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EDIUS

EDIT ANYTHING

Hardware Setting Guide

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 **Manual Explanation**

- If there are any variations between the explanation in this manual and the actual application method, priority is given to the actual application method.
- The screens used as examples in this manual are those of the development stage, so they may vary from those in the final product.
- This manual is written for people who have a basic knowledge of how to use a computer. If there are no special instructions, perform the same operation as a normal computer operation.
- In this manual, EDIUS Elite, EDIUS Pro, EDIUS Neo, and EDIUS series are called “EDIUS”.

 **DANGER**

Health Precautions

In rare cases, flashing lights or stimulation from the bright light of a computer display or TV monitor may trigger temporary epileptic seizures or loss of consciousness. It is believed that even individuals whom have never experienced such symptoms may be susceptible. If you or close relatives have experienced any of these symptoms, consult a doctor before using this product.

If you edit 3D video more than an hour continuously, take a rest of 10 to 15 minutes per hour. If you feel tired or uncomfortable, stop using the product.

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EDIUS Hardware Setting Guide

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Before Using

This manual describes the EDIUS settings required when you edit using the hardware products for capturing and exporting. For settings of the hardware products and precautions, see the manuals of the hardware products.

Supported hardware

- STORM 3G ELITE
- STORM 3G
- HDSPARK
- HDSPARK Pro
- STORM MOBILE
- HDSTORM
- Third-party hardware products (Please visit the Grass Valley Web site for the verified hardware products.)

Note

- Supported hardware products or available functions differ depending on EDIUS in use. For details, visit the Grass Valley Web site.

Configuring Editing Environments

This section describes how to store or configure the devices used for capturing or exporting. Before editing, configure the following editing environments.

 **Note**

- The contained screens are those for STORM 3G ELITE. The displays for the other hardware products might differ.

Storing Device Presets

With the device presets, store and manage the connection information of external devices used for capturing or exporting (cameras, decks, web cameras, microphones, and input/output hardware products) as the presets. By using the device presets stored, capturing and exporting operations can be performed smoothly.

This section describes how to store a device preset by an example of Grass Valley hardware product. For hardware settings other than Grass Valley products, visit the Grass Valley Web site.

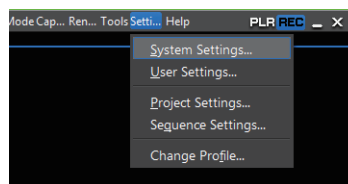
- External devices in which file-based video or audio is recorded (removable media such as CD/DVD, SD memory card) are not required to be stored as device presets, as the files can be stored to EDIUS using the bin or source browser.
- If you use the hardware product other than the Grass Valley product, besides EDIUS, other settings may be required. For details, visit the Grass Valley Web site.

1 Start up EDIUS and create a project.

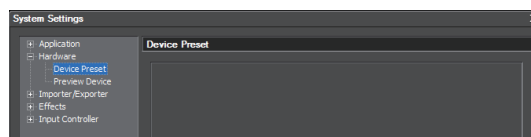
For details of start-up of EDIUS and Project setting, refer to EDIUS Reference Manual.

2 Connect the device used for input/output to a hardware product.

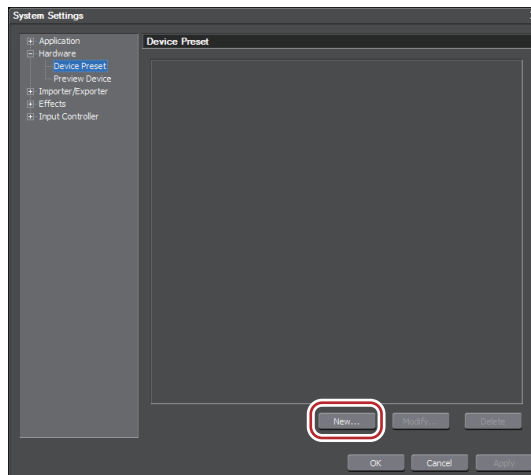
3 Click [Settings] on the menu bar, and click [System Settings].



4 Click the [Hardware] tree, and click [Device Preset].

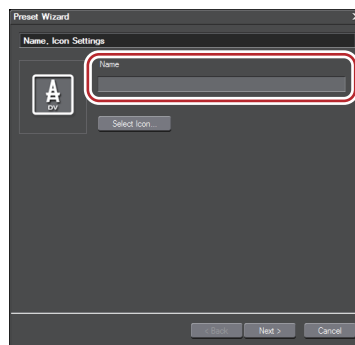


5 Click [New].



[Preset Wizard] will start up.

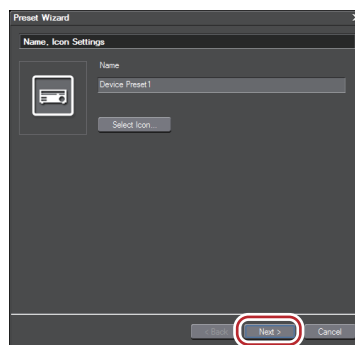
6 Enter the device preset name.



7 Click [Select Icon], select the icon image, and click [OK].

To use any image you like, click [...] and select a file.

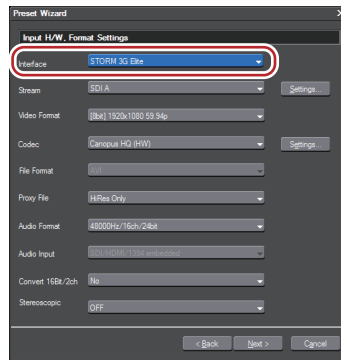
8 Click [Next].



The screen to configure the connection information for input and to configure the format settings is displayed.

9 Click the pulldown of [Interface] and select a hardware product for input.

The names of the mounted hardware products are displayed in the [Interface] list.

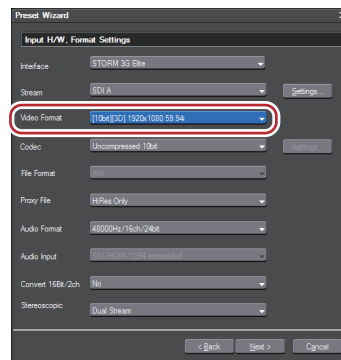


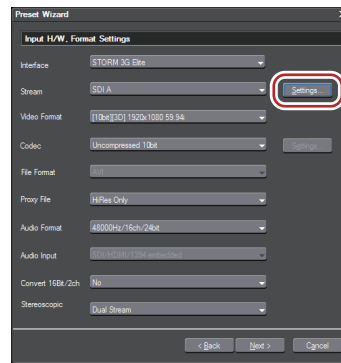
- When connecting an HDV device to the IEEE1394 port on your PC to capture video, select [Generic HDV]. When connecting a DV device to the IEEE1394 port on your PC to capture sources, select [Generic OHCI]. When capturing video from a video capture device or an audio capture device based on DirectShow, select [DirectShow Capture]. To disable use of an interface for capturing, select [Not Select].

10 Click the pulldown of [Stream] and select the terminal to use for video input.

11 Click the list in [Video Format], and select the video format of the source to capture.

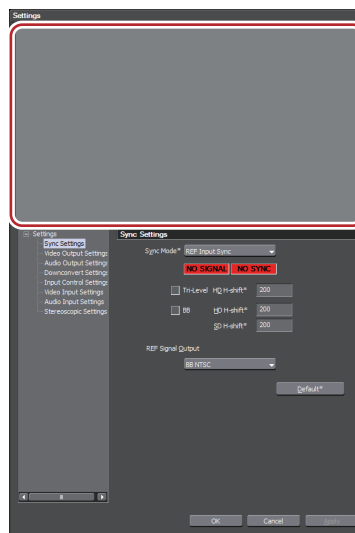
To capture sources in the stereoscopic video format using STORM 3G ELITE/STORM 3G, select a format with [3D].



12 Click [Settings].

The input setting screen of Grass Valley hardware product appears.

When EDIUS recognizes an input device used for capturing, the video from the input device is displayed on the upper part of the screen.

**13 Click the [Settings] tree and click an item to set.****14 Set each item.**

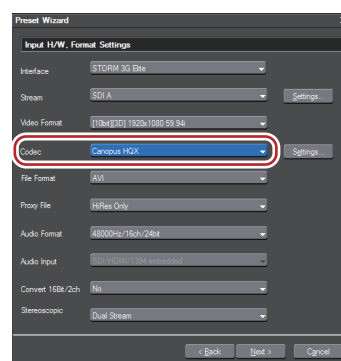
Configure the input setting of Grass Valley hardware product.

You can continue to set other items by clicking [Apply].

The setting items differ depending on the hardware products you use.

Input Control Settings ▶ P12**15 Click [OK].****16 Click the list in [Codec], and select the codec to use for capture.**

Depending on the selected codec, click [Settings] to set the codec details.

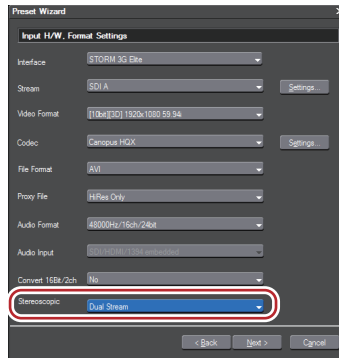


17 To capture stereoscopic sources, click the pulldown of [Stereoscopic] and select a capture method.

When using STORM 3G ELITE/STORM 3G and selecting the stereoscopic video format in step 11, you can select a capture method from the list.

Capturing Stereoscopic Sources using STORM 3G ELITE/STORM 3G ▶ P8

When using a hardware product other than STORM 3G ELITE/STORM 3G or when selecting a format other than the stereoscopic video format in step 11, select [Separate L/R Clips] to capture stereoscopic sources using the batch capture function. See EDIUS Reference Manual for more details.

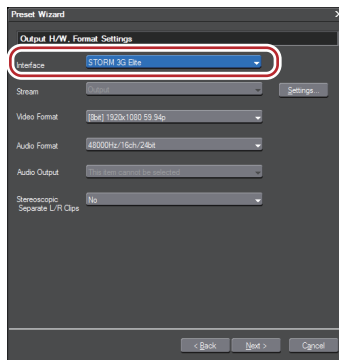


18 If necessary, set other items and click [Next].

The screens for configuring the connection information or format at outputting is displayed.

19 Click the pulldown of [Interface] and select a hardware product for output.

The names of the mounted hardware products are displayed in the [Interface] list.

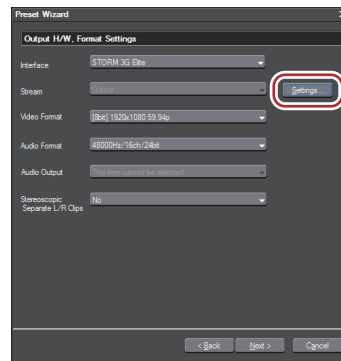


- When connecting a DV device, for example, to the IEEE1394 port on your PC for printing to tape, select [Generic OHCI]. When you do not use the output interface, or when outputting to an HDV device or printing to tape on a device which is not controlled by a deck, select [Not Select].
- In [Output H/W, Format Settings] of device preset, configure the settings for an output destination device (such as a tape deck) which can be controlled by EDIUS. When the output is performed from the output terminal unavailable for the deck control, the video is always output according to the project settings. Configure the setting in [Preview Device] for the output from the output terminal unavailable for the deck control.

Setting a Preview Device ▶ P9

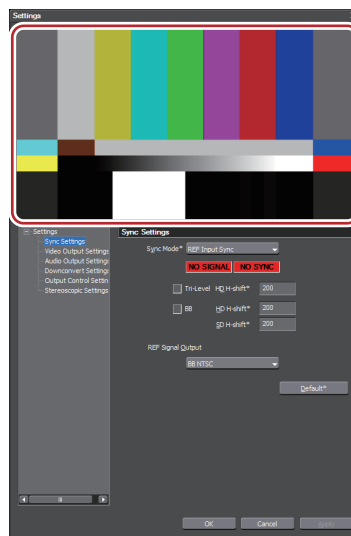
20 Click the pulldown of [Video Format] and select the video format of output destination.

21 Click [Settings].



The output setting screen of Grass Valley hardware product appears.

Color bar is displayed on the upper part of the screen. When the output video format is specified properly, color bar is displayed also in the output devices.



22 Click the [Settings] tree and click an item to set.

23 Set each item.

Configure the output setting of Grass Valley hardware product.

You can continue to set other items by clicking [Apply].

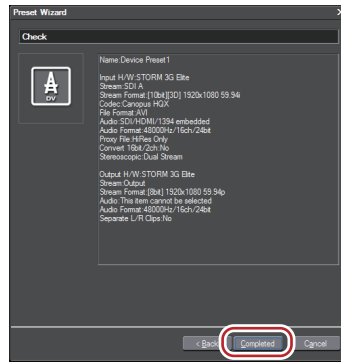
The setting items differ depending on the hardware products you use.

Output settings ▶ P23

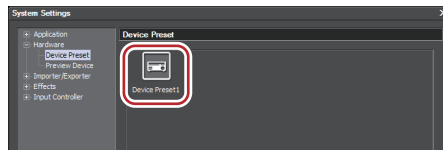
24 Click [OK].

25 If necessary, set other items and click [Next].

26 Confirm the details, and click [Completed].



The icon of the created preset appears in the device preset list.



27 Click [OK].

For details on the procedure of capturing and exporting with a device preset, refer to EDIUS Reference Manual.

Capturing Stereoscopic Sources using STORM 3G ELITE/STORM 3G

To capture sources in the stereoscopic video format using STORM 3G ELITE/STORM 3G, select a capture method from the following.

[Dual Stream]	Record the L side and the R side of the input video to a single file with 2 streams maintained.
[L Only]	Capture only L side of the input video.
[R Only]	Capture only R side of the input video.
[Side by Side]	Combine the L side and the R side of the input video so that the left half of the frame is L and the right half is R, and record it as a single file. The recorded file is stored to the bin as a stereoscopic clip.
[Top and Bottom]	Combine the L side and the R side of the input video so that the upper half of the frame is L and the lower half is R, and record it as a single file. The recorded file is stored to the bin as a stereoscopic clip.
[Line Interleave]	Combine the L side and the R side of the input video so that L is placed on the upper side of the scanning line and R is placed on the lower side, and record it as a single file. The recorded file is stored to the bin as a stereoscopic clip.
[L/R 2 file output]	Record the L side and the R side of the input video by 2 streams into 2 files simultaneously. The recorded L and R side files are stored to the bin as stereoscopic clips.
[L/R 2 file output - Capture by turns]	Use the batch capture function to capture the L side and the R side of the input video separately. The recorded L and R side files are stored to the bin as stereoscopic clips. (The [L/R 2 file output - Capture by turns] setting is enabled while batch capturing. When capturing in a normal way, only the L side is captured.)

The capture operation with the settings of [Dual Stream], [L Only], [R Only], [Side by Side], [Top and Bottom], [Line Interleave], and [L/R 2 file output] is the same as the normal capture operation.

The capture operation with the settings of [L/R 2 file output - Capture by turns] is the same as the normal batch capture operation.

For details on capture operation and batch capture operation, refer to EDIUS Reference Manual.

- If only the audio part in a stereoscopic source is captured, the WAV file is created.

- The information of the L side (such as the reel name, user bit, recorded date and time, and timecode) is retained.
- If you make the setting to automatically divide the file when capturing, the file is divided according to the video and audio data of the L side when capturing in the stereoscopic video format.

Setting a Preview Device

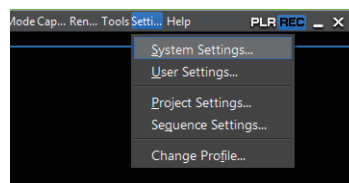
Store and manage hardware products as preview devices when editing while viewing an external monitor connected to your PC.

This section describes how to configure preview devices by an example of Grass Valley hardware product.

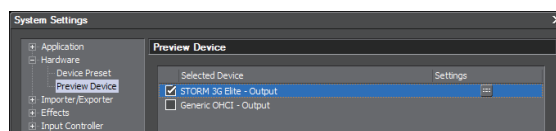


- If you use the hardware product other than the Grass Valley product, besides EDIUS, other settings may be required. For details, visit the Grass Valley Web site.

- 1 Connect the device used for editing to a hardware product.
- 2 Click [Settings] on the menu bar, and click [System Settings].

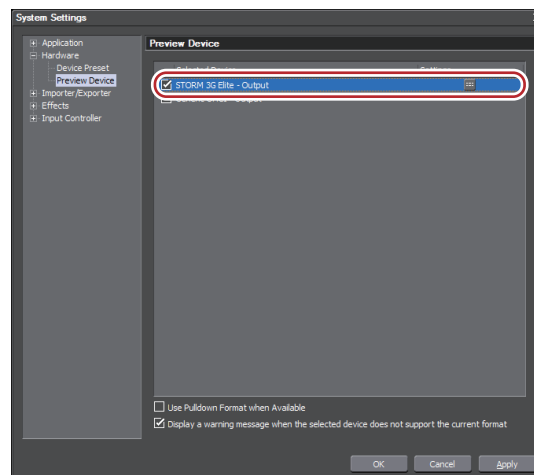


- 3 Click the [Hardware] tree, and click [Preview Device].



- 4 Click the hardware product to be used as a preview device.

Hardware products available for the preview device are displayed.

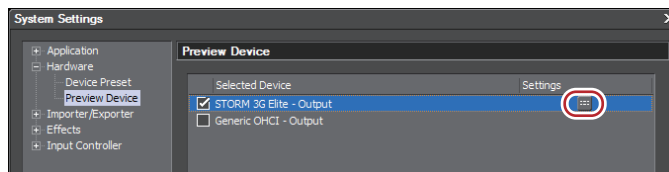


A check mark appears on the side of the device name.



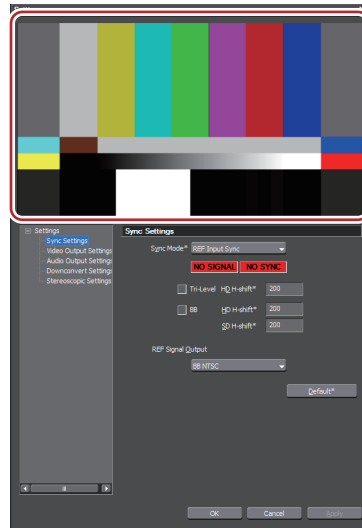
- Check [Use Pulldown Format when Available] to give priority to export by pulldown if pulldown to commonly used formats (59.94i/50i/59.94p/50p) is possible. Check it when you use a monitor not supporting 23.98p/29.97p/25p display.

5 Click [Settings].



The detailed setting screen for the preview device appears.

Color bar is displayed on the upper part of the screen. The color bar is displayed in the same way on preview device monitors.



Note

- When the preview device is not compatible with the video format set in the current project setting, a warning message appears. Modify the project setting according to the preview device.

6 Click the [Settings] tree and click an item to set.

7 Set each item.

Configure the detailed setting for the preview device.

You can continue to set other items by clicking [Apply].

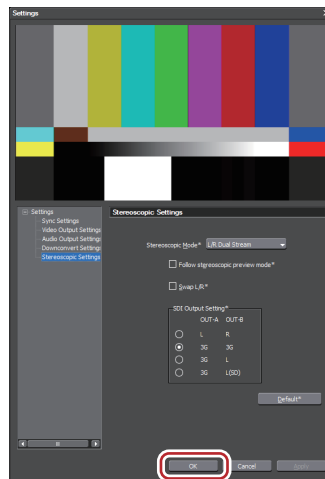
The setting items differ depending on the hardware products you use.

Preview device settings ▶ P27

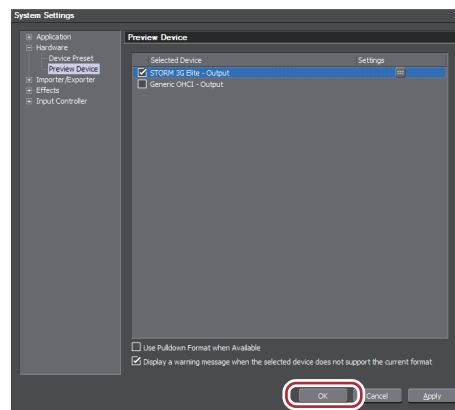
- Configure the settings in step 14, [Video Output Settings] of “Storing Device Presets” to view a video on an external monitor that is connected to the hardware product when inputting (capturing) the video.

Storing Device Presets ▶ P2

8 Click [OK].



9 Click [OK].



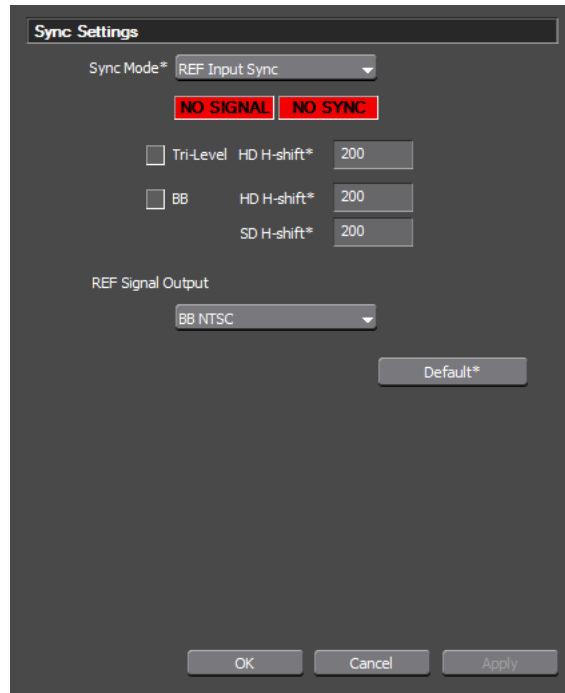
Detailed Settings

This section describes the device presets and the detailed setting of preview devices. The setting items differ depending on the hardware products you use. The following explains the items that can be set with the Grass Valley hardware products.

Input Control Settings

[Sync Settings] (STORM 3G ELITE/STORM 3G)

Configuring Sync Settings synchronizes the monitor output device used for capturing with Grass Valley hardware products.



[Sync Mode]

Select a sync signal from [REF Input Sync] and [Input Sync].
 [NO SIGNAL]/[SIGNAL OK] indicates whether a reference signal which can be synchronized with the current output video format is detected.
 If the reference signal is not detected ([NO SIGNAL]), the sync system will be automatically switched to internal sync.
 When [REF Input Sync] is selected, if the output format is HD, STORM 3G ELITE/STORM 3G can be synchronized via the signals of both [Tri-Level] (tri-level sync) and [BB] (Black Burst). If one of the signals is detected, the box for the corresponding signal ([Tri-Level] or [BB]) will light in green. If the output format is SD, only [BB] is available.

[Tri-Level HD H-shift]

Input a horizontal-shift adjustment value for the tri-level sync signal during HD output.

[BB HD H-shift]

Input a horizontal-shift adjustment value for the BB signal during HD output.

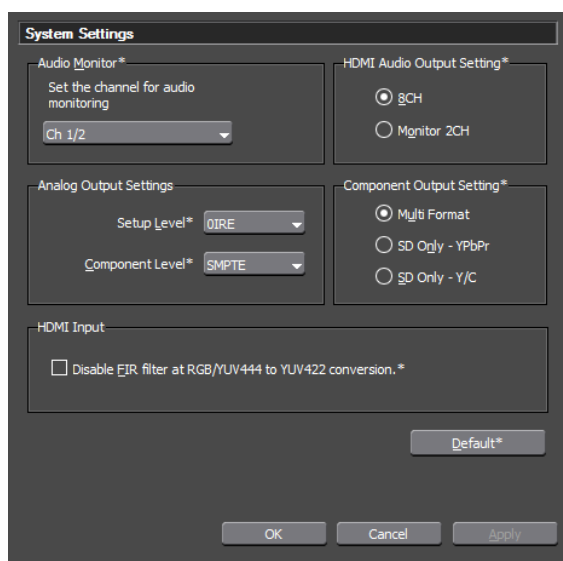
[SD H-shift]

Input a horizontal-shift adjustment value for the BB signal during SD output.

[REF Signal Output]	Select a format to output the REF signals from [BB NTSC], [BB PAL], [Tri-Level 1080/59.94i], [Tri-Level 1080/50i], [Tri-Level 1080/23.98PsF], and [Tri-Level 1080/24PsF]. For STORM 3G ELITE, when [BB NTSC] or [BB PAL] is selected, the [Ref Out SD] indicator on the front panel of STORM 3G ELITE lights, and when [Tri-Level 1080/50i], [Tri-Level 1080/23.98PsF], or [Tri-Level 1080/24PsF] is selected, the [Ref Out HD] indicator on the front panel of STORM 3G ELITE lights.
[Default]	Restore the default settings.

[System Settings] (STORM MOBILE/HDSTORM)

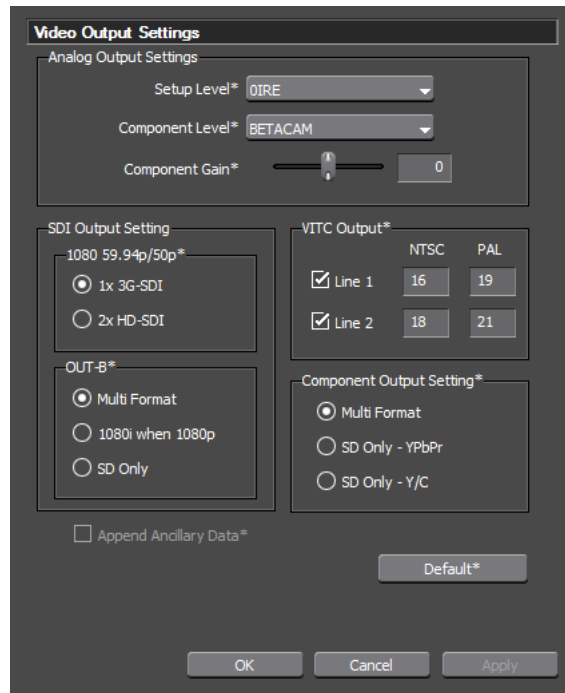
The settings of a monitor output device used for capturing.



[Audio Monitor]	Select the audio channel to monitor.
[HDMI Audio Output Setting]	Specify the output from the HDMI connector. Select if 8 audio channels are to be output or the 2 channels specified as analog audio channels are to be output.
[Analog Output Settings]	<p>[Setup Level] Set the setup level (black level) of NTSC from [0IRE] and [7.5IRE]. 0IRE is used in Japan, and 7.5IRE is used in North America.</p> <p>[Component Level] Select the component level from [SMPTE] and [BETACAM].</p>
[Component Output Setting]	<p>[Multi Format] HD/SD is switched automatically according to the input format.</p> <p>[SD Only - YPbPr] Output downconverted video (component YPbPr).</p> <p>[SD Only - Y/C] Output downconverted video (S-Video).</p>
[HDMI Input]	<p>[Disable FIR filter at RGB/YUV444 to YUV422 conversion.] Check this option to disable the FIR filter when converting to YUV422 which is the color space used for digital TV.</p>
[Default]	Restore the default settings.

[Video Output Settings] (STORM 3G ELITE/STORM 3G)

The settings of a monitor output device used for capturing.



<p>[Analog Output Settings]</p>	<p>[Setup Level] Set the setup level (black level) of NTSC from [0IRE] and [7.5IRE]. 0IRE is used in Japan, and 7.5IRE is used in North America.</p> <p>[Component Level] Select the component level from [SMPTE] and [BETACAM].</p> <p>[Component Gain] Adjust the output gain of the SD component.</p>
<p>[SDI Output Setting]:[1080 59.94p/50p]</p>	<p>Settings used when 1080 59.94p or 1080 50p signals are output from the SDI OUT terminal of STORM 3G ELITE.</p> <p>[1x 3G-SDI] Output signals from the SDI OUT (A) terminal and the SDI OUT (B) terminal as 3G-SDI.</p> <p>[2x HD-SDI] Output signals as HD-SDI×2 using the SDI OUT (A) terminal and the SDI OUT (B) terminal.</p>
<p>[SDI Output Setting]:[OUT-B]</p>	<p>Output settings for the SDI OUT (B) terminal of STORM 3G ELITE.</p> <p>[Multi Format] HD/SD is switched automatically according to the input format.</p> <p>[1080i when 1080p] When the output format is 1080p, the video is output in 1080i format.</p> <p>[SD Only] Output downconverted video.</p>
<p>[VITC Output]</p>	<p>[Line 1]/[Line 2] Set the number of VITC output lines in the input field of adopted video standard (NTSC/PAL).</p>

[Component Output Setting]	[Multi Format] HD/SD is switched automatically according to the input format. [SD Only - YPbPr] Output downconverted video (component YPbPr). [SD Only - Y/C] Output downconverted video (S-Video).
[Append Ancillary Data]	Check this option to output video appended with ancillary data such as closed captions.
[Default]	Restore the default settings.

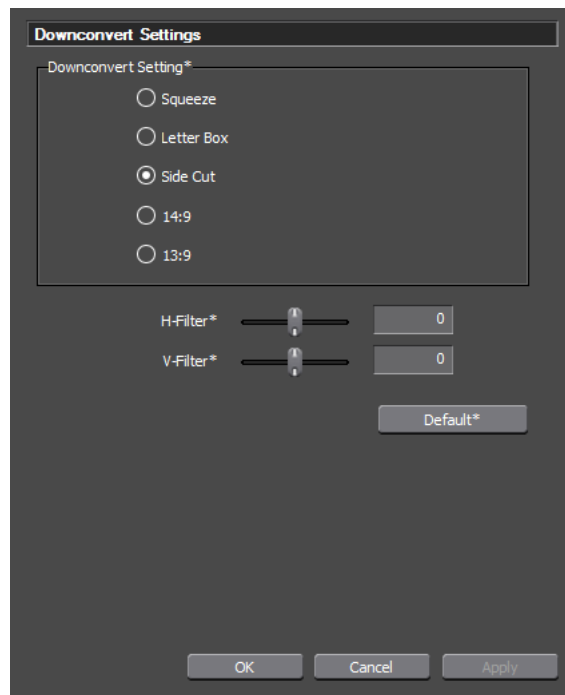
[Audio Output Settings] (STORM 3G ELITE/STORM 3G)

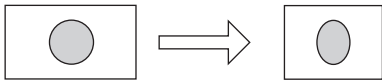
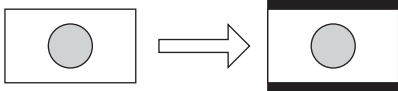
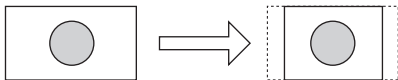
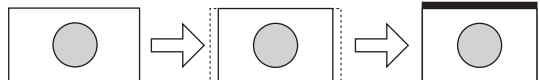
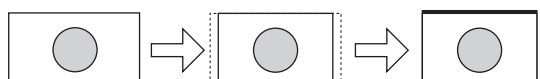
The settings of a monitor output device used for capturing.

[Audio Output Settings] (STORM 3G ELITE/STORM 3G) ▶ P27

[Downconvert Settings] (STORM 3G ELITE)

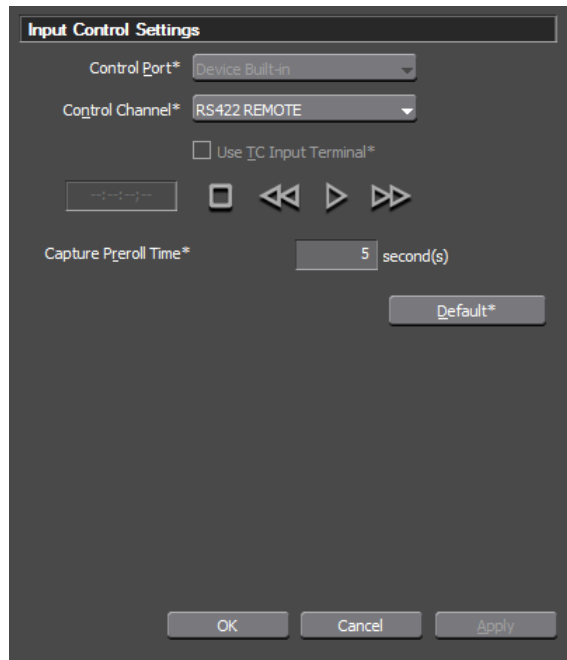
The settings of a monitor output device used for capturing.



<p>[Downconvert Setting]</p>	<p>Select the downconvert format from HD to SD. The default value is [Side Cut].</p> <p>[Squeeze] Compress 16:9 video horizontally and output as 4:3 video.</p>  <p>[Letter Box] Mask the upper and bottom part of the 4:3 screen and output 16:9 video in the center of the screen.</p>  <p>[Side Cut] Cut the side edges of 16:9 video and output as 4:3 video.</p>  <p>[14:9] Cut the side edges of 16:9 video and output as 14:9 video.</p>  <p>[13:9] Cut the side edges of 16:9 video and output as 13:9 video.</p> 
<p>[H-Filter]</p>	<p>Emphasize the horizontal outline and contrast of images. Set the value between -32 and 32.</p>
<p>[V-Filter]</p>	<p>Emphasize the vertical outline and contrast of images. Set the value between -32 and 32.</p>
<p>[Default]</p>	<p>Restore the default settings.</p>

[Input Control Settings] (STORM 3G ELITE/STORM 3G)

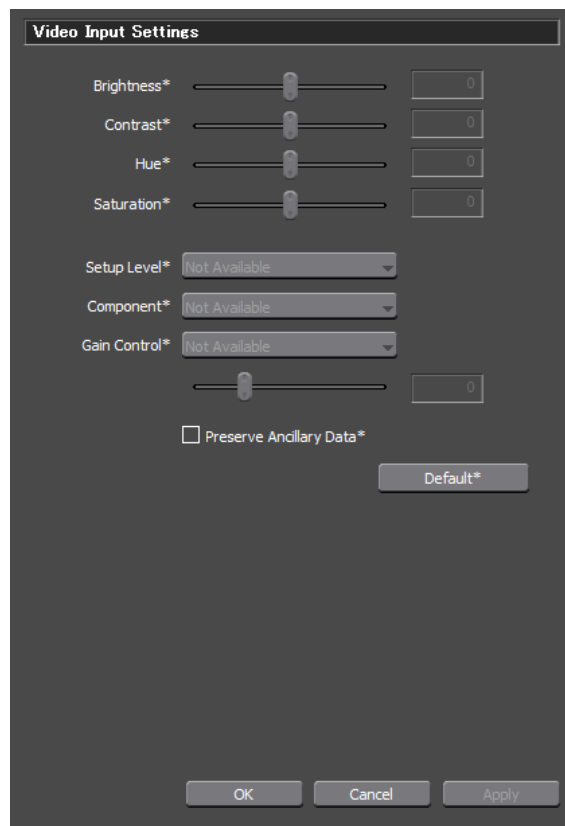
The settings of an input device used for capturing.



[Control Port]	Not available.
[Control Channel]	<p>Select whether to use RS-422 remote control. For STORM 3G ELITE, when [RS422 REMOTE A] or [RS422 REMOTE B] is selected, the [Remote A] or [Remote B] indicator on the front panel of STORM 3G ELITE lights.</p> <p>[Use TC Input Terminal] Apply the priority to TC input terminal to get timecode.</p> <p>[Check Deck Control] Check if the deck connected to REMOTE terminal can be controlled by EDIUS when using RS-422 remote control.</p>
[Capture Preroll Time]	Set the preliminary operation time (preroll) before capturing begins.
[Default]	Restore the default settings.

[Video Input Settings] (STORM 3G ELITE/STORM 3G)

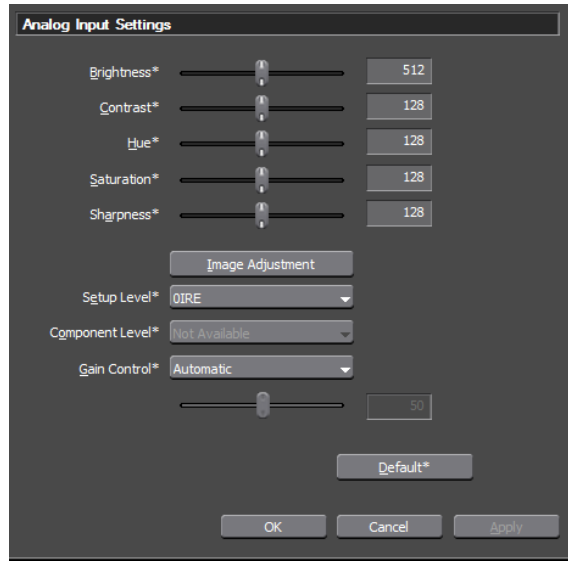
The settings of an input signal adjustment used for capturing.
The settings are available only for the Component, S-Video, or Composite input.



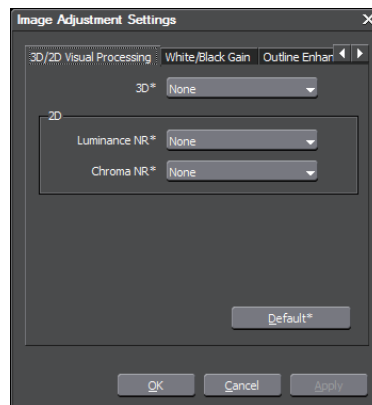
[Brightness]	Adjust the brightness of video. Set the value smaller to make the video darker, and set the value larger to make the video brighter.
[Contrast]	Adjust the contrast of images. Set the value smaller to make the contrast lower, and set the value larger to make the contrast higher.
[Hue]	Adjust the hue of video. When yellow is set as a standard, set the value smaller to make red stronger, and set the value larger to make green stronger. • This option is not available for component input.
[Saturation]	Adjust the lightness of color. Set the value smaller to make the color lighter, and set the value larger to make the color deeper. Set the value to 0 (minimum value) to make images grayscale.
[Setup Level]	Set the setup level (black level) of NTSC.
[Component]	Select the component level of NTSC.
[Gain Control]	Configure the video luminance. Select [Manual] to configure the luminance manually. Select [Automatic] to set the optimal luminance automatically.
[Sustain Ancillary Data]	Check this option to append ancillary data such as closed captions when capturing.
[Default]	Restore the default settings.

[Analog Input Settings] (STORM MOBILE/HDSTORM)

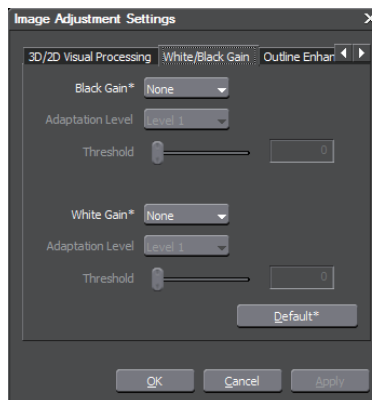
The settings of an input signal adjustment used for capturing.
 The settings are available only for the Component, S-Video, or Composite input.



[Brightness]	Adjust the brightness of video. Set the value smaller to make the video darker, and set the value larger to make the video brighter.
[Contrast]	Adjust the contrast of images. Set the value smaller to make the contrast lower, and set the value larger to make the contrast higher.
[Hue]	Adjust the hue of video. When yellow is set as a standard, set the value smaller to make red stronger, and set the value larger to make green stronger. <ul style="list-style-type: none"> This option is not available for component input.
[Saturation]	Adjust the lightness of color. Set the value smaller to make the color lighter, and set the value larger to make the color deeper. Set the value to 0 (minimum value) to make images grayscale.
[Sharpness]	Adjust the sharpness of the outline in video. Set the value smaller to make the outline blurrier, and set the value larger to make the outline sharper.
[Image Adjustment]	Display the [Image Adjustment Settings] dialog box. [3D/2D Visual Processing] tab ▶ P21 [White/Black Gain] tab ▶ P21 [Outline Enhancement] tab ▶ P22
[Setup Level]	Set the setup level (black level) of NTSC.
[Component Level]	Select the component level of NTSC.
[Gain Control]	Configure the video luminance. Select [Manual] to configure the luminance manually. Select [Automatic] to set the optimal luminance automatically.
[Default]	Restore the default settings.

[3D/2D Visual Processing] tab

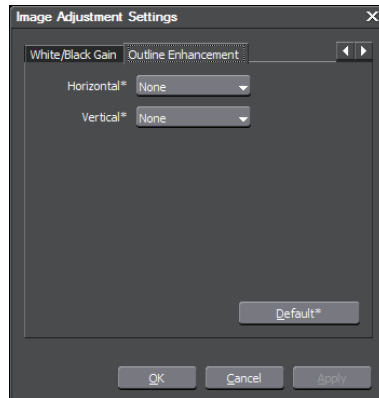
[3D]	Configure the effects of the 3D noise reduction and the 3D visual processing (only for the composite input).
[2D]	Remove the noise by nonlinear noise reduction filter. You can configure this option separately from the 3D processing. [Luminance NR] Configure the effect of the noise reduction in luminance (Y). [Chroma NR] Configure the effect of the noise reduction in chroma (C).
[Default]	Restore the default settings.

[White/Black Gain] tab

[Black Gain]	Strengthen the gain in the low luminance areas of the luminance signal. Set a higher value to emphasize black. If you select [None], [Adaptation Level] and [Threshold] become disabled.
[Adaptation Level]	Configure the adjustment level of the black expansion. Set the higher level to emphasize black.
[Threshold]	Configure the luminance level (brightness) to emphasize black. Move the cursor to the right to set a higher level.
[White Gain]	Weaken the gain in the high luminance areas of the luminance signal. Improve the tone reproduction of a part which is whitened out due to the high luminance. If you select [None], [Adaptation Level] and [Threshold] become disabled.
[Adaptation Level]	Configure the adjustment level of the limit for the white gain. Set a higher level to make adjustment level lower.

[Threshold]	Configure the luminance level (brightness) to adjust the less white gain. Move the cursor to the left to set a lower level.
[Default]	Restore the default settings.

[Outline Enhancement] tab



[Horizontal]	Configure the outline enhancement in the horizontal direction (the edges of the horizontal lines).
[Vertical]	Configure the outline enhancement in the vertical direction (the edges of the vertical lines).
[Default]	Restore the default settings.

[Audio Input Settings] (STORM 3G ELITE/STORM 3G)

The settings of an input device used for capturing.

[Balanced Audio Input Settings]	<p>[Input Headroom[dB]] Specify the headroom of the standard input level from [20], [18], [16], and [12].</p> <p>[Input Level[dBm]] Specify the input level from [+4], [0], [-3], and [-6].</p> <p>[600 ohm Termination] Check this option to enable 600 Ω terminator of the balanced audio input terminal. Set this option by channel.</p>
[Audio Bitstream Settings]	<p>Set how to handle digital audio signals when inputting SDI embedded audio. Select [LPCM] to save digital audio signals as linear PCM data and handle as normal audio signals when editing. Select [AC-3] to save digital audio signals as AC-3 audio bitstream. Select [Dolby-E] to save digital audio signals as Dolby-E audio stream</p>
[Default]	Restore the default settings.

[Stereoscopic Settings] (STORM 3G ELITE/STORM 3G)

The settings of an input device used for capturing.

[Stereoscopic Settings] (STORM 3G ELITE/STORM 3G) ▶ P26

Output settings

[Sync Settings](STORM 3G ELITE/STORM 3G)

Configuring Sync Settings synchronizes the output device used for printing to tape with Grass Valley hardware products.

[Sync Settings] (STORM 3G ELITE/STORM 3G) ▶ P12

[Video Output Settings] (STORM 3G ELITE/STORM 3G)

The settings of an output device used for printing to tape.

[Video Output Settings] (STORM 3G ELITE/STORM 3G) ▶ P14

[Audio Output Settings] (STORM 3G ELITE/STORM 3G)

The settings of an output device used for printing to tape.

[Audio Output Settings] (STORM 3G ELITE/STORM 3G) ▶ P27

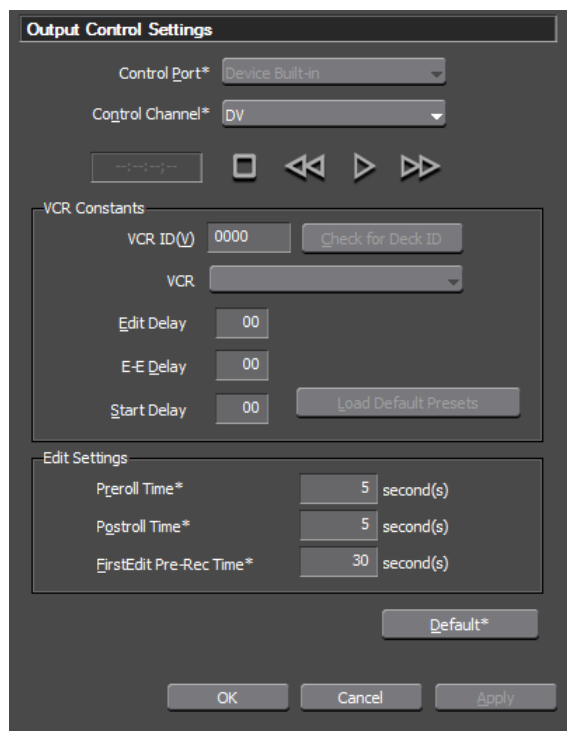
[Downconvert Settings] (STORM 3G ELITE)

The settings of an output device used for printing to tape.

[Downconvert Settings] (STORM 3G ELITE) ▶ P16

[Output Control Settings] (STORM 3G ELITE/STORM 3G)

The settings of an output device used for printing to tape.

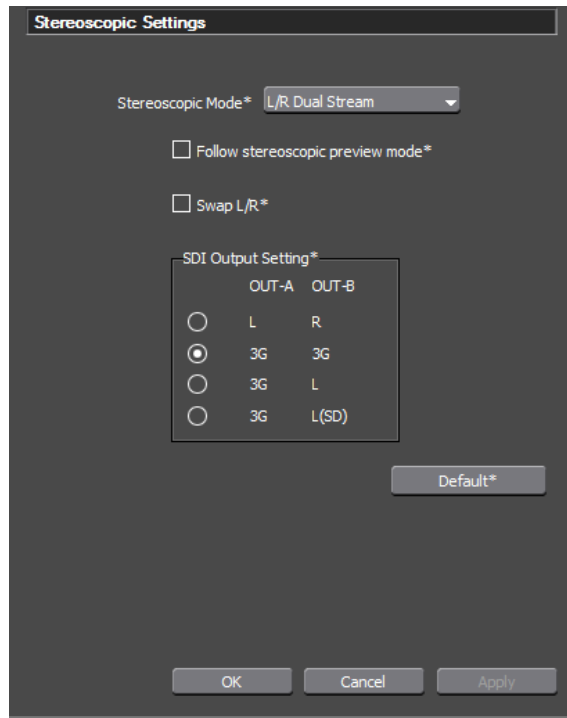


[Control Port]	Not available.
[Control Channel]	<p>Select whether to use RS-422 remote control. For STORM 3G ELITE, when [RS422 REMOTE A] or [RS422 REMOTE B] is selected, the [Remote A] or [Remote B] indicator on the front panel of STORM 3G ELITE lights.</p> <p>[Check Deck Control] Check if the deck connected to REMOTE terminal can be controlled by EDIUS when using RS-422 remote control.</p>

[VCR Constants]	<p>[VCR ID(V)] VCR Constant 1 byte1 and byte2 are displayed. For SONY decks, the deck ID (including model/mode) is displayed.</p> <p>[Check for Deck ID] Click it to load VCR ID (deck ID) from the connected deck.</p> <p>[VCR] Display the deck name corresponding to the VCR ID (only ID and deck names which are set as preset). If there are multiple decks with the same ID, all the decks are displayed.</p> <p>[Edit Delay] VCR Constant 1 Byte 6 is displayed. If the deck is not in the preset, enter manually.</p> <p>[E-E Delay] VCR Constant 1 Byte 5 is displayed. If the deck is not in the preset, enter manually.</p> <p>[Start Delay] VCR Constant 2 Byte 2 (Data 10 depending on the VCR) is displayed. If the deck is not in the preset, enter manually.</p> <p>[Load Default Presets] Initialize the edit delay, E-E delay, and start delay with the preset values.</p>
[Edit Settings]	<p>[Preroll Time] Set the preliminary operation time (preroll).</p> <p>[Postroll Time] Set the post operation time (postroll).</p> <p>[FirstEdit Pre-Rec Time] Set the draft (margin) length at FirstEdit (storing the control signals as the standard point for editing at the top of the tape automatically).</p>
[Default]	Restore the default settings.

[Stereoscopic Settings] (STORM 3G ELITE/STORM 3G)

The settings of an output device used for printing to tape.



[Stereoscopic Mode]	<p>Select a stereoscopic processing format when outputting the video of the L side and the R side in the project created in the stereoscopic edit mode. When [L/R Dual Stream] is selected, output the video of the L side and the R side with 2 streams maintained. When [L Only]/[R Only] is selected, export the video of either the L side or the R side. When [Side by Side]/[Top and Bottom]/[Line Interleave]/[Blend]/[Anaglyph]/[Difference]/[Split Grid] is selected, export the composite video of the L side and the R side.</p>
[Follow stereoscopic preview mode]	<p>Output the video in the same format as the preview window display in the stereoscopic edit mode.</p>
[Swap L/R]	<p>Check this option to display video with the L side (for left eye) and R side (for right eye) swapped.</p>
[SDI Output Setting]	<p>Set how to output 2 streams from the SDI OUT terminal when [L/R Dual Stream] is selected in STORM 3G ELITE.</p> <p>[OUT-A]:[L], [OUT-B]:[R] Output the L side video from the SDI OUT (A) terminal, and output the R side video from the SDI OUT (B) terminal.</p> <p>[OUT-A]:[3G], [OUT-B]:[3G] Output the L+R (3G-SDI) video from the SDI OUT (A) terminal, and output the L+R (3G-SDI) video from the SDI OUT (B) terminal.</p> <p>[OUT-A]:[3G], [OUT-B]:[L] Output the L+R (3G-SDI) video from the SDI OUT (A) terminal, and output the L side video from the SDI OUT (B) terminal.</p> <p>[OUT-A]:[3G], [OUT-B]:[L(SD)] Output the L+R (3G-SDI) video from the SDI OUT (A) terminal, and down-convert the L side video from the SDI OUT (B) terminal to SD and output the video.</p>
[Default]	<p>Restore the default settings.</p>

Preview device settings

[Sync Settings] (STORM 3G ELITE/STORM 3G)

Configuring Sync Settings synchronizes the monitor output device used for editing with Grass Valley hardware products.

[Sync Settings] (STORM 3G ELITE/STORM 3G) ▶ P12

[Video Output Settings] (STORM 3G ELITE/STORM 3G)

The settings of a monitor output device used for editing.

[Video Output Settings] (STORM 3G ELITE/STORM 3G) ▶ P14

[Audio Output Settings] (STORM 3G ELITE/STORM 3G)

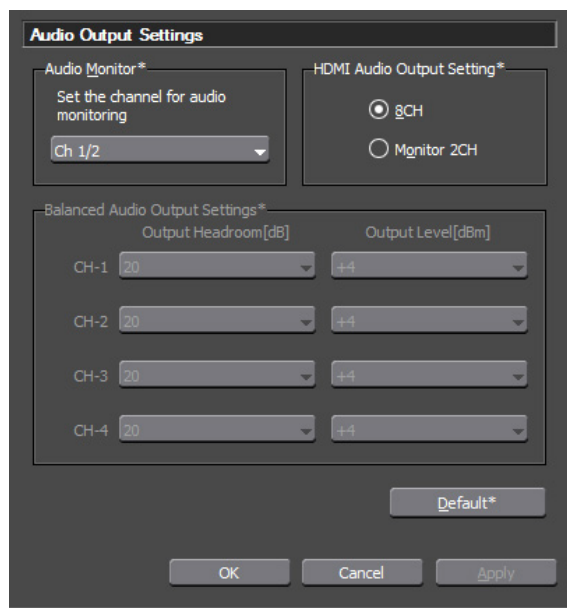
The settings of a monitor output device used for editing.

[Audio Monitor]	Select the audio channel to monitor.
[HDMI Audio Output Setting]	Specify the output from the HDMI connector. Select if 8 audio channels are to be output or the 2 channels specified as analog audio channels are to be output.
[Balanced Audio Output Settings]	<p>[Output Headroom[dB]] Specify the headroom of the standard output level from [20], [18], [16], and [12].</p> <p>[Output Level[dBm]] Specify the output level from [+4], [0], [-3], [-6], and [-20].</p>

[Audio Bitstream Settings]	Set how to handle digital audio signals when outputting SDI embedded audio. When [Auto] is selected, audio bitstream is output if playback data contains audio bitstream, and linear PCM data is output if it does not contain audio bitstream. When [LPCM] is selected, linear PCM data is output. When [AC-3] is selected, AC-3 audio bitstream is output. When [Dolby-E] is selected, Dolby-E audio stream is output.
[Default]	Restore the default settings.

[Audio Output Settings] (HDSPARK Pro/HDSPARK)

The settings of a monitor output device used for editing.



[Audio Monitor]	Select the audio channel to monitor.
[HDMI Audio Output Setting]	Specify the output from the HDMI connector. Select if 8 audio channels are to be output or the 2 channels specified as analog audio channels are to be output.
[Balanced Audio Output Settings]	Not available for HDSPARK Pro/HDSPARK.
[Default]	Restore the default settings.

[System Settings] (STORM MOBILE/HDSTORM)

The settings of a monitor output device used for editing.

[System Settings] (STORM MOBILE) ▶ P13

[Downconvert Settings] (STORM 3G ELITE)

The settings of a monitor output device used for editing.

[Downconvert Settings] (STORM 3G ELITE) ▶ P16

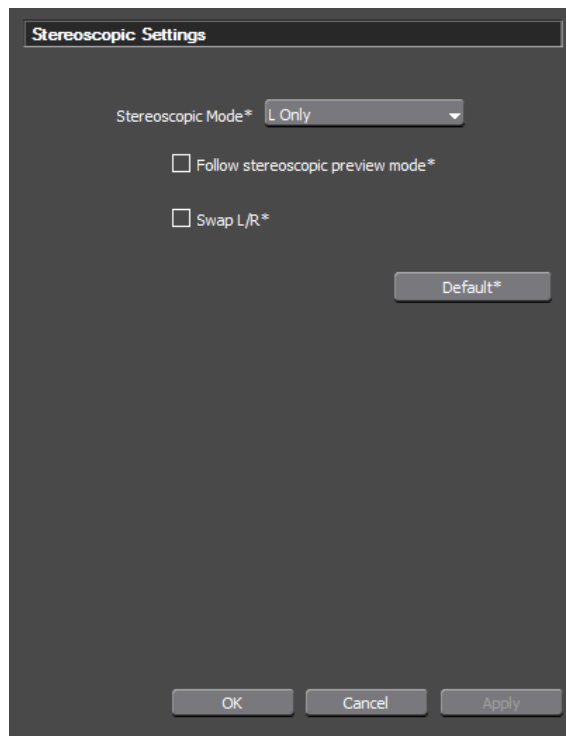
[Stereoscopic Settings] (STORM 3G ELITE/STORM 3G)

The settings of a monitor output device used for editing.

[Stereoscopic Settings] (STORM 3G ELITE/STORM 3G) ▶ P26

[Stereoscopic Settings] (STORM MOBILE/HDSPARK/HDSPARK Pro)

The settings of a monitor output device used for editing.



[Stereoscopic Mode]	Select a stereoscopic processing format when outputting the video of the L side and the R side in the project created in the stereoscopic edit mode. When [L Only]/[R Only] is selected, export the video of either the L side or the R side. When [Side by Side]/[Top and Bottom]/[Line Interleave]/[Blend]/[Anaglyph]/[Difference]/[Split Grid] is selected, export the composite video of the L side and the R side.
[Follow stereoscopic preview mode]	Output the video in the same format as the preview window display in the stereoscopic edit mode.
[Swap L/R]	Check this option to display video with the L side (for left eye) and R side (for right eye) swapped.
[Default]	Restore the default settings.