Canon

Instruction Manual

English

Video Display

Operation Guide

DP-V3120 Firmware ver. 1.1
DP-V2420 / **DP-V2421** Firmware ver. 1.4
DP-V2411 Firmware ver. 1.3
DP-V2410 Firmware ver. 1.5
DP-V1710 / **DP-V1711** Firmware ver. 1.4

- Before use, be sure to read this guide, including the safety and handling precautions.
- Reading this guide will help you learn to use the video display properly.
- Store this guide safely so that you can use it in the future.

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Table of Content

Introduction

The On Screen Display (thereafter referred to OSD) default language setting is English. To change the OSD menu language setting, please refer to p.86.

About this manual

The screen of the DP-V3120 is used as an example in this Guide. Some of the illustration used in the Guide have been simplified for clarity.

Conventions used in this manual

📖: Indicates a reference page.

ⓘ Note: Indicates a note.

☑ Reference: Indicates reference information.

❶ CAUTION: Indicates an item you must observe.

MENU ❯ [Adjustment] ❯ [Picture Mode]: Pressing the MENU button shows the OSD Menu levels. You can move between the items and select from them.

- The following symbols show differences in functions and settings depending on the product.
  V3120 V2420 V2421 V2411 V2410 V1710 V1711 : Explanations are applicable to the indicated products.
  V1710/V1711 OPTION : Indicates functions only available with a paid license, for the stated models.

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Operating the Video Display

Using buttons and jog dial on the video display, you can adjust image quality and configure settings for input signals. In addition, you can assign frequently used functions to the CH (Channel) and F (Function) buttons.

Basic operations to use the OSD menu

MENU button
Opens/closes the OSD menu, or moves up one level in a menu.

MENU

RESET

RESET button
Resets the items to be adjusted using the slider and entered characters.

Jog dial
▲▼◀▶ or rotation: Used to move to a different item and change settings.
Press: Confirms settings or moves the selection frame up/down 1 level.

The video display settings are changed from the OSD menu.

1 **Open the OSD menu.**
   • Press the MENU button.

2 **Select the Main Menu.**
   • Select the Main Menu item using the jog dial and press it to determine the selection.

3 **Select the Sub Menu.**
   • Select the Sub Menu item using the jog dial and press it to determine the selection.

Main Menu   Sub Menu   Setting Options

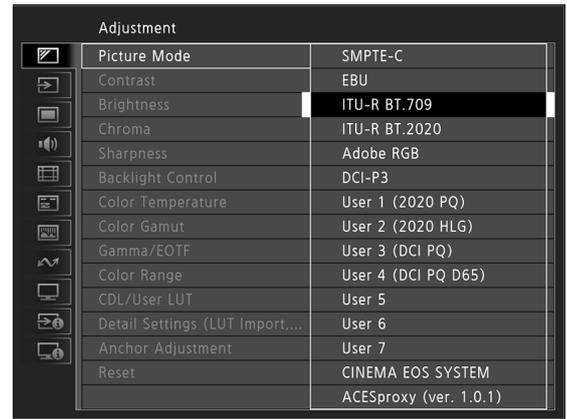| Adjustment	
Picture Mode	ITU-R BT.709
Contrast	1000
Brightness	0
Chroma	1000
Sharpness	0
Backlight Control	Local Dimming Low
Color Temperature	D65
Color Gamut	ITU-R BT.709
Gamma/EOTF	2.2
Color Range	Automatic (Limited)
CDL/User LUT	Off
Detail Settings (LUT Import,...)	
Anchor Adjustment	
Reset	

4 Select the setting to change.
- Select the setting to change using the jog dial and press it to determine the selection. You will be returned to the Sub Menu item selection screen.

5 Exit menu.
- Pressing the MENU button will return you to the Main Menu item selection screen. Pressing the MENU button again will close the menu screen.

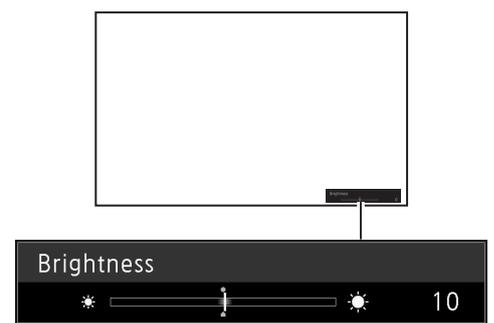| Adjustment		
	Picture Mode	SMPTE-C
	Contrast	EBU
	Brightness	ITU-R BT.709
	Chroma	ITU-R BT.2020
	Sharpness	Adobe RGB
	Backlight Control	DCI-P3
	Color Temperature	User 1 (2020 PQ)
	Color Gamut	User 2 (2020 HLG)
	Gamma/EOTF	User 3 (DCI PQ)
	Color Range	User 4 (DCI PQ D65)
	CDL/User LUT	User 5
	Detail Settings (LUT Import,...	User 6
	Anchor Adjustment	User 7
	Reset	CINEMA EOS SYSTEM
		ACESproxy (ver. 1.0.1)

(i) Note

- To adjust image quality, warming-up is necessary to stabilize the brightness of the video display. Wait at least 10 minutes after turning on the power before use.

- The OSD menu and slider will disappear automatically if no operation is performed for approximately 1 minute. The F button will disappear automatically if no operation is performed for approximately 10 seconds.

- The settings that cannot be set, are grayed out.

- The following functions can be returned to their factory default settings or their anchor point (7) by pressing the RESET button, after adjusting the image quality.
  - [Contrast], [Brightness], [Chroma], [Sharpness], [Power], [Saturation], [Offset], [Slope]

  When [Picture Mode] [User 1–7]: When executing calibration, pressing the RESET button while adjusting the image quality will return you to the settings after calibration.

Adjusting Image Quality While Viewing the Entire Image

You can adjust the OSD menu to display as a slider at the bottom of the screen. This allows for the image quality to be adjusted whilst it is displayed on the screen.
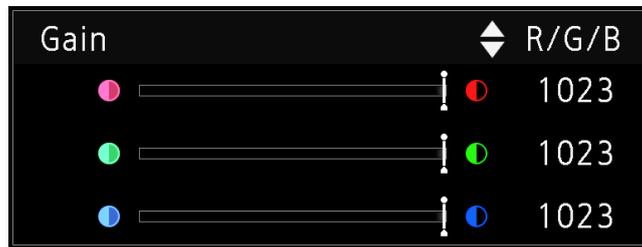
1 Press the jog dial when the selection frame is on setting options.
- A slider appears at the bottom of the screen.

2 Make adjustments using the jog dial with using the slider as guide.

3 When adjustments are completed, press the jog dial.
- The screen returns to the original OSD menu.

Brightness	
☀ ──────┼────── ☀	10

Color temperature detailed settings (gain, bias)

You can adjust RGB all at once or individually when the screens for adjusting [Gain] or [Bias] are displayed.

1 Select MENU ❯❯ [Adjustment] ❯❯ [Color Temperature].
   • [Gain R], [Gain G], [Gain B], [Bias R], [Bias G], and [Bias B] can be set individually using the jog dial (◀▶).

2 Select one.
   • The setting screen for [Gain] or [Bias] will be displayed.

3 Switch the guide in the upper right area of the slider screen using the jog dial (▲▼).
   • The indication changes to [RGB], [R], [G], and [B]. Selecting [RGB] will allow you to adjust RGB as a whole.

4 When adjustments are completed, press the jog dial.
   • The screen returns to the original OSD menu.

Color temperature detailed settings (xy values)

1 Select MENU ❯❯ [Adjustment] ❯❯ [Color Temperature].

2 Select [Custom (xy)].
   • You can set [x] and [y] individually using the jog dial (◀▶).

3 Select either [x] or [y].
   • The color map is displayed.

4 Adjust [x] with the ◀▶ and [y] with ▲▼.
   • The adjusted value is indicated by the "◯" mark on the color map.

5 When adjustments are completed, press the jog dial.
   • The screen returns to the original OSD menu.

Default value

Last used value

Current value

Current value

Temporarily Saving Parameters (Anchor Point Setting)

You can temporarily save parameters for [Contrast], [Brightness], [Chroma], [Sharpness], and [HDR Range]. See 📖32 for setting anchor points during CDL adjustment.

1　Select MENU ❯ [Adjustment] ❯ [Anchor Adjustment].

2　Press the jog dial, and when the confirmation screen appears, select [OK].
  • The parameter is saved and the anchor point is set.

3　Adjust the image quality again and press the RESET button on the video display.
  • Returns you to the anchor point for each function.

Last used value ┐ ┌ Current value

Brightness

☀ |———————•|————— ☀　　10

Anchor point

ⓘ Note

• Executing [Adjustment] ❯ [Reset] or [System Settings] ❯ [Reset All Settings] resets saved anchor points and the settings return to their factory default values.

• When calibration is executed, the values are saved as anchor points.

Enlarging the display (Zoom function) (📖55)

The zoom display position can be adjusted, and the zoom magnification (2x, 4x, 8x) can be selected.

1　Select MENU ❯ [Display Settings] ❯ [Zoom].

2　Select [Zoom Preset].
  • Select a preset zoom display.

3　Select [Position].
  • The zoom adjustment screen is displayed.
    - To move the display position: Move the jog dial (▲▼◀▶ or rotation).
    - To return to the center: Press the RESET button.

Zoom 2　[x4]

+

4　When adjustments are completed, press the jog dial.
  • The screen returns to the original OSD menu.

ⓘ Note

• When magnifying the image and the OSD menu is not being displayed,
  - you can set the magnification ratio by pressing the jog dial.
  - You can move the display location by moving the jog dial (▲▼◀▶ or rotation).
  - You can set the following functions using the CH button:
    CH1: Select zoom type; CH2: Switch between zoom presets (Zoom 1/Zoom 2/Zoom 3); CH3: Zoom off

Changing Image Quality Automatically According to Input Signal

On this video display, you can automatically change the image quality according to video resolution or metadata.

Changing [Picture Mode] automatically (📖51)

1 Select [MENU] ❯❯ [Channel Settings] ❯❯ [Select Channel].
• Select the channel.

2 Select [MENU] ❯❯ [Channel Settings] ❯❯ [Picture Mode] ❯❯ [Type].

3 Select the Type using the jog dial.
Changing by individual video resolution (4K/2K)
Select [4K/2K].

Changing according to video resolution (4K/2K) or metadata (SDI)
Select [Automatic].

4 Select the Picture Mode.

Changing the image quality setting according to video metadata (HDMI) (📖38)

1 Select [MENU] ❯❯ [Adjustment] ❯❯ [Picture Mode] ❯❯ [User 1-7].
• Select anything from [User 1] to [User 7].

2 Select [MENU] ❯❯ [Channel Settings] ❯❯ [Picture Mode] ❯❯ [Type].
• Select other than [L/R].

3 Select [MENU] ❯❯ [Adjustment] ❯❯ [Detail Settings] ❯❯ [HDMI Link] ❯❯ [Automatic Adjustment].
• Select [On].
• See [HDMI Link] (📖38) for the configurable settings.

ⓘ Note

• When automatic changing of image quality according to video resolution (4K/2K) or SDI metadata is set, information showing which resolution (4K/2K, etc.) is selected will be displayed at the top right of the menu screen.

`Resolution: 4K`

Adjust image quality on left/right side of screen (image comparison mode)

You can divide the screen in two and adjust the image quality on the left and right sides of the screen individually.

1 Select MENU ❯❯ [Channel Settings] ❯❯ [Picture Mode] ❯❯ [Type].
   - Select [L/R].

2 Select the screen to adjust image quality.
   - When the OSD menu is opened:
     - Press the ◀ in the jog dial when the [Adjustment] main menu is selected.
     - Press the CH1 button when the [Adjustment] main menu or sub menu is selected.
   - When the OSD menu is closed: Switch using the jog dial (◀▶).
   - Each time the target screen is switched, the set [Picture Mode] is displayed at the top.

3 Adjust the image quality on the selected screen.

ⓘ Note

- When in Image Comparison mode, an icon showing which screen (L/R) is selected for image quality Adjustment, is displayed at the right top of the [Adjustment] menu screen.

  `Target ☐L`

- The functions that cannot be used when the right screen is selected are as follows:
  - Sub Menu items for [Adjustment]: [Contrast], [Backlight Control], [HDR/SDR View], [Calibration][*1], [Peak Luminance Control][*2], [Boost Contrast][*3]

    [*1] `V2420` `V2421` `V2411` `V2410` `V1710` `V1711`   [*2] `V2420` `V2421`   [*3] `V2411` `V2410` `V1710/V1711 OPTION`

- When two screens are displayed, you can adjust the image quality on each screen individually and compare them.
  - When two screens are displaying the same image ([Single Input Dual View] 📖52)
  - When two screens are displaying different images ([Multi View (Dual)] 📖49)
  - You can check HDR (High Dynamic Range) display and SDR (Standard Dynamic Range) display side-by-side. ([HDR/SDR View] 📖37)

`V1710` `V1711`

Changing the screen display area

When a video signal of 4096x2160 is input, the left and right parts will be trimmed for display.

1 MENU ❯❯ Select [Display Settings] ❯❯ [Screen Scaling].
   - Select [Native Input Resolution] or [200%].

2 Press the jog dial (◀▶) while the OSD menu is closed.
   - Shifts to the left or right.

V2420 **V2421** **V2411** **V2410** **V1710** **V1711**

Performing calibrations (&37)

You can perform calibration using an external sensor, without using a computer.
The supported external sensors are Konika Minolta Display Color Analyzers CA-310 and CA-210. Be sure to also read the instruction manual of the CA-310 and CA-210.
The video display can perform measurement or calibration of the display using the DP-V Color Adjustment software. Refer to the Canon website for the DP-V Color Adjustment.

1 Connect the display color analyzer to the USB port of the main unit.

2 Select MENU ❯ [Adjustment] ❯ [Picture Mode] ❯ [User 1–7].

3 Select MENU ❯ [Adjustment] ❯ [Detail Settings] ❯ [Calibration].
   • Set each target value.

4 Select [Start].
   • Please follow the information indicated on the screen.

5 Initialize the sensor.
   • Set the mode dial of the Universal Measuring Probe to [0-CAL].
   • Press the jog dial of the video display, select [OK], and execute initialization.

6 Place the universal measuring probe pointing at the center of the video display.
   • Set the mode dial of the universal measuring probe to [MEAS] and place the probe as shown below according to the displayed content. Press the jog dial of the video display, select [OK], and execute calibration.

For the DP-V2411

Konica Minolta Universal Measuring Probe
CA-310 support: CA-PU32, CA-PU35
CA-210 support: CA-PU12, CA-PU15

Konica Minolta
Display Color Analyzer CA-310, CA-210

7 Finish calibration.
   • When the message [Calibration is completed.] is displayed, press the jog dial and select [OK].

   • If the message [Calibration error.] is displayed.
     Calibration has been terminated due to an error. The main unit returns to the state before calibration. (&113)
   • To cancel calibration
     Press the jog dial during calibration and select [Cancel]. The main unit returns to the state before calibration.

(i) Note

- Perform matrix calibration of the display color analyzer prior to calibration. If calibration is performed without performing matrix calibration, an error may occur. Refer to the CA-310 and CA-210 instruction manual for the detail operation.
- Warming-up is necessary to stabilize the brightness of the video display. Wait at least 10 minutes after turning on the power before performing calibration.
- Perform calibration in a dark room so that no external light enters the sensor. If external light enters the sensor, low brightness characteristics cannot be calibrated correctly.
- Due to the characteristic of LCD panel and individual difference of CA-310 and CA-210, the calibration results may differ.

Export/Import

You can export/import LUT and CDL parameters as well as main menu settings.

LUT Import (◻35)

1   Insert the USB memory stick containing the LUT file into the USB port of the video display.

2   Select [MENU] ❯ [Adjustment] ❯ [Detail Settings] ❯ [LUT Import].

3   Select the LUT file to import.
    - In the [Filename] field, search and display a file with extension ".clut" and ".cube" in the root folder.

4   Select the LUT type.
    - Refer to the "Concept Drawing of Display Image Processing and LUT" (◻12).

5   Select the LUT No. to save the LUT.

6   Select the color gamut that will be the standard (when [Gamut LUT] under [LUT Type] is selected).
    - Select the color gamut used when creating the LUT.

7   Select [Execute].
    - When the confirmation screen appears, select [OK]. Import starts.

(i) Note

- Import of [1D-LUT] and [3D-LUT] can also be set from [Adjustment] ❯ [CDL/User LUT] ❯ [1D-LUT] or [3D-LUT] ❯ [LUT Import].
- The LUT file (.clut format) is proprietary to Canon Video Display. Refer to the Canon website for the file format and how to create the LUT file.
- Up to 1000 LUT import files are recognized.
- You can delete the imported LUT, as well as rename the LUT (◻36).

The configuration of LUT files (cube format) is shown below.

■ LUT filename

Type of characters that can be used	One-byte alphabetical characters and numbers only
No. of characters that can be used	Up to 48 characters (including the extension)
Extension	.cube

■ LUT file format

TITLE	ASCII 24 characters can be used. * Displayed in the OSD menu of the display as a selection item. (Up to 24 characters)
LUT_1D_SIZE	Specify one from 128/256/512/1024/2048/4096.
LUT_3D_SIZE	Specify one from 9/17/33/65.
Table Data	For 1D-LUT, only Red is enabled. (Green and Blue are not used.)
DOMAIN_MIN DOMAIN_MAX LUT_1D_INPUT_RANGE LUT_3D_INPUT_RANGE	Unsupported.

- For the line feed code, use "CR (carriage return)", "LF (line feed)", or "CR+LF".
- For the character code, use "Shift-JIS", "EUC-JP", or "UTF-8 (with/without BOM)".
- Files in which both 1D-LUT and 3D-LUT are written are not supported.

■ Concept Drawing of Display Image Processing and LUT

V3120 V2421 V2411 V1710 V1711

V2420 V2410

Export/Import Main Menu Settings (📖90)

1 Select MENU ❯ [System Settings] ❯ [Export/Import].

2 Select [Export] or [Import].

Exporting
①Select [Target] from [USB], [User 1] to [User 3] or [LAN].
Export [USB] to the USB memory and [User 1] to [User 3] to the built-in memory of the main unit. When you select [LAN], the file is exported to a display connected via LAN.
②If you selected [USB] or [User 1] to [User 3], select [Filename].
- The factory default is [dinfo_dpv****.dat] (****: Number of the product name). You can change the name of the file to be exported to the USB memory within 16 one-byte characters including alphabetical characters, numbers, and symbols.

If you selected [LAN], select [Display].
- Select the display to which to export the settings from the displays connected via LAN.

Importing
①Select [Target] from [USB] or [User 1] to [User 3].
Specify the destination to save the file to be imported.
②Select [Filename] when [USB] is selected.
③In [Settings], select [All] or Main Menu name.

3 Select [Execute].
- When the confirmation screen appears, select [OK]. Export/Import starts.

ⓘ Note
- After export to [User 1] to [User 3], you can select the configurations at startup from [User 1] to [User 3] in [Power on Setting] in [System Settings] (📖90).
- To export this device's settings to other Canon displays:
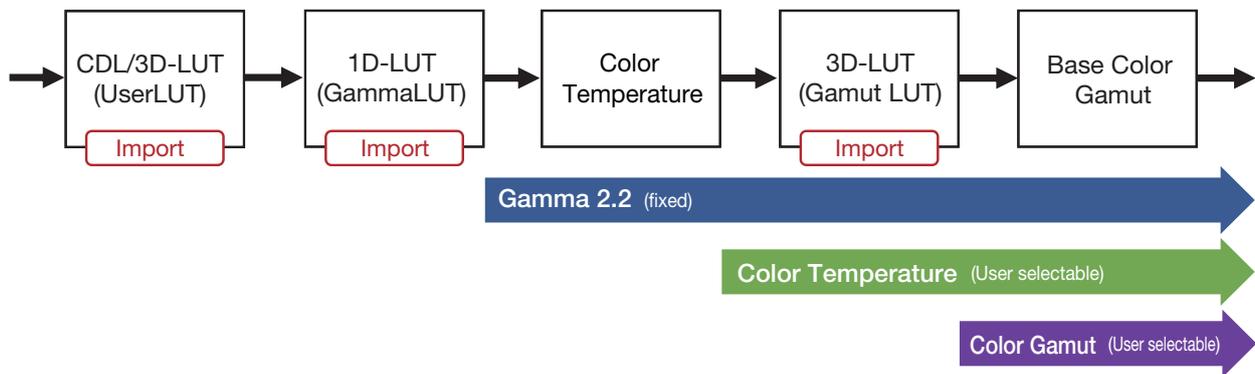 - If a display model has functions with different menu settings or setting ranges, some settings will not be correctly exported (settings will not be changed, will revert to factory defaults, etc.)
  - When the export is completed, a message will appear on the target display.

Exporting/Importing CDL Parameters (📖32)

1 Select MENU ❯ [Adjustment] ❯ [CDL/User LUT].

2 Select [CDL 1-8].

3 Select [Detail Settings] ❯ [CDL Export] or [CDL Import].

Exporting
①Select [CDL Preset].
②Select a file format ".ccc" or ".cdl".

Importing
①Select [Filename].
②Select [CDL Preset].

4 Select [Execute].
- When the confirmation screen appears, select [OK]. Export/Import starts.

(i) Note

- The exported file is automatically saved under the name "YYYYMMDDhhmmss_Preset name.ccc (cdl)".
- Up to 1000 CDL import files are recognized.

Set Date/Time (📖 86)

This section describes how to set the video display Date/Time. The video display Date/Time will be reset if the power cord is not connected for approximately 20 days.

1 Select [MENU] ❯ [System Settings] ❯ [Date/Time].
   - A screen to input the Date/Time appears.

2 Set the Date/Time.
   - The selection frame moves and numbers change as you operate the jog dial. Repeat until you complete setting the year, month, date, hour, and minute.

3 Press the jog dial when you are finished.
   - The selection frame moves to [OK].

4 Check the content and press the jog dial to confirm the settings.

☑ Reference

- When selecting [Cancel] or pressing MENU button before selecting [OK], the settings will be reset and the previous screen will be displayed.

Inputting Characters

This section describes how to input the characters.

1 When the character input screen is displayed, use the jog dial (◀▶) to select the area you wish to input.

2 Select characters using the jog dial (▲▼ or rotation).
   - The following characters can be selected: Press ▲▼ buttons to display them one by one.
       Alphanumeric characters: A to Z, a to z, 0 to 9
       Symbols: , . : ; ' ` - + / = % & ! ? # _ | $ ^ ~ @ { } [ ] < >
                   ( ) space
   - Characters that cannot be entered are automatically skipped.

3 Repeat steps 1 and 2 until the desired text has been input.

4 Press the jog dial when you are finished.
   - The selection frame moves to [OK].

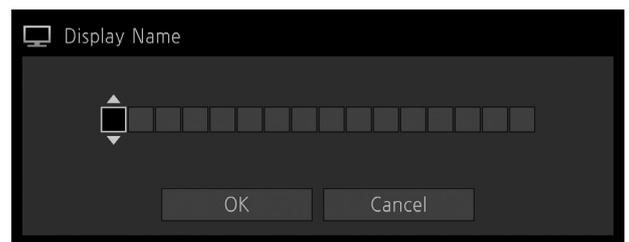5 Check the content and press the jog dial to confirm the settings.

☑ Reference

- When selecting [Cancel] or pressing MENU button before selecting [OK], the settings will be reset and the previous screen will be displayed.
- To erase a character in the selection frame, press the RESET button on the video display.

Using the Function (F) Buttons

You can assign functions to the F buttons on the video display to execute them instantly. You can assign different functions on F buttons in the normal and CDL modes respectively.

1 Select MENU ❯❯ [System Settings] ❯❯ [Function/Channel Button] ❯❯ [Display Function] or [Display Function (CDL)].
   • The button selection screen will be displayed.

2 Select the button name and press the jog dial.

3 Select the function to assign.
   • Refer to the "Function to allow registration for the display F buttons (📖92)" for the available functions.

4 Press the jog dial.
   • The setting is confirmed.

The following content is assigned to function buttons on the video display by factory default.

F button	Normal mode	CDL mode
F1	Picture Mode	CDL/User LUT
F2	Brightness	CDL SOP/SAT
F3	TC/ALM	CDL/User LUT Bypass
F4	WFM/VEC	Single Input Dual View
F5	Histogram/Frame Luminance	False Color
F6	Pixel Value Check	Range Check
F7	Zoom Preset	2020 Outside of Gamut View
F8	**V3120** Frame Hold **V2411** **V2410** **V1710** **V1711** Boost Contrast **V2420** **V2421** Peak Luminance Control	Compare View

☑ Reference

• Holding the F button down will display the function selection screen, and you can set the function you wish to register.

• You can check the function assigned to the F buttons of the main unit.
  Open the MENU ❯❯ [System Settings] ❯❯ [OSD Settings] ❯❯ [Function Button Guide] menu and select [On]. Pressing/moving the jog dial (▲▼◀▶, or Rotate) while OSD is not showing will display the list of functions. Selecting a function from the list and pressing/moving (▶) the jog dial will display the detailed settings screen, or execute that function.
  Pressing ◀ while the list of functions is displayed switches between normal mode and CDL mode.

Using the Channel (CH) Button

You can assign channels (various settings related to input signal) to the CH buttons on the video display and switch channels instantly.

1   Select MENU ❯❯ [System Settings] ❯❯ [Function/Channel Button] ❯❯ [Display Channel].
    • The button selection screen will be displayed.

2   Select the button name and press the jog dial.

3   Select the channel to assign.
    • See [Channel Settings] (📖 48) for the configurable settings.

4   Press the jog dial.
    • The setting is confirmed.

The following content is assigned to channel buttons on the video display and to each channel by factory default.

CH		CH1	CH2	CH3	CH4	CH5
Input Configuration		12-3G/HD-SDI	HDMI	3G-SDI RAW	12-3G/HD-SDI	12-3G/HD-SDI
	V2420 V2410	3G/HD-SDI	HDMI	3G-SDI RAW	3G/HD-SDI	3G/HD-SDI
	V1710	6G/3G/HD-SDI	HDMI	3G-SDI RAW	6G/3G/HD-SDI	6G/3G/HD-SDI
Select Input Signal		Automatic	Automatic	Automatic	Automatic	Automatic
Image Division		Automatic	Automatic	Automatic	Automatic	Automatic
Link Order		Automatic	Automatic	Automatic	Automatic	Automatic
Format		Automatic	Automatic	Automatic	Automatic	Automatic
Audio Input		Automatic	Automatic	Automatic	Automatic	Automatic
Marker/TC/CameraInfo Input		Input A	Input A	Input A	Input A	Input A
Internal Sync		Off	Off	Off	Off	Off
Channel Name		(Blank)	(Blank)	(Blank)	(Blank)	(Blank)
Picture Mode ❯ Type		Normal	Normal	Normal	4K/2K	L/R
Picture Mode / Picture Mode L / Resolution 4K		ITU-R BT.709	ITU-R BT.709	CINEMA EOS SYSTEM	User 1 (2020 PQ)	User 1 (2020 PQ)
Picture Mode R / Resolution 2K		ITU-R BT.709				
Payload	UHD/PQ	User 1 (2020 PQ)				
	UHD/HLG	User 2 (2020 HLG)				
	UHD	ITU-R BT.2020				
	709/PQ	—				
	709/HLG	—				
	709	ITU-R BT.709				
	VANC	—				
	Unknown	—				
Camera	CINEMA EOS SYSTEM	CINEMA EOS SYSTEM				
	ARRI	User 6				
	VARICAM	User 7				
Single Input Dual View		Off	Off	Off	Automatic	Off
Separator		Off	Off	Off	Off	White

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CH	CH6	CH7	CH8	CH9	CH10 and up
Input Configuration	12-3G/HD-SDI	12-3G/HD-SDI	12-3G/HD-SDI	12-3G/HD-SDI	— (Not set)
V2420 **V2410**	3G/HD-SDI	3G/HD-SDI	3G/HD-SDI	3G/HD-SDI	— (Not set)
V1710	6G/3G/HD-SDI	6G/3G/HD-SDI	6G/3G/HD-SDI	6G/3G/HD-SDI	— (Not set)
Select Input Signal	Automatic	Automatic	Automatic	Automatic	Automatic
Image Division	Automatic	Automatic	Automatic	Automatic	Automatic
Link Order	Automatic	Automatic	Automatic	Automatic	Automatic
Format	Automatic	Automatic	Automatic	Automatic	Automatic
Audio Input	Automatic	Automatic	Automatic	Automatic	Automatic
Marker/TC/CameraInfo Input	Input A	Input A	Input A	Input A	Input A
Internal Sync	Off	Off	Off	Off	Off
Channel Name	(Blank)	(Blank)	(Blank)	(Blank)	(Blank)
Picture Mode ❯ Type	L/R	4K/2K	L/R	L/R	Normal

Picture Mode
  Picture Mode L
  Resolution 4K
	User 1
	(2020 PQ)
		User 2
		(2020 HLG)
			User 2
			(2020 HLG)
				User 2
				(2020 HLG)
					ITU-R BT.709

Picture Mode R Resolution 2K	ITU-R BT.709				
Payload UHD/PQ	User 1 (2020 PQ)				
UHD/HLG	User 2 (2020 HLG)				
UHD	ITU-R BT.2020				
709/PQ	—				
709/HLG	—				
709	ITU-R BT.709				
VANC	—				
Unknown	—				
Camera CINEMA EOS SYSTEM	CINEMA EOS SYSTEM				
ARRI	User 6				
VARICAM	User 7				
Single Input Dual View	Automatic	Automatic	Off	Automatic	Off
Separator	Off	Off	White	Off	Off

ⓘ Note

- Holding the CH button down displays the channel list, allowing the user to select the desired channel. When [Select Input Signal] is set to [Automatic], the input signal list is displayed and the signal can be changed temporarily*.
  - * **V3120** **V2421** **V2411** **V1711** When only the 12G-SDI/6G-SDI signal is input or when a video that can be simultaneously displayed with the 12G-SDI/6G-SDI signal is input
  - **V1710** When only the 6G-SDI signal is input or when a video that can be simultaneously displayed with the 6G-SDI signal is input

Checking Signal Information and Status of the Main Unit

The video display is equipped with a banner display function.

1 Press the jog dial when the OSD menu is closed.
   • The channel name, signal information, and status of the main unit will be displayed in the banner. It will automatically disappear after 6 seconds.

(i) Note

• You can select how the banner is displayed ([Banner] 📖 87).

• You can monitor the input signal status. ([Signal Monitoring] 📖 72)

• For more detailed signal information, please refer to the section on [Signal Information] (📖 94).

• The [Detecting sync.] banner will continue to appear until the input signal is synchronized.

V3120 **V2411** **V1710** **V1711**

Operating the video display using an external device [REMOTE terminal (GPI)]

You can operate the video display using an external device connected to the REMOTE terminal and execute the functions registered in each pin. Remote operation is possible only when the video display is turned on.

Pin layout for REMOTE terminal

Pin No.	Signal	Factory default	
1	Pin1	CH1	
2	Pin2	CH2	
3	Pin3	CH3	
4	Pin4	Time Code	
5	Pin5	Tally Green	A tally appears at the top of the screen.*
6	Pin6	Tally Red	
7	Pin7	Power On	
8	Pin8 (GND)	—	

8 7 6 5 4 3 2 1

* **V1710** **V1711** The tally light lights.

1 Connect an external control device to the REMOTE terminal.

2 Select [MENU] ≫ [System Settings] ≫ [Remote(GPI)].
   • The pin selection screen will be displayed.

3 Select a pin number and press the jog dial.

4 Select the function to assign.
   • Please see [Remote(GPI)] (📖 86) for settable functions.

5 Press the jog dial.
   • The setting is confirmed.

Operating the video display using an external device [LAN terminal]

The video display supports Television Systems Ltd.'s "TSL UMD Protocol Ver. 5.0". You can operate the video display using an external device connected to the LAN terminal and display characters and tally lights on the screen. There are two tally lights, on the left and right. Up to 16 characters can be displayed.

Tally display (left)   Character display   Tally display (right)

1   Connect an external control device to the LAN terminal.

2   Set [SCREEN] and [INDEX] to [0x0000] in the TSL Protocol settings.

3   Select MENU ❯ [Network/IMD Settings] ❯ [In Monitor Display].

4   Select [Control] ❯ [TSL Ver. 5.00].
    • This will allow operation from an external control device, and display characters and tally lights.

5   Select [Position] ❯ [Top] or [Bottom].
    • This sets the position where characters and tally lights will be displayed.

ⓘ Note

• When [Multi View (Dual)] or [Multi View (Quad)] is displayed, set the [INDEX] setting to from [0x0001] to [0x0004].

• The port number for the controlling is fixed at "45000".

• With [In Monitor Display] you can also display user-selected characters on the screen. (📖85)

Operating the video display using an external device [USB terminal: Wi-Fi connection]

A Wi-Fi adapter can be connected to the USB terminal of the video display so that the video display can be connected to a portable terminal in the Wi-Fi network environment in use. The following two methods can be used to connect:
Infrastructure: This method connects to Wi-Fi via an access point.
Access Point: This device acts as an access point, and this method connects the device directly to the Wi-Fi device.

- Network settings such as IP address and subnet mask are acquired automatically.

- Supported encryption schemes
  Infrastructure: WEP64 (ASCII), WEP128 (ASCII), WPA-TKIP, WPA-AES (CCMP), WPA2-TKIP, WPA2-AES (CCMP)
  Access Point: WPA2-AES (CCMP)

CAUTION

- Note that we cannot accept any liability for damages that arise as a result of incorrect settings made on the network to use network functions and for damage that arise as a result of use of this function.

- Avoid connecting to Wi-Fi or network environments that are not protected by appropriate security measures. Remember to change the default password when setting the access point. Doing so may cause the customers' personal information or other important information to leak to a third party. When not using Wi-Fi, set [Wi-Fi] ❯ [Control] to [Off].

- The specifications and restrictions of Wi-Fi connection methods differ depending on the Wi-Fi network in use.

- There is no guarantee that the Wi-Fi adapter functions in use will work on the video display. For information about Wi-Fi adapter related defects, contact the device manufacturer. Also, in various countries and regions, approval is needed to use the Wi-Fi adapter, and use of non-approved Wi-Fi adapters is not permitted. If you are unclear of whether or not use is approved, check with the device manufacturer.

Note

- For information on equipment (Wi-Fi adapter) for which operation has been tested, please check with the distributor from where the product was purchased.

- For details on how to use the Wi-Fi adapter, precautions for use, how to set access points, and other information, either refer to the device Instruction Manual or contact the manufacturer.

- Up to 24 access points can be displayed and selected on the video display.

1 Connect the Wi-Fi adapter to the USB terminal.

2 Select MENU ❯ [Network/IMD Settings] ❯ [Wi-Fi].

When using the [Infrastructure] method

3 Select [Control] ❯ [Infrastructure].

4 Set the access point to connect to.

5 If a password is needed when connected to an access point, enter the password (📖84).
   - This is set using up to 24 alpha-numerical characters and symbols. The following characters can be entered.
     Alphanumeric characters: A to Z, a to z, 0 to 9
     Symbols: _ or -

When using the [Access Point] method

3 Select [Control] ❯ [Off].

4 Select [Access Point] (⌕84).
  • Enter the SSID. This is set using up to 24 alpha-numerical characters and symbols.
  • Set the communication mode.
  • Set the channel.
  • Enter the password. This is set using between 8 and 24 alpha-numerical characters and symbols.
  • [SSID], [Password]: The following characters can be entered.
    Alphanumeric characters: A to Z, a to z, 0 to 9
    Symbols: _ or -

5 Select [Control] ❯ [Access Point].

Use a web browser to remotely operate the video display

A web browser can be used to remotely operate the video display using a computer terminal connected to the LAN terminal or a portable terminal (📖21) connected via a Wi-Fi adapter to the USB terminal. From the device connected to the network, you can change image quality settings or switch channels.
This function checks operation using the following web browsers.
* Safari (Apple)
* Google Chrome (Google)
  * Correct operation cannot be guaranteed on all supported OS or web browser editions.

⚠ CAUTION
* Remember to change the default settings for ID and Password when using this function.

ⓘ Note
* Access is only possible from a single terminal.
* This function may not work if the video display is accessed using LAN and a Wi-Fi adapter, at the same time.
* Opening multiple pages in multiple tabs on the web browser can cause it to not function properly.
* Executing [Capture] in the [View] screen can cause the video on this video display to pause temporarily.
* Operating the video display itself while it is being accessed from a web browser can cause the network connection to be lost.
* A delay may occur in video display or in the various settings depending on the network environment and communication conditions.
* The IP address can be checked in the [System Information] screen.
* The operation screen only displays English.

1 Connect external control devices via the network.

2 Select MENU ❯ [Network/IMD Settings] ❯ [Web].

3 Select [Control] ❯ [On].

4 Select [User ID] and [Password] (📖84).
* [User ID]: Enter the user ID. This is set using up to 16 alpha-numerical characters and symbols.
  [Password]: Enter the password. This is set using between 8 and 16 alpha-numerical characters and symbols.
  The following characters can be entered.
  Alphanumeric characters: A to Z, a to z, 0 to 9
  Symbols: _ or -

5 Start up a web browser on the device connected to a network.

6 Enter the IP address of this video display in the address bar.
* The remote operation screen is displayed on the web browser.
* When the basic authentication screen is displayed, enter the user ID and password.

7 When operation ends, close the web browser.

■ Operation screen

[View] screen

After pressing one of the image capture buttons, the captured image will be displayed. You can also operate the CH buttons and F buttons (function/channel buttons).

Captured image
The position can be moved by selecting the pixel position in [Pixel Value Check].

Image capture button
(V2410 It does not have the [AUTO] or [STOP] button.)

[FULL]
Enlarges the captured image.

[Control] screen

Allows the Picture Mode, Channel, and various marker displays to be set.

[Value / Name]*
Enter characters or numbers.
[Get]: Acquires input data.
[Set]: Applies the data to the input screen.

[Zoom / Pixel Value]
Sets the display position for [Zoom] or the pixel position for [Pixel Value Check].

* [Value]
  • [Value] does not show decimal points.
  • Depending on the setting item, the value may be different from the value displayed on the menu.

[Setting] screen
You can import LUT, export the error log of [Frame Luminance Monitor] as well as [Signal Monitoring], and import or export the settings on the video display.

[LUT Import (1D-LUT)]*, [LUT Import (3D-LUT)]
Imports a LUT. (* **V3120** **V2421** **V2411** **V1710** **V1711** only)

[Frame Lum. Monitor Export]
Exports [Frame Luminance Monitor]. Exporting [Frame Luminance Monitor] will create a "latest.csv" file for the luminance in the final screen and an "All.zip" file (a file compressed using the zip method) that contains all acquired luminance information.

[Signal Monitoring Log Export]
Exports the error log of [Signal Monitoring].

[Information] screen
Displays the settings for [Adjustment] and [Channel Settings], and information for [Signal Information] and [System Information].

[Link] screen
You can display a list of the display connected via LAN to this video display, set [Display Setting Link], and change the display names.

Adjustment

This menu is used to adjust the image quality. The factory defaults differ according to the [Picture Mode] setting. (43)

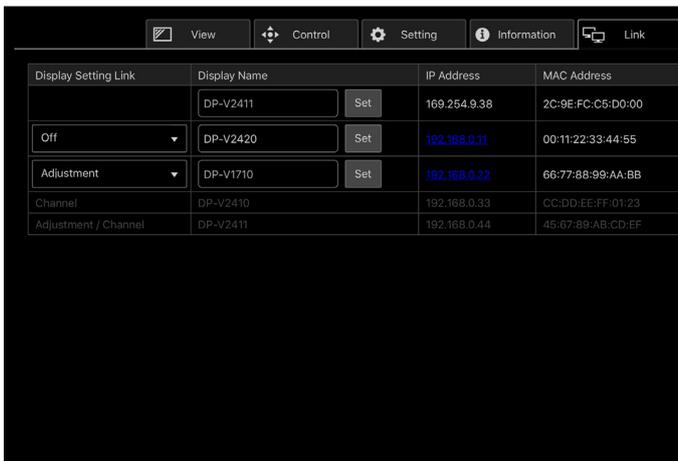| Sub Menu		Setting Options (Bold: factory default)	
Picture Mode		SMPTE-C EBU **ITU-R BT.709** ITU-R BT.2020 Adobe RGB DCI-P3 User 1 (2020 PQ) User 2 (2020 HLG) User 3 (DCI PQ) User 4 (DCI PQ D65) User 5 ~ User 7 CINEMA EOS SYSTEM ACESproxy (ver. 1.0.1)	Select a preset mode. [SMPTE-C], [EBU], [ITU-R BT.709], [ITU-R BT.2020], [Adobe RGB], [DCI-P3]: Mode set to the brightness, color temperature, gamma/EOTF, and color gamut of the three primary colors chromaticity points of each standard. [User 1–7] (User 1 (2020 PQ), User 2 (2020 HLG), User 3 (DCI PQ), User 4 (DCI PQ D65), User 5 ~ User 7): This mode allows you to set each item in [Adjustment] individually. You can change the mode name within 24 one-byte characters including alphabetical characters, numbers, and symbols (39). [CINEMA EOS SYSTEM]: Canon Log is the ideal mode for displaying images captured with Cinema EOS cameras. Using Camera Link, you can have the image quality setting change automatically ([Automatic Adjustment (CINEMA EOS)] 74). [ACESproxy (ver. 1.0.1)]: A mode to display ACESproxy videos in optimum gamma/EOTF and color gamut. • [ACESproxy (ver. 1.0.1)] cannot be set when [Channel Settings] ❯ [Picture Mode] ❯ [Type] are [L/R], [4K/2K] or [Automatic].
Contrast		Adjusts the white level of the image. (Increments of 1)	
	V3120	0 to 20000	* When [Peak Luminance Control] ❯ [On] ** When [Boost Contrast] ❯ [On] • When [Channel Settings] ❯ [Picture Mode] ❯ [Type] is [L/R], [Contrast] cannot be adjusted at the [Picture Mode] setting for the right screen. The right screen's setting will be the same as set for the left screen. • **V2420** **V2421** When [Peak Luminance Control] is [On], [Contrast [Peak Control]] is displayed. • **V2411** **V2410** **V1710/V1711 OPTION** When [Boost Contrast] is [On], [Contrast [BOOST]] is displayed. • **V3120** When [Picture Function Settings] ❯ [Compare View] ❯ [Enable] ❯ [On] and also [Compare View] ❯ [Type] ❯ [Luminance], the settings are from [1000] to [20000]. • **V1710** **V1711** When using DC power, the upper limit of the setting value is [1000] when [Backlight Control] is set to [Local Dimming High/Low].
	V2420 **V2421**	0 to 6000 0 to 12000*	
	V2411	0 to 6000 0 to 10000**	
	V2410	0 to 1500 1500 to 4000**	
	V1710 **V1711**	0 to 3000 **OPTION** 0 to 6000 0 to 10000**	
Brightness		-500 to 500 (**0**)	Adjusts the black level of the image. (Increments of 1)
Chroma		0 to 2000 (**1000**)	Adjusts the color saturation of the image (color depth). (Increments of 1) • Can only be adjusted when [CDL/User LUT] is [CDL 1-8] or [Off].
Sharpness		0 to 100 (**0**)	Adjusts the sharpness of the image. (Increments of 1)

Sub Menu		Setting Options (Bold: factory default)	
Backlight Control		Switches the backlight control method.	
	V3120	Local Dimming Automatic / High / Low, Off	[Local Dimming]: Local dimming technology controls the amount of light emitted by the backlight for each display area. The backlight of bright area is increased and the dark area is decreased according to the displayed content. [Global Dimming]: Global dimming is the ability to control the amount of light emitted by the backlight on the entire screen. If the image is dark, the whole display is darkened. * When [Boost Contrast] ❯ [On] • V3120 [Automatic]: This mode is suitable for checking HDR images. [High]: This mode is suitable for checking images with a lot of bright areas. [Low]: This mode is suitable for checking SDR images. • V2420 V2421 When [Peak Luminance Control] is set to [On], you cannot select [Backlight Control]. • V2410 When [Boost Contrast] is set to [On], [Backlight Control] turns to [Off]. • V2411 V1710/V1711 OPTION When [Local Dimming High/Low] is selected and [Boost Contrast] is set to [On], it turns to [Global Dimming]. • V2411 V2410 V1710/V1711 OPTION When [Global Dimming] is selected, the contrast may change temporarily in order to maintain gradation depending on the image. If this is undesirable, turn it [Off] and see if it improves. • When [Channel Settings] ❯ [Picture Mode] ❯ [Type] is [L/R], [Backlight Control] cannot be set at the [Picture Mode] setting for the right screen. The right screen's setting will be the same as set for the left screen.
	V2420 V2421	Local Dimming High / Low, Off	
	V2411	Local Dimming High / Low, Off	
		* Global Dimming, Off	
	V2410	Local Dimming Automatic / High / Low, Global Dimming, Off	
	V1710 V1711	Local Dimming High / Low, Off	
	OPTION	* Global Dimming, Off	
Color Temperature		D93, D65, D65 Custom, D61, D60, D56, D50, DCI-P3 Custom (xy), Off • When a preset is selected Gain R/G/B: 0 to **1023** Bias R/G/B: -500 to 500 (**0**) • When Custom (xy) is selected x: 0.260 to 0.360 y: 0.260 to 0.360	Sets the color temperature. (📖6) [D93], [D65], [D61], [D60], [D56], [D50], [DCI-P3]: Select from preset color temperatures. [D65 Custom]: This preset is for adjusting the color of the video display and displays having different display characteristics. The gain and bias are adjusted based on D65. [Gain R/G/B], [Bias R/G/B]: Adjusts the preset color temperature. (Increments of 1) [Custom (xy)]: Adjusts CIE x and y. (Increments of 0.001) • [Custom (xy)] and [Gain R/G/B] or [Bias R/G/B] cannot be selected at the same time. • When [Gain R/G/B] or [Bias R/G/B] value is adjusted, an asterisk [*] is displayed by color temperature preset mode. • The displayed color coordinates (x, y) are just a guide and not guaranteed absolute values.

Sub Menu	Setting Options (Bold: factory default)	

Color Gamut	SMPTE-C
	EBU
	ITU-R BT.709
	ITU-R BT.2020
	Adobe RGB
	DCI-P3
	Native
	Cinema Gamut to 709
	Cinema Gamut to 2020
	Cinema Gamut to DCI
	DCI-P3+ to 709
	DCI-P3+ to DCI
	S-Gamut3 to 709
	S-Gamut3 to 2020
	S-Gamut3 to DCI
	S-Gamut3.Cine to 709
	S-Gamut3.Cine to 2020
	S-Gamut3.Cine to DCI
	Gamut LUT 1 to
	 Gamut LUT 8
		Sets the color range.
		
		When [Picture Mode] ❯ [User 1–7] or [CINEMA EOS SYSTEM]
		[SMPTE-C], [EBU], [ITU-R BT.709], [ITU-R BT.2020], [Adobe RGB],
		[DCI-P3]: Color gamut compliant to each standard.
		[Native]: Color gamut that can be displayed by this video display.
		[Cinema Gamut to 709], [Cinema Gamut to 2020],
		[Cinema Gamut to DCI], [DCI-P3+ to 709], [DCI-P3+ to DCI]: Modes
		 where the color gamut is converted to monitor Cinema Gamut and
		 DCI-P3+ videos recorded by the Cinema EOS cameras.
		[S-Gamut3 to 709], [S-Gamut3 to 2020], [S-Gamut3 to DCI],
		[S-Gamut3.Cine to 709], [S-Gamut3.Cine to 2020],
		[S-Gamut3.Cine to DCI]: Preset modes where the color gamut is
		 converted.
		[Gamut LUT 1] to [Gamut LUT 8]: Selects an external LUT.
		
		• [Color Gamut] cannot be set in the following cases.
		 - When [CDL/User LUT] ❯ [ARRI (Rec2100-PQ-1K-100)], [ARRI (Rec2100-
		   HLG-1K-200)], [VARICAM (V-Log to V-709)], [RED (Log3G10 to 709/1886)],
		   [RED (Log3G10 to 2020/PQ)], [2020 PQ to 2020 SDR], [2020 PQ to 709
		   SDR], [2020 HLG to 709 HLG] or [2020 HLG to 709 SDR] is selected.
		• For checking the video captured with Cinema EOS cameras, please refer to the
		  "Parameter of Cinema EOS cameras and Canon displays (◻77)".

Sub Menu	Setting Options (Bold: factory default)	
Gamma/EOTF	1.0, 2.2, 2.35, 2.4, 2.6, ITU-R BT.1886 SMPTE ST 2084 (PQ) Hybrid Log-Gamma Hybrid Log-Gamma RGB Canon Log Canon Log (HDR) Canon Log 2 Canon Log 2 (HDR) Canon Log 3 Canon Log 3 (HDR) S-Log2 (HDR) S-Log3 (HDR) Gamma LUT 1 to Gamma LUT 8 Off	Sets the Gamma/EOTF. [1.0], [2.2], [2.35], [2.4], [2.6], [ITU-R BT.1886], [Canon Log], [Canon Log 2], [Canon Log 3], [S-Log2 (HDR)], [S-Log3 (HDR)]: Select the preset gamma. [SMPTE ST 2084 (PQ)], [Hybrid Log-Gamma], [Hybrid Log-Gamma RGB], [Canon Log (HDR)], [Canon Log 2 (HDR)], [Canon Log 3 (HDR)]: Select the gamma/EOTF for HDR display. [Gamma LUT 1] to [Gamma LUT 8]: Selects an external LUT. ❖ About [Hybrid Log-Gamma] This video display supports the following two methods. [Hybrid Log-Gamma]: This method processes the system gamma for the Y signal (Compliant with ITU-R BT.2100). [Hybrid Log-Gamma RGB]: This method processes the system gamma for the RGB signal. If using [Hybrid Log-Gamma] then the system gamma value will be displayed in the [Setting Options] on the menu screen. • Not settable in the following cases: - When [ACESproxy (ver. 1.0.1)] is selected in [Picture Mode] - When [CDL/User LUT] ❯ [ARRI (Rec2100-PQ-1K-100)], [ARRI (Rec2100-HLG-1K-200)], [VARICAM (V-Log to V-709)], [RED (Log3G10 to 709/1886)], [RED (Log3G10 to 2020/PQ)], [2020 PQ to 2020 SDR], [2020 PQ to 709 SDR], [2020 HLG to 709 SDR] is selected. • For checking the captured video with Cinema EOS cameras and ARRI / Panasonic cinema cameras, please refer to [Camera Link] ❯ [Automatic Adjustment] (❐74). • Relationship between [Color Gamut] and [Gamma/EOTF] that can be selected (❐40).

Sub Menu	Setting Options (Bold: factory default)	
HDR Range	Sets the display method when Gamma/EOTF for HDR display is selected.	
SMPTE ST 2084 (PQ)	100 to 10000 (**1000**, **V3120** **2000**)	Sets the [SMPTE ST 2084 (PQ)] dynamic range to be displayed, from 0.005 to 10,000 cd/m² (nits). (100 to 4000: 100 increments. 4000 to 10000: 1000 increments)
Hybrid Log-Gamma	100 to **1000**	Sets how far to display the [Hybrid Log-Gamma] dynamic range. (in increments of 100) The upper limit value will change to match the settings of [HLG System Gamma]. (📖37)
Hybrid Log-Gamma RGB	100 to **1000**/2000	
Canon Log (HDR)	100 to **800**	Sets the [Canon Log] dynamic range to be displayed, from 0 to 800%. (in 100 increments)
Canon Log 2 (HDR)	100 to **1600**	Sets the [Canon Log 2] dynamic range to be displayed, from 0 to 1600%. (in 100 increments)
Canon Log 3 (HDR)	100 to **1600**	Sets the [Canon Log 3] dynamic range to be displayed, from 0 to 1600%. (in 100 increments)
S-Log2 (HDR)	100 to 1400 (**1000**)	Sets how far to display the [S-Log] dynamic range. (in 100 increments)
S-Log3 (HDR)	100 to 3900 (**1000**)	
Gamma LUT 1 to Gamma LUT 8	512 to **1023**	Sets how far to display the 10-bit LUT data dynamic range, from 0 to 1023. (in 1 increments)

❖ Setting procedures

V3120 The explanation uses [SMPTE ST 2084 (PQ)] as an example.
When set at [2000], those areas that exceed 2,000 cd/m² are clipped, and those that are 2,000 cd/m² or below are assigned to the dynamic range of the video display. When displaying an image with a PQ of 2,000 cd/m², you can check the entire dynamic range of the image. Also, when displaying an image with a PQ of 4,000 cd/m², you can check the image up to 2,000 cd/m².
When set at [2000], those areas that exceed 4,000 cd/m² are clipped, and those that are 4,000 cd/m² or below are assigned to the dynamic range of the video display. When displaying an image with a PQ of 4,000 cd/m², although the apparent brightness lowers, you can still check all the dynamic range of the image.
The brightness of the video display corresponds to the value set for Contrast.

SMPTE ST 2084 (PQ) 4,000 cd/m² signal
(Contrast: [20000])

SMPTE ST 2084 (PQ): Set to [2000]

SMPTE ST 2084 (PQ) range   Range of DP-V3120

4,000 cd/m²

Clip (Saturates gradation.)

2,000 cd/m² ----> 2,000 cd/m²

Brightness value corresponding to the contrast setting

SMPTE ST 2084 (PQ): Set to [4000]

SMPTE ST 2084 (PQ) range   Range of DP-V3120

Gradation is reproduced by assigning the range to the range of the DP-V3120 (which lowers the brightness).

4,000 cd/m²

2,000 cd/m²   2,000 cd/m²

Sub Menu	Setting Options (Bold: factory default)	

Color Range	**Automatic**
	Full
	SDI Full (4-1019)
	Limited
	
	V2420 V2421
	V2410
	V1710 V1711 When [Color Range] ❯
	[Compatible] (📖89)
	Automatic
	Full (0-1023)
	SDI Full (4-1019)
	Limited 1 (64-940)
	Limited 2 (64-1023)
		Sets the quantization range.
		
		[Automatic]: Sets the range based on signal information automatically.
		
		• Setting is disabled when [ACESproxy (ver. 1.0.1)] is selected for [Picture Mode].
		• Operations when [Automatic] is selected are described below.
		  - It is set in accordance with the settings if Color Range settings are included in the camera metadata. When there is [Full Range] metadata in Payload when SDI is selected, it will be set to [SDI Full].
		  - When HDMI is selected, [Full] or [Limited] ([Full (0-1023)] or [Limited 1 (64-940)]) is set automatically depending on HDMI signal information.
		  - When SDI is selected, the setting is configured according to the settings for [Picture Mode], [Color Gamut], and [Gamma/EOTF] (📖41).
		• Operations when [Format] is set to [ICtCp] are described below.
		  - When [Color Range] is set to other than [Full], [Wave Form Monitor] will display only a signal set with [Color Range].
		  - If [Channel Settings] ❯ [Picture Mode] ❯ [Type] is [L/R], the right screen's [Color Range] setting for the following will be the same as set for the left screen:
		    - When displaying a single terminal's input in full-screen
		    - When displaying [2 Sample Interleave] or [Dual Link 3G-SDI] signals

Input Transform	Automatic Off	When [Picture Mode] ❯ [ACESproxy (ver. 1.0.1)] Sets whether to apply ACES Input Transform to the [3G-SDI RAW] signal (📖48). [Automatic]: Applied automatically. [Off]: Not applied.
Output Transform	ITU-R BT.709 ITU-R BT.2020 DCI-P3	When [Picture Mode] ❯ [ACESproxy (ver. 1.0.1)] [ITU-R BT.709], [ITU-R BT.2020], [DCI-P3]: ACESproxy is converted into respective mode.
Output Transform Surround	Dim Surround Dark Surround	When [Picture Mode] ❯ [ACESproxy (ver. 1.0.1)] [Dim Surround]: Enables Dim Surround process specified by ACESproxy. [Dark Surround]: Enables Dark Surround process specified by ACESproxy.

Sub Menu	Setting Options (Bold: factory default)	
CDL/User LUT	Configures settings for CDL or User LUT.	
CDL/User LUT	CDL 1 to CDL 8 User LUT 1 to User LUT 8 **Off** Only when [Picture Mode] is [User 1-7] ARRI (Rec2100-PQ-1K-100) ARRI (Rec2100-HLG-1K-200) VARICAM (V-Log to V-709) RED (Log3G10 to 709/1886) RED (Log3G10 to 2020/PQ) 2020 PQ to 2020 SDR 2020 PQ to 709 SDR 2020 HLG to 709 HLG 2020 HLG to 709 SDR	Select a preset such as CDL or external LUT. • When [ARRI (Rec2100-PQ-1K-100)] or [RED (Log3G10 to 2020/PQ)] is selected, [HDR Range] ❯ [SMPTE ST 2084 (PQ)] setting is less than 1000, the setting becomes [1000]. • When [ARRI (Rec2100-HLG-1K-200)] is selected, [HDR Range] ❯ [Hybrid Log-Gamma] settings become [1000]. • [Color Gamut] and [Gamma/EOTF] are set in accordance with the [User LUT] settings (📖 41).

● When [CDL 1-8] is selected

Power	0.50 to 4.00 (**1.00**)	Adjusts the Gamma of the image. (0.01 increments)
Saturation	0.000 to 2.000 (**1.000**)	Adjusts the color saturation of the image. (0.001 increments)
Offset	-1.000 to 1.000 (**0.000**)	Adjusts the black level of the image. (0.001 increments)
Slope	0.000 to 2.000 (**1.000**)	Adjusts the white level of the image. (0.001 increments)

Bypass	On, **Off**	When set to [On], you can temporarily disable the CDL adjustment result and return to previously set image quality.
		
		• Parameters are stored until the video display is turned off.
		• Bypass is set to [Off] in the following cases:
		  - [Picture Mode] has been changed
		  - When the [CDL/User LUT] setting has been changed
		  - [Picture Function Settings] ❯ [Compare View] ❯ [Enable] settings have been changed
		• When [Picture Function Settings] ❯ [Compare View] ❯ [Enable] ❯ [On], this item is fixed to [Off].

Sub Menu			Setting Options (Bold: factory default)
Detail Settings			
	CDL Export		Exports CDL parameters.
		CDL Preset	CDL 1 to CDL 15 All
		V3120	CDL 1 to CDL 8 All
		File Type	CCC CDL
		Execute	
	CDL Import		Imports CDL parameters.
		Filename	
		CDL Preset	CDL 1 to CDL 8
		Execute	
	CDL Preset Name		You can change the name of [CDL 1-8] within 16 characters including alphabetical characters, numbers, and symbols.
Anchor CDL			You can temporarily save parameters for [Power], [Saturation], [Offset], and [Slope] and recover the values. (anchor point setting)
Reset CDL			Resets CDL parameters.

● When [User LUT 1-8] is selected
  Select a preset of the 1D-LUT / 3D-LUT.

V3120 **V2421** **V2411** **V1710** **V1711** 1D-LUT			Selects the User LUT (1D-LUT) to apply and imports an external LUT (1D-LUT). • Cannot be set when [System Settings] ❯ [Compatible Settings] ❯ [User LUT] ❯ an option other than [Normal].	
	1D-LUT		1D-LUT 1 to 1D-LUT 8 Off	Select the 1D-LUT (preset) saved in one of [User LUT 1-8].
	LUT Import			Same as [Detail Settings] ❯ [LUT Import], [LUT Name], [LUT Delete] (☐ 35)
	LUT Name			
	LUT Delete			• Cannot be set when [1D-LUT] ❯ [Off].
3D-LUT			Selects the User LUT (3D-LUT) to apply and imports an external LUT (3D-LUT).	
	3D-LUT		3D-LUT 1 to 3D-LUT 8 Off	Select the 3D-LUT (preset) saved in one of [User LUT 1-8].
	LUT Import			Same as [Detail Settings] ❯ [LUT Import], [LUT Name], [LUT Delete] (☐ 35)
	LUT Name			
	LUT Delete			• Cannot be set when [3D-LUT] ❯ [Off].

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Sub Menu		Setting Options (Bold: factory default)	
V3120 **V2421** **V2411** **V1710** **V1711** Color Range	**Automatic**, Manual	Sets the method of color range conversion performed before and after User LUT processing (input/output). [Automatic]: The color range is automatically converted before and after User LUT processing (input/output). When [Color Range] ❯ [Limited] (📖31)*: [Input] is set to [Limited to Full]. [Output] is set to [Full to Limited]. When [Color Range] ❯ [Full] (📖31)**: [Input] and [Output] are set to [Off]. [Manual]: Sets [Input] or [Output]. * [Limited 1 (64-940)] or [Limited 2 (64-1023)] is included. ** [Full (0-1023)] or [SDI Full (4-1019)] is included.	
Input	Limited to Full, Off	When [Color Range] ❯ [Manual] Sets the method of range conversion performed before User LUT processing. [Limited to Full]: Performs the process for converting to [Full]. [Off]: The color range is not converted.	
Output	Full to Limited, Off	When [Color Range] ❯ [Manual] Sets the method of range conversion performed after User LUT processing. [Full to Limited]: Performs the process for converting to [Limited]. [Off]: The color range is not converted.	
Bypass	On, **Off**	When set to [On], you can return to the image quality before User LUT was applied. • When [Picture Function Settings] ❯ [Compare View] ❯ [Enable] ❯ [On], this item is fixed to [Off]. • Parameters are stored until the video display is turned off. • Bypass is set to [Off] in the following cases: - [Picture Mode] has been changed - When the [CDL/User LUT] setting has been changed - [Picture Function Settings] ❯ [Compare View] ❯ [Enable] settings have been changed	
User LUT Preset Name		You can change the name of [User LUT 1-8] within 24 characters including one-byte alphabetical characters, numbers, and symbols.	
Detail Settings ❯	Sets details for Picture Mode.		
V2420 **V2421** Peak Luminance Control	On, Off	Controls the display luminance according to the brightness of the input image. • When this is set to [On], the F button assigned with the [Peak Luminance Control] function flashes when display luminance is restricted. • It is not possible to set the function after selecting Picture Mode when the right screen is selected. The right screen's setting will be the same as set for the left screen.	

Sub Menu	Setting Options (Bold: factory default)	
V2411 Boost Contrast	On, Off	You can increase the brightness. The upper limit for [Contrast] and the [Backlight Control] settings vary depending on the [Boost Contrast] settings. [On]: The settings for [Contrast] are from 0 to 10000. When [Backlight Control] is [Local Dimming High/Low] and [Boost Contrast] is set to [On], it turns to [Global Dimming]. [Off]: The settings for [Contrast] are from 0 to 6000. • It is not possible to set the function after selecting Picture Mode when the right screen is selected. The right screen's setting will be the same as set for the left screen. • When [Backlight Control] settings are changed while [Boost Contrast] is [On], the settings for [Backlight Control] when [Boost Contrast] is [Off] are also changed.
V2410 Boost Contrast	On, Off	You can increase the brightness. The upper limit for [Contrast] settings vary depending on the [Boost Contrast] settings. [On]: The settings for [Contrast] are from 1500 to 4000. [Off]: The settings for [Contrast] are from 0 to 1500. • It is not possible to set the function after selecting Picture Mode when the right screen is selected. The right screen's setting will be the same as set for the left screen. • When [Off] is selected, [HDR/SDR View] also becomes [Off].
V1710/V1711 OPTION Boost Contrast	On, Off	You can increase the brightness (When AC power is used). The upper limit for [Contrast] and the [Backlight Control] settings vary depending on the [Boost Contrast] settings. [On]: The settings for [Contrast] are from 0 to 10000. When [Backlight Control] is [Local Dimming High/Low] and [Boost Contrast] is set to [On], it turns to [Global Dimming]. [Off]: The settings for [Contrast] are from 0 to 6000. • It is not possible to set the function after selecting Picture Mode when the right screen is selected. The right screen's setting will be the same as set for the left screen. • When [Backlight Control] settings are changed while [Boost Contrast] is [On], the settings for [Backlight Control] when [Boost Contrast] is [Off] are also changed.
LUT Import	You can import LUT. File names that can be imported can be up to 48 one-byte characters, including alphabetical characters, numbers, and symbols (including file extensions). (📖11)	
Filename		Select a filename.
LUT Type	1D-LUT* 3D-LUT Gamma LUT Gamut LUT	Select the LUT type. * **V3120 V2421 V2411 V1710 V1711** only
Select LUT	1D-LUT 1-8* 3D-LUT 1-8 Gamma LUT 1-8 Gamut LUT 1-8	* **V3120 V2421 V2411 V1710 V1711** only

Sub Menu	Setting Options (Bold: factory default)	
Base Color Gamut	SMPTE-C EBU **ITU-R BT.709** Adobe RGB DCI-P3 Native	When [LUT Type] ❯ [Gamut LUT] Selects the color gamut used when creating the LUT.
Execute		Performs import.
LUT Name	You can specify the name of LUT within one-byte 24 characters including alphabetical characters, numbers, and symbols.	
LUT Type		Same as [LUT Import]
Select LUT		
Input Name		Input the LUT name.
LUT Delete	Deletes imported LUT.	
LUT Type		Same as [LUT Import]
Select LUT		
Delete		Deletes LUT.
YCbCr Color Matrix	**Automatic** ITU-R BT.709 ITU-R BT.2020	Sets the matrix conversion method for input signals in YCbCr format. [Automatic]: Matrix coefficient is set in conformance with the ITU-R BT.2020 standard when the [Picture Mode] or [Color Gamut] setting is [ITU-R BT.2020] and in conformance with the ITU-R BT.709 standard otherwise. [ITU-R BT.709]: Matrix coefficient is set in conformance with the ITU-R BT.709 standard. [ITU-R BT.2020]: Matrix coefficient is set in conformance with the ITU-R BT.2020 standard.

2020 Constant Luminance	Constant Luminance
	Non-constant Luminance
		When [Picture Mode] or [Color Gamut] ❯ [ITU-R BT.2020]
		Sets the color matrix conversion method.
		
		[Constant Luminance]: YUV signals are linearly converted and then converted into RGB signals.
		[Non-constant Luminance]: YUV signals are converted into RGB signals without changing gamma 0.45.
		
		• When [Channel Settings] ❯ [Input Configuration] ❯ [HD/SD-SDI], the setting is fixed to [Non-constant Luminance].
		• If [Channel Settings] ❯ [Picture Mode] ❯ [Type] is [L/R], [2020 Constant Luminance] is fixed at [Non-constant Luminance] for the following. However, if [Color Gamut] for the left and right screens is [ITU-R BT.2020], then the right screen's setting will be the same as set for the left screen.
		  - When displaying a single terminal's input in full-screen
		  - When displaying [2 Sample Interleave] or [Dual Link 3G-SDI] signals

Sub Menu		Setting Options (Bold: factory default)
2020 Gamut Mapping	Gamut Mapping **Clipping**	When [Picture Mode] or [Color Gamut] ❯❯ [ITU-R BT.2020] [Gamut Mapping]: Mapping is performed on colors outside the native color gamut by Canon's unique method. [Clipping]: Colors outside the native color gamut are clipped by a general method.
HLG System Gamma	Automatic **Manual** • When Manual is selected [Gamma/EOTF] ❯❯ When [Hybrid Log-Gamma] 1.000 to 1.500 (**1.200**) When [Hybrid Log-Gamma RGB] **γ1.2 - 1000 cd/m²** γ1.2 - 2000 cd/m²	When [Gamma/EOTF] ❯❯ [Hybrid Log-Gamma] or [Hybrid Log-Gamma RGB] Sets the system gamma or peak luminance. [Automatic]: When [Hybrid Log-Gamma] is selected, it adjusts the system gamma automatically to match the contrast value and HDR range. It cannot be set when [Hybrid Log-Gamma RGB] is selected. [Manual]: Operations when [Hybrid Log-Gamma] or [Hybrid Log-Gamma RGB] is selected are as follows: [Hybrid Log-Gamma]: Adjusts the system gamma. (Increments of 0.005) [Hybrid Log-Gamma RGB]: Sets the peak luminance. The maximum value for each setting becomes the upper limit value of [HDR Range].
HDR/SDR View	On, Off	The HDR (High Dynamic Range) and SDR (Standard Dynamic Range) displays can be compared. [On]: The right screen is displayed at SDR luminance. [Off]: Does not compare the HDR and SDR display. • Cannot be set when [Picture Mode] is selected in the right screen. • When the [Contrast] setting for the left screen is specified as [1000] or less, the luminance of the left and right screens is the same.
V2420 V2421 V2411 V2410 V1710 V1711 Calibration		When [Picture Mode] ❯❯ [User 1–7] Executes calibration based on set target values. • V2411 V1710 V1711 Calibration cannot be executed when using DC power. • When [Luminance] is set to high brightness, it may be calibrated beyond the brightness adjustment range and set lower than the target value, depending on the [Color Temperature] setting. In that case, set the [Luminance] again. • Calibration cannot be executed in [Picture Mode] for the right screen.
Luminance		Sets the target luminance.
V2420 V2421	48 to 500 (**100**) cd/m²	
V2411	48 to 600 (**100**) cd/m²	
V2410	48 to 150 (**100**) cd/m²	
V1710 V1711	48 to 300 (**100**) cd/m²	
V1710/V1711 OPTION	48 to 600 (**100**) cd/m²	

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Sub Menu	Setting Options (Bold: factory default)	
Color Temperature	D93, **D65**, D61, D60, D56, D50, DCI-P3 Custom (xy) • When Custom (xy) is selected x: 0.260 to 0.360 (**0.313**) y: 0.260 to 0.360 (**0.329**)	Sets the target color temperature. [D93], [D65], [D61], [D60], [D56], [D50], [DCI-P3]: Select from preset color temperatures. [Custom (xy)]: Adjusts CIE x and y. (Increments of 0.001)
Color Gamut	SMPTE-C EBU **ITU-R BT.709** ITU-R BT.2020 Adobe RGB DCI-P3	Sets the color gamut.
Gamma	**2.2**, 2.35, 2.4, 2.6, ITU-R BT.1886	Sets the target gamma.
Start		Performs calibration.
HDMI Link	When [Picture Mode] ❯ [User 1–7] Video is displayed at the image quality linked to the video image quality setting using the HDMI metadata. • Parameter of HDMI metadata and Video Display (📖 42) • Cannot set [HDMI Link] when [Channel Settings] ❯ [Picture Mode] ❯ [Type] is [L/R].	
Automatic Adjustment	On, **Off**	
Color Gamut/Gamma/EOTF	**On**, Off	Matches the [Color Gamut] and [Gamma/EOTF] settings of the video display with the HDMI metadata.
Contrast/HDR Range	**On**, Off	Matches the [Contrast], [HDR Range] and [Boost Contrast]* setting of the video display with the HDMI metadata. * `V2411` `V2410` `V1710/V1711 OPTION` only
`V2420` `V2421` Backlight Control	**Peak luminance priority** Average luminance priority Off	Matches the brightness setting of the video display with the HDMI metadata. [Peak luminance priority]: Operates if [Peak Luminance Control] is [On] even when the average luminance of HDMI metadata is high. [Average luminance priority]: Operates if [Peak Luminance Control] is [Off] when the average luminance of HDMI metadata is high.
Copy Picture Mode	When [Picture Mode] ❯ [User 1–7] Copy the Picture Mode settings. • In [Picture Mode] other than [User 1–7], the results of calibration performed at the factory are copied.	

Sub Menu	Setting Options (Bold: factory default)	
Picture Mode (Copy from)	SMPTE-C EBU **ITU-R BT.709** ITU-R BT.2020 Adobe RGB DCI-P3 User 1 (2020 PQ) User 2 (2020 HLG) User 3 (DCI PQ) User 4 (DCI PQ D65) User 5 ~ User 7	Select "Picture Mode (Copy from)". [User 1–7]: Select from other than the currently set mode.
Execute		Performs copy.
Picture Mode Name		You can change the name of [User 1–7] within 24 characters including alphabetical characters, numbers, and symbols.
Anchor Adjustment	OK **Cancel**	Temporarily saves parameters for adjusting [Contrast], [Brightness], [Chroma], [Sharpness], and [HDR Range] and recover the values (anchor point setting). [OK]: Performs anchor point setting. [Cancel]: Returns to the previous screen without setting anchor point.
Reset	OK **Cancel**	Return [Picture Mode] to factory default. Note that in [User 1–7] mode where you are performing calibration, the setting returns to the value after calibration instead of the factory default. When selected, the message [Reset Adjustment settings to defaults?] appears. [OK]: Performs reset. [Cancel]: Returns to the previous screen without resetting.

■ Relationship between [Color Gamut] and [Gamma/EOTF] that can be selected

When [Color Gamut] is changed, [Gamma/EOTF] is changed to the underlined value (default value) when the current [Gamma/EOTF] settings are not selectable.

Picture Mode	Color Gamut	Selectable Gamma/EOTF
SMPTE-C	Cannot be selected	Off, 1.0, <u>2.2</u>, 2.35, 2.4, 2.6, ITU-R BT.1886, SMPTE ST 2084 (PQ), Canon Log, Canon Log (HDR), Gamma LUT 1 to Gamma LUT 8
EBU		Off, 1.0, 2.2, <u>2.35</u>, 2.4, 2.6, ITU-R BT.1886, SMPTE ST 2084 (PQ), Canon Log, Canon Log (HDR), Gamma LUT 1 to Gamma LUT 8
ITU-R BT.709, ITU-R BT.2020		Off, 1.0, <u>2.2</u>, 2.35, 2.4, 2.6, ITU-R BT.1886, SMPTE ST 2084 (PQ), Hybrid Log-Gamma, Hybrid Log-Gamma RGB, Canon Log, Canon Log (HDR), Canon Log 2, Canon Log 2 (HDR), Canon Log 3, Canon Log 3 (HDR), S-Log2 (HDR), S-Log3 (HDR), Gamma LUT 1 to Gamma LUT 8
Adobe RGB		Off, 1.0, <u>2.2</u>, 2.35, 2.4, 2.6, ITU-R BT.1886, Gamma LUT 1 to Gamma LUT 8
DCI-P3		Off, 1.0, 2.2, 2.35, 2.4, <u>2.6</u>, ITU-R BT.1886, SMPTE ST 2084 (PQ), Canon Log, Canon Log (HDR), Canon Log 2, Canon Log 2 (HDR), Canon Log 3, Canon Log 3 (HDR), S-Log2 (HDR), S-Log3 (HDR), Gamma LUT 1 to Gamma LUT 8
CINEMA EOS SYSTEM, User 1-7	SMPTE-C	Off, 1.0, <u>2.2</u>, 2.35, 2.4, 2.6, ITU-R BT.1886, SMPTE ST 2084 (PQ), Canon Log, Canon Log (HDR), Gamma LUT 1 to Gamma LUT 8
	EBU	Off, 1.0, 2.2, <u>2.35</u>, 2.4, 2.6, ITU-R BT.1886, SMPTE ST 2084 (PQ), Canon Log, Canon Log (HDR), Gamma LUT 1 to Gamma LUT 8
	ITU-R BT.709, ITU-R BT.2020	Off, 1.0, <u>2.2</u>, 2.35, 2.4, 2.6, ITU-R BT.1886, SMPTE ST 2084 (PQ), Hybrid Log-Gamma, Hybrid Log-Gamma RGB, Canon Log, Canon Log (HDR), Canon Log 2, Canon Log 2 (HDR), Canon Log 3, Canon Log 3 (HDR), S-Log2 (HDR), S-Log3 (HDR), Gamma LUT 1 to Gamma LUT 8
	Adobe RGB	Off, 1.0, <u>2.2</u>, 2.35, 2.4, 2.6, ITU-R BT.1886, Gamma LUT 1 to Gamma LUT 8
	DCI-P3	Off, 1.0, 2.2, 2.35, 2.4, <u>2.6</u>, ITU-R BT.1886, SMPTE ST 2084 (PQ), Canon Log, Canon Log (HDR), Canon Log 2, Canon Log 2 (HDR), Canon Log 3, Canon Log 3 (HDR), S-Log2 (HDR), S-Log3 (HDR), Gamma LUT 1 to Gamma LUT 8
	Native	Off, 1.0, <u>2.2</u>, 2.35, 2.4, 2.6, ITU-R BT.1886, SMPTE ST 2084 (PQ), Gamma LUT 1 to Gamma LUT 8
	Cinema Gamut to 709, Cinema Gamut to 2020	2.2, Canon Log, Canon Log (HDR), Canon Log 2, <u>Canon Log 2 (HDR)</u>, Canon Log 3, Canon Log 3 (HDR)
	Cinema Gamut to DCI	Canon Log, Canon Log (HDR), Canon Log 2, <u>Canon Log 2 (HDR)</u>, Canon Log 3, Canon Log 3 (HDR)
	DCI-P3+ to 709, DCI-P3+ to DCI	Canon Log, <u>Canon Log (HDR)</u>
	S-Gamut3 to 709 S-Gamut3 to 2020 S-Gamut3.Cine to 709 S-Gamut3.Cine to 2020	Off, 1.0, <u>2.2</u>, 2.35, 2.4, 2.6, ITU-R BT.1886, SMPTE ST 2084 (PQ), Hybrid Log-Gamma, Hybrid Log-Gamma RGB, S-Log2 (HDR), S-Log3 (HDR), Gamma LUT 1 to Gamma LUT 8
	S-Gamut3 to DCI S-Gamut3.Cine to DCI	Off, 1.0, 2.2, 2.35, 2.4, <u>2.6</u>, ITU-R BT.1886, SMPTE ST 2084 (PQ), S-Log2 (HDR), S-Log3 (HDR), Gamma LUT 1 to Gamma LUT 8
	Gamut LUT 1 to Gamut LUT 8	Off, 1.0, <u>2.2</u>, 2.35, 2.4, 2.6, ITU-R BT.1886, Gamma LUT 1 to Gamma LUT 8

■ Operations when [Color Range] ❯ [Automatic] (when SDI is selected)

[V3120] [V2411] [V2410]

	Setting Options	Color Range to be Set
Picture Mode	DCI-P3	Full
Color Gamut	DCI-P3 Cinema Gamut to DCI DCI-P3+ to DCI	
Gamma/EOTF	Canon Log (HDR) Canon Log 2 (HDR) Canon Log 3 (HDR) S-Log2 (HDR) S-Log3 (HDR)	
Other than the above		Limited

[V2420] [V2421] [V2410] [V1710] [V1711]

	Setting Options	Color Range to be Set [System Settings] ❯ [Compatible Settings] ❯ [Color Range]	
		When [Normal]	When [Compatible]
Picture Mode	DCI-P3	Full	Full (0-1023)
Color Gamut	DCI-P3		
	Cinema Gamut to DCI		
	DCI-P3+ to DCI		
Gamma/EOTF	Canon Log (HDR)		
	Canon Log 2 (HDR)		
	Canon Log 3 (HDR)		
	S-Log2 (HDR)		
	S-Log3 (HDR)		
	Canon Log	Limited	Limited 2 (64-1023)
	Canon Log 2		
	Canon Log 3		
Other than the above			Limited 1 (64-940)

■ Parameter of [User LUT] and [Color Gamut] / [Gamma/EOTF]

User LUT	Color Gamut	Gamma/EOTF
ARRI (Rec2100-PQ-1K-100)	ITU-R BT.2020	SMPTE ST 2084 (PQ)
ARRI (Rec2100-HLG-1K-200)	ITU-R BT.2020	Hybrid Log-Gamma
VARICAM (V-Log to V-709)	ITU-R BT.709	2.2
RED (Log3G10 to 709/1886)	ITU-R BT.709	ITU-R BT.1886
RED (Log3G10 to 2020/PQ)	ITU-R BT.2020	SMPTE ST 2084 (PQ)
2020 PQ to 2020 SDR	ITU-R BT.2020	2.4
2020 PQ to 709 SDR	ITU-R BT.709	
2020 HLG to 709 HLG	ITU-R BT.709	– (User selectable)
2020 HLG to 709 SDR	ITU-R BT.709	2.4

■ Parameter of HDMI metadata and Video Display

HDMI metadata		Video display setting
Color Gamut	BT.709	ITU-R BT.709
	BT.2020	ITU-R BT.2020
Gamma/EOTF	Traditional SDR	2.2
	PQ	PQ
	Hybrid Log-Gamma	Hybrid Log-Gamma

■ Details of the factory default settings for each [Picture Mode]

Item		SMPTE-C	EBU	ITU-R BT.709	ITU-R BT.2020	Adobe RGB	DCI-P3
Contrast		1000	1000	1000	1000	1000	480
Brightness		0	0	0	0	0	0
Chroma		1000	1000	1000	1000	1000	1000
Sharpness		0	0	0	0	0	0
Backlight Control		Local Dimming Low	Local Dimming Low	Local Dimming Low	Local Dimming Low	Local Dimming Low	Local Dimming Low
	V2410	Local Dimming High	Local Dimming High	Local Dimming High	Local Dimming High	Local Dimming High	Local Dimming High
Color Temperature	Preset	D65	D65	D65	D65	D65	DCI-P3
	x	0.313	0.313	0.313	0.313	0.313	0.314
	y	0.329	0.329	0.329	0.329	0.329	0.351
	Gain R/G/B	1023/1023/1023 (When [D65 Custom]: 1000/1023/1023)					
	Bias R/G/B	0	0	0	0	0	0
Color Gamut		SMPTE-C	EBU	ITU-R BT.709	ITU-R BT.2020	Adobe RGB	DCI-P3
Gamma/EOTF		2.2	2.35	2.2	2.2	2.2	2.6
Color Range		Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
Input Transform		–	–	–	–	–	–
Output Transform		–	–	–	–	–	–
Output Transform Surround		–	–	–	–	–	–
CDL/User LUT		Off	Off	Off	Off	Off	Off
V2420 **V2421** Peak Luminance Control		Off	Off	Off	Off	Off	Off
V2411 **V2410** **V1710/V1711 OPTION** Boost Contrast		Off	Off	Off	Off	Off	Off
YCbCr Color Matrix		Automatic	Automatic	Automatic	Automatic	Automatic	Automatic
2020 Constant Luminance		Non-constant Luminance	Non-constant Luminance	Non-constant Luminance	Non-constant Luminance	Non-constant Luminance	Non-constant Luminance
2020 Gamut Mapping		Clipping	Clipping	Clipping	Clipping	Clipping	Clipping
HLG System Gamma		–		Manual (when [Hybrid Log-Gamma]: 1.200; when [Hybrid Log-Gamma RGB]: γ1.2-1000 cd/m^2)		–	
HDR/SDR View		Off	Off	Off	Off	Off	Off
HDMI Link		Off	Off	Off	Off	Off	Off
Picture Mode Name		–	–	–	–	–	–

Item		User 1	User 2	User 3	User 4	User 5 to User 7
Contrast						
`V3120`		20000	10000	20000	20000	1000
`V2420` `V2421` `V1710/V1711 OPTION`		10000	10000	10000	10000	1000
`V2411`		6000	6000	6000	6000	1000
`V2410`		4000	4000	4000	4000	1000
`V1710` `V1711`		3000	3000	3000	3000	1000
Brightness		0	0	0	0	0
Chroma		1000	1000	1000	1000	1000
Sharpness		0	0	0	0	0
Backlight Control						
`V3120`		Local Dimming Automatic	Local Dimming Automatic	Local Dimming Automatic	Local Dimming Automatic	Local Dimming Low
`V2420` `V2421` `V1710` `V1711`		Local Dimming Low	Local Dimming Low	Local Dimming Low	Local Dimming Low	Local Dimming Low
`V2411`		Local Dimming High	Local Dimming High	Local Dimming High	Local Dimming High	Local Dimming Low
`V2410`		Local Dimming High	Local Dimming High	Local Dimming High	Local Dimming High	Local Dimming High
`V1710/V1711 OPTION`		Global Dimming	Global Dimming	Global Dimming	Global Dimming	Local Dimming Low
Color Temperature	Preset	D65	D65	DCI-P3	D65	D65
	x	0.313	0.313	0.314	0.313	0.313
	y	0.329	0.329	0.351	0.329	0.329
	Gain R/G/B	1023/1023/1023 (When [D65 Custom]: 1000/1023/1023)				
	Bias R/G/B	0	0	0	0	0
Color Gamut		ITU-R BT.2020	ITU-R BT.2020	DCI-P3	DCI-P3	ITU-R BT.709
Gamma/EOTF		SMPTE ST 2084 (PQ)	Hybrid Log-Gamma	SMPTE ST 2084 (PQ)	SMPTE ST 2084 (PQ)	2.2
Color Range		Automatic	Automatic	Automatic	Automatic	Automatic
Input Transform		–	–	–	–	–
Output Transform		–	–	–	–	–
Output Transform Surround		–	–	–	–	–
CDL/User LUT		Off	Off	Off	Off	Off
`V2420` `V2421` Peak Luminance Control		On	On	On	On	Off

Item	User 1	User 2	User 3	User 4	User 5 to User 7
Boost Contrast					
V2411	Off	Off	Off	Off	Off
V2410 V1710/V1711 OPTION	On	On	On	On	Off
YCbCr Color Matrix	Automatic	Automatic	Automatic	Automatic	Automatic
2020 Constant Luminance	Non-constant Luminance	Non-constant Luminance	Non-constant Luminance	Non-constant Luminance	Non-constant Luminance
2020 Gamut Mapping	Clipping	Clipping	Clipping	Clipping	Clipping
HLG System Gamma	Manual (when [Hybrid Log-Gamma]: 1.200; when [Hybrid Log-Gamma RGB]: γ1.2-1000 cd/m^2)				
HDR/SDR View	On	On	On	Off	Off
HDMI Link	Off	Off	Off	Off	Off
Picture Mode Name	User 1 (2020 PQ)	User 2 (2020 HLG)	User 3 (DCI PQ)	User 4 (DCI PQ D65)	User 5 to User 7

Item		CINEMA EOS SYSTEM	ACESproxy (ver. 1.0.1)
Contrast			
	V3120	20000	480
	V2420 **V2421** **V1710/V1711 OPTION**	10000	480
	V2411	6000	480
	V2410	4000	480
	V1710 **V1711**	3000	480
Brightness		0	0
Chroma		1000	1000
Sharpness		0	0
Backlight Control			
	V3120	Local Dimming Automatic	Local Dimming Low
	V2420 **V2421** **V1710** **V1711**	Local Dimming Low	Local Dimming Low
	V2411	Local Dimming High	Local Dimming Low
	V2410	Local Dimming High	Local Dimming High
	V1710/V1711 OPTION	Global Dimming	Local Dimming Low
Color Temperature	Preset	D65	D60
	x	0.313	0.322
	y	0.329	0.338
	Gain R/G/B	1023/1023/1023 (When [D65 Custom]: 1000/1023/1023)	
	Bias R/G/B	0	0
Color Gamut		ITU-R BT.2020	–
Gamma/EOTF		Canon Log 2 (HDR)	–
Color Range		Automatic	–
Input Transform		–	Automatic
Output Transform		–	DCI-P3
Output Transform Surround		–	Dark Surround
CDL/User LUT		Off	Off
V2420 **V2421** Peak Luminance Control		On	Off
Boost Contrast			
	V2411	Off	Off
	V2410 **V1710/V1711 OPTION**	On	Off
YCbCr Color Matrix		Automatic	Automatic
2020 Constant Luminance		Non-constant Luminance	Non-constant Luminance
2020 Gamut Mapping		Clipping	Clipping

Item	CINEMA EOS SYSTEM	ACESproxy (ver. 1.0.1)
HLG System Gamma	Manual (when [Hybrid Log-Gamma]: 1.200; when [Hybrid Log-Gamma RGB]: γ1.2-1000 cd/m^2)	–
HDR/SDR View	Off	Off
HDMI Link	Off	Off
Picture Mode Name	–	–

Channel Settings

This menu is used for input related settings. Select the [Select Channel] and choose a channel number from CH1 to CH20. Finally define the parameter of each of the [Channel Settings].

❖ "Supported Signal Format" (📖95)

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Sub Menu		Setting Options
Select Channel	CH1 to CH20	Display the channel number. In addition, you can assign each content of [Channel Settings] to each channel (📖16).
V2420 **V2421** **V2410**	CH1 to CH30	• It may take 5 seconds when switching channels.
Input Configuration		Select the input. Factory default depend on the channel (📖17).
V3120 **V2421** **V2411** **V1711**	12-3G/HD-SDI	
V2420 **V2410**	3G/HD-SDI	
V1710	6G/3G/HD-SDI	
	3G-SDI RAW HD/SD-SDI HDMI — (Not set)	

Select Input Signal	Automatic
	Quad Input
	Dual Input A,B
	Dual Input C,D
	Single Input A
	Single Input B
	Single Input C
	Single Input D
		Sets the signal display method.
		
		[Automatic]: The display method is automatically determined to match the input signal.
		[Quad Input]: Four input signals (Input A to Input D terminals) are displayed.
		[Dual Input A,B]: Two input signals (Input A terminal and Input B terminal) are displayed.
		[Dual Input C,D]: Two input signals (Input C terminal and Input D terminal) are displayed.
		[Single Input A], [Single Input B], [Single Input C], [Single Input D]: One input signal (any of Input A to Input D) is displayed.
		
		• Settings that can be set differ according to the input signal.
		  - When [3G-SDI RAW] is set: [Quad Input] cannot be selected.
		  - [HD/SD-SDI]: Only [Single Input A] to [Single Input D] can be selected.
		  - [HDMI]: This is fixed to [Automatic].

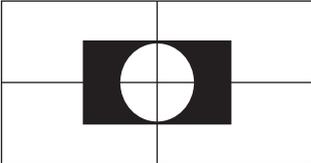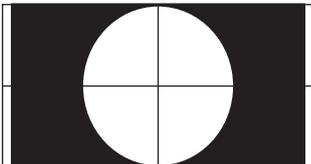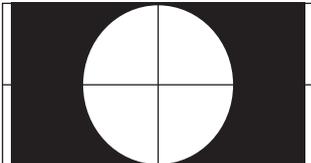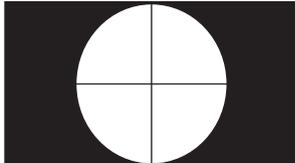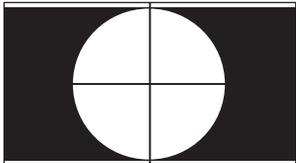| Sub Menu	Setting Options
Image Division	When [Input Configuration] ❯❯ [12-3G/HD-SDI] (V2420 V2410 [3G/HD-SDI], V1710 [6G/3G/HD-SDI]) Sets the display method when using either [Quad Input] or [Dual Input]. Two division methods "Square Division" and "2 Sample Interleave" are supported for 4K video signals.
	Automatic Square Division 2 Sample Interleave [Select Input Signal] ❯ When [Quad Input] Multi View (Quad) When [Dual Input] Dual Link 3G-SDI Multi View (Dual)	[Automatic]: Automatically determined based on payload and displayed. [Square Division]: Displays a signal transmitted over four inputs as a single image. [2 Sample Interleave]: Displays a signal transmitted divided into a 2K/HD signal as a single image. [Multi View (Quad)]: Each of the images from the four inputs are shown in four screens. [Dual Link 3G-SDI]: Displays a Dual Link 3G-SDI signal as a single image. [Multi View (Dual)]: Each of the images (Inputs A/B or Inputs C/D) from the two inputs are shown in two screens. Select Input Signal: Quad Input, Image Division: Square Division • V3120 V2421 V2411 V1711 The combinations of video signal formats that can be displayed when using two screens or four screens in [Multi View (Quad)] or [Multi View (Dual)] are as follows: - Resolution combinations: Same, or "4096x2160, 2048x1080", "3840x2160, 1920x1080" - When using a frame rate and I/P/PsF combination that is one of "23.98P / 24P / 25P / 29.97P / 30P" "I (All) / PsF (All) / 47.95P / 48P / 50P / 59.94P / 60P" - (Quad screen display only) For both left and right, when the top and bottom screen video signal frame rates and I/P/PsF are the same There may be periodical deterioration in the image when inputting signals with differing frame rates or I/P/PsF. • V2420 V1710 V2410 Two or four screens can be displayed with [Multi View (Quad)] or [Multi View (Dual)] selected only if the same image signal format is used. • V1710 V1711 When using [Multi View (Quad)] or [Multi View (Dual)]: For 2048×1080 images, the images are displayed in reduced size when [Screen Scaling] is set to [Automatic]. The left and right parts of the screen will be trimmed for display when anything other than [Automatic] is selected.
Link Order	Automatic Off	Automatically detects and displays correct terminal order based on payload when using [2 Sample Interleave] or [Dual Link 3G-SDI].

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Sub Menu	Setting Options	

Format	SDI Signal
	Automatic
	4:2:2 YCbCr 10-bit
	4:2:2 YCbCr 12-bit
	4:4:4 YCbCr 10-bit
	4:4:4 YCbCr 12-bit
	4:2:2 ICtCp 10-bit
	4:2:2 ICtCp 12-bit
	4:4:4 ICtCp 10-bit
	4:4:4 ICtCp 12-bit
	4:4:4 RGB 10-bit
	4:4:4 RGB 12-bit
	4:4:4 XYZ 10-bit
	4:4:4 XYZ 12-bit
	HDMI Signal
	Automatic
	4:4:4 XYZ 12/10-bit
		Sets the color format and gradation.
		
		[Automatic]: Sets automatically to match the input signal.
		
		• The HD-SDI signal is either [4:2:2 YCbCr 10-bit] or [4:2:2 ICtCp 10-bit].
		• When [Input Configuration] ❯ [HD/SD-SDI], the setting is fixed to [4:2:2 YCbCr 10-bit].
		• When [Input Configuration] ❯ [3G-SDI RAW], the setting is fixed to [Automatic].
		• If [Automatic] is selected, they are rendered in a Payload that is selected in the order A → B → C → D.
		• The settings for correctly displaying ICtCp format signals are as follows.
		  - [Picture Mode]: [ITU-R BT.709] or [ITU-R BT.2020]
		  - [Color Gamut]: [ITU-R BT.709] or [ITU-R BT.2020]
		  - [Gamma/EOTF]: [SMPTE ST 2084 (PQ)], [Hybrid Log-Gamma] or [Hybrid Log-Gamma RGB]
		• If you need to use the ICtCp format for SDI signals, select any of the following to match the signal: [4:2:2 ICtCp 10-bit], [4:2:2 ICtCp 12-bit], [4:4:4 ICtCp 10-bit], [4:4:4 ICtCp 12-bit]
		• To use 4:4:4 XYZ 10-bit for SDI signals, select [4:4:4 XYZ 10-bit]. Then, signals will be processed as signals where XYZ data is included in RGB data output in 4:4:4 RGB 10-bit format.	

Audio Input	[Select Input Signal] ❯ When [Quad Input] Automatic, Input A, Input B, Input C, Input D When [Dual Input A,B] Automatic, Input A, Input B When [Dual Input C,D] Automatic, Input C, Input D	Sets the audio terminal. [Automatic]: Sets automatically to match the input signal. • For [Select Input Signal] ❯ [Automatic] or [Single Input], it is fixed at [Automatic].	
Marker/TC/CameraInfo Input	[Select Input Signal] ❯ When [Automatic] or [Quad Input] Input A, Input B, Input C, Input D When [Dual Input A,B] Input A, Input B When [Dual Input C,D] Input C, Input D	Set the target terminal so that various markers (except Grid Marker), Time Code, and Camera Information are displayed. (Camera Information is available in the [Multi View (Quad)] display only) • This setting becomes invalid except for the [Multi View (Quad)] or [Multi View (Dual)] display.	

Sub Menu		Setting Options
Internal Sync	On, Off	When [Image Division] ❯ [Square Division] Sets whether to synchronize four inputs. [On]: Force synchronization. [Off]: Do not force synchronization.
Channel Name		Sets the name of the selected channel. You can input up to 16 alphanumeric characters.
Picture Mode	Set [Picture Mode] by individual channel.	
Type	Normal L/R 4K/2K Automatic	[Normal]: Sets one [Picture Mode]. [L/R]: Sets [Picture Mode] by individual left and right screen. Displays as [Single Input Dual View] when using resolutions of 2K or lower. [4K/2K]: Sets [Picture Mode] by individual 4K or 2K signal screen. [Automatic]: [Picture Mode] is set according to the SDI signal. The set [Picture Mode] is changed to in the order camera metadata → Payload → resolution (4K/2K).

[Type] ❯
When [Normal]
Picture Mode
 	
When [L/R]
Picture Mode L
Picture Mode R
 	
When [4K/2K]
Resolution 4K, 2K
 	
When [Automatic]
Resolution 4K, 2K
Payload
  UHD/PQ,
  UHD/HLG, UHD,
  709/PQ,
  709/HLG, 709,
  VANC, Unknown
Camera
  CINEMA EOS
  SYSTEM,
  ARRI, VARICAM
	SMPTE-C
	EBU
	ITU-R BT.709
	ITU-R BT.2020
	Adobe RGB
	DCI-P3
	User 1 (2020 PQ)
	User 2 (2020 HLG)
	User 3 (DCI PQ)
	User 4 (DCI PQ D65)
	User 5 ~ User 7
	CINEMA EOS SYSTEM
	ACESproxy (ver. 1.0.1)
	— (Not set)
		Set the [Picture Mode] for each screen.
		
		[ACESproxy (ver. 1.0.1)]: Can be set when [Type] is [Normal].
		[—] (Not set): Cannot automatically change image quality to suit input signal. Can be set when other than [Resolution 4K] and [Resolution 2K] are selected in [Type] ❯ [Automatic].
		
		• Colorimetry Bit/Transfer Characteristics of the SDI Payload ID supports the signal in conformity with the following standard.
		SMPTE ST 2082-10:2018 (12G-SDI) `V3120` `V2421` `V2411` `V1711`
		SMPTE ST 2081-10:2018 (6G-SDI) `V3120` `V2421` `V2411` `V1710` `V1711`
		SMPTE ST 425-1:2017 (3G-SDI Single Link / Square Division)
		SMPTE ST 425-3:2019 (3G-SDI Dual Link(2SI))
		SMPTE ST 425-5:2019 (3G-SDI Quad Link(2SI))
		SMPTE ST 292-1:2018 (HD-SDI)
		• Settings that can be set differ according to the input signal.
		  - [Input Configuration] ❯ [HD/SD-SDI]: [Type] is fixed to [Normal]. [Automatic] cannot be set.
		  - [Input Configuration] ❯ [3G-SDI RAW] and [HDMI]: [4K/2K] and [Automatic] cannot be set in [Type].
		• When [Type] is [L/R]
		  - Setting the same [Picture Mode] for both left and right screens will cause [Picture Mode] in the non-selected screen to change to a different mode (for example, the [Picture Mode] settings of the left and right screens are switched).
		  - When using a signal 2K or under, it is fixed at [Single Input Dual View].

Sub Menu		Setting Options
Single Input Dual View	Automatic, Off	When other than [Image Division] ❯ [Multi View (Quad)] or [Multi View (Dual)] The image from the input signal can be reduced and shown in dual-screen. [Automatic]: When [Picture Mode] ❯ [Type] is [L/R], or when the [Picture Function Settings] Sub Menu items are set to [On], identical images are automatically shown and dual-screen comparison can be made. 4K images are shown in reduced size. Relevant [Picture Function Settings] Sub Menu items: [Peaking], [False Color], [Range Check], [2020 Outside of Gamut View], [Monochrome], [Blue Only], [Red Off], [Green Off], [Blue Off], and [Compare View] • Cannot be used when an unsupported video signal is input. • Cannot be set when [Input Configuration] ❯ [HD/SD-SDI].
Separator	White Half Black Off	In the following cases, screen borders will be displayed. - When [Picture Mode] ❯ [Type] is [L/R] - When [Multi View (Quad)] or [Multi View (Dual)] is selected - When [Single Input Dual View] is set to [Automatic] and the images are shown next to each other for image comparison - When [Picture Function Settings] ❯ [Compare View] ❯ [Enable] is [On]

Display Settings

This menu is used to configure the display method.

Sub Menu	Setting Options (Bold: factory default)	

Screen Scaling	Native Input Resolution
	200%
	Automatic
		Defines how the video is scaled and displayed on the screen.
		
		[Native Input Resolution]: Displays the input signal without scaling.
		
		1920x1080 (original)
		
		[200%]: Doubles the vertical and horizontal dimensions.
		
		1920x1080→3840x2160
		
		[Automatic]: V3120 V2420 V2421 V2411 V2410 Enlarges to full screen.
		
		1920x1080→3840x2160
		
		[Automatic]: V1710 V1711 Fits size to fill screen.
		
		1920x1080→3840x2160 4096×2160→3840×2025
		
		• In the following cases, the maximum magnification is 200% even if [Automatic] is selected.
		  - When [Peaking], [False Color], or [Range Check] ❯ [Enable] is set to an option other than [Off]
		• V1710 V1711 In the following cases, images are shown in reduced size when [Automatic] is selected.
		  - [4096×2160]: When [Image Division] ❯ [Square Division] is selected
		  - [2048×1080]: When [Image Division] ❯ [Multi View (Quad)] or [Multi View (Dual)] is selected

Sub Menu	Setting Options (Bold: factory default)	
Anamorphic	x2.0 x1.8 x1.5 x1.33 **Off**	Set when checking images photographed using an anamorphic lens. Displayed in accordance with the set magnification. • Settings are invalid in the following cases: - When [Peaking], [False Color], or [Range Check] ❯ [Enable] is set to an option other than [Off]
Aspect (SD-SDI)	**Automatic** 16:9 4:3	Sets the size for displaying SD-SDI signal images. [Automatic]: Automatically determined based on payload. [16:9]: Images are displayed with an aspect ratio of "16:9". [4:3]: Images are displayed with an aspect ratio of "4:3". • When [Peaking], [False Color], or [Range Check] ❯ [Enable] ❯ an option other than [Off], this item is set to [4:3].
Scaling Method	**Shape Trace** Bicubic Nearest Neighbor	Sets the interpolation method when [Screen Scaling] is set to [200%] or [Automatic]. [Shape Trace]: Canon original processing that produces smooth slopes with reduced jagged lines. [Bicubic]: General interpolation process that uses neighboring pixel information to create interpolated pixels. [Nearest Neighbor]: Process that uses nearest neighbor pixel information to create (copy) new pixels. This is useful as it enlarges the original pixels, thus making any jagged lines visible.

Sub Menu	Setting Options (Bold: factory default)	
Video Position (Multi View)	Top **Middle** Center	When using [Multi View (Quad)], [Multi View (Dual)], or [Single Input Dual View] Sets the vertical display position for the image. [Top]: Displays at the top of the screen. [Middle]: Displays at the top middle of the screen. [Center]: Displays at the middle of the screen.

Zoom		Enlarges part of the video image. The zoom function can be used when the resolution is [4096x2160], [3840x2160], [2048x1080] or [1920x1080].
		
		• The zoom function cannot be used in the following cases:
		  - During execution of [Playback File] under [Screen Capture]
		  - During display of the test pattern
		  - When [Multi View (Quad)] or [Multi View (Dual)] is selected
		  - When [Channel Settings] ❯ [Input Configuration] is set to [HD/SD-SDI]
		  - When [Channel Settings] ❯ [Picture Mode] ❯ [Type] is set to [L/R]
		  - When [Picture Function Settings] ❯ [Compare View] ❯ [Enable] is set to [On]
		• While the zoom function is in use, the following are not displayed:
		Various markers, Background Color (V3120 V2420 V2421 V2411 V2410)
		• When zoom settings are changed, [Frame Hold] turns [Off].

	Zoom Preset	Zoom 1 Zoom 2 Zoom 3 **Off**	Sets the zoom display method. There are three presets.
	Magnification	x2 x4 x8	Sets the display scale of zoom.
	Position		The zoom adjustment screen is displayed. Use the jog dial to adjust the display position.
	Type	**Normal** Single Input Dual View	Sets the enlarged image display method. [Normal]: Only displays the enlarged image. [Single Input Dual View]: Displays the overall image on the left and the enlarged image on the right. • V3120 V2420 V2421 V2411 V2410 When [Normal] is selected: When the resolution is [2048x1080] or [1920x1080], the display position cannot be changed even if [Magnification] is set to [x2]. • V1710 V1711 When [Normal] is selected: When the resolution is [1920x1080], the display position cannot be changed even if [Magnification] is set to [x2]. • When [Single Input Dual View] is selected: For 4K video (3840x2160 or 4096x2160), the quality of the enlarged image will be degraded compared to [Normal].
Frame Hold	On, **Off**	Pauses the video. • Cannot be set when [Peaking] ❯ [Enable] is set to an option other than [Off]. • If the image quality setting is changed while the video is paused, the setting may not change correctly.	

Sub Menu		Setting Options (Bold: factory default)	
V3120 **V2420** **V2421** **V2411** **V2410** Background Color	White Gray **Off**	Sets the color of the black band to check the boundary of the black band and video image. • Setting is disabled when [Multi View (Quad)] or [Multi View (Dual)] is selected.	
I/PsF	**Automatic** Interlace PsF	Defines how the interlace signal or PsF signal is displayed. [Automatic]: Automatically determined based on payload and displayed. If there is no payload, the signal is displayed as an interlace signal. [Interlace]: Displayed as an interlace signal. [PsF]: Displayed as a PsF signal.	
PsF	**Progressive** Interlace	Defines how the PsF signal is displayed. [Progressive]: Interpolates giving preference to image quality by detecting paired fields. [Interlace]: Interpolates using two adjacent fields giving priority to speed.	
I/P Conversion	**Image Priority** Speed Priority	Sets the interlaced signal I/P conversion method. [Image Priority]: This mode gives priority to image quality. Processing time will be longer than [Speed Priority]. [Speed Priority]: This mode gives priority to speed.	
Film Cadence	2-2 2-3 2-3-3-2 **Off**	Sets the film cadence mode. [2-2]: Displays progressive image after conversion for 2-2 pulldown processed interlaced signal input. [2-3]: Displays progressive image after conversion for 2-3 pulldown processed interlaced signal input. [2-3-3-2]: Displays progressive image after conversion for 2-3-3-2 pulldown processed interlaced signal input. [Off]: Does not perform film cadence mode progressive conversion. • This can be set only when [I/P Conversion] is set to [Image Priority]. • Cannot be set in the [Multi View (Quad)] or [Multi View (Dual)] display. The setting is fixed to [Off].	

Audio Settings

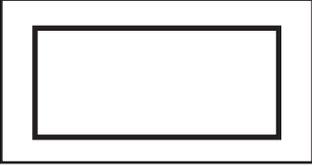This menu is used to set audio output from the headphone terminal.

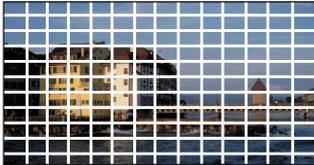| Sub Menu	Setting Options (Bold: factory default)	
SDI Group	**CH1-CH8** CH9-CH16	Switches the audio group to be input during SDI audio input.
CH L (SDI)	[SDI Group] ❯ When [CH1-CH8] CH1 to CH8 (**CH1**) When [CH9-CH16] CH9 to CH16 (**CH9**)	Sets the audio to be output from the two channels (L/R) of the headphone respectively. The options differ according to the [SDI Group] setting.
CH R (SDI)	[SDI Group] ❯ When [CH1-CH8] CH1 to CH8 (**CH2**) When [CH9-CH16] CH9 to CH16 (**CH10**)	
CH L (HDMI)	CH1 to CH8 (**CH1**)	Sets the audio to be output from the two channels (L/R) of the headphone respectively.
CH R (HDMI)	CH1 to CH8 (**CH2**)	
Volume	0 to 100 (**30**)	Sets the volume. (Increments of 1)
Audio Switch	**L R** L R MIX (L+R)	Sets the stereo output.

Marker Settings

This menu is used to configure various markers. The factory defaults differ according to the [Marker Preset] setting (📖63).

Sub Menu	Setting Options (Factory default)	
Marker Preset	**Marker 1** to 5 Off	Customizes markers which are assigned to markers 1 to 5.
Aspect Marker[1]	[Aspect Marker] displays a range in accordance with the specified aspect ratio. 	
Enable	On, Off	Switches the aspect marker On, Off.
Mask	Black Half Off	Switches the mask color. Mask is the blanking area outside the range of the marker. [Black]: [Half] (50% gray): [Off]: Turns mask off.
Aspect Ratio	16:9, 15:9, 14:9, 13:9, 4:3, 2.39:1, 2.35:1, 1.896:1, 1.85:1, 1.66:1, Variable • When Variable is selected 1.00:1 to 3.00:1	Sets the aspect ratio of the aspect marker. The aspect ratio can be entered as a numeric value when you select [Variable] (0.01:1 increments). The grayed out slider becomes active and can be used to set the aspect ratio.
Line	On, Off	When [Mask] ❯ [Black] or [Half] Switches lines on mask On, Off.
Line Width	Thick Normal Thin	Sets the thickness of the aspect marker line.

Sub Menu	Setting Options (Factory default)	
Line Color	White, Red, Green, Blue, Yellow, Cyan, Magenta, Gray	Sets the color of the aspect marker line.
Line Brightness	High, Low, Half	Sets the brightness of the aspect marker line.
H Position	-65 to 65	Changes horizontal position without changing the aspect.
V Position	-35 to 35	Changes vertical position without changing the aspect.
Safety Zone Marker 1, 2[1]	There are two types of [Safety Zone Marker]: 1 and 2, which share the same settings. A safety zone marker is used to set the safe zone of the image (actual displayed area) to check the image.	
Enable	On, Off	Switches the safety zone marker On, Off.
Aspect Ratio	16:9, 15:9, 14:9, 13:9, 4:3, 2.39:1, 2.35:1, 1.896:1, 1.85:1, 1.66:1, Variable • When Variable is selected 1.00:1 to 3.00:1	Sets the aspect ratio of the safety zone marker. [Variable]: The aspect ratio can be entered as a numeric value (0.01:1 increments). The grayed out slider becomes active and can be used to set the aspect ratio. • When [Area Size] is set to [Variable (dot)], you cannot select [Aspect Ratio].
Area Size	80%, 85%, 88%, 90%, 93%, 95%, Variable (%), Variable (dot)	Sets the safety zone marker area size. [Variable (%)]: The grayed out [Rate (%)] becomes active. [Variable (dot)]: The grayed out [Width (dot)] and [Height (dot)] become active.
Rate (%)	50 to 100	When [Area Size] ❯ [Variable (%)] Move the slider to set the displayed marker area size without changing the aspect ratio in 1 % increments.
Width (dot) **V1710** **V1711**	20 to 4096 20 to 3840	When [Area Size] ❯ [Variable (dot)] Move the slider to set the area width in 2 dot increment.
Height (dot)	20 to 2160	When [Area Size] ❯ [Variable (dot)] Move the slider to set the area height in 2 dot increment.

Sub Menu		Setting Options (Factory default)
Shape	Box Box (Mask) Brackets Enclosure	Sets the area shape of the safety zone marker. [Box]: [Box (Mask)]: [Brackets]: [Enclosure]:
Line Width	Thick Normal Thin	Sets the width of the safety zone marker line.
Line Color	White, Red, Green, Blue, Yellow, Cyan, Magenta, Gray	Sets the color of the safety zone marker line.
Line Brightness	High, Low, Half	Sets the brightness of the safety zone marker line.
H Position	-2048 to 2048	Adjusts the marker horizontal position with the set aspect and size.
V1710 **V1711**	-1920 to 1920	
V Position	-1080 to 1080	Adjusts the marker vertical position with the set aspect and size.

Sub Menu	Setting Options (Factory default)	
Area Marker1, 2[1]	There are two types of [Area Marker]: 1 and 2, which share the same settings. [Area Marker] is used to check a specific area using a rectangular box.	
Enable	On, Off	Switches the area marker On, Off.
H Position	0 to 4086	Sets the start position (x-coordinate) to draw the rectangle. (in increments of 2)
V1710 **V1711**	0 to 3830	
V Position	0 to 2150	Sets the start position (y-coordinate) to draw the rectangle. (in increments of 2)
Width (dot)	10 to 4096	Sets the width of the rectangle. (in increments of 2)
V1710 **V1711**	10 to 3840	
Height (dot)	10 to 2160	Sets the height of the rectangle. (in increments of 2)
Mask	Black Half Off	Switches the mask color (in the marker).
Line	On, Off	When [Mask] ❯ [Black] or [Half] Turns On/Off the outlines of the rectangular box.
Line Width	Thick Normal Thin	When [Mask] ❯ [Off] or [Line] ❯ [On] Sets the width of the area marker line.
Line Color	White, Red, Green, Blue, Yellow, Cyan, Magenta, Gray	When [Mask] ❯ [Off] or [Line] ❯ [On] Sets the color of the area marker line.
Line Brightness	High, Low, Half	When [Mask] ❯ [Off] or [Line] ❯ [On] Sets the brightness of the area marker line.

Sub Menu	Setting Options (Factory default)	
Center Marker[2]	[Center Marker] shows the center of the image. 	
Enable	On, Off	Switches the center marker On, Off.
Size	Large Middle Small	Sets the size of the center marker.
Line Width	Thick Normal Thin	Sets the width of the center marker line.
Line Color	White, Red, Green, Blue, Yellow, Cyan, Magenta, Gray	Sets the color of the center marker line.
Line Brightness	High, Low, Half	Sets the brightness of the center marker line.
Grid Marker[2]	[Grid Marker] is marker used to check the horizontal and vertical position. When [Distance] ❯ [*** dots] When [Distance] ❯ [***% (UHD)] 	
Enable	On, Off	Switches the grid marker On, Off.
Distance	160 dots 240 dots 320 dots 80% (UHD) 83% (UHD) 85% (UHD) 88% (UHD) 90% (UHD) 93% (UHD) 95% (UHD)	Sets the horizontal and vertical line distance. [160/240/320 dots]: Sets the line distance to the selected number of dots. [80% (UHD) to 95% (UHD)]: This indicates the percentage of the display area of the 3840x2160 area. The area of the selected ratio is indicated by the marker.
Line Width	Thick Normal Thin	Sets the width of the grid marker line.
Line Color	White, Red, Green, Blue, Yellow, Cyan, Magenta, Gray	Sets the color of the grid marker line.
Line Brightness	High, Low, Half	Sets the brightness of the grid marker line.

1 The marker is not displayed in the following cases:

- When there is no signal, unsupported signal, or a channel with [Input Configuration] not set is selected

- When an enlarged image is displayed

- During the execution of [Playback File] under [Screen Capture]

- When a [Test Pattern] is displayed

2 The marker is not displayed in the following cases:

- When an enlarged image is displayed

■ Details of the factory default settings for marker preset

Item		Factory default	
		Marker 1 to 4	Marker 5
Aspect Marker	Enable	Off	On
	Mask	Off	Half
	Aspect Ratio	16:9	16:9
	When Variable is selected	1.78:1	1.78:1
	Line	On	On
	Line Width	Normal	Normal
	Line Color	White	Gray
	Line Brightness	Low	Half
	H Position	0	0
	V Position	0	0
Safety Zone Marker 1, 2	Enable	Off	On
	Aspect Ratio	16:9	16:9
	When Variable is selected	1.78:1	1.78:1
	Area Size	80%	Variable (dot)
	Rate (%)	80	80
	Width (dot)	3276	2200 (400*)
	V1710 **V1711**	3072	
	Height (dot)	1728	100 (400*)
	Shape	Box	Box (Mask)
	Line Width	Normal	Normal
	Line Color	White	Gray
	Line Brightness	Low	Half
	H Position	0	0 (1650*)
	V Position	0	-850 (-800*)

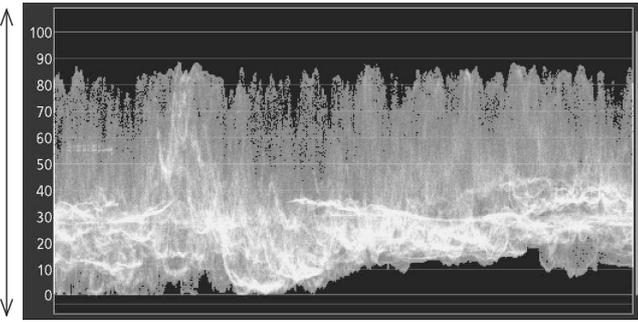| Item		Factory default	
		Marker 1 to 4	Marker 5
Area Marker 1, 2	Enable	Off	On
	H Position	240	240 (3500**)
	V Position	120	120 (60**)
	Width (dot)	240	240
	Height (dot)	120	120 (240**)
	Mask	Off	Half
	Line	On	On
	Line Width	Normal	Normal
	Line Color	White	Gray
	Line Brightness	Low	Half
Center Marker	Enable	Off	On
	Size	Middle	Small
	Line Width	Normal	Normal
	Line Color	White	White
	Line Brightness	Low	Half
Grid Marker	Enable	Off	On
	Distance	160 dots	85% (UHD)
	Line Width	Normal	Normal
	Line Color	White	White
	Line Brightness	Low	Half

*   When Safety Zone Marker 2 is used

** When Area Marker 2 is used

Function Settings

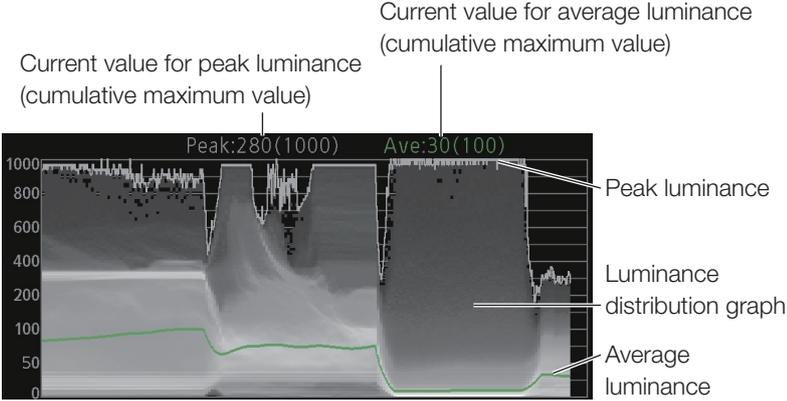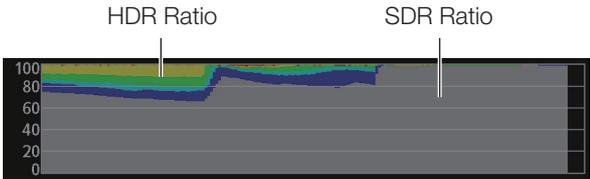This menu is used to set the image signal information display and the cinema camera link function.

Sub Menu	Setting Options (Bold: factory default)	
Time Code[1]	Display the time code superimposed on the signal.	
Enable	On, **Off**	Switches the time code display On, Off.
Type	**VITC** LTC	Selects the type. • This setting becomes invalid when HDMI signal is input and is fixed to [VITC].
Size	Large **Small**	Selects the size.
Position	Top Left Top Right **Bottom Left** Bottom Right	Selects the display position. • This setting becomes invalid in the [Multi View (Dual)] display. • When [Top Left] or [Top Right] is selected: When set to [Audio Level Meter] ❯ [Enable] ❯ [On], the time code will not be displayed.
H Offset	0 to 1460 (**0**)	Adjusts the display position of the time code.
	V1710 **V1711** 0 to 1332 (**0**)	• When [Multi View (Dual)] is displayed, the [H Offset] setting is invalid.
Type String Display	**On**, Off	Sets display of VITC/LTC strings.
Brightness	**Normal**, Half	Sets the Brightness of the strings.
Audio Level Meter[1]	Configures various settings for the audio level meter. Displays the audio level of the selected channel number. **V3120** **V2421** **V2411** **V1711** When using dual or quad screens, setting [Channel Settings] ❯ [Audio Input] to [Automatic] will display multiple audio level meters. You can display up to eight channels on the screen overall. • **V3120** **V2421** **V2411** **V1711** When [Channel Settings] ❯ [Audio Input] is set to [Automatic] - When displaying as [Multi View (Quad)], [Channel Number] becomes [2CH]. - When displaying as [Multi View (Dual)], [Channel Number] becomes [4CH].	
Enable	On, **Off**	Switches the audio level meter On, Off.

Channel Number (SDI)	2CH
	 4CH
	 6CH
	 8CH
		Sets the number of channels displayed when SDI signal is input. Options change according to the setting for [SDI Group] under [Audio Settings].
		 When [SDI Group] ❯ [CH1-CH8]
		     [2CH]: CH1 to CH2
		     [4CH]: CH1 to CH4
		     [6CH]: CH1 to CH6
		     [8CH]: CH1 to CH8
		 When [SDI Group] ❯ [CH9-CH16]
		     [2CH]: CH9 to CH10
		     [4CH]: CH9 to CH12
		     [6CH]: CH9 to CH14
		     [8CH]: CH9 to CH16

Sub Menu	Setting Options (Bold: factory default)	
Channel Number (HDMI)	**2CH** 4CH 6CH 8CH	Sets the number of channels displayed when HDMI signal is input. [2CH]: CH1 to CH2 [4CH]: CH1 to CH4 [6CH]: CH1 to CH6 [8CH]: CH1 to CH8
Channel Order	**Normal** Grouping (1-4, 5-8)	Sets the order of channels. [Normal]: On the left side, "CHs 1, 3, 5, 7 (right side: CHs 2, 4, 6, 8)" or "CHs 9, 11, 13, 15 (right side: 10, 12, 14, 16)" are displayed. [Grouping (1-4, 5-8)]: On the left side, "CHs 1, 2, 3, 4 (right side: CHs 5, 6, 7, 8)" or "CHs 9, 10, 11, 12 (right side: CHs 13, 14, 15, 16)" are displayed.
Size	**Large** Small	Sets the size of the display.
Position	**Normal** Left	Selects the display position. [Normal]: Displays the audio level meter on both ends. [Left]: Indication on the right side is displayed toward the center of the screen. This prevents the indication from overlapping with the banner.
Peak Hold	**On**, Off	One second of audio signal at the peak is kept.
Reference Level	-40 to 0 (**-20**)	Sets the reference level.
Brightness	**Normal** Low Half	Sets brightness for the audio level meter.
Wave Form Monitor[1]	Configures various settings for the wave form monitor. On the wave form monitor, the horizontal axis shows the horizontal resolution of the video and the vertical line shows the signal level. To the right of the wave form monitor, [Color Range] and [HDR Range] information (vertical line) is displayed. 	
Enable	On, **Off**	Switches the wave form monitor On, Off.
Select Signal	**Y**, Cb, Cr, R, G, B	Sets the waveform to be displayed.

Sub Menu		Setting Options (Bold: factory default)	
Display Type		**All** Line	Sets the display type. [Line]: The data for one line is displayed.
	Select Line	**1** to 2160	Selects the line to be displayed when [Line] is selected.
Scale		**Automatic** IRE SMPTE ST 2084 (PQ) Hybrid Log-Gamma Canon Log Canon Log 2 Canon Log 3 S-Log2 S-Log3 ARRI (Rec2100-PQ- 1K-100) ARRI (Rec2100-HLG- 1K-200)	Sets the scale of the wave form monitor. [Automatic]: Sets in accordance with the [Gamma/EOTF] and [Color Range] settings. • When [SMPTE ST 2084 (PQ)], [Canon Log], [Canon Log 2], or [Canon Log 3] is set (including [Automatic]): When [Gamma/EOTF] ❯ [SMPTE ST 2084 (PQ)], the item is displayed in accordance with the [Color Range] settings ([Limited 2] is set to [Limited] and [SDI Full (4-1019)] is set to [Full]).
Reference Line		4 to **1023**	A guide is displayed at the specified position. [Reference Line] is not displayed when [1023] is selected.
Reference Level		**Automatic** Manual	Sets the range of the reference level. Tints the outside of the range of the reference level. In the case of [Gamma/EOTF] corresponding to the HDR range, parts that exceed the HDR range are tinted. When [Color Range] ❯ [Limited], outside the limited range is tinted. [Automatic]: Sets in accordance with the [Gamma/EOTF] and [Color Range] settings.
	Reference Level High	468 to 1023	Sets the reference display level (high). [Reference Level High] is not displayed when [1023] is selected.
	Reference Level Low	0 to 468	Sets the reference display level (low). [Reference Level Low] is not displayed when [0] is selected.
Color		Sets the signals to be displayed and the color of signals exceeding the reference level.	
	Y	White Red Green Blue Yellow Cyan Magenta	[Y], [Cb], [Cr], [R], [G], [B]: Selects the color of the selected signal. Default value of each signal is shown below. Y (White), Cb (White), Cr (White), R (Red), G (Green), B (Blue) [Reference Level High], [Reference Level Low]: Selects the color of the signal of the selected reference level. Default value of each reference level is shown below. Reference Level High (Magenta), Reference Level Low (Cyan)
	Cb		
	Cr		
	R		
	G		
	B		
	Reference Level High		
	Reference Level Low		

Sub Menu		Setting Options (Bold: factory default)
V3120 **V2420** **V2421** **V2411** **V1710/V1711 OPTION** Brightness	**Automatic** Normal Low	Sets the Brightness of the wave form monitor. [Automatic]: Brightness is automatically adjusted according to the contrast value and average luminance value of the input signal.
Position	**Bottom Left** Bottom Right	Selects the display position. • This setting becomes invalid in the [Multi View (Dual)] display.
Size	Large, **Middle**, Small	Sets the size of the display.
Vector Scope[1]	Configures various settings for the vector scope. Vector scope displays the intensity of color signals and hue with the horizontal axis showing the color difference signal Cb and the vertical line showing Cr.	
Enable	On, **Off**	Switches the vector scope On, Off.
Target	75% **100%** 75%+100%	Sets the target.
Position	Bottom Left **Bottom Right**	Selects the display position. • This setting becomes invalid in the [Multi View (Dual)] display.
Size	Large, **Middle**, Small	Sets the size of the display.
Histogram[1]	Displays the luminance distribution of the video.	
Enable	On, **Off**	Switches between displaying or hiding [Histogram].

Sub Menu		Setting Options (Bold: factory default)
Color	**Automatic** Normal False Color	[Automatic]: Unless [Picture Function Settings] ❯ [False Color] ❯ [Enable] is set to [Off], it will automatically adjust the display to match the [False Color] settings. [Normal]: Displays in monochrome. [False Color]: When [Gamma/EOTF] is set to [SMPTE ST 2084 (PQ)] or [Hybrid Log-Gamma], then it will adjust the display to match the [False Color] settings. When [False Color] ❯ [Enable] is [False Color 1] or [Off]: Match the [False Color 1] settings. When [False Color] ❯ [Enable] is [False Color 2]: Match the [False Color 2] settings.
Gain	**x1**, x2, x3	Increases the displayed graph size.
HDR Range	**On** On (Clip) Off	[On]: Areas that exceed the HDR range will be tinted. [On (Clip)]: Areas that exceed the HDR range and areas that exceed the HDR range and are clipped will be tinted. [Off]: Areas that exceed the HDR range will not be tinted.
HDR/SDR Ratio	**On**, Off	When [Gamma/EOTF] is set to [SMPTE ST2084 (PQ)] or [Hybrid Log-Gamma] Switches between displaying or hiding [HDR/SDR Ratio]. The ratio calculation for HDR/SDR uses the [False Color] ❯ [HDR/SDR Border] settings.
Peak/Ave. Luminance	**On**, Off	When [Gamma/EOTF] is set to [SMPTE ST2084 (PQ)] or [Hybrid Log-Gamma] Switches between displaying or hiding [Peak/Ave. Luminance].
Size	**Large**, Small	Sets the size of the display. • Fixed to [Small] during [Single Input Dual View].

Sub Menu	Setting Options (Bold: factory default)	
Frame Luminance Monitor[1]	When [Gamma/EOTF] ❯ [SMPTE ST 2084 (PQ)] or [Hybrid Log-Gamma], "Max./Ave. Luminance" for the entire screen (frame) is displayed. For other conditions, "Max./Ave. Gradation Values" is displayed. The frame luminance monitor can be used when the resolution is [4096x2160], [3840x2160], [2048x1080] or [1920x1080]. Luminance graph Ratio graph • The update time for [Frame Luminance Monitor] may take a long duration, or graph indication of [Frame Luminance Monitor] may be reset when displaying the [Frame Luminance Monitor] and operating the OSD menu.	
Enable	On, **Off**	Sets [Frame Luminance Monitor] on or off. Obtains the luminance value when valid.
Display	**All** Luminance Graph HDR/SDR Ratio Graph Luminance Value Off	Sets whether each graph is displayed. [All]: Displays [Luminance Graph (Including luminance value)] and [HDR/SDR Ratio Graph]. [Luminance Graph]: Displays [Luminance Graph (Including luminance value)]. [HDR/SDR Ratio Graph]: Displays [HDR/SDR Ratio Graph]. [Luminance Value]: Displays the peak and average luminance values. [Off]: Does not display any graphs.

Sub Menu			Setting Options (Bold: factory default)	
Luminance Graph Settings			Sets [Luminance Graph] display method.	
	Luminance Distribution		**On**, Off	Switches between displaying and not displaying the luminance distribution graph.
	Color		**Automatic** Normal False Color	[Automatic]: Unless [Picture Function Settings] ❯ [False Color] ❯ [Enable] is set to [Off], it will automatically adjust the display to match the [False Color] settings. [Normal]: Displays in monochrome. [False Color]: When [Gamma/EOTF] is set to [SMPTE ST 2084 (PQ)] or [Hybrid Log-Gamma], then it will adjust the display to match the [False Color] settings. 　　When [False Color] ❯ [Enable] is [False Color 1] or [Off]: Match the [False Color 1] settings. 　　When [False Color] ❯ [Enable] is [False Color 2]: Match the [False Color 2] settings.
	Reference Luminance Level - Peak		**Automatic** Manual	[Automatic]: Works in conjunction with the [HDR Range] settings to automatically tint the areas that exceed the peak luminance. [Manual]: Sets the upper limit for peak luminance.
			400 to 10000 (**1000**)	Set when using [Manual]. Areas that exceed the set value will be tinted. (400 to 4000: increments of 100. 4000 to 10000: increments of 1000)
		Ave.	100 to 1000 (**400**)	Areas that exceed the set value will be tinted. (increments of 100)
	Reference Lum. Rise Level - Peak		0 to 1000 (**400**)	Sets the reference value for peak luminance rise level. (increments of 10 cd/m^2)
		Ave.	0 to 1000 (**200**)	Sets the reference value for average luminance rise level. (increments of 10 cd/m^2)
HDR/SDR Ratio Graph Settings			Sets the [HDR/SDR Ratio Graph] display method. The ratios for SDR and HDR use the [False Color] ❯ [HDR/SDR Border] settings as well as the settings for each range.	
	Type		HDR/SDR **HDR**	[HDR/SDR]: Displays the ratio between the HDR and SDR areas. [HDR]: Displays the ratio of luminance in the HDR area.
	Scale		**Automatic**, 100%, 75%, 50%, 25%, 10%, 5%	When [Type] ❯ [HDR] Sets [Scale] of the luminance value.
Size			**Large**, Small	Sets the size of the display. • Fixed to [Small] during [Single Input Dual View].
Reset				Resets the displayed content.
Export			The luminance information obtained when [Frame Luminance Monitor] is valid, is exported to the USB memory.	
Pixel Value Check[1]			When [Gamma/EOTF] ❯ [SMPTE ST 2084 (PQ)] or [Hybrid Log-Gamma] The luminance and RGB value of the specified pixel (cursor) position are measured and displayed. The pixel value check can be used when the resolution is [4096x2160], [3840x2160], [2048x1080] or [1920x1080]. • It may take time to refresh when using the OSD menu while [Pixel Value Check] is displayed.	
	Enable		On, **Off**	Switches the pixel value check On, Off.
	H Position		1 to 4096 (**960**)	Sets the pixel position (horizontal).
	V Position		1 to 2160 (**540**)	Sets the pixel position (vertical).

Sub Menu	Setting Options (Bold: factory default)	
Reset Position	Normal **Around Peak Luminance**	Sets operation when the RESET button is pressed. [Normal]: Resets the value to the default value. [Around Peak Luminance]: Moves closer to the area of peak luminance inside the display image.
Chromaticity Diagram	**On**, Off	Switches the chromaticity diagram On, Off. [On]: Displays the chromaticity diagram. The chromaticity diagram is displayed only when [Color Gamut] and [Gamma/EOTF] are set as shown below. ・[Color Gamut]: ITU-R BT.2020 ・[Gamma/EOTF]: 1.0, 2.2, 2.35, 2.4, 2.6, SMPTE ST 2084 (PQ), Hybrid Log-Gamma (except for Hybrid Log-Gamma RGB) • When the position to display [Wave Form Monitor] or [Vector Scope] is set to [Bottom Left], this item may not be displayed depending on the size setting for each item to be displayed.

Test Pattern	White (1023)
	White (940)
	Gray
	Black (64)
	Black (0)
	Ramp
	Color Bars
	Color Bars (PQ Full)
	Color Bars (PQ Limited)
	Color Bars (HLG)
	PLUGE
	PLUGE (PQ/HLG)
	Off
		Sets the test pattern built into the main unit.
		
		• If the power is turned off once and then back on, the test pattern will not be displayed.
		• The test pattern will be erased in the following cases:
		  - When a channel is changed using the CH button, F button assigned for Channel UP/Channel DOWN, or [Select Channel] under [Channel Settings]
		  - When changing [Input Configuration] or [Select Input Signal] under [Channel Settings]
		  - When [Reset All Settings] is executed

Signal Monitoring	Monitors the input signal status.
	
	• [Signal Monitoring] cannot be used in the following cases:
	  - When [Single Input Dual View] is displayed
	  - When an enlarged image is displayed
	  - During display of the test pattern
	  - During execution of [Playback File] under [Screen Capture]
	• When an error is displayed, [In Monitor Display] will not be shown.
	• The position the error is displayed can be adjusted with [In Monitor Display] ❯ [Position].	

Control	On, **Off**	Sets whether [Signal Monitoring] is used or not.
Error Hold	On (No time out) On (5 sec.) **Off**	Sets the length of time for displaying errors, when they are detected. [On (No time out)]: Errors continue to be displayed. To hide the displayed error, press the RESET button when closing the OSD menu. [On (5 sec.)]: The displayed error will disappear 5 seconds after the initial detection. [Off]: Only displays errors during the period when they are detected. The displayed error message will disappear once the error ends.
No Signal/Unsupported Signal	**On**, Off	Displays an error when there is [No Signal] or [Unsupported Signal].

Sub Menu		Setting Options (Bold: factory default)
2SI Link Order	**On**, Off	Displays an error when the cables inserted into the input terminals are in the wrong order when using signals input via [2 Sample Interleave].
`V3120` `V2421` `V2411` `V1711` SDI CRC Error	On, **Off**	Displays an error when an incorrect SDI signal is detected (CRC error).
`V3120` `V2421` `V2411` `V1711` 8K 2SI Format	On, **Off**	Monitors the input signal status for the four terminals using the SDI signal when [Channel Settings] ❯ [Select Input Signal] is set to [Automatic].
`V3120` `V2421` `V2411` `V1711` 8K 2SI Switching	On, **Off**	When there is no [8K 2SI Format] error, displays while switching video between each terminal (12G-SDI signal only). • Does not operate in the following cases: - When [Frame Hold] is [On]
Export		Exports the error history to USB memory. The file name is "signal_error_xxx.txt (xxx is a number)".
Error Log		Displays error history.
Screen Capture	Captures the screen.	
Capture		Captures the screen. The data is saved under the name "YYYYMMDD_hhmmss.bmp" or "YYYYMMDD_hhmmss.jpg" in the root folder of the USB memory.
Frame Hold	On, **Off**	Pauses the video.
Capture Source	**All** Video	Selects the sources to capture. [All]: Everything is captured including video assistance functions such as markers and wave form monitor as well as OSD menu. [Video]: Only video signals are captured.
File Type	Bitmap **JPEG**	Sets the File Type of the image to capture.
Create HDR/SDR Compare File	On, **Off**	Creates a file that lets you compare the brightness of HDR and SDR images on a computer. When saving, [_pc] is appended to the file name.
Playback File	Select File Execute	Plays back captured images. [Select File]: Selects a file. [Execute]: Plays back the image. • When playing back captured images on other video display or PC, color may not be played back precisely. • Files created using [Create HDR/SDR Compare File] will not be displayed in the [Select File] screen.
Finish Playback File		Finishes playback.

Sub Menu	Setting Options (Bold: factory default)	
Camera Link ❯	Sets the functions to link with Cinema EOS cameras and ARRI / Panasonic cinema cameras.	
Automatic Adjustment (CINEMA EOS)	When [Picture Mode] ❯ [CINEMA EOS SYSTEM], [Input Configuration] ❯ [12-3G/HD-SDI] (**V2420** **V2410** [3G/HD-SDI], **V1710** [6G/3G/HD-SDI]) or [3G-SDI RAW] Sets whether or not to link to the camera's image quality setting.	
	On, Off	Refer to the Setting Values Correspondence Table when [Color Gamut/Gamma/EOTF], [Color Temperature], and [Color Range] are all set to [On]. (📖77)
Color Gamut/Gamma/EOTF	**On**, Off	The image quality of the display corresponds to the camera's settings.
Color Temperature	**On**, Off	
Display Color Gamut	ITU-R BT.709 **ITU-R BT.2020** DCI-P3	Sets the color gamut shown on the display when the camera's [Color Space] is set to [Cinema Gamut] or [DCI-P3+].
Automatic Adjustment (ARRI)	When [Picture Mode] ❯ [User 6] to [User 7], [Input Configuration] ❯ [12-3G/HD-SDI] (**V2420** **V2410** [3G/HD-SDI], **V1710** [6G/3G/HD-SDI]) Sets whether or not to link to the camera's image quality setting.	
	On, Off	Refer to the Setting Values Correspondence Table. (📖78)
User LUT	**Rec2100-PQ-1K-100** Rec2100-HLG-1K-200 3D-LUT 1-8	When [Automatic Adjustment (ARRI)] ❯ [On] Sets the color gamut and gamma/EOTF shown in the display.
Automatic Adjustment (VARICAM)	When [Picture Mode] ❯ [User 6] to [User 7], [Input Configuration] ❯ [12-3G/HD-SDI] (**V2420** **V2410** [3G/HD-SDI], **V1710** [6G/3G/HD-SDI]) Sets whether or not to link to the camera's image quality setting.	
	On, Off	Refer to the Setting Values Correspondence Table. (📖78)
User LUT	**V-Log to V-709** 3D-LUT 1-8	When [Automatic Adjustment (VARICAM)] ❯ [On] Sets the color gamut and gamma/EOTF shown in the display.
Anamorphic	**On**, Off	When a Canon camera is connected, displays in accordance with the settings when anamorphic lens display settings are included in the camera metadata.
Area Marker1	ARRI Frame line 1A ARRI Frame line 1B **Off**	When an ARRI cinema camera is connected to this device, the [H Position], [V Position], [Width], and [Height] for the [Area Marker1] change depending on the metadata. • This cannot be displayed when [Marker Preset] is [Off].
V1710 **V1711** Tally	**On**, Off	The display's tally lamp will illuminate in red when the camera starts recording. The tally lamp will go out when the camera stops recording.

Sub Menu	Setting Options (Bold: factory default)	
V2420 V2421 V2411 V2410 V1710 V1711 Fan	**On**, Off	Allows you to link stopping the fan to the camera's recording operation (For Cinema EOS cameras, Canon professional-use video cameras, or ARRI cinema cameras that are compatible with this video display). Set [System Settings] ❯ [Fan Control] to [On] to enable the fan to be stopped and then set [Fan] to [On] to stop the fan whenever the camera starts recording. At room temperature (25 °C), the fan remains off for approximately one minute*. The fan operates at a faster speed than usual before and after the fan is stopped to lower the internal temperature. * V2411 Max of about 6 minutes when using DC power V2410 V1710 V1711 Max of about 10 minutes when using DC power • If the temperature inside the main unit increases while the fan is off, the message [Fan will be rotated as the temperature is high.] is displayed and the fan starts rotating approximately ten seconds later. Since the temperature of the main unit has increased, the fan rotates faster than usual. • The video display's fan may start rotating before the camera recording starts due to the temperature increase inside the main unit. • If the message [Invalid operation due to high temperature.] is displayed, the fan cannot be stopped even when [On] is selected for this item. Wait until the internal temperature lowers. However, the fan may not stop in some conditions, for example when used at a high temperature.
Camera Information	**Automatic** On Off	Sets conditions to display camera information. [Automatic]: Camera information is displayed for 4 seconds when the information has changed. [On]: Camera information is always displayed. [Off]: Camera information is not displayed.

[1] The information display functions that can be displayed vary depending on the video display's settings or the input signal status.

● : Can view　—: Cannot view

	Time Code	Audio Level Meter	Wave Form Monitor	Vector Scope	Histo-gram	Frame Luminance Monitor	Pixel Value Check
When [Channel Settings] ❯ [Input Configuration] is set to [HD/SD-SDI]	●	●	—	—	—	—	—
While zooming: When [Zoom] ❯ [Type] is set to [Normal]	●	●	—	—	—	—	—
When [Frame Hold] is [On] (For progressive signals)	—	—	●	●	●	●	●
When [Frame Hold] is [On] (For interlaced or PsF signals)	—	—	—	—	●	●	●
When [Peaking] ❯ [Enable] is set to [Peaking 1] or [Peaking 2]	●	●	—	—	●	●	●
During execution of [Playback File] under [Screen Capture]	—	—	—	—	—	—	—
When the display position and [Audio Level Meter] to be displayed is the same	—		●	●	●	●	●
When [Test Pattern] is displayed	—	—	—	—	—	—	—
When [Multi View (Quad)] is displayed	●	●	—	—	—	—	—
When [Multi View (Dual)] is displayed	●	●	●	●	—	—	—
When [Single Input Dual View] is displayed	●	●	●	●	●	●	—
When [Channel Settings] ❯ [Picture Mode] ❯ [Type] is set to [L/R]: When [Multi View (Dual)] or [Single Input Dual View] is displayed	●	●	●	●	—	—	—
When [Channel Settings] ❯ [Picture Mode] ❯ [Type] is set to [L/R], and when a single screen is being used	●	●	—	—	—	—	—
When [Picture Function Settings] ❯ [Compare View] ❯ [Enable] is set to [On]: When [Single Input Dual View] is set to [Off] and also the resolution is 4096x2160 or 3840x2160	●	●	—	—	—	—	—
When [Wave Form Monitor] is displayed: When [Wave Form Monitor] ❯ [Select Signal] is [R], [G], [B]	●	●	●	—	●	●	●
When [Wave Form Monitor] ❯ [Size] ❯ [Large] is selected while [Wave Form Monitor] is displayed:							
When the [Position] setting for [Wave Form Monitor] and [Vector Scope] are the same	●	●	●	—	●	●	●
During [Multi View (Dual)] display	●	●	●	—	—	—	—
During [Single Input Dual View] display	●	●	●	—	●	●	—
When an I/PsF 4K signal is displayed on one screen and when the [Wave Form Monitor] and [Vector Scope] [Position] settings are the same	●	●	●	—	●	●	●
When there is no signal or the input signal is not supported	●	●	●	●	—	—	—
When displaying video at resolutions other than 4096x2160 / 3840x2160 / 2048x1080 / 1920x1080	●	●	●	●	—	—	—
When displaying video at resolution lower than 1280x720	●	●	—	—	—	—	—

■ Parameter of Cinema EOS cameras and Canon displays

Cinema EOS cameras	Canon display	
Color Space	Color Gamut	Color Temperature
BT.709	ITU-R BT.709	D65
BT.2020	ITU-R BT.2020	D65
DCI-P3	DCI-P3	DCI-P3
DCI-P3+	DCI-P3+ to 709	D65
	DCI-P3+ to DCI	DCI-P3
Cinema Gamut	Cinema Gamut to 709	D65
	Cinema Gamut to 2020	D65
	Cinema Gamut to DCI	DCI-P3
RAW Gamut	Cinema Gamut to 709	D65
	Cinema Gamut to 2020	D65
	Cinema Gamut to DCI	DCI-P3

Cinema EOS cameras	Canon display	
Gamma/EOTF	Gamma/EOTF	HDR Range
Canon Log	Canon Log (HDR)	—
Canon Log 2	Canon Log 2 (HDR)	
RAW Gamma		
Canon Log 3	Canon Log 3 (HDR)	
ST 2084, PQ	SMPTE ST 2084 (PQ)	1000
		V3120 2000
Normal (BT.709)	2.2	—
Wide DR		
EOS Std.		
DCI-P3	2.6	

■ Parameter of ARRI Cinema camera and Canon displays

ARRI Cinema camera	Canon display				
Color Space	Display Color Gamut	CDL/User LUT	Color Gamut	Gamma/EOTF	HDR Range
REC 709	—	—	ITU-R BT.709	2.2	—
REC 2020	—	—	ITU-R BT.2020	2.2	—
Wide Gamut Log C	Rec2100-PQ-1K-100	ARRI (Rec2100-PQ-1K-100)	ITU-R BT.2020	SMPTE ST 2084 (PQ)	1000
	Rec2100-HLG-1K-200	ARRI (Rec2100-HLG-1K-200)	ITU-R BT.2020	Hybrid Log-Gamma	—
	3D-LUT 1-8	User LUT 1-8	—	—	—

■ Parameter of Panasonic Cinema camera and Canon displays

Panasonic Cinema camera	Canon display				
Color Space	Display Color Gamut	CDL/User LUT	Color Gamut	Gamma/EOTF	HDR Range
V-709	—	—	ITU-R BT.709	2.2	—
V-Log	V-Log to V-709	VARICAM (V-Log to V-709)	ITU-R BT.709	2.2	—
	3D-LUT 1-8	User LUT 1-8	—	—	—

Picture Function Settings

This menu is used to set video assistance functions, for example.

Sub Menu	Setting Options (Bold: factory default)	
Peaking[1]	The outline is displayed in a color, used to check the focus. Customizes peakings which are assigned to Peaking 1 or Peaking 2.	
Enable	Peaking 1 Peaking 2 **Off**	Switches the peaking display mode and also sets peaking to Off.
Monochrome	When [Peaking 1] **On**, Off When [Peaking 2] On, **Off**	Displays video in monochrome.
Frequency	When [Peaking 1] Low, **Middle**, High When [Peaking 2] Low, Middle, **High**	Sets the central frequency of contour enhancement signals.
Range	-3 ~ 3 (**0**)	Sets the width of the range to be colored.
Color	White, **Red**, Green, Blue, Yellow, Cyan, Magenta	Sets the color to be used.
False Color[1]	Displays different colors for the video's brightness levels to make it easier to check the exposure and brightness distribution. Customizes the false color and sets it to false color 1 or false color 2.	
Enable	False Color 1 False Color 2 **Off**	Switches between False Color display mode and non-display.
Type	**Automatic** IRE SMPTE ST 2084 (PQ) Hybrid Log-Gamma	Sets the tint color display method. [Automatic]: Sets in accordance with the [Gamma/EOTF] settings. • When [IRE] is selected, [Range - SDR] and [Range - HDR] settings become invalid.
HDR/SDR Border	100, **200**	Sets the boundary value for the SDR/HDR areas.

Range - SDR	When [False Color 1]
	On, **Off**
	When [False Color 2]
	On, Off
		Sets whether to tint the SDR area.
		
		When [On], sets the size of the area to be tinted. (10 to 100: increments of 5, 100 to 200: increments of 10)
		    Monochrome/Brown: 10 to 190 (90*) (**40**)
		    Brown/Monochrome: 20 to 200 (100*) (**85**)
		     * When [HDR/SDR Border] is [100]

Sub Menu	Setting Options (Bold: factory default)	

Range - HDR	When [False Color 1]
	Automatic
	Automatic (Over Range)
	Manual
	When [False Color 2]
	Automatic
	Automatic (Over Range)
	Manual
		Sets the tint color range.
		
		[Automatic]: Sets the upper limit automatically in accordance with the [Gamma/EOTF] settings.
		
		When [Manual] or [Automatic (Over Range)] is selected, sets the size of the area to be colored.
		Setting when [SMPTE ST 2084 (PQ)] (100 to 1000: 10 increments, 1000 to 4000: 100 increments, 4000 to 10000: 1000 increments)
		   Blue/light blue: 250 (150*) to 400
		   Light blue/green: 400 to 1000
		   Green/yellow: 600 to 4000
		   Yellow/orange: 800 to 8000
		   Orange/red: 1000 to 10000 (Only when using [Manual])
		Setting when [Hybrid Log-Gamma] (10 increments)
		   Blue/light blue: 250 (150*) to 300
		   Light blue/green: 300 (200*) to 500
		   Green/yellow: 400 (300*) to 700
		   Yellow/orange: 500 (400*) to 900
		   Orange/red: 600 (500*) to 1000 (Only when using [Manual])
		* When [HDR/SDR Border] is [100]

Range Check[1]	Displays video in monochrome, with the areas where the set range is exceeded are shown tinted. Customizes Range Check and sets it to Range Check 1, 2.	
Enable	Range Check 1 Range Check 2 **Off**	Switches the Range Check display mode On, Off.
Over Range	**Automatic**, Manual	Displays video in monochrome, with the areas where the set range is exceeded are shown tinted. [Automatic]: When [Gamma/EOTF] ❯ [SMPTE ST 2084 (PQ)] or [Hybrid Log-Gamma], only the areas that exceed the [HDR Range] setting are tinted. [Manual]: Only areas that exceed the range set at [SMPTE ST 2084 (PQ)] or [Hybrid Log-Gamma] are tinted.
SMPTE ST 2084 (PQ)	100 to 10000 (**1000**)	When [Over Range] ❯ [Manual] Sets the tint color range. (100 to 1000: 10 increments, 1000 to 4000: 100 increments, 4000 to 10000: 1000 increments)
Hybrid Log-Gamma	100 to 1000 (**1000**)	When [Over Range] ❯ [Manual] Sets the tint color range. (10 increments)
Other	512 to 1023 (**940**)	When [Over Range] ❯ [Manual] Sets the tint color range. (1 increments)

Sub Menu	Setting Options (Bold: factory default)	
Peak Range	When [Range Check 1] Automatic, **Off** When [Range Check 2] **Automatic**, Off	When [Over Range] ❯ [Automatic] Displays video in monochrome and the specified high-luminance areas are shown as tinted. [Automatic]: When [Gamma/EOTF] ❯ [SMPTE ST 2084 (PQ)] or [Hybrid Log-Gamma], the high-luminance range part is colored. • When a function is executed while [Automatic] is selected, the screen enters [Single Input Dual View] mode.
Range	-5 to 5 (**0**)	When [Peak Range] ❯ [Automatic] Sets the area of the high-luminance range part to be colored. (Increments of 1)
2020 Outside of Gamut View[1]	When [Picture Mode] or [Color Gamut] ❯ [ITU-R BT.2020] Displays video in monochrome, with the areas where the color gamut exceeds the selected color gamut shown in red.	
Enable	On, **Off**	Switches between On and Off for [2020 Outside of Gamut View].
Color Gamut	**ITU-R BT.709** Native	Sets the [Color Gamut] to be set as out of color gamut.

Range	0 to 512 (**0**)	Sets the range when tinting dark areas. (1 increments)
		  0: Tints all dark areas.
		  512: Dark areas at the set values or less are not tinted.

Monochrome[2]	On, **Off**	Video is displayed in monochrome.
Blue Only[2]	On, **Off**	Cuts red and green signals, and displays only blue signals in monochrome. • [Blue Only] cannot be set when [CDL/User LUT] is a setting other than [CDL 1-8] or [Off].
Red Off[2]	On, **Off**	Video is displayed with red signals cut.
Green Off[2]	On, **Off**	Video is displayed with green signals cut.
Blue Off[2]	On, **Off**	Video is displayed with blue signals cut.
V2410 Backlight Scan	High, Low, **Off**	[Backlight Scan] partially turns off the backlight area and reduces the image hold period when displaying images.
Compare View[1]	Images having different image quality settings are displayed on the left and right screens for comparison. (When [Picture Mode] for left and right screens is the same) • When a signal with a resolution of 2K or smaller is displayed on a single screen, changes to [Single Input Dual View]. • **V2410** When [HDR/SDR] is selected for [Type] and [Enable] is set to [On], [Boost Contrast] becomes [On].	
Enable	On, **Off**	Sets Comparison mode On or Off.
Type	**Automatic** HDR/SDR CDL/User LUT	Sets the type of the image to compare. [Automatic]: [HDR/SDR] when [Adjustment] ❯ [CDL/User LUT] is [Off], otherwise set at [CDL/User LUT]. [HDR/SDR]: HDR and SDR images are displayed. [CDL/User LUT]: The image on which [CDL] or [User LUT] is applied is displayed only in the left screen. [Luminance]: Displays an image with a different luminance.
V3120	**Automatic** HDR/SDR CDL/User LUT Luminance	

Sub Menu		Setting Options (Bold: factory default)	

HDR/SDR Convert Method	**2020 HDR to 709 SDR**
	2020 HDR to 2020 SDR
	User LUT 1-8
	Off
		When [Type] is set to [HDR/SDR] or [Automatic ([HDR/SDR])]
		Sets the display method of the screen set to SDR.
		
		[2020 HDR to 709 SDR], [2020 HDR to 2020 SDR]: Setting differs
		    according to the [Gamma/EOTF] settings.
		    [SMPTE ST 2084 (PQ)]: The [User LUT] corresponding to each setting
		      is applied.
		    [Hybrid Log-Gamma]: The [User LUT] corresponding to each setting is
		      applied.
		    [Canon Log(HDR)], [Canon Log 2(HDR)], [Canon Log 3(HDR)]:
		      [Canon Log], [Canon Log 2] or [Canon Log 3] is applied.
		    [S-Log2 (HDR)], [S-Log3 (HDR)]: [HDR Range] setting [100] is set.
		[User LUT 1-8]: The specified [User LUT] is applied. After applying [User
		    LUT] the adjustment inside the display fixes [Color Gamut] at [ITU-R
		    BT.709] and [Gamma/EOTF] at [2.4].
		[Off]: Only brightness is lowered.	

Contrast (SDR)	500 to 2000 (**1000**)	When [Type] is set to [HDR/SDR] or [Automatic ([HDR/SDR])] Adjusts the SDR contrast.	
Color Temperature (SDR)	**Normal**, D93, D65, D65 Custom, DCI-P3	When [Type] is set to [HDR/SDR] or [Automatic ([HDR/SDR])] Sets the SDR color temperature.	
Gain (SDR)	-15 to 15 (**0**)	When [Type] is set to [HDR/SDR] or [Automatic ([HDR/SDR])] Sets the SDR gain.	
User LUT Target 1	User LUT 1 to User LUT 8, **Off**	When [Type] is set to [CDL/User LUT] or [Automatic ([User LUT])] Sets the comparison target.	
`V3120` `V2421` `V2411` `V1710` `V1711` User LUT Target 2 (Quad) User LUT Target 3 (Quad)	User LUT 1 to User LUT 8, **Off**	When [Type] is set to [CDL/User LUT] or [Automatic ([User LUT])] Sets the comparison target. [User LUT 1-8]: Applies the User LUT separately for each quarter screen and displays comparisons when displaying [Multi View (Quad)].	

Sub Menu		Setting Options (Bold: factory default)	
V3120 Luminance Contrast	1000 to the current setting (**1000**)	Changes the HDR range or system gamma setting and displays HDR images with different luminance for comparison.	
HDR Range (PQ)	100 to 10000 (**1000**)	When [SMPTE ST 2084 (PQ)]: The set contrast and HDR range are applied.	
System Gamma (HLG)	1.000 to 1.500	When [Hybrid Log-Gamma]: The set contrast and system gamma are applied. Other than the above: The set contrast is applied. • [Contrast] is set to "1000" when it is 1000 or below. • When [Contrast] is changed, [HDR Range (PQ)] is changed to the same value as the contrast and [System Gamma (HLG)] is changed to the value set in [Automatic]. (Contrast: in 1000 increments, HDR Range (PQ): 100 to 4000: in 100 increments / 4000 to 10000: in 1000 increments, System Gamma (HLG): in 0.005 increments)	

[1] • [Peaking], [False Color], [Range Check], [2020 Outside of Gamut View], [Compare View]: Operation in accordance with the configuration of the video display

● : Can be displayed/set.   —: Cannot be displayed/set.

	Peaking	False Color	Range Check	2020 Outside of Gamut View	Compare View
When [Channel Settings] ❯ [Input Configuration] ❯ [HD/SD-SDI]	●	●	●	●	—
When [Monochrome], [Blue Only], [Red Off], [Green Off], or [Blue Off] ❯ [On]	—	—	—	—	—
When [Channel Settings] ❯ [Picture Mode] ❯ [Type] ❯ [L/R]	●	●	●	●	—
During execution of [Playback File] under [Screen Capture]	—	—	●	●	●

• [Peaking], [False Color], [Range Check], [2020 Outside of Gamut View], and [Compare View] cannot be displayed simultaneously.

[2] • When the power is turned off and on, becomes [Off].

• Cannot be set when [Peaking], [False Color], [Range Check], [2020 Outside of Gamut View], or [Compare View] ❯ [Enable] ❯ [On] (other than [Off]).

Network/IMD Settings

Sub Menu			Setting Options (Bold: factory default)	
LAN			Configures video display's network settings. • Cannot be set when [Power on Setting] is [User 1] to [User 3].	
	Configure an IP Address		**Automatic** Manual	[Automatic]: Configures an IP address automatically with DHCP/Auto IP. [Manual]: Configure an IP address and subnet mask manually.
	Display		192.168.0.1	
	Subnet Mask		255.255.255.0	
Wi-Fi			This is used to connect the video display to a network using Wi-Fi and control it from an external control device. (📖21)	
	Control		Infrastructure Access Point **Off**	Sets the Wi-Fi connection method. [Infrastructure]: This method connects to Wi-Fi via an access point. [Access Point]: This device acts as an access point, and this method connects the device directly to the Wi-Fi device.
	Infrastructure			Sets the access point to connect to. At factory settings, the access point to connect to is not configured.
		Password		You may specify a password if needed by using up to 24 alpha-numerical characters and symbols. The default password is blank.
	Access Point			Configures the access point.
		SSID		Enter the SSID. This can be set using up to 24 alpha-numerical characters and symbols.
		Frequency	2.4 GHz, **5.0 GHz**	Sets the communication mode.
		Channel	When [2.4 GHz] **1** to 13 (increments of 1) When [5.0 GHz] 36, 40, **44**, 48	Sets the channel to use for communication.
		Password		Enter the password. This is set using between 8 and 24 alpha-numerical characters and symbols. Remember to change the default password. The default password is the serial number. The serial number is the individual 12-digit number assigned to your product, and can be checked on the [System Information] screen.
Web			Settings for operating this device remotely using a Web browser. (📖23)	
	Control		On, **Off**	Set whether or not to receive control signals from an external device, connected using network connection or Wi-Fi connection, in order to operate the video display remotely from the device's web browser.
	User ID			Enter the user ID. This is set using up to 16 alpha-numerical characters and symbols. The default user ID is [user].
	Password			Enter the password. This is set using between 8 and 16 alpha-numerical characters and symbols. The default password is the serial number. The serial number is the individual 12-digit number assigned to your product, and can be checked on the [System Information] screen.

Sub Menu		Setting Options (Bold: factory default)
Display Setting Link	Adjustment Channel Adjustment/Channel **Off**	Settings are linked between displays connected via LAN. This device's setting values are applied to all linked displays. * Before linking settings, check that the following conditions are met. ① Turn on the power to this display and the display(s) to link with, and check that they are all recognized on the network ② Change the adjustment or channel and check that the other display(s) also change The devices and firmware versions that can be linked are shown below. DP-V3120: Version 1.0 or higher DP-V2410: Version 1.4 or higher DP-V2420 / DP-V2421: Version 1.3 or higher DP-V1710 / DP-V1711: Version 1.3 or higher DP-V2411: Version 1.2 or higher Displays not connected can be removed with the RESET button. • Operating the GPI* or the buttons on this display will reflect setting value changes in all. Linked operations using Payload ID, HDMI, Camera, etc. will not reflect the settings changes. (* V3120 V2411 V1710 V1711) • If a display model has functions with different menu settings or setting ranges, some settings will not be correctly exported (settings will not be changed, will revert to factory defaults, etc.) • In an environment where communication cannot be done properly, such as when the network environment is unstable or the bandwidth is insufficient, settings may not link properly. Only connect displays to be controlled to the LAN. If a Display Controller is connected, it may not operate properly (V2411 V1710 V1711). • Up to 32 displays can have their settings linked. • [Bypass] (CDL/User LUT) under [Adjustment] ❯ [CDL/User LUT] is not linked.
In Monitor Display		The video display supports Television Systems Ltd.'s "TSL UMD Protocol Ver. 5.0". You can operate the video display using an external device connected to the LAN terminal and display characters and tally lights on the screen. You can input any characters you like directly from this video display. (📖20)
Control	**TSL Ver. 5.00** Manual Off	Sets whether or not to receive the control signal from the connected device. [Manual]: Select to input the characters on this video display. Does not receive a control signal from the connected device.
Position	Top **Bottom**	This sets whether the characters and tally lights will be displayed at the top or the bottom.
Manual Display Type	**Automatic** Single Dual A,B, Dual C,D Quad A,B,C,D	[Automatic]: Changes display in accordance with the Input Configuration. [Single]: Single-screen display. [Dual A,B], [Dual C,D]: Dual-screen display. [Quad A,B,C,D]: Quadruple-screen display. • When [Function Settings] ❯ [Signal Monitoring] ❯ [Control] is set to [On] then [Manual Display Type] is fixed to [Automatic].
Manual String	(Single) (Dual/Quad A) (Dual/Quad B) (Dual/Quad C) (Dual/Quad D) (Single Dual L) (Single Dual R)	When [Control] ❯ [Manual] Sets the characters to display for the selected [Manual String]. You can input up to 16 alphanumeric characters.

System Settings

This menu is used to configure system settings related to the video display.

Sub Menu		Setting Options (Bold: factory default)	
Function/Channel Button		Sets the function or channel to assign to the F buttons or CH button.	
	Display Function	Sets the function to assign to the F buttons of the main unit (📖 15). Select an F button and assign a function from the following list (📖 92).	
	Display Function (CDL)		
	Display Channel	Sets the channel to assign to the CH button on the display.	
	CH1	CH1 to CH20* (**CH1**)	Select a CH button and register a channel number. A list of settings under the menu [Channel Settings] (📖 48) is displayed.
	CH2	CH1 to CH20* (**CH2**)	
	CH3	CH1 to CH20* (**CH3**)	* `V2420` `V2421` `V2410` : CH1 to CH30

`V3120` `V2411` `V1710` `V1711` Remote(GPI)		You can operate the video display using an external controller such as a switcher that has been connected to the REMOTE terminal. Operates by connecting (shorting) the GND (No. 8 Pin) to No.s 1 to 7.
		
		 • This function will not work correctly in the following cases.
		  - If the same function is assigned to multiple pins.
		  - If the changes to the [Remote(GPI)] setting and the pin assignments were made when the pins were shorted.	

	Type	**Level**, Short Edge	[Level]: Operates while shorted. [Short Edge]: Switches between "operate"/"do not operate" for each short.
	Pin1 ~ Pin7	Assigns functions in each GPI pin. (📖 19) Functions that can be registered: SMPTE-C, EBU, ITU-R BT.709, ITU-R BT.2020, Adobe RGB, DCI-P3, User 1 (2020 PQ), User 2 (2020 HLG), User 3 (DCI PQ), User 4 (DCI PQ D65), User 5 ~ User 7, CINEMA EOS SYSTEM, ACESproxy (ver. 1.0.1), CH1 to CH5, Marker 1 to Marker 3, Time Code, Audio Level Meter, Wave Form Monitor, Vector Scope, Histogram, Frame Luminance Monitor, False Color 1/2, Monochrome, Blue Only, Red Off, Green Off, Blue Off, Compare View, MENU, Tally Green, Tally Red, Power On, — (Not set) • About [Tally] A tally appears at the top of the screen. Combining [Tally Green] and [Tally Red] makes [Tally Amber]. • [Power On]: Can only be registered to [Pin7].	
Language		**English** 日本語 简体中文	Sets the language of the OSD menu and messages.
Date/Time			Sets the year/month/date/hour/minute.

Sub Menu	Setting Options (Bold: factory default)	
Display Name	Sets the name of the main unit. You can input up to 16 alphanumeric characters.	
OSD Settings		
Banner	Sets the banner display method for the channel name, signal information, and status of the video display.	
Automatic Display	**On**, Off	Automatically displays the banner when the input signal or picture mode are changed.
Picture Mode	**On**, Off	Sets whether to display [Picture Mode].
Time Out	**On**, Off	The banner automatically disappears.
Function Button Guide	**On**, Off	[On]: When all OSD are hidden, you can display the list of functions assigned to an F button on the video display by pressing the jog dial. [Off]: Function Button Guide is not displayed.
V3120 V2420 V2421 V2411 V2410 OSD Position	**Mode 1 (4096x2160)** Mode 2 (3840x2160)	[Mode 1 (4096x2160)]: OSD is displayed in a 4096x2160 area. [Mode 2 (3840x2160)]: OSD is displayed in a 3840x2160 area.
V3120 V2420 V2421 V2411 V2410 OSD Size	**Large** Small	The size of the OSD menu can be selected from [Large] and [Small].
V3120 V2420 V2421 V2411 V1710/V1711 OPTION OSD Brightness	**Automatic (High - Middle)** Automatic (High - Low) High Middle Low	Sets the brightness of the OSD. The brightness is automatically adjusted to suit the screen contrast when [Automatic] is selected. You can choose between [High - Low] and [High - Middle] adjustment ranges.
Protect Settings	Locks the settings so they cannot be changed. When you press the MENU button, [Signal/System Information] appears, but other operations are grayed out because they are locked.	
Password		Set a password to protect settings. Use a four-digit number (0000 to 9999). The initial password is blank.
Protect Target		You can remove Picture Mode and Select Channel from the items to be protected.
Picture Mode	**On**, Off	[On]: Protects the [Picture Mode] settings. [Off]: Removes the [Picture Mode] settings from protect target.
Select Channel	**On**, Off	[On]: Protects the [Select Channel] settings. [Off]: Removes the [Select Channel] settings from protect target.
Function Settings	**On**, Off	[On]: Protects the [Function Settings] settings. [Off]: Removes the [Function Settings] settings from protect target.
Protect		Select [OK] to protect. When a password has been set, enter the password and select [OK]. ❖ Unlocking Protect Settings Move the selection frame to [Protect] and press the Jog dial for approximately 3 seconds. When a password has been set, enter the password and select [OK].

Sub Menu		Setting Options (Bold: factory default)	
Power Indicator/Button LED Settings			
Power Indicator Brightness	Off 1 to 5 (**3**)	Adjusts the brightness of the power indicator on the main unit. The greater the number, the higher the brightness.	
Display Button LED	**On**, Off	Sets the F buttons and the lamp on the face.	
V2420 V2421	**On**, Off (Luminance Warning On), Off	[Off (Luminance Warning On)]: When [Peak Luminance Control] is set to [On], the F button assigned with this function will flash when display luminance is restricted, while the other F buttons and the lamp on the face will go out.	
Button Name Lighting Time (sec.)	Always, **60**, 30, 10, 5	Sets the time (sec) until the lamp on the face goes out, if no operation is performed. [Always]: The lamp on the face is always lit.	
Power Save	**On**, Off	Automatically turns off video display's power supply when there is no video signal input. [On]: The message [No Signal, Turn off power by Power Save function.] is displayed when there is no signal input for approximately 30 minutes. Approximately 5 minutes later, the message will read [No Signal, Turn off power.] and the power will be turned off.	
V2420 V2421 V2411 V2410 V1710 V1711 Fan Settings		Sets the operation of internal fan.	
Fan Control	On, **Off**	Fan noise can be eliminated when the main unit is used during shooting or when silent operation is needed. Set this in advance to stop the fan either manually or by linking it with the camera during shooting (📖75). When this is set to [On], the mode changes so that the fan can be stopped. The fan sometimes rotates faster than usual before stopping.	
Fan Stop	On, **Off**	If [Fan Stop] is set to [On] and when [Fan Control] is set to [On], the fan can be stopped. At room temperature (25 °C), the fan remains off for approximately one minute*. The fan operates at a faster speed than usual before and after the fan is stopped to lower the internal temperature. * V2411 Max of about 6 minutes when using DC power V2410 V1710 V1711 Max of about 10 minutes when using DC power • If the temperature inside the main unit increases while the fan is off, the message [Fan will be rotated as the temperature is high.] is displayed and the fan starts rotating approximately ten seconds later. Since the temperature of the main unit has increased, the fan rotates faster than usual. • Select [Off] to restart the fan. The fan rotates faster than usual. • If the message [Invalid operation due to high temperature.] is displayed, the fan cannot be stopped even when [On] is selected for this item. Wait until the internal temperature lowers. However, the fan may not stop in some conditions, for example when used at a high temperature.	

Sub Menu	Setting Options (Bold: factory default)
Compatible Settings	Sets compatibility with HDMI devices and operation of functions that differ according to the version of the video display's firmware.
V3120 **V2420** **V2421** **V2411** **V1710** **V1711** HDMI	**Normal** Compatible 1 Compatible 2 [Normal]: All formats are supported. [Compatible 1]: Set this option when video is not played correctly in [Normal]. HDR signals of a luminance higher than that of the display main unit are not supported. [Compatible 2]: Set this option when video is not played correctly in [Normal] or [Compatible 1]. [4K50.00P/60.00P] and HDR signals are not supported.
V2410 HDMI	**Normal** Compatible 1 Compatible 2 Compatible 3 Sets the connection compatibility with HDMI equipment. [Normal]: All formats are supported. [Compatible 1]: Set this option when video is not played correctly in [Normal]. HDR signals of a luminance higher than that of the display main unit are not supported. [Compatible 2]: Set this option when video is not played correctly in [Normal] or [Compatible 1]. HDR signals are not supported. [Compatible 3]: Set this option when video is not played correctly in other settings. [4K50.00P/60.00P] and HDR signals are not supported.
V2420 **V2421** Color Range	**Normal** Compatible [Normal]: Sets the [Color Range] setting to the new method used in DP-V2420 / DP-V2421 firmware version 1.2 or later. [Compatible]: Sets the [Color Range] setting to the conventional method used in DP-V2420 / DP-V2421 firmware version 1.1 or earlier.
V2410 Color Range	**Normal** Compatible [Normal]: Sets the [Color Range] setting to the new method used in DP-V2410 firmware version 1.3 or later. [Compatible]: Sets the [Color Range] setting to the conventional method used in DP-V2410 firmware version 1.2 or earlier.
V1710 **V1711** Color Range	**Normal** Compatible [Normal]: Sets the [Color Range] setting to the new method used in DP-V1710 / DP-V1711 firmware version 1.2 or later. [Compatible]: Sets the [Color Range] setting to the conventional method used in DP-V1710 / DP-V1711 firmware version 1.1 or earlier.
V3120 **V2420** **V2421** **V2411** **V1710** **V1711** Backlight Control	**Normal** Compatible [Normal]: HDR image visibility is improved compared to using firmware Version 1.1 for DP-V2420 / DP-V2421. [Compatible]: Displays an equivalent display to using firmware Version 1.1 for DP-V2420 / DP-V2421.
V3120 **V2420** **V2421** **V2411** **V1710** **V1711** Reduce Backlight Flash	**On**, Off When [Adjustment] ❯ [Backlight Control] is set to an option other than [Off], the screen may exhibit a flash in cases such as switching between scenes with a large difference in luminance. You can use [Reduce Backlight Flash] to reduce this phenomenon.
V3120 **V2421** **V2411** **V1710** **V1711** User LUT	**Normal** Compatible [Normal]: Information display for videos such as waveform monitors depends on the status following application of User LUT. [Compatible]: Information display for videos such as waveform monitors depends on the status before application of User LUT. • When [Picture Function Settings] ❯ [Compare View] ❯ [Enable] is set to [On], fixes as [Normal].

Sub Menu		Setting Options (Bold: factory default)	
Firmware/License Update		This function is used to update the video display firmware. Refer to the Canon website for detailed information.	
Export/Import[1]		Sets the export/import main menu settings.	
Export			
	Target	**USB** User 1 to User 3 LAN	Select the export destination. [USB]: Export to a USB memory. [User 1] to [User 3]: Export to the built-in memory of the main unit. [LAN]: Exports to a display connected with a LAN.
	Filename		When [Target] ❯ [USB] or [User 1-3] Factory default is "dinfo_dpv****.dat" (****: number of the product name). You can change the name of the file to be exported to the USB memory within 16 one-byte characters including alphabetical characters, numbers, and symbols.
	Display		When [Target] ❯ [LAN] Select the display with the settings to export from the displays connected via LAN. • Be sure to also read [Display Setting Link] (📖 85).
	Execute		Performs export.
Import			
	Target	**USB** User 1 to User 3	Specify the save destination for the file to be imported.
	Filename		Displays files with the extension ".dat" so you can select from among them.
	Settings	All Adjustment Channel Settings Display Settings Audio Settings Marker Settings Function/Network/ System Settings	Select the settings to import.
	Execute		Performs import.
Power on Setting		**Last memory** User 1 to User 3	You can select the state of the display when the power is turned on. [Last memory]: Launches with the same settings as when the power was turned off the previous time. [User 1] to [User 3]: It starts up with the settings saved in [User 1] to [User 3] under [Export].
Reset All Settings		OK **Cancel**	Returns all settings to factory default. When selected, the message [Reset all settings to factory defaults?] appears. [OK]: Performs reset. [Cancel]: Returns to the previous screen without resetting.

[1] • The following settings cannot be exported or imported.

Adjustment	Target values of CDL/User LUT Bypass and Calibration (including calibration results)
Display Settings	Zoom Preset, Frame Hold
Function Settings	Test Pattern
Picture Function Settings	Peaking (Enable), False Color (Enable), Range Check (Enable), 2020 Outside of Gamut View (Enable), Monochrome, Blue Only, Red Off, Green Off, Blue Off, Compare View (Enable)
Network/IMD Settings	LAN, Wi-Fi, Display Setting Link (LAN and Wi-Fi: only export/import via network)
System Settings	Date/Time, Fan Stop, Export/Import, Power on Setting

• User LUT data cannot be exported or imported to [User 1] to [User 3] under [Target].
• Data exported from this product may not be imported to products of which firmware version is earlier than the version of this product. To import data, update the firmware to the latest version.

■ Function to allow registration for the display F buttons (&86)

Item	Options		Item	Options
Adjustment	Picture Mode		Channel Settings	Channel UP[1]
	Contrast			Channel DOWN[1]
	Brightness			Select Input Signal
	Chroma			Audio Input
	Chroma Up			Single Input Dual View
	Sharpness			CH1 to CH20
	Backlight Control		Display Settings	Screen Scaling
	Gamma/EOTF			Anamorphic
	HDR			Scaling Method
	HDR Range			Zoom Preset
V2420 V2421	Peak Luminance Control			Zoom 1
V2411 V2410 V1710 V1711	Boost Contrast			Zoom 2
	HDR/SDR View			Zoom 3
	Gain			Frame Hold
	Bias		V3120 V2420 V2421 V2411 V2410	Background Color
	xy		Audio Settings	SDI Group
Picture Mode	SMPTE-C			CH L
	EBU			CH R
	ITU-R BT.709			Volume
	ITU-R BT.2020			Audio Switch
	Adobe RGB		Marker Settings[2]	Marker Preset
	DCI-P3			Marker 1
	User 1 (2020 PQ)			Marker 2
	User 2 (2020 HLG)			Marker 3
	User 3 (DCI PQ)			Marker 4
	User 4 (DCI PQ D65)			Marker 5
	User 5 ~ User 7			Aspect Marker
	CINEMA EOS SYSTEM			Safety Zone Marker 1
	ACESproxy (ver. 1.0.1)			Safety Zone Marker 2
CDL/User LUT	CDL/User LUT			Area Marker 1
	CDL RGB			Center Marker
	CDL R			Grid Marker
	CDL G			
	CDL B			
	CDL SOP/SAT			
	CDL Slope			
	CDL Offset			
	CDL Power			
	CDL Saturation			
	CDL/User LUT Bypass			
	CDL Export/Import			

Item	Options
Function Settings	TC/ALM
	Time Code
	Audio Level Meter
	WFM/VEC
	Wave Form Monitor
	WFM Select Signal
	Vector Scope
	Histogram/Frame Luminance
	Histogram
	Frame Luminance Monitor
	Pixel Value Check
	Signal Monitoring Log
	Capture
	Camera Information
Picture Function Settings	Peaking
	Peaking 1
	Peaking 2
	False Color
	False Color 1
	False Color 2
	Range Check
	Range Check 1
	Range Check 2
	2020 Outside of Gamut View
	Monochrome
	Blue Only
	Red Off
	Green Off
	Blue Off
V2410	Backlight Scan
	Compare View
System Settings	Signal Information
	Hide OSD[3]
V2420 **V2421** **V2411** **V2410** **V1710** **V1711**	Fan Stop

[1] When changing channels with [Channel UP/DOWN], the channels with [Input Configuration] (📖48) set to [–] are skipped.

[2] When any marker settings are changed using an F button, those changes will be applied to [Enable] under the currently selected [Marker Preset].

[3] [Hide OSD] is a function to hide all OSD. When [On] is selected, OSD, [Separator] and [Background Color] are hidden but the menu can be used.

Signal Information

Shows the signal information. When [Select Input Signal] is [Quad Input], information for the entire signal and each input is displayed. Select a signal with the jog dial according to the guide at top right corner of the menu. When signal information has been obtained although it is not displayed on the screen, the content of the information is grayed out.

SDI Signal		HDMI Signal	
Item	Display Example	Item	Display Example
Channel	CH1	Channel	CH4
Input Configuration	12-3G/HD-SDI (3G-A)	Input Configuration	HDMI
Select Input Signal	Quad Input	Format	Automatic
Image Division	Automatic	Resolution	4096x2160
Format	Automatic	Picture Rate, I/P/PsF	60.00P
Resolution	4096x2160	Pixel Encoding, Color Depth	4:2:2 YCbCr 10-bit
Picture Rate, I/P/PsF*	24.00P	Matrix	ITU-R BT.709
SDI Payload ID	89 C3 46 01	Range	Full
Video Standard	3G-SDI	EOTF	SMPTE ST 2084 (PQ)
Sampling Structure, Bit Depth	4:4:4:4 GBRA 10-bit	Max Luminance (Peak/Avg.)	1000 / 500 cd/m^2
Picture Rate	24.00	Display Luminance (Max/Min)	1000 - 0.005 cd/m^2
Scanning Method	Progressive/Progressive (Transport/Picture)	White Point	x=0.313, y=0.329
		Primary Color Red	x=0.640, y=0.330
Link Number	Single/Link_1	Primary Color Green	x=0.300, y=0.600
Colorimetry	UHD	Primary Color Blue	x=0.150, y=0.060
Transfer Characteristics	SDR-TV		

* When content is grayed out, an asterisk [*] may be displayed indicating low [Picture Rate] accuracy such as [24.00P *].

System Information

Shows the video display status and network information.

Item	Display Example
Display	DP-V3120
Serial No.	000000000000
Firmware/License Ver.	1.1
Usage Time*	5 h
IP Address	192.168.0.1
Subnet Mask	255.255.255.0
MAC Address	FF:FF:FF:FF:FF:FF
Wi-Fi IP Address	192.168.0.1
Wi-Fi Subnet Mask	255.255.255.0

* The [Usage Time] is not always [0] when you purchase the display due to factory inspection.

Supported Signal Format

SDI

*: `V3120` `V2421` `V2411` `V1710` `V1711` Formats not supporting audio signals.

**: `V2420` `V2410` Formats supporting audio signals.

Transmission method	Signal format	Color format	Color depth	Standards
SD-SDI	720x487i 59.94/60.00 Hz*	4:2:2 YCbCr	10-bit	SMPTE-259M
	720x576i 50.00 Hz*			
HD-SDI	1280x720P 59.94/60.00 Hz**	4:2:2 YCbCr	10-bit	SMPTE 292-1 SMPTE 296
	1280x720P 50.00 Hz**			
	1280x720P 29.97/30.00 Hz			
	1280x720P 25.00 Hz**			
	1280x720P 23.98/24.00 Hz**			
	1920x1080i 59.94/60.00 Hz**			SMPTE 292-1 SMPTE 274M
	1920x1080i 50.00 Hz**			
	1920x1080P 29.97/30.00 Hz**			
	1920x1080PsF 29.97/30.00 Hz**			
	1920x1080P 25.00 Hz**			
	1920x1080PsF 25.00 Hz**			
	1920x1080P 23.98/24.00 Hz**			
	1920x1080PsF 23.98/24.00 Hz**			
	2048x1080i 59.94/60.00 Hz			
	2048x1080i 50.00 Hz			
	2048x1080P 29.97/30.00 Hz			SMPTE 292-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
	2048x1080PsF 29.97/30.00 Hz			
	2048x1080P 25.00 Hz			
	2048x1080PsF 25.00 Hz			
	2048x1080P 23.98/24.00 Hz			
	2048x1080PsF 23.98/24.00 Hz			
3G-SDI (Level A)	1280x720P 59.94/60.00 Hz**	4:4:4 RGB 4:4:4 YCbCr	10-bit	SMPTE 425-1 SMPTE 296
	1280x720P 50.00 Hz**	4:4:4 RGB 4:4:4 YCbCr	10-bit	
	1280x720P 29.97/30.00 Hz	4:4:4 RGB 4:4:4 YCbCr	10-bit	
	1280x720P 25.00 Hz**	4:4:4 RGB 4:4:4 YCbCr	10-bit	
	1280x720P 23.98/24.00 Hz**	4:4:4 RGB 4:4:4 YCbCr	10-bit	
	1920x1080P 59.94/60.00 Hz**	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 274M

Transmission method	Signal format	Color format	Color depth	Standards
3G-SDI (Level A)	1920x1080i 59.94/60.00 Hz	4:4:4 RGB** 4:4:4 YCbCr**	12-bit/10-bit	SMPTE 425-1 SMPTE 274M
		4:2:2 YCbCr	12-bit	
	1920x1080P 50.00 Hz**	4:2:2 YCbCr	10-bit	
	1920x1080i 50.00 Hz	4:4:4 RGB** 4:4:4 YCbCr**	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	1920x1080P 29.97/30.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	1920x1080PsF 29.97/30.00 Hz	4:4:4 RGB**	10-bit	
			12-bit	
		4:4:4 YCbCr**	12-bit	
		4:4:4 YCbCr**	10-bit	SMPTE 425-1 SMPTE 274M
		4:2:2 YCbCr	12-bit	
	1920x1080P 25.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	1920x1080PsF 25.00 Hz	4:4:4 RGB**	10-bit	
			12-bit	
		4:4:4 YCbCr**	12-bit	
		4:4:4 YCbCr**	10-bit	SMPTE 425-1 SMPTE 274M
		4:2:2 YCbCr	12-bit	
	1920x1080P 23.98/24.00 Hz	4:4:4 RGB** 4:4:4 YCbCr**	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	1920x1080PsF 23.98/24.00 Hz	4:4:4 RGB	10-bit	
			12-bit	
		4:4:4 YCbCr	12-bit	
		4:4:4 YCbCr	10-bit	SMPTE 425-1 SMPTE 274M
		4:2:2 YCbCr	12-bit	
	2048x1080P 59.94/60.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
	2048x1080i 59.94/60.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z'	12-bit	
		4:2:2 YCbCr		
	2048x1080P 50.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 2048-2

Transmission method	Signal format	Color format	Color depth	Standards
3G-SDI (Level A)	2048x1080i 50.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z'	12-bit	
		4:2:2 YCbCr		
	2048x1080P 47.95/48.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 2048-2
	2048x1080P 29.97/30.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	2048x1080PsF 29.97/30.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	2048x1080P 25.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	2048x1080PsF 25.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	2048x1080P 23.98/24.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	2048x1080PsF 23.98/24.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	

Transmission method	Signal format	Color format	Color depth	Standards
3G-SDI (Level B)	1920x1080P 59.94/60.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 372 SMPTE 274M
	1920x1080i 59.94/60.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr**	12-bit	
	1920x1080P 50.00 Hz	4:2:2 YCbCr	10-bit	
	1920x1080i 50.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr**	12-bit	
	1920x1080P 29.97/30.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	1920x1080PsF 29.97/30.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	1920x1080P 25.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	1920x1080PsF 25.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	1920x1080P 23.98/24.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	1920x1080PsF 23.98/24.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	2048x1080P 59.94/60.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
	2048x1080i 59.94/60.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	2048x1080P 50.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
	2048x1080i 50.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	

Transmission method	Signal format	Color format	Color depth	Standards
3G-SDI (Level B)	2048x1080P 47.95/48.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
	2048x1080P 29.97/30.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	2048x1080PsF 29.97/30.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	2048x1080P 25.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	2048x1080PsF 25.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	2048x1080P 23.98/24.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	

Transmission method	Signal format	Color format	Color depth	Standards
3G-SDI (Level B)	2048x1080PsF 23.98/24.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
Dual Link 3G-SDI (Level A)	1920x1080P 59.94/60.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-3 SMPTE 274M
		4:2:2 YCbCr	12-bit	
	1920x1080P 50.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	2048x1080P 59.94/60.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-3 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	2048x1080P 50.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	2048x1080P 47.95/48.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
Dual Link 3G-SDI (Level B)	1920x1080P 59.94/60.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-3 SMPTE 372 SMPTE 274M
		4:2:2 YCbCr	12-bit	
	1920x1080P 50.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	2048x1080P 59.94/60.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-3 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	2048x1080P 50.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	2048x1080P 47.95/48.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	

Transmission method	Signal format	Color format	Color depth	Standards
Dual Link 3G-SDI Square Division (Level B)	3840x2160P 29.97/30.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-3 SMPTE 372 SMPTE 274M
	3840x2160PsF 29.97/30.00 Hz			
	3840x2160P 25.00 Hz			
	3840x2160PsF 25.00 Hz			
	3840x2160P 23.98/24.00 Hz			
	3840x2160PsF 23.98/24.00 Hz			
	4096x2160P 29.97/30.00 Hz			SMPTE 425-3 SMPTE 372 SMPTE 2048-2
	4096x2160PsF 29.97/30.00 Hz			
	4096x2160P 25.00 Hz			
	4096x2160PsF 25.00 Hz			
	4096x2160P 23.98/24.00 Hz			
	4096x2160PsF 23.98/24.00 Hz			
Dual Link 3G-SDI 2 Sample Interleave (Level B)	3840x2160P 29.97/30.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-3 SMPTE 372 SMPTE 274M
	3840x2160P 25.00 Hz			
	3840x2160P 23.98/24.00 Hz			
	4096x2160P 29.97/30.00 Hz			SMPTE 425-3 SMPTE 372 SMPTE 2048-2
	4096x2160P 25.00 Hz			
	4096x2160P 23.98/24.00 Hz			
Quad Link HD-SDI	3840x2160i 59.94/60.00 Hz**	4:2:2 YCbCr	10-bit	SMPTE 292-1 SMPTE 274M
	3840x2160i 50.00 Hz**			
	3840x2160P 29.97/30.00 Hz**			
	3840x2160PsF 29.97/30.00 Hz**			
	3840x2160P 25.00 Hz**			
	3840x2160PsF 25.00 Hz**			
	3840x2160P 23.98/24.00 Hz**			
	3840x2160PsF 23.98/24.00 Hz**			
	4096x2160i 59.94/60.00 Hz			
	4096x2160i 50.00 Hz			
	4096x2160P 29.97/30.00 Hz			SMPTE 292-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
	4096x2160PsF 29.97/30.00 Hz			
	4096x2160P 25.00 Hz			
	4096x2160PsF 25.00 Hz			
	4096x2160P 23.98/24.00 Hz			
	4096x2160PsF 23.98/24.00 Hz			

Transmission method	Signal format	Color format	Color depth	Standards
Quad Link 3G-SDI (Level A)	3840x2160P 59.94/60.00 Hz**	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 274M
	3840x2160i 59.94/60.00 Hz	4:4:4 RGB** 4:4:4 YCbCr**	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160P 50.00 Hz**	4:2:2 YCbCr	12-bit	
	3840x2160i 50.00 Hz	4:4:4 RGB** 4:4:4 YCbCr**	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160P 29.97/30.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160PsF 29.97/30.00 Hz	4:4:4 RGB**	10-bit	
			12-bit	
		4:4:4 YCbCr**	12-bit	
		4:4:4 YCbCr**	10-bit	SMPTE 425-1 SMPTE 274M
		4:2:2 YCbCr	12-bit	
	3840x2160P 25.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160PsF 25.00 Hz	4:4:4 RGB**	10-bit	
			12-bit	
		4:4:4 YCbCr**	12-bit	
		4:4:4 YCbCr**	10-bit	SMPTE 425-1 SMPTE 274M
		4:2:2 YCbCr	12-bit	
	3840x2160P 23.98/24.00 Hz	4:4:4 RGB** 4:4:4 YCbCr**	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160PsF 23.98/24.00 Hz	4:4:4 RGB	10-bit	
			12-bit	
		4:4:4 YCbCr	12-bit	
		4:4:4 YCbCr	10-bit	SMPTE 425-1 SMPTE 274M
		4:2:2 YCbCr	12-bit	
	4096x2160P 59.94/60.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
	4096x2160i 59.94/60.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	

Transmission method	Signal format	Color format	Color depth	Standards
Quad Link 3G-SDI (Level A)	4096x2160P 50.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 2048-2
	4096x2160i 50.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	4096x2160P 47.95/48.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 2048-2
	4096x2160P 29.97/30.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	4096x2160PsF 29.97/30.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	4096x2160P 25.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	4096x2160PsF 25.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	4096x2160P 23.98/24.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	4096x2160PsF 23.98/24.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	

Transmission method	Signal format	Color format	Color depth	Standards
Quad Link 3G-SDI 2 Sample Interleave (Level A)	3840x2160P 59.94/60.00 Hz**	4:2:2 YCbCr	10-bit	SMPTE 425-5 SMPTE 274M
	3840x2160P 50.00 Hz**	4:2:2 YCbCr	10-bit	
	3840x2160P 29.97/30.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160P 25.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160P 23.98/24.00 Hz	4:4:4 RGB** 4:4:4 YCbCr**	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	4096x2160P 59.94/60.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-5 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
	4096x2160P 50.00 Hz	4:2:2 YCbCr	10-bit	
	4096x2160P 47.95/48.00 Hz	4:2:2 YCbCr	10-bit	
	4096x2160P 29.97/30.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	4096x2160P 25.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	4096x2160P 23.98/24.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
Quad Link 3G-SDI (Level B)	3840x2160P 59.94/60.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 372 SMPTE 274M
	3840x2160i 59.94/60.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr**	12-bit	
	3840x2160P 50.00 Hz	4:2:2 YCbCr	10-bit	

Transmission method	Signal format	Color format	Color depth	Standards
Quad Link 3G-SDI (Level B)	3840x2160i 50.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 274M
		4:2:2 YCbCr**	12-bit	
	3840x2160P 29.97/30.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160PsF 29.97/30.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160P 25.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160PsF 25.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160P 23.98/24.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160PsF 23.98/24.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	4096x2160P 59.94/60.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
	4096x2160i 59.94/60.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	4096x2160P 50.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
	4096x2160i 50.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	4096x2160P 47.95/48.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2

Transmission method	Signal format	Color format	Color depth	Standards
Quad Link 3G-SDI (Level B)	4096x2160P 29.97/30.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	4096x2160PsF 29.97/30.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	4096x2160P 25.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	4096x2160PsF 25.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
	4096x2160P 23.98/24.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	

Transmission method	Signal format	Color format	Color depth	Standards
Quad Link 3G-SDI (Level B)	4096x2160PsF 23.98/24.00 Hz	4:4:4 RGB	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
		4:4:4 X'Y'Z'	12-bit	
		4:4:4 YCbCr	12-bit/10-bit	SMPTE 425-1 SMPTE 372 SMPTE 2048-2
		4:2:2 YCbCr	12-bit	
Quad Link 3G-SDI 2 Sample Interleave (Level B)	3840x2160P 59.94/60.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-5 SMPTE 372 SMPTE 274M
	3840x2160P 50.00 Hz	4:2:2 YCbCr	10-bit	
	3840x2160P 29.97/30.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160P 25.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160P 23.98/24.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	4096x2160P 59.94/60.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 425-5 SMPTE 372 SMPTE 428-9 SMPTE 428-19 SMPTE 2048-2
	4096x2160P 50.00 Hz	4:2:2 YCbCr	10-bit	
	4096x2160P 47.95/48.00 Hz	4:2:2 YCbCr	10-bit	
	4096x2160P 29.97/30.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	4096x2160P 25.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	4096x2160P 23.98/24.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
V3120 **V2421** **V2411** **V1710** **V1711** 6G-SDI	3840x2160P 29.97/30.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 2081-10
	3840x2160P 25.00 Hz			
	3840x2160P 23.98/24.00 Hz			
	4096x2160P 25.00 Hz			
	4096x2160P 23.98/24.00 Hz			

Transmission method	Signal format	Color format	Color depth	Standards
V3120 **V2421** **V2411** **V1710** **V1711** Dual Link 6G-SDI Square Division, 2 Sample Interleave	3840x2160P 59.94/60.00 Hz	4:2:2 YCbCr	10-bit	SMPTE 2081-11
	3840x2160P 50.00 Hz			
V3120 **V2421** **V2411** **V1711** 12G-SDI	3840x2160P 29.97/30.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	SMPTE 2082-10
		4:2:2 YCbCr	12-bit	
	3840x2160P 25.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	3840x2160P 23.98/24.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:2:2 YCbCr	12-bit	
	4096x2160P 25.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	4096x2160P 23.98/24.00 Hz	4:4:4 RGB 4:4:4 YCbCr	12-bit/10-bit	
		4:4:4 X'Y'Z' 4:2:2 YCbCr	12-bit	
	3840x2160P 59.94/60.00 Hz	4:2:2 YCbCr	10-bit	
	3840x2160P 50.00 Hz			
	4096x2160P 47.95/48.00 Hz			
	4096x2160P 59.94/60.00 Hz			
	4096x2160P 50.00 Hz			

RAW

Signal format
3840x2160P 59.94 Hz, 50.00 Hz, 29.97 Hz, 25.00 Hz, 24.00 Hz, 23.98 Hz
4096x2160P 59.94 Hz, 50.00 Hz, 29.97 Hz, 25.00 Hz, 24.00 Hz, 23.98 Hz

HDMI

Signal format	Color format/Color depth
640x480P 59.94/60.00 Hz	4:4:4 RGB 8-bit
800x600P 60.00 Hz	
1024x768P 60.00 Hz	
720x480P 59.94/60.00 Hz	4:4:4 RGB 12-bit/10-bit/8-bit 4:4:4 YCbCr 12-bit/10-bit/8-bit 4:2:2 YCbCr 12-bit
720x576P 50.00 Hz	
1280x720P 59.94/60.00 Hz	
1280x720P 50.00 Hz	
1920x1080P 59.94/60.00 Hz	
1920x1080i 59.94/60.00 Hz	
1920x1080P 50.00 Hz	
1920x1080i 50.00 Hz	
1920x1080P 29.97/30.00 Hz	
1920x1080P 25.00 Hz	
1920x1080P 23.98/24.00 Hz	
2048x1080P 59.94/60.00 Hz	
2048x1080P 50.00 Hz	
2048x1080P 29.97/30.00 Hz	
2048x1080P 25.00 Hz	
2048x1080P 23.98/24.00 Hz	
3840x2160P 59.94/60.00 Hz	4:4:4 RGB 8-bit 4:4:4 YCbCr 8-bit 4:2:2 YCbCr 12-bit 4:2:0 YCbCr 12-bit/10-bit/8-bit
3840x2160P 50.00 Hz	
3840x2160P 29.97/30.00 Hz	4:4:4 RGB 12-bit/10-bit/8-bit 4:4:4 YCbCr 12-bit/10-bit/8-bit 4:2:2 YCbCr 12-bit
3840x2160P 25.00 Hz	
3840x2160P 23.98/24.00 Hz	
4096x2160P 59.94/60.00 Hz	4:4:4 RGB 8-bit 4:4:4 YCbCr 8-bit 4:2:2 YCbCr 12-bit 4:2:0 YCbCr 12-bit/10-bit/8-bit
4096x2160P 50.00 Hz	
4096x2160P 29.97/30.00 Hz	4:4:4 RGB 12-bit/10-bit/8-bit 4:4:4 YCbCr 12-bit/10-bit/8-bit 4:2:2 YCbCr 12-bit
4096x2160P 25.00 Hz	
4096x2160P 23.98/24.00 Hz	

Image/Frame Display

SDI

Signal system			Display Method	
720x487	59.94/60.00	i	59.94/60.00	P
720x576	50.00	i	50.00	P
1280x720	23.98/24.00	P	47.96/48.00	P*
	25.00	P	50.00	P*
	29.97/30.00	P	59.94/60.00	P*
	50.00	P	50.00	P
	59.94/60.00	P	59.94/60.00	P
1920x1080	50.00	i	50.00	P
	59.94/60.00	i	59.94/60.00	P
	23.98/24.00	PsF	47.96/48.00	P*
	25.00	PsF	50.00	P*
	29.97/30.00	PsF	59.94/60.00	P*
	23.98/24.00	P	47.96/48.00	P*
	25.00	P	50.00	P*
	29.97/30.00	P	59.94/60.00	P*
	50.00	P	50.00	P
	59.94/60.00	P	59.94/60.00	P
2048x1080	50.00	i	50.00	P
	59.94/60.00	i	59.94/60.00	P
	23.98/24.00	PsF	47.96/48.00	P*
	25.00	PsF	50.00	P*
	29.97/30.00	PsF	59.94/60.00	P*
	23.98/24.00	P	47.96/48.00	P*
	25.00	P	50.00	P*
	29.97/30.00	P	59.94/60.00	P*
	47.95/48.00	P	47.95/48.00	P
	50.00	P	50.00	P
	59.94/60.00	P	59.94/60.00	P

Signal system			Display Method	
3840x2160	50.00	i	50.00	P
	59.94/60.00	i	59.94/60.00	P
	23.98/24.00	PsF	47.96/48.00	P*
	25.00	PsF	50.00	P*
	29.97/30.00	PsF	59.94/60.00	P*
	23.98/24.00	P	47.96/48.00	P*
	25.00	P	50.00	P*
	29.97/30.00	P	59.94/60.00	P*
	50.00	P	50.00	P
	59.94/60.00	P	59.94/60.00	P
4096x2160	50.00	i	50.00	P
	59.94/60.00	i	59.94/60.00	P
	23.98/24.00	PsF	47.96/48.00	P*
	25.00	PsF	50.00	P*
	29.97/30.00	PsF	59.94/60.00	P*
	23.98/24.00	P	47.96/48.00	P*
	25.00	P	50.00	P*
	29.97/30.00	P	59.94/60.00	P*
	47.95/48.00	P	47.95/48.00	P
	50.00	P	50.00	P
	59.94/60.00	P	59.94/60.00	P

* : Displaying same frame

HDMI

Signal system			Display Method	
640x480	59.94/60.00	P	59.94/60.00	P
800x600	60.00	P	60.00	P
720x480	59.94/60.00	P	59.94/60.00	P
720x576	50.00	P	50.00	P
1024x768	60.00	P	60.00	P
1280x720	59.94/60.00	P	59.94/60.00	P
1280x720	50.00	P	50.00	P
1920x1080	59.94/60.00	P	59.94/60.00	P
1920x1080	59.94/60.00	i	59.94/60.00	P
1920x1080	50.00	P	50.00	P
1920x1080	50.00	i	50.00	P
1920x1080	29.97/30.00	P	59.94/60.00	P*
1920x1080	25.00	P	50.00	P*
1920x1080	23.98/24.00	P	47.96/48.00	P*
2048x1080	59.94/60.00	P	59.94/60.00	P
2048x1080	50.00	P	50.00	P
2048x1080	29.97/30.00	P	59.94/60.00	P*
2048x1080	25.00	P	50.00	P*
2048x1080	23.98/24.00	P	47.96/48.00	P*
3840x2160	59.94/60.00	P	59.94/60.00	P
3840x2160	50.00	P	50.00	P
3840x2160	29.97/30.00	P	59.94/60.00	P*
3840x2160	25.00	P	50.00	P*
3840x2160	23.98/24.00	P	47.96/48.00	P*
4096x2160	59.94/60.00	P	59.94/60.00	P
4096x2160	50.00	P	50.00	P
4096x2160	29.97/30.00	P	59.94/60.00	P*
4096x2160	25.00	P	50.00	P*
4096x2160	23.98/24.00	P	47.96/48.00	P*

* : Displaying same frame

Error Messages

Message		Description and Action
Calibration	Failed to initialize the external sensor.	See CA-310 and CA-210 instruction manual.
	Calibration error.	• Check the installation and connection of the external sensor and retry (10). • Perform matrix calibration of CA-310 and CA-210 (10).
	Calibration is completed. (Brightness setting is lower than target brightness.)	Set the [Luminance] in calibration again (37).
	Failed to detect the external sensor. Please check the connection with the sensor.	Correctly connect the external sensor to the USB port of this main unit.
Network	Communication error.	IP address may be in conflict or there may be a network communication error. Check the network environment.
	Invalid IP Address.	Enter the correct IP address.
	Invalid Subnet Mask.	Enter the correct subnet mask.
	Display is not connected.	Check that the Canon display to which you wish to export this video display's settings and this video display are correctly connected with a LAN cable.
Various settings, CDL export	The USB memory is full.	Use another USB memory or delete the content of the memory.
	Failed to write file.	The USB memory may be defective or protected. Check the USB memory.
LUT, Various settings, CDL import	(LUT Import) "LUT Type" is different. (CDL Import) "File Type" is different.	Select the correct file format.
	Failed to read file.	The USB memory may be defective or protected. Check the USB memory.
	Failed to import.	There is an error in the file to be imported. Check the file.
	No import file.	Check and ensure that the file has been saved to the USB memory or imported to [User 1] to [User 3].

Error Messages

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Message		Description and Action
Screen Capture	Failed to capture.	The USB memory may be defective or protected. Check the USB memory.
	Invalid Signal.	A screen displaying no video is being captured for example there is no signal or an unsupported signal is being input. Check the signal, input it again, and capture it.
	Copy protected signal.	The signal you tried to capture may be protected by HDCP 2.2 which is a copy prevention standard for HDMI. In this case, the signal cannot be captured. Check the HDMI signal.
	Failed to playback file.	The USB memory or the file may be defective or protected. Check the USB memory or the file.
	No capture file.	Check and ensure that the file has been saved to the USB memory.
Hardware error	Backlight error.	Disconnect the power cord, reconnect it, and then turn on the power. If the message persists, contact Canon Customer Center.
	Fan error.	
	Panel error.	
	I/F error.	
	System error.	
	Invalid operation due to high temperature.	The temperature inside the main unit is high. Turn off the power and wait until the fan stops.
Input signal	No Signal	Displayed when there is no video signal input.
	Unsupported	Unsupported video signal is input. Check the supported signal format (□95).
Operation	Invalid operation.	Operation is disabled. Check the setting items.
	"Protect Settings" is on.	To use the OSD menu, move the selection frame to [Protect] and press the jog dial for approximately 3 seconds.
	"CDL/User LUT Bypass" is on.	When [CDL/User LUT] ❯ [Bypass] is turned [On], you cannot adjust [Power], [Saturation], [Offset], or [Slope].
	Invalid Password.	Enter the correct password.
	No license.	This function cannot be used as the license file has not been applied. Refer to the Canon website for detailed information.
USB memory	USB memory is not connected.	Correctly connect the USB memory to the USB port of this main unit.
	Unsupported USB memory.	Check the USB memory format and make sure it is not protected.

	Message	Description and Action
Wi-Fi adapter	Wi-Fi Adaptor is not connected.	Correctly connect the Wi-Fi adapter to the USB terminal of the video display.
	Failed to connect Wi-Fi Access Point.	The password may be wrong, or there may be a network communication error. Check the network environment.
Firmware Update	No update file.	Firmware update files are not saved on USB memory or other media.
	Failed to read update file.	There is an error in the file. Check the file.
	The firmware/license has been already updated.	This is the file that is updated on the video display.
V2411 **V1710** **V1711** DC power supply	Low Voltage.	The battery charge level drops if using the battery. If you use another power source, check the input voltage of the DC power supply.
	Low Voltage, Turn off power.	The power has shut off as DC power voltage became insufficient for continued operation. There may not be enough energy left if you are using the battery. Connect a charged battery and turn the video display power on. If you use another power source, check the input voltage of the DC power supply.
	Invalid Voltage, Turn off power.	The power has shut off as the DC power input voltage exceeded the operational threshold. Check the input voltage of the DC power supply.
V2410 DC power supply	Low Voltage.	Indicates that the input voltage of the DC power supply has become below approx. 22.5 V. Check the voltage of the DC power supply.
	Low Voltage, Turn off power.	Indicates that the input voltage of the DC power supply has become below approx. 21.0 V and the power will be turned off. Connect a 23.5 V or higher DC power supply and press the ⏻ button to turn on the power.
	Invalid Voltage, Turn off power.	Indicates that the input voltage of the DC power supply has reached approx. 35.8 V or higher. Check the input voltage of the DC power supply.
Power Saving	No Signal, Turn off power by Power Save function.	This indicates that there have not been any signals for approximately 30 minutes. The power will be turned off approximately 5 minutes later. Check the input signal.
	No Signal, Turn off power.	This indicates there has been no signal which will result in power being turned off to the video display. Check the input signal.

Troubleshooting

Symptom	Cause and Action	📖
Power does not turn on. (Power indicator does not turn on.)	• Press the ⏻ button.	—
	• Check that the power cord is connected correctly.	
	• Brightness of the power indicator may be turned off. Turn it on and check once more.	88
The screen is dark.	When the power indicator does not turn on: • Press the ⏻ button. • Check that the power cord is connected correctly.	—
	When the power indicator is lit orange: • Press the ⏻ button.	—
	When the power indicator is flashing orange: • Flashing once every 3 seconds : Contact Canon Customer Center. • Flashing twice every 3 seconds : - Turn on the power with the ⏻ button. - The temperature of the display rises (or falls) depend on operation environment. Check the environmental conditions and do not use in direct sunlight. - If the power still does not turn on, contact Canon Customer Center.	—
The power was turned off when there were not any signals.	When [Power Save] is set to [On], the video display's power is automatically turned off if no video signal is input for a certain period of time. Turn on the power again.	
The power suddenly goes off when a DC power supply is used.	• **V2411** **V1710** **V1711** Depending on the model of DC power supply used, the output voltage may decrease suddenly and even turn off (0 V output) when a threshold value is reached. Before that, a warning message about low input voltage may be displayed only briefly or not at all. Connect a charged DC power supply or AC power supply. • **V2410** Some DC power supply units turn off the voltage when a threshold value is reached. In this case, the message indicating low voltage is not displayed. Connect a charged DC power supply or AC power supply.	—
The image does not display.	• Set each item in [Channel Settings] according to input signal.	48
The 3G-SDI RAW signal image does not display.	• At times the 3G-SDI RAW signal image may not display, depending on the type of the Cinema EOS camera. Refer to the Canon website for a list of supported products.	—

Symptom	Cause and Action	📖
There is a blank area when set to Quad Input/Dual Input.	**V3120** **V2411** **V1711** • There may be no input signal. Check the signal. • Some combinations are not supported. Check the signal. **V2421** • There may be no input signal. Look at the display area icon in the interface area and check that the input area and signal cables are properly connected. • Some combinations are not supported. Check the signal. **V2420** **V2410** • There may be no input signal. View the display area icon in the interface area and check that the input area and signal cables are properly connected. • Signals with different resolution or frequency may be input from each terminal. Check the signal. **V1710** • There may be no input signal. Check the signal. • Signals with different resolution or frequency may be input from each terminal. Check the signal.	49 94
V3120 **V2420** **V2421** **V2411** **V1710** **V1711** The image appears to be delayed.	• When [Reduce Backlight Flash] is set to [On], the displayed image may be delayed depending on the scene. In such case, change the setting to [Off].	89
Video paused temporarily	The screen may pause when running [Capture] via a web browser. When [Capture] is complete, or turning [Web] ❯ [Control] to [Off] will return to normal screen.	23 84
Screen is too bright/dark.	• Adjust the [Contrast] on the OSD menu. • **V2411** Adjust the settings for [Boost Contrast] on the OSD menu. • **V1710/V1711 OPTION** Adjust the settings for [Boost Contrast] on the OSD menu. • There is a limit on the service life of LCD backlight. If the screen becomes dark or starts flickering, contact Canon Customer Center.	26 35 35
Burn-in image appears.	• This is a characteristic of the LCD panel and you should avoid displaying stationary image for a long time.	—
There is an unlit or red, blue, green, or white dot on screen.	• LCD display is made of very high precision technology. It has effective pixels of 99.99% or more, but there may be black dots or red, blue, or green dots that may be always on. This is not a failure.	—
There is an interference pattern or trace that remains when the LCD panel is pressed.	• The symptom may be resolved by displaying a white or black image on the entire screen.	—
OSD menu cannot be used.	• Check that [Protect Settings] is not set.	87

Symptom	Cause and Action	📖
V2420 **V2421** The F button on the main unit is flashing.	• When [Peak Luminance Control] is set to [On], the F button assigned with this function flashes when display luminance is restricted. • When [Peak Luminance Control] is assigned to two or more F buttons, one of the buttons flashes.	34
[Aspect Marker], [Safety Zone Marker] or [Area Marker] does not appear.	• A channel with no signal, unsupported signal, or with [Input Configuration] not set may be selected. Check the signal.	94
The fan starts to rotate even when [Fan] under [Camera Link] is set to [On] or [Fan Stop] is set to [On].	• The fan stays off for approx. 1 minute when an AC power supply is used. To keep the fan off for a longer period, use a DC power supply. • **V2411** **V1710** **V1711** The fan operates to lower the temperature inside the main unit. The fan stops operating when the temperature inside has lowered. • When [Fan] under [Camera Link] is set to [On], the down time may not match the camera.	75 88
The fan does not stop even when [Fan] under [Camera Link] is set to [On] or [Fan Stop] is set to [On].	• The fan does not stop if the temperature inside the main unit is high. Configure settings after the internal temperature has lowered. • The fan may not stop in some conditions, for example when used at a high temperature. Use the video display at the operating temperature or lower.	75 88
Loud fan noise	• **V2420** **V2421** **V2411** **V2410** **V1710** **V1711** The fan operates at a faster speed than usual to lower the internal temperature if [Fan Control] is set to [On] and when the temperature inside the main unit has increased. The fan operates at normal speed when [Fan Control] is set to [Off]. • When high-luminance content is displayed continuously, the temperature inside the main unit rises even if the operating temperature is within the recommended range, and the fan operates at a faster speed than usual to lower the internal temperature. It is recommended to lower the brightness of the video display.	88 —
You forgot the password for [Protect Settings].	• Press the jog dial and the ⏻ button while the video display is in standby. The configuration will be reset to the state where no password is set.	—
The video display does not start up in the condition that the power was turned off last time.	• Check the [Power on Setting] on the OSD menu. Set [Last memory] to start up the video display in the condition that the power is turned off last time.	90
The image quality for the User mode in [Picture Mode] differs from the image quality of presets.	• Select the preset mode by [Copy Picture Mode] and copy the settings.	38
Image quality on the left and right screens is different.	• Check the [Channel Settings] ❯ [Picture Mode] settings.	8 51
Image quality is automatically changed.		
The same image is displayed in two screens.	• Check the [Channel Settings] ❯ [Single Input Dual View] settings.	52

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