



RM Series (RM-CR/RM-CG/RM-TT) Remote Control Protocol Specifications

Version 1.1.0

This specification document applies to RM-CR/RM-CG/RM-TT V1.1.0 and later.

Table of contents

0. Revision History	4
1. Setup	5
1.1. Connection Procedure	5
1.2. Configuring the Remote Controller	5
1.3. Device Configuration.....	5
2. Command List	6
2.1. Commands from a device sent to a remote controller	6
2.2. Commands for controlling a device.....	6
2.3. Extended commands	6
3. Command Specifications	7
3.1. Basic Command Specifications	7
3.2. Commands a Device Sends to a Remote Controller	8
3.2.1. Device status change notification.....	8
3.2.2. Parameter change notification	8
3.2.3. Meter information notification	8
3.2.4. Event processing change notification.....	9
3.3. Commands for controlling a device.....	9
3.3.1. Device status query.....	9
3.3.2. External control protocol run mode setting.....	10
3.3.3. Parameter query	11
3.3.4. Parameter setting.....	12
3.3.5. Meter control	13
3.4. Extended commands	14
3.4.1. Product information query request.....	14
3.4.2. Parameter information query request.....	17
4. Command Sequence	22
4.1. Communication start sequence	23
4.2. Parameter sync sequence	25
4.3. Parameter query sequence at any given time	26
4.4. Meter data request/query sequence	27
4.5. Sequence when parameters are changed by another controller	27
5. Meter Value	28
5.1. Level Meter, Hold Meter, GR Meter, Beam Direction Meter	28
5.1.1. Level Meter, Hold Meter, GR Meter	28
5.1.2. Beam Direction Meter (RM-CG).....	29
5.1.2.1. Beam Direction Phi Meter (RM-CG).....	29
5.1.2.2. Beam Direction Theta Meter (RM-CG).....	30

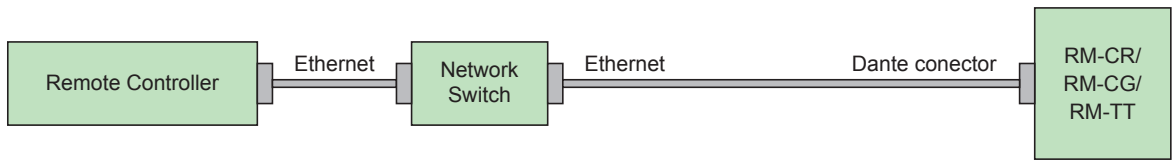
6. Parameter Value Details	31
6.1. Fader parameter	31
6.1.1. Fader with "-Infinity to 10dB" range.....	31
6.2. DRC	34
6.2.1. Ratio.....	34
6.2.2. Release.....	35
6.2.3. Hold.....	36
6.3. InputVolume.....	37
6.3.1. Level.....	37
6.4. Ducker.....	40
6.4.1. Release.....	40
6.4.2. Hold.....	40
6.5. MasterVolume.....	40
6.5.1. Level.....	40
6.6. InputEQ.....	41
6.6.1. Frequency.....	41
6.6.2. Q.....	42
6.7. Mixer.....	42
6.7.1. Level.....	42
6.8. RoomEQ.....	42
6.8.1. Frequency.....	42
6.8.2. Q.....	42
7. Parameter List	43
8. Meter List	53

0. Revision History

Version	Date	Section	Description
V1.0.0	Jan. 31, 2021	-	Initial version
V1.1.0	Jun. 8, 2021	-	Added RM-TT support and corrected typographical errors

1. Setup

1.1. Connection Procedure



1.2. Configuring the Remote Controller

RM-CR/RM-CG/RM-TT can be controlled from an external controller through the Ethernet (Dante) connector. The configuration on the remote controller side for each type of connection is shown below.

Ethernet (NETWORK connector) control

IP Address: Specify the IP address of the RM-CR/RM-CG/RM-TT
IP Port No.: 49280

1.3. Device Configuration

The setting required on the main unit is the IP address (UNIT ID) setting.
Up to eight remote controller devices can connect simultaneously to one RM-CR/RM-CG/RM-TT device.

2. Command List

2.1. Commands from a device sent to a remote controller

No.	Notification details		Reply from device	Remarks
1-1	Device status change notification	Device run mode notification	NOTIFY devstatus runmode...	
1-2		Device error status notification	NOTIFY devstatus error...	
1-3	Parameter change notification	Parameter change notification raw value	NOTIFY set...	
		Parameter change notification normalized value	NOTIFY setn...	
1-4	Meter information notification	Meter information notification	NOTIFY mtr...	
1-5	Event processing change notification	Alert notification	NOTIFY event RM:Alert...	

2.2. Commands for controlling a device

No.	Notification details		Reply from device	Remarks
2-1	Device status query	Device run mode query	devstatus runmode	
2-2		Device error status query	devstatus error	
2-3	RM-CR/CG external control protocol run mode setting	Result and change notification character encoding setting	scpmode encoding...	
2-4		Value notification mode setting	scpmode valuetype...	
2-5		Normalization resolution setting	scpmode resolution...	
2-6		Keep alive activation setting	scpmode keepalive...	
2-7	Parameter query	Raw value parameter query	get...	
2-8		Normalized value parameter query	getn...	
2-9	Parameter setting	Raw value parameter setting	set...	
2-10		Normalized value parameter setting (*)	setn...	
2-11	Meter control	Transmission request	mtrstart...	
2-12		Stop request	mtrstop...	

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

2.3. Extended commands

No.	Notification details		Reply from device	Remarks
3-1	Product information query request	RM-CR/CG external control protocol version query	devinfo protocolver ...	
3-2		Parameter set version query	devinfo paramsetver...	
3-3		Firmware version query	devinfo version ...	
3-4		Product name query	devinfo productname ...	
3-5		Serial number query	devinfo serialno ...	
3-6		Device category query	devinfo category ...	
3-7		Device ID query	devinfo deviceid...	
3-8		Device label query	devinfo devicename ...	
3-9		Product manufacture name query	devinfo manufacturer ...	
3-10		Parameter number query	prmnum	
3-11		Parameter structure query	prminfo	
3-12		Meter number query	mtrnum	
3-13		Meter structure query	mtrinfor	
3-14		Change target device identify display mode	identify	

3. Command Specifications

3.1. Basic Command Specifications

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

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

- Each command must end with LF (0x0A).
- LF (0x0A) code can be sent as heart-beat command.
- Character type letter(s) in command line must be bracketed by double quotations.
When double quotation itself needs to be included in command line, use "escape character" as shown below.

Backslash works as an escape character to express following one character for double quotation and backslash.

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

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

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

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

* Normalized value is a converted value when minimum value of the parameter is as 0 and maximum value of the parameter is as 1000*.
Example: -inf as minimum mapped 0, 10dB as maximum mapped 1000, 0dB mapped 804 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	"normal"	Normal run mode
NOTIFY devstatus	runmode	"update"	Update 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	"fault"	Alert fault information
		"error"	Alert error information
		"warning"	Alert warning information

Details: "falut" = Alert (fault) is occurring.
 "error" = Alert (Error) is occurring.
 "warning" = Alert (Warning) is occurring.

Example: Notification: NOTIFY devstatus error "fault"
 Meaning: Alert (fault) occurred

3.2.2. Parameter change notification

1-3) Parameter change notification raw value

Parameter change notification normalized value

Command	Option 1	Option 2	Option 3	Option 4	Option 5	Description
NOTIFY set	AccessID	X	Y	"(value)"	"(string)"	"Parameter change raw value"
NOTIFY setn	AccessID	X	Y	"(value)"	"(string)"	"Parameter change normalized value"

Details: AccessID = See section 7, "Parameter List."
 X = See section 7, "Parameter List."
 Y = See section 7, "Parameter List."
 "(value)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."
 "(string)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Notification: NOTIFY set RM:FeIn_Fader/Ch/Level 0 0 -7760 "-77.60"
 Meaning: Changed FarEnd input Fader 1ch(Bluetooth Input L) level at "-77.60"

3.2.3. Meter information notification

1-4) Meter information notification

Command	Option 1	Option 2	Option 3	Description
NOTIFY mtr	Meter ID	level	(meter)	Level meter value
		gr		gr meter value

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

Example: Notification: NOTIFY mtr RM:FeInPostFader level 00 00 2d 2e 00 00 00 00
 * The meter value is expressed using a 2-digit hexadecimal.
 Meaning: Notify FarEnd input channel levels of ch1 to ch8 as 00 00 2d 2e 00 00 00 00

3.2.4. Event processing change notification

1-5) Alert notification

Command	Option 1	Option 2	Description
NOTIFY event	RM:Alert	"<xx>: <yyyyyyyy>,<zzzzzz>"	<xx>: Alert number (Hex) <yyyyyyyy>:Alert message <zzzzzz>:warning/error/fault

Example: Notification: NOTIFY event RM:Alert "01:SYSTEM ERROR,fault"
Meaning: Fault type 01 SYSTEM ERROR alert occurs

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 "normal"	Normal run mode
OK devstatus runmode "update"	Update mode

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

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

When starting remote control, be sure to send "devstatus runmode" to the device.

When the device responds as [OK devstatus runmode "normal"], the device is ready to receive commands.

2-2) Device error status query

Command	Option 1	Description
devstatus	error	Queries the error status

Response

Response string	Description
OK devstatus error "none"	No alerts
OK devstatus error "fault"	fault alert
OK devstatus error "error"	error alert
OK devstatus error "warning"	warning alert

Details: "falut" = Alert (fault) is occurring.
"error" = Alert (Error) is occurring.
"warning" = Alert (Warning) is occurring.

Example: Command: devstatus error
Response: OK devstatus error "fault"
Meaning: Query the alert status.
Alert(Fault) is occurring.

3.3.2. External control protocol run mode setting

2-3) 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.

2-4) 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.

2-5) 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.

2-6) Keepalive activation setting

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

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

Response

Response string	Description
OK scpmode keepalive xxxx	Keepalive activated notification

Details: xxxx = The specified timeout value (msec)

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

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

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

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

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

3.3.3. Parameter query

2-7) Raw value parameter query

Command	Option 1	Option 2	Option 3	Description
get	AccessID	X	Y	Raw value parameter query request

Details: AccessID = See section 7, "Parameter List."
 X = See section 7, "Parameter List."
 Y = See section 7, "Parameter List."

Response

Response string	Description
OK get AccessID 0 0 (value)	Raw value parameter query response

Details: AccessID= See section 7, "Parameter List."
 X = See section 7, "Parameter List."
 Y = See section 7, "Parameter List."

(value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Command: get RM:FelN_Fader/Ch/Level 0 0
 Response: OK get RM:FelN_Fader/Ch/Level 0 0 -7760
 Meaning: Query the ch1 fader level of FarEnd input (Bluetooth Input L)
 The fader level of ch1 is -77.60dB.

2-8) Normalized value parameter query

Command	Option 1	Option 2	Option 3	Description
getn	AccessID	X	Y	Normalized value parameter query request

Details: AccessID = See section 7, "Parameter List."
 X = See section 7, "Parameter List."
 Y = See section 7, "Parameter List."

Response

Response string	Description
OK getn AccessID X Y (value)	Normalized value parameter query response

Details: AccessID = See section 7, "Parameter List."
 X = See section 7, "Parameter List."
 Y = See section 7, "Parameter List."
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Command: getn RM:FelN_Fader/Ch/Level 0 0
 Response: OK getn RM:FelN_Fader/Ch/Level 0 0 35
 Meaning: Query the fader level of Far end input ch1 (Bluetooth Input L) as normalized value.
 The fader level is 35 that is -77.60dB.
 (When the normalized value resolution is 0-1023, 35 means -77.60)

3.3.4. Parameter setting**2-9) Raw value parameter setting**

Command	Option 1	Option 2	Option 3	Option 4	Description
set	AccessID	X	Y	(value)	Raw value parameter setting

Details: AccessID = See section 7, "Parameter List."
 X = See section 7, "Parameter List."
 Y = See section 7, "Parameter List."
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Response

Response string	Description
OK set AccessID X Y (value) "(string)"	Raw value parameter setting response
OKm set AccessID X Y (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: AccessID = See section 7, "Parameter List."
 X = See section 7, "Parameter List."
 Y = See section 7, "Parameter List."
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."
 "(string)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Command: set RM:FelN_Fader/Ch/Level 0 0 -7760
 Response: OK set RM:FelN_Fader/Ch/Level 0 0 -7760 "-77.60"
 Meaning: Set the FarEnd input Fader ch1 (Bluetooth Input L) to -77.60dB using raw values.
 FarEnd input fader ch1 is set to "-77.60"

2-10) Normalized value parameter setting

Command	Option 1	Option 2	Option 3	Option 4	Description
setn	AccessID	X	Y	(value)	Normalized value parameter setting

Details: AccessID = See section 7, "Parameter List."
 X = See section 7, "Parameter List."
 Y = See section 7, "Parameter List."
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

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

Response

Response string	Description
OK setn AccessId X Y (value) "(string)"	Normalized value parameter setting response
OKm setn AccessId X Y (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: AccessID = See section 7, "Parameter List."
 X = See section 7, "Parameter List."
 Y = See section 7, "Parameter List."
 (value) = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."
 "(string)" = See section 3.1, "Basic Command Specifications," or section 7, "Parameter List."

Example: Command: setn RM:FeIn_Fader/Ch/Level 0 0 35
 Response: OK setn RM:FeIn_Fader/Ch/Level 0 0 35 "-77.60"
 Meaning: Set the ch1 level of the FarEnd Input fader to -77.60dB.
 The ch1 level of the FarEnd Input fader was set to -77.60dB.

3.3.5. Meter control

2-11) Transmission request

Command	Option 1	Option 2	Description
mtrstart	MeterId	(interval)	Requests that the specified meter data be transmitted

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

Response

Response string	Description
OK mtrstart MeterId	Meter data transmission setting complete

Details: MeterId = See section 8, "Meter List."

Example: Command: mtrstart RM:FeInPostFader 1000
 Response: OK mtrstart RM:FeInPostFader
 NOTIFY mtr RM:FeInPostFader level 00 00 2c 2e 00 00 00 00
 NOTIFY mtr RM:FeInPostFader level 00 00 2d 2d 00 00 00 00
 * The meter value is expressed using a 2-digit hexadecimal.
 Meaning: Send the meter data of ch1 to 8 of FarEnd input channels at 1000msec intervals.
 A request for the ch1 to 8 of FarEnd input channels was received, so the data will be transmitted.

2-12) Stop request

Command	Option 1	Description
mtrstop	MeterId	Requests that the specified meter data be stopped.

Details: MeterId = See section 8, "Meter List."

Response

Response string	Description
OK mtrstop MeterId	Meter data stop setting complete

Details: MeterId = See section 8, "Meter List."

Example: Command: mtrstop RM:FeInPostFader
 Response: OK mtrstop RM:FeInPostFader
 Meaning: Stop the meter data of ch1 to 8 of FarEnd inputs.
 The request to stop the meter data of ch1 to 8 was received.

3.4. Extended commands**3.4.1. Product information query request****3-1) RM-CR/CG 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"	RM-CR/CG external control protocol version

Details: xxxx = Version

Example: Command: devinfo protocolver
 Response: 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
 Response: OK devinfo paramsetver "RM:1.0.0"
 Meaning: Query the parameter set version.
 Parameter set version ="RM:1.0.0"

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
 Response: 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
 Response: OK devinfo productname "RM-CR"
 Meaning: Query the product name.
 Product name = "RM-CR"

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
 Response: OK devinfo serialno "S7A001001"
 Meaning: Query the serial number.
 Serial number = "S7A001001"

3-6) Device category query

Command	Option 1	Description
devinfo	category	Queries the device category

Response

Response string	Description
OK devinfo category "xxxx"	Device category

Details: xxxx = Device category
 RM-CR: "processor"
 RM-CG: "microphone"

Example: Command: devinfo category
 Response: OK devinfo category "processor"
 Meaning: Query the category
 Device category="processor"

3-7) 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
 Response: OK devinfo deviceid "001"
 Meaning: Query the device ID.
 Device ID = "001"

Note: The device ID corresponds to the UNIT ID.

3-8) Device name query

Command	Option 1	Description
devinfo	devicename	Queries the device category

Response

Response string	Description
OK devinfo devicelabel "xxxx"	Device Label

Details: xxxx = Device label
 RM-CR: "processor"
 RM-CG: "microphone"

Example: Command: devinfo devicename
 Response: OK devinfo devicename "Y001-Yamaha-RM-CR-061281"
 Meaning: Query the devicename
 Device name="Y001-Yamaha-RM-CR-061281"

3-9) Product manufacture name query

Command	Option 1	Description
devinfo	manufacturer	Product manufacture name query

Response

Response string	Description
OK devinfo manufacturer "xxxx"	Product manufacture name

Details: xxxx = Product manufacture name

Example: Command: devinfo manufacturer
 Response: OK devinfo manufacturer "Yamaha Corporation"
 Meaning: Query the manufacturer name.
 Manufacturer name = "Yamaha Corporation"

3.4.2. Parameter information query request

3-10) Number of parameters query

Command	Description
prmnum	Queries number of parameters

Response

Response string	Description
OK prmnum xxx	Number of parameters

Details: xxxx = Number of parameters

Example: Command: prmnum
 Response: OK prmnum 114
 Meaning: Query number of parameters
 Number of parameters are 114

3-11) Query specific parameter's structure

Command	Option 1	Description
prminfo	(parameter index)	Query parameter structure

Response

Response string	Description
OK prminfo 1 X:InputGain 144 1 10 -62 0 "dB" integer knob rw	Parameter structure of #1

Meaning: Query the content of second address

Meaning: There are (144x1) parameters at the "X:InputGain" address
 Range = +10~-62, default value = 0
 Unit string = "dB"
 Type = Integer value
 Recommended UI type = Knob type
 Read/Write functions = Both read and write

Details) OK prminfo <index> <address> <Number of sub-address X> <Number of sub-address Y>
 <Min> <Max> <Default> <Unit String> <Parameter type> <Recommended UI type> <Read/Write attributes>
 <Magnification>

Index	index	Integer	Index value when request (Maximum value is prmnum -1)
Address	address	Alphabet	Parameter address string Address that is written on specifications of the device to be operated
Number of sub-address X	xnum	Integer	Number of sub-address X in the address (above)
Number of sub-address Y	ynum	Integer	Number of sub-address Y in the address (above)
Min	min	Integer	Minimum value of parameter value (immediate value) Minimum value of characters for string parameters (always 0)
Max	max	Integer	Maximum value of parameter value (immediate value) Maximum value of characters for string parameters (immediate value)
Default	default	Integer String	Initial value of parameter value (immediate value) Initial value string for string parameters
Unit String	unit	String	Unit string
Parameter type	type	Integer	* Refer to parameter type code below
Recommended UI type	ui	Alphabet	* Refer to recommended UI type code below
Read/Write attributes	attrib	Alphabet	rw= Can both read and write r= Read only
Magnification	scaling	Integer	Magnification value (1,10,100,...)

Parameter type

integer	Integer	An integer value that can be handled within the range of Min to Max value.
freq	Frequency	Frequency values that specify the correspondence between actual values and values that handled by users according to ISO-266 standard.
binary	Hexadecimal	This is not Min or Max value, it's the parameters that are treated as hexadecimal numbers of up to 4 bytes. In this type, the operation of setn, setr, getn is not guaranteed.
string	String	Parameters treated as strings. In this type, the operation of setn, setr, getn is not guaranteed.

Recommended UI type

The most suitable UI type for the parameter is shown.
The controller side may or may not refer to this value.

any	Unspecified	No specific recommended UI.
fader	Fader type UI	For a UI that can be continuously changed linearly like a fader.
latchsw	Latch switch type UI	For two-state slide switch, toggle button, etc.
unlatchsw	Unlatch switch type UI	For unlatch type two-state button, etc.
list	List selection type UI	For UI that allows you to select alternatives such as a pull-down menu, etc.
knob	Knob type UI	For UI that can be continuously changed like a knob or encoder (this does not have to be linear like the fader type UI)

* For one address, there are parameter arrays {number of sub-address X × number of sub-address Y}.

Example: Number of Sub-address X = 1 → Only 1 parameter
Number of Sub-address Y = 1

Number of Sub-address X = 96 → One-dimensional array with 96 parameters
Number of Sub-address Y = 1

Number of Sub-address X = 96 → Two-dimensional array with 96 x 24 parameters
Number of Sub-address Y = 24

* Min and Max values are intended for the direction of operation in the control.
(Example: For fader and slider, the bottom or left is the Min Direction. For knob type, the counter-clockwise direction is the Min direction).

Therefore, it is not always the case that Min < Max numerically, and it is important to note that the Min direction may be numerically larger, like the case of HA Gain.

* Read/Write attributes are always fixed for each address.

The read / write attribute itself does not change even if the parameter operation is locked depending on the state of the device. In that case, an error notification will be shown when an operation request is made.

3-12) Number of meters query

Command	Description
mtrnum	Queries number of meters

Response

Response string	Description
OK mtrnum xxx	Number of meters

Details: xxxx = Number of meters

Example: Command: mtrnum
 Response: OK mtrnum 16
 Meaning: Query number of meters
 Number of meters is 16

3-13) Structure of meter query

Command	Option 1	Description
mtrinfo	index	Queries the meter structure

Response

Response string	Description
OK mtrinfo <index> <meter address> <number of data> <data type>	Device Label

Details)

Index	index	Integer	Index value when request
Meter address	address	Alphabet	Meter address string The address specifications depend on the specifications of the device to be operated.
Data number	num	Integer	Number of meter data contained in this address.
Data type	type	Alphabet	Types of meter data level= Level meter hold= Level hold meter gr= GR meter vu= VU meter raw= Raw value. The table is interpreted for each meter address

* For one meter address, there are meter data arrays for the number of data.

Example: Number of data = 1 → Only 1 parameter
 Number of data = 128 → 128 one-dimensional arrays

Example) Command: mtrinfo 1
 Response: OK mtrinfo 1 X:PreEQ 128 level
 Meaning: Query information of the second meter address

Meaning: If second meter address is "X:PreEQ"
 there are 128 meter data.
 Data type is level meter.

3-14) identify

Command	Option 1	Description
identify	duration(sec)	Enter identify display mode by duration(sec)

Response

Response string	Description
OK identify <duration>	The device enter identify mode as <duration> seconds.

Example: Command: identify 10
 Response: OK identify 10
 Meaning: The device enter identify mode 10seconds.

Event List

Applicable devices	RM-CR RM-CG (only work No.1 -16 commands)
--------------------	----------------------------------------------

Usage example(s)

event	event <EventID> <Data> ... ↓ OK event <EventID> <Data> ...
-------	------------------------------------------------------------------

No.	Case	Action	EventID	Data
1	Update request	event	RM:FirmwareUpdate "<xxxxxxxx>"	string :<xxxxxxxx> : update data source path (e.g. http://...)
2	Update start notification	NOTIFY event	RM:FirmwareUpdateStarted	-
3	Update finish notification	NOTIFY event	RM:FirmwareUpdateFinished "<xxxxxx>"	- :<xxxxxx> : success/failed/skip
4	Send the controller notification of device internal failure via alert message	NOTIFY event	RM:Alert "<xx>:[xxxxxxxx][xxxxx]" RM:Alert "01:SYSTEM ERROR,fault"	string :<xx> : alert number (Hex) [xxxxxxxx] : alert message [xxxxx]:warning/error/fault
5	Time zone setting	event	RM:SetTimeZone "<xx>"	string :<xx> : time zone (0-32) *See Timezone data table
6	Time zone query	event	RM:GetTimeZone ""	-
7	DST enable/disable setting	event	RM:SetDstEnable "<xxxx>"	string :<xxxx> : Enable/Disable
8	DST enable/disable query	event	RM:GetDstEnable ""	string :-
9	DST start time setting	event	RM:SetDstStartTime "month=<xx>, week=[x],day=[x],hour=(xx)"	string :<xx> : month (1-12) [x] : week (1-5) specifies which week of the month [x] : day (0-6, Sunday = 0) <xx> : hour (0-23)
10	DST start time query	event	RM:GetDstStartTime ""	-
11	DST end time setting	event	RM:SetDstEndTime "month=<xx>, week=[x],day=[x],hour=(xx)"	string :<xx> : month (1-12) [x] : week (1-5) specifies which week of the month [x] : day (0-6, Sunday = 0) <xx> : hour (0-23)
12	DST end time query	event	RM:GetDstEndTime ""	-
13	NTP support enable/disable setting	event	RM:SetNtpEnable "<xxxx>"	string :<xxxx> : Enable/Disable
14	NTP support enable/disable query	event	RM:GetNtpEnable ""	-
15	NTP server (1-4) setting	event	RM:SetNtpServer1 "<xxxxxxxx>" RM:SetNtpServer2 "<xxxxxxxx>" RM:SetNtpServer3 "<xxxxxxxx>" RM:SetNtpServer4 "<xxxxxxxx>"	string :<xxxx> : NTP server address
16	NTP server (1-4) query	event	RM:GetNtpServer1 "" RM:GetNtpServer2 "" RM:GetNtpServer3 "" RM:GetNtpServer4 ""	-
17	Initiate call	event	rm:callaction "dial=(line name):(number)"	string : • Possible line names: sip1/sip2
18	Answer call	event	rm:callaction "offhook=(line name)"	string : • Possible line names: sip1/sip2/usb/bt
19	Hold	event	rm:callaction "holdorresume=(line name)"	string : • Possible line names: sip1/sip2/usb/bt/aux
20	Resume	event	rm:callaction "holdorresume=(line name)"	string : Same as above
21	Disconnect	event	rm:callaction "hangup=(line name)"	string : • Possible line names: sip1/sip2/usb/bt
22	DTMF notification	event	rm:callaction "dtmf=(line name): (single-digit number or single character)"	string : • Possible line names: sip1/sip2
23	Join conference	event	rm:callaction "joinorsplit=(line name)"	string : • Possible line names:sip1/sip2/usb/bt/aux
24	Individual split	event	rm:callaction "joinorsplit=(line name)"	string : • Possible line names:sip1/sip2/usb/bt/aux
25	Split all	event	rm:callaction "splitall"	string :
26	Hold/resume conference	event	rm:callaction "holdorresumeconf"	string :
27	Disconnect from conference	event	rm:callaction "hangupconf"	string :
28	Status query	event	rm:getcallstatus ""	- : Possible attribute/value included in the response settings: sip1=(line status), sip2=(line status), usb=(line status), bt=(line status), aux=(line status), confstate=(conference status), serverregist=(SIP server connection status), vm-count=(voicemail count), sip1number=(SIP1 opposite party number), sip2number=(SIP2 opposite party number), ownld=(own SIP ID), ownname=(own SIP username) • Line statuses listed on "Dialer Line Status" sheet • Conference status (no lines in conference=idle/in conference=active/on hold=onhold) • SIP server connection status (3-digit number)
29	Status change notification	NOTIFY event	rm:changedcallstatus "(attribute)=(value)"	string : Same as above
30	Mic mute	event	rm:setcallconfig "mute=(mute setting)"	string : Setting is on/off
31	Volume control	event	rm:setcallconfig "vol=(volume)"	string : Volume is an integer 0-19
32	Incoming call rejection on/off	event	rm:setcallconfig "dnd=(incoming call rejection setting)"	string : Setting is on/off
33	Setting query	event	rm:getcallconfig ""	-

3. Command Specifications

No.	Case	Action	EventID	Data
34	Setting change notification	NOTIFY event	rm:changedcallconfig "(attribute)=(value)"	string Attribute/value settings are content of No. 28-30 + disable-dnd=on/off
35	Latest recent calls index query	event	rm:getlatestcallrecentindex ""	-
36	Recent calls query	event	rm:getcallrecents "(index number)"	string • index number can specify up to 100 entries with the index received from a latest recent calls index query as the max value • Recent call data format: number=(opposite party number), type=(call type), time=(call start time), duration=(call duration)
37	Contacts query	event	rm:getcallcontacts "(index number)"	string • index number is a number 0 - 100 (0=voicemail, 1-100=contact information) • Contact data format: name=(name), mobile=(number), work=(number), home=(number), default=(string) *default should be set to "mobile", "work", or "home" • Voicemail format: name=voice mail, mobile=, work=, home=(voicemail number), default=home
38	Recent calls change notification	NOTIFY event	rm:callrecent "(index number)=(recent calls data)"	string
39	Clear all recent calls notification	NOTIFY event	rm:clearcallrecents ""	-
40	Contacts change notification	NOTIFY event	rm:changedcallcontacts "(index number)=(contacts data)"	string

Dialer Line Status

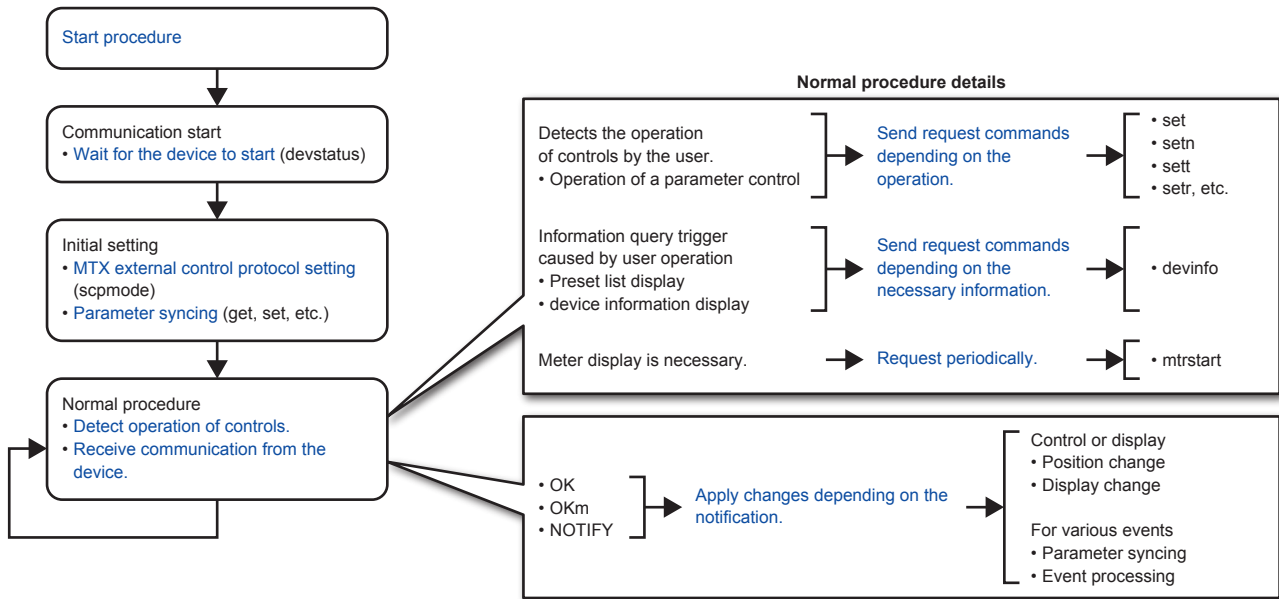
Status	Expression at command
IDLE	idle
CALLING	calling
CALLING MUTE	calling/mute
FAILED	failed
ACTIVE	active
ACTIVE MUTE	active/mute
INCOMING	incoming
INCOMING MUTE	incoming/mute
ONHOLD	onhold
ONHOLD MUTE	onhold/mute
MUSIC	music
MUSIC MUTE	music/mute
INCONF CALLING	inconference_calling
INCONF CALLING MUTE	inconference_calling/mute
INCONF ACTIVE	inconference_active
INCONF ACTIVE MUTE	inconference_active/mute
INCONF INCOMING	inconference_incoming
INCONF INCOMING MUTE	inconference_incoming/mute
INCONF ONHOLD	inconference_onhold
INCONF ONHOLD MUTE	inconference_onhold/mute
INCONF MUSIC	inconference_music
INCONF MUSIC MUTE	inconference_music/mute

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.

In the normal processing state, remote control is realized by combining various commands according to the specifications of the controller.



The controller designer needs to design and implement the blue items in the above figure.

The detailed sequences of various procedures are provided below.

4.1. Communication start sequence

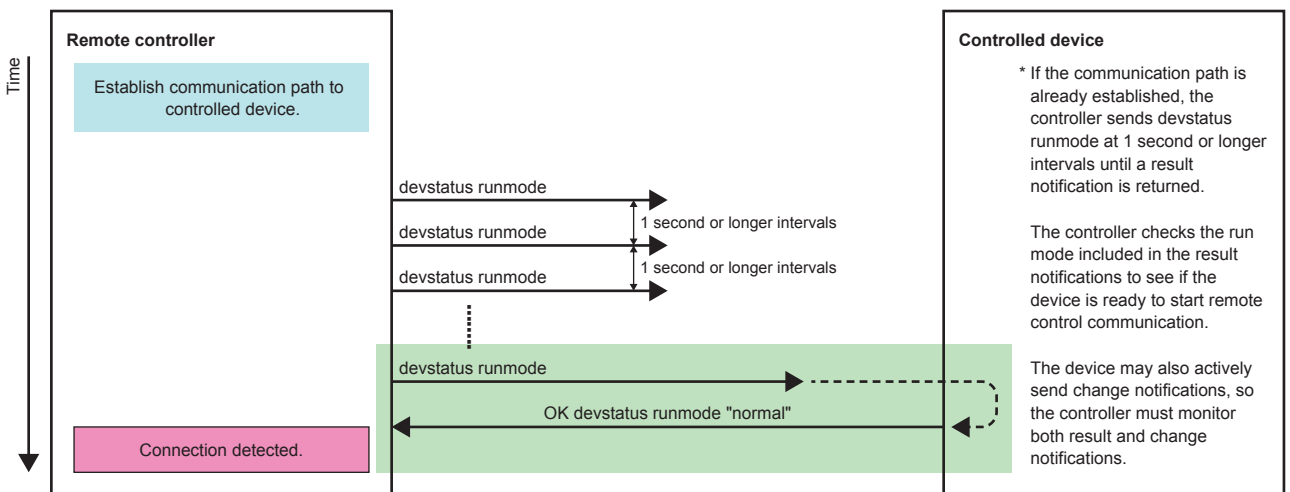
The amount of time for the controller and the controlled device to start is different.

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

The controller needs to wait using the sequence below.

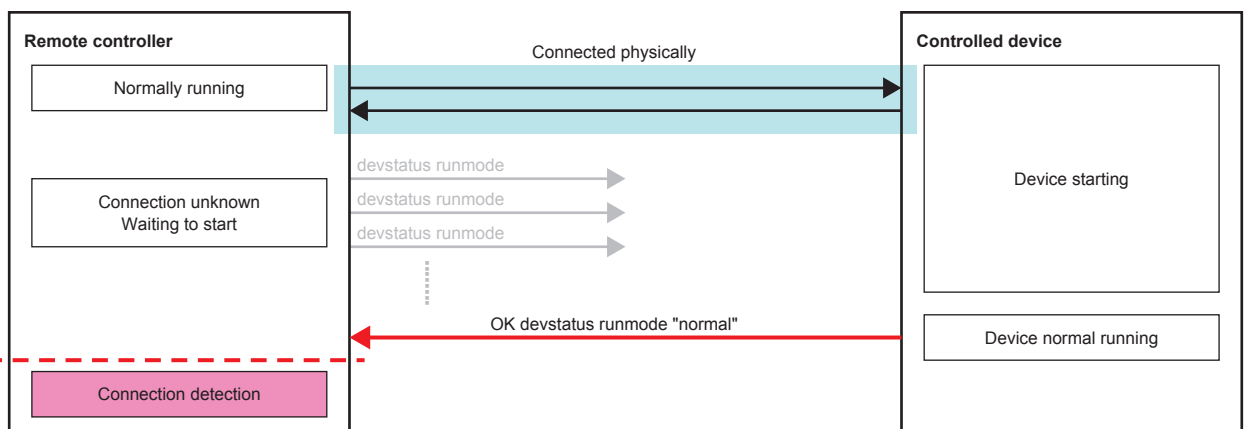
- If an Ethernet connection is required, the remote controller needs to establish a logical session.
- After the session is established, the controller sends devstatus commands at 1 second or longer intervals.
- If "OK devstatus runmode" is returned, the controller should check the information.
- If the controller determines that the controlled device is in normal running mode, the controller can start sending command strings to change parameter value and preset etc. If the controlled device is not in normal running mode, the controller continues trying.

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

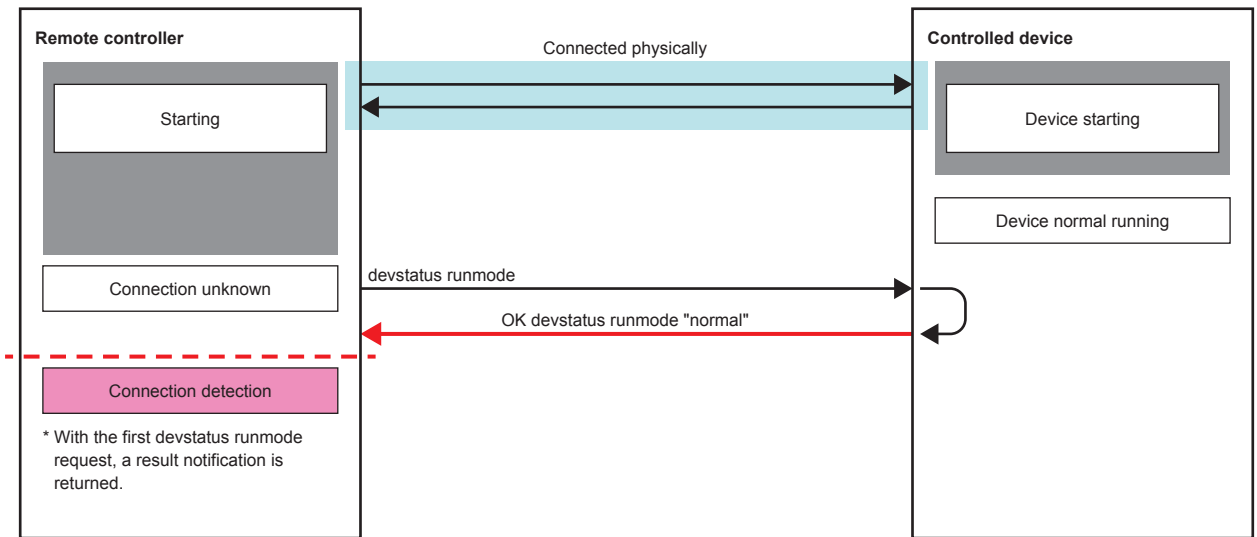


The reason for using such a sequence is provided below.

Example when the controller starts earlier than the controlled device



Example when the controlled device starts earlier than the controller



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

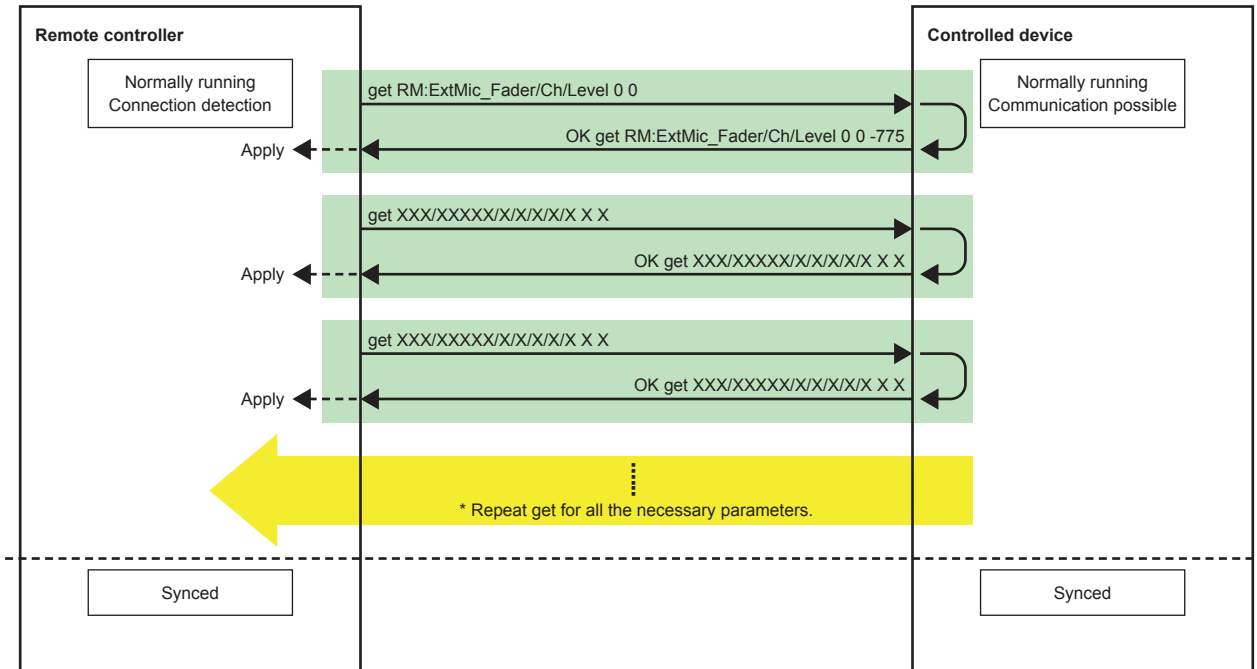
In case of Ethernet connection, Ethernet logical session (e.g. port open) should be established before sending "devstatus runmode".

4.2. Parameter sync sequence

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

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

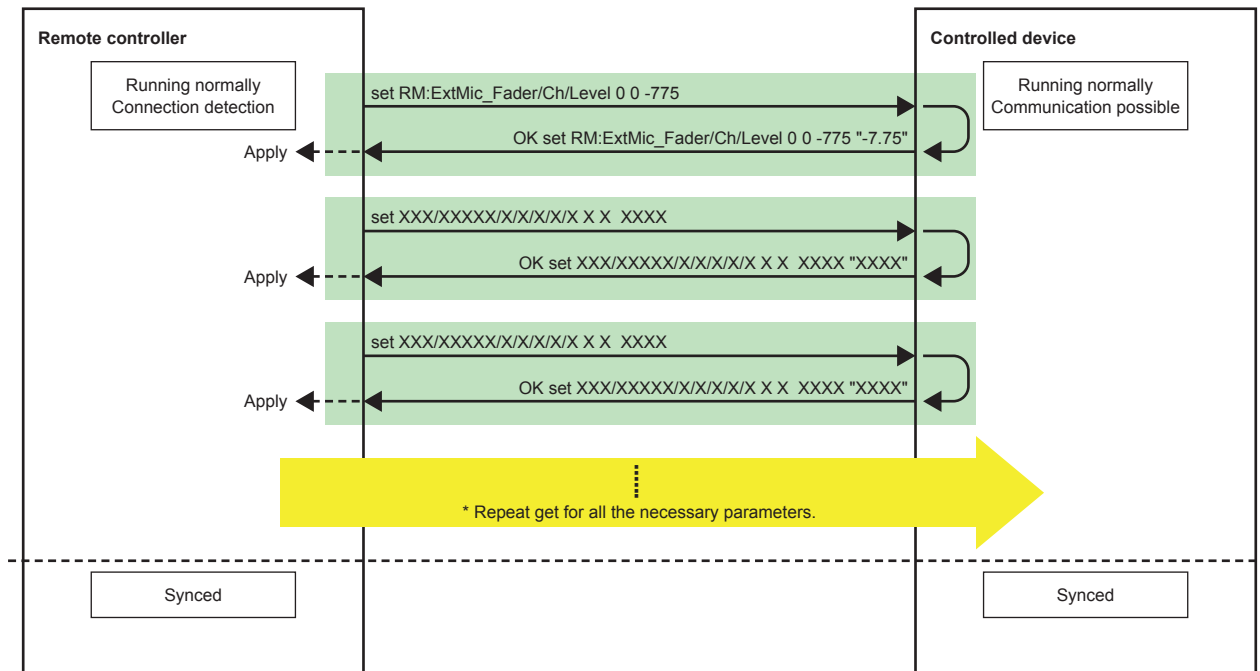
Querying the most recent status of the controlled device or when a snapshot recall occurs



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.

Applying the most recent status of the controller to the device



Even when the latest state on the controller side is reflected, depending on the situation, the value may be rounded on the operation target device side.

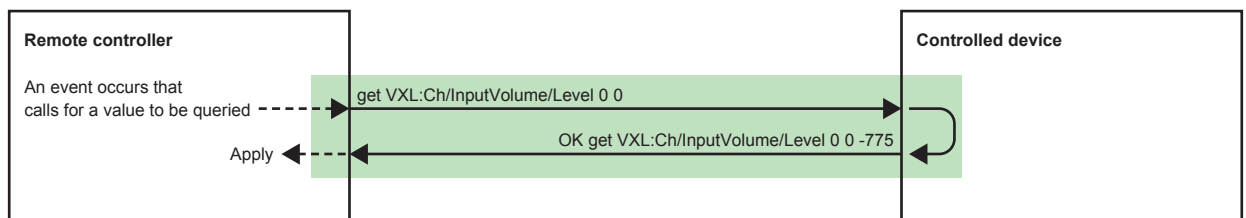
Therefore, the result notification is reflected again on the controller side as necessary.

4.3. Parameter query sequence at any given time

LEDs and displays on the GUI

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

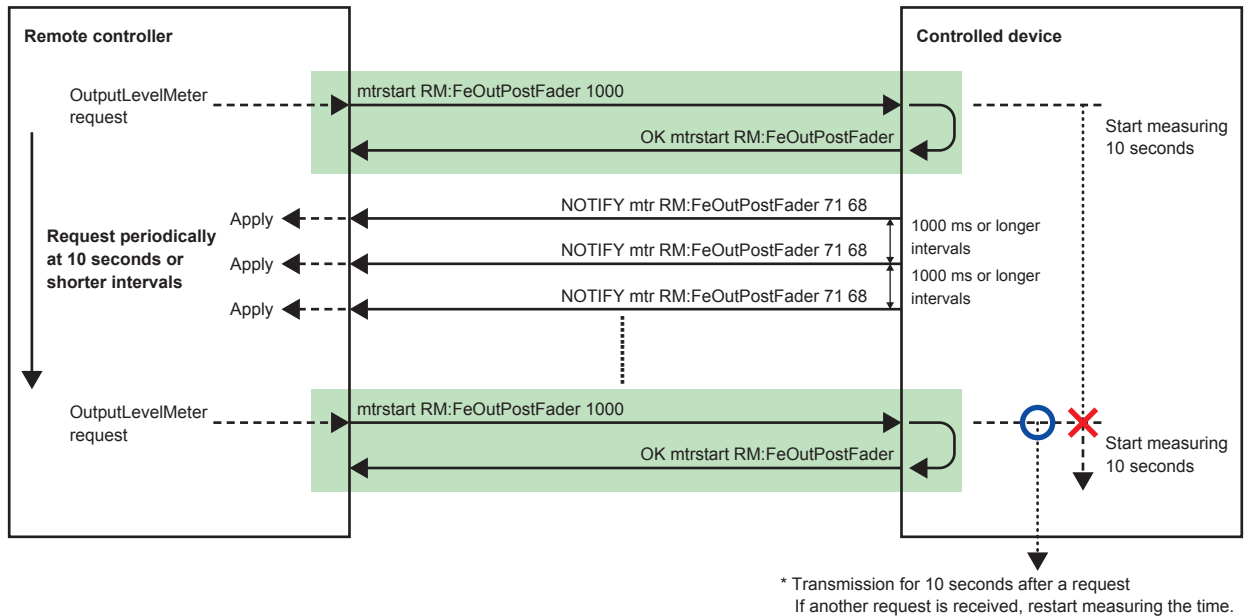
Alternatively, send an explicit get request and apply the result to the indications, as shown below.



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

4.4. Meter data request/query sequence

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



4.5. 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.

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

5.1. Level Meter, Hold Meter, GR Meter, Beam Direction Meter

5.1.1. Level Meter, Hold Meter, GR Meter

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

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

5.1.2. Beam Direction Meter (RM-CG)

5.1.2.1. Beam Direction Phi Meter (RM-CG)

Value	Angle	Value	Angle	Value	Angle	Value	Angle
0x00	-180°	0x2E	-88°	0x5C	4°	0x8A	96°
0x01	-178°	0x2F	-86°	0x5D	6°	0x8B	98°
0x02	-176°	0x30	-84°	0x5E	8°	0x8C	100°
0x03	-174°	0x31	-82°	0x5F	10°	0x8D	102°
0x04	-172°	0x32	-80°	0x60	12°	0x8E	104°
0x05	-170°	0x33	-78°	0x61	14°	0x8F	106°
0x06	-168°	0x34	-76°	0x62	16°	0x90	108°
0x07	-166°	0x35	-74°	0x63	18°	0x91	110°
0x08	-164°	0x36	-72°	0x64	20°	0x92	112°
0x09	-162°	0x37	-70°	0x65	22°	0x93	114°
0x0A	-160°	0x38	-68°	0x66	24°	0x94	116°
0x0B	-158°	0x39	-66°	0x67	26°	0x95	118°
0x0C	-156°	0x3A	-64°	0x68	28°	0x96	120°
0x0D	-154°	0x3B	-62°	0x69	30°	0x97	122°
0x0E	-152°	0x3C	-60°	0x6A	32°	0x98	124°
0x0F	-150°	0x3D	-58°	0x6B	34°	0x99	126°
0x10	-148°	0x3E	-56°	0x6C	36°	0x9A	128°
0x11	-146°	0x3F	-54°	0x6D	38°	0x9B	130°
0x12	-144°	0x40	-52°	0x6E	40°	0x9C	132°
0x13	-142°	0x41	-50°	0x6F	42°	0x9D	134°
0x14	-140°	0x42	-48°	0x70	44°	0x9E	136°
0x15	-138°	0x43	-46°	0x71	46°	0x9F	138°
0x16	-136°	0x44	-44°	0x72	48°	0xA0	140°
0x17	-134°	0x45	-42°	0x73	50°	0xA1	142°
0x18	-132°	0x46	-40°	0x74	52°	0xA2	144°
0x19	-130°	0x47	-38°	0x75	54°	0xA3	146°
0x1A	-128°	0x48	-36°	0x76	56°	0xA4	148°
0x1B	-126°	0x49	-34°	0x77	58°	0xA5	150°
0x1C	-124°	0x4A	-32°	0x78	60°	0xA6	152°
0x1D	-122°	0x4B	-30°	0x79	62°	0xA7	154°
0x1E	-120°	0x4C	-28°	0x7A	64°	0xA8	156°
0x1F	-118°	0x4D	-26°	0x7B	66°	0xA9	158°
0x20	-116°	0x4E	-24°	0x7C	68°	0xAA	160°
0x21	-114°	0x4F	-22°	0x7D	70°	0xAB	162°
0x22	-112°	0x50	-20°	0x7E	72°	0xAC	164°
0x23	-110°	0x51	-18°	0x7F	74°	0xAD	166°
0x24	-108°	0x52	-16°	0x80	76°	0xAE	168°
0x25	-106°	0x53	-14°	0x81	78°	0xAF	170°
0x26	-104°	0x54	-12°	0x82	80°	0xB0	172°
0x27	-102°	0x55	-10°	0x83	82°	0xB1	174°
0x28	-100°	0x56	-8°	0x84	84°	0xB2	176°
0x29	-98°	0x57	-6°	0x85	86°	0xB3	178°
0x2A	-96°	0x58	-4°	0x86	88°	0xB4	180°
0x2B	-94°	0x59	-2°	0x87	90°		
0x2C	-92°	0x5A	0°	0x88	92°		
0x2D	-90°	0x5B	2°	0x89	94°		

NOTE) B5 - FF are reserved.

5.1.2.2. Beam Direction Theta Meter (RM-CG)

Value	Angle	Value	Angle	Value	Angle	Value	Angle
0x00	0°	0x2E	23°	0x5C	46°	0x8A	69°
0x01	0.5°	0x2F	23.5°	0x5D	46.5°	0x8B	69.5°
0x02	1°	0x30	24°	0x5E	47°	0x8C	70°
0x03	1.5°	0x31	24.5°	0x5F	47.5°	0x8D	70.5°
0x04	2°	0x32	25°	0x60	48°	0x8E	71°
0x05	2.5°	0x33	25.5°	0x61	48.5°	0x8F	71.5°
0x06	3°	0x34	26°	0x62	49°	0x90	72°
0x07	3.5°	0x35	26.5°	0x63	49.5°	0x91	72.5°
0x08	4°	0x36	27°	0x64	50°	0x92	73°
0x09	4.5°	0x37	27.5°	0x65	50.5°	0x93	73.5°
0x0A	5°	0x38	28°	0x66	51°	0x94	74°
0x0B	5.5°	0x39	28.5°	0x67	51.5°	0x95	74.5°
0x0C	6°	0x3A	29°	0x68	52°	0x96	75°
0x0D	6.5°	0x3B	29.5°	0x69	52.5°	0x97	75.5°
0x0E	7°	0x3C	30°	0x6A	53°	0x98	76°
0x0F	7.5°	0x3D	30.5°	0x6B	53.5°	0x99	76.5°
0x10	8°	0x3E	31°	0x6C	54°	0x9A	77°
0x11	8.5°	0x3F	31.5°	0x6D	54.5°	0x9B	77.5°
0x12	9°	0x40	32°	0x6E	55°	0x9C	78°
0x13	9.5°	0x41	32.5°	0x6F	55.5°	0x9D	78.5°
0x14	10°	0x42	33°	0x70	56°	0x9E	79°
0x15	10.5°	0x43	33.5°	0x71	56.5°	0x9F	79.5°
0x16	11°	0x44	34°	0x72	57°	0xA0	80°
0x17	11.5°	0x45	34.5°	0x73	57.5°	0xA1	80.5°
0x18	12°	0x46	35°	0x74	58°	0xA2	81°
0x19	12.5°	0x47	35.5°	0x75	58.5°	0xA3	81.5°
0x1A	13°	0x48	36°	0x76	59°	0xA4	82°
0x1B	13.5°	0x49	36.5°	0x77	59.5°	0xA5	82.5°
0x1C	14°	0x4A	37°	0x78	60°	0xA6	83°
0x1D	14.5°	0x4B	37.5°	0x79	60.5°	0xA7	83.5°
0x1E	15°	0x4C	38°	0x7A	61°	0xA8	84°
0x1F	15.5°	0x4D	38.5°	0x7B	61.5°	0xA9	84.5°
0x20	16°	0x4E	39°	0x7C	62°	0xAA	85°
0x21	16.5°	0x4F	39.5°	0x7D	62.5°	0xAB	85.5°
0x22	17°	0x50	40°	0x7E	63°	0xAC	86°
0x23	17.5°	0x51	40.5°	0x7F	63.5°	0xAD	86.5°
0x24	18°	0x52	41°	0x80	64°	0xAE	87°
0x25	18.5°	0x53	41.5°	0x81	64.5°	0xAF	87.5°
0x26	19°	0x54	42°	0x82	65°	0xB0	88°
0x27	19.5°	0x55	42.5°	0x83	65.5°	0xB1	88.5°
0x28	20°	0x56	43°	0x84	66°	0xB2	89°
0x29	20.5°	0x57	43.5°	0x85	66.5°	0xB3	89.5°
0x2A	21°	0x58	44°	0x86	67°	0xB4	90°
0x2B	21.5°	0x59	44.5°	0x87	67.5°		
0x2C	22°	0x5A	45°	0x88	68°		
0x2D	22.5°	0x5B	45.5°	0x89	68.5°		

NOTE) B5 - FF are reserved.

6. Parameter Value Details

6.1. Fader parameter

6.1.1. Fader with "-Infinity to 10dB" range

Value	Display	Unit	Value	Display	Unit	Value	Display	Unit	Value	Display	Unit	Value	Display	Unit	Value	Display	Unit
-32768	-INFINITY	dB	-7260	-72.60	dB	-6060	-60.60	dB	-4860	-48.60	dB	-3830	-38.30	dB	-3230	-32.30	dB
-13800	-138.0	dB	-7240	-72.40	dB	-6040	-60.40	dB	-4840	-48.40	dB	-3820	-38.20	dB	-3220	-32.20	dB
-13500	-135.0	dB	-7220	-72.20	dB	-6020	-60.20	dB	-4820	-48.20	dB	-3810	-38.10	dB	-3210	-32.10	dB
-13200	-132.0	dB	-7200	-72.00	dB	-6000	-60.00	dB	-4800	-48.00	dB	-3800	-38.00	dB	-3200	-32.00	dB
-12900	-129.0	dB	-7180	-71.80	dB	-5980	-59.80	dB	-4780	-47.80	dB	-3790	-37.90	dB	-3190	-31.90	dB
-12600	-126.0	dB	-7160	-71.60	dB	-5960	-59.60	dB	-4760	-47.60	dB	-3780	-37.80	dB	-3180	-31.80	dB
-12300	-123.0	dB	-7140	-71.40	dB	-5940	-59.40	dB	-4740	-47.40	dB	-3770	-37.70	dB	-3170	-31.70	dB
-12000	-120.0	dB	-7120	-71.20	dB	-5920	-59.20	dB	-4720	-47.20	dB	-3760	-37.60	dB	-3160	-31.60	dB
-11700	-117.0	dB	-7100	-71.00	dB	-5900	-59.00	dB	-4700	-47.00	dB	-3750	-37.50	dB	-3150	-31.50	dB
-11400	-114.0	dB	-7080	-70.80	dB	-5880	-58.80	dB	-4680	-46.80	dB	-3740	-37.40	dB	-3140	-31.40	dB
-11100	-111.0	dB	-7060	-70.60	dB	-5860	-58.60	dB	-4660	-46.60	dB	-3730	-37.30	dB	-3130	-31.30	dB
-10800	-108.0	dB	-7040	-70.40	dB	-5840	-58.40	dB	-4640	-46.40	dB	-3720	-37.20	dB	-3120	-31.20	dB
-10500	-105.0	dB	-7020	-70.20	dB	-5820	-58.20	dB	-4620	-46.20	dB	-3710	-37.10	dB	-3110	-31.10	dB
-10200	-102.0	dB	-7000	-70.00	dB	-5800	-58.00	dB	-4600	-46.00	dB	-3700	-37.00	dB	-3100	-31.00	dB
-9900	-99.00	dB	-6980	-69.80	dB	-5780	-57.80	dB	-4580	-45.80	dB	-3690	-36.90	dB	-3090	-30.90	dB
-9600	-96.00	dB	-6960	-69.60	dB	-5760	-57.60	dB	-4560	-45.60	dB	-3680	-36.80	dB	-3080	-30.80	dB
-9500	-95.00	dB	-6940	-69.40	dB	-5740	-57.40	dB	-4540	-45.40	dB	-3670	-36.70	dB	-3070	-30.70	dB
-9400	-94.00	dB	-6920	-69.20	dB	-5720	-57.20	dB	-4520	-45.20	dB	-3660	-36.60	dB	-3060	-30.60	dB
-9300	-93.00	dB	-6900	-69.00	dB	-5700	-57.00	dB	-4500	-45.00	dB	-3650	-36.50	dB	-3050	-30.50	dB
-9200	-92.00	dB	-6880	-68.80	dB	-5680	-56.80	dB	-4480	-44.80	dB	-3640	-36.40	dB	-3040	-30.40	dB
-9100	-91.00	dB	-6860	-68.60	dB	-5660	-56.60	dB	-4460	-44.60	dB	-3630	-36.30	dB	-3030	-30.30	dB
-9000	-90.00	dB	-6840	-68.40	dB	-5640	-56.40	dB	-4440	-44.40	dB	-3620	-36.20	dB	-3020	-30.20	dB
-8900	-89.00	dB	-6820	-68.20	dB	-5620	-56.20	dB	-4420	-44.20	dB	-3610	-36.10	dB	-3010	-30.10	dB
-8800	-88.00	dB	-6800	-68.00	dB	-5600	-56.00	dB	-4400	-44.00	dB	-3600	-36.00	dB	-3000	-30.00	dB
-8700	-87.00	dB	-6780	-67.80	dB	-5580	-55.80	dB	-4380	-43.80	dB	-3590	-35.90	dB	-2990	-29.90	dB
-8600	-86.00	dB	-6760	-67.60	dB	-5560	-55.60	dB	-4360	-43.60	dB	-3580	-35.80	dB	-2980	-29.80	dB
-8500	-85.00	dB	-6740	-67.40	dB	-5540	-55.40	dB	-4340	-43.40	dB	-3570	-35.70	dB	-2970	-29.70	dB
-8400	-84.00	dB	-6720	-67.20	dB	-5520	-55.20	dB	-4320	-43.20	dB	-3560	-35.60	dB	-2960	-29.60	dB
-8300	-83.00	dB	-6700	-67.00	dB	-5500	-55.00	dB	-4300	-43.00	dB	-3550	-35.50	dB	-2950	-29.50	dB
-8200	-82.00	dB	-6680	-66.80	dB	-5480	-54.80	dB	-4280	-42.80	dB	-3540	-35.40	dB	-2940	-29.40	dB
-8100	-81.00	dB	-6660	-66.60	dB	-5460	-54.60	dB	-4260	-42.60	dB	-3530	-35.30	dB	-2930	-29.30	dB
-8000	-80.00	dB	-6640	-66.40	dB	-5440	-54.40	dB	-4240	-42.40	dB	-3520	-35.20	dB	-2920	-29.20	dB
-7900	-79.00	dB	-6620	-66.20	dB	-5420	-54.20	dB	-4220	-42.20	dB	-3510	-35.10	dB	-2910	-29.10	dB
-7800	-78.00	dB	-6600	-66.00	dB	-5400	-54.00	dB	-4200	-42.00	dB	-3500	-35.00	dB	-2900	-29.00	dB
-7780	-77.80	dB	-6580	-65.80	dB	-5380	-53.80	dB	-4180	-41.80	dB	-3490	-34.90	dB	-2890	-28.90	dB
-7760	-77.60	dB	-6560	-65.60	dB	-5360	-53.60	dB	-4160	-41.60	dB	-3480	-34.80	dB	-2880	-28.80	dB
-7740	-77.40	dB	-6540	-65.40	dB	-5340	-53.40	dB	-4140	-41.40	dB	-3470	-34.70	dB	-2870	-28.70	dB
-7720	-77.20	dB	-6520	-65.20	dB	-5320	-53.20	dB	-4120	-41.20	dB	-3460	-34.60	dB	-2860	-28.60	dB
-7700	-77.00	dB	-6500	-65.00	dB	-5300	-53.00	dB	-4100	-41.00	dB	-3450	-34.50	dB	-2850	-28.50	dB
-7680	-76.80	dB	-6480	-64.80	dB	-5280	-52.80	dB	-4080	-40.80	dB	-3440	-34.40	dB	-2840	-28.40	dB
-7660	-76.60	dB	-6460	-64.60	dB	-5260	-52.60	dB	-4060	-40.60	dB	-3430	-34.30	dB	-2830	-28.30	dB
-7640	-76.40	dB	-6440	-64.40	dB	-5240	-52.40	dB	-4040	-40.40	dB	-3420	-34.20	dB	-2820	-28.20	dB
-7620	-76.20	dB	-6420	-64.20	dB	-5220	-52.20	dB	-4020	-40.20	dB	-3410	-34.10	dB	-2810	-28.10	dB
-7600	-76.00	dB	-6400	-64.00	dB	-5200	-52.00	dB	-4000	-40.00	dB	-3400	-34.00	dB	-2800	-28.00	dB
-7580	-75.80	dB	-6380	-63.80	dB	-5180	-51.80	dB	-3990	-39.90	dB	-3390	-33.90	dB	-2790	-27.90	dB
-7560	-75.60	dB	-6360	-63.60	dB	-5160	-51.60	dB	-3980	-39.80	dB	-3380	-33.80	dB	-2780	-27.80	dB
-7540	-75.40	dB	-6340	-63.40	dB	-5140	-51.40	dB	-3970	-39.70	dB	-3370	-33.70	dB	-2770	-27.70	dB
-7520	-75.20	dB	-6320	-63.20	dB	-5120	-51.20	dB	-3960	-39.60	dB	-3360	-33.60	dB	-2760	-27.60	dB
-7500	-75.00	dB	-6300	-63.00	dB	-5100	-51.00	dB	-3950	-39.50	dB	-3350	-33.50	dB	-2750	-27.50	dB
-7480	-74.80	dB	-6280	-62.80	dB	-5080	-50.80	dB	-3940	-39.40	dB	-3340	-33.40	dB	-2740	-27.40	dB
-7460	-74.60	dB	-6260	-62.60	dB	-5060	-50.60	dB	-3930	-39.30	dB	-3330	-33.30	dB	-2730	-27.30	dB
-7440	-74.40	dB	-6240	-62.40	dB	-5040	-50.40	dB	-3920	-39.20	dB	-3320	-33.20	dB	-2720	-27.20	dB
-7420	-74.20	dB	-6220	-62.20	dB	-5020	-50.20	dB	-3910	-39.10	dB	-3310	-33.10	dB	-2710	-27.10	dB
-7400	-74.00	dB	-6200	-62.00	dB	-5000	-50.00	dB	-3900	-39.00	dB	-3300	-33.00	dB	-2700	-27.00	dB
-7380	-73.80	dB	-6180	-61.80	dB	-4980	-49.80	dB	-3890	-38.90	dB	-3290	-32.90	dB	-2690	-26.90	dB
-7360	-73.60	dB	-6160	-61.60	dB	-4960	-49.60	dB	-3880	-38.80	dB	-3280	-32.80	dB	-2680	-26.80	dB
-7340	-73.40	dB	-6140	-61.40	dB	-4940	-49.40	dB	-3870	-38.70	dB	-3270	-32.70	dB	-2670	-26.70	dB
-7320	-73.20	dB	-6120	-61.20	dB	-4920	-49.20	dB	-3860	-38.60	dB	-3260	-32.60	dB	-2660	-26.60	dB
-7300	-73.00	dB	-6100	-61.00	dB	-4900	-49.00	dB	-3850	-38.50	dB	-3250	-32.50	dB	-2650	-26.50	dB
-7280	-72.80	dB	-6080	-60.80	dB	-4880	-48.80	dB	-3840	-38.40	dB	-3240	-32.40	dB	-2640	-26.40	dB

6. Parameter Value Details

Value	Display	Unit	Value	Display	Unit	Value	Display	Unit	Value	Display	Unit	Value	Display	Unit	Value	Display	Unit
-2630	-26.30	dB	-2020	-20.20	dB	-1705	-17.05	dB	-1400	-14.00	dB	-1095	-10.95	dB	-790	-7.90	dB
-2620	-26.20	dB	-2010	-20.10	dB	-1700	-17.00	dB	-1395	-13.95	dB	-1090	-10.90	dB	-785	-7.85	dB
-2610	-26.10	dB	-2000	-20.00	dB	-1695	-16.95	dB	-1390	-13.90	dB	-1085	-10.85	dB	-780	-7.80	dB
-2600	-26.00	dB	-1995	-19.95	dB	-1690	-16.90	dB	-1385	-13.85	dB	-1080	-10.80	dB	-775	-7.75	dB
-2590	-25.90	dB	-1990	-19.90	dB	-1685	-16.85	dB	-1380	-13.80	dB	-1075	-10.75	dB	-770	-7.70	dB
-2580	-25.80	dB	-1985	-19.85	dB	-1680	-16.80	dB	-1375	-13.75	dB	-1070	-10.70	dB	-765	-7.65	dB
-2570	-25.70	dB	-1980	-19.80	dB	-1675	-16.75	dB	-1370	-13.70	dB	-1065	-10.65	dB	-760	-7.60	dB
-2560	-25.60	dB	-1975	-19.75	dB	-1670	-16.70	dB	-1365	-13.65	dB	-1060	-10.60	dB	-755	-7.55	dB
-2550	-25.50	dB	-1970	-19.70	dB	-1665	-16.65	dB	-1360	-13.60	dB	-1055	-10.55	dB	-750	-7.50	dB
-2540	-25.40	dB	-1965	-19.65	dB	-1660	-16.60	dB	-1355	-13.55	dB	-1050	-10.50	dB	-745	-7.45	dB
-2530	-25.30	dB	-1960	-19.60	dB	-1655	-16.55	dB	-1350	-13.50	dB	-1045	-10.45	dB	-740	-7.40	dB
-2520	-25.20	dB	-1955	-19.55	dB	-1650	-16.50	dB	-1345	-13.45	dB	-1040	-10.40	dB	-735	-7.35	dB
-2510	-25.10	dB	-1950	-19.50	dB	-1645	-16.45	dB	-1340	-13.40	dB	-1035	-10.35	dB	-730	-7.30	dB
-2500	-25.00	dB	-1945	-19.45	dB	-1640	-16.40	dB	-1335	-13.35	dB	-1030	-10.30	dB	-725	-7.25	dB
-2490	-24.90	dB	-1940	-19.40	dB	-1635	-16.35	dB	-1330	-13.30	dB	-1025	-10.25	dB	-720	-7.20	dB
-2480	-24.80	dB	-1935	-19.35	dB	-1630	-16.30	dB	-1325	-13.25	dB	-1020	-10.20	dB	-715	-7.15	dB
-2470	-24.70	dB	-1930	-19.30	dB	-1625	-16.25	dB	-1320	-13.20	dB	-1015	-10.15	dB	-710	-7.10	dB
-2460	-24.60	dB	-1925	-19.25	dB	-1620	-16.20	dB	-1315	-13.15	dB	-1010	-10.10	dB	-705	-7.05	dB
-2450	-24.50	dB	-1920	-19.20	dB	-1615	-16.15	dB	-1310	-13.10	dB	-1005	-10.05	dB	-700	-7.00	dB
-2440	-24.40	dB	-1915	-19.15	dB	-1610	-16.10	dB	-1305	-13.05	dB	-1000	-10.00	dB	-695	-6.95	dB
-2430	-24.30	dB	-1910	-19.10	dB	-1605	-16.05	dB	-1300	-13.00	dB	-995	-9.95	dB	-690	-6.90	dB
-2420	-24.20	dB	-1905	-19.05	dB	-1600	-16.00	dB	-1295	-12.95	dB	-990	-9.90	dB	-685	-6.85	dB
-2410	-24.10	dB	-1900	-19.00	dB	-1595	-15.95	dB	-1290	-12.90	dB	-985	-9.85	dB	-680	-6.80	dB
-2400	-24.00	dB	-1895	-18.95	dB	-1590	-15.90	dB	-1285	-12.85	dB	-980	-9.80	dB	-675	-6.75	dB
-2390	-23.90	dB	-1890	-18.90	dB	-1585	-15.85	dB	-1280	-12.80	dB	-975	-9.75	dB	-670	-6.70	dB
-2380	-23.80	dB	-1885	-18.85	dB	-1580	-15.80	dB	-1275	-12.75	dB	-970	-9.70	dB	-665	-6.65	dB
-2370	-23.70	dB	-1880	-18.80	dB	-1575	-15.75	dB	-1270	-12.70	dB	-965	-9.65	dB	-660	-6.60	dB
-2360	-23.60	dB	-1875	-18.75	dB	-1570	-15.70	dB	-1265	-12.65	dB	-960	-9.60	dB	-655	-6.55	dB
-2350	-23.50	dB	-1870	-18.70	dB	-1565	-15.65	dB	-1260	-12.60	dB	-955	-9.55	dB	-650	-6.50	dB
-2340	-23.40	dB	-1865	-18.65	dB	-1560	-15.60	dB	-1255	-12.55	dB	-950	-9.50	dB	-645	-6.45	dB
-2330	-23.30	dB	-1860	-18.60	dB	-1555	-15.55	dB	-1250	-12.50	dB	-945	-9.45	dB	-640	-6.40	dB
-2320	-23.20	dB	-1855	-18.55	dB	-1550	-15.50	dB	-1245	-12.45	dB	-940	-9.40	dB	-635	-6.35	dB
-2310	-23.10	dB	-1850	-18.50	dB	-1545	-15.45	dB	-1240	-12.40	dB	-935	-9.35	dB	-630	-6.30	dB
-2300	-23.00	dB	-1845	-18.45	dB	-1540	-15.40	dB	-1235	-12.35	dB	-930	-9.30	dB	-625	-6.25	dB
-2290	-22.90	dB	-1840	-18.40	dB	-1535	-15.35	dB	-1230	-12.30	dB	-925	-9.25	dB	-620	-6.20	dB
-2280	-22.80	dB	-1835	-18.35	dB	-1530	-15.30	dB	-1225	-12.25	dB	-920	-9.20	dB	-615	-6.15	dB
-2270	-22.70	dB	-1830	-18.30	dB	-1525	-15.25	dB	-1220	-12.20	dB	-915	-9.15	dB	-610	-6.10	dB
-2260	-22.60	dB	-1825	-18.25	dB	-1520	-15.20	dB	-1215	-12.15	dB	-910	-9.10	dB	-605	-6.05	dB
-2250	-22.50	dB	-1820	-18.20	dB	-1515	-15.15	dB	-1210	-12.10	dB	-905	-9.05	dB	-600	-6.00	dB
-2240	-22.40	dB	-1815	-18.15	dB	-1510	-15.10	dB	-1205	-12.05	dB	-900	-9.00	dB	-595	-5.95	dB
-2230	-22.30	dB	-1810	-18.10	dB	-1505	-15.05	dB	-1200	-12.00	dB	-895	-8.95	dB	-590	-5.90	dB
-2220	-22.20	dB	-1805	-18.05	dB	-1500	-15.00	dB	-1195	-11.95	dB	-890	-8.90	dB	-585	-5.85	dB
-2210	-22.10	dB	-1800	-18.00	dB	-1495	-14.95	dB	-1190	-11.90	dB	-885	-8.85	dB	-580	-5.80	dB
-2200	-22.00	dB	-1795	-17.95	dB	-1490	-14.90	dB	-1185	-11.85	dB	-880	-8.80	dB	-575	-5.75	dB
-2190	-21.90	dB	-1790	-17.90	dB	-1485	-14.85	dB	-1180	-11.80	dB	-875	-8.75	dB	-570	-5.70	dB
-2180	-21.80	dB	-1785	-17.85	dB	-1480	-14.80	dB	-1175	-11.75	dB	-870	-8.70	dB	-565	-5.65	dB
-2170	-21.70	dB	-1780	-17.80	dB	-1475	-14.75	dB	-1170	-11.70	dB	-865	-8.65	dB	-560	-5.60	dB
-2160	-21.60	dB	-1775	-17.75	dB	-1470	-14.70	dB	-1165	-11.65	dB	-860	-8.60	dB	-555	-5.55	dB
-2150	-21.50	dB	-1770	-17.70	dB	-1465	-14.65	dB	-1160	-11.60	dB	-855	-8.55	dB	-550	-5.50	dB
-2140	-21.40	dB	-1765	-17.65	dB	-1460	-14.60	dB	-1155	-11.55	dB	-850	-8.50	dB	-545	-5.45	dB
-2130	-21.30	dB	-1760	-17.60	dB	-1455	-14.55	dB	-1150	-11.50	dB	-845	-8.45	dB	-540	-5.40	dB
-2120	-21.20	dB	-1755	-17.55	dB	-1450	-14.50	dB	-1145	-11.45	dB	-840	-8.40	dB	-535	-5.35	dB
-2110	-21.10	dB	-1750	-17.50	dB	-1445	-14.45	dB	-1140	-11.40	dB	-835	-8.35	dB	-530	-5.30	dB
-2100	-21.00	dB	-1745	-17.45	dB	-1440	-14.40	dB	-1135	-11.35	dB	-830	-8.30	dB	-525	-5.25	dB
-2090	-20.90	dB	-1740	-17.40	dB	-1435	-14.35	dB	-1130	-11.30	dB	-825	-8.25	dB	-520	-5.20	dB
-2080	-20.80	dB	-1735	-17.35	dB	-1430	-14.30	dB	-1125	-11.25	dB	-820	-8.20	dB	-515	-5.15	dB
-2070	-20.70	dB	-1730	-17.30	dB	-1425	-14.25	dB	-1120	-11.20	dB	-815	-8.15	dB	-510	-5.10	dB
-2060	-20.60	dB	-1725	-17.25	dB	-1420	-14.20	dB	-1115	-11.15	dB	-810	-8.10	dB	-505	-5.05	dB
-2050	-20.50	dB	-1720	-17.20	dB	-1415	-14.15	dB	-1110	-11.10	dB	-805	-8.05	dB	-500	-5.00	dB
-2040	-20.40	dB	-1715	-17.15	dB	-1410	-14.10	dB	-1105	-11.05	dB	-800	-8.00	dB	-495	-4.95	dB
-2030	-20.30	dB	-1710	-17.10	dB	-1405	-14.05	dB	-1100	-11.00	dB	-795	-7.95	dB	-490	-4.90	dB

6. Parameter Value Details

Value	Display	Unit	Value	Display	Unit	Value	Display	Unit	Value	Display	Unit	Value	Display	Unit	Value	Display	Unit
-485	-4.85	dB	-235	-2.35	dB	15	0.15	dB	265	2.65	dB	515	5.15	dB	765	7.65	dB
-480	-4.80	dB	-230	-2.30	dB	20	0.20	dB	270	2.70	dB	520	5.20	dB	770	7.70	dB
-475	-4.75	dB	-225	-2.25	dB	25	0.25	dB	275	2.75	dB	525	5.25	dB	775	7.75	dB
-470	-4.70	dB	-220	-2.20	dB	30	0.30	dB	280	2.80	dB	530	5.30	dB	780	7.80	dB
-465	-4.65	dB	-215	-2.15	dB	35	0.35	dB	285	2.85	dB	535	5.35	dB	785	7.85	dB
-460	-4.60	dB	-210	-2.10	dB	40	0.40	dB	290	2.90	dB	540	5.40	dB	790	7.90	dB
-455	-4.55	dB	-205	-2.05	dB	45	0.45	dB	295	2.95	dB	545	5.45	dB	795	7.95	dB
-450	-4.50	dB	-200	-2.00	dB	50	0.50	dB	300	3.00	dB	550	5.50	dB	800	8.00	dB
-445	-4.45	dB	-195	-1.95	dB	55	0.55	dB	305	3.05	dB	555	5.55	dB	805	8.05	dB
-440	-4.40	dB	-190	-1.90	dB	60	0.60	dB	310	3.10	dB	560	5.60	dB	810	8.10	dB
-435	-4.35	dB	-185	-1.85	dB	65	0.65	dB	315	3.15	dB	565	5.65	dB	815	8.15	dB
-430	-4.30	dB	-180	-1.80	dB	70	0.70	dB	320	3.20	dB	570	5.70	dB	820	8.20	dB
-425	-4.25	dB	-175	-1.75	dB	75	0.75	dB	325	3.25	dB	575	5.75	dB	825	8.25	dB
-420	-4.20	dB	-170	-1.70	dB	80	0.80	dB	330	3.30	dB	580	5.80	dB	830	8.30	dB
-415	-4.15	dB	-165	-1.65	dB	85	0.85	dB	335	3.35	dB	585	5.85	dB	835	8.35	dB
-410	-4.10	dB	-160	-1.60	dB	90	0.90	dB	340	3.40	dB	590	5.90	dB	840	8.40	dB
-405	-4.05	dB	-155	-1.55	dB	95	0.95	dB	345	3.45	dB	595	5.95	dB	845	8.45	dB
-400	-4.00	dB	-150	-1.50	dB	100	1.00	dB	350	3.50	dB	600	6.00	dB	850	8.50	dB
-395	-3.95	dB	-145	-1.45	dB	105	1.05	dB	355	3.55	dB	605	6.05	dB	855	8.55	dB
-390	-3.90	dB	-140	-1.40	dB	110	1.10	dB	360	3.60	dB	610	6.10	dB	860	8.60	dB
-385	-3.85	dB	-135	-1.35	dB	115	1.15	dB	365	3.65	dB	615	6.15	dB	865	8.65	dB
-380	-3.80	dB	-130	-1.30	dB	120	1.20	dB	370	3.70	dB	620	6.20	dB	870	8.70	dB
-375	-3.75	dB	-125	-1.25	dB	125	1.25	dB	375	3.75	dB	625	6.25	dB	875	8.75	dB
-370	-3.70	dB	-120	-1.20	dB	130	1.30	dB	380	3.80	dB	630	6.30	dB	880	8.80	dB
-365	-3.65	dB	-115	-1.15	dB	135	1.35	dB	385	3.85	dB	635	6.35	dB	885	8.85	dB
-360	-3.60	dB	-110	-1.10	dB	140	1.40	dB	390	3.90	dB	640	6.40	dB	890	8.90	dB
-355	-3.55	dB	-105	-1.05	dB	145	1.45	dB	395	3.95	dB	645	6.45	dB	895	8.95	dB
-350	-3.50	dB	-100	-1.00	dB	150	1.50	dB	400	4.00	dB	650	6.50	dB	900	9.00	dB
-345	-3.45	dB	-95	-0.95	dB	155	1.55	dB	405	4.05	dB	655	6.55	dB	905	9.05	dB
-340	-3.40	dB	-90	-0.90	dB	160	1.60	dB	410	4.10	dB	660	6.60	dB	910	9.10	dB
-335	-3.35	dB	-85	-0.85	dB	165	1.65	dB	415	4.15	dB	665	6.65	dB	915	9.15	dB
-330	-3.30	dB	-80	-0.80	dB	170	1.70	dB	420	4.20	dB	670	6.70	dB	920	9.20	dB
-325	-3.25	dB	-75	-0.75	dB	175	1.75	dB	425	4.25	dB	675	6.75	dB	925	9.25	dB
-320	-3.20	dB	-70	-0.70	dB	180	1.80	dB	430	4.30	dB	680	6.80	dB	930	9.30	dB
-315	-3.15	dB	-65	-0.65	dB	185	1.85	dB	435	4.35	dB	685	6.85	dB	935	9.35	dB
-310	-3.10	dB	-60	-0.60	dB	190	1.90	dB	440	4.40	dB	690	6.90	dB	940	9.40	dB
-305	-3.05	dB	-55	-0.55	dB	195	1.95	dB	445	4.45	dB	695	6.95	dB	945	9.45	dB
-300	-3.00	dB	-50	-0.50	dB	200	2.00	dB	450	4.50	dB	700	7.00	dB	950	9.50	dB
-295	-2.95	dB	-45	-0.45	dB	205	2.05	dB	455	4.55	dB	705	7.05	dB	955	9.55	dB
-290	-2.90	dB	-40	-0.40	dB	210	2.10	dB	460	4.60	dB	710	7.10	dB	960	9.60	dB
-285	-2.85	dB	-35	-0.35	dB	215	2.15	dB	465	4.65	dB	715	7.15	dB	965	9.65	dB
-280	-2.80	dB	-30	-0.30	dB	220	2.20	dB	470	4.70	dB	720	7.20	dB	970	9.70	dB
-275	-2.75	dB	-25	-0.25	dB	225	2.25	dB	475	4.75	dB	725	7.25	dB	975	9.75	dB
-270	-2.70	dB	-20	-0.20	dB	230	2.30	dB	480	4.80	dB	730	7.30	dB	980	9.80	dB
-265	-2.65	dB	-15	-0.15	dB	235	2.35	dB	485	4.85	dB	735	7.35	dB	985	9.85	dB
-260	-2.60	dB	-10	-0.10	dB	240	2.40	dB	490	4.90	dB	740	7.40	dB	990	9.90	dB
-255	-2.55	dB	-5	-0.05	dB	245	2.45	dB	495	4.95	dB	745	7.45	dB	995	9.95	dB
-250	-2.50	dB	0	0.00	dB	250	2.50	dB	500	5.00	dB	750	7.50	dB	1000	10.00	dB
-245	-2.45	dB	5	0.05	dB	255	2.55	dB	505	5.05	dB	755	7.55	dB			
-240	-2.40	dB	10	0.10	dB	260	2.60	dB	510	5.10	dB	760	7.60	dB			

6.2. DRC

6.2.1. Ratio

Value	Display	Value	Display	Value	Display	Value	Display
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~	INFINITY:1

6.2.2. Release

Value	Display	Value	Display	Value	Display	Value	Display
3	3msec	189	189msec	1230	1.23sec	7680	7.68sec
7	7msec	196	196msec	1280	1.28sec	8110	8.11sec
10	10msec	203	203msec	1340	1.34sec	8540	8.54sec
13	13msec	209	209msec	1390	1.39sec	8970	8.97sec
17	17msec	219	219msec	1440	1.44sec	9390	9.39sec
22	22msec	229	229msec	1500	1.50sec	9820	9.82sec
25	25msec	243	243msec	1550	1.55sec	10200	10.2sec
28	28msec	256	256msec	1600	1.60sec	10700	10.7sec
32	32msec	269	269msec	1660	1.66sec	11100	11.1sec
35	35msec	283	283msec	1740	1.74sec	11500	11.5sec
38	38msec	296	296msec	1820	1.82sec	12000	12.0sec
42	42msec	309	309msec	1920	1.92sec	12400	12.4sec
45	45msec	323	323msec	2030	2.03sec	12800	12.8sec
48	48msec	336	336msec	2140	2.14sec	13200	13.2sec
52	52msec	349	349msec	2240	2.24sec	13900	13.9sec
55	55msec	363	363msec	2350	2.35sec	14500	14.5sec
59	59msec	376	376msec	2460	2.46sec	15400	15.4sec
63	63msec	390	390msec	2560	2.56sec	16200	16.2sec
66	66msec	403	403msec	2670	2.67sec	17100	17.1sec
69	69msec	416	416msec	2780	2.78sec	17900	17.9sec
73	73msec	436	436msec	2890	2.89sec	18800	18.8sec
76	76msec	456	456msec	2990	2.99sec	19600	19.6sec
79	79msec	483	483msec	3100	3.10sec	20500	20.5sec
83	83msec	509	509msec	3210	3.21sec	21400	21.4sec
86	86msec	536	536msec	3310	3.31sec	22200	22.2sec
89	89msec	563	563msec	3470	3.47sec	23100	23.1sec
93	93msec	589	589msec	3630	3.63sec	23900	23.9sec
96	96msec	616	616msec	3840	3.84sec	24800	24.8sec
99	99msec	643	643msec	4060	4.06sec	25600	25.6sec
103	103msec	670	670msec	4270	4.27sec	26500	26.5sec
106	106msec	696	696msec	4480	4.48sec	27700	27.7sec
111	111msec	723	723msec	4700	4.70sec	29000	29.0sec
116	116msec	750	750msec	4910	4.91sec	30700	30.7sec
123	123msec	777	777msec	5130	5.13sec	32400	32.4sec
129	129msec	803	803msec	5340	5.34sec	34100	34.1sec
136	136msec	830	830msec	5550	5.55sec	35900	35.9sec
143	143msec	870	870msec	5770	5.77sec	37600	37.6sec
149	149msec	909	909msec	5980	5.98sec	39300	39.3sec
156	156msec	963	963msec	6200	6.20sec	41000	41.0sec
163	163msec	1020	1.02sec	6410	6.41sec	42700	42.7sec
169	169msec	1070	1.07sec	6620	6.62sec		
176	176msec	1120	1.12sec	6940	6.94sec		
183	183msec	1180	1.18sec	7260	7.26sec		

6.2.3. Hold

Value	Display	Value	Display	Value	Display	Value	Display
2	0.02msec	201	2.01msec	2020	20.2msec	21100	211msec
4	0.04msec	210	2.10msec	2090	20.9msec	22200	222msec
7	0.07msec	219	2.19msec	2160	21.6msec	23300	233msec
9	0.09msec	228	2.28msec	2260	22.6msec	24500	245msec
11	0.11msec	236	2.36msec	2360	23.6msec	25600	256msec
14	0.14msec	245	2.45msec	2500	25.0msec	26700	267msec
16	0.16msec	254	2.54msec	2640	26.4msec	27800	278msec
18	0.18msec	262	2.62msec	2780	27.8msec	38900	289msec
21	0.21msec	271	2.71msec	2920	29.2msec	30000	300msec
23	0.23msec	284	2.84msec	3060	30.6msec	31100	311msec
25	0.25msec	297	2.97msec	3200	32.0msec	32300	323msec
27	0.27msec	314	3.14msec	3340	33.4msec	33400	334msec
29	0.29msec	332	3.32msec	3480	34.8msec	34500	345msec
31	0.31msec	349	3.49msec	3620	36.2msec	36100	361msec
34	0.34msec	366	3.66msec	3750	37.5msec	37800	378msec
36	0.36msec	384	3.84msec	3890	38.9msec	40000	400msec
39	0.39msec	401	4.01msec	4030	40.3msec	42200	422msec
41	0.41msec	419	4.19msec	4170	41.7msec	44500	445msec
43	0.43msec	436	4.36msec	4310	43.1msec	46700	467msec
45	0.45msec	453	4.53msec	4520	45.2msec	48900	489msec
47	0.47msec	471	4.71msec	4720	47.2msec	51100	511msec
49	0.49msec	488	4.88msec	5000	50.0msec	53400	534msec
52	0.52msec	506	5.06msec	5280	52.8msec	55600	556msec
54	0.54msec	523	5.23msec	5560	55.6msec	57800	578msec
56	0.56msec	540	5.40msec	5840	58.4msec	60100	601msec
58	0.58msec	566	5.66msec	6120	61.2msec	62300	623msec
60	0.60msec	592	5.92msec	6390	63.9msec	64500	645msec
62	0.62msec	627	6.27msec	6670	66.7msec	66700	667msec
65	0.65msec	661	6.61msec	6950	69.5msec	69000	690msec
67	0.67msec	696	6.96msec	7230	72.3msec	72300	723msec
69	0.69msec	731	7.31msec	7510	75.1msec	75600	756msec
72	0.72msec	766	7.66msec	7790	77.9msec	80000	800msec
75	0.75msec	801	8.01msec	8070	80.7msec	84500	845msec
80	0.80msec	836	8.36msec	8340	83.4msec	88900	889msec
84	0.84msec	870	8.70msec	8620	86.2msec	93400	934msec
88	0.88msec	905	9.05msec	9030	90.3msec	97800	978msec
93	0.93msec	940	9.40msec	9450	94.5msec	102000	1.02sec
97	0.97msec	975	9.75msec	10000	100msec	107000	1.07sec
102	1.02msec	1010	10.1msec	10600	106msec	111000	1.11sec
106	1.06msec	1040	10.4msec	11100	111msec	116000	1.16sec
110	1.10msec	1080	10.8msec	11700	117msec	120000	1.20sec
115	1.15msec	1130	11.3msec	12200	122msec	125000	1.25sec
119	1.19msec	1180	11.8msec	12800	128msec	129000	1.29sec
123	1.23msec	1250	12.5msec	13300	133msec	133000	1.33sec
128	1.28msec	1320	13.2msec	13900	139msec	138000	1.38sec
132	1.32msec	1390	13.9msec	14500	145msec	145000	1.45sec
136	1.36msec	1460	14.6msec	15000	150msec	151000	1.51sec
143	1.43msec	1530	15.3msec	15600	156msec	160000	1.60sec
149	1.49msec	1600	16.0msec	16100	161msec	169000	1.69sec
158	1.58msec	1670	16.7msec	16700	167msec	178000	1.78sec
167	1.67msec	1740	17.4msec	17200	172msec	187000	1.87sec
175	1.75msec	1810	18.1msec	18100	181msec	196000	1.96sec
184	1.84msec	1880	18.8msec	18900	189msec		
193	1.93msec	1950	19.5msec	20000	200msec		

6.3. InputVolume

6.3.1. Level

In the case of using setn with SCP resolution of 1024

Value	Display	Value	Display	Value	Display	Value	Display	Value	Display	Value	Display
-32768	-INFINITY	-9050	-90.50	-7140	-71.40	-6000	-60.00	-4920	-49.20	-4340	-43.40
-13800	-138.00	-9000	-90.00	-7120	-71.20	-5980	-59.80	-4910	-49.10	-4330	-43.30
-13600	-136.00	-8950	-89.50	-7100	-71.00	-5960	-59.60	-4900	-49.00	-4320	-43.20
-13400	-134.00	-8900	-89.00	-7080	-70.80	-5940	-59.40	-4890	-48.90	-4310	-43.10
-13300	-133.00	-8850	-88.50	-7060	-70.60	-5920	-59.20	-4880	-48.80	-4300	-43.00
-13200	-132.00	-8800	-88.00	-7040	-70.40	-5900	-59.00	-4870	-48.70	-4290	-42.90
-13100	-131.00	-8750	-87.50	-7020	-70.20	-5880	-58.80	-4860	-48.60	-4280	-42.80
-13000	-130.00	-8700	-87.00	-7000	-70.00	-5860	-58.60	-4850	-48.50	-4270	-42.70
-12900	-129.00	-8650	-86.50	-6980	-69.80	-5840	-58.40	-4840	-48.40	-4260	-42.60
-12800	-128.00	-8600	-86.00	-6960	-69.60	-5820	-58.20	-4830	-48.30	-4250	-42.50
-12700	-127.00	-8550	-85.50	-6940	-69.40	-5800	-58.00	-4820	-48.20	-4240	-42.40
-12600	-126.00	-8500	-85.00	-6920	-69.20	-5780	-57.80	-4810	-48.10	-4230	-42.30
-12500	-125.00	-8450	-84.50	-6900	-69.00	-5760	-57.60	-4800	-48.00	-4220	-42.20
-12400	-124.00	-8400	-84.00	-6880	-68.80	-5740	-57.40	-4790	-47.90	-4210	-42.10
-12300	-123.00	-8350	-83.50	-6860	-68.60	-5720	-57.20	-4780	-47.80	-4200	-42.00
-12200	-122.00	-8300	-83.00	-6840	-68.40	-5700	-57.00	-4770	-47.70	-4190	-41.90
-12100	-121.00	-8250	-82.50	-6820	-68.20	-5680	-56.80	-4760	-47.60	-4180	-41.80
-12000	-120.00	-8200	-82.00	-6800	-68.00	-5660	-56.60	-4750	-47.50	-4170	-41.70
-11900	-119.00	-8150	-81.50	-6780	-67.80	-5640	-56.40	-4740	-47.40	-4160	-41.60
-11800	-118.00	-8100	-81.00	-6760	-67.60	-5620	-56.20	-4730	-47.30	-4150	-41.50
-11700	-117.00	-8050	-80.50	-6740	-67.40	-5600	-56.00	-4720	-47.20	-4140	-41.40
-11600	-116.00	-8000	-80.00	-6720	-67.20	-5580	-55.80	-4710	-47.10	-4130	-41.30
-11500	-115.00	-7950	-79.50	-6700	-67.00	-5560	-55.60	-4700	-47.00	-4120	-41.20
-11400	-114.00	-7900	-79.00	-6680	-66.80	-5540	-55.40	-4690	-46.90	-4110	-41.10
-11300	-113.00	-7850	-78.50	-6660	-66.60	-5520	-55.20	-4680	-46.80	-4100	-41.00
-11200	-112.00	-7800	-78.00	-6640	-66.40	-5500	-55.00	-4670	-46.70	-4090	-40.90
-11100	-111.00	-7780	-77.80	-6620	-66.20	-5480	-54.80	-4660	-46.60	-4080	-40.80
-11000	-110.00	-7760	-77.60	-6600	-66.00	-5460	-54.60	-4650	-46.50	-4070	-40.70
-10900	-109.00	-7740	-77.40	-6580	-65.80	-5440	-54.40	-4640	-46.40	-4060	-40.60
-10800	-108.00	-7720	-77.20	-6560	-65.60	-5420	-54.20	-4630	-46.30	-4050	-40.50
-10700	-107.00	-7700	-77.00	-6540	-65.40	-5400	-54.00	-4620	-46.20	-4040	-40.40
-10600	-106.00	-7680	-76.80	-6520	-65.20	-5380	-53.80	-4610	-46.10	-4030	-40.30
-10500	-105.00	-7660	-76.60	-6500	-65.00	-5360	-53.60	-4600	-46.00	-4020	-40.20
-10400	-104.00	-7640	-76.40	-6480	-64.80	-5340	-53.40	-4590	-45.90	-4010	-40.10
-10300	-103.00	-7620	-76.20	-6460	-64.60	-5320	-53.20	-4580	-45.80	-4000	-40.00
-10200	-102.00	-7600	-76.00	-6440	-64.40	-5300	-53.00	-4570	-45.70	-3990	-39.90
-10150	-101.50	-7580	-75.80	-6420	-64.20	-5280	-52.80	-4560	-45.60	-3980	-39.80
-10100	-101.00	-7560	-75.60	-6400	-64.00	-5260	-52.60	-4550	-45.50	-3970	-39.70
-10050	-100.50	-7540	-75.40	-6380	-63.80	-5240	-52.40	-4540	-45.40	-3960	-39.60
-10000	-100.00	-7520	-75.20	-6360	-63.60	-5220	-52.20	-4530	-45.30	-3950	-39.50
-9950	-99.50	-7500	-75.00	-6340	-63.40	-5200	-52.00	-4520	-45.20	-3940	-39.40
-9900	-99.00	-7480	-74.80	-6320	-63.20	-5180	-51.80	-4510	-45.10	-3930	-39.30
-9850	-98.50	-7460	-74.60	-6300	-63.00	-5160	-51.60	-4500	-45.00	-3920	-39.20
-9800	-98.00	-7440	-74.40	-6280	-62.80	-5140	-51.40	-4490	-44.90	-3910	-39.10
-9750	-97.50	-7420	-74.20	-6260	-62.60	-5120	-51.20	-4480	-44.80	-3900	-39.00
-9700	-97.00	-7400	-74.00	-6240	-62.40	-5100	-51.00	-4470	-44.70	-3890	-38.90
-9650	-96.50	-7380	-73.80	-6220	-62.20	-5080	-50.80	-4460	-44.60	-3880	-38.80
-9600	-96.00	-7360	-73.60	-6200	-62.00	-5060	-50.60	-4450	-44.50	-3870	-38.70
-9550	-95.50	-7340	-73.40	-6180	-61.80	-5040	-50.40	-4440	-44.40	-3860	-38.60
-9500	-95.00	-7320	-73.20	-6180	-61.80	-5020	-50.20	-4430	-44.30	-3850	-38.50
-9450	-94.50	-7300	-73.00	-6160	-61.60	-5000	-50.00	-4420	-44.20	-3840	-38.40
-9400	-94.00	-7280	-72.80	-6140	-61.40	-4990	-49.90	-4410	-44.10	-3830	-38.30
-9350	-93.50	-7260	-72.60	-6120	-61.20	-4980	-49.80	-4400	-44.00	-3820	-38.20
-9300	-93.00	-7240	-72.40	-6100	-61.00	-4970	-49.70	-4390	-43.90	-3810	-38.10
-9250	-92.50	-7220	-72.20	-6080	-60.80	-4960	-49.60	-4380	-43.80	-3800	-38.00
-9200	-92.00	-7200	-72.00	-6060	-60.60	-4950	-49.50	-4370	-43.70	-3790	-37.90
-9150	-91.50	-7180	-71.80	-6040	-60.40	-4940	-49.40	-4360	-43.60	-3780	-37.80
-9100	-91.00	-7160	-71.60	-6020	-60.20	-4930	-49.30	-4350	-43.50	-3770	-37.70

6. Parameter Value Details

Value	Display	Value	Display	Value	Display	Value	Display	Value	Display	Value	Display
-3760	-37.60	-3130	-31.30	-2750	-27.50	-2435	-24.35	-2120	-21.20	-1805	-18.05
-3750	-37.50	-3120	-31.20	-2745	-27.45	-2430	-24.30	-2115	-21.15	-1800	-18.00
-3740	-37.40	-3110	-31.10	-2740	-27.40	-2425	-24.25	-2110	-21.10	-1795	-17.95
-3730	-37.30	-3100	-31.00	-2735	-27.35	-2420	-24.20	-2105	-21.05	-1790	-17.90
-3720	-37.20	-3090	-30.90	-2730	-27.30	-2415	-24.15	-2100	-21.00	-1785	-17.85
-3710	-37.10	-3080	-30.80	-2725	-27.25	-2410	-24.10	-2095	-20.95	-1780	-17.80
-3700	-37.00	-3070	-30.70	-2720	-27.20	-2405	-24.05	-2090	-20.90	-1775	-17.75
-3690	-36.90	-3060	-30.60	-2715	-27.15	-2400	-24.00	-2085	-20.85	-1770	-17.70
-3680	-36.80	-3050	-30.50	-2710	-27.10	-2395	-23.95	-2080	-20.80	-1765	-17.65
-3670	-36.70	-3040	-30.40	-2705	-27.05	-2390	-23.90	-2075	-20.75	-1760	-17.60
-3660	-36.60	-3030	-30.30	-2700	-27.00	-2385	-23.85	-2070	-20.70	-1755	-17.55
-3650	-36.50	-3020	-30.20	-2695	-26.95	-2380	-23.80	-2065	-20.65	-1750	-17.50
-3640	-36.40	-3010	-30.10	-2690	-26.90	-2375	-23.75	-2060	-20.60	-1745	-17.45
-3630	-36.30	-3000	-30.00	-2685	-26.85	-2370	-23.70	-2055	-20.55	-1740	-17.40
-3620	-36.20	-2995	-29.95	-2680	-26.80	-2365	-23.65	-2050	-20.50	-1735	-17.35
-3610	-36.10	-2990	-29.90	-2675	-26.75	-2360	-23.60	-2045	-20.45	-1730	-17.30
-3600	-36.00	-2985	-29.85	-2670	-26.70	-2355	-23.55	-2040	-20.40	-1725	-17.25
-3590	-35.90	-2980	-29.80	-2665	-26.65	-2350	-23.50	-2035	-20.35	-1720	-17.20
-3580	-35.80	-2975	-29.75	-2660	-26.60	-2345	-23.45	-2030	-20.30	-1715	-17.15
-3570	-35.70	-2970	-29.70	-2655	-26.55	-2340	-23.40	-2025	-20.25	-1710	-17.10
-3560	-35.60	-2965	-29.65	-2650	-26.50	-2335	-23.35	-2020	-20.20	-1705	-17.05
-3550	-35.50	-2960	-29.60	-2645	-26.45	-2330	-23.30	-2015	-20.15	-1700	-17.00
-3540	-35.40	-2955	-29.55	-2640	-26.40	-2325	-23.25	-2010	-20.10	-1695	-16.95
-3530	-35.30	-2950	-29.50	-2635	-26.35	-2320	-23.20	-2005	-20.05	-1690	-16.90
-3520	-35.20	-2945	-29.45	-2630	-26.30	-2315	-23.15	-2000	-20.00	-1685	-16.85
-3510	-35.10	-2940	-29.40	-2625	-26.25	-2310	-23.10	-1995	-19.95	-1680	-16.80
-3500	-35.00	-2935	-29.35	-2620	-26.20	-2305	-23.05	-1990	-19.90	-1675	-16.75
-3490	-34.90	-2930	-29.30	-2615	-26.15	-2300	-23.00	-1985	-19.85	-1670	-16.70
-3480	-34.80	-2925	-29.25	-2610	-26.10	-2295	-22.95	-1980	-19.80	-1665	-16.65
-3470	-34.70	-2920	-29.20	-2605	-26.05	-2290	-22.90	-1975	-19.75	-1660	-16.60
-3460	-34.60	-2915	-29.15	-2600	-26.00	-2285	-22.85	-1970	-19.70	-1655	-16.55
-3450	-34.50	-2910	-29.10	-2595	-25.95	-2280	-22.80	-1965	-19.65	-1650	-16.50
-3440	-34.40	-2905	-29.05	-2590	-25.90	-2275	-22.75	-1960	-19.60	-1645	-16.45
-3430	-34.30	-2900	-29.00	-2585	-25.85	-2270	-22.70	-1955	-19.55	-1640	-16.40
-3420	-34.20	-2895	-28.95	-2580	-25.80	-2265	-22.65	-1950	-19.50	-1635	-16.35
-3410	-34.10	-2890	-28.90	-2575	-25.75	-2260	-22.60	-1945	-19.45	-1630	-16.30
-3400	-34.00	-2885	-28.85	-2570	-25.70	-2255	-22.55	-1940	-19.40	-1625	-16.25
-3390	-33.90	-2880	-28.80	-2565	-25.65	-2250	-22.50	-1935	-19.35	-1620	-16.20
-3380	-33.80	-2875	-28.75	-2560	-25.60	-2245	-22.45	-1930	-19.30	-1615	-16.15
-3370	-33.70	-2870	-28.70	-2555	-25.55	-2240	-22.40	-1925	-19.25	-1610	-16.10
-3360	-33.60	-2865	-28.65	-2550	-25.50	-2235	-22.35	-1920	-19.20	-1605	-16.05
-3350	-33.50	-2860	-28.60	-2545	-25.45	-2230	-22.30	-1915	-19.15	-1600	-16.00
-3340	-33.40	-2855	-28.55	-2540	-25.40	-2225	-22.25	-1910	-19.10	-1595	-15.95
-3330	-33.30	-2850	-28.50	-2535	-25.35	-2220	-22.20	-1905	-19.05	-1590	-15.90
-3320	-33.20	-2845	-28.45	-2530	-25.30	-2215	-22.15	-1900	-19.00	-1585	-15.85
-3310	-33.10	-2840	-28.40	-2525	-25.25	-2210	-22.10	-1895	-18.95	-1580	-15.80
-3300	-33.00	-2835	-28.35	-2520	-25.20	-2205	-22.05	-1890	-18.90	-1575	-15.75
-3290	-32.90	-2830	-28.30	-2515	-25.15	-2200	-22.00	-1885	-18.85	-1570	-15.70
-3280	-32.80	-2825	-28.25	-2510	-25.10	-2195	-21.95	-1880	-18.80	-1565	-15.65
-3270	-32.70	-2820	-28.20	-2505	-25.05	-2190	-21.90	-1875	-18.75	-1560	-15.60
-3260	-32.60	-2815	-28.15	-2500	-25.00	-2185	-21.85	-1870	-18.70	-1555	-15.55
-3250	-32.50	-2810	-28.10	-2495	-24.95	-2180	-21.80	-1865	-18.65	-1550	-15.50
-3240	-32.40	-2805	-28.05	-2490	-24.90	-2175	-21.75	-1860	-18.60	-1545	-15.45
-3230	-32.30	-2800	-28.00	-2485	-24.85	-2170	-21.70	-1855	-18.55	-1540	-15.40
-3220	-32.20	-2795	-27.95	-2480	-24.80	-2165	-21.65	-1850	-18.50	-1535	-15.35
-3210	-32.10	-2790	-27.90	-2475	-24.75	-2160	-21.60	-1845	-18.45	-1530	-15.30
-3200	-32.00	-2785	-27.85	-2470	-24.70	-2155	-21.55	-1840	-18.40	-1525	-15.25
-3190	-31.90	-2780	-27.80	-2465	-24.65	-2150	-21.50	-1835	-18.35	-1520	-15.20
-3180	-31.80	-2775	-27.75	-2460	-24.60	-2145	-21.45	-1830	-18.30	-1515	-15.15
-3170	-31.70	-2770	-27.70	-2455	-24.55	-2140	-21.40	-1825	-18.25	-1510	-15.10
-3160	-31.60	-2765	-27.65	-2450	-24.50	-2135	-21.35	-1820	-18.20	-1505	-15.05
-3150	-31.50	-2760	-27.60	-2445	-24.45	-2130	-21.30	-1815	-18.15	-1500	-15.00
-3140	-31.40	-2755	-27.55	-2440	-24.40	-2125	-21.25	-1810	-18.10	-1495	-14.95

6. Parameter Value Details

Value	Display	Value	Display	Value	Display	Value	Display	Value	Display	Value	Display
-1490	-14.90	-1240	-12.40	-990	-9.90	-740	-7.40	-490	-4.90	-240	-2.40
-1485	-14.85	-1235	-12.35	-985	-9.85	-735	-7.35	-485	-4.85	-235	-2.35
-1480	-14.80	-1230	-12.30	-980	-9.80	-730	-7.30	-480	-4.80	-230	-2.30
-1475	-14.75	-1225	-12.25	-975	-9.75	-725	-7.25	-475	-4.75	-225	-2.25
-1470	-14.70	-1220	-12.20	-970	-9.70	-720	-7.20	-470	-4.70	-220	-2.20
-1465	-14.65	-1215	-12.15	-965	-9.65	-715	-7.15	-465	-4.65	-215	-2.15
-1460	-14.60	-1210	-12.10	-960	-9.60	-710	-7.10	-460	-4.60	-210	-2.10
-1455	-14.55	-1205	-12.05	-955	-9.55	-705	-7.05	-455	-4.55	-205	-2.05
-1450	-14.50	-1200	-12.00	-950	-9.50	-700	-7.00	-450	-4.50	-200	-2.00
-1445	-14.45	-1195	-11.95	-945	-9.45	-695	-6.95	-445	-4.45	-195	-1.95
-1440	-14.40	-1190	-11.90	-940	-9.40	-690	-6.90	-440	-4.40	-190	-1.90
-1435	-14.35	-1185	-11.85	-935	-9.35	-685	-6.85	-435	-4.35	-185	-1.85
-1430	-14.30	-1180	-11.80	-930	-9.30	-680	-6.80	-430	-4.30	-180	-1.80
-1425	-14.25	-1175	-11.75	-925	-9.25	-675	-6.75	-425	-4.25	-175	-1.75
-1420	-14.20	-1170	-11.70	-920	-9.20	-670	-6.70	-420	-4.20	-170	-1.70
-1415	-14.15	-1165	-11.65	-915	-9.15	-665	-6.65	-415	-4.15	-165	-1.65
-1410	-14.10	-1160	-11.60	-910	-9.10	-660	-6.60	-410	-4.10	-160	-1.60
-1405	-14.05	-1155	-11.55	-905	-9.05	-655	-6.55	-405	-4.05	-155	-1.55
-1400	-14.00	-1150	-11.50	-900	-9.00	-650	-6.50	-400	-4.00	-150	-1.50
-1395	-13.95	-1145	-11.45	-895	-8.95	-645	-6.45	-395	-3.95	-145	-1.45
-1390	-13.90	-1140	-11.40	-890	-8.90	-640	-6.40	-390	-3.90	-140	-1.40
-1385	-13.85	-1135	-11.35	-885	-8.85	-635	-6.35	-385	-3.85	-135	-1.35
-1380	-13.80	-1130	-11.30	-880	-8.80	-630	-6.30	-380	-3.80	-130	-1.30
-1375	-13.75	-1125	-11.25	-875	-8.75	-625	-6.25	-375	-3.75	-125	-1.25
-1370	-13.70	-1120	-11.20	-870	-8.70	-620	-6.20	-370	-3.70	-120	-1.20
-1365	-13.65	-1115	-11.15	-865	-8.65	-615	-6.15	-365	-3.65	-115	-1.15
-1360	-13.60	-1110	-11.10	-860	-8.60	-610	-6.10	-360	-3.60	-110	-1.10
-1355	-13.55	-1105	-11.05	-855	-8.55	-605	-6.05	-355	-3.55	-105	-1.05
-1350	-13.50	-1100	-11.00	-850	-8.50	-600	-6.00	-350	-3.50	-100	-1.00
-1345	-13.45	-1095	-10.95	-845	-8.45	-595	-5.95	-345	-3.45	-95	-0.95
-1340	-13.40	-1090	-10.90	-840	-8.40	-590	-5.90	-340	-3.40	-90	-0.90
-1335	-13.35	-1085	-10.85	-835	-8.35	-585	-5.85	-335	-3.35	-85	-0.85
-1330	-13.30	-1080	-10.80	-830	-8.30	-580	-5.80	-330	-3.30	-80	-0.80
-1325	-13.25	-1075	-10.75	-825	-8.25	-575	-5.75	-325	-3.25	-75	-0.75
-1320	-13.20	-1070	-10.70	-820	-8.20	-570	-5.70	-320	-3.20	-70	-0.70
-1315	-13.15	-1065	-10.65	-815	-8.15	-565	-5.65	-315	-3.15	-65	-0.65
-1310	-13.10	-1060	-10.60	-810	-8.10	-560	-5.60	-310	-3.10	-60	-0.60
-1305	-13.05	-1055	-10.55	-805	-8.05	-555	-5.55	-305	-3.05	-55	-0.55
-1300	-13.00	-1050	-10.50	-800	-8.00	-550	-5.50	-300	-3.00	-50	-0.50
-1295	-12.95	-1045	-10.45	-795	-7.95	-545	-5.45	-295	-2.95	-45	-0.45
-1290	-12.90	-1040	-10.40	-790	-7.90	-540	-5.40	-290	-2.90	-40	-0.40
-1285	-12.85	-1035	-10.35	-785	-7.85	-535	-5.35	-285	-2.85	-35	-0.35
-1280	-12.80	-1030	-10.30	-780	-7.80	-530	-5.30	-280	-2.80	-30	-0.30
-1275	-12.75	-1025	-10.25	-775	-7.75	-525	-5.25	-275	-2.75	-25	-0.25
-1270	-12.70	-1020	-10.20	-770	-7.70	-520	-5.20	-270	-2.70	-20	-0.20
-1265	-12.65	-1015	-10.15	-765	-7.65	-515	-5.15	-265	-2.65	-15	-0.15
-1260	-12.60	-1010	-10.10	-760	-7.60	-510	-5.10	-260	-2.60	-10	-0.10
-1255	-12.55	-1005	-10.05	-755	-7.55	-505	-5.05	-255	-2.55	-5	-0.05
-1250	-12.50	-1000	-10.00	-750	-7.50	-500	-5.00	-250	-2.50	0	0.00
-1245	-12.45	-995	-9.95	-745	-7.45	-495	-4.95	-245	-2.45		

6.4. Ducker

6.4.1. Release

Same as DRC Release
See "6.2.2.Release"

6.4.2. Hold

Same as DRC Hold
See "6.2.3.Hold"

6.5. MasterVolume

6.5.1. Level

Same as InputVolume Level
See "6.3.1.Level"

6.6. InputEQ

6.6.1. Frequency

Value	Display	Value	Display	Value	Display	Value	Display	Value	Display
20000	20.0	81752	81.8	334965	335	1372461	1.37k	5623413	5.60k
20535	20.5	84140	85.0	344747	345	1412538	1.40k	5787620	5.79k
21135	21.2	86596	86.6	354813	355	1453784	1.45k	5956622	6.00k
21752	21.8	89125	90.0	365174	365	1496236	1.50k	6130558	6.13k
22387	22.4	91728	91.7	375837	375	1539927	1.54k	6309573	6.30k
23041	23.0	94406	95.0	386812	387	1584893	1.60k	6493817	6.49k
23714	23.6	97163	97.2	398107	400	1631173	1.63k	6683439	6.70k
24406	24.4	100000	100	409732	410	1678804	1.70k	6878599	6.88k
25119	25.0	102920	103	421697	425	1727826	1.73k	7079458	7.10k
25852	25.9	105925	106	434010	434	1778279	1.80k	7286182	7.29k
26607	26.5	109018	109	446684	450	1830206	1.83k	7498942	7.50k
27384	27.4	112202	112	459727	460	1883649	1.90k	7717915	7.72k
28184	28.0	115478	115	473151	475	1938653	1.94k	7943282	8.00k
29007	29.0	118850	118	486968	487	1995262	2.00k	8175231	8.18k
29854	30.0	122321	122	501187	500	2053525	2.05k	8413952	8.50k
30726	30.7	125893	125	515822	516	2113489	2.12k	8659644	8.66k
31623	31.5	129569	130	530884	530	2175204	2.18k	8912510	9.00k
32546	32.5	133352	132	546387	546	2238721	2.24k	9172760	9.17k
33497	33.5	137246	137	562341	560	2304093	2.30k	9440608	9.50k
34475	34.5	141254	140	578762	579	2371374	2.36k	9716280	9.72k
35481	35.5	145378	145	595662	600	2440619	2.44k	10000000	10.0k
36517	36.5	149624	150	613056	613	2511887	2.50k	10292006	10.3k
37584	37.5	153993	154	630957	630	2585235	2.59k	10592538	10.6k
38681	38.7	158489	160	649382	649	2660725	2.65k	10901846	10.9k
39811	40.0	163117	163	668344	670	2738420	2.74k	11220186	11.2k
40973	41.0	167880	170	687860	688	2818383	2.80k	11547820	11.5k
42170	42.5	172783	173	707946	710	2900681	2.90k	11885022	11.8k
43401	43.4	177828	180	728618	729	2985383	3.00k	12232072	12.2k
44668	45.0	183021	183	749894	750	3072557	3.07k	12589254	12.5k
45973	46.0	188365	190	771792	772	3162278	3.15k	12956868	13.0k
47315	47.5	193865	194	794328	800	3254618	3.25k	13335214	13.2k
48697	48.7	199526	200	817523	818	3349654	3.35k	13724610	13.7k
50119	50.0	205353	205	841395	850	3447466	3.45k	14125376	14.0k
51582	51.6	211349	212	865964	866	3548134	3.55k	14537844	14.5k
53088	53.0	217520	218	891251	900	3651741	3.65k	14962356	15.0k
54639	54.6	223872	224	917276	917	3758374	3.75k	15399266	15.4k
56234	56.0	230409	230	944061	950	3868121	3.87k	15848932	16.0k
57876	57.9	237137	236	971628	972	3981072	4.00k	16311730	16.3k
59566	60.0	244062	244	1000000	1.00k	4097321	4.10k	16788042	17.0k
61306	61.3	251189	250	1029201	1.03k	4216965	4.25k	17278260	17.3k
63096	63.0	258524	259	1059254	1.06k	4340103	4.34k	17782794	18.0k
64938	64.9	266073	265	1090185	1.09k	4466836	4.50k	18302060	18.3k
66834	67.0	273842	274	1122018	1.12k	4597270	4.60k	18836490	19.0k
68786	68.8	281838	280	1154782	1.15k	4731513	4.75k	19386526	19.4k
70795	71.0	290068	290	1188502	1.18k	4869676	4.87k	19952624	20.0k
72862	72.9	298538	300	1223207	1.22k	5011873	5.00k		
74989	75.0	307256	307	1258925	1.25k	5158222	5.16k		
77179	77.2	316228	315	1295687	1.30k	5308844	5.30k		
79433	80.0	325462	325	1333522	1.32k	5463866	5.46k		

6.6.2. Q

Value	Display	Value	Display	Value	Display	Value	Display
100	0.1	530	0.53	2800	2.8	15000	15.0
105	0.105	560	0.56	3000	3.0	16000	16.0
110	0.11	600	0.6	3200	3.2	17000	17.0
120	0.12	630	0.63	3300	3.3	18000	18.0
125	0.125	670	0.67	3500	3.5	19000	19.0
130	0.13	700	0.7	3800	3.8	20000	20.0
140	0.14	750	0.75	4000	4.0	21000	21.0
150	0.15	800	0.8	4200	4.2	22000	22.0
160	0.16	850	0.85	4500	4.5	24000	24.0
170	0.17	900	0.9	4700	4.7	25000	25.0
180	0.18	950	0.95	5000	5.0	27000	27.0
190	0.19	1000	1.0	5300	5.3	28000	28.0
200	0.2	1050	1.05	5600	5.6	30000	30.0
210	0.21	1100	1.1	6000	6.0	32000	32.0
220	0.22	1200	1.2	6300	6.3	34000	34.0
240	0.24	1250	1.25	6700	6.7	35000	35.0
250	0.25	1300	1.3	7000	7.0	38000	38.0
270	0.27	1400	1.4	7500	7.5	40000	40.0
280	0.28	1500	1.5	8000	8	42000	42.0
300	0.3	1600	1.6	8400	8.4	45000	45.0
320	0.32	1700	1.7	9000	9.0	47000	47.0
330	0.33	1800	1.8	9500	9.5	50000	50.0
350	0.35	1900	1.9	10000	10.0	53000	53.0
380	0.38	2000	2.0	10500	10.5	56000	56.0
400	0.4	2100	2.1	11000	11.0	60000	60.0
420	0.42	2200	2.2	12000	12.0	63000	63.0
450	0.45	2400	2.4	12500	12.5		
470	0.47	2500	2.5	13000	13.0		
500	0.5	2700	2.7	14000	14.0		

6.7. Mixer

6.7.1. Level

Same as Input Volume Level
See "6.3.1.Level"

6.8. RoomEQ

6.8.1. Frequency

Same as Input EQ Frequency
See "6.6.1. Frequency"

6.8.2. Q

Same as Input EQ Q
See "6.6.2. Q"

7. Parameter List

Parameter List

Applicable devices	RM-CR
--------------------	-------

Usage example(s)

set	set RM:FeIn_EQ/Ch/On/On 0 0 1 ↓ OK set RM:FeIn_EQ/Ch/On/On 0 0 1 "ON"
get	get RM:FeIn_EQ/Ch/On/On 0 0 ↓ OK get RM:FeIn_EQ/Ch/On/On 0 0 1
NOTIFY	NOTIFY set RM:FeIn_EQ/Ch/On/On 0 0 1 "ON"

No.	Case	Action	Address	SubAddress	Parameter
1	FarEnd input PEQ enable	set setn setr get getn	RM: FeIn_EQ/Ch/On/On	0 - 7 : 0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	0 0, 1 0 : OFF 1 : ON
2	FarEnd input PEQ band bypass enable	gett	RM: FeIn_EQ/Ch/Band/ Bypass	0 - 7 : 0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	0 - 2 : 0 - 2 : Band 1 - 3 0, 1 0 : OFF 1 : ON
3	FarEnd input PEQ band cutoff frequency setting		RM: FeIn_EQ/Ch/Band/ Frequency	0 - 7 : 0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	0 - 2 : 0 - 2 : Band 1 - 3 200 ... 200000 200 : 20[Hz] ... 200000 : 20[kHz] *See Frequency data table
4	FarEnd input PEQ band gain setting		RM: FeIn_EQ/Ch/Band/ Gain	0 - 7 : 0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	0 - 2 : 0 - 2 : Band 1 - 3 -1800 ... 1800 -1800 : -18.0[dB] ... 0 : 0.0[dB] ... 1800 : +18.0[dB]
5	FarEnd input PEQ band Q value setting		RM: FeIn_EQ/Ch/Band/Q	0 - 7 : 0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	0 - 2 : 0 - 2 : Band 1 - 3 100 ... 16000 100 : 0.1 ... 16000 : 16.0 *See Q data table
6	FarEnd input PEQ band EQ type setting		RM: FeIn_EQ/Ch/Band/ Type	0 - 7 : 0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	0 - 2 : 0 - 2 : Band 1 - 3 0 ... 6 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	FarEnd input AGC enable		RM: FeIn_AGC/Ch/On	0 - 7 : 0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	0 0, 1 0 : OFF 1 : ON
8	FarEnd input AGC target signal level setting		RM: FeIn_AGC/Ch/ TargetLevel	0 - 7 : 0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	-4000 ... 0 -4000 : -40.0[dB] ... 0 : 0.0[dB]
9	FarEnd input AGC max gain setting		RM: FeIn_AGC/Ch/ MaxGain	0 - 7 : 0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	0 ... 2000 0 : 0[dB] ... 2000 : 20.0[dB]
10	FarEnd input AGC min gain setting		RM: FeIn_AGC/Ch/ MinGain	0 - 7 : 0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	-2000 ... 0 -2000 : -20.0[dB] ... 0 : 0.0[dB]
11	FarEnd input AGC noise gate enable		RM: FeIn_AGC/Ch/ NoiseGateOn	0 - 7 : 0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	0, 1 0 : OFF 1 : ON

No.	Case	Action	Address	SubAddress			Parameter					
12	FarEnd input fader enable	set setn setr get getn gett	RM: FelN_Fader/Ch/On	0 - 7	0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	0		0, 1	0 : OFF 1 : ON	0	1	1
13	FarEnd input fader level setting		RM: FelN_Fader/Ch/Level	0 - 7	0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	0		-32768 ... 1000	-32768 : -INFINITY -13800 : -138.0[dB] ... 0 : 0.0[dB] ... 1000 : +10.0[dB] *See Level data table	-32768	1000	0
14	Mic input PEQ enable		RM: ExtMic_EQ/Ch/ On/On	0 - 1	0 - 1 : Mic ch1 - 2	0		0, 1	0 : OFF 1 : ON	0	1	1
15	Mic input PEQ band bypass enable		RM: ExtMic_EQ/Ch/Band/ Bypass	0 - 1	0 - 1 : Mic ch1 - 2	0 - 4	0 - 4 : Band 1 - 5	0, 1	0 : OFF 1 : ON	0	1	0
16	Mic input PEQ band cutoff frequency setting		RM: ExtMic_EQ/Ch/Band/ Frequency	0 - 1	0 - 1 : Mic ch1 - 2	0 - 4	0 - 4 : Band 1 - 5	200 ... 200000	200 : 20[Hz] ... 200000 : 20[kHz] *See Frequency data table	200	200000	Band 1 : 1000 Band 2 : 3150 Band 3 : 10000 Band 4 : 31500 Band 5 : 100000
17	Mic input PEQ band gain setting		RM: ExtMic_EQ/Ch/Band/ Gain	0 - 1	0 - 1 : Mic ch1 - 2	0 - 4	0 - 4 : Band 1 - 5	-1800 ... 1800	-1800 : -18.0[dB] ... 0 : 0.0[dB] ... 1800 : +18.0[dB]	-1800	1800	0
18	Mic input PEQ band Q value setting		RM: ExtMic_EQ/Ch/ Band/Q	0 - 1	0 - 1 : Mic ch1 - 2	0 - 4	0 - 4 : Band 1 - 5	100 ... 16000	100 : 0.1 ... 16000 : 16.0 *See Q data table	100	16000	700
19	Mic input PEQ band EQ type setting		RM: ExtMic_EQ/Ch/Band/ Type	0 - 1	0 - 1 : Mic ch1 - 2	0 - 4	0 - 4 : Band 1 - 5	0 ... 6	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	0	6	0
20	Mic input gate function enable		RM: ExtMic_Gate/Ch/On	0 - 1	0 - 1 : Mic ch1 - 2	0		0, 1	0 : OFF 1 : ON	0	1	1
21	Mic input gate processing attenuation threshold setting		RM: ExtMic_Gate/Ch/ Threshold	0 - 1	0 - 1 : Mic ch1 - 2	0		-7200 ... 0	-7200 : -72.0[dBFs] ... 0 : 0.0[dBFs]	-7200	0	-5600
22	Gain applied when input signal level falls below the threshold during mic input gate processing		RM: ExtMic_Gate/Ch/ Range	0 - 1	0 - 1 : Mic ch1 - 2	0		-7000 ... 0	-7000 : -70.0[dB] ... 0 : 0.0[dB] *See Range data table	-7000	0	-2400
23	Set time until mic input gate processing is cancelled after signal level crosses the threshold		RM: ExtMic_Gate/Ch/ Attack	0 - 1	0 - 1 : Mic ch1 - 2	0		0 ... 120	0 : 0ms ... 120 : 120ms	0	120	0
24	Set time until mic input gate processing is completed after signal level falls under the threshold		RM: ExtMic_Gate/Ch/ Decay	0 - 1	0 - 1 : Mic ch1 - 2	0		3340 ... 42700000	3340 : 3.34[msec] ... 42700000 : 42.7[sec] *See Decay data table	3340	42700000	336000
25	Set time until mic input gate processing begins after signal level falls under the threshold		RM: ExtMic_Gate/Ch/Hold	0 - 1	0 - 1 : Mic ch1 - 2	0		20 ... 1960000	20 : 0.02[msec] ... 1960000 : 1.96[sec] *See Hold data table	20	1960000	2540
26	Mic input compressor function enable		RM: ExtMic_Comp/Ch/On	0 - 1	0 - 1 : Mic ch1 - 2	0		0, 1	0 : OFF 1 : ON	0	1	1
27	Set input signal threshold for input signal to be compressed by mic input compressor		RM: ExtMic_Comp/Ch/ Threshold	0 - 1	0 - 1 : Mic ch1 - 2	0		-5400 ... 0	-5400 : -54.0[dBFs] ... 0 : 0.0[dBFs]	-5400	0	-1300
28	Set compression ratio for input signal to be compressed by mic input compressor		RM: ExtMic_Comp/Ch/ Ratio	0 - 1	0 - 1 : Mic ch1 - 2	0		10...201	10 : 1.0:1 ... 201 : INFINITY:1 *See Ratio data table	10	201	45
29	Set knee hardness, i.e. how suddenly compression from mic input compressor should kick in when approaching threshold		RM: ExtMic_Comp/Ch/ Knee	0 - 1	0 - 1 : Mic ch1 - 2	0		0 ... 5	0 : HARD 1 : 1 2 : 2 3 : 3 4 : 4 5 : 5	0	5	2

No.	Case	Action	Address	SubAddress			Parameter					
30	Set time until compression is completed by mic input compressor after signal level crosses the threshold	set setn set setr get getn gett	RM: ExtMic_Comp/Ch/ Attack	0 - 1	0 - 1 : Mic ch1 - 2	0	0 ... 120	0 : 0[msec] ... 120 : 120[msec]	0	120	3	
31	Set time until compression is cancelled by mic input compressor after signal level falls under the threshold		RM: ExtMic_Comp/Ch/ Release	0 - 1	0 - 1 : Mic ch1 - 2	0	3340 ... 42700000	3340 : 3.34[msec] ... 42700000 : 42.7[sec] *See Release data table	3340	42700000	99000	
32	Mic input compressor output gain setting		RM: ExtMic_Comp/Ch/ Gain	0 - 1	0 - 1 : Mic ch1 - 2	0	0 ... 1800	0 : 0.0[dB] ... 1800 : 18.0[dB]	0	1800	1000	
33	Mic input FBS function enable		RM: ExtMic_FBS/Ch/On	0 - 1	0 - 1 : Mic ch1 - 2	0	0, 1	0 : OFF 1 : ON	0	1	1	
34	Mic input AGC function enable		RM: ExtMic_AGC/Ch/On	0 - 1	0 - 1 : Mic ch1 - 2	0	0, 1	0 : OFF 1 : ON	0	1	1	
35	Mic input AGC target signal level setting		RM: ExtMic_AGC/Ch/ TargetLevel	0 - 1	0 - 1 : Mic ch1 - 2	0			-4000	0	-2000	
36	Mic input AGC max gain setting		RM: ExtMic_AGC/Ch/ MaxGain	0 - 1	0 - 1 : Mic ch1 - 2	0	0 ... 2000	0 : 0[dB] ... 2000 : 20.0[dB]	0	2000	600	
37	Mic input AGC min gain setting		RM: ExtMic_AGC/Ch/ MinGain	0 - 1	0 - 1 : Mic ch1 - 2	0	-2000 ... 0	-2000 : -20.0[dB] ... 0 : 0.0[dB]	-2000	0	-600	
38	Mic input AGC noise gate enable		RM: ExtMic_AGC/Ch/ NoiseGateOn	0 - 1	0 - 1 : Mic ch1 - 2	0	0, 1	0 : OFF 1 : ON	0	1	0	
39	Mic input fader function enable		RM: ExtMic_Fader/Ch/On	0 - 1	0 - 1 : Mic ch1 - 2	0	0, 1	0 : OFF 1 : ON	0	1	1	
40	Mic input fader level setting		RM: ExtMic_Fader/Ch/ Level	0 - 1	0 - 1 : Mic ch1 - 2	0	-32768 ... 1000	-32768 : -INFINITY -13800 : -138.0[dB] ... 0 : 0.0[dB] ... 1000 : +10.0[dB] *See Level data table	-32768	1000	0	
41	Mic input echo suppressor function enable		RM: ExtMic_ES/Ch/On	0 - 1	0 - 1 : Mic ch1 - 2	0	0, 1	0 : OFF 1 : ON	0	1	1	
42	NearEnd input enable		RM: NearN_Fader/Ch/On	0 - 15	0 - 15 : Dante In ch1 - 16	0	0, 1	0 : OFF 1 : ON	0	1	1	
43	NearEnd input fader level setting		RM: NearN_Fader/Ch/Level	0 - 15	0 - 15 : Dante In ch1 - 16	0	-32768 ... 1000	-32768 : -INFINITY -13800 : -138.0[dB] ... 0 : 0.0[dB] ... 1000 : +10.0[dB] *See Level data table	-32768	1000	0	
44	NearEnd input automixer type setting		RM: Automix/Type/Type	0		0	0, 1	0 : GainSharing 1 : Gating	0	1	0	
45	Enable holding gate open when signal level falls under the threshold for the last mic CH opened by NearEnd input gating automixer		RM: GatingAutomix/ Settings/LastMicOn	0		0	0, 1	0 : OFF 1 : ON	0	1	0	
46	Set number of mic CH gates opened simultaneously by NearEnd input gating automixer		RM: GatingAutomix/ Settings/ NumOfOpenMic	0		0	1 ... 16	1 : 1ch ... 16 : 16ch	1	16	2	
47	Set signal level threshold for opening of a gate by NearEnd input gating automixer		RM: GatingAutomix/ Settings/Threshold	0		0	-7200 ... 0	-7200 : -72.0[dBFs] ... 0 : 0.0[dBFs]	-7200	0	-5400	
48	Set gain applied when gate closed by NearEnd input gating automixer		RM: GatingAutomix/ Settings/Range	0		0	-7000 ... 0	-7000 : -70.0[dB] ... 0 : 0.0[dB] *See Range data table	-7000	0	-2000	
49	Set time gate to be held open by NearEnd input gating automixer after signal level falls under the threshold		RM: GatingAutomix/ Settings/Hold	0		0	20 ... 1960000	20 : 0.02[msec] ... 1960000 : 1.96[sec] *See Hold data table	20	1960000	2360	
50	NearEnd input gating automixer priority mic setting		RM: GatingAutomix/Ch/ PriorityMic	0 - 15	0 - 15 : Dante In ch1 - 16	0	0, 1	0 : OFF 1 : ON	0	1	0	

7. Parameter List

No.	Case	Action	Address	SubAddress			Parameter					
51	Number of mic CH gates opened simultaneously by NearEnd input gain sharing automixer	set setn set setg getn gett	RM: GainSharingAutomix/ Settings/ NumOfOpenMic	0		0	1 ... 16	1 : 1ch ... 16 : 16ch	1	16	2	
52	NearEnd input gain sharing automixer priority mic setting		RM: GainSharingAutomix/ Ch/PriorityMic	0 - 15	0 - 15 : Dante In ch1 - 16	0	0, 1	0 : OFF 1 : ON	0	1	0	
53	NearEnd input AGC function enable		RM: NelN_AGC/Ch/On	0		0	0, 1	0 : OFF 1 : ON	0	1	1	
54	NearEnd input AGC target signal level setting		RM: NelN_AGC/Ch/ TargetLevel	0		0	-4000 ... 0	-4000 : -40.0[dB] ... 0 : 0.0[dB]	-4000	0	-2000	
55	NearEnd input AGC max gain setting		RM: NelN_AGC/Ch/ MaxGain	0		0	0 ... 2000	0 : 0[dB] ... 2000 : 20.0[dB]	0	2000	0	
56	NearEnd input AGC min gain setting		RM: NelN_AGC/Ch/ MinGain	0		0	-2000 ... 0	-2000 : -20.0[dB] ... 0 : 0.0[dB]	-2000	0	-600	
57	NearEnd input AGC noise gate enable		RM: NelN_AGC/Ch/ NoiseGateOn	0		0	0, 1	0 : OFF 1 : ON	0	1	0	
58	NearEnd input ducking (volume attenuation) enable		RM: NelN_Ducker/Ch/On	0		0	0, 1	0 : OFF 1 : ON	0	1	1	
59	Enable signal input from specified mixing bus input CH to output CH		RM: MixBus/Input/Output/ On	0 - 10	0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R 8 - 9 : Mic ch1 - 2 10 : AutoMixer	0 - 9	0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R 8 - 9 : Mic ch1 - 2	0, 1	0 : OFF 1 : ON	0	1	1
60	Set signal input level from specified mixing bus input CH to output CH		RM: MixBus/Input/Output/ Level	0 - 10	0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R 8 - 9 : Mic ch1 - 2 10 : AutoMixer	0 - 9	0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R 8 - 9 : Mic ch1 - 2	-32768 ... 0	-32768 : -INFINITY -13800 : -138.0[dB] ... 0 : 0.0[dB] *See Level data table	-32768	0	0
61	Enable delay from specified mixing bus input CH to output CH		RM: MixBus/Input/Output/ DelayOn	0 - 10	0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R 8 - 9 : Mic ch1 - 2 10 : AutoMixer	0 - 9	0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R 8 - 9 : Mic ch1 - 2	0, 1	0 : OFF 1 : ON	0	1	1
62	Set delay time from specified mixing bus input CH to output CH		RM: MixBus/Input/Output/ DelayTime	0 - 10	0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R 8 - 9 : Mic ch1 - 2 10 : AutoMixer	0 - 9	0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R 8 - 9 : Mic ch1 - 2	0 ... 500000	0 : 0ms ... 500000 : 500ms	0	500000	0
63	FarEnd output enable		RM: FeOut_Fader/Ch/On	0 - 7	0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	0	0, 1	0 : OFF 1 : ON	0	1	1	
64	FarEnd output fader level setting		RM: FeOut_Fader/Ch/ Level	0 - 7	0 - 1 : Bluetooth Input L - R 2 - 3 : AUX ch1 - 2 4 - 5 : SIP(VolP)ch1 - 2 6 - 7 : USB L - R	0	-32768 ... 1000	-32768 : -INFINITY -13800 : -138.0[dB] ... 0 : 0.0[dB] ... 1000 : +10.0[dB] *See Level data table	-32768	1000	0	
65	RoomEQ enable		RM: RoomEQ/Ch/On/On	0 - 1	0 - 1 : Mic ch1 - 2	0	0, 1	0 : OFF 1 : ON	0	1	1	
66	RoomEQ band bypass enable		RM: RoomEQ/Ch/Band/ Bypass	0 - 1	0 - 1 : Mic ch1 - 2	0 - 5	Band 1 - 6	0, 1	0 : OFF 1 : ON	0	1	0
67	RoomEQ band cutoff frequency setting		RM: RoomEQ/Ch/Band/ Frequency	0 - 1	0 - 1 : Mic ch1 - 2	0 - 5	Band 1 - 6	200 ... 200000	200 : 20[Hz] ... 200000 : 20[kHz] *See Frequency data table	200	200000	Band 1 : 315 Band 2 : 1000 Band 3 : 3150 Band 4 : 10000 Band 5 : 31500 Band 6 : 100000
68	RoomEQ band gain setting		RM: RoomEQ/Ch/Band/ Gain	0 - 1	0 - 1 : Mic ch1 - 2	0 - 5	Band 1 - 6	-1800 ... 1800	-1800 : -18.0[dB] ... 0 : 0.0[dB] ... 1800 : +18.0[dB]	-1800	1800	0

7. Parameter List

No.	Case	Action	Address	SubAddress			Parameter					
69	RoomEQ band Q value setting	set setn setr get getn gett	RM: RoomEQ/Ch/Band/Q	0 - 1	0 - 1 : Mic ch1 - 2	0 - 5	Band 1 - 6	100 ... 16000	100 : 0.1 ... 16000 : 16.0 *See Q data table	100	16000	700
70	RoomEQ band EQ type setting		RM: RoomEQ/Ch/Band/ Type	0 - 1	0 - 1 : Mic ch1 - 2	0 - 5	Band 1 - 6	0 ... 6	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	0	6	0
71	SpeakerProcessor input level setting		RM: SpeakerProcessor/ Ch/Input/Level	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0		-32768 ... 1000	-32768 : -INFINITY -13800 : -138.0[dB] ... 0 : 0.0[dB] ... 1000 : +10.0[dB] *See Level data table	-32768	1000	0
72	SpeakerProcessor input signal delay enable		RM: SpeakerProcessor/ Ch/Delay/On	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0		0, 1	0 : OFF 1 : ON	0	1	1
73	SpeakerProcessor input signal delay time setting		RM: SpeakerProcessor/ Ch/Delay/Time	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0		0 ... 500000	0 : 0.0[msec] ... 500000 : 500.0[msec]	0	500000	0
74	SpeakerProcessor crossover HPF cutoff frequency setting		RM: SpeakerProcessor/ Ch/XOverHpf/ Frequency	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0		200 ... 200000	200 : 20[Hz] ... 200000 : 20[kHz] *See Frequency data table	200	200000	200
75	SpeakerProcessor crossover HPF cutoff gain setting		RM: SpeakerProcessor/ Ch/XOverHpf/Gc	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0		-6 ... 6	-6 : -6[dB] ... 6 : 6[dB]	-6	6	-3
76	SpeakerProcessor crossover HPF filter type setting		RM: SpeakerProcessor/ Ch/XOverHpf/Type	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0		0 ... 19	*See FilterType data table	0	19	0
77	SpeakerProcessor crossover LPF cutoff frequency setting		RM: SpeakerProcessor/ Ch/XOverLpf/ Frequency	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0		200 ... 200000	200 : 20[Hz] ... 200000 : 20[kHz] *See Frequency data table	200	200000	200000
78	SpeakerProcessor crossover LPF cutoff gain setting		RM: SpeakerProcessor/ Ch/XOverLpf/Gc	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0		-6 ... 6	-6 : -6[dB] ... 6 : 6[dB]	-6	6	-3
79	SpeakerProcessor crossover LPF filter type setting		RM: SpeakerProcessor/ Ch/XOverLpf/Type	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0		0 ... 19	*See FilterType data table	0	19	0
80	SpeakerProcessor PEQ enable		RM: SpeakerProcessor/ Ch/PEQOn/On	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0		0, 1	0 : OFF 1 : ON	0	1	1
81	SpeakerProcessor PEQ band bypass enable		RM: SpeakerProcessor/ Ch/PEQBand/Bypass	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0 - 5	Band 1 - 6	0, 1	0 : OFF 1 : ON	0	1	0
82	SpeakerProcessor PEQ band cutoff frequency setting		RM: SpeakerProcessor/ Ch/PEQBand/ Frequency	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0 - 5	Band 1 - 6	200 ... 200000	200 : 20[Hz] ... 200000 : 20[kHz] *See Frequency data table	200	200000	Band 1 : 315 Band 2 : 1000 Band 3 : 3150 Band 4 : 10000 Band 5 : 31500 Band 6 : 100000

No.	Case	Action	Address	SubAddress			Parameter					
83	SpeakerProcessor PEQ band gain setting	set setn setr get getn gett	RM: SpeakerProcessor/ Ch/PEQBand/Gain	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0 - 5	Band 1 - 6	-1800 ... 1800	-1800 : -18.0[dB] ... 0 : 0.0[dB] ... 1800 : +18.0[dB]	-1800	1800	0
84	SpeakerProcessor PEQ band Q value setting		RM: SpeakerProcessor/ Ch/PEQBand/Q	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0 - 5	Band 1 - 6	100 ... 16000	100 : 0.1 ... 16000 : 16 *See Q data table	100	16000	700
85	SpeakerProcessor PEQ band EQ type setting		RM: SpeakerProcessor/ Ch/PEQBand/Type	0 - 3	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0 - 5	Band 1 - 6	0 ... 6	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	0	6	0
86	NearEnd output fader enable		RM: NeOut_Fader/Ch/On	0 - 4	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0		0, 1	0 : OFF 1 : ON	0	1	1
87	NearEnd output fader level setting		RM: NeOut_Fader/Ch/ Level	0 - 4	0 - 1 : Analog Speaker Output ch1 - 2 2 - 3 : Dante Speaker Output ch1 - 2	0		-32768 ... 1000	-32768 : -INFINITY -13800 : -138.0[dB] ... 0 : 0.0[dB] ... 1000 : +10.0[dB] *See Level data table	-32768	1000	0
88	FarEnd SipTone fader level adjustment		RM: SipToneFe_Fader/ Ch/Level	0		0		-32768 ... 1000	-32768 : -INFINITY -13800 : -138.0[dB] ... 0 : 0.0[dB] ... 1000 : +10.0[dB] *See Level data table	-32768	1000	0
89	NearEnd SipTone fader level adjustment		RM: SipToneNe_Fader/ Ch/Level	0		0		-32768 ... 1000	-32768 : -INFINITY -13800 : -138.0[dB] ... 0 : 0.0[dB] ... 1000 : +10.0[dB] *See Level data table	-32768	1000	-2400
90	RoomEQ output enable		RM: RoomEQ_Fader/ Ch/On	0 - 1		0		0, 1	0 : OFF 1 : ON	0	1	1
91	RoomEQ output level setting		RM: RoomEQ_Fader/Ch/ Level	0 - 1		0		0 ... -5000	-5000 : -50.0[dB] ... 0 : 0.0[dB] *See Level data table	-5000	0	0
92	RM systemwide mute		RM: MicMute/All	0		0		0, 1	0 : OFF 1 : ON	0	1	0
93	LED brightness setting		RM:Led/Brightness	0		0		0 - 3	0 : High 1 : Mdeium 2 : Low 3 : Off	0	3	0

Parameter List

Applicable devices	RM-CG
--------------------	-------

Usage example(s)

set	set RM: Mic_Beam/LimitOn 0 0 1 ↓ OK set RM: Mic_Beam/LimitOn 0 0 1 "ON"
get	get RM: Mic_Beam/LimitOn 0 0 ↓ OK get RM: Mic_Beam/LimitOn 0 0 1
NOTIFY	NOTIFY set RM: Mic_Beam/LimitOn 0 0 1 "ON"

No.	Case	Action	Address	SubAddress	Parameter						
1	Mic input level setting	set setn set setr	RM:DSPTOP/MicGainType	0	0	0 ... 3	0 : 0dB 1 : 15dB 2 : 30dB 3 : 45dB	0	3	3	
2	Beam forming tracking speed setting	get getn getr	RM:DSPTOP/MaxBeamSpeed	0	0	0 ... 2	0 : Slow 1 : Mid 2 : Fast	0	2	1	
3	Beamforming area limit enable		RM: Mic_Beam/LimitOn	0	0	0, 1	0 : OFF 1 : ON	0	1	0	
4	Beamforming area top limit setting		RM: Mic_Beam/Top	0	0	-40 ... 40		-40	40	40	
5	Beamforming area bottom limit setting		RM: Mic_Beam/Bottom	0	0	-40 ... 40		-40	40	-40	
6	Beamforming area left limit setting		RM: Mic_Beam/Left	0	0	-40 ... 40		-40	40	-40	
7	Beamforming area right limit setting		RM: Mic_Beam/Right	0	0	-40 ... 40		-40	40	40	
8	Beamforming area limit floor to speaker distance setting		RM: Mic_Beam/Height_FlrToTalk	0	0	0 ... 30		0	30	12	
9	Beamforming area limit floor to RM-CG distance setting		RM: Mic_Beam/Height_FlrToMic	0	0	20 ... 60		20	60	30	
10	Beamforming speed setting (response speed increases as the value increases, but accuracy decreases)		RM: Mic_Beam/Speed	0	0	0, 1	0 : Slow 1 : Fast	0	1	0	
11	Echo cancellation level setting (more echoing is eliminated as the value increases, but vocal input is also eliminated)		RM: Mic_Dsp/Aectype	0	0	0 ... 3	0 : Off 1 : Gentle 2 : Medium 3 : Strong	0	3	2	
12	Noise reduction level setting (more echoing is eliminated as the value increases, but vocal input is also eliminated)		RM: Mic_Dsp/Nrtype	0	0	0 ... 3	0 : Off 1 : Gentle 2 : Medium 3 : Strong	0	3	2	
13	Dereverberation level setting (more echoing is eliminated as the value increases, but vocal input is also eliminated)		RM: Mic_Dsp/Derevtype	0	0	0 ... 3	0 : Off 1 : Gentle 2 : Medium 3 : Strong	0	3	2	
14	NearEnd output EQ enable		RM: NeOut_EQ/Ch/On/On	0	0	0, 1	0 : OFF 1 : ON	0	1	1	
15	NearEnd output EQ band bypass enable		RM: NeOut_EQ/Ch/Band/Bypass	0	0 - 5	Band 1 - 6	0, 1	0 : OFF 1 : ON	0	1	0
16	NearEnd output EQ band cutoff frequency setting		RM: NeOut_EQ/Ch/Band/Frequency	0	0 - 5	Band 1 - 6	200 ... 200000 200 : 20[Hz] ... 200000 : 20[kHz] *See Frequency data table	200	200000	10000	
17	NearEnd output EQ band gain setting		RM: NeOut_EQ/Ch/Band/Gain	0	0 - 5	Band 1 - 6	-1800 ... 1800 -1800 : -18.0[dB] ... 0 : 0.0[dB] ... 1800 : +18.0[dB]	-1800	1800	0	
18	NearEnd output EQ band Q value setting		RM: NeOut_EQ/Ch/Band/Q	0	0 - 5	Band 1 - 6	100 ... 16000 100 : 0.1 ... 16000 : 16.0 *See Q data table	100	16000	700	
19	NearEnd output EQ band EQ type setting		RM: NeOut_EQ/Ch/Band/Type	0	0 - 5	Band 1 - 6	0 ... 6 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	0	6	0	
20	Mic output automix type setting (volume fluctuation is reduced as the value increases, but S/N worsens)		RM: Automix/Mixtype	0	0	0 ... 3	0 : 1ch Gating 1 : 2ch Gain Sharing 2 : 4ch Gain Sharing 3 : 4ch Mixing	0	3	2	

No.	Case	Action	Address	SubAddress			Parameter			
21	Mic input AGC gain curve setting (AGC effectiveness increases as the value increases, but volume fluctuations feel stronger)	set setn set setr	RM: Mic_Agc/Agctype	0	0	0 ... 2	0 : Off 1 : Soft 2 : Hard	0	2	1
22	Mic input AGC response speed setting (AGC response speed increases as the value increases, but volume fluctuations feel stronger)	get getn gett	RM: Mic_Agc/AgcSpeed	0	0	0, 1	0 : Slow 1 : Fast	0	1	0
23	FarEnd output fader enable		RM: NeOut_Fader/Ch/On	0 - 1	0	0, 1	0 : OFF 1 : ON	0	1	1
24	FarEnd output fader level setting		RM: NeOut_Fader/Ch/Level	0 - 1	0	-32768 ... 1000	-32768 : -∞ -13800 : -138.0[dB] ... 0 : 0.0[dB] ... 1000 : +10.0[dB] *See Level data table	-32768	1000	0
25	NearEnd output mute enable		RM: NeOut_Mute/Ch/On	0 - 1	0	0, 1	0 : ON 1 : OFF	0	1	1
26	RM systemwide mute		RM: MicMute/All	0	0	0, 1	0 : OFF 1 : ON	0	1	0
27	LED brightness setting		RM: Led/Brightness	0	0	0 - 3	0 : High 1 : Mdeium 2 : Low 3 : Off	0	3	0

Applicable devices	RM-TT
--------------------	-------

Usage example(s)

set	set RM:FeIn_EQ/Ch/On/On 0 0 1 ↓ OK set RM:FeIn_EQ/Ch/On/On 0 0 1 "ON"
get	get RM:FeIn_EQ/Ch/On/On 0 0 ↓ OK get RM:FeIn_EQ/Ch/On/On 0 0 1
NOTIFY	NOTIFY set RM:FeIn_EQ/Ch/On/On 0 0 1 "ON"

No.	Case	Action	Address	SubAddress		Parameter					
				x	y	value	min	max	default		
1	Mic input level setting	set setn setl setr setr	RM: DSPTOP/MicGainType	0	0	0 ... 3	0 : 0dB 1 : 7dB 2 : 14dB 3 : 21dB	0	3	3	
2	Directivity setting	get getn gett	RM: Mic_Directl/Mode	0	0	0 ... 6	0 : Auto voice tracking 1 : Omnidirectional 2 : Cardioid 3 : Supercardioid 4 : Hypercardioid 5 : Toroid 6 : Bidirectional	0	6	0	
3	Direction setting		RM: Mic_Directl/Ch/Angle	0 - 3	Mic 1 - 4	0	-180 ... 180 (0 ... 180 at Bidirectional setting)	-180 : -180° ... 180 : 180°	-180	180	Mic 1 : 0 Mic 2 : 90 Mic 3 : 180 Mic 4 : -90
4	Enable mic channel setting		RM: Mic_Directl/Ch/On	0 - 3	Mic 1 - 4	0	0, 1	0 : OFF 1 : ON	0	1	Mic 1 : 1 Mic 2 : 0 Mic 3 : 0 Mic 4 : 0
5	Echo cancellation level setting (more echoing is eliminated as the value increases, but vocal input is also eliminated)		RM: Mic_Dsp/Aectype	0	0	0 ... 3	0 : Off 1 : Gentle 2 : Medium 3 : Strong	0	3	2	
6	Noise reduction level setting (more echoing is eliminated as the value increases, but vocal input is also eliminated)		RM: Mic_Dsp/Nrtype	0	0	0 ... 3	0 : Off 1 : Gentle 2 : Medium 3 : Strong	0	3	2	
7	Dereverberation level setting (more echoing is eliminated as the value increases, but vocal input is also eliminated)		RM: Mic_Dsp/Derevtype	0	0	0 ... 3	0 : Off 1 : Gentle 2 : Medium 3 : Strong	0	3	2	
8	NearEnd output EQ enable		RM: NeOut_EQ/Ch/On/On	0	0	0, 1	0 : OFF 1 : ON	0	1	1	
9	NearEnd output EQ band bypass enable		RM: NeOut_EQ/Ch/Band/ Bypass	0	0 - 5	Band 1 - 6	0, 1	0 : OFF 1 : ON	0	1	0
10	NearEnd output EQ band cutoff frequency setting		RM: NeOut_EQ/Ch/Band/ Frequency	0	0 - 5	Band 1 - 6	200 ... 200000	200 : 20[Hz] ... 200000 : 20[kHz] *See data table -> Frequency	200	200000	10000
11	NearEnd output EQ band gain setting		RM: NeOut_EQ/Ch/Band/ Gain	0	0 - 5	Band 1 - 6	-1800 ... 1800	-1800 : -18.0[dB] ... 0 : 0.0[dB] ... 1800 : +18.0[dB]	-1800	1800	0
12	NearEnd output EQ band Q value setting		RM: NeOut_EQ/Ch/Band/Q	0	0 - 5	Band 1 - 6	100 ... 16000	100 : 0.1 ... 16000 : 16.0 *See data table -> Q	100	16000	700
13	NearEnd output EQ band EQ type setting		RM: NeOut_EQ/Ch/Band/ Type	0	0 - 5	Band 1 - 6	0 ... 6	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	0	6	0
14	Mic output automix type setting (volume fluctuation is reduced as the value increases, but S/N worsens)		RM: Automix/Mixtype	0	0	0 ... 3	0 : 1ch Gating 1 : 2ch Gain Sharing 2 : 4ch Gain Sharing 3 : All mix	0	3	1	
15	Mic input AGC gain curve setting (AGC effectiveness increases as the value increases, but volume fluctuations feel stronger)		RM: Mic_Agc/Agctype	0	0	0 ... 2	0 : Off 1 : Soft 2 : Hard	0	2	1	
16	Mic input AGC response speed setting (AGC response speed increases as the value increases, but volume fluctuations feel stronger)		RM: Mic_Agc/AgcSpeed	0	0	0, 1	0 : Slow 1 : Fast	0	1	0	

No.	Case	Action	Address	SubAddress		Parameter				
				x	y	value	min	max	default	
17	FarEnd output fader enable	set setn	RM: NeOut_Fader/Ch/On	0 - 1	0	0, 1	0 : OFF 1 : ON	0	1	1
18	FarEnd output fader level setting	set setr get getn gett	RM:NeOut_Fader/Ch/ Level	0 - 1	0	-32768 ... 1000	-32768 : -INFINITY -13800 : -138.0[dB] ... 0 : 0.0[dB] ... 1000 : +10.0[dB] *See Level data table	-32768	1000	0
19	NearEnd output mute enable		RM:NeOut_Mute/Ch/On	0 - 1	0	0, 1	0 : ON 1 : OFF	0	1	1
20	RM systemwide mute		RM: MicMute/All	0	0	0, 1	0 : OFF 1 : ON	0	1	0
21	LED Brightness setting		RM:Led/Brightness	0	0	0 - 3	0 : High 1 : Mdeium 2 : Low 3 : Off	0	3	0

8. Meter List

Applicable devices	RM-CR
--------------------	-------

Usage example(s)

set	mtrstart RM:InputPort 40 ↓ OK mtrstart RM:InputPort
get	mtrstop RM:InputPort ↓ OK mtrstop RM:InputPort
NOTIFY	NOTIFY mtr RM:InputPort level 28 28 2f 2e 00 00 ...

No.	Case	Action	Address	Meter Type	Parameter	Parameter	Parameter	Parameter	Parameter
1	Request input signal level notification start for input port	mtrstart	RM:InputPort	-	1 - 10000	meter transmission interval	1	10000	40
2	Request input signal level notification stop for input port	mtrstop	RM:InputPort	-	-	-	-	-	-
3	Input signal level meter data for input port	NOTIFY mtr	RM:InputPort	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
4	Request input signal level notification start for output port	mtrstart	RM:OutputPort	-	1 - 10000	meter transmission interval	1	10000	40
5	Request input signal level notification stop for output port	mtrstop	RM:OutputPort	-	-	-	-	-	-
6	Input signal level meter data for output port	NOTIFY mtr	RM:OutputPort	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
7	Request input signal level notification start for FarEnd input CH	mtrstart	RM:FeInPostFader	-	1 - 10000	meter transmission interval	1	10000	40
8	Request input signal level notification stop for FarEnd input CH	mtrstop	RM:FeInPostFader	-	-	-	-	-	-
9	Input signal level meter data for FarEnd input CH	NOTIFY mtr	RM:FeInPostFader	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
10	Request input signal level notification start for mic input CH	mtrstart	RM:ExtMicPostFader	-	1 - 10000	meter transmission interval	1	10000	40
11	Request input signal level notification stop for mic input CH	mtrstop	RM:ExtMicPostFader	-	-	-	-	-	-
12	Input signal level meter data for mic input CH	NOTIFY mtr	RM:ExtMicPostFader	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
13	Request input signal level notification start for NearEnd input CH	mtrstart	RM:NeInPostFader	-	1 - 10000	meter transmission interval	1	10000	40
14	Request input signal level notification stop for NearEnd input CH	mtrstop	RM:NeInPostFader	-	-	-	-	-	-
15	Input signal level meter data for NearEnd input CH	NOTIFY mtr	RM:NeInPostFader	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
16	Request input signal level notification start for FarEnd output CH	mtrstart	RM:FeOutPostFader	-	1 - 10000	meter transmission interval	1	10000	40
17	Request input signal level notification stop for FarEnd output CH	mtrstop	RM:FeOutPostFader	-	-	-	-	-	-
18	Input signal level meter data for FarEnd output CH	NOTIFY mtr	RM:FeOutPostFader	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
19	Request input signal level notification start for NearEnd output CH	mtrstart	RM:NeOutPostFader	-	1 - 10000	meter transmission interval	1	10000	40
20	Request input signal level notification stop for NearEnd output CH	mtrstop	RM:NeOutPostFader	-	-	-	-	-	-
21	Input signal level meter data for NearEnd output CH	NOTIFY mtr	RM:NeOutPostFader	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
22	Request AGC RMS level notification start for FarEnd input CH	mtrstart	RM:FeInAGCIn	-	1 - 10000	meter transmission interval	1	10000	40
23	Request AGC RMS level notification stop for FarEnd input CH	mtrstop	RM:FeInAGCIn	-	-	-	-	-	-
24	AGC RMS level meter data for FarEnd input CH	NOTIFY mtr	RM:FeInAGCIn	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
25	Request noise gate signal level notification start for mic input CH	mtrstart	RM:ExtMicGateOut	-	1 - 10000	meter transmission interval	1	10000	40
26	Request noise gate signal level notification stop for mic input CH	mtrstop	RM:ExtMicGateOut	-	-	-	-	-	-
27	Noise gate signal level meter data for mic input CH	NOTIFY mtr	RM:ExtMicGateOut	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
28	Request noise gate signal GR meter level notification start for mic input CH	mtrstart	RM:ExtMicGateGR	-	1 - 10000	meter transmission interval	1	10000	40
29	Request noise gate signal GR meter level notification stop for mic input CH	mtrstop	RM:ExtMicGateGR	-	-	-	-	-	-
30	Noise gate signal GR meter data for mic input CH	NOTIFY mtr	RM:ExtMicGateGR	gr	0x00 - 0x7F	meter level. (x Channel)	See data table (GR Meter)		0x00
31	Request compressor signal level notification start for mic input CH	mtrstart	RM:ExtMicCompOut	-	1 - 10000	meter transmission interval	1	10000	40
32	Request compressor signal level notification stop for mic input CH	mtrstop	RM:ExtMicCompOut	-	-	-	-	-	-

No.	Case	Action	Address	Meter Type	Parameter				
33	Compressor signal level meter data for mic input CH	NOTIFY mtr	RM:ExtMicCompOut	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
34	Request compressor signal GR meter level notification start for mic input CH	mtrstart	RM:ExtMicCompGR	-	1 - 10000	meter transmission interval	1	10000	40
35	Request compressor signal GR meter level notification stop for mic input CH	mtrstop	RM:ExtMicCompGR	-	-	-	-	-	-
36	Compressor signal GR meter data for mic input CH	NOTIFY mtr	RM:ExtMicCompGR	gr	0x00 - 0x7F	meter level. (x Channel)	See data table (GR Meter)		0x00
37	Request AGC RMS level notification start for mic input CH	mtrstart	RM:ExtMicAGCIn	-	1 - 10000	meter transmission interval	1	10000	40
38	Request AGC RMS level notification stop for mic input CH	mtrstop	RM:ExtMicAGCIn	-	-	-	-	-	-
39	AGC RMS level meter data for mic input CH	NOTIFY mtr	RM:ExtMicAGCIn	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
40	Request automix gain level notification start for NearEnd input CH	mtrstart	RM:NeInAutomixGain	-	1 - 10000	meter transmission interval	1	10000	40
41	Request automix gain level notification stop for NearEnd input CH	mtrstop	RM:NeInAutomixGain	-	-	-	-	-	-
42	Automix gain level meter data for NearEnd input CH	NOTIFY mtr	RM:NeInAutomixGain	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
43	Request automix out level notification start for NearEnd input CH	mtrstart	RM:NeInAutomixOut	-	1 - 10000	meter transmission interval	1	10000	40
44	Request automix out level notification stop for NearEnd input CH	mtrstop	RM:NeInAutomixOut	-	-	-	-	-	-
45	Automix out level meter data for NearEnd input CH	NOTIFY mtr	RM:NeInAutomixOut	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
46	Request AGC RMS level notification start for NearEnd input CH	mtrstart	RM:NeInAGCIn	-	1 - 10000	meter transmission interval	1	10000	40
47	Request AGC RMS level notification stop for NearEnd input CH	mtrstop	RM:NeInAGCIn	-	-	-	-	-	-
48	AGC RMS level meter data for NearEnd input CH	NOTIFY mtr	RM:NeInAGCIn	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00

Applicable devices	RM-CG
--------------------	-------

Usage example(s)

set	mtrstart RM:OutputPort 40 ↓ OK mtrstart RM:OutputPort
get	mtrstop RM:OutputPort ↓ OK mtrstop RM:OutputPort
NOTIFY	NOTIFY mtr RM:OutputPort level 00 00

No.	Case	Action	Address	Meter Type	Parameter				
1	Request AEC reference signal level notification start for input port	mtrstart	RM:AecRefPort	-	1 - 10000	meter transmission interval	1	10000	40
2	Request AEC reference signal level notification stop for input port	mtrstop	RM:AecRefPort	-	-	-	-	-	-
3	AEC reference signal level meter data for input port	NOTIFY mtr	RM:AecRefPort	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
4	Request input signal level notification start for output port	mtrstart	RM:OutputPort	-	1 - 10000	meter transmission interval	1	10000	40
5	Request input signal level notification stop for output port	mtrstop	RM:OutputPort	-	-	-	-	-	-
6	Input signal level meter data for output port	NOTIFY mtr	RM:OutputPort	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
7	Request BeamDirection output start	mtrstart	RM:BeamDirection	-	1 - 10000	meter transmission interval	1	10000	40
8	Request BeamDirection output stop	mtrstop	RM:BeamDirection	-	-	-	-	-	-
9	BeamDirection output data	NOTIFY mtr	RM:BeamDirection	raw	0x00 - 0xB4	Beam Direction. (Phi, Theta, HVAD Flg)	See data table (Beam Direction)		0x00

Applicable devices	RM-TT
--------------------	-------

Usage example(s)

mtrstart	mtrstart RM:InputPort 40 ↓ OK mtrstart RM:InputPort
mtrstop	mtrstop RM:InputPort ↓ OK mtrstop RM:InputPort
NOTIFY	NOTIFY mtr RM:InputPort 00 00 00 3f 54 22 ...

No.	Case	Action	Address	Meter Type	Parameter				
					value	min	max	default	
1	Request AEC reference signal level notification start for input port	mtrstart	RM:AecRefPort	-	1 - 10000	meter transmission interval	1	10000	40
2	Request AEC reference signal level notification stop for input port	mtrstop	RM:AecRefPort	-	-	-	-	-	-
3	AEC reference signal level meter data for input port	NOTIFY mtr	RM:AecRefPort	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00
4	Request input signal level notification start for output port	mtrstart	RM:OutputPort	-	1 - 10000	meter transmission interval	1	10000	40
5	Request input signal level notification stop for output port	mtrstop	RM:OutputPort	-	-	-	-	-	-
6	Input signal level meter data for output port	NOTIFY mtr	RM:OutputPort	level	0x00 - 0x7F	meter level. (x Channel)	See data table (Level Meter)		0x00