	436	-19.35dB	500	-16.15dB
53	-74.00dB	117	-61.20dB	181	-48.40dB	245	-37.80dB	309	-31.40dB	373	-25.00dB	437	-19.30dB	501	-16.10dB
54	-73.80dB	118	-61.00dB	182	-48.20dB	246	-37.70dB	310	-31.30dB	374	-24.90dB	438	-19.25dB	502	-16.05dB
55	-73.60dB	119	-60.80dB	183	-48.00dB	247	-37.60dB	311	-31.20dB	375	-24.80dB	439	-19.20dB	503	-16.00dB
56	-73.40dB	120	-60.60dB	184	-47.80dB	248	-37.50dB	312	-31.10dB	376	-24.70dB	440	-19.15dB	504	-15.95dB
57	-73.20dB	121	-60.40dB	185	-47.60dB	249	-37.40dB	313	-31.00dB	377	-24.60dB	441	-19.10dB	505	-15.90dB
58	-73.00dB	122	-60.20dB	186	-47.40dB	250	-37.30dB	314	-30.90dB	378	-24.50dB	442	-19.05dB	506	-15.85dB
59	-72.80dB	123	-60.00dB	187	-47.20dB	251	-37.20dB	315	-30.80dB	379	-24.40dB	443	-19.00dB	507	-15.80dB
60	-72.60dB	124	-59.80dB	188	-47.00dB	252	-37.10dB	316	-30.70dB	380	-24.30dB	444	-18.95dB	508	-15.75dB
61	-72.40dB	125	-59.60dB	189	-46.80dB	253	-37.00dB	317	-30.60dB	381	-24.20dB	445	-18.90dB	509	-15.70dB
62	-72.20dB	126	-59.40dB	190	-46.60dB	254	-36.90dB	318	-30.50dB	382	-24.10dB	446	-18.85dB	510	-15.65dB
63	-72.00dB	127	-59.20dB	191	-46.40dB	255	-36.80dB	319	-30.40dB	383	-24.00dB	447	-18.80dB	511	-15.60dB

## 6. Parameter Value Details

Value	Data	Value	Data	Value	Data	Value	Data	Value	Data	Value	Data	Value	Data	Value	Data
512	-15.55dB	576	-12.35dB	640	-9.15dB	704	-5.95dB	768	-2.75dB	832	0.45dB	896	3.65dB	960	6.85dB
513	-15.50dB	577	-12.30dB	641	-9.10dB	705	-5.90dB	769	-2.70dB	833	0.50dB	897	3.70dB	961	6.90dB
514	-15.45dB	578	-12.25dB	642	-9.05dB	706	-5.85dB	770	-2.65dB	834	0.55dB	898	3.75dB	962	6.95dB
515	-15.40dB	579	-12.20dB	643	-9.00dB	707	-5.80dB	771	-2.60dB	835	0.60dB	899	3.80dB	963	7.00dB
516	-15.35dB	580	-12.15dB	644	-8.95dB	708	-5.75dB	772	-2.55dB	836	0.65dB	900	3.85dB	964	7.05dB
517	-15.30dB	581	-12.10dB	645	-8.90dB	709	-5.70dB	773	-2.50dB	837	0.70dB	901	3.90dB	965	7.10dB
518	-15.25dB	582	-12.05dB	646	-8.85dB	710	-5.65dB	774	-2.45dB	838	0.75dB	902	3.95dB	966	7.15dB
519	-15.20dB	583	-12.00dB	647	-8.80dB	711	-5.60dB	775	-2.40dB	839	0.80dB	903	4.00dB	967	7.20dB
520	-15.15dB	584	-11.95dB	648	-8.75dB	712	-5.55dB	776	-2.35dB	840	0.85dB	904	4.05dB	968	7.25dB
521	-15.10dB	585	-11.90dB	649	-8.70dB	713	-5.50dB	777	-2.30dB	841	0.90dB	905	4.10dB	969	7.30dB
522	-15.05dB	586	-11.85dB	650	-8.65dB	714	-5.45dB	778	-2.25dB	842	0.95dB	906	4.15dB	970	7.35dB
523	-15.00dB	587	-11.80dB	651	-8.60dB	715	-5.40dB	779	-2.20dB	843	1.00dB	907	4.20dB	971	7.40dB
524	-14.95dB	588	-11.75dB	652	-8.55dB	716	-5.35dB	780	-2.15dB	844	1.05dB	908	4.25dB	972	7.45dB
525	-14.90dB	589	-11.70dB	653	-8.50dB	717	-5.30dB	781	-2.10dB	845	1.10dB	909	4.30dB	973	7.50dB
526	-14.85dB	590	-11.65dB	654	-8.45dB	718	-5.25dB	782	-2.05dB	846	1.15dB	910	4.35dB	974	7.55dB
527	-14.80dB	591	-11.60dB	655	-8.40dB	719	-5.20dB	783	-2.00dB	847	1.20dB	911	4.40dB	975	7.60dB
528	-14.75dB	592	-11.55dB	656	-8.35dB	720	-5.15dB	784	-1.95dB	848	1.25dB	912	4.45dB	976	7.65dB
529	-14.70dB	593	-11.50dB	657	-8.30dB	721	-5.10dB	785	-1.90dB	849	1.30dB	913	4.50dB	977	7.70dB
530	-14.65dB	594	-11.45dB	658	-8.25dB	722	-5.05dB	786	-1.85dB	850	1.35dB	914	4.55dB	978	7.75dB
531	-14.60dB	595	-11.40dB	659	-8.20dB	723	-5.00dB	787	-1.80dB	851	1.40dB	915	4.60dB	979	7.80dB
532	-14.55dB	596	-11.35dB	660	-8.15dB	724	-4.95dB	788	-1.75dB	852	1.45dB	916	4.65dB	980	7.85dB
533	-14.50dB	597	-11.30dB	661	-8.10dB	725	-4.90dB	789	-1.70dB	853	1.50dB	917	4.70dB	981	7.90dB
534	-14.45dB	598	-11.25dB	662	-8.05dB	726	-4.85dB	790	-1.65dB	854	1.55dB	918	4.75dB	982	7.95dB
535	-14.40dB	599	-11.20dB	663	-8.00dB	727	-4.80dB	791	-1.60dB	855	1.60dB	919	4.80dB	983	8.00dB
536	-14.35dB	600	-11.15dB	664	-7.95dB	728	-4.75dB	792	-1.55dB	856	1.65dB	920	4.85dB	984	8.05dB
537	-14.30dB	601	-11.10dB	665	-7.90dB	729	-4.70dB	793	-1.50dB	857	1.70dB	921	4.90dB	985	8.10dB
538	-14.25dB	602	-11.05dB	666	-7.85dB	730	-4.65dB	794	-1.45dB	858	1.75dB	922	4.95dB	986	8.15dB
539	-14.20dB	603	-11.00dB	667	-7.80dB	731	-4.60dB	795	-1.40dB	859	1.80dB	923	5.00dB	987	8.20dB
540	-14.15dB	604	-10.95dB	668	-7.75dB	732	-4.55dB	796	-1.35dB	860	1.85dB	924	5.05dB	988	8.25dB
541	-14.10dB	605	-10.90dB	669	-7.70dB	733	-4.50dB	797	-1.30dB	861	1.90dB	925	5.10dB	989	8.30dB
542	-14.05dB	606	-10.85dB	670	-7.65dB	734	-4.45dB	798	-1.25dB	862	1.95dB	926	5.15dB	990	8.35dB
543	-14.00dB	607	-10.80dB	671	-7.60dB	735	-4.40dB	799	-1.20dB	863	2.00dB	927	5.20dB	991	8.40dB
544	-13.95dB	608	-10.75dB	672	-7.55dB	736	-4.35dB	800	-1.15dB	864	2.05dB	928	5.25dB	992	8.45dB
545	-13.90dB	609	-10.70dB	673	-7.50dB	737	-4.30dB	801	-1.10dB	865	2.10dB	929	5.30dB	993	8.50dB
546	-13.85dB	610	-10.65dB	674	-7.45dB	738	-4.25dB	802	-1.05dB	866	2.15dB	930	5.35dB	994	8.55dB
547	-13.80dB	611	-10.60dB	675	-7.40dB	739	-4.20dB	803	-1.00dB	867	2.20dB	931	5.40dB	995	8.60dB
548	-13.75dB	612	-10.55dB	676	-7.35dB	740	-4.15dB	804	-0.95dB	868	2.25dB	932	5.45dB	996	8.65dB
549	-13.70dB	613	-10.50dB	677	-7.30dB	741	-4.10dB	805	-0.90dB	869	2.30dB	933	5.50dB	997	8.70dB
550	-13.65dB	614	-10.45dB	678	-7.25dB	742	-4.05dB	806	-0.85dB	870	2.35dB	934	5.55dB	998	8.75dB
551	-13.60dB	615	-10.40dB	679	-7.20dB	743	-4.00dB	807	-0.80dB	871	2.40dB	935	5.60dB	999	8.80dB
552	-13.55dB	616	-10.35dB	680	-7.15dB	744	-3.95dB	808	-0.75dB	872	2.45dB	936	5.65dB	1000	8.85dB
553	-13.50dB	617	-10.30dB	681	-7.10dB	745	-3.90dB	809	-0.70dB	873	2.50dB	937	5.70dB	1001	8.90dB
554	-13.45dB	618	-10.25dB	682	-7.05dB	746	-3.85dB	810	-0.65dB	874	2.55dB	938	5.75dB	1002	8.95dB
555	-13.40dB	619	-10.20dB	683	-7.00dB	747	-3.80dB	811	-0.60dB	875	2.60dB	939	5.80dB	1003	9.00dB
556	-13.35dB	620	-10.15dB	684	-6.95dB	748	-3.75dB	812	-0.55dB	876	2.65dB	940	5.85dB	1004	9.05dB
557	-13.30dB	621	-10.10dB	685	-6.90dB	749	-3.70dB	813	-0.50dB	877	2.70dB	941	5.90dB	1005	9.10dB
558	-13.25dB	622	-10.05dB	686	-6.85dB	750	-3.65dB	814	-0.45dB	878	2.75dB	942	5.95dB	1006	9.15dB
559	-13.20dB	623	-10.00dB	687	-6.80dB	751	-3.60dB	815	-0.40dB	879	2.80dB	943	6.00dB	1007	9.20dB
560	-13.15dB	624	-9.95dB	688	-6.75dB	752	-3.55dB	816	-0.35dB	880	2.85dB	944	6.05dB	1008	9.25dB
561	-13.10dB	625	-9.90dB	689	-6.70dB	753	-3.50dB	817	-0.30dB	881	2.90dB	945	6.10dB	1009	9.30dB
562	-13.05dB	626	-9.85dB	690	-6.65dB	754	-3.45dB	818	-0.25dB	882	2.95dB	946	6.15dB	1010	9.35dB
563	-13.00dB	627	-9.80dB	691	-6.60dB	755	-3.40dB	819	-0.20dB	883	3.00dB	947	6.20dB	1011	9.40dB
564	-12.95dB	628	-9.75dB	692	-6.55dB	756	-3.35dB	820	-0.15dB	884	3.05dB	948	6.25dB	1012	9.45dB
565	-12.90dB	629	-9.70dB	693	-6.50dB	757	-3.30dB	821	-0.10dB	885	3.10dB	949	6.30dB	1013	9.50dB
566	-12.85dB	630	-9.65dB	694	-6.45dB	758	-3.25dB	822	-0.05dB	886	3.15dB	950	6.35dB	1014	9.55dB
567	-12.80dB	631	-9.60dB	695	-6.40dB	759	-3.20dB	823	0.00dB	887	3.20dB	951	6.40dB	1015	9.60dB
568	-12.75dB	632	-9.55dB	696	-6.35dB	760	-3.15dB	824	0.05dB	888	3.25dB	952	6.45dB	1016	9.65dB
569	-12.70dB	633	-9.50dB	697	-6.30dB	761	-3.10dB	825	0.10dB	889	3.30dB	953	6.50dB	1017	9.70dB
570	-12.65dB	634	-9.45dB	698	-6.25dB	762	-3.05dB	826	0.15dB	890	3.35dB	954	6.55dB	1018	9.75dB
571	-12.60dB	635	-9.40dB	699	-6.20dB	763	-3.00dB	827	0.20dB	891	3.40dB	955	6.60dB	1019	9.80dB
572	-12.55dB	636	-9.35dB	700	-6.15dB	764	-2.95dB	828	0.25dB	892	3.45dB	956	6.65dB	1020	9.85dB
573	-12.50dB	637	-9.30dB	701	-6.10dB	765	-2.90dB	829	0.30dB	893	3.50dB	957	6.70dB	1021	9.90dB
574	-12.45dB	638	-9.25dB	702	-6.05dB	766	-2.85dB	830	0.35dB	894	3.55dB	958	6.75dB	1022	9.95dB
575	-12.40dB	639	-9.20dB	703	-6.00dB	767	-2.80dB	831	0.40dB	895	3.60dB	959	6.80dB	1023	10.00dB

## 6.2. Other parameters (MTX3, MTX5-D)

## 6.2.1. INPUT PATCH

## MTX3

Value	Displayed value	
0	NONE	
1	Input	1
2		2
3		3
4		4
5		5
6		6
7		7
8		8
9	ST IN	1L
10		1R
11		2L
12		2R
13	SD IN	L
14		R
15	YDIF	1
16		2
17		3
18		4
19		5
20		6
21		7
22		8
23		9
24		10
25		11
26		12
27		13
28		14
29		15
30		16

## MTX5-D

Value	Displayed value		Value	Displayed value	
0	NONE		31	Dante	
1	Input	1	32		2
2		2	33		3
3		3	34		4
4		4	35		5
5		5	36		6
6		6	37		7
7		7	38		8
8		8	39		9
9	ST IN	1L	40		10
10		1R	41		11
11		2L	42		12
12		2R	43		13
13	SD IN	L	44		14
14		R	45		15
15	YDIF	1	46		16
16		2	47	SLOT	1
17		3	48		2
18		4	49		3
19		5	50		4
20		6	51		5
21		7	52		6
22		8	53		7
23		9	54		8
24		10	55		9
25		11	56		10
26		12	57		11
27		13	58		12
28		14	59		13
29		15	60		14
30		16	61		15
			62		16

## 6.2.2. INPUT CHANNEL

## 6.2.2.1. 3BAND EQ

Q

Value	Displayed value	Value	Displayed value	Value	Displayed value	Value	Displayed value
0	0.1	29	0.53	58	2.8	87	15.0
1	0.105	30	0.56	59	3.0	88	16.0
2	0.11	31	0.6	60	3.2	89	17.0
3	0.12	32	0.63	61	3.3	90	18.0
4	0.125	33	0.67	62	3.5	91	19.0
5	0.13	34	0.7	63	3.8	92	20.0
6	0.14	35	0.75	64	4.0	93	21.0
7	0.15	36	0.8	65	4.2	94	22.0
8	0.16	37	0.85	66	4.5	95	24.0
9	0.17	38	0.9	67	4.7	96	25.0
10	0.18	39	0.95	68	5.0	97	27.0
11	0.19	40	1.0	69	5.3	98	28.0
12	0.2	41	1.05	70	5.6	99	30.0
13	0.21	42	1.1	71	6.0	100	32.0
14	0.22	43	1.2	72	6.3	101	34.0
15	0.24	44	1.25	73	6.7	102	35.0
16	0.25	45	1.3	74	7.0	103	38.0
17	0.27	46	1.4	75	7.5	104	40.0
18	0.28	47	1.5	76	8	105	42.0
19	0.3	48	1.6	77	8.4	106	45.0
20	0.32	49	1.7	78	9.0	107	47.0
21	0.33	50	1.8	79	9.5	108	50.0
22	0.35	51	1.9	80	10.0	109	53.0
23	0.38	52	2.0	81	10.5	110	56.0
24	0.4	53	2.1	82	11.0	111	60.0
25	0.42	54	2.2	83	12.0	112	63.0
26	0.45	55	2.4	84	12.5		
27	0.47	56	2.5	85	13.0		
28	0.5	57	2.7	86	14.0		

Type

Value	Displayed value
0	PEQ
1	L.SHELF 6dB/Oct
2	L.SHELF 12dB/Oct
3	H.SHELF 6dB/Oct
4	H.SHELF 12dB/Oct
5	HPF
6	LPF



## 6.2.2.2. GATE

## Decay

Value	Displayed value	Value	Displayed value	Value	Displayed value	Value	Displayed value
0	3msec	43	189msec	86	1.23sec	129	7.68sec
1	7msec	44	196msec	87	1.28sec	130	8.11sec
2	10msec	45	203msec	88	1.34sec	131	8.54sec
3	13msec	46	209msec	89	1.39sec	132	8.97sec
4	17msec	47	219msec	90	1.44sec	133	9.39sec
5	22msec	48	229msec	91	1.50sec	134	9.82sec
6	25msec	49	243msec	92	1.55sec	135	10.2sec
7	28msec	50	256msec	93	1.60sec	136	10.7sec
8	32msec	51	269msec	94	1.66sec	137	11.1sec
9	35msec	52	283msec	95	1.74sec	138	11.5sec
10	38msec	53	296msec	96	1.82sec	139	12.0sec
11	42msec	54	309msec	97	1.92sec	140	12.4sec
12	45msec	55	323msec	98	2.03sec	141	12.8sec
13	48msec	56	336msec	99	2.14sec	142	13.2sec
14	52msec	57	349msec	100	2.24sec	143	13.9sec
15	55msec	58	363msec	101	2.35sec	144	14.5sec
16	59msec	59	376msec	102	2.46sec	145	15.4sec
17	63msec	60	390msec	103	2.56sec	146	16.2sec
18	66msec	61	403msec	104	2.67sec	147	17.1sec
19	69msec	62	416msec	105	2.78sec	148	17.9sec
20	73msec	63	436msec	106	2.89sec	149	18.8sec
21	76msec	64	456msec	107	2.99sec	150	19.6sec
22	79msec	65	483msec	108	3.10sec	151	20.5sec
23	83msec	66	509msec	109	3.21sec	152	21.4sec
24	86msec	67	536msec	110	3.31sec	153	22.2sec
25	89msec	68	563msec	111	3.47sec	154	23.1sec
26	93msec	69	589msec	112	3.63sec	155	23.9sec
27	96msec	70	616msec	113	3.84sec	156	24.8sec
28	99msec	71	643msec	114	4.06sec	157	25.6sec
29	103msec	72	670msec	115	4.27sec	158	26.5sec
30	106msec	73	696msec	116	4.48sec	159	27.7sec
31	111msec	74	723msec	117	4.70sec	160	29.0sec
32	116msec	75	750msec	118	4.91sec	161	30.7sec
33	123msec	76	777msec	119	5.13sec	162	32.4sec
34	129msec	77	803msec	120	5.34sec	163	34.1sec
35	136msec	78	830msec	121	5.55sec	164	35.9sec
36	143msec	79	870msec	122	5.77sec	165	37.6sec
37	149msec	80	909msec	123	5.98sec	166	39.3sec
38	156msec	81	963msec	124	6.20sec	167	41.0sec
39	163msec	82	1.02sec	125	6.41sec	168	42.7sec
40	169msec	83	1.07sec	126	6.62sec		
41	176msec	84	1.12sec	127	6.94sec		
42	183msec	85	1.18sec	128	7.26sec		

## Hold

Value	Displayed value	Value	Displayed value	Value	Displayed value	Value	Displayed value
0	0.02msec	54	2.01msec	108	20.2msec	162	211msec
1	0.04msec	55	2.10msec	109	20.9msec	163	222msec
2	0.07msec	56	2.19msec	110	21.6msec	164	233msec
3	0.09msec	57	2.28msec	111	22.6msec	165	245msec
4	0.11msec	58	2.36msec	112	23.6msec	166	256msec
5	0.14msec	59	2.45msec	113	25.0msec	167	267msec
6	0.16msec	60	2.54msec	114	26.4msec	168	278msec
7	0.18msec	61	2.62msec	115	27.8msec	169	289msec
8	0.21msec	62	2.71msec	116	29.2msec	170	300msec
9	0.23msec	63	2.84msec	117	30.6msec	171	311msec
10	0.25msec	64	2.97msec	118	32.0msec	172	323msec
11	0.27msec	65	3.14msec	119	33.4msec	173	334msec
12	0.29msec	66	3.32msec	120	34.8msec	174	345msec
13	0.31msec	67	3.49msec	121	36.2msec	175	361msec
17	0.41msec	71	4.19msec	125	41.7msec	179	445msec
18	0.43msec	72	4.36msec	126	43.1msec	180	467msec
19	0.45msec	73	4.53msec	127	45.2msec	181	489msec
20	0.47msec	74	4.71msec	128	47.2msec	182	511msec
21	0.49msec	75	4.88msec	129	50.0msec	183	534msec
22	0.52msec	76	5.06msec	130	52.8msec	184	556msec
23	0.54msec	77	5.23msec	131	55.6msec	185	578msec
24	0.56msec	78	5.40msec	132	58.4msec	186	601msec
25	0.58msec	79	5.66msec	133	61.2msec	187	623msec
26	0.60msec	80	5.92msec	134	63.9msec	188	645msec
27	0.62msec	81	6.27msec	135	66.7msec	189	667msec
28	0.65msec	82	6.61msec	136	69.5msec	190	690msec
29	0.67msec	83	6.96msec	137	72.3msec	191	723msec
30	0.69msec	84	7.31msec	138	75.1msec	192	756msec
31	0.72msec	85	7.66msec	139	77.9msec	193	800msec
32	0.75msec	86	8.01msec	140	80.7msec	194	845msec
33	0.80msec	87	8.36msec	141	83.4msec	195	889msec
34	0.84msec	88	8.70msec	142	86.2msec	196	934msec
35	0.88msec	89	9.05msec	143	90.3msec	197	978msec
36	0.93msec	90	9.40msec	144	94.5msec	198	1.02sec
37	0.97msec	91	9.75msec	145	100msec	199	1.07sec
38	1.02msec	92	10.1msec	146	106msec	200	1.11sec
39	1.06msec	93	10.4msec	147	111msec	201	1.16sec
40	1.10msec	94	10.8msec	148	117msec	202	1.20sec
41	1.15msec	95	11.3msec	149	122msec	203	1.25sec
42	1.19msec	96	11.8msec	150	128msec	204	1.29sec
43	1.23msec	97	12.5msec	151	133msec	205	1.33sec
44	1.28msec	98	13.2msec	152	139msec	206	1.38sec
45	1.32msec	99	13.9msec	153	145msec	207	1.45sec
46	1.36msec	100	14.6msec	154	150msec	208	1.51sec
47	1.43msec	101	15.3msec	155	156msec	209	1.60sec
48	1.49msec	102	16.0msec	156	161msec	210	1.69sec
49	1.58msec	103	16.7msec	157	167msec	211	1.78sec
50	1.67msec	104	17.4msec	158	172msec	212	1.87sec
51	1.75msec	105	18.1msec	159	181msec	213	1.96sec
52	1.84msec	106	18.8msec	160	189msec		
53	1.93msec	107	19.5msec	161	200msec		

## 6.2.2.3. COMPRESSOR

## Ratio

Value	Displayed value	Value	Displayed value	Value	Displayed value	Value	Displayed value
10	1.0:1	58	5.8:1	106	10.6:1	154	15.4:1
11	1.1:1	59	5.9:1	107	10.7:1	155	15.5:1
12	1.2:1	60	6.0:1	108	10.8:1	156	15.6:1
13	1.3:1	61	6.1:1	109	10.9:1	157	15.7:1
14	1.4:1	62	6.2:1	110	11.0:1	158	15.8:1
15	1.5:1	63	6.3:1	111	11.1:1	159	15.9:1
16	1.6:1	64	6.4:1	112	11.2:1	160	16.0:1
17	1.7:1	65	6.5:1	113	11.3:1	161	16.1:1
18	1.8:1	66	6.6:1	114	11.4:1	162	16.2:1
19	1.9:1	67	6.7:1	115	11.5:1	163	16.3:1
20	2.0:1	68	6.8:1	116	11.6:1	164	16.4:1
21	2.1:1	69	6.9:1	117	11.7:1	165	16.5:1
22	2.2:1	70	7.0:1	118	11.8:1	166	16.6:1
23	2.3:1	71	7.1:1	119	11.9:1	167	16.7:1
24	2.4:1	72	7.2:1	120	12.0:1	168	16.8:1
25	2.5:1	73	7.3:1	121	12.1:1	169	16.9:1
26	2.6:1	74	7.4:1	122	12.2:1	170	17.0:1
27	2.7:1	75	7.5:1	123	12.3:1	171	17.1:1
28	2.8:1	76	7.6:1	124	12.4:1	172	17.2:1
29	2.9:1	77	7.7:1	125	12.5:1	173	17.3:1
30	3.0:1	78	7.8:1	126	12.6:1	174	17.4:1
31	3.1:1	79	7.9:1	127	12.7:1	175	17.5:1
32	3.2:1	80	8.0:1	128	12.8:1	176	17.6:1
33	3.3:1	81	8.1:1	129	12.9:1	177	17.7:1
34	3.4:1	82	8.2:1	130	13.0:1	178	17.8:1
35	3.5:1	83	8.3:1	131	13.1:1	179	17.9:1
36	3.6:1	84	8.4:1	132	13.2:1	180	18.0:1
37	3.7:1	85	8.5:1	133	13.3:1	181	18.1:1
38	3.8:1	86	8.6:1	134	13.4:1	182	18.2:1
39	3.9:1	87	8.7:1	135	13.5:1	183	18.3:1
40	4.0:1	88	8.8:1	136	13.6:1	184	18.4:1
41	4.1:1	89	8.9:1	137	13.7:1	185	18.5:1
42	4.2:1	90	9.0:1	138	13.8:1	186	18.6:1
43	4.3:1	91	9.1:1	139	13.9:1	187	18.7:1
44	4.4:1	92	9.2:1	140	14.0:1	188	18.8:1
45	4.5:1	93	9.3:1	141	14.1:1	189	18.9:1
46	4.6:1	94	9.4:1	142	14.2:1	190	19.0:1
47	4.7:1	95	9.5:1	143	14.3:1	191	19.1:1
48	4.8:1	96	9.6:1	144	14.4:1	192	19.2:1
49	4.9:1	97	9.7:1	145	14.5:1	193	19.3:1
50	5.0:1	98	9.8:1	146	14.6:1	194	19.4:1
51	5.1:1	99	9.9:1	147	14.7:1	195	19.5:1
52	5.2:1	100	10.0:1	148	14.8:1	196	19.6:1
53	5.3:1	101	10.1:1	149	14.9:1	197	19.7:1
54	5.4:1	102	10.2:1	150	15.0:1	198	19.8:1
55	5.5:1	103	10.3:1	151	15.1:1	199	19.9:1
56	5.6:1	104	10.4:1	152	15.2:1	200	20.0:1
57	5.7:1	105	10.5:1	153	15.3:1	201	∞:1

## Knee

Value	Displayed value
0	HARD
1	1
2	2
3	3
4	4
5	5

## Release

Same as 6.2.2.2. Gate  
/ Decay

## 6.2.2.4. AGC

## Response Time

Value	Displayed value	Value	Displayed value
0	100msec	30	2.20sec
1	150msec	31	2.30sec
2	200msec	32	2.40sec
3	250msec	33	2.50sec
4	300msec	34	2.60sec
5	350msec	35	2.70sec
6	400msec	36	2.80sec
7	450msec	37	2.90sec
8	500msec	38	3.00sec
9	550msec	39	3.10sec
10	600msec	40	3.20sec
12	700msec	42	3.40sec
13	750msec	43	3.50sec
14	800msec	44	3.60sec
15	850msec	45	3.70sec
16	900msec	46	3.80sec
17	950msec	47	3.90sec
18	1.00sec	48	4.00sec
19	1.10sec	49	4.10sec
20	1.20sec	50	4.20sec
21	1.30sec	51	4.30sec
22	1.40sec	52	4.40sec
23	1.50sec	53	4.50sec
24	1.60sec	54	4.60sec
25	1.70sec	55	4.70sec
26	1.80sec	56	4.80sec
27	1.90sec	57	4.90sec
28	2.00sec	58	5.00sec
29	2.10sec		

## 6.2.2.5. DUGAN AUTOMIXER

## Mode

Value	Displayed value
0	Mute
1	Man
2	Auto

## Weight

Value	Displayed value
-3000	-100.0
-2950	-29.5
-2900	-29.0
-2850	-28.5
:	:
:	:
-100	-1.0
-50	-0.5
0	0.0
50	0.5
100	1.0
:	:
:	:
1350	13.5
1400	14.0
1450	14.5
1500	15.0

## Group

## MTX3

Value	Displayed value
0	a
1	b

## MTX5-D

Value	Displayed value
0	a
1	b
2	c
3	d

## 6.2.3. EFFECT

## Type

Value	Displayed value
0	Reverb Hall
1	Reverb Stage1
2	Karaoke Echo
3	Vocal Echo

## RevHallTime/RevStageTime

Value	Time(sec)	Value	Time(sec)
0	0.3	29	3.2
1	0.4	30	3.3
2	0.5	31	3.4
3	0.6	32	3.5
4	0.7	33	3.6
5	0.8	34	3.7
6	0.9	35	3.8
7	1.0	36	3.9
8	1.1	37	4.0
9	1.2	38	4.1
10	1.3	39	4.2
11	1.4	40	4.3
12	1.5	41	4.4
13	1.6	42	4.5
14	1.7	43	4.6
15	1.8	44	4.7
16	1.9	45	4.8
17	2.0	46	4.9
18	2.1	47	5.0
19	2.2	48	5.5
20	2.3	49	6.0
21	2.4	50	6.5
22	2.5	51	7.0
23	2.6	52	7.5
24	2.7	53	8.0
25	2.8	54	8.5
26	2.9	55	9.0
27	3.0	56	9.5
28	3.1	57	10.0

## KaraokeTime/VocalTime

Value	Time (msec)	Value	Time (msec)	Value	Time (msec)
0	0.4	43	135.5	86	270.9
1	3.2	44	138.6	87	274.0
2	6.4	45	141.8	88	277.2
3	9.5	46	144.9	89	280.3
4	12.7	47	148.1	90	283.5
5	15.8	48	151.2	91	286.6
6	19.0	49	154.4	92	289.8
7	22.1	50	157.5	93	292.9
8	25.3	51	160.7	94	296.1
9	28.4	52	163.8	95	299.2
10	31.6	53	167.0	96	302.4
11	34.7	54	170.1	97	305.5
12	37.9	55	173.3	98	308.7
13	41.0	56	176.4	99	311.8
14	44.2	57	179.6	100	315.0
15	47.3	58	182.7	101	318.1
16	50.5	59	185.9	102	321.3
17	53.6	60	189.0	103	324.4
18	56.8	61	192.2	104	327.6
19	59.9	62	195.3	105	330.7
20	63.1	63	198.5	106	333.9
21	66.2	64	201.6	107	337.0
22	69.4	65	204.8	108	340.2
23	72.5	66	207.9	109	343.3
24	75.7	67	211.1	110	346.5
25	78.8	68	214.2	111	349.6
26	82.0	69	217.4	112	352.8
27	85.1	70	220.5	113	355.9
28	88.3	71	223.7	114	359.1
29	91.4	72	226.8	115	362.2
30	94.6	73	230.0	116	365.4
31	97.7	74	233.1	117	368.5
32	100.9	75	236.3	118	371.7
33	104.0	76	239.4	119	374.8
34	107.2	77	242.6	120	378.0
35	110.3	78	245.7	121	381.1
36	113.5	79	248.9	122	384.3
37	116.6	80	252.0	123	387.4
38	119.8	81	255.2	124	390.6
39	122.9	82	258.3	125	393.7
40	126.1	83	261.5	126	396.9
41	129.2	84	264.6	127	400.0
42	132.4	85	267.7		

## 6.2.4. ZONE

## 6.2.4.1. PAGING (MTX5-D only)

## Paging Source

## MTX5-D

Value	Displayed value	Value	Displayed value
0	NONE	31	YDIF IN 1
1	CH1	32	YDIF IN 2
2	CH2	33	YDIF IN 3
3	CH3	34	YDIF IN 4
4	CH4	35	YDIF IN 5
5	CH5	36	YDIF IN 6
6	CH6	37	YDIF IN 7
7	CH7	38	YDIF IN 8
8	CH8	39	YDIF IN 9
9	CH9	40	YDIF IN 10
10	CH10	41	YDIF IN 11
11	CH11	42	YDIF IN 12
12	CH12	43	YDIF IN 13
13	CH13	44	YDIF IN 14
14	CH14	45	YDIF IN 15
15	CH15	46	YDIF IN 16
16	CH16	47	ANC BUS1
17	STIN1L	48	ANC BUS2
18	STIN1R		
19	STIN2L		
20	STIN2R		
21	STIN3L		
22	STIN3R		
23	CH17		
24	CH18		
25	CH19		
26	CH20		
27	CH21		
28	CH22		
29	CH23		
30	CH24		

## Range

## MTX5-D

Value	Displayed value
-601	-∞
-600	-60.0dB
-599	-59.9dB
:	:
:	:
-2	-0.2dB
-1	-0.1dB
0	-0.0dB

## 6.2.4.2. 1st/2nd PRIORITY

## 1st/2nd Priority Ducker Priority Source

## MTX3

Value	Displayed value
0	NONE
1	CH1
2	CH2
3	CH3
4	CH4
5	CH5
6	CH6
7	CH7
8	CH8
9	STIN1L
10	STIN1R
11	STIN2L
12	STIN2R
13	STIN3L
14	STIN3R
15	CH9
16	CH10
17	CH11
18	CH12
19	CH13
20	CH14
21	CH15
22	CH16
23	YDIF IN 1
24	YDIF IN 2
25	YDIF IN 3
26	YDIF IN 4
27	YDIF IN 5
28	YDIF IN 6
29	YDIF IN 7
30	YDIF IN 8
31	YDIF IN 9
32	YDIF IN 10
33	YDIF IN 11
34	YDIF IN 12
35	YDIF IN 13
36	YDIF IN 14
37	YDIF IN 15
38	YDIF IN 16
39	ANC BUS1
40	ANC BUS2

## MTX5-D

Value	Displayed value	Value	Displayed value
0	NONE	31	YDIF IN 1
1	CH1	32	YDIF IN 2
2	CH2	33	YDIF IN 3
3	CH3	34	YDIF IN 4
4	CH4	35	YDIF IN 5
5	CH5	36	YDIF IN 6
6	CH6	37	YDIF IN 7
7	CH7	38	YDIF IN 8
8	CH8	39	YDIF IN 9
9	CH9	40	YDIF IN 10
10	CH10	41	YDIF IN 11
11	CH11	42	YDIF IN 12
12	CH12	43	YDIF IN 13
13	CH13	44	YDIF IN 14
14	CH14	45	YDIF IN 15
15	CH15	46	YDIF IN 16
16	CH16	47	ANC BUS1
17	STIN1L	48	ANC BUS2
18	STIN1R		
19	STIN2L		
20	STIN2R		
21	STIN3L		
22	STIN3R		
23	CH17		
24	CH18		
25	CH19		
26	CH20		
27	CH21		
28	CH22		
29	CH23		
30	CH24		

**Release**

Same as 6.2.2.2. Gate / Decay

**Hold**

Same as 6.2.2.2. Gate / Hold



**6.2.4.3. ANC****ANC Source**

Same as 6.2.4.2. 1st/2nd PRIORITY / 1st/2nd Priority Ducker Priority Source

**ANC Ratio**

Value	Displayed value
5	0.5:1
6	0.6:1
7	0.7:1
8	0.8:1
9	0.9:1
10	1.0:1
11	1.1:1
12	1.2:1
13	1.3:1
14	1.4:1
15	1.5:1
16	1.6:1
17	1.7:1
18	1.8:1
19	1.9:1
20	2.0:1

**6.2.5. ROUTER****6.2.5.1. ROUTER****MTX3**

Value	Displayed value
0	NONE
1	ZONE 1
2	ZONE 2
3	ZONE 3
4	ZONE 4
5	ZONE 5
6	ZONE 6
7	ZONE 7
8	ZONE 8
9	YDIF IN 1
10	YDIF IN 2
11	YDIF IN 3
12	YDIF IN 4
13	YDIF IN 5
14	YDIF IN 6
15	YDIF IN 7
16	YDIF IN 8
17	YDIF IN 9
18	YDIF IN 10
19	YDIF IN 11
20	YDIF IN 12
21	YDIF IN 13
22	YDIF IN 14
23	YDIF IN 15
24	YDIF IN 16

**MTX5-D**

Value	Displayed value	Value	Displayed value
0	NONE	17	YDIF IN 1
1	ZONE 1	18	YDIF IN 2
2	ZONE 2	19	YDIF IN 3
3	ZONE 3	20	YDIF IN 4
4	ZONE 4	21	YDIF IN 5
5	ZONE 5	22	YDIF IN 6
6	ZONE 6	23	YDIF IN 7
7	ZONE 7	24	YDIF IN 8
8	ZONE 8	25	YDIF IN 9
9	ZONE 9	26	YDIF IN 10
10	ZONE 10	27	YDIF IN 11
11	ZONE 11	28	YDIF IN 12
12	ZONE 12	29	YDIF IN 13
13	ZONE 13	30	YDIF IN 14
14	ZONE 14	31	YDIF IN 15
15	ZONE 15	32	YDIF IN 16
16	ZONE 16		

**6.2.5.2. OSCILLATOR****Waveform**

Value	Displayed value
0	SINE 100Hz
1	SINE 1kHz
2	SINE 10kHz
3	Pink
4	Burst
5	VARI

**6.2.6. OUTPUT CHANNEL****6.2.6.1. 4BAND EQ****Q**

Same as 6.2.2.1. 3BAND EQ / Q

**Type**

Same as 6.2.2.1. 3BAND EQ / Type

**B/W(Q)**

Value	Oct.	Value	Oct.	Value	Oct.	Value	Oct.
0	6.672	29	2.426	58	0.513	87	0.096
1	6.534	30	2.319	59	0.479	88	0.090
2	6.403	31	2.189	60	0.449	89	0.085
3	6.158	32	2.100	61	0.436	90	0.080
4	6.044	33	1.991	62	0.411	91	0.076
5	5.934	34	1.917	63	0.379	92	0.072
6	5.728	35	1.804	64	0.360	93	0.069
7	5.537	36	1.703	65	0.343	94	0.066
8	5.359	37	1.612	66	0.320	95	0.060
9	5.193	38	1.530	67	0.306	96	0.058
10	5.037	39	1.456	68	0.288	97	0.053
11	4.891	40	1.388	69	0.272	98	0.052
12	4.753	41	1.327	70	0.257	99	0.048
13	4.623	42	1.270	71	0.240	100	0.045
14	4.499	43	1.170	72	0.229	101	0.042
15	4.271	44	1.125	73	0.215	102	0.041
16	4.165	45	1.084	74	0.206	103	0.038
17	3.968	46	1.010	75	0.192	104	0.036
18	3.876	47	0.945	76	0.180	105	0.034
19	3.704	48	0.888	77	0.172	106	0.032
20	3.546	49	0.837	78	0.160	107	0.031
21	3.472	50	0.792	79	0.152	108	0.029
22	3.331	51	0.751	80	0.144	109	0.027
23	3.139	52	0.714	81	0.137	110	0.026
24	3.023	53	0.681	82	0.131	111	0.024
25	2.914	54	0.650	83	0.120	112	0.023
26	2.764	55	0.597	84	0.115		
27	2.671	56	0.573	85	0.111		
28	2.543	57	0.531	86	0.103		

**6.2.6.2. SPEAKER PROCESSOR****HPF/LPF Type**

Value	Displayed value
0	Thru
1	6dB/Oct
2	12dB/Oct AdjustGc
3	12dB/Oct Butwrth
4	12dB/Oct Bessel
5	12dB/Oct Linkwitz
6	18dB/Oct AdjustGc
7	18dB/Oct Butwrth
8	18dB/Oct Bessel
9	24dB/Oct AdjustGc
10	24dB/Oct Butwrth
11	24dB/Oct Bessel
12	24dB/Oct Linkwitz
13	32dB/Oct AdjustGc
14	32dB/Oct Butwrth
15	32dB/Oct Bessel
16	48dB/Oct AdjustGc
17	48dB/Oct Butwrth
18	48dB/Oct Bessel
19	48dB/Oct Linkwitz

**PEQ Type**

Value	Displayed value
0	PEQ
1	L.SHELF 6dB/Oct
2	L.SHELF 12dB/Oct
3	H.SHELF 6dB/Oct
4	H.SHELF 12dB/Oct
5	HPF
6	LPF
7	APF 1st
8	APF 2nd
9	Horn EQ

**PEQ Q**

Same as 6.2.2.1. 3BAND EQ / Q

**B/W(Q)**

Same as 6.2.6.1. 4BAND EQ / B/W(Q)

**Limiter Release**

Same as 6.2.2.2. GATE / Decay

**Limiter Attack/Release Mode**

Value	Displayed value
0	Fast
1	Mid
2	Slow
3	Manual

**6.2.7. OUTPUT PATCH****6.2.7.1. OUTPUT PATCH****MTX3**

Value	Displayed value
0	NONE
1	OUTPUT CH1
2	OUTPUT CH2
3	OUTPUT CH3
4	OUTPUT CH4
5	OUTPUT CH5
6	OUTPUT CH6
7	OUTPUT CH7
8	OUTPUT CH8

**MTX5-D**

Value	Displayed value
0	NONE
1	OUTPUT CH1
2	OUTPUT CH2
3	OUTPUT CH3
4	OUTPUT CH4
5	OUTPUT CH5
6	OUTPUT CH6
7	OUTPUT CH7
8	OUTPUT CH8
9	OUTPUT CH9
10	OUTPUT CH10
11	OUTPUT CH11
12	OUTPUT CH12
13	OUTPUT CH13
14	OUTPUT CH14
15	OUTPUT CH15
16	OUTPUT CH16

## 6.2.7.2. YDIF PATCH

## MTX3

Value	Displayed value
0	NONE
1	CH1
2	CH2
3	CH3
4	CH4
5	CH5
6	CH6
7	CH7
8	CH8
9	STIN1L
10	STIN1R
11	STIN2L
12	STIN2R
13	STIN3L
14	STIN3R
15	ZONE 1
16	ZONE 2
17	ZONE 3
18	ZONE 4
19	ZONE 5
20	ZONE 6
21	ZONE 7
22	ZONE 8
23	THRU 1
24	THRU 2
25	THRU 3
26	THRU 4
27	THRU 5
28	THRU 6
29	THRU 7
30	THRU 8
31	THRU 9
32	THRU 10
33	THRU 11
34	THRU 12
35	THRU 13
36	THRU 14
37	THRU 15
38	THRU 16
39	OUTPUT CH1
40	OUTPUT CH2
41	OUTPUT CH3
42	OUTPUT CH4
43	OUTPUT CH5
44	OUTPUT CH6
45	OUTPUT CH7
46	OUTPUT CH8

## MTX5-D

Value	Displayed value	Value	Displayed value
0	NONE	39	THRU 1
1	CH1	40	THRU 2
2	CH2	41	THRU 3
3	CH3	42	THRU 4
4	CH4	43	THRU 5
5	CH5	44	THRU 6
6	CH6	45	THRU 7
7	CH7	46	THRU 8
8	CH8	47	THRU 9
9	CH9	48	THRU 10
10	CH10	49	THRU 11
11	CH11	50	THRU 12
12	CH12	51	THRU 13
13	CH13	52	THRU 14
14	CH14	53	THRU 15
15	CH15	54	THRU 16
16	CH16	55	OUTPUT CH1
17	STIN1L	56	OUTPUT CH2
18	STIN1R	57	OUTPUT CH3
19	STIN2L	58	OUTPUT CH4
20	STIN2R	59	OUTPUT CH5
21	STIN3L	60	OUTPUT CH6
22	STIN3R	61	OUTPUT CH7
23	ZONE 1	62	OUTPUT CH8
24	ZONE 2	63	OUTPUT CH9
25	ZONE 3	64	OUTPUT CH10
26	ZONE 4	65	OUTPUT CH11
27	ZONE 5	66	OUTPUT CH12
28	ZONE 6	67	OUTPUT CH13
29	ZONE 7	68	OUTPUT CH14
30	ZONE 8	69	OUTPUT CH15
31	ZONE 9	70	OUTPUT CH16
32	ZONE 10		
33	ZONE 11		
34	ZONE 12		
35	ZONE 13		
36	ZONE 14		
37	ZONE 15		
38	ZONE 16		

## \* About MTX3 23 to 38 (THRU1 to 16), MTX5-D 39 to 54 (THRU1 to 16)

Note the difference in behavior between the MTX Editor and MTX external control protocol. On the MTX editor, when you press THRU, one of the 16 YDIF channels is selected automatically.

However, with the MTX external control protocol, you can select the channel freely.

## 6.2.8. MY4-AEC

## 6.2.8.1. MY4-AEC Input Patch

Near-end Mic / From Far-end

Value	PORT	Value	PORT
0	NONE	47	SLOT
1	Input	48	1
2		49	2
3		50	3
4		51	4
5		52	Output
6		53	1
7		54	2
8		55	3
9	ST IN	56	4
10		57	5
11		58	6
12		59	7
13	SD IN	60	8
14		61	9
15	YDIF	62	10
16		63	11
17		64	12
18		65	13
19		66	14
20			15
21			16
22			
23			
24			
25			
26			
27			
28			
29			
30			
31	DANTE		
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			
42			
43			
44			
45			
46			

## 6.2.8.2. MY4-AEC FBS

Width

Value	Displayed value
0	1/10oct
1	1/60oct
2	1/93oct

Depth

Value	Displayed value
0	-6dB
1	-12dB
2	-18dB

### 6.3. Other parameters (MRX7-D)

#### 6.3.1. Ambient Noise Compensator

**Ratio**

Same as 6.2.4.3. ANC ANC Ratio in "Other Parameters (MTX3,MTX5-D)"

#### 6.3.2. Auto Gain Control

**Response Type**

Same as 6.2.2.4. AGC Response Time in "Other Parameters (MTX3,MTX5-D)"

#### 6.3.3. Combiner

##### 6.3.3.1. Room Combiner

**Source**

Value	Displayed value
0	BGM1
1	BGM2
2	BGM3
3	BGM4

##### 6.3.3.2. Room Combiner plus Automixer

**Source**

Same as 6.3.3.1. Room Combiner Source in "Other Parameters (MTX3,MTX5-D)"

**Mode**

Same as 6.2.2.5. DUGAN AUTOMIXER Mode in "Other Parameters (MTX3,MTX5-D)"

**Weight**

Same as 6.2.2.5. DUGAN AUTOMIXER Weight in "Other Parameters (MTX3,MTX5-D)"

#### 6.3.4. Dynamics

##### 6.3.4.1. Compressor

**Ratio**

Same as 6.2.2.3. COMPRESSOR Ratio in "Other Parameters (MTX3,MTX5-D)"

**Knee**

Same as 6.2.2.3. COMPRESSOR Knee in "Other Parameters (MTX3,MTX5-D)"

**Release**

Same as 6.2.2.3. GATE Decay in "Other Parameters (MTX3,MTX5-D)"

**Keyin(Mono)**

Value	Displayed value
0	SELF
1	KEYIN

**Keyin(Stereo)**

Value	Displayed value
2	L
3	R
4	LR BOTH
5	KEYIN

**6.3.4.2. Gate/Ducking****Release**

Same as 6.2.2.3. GATE Decay in "Other Parameters (MTX3,MTX5-D)"

**Decay**

Same as 6.2.2.3. GATE Decay in "Other Parameters (MTX3,MTX5-D)"

**Hold**

Same as 6.2.2.3. GATE Hold in "Other Parameters (MTX3,MTX5-D)"

**Keyin(Mono)**

Same as 6.3.4.1. Compressor Keyin(Mono)

**Keyin(Stereo)**

Same as 6.3.4.1. Compressor Keyin(Stereo)

**6.3.4.3. Limiter****Release**

Same as 6.2.2.3. GATE Decay in "Other Parameters (MTX3,MTX5-D)"

**Keyin(Mono)**

Same as 6.3.4.1. Compressor Keyin(Mono)

**Keyin(Stereo)**

Same as 6.3.4.1. Compressor Keyin(Stereo)

**6.3.4.4. Paging Ducker****Range**

Same as 6.2.4.1. PAGING Range in "Other Parameters (MTX3,MTX5-D)"

## 6.3.5. Effect

## Type

Same as 6.2.3. EFFECT Type in "Other Parameters (MTX3,MTX5-D)"

## RevHallTime/RevStageTime

Same as 6.2.3. EFFECT RevHallTime/RevStageTime in "Other Parameters (MTX3,MTX5-D)"

## KaraokeTime/VocalTime

Value	Time(msec)	Value	Time(msec)	Value	Time(msec)	Value	Time(msec)	Value	Time(msec)
0	0.4	52	163.8	104	327.6	156	535.9	208	779.7
1	3.2	53	167.0	105	330.7	157	540.6	209	784.4
2	6.4	54	170.1	106	333.9	158	545.3	210	789.1
3	9.5	55	173.3	107	337.0	159	550.0	211	793.8
4	12.7	56	176.4	108	340.2	160	554.7	212	798.4
5	15.8	57	179.6	109	343.3	161	559.4	213	803.1
6	19.0	58	182.7	110	346.5	162	564.1	214	807.8
7	22.1	59	185.9	111	349.6	163	568.8	215	812.5
8	25.3	60	189.0	112	352.8	164	573.4	216	817.2
9	28.4	61	192.2	113	355.9	165	578.1	217	821.9
10	31.6	62	195.3	114	359.1	166	582.8	218	826.6
11	34.7	63	198.5	115	362.2	167	587.5	219	831.3
12	37.9	64	201.6	116	365.4	168	592.2	220	835.9
13	41.0	65	204.8	117	368.5	169	596.9	221	840.6
14	44.2	66	207.9	118	371.7	170	601.6	222	845.3
15	47.3	67	211.1	119	374.8	171	606.3	223	850.0
16	50.5	68	214.2	120	378.0	172	610.9	224	854.7
17	53.6	69	217.4	121	381.1	173	615.6	225	859.4
18	56.8	70	220.5	122	384.3	174	620.3	226	864.1
19	59.9	71	223.7	123	387.4	175	625.0	227	868.8
20	63.1	72	226.8	124	390.6	176	629.7	228	873.4
21	66.2	73	230.0	125	393.7	177	634.4	229	878.1
22	69.4	74	233.1	126	396.9	178	639.1	230	882.8
23	72.5	75	236.3	127	400.0	179	643.8	231	887.5
24	75.7	76	239.4	128	404.7	180	648.4	232	892.2
25	78.8	77	242.6	129	409.4	181	653.1	233	896.9
26	82.0	78	245.7	130	414.1	182	657.8	234	901.6
27	85.1	79	248.9	131	418.8	183	662.5	235	906.3
28	88.3	80	252.0	132	423.4	184	667.2	236	910.9
29	91.4	81	255.2	133	428.1	185	671.9	237	915.6
30	94.6	82	258.3	134	432.8	186	676.6	238	920.3
31	97.7	83	261.5	135	437.5	187	681.3	239	925.0
32	100.9	84	264.6	136	442.2	188	685.9	240	929.7
33	104.0	85	267.7	137	446.9	189	690.6	241	934.4
34	107.2	86	270.9	138	451.6	190	695.3	242	939.1
35	110.3	87	274.0	139	456.3	191	700.0	243	943.8
36	113.5	88	277.2	140	460.9	192	704.7	244	948.4
37	116.6	89	280.3	141	465.6	193	709.4	245	953.1
38	119.8	90	283.5	142	470.3	194	714.1	246	957.8
39	122.9	91	286.6	143	475.0	195	718.8	247	962.5
40	126.1	92	289.8	144	479.7	196	723.4	248	967.2
41	129.2	93	292.9	145	484.4	197	728.1	249	971.9
42	132.4	94	296.1	146	489.1	198	732.8	250	976.6
43	135.5	95	299.2	147	493.8	199	737.5	251	981.3
44	138.6	96	302.4	148	498.4	200	742.2	252	985.9
45	141.8	97	305.5	149	503.1	201	746.9	253	990.6
46	144.9	98	308.7	150	507.8	202	751.6	254	995.3
47	148.1	99	311.8	151	512.5	203	756.3	255	1000.0
48	151.2	100	315.0	152	517.2	204	760.9		
49	154.4	101	318.1	153	521.9	205	765.6		
50	157.5	102	321.3	154	526.6	206	770.3		
51	160.7	103	324.4	155	531.3	207	775.0		



**6.3.6. EQ****6.3.6.1. GEQ****Q**

Same as 6.2.2.1. 3BAND EQ Q in "Other Parameters (MTX3,MTX5-D)"

**6.3.6.2. PEQ****Q**

Same as 6.2.2.1. 3BAND EQ Q in "Other Parameters (MTX3,MTX5-D)"

**B/W(Q)**

Same as 6.2.6.1. 4BAND EQ B/W(Q) in "Other Parameters (MTX3,MTX5-D)"

**Type**

Same as 6.2.2.1. 3BAND EQ Type in "Other Parameters (MTX3,MTX5-D)"

**6.3.7. Filter****6.3.7.1. HPF/LPF/BPF****Filter Type**

Same as 6.2.6.2. SPEAKER PROCESSOR HPF/LPF Type in "Other Parameters (MTX3,MTX5-D)"

**6.3.8. Mixer****6.3.8.1. Dugan Automixer****Mode**

Same as 6.2.2.5. DUGAN AUTOMIXER Mode in "Other Parameters (MTX3,MTX5-D)"

**Weight**

Same as 6.2.2.5. DUGAN AUTOMIXER Weight in "Other Parameters (MTX3,MTX5-D)"

**Group(2 - 4 Channel)**

Value	Displayed value
0	a
1	b

**Group(5 - 8 Channel)**

Value	Displayed value
0	a
1	b
2	c
3	d

**Group(9 - 24 Channel)**

Value	Displayed value
0	a
1	b
2	c
3	d
4	e
5	f
6	g
7	h

**6.3.9. Oscillator****Waveform**

Same as 6.2.5.2. OSCILLATOR Waveform in "Other Parameters (MTX3,MTX5-D)"

**6.3.10. Paging****Range**

Same as 6.2.4.1. PAGING Range in "Other Parameters (MTX3,MTX5-D)"

**6.3.11. Speech Privacy****Select Type**

Value	Displayed value
0	Forest
1	Seashore
2	Street
3	Building

**6.3.12. Speaker Processor****HPF/LPF Type**

Same as 6.2.6.2. SPEAKER PROCESSOR HPF/LPF Type in "Other Parameters (MTX3,MTX5-D)"

**PEQ Q**

Same as 6.2.2.1. 3BAND EQ Q in "Other Parameters (MTX3,MTX5-D)"

**PEQ B/WQ**

Same as 6.2.6.1. 4BAND EQ B/W(Q) in "Other Parameters (MRX7-D)"

**PEQ Type**

Same as 6.2.6.2. SPEAKER PROCESSOR PEQ Type in "Other Parameters (MTX3,MTX5-D)"

**Limiter Release**

Same as 6.2.2.2. GATE Decay in "Other Parameters (MTX3,MTX5-D)"

**Limiter Attack/Release Mode**

Same as 6.2.6.2. SPEAKER PROCESSOR Limiter Attack/Release Mode in "Other Parameters (MTX3,MTX5-D)"

**6.3.13. MY4-AEC (MTX5-D only)****6.3.13.1. MY4-AEC FBS****Width**

Same as 6.2.8.2. MY4-AEC FBS Width in "Other Parameters (MTX3,MTX5-D)"

**Depth**

Same as 6.2.8.2. MY4-AEC FBS Depth in "Other Parameters (MTX3,MTX5-D)"

## 7. Parameter List

### 7.1. MTX3/MTX5-D

Model		Access ID							Category	Parameter Name			MIN	MAX	unit	Remarks						
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)														
o	o	512	50000	0	0-7 (1-8ch)	0	0	0	INPUT PORT	INTERNAL HA	Internal Head Amp 8ch AD	Ch	Gain	-6	66	dB	0:OFF 1:ON					
o	o		50001	0	0-2	0	0	0				1	INPUT PORT SETUP	Internal ST input 3ch AD	Port	Summing	STEREO	SUM	-	0:STEREO 1:SUM * Not saved to presets		
o	o	512	20001	0	0	0-21 (0-7:1-8ch 8-13:STINIL-3R 14-21:9-16ch *DIRECT INPUT CH*)	0	0	INPUT PATCH	INPUT PATCH	InputPatch 30(62) Input x 22(30) Output	In	Patch	NONE	YDIF IN 16 (SLOT 16)	-	* See "6.2.1. INPUT PATCH" in "6. Parameter Values"					
o	o		20003	0	0-7 (1-8ch)	0	0	0														
o	o		20004	0	0-21 (0-7:9-16ch 8-13:STINIL-3R 14-21:17-24ch *DIRECT INPUT CH*)	0	0	0														
o	o	512	20002	0	0-7 (1-8ch)	0	0	0	INPUT CHANNEL	INPUT CHANNEL CH 1-8(16)	GAIN/ HPF	PreInput Section	In	Phase	OFF	ON	-	0:OFF 1:ON				
o	o		20005	0	0-7 (9-16ch)	0	0	0														
o	o		20006	0	0-7 (9-16ch)	0	1	0										D.Gain	-96.0	24.0	dB	dB x 10 ex. -14.5dB x 10 = -145
o	o		20002	1	0-7 (1-8ch)	0	0	0									HPF	Frequency	20.0	20.0k	Hz	Hz x 1000 ex. 1000Hz x 1000 = 1000000
o	o		20005	1	0-7 (1-8ch)	0	1	0										On	OFF	ON	-	0:OFF 1:ON
o	o		20006	1	0-7 (9-16ch)	0	1	0														
o	o		20004	0	0-7 (1-8ch)	0-2 (0:Band A 1:Band B 2:Band C)	0	0							3BAND EQ	PEQ 8(16) Channel 3 Band	PEQ	Q(*)	63.0	0.1	-	* Valid only for PEQ * See "6.2.2.1. 3BAND EQ" in "6. Parameter Values"
o	o		20007	0	0-7 (1-8ch)	0-2 (0:Band A 1:Band B 2:Band C)	0	0					1					Frequency	20.0(*)	20.0k	Hz	* (100 : Other than Band A) Hz x 1000 ex. 1000Hz x 1000 = 1000000
o	o		20008	0	0-7 (9-16ch)	0-2 (0:Band A 1:Band B 2:Band C)	0	0					2					Gain(*)	-18.0	18.0	dB	* Not adjustable for HPF/LPF dB x 10 ex. -14.5dB x 10 = -145
o	o		20004	0	0-7 (1-8ch)	0-2 (0:Band A 1:Band B 2:Band C)	0	0					3					Bypass	OFF	ON	-	0:OFF 1:ON
o	o		20007	0	0-7 (1-8ch)	0-2 (0:Band A 1:Band B 2:Band C)	0	0					4					Type	PEQ	LPF	-	* See "6.2.2.1. 3BAND EQ" in "6. Parameter Values"
o	o		20008	0	0-7 (9-16ch)	0-2 (0:Band A 1:Band B 2:Band C)	0	0					0					Property	PEQOn	OFF	ON	-

Model		Access ID							Category		Parameter Name				MIN	MAX	unit	Remarks					
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)															
o		512	40002	0	0-7 (1-8ch)	0	0	0	INPUT CHANNEL	INPUT CHANNEL CH 1-8(16)	GATE	Gate 8(16) Channel	Dyn	Threshold	-72	0	dB						
	o		40000																Range	-70	0	dB	
	o		40001		0-7 (9-16ch)																		
	o		40002	0	0-7 (1-8ch)	0	1	0											Attack	0	120	ms	
	o		40000																				
	o		40001		0-7 (9-16ch)																		
	o		40002	0	0-7 (1-8ch)	0	2	0											Decay	3.2m	42.600	s	* See "6.2.2.2. GATE" in "6. Parameter Values"
	o		40000																				
	o		40001		0-7 (9-16ch)																		
	o		40002	0	0-7 (1-8ch)	0	3	0											Hold	0.02m	1.96	s	* See "6.2.2.2. GATE" in "6. Parameter Values"
	o		40000																				
	o		40001		0-7 (9-16ch)																		
	o		40002	0	0-7 (1-8ch)	0	4	0						ON	On	OFF	ON	-	0:OFF 1:ON				
	o		40000																				
	o		40001		0-7 (9-16ch)																		
	o		40002	0	0-7 (1-8ch)	0	0	0															
	o		40000																				
	o		40002	0	0-7 (1-8ch)	0	1	0															
	o		40000																				
	o		40002	0	0-7 (9-16ch)	0	2	0						Ratio	1.0:1	∞:1	-	* See "6.2.2.3. COMPRESSOR" in "6. Parameter Values"					
	o		40000																				
	o		40002	0	0-7 (1-8ch)	0	3	0						Knee	HARD	5	-	* See "6.2.2.3. COMPRESSOR" in "6. Parameter Values"					
	o		40000																				
	o		40002	0	0-7 (9-16ch)	0	4	0						Attack	0	120	ms						
	o		40000																				
	o		40002	0	0-7 (1-8ch)	0	5	0						Release	3.2m	42.600	s	* See "6.2.2.2. GATE" / Decay in "6. Parameter Values"					
	o		40000																				
	o		40002	0	0-7 (9-16ch)	0	0	0						Gain	0.0	18.0	dB	dB x 10 ex. 5.2dB x 10 = 52					
	o		40000																				
	o		40002	1	0-7 (1-8ch)	0	0	0						ON	On	OFF	ON	-	0:OFF 1:ON				
	o		40000																				
	o		40002	0	0-7 (9-16ch)	0	0	0															
	o		40000																				
	o		40002	0	0-3 (1-4ch)	0	0	0															
	o		40004																				
	o		40005	0	0-3 (1-4ch)	0	1	0						Clear	OFF	ON	-	Write 1 to start the clear process. When the process finishes, the value automatically returns to 0.					
	o		40004		0-7 (1-8ch)																		
	o		40005	1	0-3 (1-4ch)	0-6 (Freq1-7)	0	0						DynFilter	Frequency	20.0	20.0k	Hz	read-only parameter				
	o		40004																				
	o		40005	2	0-3 (1-4ch)	0	0	0						Fixed	On	OFF	ON	-	0:OFF 1:ON				
	o		40004		0-7 (1-8ch)																		
	o		40005	2	0-3 (1-4ch)	0	1	0						Detect	OFF	ON	-	0:OFF 1:ON					
	o		40004		0-7 (1-8ch)																		
	o		40005	2	0-3 (1-4ch)	0	2	0						Clear	OFF	ON	-	Write 1 to start the clear process. When the process finishes, the value automatically returns to 0.					
	o		40004		0-7 (1-8ch)																		

Model		Access ID							Category		Parameter Name				MIN	MAX	unit	Remarks			
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)													
o		512	40005	3	0-3 (1-4ch)	0-6 (Freq1-7)	0	0	INPUT CHANNEL CH 1-8(16)	INPUT CHANNEL	FBS	Feedback Suppressor 4(8) Channel	Fixed Filter	Frequency	20.0	20.0k	Hz	Readable. Writing is also possible.			
	o		40004		0-7 (1-8ch)							AGC	AutoGain Control 4(8) Channel	Compensator	Response Time	100m	5.0	s	* See "6.2.2.4. AGC" in "6. Parameter Values"		
o			40004	0	0-3 (1-4ch)	0	0	0							Level	1	5	-			
	o		40005		0-7 (1-8ch)										Noise Gate On	OFF	ON	-	0:OFF 1:ON		
o			40004		0-3 (1-4ch)			1							On	On	OFF	ON	-	0:OFF 1:ON	
	o		40005		0-7 (1-8ch)																
o			40004		0-3 (1-4ch)			2													
	o		40005		0-7 (1-8ch)																
o			40004	1	0-3 (1-4ch)	0	0	0													
	o		40005		0-7 (1-8ch)																
o			60000	0	0-7 (1-8ch)	0	0	0			0			INPUT CHANNEL LEVEL	Fader 8(16) Channel	Fader	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter
	o				0-15 (1-16ch)											On	On	OFF	ON	-	0:OFF 1:ON
o			60001	0	0-7 (1-8ch)	0	0	0			0										
	o				0-15 (1-16ch)																
o			70000	0	0-7 (1-8ch)	0	0	0			0			Channel Name	Channel Name 8(16) Channel	ChName	Name	Charactor (UTF-8) 48byte	-	-	Notification only
	o				0-15 (1-16ch)																
o		20033	0	0-15 (1-16ch)	0	0	0	0			Insert	Insert with MY card 16 Channel	Insert	Insert	OFF	ON	-	CH * Ins.Out ->SLOT OUT * CH * Ins.In -> SLOT In *			
	o																				
o	o	30000	0	0-5 (STIN1L- 3R)	0	0	0	0		STEREO INPUT CHANNEL	GAIN/ HPF	Digital Gain 6 Channel	Ch	D.Gain	-96.0	24.0	dB	dB x 10 ex. -14.5dB x 10 = -145			
	o	30001	0	0-5 (STIN1L- 3R)	0-2 (0:Band A 1:Band B 2:Band C)	0	0	0			3BAND EQ	PEQ 6 Channel 3 Band	PEQ	Q(*)	63.0	0.1	-	* See "6.2.2.1. 3BAND EQ" in "6. Parameter Values"			
	o						1	0						Frequency	20.0(*)	20.0k	Hz	*(100 : Other than Band A) Hz x 1000 ex. 1000Hz x 1000 = 1000000			
	o						2	0						Gain(*)	-18.0	18.0	dB	* Not adjustable for HPF/LPF dB x 10 ex. -14.5dB x 10 = -145			
o	o						3	0						Bypass	OFF	ON	-	0:OFF 1:ON			
	o						4	0						Type	PEQ	LPF	-	* See "6.2.2.1. 3BAND EQ" in "6. Parameter Values"			
o	o				0, 2 (0:Band A 2:Band C)	0	0	0						Property	PEQOn	OFF	ON	-	0:ON 1:OFF		

Model		Access ID							Category	Parameter Name				MIN	MAX	unit	Remarks								
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)																	
o		512	40001	0	0-3 (STIN1L-2R)	0	0	0	INPUT CHANNEL	STEREO INPUT CHANNEL STIN 1L-3R	COMPRESSOR	Compressor 4 Channel	Dyn	Threshold	-54	0	dB								
	o		40006	0																Ratio	1.0:1	∞:1	-	* See "6.2.2.3. COMPRESSOR" in "6. Parameter Values"	
			40001	0			0	1						0						Knee	HARD	5	-	* See "6.2.2.3. COMPRESSOR" in "6. Parameter Values"	
	o		40006	0																Attack	0	120	ms		
			40001	0			0	2						0						Release	3.2m	42.600	s	* See "6.2.2.2. GATE" / Decay in "6. Parameter Values"	
	o		40006	0																Gain	0.0	18.0	dB	dB x 10 ex. 5.2dB x 10 = 52	
			40001	0			0	3						0						On	On	OFF	ON	-	0:OFF 1:ON
	o		40006	1			0	0						0											
			40003	0		0-3 (STIN1L-2R)	0	0						0			AGC	AutoGain Control 4 Channel	Compensator	Response Time	100m	5.0	s	* See "6.2.2.4. AGC" in "6. Parameter Values"	
	o		40007	0				0						1	0									Level	1
			40003	0			0	2	0						Noise GateOn	OFF				ON	-	0:OFF 1:ON			
	o		40007	0			0	0	0						On	On				OFF	ON	-	0:OFF 1:ON		
			40003	1			0	0	0																
	o		60000	0	8-13 (ST IN 1L-ST IN 3R) 16-21 (ST1L-ST3R)	0	0	0		INPUT CHANNEL LEVEL	Fader 6 Channel	Fader	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter								
			60001	0			0	0	0									On	On	OFF	ON	-	0:OFF 1:ON		
	o		70004	0	0-5 (ST1L-ST3R)	0	0	0		Channel Name	Channel Name 3 Channel	ChName	Name	Charactor (UTF-8) 48byte	-				Notification only						
			60000	0	14-21 (9-16Ch "DIRECT INPUT CH") 22-29 (17-24Ch "DIRECT INPUT CH")	0	0	0		DIRECT INPUT CHANNEL CH 9 - 16 (17 - 24)	INPUT CHANNEL LEVEL	Fader 8 Channel	Fader	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter							
	o		60001	0			0	0	0										On	On	OFF	ON	-	0:OFF 1:ON	
			70000	0		8-15 (9-16ch)	0	0	0							Channel Name	Channel Name 8 Channel	ChName	Name	Charactor (UTF-8) 48byte	-				Notification Only
	o		70003	0		0-7 (17-24ch)	0	0	0																

Model		Access ID							Category		Parameter Name				MIN	MAX	unit	Remarks																
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)																										
o		512	20008	0	0-3 (Fx.RTN1L-2R)	0	0	0	INPUT CHANNEL	EFFECT ST RETURN 1L-2R	EFFECT ST RETURN	Fader 4 Channel	Fader	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360																
	o		20014																		On	On	OFF	ON	-	0:OFF 1:ON								
	o		20008	1																														
	o		20014																															
o	o		70004	0	6-7 (FxRtn1, FxRtn2)	0	0	0					Channel Name	Channel Name 2 Channel	ChName	Name	Charactor (UTF-8) 48byte	-																
	o		60000	1	0-21 (0-7:1-8ch 8-13:ST1L-ST3R 14-21:9-16Ch "DIRECT INPUT CH")	0-7 (A-H)	0	0		INPUT CHANNEL DCA	INPUT CHANNEL DCA	INPUT CHANNEL DCA	DCA Assign	Assign On	OFF	ON	-	0:OFF 1:ON																
	o			0-29 (0-15:1-16ch 16-21:ST1L-ST3R 22-29:17-24Ch "DIRECT INPUT CH")																														
	o			2	0								Group Master	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter																
o	o		60001	1	0-21 (0-7:1-8ch 8-13:ST1L-ST3R 14-21:9-16Ch "DIRECT INPUT CH")	0-7 (A-H)	0	0		INPUT CHANNEL MUTE	INPUT CHANNEL MUTE	DCA Mute	DCA Assign	Assign On	OFF	ON	-	0:OFF 1:ON																
	o			0-29 (0-15:1-16ch 16-21:ST1L-ST3R 22-29:17-24Ch "DIRECT INPUT CH")																														
	o		2	0								Group Master	MuteOn	OFF	ON	-	0:OFF 1:ON																	
o		50011	0	0	0-1 (0:a 1:b)	0-3 (0:a 1:b 2:c 3:d)	0	0	Dugan Auto Mixer	Dugan AUTO MIXER	Auto Mixer 4 (8) Channel	Master	Override	OFF	ON	-	0:OFF 1:ON																	
	o																		0-1 (0:a 1:b)	1								Mute	OFF	ON	-	0:OFF 1:ON		
	o																		0-3 (0:a 1:b 2:c 3:d)															
o																		1	0-3 (0-3:CH1-4)	0	0													* See "6.2.2.5. DUGAN AUTOMIXER" in "6. Parameter Values"
	o																		0-7 (0-7:CH1-8)															
o																			0-3 (0-3:CH1-4)	1														* See "6.2.2.5. DUGAN AUTOMIXER" in "6. Parameter Values"
	o																		0-7 (0-7:CH1-8)															
o																			0-3 (0-3:CH1-4)	2														* See "6.2.2.5. DUGAN AUTOMIXER" in "6. Parameter Values"
	o																		0-7 (0-7:CH1-8)															
o																			0-3 (0-3:CH1-4)	3														* See "6.2.2.5. DUGAN AUTOMIXER" in "6. Parameter Values"
	o		0-7 (0-7:CH1-8)																															
o			0-3 (0-3:CH1-4)	3														* See "6.2.2.5. DUGAN AUTOMIXER" in "6. Parameter Values"																
	o		0-7 (0-7:CH1-8)																															

Model		Access ID							Category	Parameter Name				MIN	MAX	unit	Remarks																		
MTX3	MTX5-D	MemNo (Memory Number)	UniqeId	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)																											
o		512	20006	0	0-1 (Effect1-2)	0	1	0	EFFECT	EFFECT	Effect	Effect	Type	Reverb Hall	Vocal Echo	-	* See "6.2.3. EFFECT" in "6. Parameter Values"																		
	o		20013																																
o			20006	1				0												Simple Effect	RevHall Time	0.3	10.0	s	* See "6.2.3. EFFECT" in "6. Parameter Values"										
	o		20013																																
o			20006					1																		RevStage Time	0.3	10.0	s	* See "6.2.3. EFFECT" in "6. Parameter Values"					
	o		20013																																
o			20006					2																							Karaoke Time	0.4	400	ms	* See "6.2.3. EFFECT" in "6. Parameter Values"
	o		20013																																
o		20006			3			Vocal Time	0.4	400	ms	* See "6.2.3. EFFECT" in "6. Parameter Values"																							
	o	20013																																	
o		30002	1	0-25 (0-7:CH1-8 8-13:STINIL-3R 14-21:CH9-16 22-25:FRIL-2R)	0-7 (MATRIX1-8 SEND)	0	0						MATRIX	MATRIX SEND	MATRIX (ZONE OUT MONO) 26(34) Input x 8(16) Output	Ch	Level	-∞	0.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter  When Input channels are set as Stereo, Send to Matrix parameters for Stereo Input channels are linked.  0:OFF 1:ON  When Input channels are set as Stereo, Send to Matrix parameters for Stereo Input channels are linked.														
	o		1	0-33 (0-15:CH1-16 16-21:STINIL-3R 22-29:CH17-24 30-33:FRIL-2R)	0-15 (MATRIX1-16 SEND)	0	0																												
o			1	0-25 (0-7:CH1-8 8-13:STINIL-3R 14-21:CH9-16 22-25:FRIL-2R)	0-7 (MATRIX1-8 SEND)	1	0																			On	OFF	ON	-						
	o		1	0-33 (0-15:CH1-16 16-21:STINIL-3R 22-29:CH17-24 30-33:FRIL-2R)	0-15 (MATRIX1-16 SEND)	1	0																												



Model		Access ID							Category	Parameter Name			MIN	MAX	unit	Remarks	
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)									
o		512	30002	1	0-25 (0-7:CH1-8 8-13:STINIL-3R 14-21:CH9-16 22-25:FR1L-2R)	0-7 (MATRIX1-8 SEND)	0	0	MATRIX	MATRIX SEND	MATRIX (ZONE OUT STEREO) 26(34) Input x 8(16) Output	Ch	Level	-∞	0.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter  When Input channels are set as Mono, Send to Stereo Matrix parameters for Mono Input channels (i.e. two parameters in total) are linked.
	o			1	0-33 (0-15:CH1-16 16-21:STINIL-3R 22-29:CH17-24 30-33:FR1L-2R)	0-15 (MATRIX1-16 SEND)	0	0									When Input channels are set as Stereo, Send to Stereo Matrix parameters for Stereo Input channels (i.e. four parameters in total) are linked.
o				1	0-25 (0-7:CH1-8 8-13:STINIL-3R 14-21:CH9-16 22-25:FR1L-2R)	0-7 (MATRIX1-8 SEND)	1	0					On	OFF	ON	-	0:OFF 1:ON  When Input channels are set as Mono, Send to Stereo Matrix parameters for Mono Input channels (i.e. two parameters in total) are linked.
	o			1	0-33 (0-15:CH1-16 16-21:STINIL-3R 22-29:CH17-24 30-33:FR1L-2R)	0-15 (MATRIX1-16 SEND)	1	0									When Input channels are set as Stereo, Send to Stereo Matrix parameters for Stereo Input channels (i.e. four parameters in total) are linked.
o				1	0-25 (0-7:CH1-8 8-13:STINIL-3R 14-21:CH9-16 22-25:FR1L-2R)	0-7 (MATRIX1-8 SEND)	2	0					Pan	L63	R63	-	-63 :L63 0:C 63:R63 e.g. L31 = -31 Valid only for odd channels and available only when destination Matrix channels are paired.
	o			1	0-33 (0-15:CH1-16 16-21:STINIL-3R 22-29:CH17-24 30-33:FR1L-2R)	0-15 (MATRIX1-16 SEND)	2	0									
o		20010	0	0-21 (0-7:CH1-8 8-13:STINIL-3R 14-21:CH9-16)	0-3 (0:FX 1 SEND 1:FX 2 SEND 2:ANC 1 SEND 3:ANC 2 SEND)	0	0		FX/ANC SEND	Matrix Mixer 22(30) Input 4 Output	Ch	Level	-∞	0.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter	
	o	20017	0	0-29 (0-15:CH1-16 16-21:STINIL-3R 22-29:CH17-24)													
o		20010	0	0-21 (0-7:CH1-8 8-13:STINIL-3R 14-21:CH9-16)		1	0						On	OFF	ON	-	0:OFF 1:ON
	o	20017	0	0-29 (0-15:CH1-16 16-21:STINIL-3R 22-29:CH17-24)													

7. Parameter List

Model		Access ID							Category		Parameter Name				MIN	MAX	unit	Remarks
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)										
	o	512	50013	0	0	0-4 (0:1st MIC 1:MIC 2 2:MIC 3 3:MIC 4 4:SD)	0	0	ZONE	ZONE OUT 1-8(16)	PAGING	Router 48 Input 6 Output	In	Patch	None	ANC BUS 2	-	* See "6.2.4.1. PAGING" in "6. Parameter Values"
	o		50012	0	0	0	0	0			PAGING	16ch	On Gain	On Range	OFF -∞	ON 0.0	- dB	* See "6.2.4.1. PAGING" in "6. Parameter Values"
	o						1							Attack	0.0	10.0	s	s x 10 ex. 5.3s x 10 = 53
	o						2							Release	0.0	10.0	s	s x 10 ex. 5.3s x 10 = 53
	o		9	0-15 (ZONE1-16)	0-23 (ZONE GROUP1-24)	0						Zone Group	ZoneOn	OFF	ON	-		
	o		20011	0	0	0-7 (0:ZONE1 2nd PRIORITY PRIORITY SOURCE : 7:ZONE8 2nd PRIORITY PRIORITY SOURCE)	0	0			2nd PRIORITY	PRIORITY SOURCE	In	Patch	None	ANC BUS 2	-	* See "6.2.4.2. 1st/2nd PRIORITY" in "6. Parameter Values"
	o		20018															
	o		20012	0	0-7 (ZONE1-8)	0	0	0				PRIORITY DUCKER	Dyn	Threshold	-54	0	dB	
	o		20019					1						Range	-70	0	dB	
	o		20012					2						Attack	0	240	ms	
	o		20019					3						Release	3.2m	42.600	s	* See "6.2.2.2. GATE" / Decay in "6. Parameter Values"
	o		20012					4						Hold	0.02m	1.96	s	* See "6.2.2.2. GATE" in "6. Parameter Values"
	o		20019										Source	Level	-∞	0.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter
	o		20012	1				1						On	OFF	ON	-	0:OFF 1:ON
	o		20019															
	o		20011	0	0	8-15 (8:ZONE1 1st PRIORITY PRIORITY SOURCE : 15:ZONE8 1st PRIORITY PRIORITY SOURCE)	0	0			1st PRIORITY	PRIORITY SOURCE	In	Patch	None	ANC BUS 2	-	* See "6.2.4.2. 1st/2nd PRIORITY" in "6. Parameter Values"
	o		20018															

Model		Access ID							Category	Parameter Name				MIN	MAX	unit	Remarks	
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)		Parameter Name	MIN	MAX	unit					Remarks
o		512	20013	0	0-7 (ZONE1-8)	0	0	0	ZONE ZONE OUT 1-8(16)	1st PRIORITY PRIORITY DUCKER	Dyn	Threshold	-54	0	dB			
	o		20020									Range	-70	0	dB			
	o		20013				1					Attack	0	240	ms			
	o		20020				2					Release	3.2m	42.600	s	* See "6.2.2.2. GATE" / Decay in "6. Parameter Values"		
	o		20013				3					Hold	0.02m	1.96	s	* See "6.2.2.2. GATE" in "6. Parameter Values"		
	o		20020				4					Source	Level	-∞	0.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter	
	o		20013	1			0					On	OFF	ON	-	0:OFF 1:ON		
	o		20020				1											
	o		20013				1											
	o		20020															
	o		20011	0	0	16-23 (16:ZONE1 ANC AMBIENT SOURCE : 23:ZONE8 ANC AMBIENT SOURCE)	0	0	ANC ANC SOURCE	In	Patch	None	ANC BUS 2	-		* See "6.2.4.2. 1st/2nd PRIORITY" in "6. Parameter Values"		
	o		20018															
	o		20014	0	0-7 (ZONE1-8)	0	0	0				Ambient Noise Compensator 8 Channel	Ambient	Threshold	-∞	0.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter
	o		20021									Gap	Threshold	-∞	0.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter	
	o		20014	1			0					Time	0.1	5.0	s	sec x 10 ex. 3.8sec x 10 = 38		
	o		20021				1					Program	Max Gain	0.0	18.0	dB	dB x 10 ex. 5.2dB x 10 = 52	
	o		20014	2			0					Min Gain	-18.0	0.0	dB	dB x 10 ex. -14.5dB x 10 = -145		
	o		20021				1					Ratio	0.5:1	2.0:1	-	* See "6.2.4.3. ANC" in "6. Parameter Values"		
	o		20014				2					Response Time	1	60	s			
	o		20021				3					On	On	OFF	ON	-	0:OFF 1:ON	
	o		20014	3			0											
	o		20021															
	o		60002	0	0-7 (ZONE1-8)	0	0	0	MATRIX OUTPUT MASTER	Fader 8(16) Channel	Fader	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter		
	o				0-15 (ZONE1-16)													
	o		60003	0	0-7 (ZONE1-8)	0	0	0				On	On	OFF	ON	-	0:OFF 1:ON	
	o				0-15 (ZONE1-16)													
	o		70001	0	0-7 (ZONE1-8)	0	0	0	Channel Name	Channel Name 8(16) Channel	ChName	Name	Charactor (UTF-8) 48byte	-	Notification Only			
	o		70005		0-7 (ZONE9-16)													

Model		Access ID							Category		Parameter Name				MIN	MAX	unit	Remarks		
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)												
o		512	60002	1	0-7 (ZONE1-8)	0-7 (A-H)	0	0	ZONE	ZONE DCA/ MUTE 1-8(16)	ZONE OUT DCA	DCA Fader 8(16) Channel	DCA Assign	Assign On	OFF	ON	-	0:OFF 1:ON		
	o			Group Master	Level	-∞	10.00	dB					dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter							
o	o				60003	1	0-7 (ZONE1-8)	0-7 (A-H)				0	0	ZONE OUT MUTE	DCA Mute 8(16) Channel	DCA Assign	Assign On	OFF	ON	-
	o			Group Master		MuteOn	OFF	ON				-	0:OFF 1:ON							
o			20016		1	0	0-7 (OUT1-8)	0			0	ROUTER	ROUTOR	Bus Out Router 24(32) Input x 8(16) Output	In	Patch	NONE	YDIF OUT 16	-	* See "6.2.5.1. ROUTER" in "6. Parameter Values"
	o			20023	0-15 (OUT1-16)	0	0-7 (OUT1-8)	0			OSCILLATOR				OSC Patch	On	OFF	ON	-	0:OFF 1:ON
o			20016		1							0	0-7 (OUT1-8)	0		OSCILLATOR	Oscillator Mono	Oscillator	Level	-∞
	o			20023	0-15 (OUT1-16)	0	0-7 (OUT1-8)	0			1	On	OFF	ON	-				0:OFF 1:ON	
o		50002	0		0				0	0		2	Vari Frequency	20.0(*)	20.0k	Hz	Hz x 1000 ex. 1000Hz x 1000 = 1000000			
	o		0	0	0	0	0	3	Wave form(*)				-	* See "6.2.5.2. OSCILLATOR" in "6. Parameter Values"						
o	o																			

Model		Access ID						Category		Parameter Name			MIN	MAX	unit	Remarks					
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)													
o		512	20017	0	0-7 (OUT1-8)	0	0	0	OUTPUT CHANNEL	OUTPUT CH STRIP 1-8(16) (1way/2way)	OUTPUT CHANNEL LEVEL	Fader	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter				
	o		20024		0-15 (OUT1-16)																
o			20017	1	0-7 (OUT1-8)										On	On	OFF	ON	-	0:OFF 1:ON	
	o		20024		0-15 (OUT1-16)																
o			70002	0	0-7 (OUT1-8)	0	0	0			0			Channel Name	Channel Name 8(16) Channel	ChName	Name	Charactor (UTF-8) 48byte	-	Notification Only	
	o		70006		0-7 (OUT9-16)																
o			20018	0	0-7 (OUT1-8)	0	0	0			0			DELAY	Delay 8(16) Channel	Delay	On	OFF	ON	-	0:OFF 1:ON
	o		20025		0-15 (OUT1-16)																
o			20018	0	0-7 (OUT1-8)		1									Delay Time	0.00	1000.00	ms	ms x 100 ex. 102.80ms x 100 = 10280	
	o		20025		0-15 (OUT1-16)																
o			20019	0	0-7 (OUT1-8)	0-3 (0:Band A 1:Band B 2:Band C 3:Band D)	0	0			0			4BAND EQ	PEQ 8(16) Channel 4 Band	PEQ	Q(*)	63.0	0.1	-	* See "6.2.2.1. 3BAND EQ" in "6. Parameter Values"
	o		20026		0-15 (OUT1-16)																
o			20019	0	0-7 (OUT1-8)		1	0								Frequency	20.0(*)	20.0k	Hz	*(100 : Other than Band A) Hz x 1000 ex. 1000Hz x 1000 = 1000000	
	o		20026		0-15 (OUT1-16)																
o			20019	0	0-7 (OUT1-8)		2	0								Gain(*)	-18.0	18.0	dB	* Not adjustable for HPF/LPF dB x 10 ex. -14.5dB x 10 = -145	
	o		20026		0-15 (OUT1-16)																
o		20019	0	0-7 (OUT1-8)		3	0						Bypass	OFF	ON	-	0:OFF 1:ON				
	o	20026		0-15 (OUT1-16)																	
o		20019	0	0-7 (OUT1-8)	0, 3 (0:Band A 3:Band D)	4	0						Type	PEQ	LPF	-	* See "6.2.2.1. 3BAND EQ" in "6. Parameter Values"				
	o	20026		0-15 (OUT1-16)																	
o		20019	1	0-7 (OUT1-8)	0	0	0	0					Property	PEQon	OFF	ON	-	0:ON 1:OFF			
	o	20026		0-15 (OUT1-16)																	
o		40006-40013 (40006:OUT1 40007:OUT2 : : 40013:OUT8)	1	0	0	0	0	0			SPEAKER PROCESSOR	Speaker Processor 1 Way *Speaker Processor type (1 Way or 2 Way) is configurable through MTX Editor software.	Delay	On	OFF	ON	-	0:OFF 1:ON			
	o	40006-40023 (40006:OUT1 40008:OUT2 : : 40023:OUT16)																			
o		40006-40013 (40006:OUT1 40007:OUT2 : : 40013:OUT8)	1	0	0	1	0	0					Delay Time	0.00	500.00	ms	ms x 100 ex. 102.80ms x 100 = 10280				
	o	40006-40023 (40006:OUT1 40008:OUT2 : : 40023:OUT16)																			

Model		Access ID							Category		Parameter Name			MIN	MAX	unit	Remarks	
MTX3	MTX5-D	MemNo (Memory Number)	UniqeId	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)										
o		512	4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	2	0	0	2	0	OUTPUT CHANNEL	OUTPUT CH STRIP 1-8(16) (1way/2way)	SPEAKER PROCESSOR	Speaker Processor 1 Way *Speaker Processor type (1 Way or 2 Way) is configurable through MTX Editor software.	Band	LPF Frequency	20.0	20.0k	Hz	Hz x 1000 ex. 1000Hz x 1000 = 1000000
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	2	0	0	3	0					HPF	Frequency	20.0	20.0k	Hz	Hz x 1000 ex. 1000Hz x 1000 = 1000000
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	2	0	0	4	0					LPFType	Thru	48dB/ Oct	Linkwitz	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "7. Parameter Values"
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	2	0	0	5	0					HPFType	Thru	48dB/ Oct	Linkwitz	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "7. Parameter Values"
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	2	0	0	6	0					LPFGc(*)	-6	6	dB	-	*Valid only for AdjustGc
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	2	0	0	7	0					HPFGc(*)	-6	6	dB	-	*Valid only for AdjustGc
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	2	0	0	8	0					Polarity	NORMAL	INVERTED	-	-	0:NORMAL 1:INVERTED
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															

7. Parameter List

Model		Access ID						Category		Parameter Name			MIN	MAX	unit	Remarks		
MTX3	MTX5-D	MemNo (Memory Number)	UniqeId	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)										
o		512	4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	4	0	0-5 (0:Band A 1:Band B 2:Band C 3:Band D 4:Band E 5:Band F)	0	0	OUTPUT CHANNEL	OUTPUT CH STRIP 1-8(16) (1way/2way)	SPEAKER PROCESSOR	Speaker Processor 1 Way *Speaker Processor type (1 Way or 2 Way) is configurable through MTX Editor software.	PEQ	Q(*)	63.0	0.1	-	* See "6.2.2.1. 3BAND EQ" in "7. Parameter Values"
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	4	0		1	0					Frequency	20.0(*)	20.0k	Hz	*(For 500 : HORN EQ 100 : Other than Band A) Hz x 1000 ex. 1000Hz x 1000 = 1000000	
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	4	0		2	0					Gain(*)	-18.0	18.0	dB	* Not adjustable for HPF/LPF/APF 1st/APF 2nd dB x 10 ex. -14.5dB x 10 = -145	
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	4	0		3	0					Bypass	OFF	ON	-	0:OFF 1:ON	
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	4	0		4	0					Type	PEQ	Horn EQ	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	5	0	0	0	0					Limiter	Threshold	-54	0	dB	
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	5	0	0	1	0					Attack	0.0	120.0	ms	ms x 10 ex. 24.5ms x 10 = 245	
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	5	0	0	2	0					Release	3.2m	42.600	s	* See "6.2.2.2. GATE" / Decay in "7. Parameter Values"	
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															

Model		Access ID							Category		Parameter Name			MIN	MAX	unit	Remarks	
MTX3	MTX5-D	MemNo (Memory Number)	UniqeId	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)										
o		512	4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	5	0	0	3	0	OUTPUT CHANNEL	OUTPUT CH STRIP 1-8(16) (1way/2way)	SPEAKER PROCESSOR	Speaker Processor 1 Way *Speaker Processor type (1 Way or 2 Way) is configurable through MTX Editor software.	Limiter	On	OFF	ON	-	0:OFF 1:ON
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	5	0	0	4	0					Attack Mode	Fast	Manual	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	5	0	0	5	0					Release Mode	Fast	Manual	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	6	0	0	0	0					Out	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360 "setr" command is available for this parameter
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	6	0	0	1	0					Mute	UNMUTED	MUTED	-	0:UNMUTED 1:MUTED	
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															
o			4006-4013 (4006:OUT1 4007:OUT2 : : 4013:OUT8)	6	0	0	2	0					PEQOn	OFF	ON	-	0:ON 1:OFF	
	o		4006-4023 (4006:OUT1 4008:OUT2 : : 4023:OUT16)															



Model		Access ID						Category		Parameter Name		MIN	MAX	unit	Remarks				
MTX3	MTX5-D	MemNo (Memory Number)	UniqeId	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)											
o		512	4014:40017 (4014:OUT1 40015:OUT3 : : 40017:OUT7)	1	0-1 (0:LOW 1:HIGH)	0	0	0	OUTPUT CHANNEL	OUTPUT CH STRIP 1-8(16) (1way/2way)	SPEAKER PROCESSOR	Speaker Processor 2 Way *Speaker Processor type (1 Way or 2 Way) is configurable through MTX Editor software.	Delay	On	OFF	ON	-	0:ON 1:OFF	
	o		40024:40031 (40024:OUT1 40028:OUT3 : : 40031:OUT15)																
o			4014:40017 (4014:OUT1 40015:OUT3 : : 40017:OUT7)	1		0	1	0					Delay	0.00	500.00	ms	ms x 100 ex. 102.80ms x 100 = 10280		
	o		40024:40031 (40024:OUT1 40028:OUT3 : : 40031:OUT15)																
o			4014:40017 (4014:OUT1 40015:OUT3 : : 40017:OUT7)	2	0 (0:LOW)	0	2	0					Band	LPF Frequency	20.0	20.0k	Hz	Hz x 1000 ex. 1000Hz x 1000 = 1000000	
	o		40024:40031 (40024:OUT1 40028:OUT3 : : 40031:OUT15)																
o			4014:40017 (4014:OUT1 40015:OUT3 : : 40017:OUT7)	2	0-1 (0:LOW 1:HIGH)	0	3	0					HPF	Frequency	20.0	20.0k	Hz	Hz x 1000 ex. 1000Hz x 1000 = 1000000	
	o		40024:40031 (40024:OUT1 40028:OUT3 : : 40031:OUT15)																
o			4014:40017 (4014:OUT1 40015:OUT3 : : 40017:OUT7)	2	0 (0:LOW)	0	4	0					LPF	Type	Thru	48dB/ Oct Linkwitz	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		40024:40031 (40024:OUT1 40028:OUT3 : : 40031:OUT15)																
o			4014:40017 (4014:OUT1 40015:OUT3 : : 40017:OUT7)	2	0-1 (0:LOW 1:HIGH)	0	5	0					HPF	Type	Thru	48dB/ Oct Linkwitz	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		40024:40031 (40024:OUT1 40028:OUT3 : : 40031:OUT15)																
o			4014:40017 (4014:OUT1 40015:OUT3 : : 40017:OUT7)	2	0 (0:LOW)	0	6	0					LPF	Gc(*)	-6	6	dB	*Valid only for AdjustGc	
	o		40024:40031 (40024:OUT1 40028:OUT3 : : 40031:OUT15)																
o			4014:40017 (4014:OUT1 40015:OUT3 : : 40017:OUT7)	2	0-1 (0:LOW 1:HIGH)	0	7	0					HPF	Gc(*)	-6	6	dB	*Valid only for AdjustGc	
	o		40024:40031 (40024:OUT1 40028:OUT3 : : 40031:OUT15)																

Model		Access ID						Category		Parameter Name		MIN	MAX	unit	Remarks				
MTX3	MTX5-D	MemNo (Memory Number)	UniqeId	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)											
o		512	40014:40017 (40014:OUT1 40015:OUT3 : : 40017:OUT7)	2	0-1 (0:LOW 1:HIGH)	0	8	0	OUTPUT CHANNEL	OUTPUT CH STRIP 1-8(16) (1way/2way)	SPEAKER PROCESSOR	Speaker Processor 2 Way *Speaker Processor type (1 Way or 2 Way) is configurable through MTX Editor software.	Band	Polarity	NORMAL	INVERTED	-	0:NORMAL 1:INVERTED	
	o		40024:40031 (40024:OUT1 40025:OUT3 : : 40031:OUT15)																
o			40014:40017 (40014:OUT1 40015:OUT3 : : 40017:OUT7)	3	0	0	0	0					Center	Frequency	20.0	20.0k	Hz	Hz x 1000 ex. 1000Hz x 1000 = 1000000	
	o		40024:40031 (40024:OUT1 40025:OUT3 : : 40031:OUT15)																
o			40014:40017 (40014:OUT1 40015:OUT3 : : 40017:OUT7)	4	0-1 (0:LOW 1:HIGH)	0-5 (0:Band A 1:Band B 2:Band C 3:Band D 4:Band E 5:Band F)	0	0					PEQ	Q(*)	63.0	0.1	-	* See "6.2.2.1. 3BAND EQ" in "7. Parameter Values"	
	o		40024:40031 (40024:OUT1 40025:OUT3 : : 40031:OUT15)																
o			40014:40017 (40014:OUT1 40015:OUT3 : : 40017:OUT7)	4			1	0						Frequency	20.0(*)	20.0k	Hz	*(For 500 : HORN EQ 100 : Other than Band A) Hz x 1000 ex. 1000Hz x 1000 = 1000000	
	o		40024:40031 (40024:OUT1 40025:OUT3 : : 40031:OUT15)																
o			40014:40017 (40014:OUT1 40015:OUT3 : : 40017:OUT7)	4			2	0						Gain(*)	-18.0	18.0	dB	*Not adjustable for HPF/LPF/ APF 1st/APF 2nd dB x 10 ex. -14.5dB x 10 = -145	
	o		40024:40031 (40024:OUT1 40025:OUT3 : : 40031:OUT15)																
o			40014:40017 (40014:OUT1 40015:OUT3 : : 40017:OUT7)	4			3	0						Bypass	OFF	ON	-	0:ON 1:OFF	
	o		40024:40031 (40024:OUT1 40025:OUT3 : : 40031:OUT15)																
o			40014:40017 (40014:OUT1 40015:OUT3 : : 40017:OUT7)	4			4	0						Type	PEQ	Horn EQ	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		40024:40031 (40024:OUT1 40025:OUT3 : : 40031:OUT15)																

7. Parameter List

Model		Access ID						Category		Parameter Name			MIN	MAX	unit	Remarks		
MTX3	MTX5-D	MemNo (Memory Number)	UniqeId	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)										
o		512	4014:40017 (4014:OUT1 4015:OUT3 : : 4017:OUT7)	5	0-1 (0:LOW 1:HIGH)	0	0	0	OUTPUT CHANNEL	OUTPUT CH STRIP 1-8(16) (1way/2way)	SPEAKER PROCESSOR	Speaker Processor 2 Way *Speaker Processor type (1 Way or 2 Way) is configurable through MTX Editor software.	Limiter	Threshold	-54	0	dB	
	o		4024:40031 (4024:OUT1 4026:OUT3 : : 4031:OUT15)															
o			4014:40017 (4014:OUT1 4015:OUT3 : : 4017:OUT7)	5		0	1	0					Attack	0.0	120.0	ms	ms x 10 ex. 24.5ms x 10 = 245	
	o		4024:40031 (4024:OUT1 4026:OUT3 : : 4031:OUT15)															
o			4014:40017 (4014:OUT1 4015:OUT3 : : 4017:OUT7)	5		0	2	0					Release	3.2m	42.600	s	* See "6.2.2.2. GATE" / Decay in "7. Parameter Values"	
	o		4024:40031 (4024:OUT1 4026:OUT3 : : 4031:OUT15)															
o			4014:40017 (4014:OUT1 4015:OUT3 : : 4017:OUT7)	5		0	3	0					On	OFF	ON	-	0:ON 1:OFF	
	o		4024:40031 (4024:OUT1 4026:OUT3 : : 4031:OUT15)															
o			4014:40017 (4014:OUT1 4015:OUT3 : : 4017:OUT7)	5		0	4	0					Attack Mode	Fast	Manual	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		4024:40031 (4024:OUT1 4026:OUT3 : : 4031:OUT15)															
o			4014:40017 (4014:OUT1 4015:OUT3 : : 4017:OUT7)	5		0	5	0					Release Mode	Fast	Manual	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		4024:40031 (4024:OUT1 4026:OUT3 : : 4031:OUT15)															



## 7.2. MRX7-D

Parameter Name			MIN	MAX	unit	Remarks	
ANALOG IN	Ch	Gain	-6	66	dB		
		+48V	OFF	ON	-	0:OFF 1:ON	
ANALOG OUT	Ch	Polarity	NORMAL	INVERTED	-	0:NORMAL 1:INVERTED	
		Gain	-96.0	24.0	dB	dB x 10 e.g. -14.5dB x 10 = -145	
SLOT OUT	Ch	Polarity	NORMAL	INVERTED	-	0:NORMAL 1:INVERTED	
		Gain	-96.0	24.0	dB	dB x 10 e.g. -14.5dB x 10 = -145	
DANTE OUT	Ch	Polarity	NORMAL	INVERTED	-	0:NORMAL 1:INVERTED	
		Gain	-96.0	24.0	dB	dB x 10 e.g. -14.5dB x 10 = -145	
Acoustic Echo Canceller	AEC	ON	OFF	ON	-	0:OFF 1:ON	
	NR	ON	OFF	ON	-	0:OFF 1:ON	
		Threshold	-72	-25	dB		
Ambient Noise Compensator	Ambient	Threshold	-∞	0.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360	
		Gap	Threshold	-∞	0.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360
	Time		0.1	5.0	s	sec x 10 e.g. 3.8sec x 10 = 38	
	Program	MaxGain	0.0	18.0	dB	dB x 10 e.g. 5.2dB x 10 = 52	
		MinGain	-18.0	0.0	dB	dB x 10 e.g. -14.5dB x 10 = -145	
		Ratio*	0.5:1	2.0:1	-	* See "6.2.4.3. ANC" in "6. Parameter Values"	
	ResponseTime	1	60	s			
On	ON	OFF	ON	-	0:OFF 1:ON		
Auto Gain Control	Compensator	ResponseTime*	100m	5.0	s	* See "6.2.2.4. AGC" in "6. Parameter Values"	
		Level	1	5	-		
		NoiseGateOn	OFF	ON	-	0:OFF 1:ON	
	On	ON	OFF	ON	-	0:OFF 1:ON	
Combiner	Room Combiner	BGM	Source*	BGM1	BGM4	-	* See "6.3.3.1. Room Combiner" in "6. Parameter Values"
			ON	OFF	ON	-	0:OFF 1:ON
			Level	-∞	10.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360 "set" command is available for this parameter
		Paging	ON	OFF	ON	-	0:OFF 1:ON
			Level	-∞	10.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360 "set" command is available for this parameter
		RoomIn	ON	OFF	ON	-	0:OFF 1:ON
			Level	-∞	10.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360 "set" command is available for this parameter
		RoomOut	ON	OFF	ON	-	0:OFF 1:ON
			Level	-∞	10.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360 "set" command is available for this parameter
		Combine	ON	OFF	ON	-	0:OFF 1:ON

Parameter Name		MIN	MAX	unit	Remarks		
Combiner	Room Combiner plus Automixer	Master	Override	OFF	ON	-	0:OFF 1:ON
			Mute	OFF	ON	-	0:OFF 1:ON
		MicsIn	ON	OFF	ON	-	0:OFF 1:ON
			Level	-∞	10.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360 "setr" command is available for this parameter
		BGM	Source*	BGM1	BGM4	-	* See "6.3.3.1. Room Combine" in "6. Parameter Values"
			ON	OFF	ON	-	0:OFF 1:ON
			Level	-∞	10.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360 "setr" command is available for this parameter
		Paging	ON	OFF	ON	-	0:OFF 1:ON
			Level	-∞	10.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360 "setr" command is available for this parameter
		RoomIn	ON	OFF	ON	-	0:OFF 1:ON
			Level	-∞	10.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360 "setr" command is available for this parameter
		RoomOut	ON	OFF	ON	-	0:OFF 1:ON
			Level	-∞	10.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360 "setr" command is available for this parameter
		Combine	ON	OFF	ON	-	0:OFF 1:ON
		MicCh	Mode*	Mute	Auto	-	* See "6.2.2.5. DUGAN AUTOMIXER" in "6. Parameter Values"
			Weight	-100.0	15.0	-	* See "6.2.2.5. DUGAN AUTOMIXER" in "6. Parameter Values"
			Override	OFF	ON	-	0:OFF 1:ON
		Master	Override	OFF	ON	-	0:OFF 1:ON
			Mute	OFF	ON	-	0:OFF 1:ON
		Delay	Delay 50mSec	ON	OFF	ON	-
DelayTime	0.00			50.00	ms	ms x 100 e.g. 22.00ms x 100 = 2200	
Delay 250mSec	ON		OFF	ON	-	0:OFF 1:ON	
	DelayTime		0.00	250.00	ms	ms x 100 e.g. 102.80ms x 100 = 10280	
Delay 500mSec	ON		OFF	ON	-	0:OFF 1:ON	
	DelayTime		0.00	500.00	ms	ms x 100 e.g. 102.80ms x 100 = 10280	
Delay 1000mSec	ON		OFF	ON	-	0:OFF 1:ON	
	DelayTime		0.00	1000.00	ms	ms x 100 e.g. 102.80ms x 100 = 10280	

Parameter Name				MIN	MAX	unit	Remarks
Dynamics	Compressor	Dyn	Threshold	-54	0	dB	
			Ratio*	1.0:1	∞:1	-	* See "6.2.2.3. COMPRESSOR" in "6. Parameter Values"
			Knee*	HARD	5	-	* See "6.2.2.3. COMPRESSOR" in "6. Parameter Values"
			Attack	0	120	ms	
			Release*	3m	42.7	s	* See "6.2.2.2. GATE" / Decay in "6. Parameter Values"
		Gain	0.0	18.0	dB	dB x 10 e.g. 5.2dB x 10 = 52	
		KeyIn	KeyIn*	SELF	KEYIN	-	* See "6.3.4.1. Compressor" in "6. Parameter Values"
	On	ON	OFF	ON	-	0:OFF 1:ON	
	Ducking	Dyn	Threshold	-54	0	dB	
			Range	-70	0	-	
			Attack	0	240	-	
			Release*	3m	42.7	s	* See "6.2.2.2. GATE" / Decay in "6. Parameter Values"
			Hold*	0.02m	1.96	s	* See "6.2.2.2. GATE" in "6. Parameter Values"
		KeyIn	KeyIn*	SELF	KEYIN	-	* See "6.3.4.1. Compressor" in "6. Parameter Values"
		On	ON	OFF	ON	-	0:OFF 1:ON
	Gate	Dyn	Threshold	-72	0	dB	
			Range	-70	0	-	
			Attack	0	120	-	
			Decay*	3m	42.7	s	* See "6.2.2.2. GATE" in "6. Parameter Values"
			Hold*	0.02m	1.96	s	* See "6.2.2.2. GATE" in "6. Parameter Values"
		KeyIn	KeyIn*	SELF	KEYIN	-	* See "6.3.4.1. Compressor" in "6. Parameter Values"
		On	ON	OFF	ON	-	0:OFF 1:ON
	Limiter	Dyn	Threshold	-54	0	dB	
			Attack	0.0	120.0	ms	ms x 10 e.g. 24.5ms x 10 = 245
			Release*	3m	42.7	s	* See "6.2.2.2. GATE" / Decay in "6. Parameter Values"
		KeyIn	KeyIn*	SELF	KEYIN	-	* See "6.3.4.1. Compressor" in "6. Parameter Values"
		On	ON	OFF	ON	-	0:OFF 1:ON
Paging Ducker		Dyn	Range*	-∞	0.0	dB	* See "6.2.4.1. PAGING" in "6. Parameter Values"
			Attack	0.0	10.0	s	s x 10 e.g. 5.3s x 10 = 53
	Release		0.0	10.0	s	s x 10 e.g. 5.3s x 10 = 53	
	Hold		0.0	10.0	s	s x 10 e.g. 5.3s x 10 = 53	
	Trigger		OFF	ON	-	0:OFF 1:ON	
	On	On	OFF	ON	-	0:OFF 1:ON	
	Status	Range Indicator	OFF	ON	-	0:OFF 1:ON	
Effect	Effect	Type*	Reverb Hall	Vocal Echo	-	* See "6.2.3. EFFECT" in "6. Parameter Values"	
		On	OFF	ON	-	0:OFF 1:ON	
	SimpleEffect	RevHallTime*	0.3	10.0	s	* See "6.2.3. EFFECT" in "6. Parameter Values"	
		RevStageTime*	0.3	10.0	s	* See "6.2.3. EFFECT" in "6. Parameter Values"	
		KaraokeTime*	0.4	1000.0	ms	* See "6.3.5. Effect" in "6. Parameter Values"	
		VocalTime*	0.4	1000.0	ms	* See "6.3.5. Effect" in "6. Parameter Values"	

Parameter Name				MIN	MAX	unit	Remarks	
EQ	GEQ	Property	Limit	±15	-24	dB	0:±15 1:±12 2:±6 3:-24	
			GEQOn	OFF	ON	-	0:OFF 1:ON	
		HPF	Frequency	20.0	20.0k	Hz	Hz x 1000 e.g. 1000Hz x 1000 = 1000000	
			Bypass	OFF	ON	-	0:OFF 1:ON	
		LPF	Frequency	20.0	20.0k	Hz	Hz x 1000 e.g. 1000Hz x 1000 = 1000000	
			Bypass	OFF	ON	-	0:OFF 1:ON	
		Notch	Frequency	20.0	20.0k	Hz	Hz x 1000 e.g. 1000Hz x 1000 = 1000000	
			Bypass	OFF	ON	-	0:OFF 1:ON	
			Q*	63.0	0.1	-	* See "6.3.6.1. GEQ" in "6. Parameter Values"	
		GEQ	Gain	-24.0	15.0	dB	Value range varies with Limit	
	Bypass		OFF	ON	-	0:OFF 1:ON		
	PEQ	PEQ	Q*	63.0	0.1	-	* Available when PEQ type chosen * See "6.2.2.1. 3BAND EQ" in "6. Parameter Values"	
			Frequency	20.0*	20.0k	Hz	Hz x 1000 e.g. 1000Hz x 1000 = 1000000 *100 : Other than Band A / B	
			Gain*	-18.0	18.0	dB	* Not available when HPF/LPF type chosen	
Bypass			OFF	ON	-	0:OFF 1:ON		
Type			PEQ	LPF	-	* See "6.2.2.1. 3BAND EQ" in "6. Parameter Values"		
Property		PEQOn	OFF	ON	-	0:OFF 1:ON		
Fader	Fader	Level	-∞	10.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360 "setr" command is available for this parameter		
		ON	OFF	ON	-	0:OFF 1:ON		
		Polarity	OFF	ON	-	0:OFF 1:ON		
Feedback Suppressor	Notch FBS	Dynamic	AutoDetect	OFF	ON	-	0:OFF 1:ON	
		FixedOn	ON	OFF	ON	-	0:OFF 1:ON	
	Pitch Shift FBS	Suppressor	Mode	Speech	Music	-		
		Suppression	0	9	-			
On	On	OFF	ON	-	0:OFF 1:ON			
Filter	LPF	Frequency	20.0	20.0k	Hz	Hz x 1000 e.g. 1000Hz x 1000 = 1000000		
			FilterType(*)	Thru	48dB/Oct Linkwitz	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "6. Parameter Values"	
			Gc*	-6	6	dB	*Available only when filter type is AdjustGc	
		ON	OFF	ON	-	0:OFF 1:ON		
			HPF	Frequency	20.0	20.0k	Hz	Hz x 1000 e.g. 1000Hz x 1000 = 1000000
				FilterType*	Thru	48dB/Oct Linkwitz	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "6. Parameter Values"
	Gc*	-6		6	dB	*Available only when filter type is AdjustGc		
	ON	OFF	ON	-	0:OFF 1:ON			
		BPF	LPF	Frequency	20.0	20.0k	Hz	Hz x 1000 e.g. 1000Hz x 1000 = 1000000
				FilterType*	Thru	48dB/Oct Linkwitz	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "6. Parameter Values"
	Gc*			-6	6	dB	*Available only when filter type is AdjustGc	
	Bypass		OFF	ON	-	0:OFF 1:ON		
			HPF	Frequency	20.0	20.0k	Hz	Hz x 1000 e.g. 1000Hz x 1000 = 1000000
				FilterType*	Thru	48dB/Oct Linkwitz	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "6. Parameter Values"
Gc*	-6	6		dB	*Available only when filter type is AdjustGc			
Bypass	OFF	ON	-	0:OFF 1:ON				
	On	ON	OFF	ON	-	0:OFF 1:ON		



7. Parameter List

Parameter Name				MIN	MAX	unit	Remarks	
Mixer	Dugan Automixer	Master	Override	OFF	ON	-	0:OFF 1:ON	
			Mute	OFF	ON	-	0:OFF 1:ON	
		Ch	Mode*	Mute	Auto	-	* See "6.2.2.5. DUGAN AUTOMIXER" in "6. Parameter Values"	
			Weight*	-100.0	15.0	dB	* See "6.2.2.5. DUGAN AUTOMIXER" in "6. Parameter Values"	
	Delay Matrix	Ch	Group*	a	b (2 - 4 Channel) d (5 - 8 Channel) h (9 - 16 Channel)	-	* See "6.3.8.1. Dugan Automixer" in "6. Parameter Values"	
			Override	OFF	ON	-	0:OFF 1:ON	
	Matrix Mixer	Ch	Level	-∞	0.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360 "set" command is available for this parameter	
			ON	OFF	ON	-	0:OFF 1:ON	
	Oscillator Mono	Oscillator	Level	ON	OFF	ON	-	0:OFF 1:ON
				VariFrequency	20.0	20.0k	Hz	Hz x 1000 e.g. 1000Hz x 1000 = 1000000
Waveform*			SINE 100Hz	VARI	-	* See "6.2.5.2. OSCILLATOR" in "6. Parameter Values"		
			ON	OFF	ON	-	0:OFF 1:ON	
Paging	Gain	Range	Attack	0.0	10.0	s	s x 10 ex. 5.3s x 10 = 53	
			Release	0.0	10.0	s	s x 10 ex. 5.3s x 10 = 53	
		ZoneGroup	ZoneOn	OFF	ON	-		
			On	On	OFF	ON	-	
Polarity		Polarity	NORMAL	INVERTED	-	0:NORMAL 1:INVERTED		
Revolabs control	Ch	ON	OFF	ON	-	0:OFF 1:ON		
Router	in	Patch	NONE	2(2 Input) 4(4 Input) 8(8 Input) 16(16 Input) 24(24 Input) 32(32 Input) 64(64 Input)	-			
Source Selector	Position	Position	1	4(4 position) 8(8 position) 16(16 position)	-			
Speech Privacy	Source	SelectType*	Forest	Building	-	* See "6.3.11. Speech Privacy" in "6. Parameter Values"		
		ON	OFF	ON	-	0:OFF 1:ON		
		Level	-∞	0.0	dB	dB x 100 ex. -73.60dB x 100 = -7360 "set" command is available for this parameter		
		MixRatio	10	70	-			

7. Parameter List

Parameter Name		MIN	MAX	unit	Remarks	
Speaker Processor	In	Level	-∞	10.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360 "set" command is available for this parameter
	Delay	ON	OFF	ON	-	0:OFF 1:ON
		Delay	0.00	500.00	ms	ms x 100 e.g. 102.80ms x 100 = 10280
	Band	LPFFrequency	20.0	20.0k	Hz	Hz x 1000 e.g. 1000Hz x 1000 = 1000000
		HPFFrequency	20.0	20.0k	Hz	Hz x 1000 e.g. 1000Hz x 1000 = 1000000
		LPFType	Thru	48dB/Oct Linkwitz	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "6. Parameter Values"
		HPFType	Thru	48dB/Oct Linkwitz	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "6. Parameter Values"
		LPFGc*	-6	6	dB	*Available only when filter type is AdjustGc
		HPFGc*	-6	6	dB	*Available only when filter type is AdjustGc
		Polarity	NORMAL	INVERTED	-	0:NORMAL 1:INVERTED
	Center	Frequency	20.0	20.0k	Hz	Hz x 1000 e.g. 1000Hz x 1000 = 1000000
	PEQ	Q*	63.0	0.1	-	* Available only when PEQ is APF 2nd * See "6.2.2.1. 3BAND EQ" in "6. Parameter Values"
		Frequency	20.0*	20.0k	Hz	*500 : When HORN EQ is chosen 100 : Other than Band A / B Hz x 1000 e.g. 1000Hz x 1000 = 1000000
		Gain*	-18.0	18.0	dB	* Not available for HPF/LPF/APF or PEQ is APF 2nd dB x 10 e.g. -14.5dB x 10 = -145
		Bypass	OFF	ON	-	0:OFF 1:ON
		Type	PEQ	Horn EQ	-	* See "6.2.6.2. SPEAKER PROCESSOR" in "6. Parameter Values"
	Limiter	Threshold	-54	0	dB	
		Attack	0.0	120.0	ms	ms x 10 e.g. 24.5ms x 10 = 245
		Release	3m	42.7	s	* See "6.2.2.2. GATE" / Decay in "6. Parameter Values"
		ON	OFF	ON	-	0:OFF 1:ON
		AttackMode	Fast	Manual	-	
	ReleaseMode	Fast	Manual	-		
	Out	Level	-∞	10.00	dB	dB x 100 e.g. -73.60dB x 100 = -7360 "set" command is available for this parameter
		Mute	UNMUTED	MUTED	-	0:UNMUTED 1:MUTED
		PEQOn	ON*	OFF*	-	*0:ON 1:OFF

7.3. XMV Series

Model				Access ID						Parameter Name		MIN	MAX	unit	Remarks			
4ch	8ch	4ch D	8ch D	MemNo (Memory Number)	UniquelId	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)								
o		o		512	1	4	0 to 3	0	0	0	Signal Processing	ATT *2	-99	0	dB	Synchronized with DigitalATT		
	o						0 to 7	0	1	0			Digital ATT *2	-99	0	dB	Synchronized with ATT	
	o						0 to 3	0	2	0			Mute	OFF	ON	-	0:OFF 1:ON	
	o						0 to 7	0	3	0			Polarity	Normal	Inverse	-	0:Normal 1:Inverse	
	o						0 to 3	0	0	0			Power	Standby	Standby	ON	-	0:ON 1:Standby
	o						0 to 7	0	0	0				Utility	InputSelect *1 *3	Analog	Multiple	-
	o							6	0	0	0	0						
	o							7	0	0	0	0						
	o							10	0	0	0	0	DigitalInput Sensitivity	Type	0dB	+17dB	-	0: -20dBFS 1: -3dBFS
	o							11	0 to 3	0	0	0	ChUtility	Input Select *3	Analog	Digital	-	Switching input source of by channel. 0:Analog 1:Digital
	o								0 to 7	0	0	0						
	o				2	0	0 to 3	0	0	0	Channel Name	Channel Name 4 Channel	ChName	Name	Character (UTF-8) 48byte	-	Notification only	
	o						0 to 7	0	0	0		Channel Name 8 Channel						

\*1 : Note

The XMV's input sensitivity is -3dBFS (rated output at -3dBFS) when connected via digital (YDIF or Dante) and +4dBu (rated output at +4dBu) when connected via analog.  
Please set an appropriate level before switching input.

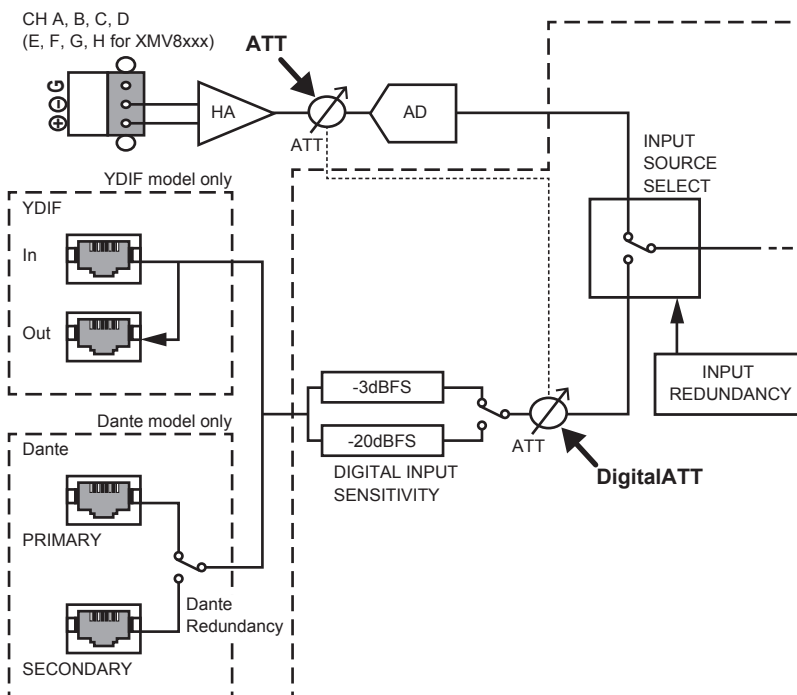
\*2 :

The ATT and DigitalATT parameters are always synchronized internally within an XMV amplifier.  
Controlling either one will provide the same result.

\*3 :

When "Utility/InputSelect" is changed to "Analog (or Digital)", "ChUtility/InputSelect" for all channels will be forcibly changed to Analog (or Digital).  
When "ChUtility/InputSelect" for all channels are set as "Analog (or Digital)" and a channel is changed to "Digital (or Analog)", "Utility/InputSelect" will be forcibly changed to "Multiple".

< XMV Block Diagram > e.g. XMV4280/XMV4140/XMV4280-D/XMV4140-D



## 7.4. EXi8

Access ID							Parameter Name	MIN	MAX	unit	Remarks	
MemNo (Memory Number)	Uniqueld	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)						
512	1	3	0 to 7	0	0	0	Signal Processing	GAIN	-6	66	dB	
					1			+48V	OFF	ON	-	0:OFF 1:ON
					2			Phase	OFF	ON	-	0:OFF 1:ON
					3			On	OFF	ON	-	0:OFF 1:ON
					4			HPFOn	OFF	ON	-	0:OFF 1:ON
					5		HPFFrequency	20	20000	Hz	Hz x 1000 ex. 1000Hz x 1000000	

## 7.5. EXo8

Access ID							Parameter Name	MIN	MAX	unit	Remarks	
MemNo (Memory Number)	Uniqueld	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)	IndexNo (Index Number)						
512	1	3	0 to 7	0	0	0	Signal Processing					0:Normal 1:Inverse
					1			On	OFF	ON	-	0:OFF 1:ON
					2			Gain	-96	24	dB	dB x 10 ex. -14.5dB x 10 = -145

## 7.6. MY4-AEC

## 7.6.1. MTX3, MTX5-D

MemNo (Memory Number)	Uniqueld	Access ID					IndexNo (Index Number)	Parameter Name				MIN	MAX	unit	Remarks		
		ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PmNo (Parameter Number)												
512	20034	0	0	1	0	0	MY4- AEC INPUT PATCH	MY4AEC InputPatch	NearEndMic	Patch	NONE	OUTPUT CH16	-	* See "12. MY4-AEC Input Patch" in "6. Parameter Values"			
		1	0	1	1	FromFarEnd				NONE	OUTPUT CH16	-	* See "12. MY4-AEC Input Patch" in "6. Parameter Values"				
90000	0	0-3 (AEC1-4)	0	0	0	0	MY4- AEC	Acoustic Echo Canceller 4 Channel	AEC	On	OFF	ON	-	0:OFF 1:ON			
									Effect	1	4	-					
									PttOn	OFF	ON	-	0:OFF 1:ON				
									PttThreshold	-80	-20	dB					
									MicType	Fixed	Moving	-	0:Fixed 1:Moving				
									Distance	2	40	meter					
		1	0-3 (AEC1-4)	0	0	0			0	1	2	FBS	On	OFF	ON	-	0:OFF 1:ON
												Width	1/10	1/93	oct	* See "6.2.8.2. MY4-AEC FBS" in "6. Parameter Values"	
												Depth	-6	-18	dB	* See "6.2.8.2. MY4-AEC FBS" in "6. Parameter Values"	
		2	0-3 (AEC1-4)	0	0	0			0	1	2	MicNR	On	OFF	ON	-	0:OFF 1:ON
												FarEndNR	On	OFF	ON	-	0:OFF 1:ON
		3	0	0-3 (0:Far-end A 1:Far-end B 2:Far-end C 3:Far-end D)	0	0			0	1	2	Reference	On	OFF	ON	-	0:OFF 1:ON
Reference (FarEndMix)	On						OFF	ON				-					

## 7.6.2. MRX7-D

Parameter Name		MIN	MAX	unit	Remarks	
AEC	AEC	On	OFF	ON	-	
		Effect	1	4	-	
		PttOn	OFF	ON	-	
		PttThreshold	-80	-20	dB	
		MicType	Fixed	Moving	-	0:Fixed 1:Moving
		Distance	2	40	meter	
	FBS	On	OFF	ON	-	
		Width	1/10	1/93	oct	* See "6.2.8.2. MY4-AEC FBS" in "6. Parameter Values"
		Depth	-6	-18	dB	* See "6.2.8.2. MY4-AEC FBS" in "6. Parameter Values"
	MicNR	On	OFF	ON	-	
	FarEndNR	On	OFF	ON	-	
	Reference (FarEndMix)	On	OFF	ON	-	

## 8. Meter List

### 8.1. MTX3/MTX5-D

Model		Access ID		Category	Meter Name	Type (*)	Remarks	
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld					
o	o	512	20000	INPUT PORT	INPUT(ANALOG)	Meter 12 Channel (INPUT1-8, STIN1L-STIN2R)	level	* Type is for "1-7) Parameter change notification" command option2.
o	o		20024		INPUT(YDIF)	Meter 16 Channel (YDIF IN 1-16)	level	
o	o		20001		INPUT(SLOT)	Meter 16 Channel (SLOT IN 1-16)	level	
o	o		20002	INPUT CHANNEL	EQ OUT	Meter 22 Channel (CH1-8, STIN1L-STIN3R, CH9-16)	level	
o	o		20003			Meter 8 Channel (CH1-8)	level	
o	o		20009			Meter 22 Channel (CH9-16, STIN1L-STIN3R, CH17-24)	level	
o	o		20010		GATE	Gate 8 Channel (CH1-8)	gr	
o	o		40002			Gate 8 Channel (CH1-8)	gr	
o	o		40000			Gate 8 Channel (CH1-8)	gr	
o	o		40001		COMP	Compressor 8 Channel (CH1-8)	gr	
o	o		40000			Compressor 4 Channel (STIN1L-STIN2R)	gr	
o	o		40001			Compressor 8 Channel (CH1-8)	gr	
o	o		40002	Compressor 8 Channel (CH9-16)		gr		
o	o		40003	Compressor 4 Channel (STIN1L-STIN2R)		gr		
o	o		40006	Dugan AUTO MIXER		Auto Mixer 4 Channel (CH1-4)	level (See the spread sheet "Dugan Automixer 2 - 4 Channel" in MRX7-D Meter List)	
o	o	50011	Auto Mixer 8 Channel (CH1-8)		level (See the spread sheet "Dugan Automixer 5 - 8 Channel" in MRX7-D Meter List)			
o	o	20005	POST ON		Meter 22 Channel (CH1-8, STIN1L-STIN3R, CH9-16)	level		
o	o	20011		Meter 8 Channel (CH1-8)	level			
o	o	20012		Meter 22 Channel (CH9-16, STIN1L-STIN3R, CH17-24)	level			
o	o	20009	EFFECT RETURN	Meter 4 Channel (Fx RTN1 L-Fx RTN2 R)	level			
o	o	20015		Meter 4 Channel (Fx RTN1 L-Fx RTN2 R)	level			
o	o	20012	ZONE	2nd PRIORITY PRIORITY DUCKER	Ducking 8 Channel (ZONE1-8)	gr		
o	o	20019		Ducking 8 Channel (ZONE1-8)	gr			
o	o	20013	1st PRIORITY PRIORITY DUCKER	Ducking 8 Channel (ZONE1-8)	gr			
o	o	20020		Ducking 8 Channel (ZONE1-8)	gr			
o	o	20014	ANC AMBIENT SOURCE	Ambient Noise Compensator 8 Channel ZONE 1-8(AMBIENT SOURCE)	level			
o	o	20021		Ambient Noise Compensator 8 Channel ZONE 1-8(AMBIENT SOURCE)	level			
o	o	20015	ZONE OUT	Meter 8 Channel ZONE 1-8	level			
o	o	20022		Meter 16 Channel ZONE 1-16	level			

Model		Access ID		Category	Meter Name	Type (*)	Remarks
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld				
o		512	40006	OUTPUT CHANNEL OUTPUT CHANNEL(1way) SPEAKER PROCESSOR LIMITER	Speaker Processor 1 Way (OUTPUT CH1)	gr	* Type is for "1-7) Parameter change notification" command option2.
o			40007		Speaker Processor 1 Way (OUTPUT CH2)	gr	
o			40008		Speaker Processor 1 Way (OUTPUT CH3)	gr	
o			40009		Speaker Processor 1 Way (OUTPUT CH4)	gr	
o			40010		Speaker Processor 1 Way (OUTPUT CH5)	gr	
o			40011		Speaker Processor 1 Way (OUTPUT CH6)	gr	
o			40012		Speaker Processor 1 Way (OUTPUT CH7)	gr	
o			40013		Speaker Processor 1 Way (OUTPUT CH8)	gr	
	o		40008		Speaker Processor 1 Way (OUTPUT CH1)	gr	
	o		40009		Speaker Processor 1 Way (OUTPUT CH2)	gr	
	o		40010		Speaker Processor 1 Way (OUTPUT CH3)	gr	
	o		40011		Speaker Processor 1 Way (OUTPUT CH4)	gr	
	o		40012		Speaker Processor 1 Way (OUTPUT CH5)	gr	
	o		40013		Speaker Processor 1 Way (OUTPUT CH6)	gr	
	o		40014		Speaker Processor 1 Way (OUTPUT CH7)	gr	
	o		40015		Speaker Processor 1 Way (OUTPUT CH8)	gr	
	o		40016		Speaker Processor 1 Way (OUTPUT CH9)	gr	
	o		40017		Speaker Processor 1 Way (OUTPUT CH10)	gr	
	o		40018		Speaker Processor 1 Way (OUTPUT CH11)	gr	
	o		40019		Speaker Processor 1 Way (OUTPUT CH12)	gr	
	o		40020		Speaker Processor 1 Way (OUTPUT CH13)	gr	
	o		40021		Speaker Processor 1 Way (OUTPUT CH14)	gr	
	o		40022		Speaker Processor 1 Way (OUTPUT CH15)	gr	
	o	40023	Speaker Processor 1 Way (OUTPUT CH16)	gr			



Model		Access ID		Category	Meter Name	Type (*)	Remarks	
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld					
o		512	40006	OUTPUT CHANNEL SPEAKER PROCESSOR LIMITER	Speaker Processor 2 Way (OUTPUT CH1 (Low))	gr	* Type is for "1-7) Parameter change notification" command option2.	
o			40007		Speaker Processor 2 Way (OUTPUT CH1 (High))	gr		
o			40008		Speaker Processor 2 Way (OUTPUT CH3 (Low))	gr		
o			40009		Speaker Processor 2 Way (OUTPUT CH3 (High))	gr		
o			40010		Speaker Processor 2 Way (OUTPUT CH5 (Low))	gr		
o			40011		Speaker Processor 2 Way (OUTPUT CH5 (High))	gr		
o			40012		Speaker Processor 2 Way (OUTPUT CH7 (Low))	gr		
o			40013		Speaker Processor 2 Way (OUTPUT CH7 (High))	gr		
	o		40008		Speaker Processor 2 Way (OUTPUT CH1 (Low))	gr		
	o		40009		Speaker Processor 2 Way (OUTPUT CH1 (High))	gr		
	o		40010		Speaker Processor 2 Way (OUTPUT CH3 (Low))	gr		
	o		40011		Speaker Processor 2 Way (OUTPUT CH3 (High))	gr		
	o		40012		Speaker Processor 2 Way (OUTPUT CH5 (Low))	gr		
	o		40013		Speaker Processor 2 Way (OUTPUT CH5 (High))	gr		
	o		40014		Speaker Processor 2 Way (OUTPUT CH7 (Low))	gr		
	o		40015		Speaker Processor 2 Way (OUTPUT CH7 (High))	gr		
	o		40016		Speaker Processor 2 Way (OUTPUT CH9 (Low))	gr		
	o		40017		Speaker Processor 2 Way (OUTPUT CH9 (High))	gr		
	o		40018		Speaker Processor 2 Way (OUTPUT CH11 (Low))	gr		
	o		40019		Speaker Processor 2 Way (OUTPUT CH11 (High))	gr		
	o		40020		Speaker Processor 2 Way (OUTPUT CH13 (Low))	gr		
	o		40021		Speaker Processor 2 Way (OUTPUT CH13 (High))	gr		
	o		40022		Speaker Processor 2 Way (OUTPUT CH15 (Low))	gr		
	o	40023	Speaker Processor 2 Way (OUTPUT CH15 (High))	gr				
o		20020		OUTPUT CHANNEL	Meter 8 Channel (OUTPUT CH1-8)	level		
	o	20027			Meter 16 Channel (OUTPUT CH1-16)	level		
o		20025		OUTPUT PORT	OUTPUT (ANALOG)	Meter 8 Channel (OUTPUT CH1-8)	level	
	o	20031			Meter 8 Channel (OUTPUT CH1-8)	level		
	o	20032			OUTPUT (SLOT)	Meter 16 Channel (SLOT OUT 1-16)	level	
	o		90000	MY4-AEC		MY4-AEC (Mic In. 1-4 Ref In. 1-4 Echo Attn. 1-4 ERL 1-4 PTT Thesh. 1-4)	level	

## 8.2. MRX7-D

Category	Meter Name		Type	Remarks
-	ANALOG IN		8 Channel (INPUT1-8)	level
-	ANALOG OUT		8 Channel (OUTPUT1-8)	level
-	YDIF IN		16 Channel (YDIF IN 1-16)	level
-	SLOT IN		16 Channel (SLOT IN 1-16)	level
-	SLOT OUT		16 Channel (SLOT OUT 1-16)	level
-	STEREO IN		4 Channel (INPUT 1L-INPUT 2R)	level
-	MY4-AEC		16 Channel (MicIn. 1-4 RefIn. 1-4 EchoAttn. 1-4 ERL. 1-4)	level
-	Ambient Noise Compensator		Mono (AMBIENT SOURCE, OUTPUT) Stereo (AMBIENT SOURCE, OUTPUT L, OUTPUT R)	level
-	Auto Gain Control		Mono (INPUT,OUTPUT) Stereo (INPUT L-OUTPUT R)	level
-	Dynamics	Compressor / Ducking / Gate / Limiter	Mono (OUTPUT) Stereo (OUTPUT L, OUTPUT R)	level
-			Mono (GR) Stereo (GR L, GR R)	gr
-		Paging Ducker	Mono (OUTPUT) Stereo (OUTPUT L, OUTPUT R)	level
-	EQ GEQ		Mono (INPUT,OUTPUT) Stereo (INPUT L-OUTPUT R)	level
-	Fader		1 Channel (CH1) 2 Channel (CH1-2) 4 Channel (CH1-4) 8 Channel (CH1-8) 16 Channel (CH1-16) 32 Channel (CH1-32)	level
-	Meter		1 Channel (CH1) 2 Channel (CH1-2) 4 Channel (CH1-4) 8 Channel (CH1-8) 16 Channel (CH1-16) 32 Channel (CH1-32)	level
-	Delay Matrix		4 OUT (OUTPUT1-4) 8 OUT (OUTPUT1-8) 16 OUT (OUTPUT1-16)	level



\*1 Room Combiner plus Auto Mixer

No.	Mic Input Channel						Type
	1	2	3	..	15	16	
1	Level (*) (Ch01)	Level (*) (Ch01)	Level (*) (Ch01)	..	Level (*) (Ch01)	Level (*) (Ch01)	level
2	-	Level (*) (Ch02)	Level (*) (Ch02)	..	Level (*) (Ch02)	Level (*) (Ch02)	
3	-	-	Level (*) (Ch03)	..	Level (*) (Ch03)	Level (*) (Ch03)	
:	:	:	:	..	:	:	
15	-	-	-	..	Level (*) (Ch15)	Level (*) (Ch15)	
16	-	-	-	..	-	Level (*) (Ch16)	
17	AutoMixGain (Ch01)	AutoMixGain (Ch01)	AutoMixGain (Ch01)	..	AutoMixGain (Ch01)	AutoMixGain (Ch01)	
18	-	AutoMixGain (Ch02)	AutoMixGain (Ch02)	..	AutoMixGain (Ch02)	AutoMixGain (Ch02)	
19	-	-	AutoMixGain (Ch03)	..	AutoMixGain (Ch03)	AutoMixGain (Ch03)	
:	:	:	:	..	:	:	
31	-	-	-	..	AutoMixGain (Ch15)	AutoMixGain (Ch15)	
32	-	-	-	..	-	AutoMixGain (Ch16)	
33	Input (Ch01)	Input (Ch01)	Input (Ch01)	..	Input (Ch01)	Input (Ch01)	
34	-	Input (Ch02)	Input (Ch02)	..	Input (Ch02)	Input (Ch02)	
35	-	-	Input (Ch03)	..	Input (Ch03)	Input (Ch03)	
:	:	:	:	..	:	:	
47	-	-	-	..	Input (Ch15)	Input (Ch15)	
48	-	-	-	..	-	Input (Ch16)	
49	Output (Ch01)	Output (Ch01)	Output (Ch01)	..	Output (Ch01)	Output (Ch01)	
50	-	Output (Ch02)	Output (Ch02)	..	Output (Ch02)	Output (Ch02)	
51	-	-	Output (Ch03)	..	Output (Ch03)	Output (Ch03)	
:	:	:	:	..	:	:	
63	-	-	-	..	Output (Ch15)	Output (Ch15)	
64	-	-	-	..	-	Output (Ch16)	

- : 00 (unused data)  
 \* : Input level which applied Weight parameter

\*2 Room Combiner plus Auto Mixer

No.	Mic Input Channel						Type
	17	18	19	..	23	24	
1	Level (*) (Ch01)	Level (*) (Ch01)	Level (*) (Ch01)	..	Level (*) (Ch01)	Level (*) (Ch01)	level
2	Level (*) (Ch02)	Level (*) (Ch02)	Level (*) (Ch02)	..	Level (*) (Ch02)	Level (*) (Ch02)	
:	:	:	:	..	:	:	
17	Level (*) (Ch17)	Level (*) (Ch17)	Level (*) (Ch17)	..	Level (*) (Ch17)	Level (*) (Ch17)	
18	-	Level (*) (Ch18)	Level (*) (Ch18)	..	Level (*) (Ch18)	Level (*) (Ch18)	
19	-	-	Level (*) (Ch19)	..	Level (*) (Ch19)	Level (*) (Ch19)	
:	:	:	:	..	:	:	
23	-	-	-	..	Level (*) (Ch23)	Level (*) (Ch23)	
24	-	-	-	..	-	Level (*) (Ch24)	
25	AutoMlxGain (Ch01)	AutoMlxGain (Ch01)	AutoMlxGain (Ch01)	..	AutoMlxGain (Ch01)	AutoMlxGain (Ch01)	
26	AutoMlxGain (Ch02)	AutoMlxGain (Ch02)	AutoMlxGain (Ch02)	..	AutoMlxGain (Ch02)	AutoMlxGain (Ch02)	
:	:	:	:	..	:	:	
41	AutoMlxGain (Ch17)	AutoMlxGain (Ch17)	AutoMlxGain (Ch17)	..	AutoMlxGain (Ch17)	AutoMlxGain (Ch17)	
42	-	AutoMlxGain (Ch18)	AutoMlxGain (Ch18)	..	AutoMlxGain (Ch18)	AutoMlxGain (Ch18)	
43	-	-	AutoMlxGain (Ch19)	..	AutoMlxGain (Ch19)	AutoMlxGain (Ch19)	
:	:	:	:	..	:	:	
47	-	-	-	..	AutoMlxGain (Ch23)	AutoMlxGain (Ch23)	
48	-	-	-	..	-	AutoMlxGain (Ch24)	
49	Input (Ch01)	Input (Ch01)	Input (Ch01)	..	Input (Ch01)	Input (Ch01)	
50	Input (Ch02)	Input (Ch02)	Input (Ch02)	..	Input (Ch02)	Input (Ch02)	
:	:	:	:	..	:	:	
65	Input (Ch17)	Input (Ch17)	Input (Ch17)	..	Input (Ch17)	Input (Ch17)	
66	-	Input (Ch18)	Input (Ch18)	..	Input (Ch18)	Input (Ch18)	
67	-	-	Input (Ch19)	..	Input (Ch19)	Input (Ch19)	
:	:	:	:	..	:	:	
71	-	-	-	..	Input (Ch23)	Input (Ch23)	
72	-	-	-	..	-	Input (Ch24)	
73	Output (Ch01)	Output (Ch01)	Output (Ch01)	..	Output (Ch01)	Output (Ch01)	
74	Output (Ch02)	Output (Ch02)	Output (Ch02)	..	Output (Ch02)	Output (Ch02)	
:	:	:	:	..	:	:	
89	Output (Ch17)	Output (Ch17)	Output (Ch17)	..	Output (Ch17)	Output (Ch17)	
90	-	Output (Ch08)	Output (Ch08)	..	Output (Ch08)	Output (Ch08)	
91	-	-	Output (Ch19)	..	Output (Ch19)	Output (Ch19)	
:	:	:	:	..	:	:	
95	-	-	-	..	Output (Ch23)	Output (Ch23)	
96	-	-	-	..	-	Output (Ch24)	

- : 00 (unused data)  
 \* : Input level which applied Weight parameter

## \*3 Dugan Automixer 2 - 4 Channel

No.	Channel			Type
	2	3	4	
1	Level (*) (Ch01)	Level (*) (Ch01)	Level (*) (Ch01)	level
2	Level (*) (Ch02)	Level (*) (Ch02)	Level (*) (Ch02)	
3	-	Level (*) (Ch03)	Level (*) (Ch03)	
4	-	-	Level (*) (Ch04)	
5	AutoMixGain (Ch01)	AutoMixGain (Ch01)	AutoMixGain (Ch01)	
6	AutoMixGain (Ch02)	AutoMixGain (Ch02)	AutoMixGain (Ch02)	
7	-	AutoMixGain (Ch03)	AutoMixGain (Ch03)	
8	-	-	AutoMixGain (Ch04)	
9	Input (Ch01)	Input (Ch01)	Input (Ch01)	
10	Input (Ch02)	Input (Ch02)	Input (Ch02)	
11	-	Input (Ch03)	Input (Ch03)	
12	-	-	Input (Ch04)	
13	Output (Ch01)	Output (Ch01)	Output (Ch01)	
14	Output (Ch02)	Output (Ch02)	Output (Ch02)	
15	-	Output (Ch03)	Output (Ch03)	
16	-	-	Output (Ch04)	

- : 00 (unused data)

\* : Input level which applied Weight parameter

\*4 Dugan Automixer 5 - 8 Channel

No.	Channel				Type
	5	6	7	8	
1	Level (*) (Ch01)	Level (*) (Ch01)	Level (*) (Ch01)	Level (*) (Ch01)	level
2	Level (*) (Ch02)	Level (*) (Ch02)	Level (*) (Ch02)	Level (*) (Ch02)	
:	:	:	:	:	
5	-Level (*) (Ch05)	Level (*) (Ch05)	Level (*) (Ch05)	Level (*) (Ch05)	
6	-	Level (*) (Ch06)	Level (*) (Ch06)	Level (*) (Ch06)	
7	-	-	Level (*) (Ch07)	Level (*) (Ch07)	
8	-	-	-	Level (*) (Ch08)	
9	AutoMixGain (Ch01)	AutoMixGain (Ch01)	AutoMixGain (Ch01)	AutoMixGain (Ch01)	
10	AutoMixGain (Ch02)	AutoMixGain (Ch02)	AutoMixGain (Ch02)	AutoMixGain (Ch02)	
:	:	:	:	:	
13	AutoMixGain (Ch05)	AutoMixGain (Ch05)	AutoMixGain (Ch05)	AutoMixGain (Ch05)	
14	-	AutoMixGain (Ch06)	AutoMixGain (Ch06)	AutoMixGain (Ch06)	
15	-	-	AutoMixGain (Ch07)	AutoMixGain (Ch07)	
16	-	-	-	AutoMixGain (Ch08)	
17	Input (Ch01)	Input (Ch01)	Input (Ch01)	Input (Ch01)	
18	Input (Ch02)	Input (Ch02)	Input (Ch02)	Input (Ch02)	
:	:	:	:	:	
21	Input (Ch05)	Input (Ch05)	Input (Ch05)	Input (Ch05)	
22	-	Input (Ch06)	Input (Ch06)	Input (Ch06)	
23	-	-	Input (Ch07)	Input (Ch07)	
24	-	-	-	Input (Ch08)	
25	Output (Ch01)	Output (Ch01)	Output (Ch01)	Output (Ch01)	
26	Output (Ch02)	Output (Ch02)	Output (Ch02)	Output (Ch02)	
:	:	:	:	:	
27	Output (Ch05)	Output (Ch05)	Output (Ch05)	Output (Ch05)	
31	-	Output (Ch06)	Output (Ch06)	Output (Ch06)	
31	-	-	Output (Ch07)	Output (Ch07)	
32	-	-	-	Output (Ch08)	

- : 00 (unused data)

\* : Input level which applied Weight parameter

\*5 Dugan Automixer 9 - 16 Channel

No.	Mic Input Channel							Type
	9	10	..	13	14	15	16	
1	Level (*) (Ch01)	Level (*) (Ch01)	..	Level (*) (Ch01)	Level (*) (Ch01)	Level (*) (Ch01)	Level (*) (Ch01)	level
2	Level (*) (Ch02)	Level (*) (Ch02)	..	Level (*) (Ch02)	Level (*) (Ch02)	Level (*) (Ch02)	Level (*) (Ch02)	
:	:	:	..	:	:	:	:	
9	Level (*) (Ch09)	Level (*) (Ch09)	..	Level (*) (Ch09)	Level (*) (Ch09)	Level (*) (Ch09)	Level (*) (Ch09)	
10	-	Level (*) (Ch10)	..	Level (*) (Ch10)	Level (*) (Ch10)	Level (*) (Ch10)	Level (*) (Ch10)	
:	:	:	..	:	:	:	:	
13	-	-	..	Level (*) (Ch13)	Level (*) (Ch13)	Level (*) (Ch13)	Level (*) (Ch13)	
14	-	-	..	-	Level (*) (Ch14)	Level (*) (Ch14)	Level (*) (Ch14)	
15	-	-	..	-	-	Level (*) (Ch15)	Level (*) (Ch15)	
16	-	-	..	-	-	-	Level (*) (Ch16)	
17	AutoMixGain (Ch01)	AutoMixGain (Ch01)	..	AutoMixGain (Ch01)	AutoMixGain (Ch01)	AutoMixGain (Ch01)	AutoMixGain (Ch01)	
18	AutoMixGain (Ch02)	AutoMixGain (Ch02)	..	AutoMixGain (Ch02)	AutoMixGain (Ch02)	AutoMixGain (Ch02)	AutoMixGain (Ch02)	
:	:	:	..	:	:	:	:	
25	AutoMixGain (Ch09)	AutoMixGain (Ch09)	..	AutoMixGain (Ch09)	AutoMixGain (Ch09)	AutoMixGain (Ch09)	AutoMixGain (Ch09)	
26	-	AutoMixGain (Ch10)	..	AutoMixGain (Ch10)	AutoMixGain (Ch10)	AutoMixGain (Ch10)	AutoMixGain (Ch10)	
:	:	:	..	:	:	:	:	
29	-	-	..	AutoMixGain (Ch13)	AutoMixGain (Ch13)	AutoMixGain (Ch13)	AutoMixGain (Ch13)	
30	-	-	..	-	AutoMixGain (Ch14)	AutoMixGain (Ch14)	AutoMixGain (Ch14)	
31	-	-	..	-	-	AutoMixGain (Ch15)	AutoMixGain (Ch15)	
32	-	-	..	-	-	-	AutoMixGain (Ch16)	
33	Input (Ch01)	Input (Ch01)	..	Input (Ch01)	Input (Ch01)	Input (Ch01)	Input (Ch01)	
34	Input (Ch02)	Input (Ch02)	..	Input (Ch02)	Input (Ch02)	Input (Ch02)	Input (Ch02)	
:	:	:	..	:	:	:	:	
41	Input (Ch09)	Input (Ch09)	..	Input (Ch09)	Input (Ch09)	Input (Ch09)	Input (Ch09)	
42	-	Input (Ch10)	..	Input (Ch10)	Input (Ch10)	Input (Ch10)	Input (Ch10)	
:	:	:	..	:	:	:	:	
45	-	-	..	Input (Ch13)	Input (Ch13)	Input (Ch13)	Input (Ch13)	
46	-	-	..	-	Input (Ch14)	Input (Ch14)	Input (Ch14)	
47	-	-	..	-	-	Input (Ch15)	Input (Ch15)	
48	-	-	..	-	-	-	Input (Ch16)	
49	Output (Ch01)	Output (Ch01)	..	Output (Ch01)	Output (Ch01)	Output (Ch01)	Output (Ch01)	
50	Output (Ch02)	Output (Ch02)	..	Output (Ch02)	Output (Ch02)	Output (Ch02)	Output (Ch02)	
:	:	:	..	:	:	:	:	
57	Output (Ch09)	Output (Ch09)	..	Output (Ch09)	Output (Ch09)	Output (Ch09)	Output (Ch09)	
58	-	Output (Ch10)	..	Output (Ch10)	Output (Ch10)	Output (Ch10)	Output (Ch10)	
:	:	:	..	:	:	:	:	
62	-	-	..	Output (Ch13)	Output (Ch13)	Output (Ch13)	Output (Ch13)	
63	-	-	..	-	Output (Ch14)	Output (Ch14)	Output (Ch14)	
63	-	-	..	-	-	Output (Ch15)	Output (Ch15)	
64	-	-	..	-	-	-	Output (Ch16)	

- : 00 (unused data)

\* : Input level with Weight parameter applied



\*6 Dugan Automixer 17 - 24 Channel

No.	Channel							Type
	17	18	..	21	22	23	24	
1	Level (*) (Ch01)	Level (*) (Ch01)	..	Level (*) (Ch01)	Level (*) (Ch01)	Level (*) (Ch01)	Level (*) (Ch01)	level
2	Level (*) (Ch02)	Level (*) (Ch02)	..	Level (*) (Ch02)	Level (*) (Ch02)	Level (*) (Ch02)	Level (*) (Ch02)	
:	:	:	..	:	:	:	:	
17	Level (*) (Ch17)	Level (*) (Ch17)	..	Level (*) (Ch17)	Level (*) (Ch17)	Level (*) (Ch17)	Level (*) (Ch17)	
18	-	Level (*) (Ch18)	..	Level (*) (Ch18)	Level (*) (Ch18)	Level (*) (Ch18)	Level (*) (Ch18)	
:	:	:	..	:	:	:	:	
21	-	-	..	Level (*) (Ch21)	Level (*) (Ch21)	Level (*) (Ch21)	Level (*) (Ch21)	
22	-	-	..	-	Level (*) (Ch22)	Level (*) (Ch22)	Level (*) (Ch22)	
23	-	-	..	-	-	Level (*) (Ch23)	Level (*) (Ch23)	
24	-	-	..	-	-	-	Level (*) (Ch24)	
25	AutoMlxGain (Ch01)	AutoMlxGain (Ch01)	..	AutoMlxGain (Ch01)	AutoMlxGain (Ch01)	AutoMlxGain (Ch01)	AutoMlxGain (Ch01)	
26	AutoMlxGain (Ch02)	AutoMlxGain (Ch02)	..	AutoMlxGain (Ch02)	AutoMlxGain (Ch02)	AutoMlxGain (Ch02)	AutoMlxGain (Ch02)	
:	:	:	..	:	:	:	:	
41	AutoMlxGain (Ch17)	AutoMlxGain (Ch17)	..	AutoMlxGain (Ch17)	AutoMlxGain (Ch17)	AutoMlxGain (Ch17)	AutoMlxGain (Ch17)	
42	-	AutoMlxGain (Ch18)	..	AutoMlxGain (Ch18)	AutoMlxGain (Ch18)	AutoMlxGain (Ch18)	AutoMlxGain (Ch18)	
:	:	:	..	:	:	:	:	
45	-	-	..	AutoMlxGain (Ch21)	AutoMlxGain (Ch21)	AutoMlxGain (Ch21)	AutoMlxGain (Ch21)	
46	-	-	..	-	AutoMlxGain (Ch22)	AutoMlxGain (Ch22)	AutoMlxGain (Ch22)	
47	-	-	..	-	-	AutoMlxGain (Ch23)	AutoMlxGain (Ch23)	
48	-	-	..	-	-	-	AutoMlxGain (Ch24)	
49	Input (Ch01)	Input (Ch01)	..	Input (Ch01)	Input (Ch01)	Input (Ch01)	Input (Ch01)	
50	Input (Ch02)	Input (Ch02)	..	Input (Ch02)	Input (Ch02)	Input (Ch02)	Input (Ch02)	
:	:	:	..	:	:	:	:	
65	Input (Ch17)	Input (Ch17)	..	Input (Ch17)	Input (Ch17)	Input (Ch17)	Input (Ch17)	
66	-	Input (Ch18)	..	Input (Ch18)	Input (Ch18)	Input (Ch18)	Input (Ch18)	
:	:	:	..	:	:	:	:	
69	-	-	..	Input (Ch21)	Input (Ch21)	Input (Ch21)	Input (Ch21)	
70	-	-	..	-	Input (Ch22)	Input (Ch22)	Input (Ch22)	
71	-	-	..	-	-	Input (Ch23)	Input (Ch23)	
72	-	-	..	-	-	-	Input (Ch24)	
73	Output (Ch01)	Output (Ch01)	..	Output (Ch01)	Output (Ch01)	Output (Ch01)	Output (Ch01)	
74	Output (Ch02)	Output (Ch02)	..	Output (Ch02)	Output (Ch02)	Output (Ch02)	Output (Ch02)	
:	:	:	..	:	:	:	:	
89	Output (Ch17)	Output (Ch17)	..	Output (Ch17)	Output (Ch17)	Output (Ch17)	Output (Ch17)	
90	-	Output (Ch18)	..	Output (Ch18)	Output (Ch18)	Output (Ch18)	Output (Ch18)	
:	:	:	..	:	:	:	:	
93	-	-	..	Output (Ch21)	Output (Ch21)	Output (Ch21)	Output (Ch21)	
94	-	-	..	-	Output (Ch22)	Output (Ch22)	Output (Ch22)	
95	-	-	..	-	-	Output (Ch23)	Output (Ch23)	
96	-	-	..	-	-	-	Output (Ch24)	

- : 00 (unused data)

\* : Input level with Weight parameter applied

## 8.3. XMV Series

Model				Access ID		Category	Meter Name	Type	Remarks	
4ch	8ch	4ch D	8ch D	MemNo (Memory Number)	Uniqueld					
o		o		512	20000	-	INPUT	Meter 4 Channel (ANALOG INPUT A-D, DIGITAL INPUT A-D)	level	See 6. Parameter Value Details.
	o		o					Meter 8 Channel (ANALOG INPUT A-H, DIGITAL INPUT A-H)	level	
o		o			20001	-	OUTPUT	Meter 4 Channel (OUTPUT A-D)	level	
	o		o					Meter 8 Channel (OUTPUT A-H)	level	

## 8.4. EXi8

Access ID		Category	Meter Name		Type	Remarks
MemNo (Memory Number)	Uniqueld					
512	20000	-	INPUT	Meter 8 Channel (INPUT1-8)	level	See Parameter Value Details.

## 8.5. EXo8

Access ID		Category	Meter Name		Type	Remarks
MemNo (Memory Number)	Uniqueld					
512	20001	-	OUTPUT	Meter 8 Channel (OUTPUT1-8)	level	See Parameter Value Details.