Roland

MULTI-FORMAT VIDEO SWITCHER

V-800HD MK II

Reference Manual
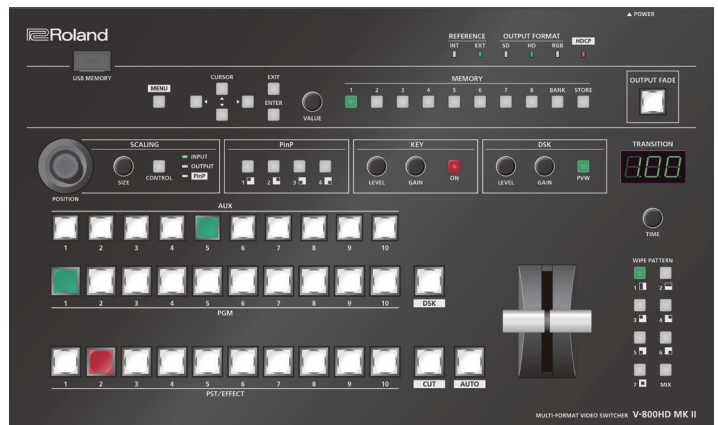
Contents

Menu List

Press the [MENU] button to call up the menu items. The menu will appear on the multi-view monitor connected to the V-800HD MK II.

* Menus are shown only on the multi-view monitor connected to the HDMI OUT connector .

The menu categories are displayed at first. Choose the menu category whose setting you want to change.

Category	Explanation
Input	This is for input setup like source assign etc.
Output	This is for output setup like format selection etc.
Transition	This is for transition setup.
PinP	This is for Picture in Picture setup.
Key	This is for luminance and chroma key setup.
DSK	This is for DSK setup.
System	This is for system setup of the V-800HD MK II.

MEMO

- The default value is printed in bold characters.
- When menu items span two or more pages, a ◀ ▶ icon is displayed at the top of the screen. Press the CURSOR [◀] [▶] buttons to switch between the pages.
- If the value area indicates "ENTER," you can press the [ENTER] button to proceed to a lower level.
- When a setting value has menu items that let you make more-detailed settings, ENTER is displayed at the top of the screen. Press the [ENTER] button to go down a level.
- To execute an operation, press the [ENTER] button.
- You can change a setting value rapidly by holding down the [ENTER] button and turning the [VALUE] knob.
- Holding down the [ENTER] button and pressing the [EXIT] button returns the currently selected setting to its default value.

Input Menu

Menu item	Value	Explanation
Ch.1– Ch.4 (*1)	(No Signal, 720 x 480@59.94 Hz–1920 x 1080@59.94 Hz)	This part displays the current input format.
	3G/HD/SD-SDI, Composite, Shared Input	This sets the video source to assign to the channel. Pressing the [ENTER] button displays the Detailed Settings menu (P.3).
		"Shared Input" can be set using Ch.2 through 4. This enables sharing of the video source on the channel previous to the set channel. For details, refer to the Owner's Manual, "Sharing a Video Source" (p. 16).
Ch.5– Ch.8 (*1)	(No Signal, 720 x 480@59.94 Hz–1920 x 1200@60.00 Hz)	This part displays the current input format. * "HDCP" is displayed while signal with HDCP is input.
	DVI-D/HDMI or **DVI-A** (*2), RGB/Component, Shared Input	This sets the video source to assign to the channel. Pressing the [ENTER] button displays the Detailed Settings menu (P.3).
		"Shared Input" can be set using Ch.5 through 8. This enables sharing of the video source on the channel previous to the set channel. For details, refer to the Owner's Manual, "Sharing a Video Source" (p. 16).
Ch.9 (*3)	(Memory No.*)	This part shows the currently selected memory No. of still images.
	Still Image	Pressing the [ENTER] button displays the Detailed Settings menu (P.4).
Ch.10 (*1)	(R:16 G:16 B:16 or Memory No.*)	This part shows either the color values of the background color or the memory number of the currently assigned background image.
	Background, Still Image	This assigns a monochrome picture (background color) or still image. Pressing the [ENTER] button displays the Detailed Settings menu (P.4).

(*1) When the menu is not displayed, you can switch the setting values in succession by holding down the [MENU] button and pressing a PST/EFFECT-section cross-point button (channel 1 through 8).

(*2) The displayed setting value differs depending on the setting of the [SIGNAL] switch.

[SIGNAL] switch	Value
DVI-D	DVI-D/HDMI
DVI-A	DVI-A

(*3) When the menu is not displayed, you can switch the memory numbers where still images are saved in succession by holding down the [MENU] button and pressing a PST/EFFECT-section cross-point button (channel 9 or 10).

Ch.1–4: Detailed setup of 3G/HD/SD-SDI, Composite, Shared Input

Menu item	Value	Explanation
Scaling	You use the following items to make settings for scaling.	
Zoom	10–**100**–1000%	This adjusts the zoom ratio.
Type	**Full**, Letterbox, Crop, Dot by Dot, Manual	This sets the scaling type. Full: The input image will be displayed fully on output screen. The aspect ratio will be changed. Letterbox: The entirety of the input image will be displayed on output screen. The aspect ratio will be maintained. Crop: The input image will be displayed fully on the output screen. The aspect ratio will be maintained. Dot by Dot: Scaling will not be executed. Manual: This performs scaling according to the "Manual Size H" and "Manual Size V" settings.
Manual Size H	-2000–**0**– +2000 (*4) (*5)	This adjusts the horizontal size.
Manual Size V	-2000–**0**– +2000 (*4) (*5)	This adjusts the vertical size.
Position H	-1920–**0**– +1920 (*4)	This adjusts the display position in the horizontal direction.
Position V	-1200–**0**– +1200 (*4)	This adjusts the display position in the vertical direction.
Color Correction	You use the following items to perform color correction.	
Brightness	-64–**0**– +63	This adjusts the brightness.
Contrast	-64–**0**– +63	This adjusts the contrast.
Saturation	-64–**0**– +63	This adjusts the color saturation.
Red	-64–**0**– +63	This adjusts the red level.
Green	-64–**0**– +63	This adjusts the green level.
Blue	-64–**0**– +63	This adjusts the blue level.

(*4) Depending on the input/output format settings, the range of value settings will be altered. The values above are the minimum/maximum values.

(*5) This is available when "Type" is set to "Manual."

Ch.5–8: Detailed setup of DVI-D/HDMI

Menu item	Value	Explanation
Color Space	**Auto**, RGB(0-255), RGB(16-235), YCC(SD), YCC(HD)	This sets the color space.
Flicker Filter	ON, **OFF**	This turns on/off the flicker filter.
Scaling	This sets the scaling. The menu items are similar for channels 1–4.	
Color Correction	This performs color correction. The menu items are similar for channels 1–4.	

Ch.5–8: Detailed setup of DVI-A, RGB/Component

Menu item	Value	Explanation
Color Space	**Auto**, RGB(0-255), RGB(16-235), YCC(SD), YCC(HD)	This sets the color space.
Flicker Filter	ON, **OFF**	This turns on/off the flicker filter.
Scaling	This sets the scaling. The menu items are similar for channels 1–4.	
Color Correction	This performs color correction. The menu items are similar for channels 1–4.	
Sampling	You use the following items for make settings for sampling.	
Auto Sampling	(Execute)	This executes automatic settings for sampling.
Position H	-1920–**0**– +1920 (*6)	This adjusts the horizontal start position of sampling.
Position V	-1200–**0**– +1200 (*6)	This adjusts the vertical start position of sampling.
Frequency	-128–**0**– +127 (*6)	This adjusts the sampling frequency.
Phase	-128–**0**– +127 (*6)	This adjusts the sampling phase.

(*6) Depending on the input/output format settings, the range of value settings will be altered. The values above are the minimum/maximum values.

Ch.5–8: Detailed setup of Shared Input

Menu item	Value	Explanation
Scaling	This sets the scaling. The menu items are similar for channels 1–4.	
Color Correction	This performs color correction. The menu items are similar for channels 1–4.	

Ch.9–10: Detailed setup of Still Image

Menu item	Value	Explanation
Still Image Memory No.	**1**–16	You select the memory number where the still image is saved and assign it to the channel. * A "✳" symbol is displayed for memory numbers where a still image is already saved.
Position H	-1920–**0**– +1920 (*7)	This adjusts the horizontal display position of the still image.
Position V	-1200–**0**– +1200 (*7)	This adjusts the vertical display position of the still image.
Color Correction	You use the following items to perform color correction for the still image.	
Brightness	-64–**0**– +63	This adjusts the brightness.
Contrast	-64–**0**– +63	This adjusts the contrast.
Saturation	-64–**0**– +63	This adjusts the color saturation.
Red	-64–**0**– +63	This adjusts the red level.
Green	-64–**0**– +63	This adjusts the green level.
Blue	-64–**0**– +63	This adjusts the blue level.

(*7) Depending on the input/output format settings, the range of value settings will be altered. The values above are the minimum/maximum values.

Ch.10: Detailed setup of Background

Menu item	Value	Explanation
Color	You use the following items to adjust the background color.	
Red	0–**16**–255	This adjusts the red level.
Green	0–**16**–255	This adjusts the green level.
Blue	0–**16**–255	This adjusts the blue level.

Output Menu

Menu item	Value	Explanation
Format	You use the following items to set the output format.	
Main	480i4:3, 480i16:9, 720p, **1080i**, 1080p, 480/576p4:3, 480/576p16:9, VGA, SVGA, XGA, WXGA, SXGA, FWXGA, SXGA+, UXGA, WUXGA	This sets the main output (SDI OUT connectors and DIV-D/HDMI OUT connectors) format. Pressing the [ENTER] button displays the Detailed Settings menu (P.5).
RGB/Component	480/576p4:3, 480/576p16:9, 720p, 1080p, VGA, SVGA, XGA, WXGA, **SXGA**, FWXGA, SXGA+, UXGA, WUXGA	This sets analog output (RGB/COMPONENT connector) format. Pressing the [ENTER] button displays the Detailed Settings menu (P.5). * Interlaced output is not available.
Composite	**480i/576i4:3**, 480i/576i16:9	The output format of the SD OUT connector is fixed at "480/576i" and cannot be changed. For the aspect ratio, select either "4:3" or "16:9." Pressing the [ENTER] button displays the Detailed Settings menu (P.5).
AUX Source	Mixer Input, Mixer Output, DSK Source, DSK Output, Input Ch.1–10 (*8)	This sets the signal to be sent to the AUX bus.
Source Assign	You can assign the bus to various output connectors. * The format in the parentheses ( ) represents the output format. If this is blank, no signal is currently being output.	
SDI 1	**PGM**, PVW, AUX	This sets the bus to be sent to SDI OUT 1 connector.
SDI 2	PGM, **PVW**, AUX	This sets the bus to be sent to SDI OUT 2 connector.
DVI-D/HDMI 1	**PGM**, PVW, AUX	This sets the bus to be sent to DVI-D/HDMI OUT 1 connector.
DVI-D/HDMI 2	PGM, **PVW**, AUX	This sets the bus to be sent to DVI-D/HDMI OUT 2 connector.
RGB/Component	**PGM**, PVW, AUX (*9)	This sets the bus to be sent to RGB/COMPONENT OUT connector.
Composite		This sets the bus to be sent to SD OUT connector.
HDMI	**Multi-view**	The output of the HDMI OUT connector is fixed and cannot be changed.

(*8) When set to "Input Ch. 1–10," DSK becomes unusable.

(*9) "RGB/Component" and "Composite" become shared settings. Making settings for separate buses us not possible.

Detailed setup of Main

Menu item	Value	Explanation
Scaling	You use the following items to make settings for scaling.	
Zoom	10–**100**–1000%	This adjusts the zoom ratio.
Size H	-2000–**0**– +2000 (*10)	This adjusts the size in the horizontal direction.
Size V	-2000–**0**– +2000 (*10)	This adjusts the size in the vertical direction.
Position H	-1920–**0**– +1920 (*10)	This adjusts the display position in the horizontal direction.
Position V	-1200– **0**– +1200 (*10)	This adjusts the display position in the vertical direction.
Cropping	You use the following items to make settings for cropping.	
Orientation	**Upper Left**, Upper Right, Lower Left, Lower Right, Center	This sets the orientation of cropping.
Type	**Full**, 4:3, 5:4, 16:9, Manual	This sets the orientation of cropping. Full: When the "Zoom" value is "100%," the entirety of the image is shown on the output screen. 4:3, 5:4, 16:9: The image will be cropped according to the selected aspect ratio. If the Zoom value is 100%, the image will be letterboxed. Manual: The image will be cropped according to the "Manual Size H" and "Manual Size V" settings.
Manual Size H	0–**128**–2000 (*10) (*11)	This adjusts the horizontal size.
Manual Size V	0–**128**–2000 (*10) (*11)	This adjusts the vertical size.
Color Correction	You use the following items to perform color correction.	
Brightness	-128–**0**– +127	This adjusts the brightness.
Contrast	-128–**0**– +127	This adjusts the contrast.
Saturation	-128–**0**– +127	This adjusts the color saturation.
Red	-64–**0**– +63	This adjusts the red level.
Green	-64–**0**– +63	This adjusts the green level.
Blue	-64–**0**– +63	This adjusts the blue level.
3G-SDI Mapping	**Level A**, Level B	This sets the mapping structure for 3G-SDI output.
DVI-D/HDMI	You use the following items to make settings for the DVI-D/HDMI OUT connectors.	
Output 1	(DVI-D/HDMI OUT 1 connector)	
Signal Mode	**DVI-D**, HDMI	This sets the output mode for HDMI output.
Color Space	**RGB(0-255)**, RGB(16-235), YCC(444), YCC(422)	This sets the color space.
Output 2	(DVI-D/HDMI OUT 2 connector)	
Signal Mode	**DVI-D**, HDMI	This sets the output mode for HDMI output.
Color Space	**RGB(0-255)**, RGB(16-235), YCC(444), YCC(422)	This sets the color space.

(*10) Depending on the input/output format settings, the range of value settings will be altered. The values above are the minimum/maximum values.

(*11) This is available when "Type" is set to "Manual."

Detailed setup of RGB/Component

Menu item	Value	Explanation
Color Space	**Auto**, RGB(0-255), RGB(16-235), YCC(SD), YCC(HD)	This sets the color space.
Scaling	This sets the scaling. The menu items are similar for Main	
Color Correction	This performs color correction. The menu items are similar for Main.	

Detailed setup of Composite

Menu item	Value	Explanation
Scaling	This sets the scaling. The menu items are similar for Main	
Color Correction	This performs color correction. The menu items are similar for Main.	

Transition Menu

Menu item	Value	Explanation
Time	0.0s–**1.0s**–10.0s, 0s0f–10s0f, 0f–300f	This sets the transition time. The displayed value differs depending on "Frame Rate" and the "Unit" setup.
Unit	**Seconds**, Seconds.Frames, Frames	This sets the transition time unit to be displayed.
Wipe Pattern	1–7, **MIX**	This sets the transition effect. * The WIPE PATTERN [1]–[7] buttons and the [MIX] button are "Wipe Pattern" shortcut buttons.
Wipe Pattern 1 : Wipe Pattern 7	(ENTER)	This displays the Detailed Settings menu for the WIPE PATTERN [1]–[7] buttons.

Detailed setup of Wipe Pattern 1–7

Menu item	Value	Explanation
Pattern	Horizontal, Vertical, Horizontal Open, Vertical Open, Upper Left, Upper Right, Lower Left, Lower Right, Box The default values of Wipe Pattern 1–7 are as follows. 1: Horizontal 2: Vertical 3: Upper Left 4: Upper Right 5: Lower Left 6: Lower Right 7: Box	This sets the wipe pattern.
Direction	**Normal**, Reverse, N/R	This sets the wipe direction.
Border	You use the following items to adjust the border settings.	
Width	**0**–63	This adjusts the border width.
Red	0–**128**–255	This adjusts the red level of border color.
Green	0–**128**–255	This adjusts the green level of border color.
Blue	0–**128**–255	This adjusts the blue level of border color.

PinP Menu

Menu item	Value	Explanation
Status	**OFF**, PVW, PGM	This sets the output status of PinP. OFF: No display. PVW: Display on PVW output. PGM: Display on PGM output.
Position 1 : Position 4	(ENTER)	This displays the Detailed Settings menu for the PinP [1]–[4] buttons. * The PinP [1]– [4] buttons are "Position" shortcut buttons.

Detailed setup of Position 1–4

Menu item	Value	Explanation
PinP	Use the following items to make the settings for the inset screen.	
Size	-10–**30**– +100%	This adjusts the zoom ratio.
Position H	-100– +100% (*12)	This adjusts the display position in the horizontal direction.
Position V	-100– +100% (*12)	This adjusts the display position in the vertical direction.
Cropping Type	**Original**, 4:3, 5:4, 16:9, Manual	This sets the cropping type.
Manual Cropping H	-2000–**0**– +2000 (*13)	This sets the horizontal cropping width.
Manual Cropping V	-2000–**0**– +2000 (*13)	This sets the vertical cropping width.
Border	Use the following items to adjust the border.	
Width	0–**5**–63	This sets the border width.
Color	Use the following items to adjust the color of the border.	
Red	0–**128**–255	This sets the red level of border color.
Green	0–**128**–255	This sets the green level of border color.
Blue	0–**128**–255	This sets the blue level of border color.
View	Use the following items to adjust the video displayed in the inset screen.	
Size	10–**100**–1000% (*14)	This sets the zoom ratio.
Position H	-1920–**0**– +1920 (*14)	This adjusts the display position in the horizontal direction.
Position V	-1200–**0**– +1200 (*14)	This adjusts the display position in the vertical direction.

(*12) The default values of Position "1"–"4" are as follows.

1	Position H: -25%, Position V: -25%
2	Position H: +25%, Position V: -25%
3	Position H: -25%, Position V: +25%
4	Position H: +25%, Position V: +25%

(*13) This is available when "Cropping Type" is set to "Manual."

(*14) Depending on the input/output format settings, the range of value settings will be altered. The values above are the minimum/maximum values.

Key Menu

Menu item	Value	Explanation
Status	**OFF**, PVW, PGM	Select output status of Key composition from below. OFF: Not display. PVW: Display on PVW output. PGM: Display on PGM output.
Mode	**Self key**, External Key	This sets the key mode.

Detailed setup of Self Key

Menu item	Value	Explanation
Type	Luminance 1 (White), **Luminance 2 (Black)**, Chroma 1 (Blue), Chroma 2 (Green)	This sets the key type (extraction color) to use when compositing. Luminance 1 (White): This uses a brightness threshold to make white transparent. Luminance 2 (Black): This uses a brightness threshold to make black transparent. Chroma 1 (Blue): This uses a color threshold to make blue transparent. Chroma 2 (Green): This uses a color threshold to make green transparent.
Level	0–**32**–255	This adjusts the amount of extraction.
Hue (*15)	You use the following items to adjust the hue of the key color.	
Fine	-128–**0**– +127	This adjusts the center position for hue.
Width	-128–**0**– +127	This adjusts the hue width (range).
Saturation (*15)	-128–**0**– +127	This adjusts the saturation of the key color.
Gain	**0**–255	This adjusts the amount of edge blur.

(*15) This is available when "Type" is set to Chroma 1 (Blue)" or "Chroma 2 (Green)."

Detailed setup of External Key

Menu item	Value	Explanation
Type	White, **Black**	This sets the extraction color.

Key Coupling
    Ch.1
      :
    Ch.10
	Ch.1–**8**–10	This sets set the fill-channel and key-channel combination.

DSK Menu

Menu item	Value	Explanation
PGM Output	**OFF**, ON	This turns on/off the PGM output of DSK.
PVW Output	**OFF**, ON	This turns on/off the PVW output of DSK.
Type	Luminance 1 (White), **Luminance 2 (Black)**, Chroma 1 (Blue), Chroma 2 (Green)	This sets the key type (extraction color) to use when compositing. Luminance 1 (White): This uses a brightness threshold to make white transparent. Luminance 2 (Black): This uses a brightness threshold to make black transparent. Chroma 1 (Blue): This uses a color threshold to make blue transparent. Chroma 2 (Green): This uses a color threshold to make green transparent.
Level	0–**32**–255	This adjusts the amount of extraction.
Hue (*16)	You use the following items to adjust the hue of the key color.	
Fine	-128–**0**– +127	This adjusts the center position for hue.
Width	-128–**0**– +127	This adjusts the hue width (range).
Saturation (*16)	-128–**0**– +127	This adjusts the saturation of the key color.
Gain	**0**–255	This adjusts the amount of edge blur.
Source Channel	1–**8**–10	This sets the channel to overlay for DSK composition.

(*16) This is available when "Type" is set to Chroma 1 (Blue)" or "Chroma 2 (Green)."

NOTE

- When the External Key is valid, DSK cannot be used.
- When the setting for sending the input-channel signal to the AUX bus is in effect, DSK cannot be used.

System Menu

Menu item	Value	Explanation
HDCP	**OFF**, ON	This turns on/off the HDCP mode.
Color Space	RGB, **YCC**	This sets the color space.
NTSC Setup Level	**0IRE**, 7.5IRE	This sets the NTSC setup level.
Frame Rate	**59.94 Hz**, 50 Hz	This sets the frame rate.
Reference	**Internal**, External, Input SDI 1–4	This sets the reference clock of the V-800HD MK II. Internal: The V-800HD MK II's internal clock is used as the reference clock. External: A synchronizing signal input via the REFERENCE IN connector is used as the reference clock. Black-burst (frame synchronization), bi-level, and tri-level synchronizing signals are supported. Input SDI 1–4: A signal input via one of the SDI IN 1–4 connectors is used as the reference clock. The VSYNC (vertical synchronizing) signal output from the V-800HD MK II is synchronized to the VSYNC signal input via SDI.
Clock Adjust (*17)	1920–**0**– +1920 (*18)	This adjusts the phase horizontally. Adjust this when output is horizontally out of sync with the operation of other devices using the same clock.
Line Adjust (*17)	-1200–**0**– +1200	This adjusts the phase vertically. Adjust this when output is vertically out of sync with or field-shifted from the operation of other devices using the same clock.
Field Sync Processing (*17)	ON, **OFF**	This is a feature that automatically aligns the fields in interlaced input and output. Setting this to "ON" lengthens processing time between video input and output, but the fields are automatically synchronized.
Panel Operation	**PGM/PST**, A/B	This sets the operation mode for video transitions.
Output Capture	(ENTER)	This displays detailed setup menu of still image capture.
Output Fade	(ENTER)	This displays detailed setup menu of output fade.
Multi-view Label	(ENTER)	This displays detailed setup menu of multi-view labels.
Cross-point Assign	(ENTER)	This displays detailed setup menu of channel assign to cross-points.
Remote	**OFF**, ON	This turns valid/invalid of remote control from an external RS-232 device.
MIDI		Press [ENTER] to execute detailed setup of MIDI.
Memory Recall Parameters	**ALL**, Cross-point	This specifies the items that are recalled when you recall a memory. ALL: This recalls all the settings. Cross-point: This recalls the settings below only. Channel selection, Key setup, PinP setup, DSK setup, Wipe setup, Input connector selection
Memory Switch Fade	**OFF**, ON	This turns on/off the output fade during memory recalling.
Memory Protect	**OFF**, ON	Setting this to "ON" protects the memory, making it impossible to saving settings to memory.
Auto Memory	ON, **OFF**	Setting this to "ON" makes memory 1-1 function as a last memory. When you close the menu or recall a memory, the current settings are automatically saved in memory 1-1.
USB Memory	You use the following items to work with a USB flash drive.	
Parameter	(ENTER)	This displays a menu for saving or recalling parameters in the unit's internal memory (P.12).
Still Image	(ENTER)	This displays a menu for loading a still image (P.12).
Format	(Execute)	This executes formatting of a connected USB memory.
Still Image Delete	(ENTER)	This displays a menu for deleting a still image (P.12).
Video Fader Calibrate	(Execute)	This calibrates the video fader.
LED Dimmer	0–**7**	This adjusts the brightness of the top panel LEDs.
Menu Background	0–**4**–7	This adjust the transparency of the menu background.
Menu Position	**Left**, Right	This switches the position of menu display. * You can also switch this by holding down the [MENU] button and pressing the CURSOR [◀] or [▶] button.
Test Pattern	**OFF**, ColorBar75%, ColorBar100%, Ramp, Step, Hatch, Frame, Frame (PVW)	This sets the test pattern.
Factory Reset	(Execute)	This returns the unit to its factory defaults.
System Information	—	This displays the version of the system program.

(*17) Adjust this as needed when "Reference" is set to "External" or "Input SDI 1–4."

(*18) Depending on the input/output format settings, the range of value settings will be altered. These values are the minimum/maximum.

Menu List

Detailed setup of MIDI

Menu item	Value	Explanation
Status	OFF, **Native**, V-LINK Master, V-LINK Slave, MVC Slave	This sets the MIDI remote control mode. OFF: No communication via MIDI. Native: Communicate using standard MIDI mode. V-LINK Master: Communicate as the V-LINK master device. V-LINK Slave: Communicate as the V-LINK slave device. (*19) MVC Slave: Communicate as the MVC (MIDI Visual Control) slave device. (*19)
Through Output	**OFF**, ON	This turns on/off of through output of the MIDI OUT/THRU connector.
Channel	**1**–16	This sets the MIDI channel to be used in standard MIDI mode.

(*19) If the V-800HD MK II receives message from an external V-LINK/MVC master device while "Native" is selected, the mode automatically turns to "V-LINK Slave" or "MVC Slave."

Detailed setup of Output Capture

Menu item	Value	Explanation
Source Bus	**PGM**, PVW, AUX	This sets the source bus for still image capture. Image of the selected bus is displayed in PGM section of the multi-view monitor.
Destination Still Image Memory No.	**1**–16	This selects the internal memory number for still image. * A "✳" symbol is displayed for memory numbers where a still image is already saved.
	(Execute)	This captures a still image.

 * You cannot use the output capture if you are selecting "Fade to Still Image" in "Output Fade" or selecting "Still Image" as the source of Ch.10.

Detailed setup of Output Fade

Menu item	Value	Explanation
Mode	**Fade to Background**, Fade to Still Image, Output Freeze	This sets the operation mode of the [OUTPUT FADE] button. Fade to Background: This makes the final video output fade to a monochrome picture (background color). Fade to Still Image: This makes the final video output fade to a still picture. (*20) Output Freeze: This makes the final video output stop (freeze). (*20)

(*20) If you are selecting "Still Image" as the source of Ch.10, setting the operation mode to "Fade to Still Image" or "Output Freeze" is not possible.

Detailed setup of Fade to Background

Menu item	Value	Explanation
Time	0.0–**0.5**–10.0 s	This sets the fade time.
Color Setting	You use the following items to set the background color.	
Red	0–**16**– 255	This sets the red level.
Green	0–**16**– 255	This sets the green level.
Blue	0–**16**– 255	This sets the blue level.

Detailed setup of Fade to Still Image

Menu item	Value	Explanation
Time	0.0–**0.5**–10.0 s	This sets the fade time.
Still Image Memory No.	**1**–16	This selects the memory number where a still image is saved and specifies the still image to use during a fade. * A "✳" symbol is displayed for memory numbers where a still image is already saved.
Position H	-1920–**0**– +1920 (*21)	This adjusts the horizontal display position of the still image.
Position V	-1200–**0**– +1200 (*21)	This adjusts the vertical display position of the still image.
Color Correction	You use the following items to perform color correction for the still image.	
Brightness	-64–**0**– +63	This adjusts the brightness.
Contrast	-64–**0**– +63	This adjusts the contrast.
Saturation	-64–**0**– +63	This adjusts the saturation.
Red	-64–**0**– +63	This adjusts the red level.
Green	-64–**0**– +63	This adjusts the green level.
Blue	-64–**0**– +63	This adjusts the blue level.

(*21) Depending on the input/output format settings, the range of value settings will be altered. These values are the minimum/maximum.

Detailed setup of Multi-view Label

Menu item	Value	Explanation
Indicate	OFF, **ON**	This turns on/off the display of labels and green/red borders.
Label		Pressing the [ENTER] button displays the following label entry screen.
PVW	**PVW**	PVW section
PGM	**PGM**	PGM section
Ch.1 SDI	**CH.1 SDI**	Ch.1 (SDI)
Ch.1 Composite	**CH.1 CMP**	Ch.1 (Composite)
Ch.2 SDI	**CH.2 SDI**	Ch.2 (SDI)
Ch.2 Composite	**CH.2 CMP**	Ch.2 (Composite)
Ch.2 Shared Input	**CH.2 SHR**	Ch.2 (Shared Input)
Ch.3 SDI	**CH.3 SDI**	Ch.3 (SDI)
Ch.3 Composite	**CH.3 CMP**	Ch.3 (Composite)
Ch.3 Shared Input	**CH.3 SHR**	Ch.3 (Shared Input)
Ch.4 SDI	**CH.4 SDI**	Ch.4 (SDI)
Ch.4 Composite	**CH.4 CMP**	Ch.4 (Composite)
Ch.4 Shared Input	**CH.4 SHR**	Ch.4 (Shared Input)
Ch.5 DVI-I	**CH.5 DVI**	Ch.5 (DVI-I)
Ch.5 RGB/Component	**CH.5 RGB**	Ch.5 (RGB/Component)
Ch.6 DVI-I	**CH.6 DVI**	Ch.6 (DVI-I)
Ch.6 RGB/Component	**CH.6 RGB**	Ch.6 (RGB/Component)
Ch.6 Shared Input	**CH.6 SHR**	Ch.6 (Shared Input)
Ch.7 DVI-I	**CH.7 DVI**	Ch.7 (DVI-I)
Ch.7 RGB/Component	**CH.7 RGB**	Ch.7 (RGB/Component)
Ch.7 Shared Input	**CH.7 SHR**	Ch.7 (Shared Input)
Ch.8 DVI-I	**CH.8 DVI**	Ch.8 (DVI-I)
Ch.8 RGB/Component	**CH.8 RGB**	Ch.8 (RGB/Component)
Ch.8 Shared Input	**CH.8 SHR**	Ch.8 (Shared Input)
Ch.9 Still Image	**CH.9 STL**	Ch.9 (Still Image)
Ch.10 Still Image	**CH10 STL**	Ch.10 (Still Image)
Ch.10 Background	**CH10 BG**	Ch.10 (Background)

Detailed setup of Cross-point Assign

Menu item	Value	Explanation
Cross-point 1 : 10	Ch.1– Ch.10, None The default values are as follows. 1: Ch.1 2: Ch.2 3: Ch.3 4: Ch.4 5: Ch.5 6: Ch.6 7: Ch.7 8: Ch.8 9: Ch.9 10: Ch.10	This sets the input channel to be assigned to Cross-point 1–10.

Detailed setup of USB Memory Parameter

Menu item	Value	Explanation
Load	(ENTER)	This displays the screen to select a file to load.
Save	(ENTER)	This displays the screen to select a file to save.
Save As	(ENTER)	This displays the screen to edit the file name.
Delete	(ENTER)	This displays the screen to select a file to delete.

Detailed setup of USB Memory Still Image

Menu item	Value	Explanation
Still Image Memory No.	**1**–16	This selects the internal memory number for saving the still image. * A "✳" symbol is displayed for memory numbers where a still image is already saved.
Load	(ENTER)	This displays the screen to select a file to load.

Detailed setup of Still Image Delete

Menu item	Value	Explanation
Still Image Memory No.	**1**–16	This selects the internal memory number for still image deleting. * A "✳" symbol is displayed for memory numbers where a still image is already saved.
	(Execute)	This deletes the still image.

List of Messages

Processing.	This is displayed while this unit is processing data (still image loading, output capture etc.) Do not turn off power while this message is displayed.
Push ENTER to execute.	This is displayed in case confirmation is necessary before execution (formatting USB memory etc.) Press the [ENTER] button to execute or the [EXIT] button to cancel.
Set at upper (lower) posision and push ENTER.	This is displayed when you execute video fader calibrations. Move the fader all the way to upper (or lower) side and press the [ENTER] button.
USB memory is not ready.	This is displayed if the V-800HD MK II cannot recognize USB memory.
File not found.	This is displayed if the connected USB memory does not contain files that can be recognized by the V-800HD MK II.
File exists.	This is displayed if a same named file exists.
Cannot write file.	This is displayed if the V-800HD MK II cannot properly write the file.
Cannot read file.	This is displayed if the V-800HD MK II cannot properly read the file.
illegal file format.	This is displayed when you attempt to load a file that cannot be handled on the V-800HD MK II. It is possible that the file is damaged.
Turn off [DSK].	This is displayed if you select "External Key" as key mode while the DSK output is in progress. Turn off DSK.
[External Key] mode. **[DSK] is not available.**	This is displayed when you enter DSK menu while the External Key is valid. Switch to "Self Key" in key mode.
Select [Fade to Background] in [Output Fade] at first.	This is displayed when you attempt to select "Still Image" for ch.10 or to execute output capture. If you want to execute these, select "Background" in "Output Fade" at first.
Select [Background] for [Input Ch.10] at first.	This is displayed when you perform the following: • Selecting "Fade to Still Image" or "Output Freeze" for output fade • Executing output capture If you want to do these things, select "Background" for Ch.10 source.
DVI output will be continued. **Others will be stopped.** **Push ENTER to execute.**	This is displayed when you turn on HDCP. If you turn it on, output from SDI, SD and RGB/Component will be stopped. Press the [ENTER] button to turn it on. Press the [EXIT] button to cancel.
Signal with HDCP cannot be input. Push ENTER to execute.	This is displayed when you turn off HDCP. If you turn it off, processing of HDCP material will be terminated. Press the [ENTER] button to turn it off. Press the [EXIT] button to cancel.
Fan error	This is displayed when the V-800HD MK II detected error of cooling fan. Contact the nearest Roland Service Center, or an authorized Roland distributor.

Remote Controlling via MIDI

MIDI Control Modes

These are the MIDI control modes for the V-800HD MK II. Select one mode best suited for your connected device or your application.

Standard MIDI mode

This is the mode for remote controlling the V-800HD MK II from an external MIDI device (like a keyboard) or linking 2 units of the V-800HD MK II.

V-LINK master mode

This is the mode for remote controlling an external V-LINK device from the V-800HD MK II.

V-LINK slave mode

This is the mode for remote controlling V-800HD MK II from an external V-LINK device. In this mode, the V-800HD MK II works as a slave device.

> **What is V-LINK**
>
> V-LINK is a feature for performing video synchronized to music using MIDI. The V-LINK feature provides a quick and simple way to establish a link with a compatible device.

MVC slave mode

This is the mode for remote controlling the V-800HD MK II from an external MVC (MIDI Visual Control) device. In this mode, the V-800HD MK II works as a slave device.

> **What is MVC (MIDI Visual Control)**
>
> MIDI Visual Control is a feature that uses MIDI to link visual expression to a musical performance.

MIDI Settings

Detailed settings for MIDI remote control are made via the MIDI menu on the V-800HD MK II.

Select the [MENU] button → "System" → "MIDI" → press the [ENTER] button → use "Status" to select one of the MIDI control modes.

- OFF
- Native
- V-LINK Master
- V-LINK Slave
- MVC Slave

Using in standard MIDI mode

Select "Native" in "Status." Also match the MIDI channel with the connected MIDI device.

Using in V-LINK master mode

Select "V-LINK Master" in "Status." The MIDI device ID of the V-800HD MK II will be "10H."

Using in V-LINK slave mode

If the V-800HD MK II receives V-LINK ON message from an external device while it's in standard MIDI mode, the mode switches automatically to V-LINK slave. Reception of V-LINK OFF message also switches the mode automatically to standard MIDI mode.

The MIDI device ID of the V-800HD MK II will be "10H."

Using in MVC slave mode

If the V-800HD MK II receives MVC ON message from an external device while it's in standard MIDI mode, the mode switches automatically to MVC slave. Reception of MVC OFF message also switches the mode automatically to standard MIDI mode.

The MIDI device ID of the V-800HD MK II will be "00H."

MEMO

- Refer to "MIDI Implementations" (p. 15) for commands in each mode.
- When "ON" is selected for "Through Output", the received MIDI message will be output from MIDI OUT/THRU connector without any alteration. V-800HD MK II exclusive messages (SYSEX) will not be output.
- When you are not using MIDI, select "OFF" in "Status."

MIDI Implementations

Messages Transmitted and Received in Standard MIDI Mode

■ Channel Voice Messages

● Control Change

○ PGM Cross-Point Selection

Status	2nd Byte	3rd Byte
BnH	0CH	0kH

n = MIDI channel number: 0H–FH (ch.1–16)
k = PGM cross-point button number: 00H–09H (ch.1–10)

○ PST/EFFECT Cross-Point Selection

Status	2nd Byte	3rd Byte
BnH	0DH	0kH

n = MIDI channel number
k = PST/EFFECT cross-point button number: 00H–09H (ch.1–10)

○ DSK Source Channel Selection

Status	2nd Byte	3rd Byte
BnH	10H	0kH

n = MIDI channel number
k = DSK source channel number: 00H–09H (ch.1–10)

○ Transition Time Adjustment

Status	2nd Byte	3rd Byte
BnH	11H	kkH

n = MIDI channel number
kk = transition time: 00H–64H (0.0 –10.0 sec)

○ Wipe Pattern Selection

Status	2nd Byte	3rd Byte
BnH	12H	0kH

n = MIDI channel number
k = wipe pattern: 00H–07H (1–7, MIX)

○ Output Fade Button Operation

Status	2nd Byte	3rd Byte
BnH	13H	7FH

n = MIDI channel number

○ Output Fade Time Adjustment

Status	2nd Byte	3rd Byte
BnH	14H	kkH

n = MIDI channel number
kk = output fade time: 00H–64H (0.0 –10.0 sec)

○ Picture in Picture Selection

Status	2nd Byte	3rd Byte
BnH	40H	0kH

n = MIDI channel number
k = PinP button: 0H–3H (1–4)

○ Key ON Button Operation

Status	2nd Byte	3rd Byte
BnH	41H	7FH

n = MIDI channel number

○ AUTO Button Operation

Status	2nd Byte	3rd Byte
BnH	42H	7FH

n = MIDI channel number

○ DSK Button Operation

Status	2nd Byte	3rd Byte
BnH	43H	7FH

n = MIDI channel number

○ CUT Button Operation

Status	2nd Byte	3rd Byte
BnH	44H	7FH

n = MIDI channel number

○ Video Fader Operation

Status	2nd Byte	3rd Byte
BnH	63H	llH
BnH	62H	mmH

n = MIDI channel number
ll,mm= video fader value: 00H, 00H–0FH, 7FH (0–2047)
* value is finalized on reception of mm.

● Program Change

○ MEMORY Setup Loading

Status	2nd Byte
CnH	ppH

n = MIDI channel number
pp = MEMORY number: 00H–3FH (1-1–8-8)

Messages Transmitted in V-LINK Master Mode

■ System Exclusive Messages

● Data Set 1 (DT1)

This is the message for actual data transmission. Use this when you want to set data for the device.

Status	Data Byte	Status
F0H	41H, dev, 00H, 51H, 12H, aaH,	F7H
	bbH, ccH, ddH,…, eeH, sum	

Byte	Explanation
F0H	Exclusive Status
41H	ID Number (Roland)
10H	Device ID
00H	Model ID upper byte (V-LINK message)
51H	Model ID lower byte (V-LINK message)
12H	Command ID (DT1)
aaH	Address upper byte
bbH	Address
ccH	Address
ddH	Data: Actual data.
	If multiple, transmitted with address order.
:	:
eeH	Data
sumH	Checksum
F7H	EOX (End of Exclusive)

Parameter Address Map

● System Preference Area

Address	Parameter Name	Sys.Ex. Value	Meaning of Value
10H 00H 00H	V-LINK ON/OFF	00H–01H	00H = OFF, 01H–ON

● Video System Performance Area

Address	Parameter Name	Sys.Ex. Value	Meaning of Value
20H 00H 00H	V-LINK Number of Video Mixer Inputs	09H	10CH

● Audio Mixer Parameter Area

Address	Parameter Name	Sys.Ex. Value	Meaning of Value
20H 20H 00H	V-LINK Audio Mixer Master Level	00H 00H–07H 68H	Level 0.0–100.0%
20H 21H 02H	V-LINK Audio Mixer Channel 1 Level	00H 00H–07H 68H	Level 0.0–100.0%
20H 21H 04H	V-LINK Audio Mixer Channel 2 Level	00H 00H–07H 68H	Level 0.0–100.0%
20H 21H 06H	V-LINK Audio Mixer Channel 3 Level	00H 00H–07H 68H	Level 0.0–100.0%
20H 21H 08H	V-LINK Audio Mixer Channel 4 Level	00H 00H–07H 68H	Level 0.0–100.0%
20H 21H 0AH	V-LINK Audio Mixer Channel 5 Level	00H 00H–07H 68H	Level 0.0–100.0%
20H 21H 0CH	V-LINK Audio Mixer Channel 6 Level	00H 00H–07H 68H	Level 0.0–100.0%
20H 21H 0EH	V-LINK Audio Mixer Channel 7 Level	00H 00H–07H 68H	Level 0.0–100.0%
20H 21H 10H	V-LINK Audio Mixer Channel 8 Level	00H 00H–07H 68H	Level 0.0–100.0%
20H 21H 12H	V-LINK Audio Mixer Channel 9 Level	00H 00H–07H 68H	Level 0.0–100.0%
20H 21H 14H	V-LINK Audio Mixer Channel 10 Level	00H 00H–07H 68H	Level 0.0–100.0%

Messages Received in V-LINK Slave Mode

■ Channel Voice Messages

● Program Change

Status	2nd Byte
CnH	ppH

n = Ctrl Rx MIDI Ch. number: 0H–FH (Ch. 1–16)

pp = PST cross-point number: 00H–09H (CH1–CH10)

* The Dissolve Time is automatically adjusted when the Auto Mix Mode is ON.

● Note On

Status	2nd Byte	3rd Byte
9nH	kkH	vvH

● Note Off

Status	2nd Byte	3rd Byte
8nH	kkH	vvH

n = Ctrl Rx MIDI Ch. number: 0H–FH (Ch. 1–16)

kk = note number: 00H–7FH (0–127)

vv = velocity: ignored

* This is valid when the Note Message Enabled is [49Key] or [Assignable].

* The Dissolve Time is automatically adjusted when the Auto Mix Mode is ON.

● Control Change

Status	2nd Byte	3rd Byte
BnH	ccH	vvH

n = Ctrl Rx MIDI Ch. number: 0H–FH (Ch. 1–16)

cc = Controller number: 00H–7FH (0–127)

vv = value: 00H–7FH (0–127)

● Channel Pressure/After Touch

Status	2nd Byte
DnH	vvH

n = Ctrl Rx MIDI Ch. number: 0H–FH (Ch. 1–16)

vv = value: 00H–7FH (0–127)

● Pitch Bend Change

Status	2nd Byte	3rd Byte
EnH	llH	mmH

n = Ctrl Rx MIDI Ch. number: 0H–FH (Ch. 1–16)

ll = ignored

mm = value: 00H–7FH (0–127)

● Reset All Controllers

Status	2nd Byte	3rd Byte
BnH	79H	00H

n = Ctrl Rx MIDI Ch. number: 0H–FH (Ch. 1–16)

* Returns to V-LINK default status.

■ System Exclusive Messages

● Data Set 1 (DT1)

This is the message for actual data transmission. Use this when you want to set data for the device.

Status	Data Byte	Status
F0H	41H, dev, 00H, 51H, 12H, aaH, bbH, ccH, ddH,..., eeH, sum	F7H

Byte	Explanation
F0H	Exclusive Status
41H	ID number (Roland)
10H	Device ID
00H	Model ID upper byte (V-LINK message)
51H	Model ID lower byte (V-LINK message)
12H	Command ID (DT1)
aaH	Address upper byte
bbH	Address
ccH	Address
ddH	Data: Actual data. If multiple, transmitted with address order.
:	:
eeH	Data
sumH	Checksum
F7H	EOX (End of Exclusive)

■ Parameter Address Map

● System Preference Area

Address	Parameter Name	Sys.Ex. Value	Meaning of Value
10H 00H 00H	V-LINK ON/OFF	00H–**01H**	00H = Off, 01H = On
10H 00H 01H	Ctrl Rx MIDI Ch. (Clip & Color)	**00H**–10H	00H = Ch. 1, 0FH = Ch. 16, 10H = Off
10H 00H 03H	Note Message Enabled	**00H**–02H	00H = OFF, 01H = 49 Keys, 02H = Assignable
10H 00H 07H	Auto Mix Mode	00H–**01H**	00H = Off, 01H = On

● Clip Control Assignment Area

Address	Parameter Name	Sys.Ex. Value	Meaning of Value
10H 10H 02H	Dissolve Time Control Assign MSN	00H–(**00H**)–0FH	4 bit MSN + 4 bit LSN = 8 bit data. D0H = After Touch E0H = Pitch Bend Change
10H 10H 03H	Dissolve Time Control Assign LSN	00H–(**05H**)–0FH	FFH = No assign 01H–1FH, 40H–5FH = CC# other values are reserved.

● Clip Control Preference Area

Address	Parameter Name	Sys.Ex. Value	Meaning of Value
10H 30H 02H	Assignable Note Mode Keyboard Range Lower	00H–(**24H**)–7FH	Note Number
10H 30H 03H	Assignable Note Mode Keyboard Range Upper	00H–(**31H**)–7FH	Note Number

Messages Received in MVC Mode

■ Channel Voice Messages

● Program Change

Status	2nd Byte
CnH	ppH

n = MIDI channel number (CCM): 0H–FH (Ch. 1–16)
pp = channel number: 00H–09H (1–10)

● Note On

Status	2nd Byte	3rd Byte
9nH	kkH	vvH

● Note Off

Status	2nd Byte	3rd Byte
8nH	kkH	vvH

n = MIDI channel number (CCM): 0H–FH (Ch. 1–16)
kk = note number: 00H–7FH (0–127)

● Control Change

Status	2nd Byte	3rd Byte
BnH	ccH	vvH

n = MIDI channel number (CCM): 0H–FH (Ch. 1–16)
cc = control number (CC#): 00H–77H (0–119)
vv = value: 00H–7FH (0–127)

● Channel Pressure (After Touch)

Status	2nd Byte
DnH	vvH

n = MIDI channel number (CCM): 0H–FH (Ch. 1–16)
vv = channel pressure value: 00H–7FH (0–127)

● Pitch Bend Change

Status	2nd Byte	3rd Byte
EnH	llH	mmH

n = MIDI channel number (CCM): 0H–FH (Ch. 1–16)
ll = ignored
mm = pitch bend value: 00H–7FH (0–127)

● Channel Mode Message

Status	2nd Byte	3rd Byte
BnH	79H	00H

n = MIDI channel number (CCM): 0H–FH (Ch. 1–16)

■ Universal System Exclusive

| F0H | 7EH, Dev, 0CH, 01H, . . . | F7H |

● MIDI Visual Control Data Set

MIDI Visual Control Data Set is made of data address, actual data to be transmitted and the checksum.

Byte	Explanation
F0H	System Exclusive Status
7EH	Universal System Exclusive Non Real-time Header
00H	Device ID
0CH	Sub ID#1 (MIDI Visual Control)
01H	Sub ID#2 (MVC command set ID; 01H = Version 1.0)
:	MIDI Visual Control Data Set
F7H	End of System Exclusive (EOX)

■ MVC Slave Parameter Address Map

● System Preference Area

Address	Parameter Name	Sys.Ex. Value	Meaning of Value
10H 00H 00H	MIDI Visual Control ON/OFF	00H–**01H**	00H = Off, 01H = On
10H 00H 01H	CCM (Clip Control Rx MIDI Ch.)	**00H**–10H	00H = Ch. 1, 0FH = Ch. 16, 10H = Off
10H 00H 03H	NME (Note Message Enabled)	**00H**–01H	00H = OFF, 01H = Assignable

● Clip Control Assignment Area

Address	Parameter Name	Sys.Ex. Value	Meaning of Value
10H 10H 02H	Dissolve Time Ctrl Assign MSN	00H–(**00H**)–0FH	4 bit MSN + 4 bit LSN = 8 bit data. D0H = After Touch E0H = Pitch Bend Change
10H 10H 03H	Dissolve Time Ctrl Assign LSN	00H–(**05H**)–0FH	FFH = No Assign 01H–1FH, 40H–5FH = CC# Other values are reserved.

● Clip Control Preference Area

Address	Parameter Name	Sys.Ex. Value	Meaning of Value
10H 30H 02H	Keyboard Range Lower	00H–(**24H**)–7FH	Note Number
10H 30H 03H	Keyboard Range Upper	00H–(**54H**)–7FH	Note Number

Appendices

● Decimal and hexadecimal conversion table

* The "H" follows the numbers in hexadecimal notation.

MIDI uses hexadecimal notation in 7-bit units to indicate data values, addresses and sizes within an exclusive message. Decimal and hexadecimal numbers corresponds as follows.

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 channels, bank select, program change and device ID are 1 greater than the decimal value shown on above table.

● Exclusive message and checksum calculation

Roland exclusive messages (RQ1, DT1) contain a checksum following the data (after F7), which can be used to check whether the message was received correctly. The checksum value is derived from the address and data (or size) of the transmitted exclusive message.

○ Calculating the checksum

* "H" is appended to hexadecimal numbers.

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 aaH bbH ccH and the data is ddH eeH, the actual calculation would be as follows:

aaH + bbH + ccH + ddH + eeH = sum

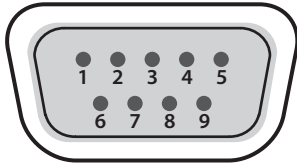sum / 128 = quotient ... remainder

128 - remainder = checksum

Command Reference

It is possible to remote control the V-800HD MK II from an external device using the RS-232 connector.

Specification of the RS-232 Connector

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

D-sub 9-pin (male)

Communication method	Synchronous (asynchronous), full-duplex
Communication speed	9600 bps
Parity	none
Data length	8 bit
Stop bit	1 bit
Code set	ASCII
Flow control	XON/XOFF

Overview of Commands

A command consists of an ASCII code sequence containing "stx," three uppercase letters, and a semicolon (";"). The three letters indicate the command type.

If the command has an argument, a colon (":") is inserted between the command letters and the argument. When multiple arguments occur, they are separated by commas (",").

stx This is the ASCII code signal name (code number 02H [hexadecimal]) and code that signals the command start.

Your device's stx command may not be the ASCII letters "stx" or "02H". Refer to your RS-232 controller's manual to send proper command.

: This is the code to separate the command and its argument.

; This is the code to make V-800HD MK II recognize the end of a command.

* The codes of stx(02H) & ACK(06H) or Xon(11H) / Xoff(13H) are the control codes.
* If the external device sends multiple commands to the V-800HD MK II sequentially, it must wait for ACK to be returned before sending the next command.

Received Commands (Controller → V-800HD MK II)

Item	Received Commands	Parameter
Select PGM channel	stxPGM:a;	a: 0 (CH 1)–9 (CH 10)
Select PST channel	stxPST:a;	a: 0 (CH 1)–9 (CH 10)
Select transition type	stxTRS:a;	a: 0 (WIPE 1), 1 (WIPE 2), 2 (WIPE 3), 3 (:WIPE 4), 4 (:WIPE 5), 5 (WIPE 6), 6 (WIPE 7), 7 (MIX)
Set transition time	stxTIM:a;	a: 0 (0.0 sec)–100 (10.0 sec)
Press the [AUTO] button	stxATO;	
Press the [CUT] button	stxCUT;	
Set PinP on/off	stxPIP:a;	a: 0 (OFF), 1 (ON)
Select PinP position	stxPPS:a;	a: 0 (Position 1)–3 (Position 4)
Set key compositing on/off	stxKEY:a;	a: 0 (OFF), 1 (ON)
Set output fade on/off	stxFDE:a;	a: 0 (OFF), 1 (ON)
Set Output fade time	stxFDT:a;	a: 0 (0.0 sec)–100 (10.0 sec)
Load memory	stxMEM:a;	a: 0 (1-1)–64 (8-8)
Return version information	stxVER;	
Acquire status of V-800HD MK II	stxACS;	
Flow control	XON	
Flow control	XOFF	

Sent Commands (V-800HD MK II → Controller)

Item	Sent Commands	Parameter
Sent when a transmitted command has been correctly received	ACK	
Sent when a transmitted command has not been correctly received	stxERR:a;	a: 0 (syntax error) The received command contains an error. 5 (out of range error) An argument of the received command is out of range.
Sent when a VER command has been received	stxVER:V-800HDMK2,a;	a: Version * The version info is ASCII text strings.
Flow control	XON	
Flow control	XOFF	