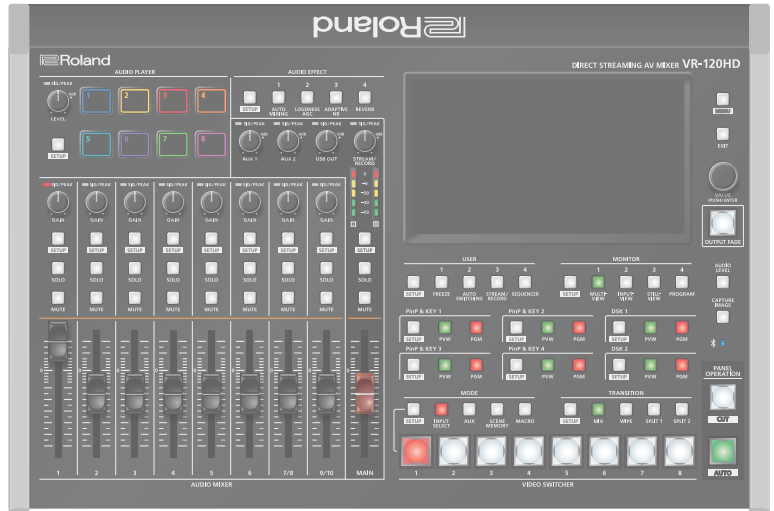


DIRECT STREAMING AV MIXER VR-120HD

Remote Control Guide



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MIDI Implementation

Model: VR-120HD
 Date: September 4, 2024
 Version: 2.00

Symbol	Item	Setting Range
n	MIDI Channel	Fixed at 00H

1. MIDI Messages Received at MIDI IN

System Exclusive Messages

Status	Data Byte	Status
F0H	iiH,ddH,...,eeH	F7H

F0H: Status of system exclusive message

ii= ID number: This is the ID to recognize manufacturer of the exclusive message (manufacturer ID). The manufacturer ID of Roland is 41H. The ID numbers of 7EH and 7FH are expansion of MIDI standards and used as universal non-realtime message (7EH) of universal realtime message (7FH).

dd,...,ee= data: 00H–7FH (0–127)

F7H: EOX (end of exclusive)

Data Request 1 (RQ1)

This is the message to request of "send data" to the connected device. Specify data type and amount using address and size. When this is received, the unit sends the requested data as "Data Set 1 (DT1)" message in case the unit is in status where the sending of data is possible and requested address and size are appropriate. If not, the unit sends nothing.

Status	Data Byte	Status
F0H	41H, 10H, 00H, 00H, 00H, 00H, 25H, 11H, aaH, bbH, ccH, ssH, ttH, uuH, sum	F7H

Byte	Explanation
F0H	Exclusive Status
41H	Manufacturer ID (Roland)
10H	Device ID
00H	1st byte of model ID (VR-120HD)
00H	2nd byte of model ID (VR-120HD)
00H	3rd byte of model ID (VR-120HD)
00H	4th byte of model ID (VR-120HD)
25H	5th byte of model ID (VR-120HD)
11H	Command ID (RQ1)
aaH	Address upper byte
bbH	Address middle byte
ccH	Address lower byte
ssH	Size upper byte
ttH	Size middle byte
uuH	Size lower byte
sum	Checksum
F7H	EOX (end of exclusive)

* Depending on the data type, the amount of single-time transmission is specified. It is necessary to execute data request according to the specified first address and size. Refer to the "2. Parameter Address Map" (p. 3) for address and size.

* See "Example of an Exclusive Message and Calculating a Checksum" (p. 43) for checksum.

Data Set 1 (DT1)

This is the message of actual data transmission. Use this when you want to set data to the unit.

Status	Data Byte	Status
F0H	41H, 10H, 00H, 00H, 00H, 00H, 25H, 12H, aaH, bbH, ccH, ddH, ..., eeH, sum	F7H

Byte	Explanation
F0H	Exclusive Status
41H	Manufacturer ID (Roland)
10H	Device ID
00H	1st byte of model ID (VR-120HD)
00H	2nd byte of model ID (VR-120HD)
00H	3rd byte of model ID (VR-120HD)
00H	4th byte of model ID (VR-120HD)
25H	5th byte of model ID (VR-120HD)
12H	Command ID (DT1)
aaH	Address upper byte
bbH	Address middle byte
ccH	Address lower byte
ddH	Data: actual data to transmit. Multiple byte data is sent in address order.
:	:
eeH	Data
sum	Checksum
F7H	EOX (end of exclusive)

* Depending on the data type, the amount of single-time transmission is specified. It is necessary to execute data request according to the specified first address and size. Refer to the "2. Parameter Address Map" (p. 3) for address and size.

* See "Example of an Exclusive Message and Calculating a Checksum" (p. 43) for checksum.

* Data exceeding 256 bytes should be divided into packets of 256 bytes or smaller. If you send data set 1 successively, set interval of 20 msec or longer between packets.

2. Parameter Address Map

Start Address	Description
00H 00H 00H	Video Parameter Area
01H 00H 00H	Audio Parameter Area
02H 00H 00H	System Parameter Area
0AH 00H 00H	Other Parameter Area
0CH 00H 00H	Tally Parameter Area
10H 00H 00H	Video Parameter (Scene Memory 1)
11H 00H 00H	Audio Parameter (Scene Memory 1)
12H 00H 00H	Video Parameter (Scene Memory 2)
13H 00H 00H	Audio Parameter (Scene Memory 2)
14H 00H 00H	Video Parameter (Scene Memory 3)
15H 00H 00H	Audio Parameter (Scene Memory 3)
16H 00H 00H	Video Parameter (Scene Memory 4)
17H 00H 00H	Audio Parameter (Scene Memory 4)

Start Address	Description
18H 00H 00H	Video Parameter (Scene Memory 5)
19H 00H 00H	Audio Parameter (Scene Memory 5)
1AH 00H 00H	Video Parameter (Scene Memory 6)
1BH 00H 00H	Audio Parameter (Scene Memory 6)
1CH 00H 00H	Video Parameter (Scene Memory 7)
1DH 00H 00H	Audio Parameter (Scene Memory 7)
1EH 00H 00H	Video Parameter (Scene Memory 8)
1FH 00H 00H	Audio Parameter (Scene Memory 8)
:	:
4EH 00H 00H	Video Parameter (Scene Memory 32)
4FH 00H 00H	Audio Parameter (Scene Memory 32)
60H 00H 00H	Memory Name

● Video Parameter Area

○ VIDEO ASSIGN

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H 00H 00H	Input 1 Assign	00H-20H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Stream/Record Status 1, Stream/Record Status 2, Date&time
00H 00H 01H	Input 2 Assign	00H-20H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Stream/Record Status 1, Stream/Record Status 2, Date&time
00H 00H 02H	Input 3 Assign	00H-20H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Stream/Record Status 1, Stream/Record Status 2, Date&time
00H 00H 03H	Input 4 Assign	00H-20H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Stream/Record Status 1, Stream/Record Status 2, Date&time
00H 00H 04H	Input 5 Assign	00H-20H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Stream/Record Status 1, Stream/Record Status 2, Date&time
00H 00H 05H	Input 6 Assign	00H-20H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Stream/Record Status 1, Stream/Record Status 2, Date&time
00H 00H 06H	Input 7 Assign	00H-20H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Stream/Record Status 1, Stream/Record Status 2, Date&time
00H 00H 07H	Input 8 Assign	00H-20H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Stream/Record Status 1, Stream/Record Status 2, Date&time
00H 00H 08H	HDMI Out 1 Assign	00H-0AH	Program, Sub Program, Preview, AUX 1-3, DSK 1-2 Source, Multi-View, Input-View, Still-View
00H 00H 09H	HDMI Out 2 Assign	00H-0AH	Program, Sub Program, Preview, AUX 1-3, DSK 1-2 Source, Multi-View, Input-View, Still-View
00H 00H 0AH	HDMI Out 3 Assign	00H-0AH	Program, Sub Program, Preview, AUX 1-3, DSK 1-2 Source, Multi-View, Input-View, Still-View
00H 00H 0BH	SDI Out 1 Assign	00H-0AH	Program, Sub Program, Preview, AUX 1-3, DSK 1-2 Source, Multi-View, Input-View, Still-View
00H 00H 0CH	SDI Out 2 Assign	00H-0AH	Program, Sub Program, Preview, AUX 1-3, DSK 1-2 Source, Multi-View, Input-View, Still-View
00H 00H 0DH	SDI Out 3 Assign	00H-0AH	Program, Sub Program, Preview, AUX 1-3, DSK 1-2 Source, Multi-View, Input-View, Still-View
00H 00H 0EH	USB Out Assign	00H-0AH	Program, Sub Program, Preview, AUX 1-3, DSK 1-2 Source, Multi-View, Input-View, Still-View
00H 00H 0FH	Stream/Record Assign	00H-0AH	Program, Sub Program, Preview, AUX 1-3, DSK 1-2 Source, Multi-View, Input-View, Still-View
00H 00H 10H	LCD Monitor Assign	00H-0AH	Program, Sub Program, Preview, AUX 1-3, DSK 1-2 Source, Multi-View, Input-View, Still-View
00H 00H 11H	AUX 1 Source	00H-24H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
00H 00H 12H	Program Layer PinP&Key 1	00H-01H	Disable, Enable
00H 00H 13H	Program Layer PinP&Key 2	00H-01H	Disable, Enable
00H 00H 14H	Program Layer PinP&Key 3	00H-01H	Disable, Enable
00H 00H 15H	Program Layer PinP&Key 4	00H-01H	Disable, Enable
00H 00H 16H	Program Layer DSK 1	00H-01H	Disable, Enable
00H 00H 17H	Program Layer DSK 2	00H-01H	Disable, Enable
00H 00H 18H	Sub Program Layer PinP&Key 1	00H-01H	Disable, Enable
00H 00H 19H	Sub Program Layer PinP&Key 2	00H-01H	Disable, Enable

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H 00H 1AH	Sub Program Layer PinP&Key 3	00H-01H	Disable, Enable
00H 00H 1BH	Sub Program Layer PinP&Key 4	00H-01H	Disable, Enable
00H 00H 1CH	Sub Program Layer DSK 1	00H-01H	Disable, Enable
00H 00H 1DH	Sub Program Layer DSK 2	00H-01H	Disable, Enable
00H 00H 1EH	AUX 1 Layer PinP&Key 1	00H-02H	Disable, Enable, Always On
00H 00H 1FH	AUX 1 Layer PinP&Key 2	00H-02H	Disable, Enable, Always On
00H 00H 20H	AUX 1 Layer PinP&Key 3	00H-02H	Disable, Enable, Always On
00H 00H 21H	AUX 1 Layer PinP&Key 4	00H-02H	Disable, Enable, Always On
00H 00H 22H	AUX 1 Layer DSK 1	00H-02H	Disable, Enable, Always On
00H 00H 23H	AUX 1 Layer DSK 2	00H-02H	Disable, Enable, Always On
00H 00H 24H	AUX 2 Source	00H-24H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
00H 00H 25H	AUX 3 Source	00H-24H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
00H 00H 26H	AUX 2 Layer PinP&Key 1	00H-02H	Disable, Enable, Always On
00H 00H 27H	AUX 2 Layer PinP&Key 2	00H-02H	Disable, Enable, Always On
00H 00H 28H	AUX 2 Layer PinP&Key 3	00H-02H	Disable, Enable, Always On
00H 00H 29H	AUX 2 Layer PinP&Key 4	00H-02H	Disable, Enable, Always On
00H 00H 2AH	AUX 2 Layer DSK 1	00H-02H	Disable, Enable, Always On
00H 00H 2BH	AUX 2 Layer DSK 2	00H-02H	Disable, Enable, Always On
00H 00H 2CH	AUX 3 Layer PinP&Key 1	00H-02H	Disable, Enable, Always On
00H 00H 2DH	AUX 3 Layer PinP&Key 2	00H-02H	Disable, Enable, Always On
00H 00H 2EH	AUX 3 Layer PinP&Key 3	00H-02H	Disable, Enable, Always On
00H 00H 2FH	AUX 3 Layer PinP&Key 4	00H-02H	Disable, Enable, Always On
00H 00H 30H	AUX 3 Layer DSK 1	00H-02H	Disable, Enable, Always On
00H 00H 31H	AUX 3 Layer DSK 2	00H-02H	Disable, Enable, Always On

○ Video Input (HDMI)

* xxH: 01H-06H (HDMI In 1-6)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H xxH 00H	Flicker Filter	00H-01H	Off, On
00H xxH 01H	Flip H	00H-01H	Off, On
00H xxH 02H	Flip V	00H-01H	Off, On
00H xxH 03H	EDID	00H-08H	Internal, SVGA (800x600), XGA (1024x768), WXGA (1280x800), FWXGA (1366x768), SXGA (1280x1024), SXGA+ (1400x1050), UXGA (1600x1200), WUXGA (1920x1200), 720p, 1080i, 1080p
00H xxH 04H 05H	Zoom	00H 64H-4EH 10H	10.0-1000.0%
00H xxH 06H	Scaling Type	00H-04H	Full, Letter Box, Crop, Dot By Dot, Manual
00H xxH 07H 08H	Manual Size H	70H 30H-00H 00H-0FH 50H	-2000-0-2000
00H xxH 09H 0AH	Manual Size V	70H 30H-00H 00H-0FH 50H	-2000-0-2000
00H xxH 0BH 0CH	Position H	71H 00H-00H 00H-0FH 00H	-1920-0-1920
00H xxH 0DH 0EH	Position V	76H 50H-00H 00H-09H 30H	-1200-0-1200
00H xxH 0FH	Brightness	60H-00H-1FH	-32-0-31
00H xxH 10H	Contrast	60H-00H-1FH	-32-0-31
00H xxH 11H	Saturation	60H-00H-1FH	-32-0-31
00H xxH 12H	Red	40H-00H-3FH	-64-0-63
00H xxH 13H	Green	40H-00H-3FH	-64-0-63
00H xxH 14H	Blue	40H-00H-3FH	-64-0-63
00H xxH 15H	Color Space	00H-04H	Auto, RGB(0-255), RGB(16-235), YPbPr(SD), YPbPr(HD)
00H xxH 16H	Test Pattern	00H-0CH	Off, Color Bars 75%, Color Bars 100%, Ramp, Step, Hatch, Diamond, Circle, Color Bars 75%-SP, Color Bars 100%-SP, Ramp-SP, Step-SP, Hatch-SP

○ Video Input (SDI)

* xxH: 07H-0CH (SDI In 1-6)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H xxH 00H	Flip H	00H-01H	Off, On
00H xxH 01H	Flip V	00H-01H	Off, On
00H xxH 02H	Brightness	60H-00H-1FH	-32-0-31

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H xxH 03H	Contrast	60H-00H-1FH	-32-0-31
00H xxH 04H	Saturation	60H-00H-1FH	-32-0-31

○ Video Input (Video Player/SRT In)

0DH

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H 0DH 00H	Flip H	00H-01H	Off, On
00H 0DH 01H	Flip V	00H-01H	Off, On

○ VIDEO OUTPUT (HDMI)

* xxH: 0EH-10H (HDMI OUT 1-3)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H xxH 00H	Color Space	00H-03H	YPbPr (4: 4: 4), YPbPr (4: 2: 2), RGB (0-255), RGB (16-235)
00H xxH 01H	DVI-D/HDMI Signal	00H-01H	HDMI, DVI-D
00H xxH 02H	Brightness	40H-00H-3FH	-64-0-63
00H xxH 03H	Contrast	40H-00H-3FH	-64-0-63
00H xxH 04H	Saturation	40H-00H-3FH	-64-0-63
00H xxH 05H	Red	40H-00H-3FH	-64-0-63
00H xxH 06H	Green	40H-00H-3FH	-64-0-63
00H xxH 07H	Blue	40H-00H-3FH	-64-0-63
00H xxH 08H	External Rec Control	00H-01H	Off, On

○ VIDEO OUTPUT (SDI)

* xxH: 11H-13H (SDI OUT 1-3)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H xxH 00H	3G-SDI Mapping	00H-01H	Level-A, Level-B
00H xxH 01H	Brightness	40H-00H-3FH	-64-0-63
00H xxH 02H	Contrast	40H-00H-3FH	-64-0-63
00H xxH 03H	Saturation	40H-00H-3FH	-64-0-63

○ Transition, Mix, Wipe, Split

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H 14H 00H	Transition	00H-03H	Mix, Wipe, Split 1, Split 2
00H 14H 01H	Mix Type	00H-02H	Mix, FAM, NAM
00H 14H 02H	Mix Time	00H-28H	0.0-4.0sec
00H 14H 03H	Wipe Type	00H-07H	Horizontal, Vertical, Upper Left, Upper Right, Lower Left, Lower Right, H-Center, V-Center
00H 14H 04H	Mix Time	00H-28H	0.0-4.0sec
00H 14H 05H	Wipe Direction	00H-02H	Normal, Reverse, Round Trip
00H 14H 06H	Wipe Border Color	00H-09H	White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, Custom, Soft Edge
00H 14H 07H	Wipe Border Width	00H-0EH	0-14
00H 14H 08H	Split 1 Sw	00H-01H	OFF, ON
00H 14H 09H	Split 1 Type	00H-01H	SPLIT V, SPLIT H
00H 14H 0AH 0BH	Split 1 PGM/A-Center	7CH 0CH-00H 00H-03H 74H	-50.0-0.0-50.0%
00H 14H 0CH 0DH	Split 1 PST/B-Center	7CH 0CH-00H 00H-03H 74H	-50.0-0.0-50.0%
00H 14H 0EH 0FH	Split 1 Center Position	7CH 0CH-00H 00H-03H 74H	-50.0-0.0-50.0%
00H 14H 10H	Split 1 Border Color	00H-08H	White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, Custom
00H 14H 11H	Split 1 Border Width	00H-0EH	0-14
00H 14H 12H	Split 2 Sw	00H-01H	OFF, ON
00H 14H 13H	Split 2 Type	00H-01H	SPLIT V, SPLIT H
00H 14H 14H 15H	Split 2 PGM/A-Center	7CH 0CH-00H 00H-03H 74H	-50.0-0.0-50.0%
00H 14H 16H 17H	Split 2 PST/B-Center	7CH 0CH-00H 00H-03H 74H	-50.0-0.0-50.0%
00H 14H 18H 19H	Split 2 Center Position	7CH 0CH-00H 00H-03H 74H	-50.0-0.0-50.0%

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H 14H 1AH	Split 2 Border Color	00H-08H	White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, Custom
00H 14H 1BH	Split 2 Border Width	00H-0EH	0-14
00H 14H 1CH 1DH	Wipe Border Color Red	00H 00H-01H 7FH	0-255
00H 14H 1EH 1FH	Wipe Border Color Green	00H 00H-01H 7FH	0-255
00H 14H 20H 21H	Wipe Border Color Blue	00H 00H-01H 7FH	0-255
00H 14H 22H 23H	Split 1 Border Color Red	00H 00H-01H 7FH	0-255
00H 14H 24H 25H	Split 1 Border Color Green	00H 00H-01H 7FH	0-255
00H 14H 26H 27H	Split 1 Border Color Blue	00H 00H-01H 7FH	0-255
00H 14H 28H 29H	Split 2 Border Color Red	00H 00H-01H 7FH	0-255
00H 14H 2AH 2BH	Split 2 Border Color Green	00H 00H-01H 7FH	0-255
00H 14H 2CH 2DH	Split 2 Border Color Blue	00H 00H-01H 7FH	0-255

○ PinP&Key

* xxH: 15H-18H (PinP&Key 1-4)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H xxH 00H	Time	00H-28H	0.0-4.0sec
00H xxH 01H	Pgm Sw	00H-01H	Off, On
00H xxH 02H	Pww Sw	00H-01H	Off, On
00H xxH 03H	Source	00H-24H	Hdmi In 1-6, Sdi In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
00H xxH 04H	Type	00H-03H	PinP, Luminance-White Key, Luminance-Black Key, Chroma Key
00H xxH 05H 06H	Position H	78H 18H-00H 00H-07H 68H	-100.0-0.0-100.0%
00H xxH 07H 08H	Position V	78H 18H-00H 00H-07H 68H	-100.0-0.0-100.0%
00H xxH 09H 0AH	Size	00H 00H-07H 68H	0.0-100.0%
00H xxH 0BH 0CH	Cropping H	00H 00H-07H 68H	0.0-100.0%
00H xxH 0DH 0EH	Cropping V	00H 00H-07H 68H	0.0-100.0%
00H xxH 0FH	Shape	00H-02H	Rectangle, Circle, Diamond
00H xxH 10H	Border Color	00H-09H	White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, Custom, Soft Edge
00H xxH 11H	Border Width	00H-0EH	0-14
00H xxH 12H 13H	View Position H	7CH 0CH-00H 00H-03H 74H	-50.0-0.0-50.0%
00H xxH 14H 15H	View Position V	7CH 0CH-00H 00H-03H 74H	-50.0-0.0-50.0%
00H xxH 16H 17H	View Zoom	00H 64H-03H 10H	100-400%
00H xxH 18H 19H	Key Level	00H 00H-01H 7FH	0-255
00H xxH 1AH 1BH	Key Gain	00H 00H-01H 7FH	0-255
00H xxH 1CH 1DH	Mix Level	00H 00H-01H 7FH	0-255
00H xxH 1EH	Chroma Color	00H-01H	Green, Blue
00H xxH 1FH	Hue Width	62H-00H-1EH	-30-0-30
00H xxH 20H 21H	Hue Fine	00H 00H-02H 68H	0-360
00H xxH 22H 23H	Saturation Width	7FH 00H-00H 00H-00H 7FH	-128-0-127
00H xxH 24H 25H	Saturation Fine	00H 00H-01H 7FH	0-255
00H xxH 26H 27H	Border Color Red	00H 00H-01H 7FH	0-255

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H xxH 28H 29H	Border Color Green	00H 00H-01H 7FH	0-255
00H xxH 2AH 2BH	Border Color Blue	00H 00H-01H 7FH	0-255
00H xxH 2CH 2DH	Value Width	7FH 00H-00H 00H -00H 7FH	-128-0-127
00H xxH 2EH 2FH	Value Fine	00H 00H-01H 7FH	0-255
00H xxH 30H	Despill	00H-01H	Off, On

○ DSK

* xxH: 19H-1AH (DSK 1, 2)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H xxH 00H	Time	00H-28H	0.0-4.0sec
00H xxH 01H	Pgm Sw	00H-01H	Off, On
00H xxH 02H	Pvw Sw	00H-01H	Off, On
00H xxH 03H	Mode	00H-02H	Self Key, Alpha Key, External Key
00H xxH 04H	Key Source	00H-24H	Hdmi In 1-6, Sdi In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
00H xxH 05H	Fill Source	00H-24H	Hdmi In 1-6, Sdi In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
00H xxH 06H	Type	00H-02H	Luminance-White Key, Luminance-Black Key, Chroma Key
00H xxH 07H 08H	Level	00H 00H-01H 7FH	0-255
00H xxH 09H 0AH	Gain	00H 00H-01H 7FH	0-255
00H xxH 0BH 0CH	Mix Level	00H 00H-01H 7FH	0-255
00H xxH 0DH	Chroma Color	00H-01H	Green, Blue
00H xxH 0EH	Hue Width	62H-00H-1EH	-30-0-30
00H xxH 0FH 10H	Hue Fine	00H 00H-02H 68H	0-360
00H xxH 11H 12H	Saturation Width	7FH 00H-00H 00H-00H 7FH	-128-0-127
00H xxH 13H 14H	Saturation Fine	00H 00H-01H 7FH	0-255
00H xxH 15H	Fill Type	00H-01H	Bus, Matte
00H xxH 16H	Matte Color	00H-08H	White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, Custom
00H xxH 17H	Edge Type	00H-04H	Off, Border, Drop, Shadow, Outline
00H xxH 18H	Edge Color	00H-08H	White, Yellow, Cyan, Green, Magenta, Red, Blue, Black, Custom
00H xxH 19H	Edge Width	00H-07H	0-7
00H xxH 26H 27H	Matte Color Red	00H 00H-01H 7FH	0-255
00H xxH 28H 29H	Matte Color Green	00H 00H-01H 7FH	0-255
00H xxH 2AH 2BH	Matte Color Blue	00H 00H-01H 7FH	0-255
00H xxH 26H 27H	Edge Color Red	00H 00H-01H 7FH	0-255
00H xxH 28H 29H	Edge Color Green	00H 00H-01H 7FH	0-255
00H xxH 2AH 2BH	Edge Color Blue	00H 00H-01H 7FH	0-255
00H xxH 2CH 2DH	Value Width	7FH 00H-00H 00H -00H 7FH	-128-0-127
00H xxH 2EH 2FH	Value Fine	00H 00H-01H 7FH	0-255
00H xxH 30H	Despill	00H-01H	Off, On

○ Panel

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H 1BH 00H	PGM Select	00H-24H	Hdmi In 1-6, Sdi In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
00H 1BH 01H	PST Select	00H-24H	Hdmi In 1-6, Sdi In 1-6, Still 1-16, Video Player/SRT In, Input 1-8

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
00H 1BH 02H 03H	PGM/PST Fader Level	00H 00H-0FH 7FH	0-2047
00H 1BH 04H	Dissolve Take Type	00H-01H	Cut, Auto
00H 1BH 05H	Fader Base	00H-01H	Upper, Lower

● Audio Parameter Area

○ Audio Fader/Knob Assign

00H

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 00H 00H	Input Fader 1	00H-17H	Audio In 1-6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In
01H 00H 01H	Input Fader 2	00H-17H	Audio In 1-6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-7, Video Player/SRT In
01H 00H 02H	Input Fader 3	00H-17H	Audio In 1-6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-8, Video Player/SRT In
01H 00H 03H	Input Fader 4	00H-17H	Audio In 1-6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-9, Video Player/SRT In
01H 00H 04H	Input Fader 5	00H-17H	Audio In 1-6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-10, Video Player/SRT In
01H 00H 05H	Input Fader 6	00H-17H	Audio In 1-6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-11, Video Player/SRT In
01H 00H 06H	Input Fader 7	00H-17H	Audio In 1-6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-12, Video Player/SRT In
01H 00H 07H	Input Fader 8	00H-17H	Audio In 1-6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-13, Video Player/SRT In
01H 00H 08H	Output Knob AUX 1	00H-06H	Main Bus, AUX 1-3 Bus, USB Out, Stream/Record, Monitor Bus
01H 00H 09H	Output Knob AUX 2	00H-06H	Main Bus, AUX 1-3 Bus, USB Out, Stream/Record, Monitor Bus
01H 00H 0AH	Output Knob USB OUT	00H-06H	Main Bus, AUX 1-3 Bus, USB Out, Stream/Record, Monitor Bus
01H 00H 0BH	Output Knob STREAM/RECORD	00H-06H	Main Bus, AUX 1-3 Bus, USB Out, Stream/Record, Monitor Bus
01H 00H 0CH	Output Fader MAIN	00H-06H	Main Bus, AUX 1-3 Bus, USB Out, Stream/Record, Monitor Bus

○ Audio Input

* xxH: 01H-18H (Audio In 1-6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H xxH 00H	Analog Gain	00H-44H	0-68 dB
01H xxH 01H 02H	Digital Gain	7CH 5CH-00H 00H-03H 24H	-42.0-0.0-42.0dB
01H xxH 03H 04H 05H	Input Level	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H xxH 06H	Input Mute	00H-01H	Off, On
01H xxH 07H	Phantom +48V	00H-01H	Off, On
01H xxH 08H	Pan	00H-32H-64H	Left-Center-Right
01H xxH 09H	Stereo Link	00H-01H	Off, On
01H xxH 0AH	Mono	00H-03H	Off, L Only, R Only, LR Mix
01H xxH 0BH	Solo	00H-01H	Off, On
01H xxH 0CH	Main Send	00H-01H	Off, On
01H xxH 0DH	Effect Preset	00H-04H	Default, Meeting, Interview, Ambient Mic, Windy Field
01H xxH 0EH 0FH	Delay	00H 00H-27H 08H	0.0-500.0msec
01H xxH 10H	Reverb Send	00H-7FH	0-127
01H xxH 11H	High Pass Filter Sw	00H-01H	Off, On
01H xxH 12H	Echo Canceller Sw	00H-01H	Off, On
01H xxH 13H	Echo Canceller Depth	01H-0AH	1-10
01H xxH 14H	Howling Canceller	00H-01H	Off, On
01H xxH 15H	De-Esser Sw	00H-01H	Off, On
01H xxH 16H	De-Esser Sens	00H-64H	0-100
01H xxH 17H	De-Esser Depth	00H-64H	0-100
01H xxH 18H	Noise Gate Sw	00H-01H	Off, On
01H xxH 19H	Noise Gate Threshold	30H-00H	-80-0dB
01H xxH 1AH	Noise Gate Release	00H-7FH	30-5000msec

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H xxH 1BH	Compressor Sw	00H-01H	Off, On
01H xxH 1CH	Compressor Threshold	4EH-00H	-50-0dB
01H xxH 1DH	Compressor Ratio	00H-0DH	1.00: 1, 1.12: 1, 1.25: 1, 1.40: 1, 1.60: 1, 1.80: 1, 2.00: 1, 2.50: 1, 3.20: 1, 4.00: 1, 5.60: 1, 8.00: 1, 16.0: 1, INF: 1
01H xxH 1EH	Compressor Attack	00H-73H	0.0-100msec
01H xxH 1FH	Compressor Release	00H-7FH	30-5000msec
01H xxH 20H	Compressor Makeup Gain	58H-00H-28H	-40-0-40dB
01H xxH 21H	Equalizer Sw	00H-01H	Off, On
01H xxH 22H	Equalizer Hi Gain	04H-7CH	-12.0-12.0dB
01H xxH 23H	Equalizer Hi Frequency	24H-3EH	1.00-20.0kHz
01H xxH 24H	Equalizer Lo-Mid Gain	04H-7CH	-12.0-12.0dB
01H xxH 25H	Equalizer Lo-Mid Frequency	02H-3EH	20Hz-20.0kHz
01H xxH 26H	Equalizer Lo-Mid Q	00H-05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H xxH 27H	Equalizer Hi-Mid Gain	04H-7CH	-12.0-12.0dB
01H xxH 28H	Equalizer Hi-Mid Frequency	02H-3EH	20Hz-20.0kHz
01H xxH 29H	Equalizer Hi-Mid Q	00H-05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H xxH 2AH	Equalizer Lo Gain	04H-7CH	-12.0-12.0dB
01H xxH 2BH	Equalizer Lo Frequency	02H-2AH	20Hz-2.00kHz
01H xxH 2CH	Voice Changer Sw	00H-01H	Off, On
01H xxH 2DH	Voice Changer Pitch	74H-00H-0CH	-12-0-+12
01H xxH 2EH	Voice Changer Formant	76H-00H-0AH	-10-0-+10
01H xxH 2FH	Voice Changer Robot	00H-01H	Off, On
01H xxH 30H	Voice Changer Mix	00H-64H	0-100
01H xxH 31H	Embedded Audio Channel	00H-03H	1/2, 3/4, 5/6, 7/8
01H xxH 32H	High Pass Filter Frequency	01H-45H	20.0Hz-1.00kHz

○ Audio Output Assign

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 20H 00H	Audio Out 1 (XLR)	00H-04H	Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, Monitor Bus
01H 21H 01H	Audio Out 2 (XLR)	00H-04H	Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, Monitor Bus
01H 22H 02H	Audio Out 3 (RCA)	00H-04H	Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, Monitor Bus
01H 20H 03H	Phones Out / Monitor Bus	00H-03H	Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus
01H 20H 04H	USB Out	00H-03H	Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus
01H 20H 05H	Stream/Record	00H-03H	Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus
01H 20H 06H	Audio Record	00H-03H	Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus
01H 20H 07H	HDMI Out 1	00H-04H	Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, Monitor Bus
01H 20H 08H	HDMI Out 2	00H-04H	Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, Monitor Bus
01H 20H 09H	HDMI Out 3	00H-04H	Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, Monitor Bus
01H 20H 0AH	SDI Out 1	00H-04H	Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, Monitor Bus
01H 20H 0BH	SDI Out 2	00H-04H	Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, Monitor Bus
01H 20H 0CH	SDI Out 3	00H-04H	Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, Monitor Bus

○ Audio Main Bus

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 21H 00H 01H 02H	Level	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 21H 03H	Mute	00H-01H	Off, On
01H 21H 04H	Solo	00H-01H	Off, On
01H 21H 05H 06H	Delay	00H 00H-27H 08H	0.0-500.0msec
01H 21H 07H	Compressor/Limiter Type	00H-01H	Compressor, Limiter
01H 21H 08H	Compressor/Limiter Sw	00H-01H	Off, On
01H 21H 09H	Limiter Threshold	58H-00H	-40-0dB
01H 21H 0AH	Compressor Threshold	4EH-00H	-50-0dB
01H 21H 0BH	Compressor Ratio	00H-0DH	1.00: 1, 1.12: 1, 1.25: 1, 1.40: 1, 1.60: 1, 1.80: 1, 2.00: 1, 2.50: 1, 3.20: 1, 4.00: 1, 5.60: 1, 8.00: 1, 16.0: 1, INF: 1
01H 21H 0CH	Compressor Attack	00H-73H	0.0-100msec
01H 21H 0DH	Compressor Release	00H-7FH	30-5000msec
01H 21H 0EH	Compressor Makeup Gain	58H-00H-28H	-40-0-40dB
01H 21H 0FH	Reverb Level	00H-7FH	0-127

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 21H 10H	Reverb Sw	00H-01H	Off, On
01H 21H 11H	Reverb Type	00H-01H	Room, Hall
01H 21H 12H	Reverb Size	01H-14H	1-20
01H 21H 13H 14H 15H	Reverb Return Level	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 21H 16H	Equalizer Sw	00H-01H	Off, On
01H 21H 17H	Equalizer Hi Gain	04H-7CH	-12.0-12.0dB
01H 21H 18H	Equalizer Hi Frequency	24H-3EH	1.00-20.0kHz
01H 21H 19H	Equalizer Lo-Mid Gain	04H-7CH	-12.0-12.0dB
01H 21H 1AH	Equalizer Lo-Mid Frequency	02H-3EH	20Hz-20.0kHz
01H 21H 1BH	Equalizer Lo-Mid Q	00H-05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H 21H 1CH	Equalizer Hi-Mid Gain	04H-7CH	-12.0-12.0dB
01H 21H 1DH	Equalizer Hi-Mid Frequency	02H-3EH	20Hz-20.0kHz
01H 21H 1EH	Equalizer Hi-Mid Q	00H-05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H 21H 1FH	Equalizer Lo Gain	04H-7CH	-12.0-12.0dB
01H 21H 20H	Equalizer Lo Frequency	02H-2AH	20Hz-2.00kHz
01H 21H 21H	GEQ Sw	00H-01H	Off, On
01H 21H 22H 23H	GEQ Gain 25Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 24H 25H	GEQ Gain 40Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 26H 27H	GEQ Gain 60Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 28H 29H	GEQ Gain 100Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 2AH 2BH	GEQ Gain 160Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 2CH 2DH	GEQ Gain 250Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 2EH 2FH	GEQ Gain 400Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 30H 31H	GEQ Gain 630Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 32H 33H	GEQ Gain 1kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 34H 35H	GEQ Gain 1.6kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 36H 37H	GEQ Gain 2.5kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 38H 39H	GEQ Gain 4kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 3AH 3BH	GEQ Gain 6.3Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 3CH 3DH	GEQ Gain 10kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 3EH 3FH	GEQ Gain 16kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 21H 40H	Loudness Auto Gain Control Sw	00H-01H	Off, On
01H 21H 41H	Integrated Gain Control	00H-01H	Disable, Enable
01H 21H 42H	Integrated Gain Control Sens	00H-7FH	0-127
01H 21H 43H	Momentary Gain Control	00H-01H	Disable, Enable
01H 21H 44H	Momentary Gain Control Sens	00H-7FH	0-127
01H 21H 45H	Target LKFS	5EH-76H	-34--10dB
01H 21H 46H	Adaptive Noise Reduction Sw	00H-01H	Off, On
01H 21H 47H	Adaptive Noise Reduction Depth	00H-7FH	0-127
01H 21H 48H	Adaptive Noise Reduction Talking Detector	00H-7FH	0-127
01H 21H 49H	Adaptive Noise Reduction Auto Learn	00H-01H	Disable, Enable
01H 21H 4AH	Lo Frequency Cut Sw	00H-01H	Off, On

○ Audio AUX 1 Bus

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 22H 00H 01H 02H	Level	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 22H 03H	Mute	00H-01H	Off, On
01H 22H 04H	Solo	00H-01H	Off, On
01H 22H 05H 06H	Delay	00H 00H-27H 08H	0.0-500.0msec
01H 22H 07H	Compressor/Limiter Type	00H-01H	Compressor, Limiter
01H 22H 08H	Compressor/Limiter Sw	00H-01H	Off, On
01H 22H 09H	Limiter Threshold	58H-00H	-40-0dB
01H 22H 0AH	Compressor Threshold	4EH-00H	-50-0dB
01H 22H 0BH	Compressor Ratio	00H-0DH	1.00: 1, 1.12: 1, 1.25: 1, 1.40: 1, 1.60: 1, 1.80: 1, 2.00: 1, 2.50: 1, 3.20: 1, 4.00: 1, 5.60: 1, 8.00: 1, 16.0: 1, INF: 1
01H 22H 0CH	Compressor Attack	00H-73H	0.0-100msec
01H 22H 0DH	Compressor Release	00H-7FH	30-5000msec
01H 22H 0EH	Compressor Makeup Gain	58H-00H-28H	-40-0-40dB
01H 22H 0FH 10H 11H	Reverb Return Level	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 22H 12H	Equalizer Sw	00H-01H	Off, On
01H 22H 13H	Equalizer Hi Gain	04H-7CH	-12.0-12.0dB
01H 22H 14H	Equalizer Hi Frequency	24H-3EH	1.00-20.0kHz
01H 22H 15H	Equalizer Lo-Mid Gain	04H-7CH	-12.0-12.0dB
01H 22H 16H	Equalizer Lo-Mid Frequency	02H-3EH	20Hz-20.0kHz
01H 22H 17H	Equalizer Lo-Mid Q	00H-05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H 22H 18H	Equalizer Hi-Mid Gain	04H-7CH	-12.0-12.0dB
01H 22H 19H	Equalizer Hi-Mid Frequency	02H-3EH	20Hz-20.0kHz
01H 22H 1AH	Equalizer Hi-Mid Q	00H-05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H 22H 1BH	Equalizer Lo Gain	04H-7CH	-12.0-12.0dB
01H 22H 1CH	Equalizer Lo Frequency	02H-2AH	20Hz-2.00kHz
01H 22H 1DH	GEQ Sw	00H-01H	Off, On
01H 22H 1EH 1FH	GEQ Gain 25Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 20H 21H	GEQ Gain 40Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 22H 23H	GEQ Gain 60Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 24H 25H	GEQ Gain 100Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 26H 27H	GEQ Gain 160Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 28H 29H	GEQ Gain 250Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 2AH 2BH	GEQ Gain 400Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 2CH 2DH	GEQ Gain 630Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 2EH 2FH	GEQ Gain 1kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 30H 31H	GEQ Gain 1.6kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 32H 33H	GEQ Gain 2.5kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 34H 35H	GEQ Gain 4kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 36H 37H	GEQ Gain 6.3Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 38H 39H	GEQ Gain 10kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 22H 3AH 3BH	GEQ Gain 16kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB

○ Audio AUX 1 Send

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 23H 00H 01H 02H	Audio In 1 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 03H 04H 05H	Audio In 2 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 06H 07H 08H	Audio In 3 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 09H 0AH 0BH	Audio In 4 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 0CH 0DH 0EH	Audio In 5 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 0FH 10H 11H	Audio In 6 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 12H 13H 14H	Audio In 7/8 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 15H 16H 17H	Audio In 9/10 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 18H 19H 1AH	USB In Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 1BH 1CH 1DH	Bluetooth In Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 1EH 1FH 20H	Audio Player Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 21H 22H 23H	HDMI In 1 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 24H 25H 26H	HDMI In 2 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 27H 28H 29H	HDMI In 3 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 2AH 2BH 2CH	HDMI In 4 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 2DH 2EH 2FH	HDMI In 5 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 30H 31H 32H	HDMI In 6 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 33H 34H 35H	SDI In 1 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 36H 37H 38H	SDI In 2 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 39H 3AH 3BH	SDI In 3 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 3CH 3DH 3EH	SDI In 4 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 23H 3FH 40H 41H	SDI In 5 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 23H 42H 43H 44H	SDI In 6 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 23H 45H 46H 47H	Video Player/SRT In Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 23H 48H	Audio In 1 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 49H	Audio In 2 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 4AH	Audio In 3 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 4BH	Audio In 4 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 4CH	Audio In 5 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 4DH	Audio In 6 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 4EH	Audio In 7/8 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 4FH	Audio In 9/10 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 50H	USB In Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 51H	Bluetooth In Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 52H	Audio Player Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 53H	HDMI In 1 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 54H	HDMI In 2 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 55H	HDMI In 3 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 56H	HDMI In 4 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 57H	HDMI In 5 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 58H	HDMI In 6 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 59H	SDI In 1 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 5AH	SDI In 2 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 5BH	SDI In 3 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 5CH	SDI In 4 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 5DH	SDI In 5 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 5EH	SDI In 6 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 23H 5FH	Video Player/SRT In Send Point	00H–02H	Dry, Pre Fader, Post Fader

○ Audio AUX 2 Bus

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 24H 00H 01H 02H	Level	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 24H 03H	Mute	00H–01H	Off, On
01H 24H 04H	Solo	00H–01H	Off, On
01H 24H 05H 06H	Delay	00H 00H–27H 08H	0.0–500.0msec
01H 24H 07H	Compressor/Limiter Type	00H–01H	Compressor, Limiter
01H 24H 08H	Compressor/Limiter Sw	00H–01H	Off, On
01H 24H 09H	Limiter Threshold	58H–00H	-40–0dB
01H 24H 0AH	Compressor Threshold	4EH–00H	-50–0dB
01H 24H 0BH	Compressor Ratio	00H–0DH	1.00: 1, 1.12: 1, 1.25: 1, 1.40: 1, 1.60: 1, 1.80: 1, 2.00: 1, 2.50: 1, 3.20: 1, 4.00: 1, 5.60: 1, 8.00: 1, 16.0: 1, INF: 1
01H 24H 0CH	Compressor Attack	00H–73H	0.0–100msec
01H 24H 0DH	Compressor Release	00H–7FH	30–5000msec
01H 24H 0EH	Compressor Makeup Gain	58H–00H–28H	-40–0–40dB
01H 24H 0FH 10H 11H	Reverb Return Level	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 24H 12H	Equalizer Sw	00H–01H	Off, On
01H 24H 13H	Equalizer Hi Gain	04H–7CH	-12.0–12.0dB
01H 24H 14H	Equalizer Hi Frequency	24H–3EH	1.00–20.0kHz
01H 24H 15H	Equalizer Lo-Mid Gain	04H–7CH	-12.0–12.0dB
01H 24H 16H	Equalizer Lo-Mid Frequency	02H–3EH	20Hz–20.0kHz
01H 24H 17H	Equalizer Lo-Mid Q	00H–05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H 24H 18H	Equalizer Hi-Mid Gain	04H–7CH	-12.0–12.0dB
01H 24H 19H	Equalizer Hi-Mid Frequency	02H–3EH	20Hz–20.0kHz
01H 24H 1AH	Equalizer Hi-Mid Q	00H–05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H 24H 1BH	Equalizer Lo Gain	04H–7CH	-12.0–12.0dB

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 24H 1CH	Equalizer Lo Frequency	02H–2AH	20Hz–2.00kHz
01H 24H 1DH	GEQ Sw	00H–01H	Off, On
01H 24H 1EH 1FH	GEQ Gain 25Hz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 20H 21H	GEQ Gain 40Hz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 22H 23H	GEQ Gain 60Hz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 24H 25H	GEQ Gain 100Hz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 26H 27H	GEQ Gain 160Hz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 28H 29H	GEQ Gain 250Hz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 2AH 2BH	GEQ Gain 400Hz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 2CH 2DH	GEQ Gain 630Hz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 2EH 2FH	GEQ Gain 1kHz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 30H 31H	GEQ Gain 1.6kHz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 32H 33H	GEQ Gain 2.5kHz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 34H 35H	GEQ Gain 4kHz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 36H 37H	GEQ Gain 6.3Hz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 38H 39H	GEQ Gain 10kHz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB
01H 24H 3AH 3BH	GEQ Gain 16kHz	7EH 6AH–00H 00H–01H 16H	-15.0–+15.0dB

○ Audio AUX 2 Send

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 25H 00H 01H 02H	Audio In 1 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 03H 04H 05H	Audio In 2 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 06H 07H 08H	Audio In 3 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 09H 0AH 0BH	Audio In 4 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 0CH 0DH 0EH	Audio In 5 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 0FH 10H 11H	Audio In 6 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 12H 13H 14H	Audio In 7/8 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 15H 16H 17H	Audio In 9/10 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 18H 19H 1AH	USB In Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 1BH 1CH 1DH	Bluetooth In Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 25H 1EH 1FH 20H	Audio Player Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 21H 22H 23H	HDMI In 1 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 24H 25H 26H	HDMI In 2 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 27H 28H 29H	HDMI In 3 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 2AH 2BH 2CH	HDMI In 4 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 2DH 2EH 2FH	HDMI In 5 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 30H 31H 32H	HDMI In 6 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 33H 34H 35H	SDI In 1 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 36H 37H 38H	SDI In 2 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 39H 3AH 3BH	SDI In 3 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 3CH 3DH 3EH	SDI In 4 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 3FH 40H 41H	SDI In 5 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 42H 43H 44H	SDI In 6 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 45H 46H 47H	Video Player/SRT In Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 25H 48H	Audio In 1 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 49H	Audio In 2 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 4AH	Audio In 3 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 4BH	Audio In 4 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 4CH	Audio In 5 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 4DH	Audio In 6 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 4EH	Audio In 7/8 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 4FH	Audio In 9/10 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 50H	USB In Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 51H	Bluetooth In Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 52H	Audio Player Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 53H	HDMI In 1 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 54H	HDMI In 2 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 55H	HDMI In 3 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 56H	HDMI In 4 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 57H	HDMI In 5 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 58H	HDMI In 6 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 59H	SDI In 1 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 5AH	SDI In 2 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 5BH	SDI In 3 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 5CH	SDI In 4 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 5DH	SDI In 5 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 5EH	SDI In 6 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 25H 5FH	Video Player/SRT In Send Point	00H–02H	Dry, Pre Fader, Post Fader

○ Audio USB Output

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 26H 00H 01H 02H	Level	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 26H 03H	Mute	00H-01H	Off, On
01H 26H 04H 05H	Delay	00H 00H-27H 08H	0.0-500.0msec
01H 26H 06H	Equalizer Sw	00H-01H	Off, On
01H 26H 07H	Equalizer Hi Gain	04H-7CH	-12.0-12.0dB
01H 26H 08H	Equalizer Hi Frequency	24H-3EH	1.00-20.0kHz
01H 26H 09H	Equalizer Lo-Mid Gain	04H-7CH	-12.0-12.0dB
01H 26H 0AH	Equalizer Lo-Mid Frequency	02H-3EH	20Hz-20.0kHz
01H 26H 0BH	Equalizer Lo-Mid Q	00H-05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H 26H 0CH	Equalizer Hi-Mid Gain	04H-7CH	-12.0-12.0dB
01H 26H 0DH	Equalizer Hi-Mid Frequency	02H-3EH	20Hz-20.0kHz
01H 26H 0EH	Equalizer Hi-Mid Q	00H-05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H 26H 0FH	Equalizer Lo Gain	04H-7CH	-12.0-12.0dB
01H 26H 10H	Equalizer Lo Frequency	02H-2AH	20Hz-2.00kHz

○ Audio Stream/Record

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 27H 00H 01H 02H	Level	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 27H 03H	Mute	00H-01H	Off, On
01H 27H 04H 05H	Delay	00H 00H-27H 08H	0.0-500.0msec
01H 27H 06H	Equalizer Sw	00H-01H	Off, On
01H 27H 07H	Equalizer Hi Gain	04H-7CH	-12.0-12.0dB
01H 27H 08H	Equalizer Hi Frequency	24H-3EH	1.00-20.0kHz
01H 27H 09H	Equalizer Lo-Mid Gain	04H-7CH	-12.0-12.0dB
01H 27H 0AH	Equalizer Lo-Mid Frequency	02H-3EH	20Hz-20.0kHz
01H 27H 0BH	Equalizer Lo-Mid Q	00H-05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H 27H 0CH	Equalizer Hi-Mid Gain	04H-7CH	-12.0-12.0dB
01H 27H 0DH	Equalizer Hi-Mid Frequency	02H-3EH	20Hz-20.0kHz
01H 27H 0EH	Equalizer Hi-Mid Q	00H-05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H 27H 0FH	Equalizer Lo Gain	04H-7CH	-12.0-12.0dB
01H 27H 10H	Equalizer Lo Frequency	02H-2AH	20Hz-2.00kHz

○ Monitor Bus

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 28H 00H 01H 02H	Level	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 28H 03H	Mute	00H-01H	Off, On

○ Audio Embedded

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 29H 00H	HDMI Out 1-3 Send (Channel 3/4)	00H-15H	N/A, Audio In 1/2, Audio In 3/4, Audio In 5/6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In
01H 29H 01H	HDMI Out 1-3 Send (Channel 5/6)	00H-15H	N/A, Audio In 1/2, Audio In 3/4, Audio In 5/6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In
01H 29H 02H	HDMI Out 1-3 Send (Channel 7/8)	00H-15H	N/A, Audio In 1/2, Audio In 3/4, Audio In 5/6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In
01H 29H 03H	SDI Out 1-3 Send (Channel 3/4)	00H-15H	N/A, Audio In 1/2, Audio In 3/4, Audio In 5/6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In
01H 29H 04H	SDI Out 1-3 Send (Channel 5/6)	00H-15H	N/A, Audio In 1/2, Audio In 3/4, Audio In 5/6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In
01H 29H 05H	SDI Out 1-3 Send (Channel 7/8)	00H-15H	N/A, Audio In 1/2, Audio In 3/4, Audio In 5/6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 29H 06H	Audio In 1 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 07H	Audio In 2 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 08H	Audio In 3 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 09H	Audio In 4 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 0AH	Audio In 5 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 0BH	Audio In 6 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 0CH	Audio In 7/8 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 0DH	Audio In 9/10 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 0EH	USB In Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 0FH	Bluetooth In Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 10H	Audio Player Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 11H	HDMI In 1 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 12H	HDMI In 2 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 13H	HDMI In 3 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 14H	HDMI In 4 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 15H	HDMI In 5 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 16H	HDMI In 6 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 17H	SDI In 1 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 18H	SDI In 2 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 19H	SDI In 3 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 1AH	SDI In 4 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 1BH	SDI In 5 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 1CH	SDI In 6 Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader
01H 29H 1DH	Video Player/SRT In Embedded Position	00H–03H	Off, Dry, Pre Fader, Post Fader

○ Audio AUX 3 Bus

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 2AH 00H 01H 02H	Level	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2AH 03H	Mute	00H–01H	Off, On
01H 2AH 04H	Solo	00H–01H	Off, On
01H 2AH 05H 06H	Delay	00H 00H–27H 08H	0.0–500.0msec
01H 2AH 07H	Compressor/Limiter Type	00H–01H	Compressor, Limiter
01H 2AH 08H	Compressor/Limiter Sw	00H–01H	Off, On
01H 2AH 09H	Limiter Threshold	58H–00H	-40–0dB
01H 2AH 0AH	Compressor Threshold	4EH–00H	-50–0dB
01H 2AH 0BH	Compressor Ratio	00H–0DH	1.00: 1, 1.12: 1, 1.25: 1, 1.40: 1, 1.60: 1, 1.80: 1, 2.00: 1, 2.50: 1, 3.20: 1, 4.00: 1, 5.60: 1, 8.00: 1, 16.0: 1, INF: 1
01H 2AH 0CH	Compressor Attack	00H–73H	0.0–100msec
01H 2AH 0DH	Compressor Release	00H–7FH	30–5000msec
01H 2AH 0EH	Compressor Makeup Gain	58H–00H–28H	-40–0–40dB
01H 2AH 0FH 10H 11H	Reverb Return Level	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2AH 12H	Equalizer Sw	00H–01H	Off, On
01H 2AH 13H	Equalizer Hi Gain	04H–7CH	-12.0–12.0dB
01H 2AH 14H	Equalizer Hi Frequency	24H–3EH	1.00–20.0kHz
01H 2AH 15H	Equalizer Lo-Mid Gain	04H–7CH	-12.0–12.0dB
01H 2AH 16H	Equalizer Lo-Mid Frequency	02H–3EH	20Hz–20.0kHz
01H 2AH 17H	Equalizer Lo-Mid Q	00H–05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H 2AH 18H	Equalizer Hi-Mid Gain	04H–7CH	-12.0–12.0dB
01H 2AH 19H	Equalizer Hi-Mid Frequency	02H–3EH	20Hz–20.0kHz
01H 2AH 1AH	Equalizer Hi-Mid Q	00H–05H	0.5, 1.0, 2.0, 4.0, 8.0, 16.0
01H 2AH 1BH	Equalizer Lo Gain	04H–7CH	-12.0–12.0dB
01H 2AH 1CH	Equalizer Lo Frequency	02H–2AH	20Hz–2.00kHz

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 2AH 1DH	GEQ Sw	00H-01H	Off, On
01H 2AH 1EH 1FH	GEQ Gain 25Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 20H 21H	GEQ Gain 40Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 22H 23H	GEQ Gain 60Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 24H 25H	GEQ Gain 100Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 26H 27H	GEQ Gain 160Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 28H 29H	GEQ Gain 250Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 2AH 2BH	GEQ Gain 400Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 2CH 2DH	GEQ Gain 630Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 2EH 2FH	GEQ Gain 1kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 30H 31H	GEQ Gain 1.6kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 32H 33H	GEQ Gain 2.5kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 34H 35H	GEQ Gain 4kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 36H 37H	GEQ Gain 6.3Hz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 38H 39H	GEQ Gain 10kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB
01H 2AH 3AH 3BH	GEQ Gain 16kHz	7EH 6AH-00H 00H-01H 16H	-15.0-+15.0dB

○ Audio AUX 3 Send

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 2BH 00H 01H 02H	Audio In 1 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 2BH 03H 04H 05H	Audio In 2 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 2BH 06H 07H 08H	Audio In 3 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 2BH 09H 0AH 0BH	Audio In 4 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 2BH 0CH 0DH 0EH	Audio In 5 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 2BH 0FH 10H 11H	Audio In 6 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 2BH 12H 13H 14H	Audio In 7/8 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 2BH 15H 16H 17H	Audio In 9/10 Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 2BH 18H 19H 1AH	USB In Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
01H 2BH 1BH 1CH 1DH	Bluetooth In Send	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 2BH 1EH 1FH 20H	Audio Player Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 21H 22H 23H	HDMI In 1 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 24H 25H 26H	HDMI In 2 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 27H 28H 29H	HDMI In 3 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 2AH 2BH 2CH	HDMI In 4 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 2DH 2EH 2FH	HDMI In 5 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 30H 31H 32H	HDMI In 6 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 33H 34H 35H	SDI In 1 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 36H 37H 38H	SDI In 2 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 39H 3AH 3BH	SDI In 3 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 3CH 3DH 3EH	SDI In 4 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 3FH 40H 41H	SDI In 5 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 42H 43H 44H	SDI In 6 Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 45H 46H 47H	Video Player/SRT In Send	7EH 00H 00H, 7FH 79H 60H–00H 00H 00H–00H 00H 64H	-INFdB, -80.0–0.0–10.0dB
01H 2BH 48H	Audio In 1 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 49H	Audio In 2 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 4AH	Audio In 3 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 4BH	Audio In 4 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 4CH	Audio In 5 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 4DH	Audio In 6 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 4EH	Audio In 7/8 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 4FH	Audio In 9/10 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 50H	USB In Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 51H	Bluetooth In Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 52H	Audio Player Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 53H	HDMI In 1 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 54H	HDMI In 2 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 55H	HDMI In 3 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 56H	HDMI In 4 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 57H	HDMI In 5 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 58H	HDMI In 6 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 59H	SDI In 1 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 5AH	SDI In 2 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 5BH	SDI In 3 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 5CH	SDI In 4 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 5DH	SDI In 5 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 5EH	SDI In 6 Send Point	00H–02H	Dry, Pre Fader, Post Fader
01H 2BH 5FH	Video Player/SRT In Send Point	00H–02H	Dry, Pre Fader, Post Fader

○ Audio Follow

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 30H 00H	HDMI In 1	00H-01H	Off, On
01H 30H 01H	HDMI In 2	00H-01H	Off, On
01H 30H 02H	HDMI In 3	00H-01H	Off, On
01H 30H 03H	HDMI In 4	00H-01H	Off, On
01H 30H 04H	HDMI In 5	00H-01H	Off, On
01H 30H 05H	HDMI In 6	00H-01H	Off, On
01H 30H 06H	SDI In 1	00H-01H	Off, On
01H 30H 07H	SDI In 2	00H-01H	Off, On
01H 30H 08H	SDI In 3	00H-01H	Off, On
01H 30H 09H	SDI In 4	00H-01H	Off, On
01H 30H 0AH	SDI In 5	00H-01H	Off, On
01H 30H 0BH	SDI In 6	00H-01H	Off, On
01H 30H 0CH	Video Player/SRT In	00H-01H	Off, On
01H 30H 0DH	Audio In 1	00H-25H	Off, HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
01H 30H 0EH	Audio In 2	00H-25H	Off, HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
01H 30H 0FH	Audio In 3	00H-25H	Off, HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
01H 30H 10H	Audio In 4	00H-25H	Off, HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
01H 30H 11H	Audio In 5	00H-25H	Off, HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
01H 30H 12H	Audio In 6	00H-25H	Off, HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
01H 30H 13H	Audio In 7/8	00H-25H	Off, HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
01H 30H 14H	Audio In 9/10	00H-25H	Off, HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
01H 30H 15H	USB In	00H-25H	Off, HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
01H 30H 16H	Bluetooth In	00H-25H	Off, HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
01H 30H 17H	Audio Player	00H-25H	Off, HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8
01H 30H 18H	PinP&Key 1 Follow	00H-01H	Off, On
01H 30H 19H	PinP&Key 2 Follow	00H-01H	Off, On
01H 30H 1AH	PinP&Key 3 Follow	00H-01H	Off, On
01H 30H 1BH	PinP&Key 4 Follow	00H-01H	Off, On
01H 30H 1CH	DSK 1 Follow	00H-01H	Off, On
01H 30H 1DH	DSK 2 Follow	00H-01H	Off, On

○ Audio Auto Mixing

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 31H 00H	Auto Mixing Sw	00H-01H	Off, On
01H 31H 01H	Audio In 1	00H-01H	Disable, Enable
01H 31H 02H	Audio In 2	00H-01H	Disable, Enable
01H 31H 03H	Audio In 3	00H-01H	Disable, Enable
01H 31H 04H	Audio In 4	00H-01H	Disable, Enable
01H 31H 05H	Audio In 5	00H-01H	Disable, Enable
01H 31H 06H	Audio In 6	00H-01H	Disable, Enable
01H 31H 07H	Audio In 7/8	00H-01H	Disable, Enable
01H 31H 08H	Audio In 9/10	00H-01H	Disable, Enable
01H 31H 09H	USB In	00H-01H	Disable, Enable
01H 31H 0AH	Bluetooth In	00H-01H	Disable, Enable
01H 31H 0BH	Audio Player	00H-01H	Disable, Enable
01H 31H 0CH	HDMI In 1	00H-01H	Disable, Enable
01H 31H 0DH	HDMI In 2	00H-01H	Disable, Enable
01H 31H 0EH	HDMI In 3	00H-01H	Disable, Enable
01H 31H 0FH	HDMI In 4	00H-01H	Disable, Enable
01H 31H 10H	HDMI In 5	00H-01H	Disable, Enable
01H 31H 11H	HDMI In 6	00H-01H	Disable, Enable
01H 31H 12H	SDI In 1	00H-01H	Disable, Enable
01H 31H 13H	SDI In 2	00H-01H	Disable, Enable
01H 31H 14H	SDI In 3	00H-01H	Disable, Enable
01H 31H 15H	SDI In 4	00H-01H	Disable, Enable
01H 31H 16H	SDI In 5	00H-01H	Disable, Enable
01H 31H 17H	SDI In 6	00H-01H	Disable, Enable
01H 31H 18H	Video Player/SRT In	00H-01H	Disable, Enable
01H 31H 19H	Audio In 1 Weight	00H-64H	0-100%
01H 31H 1AH	Audio In 2 Weight	00H-64H	0-100%

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
01H 31H 1BH	Audio In 3 Weight	00H-64H	0-100%
01H 31H 1CH	Audio In 4 Weight	00H-64H	0-100%
01H 31H 1DH	Audio In 5 Weight	00H-64H	0-100%
01H 31H 1EH	Audio In 6 Weight	00H-64H	0-100%
01H 31H 1FH	Audio In 7/8 Weight	00H-64H	0-100%
01H 31H 20H	Audio In 9/10 Weight	00H-64H	0-100%
01H 31H 21H	USB In Weight	00H-64H	0-100%
01H 31H 22H	Bluetooth In Weight	00H-64H	0-100%
01H 31H 23H	Audio Player Weight	00H-64H	0-100%
01H 31H 24H	HDMI In 1 Weight	00H-64H	0-100%
01H 31H 25H	HDMI In 2 Weight	00H-64H	0-100%
01H 31H 26H	HDMI In 3 Weight	00H-64H	0-100%
01H 31H 27H	HDMI In 4 Weight	00H-64H	0-100%
01H 31H 28H	HDMI In 5 Weight	00H-64H	0-100%
01H 31H 29H	HDMI In 6 Weight	00H-64H	0-100%
01H 31H 2AH	SDI In 1 Weight	00H-64H	0-100%
01H 31H 2BH	SDI In 2 Weight	00H-64H	0-100%
01H 31H 2CH	SDI In 3 Weight	00H-64H	0-100%
01H 31H 2DH	SDI In 4 Weight	00H-64H	0-100%
01H 31H 2EH	SDI In 5 Weight	00H-64H	0-100%
01H 31H 2FH	SDI In 6 Weight	00H-64H	0-100%
01H 31H 30H	Video Player/SRT In Weight	00H-64H	0-100%

● System Parameter Area

○ Version

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 00H 00H	System Version Major	00H-09H	0-9
02H 00H 01H	System Version Minor (1)	00H-09H	0-9
02H 00H 02H	System Version Minor (2)	00H-09H	0-9
02H 00H 03H	System Version Build (1)	00H-09H	0-9
02H 00H 04H	System Version Build (2)	00H-09H	0-9
02H 00H 05H	System Version Build (3)	00H-09H	0-9

○ System

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 01H 00H	HDCP	00H-01H	Off, On
02H 01H 01H	Frame Rate	00H-07H	60Hz, 59.94Hz, 50Hz, 30Hz, 29.97Hz, 25Hz, 24Hz, 23.98Hz
02H 01H 02H	Frame Rate - USB Out	00H-01H	Half Rate, Normal
02H 01H 03H	Frame Rate - Stream/Record	00H-01H	Half Rate, Normal
02H 01H 04H	Output Format - System Format	00H-01H	1080p, 720p
02H 01H 05H	Output Format - HDMI Out 1	00H-01H	1080p, 1080i
02H 01H 06H	Output Format - HDMI Out 2	00H-01H	1080p, 1080i
02H 01H 07H	Output Format - HDMI Out 3	00H-01H	1080p, 1080i
02H 01H 08H	Output Format - SDI Out 1	00H-01H	1080p, 1080i
02H 01H 09H	Output Format - SDI Out 2	00H-01H	1080p, 1080i
02H 01H 0AH	Output Format - SDI Out 3	00H-01H	1080p, 1080i
02H 01H 0BH	Output Format - USB Out	00H-01H	1080p, 720p
02H 01H 0CH	Output Format - Stream/Record	00H-01H	1080p, 720p
02H 01H 0DH	Reference Source	00H-07H	Internal, External, SDI 1-6
02H 01H 0EH 0FH	Reference Clock Adjust	71H 00H-00H 00H-0FH 00H	-1920-0-1920
02H 01H 10H 11H	Reference Line Adjust	76H 50H-00H 00H-09H 30H	-1200-0-1200
02H 01H 12H	Bluetooth Sw	00H-01H	Off, On
02H 01H 13H	Panel Operation	00H-01H	Dissolve, PGM/PST
02H 01H 14H	Effects Transition Sync	00H-01H	Off, On
02H 01H 15H	Effects Spot	00H-01H	Off, On
02H 01H 16H	Audio Fader/Knob Mode	00H-01H	Catch, Direct
02H 01H 17H	AUX Linked PGM	00H-02H	Off, Auto Link, Manual Link

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 01H 18H	Output Fade Assign Video Fade	00H–05H	N/A, Black, White, AUX 1–3
02H 01H 19H	Output Fade Assign Audio Fade	00H–01H	Off, On
02H 01H 1AH	Output Fade Time	00H–28H	0.0–4.0sec
02H 01H 1BH 1CH	User 1 Assign	00H 00H–01H 67H	
02H 01H 1DH 1EH	User 2 Assign	00H 00H–01H 67H	
02H 01H 1FH 20H	User 3 Assign	00H 00H–01H 67H	
02H 01H 21H 22H	User 4 Assign	00H 00H–01H 67H	
02H 01H 23H 24H	Audio Effect 1 Assign	00H 00H–01H 3AH	
02H 01H 25H 26H	Audio Effect 2 Assign	00H 00H–01H 3AH	
02H 01H 27H 28H	Audio Effect 3 Assign	00H 00H–01H 3AH	
02H 01H 29H 2AH	Audio Effect 4 Assign	00H 00H–01H 3AH	
02H 01H 2BH	Monitor 1 Assign	00H–08H	N/A, Multi-View, Input-View, Still-View, Program, Sub Program, Preview, AUX 1–3, DSK 1–2 Source
02H 01H 2CH	Monitor 2 Assign	00H–08H	N/A, Multi-View, Input-View, Still-View, Program, Sub Program, Preview, AUX 1–3, DSK 1–2 Source
02H 01H 2DH	Monitor 3 Assign	00H–08H	N/A, Multi-View, Input-View, Still-View, Program, Sub Program, Preview, AUX 1–3, DSK 1–2 Source
02H 01H 2EH	Monitor 4 Assign	00H–08H	N/A, Multi-View, Input-View, Still-View, Program, Sub Program, Preview, AUX 1–3, DSK 1–2 Source
02H 01H 2FH	LED Dimmer	01H–08H	1–8
02H 01H 30H	LCD Dimmer	01H–08H	1–8
02H 01H 31H	LCD Menu	00H–01H	Left, Right
02H 01H 32H	Tally Frame - Multi-View	00H–01H	Off, On
02H 01H 33H	Tally Frame - Input-View	00H–01H	Off, On
02H 01H 34H	Tally Frame - Still-View	00H–01H	Off, On
02H 01H 35H	AUX/Source Indicator - Multi-View	00H–01H	Off, On
02H 01H 36H	AUX/Source Indicator - Input-View	00H–01H	Off, On
02H 01H 37H	AUX/Source Indicator - Still-View	00H–01H	Off, On
02H 01H 38H	External Rec Indicator - Multi-View	00H–01H	Off, On
02H 01H 39H	External Rec Indicator - Input-View	00H–01H	Off, On
02H 01H 3AH	Audio Level Meter - Multi-View	00H–01H	Off, On
02H 01H 3BH	Audio Level Meter - Input-View	00H–01H	Off, On
02H 01H 3CH	Preview Label - Multi-View	00H–01H	Off, On
02H 01H 3DH	Preview Label - Input-View	00H–01H	Off, On
02H 01H 3EH	Preview Label - Still-View	00H–01H	Off, On
02H 01H 3FH	Preview Label Size	00H–01H	Small, Normal
02H 01H 40H	Multi-View Layout - Left	00H–08H	Program, Sub Program, Preview, AUX 1–3, DSK 1–2 Source, Black
02H 01H 41H	Multi-View Layout - Right	00H–08H	Program, Sub Program, Preview, AUX 1–3, DSK 1–2 Source, Black
02H 01H 42H	Input-View Layout - Input 1	00H–28H	HDMI In 1–6, SDI In 1–6, Still 1–16, Video Player/SRT In, Input 1–8, Stream/Record Status 1–2, Date&Time. N/A
02H 01H 43H	Input-View Layout - Input 2	00H–28H	HDMI In 1–6, SDI In 1–6, Still 1–16, Video Player/SRT In, Input 1–8, Stream/Record Status 1–2, Date&Time. N/A
02H 01H 44H	Input-View Layout - Input 3	00H–28H	HDMI In 1–6, SDI In 1–6, Still 1–16, Video Player/SRT In, Input 1–8, Stream/Record Status 1–2, Date&Time. N/A
02H 01H 45H	Input-View Layout - Input 4	00H–28H	HDMI In 1–6, SDI In 1–6, Still 1–16, Video Player/SRT In, Input 1–8, Stream/Record Status 1–2, Date&Time. N/A
02H 01H 46H	Input-View Layout - Input 5	00H–28H	HDMI In 1–6, SDI In 1–6, Still 1–16, Video Player/SRT In, Input 1–8, Stream/Record Status 1–2, Date&Time. N/A
02H 01H 47H	Input-View Layout - Input 6	00H–28H	HDMI In 1–6, SDI In 1–6, Still 1–16, Video Player/SRT In, Input 1–8, Stream/Record Status 1–2, Date&Time. N/A
02H 01H 48H	Input-View Layout - Input 7	00H–28H	HDMI In 1–6, SDI In 1–6, Still 1–16, Video Player/SRT In, Input 1–8, Stream/Record Status 1–2, Date&Time. N/A

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 01H 49H	Input-View Layout - Input 8	00H-28H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8, Stream/Record Status 1-2, Date&Time. N/A
02H 01H 4AH	Input-View Layout - Input 9	00H-28H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8, Stream/Record Status 1-2, Date&Time. N/A
02H 01H 4BH	Input-View Layout - Input 10	00H-28H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8, Stream/Record Status 1-2, Date&Time. N/A
02H 01H 4CH	Input-View Layout - Input 11	00H-28H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8, Stream/Record Status 1-2, Date&Time. N/A
02H 01H 4DH	Input-View Layout - Input 12	00H-28H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8, Stream/Record Status 1-2, Date&Time. N/A
02H 01H 4EH	Input-View Layout - Input 13	00H-28H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8, Stream/Record Status 1-2, Date&Time. N/A
02H 01H 4FH	Input-View Layout - Input 14	00H-28H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8, Stream/Record Status 1-2, Date&Time. N/A
02H 01H 50H	Input-View Layout - Input 15	00H-28H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8, Stream/Record Status 1-2, Date&Time. N/A
02H 01H 51H	Input-View Layout - Input 16	00H-28H	HDMI In 1-6, SDI In 1-6, Still 1-16, Video Player/SRT In, Input 1-8, Stream/Record Status 1-2, Date&Time. N/A
02H 01H 52H	Auto Input Detect	00H-01H	Off, On
02H 01H 53H	Auto Fan Control	00H-01H	Off, On
02H 01H 54H	Test Pattern	00H-0CH	Off, Color Bars 75%, Color Bars 100%, Ramp, Step, Hatch, Diamond, Circle, Color Bars 75%-SP, Color Bars 100%-SP, Ramp-SP, Step-SP, Hatch-SP
02H 01H 55H	Test Pattern Motion	00H-02H	Disable, Slow, Fast
02H 01H 56H	Test Tone Level	00H-03H	Off, -20dB, -10dB, 0dB
02H 01H 57H	Test Tone Frequency L	00H-02H	500Hz, 1kHz, 2kHz
02H 01H 58H	Test Tone Frequency R	00H-02H	500Hz, 1kHz, 2kHz
02H 01H 59H	VIDEO SWITCHER Button Mode	00H-03H	Input Select, AUX, Scene Memory, Macro
02H 01H 5AH	USB Output Format	00H-01H	YUY2 & MJPEG, YUY2
02H 01H 5BH	Language	00H-02H	English, 日本語, 简体中文
02H 01H 5CH	SD Card Access Type	00H-01H	A, B
02H 01H 5DH	AUX Linked PGM AUX 1	00H-01H	Off, On
02H 01H 5EH	AUX Linked PGM AUX 2	00H-01H	Off, On
02H 01H 5FH	AUX Linked PGM AUX 3	00H-01H	Off, On
02H 01H 60H	AUX Operation Target	00H-02H	AUX 1-3

○ Audio Level Meter

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 02H 00H	Level Meter Position - Audio In 1	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 01H	Level Meter Position - Audio In 2	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 02H	Level Meter Position - Audio In 3	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 03H	Level Meter Position - Audio In 4	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 04H	Level Meter Position - Audio In 5	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 05H	Level Meter Position - Audio In 6	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 06H	Level Meter Position - Audio In 7/8	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 07H	Level Meter Position - Audio In 9/10	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 08H	Level Meter Position - USB In	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 09H	Level Meter Position - Bluetooth In	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 0AH	Level Meter Position - Audio Player	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 0BH	Level Meter Position - HDMI In 1	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 0CH	Level Meter Position - HDMI In 2	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 0DH	Level Meter Position - HDMI In 3	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 0EH	Level Meter Position - HDMI In 4	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 0FH	Level Meter Position - HDMI In 5	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 10H	Level Meter Position - HDMI In 6	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 11H	Level Meter Position - SDI In 1	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 12H	Level Meter Position - SDI In 2	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 13H	Level Meter Position - SDI In 3	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 14H	Level Meter Position - SDI In 4	00H-01H	Pre Fader (PFL), Post Fader (AFL)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 02H 15H	Level Meter Position - SDI In 5	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 16H	Level Meter Position - SDI In 6	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 17H	Level Meter Position - Video Player/SRT In	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 18H	Level Meter Position - Main Bus	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 19H	Level Meter Position - AUX 1 Bus	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 1AH	Level Meter Position - AUX 2 Bus	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 1BH	Level Meter Position - USB Out	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 1CH	Level Meter Position - Stream/Record	00H-01H	Pre Fader (PFL), Post Fader (AFL)
02H 02H 1DH	Audio Level Custom 1 Assign	00H-1EH	Audio In 1-6, Audio In 7/8, Audio In 9/10, USB In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In, Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, USB Out, Stream/Record, Monitor Bus
02H 02H 1EH	Audio Level Custom 2 Assign	00H-1EH	Audio In 1-6, Audio In 7/8, Audio In 9/10, USB In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In, Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, USB Out, Stream/Record, Monitor Bus
02H 02H 1FH	Audio Level Custom 3 Assign	00H-1EH	Audio In 1-6, Audio In 7/8, Audio In 9/10, USB In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In, Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, USB Out, Stream/Record, Monitor Bus
02H 02H 20H	Audio Level Custom 4 Assign	00H-1EH	Audio In 1-6, Audio In 7/8, Audio In 9/10, USB In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In, Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, USB Out, Stream/Record, Monitor Bus
02H 02H 21H	Audio Level Custom 5 Assign	00H-1EH	Audio In 1-6, Audio In 7/8, Audio In 9/10, USB In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In, Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, USB Out, Stream/Record, Monitor Bus
02H 02H 22H	Audio Level Custom 6 Assign	00H-1EH	Audio In 1-6, Audio In 7/8, Audio In 9/10, USB In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In, Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, USB Out, Stream/Record, Monitor Bus
02H 02H 23H	Audio Level Custom 7 Assign	00H-1EH	Audio In 1-6, Audio In 7/8, Audio In 9/10, USB In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In, Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, USB Out, Stream/Record, Monitor Bus
02H 02H 24H	Audio Level Custom 8 Assign	00H-1EH	Audio In 1-6, Audio In 7/8, Audio In 9/10, USB In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In, Main Bus, AUX 1 Bus, AUX 2 Bus, AUX 3 Bus, USB Out, Stream/Record, Monitor Bus
02H 02H 25H	Level Meter Position - AUX 3 Bus	00H-01H	Pre Fader(PFL), Post Fader(AFL)
02H 02H 26H	Level Meter Position - Monitor Bus	00H-01H	Pre Fader(PFL), Post Fader(AFL)

○ Panel Lock

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 03H 00H	Touch Panel	00H-01H	Off, On
02H 03H 01H	VIDEO SWITCHER Button 1	00H-01H	Off, On
02H 03H 02H	VIDEO SWITCHER Button 2	00H-01H	Off, On
02H 03H 03H	VIDEO SWITCHER Button 3	00H-01H	Off, On
02H 03H 04H	VIDEO SWITCHER Button 4	00H-01H	Off, On
02H 03H 05H	VIDEO SWITCHER Button 5	00H-01H	Off, On
02H 03H 06H	VIDEO SWITCHER Button 6	00H-01H	Off, On
02H 03H 07H	VIDEO SWITCHER Button 7	00H-01H	Off, On
02H 03H 08H	VIDEO SWITCHER Button 8	00H-01H	Off, On
02H 03H 09H	CUT Button	00H-01H	Off, On
02H 03H 0AH	AUTO Button	00H-01H	Off, On
02H 03H 0BH	MODE - SETUP Button	00H-01H	Off, On
02H 03H 0CH	MODE - INPUT SELECT Button	00H-01H	Off, On
02H 03H 0DH	MODE - AUX Button	00H-01H	Off, On
02H 03H 0EH	MODE - SCENE MEMORY Button	00H-01H	Off, On
02H 03H 0FH	MODE - MACRO Button	00H-01H	Off, On
02H 03H 10H	TRANSITION - SETUP Button	00H-01H	Off, On
02H 03H 11H	TRANSITION - MIX Button	00H-01H	Off, On
02H 03H 12H	TRANSITION - WIPE Button	00H-01H	Off, On
02H 03H 13H	TRANSITION - SPLIT 1 Button	00H-01H	Off, On
02H 03H 14H	TRANSITION - SPLIT 2 Button	00H-01H	Off, On
02H 03H 15H	PinP&KEY 1 - SETUP Button	00H-01H	Off, On
02H 03H 16H	PinP&KEY 1 - PVW Button	00H-01H	Off, On
02H 03H 17H	PinP&KEY 1 - PGM Button	00H-01H	Off, On

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 03H 18H	PinP&KEY 2 - SETUP Button	00H-01H	Off, On
02H 03H 19H	PinP&KEY 2 - PVW Button	00H-01H	Off, On
02H 03H 1AH	PinP&KEY 2 - PGM Button	00H-01H	Off, On
02H 03H 1BH	PinP&KEY 3 - SETUP Button	00H-01H	Off, On
02H 03H 1CH	PinP&KEY 3 - PVW Button	00H-01H	Off, On
02H 03H 1DH	PinP&KEY 3 - PGM Button	00H-01H	Off, On
02H 03H 1EH	PinP&KEY 4 - SETUP Button	00H-01H	Off, On
02H 03H 1FH	PinP&KEY 4 - PVW Button	00H-01H	Off, On
02H 03H 20H	PinP&KEY 4 - PGM Button	00H-01H	Off, On
02H 03H 21H	DSK 1 - SETUP Button	00H-01H	Off, On
02H 03H 22H	DSK 1 - PVW Button	00H-01H	Off, On
02H 03H 23H	DSK 1 - PGM Button	00H-01H	Off, On
02H 03H 24H	DSK 2 - SETUP Button	00H-01H	Off, On
02H 03H 25H	DSK 2 - PVW Button	00H-01H	Off, On
02H 03H 26H	DSK 2 - PGM Button	00H-01H	Off, On
02H 03H 27H	USER - SETUP Button	00H-01H	Off, On
02H 03H 28H	USER - USER 1 Button	00H-01H	Off, On
02H 03H 29H	USER - USER 2 Button	00H-01H	Off, On
02H 03H 2AH	USER - USER 3 Button	00H-01H	Off, On
02H 03H 2BH	USER - USER 4 Button	00H-01H	Off, On
02H 03H 2CH	MONITOR - SETUP Button	00H-01H	Off, On
02H 03H 2DH	MONITOR - MONITOR 1 Button	00H-01H	Off, On
02H 03H 2EH	MONITOR - MONITOR 2 Button	00H-01H	Off, On
02H 03H 2FH	MONITOR - MONITOR 3 Button	00H-01H	Off, On
02H 03H 30H	MONITOR - MONITOR 4 Button	00H-01H	Off, On
02H 03H 31H	CAPTURE IMAGE Button	00H-01H	Off, On
02H 03H 32H	AUDIO LEVEL Button	00H-01H	Off, On
02H 03H 33H	OUTPUT FADE Button	00H-01H	Off, On
02H 03H 34H	AUDIO MIXER 1 - GAIN knob	00H-01H	Off, On
02H 03H 35H	AUDIO MIXER 1 - SETUP Button	00H-01H	Off, On
02H 03H 36H	AUDIO MIXER 1 - SOLO Button	00H-01H	Off, On
02H 03H 37H	AUDIO MIXER 1 - MUTE Button	00H-01H	Off, On
02H 03H 38H	AUDIO MIXER 1 - Level Fader	00H-01H	Off, On
02H 03H 39H	AUDIO MIXER 2 - GAIN knob	00H-01H	Off, On
02H 03H 3AH	AUDIO MIXER 2 - SETUP Button	00H-01H	Off, On
02H 03H 3BH	AUDIO MIXER 2 - SOLO Button	00H-01H	Off, On
02H 03H 3CH	AUDIO MIXER 2 - MUTE Button	00H-01H	Off, On
02H 03H 3DH	AUDIO MIXER 2 - Level Fader	00H-01H	Off, On
02H 03H 3EH	AUDIO MIXER 3 - GAIN knob	00H-01H	Off, On
02H 03H 3FH	AUDIO MIXER 3 - SETUP Button	00H-01H	Off, On
02H 03H 40H	AUDIO MIXER 3 - SOLO Button	00H-01H	Off, On
02H 03H 41H	AUDIO MIXER 3 - MUTE Button	00H-01H	Off, On
02H 03H 42H	AUDIO MIXER 3 - Level Fader	00H-01H	Off, On
02H 03H 43H	AUDIO MIXER 4 - GAIN knob	00H-01H	Off, On
02H 03H 44H	AUDIO MIXER 4 - SETUP Button	00H-01H	Off, On
02H 03H 45H	AUDIO MIXER 4 - SOLO Button	00H-01H	Off, On
02H 03H 46H	AUDIO MIXER 4 - MUTE Button	00H-01H	Off, On
02H 03H 47H	AUDIO MIXER 4 - Level Fader	00H-01H	Off, On
02H 03H 48H	AUDIO MIXER 5 - GAIN knob	00H-01H	Off, On
02H 03H 49H	AUDIO MIXER 5 - SETUP Button	00H-01H	Off, On
02H 03H 4AH	AUDIO MIXER 5 - SOLO Button	00H-01H	Off, On
02H 03H 4BH	AUDIO MIXER 5 - MUTE Button	00H-01H	Off, On
02H 03H 4CH	AUDIO MIXER 5 - Level Fader	00H-01H	Off, On
02H 03H 4DH	AUDIO MIXER 6 - GAIN knob	00H-01H	Off, On
02H 03H 4EH	AUDIO MIXER 6 - SETUP Button	00H-01H	Off, On
02H 03H 4FH	AUDIO MIXER 6 - SOLO Button	00H-01H	Off, On
02H 03H 50H	AUDIO MIXER 6 - MUTE Button	00H-01H	Off, On
02H 03H 51H	AUDIO MIXER 6 - Level Fader	00H-01H	Off, On
02H 03H 52H	AUDIO MIXER 7 - GAIN knob	00H-01H	Off, On
02H 03H 53H	AUDIO MIXER 7 - SETUP Button	00H-01H	Off, On
02H 03H 54H	AUDIO MIXER 7 - SOLO Button	00H-01H	Off, On
02H 03H 55H	AUDIO MIXER 7 - MUTE Button	00H-01H	Off, On

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 03H 56H	AUDIO MIXER 7 - Level Fader	00H-01H	Off, On
02H 03H 57H	AUDIO MIXER 8 - GAIN knob	00H-01H	Off, On
02H 03H 58H	AUDIO MIXER 8 - SETUP Button	00H-01H	Off, On
02H 03H 59H	AUDIO MIXER 8 - SOLO Button	00H-01H	Off, On
02H 03H 5AH	AUDIO MIXER 8 - MUTE Button	00H-01H	Off, On
02H 03H 5BH	AUDIO MIXER 8 - Level Fader	00H-01H	Off, On
02H 03H 5CH	MAIN - SETUP Button	00H-01H	Off, On
02H 03H 5DH	MAIN - SOLO Button	00H-01H	Off, On
02H 03H 5EH	MAIN - MUTE Button	00H-01H	Off, On
02H 03H 5FH	MAIN - Level Fader	00H-01H	Off, On
02H 03H 60H	AUX 1 Knob	00H-01H	Off, On
02H 03H 61H	AUX 2 Knob	00H-01H	Off, On
02H 03H 62H	USB OUT Knob	00H-01H	Off, On
02H 03H 63H	STREAM/RECORD Knob	00H-01H	Off, On
02H 03H 64H	AUDIO EFFECT - SETUP Button	00H-01H	Off, On
02H 03H 65H	AUDIO EFFECT - AUDIO EFFECT 1 Button	00H-01H	Off, On
02H 03H 66H	AUDIO EFFECT - AUDIO EFFECT 2 Button	00H-01H	Off, On
02H 03H 67H	AUDIO EFFECT - AUDIO EFFECT 3 Button	00H-01H	Off, On
02H 03H 68H	AUDIO EFFECT - AUDIO EFFECT 4 Button	00H-01H	Off, On
02H 03H 69H	AUDIO PLAYER - SETUP Button	00H-01H	Off, On
02H 03H 6AH	AUDIO PLAYER - AUDIO PLAYER 1 Pad	00H-01H	Off, On
02H 03H 6BH	AUDIO PLAYER - AUDIO PLAYER 2 Pad	00H-01H	Off, On
02H 03H 6CH	AUDIO PLAYER - AUDIO PLAYER 3 Pad	00H-01H	Off, On
02H 03H 6DH	AUDIO PLAYER - AUDIO PLAYER 4 Pad	00H-01H	Off, On
02H 03H 6EH	AUDIO PLAYER - AUDIO PLAYER 5 Pad	00H-01H	Off, On
02H 03H 6FH	AUDIO PLAYER - AUDIO PLAYER 6 Pad	00H-01H	Off, On
02H 03H 70H	AUDIO PLAYER - AUDIO PLAYER 7 Pad	00H-01H	Off, On
02H 03H 71H	AUDIO PLAYER - AUDIO PLAYER 8 Pad	00H-01H	Off, On
02H 03H 72H	AUDIO PLAYER - Level Knob	00H-01H	Off, On

○ Scene Memory

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 04H 00H	Start Up	7FH-00H-1FH	Last Memory, Memory 1-32
02H 04H 01H	Start Up - Priority	00H-01H	Memory, Panel
02H 04H 02H	Memory Protect	00H-01H	Off, On
02H 04H 03H	Fade Time	00H-28H	0.0-4.0sec
02H 04H 04H	Fade - Mix/Wipe	00H-01H	Off, On
02H 04H 05H	Fade - PinP&Key 1	00H-01H	Off, On
02H 04H 06H	Fade - PinP&Key 2	00H-01H	Off, On
02H 04H 07H	Fade - PinP&Key 3	00H-01H	Off, On
02H 04H 08H	Fade - PinP&Key 4	00H-01H	Off, On
02H 04H 09H	Fade - DSK 1	00H-01H	Off, On
02H 04H 0AH	Fade - DSK 2	00H-01H	Off, On
02H 04H 0BH	Load Parameters - Video Assign	00H-01H	Off, On
02H 04H 0CH	Load Parameters - Video Input	00H-01H	Off, On
02H 04H 0DH	Load Parameters - Video Output	00H-01H	Off, On
02H 04H 0EH	Load Parameters -Transition - Transition Type	00H-01H	Off, On
02H 04H 0FH	Load Parameters -Transition - Mix	00H-01H	Off, On

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 04H 10H	Load Parameters -Transition - Wipe	00H-01H	Off, On
02H 04H 11H	Load Parameters -Transition - Split 1	00H-01H	Off, On
02H 04H 12H	Load Parameters -Transition - Split 2	00H-01H	Off, On
02H 04H 13H	Load Parameters - PinP&Key - PinP&Key 1	00H-01H	Off, On
02H 04H 14H	Load Parameters - PinP&Key - PinP&Key 2	00H-01H	Off, On
02H 04H 15H	Load Parameters - PinP&Key - PinP&Key 3	00H-01H	Off, On
02H 04H 16H	Load Parameters - PinP&Key - PinP&Key 4	00H-01H	Off, On
02H 04H 17H	Load Parameters - DSK - DSK 1	00H-01H	Off, On
02H 04H 18H	Load Parameters - DSK - DSK 2	00H-01H	Off, On
02H 04H 19H	Load Parameters - Video Switcher Button	00H-01H	Off, On
02H 04H 1AH	Load Parameters - Audio Fader Assign	00H-01H	Off, On
02H 04H 1BH	Load Parameters - Audio Input	00H-01H	Off, On
02H 04H 1CH	Load Parameters - Audio Output	00H-01H	Off, On
02H 04H 1DH	Load Parameters - Audio Follow	00H-01H	Off, On
02H 04H 1EH	Load Parameters - Audio Auto Mixing	00H-01H	Off, On
02H 04H 1FH	Button Assign - VIDEO SWITCHER Button 1	00H-1FH	Memory 1-32
02H 04H 20H	Button Assign - VIDEO SWITCHER Button 2	00H-1FH	Memory 1-32
02H 04H 21H	Button Assign - VIDEO SWITCHER Button 3	00H-1FH	Memory 1-32
02H 04H 22H	Button Assign - VIDEO SWITCHER Button 4	00H-1FH	Memory 1-32
02H 04H 23H	Button Assign - VIDEO SWITCHER Button 5	00H-1FH	Memory 1-32
02H 04H 24H	Button Assign - VIDEO SWITCHER Button 6	00H-1FH	Memory 1-32
02H 04H 25H	Button Assign - VIDEO SWITCHER Button 7	00H-1FH	Memory 1-32
02H 04H 26H	Button Assign - VIDEO SWITCHER Button 8	00H-1FH	Memory 1-32
02H 04H 27H	Load Parameters - AUX 1 Source	00H-01H	Off, On
02H 04H 28H	Load Parameters - AUX 2 Source	00H-01H	Off, On
02H 04H 29H	Load Parameters - AUX 3 Source	00H-01H	Off, On

○ Scene Memory Exist

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 05H 00H	Memory 1 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 01H	Memory 2 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 02H	Memory 3 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 03H	Memory 4 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 04H	Memory 5 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 05H	Memory 6 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 06H	Memory 7 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 07H	Memory 8 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 08H	Memory 9 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 09H	Memory 10 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 0AH	Memory 11 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 0BH	Memory 12 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 0CH	Memory 13 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 0DH	Memory 14 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 0EH	Memory 15 Exist	00H-01H	Not Exist, Exist (Read Only)
02H 05H 0FH	Memory 16 Exist	00H-01H	Not Exist, Exist (Read Only)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 06H 58H	Memory 25 Thumbnail Position - DSK 2	00H-08H	Upper Left, Upper, Upper Right, Left, Center, Right, Lower Left, Lower, Lower Right
02H 06H 59H	Memory 26 Thumbnail Position - DSK 2	00H-08H	Upper Left, Upper, Upper Right, Left, Center, Right, Lower Left, Lower, Lower Right
02H 06H 5AH	Memory 27 Thumbnail Position - DSK 2	00H-08H	Upper Left, Upper, Upper Right, Left, Center, Right, Lower Left, Lower, Lower Right
02H 06H 5BH	Memory 28 Thumbnail Position - DSK 2	00H-08H	Upper Left, Upper, Upper Right, Left, Center, Right, Lower Left, Lower, Lower Right
02H 06H 5CH	Memory 29 Thumbnail Position - DSK 2	00H-08H	Upper Left, Upper, Upper Right, Left, Center, Right, Lower Left, Lower, Lower Right
02H 06H 5DH	Memory 30 Thumbnail Position - DSK 2	00H-08H	Upper Left, Upper, Upper Right, Left, Center, Right, Lower Left, Lower, Lower Right
02H 06H 5EH	Memory 31 Thumbnail Position - DSK 2	00H-08H	Upper Left, Upper, Upper Right, Left, Center, Right, Lower Left, Lower, Lower Right
02H 06H 5FH	Memory 32 Thumbnail Position - DSK 2	00H-08H	Upper Left, Upper, Upper Right, Left, Center, Right, Lower Left, Lower, Lower Right

○ STILL IMAGE

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 07H 00H	Save To Internal Storage	00H-01H	Disable, Enable

○ Freeze

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 08H 00H	Freeze	00H-01H	Off, On
02H 08H 01H	Type	00H-01H	All, Select
02H 08H 02H	Freeze Select - HDMI In 1	00H-01H	Disable, Enable
02H 08H 03H	Freeze Select - HDMI In 2	00H-01H	Disable, Enable
02H 08H 04H	Freeze Select - HDMI In 3	00H-01H	Disable, Enable
02H 08H 05H	Freeze Select - HDMI In 4	00H-01H	Disable, Enable
02H 08H 06H	Freeze Select - HDMI In 5	00H-01H	Disable, Enable
02H 08H 07H	Freeze Select - HDMI In 6	00H-01H	Disable, Enable
02H 08H 08H	Freeze Select - SDI In 1	00H-01H	Disable, Enable
02H 08H 09H	Freeze Select - SDI In 2	00H-01H	Disable, Enable
02H 08H 0AH	Freeze Select - SDI In 3	00H-01H	Disable, Enable
02H 08H 0BH	Freeze Select - SDI In 4	00H-01H	Disable, Enable
02H 08H 0CH	Freeze Select - SDI In 5	00H-01H	Disable, Enable
02H 08H 0DH	Freeze Select - SDI In 6	00H-01H	Disable, Enable

○ AUTO SWITCHING

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 09H 00H	Auto Switching	00H-01H	Off, On
02H 09H 01H	Auto Switching Type	00H-09H	Input Scan, Scene Memory Scan, Beat Sync, Video Follows Audio, PinP&Key 1 Scan-PinP&Key 4 Scan, DSK 1 Scan, DSK 2 Scan
02H 09H 02H	Input Scan - Scan Sequence	00H-02H	Normal, Reverse, Random
02H 09H 03H	Input Scan - Scan Transition Time	00H-28H	0.0-4.0sec
02H 09H 04H	Input Scan - Scan Target	00H-06H	PGM/A & PST/B, PinP&Key 1-4, DSK 1-2
02H 09H 05H	Input Scan - Input 1 Time	00H-78H	Off, 1-120sec
02H 09H 06H	Input Scan - Input 2 Time	00H-78H	Off, 1-120sec
02H 09H 07H	Input Scan - Input 3 Time	00H-78H	Off, 1-120sec
02H 09H 08H	Input Scan - Input 4 Time	00H-78H	Off, 1-120sec
02H 09H 09H	Input Scan - Input 5 Time	00H-78H	Off, 1-120sec
02H 09H 0AH	Input Scan - Input 6 Time	00H-78H	Off, 1-120sec
02H 09H 0BH	Input Scan - Input 7 Time	00H-78H	Off, 1-120sec
02H 09H 0CH	Input Scan - Input 8 Time	00H-78H	Off, 1-120sec
02H 09H 0DH	Scene Memory Scan - Scan Sequence	00H-02H	Normal, Reverse, Random
02H 09H 0EH	Scene Memory Scan - Memory 1 Time	00H-78H	Off, 1-120sec
:	:	:	:

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 09H 2DH	Scene Memory Scan - Memory 32 Time	00H-78H	Off, 1-120sec
02H 09H 2EH	Beat Sync - Sync Source	00H-17H	Audio In 1-6, Audio In 7/8, Audio In 9/10, Usb In, Bluetooth In, Audio Player, HDMI In 1-6, SDI In 1-6, Video Player/SRT In
02H 09H 2FH	Beat Sync - Scan Sequence	00H-02H	Normal, Reverse, Random
02H 09H 30H	Beat Sync - Scan Transition Time	00H-28H	0.0-4.0sec
02H 09H 31H	Beat Sync - Scan Cycle	01H-0AH	1-10
02H 09H 32H	Beat Sync - Scan Target	00H-06H	PGM/A & PST/B, PinP&Key 1-4, DSK 1-2
02H 09H 33H	Beat Sync - Input 1	00H-01H	Off, On
02H 09H 34H	Beat Sync - Input 2	00H-01H	Off, On
02H 09H 35H	Beat Sync - Input 3	00H-01H	Off, On
02H 09H 36H	Beat Sync - Input 4	00H-01H	Off, On
02H 09H 37H	Beat Sync - Input 5	00H-01H	Off, On
02H 09H 38H	Beat Sync - Input 6	00H-01H	Off, On
02H 09H 39H	Beat Sync - Input 7	00H-01H	Off, On
02H 09H 3AH	Beat Sync - Input 8	00H-01H	Off, On

○ Auto Switching - PinP&Key 1 Scan

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 0AH 00H	PinP&Key 1 Scan - Scan Sequence	00H-02H	Normal, Reverse, Random
02H 0AH 01H	PinP&Key 1 Scan - HDMI In 1 Time	00H-78H	Off, 1-120sec
02H 0AH 02H	PinP&Key 1 Scan - HDMI In 2 Time	00H-78H	Off, 1-120sec
02H 0AH 03H	PinP&Key 1 Scan - HDMI In 3 Time	00H-78H	Off, 1-120sec
02H 0AH 04H	PinP&Key 1 Scan - HDMI In 4 Time	00H-78H	Off, 1-120sec
02H 0AH 05H	PinP&Key 1 Scan - HDMI In 5 Time	00H-78H	Off, 1-120sec
02H 0AH 06H	PinP&Key 1 Scan - HDMI In 6 Time	00H-78H	Off, 1-120sec
02H 0AH 07H	PinP&Key 1 Scan - SDI In 1 Time	00H-78H	Off, 1-120sec
02H 0AH 08H	PinP&Key 1 Scan - SDI In 2 Time	00H-78H	Off, 1-120sec
02H 0AH 09H	PinP&Key 1 Scan - SDI In 3 Time	00H-78H	Off, 1-120sec
02H 0AH 0AH	PinP&Key 1 Scan - SDI In 4 Time	00H-78H	Off, 1-120sec
02H 0AH 0BH	PinP&Key 1 Scan - SDI In 5 Time	00H-78H	Off, 1-120sec
02H 0AH 0CH	PinP&Key 1 Scan - SDI In 6 Time	00H-78H	Off, 1-120sec
02H 0AH 0DH	PinP&Key 1 Scan - Still 1 Time	00H-78H	Off, 1-120sec
02H 0AH 0EH	PinP&Key 1 Scan - Still 2 Time	00H-78H	Off, 1-120sec
02H 0AH 0FH	PinP&Key 1 Scan - Still 3 Time	00H-78H	Off, 1-120sec
02H 0AH 10H	PinP&Key 1 Scan - Still 4 Time	00H-78H	Off, 1-120sec
02H 0AH 11H	PinP&Key 1 Scan - Still 5 Time	00H-78H	Off, 1-120sec
02H 0AH 12H	PinP&Key 1 Scan - Still 6 Time	00H-78H	Off, 1-120sec
02H 0AH 13H	PinP&Key 1 Scan - Still 7 Time	00H-78H	Off, 1-120sec
02H 0AH 14H	PinP&Key 1 Scan - Still 8 Time	00H-78H	Off, 1-120sec
02H 0AH 15H	PinP&Key 1 Scan - Still 9 Time	00H-78H	Off, 1-120sec
02H 0AH 16H	PinP&Key 1 Scan - Still 10 Time	00H-78H	Off, 1-120sec
02H 0AH 17H	PinP&Key 1 Scan - Still 11 Time	00H-78H	Off, 1-120sec
02H 0AH 18H	PinP&Key 1 Scan - Still 12 Time	00H-78H	Off, 1-120sec
02H 0AH 19H	PinP&Key 1 Scan - Still 13 Time	00H-78H	Off, 1-120sec
02H 0AH 1AH	PinP&Key 1 Scan - Still 14 Time	00H-78H	Off, 1-120sec
02H 0AH 1BH	PinP&Key 1 Scan - Still 15 Time	00H-78H	Off, 1-120sec
02H 0AH 1CH	PinP&Key 1 Scan - Still 16 Time	00H-78H	Off, 1-120sec
02H 0AH 1DH	PinP&Key 1 Scan - Video Player/SRT In Time	00H-78H	Off, 1-120sec

○ Auto Switching - PinP&Key 2 Scan

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 0BH 00H	PinP&Key 2 Scan - Scan Sequence	00H-02H	Normal, Reverse, Random
02H 0BH 01H	PinP&Key 2 Scan - HDMI In 1 Time	00H-78H	Off, 1-120sec
02H 0BH 02H	PinP&Key 2 Scan - HDMI In 2 Time	00H-78H	Off, 1-120sec
02H 0BH 03H	PinP&Key 2 Scan - HDMI In 3 Time	00H-78H	Off, 1-120sec
02H 0BH 04H	PinP&Key 2 Scan - HDMI In 4 Time	00H-78H	Off, 1-120sec
02H 0BH 05H	PinP&Key 2 Scan - HDMI In 5 Time	00H-78H	Off, 1-120sec
02H 0BH 06H	PinP&Key 2 Scan - HDMI In 6 Time	00H-78H	Off, 1-120sec
02H 0BH 07H	PinP&Key 2 Scan - SDI In 1 Time	00H-78H	Off, 1-120sec
02H 0BH 08H	PinP&Key 2 Scan - SDI In 2 Time	00H-78H	Off, 1-120sec
02H 0BH 09H	PinP&Key 2 Scan - SDI In 3 Time	00H-78H	Off, 1-120sec
02H 0BH 0AH	PinP&Key 2 Scan - SDI In 4 Time	00H-78H	Off, 1-120sec
02H 0BH 0BH	PinP&Key 2 Scan - SDI In 5 Time	00H-78H	Off, 1-120sec
02H 0BH 0CH	PinP&Key 2 Scan - SDI In 6 Time	00H-78H	Off, 1-120sec
02H 0BH 0DH	PinP&Key 2 Scan - Still 1 Time	00H-78H	Off, 1-120sec
02H 0BH 0EH	PinP&Key 2 Scan - Still 2 Time	00H-78H	Off, 1-120sec
02H 0BH 0FH	PinP&Key 2 Scan - Still 3 Time	00H-78H	Off, 1-120sec
02H 0BH 10H	PinP&Key 2 Scan - Still 4 Time	00H-78H	Off, 1-120sec
02H 0BH 11H	PinP&Key 2 Scan - Still 5 Time	00H-78H	Off, 1-120sec
02H 0BH 12H	PinP&Key 2 Scan - Still 6 Time	00H-78H	Off, 1-120sec
02H 0BH 13H	PinP&Key 2 Scan - Still 7 Time	00H-78H	Off, 1-120sec
02H 0BH 14H	PinP&Key 2 Scan - Still 8 Time	00H-78H	Off, 1-120sec
02H 0BH 15H	PinP&Key 2 Scan - Still 9 Time	00H-78H	Off, 1-120sec
02H 0BH 16H	PinP&Key 2 Scan - Still 10 Time	00H-78H	Off, 1-120sec
02H 0BH 17H	PinP&Key 2 Scan - Still 11 Time	00H-78H	Off, 1-120sec
02H 0BH 18H	PinP&Key 2 Scan - Still 12 Time	00H-78H	Off, 1-120sec
02H 0BH 19H	PinP&Key 2 Scan - Still 13 Time	00H-78H	Off, 1-120sec
02H 0BH 1AH	PinP&Key 2 Scan - Still 14 Time	00H-78H	Off, 1-120sec
02H 0BH 1BH	PinP&Key 2 Scan - Still 15 Time	00H-78H	Off, 1-120sec
02H 0BH 1CH	PinP&Key 2 Scan - Still 16 Time	00H-78H	Off, 1-120sec
02H 0BH 1DH	PinP&Key 2 Scan - Video Player/SRT In Time	00H-78H	Off, 1-120sec

○ Auto Switching - PinP&Key 3 Scan

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 0CH 00H	PinP&Key 3 Scan - Scan Sequence	00H-02H	Normal, Reverse, Random
02H 0CH 01H	PinP&Key 3 Scan - HDMI In 1 Time	00H-78H	Off, 1-120sec
02H 0CH 02H	PinP&Key 3 Scan - HDMI In 2 Time	00H-78H	Off, 1-120sec
02H 0CH 03H	PinP&Key 3 Scan - HDMI In 3 Time	00H-78H	Off, 1-120sec
02H 0CH 04H	PinP&Key 3 Scan - HDMI In 4 Time	00H-78H	Off, 1-120sec
02H 0CH 05H	PinP&Key 3 Scan - HDMI In 5 Time	00H-78H	Off, 1-120sec
02H 0CH 06H	PinP&Key 3 Scan - HDMI In 6 Time	00H-78H	Off, 1-120sec
02H 0CH 07H	PinP&Key 3 Scan - SDI In 1 Time	00H-78H	Off, 1-120sec
02H 0CH 08H	PinP&Key 3 Scan - SDI In 2 Time	00H-78H	Off, 1-120sec
02H 0CH 09H	PinP&Key 3 Scan - SDI In 3 Time	00H-78H	Off, 1-120sec
02H 0CH 0AH	PinP&Key 3 Scan - SDI In 4 Time	00H-78H	Off, 1-120sec
02H 0CH 0BH	PinP&Key 3 Scan - SDI In 5 Time	00H-78H	Off, 1-120sec
02H 0CH 0CH	PinP&Key 3 Scan - SDI In 6 Time	00H-78H	Off, 1-120sec
02H 0CH 0DH	PinP&Key 3 Scan - Still 1 Time	00H-78H	Off, 1-120sec

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 0CH 0EH	PinP&Key 3 Scan - Still 2 Time	00H-78H	Off, 1-120sec
02H 0CH 0FH	PinP&Key 3 Scan - Still 3 Time	00H-78H	Off, 1-120sec
02H 0CH 10H	PinP&Key 3 Scan - Still 4 Time	00H-78H	Off, 1-120sec
02H 0CH 11H	PinP&Key 3 Scan - Still 5 Time	00H-78H	Off, 1-120sec
02H 0CH 12H	PinP&Key 3 Scan - Still 6 Time	00H-78H	Off, 1-120sec
02H 0CH 13H	PinP&Key 3 Scan - Still 7 Time	00H-78H	Off, 1-120sec
02H 0CH 14H	PinP&Key 3 Scan - Still 8 Time	00H-78H	Off, 1-120sec
02H 0CH 15H	PinP&Key 3 Scan - Still 9 Time	00H-78H	Off, 1-120sec
02H 0CH 16H	PinP&Key 3 Scan - Still 10 Time	00H-78H	Off, 1-120sec
02H 0CH 17H	PinP&Key 3 Scan - Still 11 Time	00H-78H	Off, 1-120sec
02H 0CH 18H	PinP&Key 3 Scan - Still 12 Time	00H-78H	Off, 1-120sec
02H 0CH 19H	PinP&Key 3 Scan - Still 13 Time	00H-78H	Off, 1-120sec
02H 0CH 1AH	PinP&Key 3 Scan - Still 14 Time	00H-78H	Off, 1-120sec
02H 0CH 1BH	PinP&Key 3 Scan - Still 15 Time	00H-78H	Off, 1-120sec
02H 0CH 1CH	PinP&Key 3 Scan - Still 16 Time	00H-78H	Off, 1-120sec
02H 0CH 1DH	PinP&Key 3 Scan - Video Player/ SRT In Time	00H-78H	Off, 1-120sec

○ Auto Switching - PinP&Key 4 Scan

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 0DH 00H	PinP&Key 4 Scan - Scan Sequence	00H-02H	Normal, Reverse, Random
02H 0DH 01H	PinP&Key 4 Scan - HDMI In 1 Time	00H-78H	Off, 1-120sec
02H 0DH 02H	PinP&Key 4 Scan - HDMI In 2 Time	00H-78H	Off, 1-120sec
02H 0DH 03H	PinP&Key 4 Scan - HDMI In 3 Time	00H-78H	Off, 1-120sec
02H 0DH 04H	PinP&Key 4 Scan - HDMI In 4 Time	00H-78H	Off, 1-120sec
02H 0DH 05H	PinP&Key 4 Scan - HDMI In 5 Time	00H-78H	Off, 1-120sec
02H 0DH 06H	PinP&Key 4 Scan - HDMI In 6 Time	00H-78H	Off, 1-120sec
02H 0DH 07H	PinP&Key 4 Scan - SDI In 1 Time	00H-78H	Off, 1-120sec
02H 0DH 08H	PinP&Key 4 Scan - SDI In 2 Time	00H-78H	Off, 1-120sec
02H 0DH 09H	PinP&Key 4 Scan - SDI In 3 Time	00H-78H	Off, 1-120sec
02H 0DH 0AH	PinP&Key 4 Scan - SDI In 4 Time	00H-78H	Off, 1-120sec
02H 0DH 0BH	PinP&Key 4 Scan - SDI In 5 Time	00H-78H	Off, 1-120sec
02H 0DH 0CH	PinP&Key 4 Scan - SDI In 6 Time	00H-78H	Off, 1-120sec
02H 0DH 0DH	PinP&Key 4 Scan - Still 1 Time	00H-78H	Off, 1-120sec
02H 0DH 0EH	PinP&Key 4 Scan - Still 2 Time	00H-78H	Off, 1-120sec
02H 0DH 0FH	PinP&Key 4 Scan - Still 3 Time	00H-78H	Off, 1-120sec
02H 0DH 10H	PinP&Key 4 Scan - Still 4 Time	00H-78H	Off, 1-120sec
02H 0DH 11H	PinP&Key 4 Scan - Still 5 Time	00H-78H	Off, 1-120sec
02H 0DH 12H	PinP&Key 4 Scan - Still 6 Time	00H-78H	Off, 1-120sec
02H 0DH 13H	PinP&Key 4 Scan - Still 7 Time	00H-78H	Off, 1-120sec
02H 0DH 14H	PinP&Key 4 Scan - Still 8 Time	00H-78H	Off, 1-120sec
02H 0DH 15H	PinP&Key 4 Scan - Still 9 Time	00H-78H	Off, 1-120sec
02H 0DH 16H	PinP&Key 4 Scan - Still 10 Time	00H-78H	Off, 1-120sec
02H 0DH 17H	PinP&Key 4 Scan - Still 11 Time	00H-78H	Off, 1-120sec
02H 0DH 18H	PinP&Key 4 Scan - Still 12 Time	00H-78H	Off, 1-120sec
02H 0DH 19H	PinP&Key 4 Scan - Still 13 Time	00H-78H	Off, 1-120sec
02H 0DH 1AH	PinP&Key 4 Scan - Still 14 Time	00H-78H	Off, 1-120sec
02H 0DH 1BH	PinP&Key 4 Scan - Still 15 Time	00H-78H	Off, 1-120sec
02H 0DH 1CH	PinP&Key 4 Scan - Still 16 Time	00H-78H	Off, 1-120sec
02H 0DH 1DH	PinP&Key 4 Scan - Video Player/ SRT In Time	00H-78H	Off, 1-120sec

○ Auto Switching - DSK 1 Scan

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 0EH 00H	DSK 1 Scan - Scan Sequence	00H-02H	Normal, Reverse, Random
02H 0EH 01H	DSK 1 Scan - HDMI In 1 Time	00H-78H	Off, 1-120sec
02H 0EH 02H	DSK 1 Scan - HDMI In 2 Time	00H-78H	Off, 1-120sec
02H 0EH 03H	DSK 1 Scan - HDMI In 3 Time	00H-78H	Off, 1-120sec
02H 0EH 04H	DSK 1 Scan - HDMI In 4 Time	00H-78H	Off, 1-120sec
02H 0EH 05H	DSK 1 Scan - HDMI In 5 Time	00H-78H	Off, 1-120sec
02H 0EH 06H	DSK 1 Scan - HDMI In 6 Time	00H-78H	Off, 1-120sec
02H 0EH 07H	DSK 1 Scan - SDI In 1 Time	00H-78H	Off, 1-120sec
02H 0EH 08H	DSK 1 Scan - SDI In 2 Time	00H-78H	Off, 1-120sec
02H 0EH 09H	DSK 1 Scan - SDI In 3 Time	00H-78H	Off, 1-120sec
02H 0EH 0AH	DSK 1 Scan - SDI In 4 Time	00H-78H	Off, 1-120sec
02H 0EH 0BH	DSK 1 Scan - SDI In 5 Time	00H-78H	Off, 1-120sec
02H 0EH 0CH	DSK 1 Scan - SDI In 6 Time	00H-78H	Off, 1-120sec
02H 0EH 0DH	DSK 1 Scan - Still 1 Time	00H-78H	Off, 1-120sec
02H 0EH 0EH	DSK 1 Scan - Still 2 Time	00H-78H	Off, 1-120sec
02H 0EH 0FH	DSK 1 Scan - Still 3 Time	00H-78H	Off, 1-120sec
02H 0EH 10H	DSK 1 Scan - Still 4 Time	00H-78H	Off, 1-120sec
02H 0EH 11H	DSK 1 Scan - Still 5 Time	00H-78H	Off, 1-120sec
02H 0EH 12H	DSK 1 Scan - Still 6 Time	00H-78H	Off, 1-120sec
02H 0EH 13H	DSK 1 Scan - Still 7 Time	00H-78H	Off, 1-120sec
02H 0EH 14H	DSK 1 Scan - Still 8 Time	00H-78H	Off, 1-120sec
02H 0EH 15H	DSK 1 Scan - Still 9 Time	00H-78H	Off, 1-120sec
02H 0EH 16H	DSK 1 Scan - Still 10 Time	00H-78H	Off, 1-120sec
02H 0EH 17H	DSK 1 Scan - Still 11 Time	00H-78H	Off, 1-120sec
02H 0EH 18H	DSK 1 Scan - Still 12 Time	00H-78H	Off, 1-120sec
02H 0EH 19H	DSK 1 Scan - Still 13 Time	00H-78H	Off, 1-120sec
02H 0EH 1AH	DSK 1 Scan - Still 14 Time	00H-78H	Off, 1-120sec
02H 0EH 1BH	DSK 1 Scan - Still 15 Time	00H-78H	Off, 1-120sec
02H 0EH 1CH	DSK 1 Scan - Still 16 Time	00H-78H	Off, 1-120sec
02H 0EH 1DH	DSK 1 Scan - Video Player/SRT In Time	00H-78H	Off, 1-120sec

○ Auto Switching - DSK 2 Scan

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 0FH 00H	DSK 2 Scan - Scan Sequence	00H-02H	Normal, Reverse, Random
02H 0FH 01H	DSK 2 Scan - HDMI In 1 Time	00H-78H	Off, 1-120sec
02H 0FH 02H	DSK 2 Scan - HDMI In 2 Time	00H-78H	Off, 1-120sec
02H 0FH 03H	DSK 2 Scan - HDMI In 3 Time	00H-78H	Off, 1-120sec
02H 0FH 04H	DSK 2 Scan - HDMI In 4 Time	00H-78H	Off, 1-120sec
02H 0FH 05H	DSK 2 Scan - HDMI In 5 Time	00H-78H	Off, 1-120sec
02H 0FH 06H	DSK 2 Scan - HDMI In 6 Time	00H-78H	Off, 1-120sec
02H 0FH 07H	DSK 2 Scan - SDI In 1 Time	00H-78H	Off, 1-120sec
02H 0FH 08H	DSK 2 Scan - SDI In 2 Time	00H-78H	Off, 1-120sec
02H 0FH 09H	DSK 2 Scan - SDI In 3 Time	00H-78H	Off, 1-120sec
02H 0FH 0AH	DSK 2 Scan - SDI In 4 Time	00H-78H	Off, 1-120sec
02H 0FH 0BH	DSK 2 Scan - SDI In 5 Time	00H-78H	Off, 1-120sec
02H 0FH 0CH	DSK 2 Scan - SDI In 6 Time	00H-78H	Off, 1-120sec
02H 0FH 0DH	DSK 2 Scan - Still 1 Time	00H-78H	Off, 1-120sec
02H 0FH 0EH	DSK 2 Scan - Still 2 Time	00H-78H	Off, 1-120sec
02H 0FH 0FH	DSK 2 Scan - Still 3 Time	00H-78H	Off, 1-120sec
02H 0FH 10H	DSK 2 Scan - Still 4 Time	00H-78H	Off, 1-120sec
02H 0FH 11H	DSK 2 Scan - Still 5 Time	00H-78H	Off, 1-120sec
02H 0FH 12H	DSK 2 Scan - Still 6 Time	00H-78H	Off, 1-120sec
02H 0FH 13H	DSK 2 Scan - Still 7 Time	00H-78H	Off, 1-120sec
02H 0FH 14H	DSK 2 Scan - Still 8 Time	00H-78H	Off, 1-120sec
02H 0FH 15H	DSK 2 Scan - Still 9 Time	00H-78H	Off, 1-120sec
02H 0FH 16H	DSK 2 Scan - Still 10 Time	00H-78H	Off, 1-120sec
02H 0FH 17H	DSK 2 Scan - Still 11 Time	00H-78H	Off, 1-120sec
02H 0FH 18H	DSK 2 Scan - Still 12 Time	00H-78H	Off, 1-120sec
02H 0FH 19H	DSK 2 Scan - Still 13 Time	00H-78H	Off, 1-120sec

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 0FH 1AH	DSK 2 Scan - Still 14 Time	00H-78H	Off, 1-120sec
02H 0FH 1BH	DSK 2 Scan - Still 15 Time	00H-78H	Off, 1-120sec
02H 0FH 1CH	DSK 2 Scan - Still 16 Time	00H-78H	Off, 1-120sec
02H 0FH 1DH	DSK 2 Scan - Video Player/SRT In Time	00H-78H	Off, 1-120sec

○ CTL/EXP

* xxH: 10H-11H (CTL/EXP 1, 2)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H xxH 00H	CTL/EXP TYPE	00H-02H	Off, Ctl A & Ctl B, Exp
02H xxH 01H 02H	CTL A ASSIGN	00H 00H-07H 60H	See "Menu List" in the "Reference Manual" (PDF).
02H xxH 03H 04H	CTL B ASSIGN	00H 00H-07H 60H	
02H xxH 05H	EXP ASSIGN	00H-39H	

○ RS-232/Tally/GPO/GPI/Keypad

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 12H 00H	RS-232	00H-01H	Off, On
02H 12H 01H	RS-232 - Baudrate	00H-02H	9600, 38400, 115200
02H 12H 02H	Tally/GPO - Template	00H-04H	HDMI Tally, SDI Tally, GPO, HDMI Tally/GPO, SDI Tally/GPO
02H 12H 03H	Tally/GPO - Tally/GPO 1	00H-59H	PGM HDMI In 1-6, PGM SDI In 1-6, PGM Still 1-16, PGM Video Player/SRT In, PGM Input 1-8, PST HDMI In 1-6, PST SDI In 1-6, PST Still 1-16, PST Video Player/SRT In, PST Input 1-8, GPO 1-16
:	:	:	:
02H 12H 12H	Tally/GPO - Tally/GPO 16	00H-59H	PGM HDMI In 1-6, PGM SDI In 1-6, PGM Still 1-16, PGM Video Player/SRT In, PGM Input 1-8, PST HDMI In 1-6, PST SDI In 1-6, PST Still 1-16, PST Video Player/SRT In, PST Input 1-8, GPO 1-16
02H 12H 13H 14H	GPI 1	00H 00H-07H 60H	See "Menu List" in the "Reference Manual" (PDF).
:	:	:	
02H 12H 21H 22H	GPI 8	00H 00H-07H 60H	
02H 12H 23H 24H	Numeric Keypad 0	00H 00H-07H 60H	
:	:	:	
02H 12H 35H 36H	Numeric Keypad 9	00H 00H-07H 60H	
02H 12H 37H 38H	Numeric Keypad +	00H 00H-07H 60H	
02H 12H 39H 3AH	Numeric Keypad -	00H 00H-07H 60H	
02H 12H 3BH 3CH	Numeric Keypad *	00H 00H-07H 60H	
02H 12H 3DH 3EH	Numeric Keypad /	00H 00H-07H 60H	
02H 12H 3FH 40H	Numeric Keypad .	00H 00H-07H 60H	
02H 12H 41H 42H	Numeric Keypad Enter	00H 00H-07H 60H	
02H 12H 43H	Tally Settings - AUX 1	00H-01H	Disable, Enable
02H 12H 44H	Tally Settings - PinP&Key 1	00H-01H	Disable, Enable
02H 12H 45H	Tally Settings - PinP&Key 2	00H-01H	Disable, Enable
02H 12H 46H	Tally Settings - PinP&Key 3	00H-01H	Disable, Enable
02H 12H 47H	Tally Settings - PinP&Key 4	00H-01H	Disable, Enable
02H 12H 48H	Tally Settings - DSK 1	00H-01H	Disable, Enable
02H 12H 49H	Tally Settings - DSK 2	00H-01H	Disable, Enable
02H 12H 4AH	Tally Settings - AUX 2	00H-01H	Disable, Enable
02H 12H 4BH	Tally Settings - AUX 3	00H-01H	Disable, Enable

○ Auto Switching - Video Follows Audio

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 13H 00H 01H	Video Follows Audio - Audio In 1 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 02H 03H	Video Follows Audio - Audio In 2 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 04H 05H	Video Follows Audio - Audio In 3 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 06H 07H	Video Follows Audio - Audio In 4 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 08H 09H	Video Follows Audio - Audio In 5 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 0AH 0BH	Video Follows Audio - Audio In 6 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 0CH 0DH	Video Follows Audio - Audio In 7/8 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 0EH 0FH	Video Follows Audio - Audio In 9/10 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 10H 11H	Video Follows Audio - USB In Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 12H 13H	Video Follows Audio - Bluetooth In Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 14H 15H	Video Follows Audio - Audio Player Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 16H 17H	Video Follows Audio - HDMI In 1 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 18H 19H	Video Follows Audio - HDMI In 2 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 1AH 1BH	Video Follows Audio - HDMI In 3 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 1CH 1DH	Video Follows Audio - HDMI In 4 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 1EH 1FH	Video Follows Audio - HDMI In 5 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 20H 21H	Video Follows Audio - HDMI In 6 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 22H 23H	Video Follows Audio - SDI In 1 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 24H 25H	Video Follows Audio - SDI In 2 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 26H 27H	Video Follows Audio - SDI In 3 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 28H 29H	Video Follows Audio - SDI In 4 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 2AH 2BH	Video Follows Audio - SDI In 5 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 2CH 2DH	Video Follows Audio - SDI In 6 Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 2EH 2FH	Video Follows Audio - Video Player/SRT In Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 30H	Video Follows Audio - Audio In 1 Threshold	4EH-00H	-50-0 dB
02H 13H 31H	Video Follows Audio - Audio In 2 Threshold	4EH-00H	-50-0 dB
02H 13H 32H	Video Follows Audio - Audio In 3 Threshold	4EH-00H	-50-0 dB
02H 13H 33H	Video Follows Audio - Audio In 4 Threshold	4EH-00H	-50-0 dB
02H 13H 34H	Video Follows Audio - Audio In 5 Threshold	4EH-00H	-50-0 dB
02H 13H 35H	Video Follows Audio - Audio In 6 Threshold	4EH-00H	-50-0 dB

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 13H 36H	Video Follows Audio - Audio In 7/8 Threshold	4EH-00H	-50-0 dB
02H 13H 37H	Video Follows Audio - Audio In 9/10 Threshold	4EH-00H	-50-0 dB
02H 13H 38H	Video Follows Audio - USB In Threshold	4EH-00H	-50-0 dB
02H 13H 39H	Video Follows Audio - Bluetooth In Threshold	4EH-00H	-50-0 dB
02H 13H 3AH	Video Follows Audio - Audio Player Threshold	4EH-00H	-50-0 dB
02H 13H 3BH	Video Follows Audio - HDMI In 1 Threshold	4EH-00H	-50-0 dB
02H 13H 3CH	Video Follows Audio - HDMI In 2 Threshold	4EH-00H	-50-0 dB
02H 13H 3DH	Video Follows Audio - HDMI In 3 Threshold	4EH-00H	-50-0 dB
02H 13H 3EH	Video Follows Audio - HDMI In 4 Threshold	4EH-00H	-50-0 dB
02H 13H 3FH	Video Follows Audio - HDMI In 5 Threshold	4EH-00H	-50-0 dB
02H 13H 40H	Video Follows Audio - HDMI In 6 Threshold	4EH-00H	-50-0 dB
02H 13H 41H	Video Follows Audio - SDI In 1 Threshold	4EH-00H	-50-0 dB
02H 13H 42H	Video Follows Audio - SDI In 2 Threshold	4EH-00H	-50-0 dB
02H 13H 43H	Video Follows Audio - SDI In 3 Threshold	4EH-00H	-50-0 dB
02H 13H 44H	Video Follows Audio - SDI In 4 Threshold	4EH-00H	-50-0 dB
02H 13H 45H	Video Follows Audio - SDI In 5 Threshold	4EH-00H	-50-0 dB
02H 13H 46H	Video Follows Audio - SDI In 6 Threshold	4EH-00H	-50-0 dB
02H 13H 47H	Video Follows Audio - Video Player/SRT In Threshold	4EH-00H	-50-0 dB
02H 13H 48H 49H	Video Follows Audio - Mix Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 4AH 4BH	Video Follows Audio - Silent Target	00H 00H-01H 0CH	Off, Input 1-8, Memory 1-32, Macro 1-100
02H 13H 4CH 4DH	Video Follows Audio - Redetection Time	00H 00H-02H 2CH	0.0-30.0sec
02H 13H 4EH	Video Follows Audio - Scan Transition Time	00H-28H	0.0-4.0sec

○ Roland Fill+Key

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 14H 00H	Mode	00H-02H	Off, DSK 1-2

○ Preview Label

* xxH: 20H-45H (HDMI In 1-6, SDI In 1-6, Still 1-16, Program, Sub Program, Preview, AUX 1-3, DSK 1-2 Source, SRT In)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H xxH 00H	LABEL (0)	00H-7FH	
02H xxH 01H	LABEL (1)	00H-7FH	
02H xxH 02H	LABEL (2)	00H-7FH	
02H xxH 03H	LABEL (3)	00H-7FH	
02H xxH 04H	LABEL (4)	00H-7FH	
02H xxH 05H	LABEL (5)	00H-7FH	
02H xxH 06H	LABEL (6)	00H-7FH	
02H xxH 07H	LABEL (7)	00H-7FH	

○ Camera Control Common

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 50H 00H	Camera ID	00H-0BH	Camera 1-12
02H 50H 01H	Camera Control Mode	00H-01H	Off, On
02H 50H 02H	All Cameras Load	00H-01H	Off, On

○ Camera Control

* xxH: 51H-5CH (Camera1-12)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H xxH 00H	Protocol	00H-06H	N/A, JVC, Panasonic, Canon, VISCA over IP, PTZOptics, Avonic
02H xxH 01H 02H	IP Address 1	00H 00H-01H 7FH	0-255
02H xxH 03H 04H	IP Address 2	00H 00H-01H 7FH	0-255
02H xxH 05H 06H	IP Address 3	00H 00H-01H 7FH	0-255
02H xxH 07H 08H	IP Address 4	00H 00H-01H 7FH	0-255
02H xxH 09H	Login Name 1	00H-7FH	
02H xxH 0AH	Login Name 2	00H-7FH	
02H xxH 0BH	Login Name 3	00H-7FH	
02H xxH 0CH	Login Name 4	00H-7FH	
02H xxH 0DH	Login Name 5	00H-7FH	
02H xxH 0EH	Login Name 6	00H-7FH	
02H xxH 0FH	Login Name 7	00H-7FH	
02H xxH 10H	Login Name 8	00H-7FH	
02H xxH 11H	Password 1	00H-7FH	
02H xxH 12H	Password 2	00H-7FH	
02H xxH 13H	Password 3	00H-7FH	
02H xxH 14H	Password 4	00H-7FH	
02H xxH 15H	Password 5	00H-7FH	
02H xxH 16H	Password 6	00H-7FH	
02H xxH 17H	Password 7	00H-7FH	
02H xxH 18H	Password 8	00H-7FH	
02H xxH 19H	Password 9	00H-7FH	
02H xxH 1AH	Password 10	00H-7FH	
02H xxH 1BH	Password 11	00H-7FH	
02H xxH 1CH	Password 12	00H-7FH	
02H xxH 1DH	Password 13	00H-7FH	
02H xxH 1EH	Password 14	00H-7FH	
02H xxH 1FH	Password 15	00H-7FH	
02H xxH 20H	Password 16	00H-7FH	
02H xxH 21H	Current Preset	7FH-00H-07H	None, Preset 1-8 (Read Only)
02H xxH 22H	Pan	7FH, 00H, 01H	Left, Stop, Light
02H xxH 23H	Tilt	7FH, 00H, 01H	Down, Stop, Up
02H xxH 24H	Pan/Tilt Speed	01H-18H	1-24
02H xxH 25H	Zoom	7EH-00H-02H	Wide (Fast), Wide (Slow), Stop, Tele (Slow), Tele (Fast)
02H xxH 26H	Focus	7FH, 00H, 01H	Near, Stop, Far
02H xxH 27H	Auto Focus	00H-01H	Off, On
02H xxH 28H	Exposure	00H-01H	Manual, Auto
02H xxH 29H	Tally Channel	00H-0CH	HDMI In 1-6, SDI In 1-6, SRT In

○ Audio Player Common

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 61H 00H	Audio Player Bank	00H-01H	Bank A, Bank B

○ Audio Player

* xxH: 62H-71H (Audio Player A 1-8, Audio Player B 1-8)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H xxH 00H	Audio Player Name 1	00H-7FH	

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H xxH 01H	Audio Player Name 2	00H-7FH	
02H xxH 02H	Audio Player Name 3	00H-7FH	
02H xxH 03H	Audio Player Name 4	00H-7FH	
02H xxH 04H	Audio Player Name 5	00H-7FH	
02H xxH 05H	Audio Player Name 6	00H-7FH	
02H xxH 06H	Audio Player Name 7	00H-7FH	
02H xxH 07H	Audio Player Name 8	00H-7FH	
02H xxH 08H 09H 0AH	Level	7EH 00H 00H, 7FH 79H 60H-00H 00H 00H-00H 00H 64H	-INFdB, -80.0-0.0-10.0dB
02H xxH 0BH	Fade In Time	00H-64H	0.0-10.0sec
02H xxH 0CH	Fade Out Time	00H-64H	0.0-10.0sec
02H xxH 0DH	Repeat	00H-01H	Off, On
02H xxH 0EH	Pad Mode	00H-03H	Latch, Pause, Replay, Momentary
02H xxH 0FH	Pad Color	00H-09H	White, Red, Green, Blue, Yellow, Magenta, Cyan, Dark Orange, Turquoise Green, Purple
02H xxH 10H	Playing Mode	00H-02H	BGM, SE, Solo
02H xxH 11H 12H 13H 14H 15H	Offset Time	00H 00H 00H 00H 00H-07H 7FH 7FH 7FH 7FH	0.0-214748364.7sec * The actual maximum value depends on the length of the audio file.

○ Video Player

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 72H 00H 01H 02H 03H 04H	Start Time	7FH 7FH 7FH 7FH 7FH-00H 00H 00H 00H 00H-07H 7FH 7FH 7FH 7FH	None, 0.0-2147483.647sec * The actual maximum value depends on the length of the audio file. (Read Only)
02H 72H 05H 06H 07H 08H 09H	End Time	7FH 7FH 7FH 7FH 7FH-00H 00H 00H 00H 00H-07H 7FH 7FH 7FH 7FH	None, 0.0-2147483.647sec * The actual maximum value depends on the length of the audio file. (Read Only)
02H 72H 0AH	Skip Forward Time	00H-03H	1sec, 10sec, 30sec, 60sec
02H 72H 0BH	Skip Backward Time	00H-03H	1sec, 10sec, 30sec, 60sec
02H 72H 0CH	Repeat	00H-01H	Off, On

○ Date&Time

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
02H 73H 00H 01H	reserved		
02H 73H 02H	Date Format	00H-02H	Month/Day/Year, Day/Month/Year, Year/Month/Day
02H 73H 03H	Clock Display Type	00H-01H	Analog, Digital
02H 73H 04H	Configure	00H-01H	Manual, Using NTP
02H 73H 05H	NTP Server 1	00H-7FH	
:	:	:	:
02H 73H 24H	NTP Server 32	00H-7FH	

● Command Area

○ Scene Memory

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
0AH 00H 00H	Memory Load Trigger	7FH-00H-1FH	None, Memory 1-32
0AH 00H 01H	Memory Save Trigger	7FH-00H-1FH	None, Memory 1-32
0AH 00H 02H	Memory Initialize Trigger	7FH-00H-1FH	None, Memory 1-32
0AH 00H 03H	Loaded Memory Number	7FH-00H-1FH	Last Memory, Memory 1-32

● Tally Area

○ Tally Info

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
0CH 00H 00H	HDMI In 1 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 01H	HDMI In 2 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 02H	HDMI In 3 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 03H	HDMI In 4 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 04H	HDMI In 5 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 05H	HDMI In 6 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 06H	SDI In 1 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 07H	SDI In 2 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 08H	SDI In 3 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 09H	SDI In 4 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 0AH	SDI In 5 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 0BH	SDI In 6 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 0CH	Sill 1 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 0DH	Sill 2 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 0EH	Sill 3 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 0FH	Sill 4 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 10H	Sill 5 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 11H	Sill 6 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 12H	Sill 7 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 13H	Sill 8 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 14H	Sill 9 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 15H	Sill 10 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 16H	Sill 11 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 17H	Sill 12 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 18H	Sill 13 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 19H	Sill 14 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 1AH	Sill 15 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 1BH	Sill 16 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 1CH	Video Player/SRT In Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 1DH	Input 1 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 1EH	Input 2 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 1FH	Input 3 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 20H	Input 4 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 21H	Input 5 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 22H	Input 6 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 23H	Input 7 Tally	00H-02H	Off, PGM, PST (Read Only)
0CH 00H 24H	Input 8 Tally	00H-02H	Off, PGM, PST (Read Only)

● Video Parameter (Memory 1) Area, Audio Parameter (Memory 1) Area–Video Parameter (Memory 32) Area, Audio Parameter (Memory 32) Area

○ Memory

* xxH xxH: The second and third bytes of the parameter address for the video/audio area to read/write

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
10H 00H 00H	Video Parameter (Memory 1)		Load/rewrite video parameter stored in Memory 1
11H 00H 00H	Audio Parameter (Memory 1)		Load/rewrite audio parameter stored in Memory 1
12H 00H 00H	Video Parameter (Memory 2)		Load/rewrite video parameter stored in Memory 2
13H 00H 00H	Audio Parameter (Memory 2)		Load/rewrite audio parameter stored in Memory 2
14H 00H 00H	Video Parameter (Memory 3)		Load/rewrite video parameter stored in Memory 3
15H 00H 00H	Audio Parameter (Memory 3)		Load/rewrite audio parameter stored in Memory 3
16H 00H 00H	Video Parameter (Memory 4)		Load/rewrite video parameter stored in Memory 4
17H 00H 00H	Audio Parameter (Memory 4)		Load/rewrite audio parameter stored in Memory 4
18H 00H 00H	Video Parameter (Memory 5)		Load/rewrite video parameter stored in Memory 5
19H 00H 00H	Audio Parameter (Memory 5)		Load/rewrite audio parameter stored in Memory 5
1AH 00H 00H	Video Parameter (Memory 6)		Load/rewrite video parameter stored in Memory 6
1BH 00H 00H	Audio Parameter (Memory 6)		Load/rewrite audio parameter stored in Memory 6
1CH 00H 00H	Video Parameter (Memory 7)		Load/rewrite video parameter stored in Memory 7
1DH 00H 00H	Audio Parameter (Memory 7)		Load/rewrite audio parameter stored in Memory 7

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
1EH 00H 00H	Video Parameter (Memory 8)		Load/rewrite video parameter stored in Memory 8
1FH 00H 00H	Audio Parameter (Memory 8)		Load/rewrite audio parameter stored in Memory 8
:	:		
:	:		
4EH 00H 00H	Video Parameter (Memory 32)		Load/rewrite video parameter stored in Memory 32
4FH 00H 00H	Audio Parameter (Memory 32)		Load/rewrite audio parameter stored in Memory 32

● Memory Name Area

* xxH: 00H–1FH (Memory 1–32)

Address	Parameter Name	Sys.Ex.Value	Meaning of Value
60H xxH 00H	Name (0)		Name of preset memory number xx (1st character)
60H xxH 01H	Name (1)		Name of preset memory number xx (2nd character)
60H xxH 02H	Name (2)		Name of preset memory number xx (3rd character)
60H xxH 03H	Name (3)		Name of preset memory number xx (4th character)
60H xxH 04H	Name (4)		Name of preset memory number xx (5th character)
60H xxH 05H	Name (5)		Name of preset memory number xx (6th character)
60H xxH 06H	Name (6)		Name of preset memory number xx (7th character)
60H xxH 07H	Name (7)		Name of preset memory number xx (8th character)

3. Supplementary Material

● Decimal and Hexadecimal Table

(Hexadecimal Numbers are Indicated by "H")

In MIDI documentation, data values and addresses/sizes of exclusive messages etc. are expressed as hexadecimal values for each 7 bits.

The following table shows how these correspond to decimal numbers.

D	H	D	H	D	H	D	H
0	00H	32	20H	64	40H	96	60H
1	01H	33	21H	65	41H	97	61H
2	02H	34	22H	66	42H	98	62H
3	03H	35	23H	67	43H	99	63H
4	04H	36	24H	68	44H	100	64H
5	05H	37	25H	69	45H	101	65H
6	06H	38	26H	70	46H	102	66H
7	07H	39	27H	71	47H	103	67H
8	08H	40	28H	72	48H	104	68H
9	09H	41	29H	73	49H	105	69H
10	0AH	42	2AH	74	4AH	106	6AH
11	0BH	43	2BH	75	4BH	107	6BH
12	0CH	44	2CH	76	4CH	108	6CH
13	0DH	45	2DH	77	4DH	109	6DH
14	0EH	46	2EH	78	4EH	110	6EH
15	0FH	47	2FH	79	4FH	111	6FH
16	10H	48	30H	80	50H	112	70H
17	11H	49	31H	81	51H	113	71H
18	12H	50	32H	82	52H	114	72H
19	13H	51	33H	83	53H	115	73H
20	14H	52	34H	84	54H	116	74H
21	15H	53	35H	85	55H	117	75H
22	16H	54	36H	86	56H	118	76H
23	17H	55	37H	87	57H	119	77H
24	18H	56	38H	88	58H	120	78H
25	19H	57	39H	89	59H	121	79H
26	1AH	58	3AH	90	5AH	122	7AH
27	1BH	59	3BH	91	5BH	123	7BH
28	1CH	60	3CH	92	5CH	124	7CH
29	1DH	61	3DH	93	5DH	125	7DH
30	1EH	62	3EH	94	5EH	126	7EH
31	1FH	63	3FH	95	5FH	127	7FH

D: decimal

H: hexadecimal

- * Decimal expressions used for MIDI channel, bank select, and program change are 1 greater than the decimal value shown in the above table.
- * Hexadecimal values in 7-bit units can express a maximum of 128 levels in one byte of data. If the data requires greater resolution, two or more bytes are used. For example, a value indicated by a hexadecimal expression in two 7-bit bytes aa bbH would be $aa \times 128 + bb$.
- * Data marked "nibbled" is expressed in hexadecimal in 4-bit units. A value expressed as a 2-byte nibble 0a 0bH has the value of $a \times 16 + b$.

<Example 1>

What is the decimal expression of 5AH?

From the preceding table, 5AH = 90

<Example 2>

What is the decimal expression of the value 12 34H given as hexadecimal for each 7 bits?

From the preceding table, since 12H = 18 and 34H = 52

$18 \times 128 + 52 = 2356$

● Example of an Exclusive Message and Calculating a Checksum

Roland Exclusive messages are transmitted with a checksum at the end (before F7) to make sure that the message was correctly received. The value of the checksum is determined by the address and data (or size) of the transmitted exclusive message.

○ How to Calculate the Checksum

(Hexadecimal Numbers are Indicated by "H")

The checksum is a value that produces a lower 7 bits of zero when the address, size, and checksum itself are summed. If the exclusive message to be transmitted has an address of aa bb ccH and the data is dd ee ffH, the actual calculation would be as follows:

$$aa + bb + cc + dd + ee + ff = \text{sum}$$

$$\text{sum} / 128 = \text{quotient} \dots \text{remainder}$$

$$128 - \text{remainder} = \text{checksum}$$

(However, the checksum will be 0 if the remainder is 0.)

<Example>

When setting PGM Select to INPUT 2 for data set 1

From the "Parameter Address Map", the address of the PGM Select is 00H 1BH 00H and the INPUT 2 parameter is 01H. Therefore ...

F0H	41H	10H	00H 00H 00H 00H 25H	12H	00H 1BH 00H	1EH	??H	F7H
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

- (1) Exclusive Status
- (2) ID Number (Roland)
- (3) Device ID
- (4) Model ID
- (5) Command ID (DT1)
- (6) Address
- (7) Data
- (8) Checksum
- (9) EOX

Next calculate the checksum. Add (6) to (7).

$$00H + 1BH + 00H + 1EH = 0 + 27 + 0 + 30 = 57 \text{ (sum)}$$

$$57 \text{ (sum)} / 128 = 0 \text{ (quotient)} \dots 57 \text{ (remainder)}$$

$$\text{Checksum} = 128 - 57 \text{ (remainder)} = 71 = 47H$$

Thus, the message to transmit is :

F0H 41H 10H 00H 00H 00H 00H 25H 12H 00H 1BH 00H 1EH 47H F7H

MIDI Implementation Chart

Function		Transmitted	Recognized	Remarks
Basic Channel	Default	1	1	
	Changed	1	1	
Mode	Default	x	x	
	Messages	x	x	
	Altered	*****	*****	
Note Number	True Voice	x	x	
Velocity	Note On	x	x	
	Note Off	x	x	
After Touch	Key's	x	x	
	Channel's	x	x	
Pitch bend		x	x	
Control Change	0-9	x	x	
	10-31	x	x	
	32-51	x	x	
	52-60	x	x	
	61-119	x	x	
Program Change	True Number	x	x	
System Exclusive		o	o	
System Common	Song Position	x	x	
	Song Select	x	x	
	Tune Request	x	x	
System Real Time	Clock	x	x	
	Commands	x	x	
Aux Messages	All Sound Off	x	x	
	Reset All Controllers	x	x	
	Local On/Off	x	x	
	All Notes Off	x	x	
	Active Sensing	x	x	
	System Reset	x	x	
Notes				

LAN/RS-232 Command Reference

The VR-120HD support two types of remote-interface communication: LAN and RS-232.

Using the LAN CONTROL port or RS-232 connector to send specific commands to the VR-120HD from a controlling device lets you operate the VR-120HD remotely.

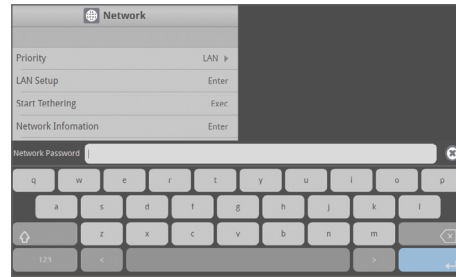
LAN Interface

This uses the LAN CONTROL port on the VR-120HD.

You use Telnet to operate the VR-120HD remotely over a LAN (TCP/IP protocol).

Communication standards

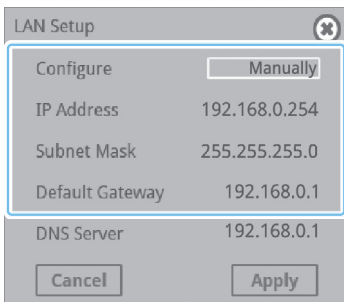
Port	LAN CONTROL jack
TCP port number	8023



5. Press the [MENU] button to close the menu.

Specifying the VR-120HD's Network Settings

1. [MENU] button → “LAN Setup” → select the menu item shown below, and press the [VALUE] knob.



Menu item	Explanation
Configure	Selects how settings are made for the IP address, subnet mask, and default gateway. Using DHCP: The IP address and other information needed for connecting to the network is obtained automatically from the DHCP server of the LAN. Manually: The IP address, subnet mask, and default gateway are specified manually.
IP Address	Shows the IP address. (*1)
Subnet Mask	Shows the subnet mask. (*1)
Default Gateway	Shows the default gateway. (*1)

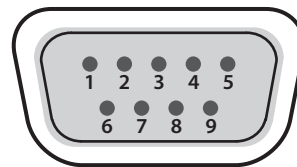
(*1) When “Configure” is set to “Manually”, set these respectively according to the network.

2. Use the [VALUE] knob to change the value of the setting.
3. Use the [VALUE] knob to select “Network Password”, and press the [VALUE] knob.
4. Set a network password (four characters).

Input the password that's set here when connecting a computer or other device on the same network to access the VR-120HD.

RS-232 Interface

RS-232 connector pin layout



DB-9 type (male)

Pin assignments

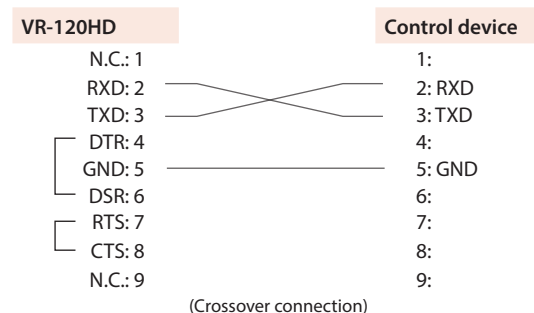
Pin No.	Signal
1	N.C.
2	RXD
3	TXD
4	DTR
5	GND
6	DSR
7	RTS
8	CTS
9	N.C.

Communication standards

Communication method	Synchronous (asynchronous), full-duplex
Communication speed	9,600/38,400/115,200 bps
Parity	none
Data length	8 bits
Stop bit	1 bit
Code set	ASCII

Cable wiring diagram

Use an RS-232 crossover cable to connect the VR-120HD and the controller (an RS-232-compatible computer or other device).



* The connections between 4 and 6 and between 7 and 8 are inside the VR-120HD.

Command Format

Commands are formatted using the configuration shown below.
Commands are all in ASCII code.

* Commands are common to the LAN and the RS-232 interface.

```
stx Command code : Parameter , Parameter ;
```

stx	ASCII code "02H" is a control code indicating the start of a command. "H" indicates that it is a hexadecimal value.
Command code	This specifies the command type (three single-byte alphanumeric characters).
Parameter	This is appended to a command that requires one or more parameter. The command and the parameter portion are separated by a ":" (colon). When there are multiple parameters, they are each separated by "," (comma) characters.
;	This is the code that this unit recognizes as the end of a command.

* The codes of stx (02H), ack (06H), xon (11H), and xoff (13H) are the control codes.

List of Commands

See "MIDI Implementation" (p. 2) for the SysEx addresses and setting values.

* When controlling via LAN (Telnet), "stx (02H)" may be omitted.

Item	Sent command	Response command	Parameter
Parameter write (SysEx-supported command)	stxDTH:a,b;	ack	a: SysEx address (hexadecimal, three bytes) b: Setting value (hexadecimal) <Example> When setting "01H" to address 12H 34H 56H Ó stx-DTH:123456,01;
Parameter value retrieve (SysEx-supported command)	stxRQH:a,b;	stxDTH:a,c;	a: SysEx address (hexadecimal, three bytes) b: Request size (hexadecimal, three bytes) c: Setting value (hexadecimal)
Version information	stxVER;	stxVER:a,b;	a: VR-120HD (Product name) b: Version number <Example> 1.00
Flow control	xon		
Flow control	xoff		

Commands spontaneously sent from the VR-120HD

Item	Sent command	Response command	Parameter
Error detected		stxERR:a;	a: 0 (syntax error) The received command contains an error. 4 (invalid) This has no effect because it is controlled by another setting. 5 (out of range error) An argument of the received command is out of range. 6 (no stx error) The command does not have a "stx" prefix. * Only RS-232
Flow control		xon	
Flow control		xoff	