

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

Version 1.0.1

Release October 03, 2013

This specification document applies to MTX3, MTX5-D, XMV, EXi8, and EXo8 V1.12 and later.



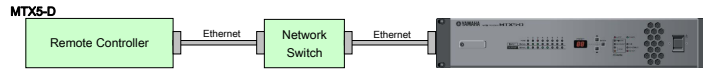
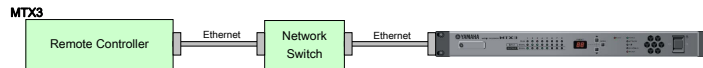
0. Revision History

Version	Date	Page #	Description
V1.0.0	Sep. 1, 2013	-	Initial version
V1.0.1	Oct. 3, 2013	37	Added note (*1) to XMV "InputSelect"
		44,45	Separated Meter List of EXi8 and EXo8
		37	Added *2 to XMV "ATT" and "DigitalATT"

1. Setup

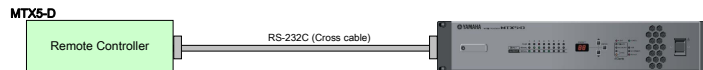
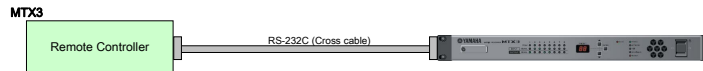
1.1. Connection Procedure

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



* Also for XMV, EXi8, and EXo8.

Connection when using the remote terminal to perform remote control using this protocol



* XMV, EXi8, and EXo8 do not have RS-232C connector

1.2. Configuring the Remote Controller

MTX3 and MTX5-D can be controlled from an external device through the Ethernet (NETWORK) terminal and remote (RS-232C) terminal. XMV, EXi8, and EXo8 can be controlled from an external controller through the Ethernet (NETWORK) terminal. 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

Remote (RS-232C connector) control

Bit Rate: The specified bit rate.
Data: 8 bits
Parity: none
Stop bit: 1 bit
Flow Control : none

RS232C 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

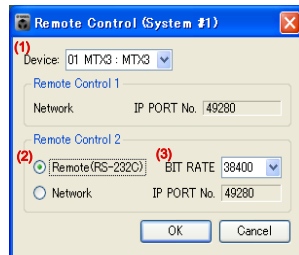
1.3.1 MTX3 and MTX5-D

MTX3 and MTX5-D can be controlled via an external device through a NETWORK and RS-232C connector.

Two remote controllers can connect simultaneously via two available ports.

The first controller is fixed to using the NETWORK connector while the second controller can use the NETWORK or RS-232C connector.

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



- (1) Select an MTX within the MTX system.
- (2) Select NETWORK connector or RS-232C for Remote Control 2.
- (3) Select 38400 or 115200 (if RS-232C is selected).

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 RS232C 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.

Two remote controllers can connect simultaneously via two available ports.

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 Editor.

When XMV, EXi8 and EXo8 are connected and controlled from MTX3 or MTX5-D, only one remote controller can be used, as one port is required for system control from MTX3 or MTX5-D.

2. Command List

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	Device error status notification NOTIFY devstatus error ...	
1-3	Current Fs (sampling frequency) setting notification	Current Fs (sampling frequency) setting notification NOTIFY devstatus fs ...	
1-4	Current word clock status notification	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	Parameter change notification normalized value NOTIFY setn ...	
1-6	Scheduler on/off change notification	Scheduler on/off change notification NOTIFY set(setn) MTX:EvtMScd_On ...	
1-7	Meter change notification	Meter information notification NOTIFY mtr ...	
1-8	Current snapshot (preset) number change notification	Current snapshot (preset) number change notification NOTIFY sscurrent ...	
1-9	Event processing change notification	Media insertion notification NOTIFY event MTX:Media ...	This command is invalid on the XMV, EXi8, and EXo8.
1-10	Time synchronization notification	Time synchronization notification NOTIFY event MTX:AbsoluteTime ...	This command is invalid on the EXi8, and EXo8.
1-11	Song play mode notification	Song play mode notification NOTIFY event MTX:AudioPlayerSetPlayMode ...	This command is invalid on the XMV, EXi8, and EXo8.
1-12	Play, stop, and other transport operation notification	Play, stop, and other transport operation notification NOTIFY event MTX:AudioPlayerTransport ...	This command is invalid on the XMV, EXi8, and EXo8.
1-13	Playback song notification	Playback song notification NOTIFY event MTX:AudioPlayerSetCurrentSong ...	This command is invalid on the XMV, EXi8, and EXo8.
1-14	MTX Editor synchronization processing notification	MTX Editor synchronization processing notification NOTIFY event MTX:SynchronizationSetStatus ...	This command is invalid on the XMV, EXi8, and EXo8.

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	Device error status query devstatus error	
2-3	Current Fs (sampling frequency) status query	Current Fs (sampling frequency) status query devstatus fs	
2-4	Current word clock status query	Current word clock status query devstatus lockstatus	
2-5	Device run mode change	Normal run mode change devmode normal	
2-5	Emergency run mode change	Emergency run mode change devmode emergency	This command 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	Value notification mode setting scpmode valuetype ...	
2-8	Normalization resolution setting	Normalization resolution setting scpmode resolution ...	
2-9	Keypalve activation setting	Keypalve activation setting scpmode keeppalve ...	
2-10	Parameter query	Raw value parameter query get ...	
2-11	Normalized value parameter query	Normalized value parameter query getn ...	
2-12	Scheduler status notification	Scheduler status notification get(getn,gett) MTX:EvtMScd_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	Normalized value parameter setting setn ...	
2-15	Scheduler setting	Scheduler setting set(setn,set) MTX:EvtMScd_On ...	This command is invalid on the XMV, EXi8, and EXo8.
2-16	Meter control	Transmission request mtrstart ...	
2-17	Stop request	Stop request mtrstop ...	
2-18	Snapshot (preset) processing	Snapshot (preset) current number query sscurrent ...	This command is invalid on the XMV, EXi8, and EXo8.
2-19	Snapshot (preset) recall processing	Snapshot (preset) recall processing ssrecall ...	This command is invalid on the XMV, EXi8, and EXo8.

3. Extended commands

No.	Request details	Data	Remarks
3-1	Product information query request	MTX external control protocol version query devinfo protocolver ...	
3-2	Parameter set version query	Parameter set version query devinfo paramsetver ...	
3-3	Firmware version query	Firmware version query devinfo version ...	
3-4	Product name query	Product name query devinfo productname ...	
3-5	Serial number query	Serial number query devinfo serialno ...	
3-6	Device ID query	Device ID query devinfo deviceid ...	
3-7	Device name query	Device name query devinfo devicename ...	
3-8	Snapshot list (preset) recall processing	Number of snapshot (preset) lists ssnum ...	This command is invalid on the XMV, EXi8, and EXo8.
3-9	Nth preset information	Nth preset information ssinfo ...	This command is invalid on the XMV, EXi8, and EXo8.
3-10	Event processing request	Time synchronization event MTX:AbsoluteTime ...	This command is invalid on the EXi8, and EXo8.
3-11	Current folder information (for list) query	Current folder information (for list) query event MTX:AudioPlayerGetCurrentDir ...	This command is invalid on the XMV, EXi8, and EXo8.
3-12	Current folder move (for list) query	Current folder move (for list) query event MTX:AudioPlayerSetCurrentDir ...	This command is invalid on the XMV, EXi8, and EXo8.
3-13	Folder name query	Folder name query event MTX:AudioPlayerGetDirName ...	This command is invalid on the XMV, EXi8, and EXo8.
3-14	File name query	File name query event MTX:AudioPlayerGetFileName ...	This command is invalid on the XMV, EXi8, and EXo8.
3-15	Folder name list: Multiple Folder name query	Folder name list: Multiple Folder name query event MTX:AudioPlayerGetDirNameList ...	This command is invalid on the XMV, EXi8, and EXo8.
3-16	File name list query	File name list query event MTX:AudioPlayerGetFileNameList ...	This command is invalid on the XMV, EXi8, and EXo8.
3-17	Song play mode query	Song play mode query event MTX:AudioPlayerGetPlayMode ...	This command is invalid on the XMV, EXi8, and EXo8.
3-18	Song play mode setting	Song play mode setting event MTX:AudioPlayerSetPlayMode ...	This command is invalid on the XMV, EXi8, and EXo8.
3-19	Song playback status query	Song playback status query event MTX:AudioPlayerGetStatus ...	This command is invalid on the XMV, EXi8, and EXo8.
3-20	Play, stop, and other transport operation	Play, stop, and other transport operation event MTX:AudioPlayerTransport ...	This command is invalid on the XMV, EXi8, and EXo8.
3-21	Currently playing or selected song information query	Currently playing or selected song information query event MTX:AudioPlayerGetCurrentSong ...	This command is invalid on the XMV, EXi8, and EXo8.
3-22	Playback song designation	Playback song designation event MTX:AudioPlayerSetCurrentSong ...	This command is invalid on the XMV, EXi8, and EXo8.
3-23	MTX Editor synchronization processing query	MTX Editor synchronization processing query event MTX:SynchronizationGetStatus ...	This command is invalid on the XMV, EXi8, and EXo8.

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).
- 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	810
-6.5dB	"-6.50"	-650	888
0dB	"0.00"	0	932
10dB	"10.00"	1000	1000
2kHz	"2.00k"	2000	98
400Hz	"400"	400	18
Pan L 63	"L63"	-63	0
Pan Center	"C"	0	500
Pan R 63	"R63"	+63	1000
ON	"ON"	0	0
		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*1.

Example: -inf as minimum mapped 0, 10dB as maximum mapped 1000, 0dB mapped 932 for level parameter.

*1: 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" = "fMmessage// xnnn onf (sssss) ID-xxx 2012/12/31 23:59:59"
 "err/xxxx" = "eMmessage// xnnn onf (sssss) ID-xxx 2012/12/31 23:59:59"
 "wrn/xxxx" = "wMmessage// 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 "f" to "l" 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/DCPI[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

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

Description
Parameter change raw value
Parameter change normalized value

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

Example: Notification: NOTIFY set MTX:mem_512/60000/0/0/0/0 0 -77.60
Meaning: DCA Fader 1ch level was changed to "-77.60."

1-6) Scheduler on/off change notification

Command	Option 1	Option 2	Option 3	Option 4	Option 5	Description
NOTIFY set(setn)	MTX:EvtScd_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:EvtScd_On 0 0 1 "1"
Meaning: The scheduler was turned on.

1-7) Parameter change notification

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

Details: *MemNo* = See section 8, "Meters."
UniqueId = 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 69 68
* The meter value is expressed using a 2-digit hexadecimal.
Meaning: Output levels for ch1 to 8 Level are sent.

3.2.3. Current snapshot (preset) number change notification

1-8) Current snapshot (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).

3.2.4. Event processing change notification

1-9) Media insertion notification

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

Example: Notification: NOTIFY event MTX:Media "sdcard=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.

1-10) Time synchronization notification

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.

1-11) Song play mode notification

Command	Option 1	Option 2	Description
NOTIFY 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

Example: Notification: NOTIFY event MTX:AudioPlayerSetPlayMode "playmode=repeat one"
Meaning: The play mode was changed to one song repeat.

1-12) Play, stop, and other transport operation notification

Command	Option 1	Option 2	Description
NOTIFY event	MTX:AudioPlayerTransport	"operation=stop"	Stop
		"operation=play"	Play
		"operation=pause"	Pause

Example: Notification: NOTIFY event MTX:AudioPlayerTransport "operation=stop"
 Meaning: Playback was paused.

1-13) Playback song notification

Command	Option 1	Option 2	Description
NOTIFY event	MTX:AudioPlayerSetCurrentSong	"dirpath=xxx dirname=yyy fileindex=zzz filename=www"	Playback song designation

Details: xxx = Directory path (index expression)
 yyyy = Directory name (name of the folder)
 zzzz = File index
 www = File name

Example: Notification: NOTIFY event MTX:AudioPlayerSetCurrentSong "dirpath=0|1|dirname=Folder #1|fileindex=2|filename=xxxx.mp3"
 Meaning: The playback song was set to index number 1 "xxxx.mp3" in the "Folder #1" folder of 0/1 (index expression).
 "0/1" expresses the root folder number/sub folder number (the root folder number is always fixed at 0).

Note: The character encoding for directory and file names conforms to the setting specified by the scpmode encoding command.

1-14) MTX Editor synchronization processing notification

Command	Option 1	Option 2	Description
NOTIFY event	MTX:SynchronizationSetStatus	"active"	Synchronization start
		"inactive"	Synchronization end

Example: Notification: NOTIFY event MTX:SynchronizationSetStatus "active"
 Meaning: Synchronization processing was started between MTX and MTX Editor.

Note: When this notification is received, because the internal MTX settings may have changed significantly, we recommend that you verify the connection by querying relevant parameters.

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.

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 "f" 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 query

2-5) Emergency 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	The specified maximum interval

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).

3.3.4. Parameter query

2-10) Raw value parameter query

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

Details: MemNo = See section 7, "Parameter Values."
 UniqueId = See section 7, "Parameter Values."
 Xpos = See section 7, "Parameter Values."
 Ypos = See section 7, "Parameter Values."
 IndexNo = See section 7, "Parameter Values."

Response

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

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

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.

2-11) Normalized value parameter query

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 Values."
 UniqueId = See section 7, "Parameter Values."
 Xpos = See section 7, "Parameter Values."
 Ypos = See section 7, "Parameter Values."
 IndexNo = See section 7, "Parameter Values."

Response

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

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

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.

2-12) Scheduler status query

Command	Option 1	Option 2	Option 3	Description
get(getn,gett)	MTX:EvtScd_On	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

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

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

Response

Response string	Description
OK set MTX:mem_MemNo UniqueId ElmNo Xpos Ypos PrmNo IndexNo 0 0 (value) "(string)"	Raw value parameter setting response
OKm set 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 Values."
 UniqueId = See section 7, "Parameter Values."
 Xpos = See section 7, "Parameter Values."
 Ypos = See section 7, "Parameter Values."
 IndexNo = See section 7, "Parameter Values."
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter Values."
 "(string)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter Values."

Example: Command: set MTX:mem_512/60000/0/0/0/0 0 -7760
 Response: OK set MTX:mem_512/60000/0/0/0/0 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".

2-14) Normalized value parameter setting

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

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

Response

Response string	Description
OK setn MTX:mem_MemNo Uniqueld ElmNo Xpos Ypos PmNo IndexNo 0 0 (value) "(string)"	Normalized value parameter setting response
OKm setn MTX:mem_MemNo Uniqueld ElmNo Xpos Ypos PmNo 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 Values."
 Uniqueld = See section 7, "Parameter Values."
 Xpos = See section 7, "Parameter Values."
 Ypos = See section 7, "Parameter Values."
 IndexNo = See section 7, "Parameter Values."
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter Values."
 "(string)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter Values."

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 "-77.62"
 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 "-77.60".

2-15) Scheduler status query

Command	Option 1	Option 2	Option 3	Option 4	Description
set(setn,sett)	MTX:EvtScd_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:EvtScd_On 0 0 1 "1"	Scheduler enabled response
OK set MTX:EvtScd_On 0 0 0 "0"	Scheduler disabled response

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

3.3.6 Meter control

2-16) Transmission request

Command	Option 1	Option 3	Description
mtrstart	MTX:mtr_MemNo Uniqueld meter	(interval)	Requests that the specified meter data be transmitted.
	MTX:mtr_MemNo Uniqueld hold		Requests that the specified hold meter data be transmitted.

Details: MemNo = See section 7, "Parameter Values."
 Uniqueld = See section 7, "Parameter Values."
 (interval) = Minimum transmission interval (msec)

Response

Response string	Description
OK mtrstart MTX:mtr_MemNo Uniqueld meter	Meter data transmission setting complete
OK mtrstart MTX:mtr_MemNo Uniqueld hold	Hold meter data transmission setting complete

Details: MemNo = See section 7, "Parameter Values."
 Uniqueld = See section 7, "Parameter Values."

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.

2-17) Stop request

Command	Option 1	Description
mtrstop	MTX:mtr_MemNo Uniqueld meter	Requests that the specified meter data be stopped.
	MTX:mtr_MemNo Uniqueld hold	Requests that the specified hold meter data be stopped.

Details: MemNo = See section 7, "Parameter Values."
 Uniqueld = See section 7, "Parameter Values."

Response

Response string	Description
OK mtrstop MTX:mtr_MemNo Uniqueld meter	Meter data stop setting complete
OK mtrstop MTX:mtr_MemNo Uniqueld hole	Hold meter data stop setting complete

Details: MemNo = See section 7, "Parameter Values."
 Uniqueld = See section 7, "Parameter Values."

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.

3.3.7. Snapshot (preset) processing

2-18) Snapshot (preset) current number query processing

Command	Description
sscurent	Queries the current preset number (index)

Response

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

Details: (index) = Current preset number

Example: Command: sscurent
 Notification: OK sscurent 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.

2-19) Snapshot (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.

3.4 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. Snapshot (preset) list recall processing

devinfo: queries the device status

3-8) Number of snapshot (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
 "xxxxxx" = 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. *"MTX does not use, always as ""*.

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

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) Current folder information (for list) query

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

Response

Response string	Description
OK event MTX:AudioPlayerGetCurrentDir "dirpath=xxx dirname=yyy subdirnum=zzz filename=www"	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: xxx = Directory path (index expression)
 yyy = Directory name (name of the folder)
 zzz = The number of sub folders in the current directory
 www = The number of files in the current directory

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

3-12) Current folder move (for list) query

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerSetCurrentDir	"dirpath=xxx"	Moves the current folder

Details: xxx = Directory path (index expression)

Response

Response string	Description
OK event MTX:AudioPlayerSetCurrentDir "dirpath=xxx dirname=yyy subdirnum=zzz filename=www"	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: xxx = Directory path (index expression)
 yyy = Directory name (name of the folder)
 zzz = The number of sub folders in the current directory
 www = 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|subdirnum=0|filename=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).

3-13) Folder name query

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

Details: xxx = Index number

Response

Response string	Description
OK event MTX:AudioPlayerGetDirName "dirname=xxx"	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: xxx = Folder name

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

3-14) File name query

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

Details: xxx = Index number

Response

Response string	Description
OK event MTX:AudioPlayerGetFileName "filename=xxx"	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: xxx = File name

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

3-15) 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 = Index number

Response

Response string	Description
OK event MTX:AudioPlayerGetDirNameList "dirindex=xxxx-xxxx dirname0=xxxx ... "	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-xxxx= First list number-last list number (decimal notation)
 -> 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.

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 0 and 1 (index expression).
 The directory name of 0 is "Folder #1", and that of 1 is "Folder #2".

3-16) 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 = Index number

Response

Response string	Description
OK event MTX:AudioPlayerGetFileNameList "fileindex=xxxx-xxxx filename0=xxxx ... "	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-xxxx= First list number-last list number (decimal notation)
 -> 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.

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 0 and 1 (index expression).
 The file name of 0 is "xxxx.mp3", and that of 1 is "xxxx2.mp3".

3-17) 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.

3-18) 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.

3-19) 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

3-20) 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.

3-21) Currently playing or selected song information query

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerGetCurrentSo	""	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: xxx = Directory path (index expression)
 yyyy = Directory name (name of the folder)
 zzzz = File index
 www = File name

Example: Command: event MTX:AudioPlayerGetCurrentSong ""
 Notification: OK event MTX:AudioPlayerGetCurrentSong "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 0/1 (index expression).
 * "0/1" expresses the root folder number/sub folder number (the root folder number is always fixed at 0).

3-22) Playback song designation

Command	Option 1	Option 2	Description
event	MTX:AudioPlayerSetCurrentSong	"dirpath=xxxx fileindex=yyyy"	Playback song designation

Details: xxx = Directory path (index expression)
 yyyy = File index

Response

Response string	Description
OK event MTX:AudioPlayerSetCurrentSong "dirpath=xxxx dirname=yyyy fileindex=zzzz filename=www"	The specified song that will be played
OKm event MTX:AudioPlayerSetCurrentSong "sdcard is not inserted"	There is no SD memory card inserted.

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

Details: xxx = Directory path (index expression)
 yyyy = Directory name (name of the folder)
 zzzz = File index
 www = File name

Example: Command: event MTX:AudioPlayerSetCurrentSong "dirpath=0/1|fileindex=2"
 Notification: OK event MTX:AudioPlayerSetCurrentSong "dirpath=0/1|dirname=Folder #1|fileindex=2|filename=xxx.mp3"
 Meaning: Play the file at index number 2 in the 0/1 folder (index expression).
 The playback song was set to index number 2 "xxx.mp3" in the "Folder #1" folder of 0/1 (index expression).
 * "0/1" expresses the root folder number/sub folder number (the root folder number is always fixed at 0).

3-23) MTX Editor synchronization processing query

Command	Option 1	Option 2	Description
event	MTX:SynchronizationGetStatus	""	MTX Editor synchronization processing query

Response

Response string	Description
OK event MTX:SynchronizationGetStatus "active"	In the process of synchronizing
OK event MTX:SynchronizationGetStatus "inactive"	Not in the process of synchronizing

Example: Command: event MTX:SynchronizationGetStatus ""
 Notification: OK event MTX:SynchronizationGetStatus "inactive"
 Meaning: Query the synchronization status between the MTX and MTX Editor.
 Not in the process of synchronizing

Note: The character encoding for directory and file names conforms to the setting specified by the scpmode encoding command.

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.

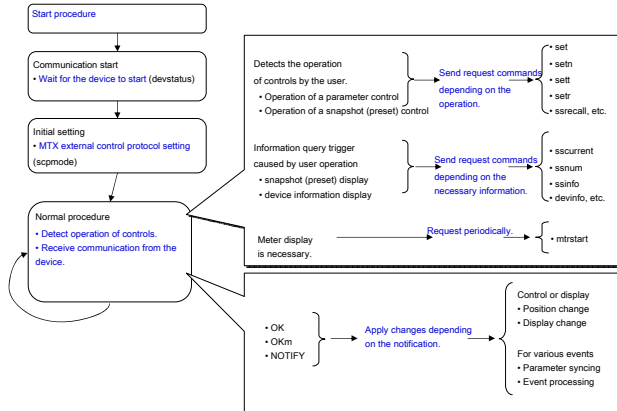
Error code

Error code	Type	Description
UnknownCommand	Unknown command	Ignored because it was an unknown command.
WrongFormat	Improper command format	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	Invalid argument	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	Unknown address	Ignored because the specified address does not exist.
UnknownEventID	Unknown event ID	Ignored because the specified event ID does not exist.
TooLongCommand	Command too long	Could not be interpreted because the command was too long.
AccessDenied	Access denied	Procedure rejected because the peer device is not in a normal running state. Examples: Rejected because an srecall command was received in emergency run mode.
ReadOnly	Writing is not possible.	Ignored because an attempt was made to set a parameter at a read-only address.
NoPermission	No access permission	Ignored because you do not have access permission.
InternalError	Internal error	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.



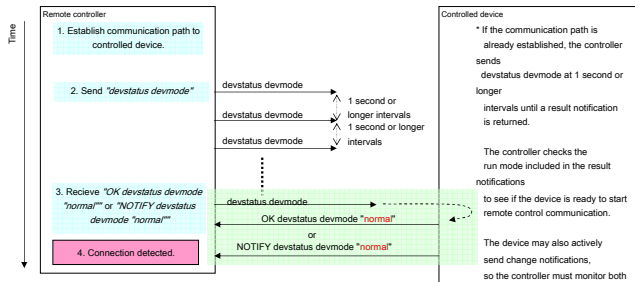
The controller designer needs to design and implement the blue items in the above figure. The detailed sequences of various procedures are provided below.

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.

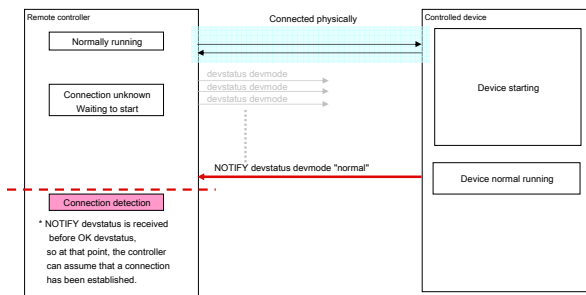
The controller needs to wait using the sequence below.

1. If a logical session, as on an Ethernet network, needs to be established, the controller tries to establish the session itself. (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 devmode at 1 second or longer intervals.
3. If "OK devstatus devmode" or "NOTIFY devstatus devmode" is returned, the controller checks the information.
4. If the controller determines that the controlled device is in normal running mode, the controller starts the user defined remote control operation. If the controlled device is not in normal running mode, the controller continues trying.



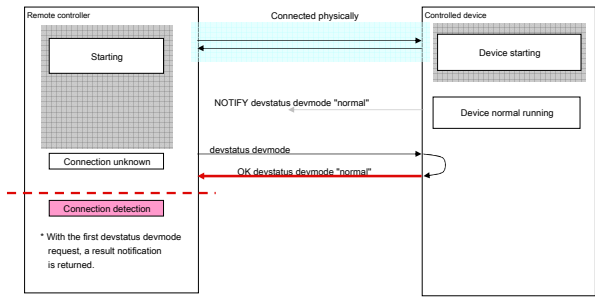
The reason for using such a sequence is provided below.

Example when the controller starts earlier than the controlled device



In this case, regardless of whether the controller sends devstatus devmode requests, the controller was able to determine whether the device has started with the active NOTIFY devstatus devmode message from the controlled device.

Example when the controlled device starts earlier than the controller

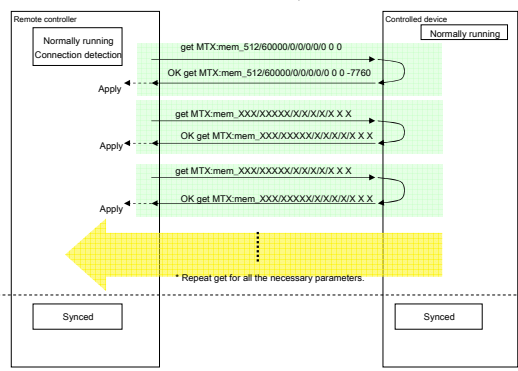


* If a logical session, as on an Ethernet network, needs to be established, the controller tries to establish the session before the sequence example above.

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



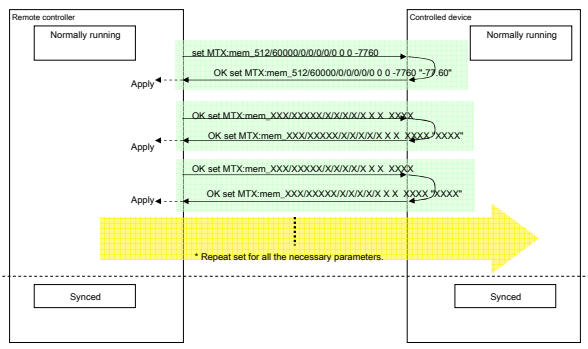
Example 1: Query the DCA fader value.
`get MTX:mem_512/60000/0/0/0/0 0 0`
 Query the 1ch level of the DCA fader with raw values.
`OK get MTX:mem_512/60000/0/0/0/0 0 0 -7760`
 The 1ch level of the DCA fader is -77.60.

Example 2: Set the DCA fader value.
`set MTX:mem_512/60000/0/0/0/0 0 0 -77.60`
 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 -77.60`
 The 1ch level of the DCA fader is 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

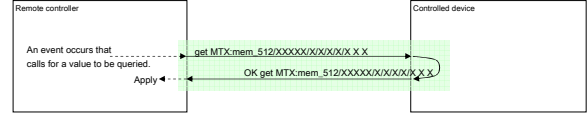


Depending on the controller specifications, the above two sequences may be used in combination. Example: The GPI fader uses the status of the controller, but other parameters use the status of the controlled device.

Parameter query sequence at any given time

LEDs and displays on the GUI

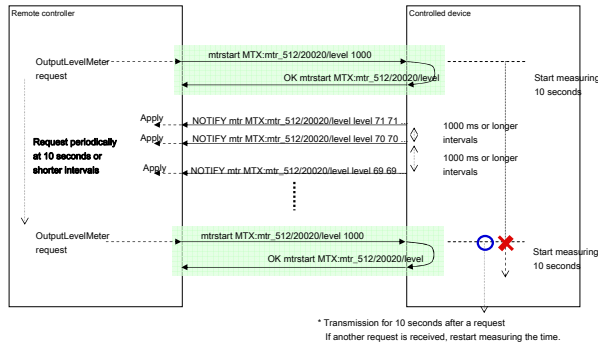
Indications are updated on the basis of the result notifications returned after the processing of the set commands. Alternatively, send an explicit get request and apply the result to the indications, as shown below.



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

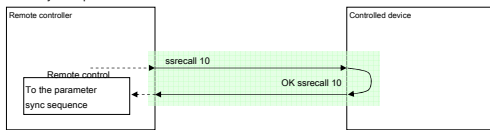
Meter data request/query sequence

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.



Snapshot (preset) recall request sequence

Upon receiving a result notification in response to a snapshot (preset) request, you need to execute the parameter sync sequence.

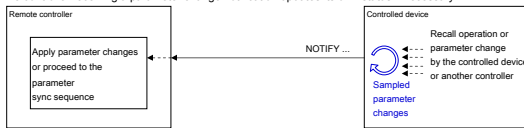


In addition, if a snapshot (preset) recall occurs internally in the controlled device or when such a request is received from another controller, the controller receives a change notification that indicates that all parameters have changed (see the next section). If this occurs, the controller needs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

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 no_rnormalized/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
1.Level Meter, Hold 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	64	-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

1.INPUT PATCH

MTX3

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

MTX5-D

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

2.3BAND EQ / 4BAND EQ

Q

Value	Displayed value	Value	Displayed value	Value	Displayed value	Value	Displayed value
0	0.11	29	0.53	58	2.8	87	15.0
1	0.11	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	0.13	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
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

3.GATE

DECAY

Value	Displayed value	Value	Displayed value	Value	Displayed value	Value	Displayed value
0	3msec	43	189msec	86	1.23sec	129	7.88sec
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	27.3sec
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	6.84sec		
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	13.8msec	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		

4.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	20.1:1

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

RELEASE
Same as GATE DECAY

5.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.EFFECT

TYPE

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

RevHallTime/RevStageTime

Value	Time(sec)
0	0.3
1	0.4
2	0.5
3	0.6
4	0.7
5	0.8
6	0.9
7	1.0
8	1.1
9	1.2
10	1.3
11	1.4
12	1.5
13	1.6
14	1.7
15	1.8
16	1.9
17	2.0
18	2.1
19	2.2
20	2.3
21	2.4
22	2.5
23	2.6
24	2.7
25	2.8
26	2.9
27	3.0
28	3.1
29	3.2
30	3.3
31	3.4
32	3.5
33	3.6
34	3.7
35	3.8
36	3.9
37	4.0
38	4.1
39	4.2
40	4.3
41	4.4
42	4.5
43	4.6

KaraokeTime/VocalTime

Value	Time	Value	Time
0	0.4	64	202
1	3.2	65	205
2	6.4	66	208
3	9.5	67	211
4	12.7	68	214
5	15.8	69	217
6	19	70	221
7	22.1	71	224
8	25.3	72	227
9	28.4	73	230
10	31.6	74	233
11	34.7	75	236
12	37.9	76	239
13	41	77	243
14	44.2	78	246
15	47.3	79	249
16	50.5	80	252
17	53.6	81	255
18	56.8	82	258
19	59.9	83	262
20	63.1	84	265
21	66.2	85	268
22	69.4	86	271
23	72.5	87	274
24	75.7	88	277
25	78.9	89	280
26	82	90	284
27	85.1	91	287
28	88.3	92	290
29	91.4	93	293
30	94.6	94	296
31	97.7	95	299
32	101	96	302
33	104	97	306
34	107	98	309
35	110	99	312
36	114	100	315
37	117	101	318
38	120	102	321
39	123	103	324
40	126	104	328
41	129	105	331
42	132	106	334
43	136	107	337
62	195	126	397
63	199	127	400

7.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 Q

Same as the Q of 3BAND EQ / 4BAND EQ

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

LIMITER RELEASE

Same as GATE DECAY

LIMITER ATTACK/RELEASE MODE

Value	Displayed value
0	Fast
1	Mid
2	Slow
3	Manual

8.PRIORITY PROCESSOR

1st/2nd PRIORITY DUCKER PRIORITY SOURCE

ANC SOURCE

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

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		

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

RELEASE

Same as GATE DECAY

HOLD

Same as GATE HOLD

9.ROUTER

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

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		

10.OUTPUT PATCH

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

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

11.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
23	ZONE 1
24	ZONE 2
25	ZONE 3
26	ZONE 4
27	ZONE 5
28	ZONE 6
29	ZONE 7
30	ZONE 8
31	THRU 1
32	THRU 2
33	THRU 3
34	THRU 4
35	THRU 5
36	THRU 6
37	THRU 7
38	THRU 8
39	THRU 9
40	THRU 10
41	THRU 11
42	THRU 12
43	THRU 13
44	THRU 14
45	THRU 15
46	THRU 16
47	OUTPUT CH1
48	OUTPUT CH2
49	OUTPUT CH3
50	OUTPUT CH4
51	OUTPUT CH5
52	OUTPUT CH6
53	OUTPUT CH7
54	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 31 to 46 (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.

7. Parameter List

MTX3/MTX5-D

Model		MemNo (Memory Number)	UniqueId	ElemNo (Element Number)	Access ID		PrmNo (Parameter Number)	IndexNo (Index Number)	Category	Parameter Name	MIN	MAX	unit	Remarks				
MTX3	MTX5-D				Xpos (X Position)	Ypos (Y Position)												
o	o	512	50000	0	0-7 (1-8ch)	0	0		INPUT PORT	INTERNAL HA	Internal Head Amp 8ch AD	Ch	Gain +48V	-6 OFF	66 ON	dB		
o	o		50001	0	0-2	0	0		INPUT PORT SETUP	Internal ST input 3ch AD	Port	Summing	STEREO	SUM				0:OFF 1:ON 0:STEREO 1:SUM *Not saved to presets
o	o		20001	0	0	0-21 (1-22ch)	0	0	INPUT PATCH	INPUT PATCH	InputPatch 30(62) Input x 22(30) Output	In	Patch	NONE	YDIF IN 16 (SLOT 16)			* See "1.INPUT PATCH" in "7. Parameter Values"
	o		20003		0-7 (1-8ch)													
	o		20004		0-21 (9-30ch)													
o	o		20002	0	0-7 (1-8ch)	0	0	0	INPUT CHANNEL	GAIN/HPF	PreInputSection	In	Phase	OFF	ON			0:OFF 1:ON
	o		20005		0-7 (1-8ch)								Gain	96.0	24.0	dB		dB x 10 ex. -14.5dB x 10 = -145
	o		20006		0-7 (9-16ch)													
o	o		20002	0	0-7 (1-8ch)	0	0	0					HPF	Frequency	20.0	20.0k	Hz	Hz x 1000 ex. 1000Hz x 1000000
	o		20005		0-7 (1-8ch)													
	o		20006		0-7 (9-16ch)													
o	o		20002	1	0-7 (1-8ch)	0	0	0					On	OFF	ON			0:OFF 1:ON
	o		20005		0-7 (1-8ch)													
	o		20006		0-7 (9-16ch)													
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 "2.BAND EQ / 4BAND EQ" in "7. Parameter Values"
	o		20007		0-7 (1-8ch)													
	o		20008		0-7 (9-16ch)													
o	o		20004	0	0-7 (1-8ch)	0-2 (0:Band A 1:Band B 2:Band C)	1	0						Frequency	20.0(*)	20.0k	Hz	*1000 : Other than Band (A) Hz x 1000 ex. 1000Hz x 1000 = 1000000
	o		20007		0-7 (1-8ch)													
	o		20008		0-7 (9-16ch)													
o	o		20004	0	0-7 (1-8ch)	0-2 (0:Band A 1:Band B 2:Band C)	2	0						Gain(*)	-18.0	18.0	dB	* Not adjustable for HPF/LPF dB x 10 ex. -14.5dB x 10 = -145
	o		20007		0-7 (1-8ch)													
	o		20008		0-7 (9-16ch)													
o	o		20004	0	0-7 (1-8ch)	0-2 (0:Band A 1:Band B 2:Band C)	3	0						Bypass	OFF	ON		0:OFF 1:ON
	o		20007		0-7 (1-8ch)													
	o		20008		0-7 (9-16ch)													
o	o		20004	0	0-7 (1-8ch)	0-2 (0:Band A 1:Band B 2:Band C)	4	0						Type	PEQ	LPF		* See "2.BAND EQ / 4BAND EQ" in "7. Parameter Values"
	o		20007		0-7 (1-8ch)													
	o		20008		0-7 (9-16ch)													
o	o		20004	1	0-7 (1-8ch)	0-2 (0:Band A 1:Band B 2:Band C)	0	0					Property	PEQOn	OFF	ON		0:ON 1:OFF
	o		20007		0-7 (1-8ch)													
	o		20008		0-7 (9-16ch)													
o	o		40002	0	0-7 (1-8ch)	0	0	0		GATE	Gate 8(16) Channel	Dyn	Threshold	-72	0	dB		
	o		40000		0-7 (1-8ch)													
	o		40001		0-7 (9-16ch)													
o	o		40002	0	0-7 (1-8ch)	0	1	0						Range	-70	0	dB	
	o		40000		0-7 (1-8ch)													
	o		40001		0-7 (9-16ch)													
o	o		40002	0	0-7 (1-8ch)	0	2	0						Attack	0	120	ms	
	o		40000		0-7 (1-8ch)													
	o		40001		0-7 (9-16ch)													
o	o		40002	0	0-7 (1-8ch)	0	3	0						Decay	3.2m	42.600	s	* See "3.GATE" in "7. Parameter Values"
	o		40000		0-7 (1-8ch)													
	o		40001		0-7 (9-16ch)													
o	o		40002	0	0-7 (1-8ch)	0	4	0						Hold	0.02m	1.96	s	* See "3.GATE" in "7. Parameter Values"
	o		40000		0-7 (1-8ch)													
	o		40001		0-7 (9-16ch)													
o	o		40002	1	0-7 (1-8ch)	0	0	0						On	OFF	ON		0:OFF 1:ON
	o		40000		0-7 (1-8ch)													
	o		40001		0-7 (9-16ch)													
o	o		40002		-	-	-	-		Gate 8(16) Channel Meter								See Meter Value Details
	o		40000		-	-	-	-										
	o		40001		-	-	-	-										

Model		MemNo (Memory Number)	UniqeId	Access ID				Category	Parameter Name			MIN	MAX	unit	Remarks
MTX3	MTX5-D			ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PrmNo (Parameter Number)		IndexNo (Index Number)						
o	o	40000	0	0-7 (1-8ch)	0	0	0	COMPRESSOR	Compressor 8(16) Channel	Dyn	Threshold	-54	0	dB	
o	o	40002	0	0-7 (1-8ch)	0	1	0				Ratio	1.0:1	0:1	-	* See "4.COMPRESSOR" in "7. Parameter Values"
o	o	40003	0	0-7 (1-8ch)	0	2	0				Knee	HARD	5	-	* See "4.COMPRESSOR" in "7. Parameter Values"
o	o	40000	0	0-7 (1-8ch)	0	3	0				Attack	0	120	ms	
o	o	40002	0	0-7 (1-8ch)	0	4	0				Release	3.2m	42.600	s	* See "4.COMPRESSOR" in "7. Parameter Values"
o	o	40003	0	0-7 (1-8ch)	0	5	0				Gain	0.0	18.0	dB	dB x 10 ex. 5.2dB x 10 = 52
o	o	40000	1	0-7 (1-8ch)	0	0	0			ON	On	OFF	ON	-	0:OFF 1:ON
o	o	40002	-	-	-	-	-		Compressor 8(16) Channel Meter	-	-	-	-	-	See Meter Value Details See Meter Value Details
o	o	40003	-	-	-	-	-								
o	o	40005	0	0-3 (1-4ch)	0	0	0	FBS	Feedback Suppressor 4(8) Channel	Dynamic	AutoDetect	OFF	ON	-	0:OFF 1:ON
o	o	40004	0	0-7 (1-8ch)	0	1	0				Clear	OFF	ON	-	Write 1 to start the clear process. When the process finishes, the value automatically returns to 0.
o	o	40005	1	0-3 (1-4ch)	0-6 (Freq1-7)	0	0			DynFilter	Frequency	20.0	20.0k	Hz	Roundable Operation is not guaranteed when it is written to.
o	o	40004	2	0-3 (1-4ch)	0	0	0			Fixed	On	OFF	ON	-	0:OFF 1:ON
o	o	40005	2	0-3 (1-4ch)	0	1	0				Detect	OFF	ON	-	0:OFF 1:ON
o	o	40004	2	0-7 (1-8ch)	0	2	0				Clear	OFF	ON	-	Write 1 to start the clear process. When the process finishes, the value automatically returns to 0.
o	o	40005	3	0-3 (1-4ch)	0-6 (Freq1-7)	0	0			FixedFilter	Frequency	20.0	20.0k	Hz	Roundable Writing is also possible.
o	o	40004	0	0-3 (1-4ch)	0	0	0	AGC	AutoGainControl 4(8) Channel	Compensator	ResponseTime	100m	5.0	-	* See "5.AGC" in "7. Parameter Values"
o	o	40005	0	0-7 (1-8ch)	0	1	0				Level	1	5	-	
o	o	40004	0	0-3 (1-4ch)	0	2	0				NoiseGateOn	OFF	ON	-	0:OFF 1:ON
o	o	40005	1	0-3 (1-4ch)	0	0	0			On	On	OFF	ON	-	0:OFF 1:ON
o	o	60000	0	0-7 (1-8ch)	0	0	0	INPUT CHANNEL LEVEL	DCA Fader 8(16) Channel	Fader	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360
o	o	60000	1	0-15 (1-16ch)	0-7 (A-H)	0	0			DCAAssign	AssignOn	OFF	ON	-	0:OFF 1:ON
o	o	60000	2	0-15 (1-16ch)	0	0	0			GroupMaster	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360

Model		MemNo (Memory Number)	UniqueID	Access ID				PrmNo (Parameter Number)	IndexNo (Index Number)	Category	Parameter Name			MIN	MAX	unit	Remarks
MTX3	MTX5-D			ElemNo (Element Number)	Xpos (X Position)	Ypos (Y Position)					ChannelName	Parameter Name	ChName				
o			60001	0	0-7 (1-8ch) 0-15 (1-16ch)	0	0	0	INPUT CHANNEL MUTE	DCA Mute 8(16) Channel	On	On	OFF	ON	-	0:OFF 1:ON	
	o			1	0-7 (1-8ch) 0-15 (1-16ch)	0-7 (A-H)				DCAAssign	AssignOn	OFF	ON	-	-	0:OFF 1:ON	
	o			2	0					GroupMaster	MuteOn	UNMUTED	MUTED	-	-	0:UNMUTED 1:MUTED	
o			70000	0	0-7 (1-8ch) 0-15 (1-16ch)	0	0	0	ChannelName	Channel Name 8(16) Channel	ChName	Name	Character (UTF-8) 48byte	-	-		
o	o		30000	0	0-5 (STIN1L-3R)	0	0	0	GAIN/HPF	Digital Gain 6 Channel	Ch	Gain	-96.0	24.0	dB x 10 ex. -14.5dB x 10 = -145		
o	o		30001	0	0-5 (STIN1L-3R)	0-2 (0:Band A 1:Band B 2:Band C)	0	0	3BAND EQ	PEQ 6 Channel 3 Band	PEQ	Q(*)	63.0	0.1	-	* See "3.BAND EQ / 4 BAND EQ" in "7. Parameter Values"	
o	o			0			1	0			Frequency	20.0(*)	20.0k	Hz	*1000 : Other than Band A) Hz x 1000 ex. 1000Hz x 1000 = 1000000		
o	o			0			2	0			Gain(*)	-18.0	18.0	dB	* Not adjustable for HPF/LPF dB x 10 ex. -14.5dB x 10 = -145		
o	o			0			3	0			Bypass	OFF	ON	-	-	0:OFF 1:ON	
o	o			0		0.2 (0:Band A 2:Band C)	4	0			Type	PEQ	LPF	-	-	* See "3.BAND EQ / 4 BAND EQ" in "7. Parameter Values"	
o	o			1			0	0		Property	PEQOn	OFF	ON	-	-	0:ON 1:OFF	
o	o		40001	0	0-3 (STIN1L-2R)	0	0	0	COMPRESSOR	Compressor 4 Channel	Dyn	Threshold	-54	0	dB		
o	o		40006	0			1	0			Ratio	1.0:1	99:1	-	-	* See "4.COMPRESSOR" in "7. Parameter Values"	
o	o		40001	0			2	0			Knee	HARD	5	-	-	* See "4.COMPRESSOR" in "7. Parameter Values"	
o	o		40006	0			3	0			Attack	0	120	ms	-	-	
o	o		40001	0			4	0			Release	3.2m	42.600	s	-	* See "4.COMPRESSOR" in "7. Parameter Values"	
o	o		40006	0			5	0			Gain	0.0	18.0	dB	dB x 10 ex. 5.2dB x 10 = 52		
o	o		40001	1			0	0			On	On	OFF	ON	-	0:OFF 1:ON	
o	o		40006	1			0	0			Compressor 4 Channel Meter	-	-	-	-	See Meter Value Details	
o	o		40003	0	0-3 (STIN1L-2R)	0	0	0	AGC	AutoGainControl 4 Channel	Compensator	ResponseTime	100m	5.0	s	* See "5.AGC" in "7. Parameter Values"	
o	o		40007	0			1	0			Level	1	6	-	-		
o	o		40003	0			2	0			NoiseGateOn	OFF	ON	-	-	0:OFF 1:ON	
o	o		40007	1			0	0			On	On	OFF	ON	-	0:OFF 1:ON	
o	o		60000	0	8-13 (ST IN 1L-ST IN 3R) 16-21 (ST1L-ST3R)	0	0	0	INPUT CHANNEL LEVEL	DCA Fader 6 Channel	Fader	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360	
o	o			1	8-13 (ST1L-ST3R) 16-21 (ST1L-ST3R)	0-7 (A-H)				DCAAssign	AssignOn	OFF	ON	-	-	0:OFF 1:ON	
o	o			2	0					GroupMaster	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360		

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)	PrmNo (Parameter Number)		IndexNo (Index Number)	Parameter Name	ChName	Name					Character (UTF-8)
o			60001	0	8-13 (ST1L-ST3R)	0	0	0	INPUT CHANNEL MUTE	DCA Mute 6 Channel	On	On	OFF	ON	-	0:OFF 1:ON	
	o			1	8-13 (ST1L-ST3R)	0-7 (A-H)	0	0	DCAAssign	AssignOn	OFF	ON	-	-	-	0:OFF 1:ON	
o				2	16-21 (ST1L-ST3R)	0	0	0	GroupMaster	MuteOn	UNMUTED	MUTED	-	-	-	0:UNMUTED 1:MUTED	
o	o		70004	0	0-5 (ST1L-ST3R)	0	0	0	ChannelName	Channel Name 3 Channel	ChName	Name	Character (UTF-8)	48byte	-	-	
o			60000	0	14-21 (9-16Ch "DIRECT INPUT CH")	0	0	0	INPUT CHANNEL LEVEL	DCA Fader 8 Channel	Fader	Level	-∞	10.00	dB	dB x 100 ex.-73.60dB x 100 = -7360	
	o			1	14-21 (9-16Ch "DIRECT INPUT CH")	0-7 (A-H)	0	0	DCAAssign	AssignOn	OFF	ON	-	-	-	0:OFF 1:ON	
o				2	22-29 (17-24Ch "DIRECT INPUT CH")	0	0	0	GroupMaster	Level	-∞	10.00	dB	-	-	dB x 100 ex.-73.60dB x 100 = -7360	
o	o		60001	0	14-21 (9-16Ch "DIRECT INPUT CH")	0	0	0	INPUT CHANNEL MUTE	DCA Mute 8 Channel	On	On	OFF	ON	-	0:OFF 1:ON	
	o			1	14-21 (9-16Ch "DIRECT INPUT CH")	0-7 (A-H)	0	0	DCAAssign	AssignOn	OFF	ON	-	-	-	0:OFF 1:ON	
o				2	22-29 (17-24Ch "DIRECT INPUT CH")	0	0	0	GroupMaster	MuteOn	UNMUTED	MUTED	-	-	-	0:UNMUTED 1:MUTED	
o	o		70000	0	8-15 (9-16ch)	0	0	0	ChannelName	Channel Name 8 Channel	ChName	Name	Character (UTF-8)	48byte	-	-	
o			70003	0	0-7 (17-24ch)	0	0	0									
o	o		20006	0	0-1 (Effect1-2)	0	1	0	EFFECT	Effect	Effect	Type	Reverb Hall	Vocal Echo	-	* See "6. EFFECT" in "7. Parameter Values"	
o			20013	1		0	0	0	SimpleEffect	RevHallTime	0.3	10.0	s	-	-	* See "6. EFFECT" in "7. Parameter Values"	
o	o		20006	1		1	1	0	SimpleEffect	RevStageTime	0.3	10.0	s	-	-	* See "6. EFFECT" in "7. Parameter Values"	
o			20013	2		2	2	0	SimpleEffect	KaraokeTime	0.4	400	ms	-	-	* See "6. EFFECT" in "7. Parameter Values"	
o	o		20006	3		3	3	0	SimpleEffect	VocalTime	0.4	400	ms	-	-	* See "6. EFFECT" in "7. Parameter Values"	
o	o		20008	0	0-3 (Fx.RTN1L - 2R)	0	0	0	EFFECT ST RETURN	Fader 4 Channel	Fader	Level	-∞	10.00	dB	dB x 100 ex.-73.60dB x 100 = -7360	
o			20014	1		0-7	0	0	On	On	OFF	ON	-	-	-	0:OFF 1:ON	
o	o		70004	0	6-7 (FxRm1, FxRm2)	0	0	0	INPUT CHANNEL	ChannelName	Channel Name 2 Channel	ChName	Name	Character (UTF-8)	48byte	-	
o			30002	1	0-25 (0-7:CH1-8 8-13:STINL-3R 14-17:FxR1L-2R 18-25:CH9-16)	0-7 (MATRIX1-8 SEND)	0	0	MATRIX	MATRIX SEND	MixBus 26(34) Input x 8(16) Output (STEREO) -> (MONO)	Ch	Level	-∞	0.00	dB	dB x 100 ex.-73.60dB x 100 = -7360
	o			1	0-33 (0-15:CH1-16 16-21:STINL-3R 22-25:CH17-24 26-33:FxR1L-2R)	0-15 (MATRIX1-16 SEND)	0	0									
o				1	0-25 (0-7:CH1-8 8-13:STINL-3R 14-17:FxR1L-2R 18-25:CH9-16)	0-7 (MATRIX1-8 SEND)	1	0					On	OFF	ON	-	0:OFF 1:ON
	o			1	0-33 (0-15:CH1-16 16-21:STINL-3R 22-25:CH17-24 26-33:FxR1L-2R)	0-15 (MATRIX1-16 SEND)	1	0									
o				1	0-25 (0-7:CH1-8 8-13:STINL-3R 14-17:FxR1L-2R 18-25:CH9-16)	0-7 (MATRIX1-8 SEND)	0	0			MixBus 26(34) Input x 8(16) Output (MONO) -> (STEREO)	Ch	Level	-∞	0.00	dB	dB x 100 ex.-73.60dB x 100 = -7360
	o			1	0-33 (0-15:CH1-16 16-21:STINL-3R 22-25:CH17-24 26-33:FxR1L-2R)	0-15 (MATRIX1-16 SEND)	0	0									

Model		MemNo (Memory Number)	UniqueId	Access ID				Category	Parameter Name				MIN	MAX	unit	Remarks		
MTX3	MTX5-D			ElemNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PrmNo (Parameter Number)		IndexNo (Index Number)									
o				1	0-25 (0-7:CH1-8 8-13:STINL-3R 14-17:FxRIL-2R 18-25:CH9-16)	0-7 (MATRIX1-8 SEND)	1	0				On	OFF	ON	-	0:OFF 1:ON		
	o			1	0-33 (0-15:CH1-16 16-21:STINL-3R 22-25:CH17-24 26-33:FxRIL-2R)	0-15 (MATRIX1-16 SEND)	1	0										
o				1	0-25 (0-7:CH1-8 8-13:STINL-3R 14-17:FxRIL-2R 18-25:CH9-16)	0-7 (MATRIX1-8 SEND)	2	0				Pm	L63	Re3	-	* Matrix is valid only for odd channels.		
	o			1	0-33 (0-15:CH1-16 16-21:STINL-3R 22-25:CH17-24 26-33:FxRIL-2R)	0-15 (MATRIX1-16 SEND)	2	0										
o				20010	0	0-21 (0-7:CH1-8 8-13:STINL-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 2 Output	Ch	Level	-∞	0.00	dB	dB x 100 ex.-73.60dB x 100 = -7360	
	o			20017	0	0-29 (0-15:CH1-16 16-21:STINL-3R 22-29:CH17-24)												
o				20010	0	0-21 (0-7:CH1-8 8-13:STINL-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:STINL-3R 22-29:CH17-24)												
o				20011	0	0	0-7 (2:ZONE1 2nd PRIORITY PRIORITY SOURCE)	0	0	ZONE	SOURCE SELECT	Router 40(48) Input 1 Output	In	Patch	None	ANC BUS 2	-	* See "8.PRIORITY PROCESSOR" in "7. Parameter Values"
	o			20018			7:ZONE8 2nd PRIORITY PRIORITY SOURCE)											
o				20012	0	0-7 (ZONE1-8)	0	0	0	2nd PRIORITY DUCKER	Ducking 8 Channel	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 "8.PRIORITY PROCESSOR" in "7. Parameter Values"	
o				20012				4					Hold	0.02m	1.96	s	* See "8.PRIORITY PROCESSOR" in "7. Parameter Values"	
	o			20019				0				Source	Level	-∞	0.00	dB	dB x 100 ex.-73.60dB x 100 = -7360	
o				20012	1			1					On	OFF	ON	-	0:OFF 1:ON	
	o			20019				1										
o				20011	0	0	8-15 (8:ZONE1 1st PRIORITY PRIORITY SOURCE)	0	0	SOURCE SELECT	Router 40(48) Input 1 Output	In	Patch	None	ANC BUS 2	-	* See "8.PRIORITY PROCESSOR" in "7. Parameter Values"	
	o			20018			15:ZONE8 1st PRIORITY PRIORITY SOURCE)											
o				20012	0	0-7 (ZONE1-8)	0	0	0	1st PRIORITY DUCKER	Ducking 8 Channel	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 "8.PRIORITY PROCESSOR" in "7. Parameter Values"	
o				20012				4					Hold	0.02m	1.96	s	* See "8.PRIORITY PROCESSOR" in "7. Parameter Values"	
	o			20019				0				Source	Level	-∞	0.00	dB	dB x 100 ex.-73.60dB x 100 = -7360	
o				20012	1			1					On	OFF	ON	-	0:OFF 1:ON	
	o			20019				1										
o				20011	0	0	16-23 (16:ZONE1 ANC AMBIENT SOURCE)	0	0	SOURCE SELECT	Router 40(48) Input 1 Output	In	Patch	None	ANC BUS 2	-	* See "8.PRIORITY PROCESSOR" in "7. Parameter Values"	
	o			20018			23:ZONE8 ANC AMBIENT SOURCE)											

Model		MemNo (Memory Number)	UniqueId	Access ID			PrmNo (Parameter Number)	IndexNo (Index Number)	Category	Parameter Name		MIN	MAX	unit	Remarks	
MTX3	MTX5-D			ElemNo (Element Number)	Xpos (X Position)	Ypos (Y Position)				Parameter Name	Parameter Name					
o	o	20014	0	0-7 (ZONE1-8)	0	0	0	ANC	Ambient Noise Compensator 8 Channel	Ambient	Threshold	-∞	0.00	dB	dB x 100 ex. -73.60dB x 100 = -7360	
o	o	20021	1	0-15 (ZONE1-16)	0	0	0		Gap	Threshold	-∞	0.00	dB	dB x 100 ex. -73.60dB x 100 = -7360		
o	o	20014	2	0-7 (ZONE1-8)	0	0	0		Program	Time	0.1	5.0	s	sec x 10 ex. 3.8sec x 10 = 38		
o	o	20021	1	0-15 (ZONE1-16)	0	0	0		MaxGain	0.0	18.0	dB	dB x 10 ex. 5.2dB x 10 = 52			
o	o	20021	1	0-15 (ZONE1-16)	0	0	0		MinGain	-18.0	0.0	dB	dB x 10 ex. -14.5dB x 10 = -145			
o	o	20014	2	0-7 (ZONE1-8)	0	0	0		Ratio	0.5:1	2.0:1	s	* See "8.PRIORITY PROCESSOR" in "7. Parameter Values"			
o	o	20021	3	0-15 (ZONE1-16)	0	0	0		ResponseTime	1	60	s				
o	o	20021	3	0-15 (ZONE1-16)	0	0	0		On	On	OFF	ON	-	0:OFF 1:ON		
o	o	60002	0	0-7 (ZONE1-8)	0	0	0	MATRIX OUTPUT MASTER	DCA Fader 8(16) Channel	Fader	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360	
o	o	60002	1	0-7 (ZONE1-8)	0-7 (A-H)	0	0		DCAAssign	AssignOn	OFF	ON	-	0:OFF 1:ON		
o	o	60002	2	0-15 (ZONE1-16)	0-7 (A-H)	0	0		GroupMaster	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360		
o	o	60003	0	0-7 (ZONE1-8)	0	0	0	MATRIX OUTPUT MASTER	DCA Mute 8(16) Channel	On	On	OFF	ON	-	0:OFF 1:ON	
o	o	60003	1	0-15 (ZONE1-16)	0-7 (A-H)	0	0		DCAAssign	AssignOn	OFF	ON	-	0:OFF 1:ON		
o	o	60003	2	0-15 (ZONE1-16)	0-7 (A-H)	0	0		GroupMaster	MuteOn	UNMUTED	MUTED	-	0:UNMUTED 1:MUTED		
o	o	70001	0	0-7 (ZONE1-8)	0	0	0	ChannelName	Channel Name 8(16) Channel	ChName	Name	Character (UTF-8)	48byte	-		
o	o	70005	0	0-7 (ZONE9-16)	0	0	0									
o	o	20016	1	0-7 (OUT1-8)	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 "9.ROUTER" in "7. Parameter Values"	
o	o	20023	0	0-15 (OUT1-16)	0	0	0									
o	o	20017	0	0-7 (OUT1-8)	0	0	0	OUTPUT CHANNEL	OUTPUT CHANNEL LEVEL	Fader 8(16) Channel	Fader	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360
o	o	20017	1	0-15 (OUT1-16)	0-7 (OUT1-8)	0	0		On	On	OFF	ON	-	0:OFF 1:ON		
o	o	70002	0	0-7 (OUT1-8)	0	0	0	ChannelName	Channel Name 8(16) Channel	ChName	Name	Character (UTF-8)	48byte	-		
o	o	70006	0	0-7 (OUT9-16)	0	0	0									
o	o	20018	0	0-7 (OUT1-8)	0	0	0	DELAY	Delay 8(16) Channel	Delay	On	OFF	ON	-	0:OFF 1:ON	
o	o	20025	0	0-15 (OUT1-16)	0	0	0									
o	o	20018	0	0-7 (OUT1-8)	0	1	1				DelayTime	0.00	1000.00	ms	ms x 100 ex. 102.80ms x 100 = 10280	
o	o	20025	0	0-15 (OUT1-16)	0	0	0									
o	o	20019	0	0-7 (OUT1-8)	0-3 (0:Band A	0	0	4BAND EQ	PEQ 8(16) Channel 4 Band	PEQ	Q(*)	63.0	0.1	-	* See "2.3BAND EQ / 4 BAND EQ" in "7. Parameter Values"	
o	o	20026	0	0-15 (OUT1-16)	1:Band B	0	0				Frequency	20.0(*)	20.0k	Hz	*(100 : Other than Band A) Hz x 1000 ex. 1000Hz x 1000 = 1000000	
o	o	20019	0	0-7 (OUT1-8)	2:Band C	1	0				Gain(*)	-18.0	18.0	dB	* Not adjustable for HPF/LPF dB x 10 ex. -14.5dB x 10 = -145	
o	o	20026	0	0-15 (OUT1-16)	3:Band D)	2	0				Bypass	OFF	ON	-	0:OFF 1:ON	
o	o	20019	0	0-7 (OUT1-8)	0	3	0				Type	PEQ	LPF	-	* See "2.3BAND EQ / 4 BAND EQ" in "7. Parameter Values"	
o	o	20026	0	0-15 (OUT1-16)	0	4	0									

Model		MemNo (Memory Number)	UniqueID	Access ID				IndexNo (Index Number)	Category	Parameter Name			MIN	MAX	unit	Remarks
MTX3	MTX5-D			ElemNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PrmNo (Parameter Number)			Property	PEQOn	OFF				
o			2009	1	0-7 (OUT1-8)	0	0	0							0:ON 1:OFF	
	o		2026		0-15 (OUT1-16)											
o			4006-OUT1 4007-OUT2 : : 4013-OUT8 4008-OUT1 4009-OUT2 : : 4023-OUT16	1	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		4006-OUT1 4007-OUT2 : : 4013-OUT8 4008-OUT1 4009-OUT2 : : 4023-OUT16	1	0	0	1	0			DelayTime	0.00	500.00	ms	ms x 100 ex. 102.80ms x 100 = 10280	
o			4006-OUT1 4007-OUT2 : : 4013-OUT8 4008-OUT1 4009-OUT2 : : 4023-OUT16	2	0	0	2	0			Band	LPFFrequency	20.0	20.0k	Hz	Hz x 1000 ex. 1000Hz x 1000 = 1000000
	o		4006-OUT1 4007-OUT2 : : 4013-OUT8 4008-OUT1 4009-OUT2 : : 4023-OUT16	2	0	0	3	0			HPFFrequency	20.0	20.0k	Hz	Hz x 1000 ex. 1000Hz x 1000 = 1000000	
o			4006-OUT1 4007-OUT2 : : 4013-OUT8 4008-OUT1 4009-OUT2 : : 4023-OUT16	2	0	0	4	0			LPFFType	Thru	48dB/Oct Linkwitz	-	* See "7.SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		4006-OUT1 4007-OUT2 : : 4013-OUT8 4008-OUT1 4009-OUT2 : : 4023-OUT16	2	0	0	5	0			HPFFType	Thru	48dB/Oct Linkwitz	-	* See "7.SPEAKER PROCESSOR" in "7. Parameter Values"	
o			4006-OUT1 4007-OUT2 : : 4013-OUT8 4008-OUT1 4009-OUT2 : : 4023-OUT16	2	0	0	6	0			LPFGc(*)	-6	6	dB	*Valid only for AdjustGc	
	o		4006-OUT1 4007-OUT2 : : 4013-OUT8 4008-OUT1 4009-OUT2 : : 4023-OUT16	2	0	0	7	0			HPFGc(*)	-6	6	dB	*Valid only for AdjustGc	
o			4006-OUT1 4007-OUT2 : : 4013-OUT8 4008-OUT1 4009-OUT2 : : 4023-OUT16	2	0	0	8	0			Polarity	NORMAL	INVERTED	-	0:NORMAL 1:INVERTED	

Model		MemNo (Memory Number)	UniqueID	Access ID			PrmNo (Parameter Number)	IndexNo (Index Number)	Category	Parameter Name	MIN	MAX	unit	Remarks
MTX3	MTX5-D			ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)								
o			4006:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	4	0	0	0		PEQ	Q(*)	63.0	0.1		* See "7.SPEAKER PROCESSOR" in "7. Parameter Values"
	o		4006:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	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:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	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:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	4	0	3	0			Bypass	OFF	ON		0:OFF 1:ON
	o		4006:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	4	0	4	0			Type	PEQ	Horn EQ		* See "7.SPEAKER PROCESSOR" in "7. Parameter Values"
	o		4006:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	5	0	0	0		Limiter	Threshold	-54	0	dB	
	o		4006:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	5	0	1	0			Attack	0.0	120.0	ms	ms x 10 ex. 24.5ms x 10 = 245
	o		4006:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	5	0	2	0			Release	3.2m	42.600	s	* See "7.SPEAKER PROCESSOR" in "7. Parameter Values"
	o		4006:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	5	0	3	0			On	OFF	ON		0:OFF 1:ON
	o		4006:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	5	0	4	0			AttackMode	Fast	Manual		* See "7.SPEAKER PROCESSOR" in "7. Parameter Values"
	o		4006:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	5	0	5	0			ReleaseMode	Fast	Manual		* See "7.SPEAKER PROCESSOR" in "7. Parameter Values"
	o		4006:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	6	0	0	0		Out	Level	-∞	10.00	dB	dB x 100 ex. -73.60dB x 100 = -7360

Model		MemNo (Memory Number)	UniqueID	Access ID				PrmNo (Parameter Number)	IndexNo (Index Number)	Category	Parameter Name	MIN	MAX	unit	Remarks
MTX3	MTX5-D			ElemNo (Element Number)	Xpos (X Position)	Ypos (Y Position)									
o			4006:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	6	0	0	1	0		Mute	UNMUTED	MUTED		0:UNMUTED 1:MUTED	
	o		4006:OUT1 4007:OUT2 : 40013:OUT8 4008:OUT1 4009:OUT2 : 40023:OUT16	6	0	0	2	0		PEQOn	OFF	ON		0:ON 1:OFF	
o			40014:OUT1 40015:OUT3 : 40017:OUT7 40024:OUT1 40025:OUT3 : 40031:OUT15	1	0-1 (0:LOW 1:HIGH)	0	0	0	SPEAKER PROCESSOR	Delay	On	OFF	ON	0:ON 1:OFF	
	o		40014:OUT1 40015:OUT3 : 40017:OUT7 40024:OUT1 40025:OUT3 : 40031:OUT15	1	0	0	1	0		Delay	0.00	500.00	ms	ms x 100 ex. 102.80ms x 100 = 10280	
o			40014:OUT1 40015:OUT3 : 40017:OUT7 40024:OUT1 40025:OUT3 : 40031:OUT15	2	0 (0:LOW)	0	2	0		Band	LPFFrequency	20.0	20.0k	Hz	Hz x 1000 ex. 1000Hz x 1000 = 1000000
	o		40014:OUT1 40015:OUT3 : 40017:OUT7 40024:OUT1 40025:OUT3 : 40031:OUT15	2	0-1 (0:LOW 1:HIGH)	0	3	0		HPFFrequency	20.0	20.0k	Hz	Hz x 1000 ex. 1000Hz x 1000 = 1000000	
o			40014:OUT1 40015:OUT3 : 40017:OUT7 40024:OUT1 40025:OUT3 : 40031:OUT15	2	0 (0:LOW)	0	4	0		LPFType	Thru	48dB/Oct Linkwitz		* See "7. SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		40014:OUT1 40015:OUT3 : 40017:OUT7 40024:OUT1 40025:OUT3 : 40031:OUT15	2	0-1 (0:LOW 1:HIGH)	0	5	0		HPFType	Thru	48dB/Oct Linkwitz		* See "7. SPEAKER PROCESSOR" in "7. Parameter Values"	
o			40014:OUT1 40015:OUT3 : 40017:OUT7 40024:OUT1 40025:OUT3 : 40031:OUT15	2	0 (0:LOW)	0	6	0		LPFGc(+)	-6	6	dB	*Valid only for AdjustGc	
	o		40014:OUT1 40015:OUT3 : 40017:OUT7 40024:OUT1 40025:OUT3 : 40031:OUT15	2	0-1 (0:LOW 1:HIGH)	0	7	0		HPFGc(+)	-6	6	dB	*Valid only for AdjustGc	
o			40014:OUT1 40015:OUT3 : 40017:OUT7 40024:OUT1 40025:OUT3 : 40031:OUT15	2	0	0	8	0		Polarity	NORMAL	INVERTED		0:NORMAL 1:INVERTED	
	o		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	

Model		MemNo (Memory Number)	UniqueId	Access ID				PrmNo (Parameter Number)	IndexNo (Index Number)	Category	Parameter Name	MIN	MAX	unit	Remarks
MTX3	MTX5-D			ElemNo (Element Number)	Xpos (X Position)	Ypos (Y Position)									
	o		40024-OUT1 40025-OUT3 :												
	o		40031-OUT15 40014-OUT1 40015-OUT3 :	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 "7.SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		40017-OUT7 40024-OUT1 40025-OUT3 :	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		40031-OUT15 40014-OUT1 40015-OUT3 :	4			2	0			Gain(*)	-18.0	18.0	dB *Not adjustable for HP/LP/APF 1st/APF 2nd dB x 10 ex. -14.5dB x 10 = -145	
	o		40017-OUT7 40024-OUT1 40025-OUT3 :	4			3	0			Bypass	OFF	ON	0:ON 1:OFF	
	o		40031-OUT15 40014-OUT1 40015-OUT3 :	4			4	0			Type	PEQ	Horn EQ	* See "7.SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		40017-OUT7 40024-OUT1 40025-OUT3 :	5	0-1 (0:LOW 1:HIGH)		0	0		Limiter	Threshold	-54	0	dB	
	o		40031-OUT15 40014-OUT1 40015-OUT3 :	5			0	1	0		Attack	0.0	120.0	ms ms x 10 ex. 24.5ms x 10 = 245	
	o		40017-OUT7 40024-OUT1 40025-OUT3 :	5			0	2	0		Release	3.2m	42,600	* See "7.SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		40031-OUT15 40014-OUT1 40015-OUT3 :	5			0	3	0		On	OFF	ON	0:ON 1:OFF	
	o		40017-OUT7 40024-OUT1 40025-OUT3 :	5			0	4	0		AttackMode	Fast	Manual	* See "7.SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		40031-OUT15 40014-OUT1 40015-OUT3 :	5			0	5	0		ReleaseMode	Fast	Manual	* See "7.SPEAKER PROCESSOR" in "7. Parameter Values"	
	o		40017-OUT7 40024-OUT1 40025-OUT3 :	6	0-1 (0:LOW 1:HIGH)		0	0	0		Out	Level	-80	10.00	dB x 100 ex. -73.60dB x 100 = -7360

Model		MemNo (Memory Number)	UniqueID	Access ID				Category	Parameter Name				MIN	MAX	unit	Remarks	
MTX3	MTX5-D			ElemNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PrmNo (Parameter Number)		IndexNo (Index Number)								
	o		40024-OUT1 40025-OUT3 : 40031-OUT15 40014-OUT1 40015-OUT3 : 40017-OUT7 40024-OUT1 40025-OUT3 : 40031-OUT15	6	0	1	0					Mute	UNMUTED	MUTED	0:UNMUTED 1:MUTED		
	o		40014-OUT1 40015-OUT3 : 40017-OUT7 40024-OUT1 40025-OUT3 : 40031-OUT15	6	0	2	0					PEQOn	OFF	ON	0:ON 1:OFF		
	o		20021	0	0	0-7 (OUT1-8)	0	0	OUTPUT PORT	OUTPUT PATCH	OutputPatch 8(16) Input x 8(40) Output	In	Patch	NONE	OUTPUT CH8 (SLOT OUT 16)	* See "10.OUTPUT PATCH" in "7. Parameter Values"	
	o		20028	0	0	0-15 (OUT1-16)	0	0		YDIF OUT PATCH	Router 46(70) Input x 16 Output	In	Patch	NONE	OUTPUT CH8(OUTPUT T CH16)	* See "11.YDIF PATCH" in "7. Parameter Values"	
	o		20022	0	0	0-15 (1-16ch)	0	0		OUTPUT PORT	OutputPort 8(40) Channel	Out	Polarity	NORMAL	INVERTED	0:NORMAL 1:INVERTED	
	o		20030	0	0	0-7 (OUTPUT1-8)	0	0									
	o		20023	0	0	0-7 (OUTPUT1-8)	1	0					Gain	-96.0	24.0	dB	dB x 10 ex. -14.5dB x 10 = -145
	o		20030	0	0	0-15 (OUTPUT1-16)	0	0									

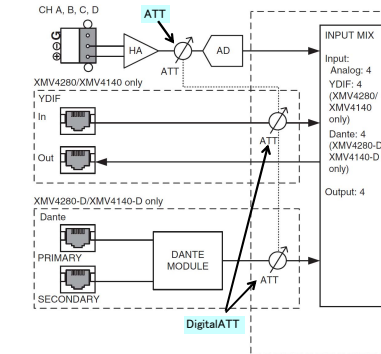
XMV Series

Model				MemNo (Memory Number)	Uniquelfd	ElmNo (Element Number)	Access ID				Parameter Name	MIN	MAX	unit	Remarks					
4ch	8ch	4ch D	8ch D				Xpos (X Position)	Ypos (Y Position)	PrmNo (Parameter Number)	IndexNo (Index Number)										
0	0	0	0	512	1	4	0 to 3	0	0	0	SignalProcessing	ATT *2	-99	0	dB	Synchronized with DigitalATT				
0	0	0	0				0 to 7	0	1	0	DigitalATT *2	-99	0	dB	Synchronized with ATT					
0	0	0	0				0 to 3	0	2	0	Mute	OFF	ON	-	0:OFF					
0	0	0	0				0 to 7	0	3	0	Polarity	Normal	Inverse	-	1:ON 0:Normal					
0	0	0	0				0 to 3	0	0	0	Power	Standby	Standby	ON	-	1:Inverse 0:Standby				
0	0	0	0				0 to 7	0	0	0	Utility	InputSelect *1	Analog	Digital	-	1:ON 0:Analog 1:Digital				
0	0	0	0				2	0	0 to 3	0	0	0	ChannelName	Channel Name 4 Channel	ChName	Name	Character (UTF-8) 48byte	-		
0	0	0	0						0 to 7	0	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.

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



EXi8

MemNo (Memory Number)	UniqueId	ElmNo (Element Number)	Access ID		PrmNo (Parameter Number)	IndexNo (Index Number)	Parameter Name	MIN	MAX	unit	Remarks	
			Xpos (X Position)	Ypos (Y Position)								
512	1	3	0 to 7	0	0							
					0		SignalProcessing	GAIN	-6	66	dB	
					1		V48	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	

EXo8

Access ID							Parameter Name				MIN	MAX	unit	Remarks
MemNo (Memory Number)	UniqueID	ElmNo (Element Number)	Xpos (X Position)	Ypos (Y Position)	PrmNo (Parameter Number)	IndexNo (Index Number)								
512	1	3	0 to 7	0	0	0			SignalProcessing	Polarity	Normal	Inverse	-	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

8. Meter List

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	See Parameter Value Details.
o	o		20004		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		Meter 22 Channel (CH1-8, STIN1L-STIN3R, CH9-16)	level		
o	o		20003	INPUT CHANNEL	EQ OUT	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)	gf	
o	o		40002	GATE	Gate 8 Channel (CH1-8)	gf		
o	o		40000		Gate 8 Channel (CH1-8)	gf		
o	o		40001		Gate 8 Channel (CH9-16)	gf		
o	o		40000	COMP	Compressor 8 Channel (CH1-8)	gf		
o	o		40001		Compressor 4 Channel (STIN1L-STIN2R)	gf		
o	o		40002		Compressor 8 Channel (CH1-8)	gf		
o	o		40003		Compressor 8 Channel (CH9-16)	gf		
o	o		40006		Compressor 4 Channel (STIN1L-STIN2R)	gf		
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)	gf		
o	o	20019		Ducking 8 Channel (ZONE1-8)	gf			
o	o	20013	1st PRIORITY PRIORITY DUCKER	Ducking 8 Channel (ZONE1-8)	gf			
o	o	20020		Ducking 8 Channel (ZONE1-8)	gf			
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			
o	o	40006	OUTPUT CHANNEL	OUTPUT CHANNEL(1way)	Speaker Processor 1 Way (OUTPUT CH1)	gf		
o	o	40007		SPEAKER PROCESSOR LIMITER	Speaker Processor 1 Way (OUTPUT CH2)	gf		
o	o	40008		Speaker Processor 1 Way (OUTPUT CH3)	gf			
o	o	40009		Speaker Processor 1 Way (OUTPUT CH4)	gf			
o	o	40010		Speaker Processor 1 Way (OUTPUT CH5)	gf			
o	o	40011		Speaker Processor 1 Way (OUTPUT CH6)	gf			
o	o	40012		Speaker Processor 1 Way (OUTPUT CH7)	gf			
o	o	40013		Speaker Processor 1 Way (OUTPUT CH8)	gf			
o	o	40008		Speaker Processor 1 Way (OUTPUT CH1)	gf			

Model		Access ID		Category	Meter Name	Type	Remarks
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld				
	o		40009		Speaker Processor 1 Way (OUTPUT CH2)	gf	
	o		40010		Speaker Processor 1 Way (OUTPUT CH3)	gf	
	o		40011		Speaker Processor 1 Way (OUTPUT CH4)	gf	
	o		40012		Speaker Processor 1 Way (OUTPUT CH5)	gf	
	o		40013		Speaker Processor 1 Way (OUTPUT CH6)	gf	
	o		40014		Speaker Processor 1 Way (OUTPUT CH7)	gf	
	o		40015		Speaker Processor 1 Way (OUTPUT CH8)	gf	
	o		40016		Speaker Processor 1 Way (OUTPUT CH9)	gf	
	o		40017		Speaker Processor 1 Way (OUTPUT CH10)	gf	
	o		40018		Speaker Processor 1 Way (OUTPUT CH11)	gf	
	o		40019		Speaker Processor 1 Way (OUTPUT CH12)	gf	
	o		40020		Speaker Processor 1 Way (OUTPUT CH13)	gf	
	o		40021		Speaker Processor 1 Way (OUTPUT CH14)	gf	
	o		40022		Speaker Processor 1 Way (OUTPUT CH15)	gf	
	o		40023		Speaker Processor 1 Way (OUTPUT CH16)	gf	
o			40006	OUTPUT CHANNEL(2way) SPEAKER PROCESSOR LIMITER	Speaker Processor 2 Way (OUTPUT CH1 (Low))	gf	
o			40007		Speaker Processor 2 Way (OUTPUT CH1 (High))	gf	
o			40008		Speaker Processor 2 Way (OUTPUT CH3 (Low))	gf	
o			40009		Speaker Processor 2 Way (OUTPUT CH3 (High))	gf	
o			40010		Speaker Processor 2 Way (OUTPUT CH5 (Low))	gf	
o			40011		Speaker Processor 2 Way (OUTPUT CH5 (High))	gf	
o			40012		Speaker Processor 2 Way (OUTPUT CH7 (Low))	gf	
o			40013		Speaker Processor 2 Way (OUTPUT CH7 (High))	gf	
o			40008		Speaker Processor 2 Way (OUTPUT CH1 (Low))	gf	
o			40009		Speaker Processor 2 Way (OUTPUT CH1 (High))	gf	
o			40010		Speaker Processor 2 Way (OUTPUT CH3 (Low))	gf	
o			40011		Speaker Processor 2 Way (OUTPUT CH3 (High))	gf	
o			40012		Speaker Processor 2 Way (OUTPUT CH5 (Low))	gf	
o			40013		Speaker Processor 2 Way (OUTPUT CH5 (High))	gf	
o			40014		Speaker Processor 2 Way (OUTPUT CH7 (Low))	gf	
o			40015		Speaker Processor 2 Way (OUTPUT CH7 (High))	gf	
o			40016		Speaker Processor 2 Way (OUTPUT CH9 (Low))	gf	
o			40017		Speaker Processor 2 Way (OUTPUT CH9 (High))	gf	
o			40018		Speaker Processor 2 Way (OUTPUT CH11 (Low))	gf	
o			40019		Speaker Processor 2 Way (OUTPUT CH11 (High))	gf	
o			40020		Speaker Processor 2 Way (OUTPUT CH13 (Low))	gf	
o			40021		Speaker Processor 2 Way (OUTPUT CH13 (High))	gf	
o			40022		Speaker Processor 2 Way (OUTPUT CH15 (Low))	gf	

Model		Access ID		Category	Meter Name	Type	Remarks
MTX3	MTX5-D	MemNo (Memory Number)	Uniqueld				
	o		40023		Speaker Processor 2 Way OUTPUT CH15 (High)	gf	
	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 IN 1-16)	level	

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							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	

EXi8

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

EXo8

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