



VXL1-16P

Remote Control Protocol Specifications

Version 2.5.0

This specification document applies to VXL1-16P V2.5.0 and later.

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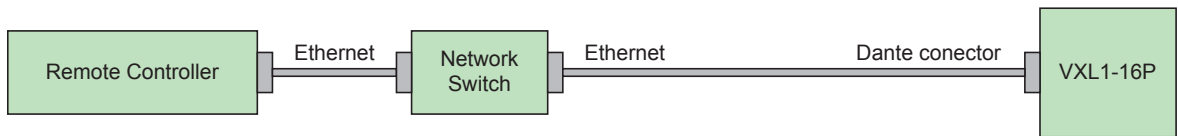
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0. Revision History

| Version | Date | Section | Description |
|---------|---------------|---------|---|
| V1.0.0 | Sep. 11, 2019 | - | Initial version |
| V1.2.0 | Mar. 9, 2022 | - | Addition of the commands regarding IP address settings. |
| V2.0.0 | Jan. 26, 2023 | - | Addition of the commands regarding UNIT ID settings. |
| V2.5.0 | Feb. 20, 2024 | - | Addition of the commands regarding device name queries |

1. Setup

1.1. Connection Procedure



1.2. Configuring the Remote Controller

VXL1-16P 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 VXL1-16P
IP Port No.: 49280

1.3. Device Configuration

The setting required on the main unit is the IP address (UNIT ID) setting.
Up to four remote controller devices can connect simultaneously to one VXL1-16P 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 | Device run mode notification | NOTIFY devstatus runmode... | |
| 1-2 | change notification | 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 | Device identify notification | NOTIFY set AMP:Identified... | |
| 1-6 | | Alert notification | NOTIFY event AMP:Alert... | |
| 1-7 | | IP address assignment (DHCP/Auto IP or Static IP) change notification | NOTIFY event VXL:SetIpSettingPcMode | |
| 1-8 | | IP address change notification after the next boot | NOTIFY event VXL:SetNextBootIpAddress | |
| 1-9 | | Subnet Mask change notification after the next boot | NOTIFY event VXL:SetNextBootSubnetAddress | |
| 1-10 | | Default Gateway change notification after the next boot | NOTIFY event VXL:SetNextBootDefaultGateway | |
| 1-11 | | Default Gateway notification | NOTIFY event VXL:SetDefaultGateway | |
| 1-12 | | UNIT ID change notification after the next boot | NOTIFY event VXL:SetNextBootUnitID | |

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 | VXL1-16P 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 | VXL1-16P external control protocol version query | devinfo protocolver... |
| 3-2 | | Parameter set version query | devinfo paramsetver... |
| 3-3 | | Firmware version query | devinfo version... |
| 3-4 | | Product name query | devinfo productname... |
| 3-5 | | Serial number query | devinfo serialno... |
| 3-6 | | Device ID query | devinfo deviceid... |
| 3-7 | | Product manufacture name query | devinfo manufacturer... |
| 3-8 | | Device name query | devinfo devicename |
| 3-9 | | Device confirmation | event AMP:IdentifyDev... |
| 3-10 | | DIP switch 6 (IP SETTING) status query | event VXL:GetIpSetting |
| 3-11 | | IP address assignment (DHCP/Auto IP or Static IP) setting when the DIP switch 6 (IP SETTING) is set to "PC" | event VXL:SetIpSettingPcMode |
| 3-12 | | IP address assignment (DHCP/Auto IP or Static IP) query when the DIP switch 6 (IP SETTING) is set to "PC" | event VXL:GetIpSettingPcMode |
| 3-13 | | IP address setting (Static IP address setting) after the next boot when the DIP switch 6 (IP SETTING) is "PC" | event VXL:SetNextBootIpAddress |
| 3-14 | | IP address query after the next boot | event VXL:GetNextBootIpAddress |
| 3-15 | | Subnet Mask setting after the next boot when the DIP switch 6 (IP SETTING) is "PC" | event VXL:SetNextBootSubnetAddress |
| 3-16 | | Subnet Mask query after the next boot | event VXL:GetNextBootSubnetAddress |
| 3-17 | | Default Gateway setting after the next boot when the DIP switch 6 (IP SETTING) is "PC" | event VXL:SetNextBootDefaultGateway |
| 3-18 | | Default Gateway query after the next boot | event VXL:GetNextBootDefaultGateway |
| 3-19 | | Default Gateway query | event VXL:GetDefaultGateway |
| 3-20 | | DIP switches 1-4 (UNIT ID) status query | event VXL:GetUnitIDMode |
| 3-21 | | UNIT ID setting after the next boot when the DIP switches 1-4 (UNIT ID) are "RESERVED" | event VXL:SetNextBootUnitID |
| 3-22 | | Hostname mode setting | event VXL:SetHostnameMode |
| 3-23 | | Hostname mode query | event VXL:GetHostnameMode |
| 3-24 | | Hostname setting | event VXL:SetHostname |
| 3-25 | | Hostname query | event VXL:GetHostname |

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 1000¹.
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: "fault" = 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 VXL:Ch/InputVolume/Level 0 0 -7760 "-77.60"
 Meaning: DCA Fader 1ch level was changed to "-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 AMP:DigitalIn/Level level 71 71
 * The meter value is expressed using a 2-digit hexadecimal.
 Meaning: Digital input levels for ch1 to 2 Level are sent.

3.2.4. Event processing change notification

1-5) Device Identify notification

| Command | Option 1 | Option 2 | Description |
|------------|----------------------|----------------|---|
| NOTIFY set | AMP:Identified 0 0 0 | "Normal state" | Current device identify status notification |

Example: Notification: NOTIFY set AMP:Identified 0 0 0 "Normal state"
Meaning: Notify that the Identify LED is blinking

1-6) Alert notification

| Command | Option 1 | Option 2 | Description |
|--------------|-----------|---------------------------|---|
| NOTIFY event | AMP:Alert | "xx:yyyyyyyyy, zzzzzz" | xx: Alert number (Hex) yyyyyyyyy: Alert message zzzzzz: warning/error/fault |

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

1-7) IP address assignment (DHCP/Auto IP or Static IP) change notification

| Command | Option 1 | Option 2 | Description |
|--------------|------------------------|----------|-------------------------------------|
| NOTIFY event | VXL:SetIpSettingPcMode | "x" | x: 0 (DHCP/Auto IP) / 1 (Static IP) |

Example: Notification: NOTIFY event VXL:SetIpSettingPcMode "0"
Meaning: IP address settings was changed to DHCP/Auto IP

1-8) IP address change notification after the next boot

| Command | Option 1 | Option 2 | Description |
|--------------|--------------------------|-------------------|-----------------------------|
| NOTIFY event | VXL:SetNextBootIpAddress | "xxx.xxx.xxx.xxx" | xxx.xxx.xxx.xxx: IP address |

Example: Notification: NOTIFY event VXL:SetNextBootIpAddress "192.168.0.1"
Meaning: IP address after the next boot was changed to 192.168.0.1

1-9) Subnet Mask change notification after the next boot

| Command | Option 1 | Option 2 | Description |
|--------------|------------------------------|-------------------|------------------------------|
| NOTIFY event | VXL:SetNextBootSubnetAddress | "xxx.xxx.xxx.xxx" | xxx.xxx.xxx.xxx: Subnet Mask |

Example: Notification: NOTIFY event VXL:SetNextBootSubnetAddress "255.255.255.0"
Meaning: Subnet Mask after the next boot was changed to 255.255.255.0

1-10) Default Gateway change notification after the next boot

| Command | Option 1 | Option 2 | Description |
|--------------|-------------------------------|-------------------|----------------------------------|
| NOTIFY event | VXL:SetNextBootDefaultGateway | "xxx.xxx.xxx.xxx" | xxx.xxx.xxx.xxx: Default Gateway |

Example: Notification: NOTIFY event VXL:SetNextBootDefaultGateway "192.168.0.1"
Meaning: Default Gateway after the next boot was changed to 192.168.0.1

1-11) Default Gateway notification

| Command | Option 1 | Option 2 | Description |
|--------------|-----------------------|-------------------|----------------------------------|
| NOTIFY event | VXL:SetDefaultGateway | "xxx.xxx.xxx.xxx" | xxx.xxx.xxx.xxx: Default Gateway |

Example: Notification: NOTIFY event VXL:SetDefaultGateway "192.168.0.1"
Meaning: Default Gateway is 192.168.0.1

1-12) UNIT ID change notification after the next boot

| Command | Option 1 | Option 2 | Description |
|--------------|-----------------------|----------|--------------|
| NOTIFY event | VXL:SetNextBootUnitID | "xxx" | xxx: UNIT ID |

Example: Notification: NOTIFY event VXL:SetNextBootUnitID "078"
* The UNIT ID is expressed using a 3-digit hexadecimal 000-07F (000-127)
Meaning: UNIT ID after the next boot was changed to 120

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: "fault" = 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 VXL:Ch/InputVolume/Level 0 0
 Response: OK get VXL:Ch/InputVolume/Level 0 0 -775
 Meaning: Query the 1ch level of the Input Volume Conference with raw values.
 The 1ch level of the Input Volume Conference is -77.60.

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 VXL:Ch/InputVolume/Level 0 0
 Response: OK getn VXL:Ch/InputVolume/Level 0 0 408
 Meaning: Query the 1ch level of the Input Volume Conference with raw values.
 The 1ch level of the Input Volume Conference is -31.50.
 (When the normalized value resolution is 0-1023, 408 means -31.50.)

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 VXL:Ch/InputVolume/Level 0 0 -775
 Response: OK set VXL:Ch/InputVolume/Level 0 0 -775 "-7.75"
 Meaning: Set the 1ch level of the Input Volume Conference to -7.75 using raw values.
 Input Volume Conference Ch level is set to "-7.75"

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 "Nomalised 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 VXL:Ch/InputVolume/Level 0 0 408
 Response: OK setn VXL:Ch/InputVolume/Level 408 "-31.50"
 Meaning: Set the 1ch level of the Input Volume Conference to a normalized value of 408.
 The 1ch level of the Input Volume Conference was set to "-31.50".

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 AMP:DigitalIn/Level 1000
 Notification: OK mtrstart AMP:DigitalIn/Level
 NOTIFY mtr AMP:DigitalIn/Level 71 68
 NOTIFY mtr AMP:DigitalIn/Level 71 68
 * The meter value is expressed using a 2-digit hexadecimal.
 Meaning: Send the meter data of ch1 to 2 Digital Input Levels at 1000 msec intervals.
 A request for the ch1 to 2 Digital Input Levels 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 AMP:DigitalIn/Level
 Response: OK mtrstop AMP:DigitalIn/Level
 Meaning: Stop the meter data of ch1 to 2 output levels.
 The request to stop the meter data of ch1 to 2 output levels was received.

3.4. Extended commands**3.4.1. Product information query request****3-1) VXL1-16P 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" | VXL1-16P external control protocol version |

Details: xxxx = Version

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

3-2) Parameter set version query

| Command | Option 1 | Description |
|---------|-------------|-----------------------------------|
| devinfo | paramsetver | Queries the parameter set version |

Response

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

Details: xxxx = Version

Example: Command: devinfo paramsetver
 Notification: OK devinfo paramsetver "AMP:1.0.0 VXL:1.0.0"
 Meaning: Query the parameter set version.
 Parameter set version ="AMP:1.0.0 VXL: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
 Notification: OK devinfo version "1.0.0"
 Meaning: Query the firmware version.
 Firmware version = V1.00

3-4) Product name query

| Command | Option 1 | Description |
|---------|-------------|--------------------------|
| devinfo | productname | Queries the product name |

Response

| Response string | Description |
|-------------------------------|--------------|
| OK devinfo productname "xxxx" | Product name |

Details: xxxx = Product name

Example: Command: devinfo productname
 Notification: OK devinfo productname "VXL1-16P"
 Meaning: Query the product name.
 Product name = "VXL1-16P"

3-5) Serial number query

| Command | Option 1 | Description |
|---------|----------|---------------------------|
| devinfo | serialno | Queries the serial number |

Response

| Response string | Description |
|----------------------------|---------------|
| OK devinfo serialno "xxxx" | Serial number |

Details: xxxx = Serial number

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

3-6) Device ID query

| Command | Option 1 | Description |
|---------|----------|-----------------------|
| devinfo | deviceid | Queries the device ID |

Response

| Response string | Description |
|----------------------------|-------------|
| OK devinfo deviceid "xxxx" | Device ID |

Details: xxxx = Device ID
 * 3-digit hexadecimal

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

Note: The device ID corresponds to the UNIT ID.

3-7) 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
 Notification: OK devinfo manufacturer "Yamaha Corporation"
 Meaning: Query the manufacturer name.
 Manufacturer name = "Yamaha Corporation"

3-8) Device name query

| Command | Option 1 | Description |
|---------|------------|-------------------|
| devinfo | devicename | Device name query |

Response

| Response string | Description |
|------------------------------|-------------|
| OK devinfo devicename "xxxx" | Device name |

Details: xxxx = Device name

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

3.4.2. Event processing request**3-9) Device confirmation**

| Command | Option 1 | Option 2 | Description |
|---------|-----------------|----------|---------------------|
| event | AMP:IdentifyDev | duration | Device confirmation |

Details: duration = "xxx" flashing duration (s) 1 to 255, "off" specified to stop Identify

Response

| Response string | Description |
|--------------------------------|------------------------------|
| OK event AMP:IdentifyDev "xxx" | Device confirmation complete |

Example: Command: event AMP:IdentifyDev "duration=5"
 Notification: OK event AMP:IdentifyDev "duration=5"
 Meaning: Blink the VXL1-16P LED for 5 seconds.
 Start executing blinking process

3-10) DIP switch 6 (IP SETTING) status query

| Command | Option 1 | Option 2 | Description |
|---------|------------------|----------|--|
| event | VXL:GetIpSetting | "" | DIP switch 6 (IP SETTING) status query |

Response

| Response string | Description |
|-------------------------------|----------------------------------|
| OK event VXL:GetIpSetting "x" | DIP switch 6 (IP SETTING) status |

Details: x = 0 (UNIT ID) / 1 (PC)

Example: Command: event VXL:GetIpSetting ""
 Notification: OK event VXL:GetIpSetting "1"
 Meaning: Query the DIP switch 6 (IP SETTING) status
 DIP switch 6 (IP SETTING) status ="PC"

3-11) IP address assignment (DHCP/Auto IP or Static IP) setting when the DIP switch 6 (IP SETTING) is set to "PC"

| Command | Option 1 | Option 2 | Description |
|---------|------------------------|----------|---|
| event | VXL:SetIpSettingPcMode | "x" | IP address assignment (DHCP/Auto IP or Static IP) setting |

Details: x = 0 (DHCP/Auto IP) / 1 (Static IP)

Response

| Response string | Description |
|-------------------------------------|---|
| OK event VXL:SetIpSettingPcMode "x" | IP address assignment (DHCP/Auto IP or Static IP) setting completed |

Example: Command: event VXL:SetIpSettingPcMode "1"
 Notification: OK event VXL:SetIpSettingPcMode "1"
 Meaning: Set the IP address assignment to Static IP
 The IP address assignment is set to StaticIP

3-12) IP address assignment (DHCP/Auto IP or Static IP) query when the DIP switch 6 (IP SETTING) is set to "PC"

| Command | Option 1 | Option 2 | Description |
|---------|------------------------|----------|---|
| event | VXL:GetIpSettingPcMode | "" | IP address assignment (DHCP/Auto IP or Static IP) query |

Response

| Response string | Description |
|-------------------------------------|---|
| OK event VXL:GetIpSettingPcMode "x" | IP address assignment (DHCP/Auto IP or Static IP) |

Details: x = 0 (DHCP/Auto IP) / 1 (Static IP)

Example: Command: event VXL:GetIpSettingPcMode ""
 Notification: OK event VXL:GetIpSettingPcMode "1"
 Meaning: Query the IP address assignment
 IP address assignment ="StaticIP"

3-13) IP address setting (Static IP address setting) after the next boot when the DIP switch 6 (IP SETTING) is "PC"

| Command | Option 1 | Option 2 | Description |
|---------|--------------------------|-------------------|--|
| event | VXL:SetNextBootIpAddress | "xxx.xxx.xxx.xxx" | IP address setting (Static IP address setting) after the next boot |

Details: xxx.xxx.xxx.xxx = Device IP Address

Response

| Response string | Description |
|---|--|
| OK event VXL:SetNextBootIpAddress "xxx.xxx.xxx.xxx" | IP address setting (Static IP address setting) after the next boot completed |

Example: Command: event VXL:SetNextBootIpAddress "192.168.0.1"
 Notification: OK event VXL:SetNextBootIpAddress "192.168.0.1"
 Meaning: Set the IP address after the next boot to 192.168.0.1
 The IP address after the next boot is set to 192.168.0.1

3-14) IP address query after the next boot

| Command | Option 1 | Option 2 | Description |
|---------|--------------------------|----------|--------------------------------------|
| event | VXL:GetNextBootIpAddress | "" | IP address query after the next boot |

Response

| Response string | Description |
|---|--------------------------------|
| OK event VXL:GetNextBootIpAddress "xxx.xxx.xxx.xxx" | IP address after the next boot |

Details: xxx.xxx.xxx.xxx = Device IP Address

Example: Command: event VXL:GetNextBootIpAddress ""
 Notification: OK event VXL:GetNextBootIpAddress "192.168.0.1"
 Meaning: Query the IP address after the next boot
 IP address after the next boot ="192.168.0.1"

3-15) Subnet Mask setting after the next boot when the DIP switch 6 (IP SETTING) is "PC"

| Command | Option 1 | Option 2 | Description |
|---------|------------------------------|-------------------|---|
| event | VXL:SetNextBootSubnetAddress | "xxx.xxx.xxx.xxx" | Subnet Mask setting after the next boot |

Details: xxx.xxx.xxx.xxx = Subnet Mask

Response

| Response string | Description |
|---|---|
| OK event VXL:SetNextBootSubnetAddress "xxx.xxx.xxx.xxx" | Subnet Mask setting after the next boot completed |

Example: Command: event VXL:SetNextBootSubnetAddress "255.255.255.0"
 Notification: OK event VXL:SetNextBootSubnetAddress "255.255.255.0"
 Meaning: Set the Subnet Mask after the next boot to 255.255.255.0
 The Subnet Mask after the next boot is set to 255.255.255.0

3-16) Subnet Mask query after the next boot

| Command | Option 1 | Option 2 | Description |
|---------|------------------------------|----------|---------------------------------------|
| event | VXL:GetNextBootSubnetAddress | "" | Subnet Mask query after the next boot |

Response

| Response string | Description |
|---|---------------------------------|
| OK event VXL:GetNextBootSubnetAddress "xxx.xxx.xxx.xxx" | Subnet Mask after the next boot |

Details: xxx.xxx.xxx.xxx = Subnet Mask

Example: Command: event VXL:GetNextBootSubnetAddress ""
 Notification: OK event VXL:GetNextBootSubnetAddress "255.255.255.0"
 Meaning: Query the Subnet Mask after the next boot
 Subnet Mask after the next boot ="255.255.255.0"

3-17) Default Gateway setting after the next boot when the DIP switch 6 (IP SETTING) is "PC"

| Command | Option 1 | Option 2 | Description |
|---------|-------------------------------|-------------------|---|
| event | VXL:SetNextBootDefaultGateway | "xxx.xxx.xxx.xxx" | Default Gateway setting after the next boot |

Details: xxx.xxx.xxx.xxx = Default Gateway

Response

| Response string | Description |
|--|---|
| OK event VXL:SetNextBootDefaultGateway "xxx.xxx.xxx.xxx" | Default Gateway setting after the next boot completed |

Example: Command: event VXL:SetNextBootDefaultGateway "192.168.0.1"
 Notification: OK event VXL:SetNextBootDefaultGateway "192.168.0.1"
 Meaning: Set the Default Gateway after the next boot to 192.168.0.1
 The Default Gateway after the next boot is set to 192.168.0.1

3-18) Default Gateway query after the next boot

| Command | Option 1 | Option 2 | Description |
|---------|-------------------------------|----------|---|
| event | VXL:GetNextBootDefaultGateway | "" | Default Gateway query after the next boot |

Response

| Response string | Description |
|--|-------------------------------------|
| OK event VXL:GetNextBootDefaultGateway "xxx.xxx.xxx.xxx" | Default Gateway after the next boot |

Details: xxx.xxx.xxx.xxx = Default Gateway

Example: Command: event VXL:GetNextBootDefaultGateway ""
 Notification: OK event VXL:GetNextBootDefaultGateway "192.168.0.1"
 Meaning: Query the Default Gateway after the next boot
 Default Gateway after the next boot ="192.168.0.1"

3-19) Default Gateway query

| Command | Option 1 | Option 2 | Description |
|---------|-----------------------|----------|-----------------------|
| event | VXL:GetDefaultGateway | "" | Default Gateway query |

Response

| Response string | Description |
|--|-----------------|
| OK event VXL:GetDefaultGateway "xxx.xxx.xxx.xxx" | Default Gateway |

Details: xxx.xxx.xxx.xxx = Default Gateway

Example: Command: event VXL:GetDefaultGateway ""
 Notification: OK event VXL:GetDefaultGateway "192.168.0.1"
 Meaning: Query the Default Gateway
 Default Gateway ="192.168.0.1"

3-20) DIP switches 1-4 (UNIT ID) status query

| Command | Option 1 | Option 2 | Description |
|---------|-------------------|----------|---|
| event | VXL:GetUnitIDMode | "" | DIP switches 1-4 (UNIT ID) status query |

Response

| Response string | Description |
|--------------------------------|-----------------------------------|
| OK event VXL:GetUnitIDMode "x" | DIP switches 1-4 (UNIT ID) status |

Details: x = 0 (DIP SW) / 1 (RESERVED)

Example: Command: event VXL:GetUnitIDMode ""
 Notification: OK event VXL:GetUnitIDMode "1"
 Meaning: Query the DIP switches 1-4 (UNIT ID) status
 DIP switches 1-4 (UNIT ID) status ="RESERVED"

3-21) UNIT ID setting after the next boot when the DIP switches 1-4 (UNIT ID) are "RESERVED"

| Command | Option 1 | Option 2 | Description |
|---------|-----------------------|----------|-------------------------------------|
| event | VXL:SetNextBootUnitID | "xxx" | UNIT ID setting after the next boot |

Details: xxx = UNIT ID
 * The UNIT ID is expressed using a 3-digit hexadecimal 000-07F (000-127).

Response

| Response string | Description |
|--------------------------------------|---|
| OK event VXL:SetNextBootUnitID "xxx" | UNIT ID setting after the next boot completed |

Example: Command: event VXL:SetNextBootUnitID "078"
 Notification: OK event VXL:SetNextBootUnitID "078"
 Meaning: Set the UNIT ID after the next boot to 120
 The UNIT ID after the next boot is set to 120

3-22) Hostname mode setting

| Command | Option 1 | Option 2 | Description |
|---------|---------------------|----------|-----------------------|
| event | VXL:SetHostnameMode | "x" | Hostname mode setting |

Response

| Response string | Description |
|----------------------------------|---------------|
| OK event VXL:SetHostnameMode "x" | Hostname mode |

Details: x = 0 Manual mode / 1 UnitID mode

Example: Command: event VXL:SetHostnameMode "1"
 Notification: OK event VXL:SetHostnameMode "1"
 Meaning: Set the hostname mode to the UnitID mode
 The hostname mode is set to the UnitID mode

3-23) Hostname mode query

| Command | Option 1 | Option 2 | Description |
|---------|---------------------|----------|---------------------|
| event | VXL:GetHostnameMode | "" | Hostname mode query |

Response

| Response string | Description |
|----------------------------------|---------------|
| OK event VXL:GetHostnameMode "x" | Hostname mode |

Details: x = 0 Manual mode / 1 UnitID mode

Example: Command: event VXL:GetHostnameMode ""
 Notification: OK event VXL:GetHostnameMode "1"
 Meaning: Query the hostname mode
 Hostname mode = UnitID mode

3-24) Hostname setting

| Command | Option 1 | Option 2 | Description |
|---------|-----------------|----------|------------------|
| event | VXL:SetHostname | "xxxx" | Hostname setting |

Response

| Response string | Description |
|---------------------------------|-------------|
| OK event VXL:SetHostname "xxxx" | Hostname |

Details: xxxx = Hostname*1
 *1 A hostname can be up to 64 bytes.
 The hostname can be changed only when the hostname mode is set to 0.

Example: Command: event VXL:SetHostname "VXL1B-16P"
 Notification: OK event VXL:SetHostname "VXL1B-16P"
 Meaning: Set the hostname to "VXL1B-16P"
 The hostname is set to "VXL1B-16P"

3-25) Hostname query

| Command | Option 1 | Option 2 | Description |
|---------|-----------------|----------|----------------|
| event | VXL:GetHostname | "" | Hostname query |

Response

| Response string | Description |
|---------------------------------|-------------|
| OK event VXL:GetHostname "xxxx" | Hostname |

Details: xxxx = Hostname

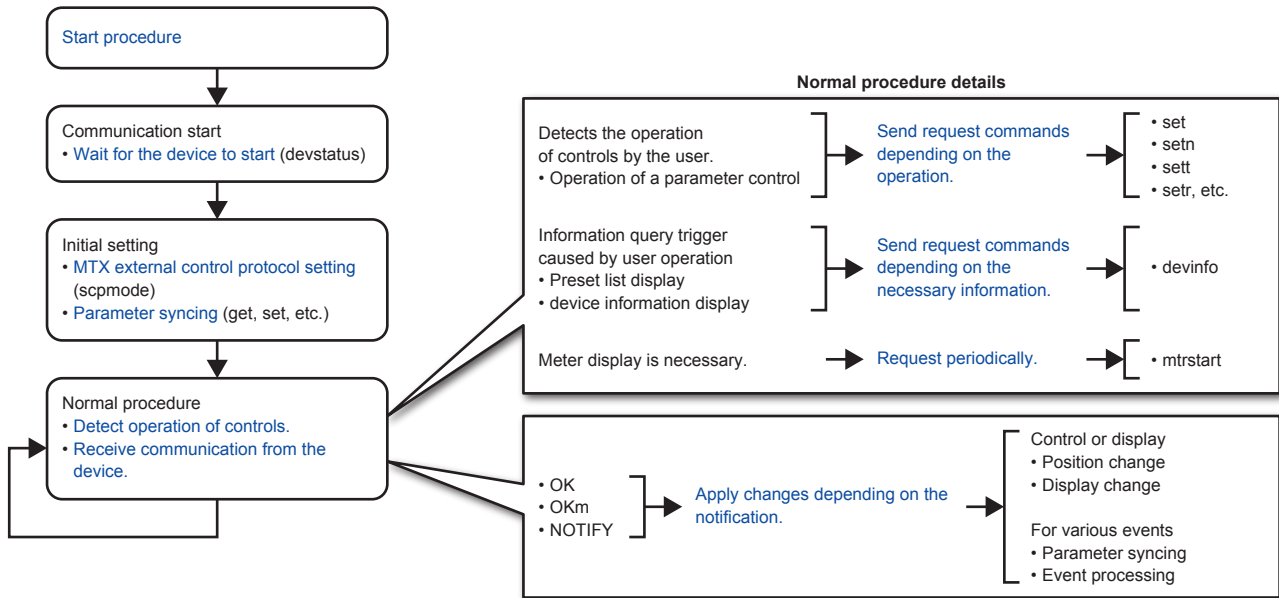
Example: Command: event VXL:GetHostname ""
 Notification: OK event VXL:GetHostname "VXL1B-16P"
 Meaning: Query the hostname
 Hostname = "VXL1B-16P"

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

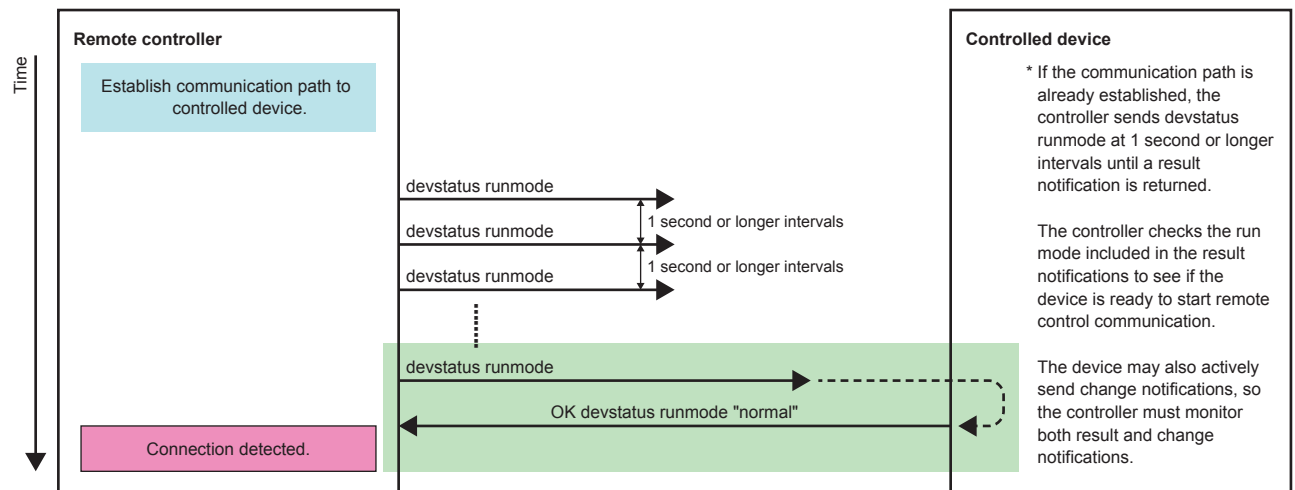
The amount of time for the controller and the controlled device to start is different.

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.

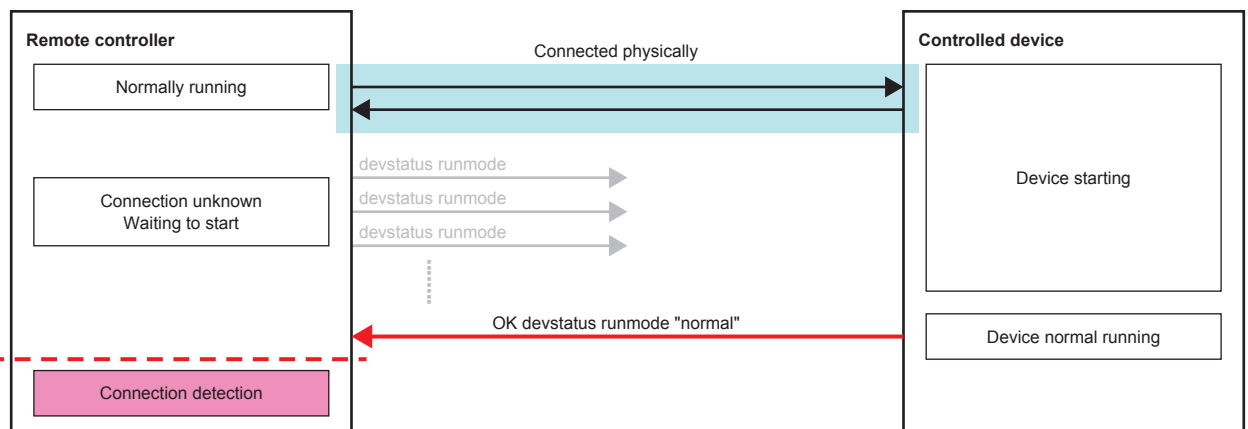
- If an Ethernet connection is required, the remote controller needs to establish a logical session. (This is not necessary for a connection that only needs to be connected physically, as in RS-232C.)
- After the session is established, the controller sends devstatus commands at 1 second or longer intervals.
- 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.

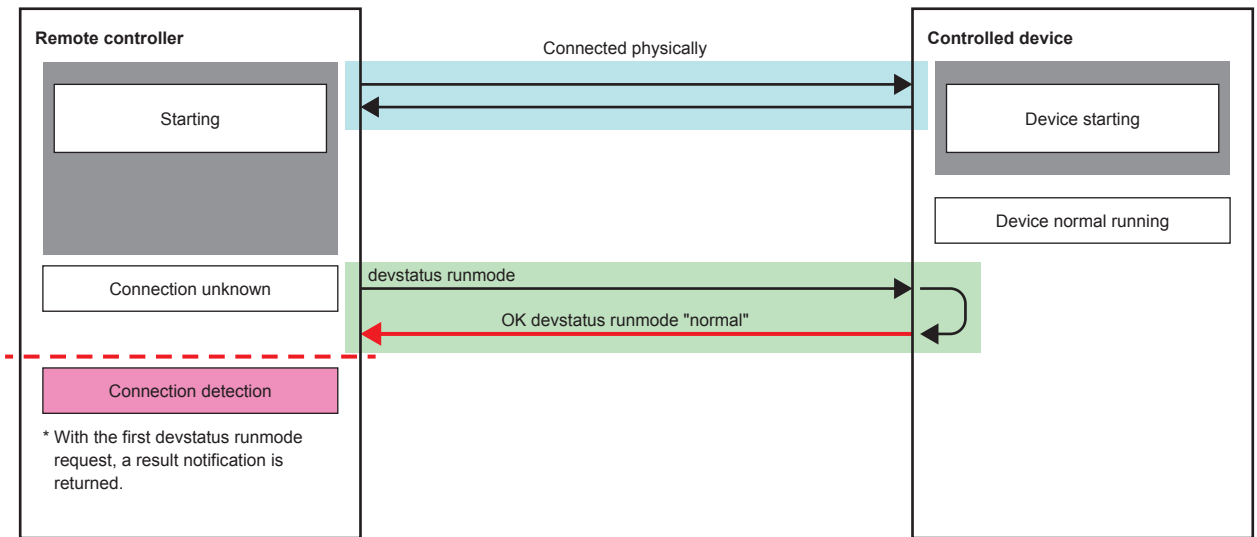


The reason for using such a sequence is provided below.

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.

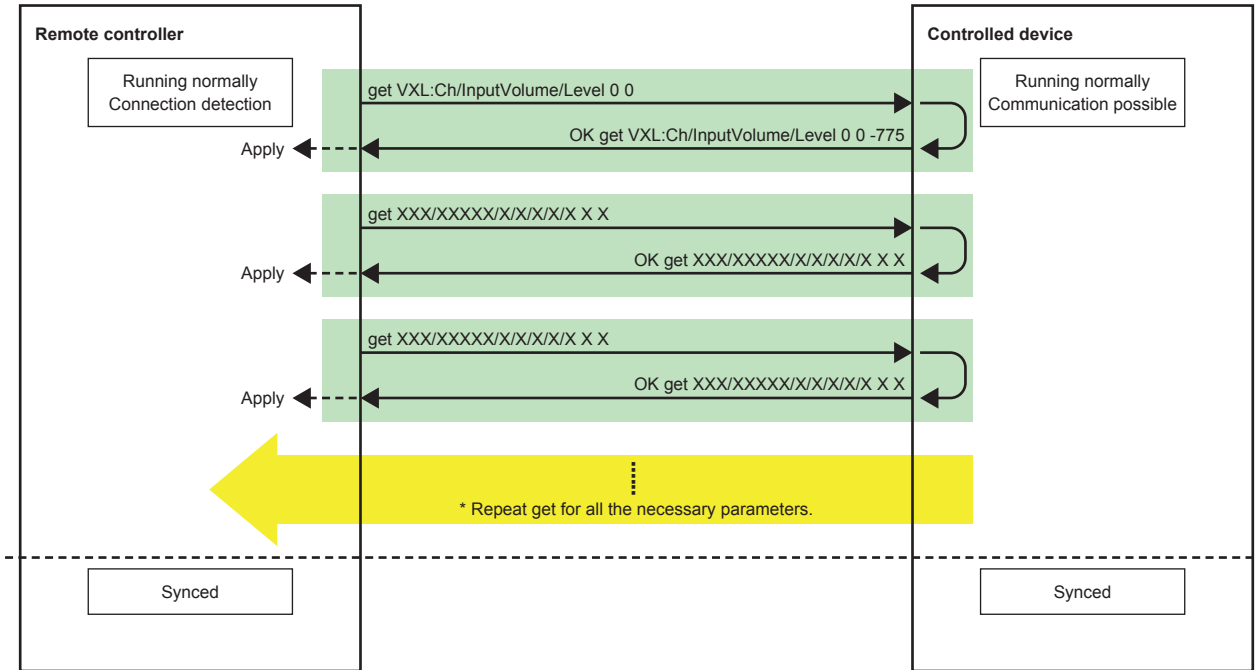
In case of Ethernet connection, Ethernet logical session (e.g. port open) should be established before sending "devstatus runmode".

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.

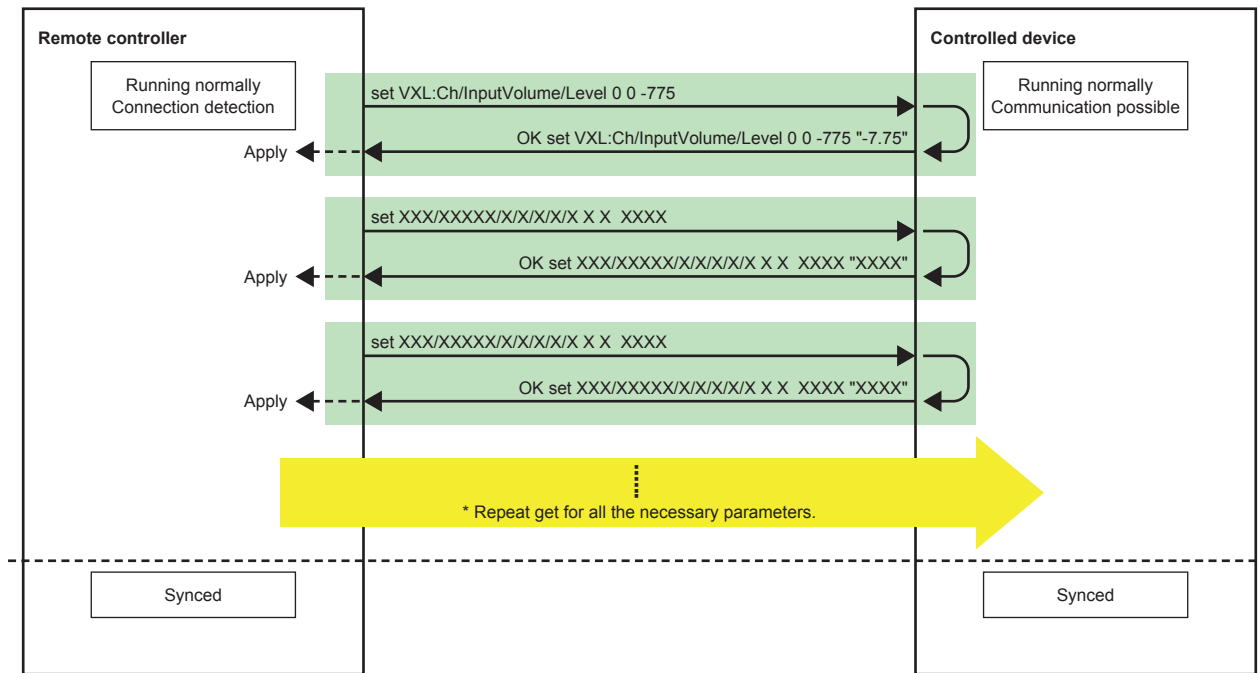
Querying the most recent status of the controlled device or when a snapshot recall occurs



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.

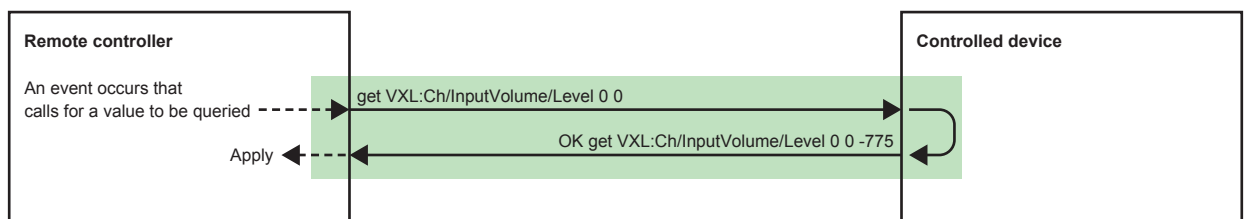
Therefore, the result notification is reflected again on the controller side as necessary.

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.

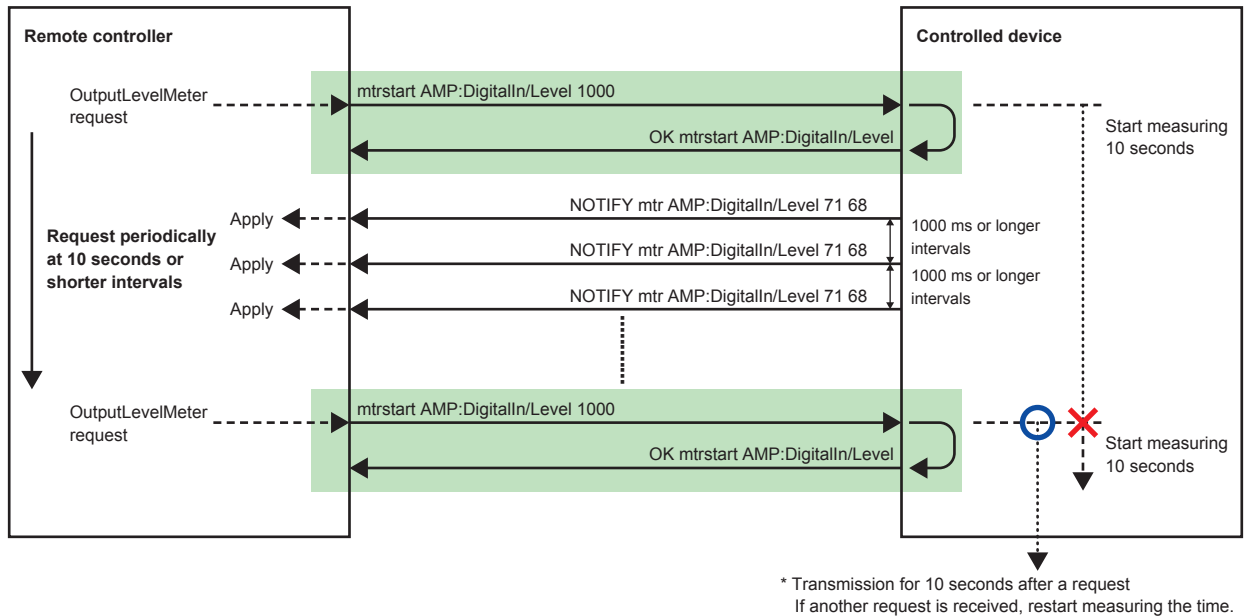
Alternatively, send an explicit get request and apply the result to the indications, as shown below.



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 a 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

5.1.1.

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

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

6. Parameter Value Details

6.1. Fader parameter

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

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

6. Parameter Value Details

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

6.2. 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~ | ∞: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 | -∞ | -8850 | -88.50 | -6980 | -69.80 | -5760 | -57.60 | -4760 | -47.60 | -4140 | -41.40 |
| -13800 | -138.00 | -8800 | -88.00 | -6960 | -69.60 | -5740 | -57.40 | -4750 | -47.50 | -4130 | -41.30 |
| -13600 | -136.00 | -8750 | -87.50 | -6940 | -69.40 | -5720 | -57.20 | -4740 | -47.40 | -4120 | -41.20 |
| -13400 | -134.00 | -8700 | -87.00 | -6920 | -69.20 | -5700 | -57.00 | -4730 | -47.30 | -4110 | -41.10 |
| -13300 | -133.00 | -8650 | -86.50 | -6900 | -69.00 | -5680 | -56.80 | -4720 | -47.20 | -4100 | -41.00 |
| -13200 | -132.00 | -8600 | -86.00 | -6880 | -68.80 | -5660 | -56.60 | -4710 | -47.10 | -4090 | -40.90 |
| -13100 | -131.00 | -8550 | -85.50 | -6860 | -68.60 | -5640 | -56.40 | -4700 | -47.00 | -4080 | -40.80 |
| -13000 | -130.00 | -8500 | -85.00 | -6840 | -68.40 | -5620 | -56.20 | -4690 | -46.90 | -4070 | -40.70 |
| -12900 | -129.00 | -8450 | -84.50 | -6820 | -68.20 | -5600 | -56.00 | -4680 | -46.80 | -4060 | -40.60 |
| -12800 | -128.00 | -8400 | -84.00 | -6800 | -68.00 | -5580 | -55.80 | -4670 | -46.70 | -4050 | -40.50 |
| -12700 | -127.00 | -8350 | -83.50 | -6780 | -67.80 | -5560 | -55.60 | -4660 | -46.60 | -4040 | -40.40 |
| -12600 | -126.00 | -8300 | -83.00 | -6760 | -67.60 | -5540 | -55.40 | -4650 | -46.50 | -4030 | -40.30 |
| -12500 | -125.00 | -8250 | -82.50 | -6740 | -67.40 | -5520 | -55.20 | -4640 | -46.40 | -4020 | -40.20 |
| -12400 | -124.00 | -8200 | -82.00 | -6720 | -67.20 | -5500 | -55.00 | -4630 | -46.30 | -4010 | -40.10 |
| -12300 | -123.00 | -8150 | -81.50 | -6700 | -67.00 | -5480 | -54.80 | -4620 | -46.20 | -4000 | -40.00 |
| -12200 | -122.00 | -8100 | -81.00 | -6680 | -66.80 | -5460 | -54.60 | -4610 | -46.10 | -3990 | -39.90 |
| -12100 | -121.00 | -8050 | -80.50 | -6660 | -66.60 | -5440 | -54.40 | -4600 | -46.00 | -3980 | -39.80 |
| -12000 | -120.00 | -8000 | -80.00 | -6640 | -66.40 | -5420 | -54.20 | -4590 | -45.90 | -3970 | -39.70 |
| -11900 | -119.00 | -7950 | -79.50 | -6620 | -66.20 | -5400 | -54.00 | -4580 | -45.80 | -3960 | -39.60 |
| -11800 | -118.00 | -7900 | -79.00 | -6600 | -66.00 | -5380 | -53.80 | -4570 | -45.70 | -3950 | -39.50 |
| -11700 | -117.00 | -7850 | -78.50 | -6580 | -65.80 | -5360 | -53.60 | -4560 | -45.60 | -3940 | -39.40 |
| -11600 | -116.00 | -7800 | -78.00 | -6560 | -65.60 | -5340 | -53.40 | -4550 | -45.50 | -3930 | -39.30 |
| -11500 | -115.00 | -7780 | -77.80 | -6540 | -65.40 | -5320 | -53.20 | -4540 | -45.40 | -3920 | -39.20 |
| -11400 | -114.00 | -7760 | -77.60 | -6520 | -65.20 | -5300 | -53.00 | -4530 | -45.30 | -3910 | -39.10 |
| -11300 | -113.00 | -7740 | -77.40 | -6500 | -65.00 | -5280 | -52.80 | -4520 | -45.20 | -3900 | -39.00 |
| -11200 | -112.00 | -7720 | -77.20 | -6480 | -64.80 | -5260 | -52.60 | -4510 | -45.10 | -3890 | -38.90 |
| -11100 | -111.00 | -7700 | -77.00 | -6460 | -64.60 | -5240 | -52.40 | -4500 | -45.00 | -3880 | -38.80 |
| -11000 | -110.00 | -7680 | -76.80 | -6440 | -64.40 | -5220 | -52.20 | -4490 | -44.90 | -3870 | -38.70 |
| -10900 | -109.00 | -7660 | -76.60 | -6420 | -64.20 | -5200 | -52.00 | -4480 | -44.80 | -3860 | -38.60 |
| -10800 | -108.00 | -7640 | -76.40 | -6400 | -64.00 | -5180 | -51.80 | -4470 | -44.70 | -3850 | -38.50 |
| -10700 | -107.00 | -7620 | -76.20 | -6380 | -63.80 | -5160 | -51.60 | -4460 | -44.60 | -3840 | -38.40 |
| -10600 | -106.00 | -7600 | -76.00 | -6360 | -63.60 | -5140 | -51.40 | -4450 | -44.50 | -3830 | -38.30 |
| -10500 | -105.00 | -7580 | -75.80 | -6340 | -63.40 | -5120 | -51.20 | -4440 | -44.40 | -3820 | -38.20 |
| -10400 | -104.00 | -7560 | -75.60 | -6320 | -63.20 | -5100 | -51.00 | -4430 | -44.30 | -3810 | -38.10 |
| -10300 | -103.00 | -7540 | -75.40 | -6300 | -63.00 | -5080 | -50.80 | -4420 | -44.20 | -3800 | -38.00 |
| -10200 | -102.00 | -7520 | -75.20 | -6280 | -62.80 | -5060 | -50.60 | -4410 | -44.10 | -3790 | -37.90 |
| -10150 | -101.50 | -7500 | -75.00 | -6260 | -62.60 | -5040 | -50.40 | -4400 | -44.00 | -3780 | -37.80 |
| -10100 | -101.00 | -7480 | -74.80 | -6240 | -62.40 | -5020 | -50.20 | -4390 | -43.90 | -3770 | -37.70 |
| -10050 | -100.50 | -7460 | -74.60 | -6220 | -62.20 | -5000 | -50.00 | -4380 | -43.80 | -3760 | -37.60 |
| -10000 | -100.00 | -7440 | -74.40 | -6200 | -62.00 | -4990 | -49.90 | -4370 | -43.70 | -3750 | -37.50 |
| -9950 | -99.50 | -7420 | -74.20 | -6180 | -61.80 | -4980 | -49.80 | -4360 | -43.60 | -3740 | -37.40 |
| -9900 | -99.00 | -7400 | -74.00 | -6180 | -61.80 | -4970 | -49.70 | -4350 | -43.50 | -3730 | -37.30 |
| -9850 | -98.50 | -7380 | -73.80 | -6160 | -61.60 | -4960 | -49.60 | -4340 | -43.40 | -3720 | -37.20 |
| -9800 | -98.00 | -7360 | -73.60 | -6140 | -61.40 | -4950 | -49.50 | -4330 | -43.30 | -3710 | -37.10 |
| -9750 | -97.50 | -7340 | -73.40 | -6120 | -61.20 | -4940 | -49.40 | -4320 | -43.20 | -3700 | -37.00 |
| -9700 | -97.00 | -7320 | -73.20 | -6100 | -61.00 | -4930 | -49.30 | -4310 | -43.10 | -3690 | -36.90 |
| -9650 | -96.50 | -7300 | -73.00 | -6080 | -60.80 | -4920 | -49.20 | -4300 | -43.00 | -3680 | -36.80 |
| -9600 | -96.00 | -7280 | -72.80 | -6060 | -60.60 | -4910 | -49.10 | -4290 | -42.90 | -3670 | -36.70 |
| -9550 | -95.50 | -7260 | -72.60 | -6040 | -60.40 | -4900 | -49.00 | -4280 | -42.80 | -3660 | -36.60 |
| -9500 | -95.00 | -7240 | -72.40 | -6020 | -60.20 | -4890 | -48.90 | -4270 | -42.70 | -3650 | -36.50 |
| -9450 | -94.50 | -7220 | -72.20 | -6000 | -60.00 | -4880 | -48.80 | -4260 | -42.60 | -3640 | -36.40 |
| -9400 | -94.00 | -7200 | -72.00 | -5980 | -59.80 | -4870 | -48.70 | -4250 | -42.50 | -3630 | -36.30 |
| -9350 | -93.50 | -7180 | -71.80 | -5960 | -59.60 | -4860 | -48.60 | -4240 | -42.40 | -3620 | -36.20 |
| -9300 | -93.00 | -7160 | -71.60 | -5940 | -59.40 | -4850 | -48.50 | -4230 | -42.30 | -3610 | -36.10 |
| -9250 | -92.50 | -7140 | -71.40 | -5920 | -59.20 | -4840 | -48.40 | -4220 | -42.20 | -3600 | -36.00 |
| -9200 | -92.00 | -7120 | -71.20 | -5900 | -59.00 | -4830 | -48.30 | -4210 | -42.10 | -3590 | -35.90 |
| -9150 | -91.50 | -7100 | -71.00 | -5880 | -58.80 | -4820 | -48.20 | -4200 | -42.00 | -3580 | -35.80 |
| -9100 | -91.00 | -7080 | -70.80 | -5860 | -58.60 | -4810 | -48.10 | -4190 | -41.90 | -3570 | -35.70 |
| -9050 | -90.50 | -7060 | -70.60 | -5840 | -58.40 | -4800 | -48.00 | -4180 | -41.80 | -3560 | -35.60 |
| -9000 | -90.00 | -7040 | -70.40 | -5820 | -58.20 | -4790 | -47.90 | -4170 | -41.70 | -3550 | -35.50 |
| -8950 | -89.50 | -7020 | -70.20 | -5800 | -58.00 | -4780 | -47.80 | -4160 | -41.60 | -3540 | -35.40 |
| -8900 | -89.00 | -7000 | -70.00 | -5780 | -57.80 | -4770 | -47.70 | -4150 | -41.50 | -3530 | -35.30 |

| value | Display | value | Display | value | Display | value | Display | value | Display | value | Display |
|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|
| -3520 | -35.20 | -2930 | -29.30 | -2600 | -26.00 | -2270 | -22.70 | -1940 | -19.40 | -1610 | -16.10 |
| -3510 | -35.10 | -2925 | -29.25 | -2595 | -25.95 | -2265 | -22.65 | -1935 | -19.35 | -1605 | -16.05 |
| -3500 | -35.00 | -2920 | -29.20 | -2590 | -25.90 | -2260 | -22.60 | -1930 | -19.30 | -1600 | -16.00 |
| -3490 | -34.90 | -2915 | -29.15 | -2585 | -25.85 | -2255 | -22.55 | -1925 | -19.25 | -1595 | -15.95 |
| -3480 | -34.80 | -2910 | -29.10 | -2580 | -25.80 | -2250 | -22.50 | -1920 | -19.20 | -1590 | -15.90 |
| -3470 | -34.70 | -2905 | -29.05 | -2575 | -25.75 | -2245 | -22.45 | -1915 | -19.15 | -1585 | -15.85 |
| -3460 | -34.60 | -2900 | -29.00 | -2570 | -25.70 | -2240 | -22.40 | -1910 | -19.10 | -1580 | -15.80 |
| -3450 | -34.50 | -2895 | -28.95 | -2565 | -25.65 | -2235 | -22.35 | -1905 | -19.05 | -1575 | -15.75 |
| -3440 | -34.40 | -2890 | -28.90 | -2560 | -25.60 | -2230 | -22.30 | -1900 | -19.00 | -1570 | -15.70 |
| -3430 | -34.30 | -2885 | -28.85 | -2555 | -25.55 | -2225 | -22.25 | -1895 | -18.95 | -1565 | -15.65 |
| -3420 | -34.20 | -2880 | -28.80 | -2550 | -25.50 | -2220 | -22.20 | -1890 | -18.90 | -1560 | -15.60 |
| -3410 | -34.10 | -2875 | -28.75 | -2545 | -25.45 | -2215 | -22.15 | -1885 | -18.85 | -1555 | -15.55 |
| -3400 | -34.00 | -2870 | -28.70 | -2540 | -25.40 | -2210 | -22.10 | -1880 | -18.80 | -1550 | -15.50 |
| -3390 | -33.90 | -2865 | -28.65 | -2535 | -25.35 | -2205 | -22.05 | -1875 | -18.75 | -1545 | -15.45 |
| -3380 | -33.80 | -2860 | -28.60 | -2530 | -25.30 | -2200 | -22.00 | -1870 | -18.70 | -1540 | -15.40 |
| -3370 | -33.70 | -2855 | -28.55 | -2525 | -25.25 | -2195 | -21.95 | -1865 | -18.65 | -1535 | -15.35 |
| -3360 | -33.60 | -2850 | -28.50 | -2520 | -25.20 | -2190 | -21.90 | -1860 | -18.60 | -1530 | -15.30 |
| -3350 | -33.50 | -2845 | -28.45 | -2515 | -25.15 | -2185 | -21.85 | -1855 | -18.55 | -1525 | -15.25 |
| -3340 | -33.40 | -2840 | -28.40 | -2510 | -25.10 | -2180 | -21.80 | -1850 | -18.50 | -1520 | -15.20 |
| -3330 | -33.30 | -2835 | -28.35 | -2505 | -25.05 | -2175 | -21.75 | -1845 | -18.45 | -1515 | -15.15 |
| -3320 | -33.20 | -2830 | -28.30 | -2500 | -25.00 | -2170 | -21.70 | -1840 | -18.40 | -1510 | -15.10 |
| -3310 | -33.10 | -2825 | -28.25 | -2495 | -24.95 | -2165 | -21.65 | -1835 | -18.35 | -1505 | -15.05 |
| -3300 | -33.00 | -2820 | -28.20 | -2490 | -24.90 | -2160 | -21.60 | -1830 | -18.30 | -1500 | -15.00 |
| -3290 | -32.90 | -2815 | -28.15 | -2485 | -24.85 | -2155 | -21.55 | -1825 | -18.25 | -1495 | -14.95 |
| -3280 | -32.80 | -2810 | -28.10 | -2480 | -24.80 | -2150 | -21.50 | -1820 | -18.20 | -1490 | -14.90 |
| -3270 | -32.70 | -2805 | -28.05 | -2475 | -24.75 | -2145 | -21.45 | -1815 | -18.15 | -1485 | -14.85 |
| -3260 | -32.60 | -2800 | -28.00 | -2470 | -24.70 | -2140 | -21.40 | -1810 | -18.10 | -1480 | -14.80 |
| -3250 | -32.50 | -2795 | -27.95 | -2465 | -24.65 | -2135 | -21.35 | -1805 | -18.05 | -1475 | -14.75 |
| -3240 | -32.40 | -2790 | -27.90 | -2460 | -24.60 | -2130 | -21.30 | -1800 | -18.00 | -1470 | -14.70 |
| -3230 | -32.30 | -2785 | -27.85 | -2455 | -24.55 | -2125 | -21.25 | -1795 | -17.95 | -1465 | -14.65 |
| -3220 | -32.20 | -2780 | -27.80 | -2450 | -24.50 | -2120 | -21.20 | -1790 | -17.90 | -1460 | -14.60 |
| -3210 | -32.10 | -2775 | -27.75 | -2445 | -24.45 | -2115 | -21.15 | -1785 | -17.85 | -1455 | -14.55 |
| -3200 | -32.00 | -2770 | -27.70 | -2440 | -24.40 | -2110 | -21.10 | -1780 | -17.80 | -1450 | -14.50 |
| -3190 | -31.90 | -2765 | -27.65 | -2435 | -24.35 | -2105 | -21.05 | -1775 | -17.75 | -1445 | -14.45 |
| -3180 | -31.80 | -2760 | -27.60 | -2430 | -24.30 | -2100 | -21.00 | -1770 | -17.70 | -1440 | -14.40 |
| -3170 | -31.70 | -2755 | -27.55 | -2425 | -24.25 | -2095 | -20.95 | -1765 | -17.65 | -1435 | -14.35 |
| -3160 | -31.60 | -2750 | -27.50 | -2420 | -24.20 | -2090 | -20.90 | -1760 | -17.60 | -1430 | -14.30 |
| -3150 | -31.50 | -2745 | -27.45 | -2415 | -24.15 | -2085 | -20.85 | -1755 | -17.55 | -1425 | -14.25 |
| -3140 | -31.40 | -2740 | -27.40 | -2410 | -24.10 | -2080 | -20.80 | -1750 | -17.50 | -1420 | -14.20 |
| -3130 | -31.30 | -2735 | -27.35 | -2405 | -24.05 | -2075 | -20.75 | -1745 | -17.45 | -1415 | -14.15 |
| -3120 | -31.20 | -2730 | -27.30 | -2400 | -24.00 | -2070 | -20.70 | -1740 | -17.40 | -1410 | -14.10 |
| -3110 | -31.10 | -2725 | -27.25 | -2395 | -23.95 | -2065 | -20.65 | -1735 | -17.35 | -1405 | -14.05 |
| -3100 | -31.00 | -2720 | -27.20 | -2390 | -23.90 | -2060 | -20.60 | -1730 | -17.30 | -1400 | -14.00 |
| -3090 | -30.90 | -2715 | -27.15 | -2385 | -23.85 | -2055 | -20.55 | -1725 | -17.25 | -1395 | -13.95 |
| -3080 | -30.80 | -2710 | -27.10 | -2380 | -23.80 | -2050 | -20.50 | -1720 | -17.20 | -1390 | -13.90 |
| -3070 | -30.70 | -2705 | -27.05 | -2375 | -23.75 | -2045 | -20.45 | -1715 | -17.15 | -1385 | -13.85 |
| -3060 | -30.60 | -2700 | -27.00 | -2370 | -23.70 | -2040 | -20.40 | -1710 | -17.10 | -1380 | -13.80 |
| -3050 | -30.50 | -2695 | -26.95 | -2365 | -23.65 | -2035 | -20.35 | -1705 | -17.05 | -1375 | -13.75 |
| -3040 | -30.40 | -2690 | -26.90 | -2360 | -23.60 | -2030 | -20.30 | -1700 | -17.00 | -1370 | -13.70 |
| -3030 | -30.30 | -2685 | -26.85 | -2355 | -23.55 | -2025 | -20.25 | -1695 | -16.95 | -1365 | -13.65 |
| -3020 | -30.20 | -2680 | -26.80 | -2350 | -23.50 | -2020 | -20.20 | -1690 | -16.90 | -1360 | -13.60 |
| -3010 | -30.10 | -2675 | -26.75 | -2345 | -23.45 | -2015 | -20.15 | -1685 | -16.85 | -1355 | -13.55 |
| -3000 | -30.00 | -2670 | -26.70 | -2340 | -23.40 | -2010 | -20.10 | -1680 | -16.80 | -1350 | -13.50 |
| -2995 | -29.95 | -2665 | -26.65 | -2335 | -23.35 | -2005 | -20.05 | -1675 | -16.75 | -1345 | -13.45 |
| -2990 | -29.90 | -2660 | -26.60 | -2330 | -23.30 | -2000 | -20.00 | -1670 | -16.70 | -1340 | -13.40 |
| -2985 | -29.85 | -2655 | -26.55 | -2325 | -23.25 | -1995 | -19.95 | -1665 | -16.65 | -1335 | -13.35 |
| -2980 | -29.80 | -2650 | -26.50 | -2320 | -23.20 | -1990 | -19.90 | -1660 | -16.60 | -1330 | -13.30 |
| -2975 | -29.75 | -2645 | -26.45 | -2315 | -23.15 | -1985 | -19.85 | -1655 | -16.55 | -1325 | -13.25 |
| -2970 | -29.70 | -2640 | -26.40 | -2310 | -23.10 | -1980 | -19.80 | -1650 | -16.50 | -1320 | -13.20 |
| -2965 | -29.65 | -2635 | -26.35 | -2305 | -23.05 | -1975 | -19.75 | -1645 | -16.45 | -1315 | -13.15 |
| -2960 | -29.60 | -2630 | -26.30 | -2300 | -23.00 | -1970 | -19.70 | -1640 | -16.40 | -1310 | -13.10 |
| -2955 | -29.55 | -2625 | -26.25 | -2295 | -22.95 | -1965 | -19.65 | -1635 | -16.35 | -1305 | -13.05 |
| -2950 | -29.50 | -2620 | -26.20 | -2290 | -22.90 | -1960 | -19.60 | -1630 | -16.30 | -1300 | -13.00 |
| -2945 | -29.45 | -2615 | -26.15 | -2285 | -22.85 | -1955 | -19.55 | -1625 | -16.25 | -1295 | -12.95 |
| -2940 | -29.40 | -2610 | -26.10 | -2280 | -22.80 | -1950 | -19.50 | -1620 | -16.20 | -1290 | -12.90 |
| -2935 | -29.35 | -2605 | -26.05 | -2275 | -22.75 | -1945 | -19.45 | -1615 | -16.15 | -1285 | -12.85 |

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

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

7.1. VXL1-16P

| Parameter Access ID | | | Parameter Name | | | MIN | MAX | unit | Remarks |
|------------------------------|--|--|------------------------------|--------------|---------------|-----------|------------|------|---|
| | X | Y | | | | | | | |
| VXL:Ch/InputGain/Sensitivity | 0 - 1 0: Conference 1: Music | 0 | Gain | InputGain | Gain | -20.0(*) | 20.0(*) | dB | * -2000 - 2000 dB x 100 ex -12.5dB x 100 = -1250 |
| VXL:Ch/Enhancer/On | 0 - 1 0: Conference 1: Music | 0 | Enhancer | Enhancer | On | OFF | ON | - | 0: OFF 1: ON |
| VXL:Compressor/On | 0 | 0 | Comp | DRC | On | OFF | ON | - | 0: OFF 1: ON |
| VXL:Compressor/Threshold | | | | | Threshold | -54 | 0 | dB | |
| VXL:Compressor/Ratio | | | | | Ratio | 1.0:1(*) | ∞:1(*) | - | * 10 - 201 (See"6.2.1.Ratio" in Section 6) |
| VXL:Compressor/Attack | | | | | Attack | 0 | 120 | ms | |
| VXL:Compressor/Release | | | | | Release | 3m(*) | 42.7(*) | s | * 3-42700 (See"6.2.2.Release" in Section 6) |
| VXL:Compressor/Hold | | | | | Hold | 0.02m(*) | 1.96(*) | s | * 2-196000 (See"6.2.3.Hold" in Section 6) ms x 100 ex 20.2ms x 100 = 2020 |
| VXL:Compressor/Gain | | | | | OutGain | 0.00(*) | 18.00(*) | dB | * dB x 100 ex 6.5dB x 100 = 650 |
| VXL:Ch/InputVolume/On | 0 - 1 0:Conference 1: Music | 0 | Level | InputVolume | On | OFF | ON | - | 0: OFF 1: ON |
| VXL:Ch/InputVolume/Level | | | | | Level | -∞(*) | 0.0(*) | dB | * -32768,13800 - 0 (See"6.3.1.Level" in Section 6) dB x 100 ex -24.5dB x 100 = -2450 |
| VXL:Ducker/On | 0 | 0 | DUCKER With Noise Gate | Ducker | On | OFF | ON | - | 0: OFF 1: ON |
| VXL:Ducker/Threshold | | | | | Threshold | -54 | 0 | dB | |
| VXL:Ducker/Range | | | | | Range | -70 | 0 | dB | |
| VXL:Ducker/Attack | | | | | Attack | 0 | 240 | ms | |
| VXL:Ducker/Release | | | | | Release | 3m(*) | 42.7(*) | s | * 3-42700 (See"6.2.2.Release" in Section 6) |
| VXL:Ducker/Hold | | | | | Hold | 0.02m(*) | 1.96(*) | s | * 2-196000 (See"6.2.3.Hold" in Section 6) ms x 100 ex 20.2ms x 100 = 2020 |
| VXL:Ducker/NoiseGateOn | | | | | NoiseGateOn | OFF | ON | - | 0: OFF 1: ON |
| VXL:Ch/PEQ/On | 0 - 1 0: Conference 1: Music | 0 | PEQ 3band | InputEQAllOn | Ch1AllOn | OFF | ON | - | 0: OFF 1: ON |
| VXL:Ch/PEQ/Band/Bypass | 0 - 1 0: Conference 1: Music | 0 - 2 0: Band A 1: Band B 2: Band C | | InputPEQ | On | Bypass ON | Bypass OFF | - | 0:Off(Bypass OFF) 1:On(Bypass ON) |
| VXL:Ch/PEQ/Band/Frequency | | | | | Frequency | 20.000(*) | 20.000k(*) | Hz | * 20000 - 20000000 (See"6.6.1 Frequency" in Section 6) |
| VXL:Ch/PEQ/Band/Gain | | | | | Gain | -18.0(*) | 6.0(*) | dB | * dB x 10 ex -6.5dB x 10 = -65 |
| VXL:Ch/PEQ/Band/Q | | | | | Q | 0.1(*) | 63.0(*) | - | *100-63000 (See"6.6.2 Q" in Section 6) Q x 1000 ex 0.53 x 1000 = 530 |
| VXL:Ch/PEQ/Band/Type | | | | | Type | PEQ(*) | LPF(*) | - | * 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 |
| - | | | | | _BypassResult | OFF | ON | - | 0: OFF 1: ON |
| VXL:Mix/Fader/On | 0 - 2 0: Conference 1: Music 2: OSC | 0 | Matrix MIXER | Mixer | On | OFF | ON | - | 0: OFF 1: ON |
| VXL:Mix/Fader/Level | | | | | Level | -∞(*) | 0.0(*) | dB | * -32768 - 0 (See"6.3.1 Level" in Section 6) |

| Parameter Access ID | | | Parameter Name | | MIN | MAX | unit | Remarks | |
|----------------------------|---|---|---------------------|---------------|-----------|------------|------------|--------------------------------------|---|
| | X | Y | | | | | | | |
| VXL:RoomEQ/On | 0 | 0 | Room EQ 10Band | RoomEQAllOn | AllOn | OFF | ON | - | 0: OFF 1: ON |
| VXL:RoomEQ/BandL/Bypass | 0 | 0 - 3 0: Band A 1: Band B : 3: Band D | | RoomEQL | On | Bypass ON | Bypass OFF | - | 0:Off(Bypass OFF) 1:On(Bypass ON) |
| VXL:RoomEQ/BandL/Frequency | | | | | Frequency | 20.000(*) | 20.000k(*) | Hz | * 20000 - 20000000 (See"6.6.1 Frequency" in Section 6) |
| VXL:RoomEQ/BandL/Gain | | | | | Gain | -18.0(*) | 6.0(*) | dB | * dB x 10 ex -6.5dB x 10 = -65 |
| VXL:RoomEQ/BandL/Q | | | | | Q | 0.1(*) | 63.0(*) | - | * 100-63000 (See"6.6.2 Q" in Section 6) Q x 1000 ex 0.53 x 1000 = 530 |
| VXL:RoomEQ/BandL/Type | | | | | Type | PEQ(*) | LPF(*) | - | * 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 |
| - | | | | _BypassResult | OFF | ON | - | 0: OFF 1: ON | |
| VXL:RoomEQ/Band/Bypass | 0 | 0 - 5 | RoomEQ | On | Bypass ON | Bypass OFF | - | 0:Off(Bypass OFF) 1:On(Bypass ON) | |
| VXL:RoomEQ/Band/Frequency | 0 | 0: Band E 1: Band F : 5: Band J | | RoomEQ | Frequency | 100.000(*) | 20.000k(*) | Hz | * 100000 - 20000000 (See"6.6.1 Frequency" in Section 6) |
| VXL:RoomEQ/Band/Gain | | | | | Gain | -18.0(*) | 6.0(*) | dB | * dB x 10 ex -6.5dB x 10 = -65 |
| VXL:RoomEQ/Band/Q | | | | | Q | 0.1(*) | 63.0(*) | - | * 100-63000 (See"6.6.2 Q" in Section 6) Q x 1000 ex 0.53 x 1000 = 530 |
| VXL:RoomEQ/Band/Type | | | | | Type | PEQ(*) | LPF(*) | - | * 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 |
| AMP:Ch/Delay/On | 0 | 0 | Delay | Delay | On | OFF | ON | - | 0: OFF 1: ON |
| AMP:Ch/Delay/Time | | | | | DelayTime | 0.000(*) | 100.000(*) | ms | * ms x 1000 ex: 24ms x1000 =24000 |
| VXL:Oscillator/On | 0 | 0 | PinkNoise Generator | OSC | On | OFF | ON | - | 0: OFF 1: ON |
| VXL:Oscillator/Level | | | | | Level | -∞(*) | 0.0(*) | dB | * -32768 - 0 (See"6.3.1.Level" in Section 6) |
| AMP:Ch/Mute | 0 | 0 | Master Vol. | MainVolume | On | Mute | Unmute | - | 0:Off(Unmute) 1:On(Mute) |
| AMP:Ch/Volume | | | | | Level | -∞(*) | 0.0(*) | dB | * -32768,13800 - 0 (See"6.3.1.Level" in Section 6) dB x 100 ex -24.5dB x 100 = -2450 |

8. Meter List

8.1. VXL1-16P

| Meter Id | Meter Name | Type (*) | Remarks |
|----------------------------|--------------------------------|----------|----------------|
| AMP:DigitalIn/Level | Digital Input Level | level | |
| VXL:Compressor/OutputLevel | Compressor Output Level | level | Ch2 is invalid |
| VXL:Compressor/GR | Compressor GR | gr | Ch2 is invalid |
| VXL:Ducker/OutputLevel | Ducker Output Level | level | Ch2 is invalid |
| VXL:Ducker/GR | Ducker GR | gr | Ch2 is invalid |
| AMP:Ch/OutputVoltage | Amplifier Output Voltage Level | level | Ch2 is invalid |