

# Digital Motion Picture Camera

## VENICE

Operating Instructions

### MPC-3610

Firmware Version 6.1



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# Features

## New 36×24 mm Full Frame CMOS Image Sensor

Supports image capture at resolutions up to 6048 × 4032 pixels.\* By switching the imager mode, the unit can natively support many shooting formats, including Super 35 24.3 × 12.8 mm, 4096 × 2160 pixel resolution (equivalent to 3-perforation motion picture film) and 4:3 Anamorphic\* Super 35 24.3 × 18.3 mm, 4096 × 3024 pixel resolution (equivalent to 4-perforation motion picture film).

\* Full Frame and Anamorphic modes require licenses sold separately.

## Wide Latitude

The unit supports 15+ stops of latitude. It features very low noise for delivering phenomenal images in conditions from searing sunlight to almost no light, allowing for unprecedented creative freedom in grading.

## Wide Color Space Capture

Images can be captured in a color space that exceeds DCI-P3. The degree of freedom in the grading is dramatically improved when using Sony's S-Gamut and S-Gamut3.Cine color space together with S-Log3.

## Dual Base ISO

The unit supports two selectable native ISO settings (ISO500 and ISO2500). Using Base ISO500 under normal lighting conditions and Base ISO2500 under low light conditions allows you to maintain the latitude balance between bright and low light conditions when shooting, without graining (noise).

## PL Lens Mount

Equipped with the industry-standard PL lens mount. The lens mount supports Cooke /i technology, and lens information is recorded as metadata frame by frame.

## E-Mount Lens

E-mount lenses are supported by removing the PL lens adaptor. E-mount lenses are smaller and lighter than PL lenses, and are available in a diverse lineup for expanded possibilities in image reproduction.

## Compact Body and Intuitive Operation

A relatively compact design for a device equipped with a large Full Frame image sensor, achieved using Sony's miniaturization technology, which allows easier shooting in confined spaces or on drones.

The position, shape, and size of the control buttons reflect the requirements of camera operators for intuitive operation. They also feature backlighting for ease of use in dark locations.

## Engineered to Survive

The chassis is made from magnesium alloy for high robustness and durability. The ventilation system is completely isolated from all electronic components to prevent ingress of dust, sand, and liquids.\*

The silent-running fan can be removed and cleaned on-set quickly and easily to maintain high readiness.

\* Design protects against dust and rain, but cannot completely prevent the ingress of dust and liquid.

## Modular Design

Features a fully modular design, allowing you to flexibly support various rigs and peripheral equipment according to the shooting application. The top handle and viewfinder are easily adjustable to maintain ergonomic balance and ease of use with lenses. The height of the optical axis is the same as the PMW-F55, permitting the use of peripheral devices used with the PMW-F55. And an optional AXS-R7 Portable Memory Recorder can be securely attached to the rear of the unit using four hex screws.

## 8-Position Optical ND Filter

Employs an 8-position optical ND filter. It offers a wide ND range of 0.3ND (1/2 = 1 stop) to 2.4ND (1/256 = 8 stops) that reduces time lost on set changing external ND filters. The ND filter mechanism is servo-controllable.

## Intuitive and Familiar On-Set Operation

The menu screen is available from both sides of the camera, with the main control display on the Assistant side of the camera for fast access to the camera settings by the camera assistant while shooting.

An OLED mini display on the Operator side allows the operator to access commonly accessed features such as ND filter position, shutter, white balance, exposure index (EI), and frame rate (FPS), making it convenient for the operator to check the status of the unit.

## Paint Control from RM/RCP and this Unit

The unit supports control from an RM/RCP panel that can be used with broadcast camcorders and system cameras. When connected, ITU-R Rec. 2020 color space and HLG are selectable and adjustment of various paint parameters is supported.

Paint control operations are also supported using the full menu of the unit.

## High Frame Rate (HFR) Shooting

4K X-OCN recording at frame rates up to 120 fps is supported using the unit in combination with an AXS-R7.

## Remote Control Unit Support

By connecting an RM-B170 or other remote control unit, you can control some of the functions of the unit from the remote control unit even when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to Off in the full menu.

## Various Recording Formats

The unit supports recording on SxS memory cards in XAVC 4K/QFHD, MPEG HD, and HD ProRes 422 formats. In addition, it can record in 16-bit RAW or X-OCN format onto AXS memory cards when used in combination with an optional AXS-R7 Portable Memory Recorder.

## Imager Block Extension

The imager block can be extended from the camera body by 2.7 m (8.9 ft) or 5.5 m (18 ft) by connecting the CBK-3610XS\* Camera Extension System.

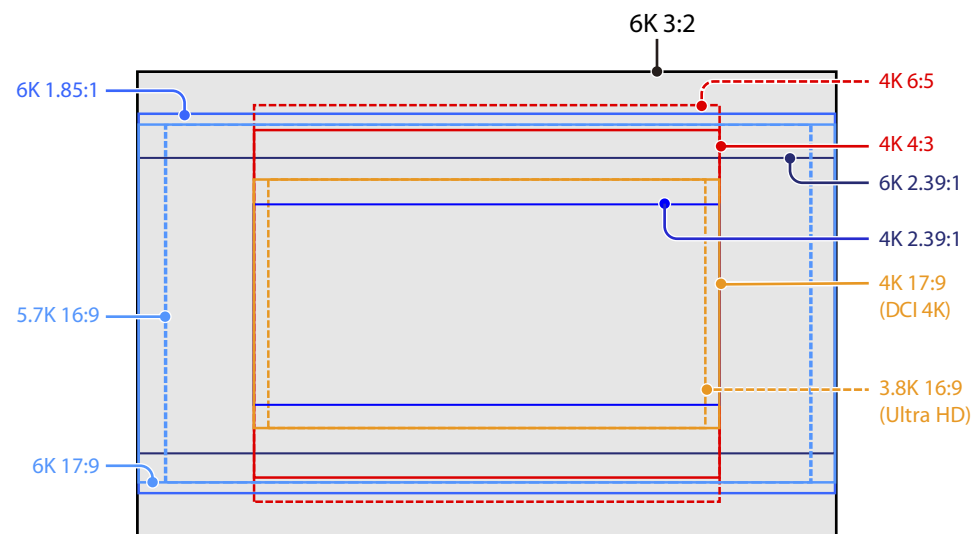
\* Update the firmware to version 3.0 or later.

## Effective Picture Size

The unit supports shooting in the following effective picture sizes.

[Note]

A software license is required to shoot in 6K 17:9, 6K 1.85:1, 6K 2.39:1, 6K 3:2, 5.7K 16:9, 4K 4:3, and 4K 6:5.



## Software Licenses

You can select software licenses (optional) according to the intended usage of the unit.  
Software licenses are installed using Maintenance > License Options (page 85) in the full menu.

Software license	Imager mode	Effective number of pixels (Image pixels)	W × H (mm)	Project frame rate
License not required <sup>1)</sup>	3.8K 16:9	3840 × 2160	22.8 × 12.8	23, 24, 25, 29, 50, 59
	3.8K 16:9 Surround View	3840 × 2160 (4268 × 2400)	22.8 × 12.8 (25.4 × 14.3)	23, 24, 25, 29
	4K 2.39:1	4096 × 1716	24.3 × 10.3	23, 24, 25, 29, 47, 50, 59
	4K 17:9	4096 × 2160	24.3 × 12.8	23, 24, 25, 29, 47, 50, 59
	4K 17:9 Surround View	4096 × 2160 (4552 × 2400)	24.3 × 12.8 (27.0 × 14.3)	23, 24, 25, 29
	Anamorphic License	4K 4:3	4096 × 3024	24.3 × 18.0
4K 4:3 Surround View		4096 × 3024 (4552 × 3360)	24.3 × 18.0 (27.0 × 20.0)	23, 24, 25, 29
4K 6:5		4096 × 3432	24.3 × 20.4	23, 24, 25, 29, 47 <sup>2)</sup> , 50 <sup>2)</sup> , 59 <sup>2)</sup>
Full Frame License <sup>1)</sup>	5.7K 16:9	5674 × 3192	33.7 × 18.9	23, 24, 25, 29, 50 <sup>2)</sup> , 59 <sup>2)</sup>
	6K 2.39:1	6048 × 2534	35.9 × 15.0	23, 24, 25, 29, 47 <sup>2) 3)</sup> , 50 <sup>2) 3)</sup> , 59 <sup>2) 3)</sup>
	6K 17:9	6054 × 3192	36.0 × 19.0	23, 24, 25, 29, 47 <sup>2) 3)</sup> , 50 <sup>2) 3)</sup> , 59 <sup>2) 3)</sup>
	6K 1.85:1	6054 × 3272	36.0 × 19.4	23, 24, 25, 29, 47 <sup>2) 3)</sup> , 50 <sup>2) 3)</sup> , 59 <sup>2) 3)</sup>
	6K 3:2	6048 × 4032	35.9 × 24.0	23, 24, 25, 29 <sup>2)</sup> , 47 <sup>2) 3)</sup> , 50 <sup>2) 3)</sup> , 59 <sup>2) 3)</sup>

<sup>1)</sup> The Anamorphic license is required to enable ratio settings, other than Off(1.0x), for the de-squeeze function.

<sup>2)</sup> Only when a High Frame Rate License is activated.

<sup>3)</sup> AXS recording is supported, but AXS playback is not supported on the unit.

## Supported Shooting Frame Rates and De-Squeeze Values

The following table shows the supported shooting frame rates and De-Squeeze values (page 67) in each imager mode.

Imager mode	Shooting frame rate		De-Squeeze						
	Standard	Extension frame rates	Off (1.0x)	1.25x	1.3x	1.5x	1.65x	1.8x	2.0x
6K 3:2	1 to 25	Up to 60	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6K 1.85:1	1 to 30	Up to 60, 66, 72	Yes	–	–	–	–	–	–
6K 17:9	1 to 30	Up to 60, 66, 72	Yes	Yes	Yes	–	Yes	Yes	Yes
6K 2.39:1	1 to 30	Up to 60, 66, 72, 75, 88, 90	Yes	–	–	–	–	–	–
5.7K 16:9	1 to 30	Up to 60, 66, 72	Yes	–	–	–	–	–	–
4K 6:5 <sup>1)</sup>	1 to 30	Up to 60, 66, 72	Yes	–	–	–	–	–	Yes
4K 4:3 Surround	1 to 30	–	Yes	–	Yes	–	Yes	Yes	Yes
4K 4:3 <sup>2)</sup>	1 to 48	up to 60, 66, 72, 75	Yes	–	Yes	–	Yes	Yes	Yes
4K 17:9 Surround	1 to 48	–	Yes	Yes	Yes	–	Yes	Yes	Yes
4K 17:9	1 to 60	66, 72, 75, 88, 90, 96, 100, 110	Yes	Yes	Yes	–	Yes	Yes	Yes
4K 2.39:1	1 to 60	66, 72, 75, 88, 90, 96, 100, 110, 120	Yes	–	–	–	–	–	–
3.8K 16:9 Surround	1 to 48	–	Yes	–	–	–	–	–	–
3.8K 16:9	1 to 60	66, 72, 75, 88, 90, 96, 100, 110	Yes	–	–	–	–	–	–

<sup>1)</sup> Only Off (1.0x) is available when SxS Rec Format is set to ProRes 4444 HD P.

<sup>2)</sup> Only Off (1.0x) and 1.3x are available when SxS Rec Format is set to ProRes 4444 HD P.

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## Surround View

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Surround View is a mode available in the following imager modes that displays an image range that includes a 5% outer region beyond the effective picture size (top/bottom/left/right) in the viewfinder and SDI monitor output, allowing you to view a larger image range when shooting. The recorded image area does not include the outer region.

3.8K 16:9

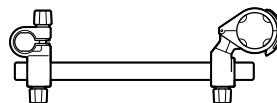
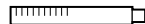
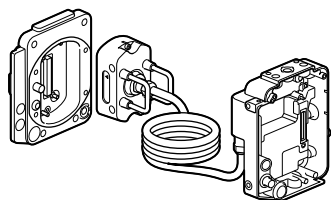
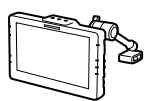
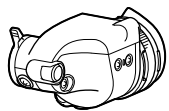
4K 17:9

4K 4:3

### [Notes]

- In this mode, limitations on the maximum project frame rate setting may apply.
- In 4K 4:3 mode with de-squeeze ratio of 2.0x, the image area includes only 5% of the top and bottom outer regions.

# System Configuration



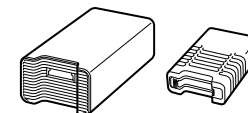
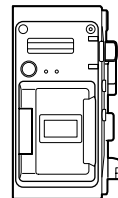
Microphone Holder Base assembly (A-2182-620-B)  
 Rod Clamp (A-2182-621-B)  
 Rod (4-684-612-01)  
 Microphone Holder assembly (X-2596-733-2)  
 Screws P2.6x8 (2) (7-627-556-98)

DVF-EL200  
 Viewfinder  
 (VF cable A-2203-745-A (supplied with unit) or 1-912-598-21 is required)

DVF-L700  
 Viewfinder  
 (VF cable (A-2201-632-A or A-2201-633-A) is required)

CBK-3610XS  
 Camera Extension System

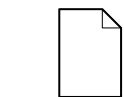
ECM-680S, ECM-678,  
 ECM-674  
 Microphone  
 (EC-0.5X3F5M is required)



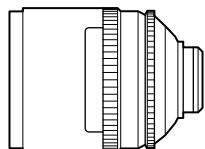
AXS-R7  
 Portable Memory Recorder

AXS-A256S24, AXS-A512S48,  
 AXS-A512S24, AXS-A1TS48,  
 AXS-A1TS24  
 AXS Memory Card

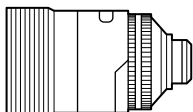
AXS-AR1, AXS-CR1  
 AXS Memory Card Reader



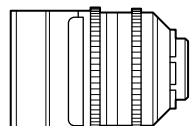
CBKZ-3610A,  
 CBKZ-3610AM,  
 CBKZ-3610AW  
 Anamorphic License



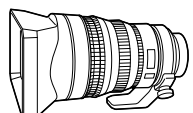
SCL-PK6,  
 SCL-P11X15  
 S35 PL Lens



Anamorphic Lens  
 (PL-mount / E-mount)

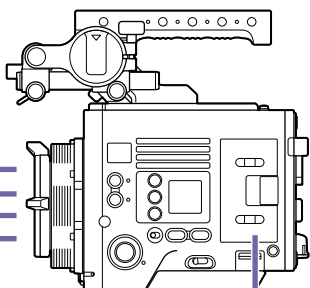


Full Frame Lens  
 (PL-mount / E-mount)

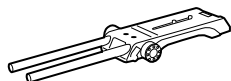


CBKZ-3610H  
 CBKZ-3610HM  
 CBKZ-3610HW  
 High Frame Rate License

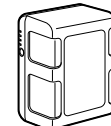
SELP28135G, SEL1635GM, SEL2470GM, SEL70200GM, SEL100400GM, SEL1224G,  
 SEL35F14Z, SEL50F14Z, SEL85F14GM, SEL90M28G, SEL100F28GM  
 E-mount lens



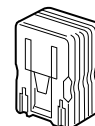
MPC-3610



VCT-FSA5  
 Shoulder Adaptor



BP-FL75, BP-GL95B  
 Battery Pack



AC-DN10A  
 AC Adaptor

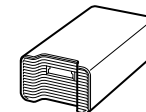


SBP-64/128/256E, SBS-32/64/128G1C, SBP-240F/120F  
 SxS Memory Card

QD-G32E/G64E/G120F/G240F  
 XQD Memory Card  
 (QDA-EX1 XQD ExpressCard Adaptor is required)



RM-B170/B750  
 RCP-1000/1500/1530/3500  
 RCP-1001/1501/3501  
 Remote Control Unit



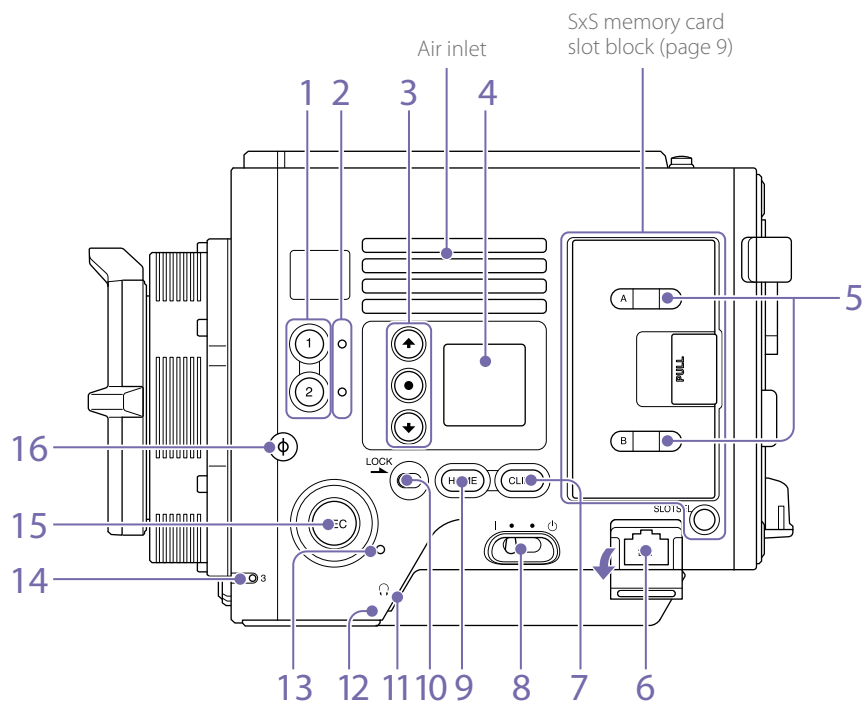
AXS-AR1  
 AXS Memory Card Reader



SBAC-US30/T40  
 SxS Memory Card Reader

# Location and Function of Parts

## Operator Side



1. **ASSIGN (assignable) buttons 1/2 (page 43)**  
Assign functions using the EDIT page of the user functions screen (page 43). The assigned function toggles between on/off (enable/disable) or is activated with each press.
2. **ASSIGN (assignable) lamps 1/2 (page 43)**  
Each lamp is lit orange when the assigned function is on (enabled) or activated, and not lit when the function is off (disabled).
3. **Mini display ITEM keys 1 to 3**  
Controls the operation of functions on the mini display (page 89).

4. **Mini display**  
Displays various setup items, such as shutter angle, that you can check or modify (page 89).
5. **ACCESS lamps (SLOT A/B)**  
Each lamp is lit when the recording media in SxS card slot A/B is the target for recording/playback and when data is being written to or read from the recording media in SxS card slot A/B (page 24).
6. **Network connector (RJ-45)**  
Connect to a wired LAN network using a LAN cable (not supplied) for remote control of the unit (page 92).

7. **CLIPS button**  
Press to display the clip screen on the mini display to enable clip operations (page 91). Simultaneously, the clip list screen is displayed on the sub display and can also be used for clip operations.  
To switch from playback mode to shooting mode, press the HOME button.
8. **Power switch**  
Set to the ON position (I) to turn the power on. Set to the OFF position (O) to turn the power off.

### [Notes]

- This unit uses a small amount of standby power even when the power switch is set to OFF. Remove the battery pack if the unit will not be used for a prolonged period.
- When removing the battery pack or the DC IN power, be sure to first set the power switch to the OFF position. Interrupting the power supply during recording or during memory card access could cause a malfunction.

9. **HOME button**  
Press to clear the item selection display and return to the Home screen on the mini display. If pressed when the unit is in playback state, the unit transitions to shooting mode (page 89).
10. **LOCK switch**  
Locks the operation of the buttons on the Operator side. When locked, the switch background LED lights in orange.
11. **Headphones connector (stereo mini jack)**  
Connect to earphones for audio monitoring. You can monitor the input audio during shooting/recording and playback sound during playback (page 88).
12. **Built-in speaker**  
You can monitor the input audio during shooting/recording and playback sound during playback. The speaker also sounds alarms to reinforce visual warnings (page 88).

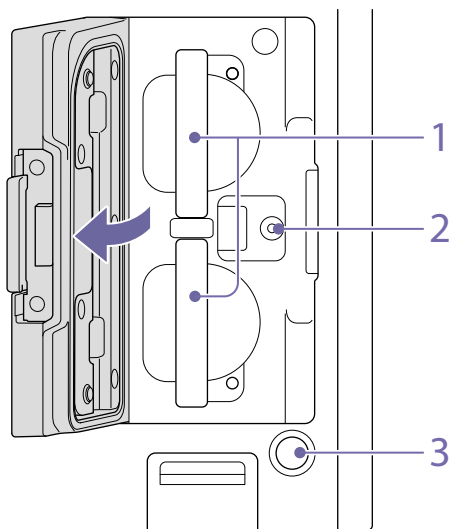
If you connect earphones to the headphones jack, the speaker output is suppressed automatically.

13. **REC ACTIVE lamp**  
The lamp is lit green when the REC button is enabled.
14. **ASSIGN (assignable) lamp 3 (page 43)**  
The lamp is lit orange when the assigned function is on (enabled) or activated, and not lit when the function is off (disabled).
15. **REC (recording start/stop) button/lamp**  
Press to start recording, turning the REC lamp on. Press again to stop recording, turning the REC lamp off (page 97).  
The REC lamp flashes when a device error or warning occurs.
16. **phi mark**  
The phi mark is on the same plane as the image sensor.  
To measure the precise distance between the unit and the subject, use the phi mark as a reference.



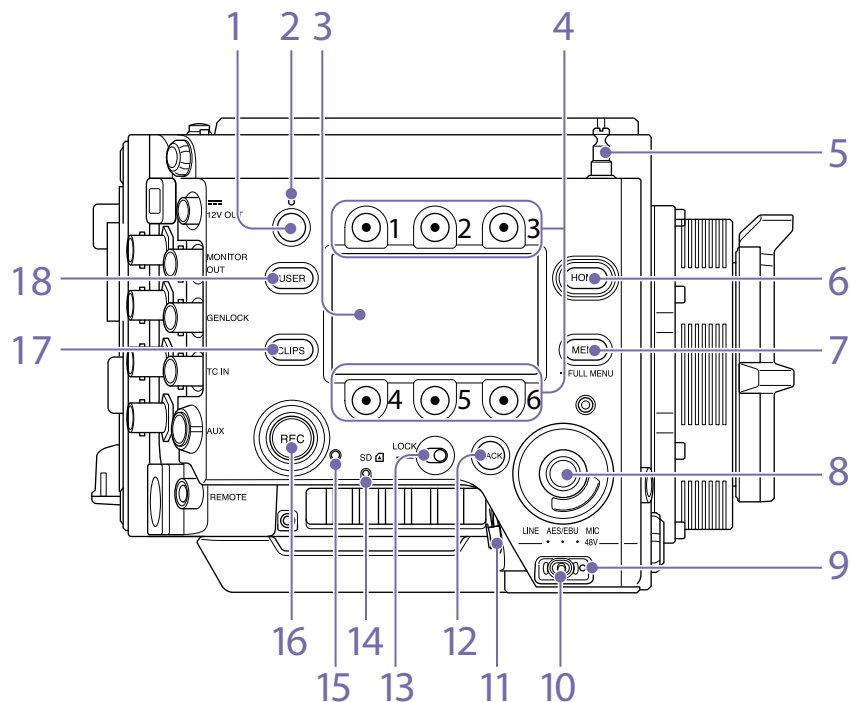
## SxS memory card slot block (page 24)

The SxS memory card slots are located behind the cover.



1. **SxS memory card slots A/B**
2. **Manufacturer calibration terminal**  
Manufacturer terminal for calibration and servicing (cannot be used by users).
3. **SLOT SELECT (SxS memory card select) button**  
Press to switch the active slot.

## Assistant Side



1. **ASSIGN (assignable) button 4 (page 43)**  
Assign functions using the EDIT page of the user functions screen (page 43). The assigned function toggles between on/off (enable/disable) or is activated with each press.
2. **ASSIGN (assignable) lamp 4 (page 43)**  
The lamp is lit orange when the assigned function is on (enabled) or activated, and not lit when the function is off (disabled).
3. **Sub display**  
Allows you to check the operation status of the unit and make various settings (page 32).  
With the Home screen displayed, press and hold the BACK button (page 10) and turn the SEL/SET dial to adjust the brightness of the sub display and mini display.  
The brightness can also be adjusted using Technical > Control Display > Brightness level (page 83) in the full menu.

4. **Sub display ITEM keys 1 to 6**  
Controls the operation of functions on the sub display (page 48).
5. **Tape measure hook**  
The tape measure hook is on the same plane as the image sensor. To measure the precise distance between the unit and the subject, use the tape measure hook as a reference. You can attach the end of a tape measure to the hook, and measure the distance from the subject.
6. **HOME button**  
Press to clear the display and return to the Home screen on the sub display (page 34). If pressed when the unit is in playback state, the unit transitions to shooting mode.
7. **MENU (menu display on/off) button (pages 48, 61)**  
Press the MENU button to display the menu screen on the sub display. Press and hold the MENU button for 2 seconds or longer to display the full menu screen on the sub display. Press the button during menu screen or full menu screen display to return to the previous screen display.
8. **SEL/SET (select/set) dial (MENU dial)**  
Changes the item selection or a setting within the menu (pages 34, 48, 61).
9. **+48V power lamp**  
Lights in green if the AUDIO IN switch is set to MIC and +48 V phantom power is supplied on the AUDIO IN connector. It is not lit if phantom power is not supplied.  
  
You can turn +48 V phantom power on/off using Audio category > Audio Details > Audio Configuration > Phantom Power +48V (page 78) in the menu.

**10. AUDIO IN (audio selector) switch**

Select the input signal type corresponding to the audio source connected to the AUDIO IN connector.

LINE: When connecting an external analog audio signal source

AES/EBU: When connecting an external digital audio signal source

MIC: When connecting a microphone

**11. AUDIO IN connector (XLR 5-pin)**

Input external microphone or audio equipment signals.

When the audio source is set to LINE or MIC using the AUDIO IN switch, this connector functions as an AUDIO IN CH-1 and AUDIO IN CH-2 connector.

When the audio source is set to AES/EBU using the AUDIO IN switch, this connector functions as the AUDIO IN CH-1/2 and AUDIO IN CH-3/4 connector.

**12. BACK button**

Cancels the menu setting and moves up one level in the menu hierarchy during menu display. Cancels the execution process or pending process during process execution/pending display (pages 34, 48, 61).

**13. LOCK switch**

Locks the operation of the buttons on the Assistant side. When locked, the switch background LED lights in orange.

**14. ACCESS (SD card access) lamp (page 26)****15. REC ACTIVE lamp**

The lamp is lit green when the REC button is enabled.

**16. REC (recording start/stop) button/lamp**

Press to start recording, turning the REC lamp on. Press again to stop recording, turning the REC lamp off (page 97).

The REC lamp flashes when a device error or warning occurs.

**17. CLIPS button**

Press to display the clip list screen on the sub display to enable clip operations (page 86).

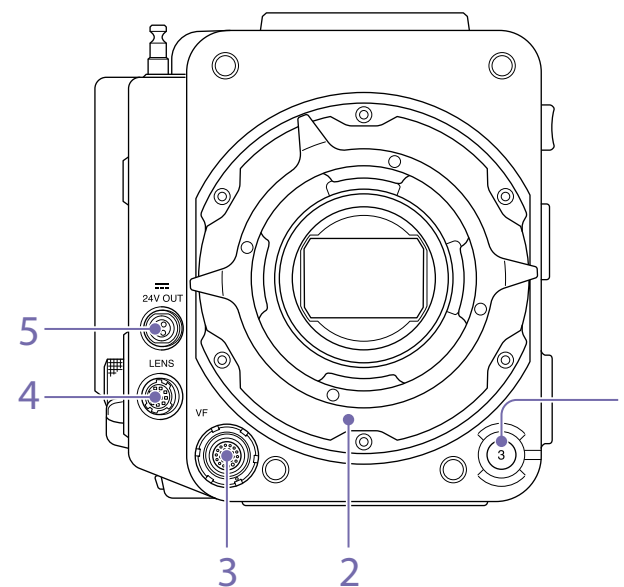
Simultaneously, the clip screen is displayed on the mini display.

To switch from playback mode to shooting mode, press the HOME button.

**18. USER button**

Press to display the user function list on the sub display, and to operate the ITEM keys 1 to 5 user function buttons.

ITEM key 6 is the user function list EDIT button. Press this button to display the function selection screen for the user function buttons and assignable buttons. Press again when the user functions screen is displayed to return to the previous display (page 43).

**Front****1. ASSIGN (assignable) button 3 (page 43)**

Assign functions using the EDIT page of the user functions screen (page 43). The assigned function toggles between on/off (enable/disable) or is activated with each press.

**2. PL lens mount adaptor (page 19)****3. VF (viewfinder output) connector (page 22)****4. LENS connector (12-pin)**

Supports iris, focus, and zoom control from a network-connected computer, smartphone, or tablet in firmware version 4.0 or later.

**5. 24V OUT connector (DC OUT 24 V, Fischer 3-pin)**

24 V DC power supply output connector (page 110). The output voltage and maximum output current of this connector vary depending on the input voltage to the unit. The maximum current includes the output current from the 24V OUT connector on the rear panel (page 11).

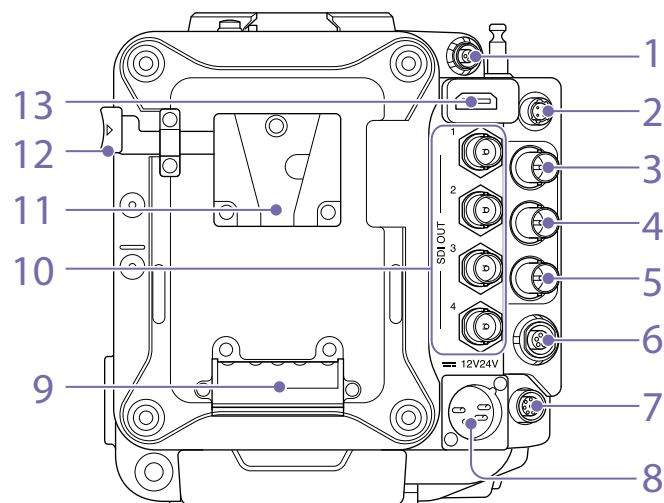
**11 V to 17 V input**

Output voltage : 24 V  
Maximum output current: 1.0 A

**22 V to 32 V input**

Output voltage: Same as the input voltage  
Maximum output current: 2.0 A

## Rear



**1. 24V OUT connector (DC OUT 24 V, Fischer 3-pin)**

24 V DC power supply output connector (page 110).

The output voltage and maximum output current of this connector vary depending on the input voltage to the unit. The maximum current includes the output current from the 24V OUT connector on the front panel (page 10).

**11 V to 17 V input**

Output voltage : 24 V

Maximum output current: 1.0 A

**22 V to 32 V input**

Output voltage: Same as the input voltage

Maximum output current: 2.0 A

**2. 12V OUT connector (DC OUT 12V, Hirose 4-pin)**

12 V DC power supply output connector (page 110).

The output voltage and maximum output

current of this connector vary depending on the input voltage to the unit.

**11 V to 17 V input**

Output voltage: Same as the input voltage

Maximum output current: 1.0 A

**22 V to 32 V input**

Output voltage : 15 V

Maximum output current: 0.8 A

**3. MONITOR OUT connector (BNC type)**

HD SDI monitor signal output connector (page 110).

**4. GENLOCK (genlock input) connector (BNC type)**

To genlock the unit to an external source or to lock the timecode of the unit to an external source, input an external reference signal. Digital signal and analog signal input are supported.

Digital signal: 1.5G HDSDI interlaced signal

Analog signal: HD sync, Analog

**5. TC IN (timecode input) connector (BNC type)**

To lock the timecode of the unit to an external source, input a reference timecode signal.

**6. AUX connector (LEMO 5-pin)**

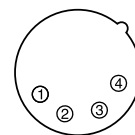
Outputs the timecode signal (page 111).

**7. REMOTE (remote control) connector (8-pin)**

Connect to a remote control unit or other external control device.

**8. 12V/24V (DC power input) connector (page 16)**

DC power supply input connector for external power supply to the unit. Supports 12 V and 24 V input voltages.



No.	Signal
1	GND
2	NC
3	NC
4	DC IN (11 V to 17 V or 22 V to 32 V)

**9. Battery attachment terminal (page 16)**

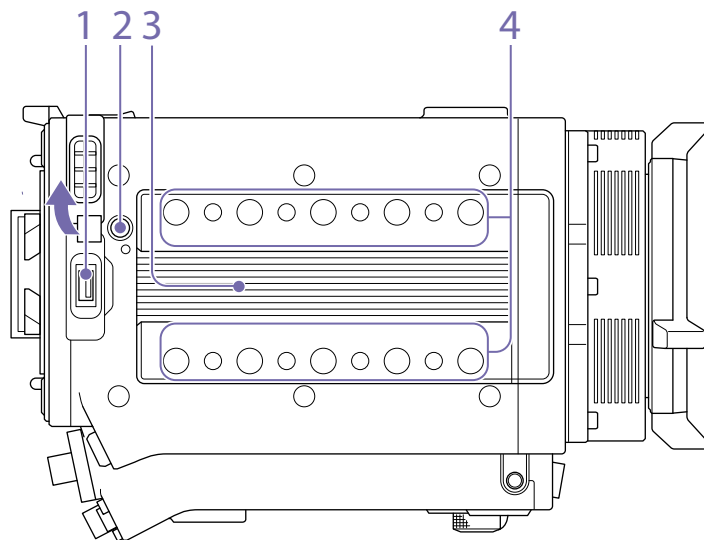
**10. SDI OUT 1 to 4 (serial digital output) connectors (BNC type) (page 110)**

**11. Battery pack mount (page 16)**

**12. Battery release lever (page 16)**

**13. HDMI OUT connector (page 110)**

## Top

**1. External device connector**

Used for updating an AXS-R7 AXS Recorder (option) when the AXS-R7 is attached to the unit (page 29) or for using camera wireless remote control (page 92) by connecting a CBK-WA02 Wireless LAN Adaptor (option).

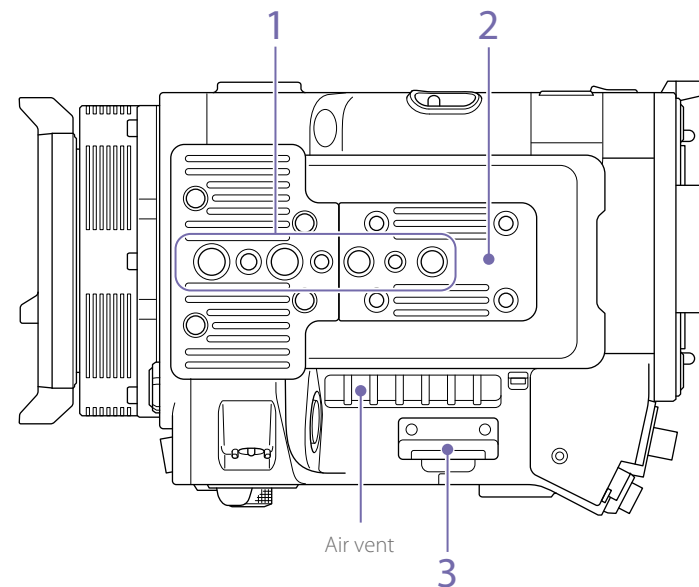
**2. Release button (page 18)****3. Handle/VF attachment mount (page 18)****4. Accessory mounting screw holes**

Type of screw: 1/4-20UNC (8)

Type of screw: 3/8-16UNC (10)

Length of engagement: 10 mm (3/8 inch) or less

## Bottom

**1. Tripod plate attachment holes**

Type of screw: 1/4-20UNC (2)

Type of screw: 3/8-16UNC (4)

Length of engagement: 9 mm (3/8 inch) or less

**2. Bottom cover**

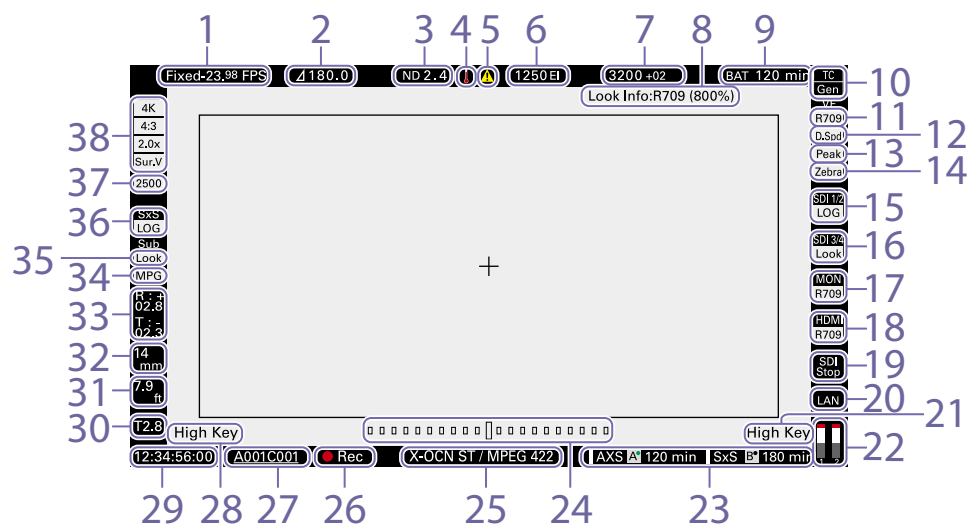
Remove the four hex screws to remove the cover.

**3. SD card slot (page 26)**

## Viewfinder/Monitor Screen

During shooting (recording or standby) and playback, the information selected in Monitoring > OSD Appearance > Status Info A/B Setup (page 72) in the full menu is displayed.

### Information displayed on the screen while recording



1. **Recording frame rate indicator**  
 Displays the recording frame rate and project frame rate.  
 0.9 (1/8)  
 1.2 (1/16)  
 1.5 (1/32)  
 1.8 (1/64)
2. **Shutter angle/shutter speed indicator**  
 Displays the shutter angle or shutter speed of the electronic shutter, according to the Technical > System Configuration setting in the full menu.  
 2.1 (1/128)  
 2.4 (1/256)
3. **ND filter indicator**  
 Displays the density of the ND filter. The display value is a LOG (base 10) value (page 62).  
 CLEAR  
 0.3 (1/2)  
 0.6 (1/4)
4. **Thermometer icon**  
 Displayed when a high temperature warning message is issued.  
 The description is displayed in the Info category in the menu.

5. **Warning icon**  
 Displayed when other than a high temperature warning message is issued. The description is displayed in the Info category in the menu.
6. **Exposure index (EI)/gain indicator**  
 Displays the EI value, or the gain value (dB units) set by an RM-B170 or other remote control unit.  
 [Note]  
 The gain value is displayed only when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.
7. **Color temperature indicator**  
 Displays the color temperature and Tint value of the white balance.
8. **Look information display**  
 Displays the selected Look (page 65).
9. **Battery capacity/voltage indicator**  
 Displays the following indicators according to the type of battery power source.

Battery type	Display
InfoLithium battery	Battery remaining capacity and remaining recording time
Anton/Bauer battery	Remaining battery capacity (% indicator)
Other batteries	Input voltage

10. **Timecode external lock indicator/Genlock status indicator**  
 Displays locked status when the timecode is locked to an external source. Displays locked status when genlocked.
11. **VF LUT indicator**  
 Displays the viewfinder LUT (page 64).
12. **VF Double Speed Scan indicator**  
 Displays the on/off state of the function for doubling the frame rate of the viewfinder display.

13. **VF Peaking indicator**  
 Displays the on/off state of the peaking function of the viewfinder display.
14. **VF Zebra indicator**  
 Displays the on/off state of the zebra function of the viewfinder display (page 45).
15. **SDI OUT 1/2 connector LUT indicator**  
 Displays the LUT setting of the SDI OUT 1/2 connectors (page 63).
16. **SDI OUT 3/4 connector LUT indicator**  
 Displays the LUT setting of the SDI OUT 3/4 connectors (page 63).
17. **Monitor LUT indicator**  
 Displays the LUT setting of the Monitor output (page 63).
18. **HDMI LUT indicator**  
 Displays the LUT setting of the HDMI output (page 64).

**19. SDI output REC trigger indicator**

Displays the SDI output REC trigger status.

State	Display	
Technical > System Configuration > SDI Rec Remote Trigger in the full menu	Recording command superimposed on the SDI output	
Off	–	(Blank)
HD SDI Remote I/F	Stop command	Top: SDI Bottom: Stop
	Rec command	Top: SDI Bottom: REC
Parallel Rec	Stop command	Top: SDI-P Bottom: Stop
	Rec command	Top: SDI-P Bottom: REC

**20. Network connection status indicator**

Displays the network connection status (LAN or Wi-Fi).

State	Display
Disconnected or other error (valid network connection settings)	Flashing
Connected (valid network connection settings)	On
Network connection function not used	Blank

**21. High Key/Low Key indicator (Monitor output)**

Displayed when the Monitor output is High Key (screen for checking blown-out highlights) or Low Key (screen for checking blocked-out shadows) (displayed for Monitor Out output).


**22. Audio level meter indicators**


Displays the levels of audio channels 1 and 2 while recording.

**23. Recording media state/remaining capacity indicator for each media slot**

Displays the state and remaining capacity of the media in SxS memory card slots A/B and AXS memory card slots A/B.

A  mark on the left of "AXS" or "SxS" indicates the recording target media.

An indicator  on the upper right of the slot A/B icon on the right of "AXS" or "SxS" indicates the playback target media (green indicator indicates media is being played).

A  icon is displayed for media if a condition occurs that could impact recording.

**24. Spirit level gauge graphical indicator**

Displays the horizontal tilt of the unit in  $\pm 0.1^\circ$  increments, up to  $\pm 10^\circ$ .





You can adjust the zero angle alignment of the spirit level gauge by executing Technical > Special Configuration > Level Gauge Adjust (page 81) in the full menu.

**25. Recording media format (codec) indicator**

Displays the format of the recording on an AXS memory card or an SxS memory card.

**26. Recording status indicator**

Displays the following recording operation states of the unit.

Display	Description
	Recording
	Recording standby
	Picture cache recording standby
	CALL command incoming

**27. Clip name display**

Displays the first 8 characters of the name of the next clip to be recorded in recording standby mode.

Displays the first 8 characters of the name of the clip currently being recorded when recording.

**28. High Key/Low Key indicator (viewfinder output)**

Displayed when the viewfinder output is High Key (screen for checking blown-out highlights) or Low Key (screen for checking blocked-out shadows) (displayed for viewfinder output).

**29. Time data display**

Displays the duration or timecode, depending on the TC/Media category > TC Display setting in the menu (page 49).

**30. Iris position indicator**

Displays the iris position (only when a lens that is compatible with the iris setting display function is attached).

The iris position indicator displays in 1/3 stop increments when using an E-mount lens.

**[Note]**

The F-stop value is displayed instead of the T-stop value if the T-stop value cannot be obtained.

**31. Focus position indicator**

Displays the focus position (only when a lens that is compatible with the focus setting display function is attached).

**32. Zoom position indicator**

Displays the focal length of the zoom (displayed only when a lens that supports the zoom setting indicator is attached).

**33. Spirit level indicator**

Displays horizontal level information numerically.

R (Roll) indicates the left-to-right horizontal tilt of the unit.

T (Tilt) indicates the front-to-rear vertical tilt of the unit.

You can adjust the zero angle alignment of the spirit level gauge by executing Technical > Special Configuration > Level Gauge Adjust (page 81) in the full menu.

**34. Simultaneous recording status indicator**

Displays the sub clip recording format in 1-slot simultaneous recording mode (page 98).

**35. SxS Sub LUT indicator**

Displays the LUT setting to register for a sub clip in SxS 1-slot simultaneous recording mode.

**36. SxS LUT indicator**

Displays the LUT setting for SxS recording.

**37. Base ISO indicator**

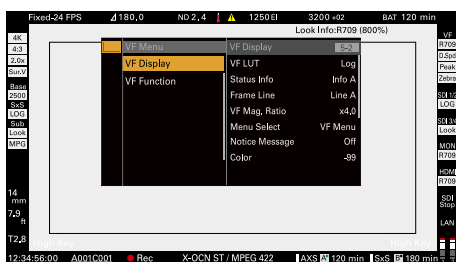
Displays the configured native sensitivity.

**38. Effective picture size indicator**

Displays the effective picture size and whether anamorphic de-squeeze conversion is applied, set using Project category > Imager Mode in the menu. In Surround View mode, a "Sur.V" icon is displayed below the anamorphic conversion ratio icon (page 49).

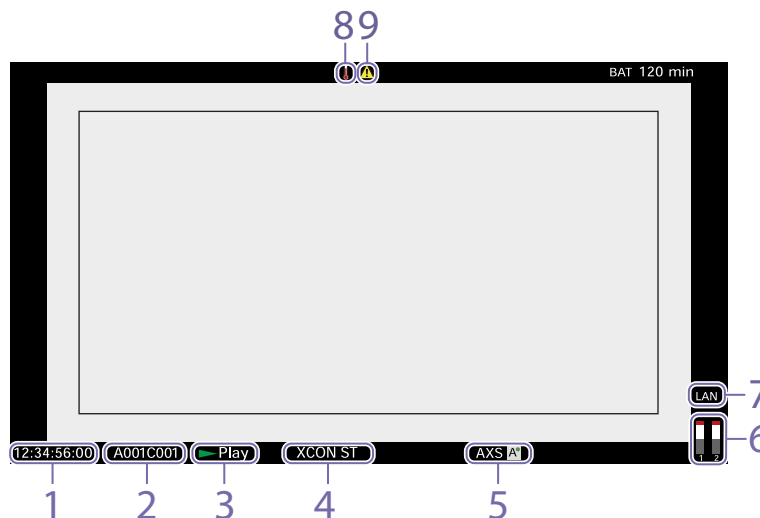
### Menu display and settings on the viewfinder screen

When a DVF-EL200 is attached to the unit, press and hold the Menu button on the DVF-EL200 to display the Monitoring > VF Display (page 76) and VF Function (page 77) setup menus on the viewfinder screen. This allows you to configure these functions while viewing the viewfinder screen.



### Information displayed on the playback screen

The following information is displayed on the playback picture.



1. **Time data display**  
Displays the duration or timecode, depending on the TC/Media category > TC Display setting in the menu (page 49).
2. **Playback clip name display**  
Displays the first 8 characters of the name of the playback clip.
3. **Playback status indicator**  
Displays the playback status.  
Displays "CALL" when a CALL command is received.
4. **Playback media format (codec) indicator**  
Displays the recording format (codec) of the playback clip.
5. **Playback media indicator**  
Displays the type of recording media being played.  
A icon appears on the right if the memory card is write-protected.

6. **Audio level meter indicators**  
Displays the levels of audio channels 1 and 2 during playback.
7. **Network connection status indicator**  
Displays the network connection status (LAN or Wi-Fi).

State	Display
Disconnected or other error (valid network connection settings)	Flashing
Connected (valid network connection settings)	On
Network connection function not used	Blank

8. **Thermometer icon**  
Displayed when a high temperature warning message is issued.  
The description is displayed in the Info category in the menu.

9. **Warning icon**  
Displayed when other than a high temperature warning message is issued.  
The description is displayed in the Info category in the menu.

# Preparing a Power Supply

You can use a battery pack or AC power via an AC adaptor.

For safety, use only the Sony battery packs and AC adaptors listed below.

## Lithium-ion battery pack

BP-FL75  
BP-GL95B

## AC adaptor

AC-DN10A

## Using a Battery Pack

Insert the battery pack into the battery pack mount (page 11) of the battery adaptor, then slide the battery pack down to lock it in place. To remove it, unlock the battery pack by sliding it up while pressing the battery release lever (page 11), then remove it.

### [Notes]

- Before use, charge the battery pack with the battery charger.
- A warm battery pack immediately after use may not be able to be fully recharged.
- Remove the battery adaptor while supporting the unit by hand.

## Checking the remaining battery charge

When recording or playback is in progress using the battery pack, the current battery remaining time and battery voltage are displayed on the sub display screen (page 32) and viewfinder/monitor screen (page 13).

The unit indicates the remaining usage time in minutes by calculating the available time with the battery pack if operation is continued at the current rate of power consumption.

## If the remaining battery charge becomes low

If the remaining battery charge decreases to a certain level during operation, the remaining battery capacity indicator flashes and the REC lamp flashes to warn you.

If the remaining charge further decreases to a level at which operation cannot be continued, a battery-empty message appears.

Replace the battery pack with one that is fully charged.

## To change the message levels

Change levels using Technical > Battery (page 83) in the full menu.

## Using AC Power (DC IN Power)

The unit works with AC power using the AC-DN10A (optional) or AC-DN2B AC adaptor (optional) and CCDD-X2 DC cable (optional). 11 V to 17 V and 22 V to 32 V input voltage ranges are supported.

### [Notes]

- When switching to the DC IN power supply during battery operation, use a power supply with a voltage in the range 12 V to 17 V.
- When using a 22 V to 32 V power supply, first set the power switch to the OFF position before connecting the power supply.
- Do not switch directly from a 11 V to 17 V power supply to a 22 V to 32 V power supply, or vice versa. This may cause a malfunction.

## Using a Battery Pack and DC IN Power Supply Together

Whenever an active power supply is applied using a battery pack and a DC IN power supply, the DC IN power supply takes precedence.

### [Note]

When the power supply switches from battery operation to the DC IN power supply, operation of the unit may stop if the following occurs.

- Chattering of the connector contacts when inserting the DC connector
- Voltage drop when switching between power supplies (more prevalent when the external load is greater)



# Setting the Clock

When you use the unit for the first time, the initial setup screen appears on the sub display when the power is turned on.

Set the date and time of the built-in clock using this display.

---

## Time Zone

---

The value shows the time difference from UTC (Coordinated Universal Time). Change the setting if needed.

**[Note]**

When Time Zone is changed, the clock setting changes according to the time difference.

---

## Setting the Date and Time

---

Turn the MENU dial (page 9) to move the cursor, then press the MENU dial to set each menu item. When you press the MENU dial when the cursor is on "Set," the setting display disappears and the clock setting is completed.

After the initial setup screen disappears, you can change Time Zone and date/time settings using Maintenance > Clock Set (page 84) in the full menu.

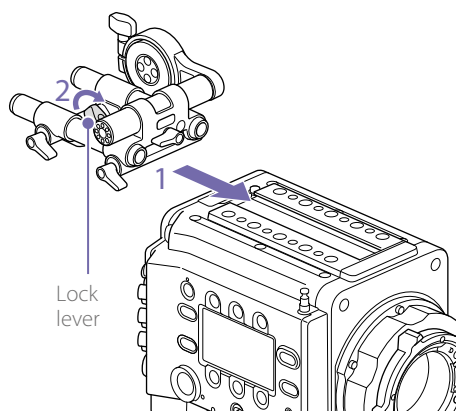
**[Notes]**

- If the clock setting is cleared because the backup battery fully discharged when no power was supplied (no battery pack and no DC IN connection), the initial setup display will be displayed when you next turn the unit on.
- While the initial setup display is shown, no other operation, except turning the power off, is permitted until you finish the setting for this display.

# Attaching the VF Attachment and Handle

## Attaching the VF Attachment

- 1 Slide the VF attachment on in the direction of the arrow to attach it.
- 2 Position the VF attachment in the desired front/rear position, then turn the lock lever to secure it in position.



### [Notes]

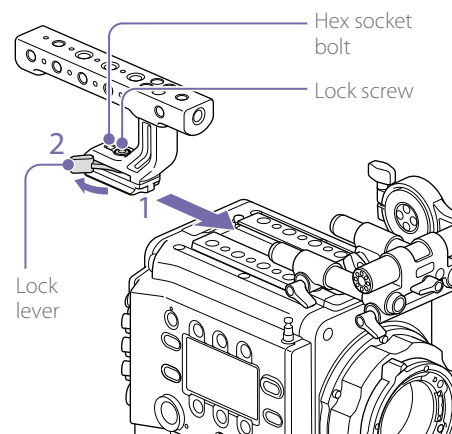
- You can also attach the VF attachment in the front/rear or left/right orientation.
- If the lock lever is difficult to tighten or loosen, you can use a hex wrench (3 mm) on the lock screw on the top of the lock lever.

## To remove the VF attachment

Turn the lock lever to loosen, press the release button and slide the VF attachment off in the reverse direction from when attaching it.

## Attaching the Handle

- 1 Slide the handle on in the direction of the arrow to attach it.
- 2 Position the handle in the desired front/rear position, then turn the lock lever to secure it in position.



### [Notes]

- You can also attach a lock screw using a hex wrench (5 mm) to secure it in position.
- If the lock lever on the handle becomes loose during use, you can secure the handle by tightening a hex socket bolt (2 mm) beside the lock screw.
- You can also attach the handle in the reverse orientation.

## To remove the handle

Turn the lock lever to loosen, press the release button and slide the handle off in the reverse direction from when attaching it.

# Mounting a Lens and Adjusting the Flange Focal Length

## Recommended PL-mount lens (Super 35mm size)

SCL-PK6/F, SCL-PK6/M (set of 6 lenses,  
20 mm/25 mm/35 mm/50 mm/85 mm/135 mm)  
SCL-PK3/F, SCL-PK3/M (set of 3 lenses,  
20 mm/25 mm/135 mm)  
SCL-P11X15

## Recommended E-mount lens

SELP28135G, SEL1635GM, SEL2470GM,  
SEL70200GM, SEL100400GM, SEL1224G,  
SEL35F14Z, SEL50F14Z, SEL85F14GM, SEL90M28G,  
SEL100F28GM

### [Note]

Control may not be supported with some E-mount lenses.  
Use a recommended lens.

For details about available lenses for the unit, contact a Sony  
service representative.

### [CAUTION]

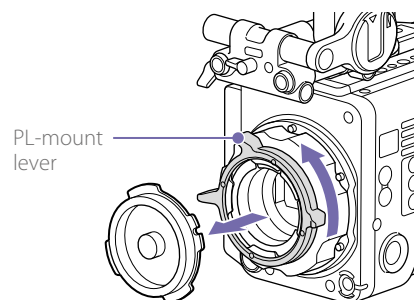
Do not leave the lens facing the sun. Direct  
sunlight can enter through the lens, be focused in  
the unit, and cause fire.

### [Notes]

- Turn the unit off before attaching or removing the lens and adapter.
- A lens is a precision part. Do not place the lens down with the mount side facing down. Attach the cap supplied with the lens.
- The lens interface of the unit is configured by factory default for an SCL-P11X15 and lenses with Cooke type connector. To use an SCL-PK6, SCL-PK3, or other lenses that do not have a Cooke type connector, set Technical > Lens Configuration > PL-Mt Interface Position (page 81) to Off in the full menu. If this setting is not correct, an alert message appears when the unit is turned on after attaching the lens.

## Attaching a PL-Mount Lens

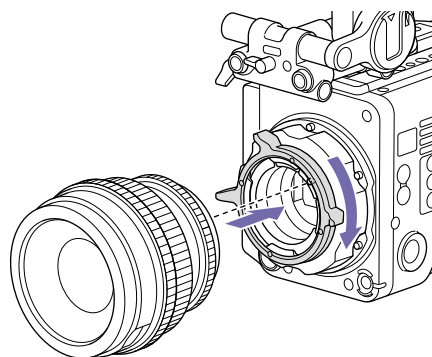
- 1 Remove the mount cover from the lens mount by turning the PL-mount lever counterclockwise.



### [Note]

Turn the PL-mount lever counterclockwise to the stopper position.

- 2 Insert the lens into the lens mount by aligning the concave part of the lens with the positioning pin on the upper right of the lens mount.
- 3 Secure the lens by turning the PL-mount lever clockwise while holding the lens.



### [Note]

Do not turn the lens when attaching the PL-mount lens.  
It may cause damage to the hot shoe pin.

## To attach a Cooke /i lens

Align the contacts on the lens with the hot shoe of the unit. There are two connectors on the side of the lens adaptor, and either can be used.

## To remove the lens

- 1 Turn the PL-mount lever counterclockwise while holding the lens from underneath.
- 2 Pull the lens forward.

### [Note]

If another lens will not be attached soon, carefully align the concave part of the mount cover, then secure the mount cover by turning the PL-mount lever clockwise.

## Adjusting the Flange Focal Length

The unit is shipped with the flange focal length already adjusted. If you need to adjust the flange focal length, remove the lens mount, and change the shims with those of the appropriate thickness. You can adjust the thickness by  $\pm 0.1$  mm in 0.01 mm increments.

## Shims

The following shims are supplied with the unit.  
0.05 mm  $\times$  1 (circular)  
0.01 mm  $\times$  15 (1/3 arc)  
1/3 arc shims should always be used as a set of three shims. Insert shims to increase the flange focal length. The unit is shipped with the flange focal length already adjusted using the following three types of shims.

0.10 mm (circular)

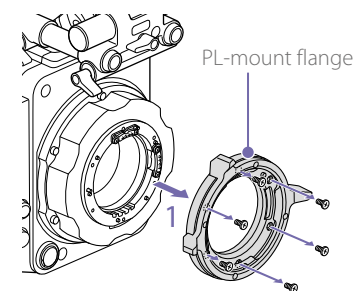
0.05 mm (circular)

0.01 mm (1/3 arc)

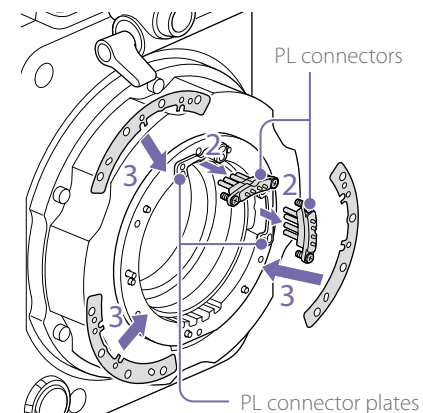
A seal is attached showing the shim thickness when shipped.

## Adjusting the flange focal length

- 1 Remove the six Torx screws and remove the PL-mount flange.

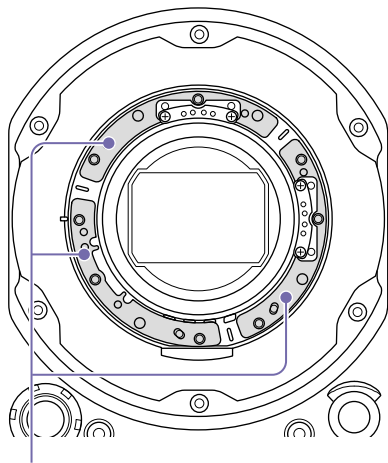


- 2 Loosen the four Phillips screws on both sides of the PL connectors (two locations), and remove the PL connectors and PL connector plates.
- 3 Attach shims to the PL-mount adaptor (three locations).



**When using 1/3 arc shims**

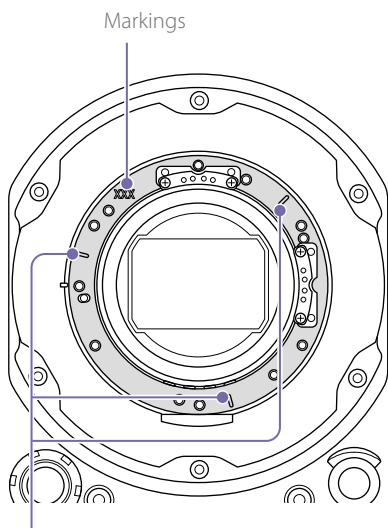
Attach shims so that they have the same thickness in all three locations.



Shims

**When using circular shims**

Attach with the surface that has markings on it facing the front.

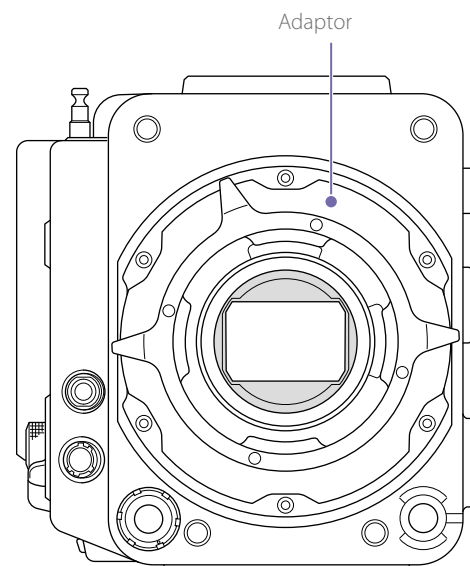


Markings

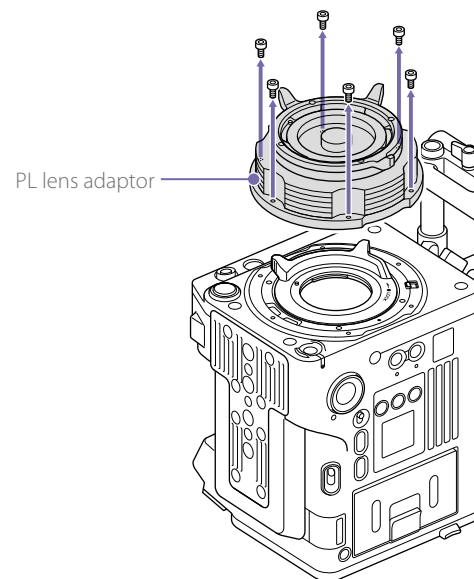
- 4 Reattach the PC connectors (two locations) to their original positions, and tighten the four Phillips screws with 0.18 N·m tightening torque.
- 5 Reattach the PL-mount flange in its original position, and tighten the six Torx screws to a tightening torque of 0.35 N·m using a T8 torque wrench.

**Cleaning the Filter**

To clean the filter, first remove the adaptor. Exercise care when wiping the adaptor center part (shaded part) with a cloth or other material to prevent fibers adhering to surfaces. If fibers are adhering, wipe off using a soft brush.

**Removing the PL Lens Adaptor**

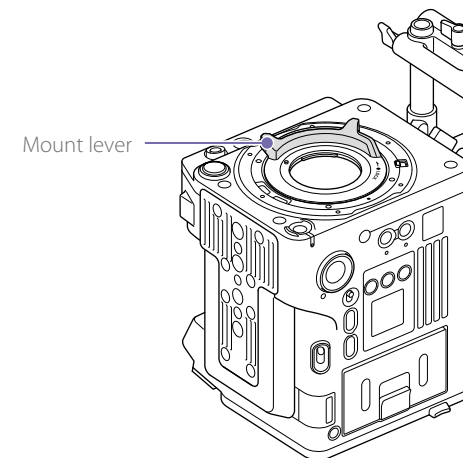
Remove the PL lens adaptor when you want to mount an E-mount lens to the unit. Attachment/removal is performed with the rear side of the unit facing down. Remove the six hex screws (2.5 mm) and remove the PL lens adaptor.

**[Notes]**

- Removing the battery and placing the rear side of the unit face down provides stability.
- When attaching/removing the adaptor, take care not to touch the connector contacts of the unit and PL lens adaptor.

**To attach the PL lens adaptor**

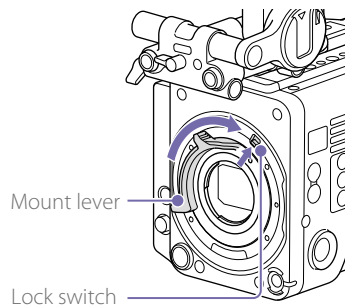
- 1 Check that the mount lever is in the locked position.



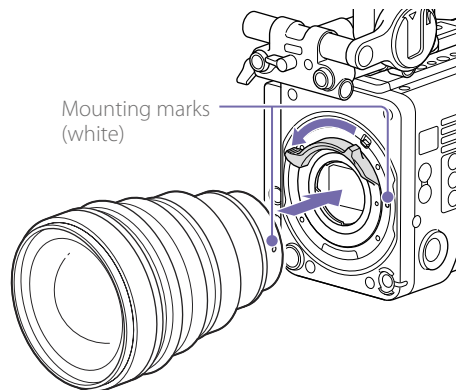
- 2 Place the PL lens adaptor back in its original position, insert the six hex screws (2.5 mm), and tighten the screws to a tightening torque of  $0.8 \pm 0.12$  N·m using a hex wrench (2.5 mm).

## Attaching an E-Mount Lens

- 1 Remove the PL lens adaptor (page 20).
- 2 Push the lock switch up, and turn the mount lever clockwise to release the lock.



- 3 Align the mounting marks (white) on the unit and lens mount, and then push the lens into the mount.
- 4 Secure the lens by turning the mount lever counterclockwise while holding the lens.



## To remove the lens

- 1 Push the lock switch up, and turn the mount lever clockwise to release the lock.
- 2 Pull the lens forward.

### [Note]

If another lens will not be attached soon, carefully align the concave part of the mount cover, then secure the mount cover by turning the mount lever counterclockwise.

### [Note]

When an E-mount lens is connected, operation using a 12-pin lens connector is not guaranteed.

# Attaching a Viewfinder

## Available viewfinders for the unit

DVF-EL200: OLED color viewfinder

DVF-L700: LCD color viewfinder

Viewfinders are available separately.

This section describes attachment of the DVF-EL200 as an example.

For details about attaching each viewfinder, refer to the operating instructions of the viewfinder.

### [CAUTION]

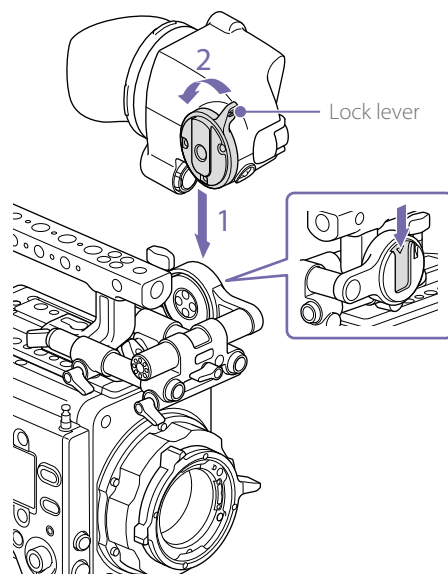
Do not leave the unit with the eyepiece of the viewfinder facing the sun. Direct sunlight can enter through the eyepiece, be focused in the viewfinder, and cause fire.

### [Notes]

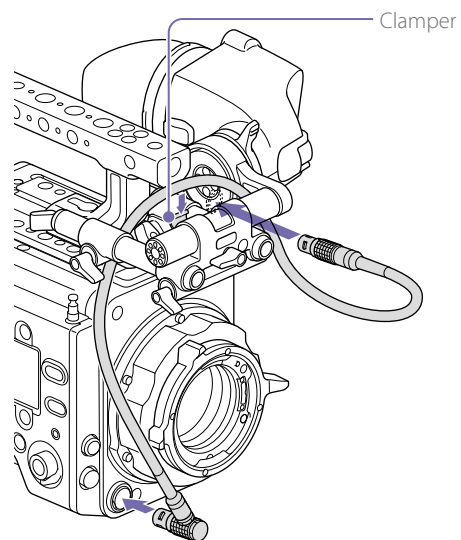
- Attach/remove the viewfinder while the unit is turned off.
- A VF cable (A-2201-632-A or A-2201-633-A) is required in order to attach the DVF-L700. Also, turn the unit on after setting the POWER switch of the DVF-L700 to the ON position.

## Attaching a Viewfinder

- 1 Align the viewfinder shoe with the groove of the viewfinder mount on the VF attachment, and attach the viewfinder.
- 2 Turn the viewfinder lock lever in the LOCK direction to secure it in position.



- 3 Connect the viewfinder and unit using the VF connection cable.  
Viewfinder side:  
Position the connector with the mark (red) at the top, and fully insert the connector.  
Camera side:  
Align the concave part of the VF connector with the connector mark (red), and fully insert the connector.



### [Note]

Secure the cable in the clammer as required.

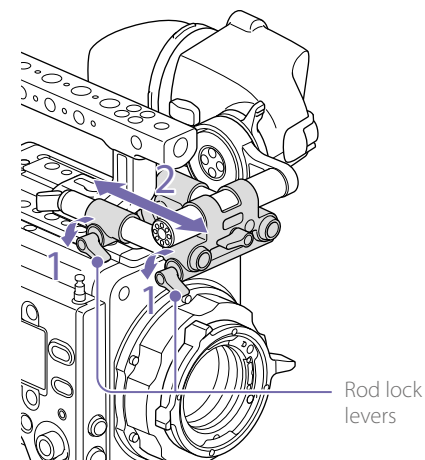
## To remove the viewfinder

- 1 Disconnect the VF connection cable from the viewfinder and unit.
- 2 Turn the lock lever in the direction opposite to LOCK, then remove the viewfinder from the VF attachment.

## Adjusting the Viewfinder Position

### To adjust the front/rear position

- 1 Loosen one or both of the front/rear rod lock levers of the VF attachment.
- 2 Slide the VF attachment forward/rearward to adjust the viewfinder position.



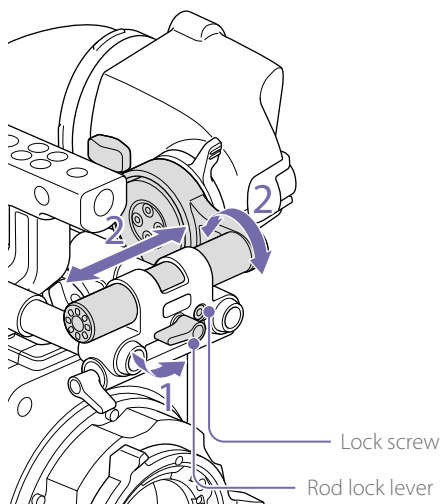
- 3 Tighten the rod lock levers.

### [Note]

If a rod lock lever is difficult to turn, pull the lever out, turn it to a position where it is easier to operate, and then push the lever back in.

### To adjust the left/right position and height (angle)

- 1 Loosen the rod lock lever at the front of the VF attachment.
- 2 Slide the VF attachment rod left/right and turn the rod up/down to adjust the viewfinder position.



- 3 Tighten the rod lock lever.

#### [Note]

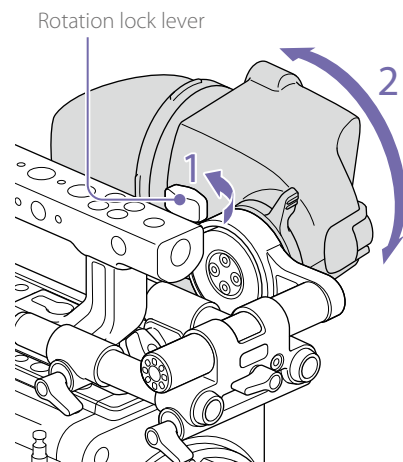
When the rod lock lever is loosened, adjust the lock screw using a hex wrench (3 mm) to prevent the viewfinder from falling down.

### To adjust the viewfinder angle

You can adjust the angle of the viewfinder while shooting.

- 1 Loosen the rotation lock lever on the viewfinder mount.

- 2 Turn the viewfinder up/down to adjust the angle.



- 3 Tighten the rotation lock lever.

# Handling SxS Memory Cards

This unit records audio and video on SxS memory cards (optional) loaded in the card slots.

## About SxS Memory Cards

Use the following Sony SxS memory cards or XQD memory cards.\*

\* When using an XQD memory card, the XQD ExpressCard adaptor (QDA-EX1) is required.

The supported memory cards differ depending on the recording format.

### SxS PRO X

SBP-240F/120F: Supported for all recording formats.

### SxS PRO+

SBP-256D/E, SBP-128B/C/D/E, SBP-64B/C/D/E: Supported for all recording formats

### SxS PRO

SBP-64A, SBP-32:  
MPEG 1920×1080i, HD ProRes 422,  
HD ProRes 422 Proxy

### SxS-1

SBS-128G1B/C, SBS-64G1A/B/C, SBS-32G1A/B/C:  
MPEG 1920×1080i, HD ProRes 422,  
HD ProRes 422 Proxy

### XQD memory card S series, G series

QD-S64E, QD-S32E, QD-G128A/E, QD-G64A/E, QD-G32A/E, QD-G120F, QD-G240F: Supported for all recording formats

### XQD memory card N series, M series

QD-N64, QD-M128A, QD-M64A, QD-M32A:  
MPEG 1920×1080i, HD ProRes 422 Proxy

Operations are not guaranteed with other memory cards.

These memory cards comply with the ExpressCard standard.

*For details on using SxS memory cards and usage-related precautions, refer to the instruction manual for the SxS memory card.*

- SxS, SxS PRO, and SxS-1 are trademarks of Sony Corporation.
- XQD is a trademark of Sony Corporation.
- The ExpressCard word mark and logo are owned by Personal Computer Memory Card International Association (PCMCIA) and are licensed to Sony Corporation.
- ProRes is a registered trademark of Apple Inc. All other trademarks are the property of their respective owners.

## Inserting an SxS Memory Card

- 1 Open the cover of the card slot block (page 9).
- 2 Insert the SxS memory card into the slot with the SxS label facing to the right. The ACCESS lamp (page 8) lights in red then changes to green once the memory card is ready for use.
- 3 Close the cover.

## ACCESS lamp status

Card slots A and B each have an ACCESS lamp that indicate the slot status.

Lamp	Slot status
Lights in red	Accessing the SxS memory card (writing/reading data)
Lights in green	Standby (ready for recording or playback using the SxS memory card)
Off	<ul style="list-style-type: none"> <li>• No SxS memory card is loaded.</li> <li>• The loaded card is invalid.</li> <li>• An SxS memory card is loaded, but the other slot is selected.</li> </ul>

## Removing an SxS Memory Card

- 1 Open the cover of the card slot block.
- 2 Pull out the SxS memory card.

### [Note]

Data integrity is not guaranteed if the power is turned off or a memory card is removed while it is being accessed. Data on the card may be destroyed. Be sure that its ACCESS lamp is lit in green or off when you turn off the power or remove a memory card.

## Switching Between SxS Memory Cards

When SxS memory cards are loaded in both slot A and slot B, you can press the SLOT SELECT button (page 9) to select the SxS memory card to use. If a card becomes full, recording continues after automatically switching to the second card.

### [Note]

The SLOT SELECT button is disabled while recording/playback is in progress. The memory cards are not switched even if you press the button.



## Formatting (Initializing) SxS Memory Cards

When an unformatted SxS memory card or an SxS memory card formatted in another specification is loaded, a message notifying you that the media has a different file system appears. In this case, format the memory card in the following way.

- 1 Select TC/Media category > Format Media in the menu.
- 2 Select SxS Slot A (slot A) or SxS Slot B (slot B), then press the MENU dial.  
A confirmation screen prompting whether to format the card appears.
- 3 Press and hold ITEM key 1 and ITEM key 3 for 3 seconds to execute formatting.  
Formatting starts, a message is displayed during execution, and the ACCESS lamp lights in red.  
When formatting ends, a completion message appears. Press the MENU dial to dismiss the message.

### If formatting fails

A write-protected SxS memory card or memory card that cannot be used with this unit will not be formatted.

A warning message is displayed. Replace the card with an appropriate SxS memory card, according to the instructions in the message.

#### [Note]

All the data, including recorded pictures and setup files, are erased when a memory card is formatted.

### Formatting while recording

Even while recording, the SxS memory card loaded in the other card slot can be formatted.

## Checking the Remaining Recording Time

While shooting (recording or standby), you can check the remaining capacity on the SxS memory cards loaded in each slot using the recording media remaining capacity indicator on the Home screen of the sub display (page 32) or the viewfinder/monitor screen (page 13).  
The available time for recording with the current video format (recording bit rate) is calculated according to the remaining space on each card and displayed in time units of minutes.

#### [Note]

A  icon appears if a memory card is write-protected.

### Exchanging an SxS memory card

- If the total remaining time on the inserted memory cards during recording becomes less than the time set using Technical > System Configuration > Media Near Full Alarm (page 81) in the full menu, the remaining media capacity indicator flashes, the REC lamp flashes, and a beep sound is emitted to warn you. Replace the cards with those that have sufficient space.
- If you continue recording, the message “Media Full” appears, and recording stops when the total remaining recording time falls to 0.

#### [Note]

Up to approximately 600 clips can be recorded on one SxS memory card.

The display of remaining recording time changes to “0” and the message “Media Full” appears when the clip limit is reached.

## Restoring an SxS Memory Card

If for any reason an error should occur in a memory card, the card must be restored before use.

If an SxS memory card that needs to be restored is loaded, a message prompting you to execute the restore operation is displayed on the sub display. To start the restore process, select Execute by turning the MENU dial, then press the MENU dial. The restoration starts.

During execution, a message is displayed and the ACCESS lamp lights in red.

When restoration ends, a completion message appears. Press the MENU dial to dismiss the message.

### If restoration fails

- A write-protected SxS memory card, or one on which an error occurred, cannot be restored. For such a card, a warning message is displayed. Release the write protection or replace the card, according to the instructions in the message.
- An SxS memory card on which an error occurred may become usable again when reformatted.
- In some cases, some clips can be restored while others cannot. Playback of the restored clips becomes possible again.
- The following operation may restore an SxS memory card for which the message “Could not Restore Some Clips” is repeatedly displayed each time you try the restoration process.

- [1] Copy the required clips to another SxS memory card.
- [2] Format the unusable SxS memory card on the unit.
- [3] Copy the required clips back to the newly formatted SxS memory card.
- [4] Update the management file as described below.

#### [Note]

For restoration of media recorded with this unit, be sure to use this unit.

Media recorded with a device other than this unit or with another unit of different version (even of the same model) may not be restored using this unit.

### Updating the management file

If clips cannot be played back, updating the management file on the card may improve the situation.

Use TC/Media > Update Media (page 71) in the full menu to update the management file.

If you write an XAVC file that is imported by RAW Viewer V2.2 or later to the “XDROOT/Clip” directory of an SxS memory card directly, that file can become playable by executing Update Media.

# Handling SD Cards for Saving Configuration Data

You can store the configuration file of the camera on an SD card (optional). The stored file can be loaded from the SD card.

## Supported SD Cards

SDHC memory cards\* (Speed Class: 4 to 10, non-UHS, Capacity: 2 GB to 32 GB)

SD memory cards\* (File system: FAT 16, Capacity: up to 2 GB)

\* Referred to as "SD cards" in this manual.

## Inserting an SD Card

Insert an SD card into the SD card slot (page 12). The ACCESS lamp (page 10) lights in red then changes to green once the memory card is ready for use.

### ACCESS lamp status

Lamp	Slot status
Lights in red	Accessing the SD card (writing/reading data)
Off	<ul style="list-style-type: none"> <li>No SD card is loaded.</li> <li>The loaded card is invalid.</li> </ul>

## Removing an SD Card

Press the SD card in slightly, then remove the card.

### [Notes]

- Data integrity is not guaranteed if the power is turned off or a memory card is removed while it is being accessed. Data on the card may be destroyed. Be sure that its ACCESS lamp is lit in green or off when you turn off the power or remove a memory card.
- Make sure that the card does not pop out when inserting or removing it.

## Formatting (Initializing) an SD Card

SD cards must be formatted the first time they are used in the unit.

SD cards for use in the unit should be formatted using the format function of the unit. It is also necessary to format an SD memory card if a caution message is displayed when the card is loaded.

If an SD card that was formatted in an unsupported format is loaded in the unit, a file system mismatch message is displayed.

1 Select TC/Media category > Format Media > SD Card in the menu, then press the MENU dial.  
A confirmation screen prompting whether to format the card appears.

2 Press and hold ITEM key 1 and ITEM key 3 for 3 seconds to execute formatting.  
Formatting starts, a message is displayed during execution, and the ACCESS lamp lights in red.  
When formatting ends, a completion message appears. Press the MENU dial to dismiss the message.

### [Note]

All data is erased when an SD card is formatted, and the data cannot be restored.

### To use media formatted with this unit in the slots of other devices

Make a backup of the media, then format it using the other device.

# Using with AXS-R7

You can record video/audio in RAW or X-OCN to an AXS-R7 AXS (Access Memory Card System) Recorder (optional) by attaching the recorder to the unit.

## [Note]

To attach an AXS-R7 to the unit, the firmware version of the AXS-R7 may need to be updated according to the version of the unit (page 29). The following shows the version compatibility.

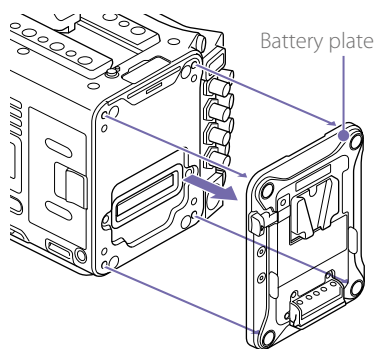
Version of unit	Version of AXS-R7
1.0, 1.01	1.1
2.01	2.0
3.0	3.0
4.0	4.0
5.0	5.0

## Attaching the AXS-R7

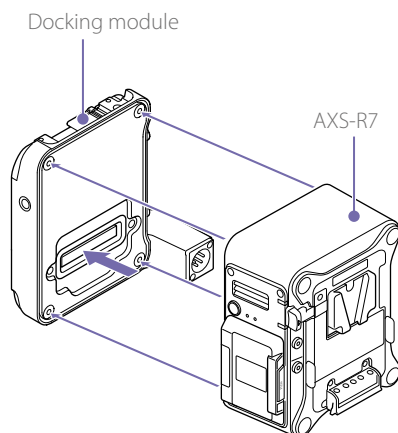
### [Note]

Attach/remove the AXS-R7 while the unit is turned off.

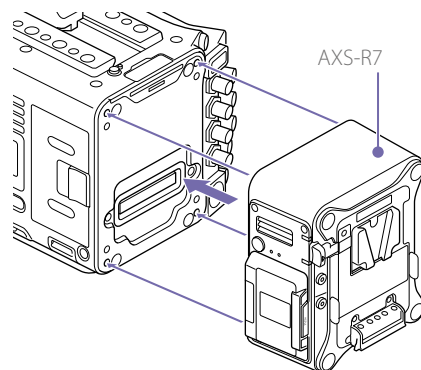
- 1 Unscrew the four hex screws (3 mm) on the rear of the unit, and remove the battery plate.



- 2 Unscrew the four hex screws on the rear of the AXS-R7, and remove the docking module from the AXS-R7.



- 3 Attach the AXS-R7 to the unit, and tighten the four hex screws.

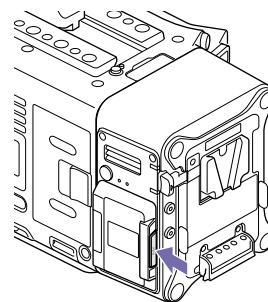


## To remove the AXS-R7

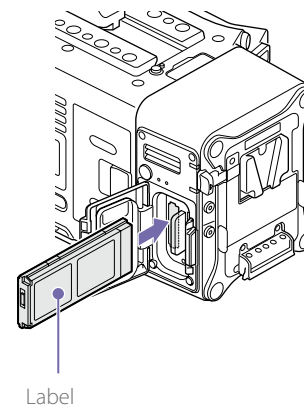
Unscrew the four hex screws, and remove the AXS-R7.

## Inserting an AXS Memory Card

- 1 Press the memory card slot cover open button to open the cover.



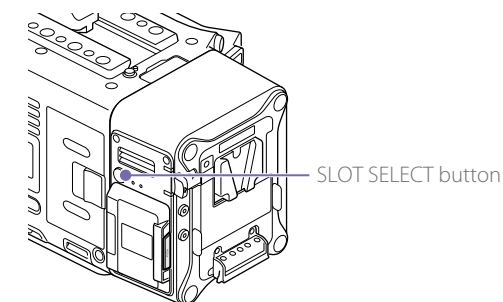
- 2 Insert the AXS memory card into the card slot with the label facing as indicated below.



- 3 Close the cover.

## Switching Between AXS Memory Cards

When two AXS memory cards are loaded, press the SLOT SELECT button of the AXS-R7 to switch active slot.



## Removing an AXS Memory Card

Open the memory slot cover of the AXS-R7, and pull out the AXS memory card.

### [Note]

Data integrity is not guaranteed if the power is turned off or an AXS memory card is removed while it is being accessed. Data on the card may be destroyed. Be sure that its ACCESS lamp is lit in green or off when you turn off the power or remove a memory card.

## Recording to an AXS Memory Card

You can select the format for recording to an AXS memory card using Project category > AXS Rec Format (page 49) in the menu.

During AXS standalone recording on the AXS-R7, recording automatically switches to the second AXS memory card when the first card becomes full.

If using an S24 or S48 AXS memory card, the following restrictions apply depending on the AXS Rec Format and Imager Mode settings. If an S24 AXS memory card is detected for a setting where S24 AXS memory cards are not supported, a warning message is displayed.

### [Note]

AXS simultaneous recording is not supported when recording in ProRes 4444 HD P video format.

AXS Rec Format	Imager Mode	Shooting frame rate and S24/S48 AXS memory card support									
		24	25	30	48	50	60	75	110	120	
X-OCN XT	3.8K 16:9	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S48	S48	-
	3.8K 16:9 Surround View	S24/ S48	S24/ S48	S24/ S48	S24/ S48	-	-	-	-	-	-
	4K 2.39:1	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S48	S48	-
	4K 17:9	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S48	S48	-	-
	4K 17:9 Surround View	S24/ S48	S24/ S48	S24/ S48	S24/ S48	-	-	-	-	-	-
	4K 4:3	S24/ S48	S24/ S48	S24/ S48	S48	S48	S48	S48	-	-	-
	4K 4:3 Surround View	S24/ S48	S24/ S48	S24/ S48	-	-	-	-	-	-	-
	4K 6:5	S24/ S48	S24/ S48	S24/ S48	S48	S48	S48	-	-	-	-
	5.7K 16:9	S24/ S48	S24/ S48	S48	S48	S48	-	-	-	-	-
	6K 2.39:1	S24/ S48	S24/ S48	S24/ S48	S48	S48	S48	-	-	-	-
	6K 17:9	S24/ S48	S24/ S48	S48	S48	S48	-	-	-	-	-
	6K 1.85:1	S24/ S48	S24/ S48	S48	S48	S48	-	-	-	-	-
	6K 3:2	S48	S48	S48	-	-	-	-	-	-	-

AXS Rec Format	Imager Mode	Shooting frame rate and S24/S48 AXS memory card support									
		24	25	30	48	50	60	75	110	120	
RAW SQ	3.8K 16:9	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S48	S48	-
	3.8K 16:9 Surround View	S24/ S48	S24/ S48	S24/ S48	S24/ S48	-	-	-	-	-	-
	4K 17:9	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S48	S48	-
	4K 17:9 Surround View	S24/ S48	S24/ S48	S24/ S48	S24/ S48	-	-	-	-	-	-
X-OCN ST	3.8K 16:9	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S48	S48	-
	3.8K 16:9 Surround View	S24/ S48	S24/ S48	S24/ S48	S24/ S48	-	-	-	-	-	-
	4K 2.39:1	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S48
	4K 17:9	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S48	S48	-
	4K 17:9 Surround View	S24/ S48	S24/ S48	S24/ S48	S24/ S48	-	-	-	-	-	-
	4K 4:3	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S48	-	-	-
	4K 4:3 Surround View	S24/ S48	S24/ S48	S24/ S48	-	-	-	-	-	-	-
	4K 6:5	S24/ S48	S24/ S48	S24/ S48	S48	S48	S48	-	-	-	-
	5.7K 16:9	S24/ S48	S24/ S48	S24/ S48	S48	S48	S48	-	-	-	-
	6K 2.39:1	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S48	S48	-	-	-
6K 17:9	S24/ S48	S24/ S48	S24/ S48	S48	S48	S48	-	-	-	-	
6K 1.85:1	S24/ S48	S24/ S48	S24/ S48	S48	S48	S48	-	-	-	-	
6K 3:2	S24/ S48	S24/ S48	S24/ S48	S48	S48	S48	-	-	-	-	

AXS Rec Format	Imager Mode	Shooting frame rate and S24/S48 AXS memory card support									
		24	25	30	48	50	60	75	110	120	
X-OCN LT	3.8K 16:9	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S48	S48	–
	3.8K 16:9 Surround View	S24/ S48	S24/ S48	S24/ S48	S24/ S48	–	–	–	–	–	–
	4K 2.39:1	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48
	4K 17:9	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	–
	4K 17:9 Surround View	S24/ S48	S24/ S48	S24/ S48	S24/ S48	–	–	–	–	–	–
	4K 4:3	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	–	–
	4K 4:3 Surround View	S24/ S48	S24/ S48	S24/ S48	–	–	–	–	–	–	–
	4K 6:5	S24/ S48	S24/ S48	S24/ S48	S48	S48	S48	–	–	–	–
	5.7K 16:9	S24/ S48	S24/ S48	S24/ S48	S48	S48	S48	–	–	–	–
	6K 2.39:1	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	–	–	–
	6K 17:9	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	–	–	–	–
	6K 1.85:1	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	–	–	–	–
	6K 3:2	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S24/ S48	S48	–	–	–	–

## Formatting (Initializing) an AXS Memory Card

AXS memory cards must be formatted the first time they are used in the AXS-R7 attached to the unit.

Use the format function of the unit to format AXS memory cards for use in the AXS-R7. It is also necessary to format an AXS memory card if a caution message is displayed when the unit is turned on with the AXS-R7 attached.

If an AXS memory card that was formatted in a

format not supported by the AXS-R7 is loaded, a file system mismatch message is displayed.

- 1 Select TC/Media category > Format Media in the menu, then press the MENU dial.
- 2 Select AXS Slot A (slot A) or AXS Slot B (slot B). A confirmation screen prompting whether to format the card appears.
- 3 Press and hold ITEM key 1 and ITEM key 3 for 3 seconds to execute formatting. Formatting starts, a message is displayed during execution, and the ACCESS lamp lights

in red.

When formatting ends, a completion message appears. Press the MENU dial to dismiss the message.

### [Note]


All data is erased when a memory card is formatted, and the data cannot be restored.

## Checking the Remaining Recording Time

While shooting (recording or standby), you can check the remaining capacity on a loaded AXS memory card using the recording media remaining capacity indicator on the Home screen of the sub display (page 32) or the viewfinder/monitor screen (page 13).

The available time for recording with the current video format (recording bit rate) is calculated according to the remaining space of each card and displayed in time units of minutes.

### [Note]

A  icon appears if an AXS memory card is write-protected.

## Restoring an AXS Memory Card

If for any reason an error should occur in a memory card, the card must be restored before use.

If an AXS memory card that needs to be restored is loaded, a message prompting you to execute restoration is displayed.

To start the restore process, select Execute by turning the MENU dial, then press the MENU dial. The restoration starts.

During execution, a message is displayed and the ACCESS lamp lights in red.

When restoration ends, a completion message appears. Press the MENU dial to dismiss the

message.

## If restoration fails

- A write-protected AXS memory card or one on which an error occurred cannot be restored. For such a card, a warning message is displayed. Release the write protection or replace the card, according to the instructions in the message.
- An AXS memory card on which an error occurred may become usable again when reformatted.
- In some cases, some clips can be restored while others cannot. Playback of the restored clips becomes possible again.

### [Note]

For restoration of media recorded with this unit, be sure to use this unit.

Media recorded with a device other than this unit or with another unit of different version (even of the same model) may not be restored using this unit.

## Updating the management file

If clips cannot be played back, updating the management file on the card may improve the situation.

Use TC/Media > Update Media (page 71) in the full menu to update the management file.

## Updating the AXS-R7 Firmware Version

You can update the version of the AXS-R7 firmware with the AXS-R7 attached to the unit.

### [Notes]

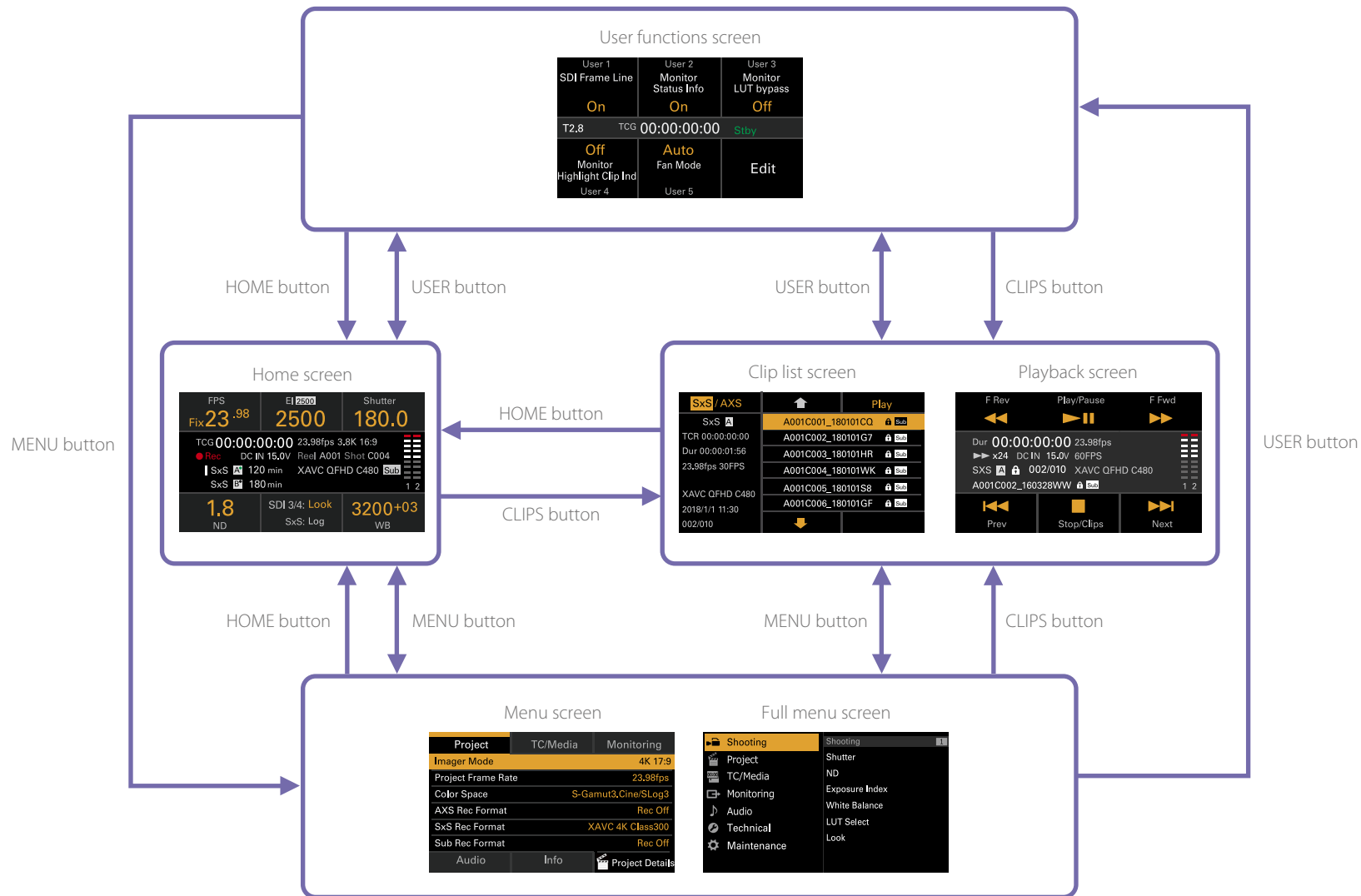
- The firmware version of the unit must be 2.0 or later in order to perform this operation.
- Set AXS Rec Format (page 49) to Rec Off before performing this operation.

- 1 Prepare a 4 GB to 32 GB USB flash drive to use during the update.

- 2 Format the USB flash drive using a computer or other device.  
The format criteria are shown below. A USB flash drive that is formatted differently cannot be used for the update.  
File system: FAT32  
Allocation unit size: 32 KB
- 3 Write the specified update data to the root directory of the formatted USB flash drive.  
Do not write any data other than the update data to the USB flash drive.
- 4 Insert the USB flash drive updater in the external device connector (page 12).
- 5 Execute the AXS-R7 update function using Maintenance > Firmware > FW Update-AXS-R7 (page 85) in the full menu.  
The version update process takes about 15 minutes. When the version update process finishes, the unit automatically restarts and "Firmware Upgrade Done" is displayed.

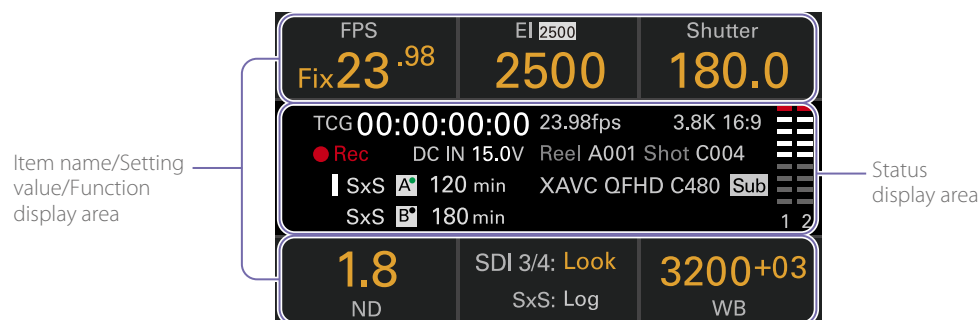
# Sub Display

The sub display displays the Home screen, clip list screen, playback screen, menu screen, full menu screen, and user functions screen. You can switch between the screens on the sub display using the buttons on the Assistant side of the unit.

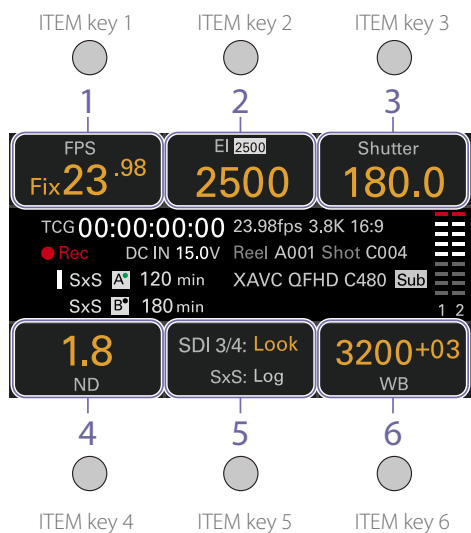


## Home Screen

Press the HOME button on the Assistant side to display the Home screen. You can check the status of the unit and set basic settings for the unit on the Home screen.



### Item name/Setting value/Function display area

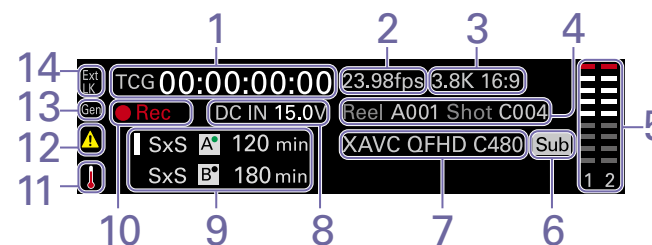


#### [Note]

The areas labeled 1 to 6 correspond to ITEM keys 1 to 6 (page 43). Press an ITEM key to select the corresponding item. The ITEM keys for functions displayed in orange text color are enabled.

- FPS**  
Displays and sets the video frame rate.
- Exposure Index/Gain**  
Displays and sets the exposure index (EI) (top icon displays the Base ISO sensitivity) or the gain set by an RM-B170 or other remote control unit.  
  
[Note]  
The gain value is displayed only when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.
- Shutter**  
Displays and sets the shutter speed/shutter angle of the electronic shutter.
- ND Filter**  
Displays and sets the ND filter position.
- LUT**  
Displays and sets the monitor LUT.
- WB (White Balance)**  
Displays and sets the white balance.

### Status display area



- Time data display**  
Displays the duration or timecode, depending on the TC/Media category > TC Display setting in the menu (page 49).  
Displays the type of data currently shown in the time data display, as follows.  
TCG: Recorded timecode  
TCR: Playback timecode  
Dur: Duration
- Frame rate indicator**  
Displays the value of the Project category > Project Frame Rate setting in the menu (page 49).
- Imager mode indicator**  
Displays the Project category > Imager Mode setting in the menu, and de-squeeze information.
- Clip name display**  
Displays "Reel: Camera ID + Reel Number" and "ShotNumber".
- Audio level meters**  
Displays the audio recording or playback levels. The numbers 1 and 2 indicate channels 1 and 2.
- Simultaneous recording indicator**  
When 1-slot simultaneous recording is configured for the displayed media, a "Sub" icon appears on the right of the displayed main recording format.
- Recording format (codec) indicator**  
Displays the format of the recording on an AXS memory card or an SxS memory card (page 53).
- Power supply voltage/Remaining battery capacity indicator**  
Displays the power supply voltage or remaining battery capacity.
- Remaining media capacity indicator**  
Displays the active media icon, media type, slot type (A/B), and remaining recording time (when recording in the current recording format).  
It also displays the clip name during playback.
- Recording status indicator**  
Displays the following recording operation states of the unit.

Display	Description
Stby	Recording standby
Rec	Recording
Cache	Picture cache recording standby
CALL	CALL command incoming
- Thermometer icon**  
Displayed when a high temperature warning message is issued.  
The description is displayed in the Info category in the menu.



**12. Warning icon**

Displayed when other than a high temperature warning message is issued. The description is displayed in the Info category in the menu.

**13. Genlock icon**

Displays locked status when genlocked.

**14. Ext-LK icon**

Displayed when the internal timecode generator is locked to an external signal input to the TC IN (timecode input) connector.

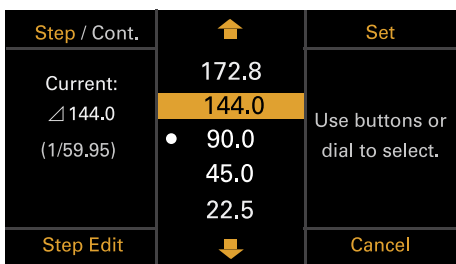
# Operations on the Home Screen of the Sub Display

## Basic Operation

- 1 Press the HOME button.  
The Home screen appears.



- 2 Select the item to set using the ITEM keys 1 to 6.  
The setting value for items that can be changed are displayed in orange.  
The following diagram shows an example when ITEM key 3 is pressed.



- 3 Move the cursor to the item or setting value to select using the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial.
- 4 Press the MENU dial or Set button (ITEM key 3) to apply the setting.

## Changing the brightness of the sub display

You can change the brightness of the sub display using Technical > Control Display > Brightness level (page 83) in the full menu.  
On the Home screen, you can also press and hold the BACK button and turn the MENU dial clockwise to change the brightness of the sub display in the sequence Minimum → Low → Mid → High with the current setting as the base point.  
You can also press and hold the BACK button and turn the MENU dial counterclockwise to change the brightness of the sub display in the sequence High → Mid → Low → Minimum with the current setting as the base point.

### [Note]

The display brightness setting is common to both the sub display and the mini display, and is reflected on both displays simultaneously.

## Display and operation when RM/RCP Paint Control is enabled

- When Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu, the gain value set by an RM-B170 or other remote control unit is displayed in the EI display area. In this mode, the EI value cannot be changed, but the gain value can be changed (page 35). However, the Base ISO setting can be switched.  
In this mode, the Monitor and viewfinder LUT settings are configurable. If R709(800%) or R709-Like is selected, the output gain can be changed using the SDR Gain setting. However, the output gain cannot be changed when Project > Basic Setting > Input Color Space (page 66) is set to Rec.709/User Gamma in the full menu.
- The following display areas are grayed out and cannot be operated when an RM-B170 or other remote control unit is connected and Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu. Set these using the remote control unit (page 105).

- Shutter display area
- WB display area

### [Note]

A setting can be added if the "Add" character string is displayed in orange.

## When setting White Balance

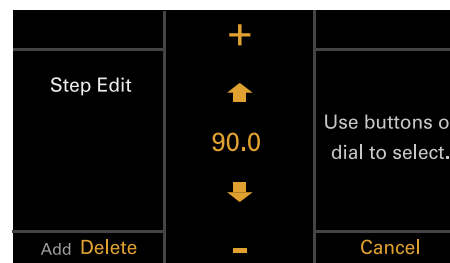
On the White Balance settings edit screen, you can press the Coarse/Fine button (ITEM key 1) to change the 1-step increment variation to coarse or fine. You can also press the Temp/Tint button (ITEM key 3) to switch the value between color temperature (Temp) and color tone (Tint).

Coarse / Fine	+	Temp / Tint
Step Edit (User WB)	↑	Use buttons or dial to select temp.
Base: 3200 K + 03	↓	Coarse=100K Fine=1K
Add Delete	-	Cancel

## Step Edit Operation

You can change the settings available for selection when "Step Edit" is displayed for ITEM key 4 in step 2 in the basic operation. You can add and delete settings on the settings edit screen.

- 1 On the settings selection screen, move the cursor to the setting you want to change or delete, and press the Step Edit button (ITEM key 4).  
The settings edit screen appears.



- 2 To delete a setting, press the Delete button (ITEM key 4).

### [Note]

The selected setting can be deleted if the "Delete" character string is displayed in orange.

- 3 Use the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial to change the setting.

- 4 When finished, press the Add button (ITEM key 4).  
The setting is added and the display returns to the setting selection screen.

## FPS Operation

Press ITEM key 1 on the Home screen to display the FPS operation screen. You can press the Variable/Fixed button (ITEM key 4) to switch between "Fixed" for constant speed shooting and "Variable (Select FPS)" for variable speed shooting.

	↑	Set
Current: FPS 26	22	Use buttons or dial to select.
Project: 23.98fps	23	
	24	
	25	
Variable/ Fixed	• 26	Cancel

### [Note]

Audio is not recorded in "Select FPS" mode.

## EI Operation/Gain Operation

You can change the EI value. When an RM-B170 or other remote control unit is connected and Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu, the gain value is displayed instead of the EI value allowing you to change the gain value.

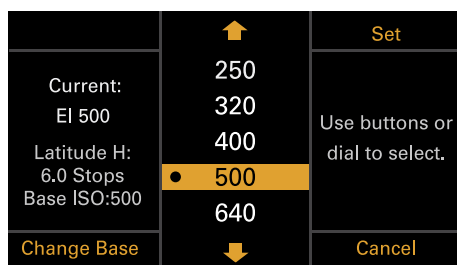
### Changing the EI value or gain value

#### [Note]

This section shows the display for when changing the EI value as an example.

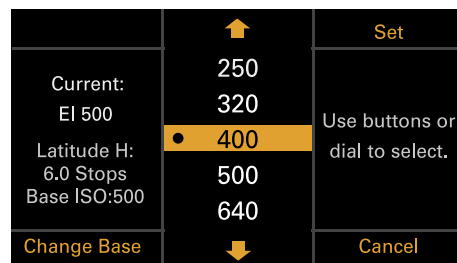
You can change the EI value or gain value using ITEM key 2 on the Home screen.

- 1 Press ITEM key 2 on the Home screen. The EI setup screen or Gain setup screen appears.



- 2 Use the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial to change the setting.

- 3 Press the MENU dial or Set button (ITEM key 3) to apply the setting.

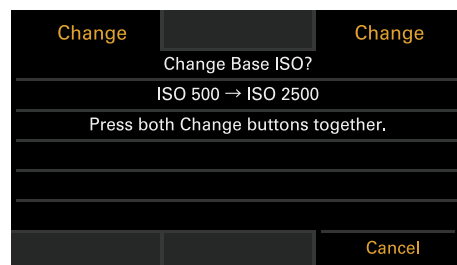


### Switching the Base ISO

You can switch the Base ISO by pressing ITEM key 4 on the EI setup screen or Gain setup screen.

- 1 Press ITEM key 4 on the EI setup screen or Gain setup screen. The Base ISO switching screen appears.

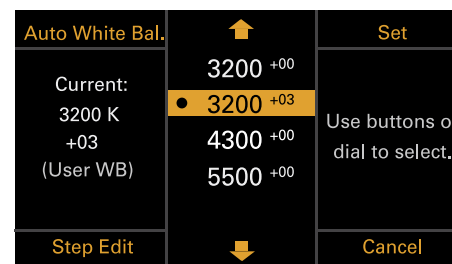
- 2 Press the two Change buttons (ITEM key 1 and ITEM key 3) simultaneously.



The Base ISO is changed (page 40).

## AWB Operation

Press ITEM key 6 on the Home screen to display the white balance operation screen. Press the Auto White Bal. button (ITEM key 1) to execute white balance. After execution, press the Add button (ITEM key 4) to add the setting to a step. You can also press the Temp/Tint button (ITEM key 3) to switch the value between color temperature (Temp) and color tone (Tint) to make fine adjustments to the value before adding a value to a step.



#### [Note]

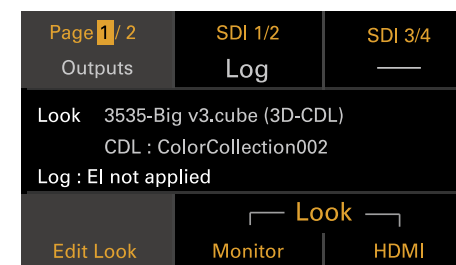
During AWB operation, shoot a white chart under uniform lighting conditions.

## LUT Operation

### Setting a LUT

You can set a LUT for each output system using ITEM key 5 on the Home screen.

- 1 Press ITEM key 5 on the Home screen. The LUT selection screen appears.



The LUT selection screen has two pages, and you can switch the page by pressing ITEM key 1.

On page 1, you can set the LUT settings for SDI 1/2 (display only), SDI 3/4, Monitor, and HDMI. On page 2, you can set the LUT settings for the viewfinder, SDR Gain, SxS Rec, and Sub Rec.

#### [Note]

User gamma information is displayed on the LUT selection screen when Project > Basic Setting > Input Color Space (page 66) is set to Rec.2020/User Gamma or Rec.709/User Gamma in the full menu.

- 2 Select the output to set using ITEM keys 2, 3, 5, and 6. The settings edit screen appears.
- 3 Use the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial to change the setting.
- 4 Press the MENU dial or Set button (ITEM key 3) to apply the setting.

## Changing Preset Look

You can set a LUT when Look is selected on the LUT selection screen using the Edit Look button (ITEM key 4) on page 1 or page 2.

- 1 Press the Edit Look button (ITEM key 4) on the LUT selection screen.  
The Look selection screen appears.

CDL / ART Info	↑	Select
Category	Preset look	
Preset Look	s709	
ASC CDL Process	CDL Off	
ASC CDL Select	03: Scene4_Dark_160830	
Load File	↓	Done

- 2 Press the Select button (ITEM key 3).  
The items that can be selected are displayed.
- 3 Use the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial to change the setting.
- 4 Press the MENU dial or Set button (ITEM key 3) to apply the setting.

## Changing the LUT category

You can change the target category for LUT operations to User 3D LUT, ACES, or Preset Look (page 65).

- 1 Press the Edit Look button (ITEM key 4) on the LUT selection screen.  
The Look selection screen appears.
- 2 Use the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial to enable category selection.

- 3 Press the MENU dial or the Select button (ITEM key 3).
- 4 Use the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial to select a category (User 3D LUT, ACES, or Preset Look).
- 5 Press the MENU dial or Set button (ITEM key 3) to apply the setting.

## Loading a User 3D LUT file

You can load a User 3D LUT file stored on an SD card into the unit.

[Note]  
Save the User 3D LUT file in the following directory on the SD card (page 100).  
PRIVATE\SONY\PRO\LUT\

- 1 Insert the SD card into the SD card slot (page 12).
- 2 Press the Edit Look button (ITEM key 4) on the LUT selection screen.  
The Look selection screen appears.
- 3 Press the Load File button (ITEM key 4).

CDL / ART Info	↑	Select
Category	User 3D LUT	
User 3D LUT	s709.cube	
ASC CDL Process	CDL Off	
ASC CDL Select	03: Scene4_Dark_160830	
Load File	↓	Done

- 4 Press the MENU dial or the Select button (ITEM key 3).  
The load destination numbers (01 to 16) are displayed.  
A file name is displayed for loaded numbers.

	↑	Select
Load 3D LUT	01: sLog2 to Linear.cube	
	02: LMT ACES v0.1.1.cube	
Step1:	03: LightIllusion_LP.cube	
Select	04: Binary_Through_17.I3D	
Destination	05: Test0312_EI+0.6/Cube	
	↓	Back

- 5 Use the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial to select a load destination number.
- 6 Press the MENU dial or the Select button (ITEM key 3).  
The file name of the User 3D LUT file stored on the SD card is displayed.

	↑	Load
Load 3D LUT	3535-Big v3.cube	
	Rec709 to DCI-XYZ.cube	
Step2:	Raw Viewer_LP2.cube	
Select File to Load on 03	Test0312_EI+0.6.cube	
	ACES_RRT709_V1--_f5_V7.13	
	↓	Back

- 7 Use the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial to select a file.
- 8 Press the MENU dial or the Load button (ITEM key 3).  
When the file is loaded successfully, "Successfully loaded" is displayed.

- 9 Press the OK button (ITEM key 6).

## Loading an ART file

You can load an ART file stored on an SD card into the unit.

[Note]  
Save the ART file in the following directory on the SD card (page 100).  
PRIVATE\SONY\PRO\CAMERA\MPC3610\

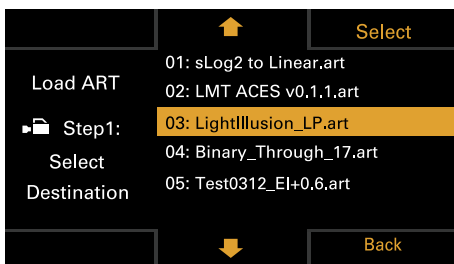
- 1 Insert the SD card into the SD card slot (page 12).
- 2 Press the Edit Look button (ITEM key 4) on the LUT selection screen.  
The Look selection screen appears.
- 3 Press the Load File button (ITEM key 4).

CDL / ART Info	↑	Select
Category	Look Profile	
Preset Look	LC-709 Type A	
ASC CDL	Active	
Process	1D-3D-CDL	
ASC CDL File	03: Scene4_Dark_160830	
Load File	↓	Done

- 4 Use the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial to select Load ART File.

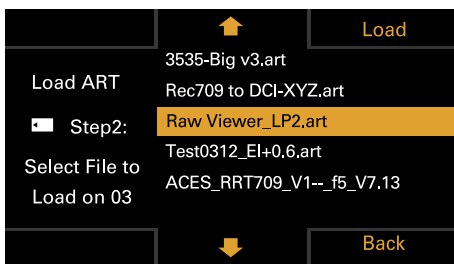
	↑	Select
Load User 3D LUT File >		
Load ART File >		
Load ASC CDL File >		
	↓	Done

- 5 Press the MENU dial or the Select button (ITEM key 3).  
The load destination numbers (01 to 16) are displayed.  
A file name is displayed for loaded numbers.



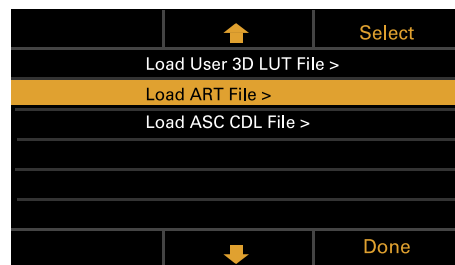
- 6 Use the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial to select a load destination number.

- 7 Press the MENU dial or the Select button (ITEM key 3).  
The file name of the ART file stored on the SD card is displayed.



- 8 Use the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial to select the file.

- 9 Press the MENU dial or the Load button (ITEM key 3).  
When the file is loaded successfully, the following screen appears.



- 10 Press the BACK button or Done button (ITEM key 6)

### Loading an ASC CDL file

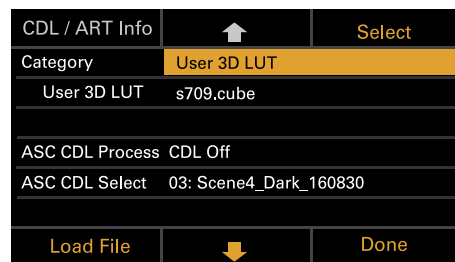
You can load an ASC CDL file stored on an SD card into the unit.

#### [Note]

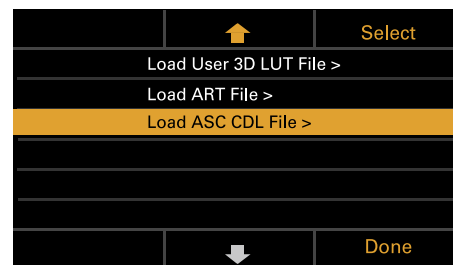
Save the ASC CDL file in the following directory on the SD card (page 100).

PRIVATE\SONY\PRO\CDL\

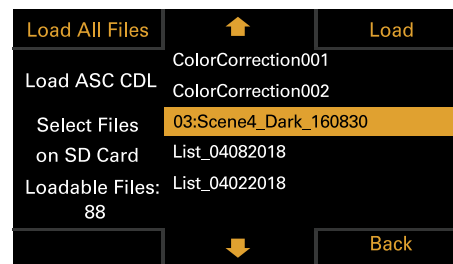
- 1 Insert the SD card into the SD card slot (page 12).
- 2 Press the Edit Look button (ITEM key 4) on the LUT selection screen.  
The Look selection screen appears.
- 3 Press the Load File button (ITEM key 4).



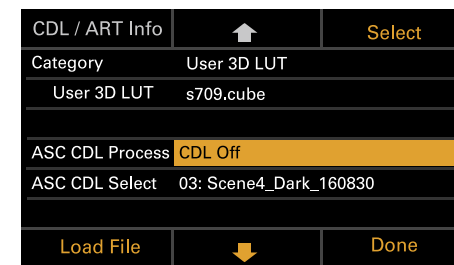
- 4 Select Load ASC CDL File, and press the MENU dial or the Select button (ITEM key 3).



The file name of the ASC CDL file stored on the SD card is displayed.



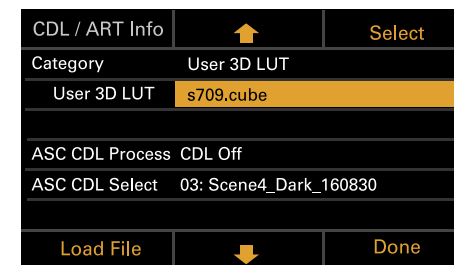
- 5 Use the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial to select a file.
- 6 Press the MENU dial or the Load button (ITEM key 3).  
You can press the Load All Files button (ITEM key 1) to load all files.  
When the file is loaded successfully, "Successfully loaded" is displayed.
- 7 Press the OK button (ITEM key 6).
- 8 Specify the ASC CDL processing sequence in ASC CDL Process.



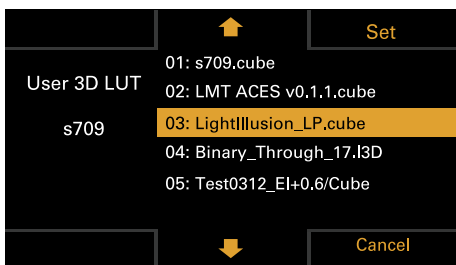
### Changing the User 3D LUT File

You can change the currently selected User 3D LUT file.

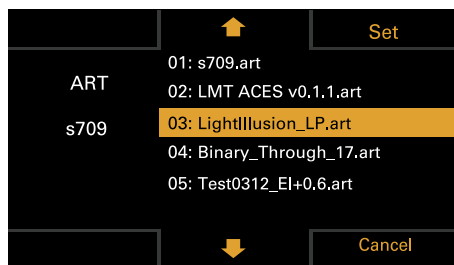
- 1 Press the Edit Look button (ITEM key 4) on the LUT selection screen.  
The Look selection screen appears.



- 2 Press the MENU dial or the Select button (ITEM key 3).
- 3 Use the ↑ button (ITEM key 2), ↓ button (ITEM key 5), or MENU dial to change the User 3D LUT file.



- 4 Press the MENU dial or Set button (ITEM key 3) to apply the setting.

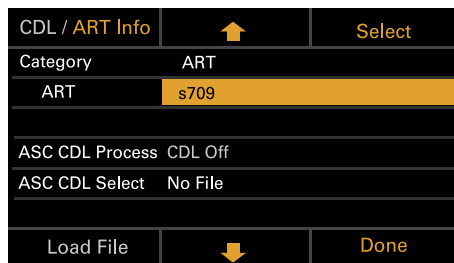


- 4 Press the MENU dial or Set button (ITEM key 3) to apply the setting.

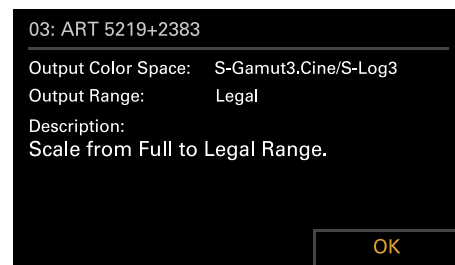
### Displaying ART file information

You can display information for the currently selected ART file.

- 1 Press the Edit Look button (ITEM key 4) on the LUT selection screen. The Look selection screen appears.
- 2 Select the ART file, and press the CDL / ART Info button (ITEM key 1).



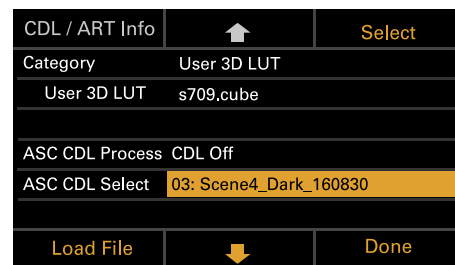
The ART file information is displayed.



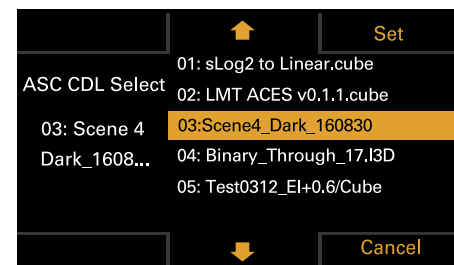
### Changing the ASC CDL File

You can change the currently selected ASC CDL file.

- 1 Press the Edit Look button (ITEM key 4) on the LUT selection screen. The Look selection screen appears.
- 2 Select ASC CDL Select, and press the MENU dial or the Select button (ITEM key 3).



- 3 Use the **↑** button (ITEM key 2), **↓** button (ITEM key 5), or MENU dial to change the ASC CDL file.



[Note]

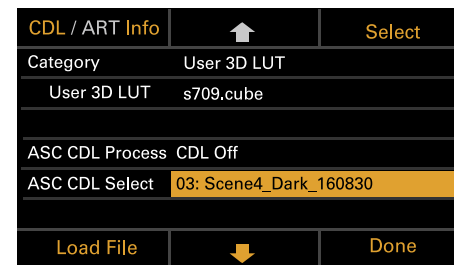
Files that cannot be applied on the unit are grayed out.

- 4 Press the MENU dial or Set button (ITEM key 3) to apply the setting.

### Displaying ASC CDL file information

You can display information for the currently selected ASC CDL file.

- 1 Press the Edit Look button (ITEM key 4) on the LUT selection screen. The Look selection screen appears.
- 2 Select ASC CDL Select, and press the CDL / ART Info button (ITEM key 1).

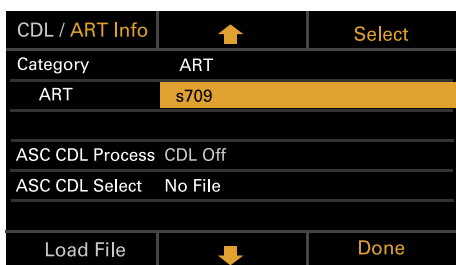


The ASC CDL file information is displayed.

### Changing the ART File

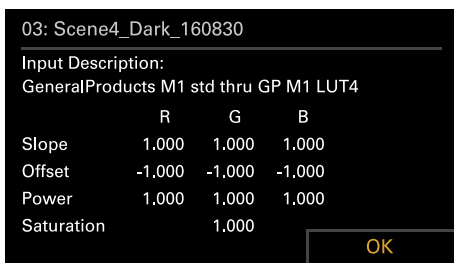
You can change the currently selected ART file.

- 1 Press the Edit Look button (ITEM key 4) on the LUT selection screen. The Look selection screen appears.



- 2 Press the MENU dial or the Select button (ITEM key 3).

- 3 Use the **↑** button (ITEM key 2), **↓** button (ITEM key 5), or MENU dial to change the ART file.



### About the ASC CDL file setting ranges

The ASC CDL file setting ranges are shown below. Files that exceed the ranges cannot be loaded.

Slope: 0.000 to 3.999

Offset: -1.000 to 1.000

Power: 0.400 to 4.000

Saturation: 0.000 to 3.999

### Monitor/Viewfinder LUT Settings

When Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu, you can select whether the individual Monitor and viewfinder outputs are the same as the main signal, such as an SDI output, or set to R709(800%) or R709-Like.

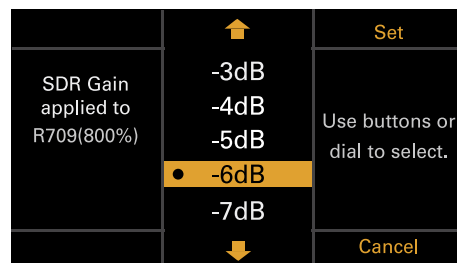
#### [Note]

R709-Like is displayed when Project > Basic Setting > Input Color Space (page 66) is set to Rec.2020/User Gamma in the full menu.

### Switching the gain

You can switch the gain of each output by setting the Monitor or viewfinder output to R709(800%) or R709-Like.

- 1 On page 2 of the Home screen, press the SDR Gain button (ITEM key 3).  
The SDR Gain screen appears.



- 2 Use the button (ITEM key 2), button (ITEM key 5), or MENU dial to change the setting.
- 3 Press the MENU dial or Set button (ITEM key 3) to apply the setting.



### Home Screen Items on the Sub Display

The names of items and corresponding setting values are given below. Default values are shown underlined and in **bold** text.

#### [Note]

The maximum shooting frame rate value varies depending on the recording format. The maximum shooting frame rate value is restricted to the following during SxS standalone recording and AXS/SxS simultaneous recording.

4K/QFHD XAVC Intra Class 480: 30 fps (max)

4K/QFHD XAVC Intra Class 300: 60 fps (max)

MPEG HD 422 Codec: 30 fps (max)

ProRes 422 Codec: 60 fps (max)

Item	Description																
FPS	Sets the shooting frame rate. Variable/Fixed: Switch between variable speed and constant speed shooting. When "Fixed" is selected, the setting is determined by the Project category > Project Frame Rate (page 49) setting in the menu.																
	<table border="1"> <thead> <tr> <th>Project Frame Rate</th> <th>Display</th> </tr> </thead> <tbody> <tr> <td>23.98</td> <td>Fix 23.98</td> </tr> <tr> <td>24</td> <td>Fix 24.00</td> </tr> <tr> <td>25</td> <td>Fix 25.00</td> </tr> <tr> <td>29.97</td> <td>Fix 29.97</td> </tr> <tr> <td>47.95</td> <td>Fix 47.95</td> </tr> <tr> <td>50</td> <td>Fix 50.00</td> </tr> <tr> <td>59.94</td> <td>Fix 59.94</td> </tr> </tbody> </table>	Project Frame Rate	Display	23.98	Fix 23.98	24	Fix 24.00	25	Fix 25.00	29.97	Fix 29.97	47.95	Fix 47.95	50	Fix 50.00	59.94	Fix 59.94
Project Frame Rate	Display																
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25	Fix 25.00																
29.97	Fix 29.97																
47.95	Fix 47.95																
50	Fix 50.00																
59.94	Fix 59.94																

Item	Description																																																
	When "Variable" is selected, the setting changes as follows depending on the Project category > Imager Mode (page 66) setting in the menu.																																																
	<table border="1"> <thead> <tr> <th>Imager Mode</th> <th>Setting</th> </tr> </thead> <tbody> <tr> <td>3.8K 16:9</td> <td>1 to 60 FPS</td> </tr> <tr> <td>4K 17:9</td> <td></td> </tr> <tr> <td>4K 2.39:1</td> <td></td> </tr> <tr> <td>3.8K 16:9<sup>1)</sup></td> <td>1 to 60, 66, 72, 75, 88, 90, 96, 100,</td> </tr> <tr> <td>4K 17:9<sup>1)</sup></td> <td>110 FPS</td> </tr> <tr> <td>3.8K 16:9 Surround View</td> <td>1 to 48 FPS</td> </tr> <tr> <td>4K 17:9 Surround View</td> <td></td> </tr> <tr> <td>4K 4:3</td> <td></td> </tr> <tr> <td>4K 4:3<sup>1)</sup></td> <td>1 to 60, 66, 72, 75 FPS</td> </tr> <tr> <td>4K 2.39:1<sup>1)</sup></td> <td>1 to 60, 66, 72, 75, 88, 90, 96, 100, 110, 120 FPS</td> </tr> <tr> <td>4K 4:3 Surround View</td> <td>1 to 30 FPS</td> </tr> <tr> <td>4K 6:5</td> <td></td> </tr> <tr> <td>5.7K 16:9</td> <td></td> </tr> <tr> <td>6K 2.39:1</td> <td></td> </tr> <tr> <td>6K 17:9</td> <td></td> </tr> <tr> <td>6K 1.85:1</td> <td></td> </tr> <tr> <td>6K 2.39:1<sup>1)</sup></td> <td>1 to 60, 66, 72, 75, 90 FPS</td> </tr> <tr> <td>4K 6:5<sup>1)</sup></td> <td>1 to 60, 66, 72 FPS</td> </tr> <tr> <td>5.7K 16:9<sup>1)</sup></td> <td></td> </tr> <tr> <td>6K 17:9<sup>1)</sup></td> <td></td> </tr> <tr> <td>6K 1.85:1<sup>1)</sup></td> <td></td> </tr> <tr> <td>6K 3:2</td> <td>1 to 25 FPS</td> </tr> <tr> <td>6K 3:2<sup>1)</sup></td> <td>1 to 60 FPS</td> </tr> </tbody> </table>	Imager Mode	Setting	3.8K 16:9	1 to 60 FPS	4K 17:9		4K 2.39:1		3.8K 16:9 <sup>1)</sup>	1 to 60, 66, 72, 75, 88, 90, 96, 100,	4K 17:9 <sup>1)</sup>	110 FPS	3.8K 16:9 Surround View	1 to 48 FPS	4K 17:9 Surround View		4K 4:3		4K 4:3 <sup>1)</sup>	1 to 60, 66, 72, 75 FPS	4K 2.39:1 <sup>1)</sup>	1 to 60, 66, 72, 75, 88, 90, 96, 100, 110, 120 FPS	4K 4:3 Surround View	1 to 30 FPS	4K 6:5		5.7K 16:9		6K 2.39:1		6K 17:9		6K 1.85:1		6K 2.39:1 <sup>1)</sup>	1 to 60, 66, 72, 75, 90 FPS	4K 6:5 <sup>1)</sup>	1 to 60, 66, 72 FPS	5.7K 16:9 <sup>1)</sup>		6K 17:9 <sup>1)</sup>		6K 1.85:1 <sup>1)</sup>		6K 3:2	1 to 25 FPS	6K 3:2 <sup>1)</sup>	1 to 60 FPS
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Exposure Index	<p>Sets the EI value. You can change the Base ISO setting by pressing the Change Base button (ITEM key 4) and then simultaneously pressing the two Change buttons (ITEM key 1 and ITEM key 3) on the subsequent screen. The available settings vary as follows depending on the Base ISO setting.</p> <p>Base ISO 500:  125EI/160EI/200EI/250EI/320EI/400EI/<b>500EI</b>/640EI/800EI/1000EI/1250EI/  1600EI/2000EI</p> <p>Base ISO 2500:  640EI/800EI/1000EI/1250EI/1600EI/2000EI/<b>2500EI</b>/3200EI/4000EI/5000EI/  6400EI/8000EI/10000EI</p>																																																

Item	Description
Gain	<p>Sets the base ISO sensitivity.</p> <p>–6dB/–3dB/<b>0dB</b>/3dB/6dB/9dB/12dB/15dB/18dB</p> <p><b>[Note]</b>  Configurable only when an RM-B170 or other remote control unit is connected and Technical &gt; System Configuration &gt; RM/RCP Paint Control (page 81) is set to On in the full menu.</p>
Shutter	<p>Sets the electronic shutter angle/shutter speed.</p> <p>Press the Step/Cont. button (ITEM key 1) to switch between step and continuous selection methods.</p> <p>Step: Select from up to 16 preset values registered as shutter steps. You can press the Step Edit button (ITEM key 4) to change any setting from the preset value after selection.</p> <p>Displays the following selection options depending on the Technical &gt; System Configuration &gt; Shutter Mode (page 81) setting in the full menu.</p> <p><b>Angle: Shutter angle indicator</b></p> <p>Default selection options  360/180/172.8/144/90/45/22.5/11.2/5.6</p> <p><b>Speed: Shutter speed indicator</b></p> <p>Default selection options  1/24, 1/25, 1/30, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000<sup>2)</sup></p> <p><b>[Note]</b>  The default speed values for different Project Frame Rate (page 49) settings are given below.  23.98/24: 1/24, 25: 1/25, 29.97: 1/30, 47.95: 1/48, 50: 1/50, 59.94: 1/60</p> <p>Cont.: Select an angle/speed within the supported range.</p>
ND Filter	<p>Sets the ND filter position. The following settings are available.</p> <p><b>Clear</b>/0.3/0.6/0.9/1.2/1.5/1.8/2.1/2.4</p>



Item	Description
LUT	<p>Configures settings related to the LUT to apply to the output video. The settings will vary depending on the Technical &gt; System Configuration &gt; RM/RCP Paint Control (page 81) setting in the full menu.</p> <p><b>Page 1</b></p> <p>SDI 1/2 (ITEM key 2)</p> <p>When RM/RCP Paint Control is set to Off: Log</p> <p>Display only, as LUT cannot be applied to the SDI 1/2 output image.</p> <p>When RM/RCP Paint Control is set to On: <a href="#">Log</a>/HLG(Natural)/HLG(Live)/User Gamma</p> <p>The SDI 1/2 output image setting is display only, because it is determined by the Project category &gt; Input Color Space setting in the menu.</p> <p>SDI 3/4 (ITEM key 3)</p> <p>When RM/RCP Paint Control is set to Off: Log/<a href="#">Look</a></p> <p>Selects the LUT to apply to the SDI 3/4 output image.</p> <p>Disabled when Monitoring category &gt; Output Format &gt; SDI 1/2 is set to 4K/QFHD in the menu.</p> <p>When RM/RCP Paint Control is set to On: <a href="#">Log</a>/HLG(Natural)/HLG(Live)/User Gamma</p> <p>The SDI 3/4 output image setting is display only, because it is determined by the Project category &gt; Input Color Space setting in the menu.</p> <p>Monitor (ITEM key 5)</p> <p>When RM/RCP Paint Control is set to Off:</p> <p>Selects the LUT to apply to the Monitor output image.</p> <p>When Output Format &gt; SDI 1/2 is set to 2K/HD: Log/<a href="#">s709</a>/R709(800%)</p> <p>When Output Format &gt; SDI 1/2 is set to 4K/QFHD: Log/<a href="#">Look</a></p> <p>When RM/RCP Paint Control is set to On:</p> <p>Selects the type of Monitor output image.</p> <p>The setting changes as follows depending on the Project category &gt; Input Color Space setting in the menu.</p> <p>S-Gamut3.Cine/SLog3 or S-Gamut3/SLog3: <a href="#">Log</a>/R709(800%)</p> <p>HLG(Natural): <a href="#">HLG(Natural)</a>/R709(800%)</p> <p>HLG(Live): <a href="#">HLG(Live)</a>/R709(800%)</p> <p>Rec.2020/User Gamma: <a href="#">User Gamma</a>/R709-Like</p> <p>Rec.709/User Gamma: User Gamma</p>

Item	Description
HDMI (ITEM key 6)	<p>When RM/RCP Paint Control is set to Off: Log/<a href="#">s709</a>/R709(800%)/Look</p> <p>Displays the LUT to apply to HDMI output image.</p> <p>Fixed to Log when Monitoring category &gt; Output Format &gt; SDI 1/2 is set to 4K/QFHD and HDMI is set to 4K/QFHD in the menu. In all other cases, the options are the same as for Monitor.</p> <p>When RM/RCP Paint Control is set to On (4K/QFHD output): <a href="#">Log</a>/HLG(Natural)/HLG(Live)/User Gamma</p> <p>Display only, because the HDMI output image setting is the same as SDI 1/2.</p> <p>When RM/RCP Paint Control is set to On (2K/HD output): <a href="#">Log</a>/HLG(Natural)/HLG(Live)/User Gamma/R709(800%)/R709-Like</p> <p>Display only, because the HDMI output image setting is the same as Monitor.</p> <p><b>Page 2</b></p> <p>Viewfinder (ITEM key 2)</p> <p>When RM/RCP Paint Control is set to Off: Log/<a href="#">s709</a>/R709(800%)</p> <p>Selects the LUT to apply to the viewfinder/monitor screen output image.</p> <p>When RM/RCP Paint Control is set to On:</p> <p>Selects the type of viewfinder/monitor screen output image.</p> <p>The setting changes as follows depending on the Project category &gt; Input Color Space setting in the menu.</p> <p>S-Gamut3.Cine/SLog3 or S-Gamut3/SLog3: Log/<a href="#">R709(800%)</a></p> <p>HLG(Natural): HLG(Natural)/<a href="#">R709(800%)</a></p> <p>HLG(Live): HLG(Live)/<a href="#">R709(800%)</a></p> <p>Rec.2020/User Gamma: User Gamma/<a href="#">R709-Like</a></p> <p>Rec.709/User Gamma: User Gamma</p> <p>SDR Gain (ITEM key 3): -15dB to 0dB (<a href="#">-12dB</a>)</p> <p>Sets the SDR output gain in HDR mode.</p> <p><b>[Note]</b></p> <p>Configurable when Technical &gt; System Configuration &gt; RM/RCP Paint Control (page 81) is set to On in the full menu.</p> <p>SxS Rec (ITEM key 5)</p> <p>When RM/RCP Paint Control is set to Off: <a href="#">Log</a>/Look</p> <p>Selects the LUT to apply to SDI Main clip recorded video.</p> <p>Disabled when Project category &gt; SxS Rec Format is set to Rec Off in the menu, or fixed to Log when set to XAVC.</p> <p>When RM/RCP Paint Control is set to On: Log/HLG(Natural)/HLG(Live)/User Gamma</p> <p>The SxS Main clip recording image setting is display only, because it is determined by the Project category &gt; Input Color Space setting in the menu.</p>

Item	Description
	<p>Sub Rec (ITEM key 6)</p> <p>When RM/RCP Paint Control is set to Off: Log/<a href="#">Look</a>  Selects the LUT to apply to SDI Sub clip recorded video.  Disabled when Project category &gt; SxS Rec Format is set to Rec Off in the menu.</p> <p>When RM/RCP Paint Control is set to On: Log/HLG(Natural)/HLG(Live)/User Gamma  The SxS Sub clip recording image setting is display only, because it is determined by the Project category &gt; Input Color Space setting in the menu.</p> <p><b>Page 1/2 common items</b></p> <p>Edit Look: Sets a LUT to apply as a Look.  s709 / R709(800%) / S-Gamut3.Cine/SLog3 / S-Gamut3/SLog3 / User 3D LUT</p>
WB (White Balance)	<p>Sets the color temperature/color tone of the white balance.  Default selection options  <a href="#">3200K+00</a>/4300K+00/5500K+00</p> <p>You can press the Step Edit button (ITEM key 4) to change the white balance preset value and Tint value.  Auto White Bal.: Execute auto white balance.</p>

<sup>1)</sup> Only when a High Frame Rate License is activated.

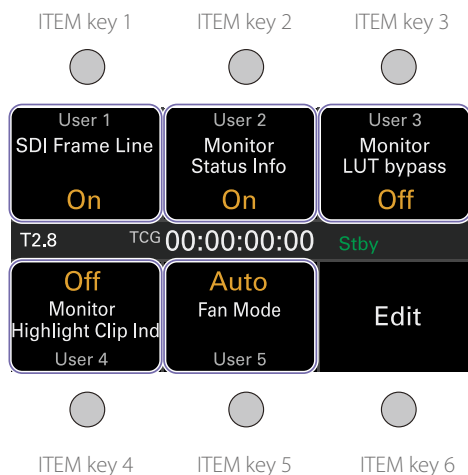
<sup>2)</sup> The options are 1/60 and subsequent values when the project frame rate is 59.94, 1/50 and subsequent values when 50.0, 1/30 and subsequent values when 29.97, and 1/25 and subsequent values when 25.0.

# User Functions Screen

You can press the USER button (page 10) to display the user functions screen on the sub display and use the ITEM keys 1 to 5 as assignable buttons (User 1 to 5).

There are also four assignable buttons (1 to 4) (pages 8, 9, 10) on the unit and three assignable buttons (A to C) on the viewfinder (DVF-EL200) to which you can assign various functions.

Functions can be assigned to these buttons using the user functions screen, in addition to using Project > Assignable Button in the full menu.

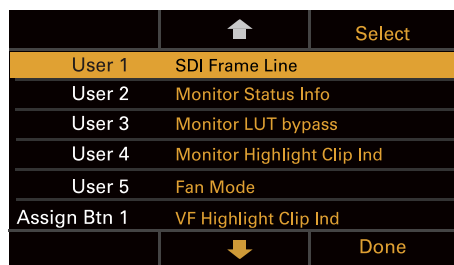


## [Note]

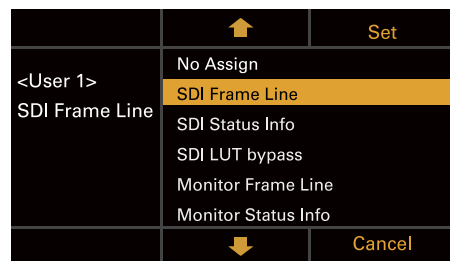
When a lens that supports the iris setting display function is attached, the iris position is displayed in the center left of the user functions screen.

## Changing Button Functions

The user functions selection screen is displayed by pressing the Edit button (ITEM key 6) on the user functions screen. You can set the functions for the User 1 to 5 buttons, assignable buttons 1 to 4, and viewfinder assignable buttons A to C on the user functions selection screen.



- 1 On the user functions selection screen, move the cursor to the button you want to change, and press the Select button (ITEM key 3). The functions that can be selected are displayed.



- 2 Use the **↑** button (ITEM key 2), **↓** button (ITEM key 5), or MENU dial to change the setting.
- 3 When finished, press the Set button (ITEM key 3). The display returns to the user functions screen, and displays the changed function.

The following table lists the functions that are assigned when the unit is shipped from the factory.

Button	Function	Assignable Button setting
Assignable 1	Displays clipped highlight areas in red in the viewfinder.	VF Highlight Clip Ind
Assignable 2	No assignment	Not Assigned
Assignable 3	No assignment	Not Assigned
Assignable 4	No assignment	Not Assigned
ITEM key 1	No assignment	Not Assigned
ITEM key 2	No assignment	Not Assigned
ITEM key 3	No assignment	Not Assigned
ITEM key 4	Displays clipped highlight areas in red on the Monitor output.	Monitor Highlight Clip Ind
ITEM key 5	Sets the fan control mode.	Fan Mode
Viewfinder assignable A	Turns the focus magnifier function of the viewfinder on/off.	VF Focus Magnifier
Viewfinder assignable B	Turns the false color function display in a viewfinder on/off.	VF False Color
Viewfinder assignable C	Turns the information display on the viewfinder/monitor screen output image on/off.	VF Status Info

## Functions that can be Assigned to ITEM Keys 1 to 5

Assignable Button setting	Function	State when unit is powered on
No Assign	No assignment	-
SDI Frame Line	Turns superimposition of frame lines on the SDI 3/4 output image on/off.	Setting retained
SDI Status Info	Turns display of information on the SDI 3/4 output image on/off.	Setting retained
Press & Hold for SDI Log <sup>1)</sup>	Disables the LUT applied to the SDI 3/4 output image while the key is pressed, and sets Log image quality without applying a LUT.	Setting not retained
Monitor Frame Line	Turns superimposition of frame lines on the Monitor output image on/off.	Setting retained
Monitor Status Info	Turns display of information on the Monitor output image on/off.	Setting retained
Monitor Focus Magnifier <sup>2)3)</sup>	Turns the focus magnifier function of the Monitor output image on/off.	Setting not retained

Assignable Button setting	Function	State when unit is powered on
Press & Hold for Monitor Log <sup>4)</sup>	Disables the LUT applied to the Monitor output image while the key is pressed for normal image quality without applying a LUT.	Setting not retained
Monitor Highlight Clip Ind <sup>1)</sup>	Turns the function that displays clipped highlight areas in red on the Monitor output image on/off.	Setting retained
Monitor False Color <sup>1)</sup>	Turns the false color function display on a monitor on/off.	Setting retained
Color Bars <sup>5)</sup>	Turns color bars on/off.	Setting retained
AXS Slot Change	Switches the active slot when two AXS memory cards are inserted. Switches between A and B each time the key is pressed.	Setting retained
SxS Slot Change	Switches the active slot when two SxS memory cards are inserted. Switches between A and B each time the key is pressed.	Setting retained
Fan Mode	Sets the fan control mode. Switches between Auto → Max → Off in Rec/ Auto → Off in Rec/Max each time the key is pressed.	Setting retained
Format Media AXS Slot A	Formats media in AXS slot A.	–
Format Media AXS Slot B	Formats media in AXS slot B.	–
Format Media SxS Slot A	Formats media in SxS slot A.	–
Format Media SxS Slot B	Formats media in SxS slot B.	–
APR	Executes APR.	–
PL-Mt Interface Position	Sets the interface position of the PL-mount lens. Switches between Top → Side → Off each time the key is pressed.	Setting retained
VF Highlight Clip Ind <sup>1)</sup>	Turns the function to display clipped highlight areas in red in the viewfinder on/off.	Setting retained
VF False Color <sup>1)</sup>	Turns the false color function display in a viewfinder on/off.	Setting retained
Line A: Aspect Ratio Disp.	Turns the Aspect Ratio display for Line A on/off.	Setting retained
Line B: Aspect Ratio Disp.	Turns the Aspect Ratio display for Line B on/off.	Setting retained
Line A: User Frame Disp.	Turns the User Frame Line 1 and User Frame Line 2 display for Line A on/off. Each time the key is pressed, the display switches between User Frame Line 1 and 2 display → User Frame Line 1 display → User Frame Line 2 display → User Frame Line 1 and 2 hidden.	Setting retained

Assignable Button setting	Function	State when unit is powered on
Line B: User Frame Disp.	Turns the User Frame Line 1 and User Frame Line 2 display for Line B on/off. Each time the key is pressed, the display switches between User Frame Line 1 and 2 display → User Frame Line 1 display → User Frame Line 2 display → User Frame Line 1 and 2 hidden.	Setting retained
Auto White Balance <sup>5)</sup>	Executes auto white balance.	–
Picture Cache Rec	Turns the picture cache recording function on/off.	Setting retained
Iris Open (1/16 stop) <sup>6)</sup>	Opens the lens iris. Press and hold to open the iris until fully open. This function is available when an E-mount lens with power iris is attached. The setting is in 1/16 stop increments, whereas the iris indication is in units of 1/3 stop increments.	–
Iris Close (1/16 stop) <sup>6)</sup>	Closes the lens iris. Press and hold to close the iris until fully closed. This function is available when an E-mount lens with power iris is attached. The setting is in 1/16 stop increments, whereas the iris indication is in units of 1/3 stop increments.	–
H & V Flip <sup>7)</sup>	In shooting mode, turns the function to flip the image horizontally and vertically on/off.	Setting retained
SxS/Output De-Squeeze	Changes the Project > Basic Setting > SxS/Output De-Squeeze setting in the full menu. Each time the key is pressed, the setting changes to the next item in the list of menu selection options.	Setting retained

<sup>1)</sup> Does not function if the key is pressed when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

<sup>2)</sup> Also applied to the HDMI output if the HDMI output has the same output format as the Monitor output. You can check the setting using Monitoring > OSD Appearance > HDMI (page 72) in the full menu. The HDMI output is the same as the Monitor output if HDMI is set to "Same as Monitor".

<sup>3)</sup> If the SDI output format is 1920x1080i, the focus magnifier function is off, and pressing the key performs no function.

<sup>4)</sup> Switches to the same image as the main signal that is selected using Project > Basic Setting > Input Color Space (page 66) in the full menu while the key is pressed.

<sup>5)</sup> Does not function if the key is pressed when an RM-B170 or other remote control unit is connected and Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

<sup>6)</sup> Does not function if the key is pressed when an RM-B170 or other remote control unit is connected.

<sup>7)</sup> Does not function if the key is pressed when Technical > Special Configuration > Flip Image (page 81) H & V Flip in the full menu is grayed out.

## Functions that can be Assigned to Assignable Buttons 1 to 4

Assignable Button setting	Function	State when unit is powered on
No Assign	No assignment	–
SDI Frame Line	Turns superimposition of frame lines on the SDI 3/4 output image on/off.	Setting retained
SDI Status Info	Turns display of information on the SDI 3/4 output image on/off.	Setting retained
Press & Hold for SDI Log <sup>1)</sup>	Disables the LUT applied to the SDI 3/4 output image while the button is pressed, and sets Log image quality without applying a LUT.	Setting not retained
Monitor Frame Line	Turns superimposition of frame lines on the Monitor output image on/off.	Setting retained
Monitor Status Info	Turns display of information on the Monitor output image on/off.	Setting retained
Monitor Focus Magnifier <sup>2) 3)</sup>	Turns the focus magnifier function of the Monitor output image on/off.	Setting not retained
Press & Hold for Monitor Log <sup>4)</sup>	Disables the LUT applied to the Monitor output image while the button is pressed, and sets Log image quality without applying a LUT.	Setting not retained
Monitor Highlight Clip Ind <sup>1)</sup>	Turns the function that displays clipped highlight areas in red on the Monitor output image on/off.	Setting retained
Monitor High/Low Key <sup>1)</sup>	Selects the Monitor output mode. Switches between High Key (screen for checking for blown-out highlights) → Low Key (screen for checking for blocked-out shadows) → Off (normal display) each time the button is pressed.	Setting not retained
Monitor False Color <sup>1)</sup>	Turns the false color function display on a monitor on/off.	Setting retained
Color Bars <sup>5)</sup>	Turns color bars on/off.	Setting retained
AXS Slot Change	Switches the active slot when two AXS memory cards are inserted. Switches between A and B each time the button is pressed.	–
SxS Slot Change	Switches the active slot when two SxS memory cards are inserted. Switches between A and B each time the button is pressed.	–
Rec Review	Executes the Rec Review function.	Setting not retained

Assignable Button setting	Function	State when unit is powered on
VF Frame Line	Turns superimposition of frame lines on the viewfinder/monitor screen output image on/off.	Setting retained
VF Zebra	Turns the zebra function of the viewfinder/monitor screen output image on/off.	Setting retained
VF Status Info	Turns the information display on the viewfinder/monitor screen output image on/off.	Setting retained
VF Focus Magnifier	Turns the focus magnifier function of the viewfinder on/off.	Setting not retained
Press & Hold for VF Log <sup>6)</sup>	Disables the LUT applied to the viewfinder/monitor screen output image while the button is pressed for normal image quality without applying a LUT.	Setting not retained
VF Highlight Clip Ind <sup>1)</sup>	Turns the function to display clipped highlight areas in red in the viewfinder on/off.	Setting retained
VF High/Low Key <sup>1)</sup>	Selects the viewfinder output mode. Switches between High Key (screen for checking for blown-out highlights) → Low Key (screen for checking for blocked-out shadows) → Off (normal display) each time the button is pressed.	Setting not retained
VF False Color <sup>1)</sup>	Turns the false color function display in a viewfinder on/off.	Setting retained
Line A: Aspect Ratio Disp.	Turns the Aspect Ratio display for Line A on/off.	Setting retained
Line B: Aspect Ratio Disp.	Turns the Aspect Ratio display for Line B on/off.	Setting retained
Line A: User Frame Disp.	Turns the User Frame Line 1 and User Frame Line 2 display for Line A on/off. Each time the button is pressed, the display switches between User Frame Line 1 and 2 display → User Frame Line 1 display → User Frame Line 2 display → User Frame Line 1 and 2 hidden.	Setting retained
Line B: User Frame Disp.	Turns the User Frame Line 1 and User Frame Line 2 display for Line B on/off. Each time the button is pressed, the display switches between User Frame Line 1 and 2 display → User Frame Line 1 display → User Frame Line 2 display → User Frame Line 1 and 2 hidden.	Setting retained

Assignable Button setting	Function	State when unit is powered on
Auto White Balance <sup>5)</sup>	Executes auto white balance. Stops execution if pressed during auto white balance.	–
Picture Cache Rec	Turns the picture cache recording function on/off.	Setting retained
Iris Open (1/16 stop) <sup>7)</sup>	Opens the lens iris. Press and hold to open the iris until fully open. This function is available when an E-mount lens with power iris is attached. The setting is in 1/16 stop increments, whereas the iris indication is in units of 1/3 stop increments.	–
Iris Close (1/16 stop) <sup>7)</sup>	Closes the lens iris. Press and hold to close the iris until fully closed. This function is available when an E-mount lens with power iris is attached. The setting is in 1/16 stop increments, whereas the iris indication is in units of 1/3 stop increments.	–
ND +1stop	Switches the ND filter one stop in the darker direction.	–
ND -1stop	Switches the ND filter one stop in the brighter direction.	–
Rec	Starts/stops recording.	–
H & V Flip <sup>8)</sup>	In shooting mode, turns the function to flip the image horizontally and vertically on/off.	Setting retained
SxS/Output De-Squeeze	Changes the Project > Basic Setting > SxS/Output De-Squeeze setting in the full menu. Each time the button is pressed, the setting changes to the next item in the list of menu selection options.	Setting retained

<sup>1)</sup> Does not function if the button is pressed when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

<sup>2)</sup> Also applied to the HDMI output if the HDMI output has the same output format as the Monitor output. You can check the setting using Monitoring > OSD Appearance > HDMI (page 72) in the full menu. The HDMI output is the same as the Monitor output if HDMI is set to "Same as Monitor".

<sup>3)</sup> If the SDI output format is 1920x1080i, the focus magnifier function is off, and pressing the button performs no function.

<sup>4)</sup> Switches to the same image as the main signal that is selected using Project > Basic Setting > Input Color Space (page 66) in the full menu while the button is pressed.

<sup>5)</sup> Does not function if the button is pressed when an RM-B170 or other remote control unit is connected and Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

<sup>6)</sup> When Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On and Shooting > LUT Select > VF LUT (page 64) is set to R709(800%) or R709-Like in the full menu, this switches to the same image as the main signal while the button is pressed. When RM/RCP Paint Control is set to Off and VF LUT is not set to Log, this switches to the same image as the main signal while the button is pressed.

<sup>7)</sup> Does not function if the button is pressed when an RM-B170 or other remote control unit is connected.

<sup>8)</sup> Does not function if the button is pressed when Technical > Special Configuration > Flip Image (page 81) H & V Flip in the full menu is grayed out.

## Functions that can be Assigned to Viewfinder (DVF-EL200) Assignable Buttons A to C

Assignable Button setting	Function	State when unit is powered on
No Assign	No assignment	–
Color Bars <sup>1)</sup>	Turns color bars on/off.	Setting retained
AXS Slot Change	Switches the active slot when two AXS memory cards are inserted. Switches between A and B each time the button is pressed.	–
SxS Slot Change	Switches the active slot when two SxS memory cards are inserted. Switches between A and B each time the button is pressed.	–
Rec Review	Executes the Rec Review function.	Setting not retained
VF Frame Line	Turns superimposition of frame lines on the viewfinder/monitor screen output image on/off.	Setting retained
VF Zebra	Turns the zebra function of the viewfinder/monitor screen output image on/off.	Setting retained
VF Status Info	Turns the information display on the viewfinder/monitor screen output image on/off.	Setting retained
VF Focus Magnifier	Turns the focus magnifier function of the viewfinder on/off.	Setting not retained
Press & Hold for VF Log <sup>2)</sup>	Disables the LUT applied to the viewfinder/monitor screen output image while the button is pressed for normal image quality without applying a LUT.	Setting not retained
VF Highlight Clip Ind <sup>3)</sup>	Turns the function to display clipped highlight areas in red in the viewfinder on/off.	Setting retained

Assignable Button setting	Function	State when unit is powered on
VF High/Low Key <sup>3)</sup>	Selects the viewfinder output mode. Switches between High Key (screen for checking for blown-out highlights) → Low Key (screen for checking for blocked-out shadows) → Off (normal display) each time the button is pressed.	Setting not retained
VF False Color <sup>3)</sup>	Turns the false color function display in a viewfinder on/off.	Setting retained
Line A: Aspect Ratio Disp.	Turns the Aspect Ratio display for Line A on/off.	Setting retained
Line B: Aspect Ratio Disp.	Turns the Aspect Ratio display for Line B on/off.	Setting retained
Line A: User Frame Disp.	Turns the User Frame Line 1 and User Frame Line 2 display for Line A on/off. Each time the button is pressed, the display switches between User Frame Line 1 and 2 display → User Frame Line 1 display → User Frame Line 2 display → User Frame Line 1 and 2 hidden.	Setting retained
Line B: User Frame Disp.	Turns the User Frame Line 1 and User Frame Line 2 display for Line B on/off. Each time the button is pressed, the display switches between User Frame Line 1 and 2 display → User Frame Line 1 display → User Frame Line 2 display → User Frame Line 1 and 2 hidden.	Setting retained
Picture Cache Rec	Turns the picture cache recording function on/off.	Setting retained
Iris Open (1/16 stop) <sup>4)</sup>	Opens the lens iris. Press and hold to open the iris until fully open. This function is available when an E-mount lens with power iris is attached. The setting is in 1/16 stop increments, whereas the iris indication is in units of 1/3 stop increments.	–
Iris Close (1/16 stop) <sup>4)</sup>	Closes the lens iris. Press and hold to close the iris until fully closed. This function is available when an E-mount lens with power iris is attached. The setting is in 1/16 stop increments, whereas the iris indication is in units of 1/3 stop increments.	–

Assignable Button setting	Function	State when unit is powered on
ND +1stop	Switches the ND filter one stop in the darker direction.	–
ND -1stop	Switches the ND filter one stop in the brighter direction.	–
Rec	Starts/stops recording.	–
H & V Flip <sup>5)</sup>	In shooting mode, turns the function to flip the image horizontally and vertically on/off.	Setting retained
SxS/Output De-Squeeze	Changes the Project > Basic Setting > SxS/Output De-Squeeze setting in the full menu. Each time the button is pressed, the setting changes to the next item in the list of menu selection options.	Setting retained

<sup>1)</sup> Does not function if the button is pressed when an RM-B170 or other remote control unit is connected and Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

<sup>2)</sup> Switches to the same image as the main signal that is selected using Project > Basic Setting > Input Color Space (page 66) in the full menu while the button is pressed.

<sup>3)</sup> Does not function if the button is pressed when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

<sup>4)</sup> Does not function if the button is pressed when an RM-B170 or other remote control unit is connected.

<sup>5)</sup> Does not function if the button is pressed when Technical > Special Configuration > Flip Image (page 81) H & V Flip in the full menu is grayed out.

# Menu Operations

By pressing the MENU button while shooting (during recording or recording standby) or during playback, you can display and operate the menu screen on the sub display.

- Project category: Basic settings and recording format settings
- TC/Media category: Timecode value and TC format settings
- Monitoring category: SDI/HDMI/Monitor external signal output format, OSD, and marker overlay status settings
- Audio category: Audio source and audio level settings
- Info category: Camera, media, and battery status information

## Controls

### MENU button (page 9)

Press to display the menu on the sub display.

### ITEM keys 1 to 6 (page 9)

Selects the category of the menu.

### SEL/SET dial (MENU dial) (page 9)

Turn to move the cursor in the corresponding direction to select setting items or setting values. Press the MENU dial to apply the selected item.

### BACK button (page 10)

Press to return to the previous menu. Unconfirmed changes are canceled.

## Basic Operation

- 1 Press the MENU button.  
The menu screen appears.
- 2 Select the category to set using ITEM keys 1 to 6.
- 3 Turn the MENU dial to move the cursor to the setting item to select.  
For each setting item, the setting value is displayed.

*"Menu Item List" (page 49)*

Project	TC/Media	Monitoring
Imager Mode		4K 17:9
Project Frame Rate		23.98
Input Color Space	S-Gamut3.Cine/SLog3	
AXS Rec Format		Rec Off
SxS Rec Format		XAVC 4K Class300
Sub Rec Format		Rec Off
Audio	Info	Project Details

- 4 Press the MENU dial.  
The setting value selection screen appears next to the selected item.

Project	TC/Media	Monitoring
Imager Mode		4K 4:3
Project Frame Rate		4K 17:9
Input Color Space		3.8K 16:9
AXS Rec Format		Rec Off
SxS Rec Format		XAVC 4K Class300
Sub Rec Format		Rec Off
Audio	Info	Project Details

- 5 Turn the MENU dial to move the cursor to the setting value.
- 6 Press the MENU dial to apply the setting.



## Menu Item List

The items available in each category are given below.

### Project category

Default values are shown underlined and in **bold** text.

Item	Settings	Description
Imager Mode	<u>6K 3:2/6K 1.85:1/6K 17:9/</u> 6K 2.39:1/5.7K 16:9/4K 6:5/ 4K 4:3/4K 4:3 Surround View/ <u>4K 17:9/</u> 4K 17:9 Surround View/ 4K 2.39:1/3.8K 16:9/ 3.8K 16:9 Surround View	Sets the effective picture size.  [Notes] <ul style="list-style-type: none"> <li>6K 3:2/6K 1.85:1/6K 17:9 are displayed only when a Full Frame license is installed.</li> <li>4K 6:5/4K 4:3/4K 4:3 Surround View are displayed only when an Anamorphic license is installed.</li> </ul>
Project Frame Rate	<u>23.98</u> /24/25/29.97/47.95/ 50/59.94	Sets the project frame rate.
Input Color Space	<u>S-Gamut3.Cine/SLog3</u> / S-Gamut3/SLog3 / HLG(Natural) / HLG(Live) / Rec.2020/User Gamma / Rec.709/User Gamma	Sets the color space.  [Notes] <ul style="list-style-type: none"> <li>HLG(Natural) / HLG(Live) / Rec.2020/User Gamma / Rec.709/User Gamma can be selected only when Technical &gt; System Configuration &gt; RM/RCP Paint Control (page 81) is set to On in the full menu.</li> <li>HLG(Natural) is equivalent to HLG BT.2100.</li> </ul>
AXS Rec Format <sup>1)</sup> (Only when an AXS-R7 is attached)	<u>Rec Off</u> /X-OCN XT/ RAW SQ/X-OCN ST/ X-OCN LT	Sets the recording format for AXS memory cards when an AXS-R7 is connected.
SxS Rec Format <sup>1)</sup>	<u>Rec Off</u> /XAVC 4K Class480/ <u>XAVC 4K Class300</u> / XAVC QFHD Class480/ XAVC QFHD Class300/ MPEG HD P/MPEG HD i/ ProRes 4444 HD P/ ProRes 422 HQ HD P/ ProRes 422 HQ HD i/ ProRes 422 HD P/ ProRes 422 HD i/ ProRes Proxy HD P/ ProRes Proxy HD i	Sets the main recording format for SxS memory cards.  [Note] <ul style="list-style-type: none"> <li>ProRes 4444 HD P is supported only for the following effective picture sizes. <ul style="list-style-type: none"> <li>5.7K 16:9</li> <li>4K 6:5</li> <li>4K 4:3</li> <li>3.8K 16:9</li> </ul> </li> <li>ProRes 4444 HD P cannot be selected when Input Color Space is set to HLG(Natural), HLG(Live), or Rec.2020/User Gamma.</li> </ul>
Sub Rec Format <sup>1)</sup>	<u>Rec Off</u> /MPEG HD P/ MPEG HD i/ ProRes 422 Proxy HD P/ ProRes 422 Proxy HD i	Sets the sub recording format for SxS memory cards.

Item	Settings	Description
Project Details (ITEM key 6)		Displays the contents of the Project menu (page 66) in the full menu.

<sup>1)</sup> The recording formats available vary depending on the combination of the effective picture size and project frame rate settings. For details about settings, see "Recording Format Settings" (page 53).

### TC/Media category

Default values are shown underlined and in **bold** text.

Item	Settings	Description
TC Mode	Preset F-Run (Ext-Lk)/ <u>Preset</u> <u>R-Run</u> /Int Regen	Sets the timecode mode. Preset F-Run (Ext-Lk): Timecode advances continuously from specified value, regardless of whether recording or not. Preset R-Run: Timecode advances from specified value only when recording. Int Regen: Timecode continues from that of the previous clip.
TC Display	<u>Timecode</u> /Duration	Switches the time data indication.
TC Setting (set when switching to another screen)	Setting (H, M, S, F)	Sets the timecode to a desired value.
	Reset	Resets the timecode to 00:00:00:00.
	TC Format    DF/ <u>NDF</u>	Sets the timecode format. DF: Drop frame NDF: Non drop frame
TC Source	Internal/External	Display only.
Cam ID	<u>A</u> to Z	Sets the camera ID used when generating clip names. Clip name: Camera ID + Reel Number + Shot Number + date + random string
Reel#	<u>001</u> to 999	Sets the numeric portion of the Reel Number used when generating clip names. Clip name: Camera ID + Reel Number + Shot Number + date + random string
Camera Position	<u>C</u> /L/R	Sets the first character portion of the Shot Number used when generating clip names. Clip name: Camera ID + Reel Number + Shot Number + date + random string

Item	Settings	Description
Format Media (executed when switching to another screen)	<u>AXS Slot A</u>	Formats the AXS memory card in slot A.
	<u>AXS Slot B</u>	Formats the AXS memory card in slot B.
	<u>SxS Slot A</u>	Formats the SxS memory card in slot A.
	<u>SxS Slot B</u>	Formats the SxS memory card in slot B.
	<u>SD Card</u>	Formats the SD card.
Media Details (ITEM key 6)		Displays the contents of the TC/Media menu (page 70) in the full menu.

## Monitoring category

Default values are shown underlined and in **bold** text.

### [Notes]

- The unit supports independent configuration of Status Info and Frame Line for each system. The display information for the A and B output images is configured using the Monitoring menu (page 71).
- Info and Frame Line may not be displayed depending on the Output Format setting. In this case, “–” is displayed and the setting cannot be changed.

Item	Settings	Description
VF	Status Info <u>Info A/Info B/Off</u>	Selects the information to display superimposed on the viewfinder image.
	Frame Line <u>Line A/Line B/Off</u>	Selects the frame lines to display superimposed on the viewfinder image.
SDI 1/2	Output Format	The available settings vary according to the imager mode, project frame rate, and SxS recording format settings. Selects the SDI 1/2 output format. <sup>1)</sup>
	Status Info –	Information display is not superimposed on the SDI 1/2 output.
	Frame Line <u>Line A/Line B/Off</u>	Selects the frame lines to display superimposed on the SDI 1/2 output.  <b>[Note]</b> Frame lines are only superimposed if the output format is 4K/QFHD.
SDI 3/4  <b>[Note]</b> Depending on the Output Format setting of SDI 1/2, the Output Format, Info, Frame Line settings of SDI 3/4 may be blank and cannot be changed.	Output Format	The available settings vary depending on the SDI 1/2 setting. Selects the SDI 3/4 output format. <sup>1)</sup>
	Status Info <u>Info A/Info B/Off</u>	Selects the information to display superimposed on the SDI 3/4 output.
	Frame Line <u>Line A/Line B/Off</u>	Selects the frame lines to display superimposed on the SDI 3/4 output.

Item	Settings	Description
Monitor	Output Format	The available settings vary depending on the SDI 1/2 setting. Selects the Monitor output format. <sup>2)</sup>
	Status Info <u>Info A/Info B/Off</u>	Selects the information to display superimposed on the Monitor output.
	Frame Line <u>Line A/Line B/Off</u>	Selects the frame lines to display superimposed on the Monitor output.
HDMI	Output Format	The available settings vary depending on the SDI 1/2 setting. Selects the HDMI output format. <sup>2)</sup>
Moni. Details (ITEM key 6)		Displays the contents of the Monitoring menu (page 71) in the full menu.

<sup>1)</sup> For details about formats available for selection, see “SDI OUT Connector Output Formats” (page 116).

<sup>2)</sup> For details about formats available for selection, see “MONITOR OUT Connector/HDMI OUT Connector Output Formats” (page 120).

## Audio category

Default values are shown underlined and in **bold** text.

Item	Settings	Description
Source Switch	<u>LINE / AES/EBU / MIC</u>	Displays the position of the AUDIO IN switch (page 10) that sets the CH1 and CH2 input source.
CH-1 Audio Level	Auto/Manual –99 to <u>±0</u> to +99	The audio recording level is adjusted automatically when set to Auto. The audio recording level is adjusted manually when set to Manual.
CH-2 Audio Level	Auto/Manual –99 to <u>±0</u> to +99	The audio recording level is adjusted automatically when set to Auto. The audio recording level is adjusted manually when set to Manual.
MIC Reference	–60dB/ <u>–50dB</u> /–40dB	Selects the reference input level of the microphone.
Monitor CH	When Monitor Output CH Pair is set to CH-1/CH-2 <u>CH-1/CH-2</u> , CH-1, CH-2 When Monitor Output CH Pair is set to CH-3/CH-4 <u>CH-3/CH-4</u> , CH-3, CH-4	Selects the audio channel that is output to the headphones and speaker.
Monitor Level	<u>0</u> to 99	Adjusts the monitor audio level.
CH1 Level Meter	–	Displays the CH1 level meter.
CH2 Level Meter	–	Displays the CH2 level meter.

Item	Settings	Description
CH3 Level Meter	–	Displays the CH3 level meter.
CH4 Level Meter	–	Displays the CH4 level meter.
Audio Details (ITEM key 6)		Displays the contents of the Audio menu (page 77) in the full menu.

## Checking the Status using the Info Category

You can check the status of media and the battery, and check the contents of warnings and errors that are issued using the Info category. The contents of the display update in realtime as the status of the unit changes.

The Info category consists of the following eight information pages. Turn the MENU dial to switch the page.

No.	Page	Description
1	Camera Condition	Displays warning messages and error messages. When there are no messages, "All Systems are OK" is displayed at the top of the display area.
2	Firmware	Displays the serial number and firmware version of the unit, and the serial number and firmware version of the AXS-R7 attached to the unit.
3	License	Displays the name and installation status/validity of option software licenses. If an option is not added, "Not Installed" or "Expired" is displayed for the installation status.
4	System	Displays the following system information. <ul style="list-style-type: none"> <li>• Date and time</li> <li>• Fan rotation speed</li> <li>• Sensor detection temperature</li> <li>• Hours meter</li> <li>• IP Address</li> </ul> <p>[Notes]</p> <ul style="list-style-type: none"> <li>• If the sensor detection temperature reaches 65 °C (149 °F), a high temperature warning message is issued.</li> <li>• "0.0.0.0" is displayed if the IP address cannot be obtained.</li> </ul>
5	Battery	Displays the following battery information. <ul style="list-style-type: none"> <li>• Detected battery name or type</li> <li>• Remaining capacity (%)</li> <li>• Estimated remaining time</li> <li>• Remaining capacity (Ah)</li> <li>• Voltage (V)</li> <li>• Number of times that the battery has been charged</li> <li>• Power source</li> <li>• Supplied power source voltage</li> </ul>
6	Media	Displays the remaining capacity, remaining recording time, and lifespan data of SxS memory cards, AXS memory cards (when AXS-R7 is attached), and SD cards.

No.	Page	Description
7	Lens	<p>Displays the following information for the lens attached to the unit.</p> <ul style="list-style-type: none"><li>• Lens model name</li><li>• T value of iris</li></ul> <p><b>[Note]</b> The F-stop value is displayed instead of the T-stop value if the T-stop value cannot be obtained.</p> <ul style="list-style-type: none"><li>• Focal length</li><li>• Focus distance</li><li>• Depth of field</li><li>• Serial number</li></ul>
8	Network	<p>Displays the network connection setup information.</p> <ul style="list-style-type: none"><li>• Status (LAN/Wireless Access Point/Wireless Station/Off)</li><li>• IP Address</li><li>• SSID</li><li>• MAC Address</li></ul> <p><b>[Note]</b> "0.0.0.0" is displayed if the IP address cannot be obtained.</p>

## Recording Format Settings

The following recording formats can be selected for different combinations of effective picture size and project frame rate settings. If a value shown underlined and in **bold** text is selected, a Log or LUT setting can be applied to the recorded video signal.

### AXS Rec Format and SxS Rec Format combinations

Effective picture size (Imager Mode)	Main recording format		Project Frame Rate						
	AXS Rec Format	SxS Rec Format	23.98	24.00	25.00	29.97	47.95	50.00	59.94
6K 3:2 (6048×4032)	X-OCN XT X-OCN ST X-OCN LT	None	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		4K XAVC-I Class480	Yes	Yes	Yes	Yes	–	–	–
		4K XAVC-I Class300	Yes	Yes	Yes	Yes	–	Yes	Yes
		<u>MPEG HD422 P</u>	Yes	–	Yes	Yes	–	–	–
		<u>MPEG HD422 i</u>	–	–	–	–	–	Yes	Yes
		<u>FHD ProRes 422 HQ P</u>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<u>FHD ProRes 422 P</u>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<u>FHD ProRes 422 Proxy P</u>	Yes	Yes	Yes	Yes	–	Yes	Yes
6K 1.85:1 (6054×3272)	X-OCN XT X-OCN ST X-OCN LT	None	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		4K XAVC-I Class480	Yes	Yes	Yes	Yes	–	–	–
		4K XAVC-I Class300	Yes	Yes	Yes	Yes	–	Yes	Yes
		<u>MPEG HD422 P</u>	Yes	–	Yes	Yes	–	–	–
		<u>MPEG HD422 i</u>	–	–	–	–	–	Yes	Yes
		<u>FHD ProRes 422 HQ P</u>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<u>FHD ProRes 422 P</u>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<u>FHD ProRes 422 Proxy P</u>	Yes	Yes	Yes	Yes	–	Yes	Yes
6K 17:9 (6054×3192)	X-OCN XT X-OCN ST X-OCN LT	None	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		4K XAVC-I Class480	Yes	Yes	Yes	Yes	–	–	–
		4K XAVC-I Class300	Yes	Yes	Yes	Yes	–	Yes	Yes
		<u>MPEG HD422 P</u>	Yes	–	Yes	Yes	–	–	–
		<u>MPEG HD422 i</u>	–	–	–	–	–	Yes	Yes
		<u>FHD ProRes 422 HQ P</u>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<u>FHD ProRes 422 P</u>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<u>FHD ProRes 422 Proxy P</u>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<u>FHD ProRes 422 Proxy i</u>	–	–	–	–	–	Yes	Yes

Effective picture size (Imager Mode)	Main recording format		Project Frame Rate						
	AXS Rec Format	SxS Rec Format	23.98	24.00	25.00	29.97	47.95	50.00	59.94
6K 2.39:1 (6048×2534)	X-OCN XT X-OCN ST X-OCN LT	None	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		4K XAVC-I Class480	Yes	Yes	Yes	Yes	–	–	–
		4K XAVC-I Class300	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">FHD ProRes 422 HQ P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes
5.7K 16:9 (5674×3192)	X-OCN XT X-OCN ST X-OCN LT	None	Yes	Yes	Yes	Yes	–	Yes	Yes
		QFHD XAVC-I Class480	Yes	–	Yes	Yes	–	–	–
		QFHD XAVC-I Class300	Yes	–	Yes	Yes	–	Yes	Yes
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">FHD ProRes 422 HQ P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes
4K 6:5 (4096×3432)	X-OCN XT X-OCN ST X-OCN LT	None	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		4K XAVC-I Class480	Yes	Yes	Yes	Yes	–	–	–
		4K XAVC-I Class300	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">FHD ProRes 422 HQ P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes
4K 4:3 (4096×3024)	X-OCN XT X-OCN ST X-OCN LT	None	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		4K XAVC-I Class480	Yes	Yes	Yes	Yes	–	–	–
		4K XAVC-I Class300	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">FHD ProRes 422 HQ P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes

Effective picture size (Imager Mode)	Main recording format		Project Frame Rate						
	AXS Rec Format	SxS Rec Format	23.98	24.00	25.00	29.97	47.95	50.00	59.94
4K 4:3 Surround (4096×3024) Picture size (4552×3360)	X-OCN XT	None	Yes	Yes	Yes	Yes	–	–	–
	X-OCN ST	<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
	X-OCN LT	<a href="#">FHD ProRes 422 HQ P</a>	Yes	Yes	Yes	Yes	–	–	–
		<a href="#">FHD ProRes 422 P</a>	Yes	Yes	Yes	Yes	–	–	–
		<a href="#">FHD ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–
4K 17:9 (4096×2160)	X-OCN XT	None	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	RAW SQ	4K XAVC-I Class480	Yes	Yes	Yes	Yes	–	–	–
	X-OCN ST	4K XAVC-I Class300	Yes	Yes	Yes	Yes	–	Yes	Yes
	X-OCN LT	<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">FHD ProRes 422 HQ P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 HQ i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">FHD ProRes 422 P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">FHD ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes
4K 17:9 Surround (4096×2160) Picture size (4552×2400)	X-OCN XT	None	Yes	Yes	Yes	Yes	–	–	–
	RAW SQ	<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
	X-OCN ST	<a href="#">FHD ProRes 422 HQ P</a>	Yes	Yes	Yes	Yes	–	–	–
	X-OCN LT	<a href="#">FHD ProRes 422 P</a>	Yes	Yes	Yes	Yes	–	–	–
		<a href="#">FHD ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–
4K 4096×1716 2.39:1	X-OCN XT	None	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	X-OCN ST	4K XAVC-I Class480	Yes	Yes	Yes	Yes	–	–	–
	X-OCN LT	4K XAVC-I Class300	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">FHD ProRes 422 HQ P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes

Effective picture size (Imager Mode)	Main recording format		Project Frame Rate						
	AXS Rec Format	SxS Rec Format	23.98	24.00	25.00	29.97	47.95	50.00	59.94
3.8K (QFHD) 16:9 (3840×2160)	X-OCN XT	None	Yes	Yes	Yes	Yes	–	Yes	Yes
	RAW SQ	QFHD XAVC-I Class480	Yes	–	Yes	Yes	–	–	–
	X-OCN ST	QFHD XAVC-I Class300	Yes	–	Yes	Yes	–	Yes	Yes
	X-OCN LT	<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">FHD ProRes 422 HQ P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 HQ i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">FHD ProRes 422 P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">FHD ProRes 422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">FHD ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	Yes	Yes
	<a href="#">FHD ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes	
3.8K (QFHD) 16:9 Surround (3840×2160) Picture size (4268×2400)	X-OCN XT	None	Yes	Yes	Yes	Yes	–	–	–
	RAW SQ	<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
	X-OCN ST	<a href="#">FHD ProRes 422 HQ P</a>	Yes	Yes	Yes	Yes	–	–	–
	X-OCN LT	<a href="#">FHD ProRes 422 P</a>	Yes	Yes	Yes	Yes	–	–	–
		<a href="#">FHD ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–

### SxS Rec Format and Sub Rec Format combinations

Effective picture size (Imager Mode)	Recording format		Project Frame Rate						
	SxS main recording format (SxS Rec Format) <sup>1)</sup>	SxS sub recording format (Sub Rec Format) <sup>2)</sup>	23.98	24.00	25.00	29.97	47.95	50.00	59.94
6K 3:2 (6048×4032)	4K XAVC-I Class480	None	–	–	–	–	–	–	–
	4K XAVC-I Class300	None	–	–	–	–	–	–	–
	MPEG HD422 P	None	–	–	–	–	–	–	–
	FHD ProRes 422 HQ P	None	–	–	–	–	–	–	–
	FHD ProRes 422 P	None	–	–	–	–	–	–	–
	FHD ProRes 422 Proxy P	None	–	–	–	–	–	–	–



Effective picture size (Imager Mode)	Recording format		Project Frame Rate							
	SxS main recording format (SxS Rec Format) <sup>1)</sup>	SxS sub recording format (Sub Rec Format) <sup>2)</sup>	23.98	24.00	25.00	29.97	47.95	50.00	59.94	
6K 1.85:1 (6054×3272)	4K XAVC-I Class480	None	Yes	Yes	Yes	Yes	–	–	–	
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–	
		<a href="#">ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–	
	4K XAVC-I Class300	None	Yes	Yes	Yes	Yes	–	Yes	Yes	
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–	
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes	
		<a href="#">ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–	
		<a href="#">ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes	
	MPEG HD422 P	None	Yes	–	Yes	Yes	–	–	–	
	MPEG HD422 i	None	–	–	–	–	–	Yes	Yes	
	FHD ProRes 422 HQ P	None	Yes	Yes	Yes	Yes	–	Yes	Yes	
	FHD ProRes 422 P	None	Yes	Yes	Yes	Yes	–	Yes	Yes	
6K 17:9 (6054×3192)	4K XAVC-I Class480	None	Yes	Yes	Yes	Yes	–	–	–	
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–	
		<a href="#">ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–	
	4K XAVC-I Class300	None	Yes	Yes	Yes	Yes	–	Yes	Yes	
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–	
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes	
		<a href="#">ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–	
		<a href="#">ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes	
	6K 2.39:1 (6048×2534)	4K XAVC-I Class480	None	Yes	Yes	Yes	Yes	–	–	–
			<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
			<a href="#">ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–
		4K XAVC-I Class300	None	Yes	Yes	Yes	Yes	–	Yes	Yes
<a href="#">MPEG HD422 P</a>			Yes	–	Yes	Yes	–	–	–	
<a href="#">MPEG HD422 i</a>			–	–	–	–	–	Yes	Yes	
<a href="#">ProRes 422 Proxy P</a>			Yes	Yes	Yes	Yes	–	–	–	
<a href="#">ProRes 422 Proxy i</a>			–	–	–	–	–	Yes	Yes	
MPEG HD422 P		None	Yes	–	Yes	Yes	–	–	–	
MPEG HD422 i		None	–	–	–	–	–	Yes	Yes	
FHD ProRes 422 HQ P		None	Yes	Yes	Yes	Yes	–	Yes	Yes	
FHD ProRes 422 P		None	Yes	Yes	Yes	Yes	–	Yes	Yes	

Effective picture size (Imager Mode)	Recording format		Project Frame Rate						
	SxS main recording format (SxS Rec Format) <sup>1)</sup>	SxS sub recording format (Sub Rec Format) <sup>2)</sup>	23.98	24.00	25.00	29.97	47.95	50.00	59.94
5.7K 16:9 (5674×3192)	QFHD XAVC-I Class480	None	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">ProRes 422 Proxy P</a>	Yes	–	Yes	Yes	–	–	–
	QFHD XAVC-I Class300	None	Yes	–	Yes	Yes	–	Yes	Yes
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">ProRes 422 Proxy P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes
	MPEG HD422 P	None	Yes	–	Yes	Yes	–	–	–
	FHD ProRes 4444 P	None	Yes	Yes	Yes	Yes	–	–	–
	FHD ProRes 422 HQ P	None	Yes	Yes	Yes	Yes	–	–	–
	FHD ProRes 422 P	None	Yes	Yes	Yes	Yes	–	–	–
4K 6:5 (4096×3432)	4K XAVC-I Class480	None	Yes	Yes	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–
	4K XAVC-I Class300	None	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–
		<a href="#">ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes
	MPEG HD422 P	None	Yes	–	Yes	Yes	–	–	–
	FHD ProRes 4444 P (Anamorphic: None)	None	Yes	Yes	Yes	Yes	–	–	–
	FHD ProRes 422 HQ P	None	Yes	Yes	Yes	Yes	–	–	–
	FHD ProRes 422 P	None	Yes	Yes	Yes	Yes	–	–	–
4K 4:3 (4096×3024)	4K XAVC-I Class480	None	Yes	Yes	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–
	4K XAVC-I Class300	None	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–
		<a href="#">ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes
	MPEG HD422 P	None	Yes	–	Yes	Yes	–	–	–
	MPEG HD422 i	None	–	–	–	–	–	Yes	Yes
	FHD ProRes 4444 P	None	Yes	Yes	Yes	Yes	–	–	–
	FHD ProRes 422 HQ P	None	Yes	Yes	Yes	Yes	–	Yes	Yes
FHD ProRes 422 P	None	Yes	Yes	Yes	Yes	–	Yes	Yes	

Effective picture size (Imager Mode)	Recording format		Project Frame Rate						
	SxS main recording format (SxS Rec Format) <sup>1)</sup>	SxS sub recording format (Sub Rec Format) <sup>2)</sup>	23.98	24.00	25.00	29.97	47.95	50.00	59.94
4K 4:3 Surround (4096×3024) Picture size (4552×3360)	MPEG HD422 P	None	Yes	–	Yes	Yes	–	–	–
	FHD ProRes 422 HQ P	None	Yes	Yes	Yes	Yes	–	–	–
	FHD ProRes 422 P	None	Yes	Yes	Yes	Yes	–	–	–
4K 17:9 (4096×2160)	4K XAVC-I Class480	None	Yes	Yes	Yes	Yes	–	–	–
		<a href="#">MPEG HD422</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–
	4K XAVC-I Class300	None	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–
		<a href="#">ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes
4K 4096×1716 2.39:1	4K XAVC-I Class480	None	Yes	Yes	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–
	4K XAVC-I Class300	None	Yes	Yes	Yes	Yes	–	Yes	Yes
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">ProRes 422 Proxy P</a>	Yes	Yes	Yes	Yes	–	–	–
		<a href="#">ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes
	MPEG HD422 P	None	Yes	–	Yes	Yes	–	–	–
	MPEG HD422 i	None	–	–	–	–	–	Yes	Yes
	FHD ProRes 422 HQ P	None	Yes	Yes	Yes	Yes	–	Yes	Yes
	FHD ProRes 422 P	None	Yes	Yes	Yes	Yes	–	Yes	Yes

Effective picture size (Imager Mode)	Recording format		Project Frame Rate						
	SxS main recording format (SxS Rec Format) <sup>1)</sup>	SxS sub recording format (Sub Rec Format) <sup>2)</sup>	23.98	24.00	25.00	29.97	47.95	50.00	59.94
3.8K (QFHD) 16:9 (3840×2160)	QFHD XAVC-I Class480	None	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">ProRes 422 Proxy P</a>	Yes	–	Yes	Yes	–	–	–
		None	Yes	–	Yes	Yes	–	Yes	Yes
	QFHD XAVC-I Class300	<a href="#">MPEG HD422 P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">MPEG HD422 i</a>	–	–	–	–	–	Yes	Yes
		<a href="#">ProRes 422 Proxy P</a>	Yes	–	Yes	Yes	–	–	–
		<a href="#">ProRes 422 Proxy i</a>	–	–	–	–	–	Yes	Yes
	MPEG HD422 P	None	Yes	–	Yes	Yes	–	–	–
	MPEG HD422 i	None	–	–	–	–	–	Yes	Yes
	FHD ProRes 4444 P	None	Yes	Yes	Yes	Yes	–	–	–
	FHD ProRes 422 HQ P	None	Yes	Yes	Yes	Yes	–	Yes	Yes
	FHD ProRes 422 HQ i	None	–	–	–	–	–	Yes	Yes
	FHD ProRes 422 P	None	Yes	Yes	Yes	Yes	–	Yes	Yes
FHD ProRes 422 i	None	–	–	–	–	–	Yes	Yes	
3.8K (QFHD) 16:9 Surround (3840×2160) Picture size (4268×2400)	MPEG HD422 P	None	Yes	–	Yes	Yes	–	–	–
	FHD ProRes 422 HQ P	None	Yes	Yes	Yes	Yes	–	–	–
	FHD ProRes 422 P	None	Yes	Yes	Yes	Yes	–	–	–

<sup>1)</sup> When the SxS main recording format is set to XAVC, the LUT is off (fixed) for XAVC recording.

<sup>2)</sup> When the SxS recording format is set to MPEG or ProRes, either Log or Look can be selected (FHD only).

# Full Menu Operations

The full menu for configuring the required settings for shooting and playback is displayed on the sub display by pressing and holding the MENU button for 2 seconds or longer.

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## Menu Structure

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### Shooting menu

Menu used to make settings related to shooting.

### Project menu

Menu used to make basic settings for a project.

### TC/Media menu

Menu used to make settings related to timecode and recording media.

### Monitoring menu

Menu used to make settings related to video output and viewfinder output.

### Audio menu

Menu used to make settings related to audio.

### Paint menu

Menu used to make settings related to paint functions.

The Paint menu can be displayed and selected only when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

### Technical menu

Menu used to make settings related to technical matters.

### Maintenance menu

Menu used to make unit settings, such as the clock and language settings.

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## Controls

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### MENU button (page 9)

Press and hold for 2 seconds or longer to display the full menu on the sub display.

### SEL/SET dial (MENU dial) (page 9)

Turn to move the cursor in the corresponding direction to select setting items or setting values. Press the MENU dial to apply the selected item.

### BACK button (page 10)

Press to return to the previous menu. Unconfirmed changes are canceled.

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## Setting Menu Items

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Turn the MENU dial to move the cursor to the menu item you want to set, then press the MENU dial to select that item.

- The menu item selection area can show a maximum of nine lines. When all the selectable items cannot be displayed at one time, you can scroll the display up or down by moving the cursor.
- For items having a wide range of available values (example: -99 to +99), the selection area is not displayed. The current setting is highlighted to indicate that the value can be changed.
- If you select Execute for an executable item, the corresponding function is executed.
- When you select an item that you must confirm before execution, a confirmation message appears. Follow the instructions in the message to execute or cancel the operation.

# Full Menu List

The functions and available settings of each menu item are given below.

## Shooting Menu

Default values are shown underlined and in **bold** text.

Shooting > FPS																										
Sets the shooting frame rate.																										
<b>[Note]</b> FPS cannot be configured if Project > Basic Setting > SxS Rec Format in the full menu is set to interlaced recording or ProRes 4444 recording. In this case, the Fixed/Variable Select setting changes to Fixed.																										
Menu item	Settings	Description																								
Fixed/Variable Select	<u>Fixed</u> /Variable	Selects whether the FPS setting is set to constant speed shooting or variable speed shooting.																								
FPS Select	When Fixed/Variable Select is set to Fixed, one of the following values is displayed. Fixed 23.98/Fixed 24.00/ Fixed 25.00/Fixed 29.97/ Fixed 47.95/Fixed 50.00/ Fixed 59.94	Selects the shooting frame rate. The default values vary as shown below depending on the Project Frame Rate setting.																								
		<table border="1"> <thead> <tr> <th>Project Frame Rate</th> <th>Default when Fixed/Variable Select is Variable</th> <th>Display value when Fixed/Variable Select is Fixed</th> </tr> </thead> <tbody> <tr> <td>59.94</td> <td>60</td> <td>Fixed 59.94</td> </tr> <tr> <td>50</td> <td>50</td> <td>Fixed 50.00</td> </tr> <tr> <td>47.95</td> <td>48</td> <td>Fixed 47.95</td> </tr> <tr> <td>29.97</td> <td>30</td> <td>Fixed 29.97</td> </tr> <tr> <td>25</td> <td>25</td> <td>Fixed 25.00</td> </tr> <tr> <td>24</td> <td>24</td> <td>Fixed 24.00</td> </tr> <tr> <td>23.97</td> <td>24</td> <td>Fixed 23.98</td> </tr> </tbody> </table>	Project Frame Rate	Default when Fixed/Variable Select is Variable	Display value when Fixed/Variable Select is Fixed	59.94	60	Fixed 59.94	50	50	Fixed 50.00	47.95	48	Fixed 47.95	29.97	30	Fixed 29.97	25	25	Fixed 25.00	24	24	Fixed 24.00	23.97	24	Fixed 23.98
Project Frame Rate	Default when Fixed/Variable Select is Variable	Display value when Fixed/Variable Select is Fixed																								
59.94	60	Fixed 59.94																								
50	50	Fixed 50.00																								
47.95	48	Fixed 47.95																								
29.97	30	Fixed 29.97																								
25	25	Fixed 25.00																								
24	24	Fixed 24.00																								
23.97	24	Fixed 23.98																								

## Shooting > Shutter

Makes settings related to the electronic shutter.

### **[Note]**

Shutter is grayed out and cannot be operated when an RM-B170 or other remote control unit is connected and Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

Menu item	Settings	Description
Shutter Select	When Shutter Mode (page 81) is set to Speed Default selection options 1/24, 1/25, 1/30, 1/48, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000 <sup>1)</sup> When Shutter Mode (page 81) is set to Angle Default selection options 360.0/ <u>180.0</u> /172.8/144.0/ 90.0/45.0/22.5/11.2/5.6 When Step/Cont. Select is set to Continuous, the selection range is 360.0 to 4.2 (Angle) or 1/24 <sup>1)</sup> to 1/8000 <sup>2)</sup> (Speed).	Selects shutter angle or speed of the electronic shutter. The default speed values for different Project Frame Rate (page 66) settings are given below. 23.98/24: 1/24 25: 1/25 29.97: 1/30 47.95: 1/48 50: 1/50 59.94: 1/60
Step/Cont. Select	<u>Step</u> /Continuous	Selects whether the electronic shutter values are step values or continuous.
Add/Change Step		Adds or edits a selection option available in Shutter Select in Step mode. Up to 16 selection options can be added.
Delete Step		Deletes a selection option available in Shutter Select in Step mode.
<b>Shooting &gt; ND</b> Sets the ND filter position.		
Menu item	Settings	Description
ND Position	<u>Clear</u> /0.3/0.6/0.9/1.2/1.5/1.8/ 2.1/2.4	Selects the density of the ND filter.

- <sup>1)</sup> The options are 1/60 and subsequent values when the project frame rate is 59.94, 1/50 and subsequent values when 50.0, 1/30 and subsequent values when 29.97, and 1/25 and subsequent values when 25.0.  
<sup>2)</sup> The options are 1/7000 and preceding values when the project frame rate is 50.0 or 25.0, and 1/6000 and preceding values when 24.0 or 23.98.

**Shooting > Exposure Index**

Sets the EI value.

**[Note]**

Exposure Index is grayed out and the setting cannot be changed when Technical &gt; System Configuration &gt; RM/RCP Paint Control (page 81) is set to On in the full menu.

Menu item	Settings	Description
EI Select	The setting changes as follows depending on the Project > Basic Setting > Base ISO (page 66) setting in the full menu. ISO 500: 125EI/160EI/200EI/250EI/ 320EI/400EI/ <b>500EI</b> /640EI/ 800EI/1000EI/1250EI/1600EI/ 2000EI ISO 2500: 640EI/800EI/1000EI/1250EI/ 1600EI/2000EI/ <b>2500EI</b> / 3200EI/4000EI/5000EI/ 6400EI/8000EI/10000EI	Selects the EI value.  <b>[Note]</b> The settings are fixed to the following values when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu. When Base ISO is set to ISO500: 500EI When Base ISO is set to ISO2500: 2500EI

**Shooting > Gain**

Makes settings related to the gain.

**[Note]**

Gain setting cannot be changed when an RM-B170 or other remote control unit is connected or Technical &gt; System Configuration &gt; RM/RCP Paint Control (page 81) is set to Off in the full menu.

Menu item	Settings	Description
Gain Select	-6dB/-3dB/ <b>0dB</b> /3dB/6dB/9dB/ 12dB/15dB/18dB	Sets the base ISO sensitivity.

**Shooting > White Balance**

Makes settings related to white balance.

**[Note]**

White Balance is grayed out and cannot be operated when an RM-B170 or other remote control unit is connected and Technical &gt; System Configuration &gt; RM/RCP Paint Control (page 81) is set to On in the full menu.

Menu item	Settings	Description
Color Temp. Select	<b>3200K+00</b> /4300K+00/ 5500K+00 + other added options (up to 16)	Displays and selects the color temperature/color tone of the white balance.
Add/Change Step		Adds or edits a selection option by changing the color temperature and tint value of white balance.
Delete Step		Deletes an added selection option.
Auto White Balance	Execute/Cancel	Executes auto white balance (execute by selecting Execute).

**Shooting > LUT Select**

Makes settings related to the LUT to apply to the output image.

**[Note]**

The value of each menu item (excluding SDR Gain) varies depending on the Technical &gt; System Configuration &gt; RM/RCP Paint Control (page 81) setting in the full menu.

Menu item	Settings	Description
SDI 1/2	When RM/RCP Paint Control is set to Off: Log When RM/RCP Paint Control is set to On: <b>Log</b> /HLG(Natural)/HLG(Live)/ User Gamma	Display only, as LUT cannot be applied to the SDI 1/2 output image.  The SDI 1/2 output image setting is display only, because it is determined by the Project > Basic Setting > Input Color Space (page 66) setting in the full menu.
SDI 3/4	When RM/RCP Paint Control is set to Off: Log/ <b>Look</b> /--- When RM/RCP Paint Control is set to On: <b>Log</b> /HLG(Natural)/HLG(Live)/ User Gamma	Selects the LUT to apply to the SDI 3/4 output image.  The SDI 3/4 output image setting is display only, because it is determined by the Project > Basic Setting > Input Color Space (page 66) setting in the full menu.
Monitor	When RM/RCP Paint Control is set to Off: When Output Format > SDI 1/2 is set to 2K/HD: Log/ <b>s709</b> /R709(800%)/ART When Output Format > SDI 1/2 is set to 4K/QFHD: Log/ <b>Look</b> When RM/RCP Paint Control is set to On, the setting changes as follows depending on the Project > Basic Setting > Input Color Space (page 66) setting in the full menu. S-Gamut3.Cine/SLog3 or S-Gamut3/SLog3: <b>Log</b> /R709(800%) HLG(Natural): <b>HLG(Natural)</b> /R709(800%) HLG(Live): <b>HLG(Live)</b> /R709(800%) Rec.2020/User Gamma: <b>User Gamma</b> /R709-Like Rec.709/User Gamma: User Gamma	Selects the LUT to apply to the Monitor output image.  <b>[Note]</b> ART can be selected only when Shooting > Look > Category (page 65) is set to ART in the full menu.

**Shooting > LUT Select**

Makes settings related to the LUT to apply to the output image.

**[Note]**

The value of each menu item (excluding SDR Gain) varies depending on the Technical > System Configuration > RM/RCP Paint Control (page 81) setting in the full menu.

Menu item	Settings	Description
HDMI	When RM/RCP Paint Control is set to Off: Log/ <a href="#">s709</a> /R709(800%)/ART/ Look	Displays the LUT to apply to HDMI output image.  <b>[Note]</b> ART can be selected only when Shooting > Look > Category (page 65) is set to ART in the full menu.
	When RM/RCP Paint Control is set to On (4K/QFHD output): <a href="#">Log</a> /HLG(Natural)/HLG(Live)/ User Gamma	Display only, because the HDMI output image setting is the same as SDI 1/2.
	When RM/RCP Paint Control is set to On (2K/HD output): <a href="#">Log</a> /HLG(Natural)/HLG(Live)/ User Gamma/R709(800%)/ R709-Like	Display only, because the HDMI output image setting is the same as Monitor.
VF LUT	When RM/RCP Paint Control is set to Off: Log/ <a href="#">s709</a> /R709(800%)/Look	Selects the LUT to apply to the viewfinder/ monitor screen output image.  <b>[Note]</b> An SDR gain value (-12 dB) is applied to the viewfinder/ monitor output image.
	When RM/RCP Paint Control is set to On, the setting changes as follows depending on the Project > Basic Setting > Input Color Space (page 66) setting in the full menu. S-Gamut3.Cine/SLog3 or S-Gamut3/SLog3: Log/ <a href="#">R709(800%)</a> HLG(Natural): HLG(Natural)/ <a href="#">R709(800%)</a> HLG(Live): HLG(Live)/ <a href="#">R709(800%)</a> Rec.2020/User Gamma: User Gamma/ <a href="#">R709-Like</a> Rec.709/User Gamma: User Gamma	Selects the type of viewfinder/monitor screen output image.

**Shooting > LUT Select**

Makes settings related to the LUT to apply to the output image.

**[Note]**

The value of each menu item (excluding SDR Gain) varies depending on the Technical > System Configuration > RM/RCP Paint Control (page 81) setting in the full menu.

Menu item	Settings	Description
SxS Rec	When RM/RCP Paint Control is set to Off: <a href="#">Log</a> / <a href="#">Look</a>	Selects the LUT to apply to SDI Main clip recorded video.
	When RM/RCP Paint Control is set to On: <a href="#">Log</a> /HLG(Natural)/HLG(Live)/ User Gamma	The SxS Main clip recording image setting is display only, because it is determined by the Project > Basic Setting > Input Color Space (page 66) setting in the full menu.
Sub Rec	When RM/RCP Paint Control is set to Off: <a href="#">Log</a> / <a href="#">Look</a>	Selects the LUT to apply to SDI Sub clip recorded video.
	When RM/RCP Paint Control is set to On: <a href="#">Log</a> /HLG(Natural)/HLG(Live)/ User Gamma	The SxS Sub clip recording image setting is display only, because it is determined by the Project > Basic Setting > Input Color Space (page 66) setting in the full menu.
SDR Gain	-15dB to 0dB ( <a href="#">-12dB</a> ) (1 dB increments)	Sets the SDR output gain in HDR mode. You can use this to change the gain of the Monitor or viewfinder output that is set to R709(800%) or R709-Like.  <b>[Note]</b> Configurable when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.



**Shooting > Look**

Makes settings related to Preset Look.

**[Note]**

Look is grayed out and the setting cannot be changed when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

Menu item	Settings	Description
Category	<a href="#">Preset Look</a> /ACES/User 3D LUT/ ART	Selects the LUT category.  <b>[Note]</b> ACES can be selected only when Project > Basic Setting > Input Color Space (page 66) is set to S-Gamut3/SLog3 in the full menu.
Preset Look Select	<a href="#">s709</a> /R709(800%) / S-Gamut3.Cine/SLog3 / S-Gamut3/SLog3	Selects the Preset Look. Outputs images that are suitable as the starting point for color grading or images that are close to print film quality. s709: Cinema color R709(800%): Faithful color S-Gamut3/SLog3: Wide color space S-Gamut3.Cine/SLog3: Color space for digital cinema  <b>[Notes]</b> <ul style="list-style-type: none"> <li>Configurable only when Category is set to Preset Look.</li> <li>S-Gamut3/SLog3 can be selected only when Project &gt; Basic Setting &gt; Input Color Space (page 66) is set to S-Gamut3/SLog3 in the full menu.</li> </ul>
ACES Select	<a href="#">ACESproxy</a> /ACESsct/ ACES 1.0 Output-Rec.709	Selects the ACES standard Look type. ACESproxy: Log curve of wide color space (AP1) defined by the Academy. ACESsct: Log curve of wide color space (AP1) based on ACESproxy, with toe characteristic that reduces contrast in the curve near black. ACES 1.0 Output-Rec.709: Rec.709 reference Look defined by the Academy.  <b>[Note]</b> Configurable only when Category is set to ACES.
User 3D LUT Select	File name (01 to 16) of User 3D LUT files stored in internal memory	Selects the User 3D LUT file.  <b>[Note]</b> Configurable only when Category is set to User 3D LUT.
ART Select	File name (01 to 16) of ART files stored in internal memory	Selects the ART file.  <b>[Note]</b> Configurable only when Category is set to ART.

**Shooting > Look**

Makes settings related to Preset Look.

**[Note]**

Look is grayed out and the setting cannot be changed when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

Menu item	Settings	Description
ART Information		Displays information from the ART file selected by ART Select.  <b>[Note]</b> Displayed only when Category is set to ART.
ASC CDL Process	<a href="#">CDL Off</a> /Look-> CDL/ CDL -> Look	Sets whether to apply ASC CDL to the output video. When applying, specify the ASC CDL processing sequence. CDL Off: Do not apply ASC CDL to the output video. CDL -> Look: Apply CDL before applying Look. Look -> CDL: Apply CDL after applying Look.  <b>[Notes]</b> <ul style="list-style-type: none"> <li>ASC CDL is enabled for outputs for which Look is selected in Shooting &gt; LUT Select (page 63) in the full menu.</li> <li>The conditions under which the ASC CDL Process options are enabled are given below.</li> </ul>

Shooting > Look >				Project > Basic	ASC CDL
Category	Preset Look Select	ACES Select	User 3D LUT Select	Setting > Input Color Space	Process available options
Preset Look	s709	-	-	S-Gamut3/SLog3 S-Gamut3.Cine/ SLog3	CDL Off Look -> CDL CDL -> Look
	R709(800%) S-Gamut3/ SLog3 S-Gamut3.Cine/ SLog3	-	-	S-Gamut3/SLog3 S-Gamut3.Cine/ SLog3	CDL Off Look -> CDL
ACES	-	ACESproxy ACESsct ACES 1.0 Output- Rec.709	-	S-Gamut3/SLog3	CDL Off CDL -> Look
User 3D LUT	-	-	s709xxx. cube	S-Gamut3/SLog3 S-Gamut3.Cine/ SLog3	CDL Off Look -> CDL CDL -> Look

**Shooting > Look**

Makes settings related to Preset Look.

**[Note]**

Look is grayed out and the setting cannot be changed when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

Menu item	Settings	Description
ASC CDL Select	<u>No File</u> /Not Selected	Selects the ASC CDL registered in the unit.
ASC CDL Information		Displays information from the ASC CDL file selected by ASC CDL Select.

**Shooting > Look File**

Loads a User 3D LUT file into the unit.

**[Note]**

Look File is grayed out and the setting cannot be changed when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

Menu item	Settings	Description
Load User 3D LUT		Loads a User 3D LUT file stored on an SD card into the unit.
Reset User 3D LUT		Resets a User 3D LUT data setting.
Reset All User 3D LUTs	Execute/Cancel	Resets all User 3D LUT data settings (execute by selecting Execute).
Load ART		Loads an ART file stored on an SD card into the unit.
Reset ART		Resets an ART data setting.
Reset All ARTs	Execute/Cancel	Resets all ART data settings (execute by selecting Execute).
Load ASC CDL		Loads ASC CDL data from an SD card.
Reset ASC CDL		Resets an ASC CDL data setting.
Reset All ASC CDLs	Execute/Cancel	Resets all ASC CDL data settings (execute by selecting Execute).

**Shooting > Flicker Reduce**

Makes settings related to flicker reduction.

Menu item	Settings	Description
Mode	On/ <u>Off</u>	Turns the flicker reduction function on/off.
Frequency	50Hz/ <u>60Hz</u>	Sets the power supply frequency of lighting causing flicker.

**Project Menu**

Default values are shown underlined and in **bold** text.

**Project > Basic Setting**

Makes settings related to picture size and project frame rate.

Menu item	Settings	Description
Imager Mode	6K 3:2/6K 1.85:1/6K 17:9/ 6K 2.39:1/5.7K 16:9/4K 6:5/ 4K 4:3/4K 4:3 Surround View/ <u>4K 17:9</u> /4K 17:9 Surround View/ 4K 2.39:1/3.8K 16:9/ 3.8K 16:9 Surround View	Selects the effective picture size.  <b>[Notes]</b> <ul style="list-style-type: none"> <li>6K 3:2/6K 1.85:1/6K 17:9 are displayed only when a Full Frame license is installed.</li> <li>4K 6:5/4K 4:3/4K 4:3 Surround View are displayed only when an Anamorphic license is installed.</li> </ul>
Project Frame Rate	<u>23.98</u> /24/25/29.97/47.95/ 50/59.94	Selects the project frame rate.
Input Color Space	<u>S-Gamut3.Cine/SLog3</u> / S-Gamut3/SLog3 / HLG(Natural) / HLG(Live) / Rec.2020/User Gamma / Rec.709/ User Gamma	Sets the color space.  <b>[Notes]</b> <ul style="list-style-type: none"> <li>HLG(Natural) / HLG(Live) / Rec.2020/User Gamma / Rec.709/User Gamma can be selected only when Technical &gt; System Configuration &gt; RM/RCP Paint Control (page 81) is set to On in the full menu.</li> <li>HLG(Natural) is equivalent to HLG.BT.2100.</li> </ul>
AXS Rec Format (Only when an AXS-R7 is attached)	<u>Rec Off</u> /X-OCN XT/RAW SQ/X- OCN ST/X-OCN LT	Selects the video format for recording onto an AXS memory card inserted into an AXS-R7.
SxS Rec Format	Rec Off/XAVC 4K Class480/ <u>XAVC 4K Class300</u> / XAVC QFHD Class480/ XAVC QFHD Class300/ MPEG HD P/MPEG HD i/ ProRes 4444 HD P/ ProRes 422 HQ HD P/ ProRes 422 HQ HD i/ ProRes 422 HD P/ ProRes 422 HD i/ ProRes 422 Proxy HD P/ ProRes 422 Proxy HD i	Selects the video format to be recorded on an SxS memory card.  <b>[Notes]</b> <ul style="list-style-type: none"> <li>ProRes 4444 HD P is supported only for the following effective picture sizes. <ul style="list-style-type: none"> <li>5.7K 16:9</li> <li>4K 6:5</li> <li>4K 4:3</li> <li>3.8K 16:9</li> </ul> </li> <li>ProRes 4444 HD P cannot be selected when Input Color Space is set to HLG(Natural), HLG(Live), or Rec.2020/User Gamma.</li> </ul>
Sub Rec Format	<u>Rec Off</u> /MPEG HD P/MPEG HD i/ ProRes 422 Proxy HD P/ ProRes 422 Proxy HD i	Selects the sub recording format for SxS memory cards.
Base ISO	<u>ISO 500</u> /ISO 2500	Sets the base ISO sensitivity.

**Project > Basic Setting**

Makes settings related to picture size and project frame rate.

Menu item	Settings	Description
SxS/Output De-Squeeze	<a href="#">Off (1.0x)</a> /1.25x/1.3x/1.5x/1.65x/1.8x/2.0x	Sets the de-squeeze processing for SxS recording signals and video output signals. This setting is available when an Anamorphic license is installed and Imager Mode is set to 4K 4:3/4K 4:3 Surround View/4K 6:5/4K 17:9/4K 17:9 Surround View/6K 3:2/6K 17:9, or when an Anamorphic license and Full Frame license are installed and Imager Mode is set to 6K 3:2/6K 17:9. The options vary depending on the picture size.

Imager Mode	SxS/Output De-Squeeze						
	Off (1.0x)	1.25x	1.3x	1.5x	1.65x	1.8x	2.0x
6K 3:2	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6K 1.85:1	Yes	–	–	–	–	–	–
6K 17:9	Yes	Yes	Yes	–	Yes	Yes	Yes
6K 2.39:1	Yes	–	–	–	–	–	–
5.7K 16:9	Yes	–	–	–	–	–	–
4K 6:5	Yes	–	–	–	–	–	Yes
4K 4:3 Surround	Yes	–	Yes	–	Yes	Yes	Yes
4K 4:3	Yes	–	Yes	–	Yes	Yes	Yes
4K 17:9 Surround	Yes	Yes	Yes	–	Yes	Yes	Yes
4K 17:9	Yes	Yes	Yes	–	Yes	Yes	Yes
4K 2.39:1	Yes	–	–	–	–	–	–
3.8K 16:9 Surround	Yes	–	–	–	–	–	–
3.8K 16:9	Yes	–	–	–	–	–	–

Restrictions apply to the effective picture size supported for RGB output in HD ProRes 4444. The available options are given below.

Imager Mode	SxS/Output De-Squeeze						
	Off (1.0x)	1.25x	1.3x	1.5x	1.65x	1.8x	2.0x
5.7K 16:9	Yes	–	–	–	–	–	–
4K 6:5	Yes	–	–	–	–	–	–
4K 4:3	Yes	–	Yes	–	–	–	–
3.8K 16:9	Yes	–	–	–	–	–	–

**Project > Special Recording**

Makes settings related to picture cache recording.

Menu item	Settings	Description
Cache Rec Select	On/ <a href="#">Off</a>	Turns the picture cache recording function on/off. Picture cache recording is not supported (set to Off and grayed out) in the following cases. <ul style="list-style-type: none"> <li>When XAVC-I Class480 (4K, QFHD) recording format is selected</li> <li>For some combinations of effective picture size and system frequency settings</li> <li>When AXS Rec Format and SxS Rec Format are both set to Rec Off</li> <li>During simultaneous AXS and SxS recording</li> </ul>
Max Cache Rec Duration	<a href="#">2sec</a> /4sec/6sec/8sec/10sec/15sec/24sec/30sec	Sets the playback duration of video to cache in picture cache memory. The maximum value that can be set for each memory card is given below.

**When recording to an SxS memory card**

SxS Rec Format	Project Frame Rate						
	23.98	24	25	29.97	47.95	50	59.94
4K/QFHD XAVC-I Class480	–	–	–	–	–	–	–
4K/QFHD XAVC-I Class300	2	2	2	2	–	–	–
FHD ProRes 4444 HQ P	2	2	2	2	–	–	–
2K/FHD ProRes 422 HQ P	2	2	2	2	–	–	–
2K/FHD ProRes 422 HQ i	–	–	–	–	–	2	2
2K/FHD ProRes 422 P	6	6	6	6	–	2	2
2K/FHD ProRes 422 i	–	–	–	–	–	6	6
MPEG HD422 P	15	–	15	15	–	–	–
MPEG HD422 i	–	–	–	–	–	15	15

**Project > Special Recording**

Makes settings related to picture cache recording.

Menu item	Settings	Description						
When recording to an AXS memory card								
Imager Mode	AXS Rec Format	Project Frame Rate						
		23.98	24	25	29.97	47.95	50	59.94
6K 3:2	X-OCN XT	4	4	2	2	–	–	–
	X-OCN ST	8	8	8	6	–	–	–
	X-OCN LT	15	15	15	15	6	6	4
6K 1.85:1	X-OCN XT	6	6	6	4	–	–	–
	X-OCN ST	10	10	10	8	2	2	–
	X-OCN LT	24	24	24	15	10	10	6
6K 17:9	X-OCN XT	6	6	6	4	–	–	–
	X-OCN ST	10	10	10	8	4	2	2
	X-OCN LT	24	24	24	15	10	10	8
6K 2.39:1	X-OCN XT	10	10	10	6	2	2	–
	X-OCN ST	15	15	15	10	6	6	4
	X-OCN LT	30	30	30	24	15	15	10
5.7K 16:9	X-OCN XT	6	6	6	4	–	–	–
	X-OCN ST	10	10	10	8	–	2	2
	X-OCN LT	24	24	24	15	–	10	8
4K 6:5	X-OCN XT	10	10	10	8	2	2	–
	X-OCN ST	15	15	15	15	8	6	4
	X-OCN LT	30	30	30	30	15	15	10
4K 4:3	X-OCN XT	15	15	10	10	4	4	2
	X-OCN ST	24	24	24	15	8	8	6
	X-OCN LT	30	30	30	30	15	15	15

**Project > Special Recording**

Makes settings related to picture cache recording.

Menu item	Settings	Description						
Imager Mode	AXS Rec Format	Project Frame Rate						
		23.98	24	25	29.97	47.95	50	59.94
4K 4:3 Surround	X-OCN XT	15	15	10	10	–	–	–
	X-OCN ST	24	24	24	15	–	–	–
	X-OCN LT	30	30	30	30	–	–	–
4K 17:9	RAW SQ	24	24	24	15	8	8	6
	X-OCN XT	24	24	24	15	8	8	6
	X-OCN ST	30	30	30	30	15	15	10
4K 17:9 Surround	X-OCN LT	30	30	30	30	30	30	24
	RAW SQ	24	24	24	15	–	–	–
	X-OCN XT	24	24	24	15	–	–	–
4K 2.39:1	X-OCN ST	30	30	30	30	–	–	–
	X-OCN LT	30	30	30	30	–	–	–
	X-OCN XT	30	30	30	24	10	10	10
3.8K(QFHD) 16:9	X-OCN ST	30	30	30	30	15	15	15
	X-OCN LT	30	30	30	30	30	30	30
	X-OCN XT	24	24	24	15	–	8	6
3.8K(QFHD) 16:9 Surround	X-OCN ST	30	30	30	30	–	15	10
	X-OCN LT	30	30	30	30	–	30	24
	X-OCN XT	24	24	24	15	–	–	–
3.8K(QFHD) 16:9 Surround	X-OCN ST	30	30	30	30	–	–	–
	X-OCN LT	30	30	30	30	–	–	–
	X-OCN XT	30	30	30	30	–	–	–

**Project > Assignable Button**

Assigns functions to assignable buttons.

For details about assigning functions, see "User Functions Screen" (page 43).

Menu item	Settings	Description
<1>	page 43	Assigns a function to assignable button 1.
<2>	page 43	Assigns a function to assignable button 2.
<3>	page 43	Assigns a function to assignable button 3.
<4>	page 43	Assigns a function to assignable button 4.
<VF A>	page 43	Assigns a function to assignable button A on the viewfinder (DVF-EL200).
<VF B>	page 43	Assigns a function to assignable button B on the viewfinder (DVF-EL200).
<VF C>	page 43	Assigns a function to assignable button C on the viewfinder (DVF-EL200).
<User 1>	page 43	Assigns a function to ITEM key 1.
<User 2>	page 43	Assigns a function to ITEM key 2.
<User 3>	page 43	Assigns a function to ITEM key 3.
<User 4>	page 43	Assigns a function to ITEM key 4.
<User 5>	page 43	Assigns a function to ITEM key 5.

**Project > All File**

Makes settings related to All-settings files.

Menu item	Settings	Description
Load SD Card		Load an All-settings file from an SD card.
Save SD Card		Save an All-settings file on an SD card.
File ID		Displays the file ID of the All-settings file for editing.
Format SD Card		Formats an SD card.

**Project > Scene File**

Makes settings related to scene files.

**[Note]**

Scene File can be displayed and selected only when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

Menu item	Settings	Description
Recall Internal Memory		Load a scene file from internal memory.
Store Internal Memory		Save a scene file in internal memory.
Load SD Card		Load a scene file from an SD card.
Save SD Card		Save a scene file on an SD card.
File ID		Displays the file ID of the scene file for editing.

**Project > User Gamma**

Makes settings related to user gamma files.

**[Note]**

User Gamma can be displayed and selected only when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

Menu item	Settings	Description
Current Settings		Displays the name of the current user gamma file in internal memory.
Load SD Card		Load user-defined gamma table data (user gamma file) from an SD card to internal memory. Save user gamma files created using RAW Viewer for use by the unit in the following directory on the SD card. PRIVATE\SONY\PROXCAMERA\MPC3610
Reset	1/2/3/4/5/All	Reset the user gamma files in internal memory to initial settings. 1 to 5: Reset individually All: Reset all

## TC/Media Menu

Default values are shown underlined and in **bold** text.

TC/Media > Timecode		
Makes settings related to timecode.		
Menu item	Settings	Description
Mode	Preset F-Run (Ext-Lk)/ <u>Preset R-Run</u> /Int Regen	Selects the timecode mode. Preset F-Run (Ext-Lk): Timecode advances continuously from specified value, in sync with external input timecode. Preset R-Run: Timecode advances from specified value only when recording. Int Regen: Timecode continues from that of the previous clip.
Manual Setting	00:00:00:00 to 23:59:59:29	Sets an arbitrary timecode value.
Reset	Execute/Cancel	Resets the timecode to 00:00:00:00 (execute by selecting Execute).
TC Format	DF/ <u>NDF</u>	Selects the timecode format. DF: Drop frame NDF: Non drop frame
TC Source	Internal/External	Displays the TCG sync source.
Time Data Display	<u>Timecode</u> /Duration	Selects the time data to display.
TC/Media > Clip Name Format		
Sets clip names. (Clip name: Camera ID + Reel Number + Shot Number + date + random string)		
Menu item	Settings	Description
Camera ID	<u>A</u> to Z	Sets the camera ID used when generating clip names.
Reel Number	<u>001</u> to 999	Sets the numeric portion of the Reel Number used when generating clip names.
Camera Position	<u>C</u> /L/R	Sets the first character portion of the Shot Number used when generating clip names.

TC/Media > Clip Name Format		
Sets clip names. (Clip name: Camera ID + Reel Number + Shot Number + date + random string)		
Menu item	Settings	Description
SxS Root Folder Name	<u>XDROOT</u> /Cam ID + Reel#	Sets the naming format for the volume label and root folder names on an SxS card. XDROOT: Root folder is named "XDROOT". Cam ID + Reel#: Volume label name and root folder name follow the Cam ID naming format.
[Notes]		
<ul style="list-style-type: none"> <li>• If the setting is changed, playback is not possible on Sony camcorders and VTRs other than the MPC-3610 and PMW-PZ1 (setting must be changed on PMW-PZ1).</li> <li>• Changes to volume label name and root folder name are applied when recording starts.</li> <li>• On media in which the root folder name has been set to Camera ID naming format, the root folder name cannot be reset to "XDROOT" using this setting.</li> <li>• The root folder is set to "XDROOT" when media is formatted.</li> <li>• If media recorded with a root folder name in Camera ID naming format is inserted into a device that does not support Camera ID naming format (including Venice V2.0 or earlier), an XDROOT folder is created and recognized as the root folder (because a root folder in Camera ID naming format cannot be recognized).</li> </ul>		
TC/Media > Format Media		
Formats media.		
Menu item	Settings	Description
AXS Slot A (Only when an AXS-R7 is attached)	Execute/Cancel	Initializes the AXS memory card in slot A (execute by selecting Execute).
AXS Slot B (Only when an AXS-R7 is attached)	Execute/Cancel	Initializes the AXS memory card in slot B (execute by selecting Execute).
SxS Slot A	Execute/Cancel	Initializes the SxS memory card in slot A (execute by selecting Execute).
SxS Slot B	Execute/Cancel	Initializes the SxS memory card in slot B (execute by selecting Execute).
SD Card	Execute/Cancel	Formats the SD card (execute by selecting Execute).

**TC/Media > Update Media**

Updates the media's management file.

Menu item	Settings	Description
AXS Slot A (Only when an AXS-R7 is attached)	Execute/Cancel	Updates the management file on the AXS memory card in slot A of the AXS-R7 (execute by selecting Execute).
AXS Slot B (Only when an AXS-R7 is attached)	Execute/Cancel	Updates the management file on the AXS memory card in slot B of the AXS-R7 (execute by selecting Execute).
SxS Slot A	Execute/Cancel	Updates the management file on the SxS memory card in slot A (execute by selecting Execute).
SxS Slot B	Execute/Cancel	Updates the management file on the SxS memory card in slot B (execute by selecting Execute).

**Monitoring Menu**Default values are shown underlined and in **bold** text.**Monitoring > Output Format**

Makes settings related to output format.

Menu item	Settings	Description
SDI 1/2	The available settings vary according to the imager mode, project frame rate, and SxS recording format settings.	Selects the SDI 1/2 output format. Settings vary according to the recording format (page 116).
SDI 3/4	The available settings vary depending on the SDI 1/2 setting.	Selects the SDI 3/4 output format. Settings vary according to the recording format (page 116).
Monitor	The available settings vary depending on the SDI 1/2 setting.	Selects the Monitor output format. Settings vary according to the recording format (page 120).
HDMI	The available settings vary depending on the SDI 1/2 setting.	Selects the HDMI output format. Settings vary according to the recording format (page 120).

**Monitoring > OSD Appearance**

Makes settings related to information and frame lines superimposed on each output signal. On/Off setting is selected using a checkbox (excluding Frame Line on Playback).

On: Checkbox selected

Off: Checkbox cleared

Menu item	Settings	Description
VF	Status Info ( <u>On</u> /Off, <u>Info. A</u> /Info. B)	Selects the information to display superimposed on the viewfinder/monitor screen output image.
	Frame Line (On/ <u>Off</u> , <u>Line A</u> /Line B)	Selects the frame lines to display superimposed on the viewfinder/monitor screen output image.
SDI SDI 1/2 SDI 3/4	Status Info ( <u>On</u> /Off, Info. A/ <u>Info. B</u> )	Selects the information to display superimposed on the SDI 3/4 output signal.
	Frame Line (On/ <u>Off</u> , Line A/ <u>Line B</u> )	Selects the frame lines to display superimposed on the SDI 3/4 output signal.
[Note]	The display changes according to the Output Format > SDI 1/2 and SDI 3/4 settings.	
Monitor	Status Info ( <u>On</u> /Off, Info. A/ <u>Info. B</u> )	Selects the information to display superimposed on the Monitor output signal.
	Frame Line (On/ <u>Off</u> , Line A/ <u>Line B</u> )	Selects the frame lines to display superimposed on the Monitor output signal.

**Monitoring > OSD Appearance**

Makes settings related to information and frame lines superimposed on each output signal.

On/Off setting is selected using a checkbox (excluding Frame Line on Playback).

On: Checkbox selected

Off: Checkbox cleared

Menu item	Settings	Description	
HDMI	Same as SDI/Same as Monitor	Selects whether the information displayed superimposed on the HDMI output signal is the same as for the SDI output or Monitor output.	
Status Info A/B Setup	Project Info. A (On/Off) Info. B (On/Off)	Selects whether to display the project in the output information set for Status Info A and Status Info B.	
	Timecode Info. A (On/Off) Info. B (On/Off)	Selects whether to display the timecode in the output information set for Status Info A and Status Info B.	
	Audio Level Meter Info. A (On/Off) Info. B (On/Off)	Selects whether to display an audio level meter in the output information set for Status Info A and Status Info B.	
	Look Status Info. A (On/Off) Info. B (On/Off)	Selects whether to display the type of selected Look in the output information set for Status Info A and Status Info B.	
	Output LUT Info. A (On/Off) Info. B (On/Off)	Selects whether to display the output LUT in the output information set for Status Info A and Status Info B.	
	Recording LUT Info. A (On/Off) Info. B (On/Off)	Selects whether to display the recording LUT in the output information set for Status Info A and Status Info B.	
	VF Status Info. A (On/Off) Info. B (On/Off)	Selects whether to display the viewfinder status in the output information set for Status Info A and Status Info B.	
	Lens Status Info. A (On/Off) Info. B (On/Off)	Selects whether to display the lens status in the output information set for Status Info A and Status Info B.	
	Remote Control Status Info. A (On/Off) Info. B (On/Off)	Selects whether to display the remote control status in the output information set for Status Info A and Status Info B.	
	Level Gauge Info. A (On/Off) Info. B (On/Off)	Selects whether to display the graphical spirit level gauge in the output information set for Status Info A and Status Info B.	
			<b>[Note]</b> Level Gauge is grayed out and cannot be operated when a CBK-3610XS is connected to the unit.

**Monitoring > OSD Appearance**

Makes settings related to information and frame lines superimposed on each output signal.

On/Off setting is selected using a checkbox (excluding Frame Line on Playback).

On: Checkbox selected

Off: Checkbox cleared

Menu item	Settings	Description
	Roll/Tilt Value Info. A (On/Off) Info. B (On/Off)	Selects whether to display the numerical spirit level indicator in the output information set for Status Info A and Status Info B.
		<b>[Note]</b> Roll/Tilt Value is grayed out and cannot be operated when a CBK-3610XS is connected to the unit.
	TC/Genlock Status Info. A (On/Off) Info. B (On/Off)	Selects whether to display the timecode external lock status and genlock status information in the output information set for Status Info A and Status Info B.
	Frame Line A/B Setup	
Frame Line A/B Setup	Center Marker Line A (On/Off) Line B (On/Off) Option (Cross/Open Cross/Dot)	Selects whether to display the center marker in the output information set for Frame Line A and Frame Line B. Selects the display form (Cross/Open Cross/Dot) of the center marker.
	Aspect Ratio Line A (On/Off) Line B (On/Off) Option (17:9/16:9/15:9/ 14:9/13:9/9:16/4:3/1:1/1.43:1/ 1.66:1/1.85:1/2:1/2.35:1/ 2.39:1)	Selects whether to display the aspect ratio marker in the output information set for Frame Line A and Frame Line B. Selects the mode (17:9/16:9/15:9/14:9/13:9/9:16/4:3/1:1/1.43:1/1.66:1/1.85:1/2:1/2.35:1/2.39:1) when displaying the aspect ratio marker.
	Aspect Safety Zone Line A (On/Off) Line B (On/Off) Option (80%/90%/92.5%/95%)	Selects whether to display the aspect safety zone in the output information set for Frame Line A and Frame Line B. Selects the size (percentage of the entire screen) of the aspect safety zone marker.
	Picture Area Line A (On/Off) Line B (On/Off)	Selects whether to display the picture area in the output information set for Frame Line A and Frame Line B.
	Safety Zone Line A (On/Off) Line B (On/Off) Option (80%/90%/92.5%/95%)	Selects whether to display the safety zone in the output information set for Frame Line A and Frame Line B. Selects the range (80%/90%/92.5%/95%) of the safety zone.



**Monitoring > OSD Appearance**

Makes settings related to information and frame lines superimposed on each output signal.

On/Off setting is selected using a checkbox (excluding Frame Line on Playback).

On: Checkbox selected

Off: Checkbox cleared

Menu item	Settings	Description
User Frame Line 1 Line A (On/Off) Line B (On/Off) Option (Preset/Variable)		Selects whether to display user frame line 1 in the output information set for Frame Line A and Frame Line B. Selects whether to display user frame line 1 or fixed aspect ratio.
User Frame Line 2 Line A (On/Off) Line B (On/Off) Option (Preset/Variable)		Selects whether to display user frame line 2 in the output information set for Frame Line A and Frame Line B. Selects whether to display user frame line 2 or fixed aspect ratio.
Color Option (White/Yellow/Cyan/ Green/Magenta/Red/Blue)		Sets the display color of frame lines.
Surround View Type Option (Line/Mask/ Line&Mask)		Selects the display form of the Surround View marker. Line: Displays the recording area using lines. Mask: Displays the recording area by masking (reducing) the video signal level outside the recording area. Line&Mask: Displays the recording area using lines and by masking (reducing) the video signal level outside the recording area.
Aspect Ratio Type Option (Line/Mask/ Line&Mask)		Selects the display form of the aspect ratio marker. Line: Displays lines with color set by Color. Mask: Displays a lower video signal level for areas outside the marker area. Line&Mask: Displays lines with color set by Color and a lower video signal level for areas outside the marker area.
Mask Level Option (0 to 15 (12))		Selects the brightness of the image outside the marker when Aspect Ratio Type or Surround View Type is set to Mask.
Frame Line on Playback Option (On/Off)		Turns the function to superimpose frame lines during playback on/off.

**Monitoring > Monitor Display**

Makes settings related to monitor display.

Menu item	Settings	Description
Focus Distance Format	Meter/ <u>Feet</u>	Selects the focus position display units.

**Monitoring > Monitor Display**

Makes settings related to monitor display.

Menu item	Settings	Description
Monitor Magnifier Ratio	<u>x2.0</u> / x4.0 / x2.0/x4.0	Selects the focus magnification ratio for the Monitor output image.
		[Note] Only x2.0 can be selected when Project Frame Rate (page 66) is set to 59.94 or 50.

**Monitoring > Frame Line**

Makes settings related to lines and markers displayed on the output image.

Menu item	Settings	Description
Center Marker	<u>Cross</u> /Open Cross/Dot	Selects the display form of the center marker.
Aspect Ratio	17:9/ <u>16:9</u> /15:9/14:9/13:9/9:16/ 4:3/1:1/1.43:1/1.66:1/1.85:1/2:1/ 2.35:1/2.39:1	Selects the mode when displaying the aspect ratio marker.
Aspect Safety Zone	80%/ <u>90%</u> /92.5%/95%	Selects the size (percentage of the entire screen) of the aspect safety zone marker.
Safety Zone	80%/ <u>90%</u> /92.5%/95%	Selects the safety zone range.
Color	<u>White</u> /Yellow/Cyan/Green/ Magenta/Red/Blue	Selects the display color of frame lines.
Surround View Type	<u>Line</u> /Mask/Line&Mask	Selects the display form of the Surround View marker. Line: Displays the recording area using lines. Mask: Displays the recording area by masking (reducing) the video signal level outside the recording area. Line&Mask: Displays the recording area using lines and by masking (reducing) the video signal level outside the recording area.
Aspect Ratio Type	<u>Line</u> /Mask/Line&Mask	Selects the display form of the aspect ratio marker. Line: Displays lines with color set by Color. Mask: Displays a lower video signal level for areas outside the marker area. Line&Mask: Displays lines with color set by Color and a lower video signal level for areas outside the marker area.
Mask Level	0 to 15 ( <u>12</u> )	Selects the brightness of the image outside the marker when Aspect Ratio Type or Surround View Type is set to Mask.
Frame Line on Playback	<u>On</u> /Off	Turns the function to superimpose frame lines during playback on/off.

Monitoring > User Frame Line 1		
Makes settings related to user frame line 1.		
Menu item	Settings	Description
Select	Preset/ <a href="#">Variable</a>	Selects whether to display user frame line 1 or fixed aspect ratio. Preset: Displays the aspect ratio set by Preset Aspect Ratio, Scaling, and Preset Aspect Ratio Type. Variable: Displays an arbitrary rectangular frame set by Width, Height, H Position, V Position, and Variable Aspect Type.
Preset Aspect Ratio	17:9/ <a href="#">16:9</a> /15:9/14:9/13:9/9:16/4:3/1:1/1.43:1/1.66:1/1.85:1/2:1/2.35:1/2.39:1/1.90:1 (W34)* * Frame line with the same horizontal picture size as when 1.43:1 is set. In 6K 3:2 mode, the horizontal picture size is approximately 34 mm.	Selects the mode when displaying a fixed aspect ratio. <b>[Note]</b> Configurable only when Select is set to Preset.
Scaling	1% to <a href="#">100%</a> /---	Sets the scale factor for a fixed aspect ratio. <b>[Notes]</b> <ul style="list-style-type: none"> <li>Configurable only when Select is set to Preset.</li> <li>"---" is displayed when Preset Aspect Ratio is set to 1.90:1 (W34), and configuration is not possible.</li> </ul>
Preset Aspect Ratio Type	<a href="#">Line</a> /Mask/Line&Mask	Selects the display form for a fixed aspect ratio. Line: Displays using lines. Mask: Displays a lower video signal level for areas outside the marker area. Line&Mask: Displays lines and a lower video signal level for areas outside the marker area. <b>[Note]</b> Configurable only when Select is set to Preset.
Aspect Ratio(Pixels)	Aspect ratio (number of pixels, anamorphic ratio)	Displays the aspect ratio of user frame line 1, number of pixels, and anamorphic ratio for the effective picture size. <b>[Note]</b> The number of pixels is the value for the effective picture size before anamorphic de-squeeze conversion.
Width	3 to 480 ( <a href="#">240</a> )	Sets the user frame line 1 width (distance from the center to the left and right edges). <b>[Note]</b> Configurable only when Select is set to Variable.

Monitoring > User Frame Line 1		
Makes settings related to user frame line 1.		
Menu item	Settings	Description
Height	3 to 270 ( <a href="#">135</a> )	Sets the user frame line 1 height (distance from the center to the top and bottom edges). <b>[Note]</b> Configurable only when Select is set to Variable.
H Position	Max. -477 to 477 ( <a href="#">±0</a> )	Sets the horizontal position of the center of user frame line 1. The setting range becomes narrower as the Width setting increases above 3. <b>[Note]</b> Configurable only when Select is set to Variable.
V Position	Max. -267 to 267 ( <a href="#">±0</a> )	Sets the vertical position of the center of user frame line 1. The setting range becomes narrower as the Height setting increases above 3. <b>[Note]</b> Configurable only when Select is set to Variable.
Variable Aspect Type	Line	Displays arbitrary user frame line 1. <b>[Note]</b> Configurable only when Select is set to Variable.

Monitoring > User Frame Line 2		
Makes settings related to user frame line 2.		
Menu item	Settings	Description
Select	Preset/ <a href="#">Variable</a>	Selects whether to display user frame line 2 or fixed aspect ratio. Preset: Displays the aspect ratio set by Preset Aspect Ratio, Scaling, and Preset Aspect Ratio Type. Variable: Displays an arbitrary rectangular frame set by Width, Height, H Position, V Position, and Variable Aspect Type.
Preset Aspect Ratio	17:9/ <a href="#">16:9</a> /15:9/14:9/13:9/9:16/4:3/1:1/1.43:1/1.66:1/1.85:1/2:1/2.35:1/2.39:1/1.90:1 (W34)* * Frame line with the same horizontal picture size as when 1.43:1 is set. In 6K 3:2 mode, the horizontal picture size is approximately 34 mm.	Selects the mode when displaying a fixed aspect ratio. <b>[Note]</b> Configurable only when Select is set to Preset.

Monitoring > User Frame Line 2		
Makes settings related to user frame line 2.		
Menu item	Settings	Description
Scaling	1% to <a href="#">100%/---</a>	Sets the scale factor for a fixed aspect ratio.  [Notes] • Configurable only when Select is set to Preset. • "----" is displayed when Preset Aspect Ratio is set to 1.90:1 (W34), and configuration is not possible.
Preset Aspect Ratio Type	Line	Displays the display form for a fixed aspect ratio.  [Note] Configurable only when Select is set to Preset.
Aspect Ratio(Pixels)	Aspect ratio (number of pixels, anamorphic ratio)	Displays the aspect ratio of user frame line 2, number of pixels, and anamorphic ratio for the effective picture size.  [Note] The number of pixels is the value for the effective picture size before anamorphic de-squeeze conversion.
Width	3 to 480 ( <a href="#">240</a> )	Sets the user frame line 2 width (distance from the center to the left and right edges).  [Note] Configurable only when Select is set to Variable.
Height	3 to 270 ( <a href="#">135</a> )	Sets the user frame line 2 height (distance from the center to the top and bottom edges).  [Note] Configurable only when Select is set to Variable.
H Position	Max. -477 to 477 ( <a href="#">±0</a> )	Sets the horizontal position of the center of user frame line 2. The setting range becomes narrower as the Width setting increases above 3.  [Note] Configurable only when Select is set to Variable.
V Position	Max. -267 to 267 ( <a href="#">±0</a> )	Sets the vertical position of the center of user frame line 2. The setting range becomes narrower as the Height setting increases above 3.  [Note] Configurable only when Select is set to Variable.
Variable Aspect Type	Line	Displays arbitrary user frame line 2.  [Note] Configurable only when Select is set to Variable.

Monitoring > False Color		
Makes settings related to false colors.		
[Note] False Color is grayed out and the setting cannot be changed when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.		
Menu item	Settings	Description
Level	<a href="#">Preset</a> /Manual	Sets whether to use the preset on/off setting and threshold of each false color in the viewfinder/monitor output or to set colors manually. When Manual is selected, the following items can be configured.
Red	<a href="#">On/Off</a>	Turns the display of red on/off.
Red Upper Limit	0.0% to 109.0% ( <a href="#">96.1%</a> ) (0.1% increments)	Sets the upper limit for display in red.
Red Lower Limit	0.0% to 109.0% ( <a href="#">93.4%</a> ) (0.1% increments)	Sets the lower limit for display in red.
Yellow	<a href="#">On/Off</a>	Turns the display of yellow on/off.
Yellow Upper Limit	0.0% to 109.0% ( <a href="#">93.4%</a> ) (0.1% increments)	Sets the upper limit for display in yellow.
Yellow Lower Limit	0.0% to 109.0% ( <a href="#">91.3%</a> ) (0.1% increments)	Sets the lower limit for display in yellow.
Orange	<a href="#">On/Off</a>	Turns the display of orange on/off.
Orange Upper Limit	0.0% to 109.0% ( <a href="#">90.6%</a> ) (0.1% increments)	Sets the upper limit for display in orange.
Orange Lower Limit	0.0% to 109.0% ( <a href="#">87.7%</a> ) (0.1% increments)	Sets the lower limit for display in orange.
Pink	<a href="#">On/Off</a>	Turns the display of pink on/off.
Pink Upper Limit	0.0% to 109.0% ( <a href="#">58.0%</a> ) (0.1% increments)	Sets the upper limit for display in pink.
Pink Lower Limit	0.0% to 109.0% ( <a href="#">54.3%</a> ) (0.1% increments)	Sets the lower limit for display in pink.
Light Pink	<a href="#">On/Off</a>	Turns the display of light pink on/off.
Light Pink Upper Limit	0.0% to 109.0% ( <a href="#">50.8%</a> ) (0.1% increments)	Sets the upper limit for display in light pink.
Light Pink Lower Limit	0.0% to 109.0% ( <a href="#">47.8%</a> ) (0.1% increments)	Sets the lower limit for display in light pink.
Cyan	<a href="#">On/Off</a>	Turns the display of cyan on/off.
Cyan Upper Limit	0.0% to 109.0% ( <a href="#">46.5%</a> ) (0.1% increments)	Sets the upper limit for display in cyan.
Cyan Lower Limit	0.0% to 109.0% ( <a href="#">43.8%</a> ) (0.1% increments)	Sets the lower limit for display in cyan.
Green	<a href="#">On/Off</a>	Turns the display of green on/off.

**Monitoring > False Color**

Makes settings related to false colors.

**[Note]**

False Color is grayed out and the setting cannot be changed when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

Menu item	Settings	Description
Green Upper Limit	0.0% to 109.0% ( <a href="#">42.2%</a> ) (0.1% increments)	Sets the upper limit for display in green.
Green Lower Limit	0.0% to 109.0% ( <a href="#">38.9%</a> ) (0.1% increments)	Sets the lower limit for display in green.
Light Blue	<a href="#">On</a> /Off	Turns the display of light light blue on/off.
Light Blue Upper Limit	0.0% to 109.0% ( <a href="#">34.4%</a> ) (0.1% increments)	Sets the upper limit for display in light blue.
Light Blue Lower Limit	0.0% to 109.0% ( <a href="#">24.6%</a> ) (0.1% increments)	Sets the lower limit for display in light blue.
Blue	<a href="#">On</a> /Off	Turns the display of blue on/off.
Blue Upper Limit	0.0% to 109.0% ( <a href="#">5.6%</a> ) (0.1% increments)	Sets the upper limit for display in blue.
Blue Lower Limit	0.0% to 109.0% ( <a href="#">3.5%</a> ) (0.1% increments)	Sets the lower limit for display in blue.
Purple	<a href="#">On</a> /Off	Turns the display of purple on/off.
Purple Upper Limit	0.0% to 109.0% ( <a href="#">3.5%</a> ) (0.1% increments)	Sets the upper limit for display in purple.
Purple Lower Limit	-7.3% to 109.0% ( <a href="#">-7.3%</a> ) (0.1% increments)	Sets the lower limit for display in purple.
Reset	Execute/Cancel	Resets the on/off setting and threshold of each color (execute by selecting Execute).

**Monitoring > VF Display**

Makes settings related to the viewfinder display.

Menu item	Settings	Description
VF LUT	When Technical > System Configuration > RM/RCP Paint Control (page 81) is set to Off in the full menu: Log/ <a href="#">s709</a> /R709(800%)/Look	Selects the LUT to apply to the viewfinder/monitor screen output image.
	When RM/RCP Paint Control is set to On, the setting changes as follows depending on the Project > Basic Setting > Input Color Space (page 66) setting in the full menu. S-Gamut3.Cine/SLog3 or S-Gamut3/SLog3: Log/ <a href="#">R709(800%)</a> HLG(Natural): HLG(Natural)/ <a href="#">R709(800%)</a> HLG(Live): HLG(Live)/ <a href="#">R709(800%)</a> Rec.2020/User Gamma: User Gamma/ <a href="#">R709-Like</a> Rec.709/User Gamma: User Gamma	Selects the type of viewfinder/monitor screen output image.
Status Info	<a href="#">Info. A</a> /Info. B/Off	Selects the information to display superimposed on the viewfinder/monitor screen output image.
Frame Line	Frame Line A/Frame Line B/ <a href="#">Off</a>	Selects the frame lines to display superimposed on the viewfinder/monitor screen output image.
VF Magnifier Ratio	<a href="#">x2.0</a> / x4.0 / x2.0/x4.0	Selects the focus magnification ratio for the viewfinder.
Color	-99 to <a href="#">±0</a> to +99	Adjusts the color depth of the viewfinder image.
SDR Gain	-15dB to 0dB ( <a href="#">-12dB</a> ) (1 dB increments)	Sets the SDR output gain in HDR mode. You can use this to change the gain of the Monitor or viewfinder output that is set to R709(800%) or R709-Like.
		<b>[Note]</b> Configurable when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

Monitoring > VF Function		
Makes settings related to viewfinder functions.		
Menu item	Settings	Description
Double Speed Scan	On/ <u>Off</u>	Turns the viewfinder double speed scan function on/off.
Peaking Frequency	<u>Normal</u> /High	Selects whether the peaking frequency is normal or high during peaking.  [Note] The peaking level is set using the viewfinder menu.
Zebra	On/ <u>Off</u>	Turns the zebra function on/off.
Zebra Select	<u>1/2</u> /Both	Selects the zebra pattern type (Zebra 1, Zebra 2, Both).
Zebra1 Level	0% to 107% ( <u>41%</u> )	Sets the display level of zebra 1.
Zebra1 Aperture Level	1% to 20% ( <u>10%</u> )	Sets the aperture level of zebra 1.
Zebra2 Level	0% to 109% ( <u>61%</u> )	Sets the display level of zebra 2.
Assign<VF A>	page 43	Assigns a function to assignable button A on the viewfinder (DVF-EL200).
Assign<VF B>	page 43	Assigns a function to assignable button B on the viewfinder (DVF-EL200).
Assign<VF C>	page 43	Assigns a function to assignable button C on the viewfinder (DVF-EL200).

## Audio Menu

Default values are shown underlined and in **bold** text.

Audio > Audio Input		
Makes settings related to audio recording levels.		
[Note] The audio recording level with AES/EBU signal selected is fixed.		
Menu item	Settings	Description
CH-1 Audio Select	<u>Auto</u> /Manual	Automatically adjusts the audio recording when set to Auto.
CH-2 Audio Select	<u>Auto</u> /Manual	Automatically adjusts the audio recording when set to Auto.
CH-1 Audio Level	-99 to <u>±0</u> to +99	Adjusts the audio recording level when CH-1 Audio Select is set to Manual.
CH-2 Audio Level	-99 to <u>±0</u> to +99	Adjusts the audio recording level when CH-2 Audio Select is set to Manual.
MIC Reference	-60dB/ <u>-50dB</u> /-40dB	Selects the reference input level of the microphone.
Audio > Audio Monitor		
Makes settings related to audio monitoring.		
Menu item	Settings	Description
Monitor CH	When Monitor Output CH Pair is set to CH-1/CH-2 <u>CH-1/CH-2</u> , CH-1, CH-2 When Monitor Output CH Pair is set to CH-3/CH-4 <u>CH-3/CH-4</u> , CH-3, CH-4	Selects the audio channel that is output to the headphones and speaker. CH-1/CH-2 (CH-3/CH-4): Channel 1+2 (Channel 3+4) CH-1 (CH-3): Channel 1 (Channel 3) only CH-2 (CH-4): Channel 2 (Channel 4) only
Monitor Level	<u>0</u> to 99	Adjusts the monitor audio level.
Audio > Audio Configuration		
Makes settings related to audio input/output.		
Menu item	Settings	Description
Alarm Level	<u>0</u> to 99	Adjusts the alarm audio level.
Input Limiter Mode	<u>Off</u> /-6dB/-9dB/-12dB/ -15dB/-17dB	Selects the limiter characteristic (saturation level) for large input signals when adjusting the audio input level manually. Select Off if not using the limiter.
AGC Level	<u>-6dB</u> /-9dB/-12dB/ -15dB/-17dB	Selects the AGC characteristic (saturation level).

**Audio > Audio Configuration**

Makes settings related to audio input/output.

Menu item	Settings	Description
AGC Mono/Stereo	Mono/ <u>Stereo</u>	Automatically adjusts the input level of analog audio signals recorded on channels 1 and 2, and selects whether to make the adjustments separately for each channel (Mono) or in stereo mode (Stereo).
MIC Input Mono/Stereo	Mono/ <u>Stereo</u>	Selects whether the front microphone is monaural (Mono) or stereo (Stereo).
Phantom Power +48V	<u>On</u> /Off	Turns the function to supply a +48 V external source (phantom power) to the microphone on/off.
Monitor Output CH Pair	<u>CH-1/CH-2</u> , CH-3/CH-4	Sets the audio output channels to either channels 1 and 2 or channels 3 and 4.
Headphone Mono/ST	<u>Mono</u> /Stereo	Sets the headphones output to monaural (Mono) or stereo (Stereo).

**Paint Menu****[Note]**

Technical > System Configuration > RM/RCP Paint Control (page 81) must be set to On in the full menu to enable the setting of Paint menu items.

Default values are shown underlined and in **bold** text.

<b>Paint &gt; Black</b> Makes settings related to black level.		
Menu item	Settings	Description
Master Black	-99 to <u>±0</u> to +99	Sets the master black level.
R Black	-99 to <u>±0</u> to +99	Sets the R black level.
B Black	-99 to <u>±0</u> to +99	Sets the B black level.
<b>Paint &gt; Flare</b> Makes settings related to flare correction.		
Menu item	Settings	Description
Setting	On/ <u>Off</u>	Turns the flare correction function on/off.
Master Flare	-99 to <u>±0</u> to +99	Sets the master flare user adjustment of the flare correction required by the unit.
R Flare	-99 to <u>±0</u> to +99	Sets the R flare user adjustment of the flare correction required by the unit.
G Flare	-99 to <u>±0</u> to +99	Sets the G flare user adjustment of the flare correction required by the unit.
B Flare	-99 to <u>±0</u> to +99	Sets the B flare user adjustment of the flare correction required by the unit.
<b>Paint &gt; Gamma</b> Makes settings related to gamma correction.		
Menu item	Settings	Description
Setting	<u>On</u> /Off	Turns the gamma correction function on/off.
Gamma Category	S-Log3/HLG(Natural)/HLG(Live)/User	The gamma category setting is display only, because it is determined by the Project > Basic Setting > Input Color Space (page 66) setting in the full menu.

**Paint > Gamma**

Makes settings related to gamma correction.

Menu item	Settings	Description
Gamma Select	When Gamma Category is set to S-Log3: S-Log3 When Gamma Category is set to HLG(Natural): HLG(Natural) When Gamma Category is set to HLG(Live): HLG(Live) When Gamma Category is set to User: User 1/User 2/User 3/User 4/ User 5	Selects the gamma table used for gamma correction.

**Paint > Black Gamma**

Makes settings related to black gamma correction.

**[Note]**

Black Gamma is grayed out and cannot be operated when Project > Basic Setting > Input Color Space (page 66) is set to S-Gamut3.Cine/SLog3 or S-Gamut3/SLog3 in the full menu.

Menu item	Settings	Description
Setting	On/Off	Turns the black gamma correction function on/off.
Range	Low/L.Mid/H.Mid	Selects the effective range of the black gamma correction. Low: 0% to 3.6% L.Mid: 0% to 7.2% H.Mid: 0% to 14.4%
Master Black Gamma	-99 to $\pm 0$ to +99	Sets the master black gamma level.

**Paint > Knee**

Makes settings related to knee correction.

**[Note]**

Knee is grayed out and cannot be operated when Project > Basic Setting > Input Color Space (page 66) is set to S-Gamut3.Cine/SLog3 or S-Gamut3/SLog3 in the full menu.

Menu item	Settings	Description
Setting	On/Off	Turns the knee correction function on/off.
Point	-99 to $\pm 0$ to +99	Sets the knee point.
Slope	-99 to $\pm 0$ to +99	Sets the knee slope.

**Paint > White Clip**

Makes settings related to white clip adjustment.

**[Note]**

White Clip is grayed out and cannot be operated when Project > Basic Setting > Input Color Space (page 66) is set to S-Gamut3.Cine/SLog3 or S-Gamut3/SLog3 in the full menu.

Menu item	Settings	Description
Setting	On/Off	Turns the white clip adjustment function on/off.
Level	60.0% to 108.0% to <u>109.0%</u>	Sets the white clip level.

**Paint > Detail**

Makes settings related to detail adjustment.

Menu item	Settings	Description
Setting	On/Off	Turns the detail adjustment function on/off.
Level	-99 to $\pm 0$ to +99	Sets the detail level.
H/V Ratio	-99 to $\pm 0$ to +99	Sets the mix ratio between the H detail level and the V detail level.
Crispening	-99 to $\pm 0$ to +99	Sets the crispening level.
Level Depend	On/Off	Turns the level dependence adjustment function on/off.
Level Depend Level	-99 to $\pm 0$ to +99	Sets the level dependence level.
Frequency	-99 to $\pm 0$ to +99	Sets the center frequency of the H detail signal (larger values give finer detail).
Knee Aperture	On/Off	Turns the knee aperture correction function on/off.
Knee Aperture Level	-99 to $\pm 0$ to +99	Sets the knee aperture level.
Limit	-99 to $\pm 0$ to +99	Sets the detail limiter for both the white-side and black-side directions.
White Limit	-99 to $\pm 0$ to +99	Sets the white-side detail limiter.
Black Limit	-99 to $\pm 0$ to +99	Sets the black-side detail limiter.

**Paint > Matrix**

Makes settings related to matrix correction.

Menu item	Settings	Description
Setting	On/Off	Turns the matrix correction function on/off.
User Matrix	On/Off	Turns the user matrix correction function on/off.
User Matrix R-G	-99 to $\pm 0$ to +99	Sets matrix coefficients individually for fine adjustment of the color of the whole image.
User Matrix R-B	-99 to $\pm 0$ to +99	
User Matrix G-R	-99 to $\pm 0$ to +99	
User Matrix G-B	-99 to $\pm 0$ to +99	
User Matrix B-R	-99 to $\pm 0$ to +99	
User Matrix B-G	-99 to $\pm 0$ to +99	

**Paint > Multi Matrix**

Makes settings related to multi matrix correction.

**[Note]**

Multi Matrix is grayed out and cannot be operated when Matrix is set to Off.

Menu item	Settings	Description
Setting	On/ <u>Off</u>	Turns multi-matrix correction function on/off for setting the saturation in 16-axis hue space.
Area Indication	On/ <u>Off</u>	Turns the display of a zebra pattern in the color area of the screen targeted for multi matrix correction on/off.
Reset	Execute/Cancel	Sets all hue and saturation on each axis to default values (execute by selecting Execute).
Axis	<u>B</u> /B+/MG-/MG/MG+/R/R+/YL-/YL/YL+/G-/G/G+/CY/CY+/B-	Sets the color targeted for multi matrix correction (16-axis mode)
Hue	-99 to <u>±0</u> to +99	Sets the hue of the color targeted for multi matrix correction for each of the 16 axes.
Saturation	-99 to <u>±0</u> to +99	Sets the saturation of the color targeted for multi matrix correction for each of the 16 axes.

**Technical Menu**

Default values are shown underlined and in **bold** text.

**Technical > Test Signals**

Makes settings related to color bars.

Menu item	Settings	Description
Color Bars	On/ <u>Off</u>	Turns color bars on/off.  <b>[Note]</b> When an RM-B170 or other remote control unit is connected, the setting from the remote control unit is displayed and grayed out.
Color Bars Type	<u>ARIB</u> /SMPTE	Selects the type of color bars.
1 kHz Tone on Color Bars	On/ <u>Off</u>	Turns the function to output a 1 kHz test signal in color bars mode on/off.
Test Saw	On/ <u>Off</u>	Turns the test signal on/off.
Test Type	<u>Saw</u> /Step	Selects the type of test signal. Saw: Output a saw wave as the test signal. Step: Output a step wave as the test signal.

**Technical > Switch & Rec Light**

Makes settings related to the REC button.

Menu item	Settings	Description
Lock Operator Side	<u>without Rec Button</u> /with Rec Button	Sets whether to lock the REC button operation when buttons are locked using the LOCK switch on the Operator side.
Lock Assistant Side	<u>without Rec Button</u> /with Rec Button	Sets whether to lock the REC button operation when buttons are locked using the LOCK switch on the Assistant side.
Rec Light	<u>On</u> /Off	Turns the REC lamp on/off.
Rec Start/Stop Beep	<u>0</u> to 99	Adjusts the volume of the beep sound emitted when recording starts and stops.



Technical > System Configuration		
Makes settings related to control of the unit.		
Menu item	Settings	Description
Fan Control	Auto / Max / <a href="#">Off in Rec/Auto</a> / Off in Rec/Max	Selects the fan control mode. Auto: Controls the fan automatically in response to the internal temperature. Max: Fan rotates at maximum speed. Off in Rec/Auto: The fan is silent when recording, and operates automatically in response to the internal temperature when not recording. Off in Rec/Max: The fan is silent when recording, and rotates at maximum speed when not recording.
RM/RCP Paint Control	On/ <a href="#">Off</a>	Turns the paint functions of an RM-B170 or other remote control unit on/off.  [Note] All settings on the unit are initialized when the RM/RCP Paint Control setting is changed. However, RM/RCP Paint Control and some other settings, such as network settings, are not initialized.
SDI Rec Remote Trigger	<a href="#">Off</a> / HD SDI Remote I/F / Parallel Rec	Selects the SDI remote mode control method. Off: Disables remote control. HD SDI Remote I/F: Uses HD SDI Remote control method. Parallel Rec: Uses valid flag control method.
3G SDI 1/2/3/4 Output	Level A/ <a href="#">Level B</a>	Selects whether the 3G SDI output format is Level A or Level B.
SD HDMI	On/ <a href="#">Off</a>	Turns the function to set the HDMI output signal to SD format on/off.
Shutter Mode	Speed/ <a href="#">Angle</a>	Selects the operating mode of the electronic shutter.
Media Near Full Alarm	1min/3min/ <a href="#">5min</a>	Sets the alarm threshold for notification that the remaining media is low.

Technical > Special Configuration		
Makes settings related to screen flip and noise reduction functions.		
Menu item	Settings	Description
Flip Image	<a href="#">Normal</a> /Horizontal Flip/ Vertical Flip/H & V Flip	In shooting mode, turns the image flip function on/off and sets the flip state when on.  [Notes] <ul style="list-style-type: none"> <li>• AXS recording images are stored unflipped.</li> <li>• When Vertical Flip or H &amp; V Flip is selected, both the video and audio signals are delayed by 1 frame at the imaging frame rate due to internal processing.</li> </ul>

Technical > Special Configuration		
Makes settings related to screen flip and noise reduction functions.		
Menu item	Settings	Description
Audio/Video Delay	<a href="#">Off</a> /1frame	Turns the sync function on/off for synchronizing the audio and video with another device that is flipping the image by delaying the video signal and audio signal. Off: No delay 1frame: Delay the video signal, audio signal, and metadata (including the timecode) by approximately 1 frame.  [Note] Fixed to 1frame when Flip Image is set to Vertical Flip or H & V Flip.
NR(4K 17:9/16:9 AXS)	On/ <a href="#">Off</a>	Turns the 4K 17:9/16:9 AXS recording image noise reduction on/off.  [Note] Set to Off (fixed) when the following functions are enabled. <ul style="list-style-type: none"> <li>• Select FPS</li> <li>• SxS/Output De-Squeeze: Settings other than Off(1.0x)</li> <li>• Flip Image: Settings other than Normal</li> </ul>
Level Gauge Adjust	Execute/Cancel	Execute the zero adjustment of the spirit level gauge (execute by selecting Execute).
Level Gauge Reset	Execute/Cancel	Reset the zero adjustment value of the spirit level gauge (execute by selecting Execute).
360° Shutter Setting	<a href="#">Pre Shutter On</a> /Pre Shutter Off	Turns the pre-shutter function on/off when using 360° shutter angle (shutter off). Pre Shutter On: Turn pre-shutter on. Pre Shutter Off: Turn pre-shutter off.  [Note] When set to Pre Shutter Off, an afterimage may remain for one frame when an excessive amount of light is incident, such as when shooting with a flash.

Technical > Lens Configuration		
Makes settings related to lenses.		
Menu item	Settings	Description
PL-Mt Interface Position	<a href="#">Top</a> /Side/Off	Sets the lens interface, before attaching a lens, according to the lens type to attach.  [Note] If changing this setting while the lens is attached to the unit, turn the turn off and then on again.

Technical > Lens Configuration		
Makes settings related to lenses.		
Menu item	Settings	Description
Lens 12pin	<a href="#">On/Off</a>	Turns the 12-pin lens interface on/off.  [Note] If changing this setting while the lens is attached to the unit, turn the turn off and then on again.
E-Mount Shading Comp.	<a href="#">Auto/Off</a>	Sets whether to compensate for a drop in peripheral lighting when a compatible lens is attached.
E-Mt Chro. Aber. Comp.	<a href="#">Auto/Off</a>	Sets whether to compensate for chromatic aberration in peripheral lighting when a compatible lens is attached.

Technical > Authentication		
Makes basic settings related to network authentication.		
Menu item	Settings	Description
User Name	(Displays the current user name.)	Sets the user name to use for access authentication. Set to "admin" by factory default.
Password	(*****)	Sets the password to use for access authentication (8 or more alphanumeric characters containing at least one alphabetic and one numeric character). When entering a password, the asterisk characters displayed are replaced by the entered characters while the sub display ITEM key 1 is pressed.  [Note] The password setting is reset when updating the unit firmware from version 5.0 or earlier to version 5.0 or later. In this case, set the password again.

Technical > Network		
Makes settings related to the network.		
Menu item	Settings	Description
Setting	LAN/Wireless/ <a href="#">Off</a>	Turns the network connection on/off.  [Note] Grayed out and cannot be changed if a password is not configured using Technical > Authentication > Password (page 82) in the full menu.

Technical > Network		
Makes settings related to the network.		
Menu item	Settings	Description
LAN	DHCP ( <a href="#">On/Off</a> )	Enables/disables DHCP. When set to [On], an IP address is automatically assigned to the unit. To enter the IP address of the unit manually, set to [Off].
	IP Address (DHCP/On: <a href="#">obtain automatically</a> , DHCP/Off: <a href="#">192.168.2.50</a> )	Enter the IP address of the unit. Enabled only when DHCP is [Off].
	Subnet Mask (DHCP/On: <a href="#">obtain automatically</a> , DHCP/Off: <a href="#">255.255.255.0</a> )	Enter the subnet mask of the unit. Enabled only when DHCP is [Off].
Wireless	Network Mode ( <a href="#">Access Point/Station</a> )	Sets the network mode for wireless connections.
	Scan Networks (Execute/Cancel)	Scans for access points for connection destinations (execute by selecting Execute).  [Note] Configurable only when Network Mode is set to Station.
	SSID	When Network Mode is set to Access Point Displays the SSID for the wireless connection to the unit. When Network Mode is set to Station Displays/configures the SSID of the connection destination access point.  [Note] Valid characters for display and entry: Alphabetic (A to Z, a to z) Numeric (0 to 9 -@_~) Symbols (!"#%&*+./:;<=>?[\^`{ }~)
	Password	When Network Mode is set to Access Point Displays the password for wireless connection to the unit. When Network Mode is set to Station Configures the password of the connection destination access point. When entering a password, the asterisk characters displayed are replaced by the entered characters while the sub display ITEM key 1 is pressed.  [Note] Valid characters for display and entry: Alphabetic (A to Z, a to z) Numeric (0 to 9 -@_~) Symbols (!"#%&*+./:;<=>?[\^`{ }~)

Technical > Network		
Makes settings related to the network.		
Menu item	Settings	Description
	WPS (Execute/Cancel)	Starts connection setup using WPS (execute by selecting Execute).
	Channel (Auto(5GHz)/Auto/CH1/CH2/CH3/CH4/CH5/CH6/CH7/CH8/CH9/CH10/CH11)	Sets the channel of the access point.  [Notes] <ul style="list-style-type: none"> <li>Configurable only when Network Mode is set to Access Point.</li> <li>Auto(5GHz) may not be displayed, depending on the wireless LAN module being used. Check whether use of the wireless LAN module is supported in your country/region. For details, refer to the operating instructions of the wireless LAN module.</li> </ul>
	DHCP (On/Off)	Enables/disables DHCP. When set to [On], an IP address is automatically assigned to the unit. To enter the IP address of the unit manually, set to [Off].  [Note] Configurable only when Network Mode is set to Station.
	IP Address (DHCP/On: <a href="#">obtain automatically</a> , DHCP/Off: <a href="#">192.168.1.50</a> )	Enter the IP address of the unit. Enabled only when DHCP is [Off].  [Note] Configurable only when Network Mode is set to Station.
	Subnet Mask (DHCP/On: <a href="#">obtain automatically</a> , DHCP/Off: <a href="#">255.255.255.0</a> )	Enter the subnet mask of the unit. Enabled only when DHCP is [Off].  [Note] Configurable only when Network Mode is set to Station.
	MAC Address	Displays the MAC address of the wireless LAN adaptor connected to the unit.
	Regenerate Password (Execute/Cancel)	Regenerates the password (execute by selecting Execute).  [Note] Executable only when Network Mode is set to Access Point.

Technical > APR		
Executes APR (Auto Pixel Restoration: auto adjustment of the image sensor).		
Menu item	Settings	Description
APR	Execute/Cancel	Executes the automatic pixel noise reduction function (execute by selecting Execute).
Reset	Execute/Cancel	Deletes white flecks added by execution of the APR function (execute by selecting Execute).

Technical > Battery		
Makes settings related to batteries.		
Menu item	Settings	Description
Near End:Info Battery	<a href="#">5%</a> to 100% (5% increments)	Sets the threshold value at which the remaining battery capacity indicator starts flashing when using an InfoLithium battery.
End:Info Battery	<a href="#">0%</a> to 5%	Sets the threshold value for displaying the "Battery End" warning when using an InfoLithium battery.
Near End:Sony Battery	<a href="#">11.5V</a> to 17V (0.1V increments)	Sets the threshold value at which the remaining battery capacity indicator starts flashing when using a Sony non-InfoLithium battery.
End:Sony Battery	<a href="#">11.0V</a> to 11.5V (0.1V increments)	Sets the threshold value for displaying the "Battery End" warning when using a Sony non-InfoLithium battery.
Near End:Other Battery	11.5V to 17V ( <a href="#">11.8V</a> ) (0.1V increments)	Sets the threshold value at which the remaining battery capacity indicator starts flashing when using a non-Sony battery.
End:Other Battery	<a href="#">11.0V</a> to 14V (0.1V increments)	Sets the threshold value for displaying the "Battery End" warning when using a non-Sony battery.
Detected Battery	Sony Info Battery/Sony Battery/Other Battery/DC IN (12V)/DC IN (24V)	Displays the result of automatic battery pack type detection.

Technical > DC Voltage Alarm		
Sets alarms relating to external DC supply voltage.		
Menu item	Settings	Description
DC Low Voltage1	<a href="#">11.5V</a> to 17V (0.1V increments)	Sets the threshold value for displaying a low voltage warning when using an external power source connected to the DC IN connector.
DC Low Voltage2	<a href="#">11.0V</a> to 14V (0.1V increments)	Sets the threshold value for displaying an undervoltage warning when using an external power source connected to the DC IN connector.
DC(24V) Low Voltage1	<a href="#">22.5V</a> to 34.0V (0.1V increments)	Sets the threshold value for displaying a low voltage warning when using a 24 V external power source connected to the DC IN connector.
DC(24V) Low Voltage2	<a href="#">22.0V</a> to 28.0V (0.1V increments)	Sets the threshold value for displaying an undervoltage warning when using a 24 V external power source connected to the DC IN connector.

Technical > Control Display		
Makes settings related to the displays.		
Menu item	Settings	Description
Brightness level	<a href="#">High</a> /Mid/Low/Minimum	Adjusts the brightness of the sub display and mini display.

**Technical > Genlock**

Makes settings related to genlock.

Menu item	Settings	Description
Input Source	<u>HD SDI</u> /Analog	Selects the genlock input signal. HD SDI: Digital Analog: Analog
Reference Lock Type	Internal/External(HD)/ External(SD)	Displays the genlock status. Displays the signal type when genlocked. Internal: Not genlocked. External(HD): Genlocked by the HD signal. External(SD): Genlocked by the SD signal.

**Maintenance Menu**

Default values are shown underlined and in **bold** text.

**Maintenance > Clock Set**

Makes settings related to the built-in clock.

Menu item	Settings	Description
Time Zone	UTC + 14:00 to <u>UTC Greenwich</u> to UTC – 12:00 (30-minute increments)	Selects the difference in time from UTC (Greenwich Mean Time) in increments of 30 minutes.
Date Mode	<u>YYMMDD</u> /MMDDYY/DDMMYY	Selects the display format for dates. YYMMDD: Year, month, day MMDDYY: Month, day, year DDMMYY: Day, month, year
Date		Sets the current date (apply by pressing Set).
Time		Sets the current time (apply by pressing Set).

**Maintenance > Language**

Selects the display language for menus and messages.

Menu item	Settings	Description
Select	English/中文(简)	Selects the display language for the full menu and messages.

**Maintenance > Hours Meter**

Displays the accumulated usage time.

Menu item	Settings	Description
Camera(System)		Displays the accumulated time of use of the unit (cannot be reset).
R7 Recorder (System) (Only when an AXS-R7 is attached)		Displays the accumulated time of use of the AXS-R7 connected to the unit (cannot be reset).
Camera(Resettable)		Displays the accumulated time of use of the unit (can be reset).
R7 Recorder (Resettable) (Only when an AXS-R7 is attached)		Displays the accumulated time of use of the AXS-R7 connected to the unit (can be reset).
Reset-Cam (Resettable)	Execute/Cancel	Resets the Camera(Resettable) display to 0 (execute by selecting Execute).
Reset-R7 (Resettable) (Only when an AXS-R7 is attached)	Execute/Cancel	Resets the R7 Recorder(Resettable) display for the AXS-R7 connected to the unit to 0 (execute by selecting Execute).

**Maintenance > Reset to Default**

Returns the unit to factory default state.

Menu item	Settings	Description
Reset	Execute/Cancel	Initializes all unit settings (execute by selecting Execute).

**Maintenance > Network Reset**

Returns the network-related settings to factory default state.

Menu item	Settings	Description
Reset	Execute/Cancel	Initializes all network-related settings (execute by selecting Execute).

**Maintenance > License Options**

Installs software options.

Menu item	Settings	Description
Install: <target_license>	Execute/Cancel	Installs software options (execute by selecting Execute).
Anamorphic	Permanent License Installed/XX days Remaining (YY keys)/Expired/Not Installed	Displays whether the Anamorphic option is enabled. Permanent License Installed: Permanent license is installed XX days Remaining (YY keys): Expiration of timed license Expired: Timed license has expired Not Installed: Not installed
Full-Frame	Permanent License Installed/XX days Remaining (YY keys)/Expired/Not Installed	Displays whether the Full Frame option is enabled. Permanent License Installed: Permanent license is installed XX days Remaining (YY keys): Expiration of timed license Expired: Timed license has expired Not Installed: Not installed
High Frame Rate	Permanent License Installed/XX days Remaining (YY keys)/Expired/Not Installed	Displays whether the High Frame Rate option is enabled. Permanent License Installed: Permanent license is installed XX days Remaining (YY keys): Expiration of timed license Expired: Timed license has expired Not Installed: Not installed
Unique Device ID		Displays the ID used for issuing the software option license key.

**Maintenance > Firmware**

Displays the version of the unit and AXS-R7, and updates the unit.

Menu item	Settings	Description
Camera		Displays the firmware version of the unit (Vx.xx).
AXS (Only when an AXS-R7 is attached)		Displays the firmware version of the AXS-R7 connected to the unit (Vx.xx).
FW Update-camera	Execute/Cancel	Updates the unit (execute by selecting Execute).
FW Update-AXS-R7	Execute/Cancel	Updates the firmware version of the AXS-R7 connected to the unit (execute by selecting Execute).

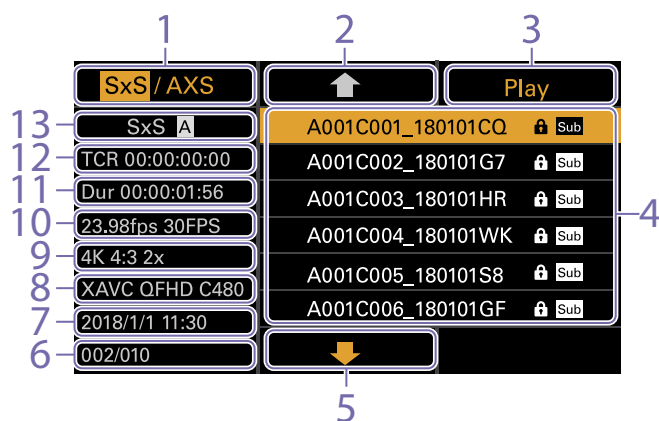
# Clip Operations on the Sub Display

Clip operations are performed using the clip list screen and the playback screen. You can play a clip by selecting the clip to play from the clip list screen displayed on the sub display.

When AXS Rec Format is not set to Rec Off in the Project category in the menu, AXS media becomes playable. Similarly, when SxS Rec Format is not set to Rec Off, SxS media becomes playable.

## Clip List Screen

Press the CLIPS button (page 10) on the Assistant side to display the clip list screen for playable media on the sub display.



### 1. Media select button

Displays "SxS/AXS" if both SxS and AXS media are playable. Press ITEM key 1 to switch the playback media.

### 2. Cursor up button

Press ITEM key 2 to select the clip to play from the clip list.

### 3. Playback start button

Press ITEM key 3 to display the playback screen (page 15) and start playback.

### 4. Clip list

Displays a list of clips on the active playback media. It also displays the clips status using icons.

Icon	Meaning
Sub	Clip with a created sub clip
🔒	Locked (write protection) clip

### 5. Cursor down button

Press ITEM key 5 to select the clip to play from the clip list.

### 6. Clip position in playback media

Displays the number of the clip indicated by the cursor and total number of clips.

### 7. Creation date and time

Displays the creation date and time of the clip indicated by the cursor.

### 8. Format (codec)

Displays the recording format (codec) of the clip indicated by the cursor.

### 9. Picture size indicator

Displays the effective picture size when the clip indicated by the cursor was recorded.

#### [Note]

Not displayed when the playback media is an SxS memory card.

### 10. Project frame rate/special recording mode indicator

Displays the project frame rate and special recording mode of the clip indicated by the cursor.

### 11. Duration (Dur)

Displays the duration of the clip indicated by the cursor.

### 12. Timecode (TCR)

Displays the timecode of the first frame of the clip indicated by the cursor.

### 13. Active playback media

Displays the active playback media of the displayed list.

## Playback Screen

The playback screen is displayed when you select a clip to play on the clip list screen and press the MENU dial or Play button (ITEM key 3).

### Function display area



#### 1. F Rev button

Play back at high speed in the reverse direction.

#### 2. Play/Pause button

Play a clip or pause playback.

#### 3. F Fwd button

Play back at high speed in the forward direction.

#### 4. Prev button

Skip to the start of the previous clip.

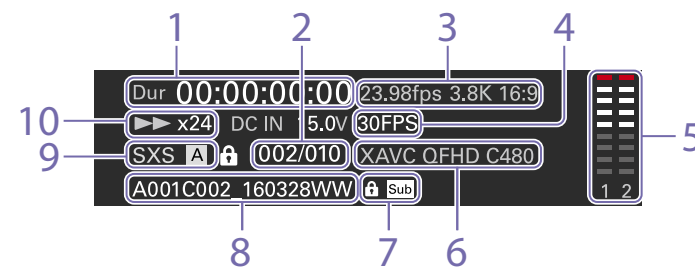
#### 5. Stop/Clips button

Stop playback and return to the clip list screen.

#### 6. Next button

Skip to the start of the next clip.

### Status display area



#### 1. Time data display

Displays the timecode of the playback position.

#### 2. Clip number

Displays the Current playback clip number/ Total number of playable clips.

#### 3. Frame rate/imager mode indicator

Displays the project frame rate and picture size.

#### [Note]

The picture size is not displayed when the playback media is an SxS memory card.

#### 4. Special recording mode indicator

Displays the special recording mode information of the playback clip.

#### 5. Audio level meters

Displays the playback audio level.

#### 6. Playback clip format (codec) indicator

Displays the format (codec) of the playback clip.

#### 7. Icon display

Displays the clip status using icons.

Icon	Meaning
Sub	Clip with a created sub clip
🔒	Locked (write protection) clip

#### 8. Clip name indicator

Displays the name of the clip.

#### 9. Media indicator

Displays the media being played.

#### 10. Playback status indicator



Displays the playback status. Displays "CALL" when a CALL command is received.

# Playback

You can play recorded clips while the unit is in standby mode.

## [Note]

The playback controls appear on ITEM keys 1 to 6 (page 9). Press an ITEM key to select the corresponding item.

- 1 Insert the SxS memory card to play.
- 2 Press the CLIPS button (page 10) on the Assistant side.  
The clip list on the active playback media appears on the sub display.
- 3 Use the  button (ITEM key 2),  button (ITEM key 5), or MENU dial to select a clip to play.
- 4 Press the MENU dial or the Play button (ITEM key 3).  
The playback image appears on the viewfinder/monitor screen.



## Playback operations

Playback operation is performed using the buttons on the sub display (page 87).

Play/Pause button: Pause playback. To resume playback, press this button again.

F Fwd button/F Rev button: Fast forward/reverse.  
To return to normal playback, press the Play/Pause button.

Stop/Clips button: Stop playback and return to the clip list screen.

## Monitoring audio

In normal playback mode, you can monitor the recorded audio through the built-in speaker (page 8) or connected headphones.

When headphones are connected to the headphones connector (page 8), the built-in speaker is turned off.

You can select the channel to monitor and adjust the volume using Audio category > Monitor CH and Monitor Level (page 50) in the menu.

## Cueing up

To play from the start of a clip, press the Prev button on the sub display (page 87).

You can skip clips and cue-up another clip by pressing the Prev button or Next button repeatedly.

## Switching the SxS memory cards

When two SxS memory cards are loaded, press the SLOT SELECT button (page 9) to switch memory cards.

## [Note]

You cannot switch SxS memory cards during playback. Continuous playback of cards in slots A and B is not possible.

## Switching to an AXS memory card

You can quickly play video recorded on an AXS memory card in the AXS-R7.

To switch to an AXS memory card, press ITEM key 1 (page 86) on the sub display.

## Cases where playback on the unit is not supported

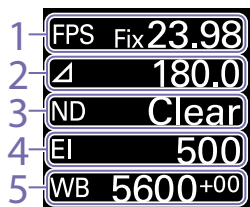
Clips recorded on AXS media under the following conditions cannot be played back on the unit. Play the clips using a PC application, such as RAW Viewer.

- When both Imager Mode is set to 6K 3:2, 6K 1.85:1, 6K 17:9, 6K 2.39:1, or 5.7K 16:9, and Project Frame Rate is set to 59.94P, 50P, or 47.95P



# Operations on the Home Screen of the Mini Display

You can check the status of the unit and set basic settings for the unit on the Home screen of the mini display.



1. **FPS**  
Sets the shooting frame rate.
2. **Shutter**  
Displays and sets the shutter speed/shutter angle of the electronic shutter.
3. **ND Filter**  
Displays and sets the density of the ND filter.
4. **Exposure Index/Gain**  
Displays and sets the exposure index (EI), or displays and sets the gain value (dB units) set by an RM-B170 or other remote control unit.  
  
[Note]  
The gain value is displayed only when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.
5. **WB (White Balance)**  
Displays and sets the white balance.

## Display and operation when RM/RCP Paint Control is enabled

- The gain value is displayed instead of the Exposure Index when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu. In this mode, the EI value cannot be changed, but the gain value can be changed.
- The following items cannot be operated when an RM-B170 or other remote control unit is connected and Technical > System

Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu. Set these using the remote control unit (page 106).

- Shutter
- WB (White Balance)

## Controls

**HOME button** (page 8)

Press to return to the Home screen. Unconfirmed changes are canceled.

**ITEM key 1** (↑) (page 8)

Press to select items on the Home screen.

**ITEM key 2** (●) (page 8)

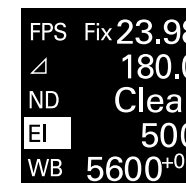
Press to apply the selected item.

**ITEM key 3** (↓) (page 8)

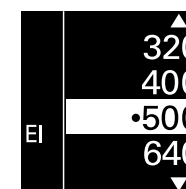
Press to select items on the Home screen.

## Basic Operation

- 1 Press ITEM key 1, 2, or 3. The cursor appears.
- 2 Select the item to set using the ↑ button (ITEM key 1) or ↓ button (ITEM key 3).



- 3 Press the ● button (ITEM key 2). The setting value selection screen appears for the selected item.



[Note]

The ● mark indicates the current setting.

- 4 Move the cursor to the item or setting value using the ↑ button (ITEM key 1) or ↓ button (ITEM key 3).
- 5 Press the ● button (ITEM key 2) to apply the setting.
- 6 Press the HOME button to hide the cursor.

## Home Screen Items on the Mini Display

The names of items and corresponding setting values are given below.  
Default values are shown underlined and in **bold** text.

Item	Description																
FPS	Sets the shooting frame rate. Variable/Fixed: Switch between variable speed and constant speed shooting on the Home screen (page 39) of the sub display. When "Fixed" is selected, the setting is determined by the Project category > Project Frame Rate (page 49) setting in the menu.																
	<table border="1"> <thead> <tr> <th>Project Frame Rate</th> <th>Display</th> </tr> </thead> <tbody> <tr> <td>23.98</td> <td>Fix 23.98</td> </tr> <tr> <td>24</td> <td>Fix 24.00</td> </tr> <tr> <td>25</td> <td>Fix 25.00</td> </tr> <tr> <td>29.97</td> <td>Fix 29.97</td> </tr> <tr> <td>47.95</td> <td>Fix 47.95</td> </tr> <tr> <td>50</td> <td>Fix 50.00</td> </tr> <tr> <td>59.94</td> <td>Fix 59.94</td> </tr> </tbody> </table>	Project Frame Rate	Display	23.98	Fix 23.98	24	Fix 24.00	25	Fix 25.00	29.97	Fix 29.97	47.95	Fix 47.95	50	Fix 50.00	59.94	Fix 59.94
Project Frame Rate	Display																
23.98	Fix 23.98																
24	Fix 24.00																
25	Fix 25.00																
29.97	Fix 29.97																
47.95	Fix 47.95																
50	Fix 50.00																
59.94	Fix 59.94																

When "Variable" is selected, the setting changes as follows depending on the Project category > Imager Mode (page 66) setting in the menu.

Imager Mode	Setting
3.8K 16:9	1 to 60 FPS
4K 17:9	
4K 2.39:1	
3.8K 16:9 <sup>1)</sup>	1 to 60, 66, 72, 75, 88, 90, 96, 100, 110 FPS
4K 17:9 <sup>1)</sup>	
3.8K 16:9 Surround View	1 to 48 FPS
4K 17:9 Surround View	
4K 4:3	
4K 4:3 <sup>1)</sup>	1 to 60, 66, 72, 75 FPS
4K 2.39:1 <sup>1)</sup>	1 to 60, 66, 72, 75, 88, 90, 96, 100, 110, 120 FPS
4K 4:3 Surround View	1 to 30 FPS
4K 6:5	
5.7K 16:9	
6K 2.39:1	
6K 17:9	
6K 1.85:1	

Item	Description																
	<table border="1"> <thead> <tr> <th>Imager Mode</th> <th>Setting</th> </tr> </thead> <tbody> <tr> <td>6K 2.39:1<sup>1)</sup></td> <td>1 to 60, 66, 72, 75, 90 FPS</td> </tr> <tr> <td>4K 6:5<sup>1)</sup></td> <td>1 to 60, 66, 72 FPS</td> </tr> <tr> <td>5.7K 16:9<sup>1)</sup></td> <td></td> </tr> <tr> <td>6K 17:9<sup>1)</sup></td> <td></td> </tr> <tr> <td>6K 1.85:1<sup>1)</sup></td> <td></td> </tr> <tr> <td>6K 3:2</td> <td>1 to 25 FPS</td> </tr> <tr> <td>6K 3:2<sup>1)</sup></td> <td>1 to 60 FPS</td> </tr> </tbody> </table>	Imager Mode	Setting	6K 2.39:1 <sup>1)</sup>	1 to 60, 66, 72, 75, 90 FPS	4K 6:5 <sup>1)</sup>	1 to 60, 66, 72 FPS	5.7K 16:9 <sup>1)</sup>		6K 17:9 <sup>1)</sup>		6K 1.85:1 <sup>1)</sup>		6K 3:2	1 to 25 FPS	6K 3:2 <sup>1)</sup>	1 to 60 FPS
Imager Mode	Setting																
6K 2.39:1 <sup>1)</sup>	1 to 60, 66, 72, 75, 90 FPS																
4K 6:5 <sup>1)</sup>	1 to 60, 66, 72 FPS																
5.7K 16:9 <sup>1)</sup>																	
6K 17:9 <sup>1)</sup>																	
6K 1.85:1 <sup>1)</sup>																	
6K 3:2	1 to 25 FPS																
6K 3:2 <sup>1)</sup>	1 to 60 FPS																
Exposure Index	Sets the EI value. The setting changes as follows depending on the Project > Basic Setting > Base ISO (page 66) setting in the full menu. ISO 500: 125EI/160EI/200EI/250EI/320EI/400EI/ <u>500EI</u> /640EI/800EI/1000EI/1250EI/1600EI/2000EI ISO 2500: 640EI/800EI/1000EI/1250EI/1600EI/2000EI/ <u>2500EI</u> /3200EI/4000EI/5000EI/6400EI/8000EI/10000EI																
Gain	Sets the base ISO sensitivity. -6dB/-3dB/ <u>0dB</u> /3dB/6dB/9dB/12dB/15dB/18dB  [Note] Configurable only when an RM-B170 or other remote control unit is connected and Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.																
Shutter	Sets the electronic shutter angle/shutter speed. Select from preset values registered as shutter steps.  [Note] Not available when the electronic shutter operation is set to Continuous.  Displays the following selection options depending on the Technical > System Configuration > Shutter Mode (page 81) setting in the full menu. Angle (Δ): Shutter angle indicator 360.0/ <u>180.0</u> /172.8/144.0/90.0/45.0/22.5/11.2/5.6 <sup>2)</sup> Speed (SS): Shutter speed indicator 1/24, 1/25, 1/30, 1/48, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000 <sup>2)</sup>																
ND Filter	Sets the density of the ND filter. The following settings are available. <u>Clear</u> /0.3/0.6/0.9/1.2/1.5/1.8/2.1/2.4																
WB (White Balance)	Sets the color temperature of the white balance. Select from preset values registered as WB steps. <u>3200K+00</u> /4300K+00/5500K+00 <sup>2)</sup>																

<sup>1)</sup> Only when a High Frame Rate License is activated.

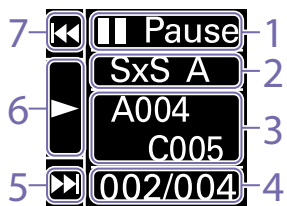
<sup>2)</sup> The selection options can be changed using Step Edit on the Home screen of the sub display.

# Clip Operations on the Mini Display

You can play a clip by selecting the clip to play from the clip screen displayed on the mini display. When AXS Rec Format is not set to Rec Off in the Project category in the menu, AXS media becomes playable. Similarly, when SxS Rec Format is not set to Rec Off, SxS media becomes playable. When both AXS and SxS media playback is enabled, you can select the active media on the clip list screen (page 86) of the sub display.

## Clip Screen

Press the CLIPS button (page 8) on the Operator side to display the clip screen for playable media on the mini display.



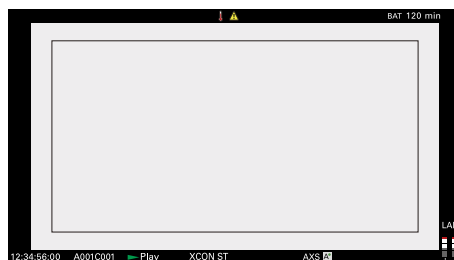
- 1. Playback status indicator**  
Displays the clip playback status.
- 2. Active playback media**  
Displays the active playback media of the selected clip.
- 3. Clip name**  
Displays the clip name of the selected clip.
- 4. Clip position in playback media**  
Displays the clip number/total number of the selected clip.
- 5. F Fwd/Next button**  
Jumps to the next clip when ITEM key 3 (⏩) is pressed while playback is paused. Fast forwards the clip when ITEM key 3 (⏩) is pressed during playback.

- 6. Play/Pause button**  
Plays/pauses clip playback when ITEM key 2 (⏪) is pressed.
- 7. F Rev/Prev button**  
Jumps to the previous clip when ITEM key 1 (⏮) is pressed while playback is paused. Fast reverses the clip when ITEM key 1 (⏮) is pressed during playback.

## Playing

You can play recorded clips while the unit is in standby mode.

- 1 Insert the SxS memory card to play.
- 2 Press the CLIPS button (page 8) on the Operator side.  
The active playback clip appears on the mini display.
- 3 Use the Prev button (ITEM key 1) or Next button (ITEM key 3) to select a clip to play.
- 4 Press the Play/Pause button (ITEM key 2).  
The playback image appears on the viewfinder/monitor screen.



## Playback operations

Playback operation is performed using the buttons on the mini display (page 91).

Play/Pause button: Pause playback. To resume playback, press this button again.

F Fwd button/F Rev button: Fast forward/reverse. To return to normal playback, press the Play/Pause button.

## Monitoring audio

In normal playback mode, you can monitor the recorded audio through the built-in speaker (page 8) or connected headphones.

When headphones are connected to the headphones connector (page 8), the built-in speaker is turned off.

You can select the channel to monitor and adjust the volume using Audio category > Monitor CH and Monitor Level (page 50) in the menu.

## Switching the SxS memory cards

When two SxS memory cards are loaded, press the SLOT SELECT button (page 9) to switch memory cards.

### [Note]

You cannot switch SxS memory cards during playback. Continuous playback of cards in slots A and B is not possible.

# Network Setup and Operations

Connecting the unit to a network allows you to control various settings of the unit from a computer, smartphone, tablet, or other device and to display information about the unit.

## Overview of Network Function

When the unit and a device are connected via wired LAN or wireless LAN, the unit can be accessed from a browser on the device, displaying the web remote control and enabling the following operations.

- Control recording on the unit (page 95)
- Control playback on the unit (page 95)
- Configure shooting settings on the unit (page 95)
- Control the lens attached to the unit (page 95)
- Configure and operate assignable buttons on the unit (page 95)

Using the web remote control allows you to start/stop recording or configure settings remotely, and is useful in applications where the unit is fixed in a remote location or mounted on a crane, for example.

## Compatible Devices

You can use a computer, smartphone, or tablet to configure and operate the unit. The verified devices, OS, and browsers are shown in the following table.

Device	OS	Browser
Computer	Microsoft Windows 8.1/	Chrome
	Microsoft Windows 10	
	macOS 11.x	Safari

Device	OS	Browser
Smartphone	Android 10.0	Chrome
	iOS 14.x	Safari
Tablet	Android 10.0	Chrome
	iPadOS 14.x	Safari

### [Note]

The controls may not be displayed normally, depending on the version of the browser you are using. Operation in the following versions of the browsers has been verified.

Safari: 14  
Chrome: V89

## Connecting the Unit and Device via Wired LAN

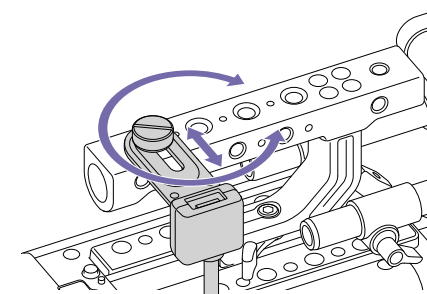
You can connect the unit to a device via a wired LAN connection or via a router using the network connector of the unit.

- 1 Connect the network connector (page 8) of the unit and computer using a LAN cable. Or connect the network connector of the unit and router using a LAN cable.
- 2 Set Technical > Network > Setting (page 82) in the full menu to LAN.
- 3 Configure the unit.  
To obtain the IP address of the unit automatically:  
Set Technical > Network > LAN > DHCP (page 82) in the full menu to On, then select Set to apply the setting.  
To enter the IP address of the unit manually:  
Set Technical > Network > LAN > DHCP in the full menu to Off, enter the specified address using LAN > IP Address, and select Set to apply the setting.

### [Note]

Select Set on the Technical > Network > LAN setup screen in the full menu. If Set is not selected, the configured settings are not applied.

When the wired LAN connection is enabled, the LAN icon of the network connection status indicator (page 14) is displayed on the viewfinder/monitor screen.



## Connecting the Unit and Device via Wireless LAN

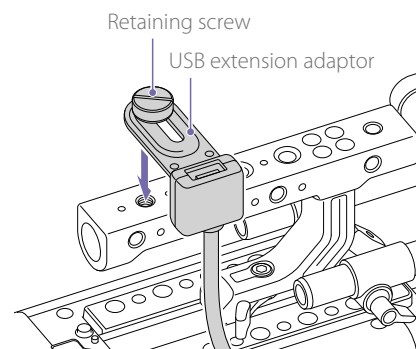
The unit can connect to devices using wireless LAN connection by attaching the CBK-WA02 Wireless LAN Adaptor (option) to the unit.

### Attaching the CBK-WA02

#### [Note]

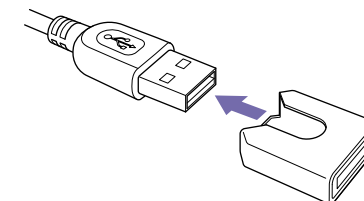
Always turn the unit off before connecting the CBK-WA02.

- 1 Attach the USB extension adaptor to the point shown in the following diagram, and turn the retaining screw clockwise to secure it in position.

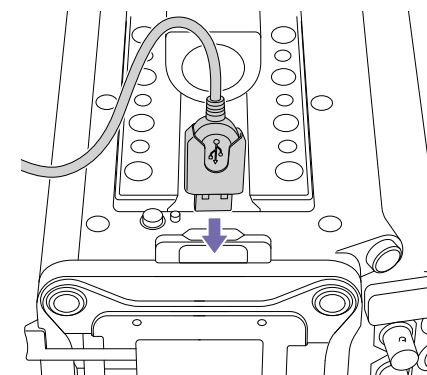


You can adjust the position of the USB extension adaptor over the range shown in the following diagram.

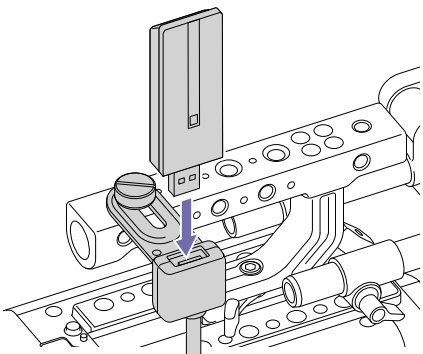
- 2 Attach the protective cap (supplied) to the USB connector of the USB extension adaptor.



- 3 Open the cover of the external device connector block, and insert the USB connector of the USB extension adaptor into the external device connector.

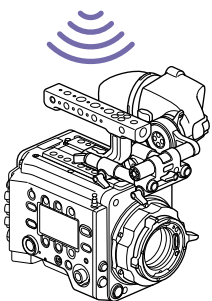
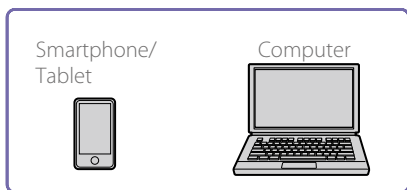


- 4 Insert the CBK-WA02 into the USB connector of the USB extension adaptor.



### Connecting in access point mode

The unit can connect to devices that are set up as an access point.



### Connecting using WPS-equipped devices

Devices that support WPS can be connected using WPS.

- 1 Set Technical > Network > Setting (page 82) in the full menu to Wireless.

- 2 Set Technical > Network > Wireless > Network Mode (page 82) in the full menu to Access Point.
- 3 Select Technical > Network > Wireless > WPS (page 83) in the full menu.
- 4 Select Execute by turning the MENU dial, then press the MENU dial.
- 5 Open the device Network Settings or Wi-Fi Settings, and turn Wi-Fi on.
- 6 Press the WPS push button in the device Network Settings or Wi-Fi Settings preferences.

[Note]

The steps will vary depending on the device used.

### Connecting using SSID and password on the device

Connect by entering the SSID and password on the device.

- 1 Set Technical > Network > Setting (page 82) in the full menu to Wireless.
- 2 Set Technical > Network > Wireless > Network Mode (page 82) in the full menu to Access Point.
- 3 Open the device Network Settings or Wi-Fi Settings, and turn Wi-Fi on.
- 4 Select the unit's SSID from the Wi-Fi network SSID list, then enter a password to connect. For the unit's SSID and password, see Technical > Network > Wireless > SSID and Password (page 82) in the full menu.

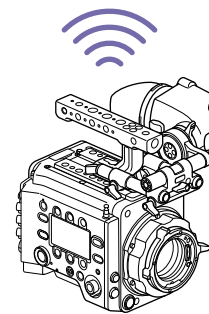
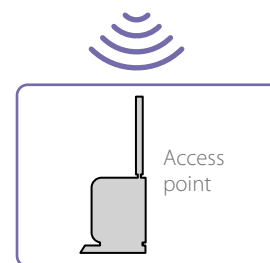
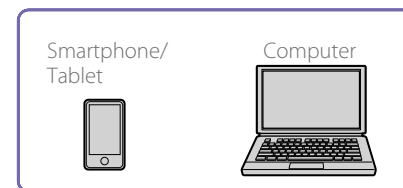
[Note]

The steps will vary depending on the device used.

### Connecting in station mode

The unit can connect to existing wireless LAN access points as a client.

The device connects via the access point.



### Connecting to an access point using WPS

If an access point supports the WPS function, you can connect using a basic setting.

- 1 Turn the access point on.
- 2 Turn the unit on.
- 3 Set Technical > Network > Setting (page 82) in the full menu to Wireless.

- 4 Set Technical > Network > Wireless > Network Mode (page 82) in the full menu to Station.
- 5 Select Technical > Network > Wireless > WPS (page 83) in the full menu.
- 6 Select Execute by turning the MENU dial, then press the MENU dial.
- 7 Press the access point WPS button. For details about WPS button operation, refer to the instruction manual for the access point.

[Note]

If the connection fails, perform the procedure again from step 1.

### Connecting by entering a SSID and password

Connect by entering the SSID and password on the unit.

- 1 Set Technical > Network > Setting (page 82) in the full menu to Wireless.
- 2 Set Technical > Network > Wireless > Network Mode (page 82) in the full menu to Station.
- 3 Set the following items in Technical > Network > Wireless (page 82) in the full menu.
  - SSID
  - Password
  - DHCP
  - IP Address
  - Subnet Mask
- 4 Select Set to confirm.

[Note]

Always use Set to confirm the settings. If the settings are not confirmed using Set, the configured settings are not applied.

### Connecting using access point auto detection

The unit can connect by detecting connection access points automatically, without having to enter the SSID manually.

- 1 Set Technical > Network > Setting (page 82) in the full menu to Wireless.
- 2 Set Technical > Network > Wireless > Network Mode (page 82) in the full menu to Station.
- 3 Select Technical > Network > Wireless > Scan Networks (page 82) in the full menu.
- 4 Select Execute by turning the MENU dial, then press the MENU dial.  
The unit starts auto detection of connection access points. When auto detection finishes, networks available for connection are displayed in a list.
- 5 Select the network to be connected by turning the MENU dial, then press the MENU dial.
- 6 Select Set to confirm.  
A password input screen appears.
- 7 Enter the password, then select Done.  
The Wireless preferences screen appears.
- 8 Set the following items in Technical > Network > Wireless in the full menu, then select Set to confirm.
  - DHCP
  - IP Address
  - Subnet Mask

#### [Note]

Always use Set to confirm the settings. If the settings are not confirmed using Set, the configured settings are not applied.

## Displaying the Web Remote Control

The web remote control is displayed when the unit is accessed from the browser of a device. The web remote control screen is automatically resized to match the screen size of the connected device.


- 1 Connect the unit and device as described in “Connecting the Unit and Device via Wired LAN” or “Connecting the Unit and Device via Wireless LAN”.
- 2 Launch a browser on the device and enter “http://IP address of unit/rm.html” in the URL bar.  
You can check the IP address of the unit using Info category > System > IP Address (page 51) in the menu.  
For example, if the IP address is 192.168.1.1, enter “http://192.168.1.1/rm.html” in the URL bar.
- 3 Enter the user name and password (Technical > Authentication (page 82) in the full menu) on the browser screen.  
When connection is successful, the web remote control screen appears on the device.

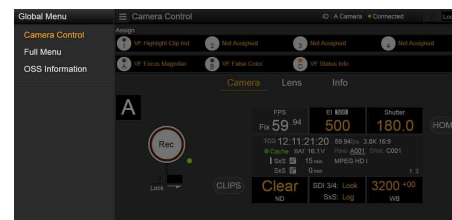
#### [Note]

The page may not be displayed correctly on a smartphone or other device if the viewing mode is set to mobile pages. Change the viewing mode to desktop pages.

## Web Remote Control Screen

### Global Menu

Select  at the top left of the web remote control screen to display the Global Menu. Select the item you want to configure.



### Camera Control screen

The Camera Control screen contains the Camera screen, Lens screen, and Info screen. Select the Camera tab to display the Camera screen, the Lens tab to display the Lens screen, and the Info tab to display the Info screen.

Various display items and operation buttons are displayed on the Camera Control screen (common to Camera screen, Lens screen, Info screen, and playback screen).

- Network connection status (Connected/Disconnected)
  - Camera ID\*
  - Rec button
  - Assignable buttons (1 to 4, A to C)
- \* The Camera ID text color is the same color set using Frame Line A/B Setup > Color.

### Camera screen



You can configure the same items that are displayed on the Home screen of the sub display on the Camera screen.

#### [Note]

Similarly as for the sub display screen, the EI display area switches to become the Gain display area and restrictions apply to the items (page 34) that can be operated when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

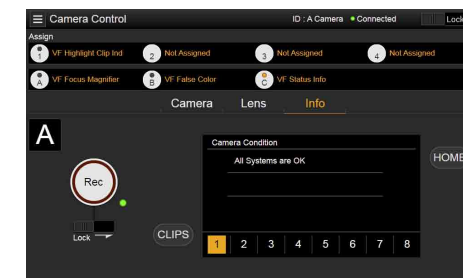
- Shooting settings (page 32)  
FPS, EI, Shutter, ND, LUT, WB
- Camera status display (page 32)  
Operating status, time data, audio level meter, clip name, recording format, media status/free space, battery voltage/remaining battery capacity

### Lens screen



Lens controls for zoom, focus, and iris are displayed on the Lens screen.

### Info screen



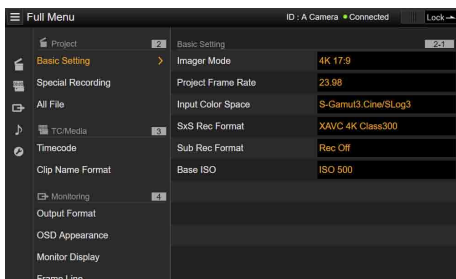
The Info screen displays the same contents as the Info category (page 51) of the sub display menu screen, allowing you to check the status of the camera, media, and battery.

## Full Menu screen

Select Full Menu in the Global Menu to display the full menu screen in order to configure items (page 62).

### [Note]

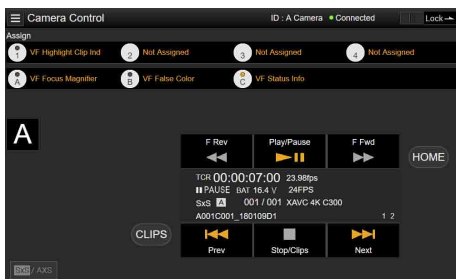
Some items may not be configurable from the web remote control.



## OSS (Open Source Software) Information screen

Select OSS Information in the Global Menu to display the open source software information.

## Playback screen



You can play clips on the playback screen. Information about the playback clip is also displayed in the status display area on the screen.

- Function display (page 87)  
F Rev, Play/Pause, F Fwd, Prev, Stop/Clips, Next
- Playback status display (page 87)

Time data, clip number, frame rate/playback clip picture size (AXS only), special recording mode, audio level meter, playback clip format (codec), icon (protection, sub clip), clip name, playback media, and playback status.

## HOME button

Press the HOME button to return to the Camera screen.  
When the camera is in playback mode, pressing the HOME button returns to the camera shooting status even when the playback screen is displayed on the web remote control screen.

## CLIPS button

Press the CLIPS button to return to the playback screen. (The unit switches to the clip list screen (page 86).)

## Recording

Press the Rec button on the Camera Control screen to start recording and to display the REC lamp in red. Click again to stop recording. The Rec button is enabled when the REC ACTIVE lamp below and to the right of the Rec button is green.

## To lock the Rec button

Slide the Lock slider below the Rec button to the right to disable the Rec button operation.

## Playback

Press the CLIPS button on the Camera screen to return to the playback screen in playback state.

(The sub display on the unit displays the clip list screen (page 86).)

Select the clip you want to play on the playback screen, and use the playback controls to play the clip.

## To switch between playback media

The media select button is displayed when the unit is in playback state. If both SxS and AXS media are playable, the media select button is enabled. Press the button to switch the playback media.

## Configuring Shooting Settings

You can configure and operate the same items that are displayed on the Home screen of the sub display of the unit on the Camera screen.

### [Note]

Step Edit operation for Shutter is not supported.

The operation is the same as on the Home screen of the sub display.

*"Operations on the Home Screen of the Sub Display" (page 34)*

## Controlling the Lens

You can check the status of E-mount lens settings (zoom, focus, iris) on the Lens screen, and also control the zoom, focus, and iris using sliders if the attached lens is controllable.

PL-mount Cooke lens communication control is supported on the Lens screen.

Also, 12-pin lens communication control is supported on the Lens screen.

### [Note]

The sliders are grayed out and cannot be operated when an RM-B170 or other remote control unit is connected and Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu. The focus and zoom sliders are grayed out when remote control of focus and zoom, respectively, are enabled.

## Configuring/Operating Assignable Buttons

Assignable buttons 1 to 4 and viewfinder assignable buttons A to C are displayed on the Camera Control screen.

Press assignable buttons 1 to 4 and DVF-EL200 assignable buttons A to C to toggle the assigned functions between on/off (enable/disable) or to activate the assigned functions in the same way as assignable buttons on the unit.

Select the function name of an assignable button to display selection options in a pull-down. Select an option to change the function assigned to the assignable button.

*"Functions that can be Assigned to Assignable Buttons 1 to 4" (page 45)*

*"Functions that can be Assigned to Viewfinder (DVF-EL200) Assignable Buttons A to C" (page 46)*

### [Note]

Functions assigned to assignable switches that are enabled only while a button is pressed or are enabled by a long press cannot be operated from the assignable buttons of the web remote control. These comprise the following functions.

- Press & Hold for SDI Log
- Press & Hold for Monitor Log
- Press & Hold for VF Log
- Iris Open (1/16 stop)
- Iris Close (1/16 stop)

---

## Locking the Web Remote Control Screen

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You can disable web remote control screen operation by sliding the Lock slider to the right on the top right of the web remote control screen.



# Basic Operations

Basic recording can be performed with the following procedures.

- 1 Make sure that the necessary devices are attached to the unit and power is supplied to them.
- 2 Set the power switch (page 8) to the ON position.  
The recording screen is displayed on the viewfinder screen.
- 3 Load the memory card(s).  
If you load two AXS memory card or SxS memory cards, recording is continued by automatically switching to the second card when the first card becomes full.  
  
[Note]  
The cards do not switch automatically during simultaneous recording.
- 4 Press the REC button (pages 8, 10).  
The REC lamp lights and recording begins.  
  
[Note]  
If the unit cannot start recording immediately after the pressing the REC button, the REC lamp flashes. The REC lamp lights when recording starts.
- 5 To stop recording, press the REC button again.  
Recording stops and the unit enters STBY (recording standby) mode.  
When you stop recording, the video, audio, and subsidiary data from the start to the end of the recording are recorded as a single clip.

## Clip names

Clip names are recorded using the "Cam ID + Reel#" format. The clip name is created according to the following rules.

- When there is already a clip that is stored using the "Cam ID + Reel#" name format on the inserted SxS memory card or AXS memory card, the new file inherits from the last file.  
Example: If "B002C003\_XXXXXXXX" exists on the AXS memory card, the next created clip will be named "B002C004\_XXXXXXXX."
- If the inserted AXS memory card has no files, "1" is added to the Reel Number of the clip that was recorded last.  
Example: If you record on empty card 2 after recording up to "D001CXXX\_XXXXXXXX" on card 1, the next created clip will be named "D002C001\_XXXXXXXX." The clip name is displayed underlined until recording starts.
- If you set Camera ID and Reel Number using the TC/Media category in the menu, that information is applied.  
Example: If you change Camera ID to "F" and Reel Number to "001" in the menu for the AXS memory card that has recorded up to "E003CXXX\_XXXXXXXX," the next clip will be named "F001CXXX\_XXXXXXXX." When you change Camera ID only, Reel Number is changed to "001."

## Maximum duration of a clip

The maximum single clip length that you can record to an SxS memory card is 6 hours. The maximum recording time is 24 hours. Recording will span clips if the recording time exceeds the maximum clip duration. Recording stops when the recording time reaches 24 hours.

# Useful Functions

## Simultaneous Recording

You can simultaneously record two sizes of pictures on an SxS memory card in one slot. You can also simultaneously record an HD signal on an SxS memory card in the unit while recording video and audio in RAW format on the AXS-R7.

You can perform simultaneous recording using Project category > AXS Rec Format and SxS Rec Format or SxS Rec Format and Sub Rec Format in the menu as described in "Recording Format Settings" (page 53).

In 1-slot simultaneous recording, the XAVC 4K Class480/XAVC 4K Class300/XAVC QFHD Class480/XAVC QFHD Class300 clip is recorded in the XDROOT/Clip directory on the SxS memory card, but the MPEG2 1920×1080 clip is recorded in the XDROOT/Sub directory on the SxS memory card. The suffix "S02" is appended to the end of the clip name.

### [Note]

Simultaneous recording is not supported in ProRes 4444 HD P video format.

## User Frame Line Display

You can select whether to display arbitrarily configured user frame lines or a fixed aspect ratio. User Frame Line 1 and User Frame Line 2 can be set for user frame lines.

To set user-configured lines, select Variable using Monitoring > User Frame Line 1 (page 74) or User Frame Line 2 (page 74) > Select in the full menu, and specify the Width, Height, H Position, and V Position menu items.

To set a fixed aspect ratio, select Preset using Monitoring > User Frame Line 1 (page 74) or User Frame Line 2 (page 74) > Select in the full menu, and specify the Preset Aspect Ratio, Scaling, and Preset Aspect Ratio Type menu items.

You can check the aspect ratio, number of pixels, and anamorphic ratio of configured user frame lines for both user-configured lines or a fixed aspect ratio using Aspect Ratio(Pixels).

### [Notes]

- The User Frame Line 2 > Preset Aspect Ratio Type setting is set to Line (fixed).
- The anamorphic ratio is not displayed for effective picture size (Imager Mode) settings for which the anamorphic ratio cannot be configured.

## Assignable buttons operations

You can show/hide User Frame Line 1 and User Frame Line 2 configured for Line A by assigning Line A: User Frame Disp. to any of assignable buttons 1 to 4, viewfinder assignable buttons A to C, and ITEM keys 1 to 5 (page 43).

Each time the assignable button is pressed, the display switches between User Frame Line 1 and 2 display → User Frame Line 1 display → User Frame Line 2 display → User Frame Line 1 and 2 hidden.

Similarly, you can show/hide User Frame Line 1 and User Frame Line 2 configured for Line B by assigning Line B: User Frame Disp. to an assignable button or key.

You can also show/hide Aspect Ratio configured for Line A or Line B by assigning Line A: Aspect Ratio Disp. or Line B: Aspect Ratio Disp. to any of assignable buttons 1 to 4, viewfinder assignable buttons A to C, and ITEM keys 1 to 5. Each time the assignable button is pressed, the display switches between Aspect Ratio display and Aspect Ratio hidden.

## Picture Cache Recording

The unit always maintains a cache of video and audio data for a set interval (maximum of 30 seconds) in memory when shooting, allowing you to record several seconds of footage before the start of recording.

When you start recording with Project > Special Recording > Cache Rec Select (page 67) set to On in the full menu, video of duration set by Project > Special Recording > Max Cache Rec Duration (page 67) is recorded retroactively. You can also turn picture cache recording on/off using an assignable button assigned with the Picture Cache Rec function.

### [Notes]

- Restrictions to the Max Cache Rec Duration setting may apply, depending on the system frequency, recording format, and recording media. For details, see page 67.
- Changing system settings, such as the recording format, clears all images stored in memory. Consequently, images shot just before changing settings cannot be recorded, if recording is started immediately after changing settings. Picture cache mode is automatically released.
- Picture cache mode recording is not available during 1-slot simultaneous recording or AXS/SxS simultaneous recording.
- The picture cache settings cannot be changed during recording.
- When recording in MPEG 422 at low shooting frame rates, it may take some time to stop recording or to switch between memory cards.

## Recording Review (Rec Review)

You can review the last recorded clip on the screen by assigning the Rec Review function to one of assignable buttons 1 to 4 (page 43). When you stop recording and press the button assigned with Rec Review, the clip is played at normal speed starting from the first frame. The clip is played to the end, then Rec Review ends and the unit returns to STBY (recording standby) mode. If the HOME button is pressed on the Operator side or Assistant side during playback, playback stops and the unit switches to shooting mode.

## High-Definition Focus Magnifier Function

You can magnify the display for the viewfinder screen or Monitor output. By pressing the FOCUS MAG button of the viewfinder (DVF-EL200, DVF-L700) attached to the unit, or pressing an assignable button assigned with the VF Focus Magnifier function, you can expand the center part of the viewfinder screen, making it is easier to adjust the focus. By pressing an assignable button assigned with the Monitor Focus Magnifier function, you can expand the center part of the Monitor output image, making it is easier to adjust the focus.

The magnified display does not affect the recorded image or other output signals, other than the Monitor output.

Normal focus magnification reduces the resolution because it simply magnifies a part of the displayed image. However, the two-times (x2) focusing by the unit provides focus magnification while maintaining the display resolution by cutting out the portion to magnify from the 4K image instead of the recorded image or other output signals, other than the Monitor output.

Four-times (x4) focus magnification selection is also supported using the 4K image cutout function.

The following focus magnification functions can be assigned to an assignable button (page 45).

- Viewfinder focus magnifier function: VF Focus Magnifier
- Monitor output focus magnifier function: Monitor Focus Magnifier

The magnification sequence of the FOCUS MAG button and assignable buttons assigned with a focus magnification function is set using the following items.

- Viewfinder screen: Monitoring > VF Display > VF Magnifier Ratio (page 76) in the full menu

- Monitor output: Monitoring > Monitor Display > Monitor Magnifier Ratio (page 73) in the full menu

When VF Magnifier Ratio is set to x2.0/x4.0, the magnification sequence each time you press an assignable button assigned with VF Focus Magnifier is x2.0 → x4.0 → x1.0 → x2.0. Similarly, when Monitor Magnifier Ratio is set to x2.0/x4.0, the magnification changes each time you press an assignable button assigned with Monitor Focus Magnifier.

### [Notes]

- In High Frame Rate mode (shooting frame rate of 61 fps or higher), the x2/x4 focus display image resolution decreases because cutout display from a 4K image is not supported.
- When Project Frame Rate is set to 59.94 or 50 and the Monitor output setting is 1920x1080P, Monitor Magnifier Ratio cannot be set to x4.0 or x2.0/x4.0. When the Monitor output setting is 1920x1080i, Monitor Focus Magnifier does not function.
- Monitor Focus Magnifier is also applied to the HDMI output if the HDMI output has the same output format as the Monitor output. You can check the setting using Monitoring > OSD Appearance > HDMI (page 72) in the full menu. The HDMI output is the same as the Monitor output if HDMI is set to "Same as Monitor".

## Highlight Clip Indicator

You can display clipped highlight areas in red in the Monitor output image and viewfinder output image. Press the assignable buttons (pages 43, 45) assigned with Monitor Highlight Clip Ind and VF Highlight Clip Ind to switch the highlight clip indicators on/off.

### [Note]

Highlight clip indicators do not function when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

## High Key / Low Key

You can check for blown-out highlights and blocked-out shadows in the Monitor output image and viewfinder output image.

Turn High Key on to differentiate areas of high luminance, making them easier to see, to check for blown-out highlights.

Turn Low Key on to differentiate areas of low luminance, making them easier to see, to check for blocked-out shadows.

Press assignable buttons 1 to 4 (page 45) assigned with Monitor High/Low Key and VF High/Low Key to switch the high key and low key settings.

### [Note]

High/Low key does not function when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

## False Color Display

You can display false color in the viewfinder by pressing the B/False Color button (DVF-EL200) or SPARE button (DVF-L700) on the viewfinder attached to the unit.

You can also display false color on the monitor output.

Display color	Signal level	
	S-Log3 (default)	S-Log2 (PMW-F55 reference)
Red	93.4% to 96.1%	105.5% to 109.5%
Yellow	91.3% to 93.4%	102.5% to 105.5%
Orange	87.7% to 90.6%	97.4% to 101.5%
Pink	54.3% to 58.0%	50.2% to 55.2%
Light pink	47.8% to 50.8% (18% gray + 1 stop)	41.5% to 45.4% (18% gray + 1 stop)
Cyan	43.8% to 46.5%	36.3% to 39.6%
Green	38.9% to 42.2% (18% gray)	30.4% to 34.4% (18% gray)
Light blue	24.6% to 34.4%	15.5% to 25.2%
Blue	3.5% to 5.6%	3.0% to 4.0%
Purple	-7.3% to 3.5%	-7.3% to 3.0%

- You can set whether to use the preset on/off setting and threshold of each false color in the viewfinder and monitor output, or to set colors manually using Monitoring > False Color (page 75).
- You can turn the false color function display in a viewfinder on/off by pressing an assignable button assigned with VF False Color.
- You can turn the false color function display on a monitor on/off by pressing an assignable button assigned with Monitor False Color.

### [Notes]

- On the DVF-L700, display is supported only when Gamma is set to S-Log2 for the video signal output in the viewfinder.
- The false color function does not operate when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

## Viewfinder Double Speed Scan Function

If the project frame rate is 23.98P, 24P, 25P, or 29.97P, the image may become blurred and hard to see due to low frame frequency when you shoot while swaying the unit to the right and the left.

In this case, you can decrease image blur and make it easier to see by activating the viewfinder double speed scan function.

To activate the function, set Monitoring > VF Function > Double Speed Scan (page 77) in the full menu to On.

### [Notes]

- When this function is activated, the shutter angle of the electronic shutter function is limited to 180 degrees or lower.
- This function is set to Off during variable speed shooting.
- This function is enabled for the following combinations of image size and project frame rate.
  - 3.8K 16:9 (23.98p, 24p, 25p, 29.97p)
  - 4K 17:9 (23.98p, 24p, 25p, 29.97p)
  - 3.8K 16:9 Surround (23.98p, 24p)
  - 4K 17:9 Surround (23.98p, 24p)
  - 4K 4:3 (23.98p, 24p)
  - 4K 2.39:1 (23.98p, 24p, 25p, 29.97p)

## User 3D LUT

You can load a CUBE file (\*.cube) for a 17-point or 33-point 3D LUT created using RAW Viewer or DaVinci Resolve (by Blackmagic Design Pty. Ltd.) (page 36).

Set Input Color Space to match the input color space of when the CUBE file was created.

If the file was created using S-Gamut3.Cine/SLog3, set Project category > Basic Setting > Input Color Space (page 66) in the menu to S-Gamut3.Cine/SLog3.

Save the User 3D LUT file in the following directory on the SD card.

PRIVATE\SONY\PRO\LUT\

## ART

You can import ART (Advanced Rendering Transform) files (\*.art) created using RAW Viewer into the camcorder (page 36).

An ART file is a Sony proprietary Look file created in a binary format. Using an ART file supports higher quality monitor output than importing a user 3D LUT into the unit.

Save the created ART file for the unit in the following directory on the SD card.

PRIVATE\SONY\PRO\CAMERA\MPC3610\

## ASC CDL

You can import ASC CDL (The American Society of Cinematographers Color Decision List) files (\*.cdl) created by external tools into the unit.

This allows you shoot with ASC CDL parameters applied to the Look.

Save the ASC CDL file in the following directory on the SD card.

PRIVATE\SONY\PRO\CDL\

# User Configuration Data

You can save/load full menu settings in internal memory and on SD cards. This allows you to quickly recall an appropriate set of menu settings for the current situation.

To save configuration data on an SD card, insert a writable SD card (page 26) into the SD card slot (page 12) before proceeding.

For details about the settings saved in each file, see "Items Saved in Files" (page 127).

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## All Files

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All-settings files are used to save/load the configuration data of all menus.

You can save up to 64 files on an SD card.

**[Note]**

Device specific data (shading, output levels, and other data that requires adjustment for the specific device) is not saved.

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## Scene Files

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Scene files are used to save/load adjustments to paint items for the purpose of shooting a particular scene. You can save up to five files in internal memory and up to 64 files on an SD card.

Scene files allow you to save the following types of data.

- Values set in the Paint menu
- Shutter, ND filter, Gain, Base ISO, Input Color Space, and NR settings
- White balance data

**[Note]**

Settings cannot be saved or loaded when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to Off in the full menu.

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## User Gamma

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You can save up to five user-defined user gamma files in internal memory.

**[Note]**

Cannot be saved when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to Off in the full menu.

# All Files

## Saving Configuration Data as an All File

- 1 Select Project > All File > Save SD Card (page 69) in the full menu.  
A screen for selecting an All file save destination appears.
- 2 Select a save destination by turning the MENU dial, then press the MENU dial.  
You can save files in rows with a File ID of "No File."  
Selecting a row with a specified File ID name will overwrite the selected file.  
The File ID is generated automatically, but you can modify it.
- 3 Select Execute on the confirmation screen by turning the MENU dial, then press the MENU dial.

### If an error message appears

One of the following error messages may appear during or after operation. In this case, the file is not saved.

Error message	Problem	Solution
File Access NG	No recordable SD card is inserted.	Insert a recordable SD card.

## Changing the File ID

- 1 Select Project > All File > File ID (page 69) in the full menu.  
A screen for editing the File ID appears.
- 2 Select characters and enter the File ID.
- 3 Select Done by turning the MENU dial, then press the MENU dial.  
The File ID is updated.

## Loading Configuration Data

- 1 Select Project > All File > Load SD Card (page 69) in the full menu.  
An All file list screen appears.
- 2 Select the file to load by turning the MENU dial, then press the MENU dial.  
A confirmation screen appears.
- 3 Select Execute by turning the MENU dial, then press the MENU dial.

### [Notes]

- When you load a file from an SD card, the data saved in internal memory is overwritten.
- Do not load a file on a device that is an older version than the device from which the file was saved. Doing so could cause a malfunction.
- The unit will reboot automatically after loading configuration data.

### If a file cannot be loaded

One of the following error messages may appear during or after operation. In this case, the file is not loaded.

Error message	Problem	Solution
File Access NG	<ul style="list-style-type: none"> <li>• File loading terminated abnormally</li> <li>• Data in the corresponding file on the SD card is corrupted</li> </ul>	<ul style="list-style-type: none"> <li>• Try loading again</li> <li>• Insert the SD card again</li> <li>• Save a valid file to the SD card</li> </ul>

### [Notes]

- A file saved by a unit with an AXS-R7 attached cannot be loaded into a unit without an AXS-R7 attached.
- A file saved by a unit with a software option installed cannot be loaded into a unit without the corresponding software option installed.
- To load a file saved by a unit using V3.0 or earlier, first set Technical > System Configuration > RM/RCP Paint Control (page 81) to Off in the full menu.

## Restoring All Current Settings to Default Values

- 1 Select Maintenance > Reset to Default (page 85) in the full menu.  
A confirmation screen appears.
- 2 Select Execute by turning the MENU dial, then press the MENU dial.

### [Note]

The unit will reboot automatically after executing.

# Scene Files

## Saving a Scene File in Internal Memory

- 1 Select Project > Scene File > Store Internal Memory (page 69) in the full menu.  
A scene file list screen appears.  
If the File ID is set to "Standard" destination, preconfigured standard settings are saved.
- 2 Select a save destination by turning the MENU dial, then press the MENU dial.  
The scene file is saved, overwriting any existing file, in the selected destination.
- 3 Select Execute on the confirmation screen by turning the MENU dial, then press the MENU dial.

## Saving a Scene File on an SD Card

- 1 Select Project > Scene File > Save SD Card (page 69) in the full menu.  
A screen for selecting a scene file save destination appears.
- 2 Select a save destination by turning the MENU dial, then press the MENU dial.  
You can save files in rows with a File ID of "No File."  
Selecting a row with a specified File ID name will overwrite the selected file.  
The File ID is generated automatically, but you can modify it.
- 3 Select Execute on the confirmation screen by turning the MENU dial, then press the MENU dial.

## Changing the File ID

- 1 Select Project > Scene File > File ID (page 69) in the full menu.  
A screen for editing the File ID appears.
- 2 Select characters and enter the File ID.
- 3 Select Done by turning the MENU dial, then press the MENU dial.  
The File ID is updated.

## Loading a Scene File from Internal Memory

- 1 Select Project > Scene File > Recall Internal Memory (page 69) in the full menu.  
A scene file list screen appears.
- 2 Select the file to load by turning the MENU dial, then press the MENU dial.  
A confirmation screen appears.
- 3 Select Execute by turning the MENU dial, then press the MENU dial.

## Loading a Scene File from an SD Card

- 1 Select Project > Scene File > Load SD Card (page 69) in the full menu.  
A scene file list screen appears.
- 2 Select the file to load by turning the MENU dial, then press the MENU dial.  
A confirmation screen appears.
- 3 Select Execute by turning the MENU dial, then press the MENU dial.

# User Gamma Files

## Using User Gamma Files Created with RAW Viewer V3.5 or Later

You can use user gamma files created with RAW Viewer V3.5 or later. Save the created files in the following directory on an SD card.  
PRIVATE\SONY\PRO\CAMERA\MPC3610  
For details about RAW Viewer V3.5 or later, contact your Sony dealer or a Sony service representative.

To perform load, check, reset, or other operations on user gamma files, set Technical > System Configuration > RM/RCP Paint Control (page 81) to On in the full menu to enable the paint functions.

## Loading a User Gamma File from an SD Card

- 1 Select Project > User Gamma > Load SD Card (page 69) in the full menu. A user gamma file list screen appears. You can select up to five files on the user gamma file list screen.

User Gamma : Load SD Card			
No.	Name	Date/Time	Comment
01	0234567890ABC	2019/12/10 10:33	0234567890
02	0234567890	2019/12/10 10:59	0234567890
03	0234567890ABCDE	2019/12/10 11:10	0234567890
04	0234567890ABCDE	2019/12/10 11:32	0234567890
05	0234567890	2019/12/10 12:33	0234567890

**[Note]**  
The five load operations are performed together. Files cannot be selected and loaded individually.

- 2 Press the MENU dial. A confirmation screen appears.
- 3 Select Execute by turning the MENU dial, then press the MENU dial. The five files are loaded into internal memory.

## Checking User Gamma Files Currently Stored in Internal Memory

Select Project > User Gamma > Current Settings (page 69) in the full menu to display a list of the user gamma files currently stored in internal memory.

User Gamma : Load SD Card			
No.	Name	Date/Time	Comment
01	0234567890ABC	2019/12/10 10:33	0234567890
02	0234567890	2019/12/10 10:59	0234567890
03	0234567890ABCDE	2019/12/10 11:10	0234567890
04	0234567890ABCDE	2019/12/10 11:32	0234567890
05	0234567890	2019/12/10 12:33	0234567890

**[Note]**  
Before loading user gamma files from an SD card, "709(800%)" is displayed under "Name" when Project > Basic Setting > Input Color Space (page 66) is set to Rec.709/User Gamma in the full menu. "HLG(Natural)" is displayed for settings other than Rec.709/User Gamma.

## Setting User Gamma Files Stored in Internal Memory

- 1 Set Project > Basic Setting > Input Color Space (page 66) to Rec.2020/User Gamma or Rec.709/User Gamma in the full menu.

**[Note]**  
Rec.2020/User Gamma and Rec.709/User Gamma can be selected only when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

- 2 Select one of User 1 to User 5 in Paint > Gamma > Gamma Select (page 79) in the full menu.

**[Note]**  
The User 1 to User 5 options in Gamma Select correspond to numbers 1 to 5 on the user gamma file list screen.

## Resetting User Gamma Files Stored in Internal Memory to Default State

- 1 Select Project > User Gamma > Reset (page 69) in the full menu. A gamma file number reset selection screen appears.
- 2 Turn the MENU dial to select the number of the gamma file to reset (1 to 5). To reset all gamma files, select All. A confirmation screen appears.
- 3 Select Execute by turning the MENU dial, then press the MENU dial.



# Connecting a Remote Control Unit

When an RM-B170 Remote Control Unit, RCP-1001/1501/3501 Remote Control Panel, or other control unit is connected, some functions can be controlled from that unit.

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## Connecting a Remote Control Unit

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Connect the camera connector of the control unit to the REMOTE connector (8-pin) of the unit using a remote control cable.

When you turn on the unit after making the connection, the unit enters remote control mode, enabling menu operations and shooting operations.

### [Notes]

- Do not connect or disconnect the remote control unit when the unit is on.
- A remote control cable is not supplied with the RCP-1001/1501/3501 Remote Control Panel.

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## Releasing Remote Control Mode

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Turn off the unit, and disconnect the remote control unit.

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## Setting the Paint Function

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Technical > System Configuration > RM/RCP Paint Control (page 81) must be set to On in the full menu to enable the paint function.

## Main Functions Controllable using the RCP-1001/1501/3501 or RM-B170/B750

### Table legend

The following indicate remote control support on the display.

Yes: Control supported

–: Control not supported

Item	Sub-item	Sub-item	Selection option	RCP-1001	RCP-1501/3501	RM-B170	RM-B750	
Shooting	FPS	Fixed/Variable Select	On/Off	–	Yes	Yes <sup>1)</sup>	Yes	
		FPS Select	1FPS to 120FPS	–	Yes	Yes <sup>1)</sup>	Yes	
	Shutter Select <sup>2)</sup>	Shutter ON/OFF	On/Off	–	Yes	Yes	Yes	
		ECS ON/OFF	On/Off	–	Yes	Yes	Yes	
		Shutter Speed	Values registered for Step. The following values can be displayed. 1/32 1/33 1/48 1/50 1/60 1/96 1/100 1/120 1/125 1/250 1/500 1/1000 1/2000 1/3000 1/4000 1/5000	–	Yes	Yes	Yes	
		ECS Frequency	–	–	Yes	Yes	Yes	
	ND	ND Position	1: (CLEAR)	1: (CLEAR)	Yes	Yes	Yes	Yes
			2: (0.3 density)	2: (0.3 density)				
			3: (0.6 density)	3: (0.6 density)				
			4: (0.9 density)	4: (0.9 density)				
5: (1.2 density)			5: (1.2 density)					
6: (1.5 density)			6: (1.5 density)					
Gain <sup>2)</sup>	Gain(Step)	–6dB/–3dB/0dB/3dB/6dB/9dB/12dB/15dB/18dB	–6dB/–3dB/0dB/3dB/6dB/9dB/12dB/15dB/18dB	Yes	Yes	Yes	Yes	

Item	Sub-item	Sub-item	Selection option	RCP-1001	RCP-1501/3501	RM-B170	RM-B750
	White Balance <sup>2)</sup>	Color Temp	2000K to 15000K <sup>3)</sup>	–	Yes	–	Yes
		Color Temp Balance (Tint equivalent)	–99 to ±0 to +99 <sup>4)</sup>	–	Yes	–	Yes
		R Gain	–99 to ±0 to +99	Yes	Yes	Yes	Yes
		B Gain	–99 to ±0 to +99	Yes	Yes	Yes	Yes
		Auto White Balance	–	Yes	Yes	Yes	Yes
Project	Scene File <sup>2)5)</sup>	–	–	–	Yes	–	Yes
	Standard <sup>6)</sup>	–	–	Yes	Yes	–	Yes
Paint <sup>2)</sup>	Switch Status	Gamma	On/Off	–	Yes	Yes <sup>1)</sup>	Yes
		Black Gamma <sup>7)</sup>	On/Off	–	Yes	Yes <sup>1)</sup>	Yes
		Matrix	On/Off	–	Yes	–	Yes
		Knee <sup>7)</sup>	On/Off	–	Yes	Yes <sup>1)</sup>	Yes
		White Clip <sup>7)</sup>	On/Off	–	Yes	–	Yes
		Detail	On/Off	–	Yes	–	Yes
		Flare	On/Off	–	Yes	Yes <sup>1)</sup>	Yes
		Test Saw <sup>8)</sup>	On/Off	–	Yes	Yes <sup>1)</sup>	Yes
	Black	Master Black	–99 to ±0 to +99	Yes	Yes	Yes	Yes
		R Black	–99 to ±0 to +99	Yes	Yes	Yes	Yes
		B Black	–99 to ±0 to +99	Yes	Yes	Yes	Yes
	Flare	Setting	On/Off	–	Yes	Yes <sup>1)</sup>	Yes
		Master Flare	–99 to ±0 to +99	–	Yes	Yes <sup>1)</sup>	–
		R Flare	–99 to ±0 to +99	–	Yes	–	Yes
		G Flare	–99 to ±0 to +99	–	Yes	–	Yes
		B Flare	–99 to ±0 to +99	–	Yes	–	Yes
	Gamma	Setting	On/Off	–	Yes	Yes <sup>1)</sup>	Yes
		Gamma Category (display only) <sup>9)</sup>	User	–	Yes	–	Yes
		Gamma Select	User 1/User 2/User 3/User 4/User 5	–	Yes	–	Yes
	Black Gamma <sup>7)</sup>	Setting	On/Off	–	Yes	Yes <sup>1)</sup>	Yes
		Range	Low/L.Mid/H.Mid	–	Yes	–	Yes
		Master Black Gamma	–99 to ±0 to +99	–	Yes	Yes <sup>1)</sup>	Yes
	Knee <sup>7)10)</sup>	Setting	On/Off	Yes	Yes	Yes	Yes
		Point	–99 to ±0 to +99	Yes	Yes	Yes	Yes
		Slope	–99 to ±0 to +99	Yes	Yes	–	Yes
	White Clip <sup>7)</sup>	Setting	On/Off	–	Yes	–	Yes
		Level	–99 to ±0 to +99	–	Yes	–	Yes

Item	Sub-item	Sub-item	Selection option	RCP-1001	RCP-1501/3501	RM-B170	RM-B750
	Detail	Setting	On/Off	–	Yes	–	Yes
		Level	–99 to ±0 to +99	–	Yes	–	Yes
		H/V Ratio	–99 to ±0 to +99	–	Yes	–	Yes
		Crispeneing	–99 to ±0 to +99	–	Yes	–	Yes
		Level Depend	On/Off	–	Yes	–	Yes
		Level Depend Level	–99 to ±0 to +99	–	Yes	–	Yes
		Frequency	–99 to ±0 to +99	–	Yes	–	Yes
		Knee Aperture	On/Off	–	Yes	–	Yes
		Knee Aperture Level	–99 to ±0 to +99	–	Yes	–	Yes
		Limit	–99 to ±0 to +99	–	Yes	–	Yes
		White Limit	–99 to ±0 to +99	–	Yes	–	Yes
		Black Limit	–99 to ±0 to +99	–	Yes	–	Yes
		Matrix	Setting	On/Off	–	Yes	–
	User Matrix		On/Off	–	Yes	–	Yes
	User Matrix R-G		–99 to ±0 to +99	–	Yes	–	Yes
	User Matrix R-B		–99 to ±0 to +99	–	Yes	–	Yes
	User Matrix G-R		–99 to ±0 to +99	–	Yes	–	Yes
	User Matrix G-B		–99 to ±0 to +99	–	Yes	–	Yes
	User Matrix B-R		–99 to ±0 to +99	–	Yes	–	Yes
	User Matrix B-G		–99 to ±0 to +99	–	Yes	–	Yes
	Multi Matrix	Setting	On/Off	–	Yes	–	Yes
		Area Indication	On/Off	–	Yes	–	Yes
		Reset	Execute/Cancel	–	Yes	–	Yes
		Axis	B/B+/MG–/MG+/R/R+/YL–/YL+/G–/G+/CY/ CY+/B–	–	Yes	–	Yes
		Hue	–99 to ±0 to +99	–	Yes	–	Yes
		Saturation	–99 to ±0 to +99	–	Yes	–	Yes
Technical	Test Signals	Color Bars On/Off	On/Off	Yes	Yes	Yes	Yes
		Test Saw <sup>®)</sup>	On/Off	–	Yes	Yes <sup>1)</sup>	Yes
Rec	–	–	–	–	–	Yes	Yes
Play	–	–	–	–	–	Yes	Yes
Stop	–	–	–	–	–	Yes	Yes
F.Rev	–	–	–	–	–	Yes	Yes
F.Fwd	–	–	–	–	–	Yes	Yes
Rec Review	–	–	–	–	–	Yes	Yes
Next	–	–	–	–	–	Yes	–
Prev.	–	–	–	–	–	Yes	–
White Mode <sup>2)</sup>	Preset ON/OFF	–	On/Off	–	–	Yes	Yes

Item	Sub-item	Sub-item	Selection option	RCP-1001	RCP-1501/3501	RM-B170	RM-B750
Iris	Iris Level	–	(Control range of target lens)	Yes	Yes	Yes	Yes
	Close	–	On/Off	Yes	Yes	–	Yes
Zoom <sup>11)</sup>	Remote	–	On/Off	–	Yes <sup>1)</sup>	Yes <sup>1)</sup>	–
	Speed	–	–	–	–	–	–
	Tele to Wide	–	–	–	Yes <sup>1)</sup>	Yes <sup>1)</sup>	–
	Zoom Value[%]	–	–	–	Yes <sup>1)</sup>	Yes <sup>1)</sup>	–
	Focal Length[mm]	–	–	–	Yes <sup>1)</sup>	Yes <sup>1)</sup>	–
Focus <sup>11)</sup>	Remote	–	On/Off	–	Yes <sup>1)</sup>	Yes <sup>1)</sup>	–
	Focus Position	–	–	–	Yes <sup>1)</sup>	Yes <sup>1)</sup>	–
	Focus Value[%]	–	–	–	Yes <sup>1)</sup>	Yes <sup>1)</sup>	–
	Focus Length[m]	–	–	–	Yes <sup>1)</sup>	Yes <sup>1)</sup>	–
Call	–	–	–	Yes	Yes	Yes	Yes

<sup>1)</sup> Controllable when assigned to operation block of controller.

<sup>2)</sup> Controllable only when Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu.

<sup>3)</sup> Since Color Temp is clipped at 2000K and 15000K during R/B Gain operation, it may not be possible to display the correct Color Temp value for the R/B Gain value.

<sup>4)</sup> Since Color Temp Balance is clipped at  $\pm 99$ , it may not be possible to display the correct Color Temp Balance value for the R/B Gain value.

<sup>5)</sup> Scene files 1 to 5 can be selected or deselected only after they have been loaded into the unit.

<sup>6)</sup> Allows you to restore the settings of the unit to standard state from the controller without any scene files loaded.

<sup>7)</sup> Configurable only when Project > Basic Setting > Input Color Space (page 66) is set to HLG(Natural), HLG(Live), Rec.2020/User Gamma, or Rec.709/User Gamma in the full menu.

<sup>8)</sup> The test signal cannot be switched on/of during auto white balance execution.

<sup>9)</sup> May not be displayed depending on the controller model and version.

<sup>10)</sup> The normal Knee function of the unit controls the high-luminance knee equivalent of HDR Knee.

<sup>11)</sup> The zoom and focus drive instructions from a remote control unit are disabled when an E-mount lens is attached.

# Connecting External Monitors and Recording Devices

To display the recording/playback image on an external monitor, select the output signal and use an appropriate cable for the monitor to be connected.

The output signal from the unit can be recorded by connecting a recording device, such as a VTR. The same status information and menus can be displayed on the external monitor as those on the viewfinder screen. Set the content to display, according to the output signal for the monitor, using the Monitoring menu (page 71).

## [Note]

When FPS is set to Variable, horizontal image shift may occur with 4K output only. This phenomenon may be noticeable for faster frame rates (FPS). However, this does not affect the recorded image, and the playback image is displayed correctly.

## SDI OUT Connector (BNC Type)

Set the output format using the Monitoring menu (page 71).

Use a commercially available 75-ohm coaxial cable for connection.

## [Note]

Check that the ground connection between the unit and external device is securely grounded before turning the power on. (We recommend turning on the unit and external device after connecting a 75-ohm coaxial cable.)  
When connecting an external device to the unit while the unit is turned on, connect to the unit after connecting a 75-ohm coaxial cable to the external device.

## To start synchronized recording on an external device

With SDI signal output selected, synchronized recording is possible by feeding a REC trigger signal to an external recording device connected to the SDI OUT connector. Enable synchronized recording by setting Technical > System Configuration > SDI Rec Remote Trigger

(page 81) in the menu to HD SDI Remote I/F or Parallel Rec.

## [Note]

When a connected external device does not support a REC trigger signal, the device cannot be operated.

## MONITOR OUT Connector (BNC Type)

Outputs an HD SDI signal.

Set the output format using the Monitoring menu (page 71).

Use a commercially available 75-ohm coaxial cable for connection.

## [Note]

Audio and timecode are not superimposed on this output.

## HDMI OUT Connector (Type A Connector)

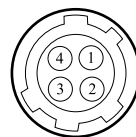
Set the output format using the Monitoring menu (page 71).

Use a commercially available HDMI cable for connection.

If the output format has the same resolution as the MONITOR OUT connector signal, the same video signal is output.

## 12V OUT Connector (DC OUT 12V, Hirose 4-pin)

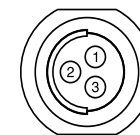
Supplies 12 V DC power to an accessory when the power switch is set to ON. You can output a REC Tally signal and input a REC Trigger signal through the 12V OUT connector.



No.	Signal	I/O	Specification
1	UNREG GND	–	GND for UNREG
2	REC TALLY	OUT	Open-collector output (Max. 50 mA) Low: REC
3	REC TRIGGER	IN	Open or +5 V DC: Normal GND: Active (REC)
4	UNREG +12 V OUT	OUT	+11 V to 17 V DC output <b>11 V to 17 V input</b> Output voltage: Same as the input voltage Maximum output current: 1.0 A <b>22 V to 32 V input</b> Output voltage : 15 V Maximum output current: 0.8 A

## 24V OUT Connector (DC OUT 24 V, Fischer 3-pin)

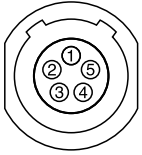
Supplies 24 V DC power to an accessory when the power switch is set to ON. You can input a REC Trigger signal through the 24V OUT connector.



No.	Signal	Specification
1	GND	
2	24V-AUX	<b>11 V to 17 V input</b> Output voltage : 24 V Maximum output current: 1.0 A <b>22 V to 32 V input</b> Output voltage: Same as the input voltage Maximum output current: 2.0 A
3	REC TRIGGER	Open or +5 V DC: Normal GND: Active (REC)

## AUX Connector (LEMO 5-pin)

Outputs the timecode signal.



No.	Signal
1	Factory Use
2	NC
3	-
4	TC OUT
5	GND

# External Synchronization

When shooting with multiple units, synchronized recording can be performed using a specific reference signal to synchronize the timecode among all the units.

## Synchronizing the Phase of the Video Signal (Genlock)

Genlock operation is enabled by supplying one of the following reference signals to the GENLOCK IN connector (page 11) of the unit.

- HDSDI 1.5G digital (Interlaced or PsF)
- HD Y analog
- SD VBS analog

Set the genlock input signal using Technical > Genlock > Input Source (page 84) in the full menu.

You can also check the genlock status using Technical > Genlock > Reference Lock Type (page 84) in the full menu, the Home screen of the sub display (page 32), and the genlock status indicator (page 13).

Valid input reference signals vary depending on the project frame rate setting.

Project frame rate	Valid reference signal
23.98P	1920×1080 47.95i (23.98PsF)
24P	1920×1080 48i (24PsF)
25P	1920×1080 50i 720×576 50i
29.97P	1920×1080 59.94i 720×486 59.94i
47.952	1920×1080 47.95i (23.98PsF)
50i	1920×1080 50i 720×576 50i
50P	1920×1080 50i 720×576 50i
59.94i	1920×1080 59.94i 720×486 59.94i

Project frame rate	Valid reference signal
59.94P	1920×1080 59.94i 720×486 59.94i

You can check the genlock status using Technical > Genlock > Reference Lock Type (page 84) in the menu.

### [Notes]

- If the reference signal is unstable, genlock is not possible.
- The subcarrier is not synchronized.

## Synchronizing the Timecode with Another Device

Set the unit that supplies the timecode to a mode in which the timecode output keeps advancing (Free Run mode).

- 1 Set TC/Media > Timecode > Mode (page 70) in the menu to Preset F-Run (Ext-Lk).
- 2 Supply an HD or SD reference video signal to the GENLOCK IN connector (page 11) and a reference timecode synchronized with that signal to the TC IN (page 11) connector.

The built-in timecode generator of your unit locks to the reference timecode, and the message "Ext-Lk" is displayed on the Home screen of the sub display.

Once about ten seconds have elapsed after the timecode locks, the external lock state is maintained even if the external timecode source is disconnected.

### [Notes]

- Check that the reference timecode and the reference video signal are in a phase relationship that complies with the SMPTE timecode standards.
- When you finish the above procedure, the timecode is immediately synchronized with the external timecode, and the time data indication will show the value of the external timecode. However, wait for a few seconds until the timecode generator stabilizes before recording.
- If the frequency of the reference video signal and the frame frequency are not the same, lock cannot be acquired, and the unit will not operate properly. If this occurs, the timecode will not acquire successful lock with the external timecode.
- When the connection is removed, the timecode advance may shift one frame per hour with respect to the reference timecode.

## To release external lock

Change the TC/Media > Timecode > Mode (page 70) setting in the menu.



# Usage Precautions

Read this section in conjunction with the information provided in the supplied "Before Using This Unit" document.

## Use and Storage

### Do not subject the unit to severe shock

The internal mechanism may be damaged or the body warped.

### Do not cover the unit while operating

Putting a cloth, for example, over the unit can cause excessive internal heat build-up.

### After use

Always set the power switch to OFF.

### Before storing the unit for a long period

Remove the battery pack.

### Do not leave the unit with the lens facing the sun

Direct sunlight can enter through the lens, be focused in the unit, and cause fire.

## Shipping

- Remove the memory cards before transporting the unit.
- If sending the unit by truck, ship, air or other transportation service, pack it in the shipping carton of the unit.

## Care of the Unit

If the body of the unit is dirty, clean it with a soft, dry cloth. In extreme cases, use a cloth moistened in a little neutral detergent, then wipe dry. Do not use organic solvents, such as alcohol or thinners, as these may cause discoloration or other damage to the finish of the unit. Refrain from cleaning with high air pressure equipment, such as an air duster, as these may damage optical components.

### In the event of operating problems

If you should experience problems with the unit, contact your Sony dealer.

## Periodic Replacement of Fan and Battery

The fan and battery are consumable parts that will need periodic replacement.

When operating at room temperature, a normal replacement cycle will be about 5 years. However, this replacement cycle represents only a general guideline and does not imply that the life expectancy of these parts is guaranteed. For details on parts replacement, contact your dealer.

## Life Expectancy of the Electrolytic Capacitor

The life expectancy of the electrolytic capacitor is about 5 years under normal operating temperatures and normal usage (8 hours per day; 25 days per month).

If usage exceeds the above normal usage frequency, the life expectancy may be reduced correspondingly.

## Note about the Battery Terminal

The battery terminal of this unit (the connector for battery packs and AC adaptors) is a consumable part.

Power may not be supplied to the unit properly if the pins of the battery terminal are bent or deformed by shock or vibrations, or if they become corroded due to prolonged outdoor use. Periodic inspections are recommended to keep the unit working properly and to prolong its usable lifetime. Contact a Sony service or sales representative for more information about inspections.

## Use and Storage Locations

Store in a level, ventilated place.

Avoid using or storing the unit in the following places.

- In excessive heat or cold (operating temperature range: 0 °C to 40 °C (32 °F to 104 °F)) Remember that in summer in warm climates the temperature inside a car with the windows closed can easily exceed 50 °C (122 °F).
- In damp or dusty locations
- Locations where the unit may be exposed to rain
- Locations subject to violent vibration
- Near strong magnetic fields
- Close to radio or TV transmitters producing strong electromagnetic fields.
- In direct sunlight or close to heaters for extended periods

## To prevent electromagnetic interference from portable communications devices

The use of portable telephones and other communications devices near this unit can result in malfunctions and interference with audio and video signals.

It is recommended that the portable communications devices near this unit be powered off.

## Note on laser beams

Laser beams may damage the CMOS image sensor. If you shoot a scene that includes a laser beam, be careful not to let the laser beam be directed into the lens of the unit. Specifically, high-power laser beams from medical devices or other devices may cause damage due to reflected light and scattered light.

## About the Screens

- Do not leave the screens facing direct sunlight, as this may damage the screens.
- Do not press/swipe the screens forcefully, or leave objects on the screens, as it may cause a malfunction, such as picture irregularity, etc.
- The screens may become warm in use. This is not a malfunction.

## LCD Panels

The LCD panel fitted to this unit is manufactured with high precision technology, giving a functioning pixel ratio of at least 99.99%. Thus a very small proportion of pixels may be "stuck", either always off (black), always on (red, green, or

blue), or flashing. In addition, over a long period of use, because of the physical characteristics of the liquid crystal display, such “stuck” pixels may appear spontaneously.

These problems are not a malfunction.

Note that any such problems have no effect on recorded data.

## OLED Panels

The OLED panel fitted to this unit is manufactured with high precision technology, giving a functioning pixel ratio of at least 99.99%. Thus a very small proportion of pixels may be “stuck”, either always off (black), always on, or flashing. In addition, over a long period of use, because of the physical characteristics of the organic light-emitting diode, such “stuck” pixels may appear spontaneously. These problems are not a malfunction. Note that any such problems have no effect on recorded data.

Due to the characteristics of the material used in the OLED panel, permanent burn-in or reduction in brightness may occur.

These problems are not a malfunction.

## On Condensation

If the unit is suddenly taken from a cold to a warm location, or if ambient temperature suddenly rises, moisture may form on the outer surface of the unit and/or inside of the unit. This is known as condensation. If condensation occurs, turn off the unit and wait until the condensation clears before operating the unit. Operating the unit while condensation is present may damage the unit.

## Phenomena Specific to CMOS Image Sensors

The following phenomena that may appear in images are specific to CMOS (Complementary Metal Oxide Semiconductor) image sensors. They do not indicate malfunctions.

### White flecks

Although the CMOS image sensors are produced with high-precision technologies, fine white flecks may be generated on the screen in rare cases, caused by cosmic rays, etc. This is related to the principle of image sensors and is not a malfunction.

The white flecks especially tend to be seen in the following cases.

- When operating at high environmental temperatures

### Aliasing

When fine patterns, stripes, or lines are shot, they may appear jagged or flicker.

### Focal plane

Owing to the characteristics of the pickup elements (CMOS sensors) for reading video signals, subjects that quickly move across the screen may appear slightly skewed.

### Flashbanding

The luminance at the top and bottom of the screen may change when shooting a flashlight beam or a light source that quickly flashes.

## Flicker

If recording is made under lighting produced by discharge tubes, such as fluorescent, sodium, or mercury-vapor lamps, the screen may flicker, colors may vary, or horizontal stripes may appear distorted.

The flicker can be reduced using the flicker reduction function of the unit (page 66).

## Notes on the Display

- Pictures on the viewfinder screen may be distorted by the following operations.
  - Changing the video format
- When you change the line of sight in the viewfinder, you may see primary colors red, green, and blue, but this is not a defect of the unit. These primary colors are not recorded on any recording media.

## Fragmentation

If pictures cannot be recorded/reproduced properly, try formatting the recording medium. While repeating picture recording/playback with a certain recording media for an extended period, files in the media may be fragmented, disabling proper recording/storage. In such a case, make a backup of clips in the media then perform formatting of the media using TC/Media > Format Media (page 70) in the menu.

## Output Voltages of the Unit

The total output power that can be supplied to peripheral devices from the unit varies depending on the input voltage to the unit and the state of the connected accessories. The maximum output capacity ratings of the following connectors that can supply power may not be achieved depending on the conditions.

**LENS connector: 1 A max.**

**12V OUT connector (4-pin):**

0.8 A max. (Input voltage: 22 V to 32 V)

1 A max. (Input voltage: 11 V to 17 V)

**24V OUT connector (3-pin):**

2 A max. (Input voltage: 22 V to 32 V)

1 A max. (Input voltage: 11 V to 17 V)

The power delivery rating available for accessories (AXS-R7, DVF-EL200, and CBK-3610XS) and peripheral devices is limited depending on the input voltage to the unit.

Voltage of power supply to the unit: X [V]

Total power rating of peripheral devices: Y [W]

Power consumption of the unit: Approx. 60 W

① Power consumption of the AXS-R7: Approx. 24 W

② Power consumption of the DVF-EL200: Approx. 2.5 W

③ Power consumption of the CBK-3610XS: Approx. 3.9 W

$$Y [W] = X [V] \times 9.0 [A]^{1)} - (60 + \textcircled{1} + \textcircled{2} + \textcircled{3})^{2)} [W]$$

When supplying power to the above attached accessories and peripheral devices, make sure that the value Y given by the equation above does not become negative.

(Note that the equation does not apply if the calculated result Y exceeds the sum of the maximum allowable output power of each power output connector.)

<sup>1)</sup> 6.0 [A] when using the AC-DN10A.

- <sup>2)</sup> When using an AC-DN10A, do not use units ① and ③ at the same time. Depending on the usage environment, the power supply rating may be exceeded.

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## Notes on Security

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- SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND RESULTING FROM A FAILURE TO IMPLEMENT PROPER SECURITY MEASURES ON TRANSMISSION DEVICES, UNAVOIDABLE DATA LEAKS RESULTING FROM TRANSMISSION SPECIFICATIONS, OR SECURITY PROBLEMS OF ANY KIND.
- Depending on the operating environment, unauthorized third parties on the network may be able to access the unit. When connecting the unit to the network, be sure to confirm that the network is protected securely.
- From a safety standpoint, when using the unit connected with the network, it is strongly recommended to access the Control window via a Web browser and change the access limitation settings from the factory preset values (page 82).  
Changing the password regularly is also recommended.
- Do not browse any other website in the Web browser while making settings or after making settings. Since the login status remains in the Web browser, close the Web browser when you complete the settings to prevent unauthorized third parties from using the unit or harmful programs from running.

# Recording Formats and Output Signals

## SDI OUT Connector Output Formats

The serial digital signal from an SDI OUT connector is output according to the Project category and Monitoring category settings in the menu.

For details about Project category settings combinations, see "Recording Format Settings" (page 53).

You can set the 3G SDI output format to Level A or Level B using Technical > System Configuration > 3G SDI 1/2/3/4 Output (page 81) in the full menu.

Default values are shown underlined and in **bold** text.

Project			Monitoring > Output Format		Output format			
Project Frame Rate	Imager Mode	SxS Rec Format	SDI 1/2	SDI 3/4	SDI 1	SDI 2	SDI 3	SDI 4
59.94/50	6K 3:2/ 6K 1.85:1/ 6K 17:9/ 6K 2.39:1/ 4K 4:3/ 4K 17:9/ 4K 2.39:1 <sup>1)</sup>	<u>XAVC-I 4K Class300/</u> Rec Off	4096x2160P 12G	–	4096x2160P YPbPr 12G	4096x2160P YPbPr 12G	No output	No output
			4096x2160P Square	4096x2160P Square	4096x2160P YPbPr 3G			
			4096x2160P 2SI	4096x2160P 2SI	4096x2160P YPbPr 3G			
			2048x1080P	1920x1080P	2048x1080P YPbPr 3G	2048x1080P YPbPr 3G	1920x1080P YPbPr 3G	1920x1080P YPbPr 3G
				<u>1920x1080i</u>			1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G
			1920x1080P	1920x1080P	1920x1080P YPbPr 3G	1920x1080P YPbPr 3G	1920x1080P YPbPr 3G	1920x1080P YPbPr 3G
				<u>1920x1080i</u>			1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G
				<u>1920x1080i</u>	1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G
				<u>1920x1080i</u>			1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G
				<u>1920x1080i</u>			1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G
5.7K 16:9/ 3.8K 16:9	<u>XAVC-I QFHD</u> <u>Class300/</u> Rec Off	3840x2160P 12G	–	3840x2160P YPbPr 12G	3840x2160P YPbPr 12G	No output	No output	
		3840x2160P Square	3840x2160P Square	3840x2160P YPbPr 3G				
		3840x2160P 2SI	3840x2160P 2SI	3840x2160P YPbPr 3G				
		1920x1080P	1920x1080P	1920x1080P YPbPr 3G	1920x1080P YPbPr 3G	1920x1080P YPbPr 3G	1920x1080P YPbPr 3G	
			<u>1920x1080i</u>			1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G	
			<u>1920x1080i</u>	1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G	
			<u>1920x1080i</u>			1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G	
			<u>1920x1080i</u>			1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G	
			<u>1920x1080i</u>			1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G	
			<u>1920x1080i</u>			1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G	
6K 3:2/ 6K 1.85:1/ 6K 17:9/ 6K 2.39:1/ 5.7K 16:9/ 4K 4:3/ 4K 6:5/ 4K 17:9/ 3.8K 16:9	ProRes 422 HQ HD P/ ProRes 422 HD P/ ProRes 422 Proxy HD P MPEG 1920x1080i/ ProRes 422 HQ HD i/ ProRes 422 HD i/ ProRes 422 Proxy HD i			1920x1080P				
		1920x1080P		<u>1920x1080i</u>	1920x1080P YPbPr 3G	1920x1080P YPbPr 3G	1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G
							1920x1080P YPbPr 3G	1920x1080P YPbPr 3G
							1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G
		1920x1080i	1920x1080i	1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G	1920x1080i YPbPr 1.5G	

Project			Monitoring > Output Format		Output format			
Project Frame Rate	Imager Mode	AXS Rec Format	SDI 1/2	SDI 3/4	SDI 1	SDI 2	SDI 3	SDI 4
47.95	6K 3:2/ 6K 1.85:1/ 6K 17:9/ 6K 2.39:1/ 4K 4:3/ 4K 6:5/ 4K 17:9/ 4K 2.39:1	RAW SQ/ X-OCN XT/ X-OCN ST/ X-OCN LT/ Rec Off	4096x2160P Square	4096x2160P Square	4096x2160P YPbPr 3G			
			4096x2160P 2SI	4096x2160P 2SI	4096x2160P YPbPr 3G			
			2048x1080P	<a href="#">1920x1080P</a>	2048x1080P YPbPr 3G		1920x1080P YPbPr 1.5G	
			<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G		1920x1080P YPbPr 1.5G	
Project			Monitoring > Output Format		Output format			
Project Frame Rate	Imager Mode	SxS Rec Format	SDI 1/2	SDI 3/4	SDI 1	SDI 2	SDI 3	SDI 4
29.97/25	6K 3:2/ 6K 1.85:1/ 6K 17:9/ 6K 2.39:1/ 5.7K 16:9 <sup>2)</sup> / 4K 6:5/ 4K 4:3/ 4K 17:9/ 4K 2.39:1 <sup>1)</sup>	XAVC-I 4K Class480/ <a href="#">XAVC-I 4K Class300</a> / Rec Off	4096x2160P 6G	–	4096x2160P YPbPr 6G	4096x2160P YPbPr 6G	No output	No output
			4096x2160P 2SI	–	4096x2160P YPbPr 3G		No output	No output
			4096x2160P Square	4096x2160P Square	4096x2160P YPbPr 1.5G			
			2048x1080PsF	1920x1080P	2048x1080PsF YPbPr 1.5G	2048x1080PsF YPbPr 1.5G	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G
			<a href="#">1920x1080PsF</a>				1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G
			1920x1080P	1920x1080P	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G
			<a href="#">1920x1080PsF</a>	1920x1080PsF	1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G
	5.7K 16:9 <sup>3)</sup> / 3.8K 16:9	<a href="#">XAVC-I QFHD Class480</a> / <a href="#">XAVC-I QFHD Class300</a> /Rec Off	3840x2160P 6G	–	3840x2160P YPbPr 6G	3840x2160P YPbPr 6G	No output	No output
			3840x2160P 2SI	–	3840x2160P YPbPr 3G		No output	No output
			3840x2160P Square	3840x2160P Square	3840x2160P YPbPr 1.5G			
			1920x1080P	1920x1080P	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G
			<a href="#">1920x1080PsF</a>	1920x1080PsF	1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G
	6K 3:2/ 6K 1.85:1/ 6K 17:9/ 6K 2.39:1/ 5.7K 16:9/ 4K 6:5/ 4K 4:3/ 4K 17:9/ 3.8K 16:9	MPEG 1920x1080P/ ProRes 422 HQ HD P/ ProRes 422 HD P/ ProRes 422 Proxy HD P ProRes 4444 HD P <sup>4)</sup>	1920x1080P	1920x1080P	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G
			<a href="#">1920x1080PsF</a>	1920x1080PsF	1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G
				1920x1080P	1920x1080P RGB 3G	1920x1080P RGB 3G	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G
			<a href="#">1920x1080P RGB</a>	<a href="#">1920x1080PsF</a>			1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G

Project			Monitoring > Output Format		Output format				
Project Frame Rate	Imager Mode	SxS Rec Format	SDI 1/2	SDI 3/4	SDI 1	SDI 2	SDI 3	SDI 4	
24	6K 3:2/ 6K 1.85:1/ 6K 17:9/ 6K 2.39:1/ 4K 6:5/ 4K 4:3/ 4K 17:9/ 4K 2.39:1 <sup>1)</sup>	XAVC-I 4K Class480/ <a href="#">XAVC-I 4K Class300/</a> Rec Off	4096x2160P 6G	–	4096x2160P YPbPr 6G	4096x2160P YPbPr 6G	No output	No output	
			4096x2160P 2SI	–	4096x2160P YPbPr 3G		No output	No output	
			4096x2160P Square	4096x2160P Square	4096x2160P YPbPr 1.5G				
			2048x1080P	<a href="#">1920x1080P</a>	2048x1080PsF YPbPr 1.5G	2048x1080PsF YPbPr 1.5G	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G	
			1920x1080P	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G	
			<a href="#">1920x1080PsF</a>		1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G			
			6K 3:2/ 6K 1.85:1/ 6K 17:9/ 6K 2.39:1/ 5.7K 16:9/ 4K 6:5/ 4K 4:3/ 4K 17:9/ 3.8K 16:9	ProRes 422 HQ HD P/ ProRes 422 HD P/ ProRes 422 Proxy HD P	1920x1080P	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G
					<a href="#">1920x1080PsF</a>	1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G		
				ProRes 4444 HD P <sup>4)</sup>	<a href="#">1920x1080P RGB</a>	<a href="#">1920x1080P</a>	1920x1080P RGB 3G	1920x1080P RGB 3G	1920x1080P YPbPr 1.5G
					<a href="#">1920x1080P RGB</a>	<a href="#">1920x1080P</a>	1920x1080P RGB 3G	1920x1080P RGB 3G	1920x1080P YPbPr 1.5G
				<a href="#">Rec Off</a>	3840x2160P 6G	–	3840x2160P YPbPr 6G	3840x2160P YPbPr 6G	No output
					3840x2160P Square	3840x2160P Square	3840x2160P YPbPr 1.5G		
					3840x2160P 2SI	–	3840x2160P YPbPr 3G	3840x2160P YPbPr 3G	No output
					1920x1080P	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G	1920x1080P YPbPr 1.5G
				<a href="#">1920x1080PsF</a>		1920x1080PsF YPbPr 1.5G	1920x1080PsF YPbPr 1.5G		



## MONITOR OUT Connector/HDMI OUT Connector Output Formats

The digital signal from the MONITOR OUT and HDMI OUT connectors is output according to the Project category and Monitoring category settings in the menu. For details about Project category settings combinations, see "Recording Format Settings" (page 53).

Default values are shown underlined and in **bold** text.

Project			Monitoring > Output Format				Output format			
Project Frame Rate	Imager Mode	SxS Rec Format	SDI 1/2	SDI 3/4	Monitor	HDMI	Monitor Out	HDMI		
59.94/50	6K 3:2/ 6K 1.85:1/ 6K 17:9/ 6K 2.39:1/ 4K 4:3/ 4K 6:5/ 4K 17:9/ 4K 2.39:1	<u>XAVC-I 4K Class300/</u> Rec Off	4096×2160P 12G	-	1920×1080P Level A	4096×2160P	1920×1080P YPbPr 3G Level A	4096×2160P		
					<b><u>1920×1080P</u></b>	1920×1080P				
					<b><u>1920×1080i</u></b>	4096×2160P	1920×1080i YPbPr 1.5G	4096×2160P		
					<b><u>1920×1080i</u></b>	1920×1080P				
					1920×1080P Level A	4096×2160P	1920×1080P YPbPr 3G Level A	4096×2160P		
					<b><u>1920×1080i</u></b>	4096×2160P				
			4096×2160P 2SI	4096×2160P 2SI	1920×1080P Level A	1920×1080P	1920×1080P YPbPr 3G Level A	1920×1080P		
					<b><u>1920×1080i</u></b>	1920×1080P				
					1920×1080P Level A	1920×1080P	1920×1080i YPbPr 1.5G	1920×1080P		
					<b><u>1920×1080i</u></b>	1920×1080P				
					4096×2160P Square	4096×2160P Square	1920×1080P Level A	1920×1080P	1920×1080P YPbPr 3G Level A	1920×1080P
					<b><u>1920×1080i</u></b>	1920×1080P				
2048×1080P	1920×1080P	1920×1080P Level A	1920×1080P	1920×1080P YPbPr 3G Level A	1920×1080P					
<b><u>1920×1080i</u></b>	1920×1080P									
1920×1080P	1920×1080P	1920×1080P Level A	1920×1080P	1920×1080P YPbPr 3G Level A	1920×1080P					
<b><u>1920×1080i</u></b>	1920×1080P									
<b><u>1920×1080i</u></b>	<b><u>1920×1080i</u></b>	<b><u>1920×1080i</u></b>	<b><u>1920×1080i</u></b>	1920×1080i YPbPr 1.5G	1920×1080i					



Project			Monitoring > Output Format				Output format		
Project Frame Rate	Imager Mode	SxS Rec Format	SDI 1/2	SDI 3/4	Monitor	HDMI	Monitor Out	HDMI	
	5.7K 16:9/ 3.8K 16:9	<a href="#">XAVC-I QFHD Class300/</a> Rec Off	3840x2160P 12G	-	1920x1080P Level A	3840x2160P	1920x1080P YPbPr 3G Level A	3840x2160P	
						<a href="#">1920x1080P</a>		1920x1080P	
					<a href="#">1920x1080i</a>	3840x2160P	1920x1080i YPbPr 1.5G	3840x2160P	
						<a href="#">1920x1080i</a>		1920x1080i	
				3840x2160P 2SI	3840x2160P 2SI	1920x1080P Level A	3840x2160P	1920x1080P YPbPr 3G Level A	3840x2160P
						<a href="#">1920x1080P</a>	3840x2160P	1920x1080P	1920x1080P
						<a href="#">1920x1080i</a>	3840x2160P	1920x1080i YPbPr 1.5G	3840x2160P
						<a href="#">1920x1080i</a>	3840x2160P	1920x1080i	1920x1080i
				3840x2160P Square	3840x2160P Square	1920x1080P Level A	1920x1080P	1920x1080P YPbPr 3G Level A	1920x1080P
						<a href="#">1920x1080P</a>	1920x1080P	1920x1080P YPbPr 1.5G	1920x1080P
						<a href="#">1920x1080i</a>	1920x1080P	1920x1080i YPbPr 1.5G	1920x1080i
						<a href="#">1920x1080i</a>	1920x1080P	1920x1080i YPbPr 1.5G	1920x1080i
6K 3:2/ 6K 1.85:1/ 6K 17:9/ 6K 2.39:1/ 5.7K 16:9/ 4K 4:3/ 4K 6:5/ 4K 17:9/ 3.8K 16:9	ProRes 422 HQ HD P/ ProRes 422 HD P/ ProRes 422 Proxy HD P	1920x1080P		1920x1080P	1920x1080P Level A	1920x1080P	1920x1080P YPbPr 3G Level A	1920x1080P	
						<a href="#">1920x1080i</a>	<a href="#">1920x1080i</a>	1920x1080i YPbPr 1.5G	1920x1080i
		ProRes 422 HQ HD i/ ProRes 422 HD i/ ProRes 422 Proxy HD i	1920x1080i	1920x1080i	1920x1080i	1920x1080i	1920x1080i	1920x1080i YPbPr 1.5G	1920x1080i
		MPEG 1920x1080i	1920x1080i	1920x1080i	1920x1080i	1920x1080i	1920x1080i YPbPr 1.5G	1920x1080i	
						-	720x480P <sup>1)2)</sup>	No output	720x480P
							720x576P <sup>1)3)</sup>	No output	720x576P

Project			Monitoring > Output Format				Output format	
Project Frame Rate	Imager Mode	AXS Rec Format	SDI 1/2	SDI 3/4	Monitor	HDMI	Monitor Out	HDMI
47.95	6K 3:2/	RAW SQ/	4096x2160P Square	4096x2160P Square	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P
	6K 1.85:1/	X-OCN XT/	4096x2160P 2SI	4096x2160P 2SI				
	6K 17:9/	X-OCN ST/	2048x1080P	<a href="#">1920x1080P</a>				
	6K 2.39:1/	X-OCN LT/		<a href="#">1920x1080P</a>				
	4K 4:3/	Rec Off						
	4K 6:5/							

Project			Monitoring > Output Format				Output format						
Project Frame Rate	Imager Mode	SxS Rec Format	SDI 1/2	SDI 3/4	Monitor	HDMI	Monitor Out	HDMI					
29.97/25	6K 3:2/	XAVC-I 4K Class480/	4096x2160P 6G	-	1920x1080P	4096x2160P	1920x1080P YPbPr 1.5G	4096x2160P					
	6K 1.85:1/	<a href="#">XAVC-I 4K Class300/</a>				<a href="#">1920x1080P</a>		1920x1080P					
	6K 17:9/	Rec Off			<a href="#">1920x1080PsF</a>	-	1920x1080P	4096x2160P	1920x1080PsF YPbPr 1.5G	4096x2160P			
	6K 2.39:1/							<a href="#">1920x1080PsF</a>		1920x1080PsF			
	5.7K 16:9 <sup>4)</sup> /				4096x2160P 2SI	-	1920x1080P	4096x2160P	1920x1080P YPbPr 1.5G	4096x2160P			
	4K 6:5/							<a href="#">1920x1080PsF</a>		1920x1080P			
	4K 4:3/				4096x2160P Square	4096x2160P Square	1920x1080P	4096x2160P	1920x1080P YPbPr 1.5G	4096x2160P			
	4K 17:9/							<a href="#">1920x1080PsF</a>		1920x1080P			
	4K 2.39:1				2048x1080PsF	1920x1080P	1920x1080P	1920x1080P	1920x1080P YPbPr 1.5G	1920x1080P			
						<a href="#">1920x1080PsF</a>	1920x1080PsF	1920x1080PsF	1920x1080PsF YPbPr 1.5G	1920x1080PsF			
						1920x1080P	1920x1080P	1920x1080P	1920x1080P YPbPr 1.5G	1920x1080P			
						<a href="#">1920x1080PsF</a>	1920x1080PsF	1920x1080PsF	1920x1080PsF YPbPr 1.5G	1920x1080PsF			
						1920x1080P	1920x1080P	1920x1080P	1920x1080P YPbPr 1.5G	1920x1080P			
						<a href="#">1920x1080PsF</a>	1920x1080PsF	1920x1080PsF	1920x1080PsF YPbPr 1.5G	1920x1080PsF			
5.7K 16:9 <sup>5)</sup> / 3.8K 16:9	XAVC-I QFHD Class480/ <a href="#">XAVC-I QFHD Class300/</a> Rec Off	3840x2160P 6G	-	1920x1080P	3840x2160P	1920x1080P YPbPr 1.5G	3840x2160P						
					<a href="#">1920x1080PsF</a>		1920x1080PsF						
				3840x2160P 2SI	-	1920x1080P	3840x2160P	1920x1080P YPbPr 1.5G	3840x2160P				
							<a href="#">1920x1080PsF</a>		1920x1080PsF				
				3840x2160P Square	3840x2160P Square	1920x1080P	3840x2160P	1920x1080P YPbPr 1.5G	3840x2160P				
							<a href="#">1920x1080PsF</a>		1920x1080PsF				
				1920x1080P	1920x1080P	1920x1080P	1920x1080P	1920x1080P YPbPr 1.5G	1920x1080P				
				<a href="#">1920x1080PsF</a>	1920x1080PsF	1920x1080PsF	1920x1080PsF	1920x1080PsF YPbPr 1.5G	1920x1080PsF				
				6K 3:2/	MPEG 1920x1080P/	1920x1080P	1920x1080P	1920x1080P	1920x1080P	1920x1080P YPbPr 1.5G	1920x1080P		
				6K 1.85:1/	ProRes 422 HQ HD P/				<a href="#">1920x1080PsF</a>		1920x1080PsF		
				6K 17:9/	ProRes 422 HD P/			<a href="#">1920x1080PsF</a>	1920x1080PsF	1920x1080PsF	1920x1080PsF	1920x1080PsF YPbPr 1.5G	1920x1080PsF
				6K 2.39:1/	ProRes 422 Proxy HD P						<a href="#">1920x1080PsF</a>		1920x1080PsF
				5.7K 16:9/	ProRes 4444 HD P <sup>6)</sup>			1920x1080P	1920x1080P	1920x1080P	1920x1080P	1920x1080P YPbPr 1.5G	1920x1080P
				4K 6:5/							<a href="#">1920x1080PsF</a>		1920x1080PsF
4K 4:3/	<a href="#">1920x1080PsF</a>	1920x1080PsF	1920x1080PsF	1920x1080PsF						1920x1080PsF YPbPr 1.5G	1920x1080PsF		
4K 17:9/				<a href="#">1920x1080PsF</a>							1920x1080PsF		
3.8K 16:9		<a href="#">1920x1080PsF</a>	1920x1080PsF	1920x1080PsF						1920x1080PsF YPbPr 1.5G	1920x1080PsF		

Project			Monitoring > Output Format				Output format		
Project Frame Rate	Imager Mode	SxS Rec Format	SDI 1/2	SDI 3/4	Monitor	HDMI	Monitor Out	HDMI	
24	6K 3:2/ 6K 1.85:1/ 6K 17:9/ 6K 2.39:1/ 4K 6:5/ 4K 4:3/ 4K 17:9/ 4K 2.39:1	XAVC-I 4K Class480/ <a href="#">XAVC-I 4K Class300/</a> Rec Off	4096x2160P 6G	-	<a href="#">1920x1080P</a>	4096x2160P <a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	4096x2160P 1920x1080P	
			4096x2160P 2SI	-	<a href="#">1920x1080P</a>	4096x2160P <a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	4096x2160P 1920x1080P	
			4096x2160P Square	4096x2160P Square	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P	
			2048x1080P	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P	
			1920x1080P	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P	
			<a href="#">1920x1080PsF</a>						
			1920x1080P						
			<a href="#">1920x1080PsF</a>						
			ProRes 422 HQ HD P/ ProRes 422 HD P/ ProRes 422 Proxy HD P	1920x1080P	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P
			ProRes 4444 HD P <sup>6)</sup>	<a href="#">1920x1080P RGB</a>	<a href="#">1920x1080P</a>	1920x1080P	1920x1080P	1920x1080P YPbPr 1.5G	1920x1080P
			<a href="#">Rec Off</a>	3840x2160P 6G	-	<a href="#">1920x1080P</a>	3840x2160P <a href="#">1920x1080P</a>	1920x1080PsF YPbPr 1.5G	3840x2160P 1920x1080PsF
				3840x2160P Square	3840x2160P Square	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P
				3840x2160P 2SI	-	<a href="#">1920x1080P</a>	3840x2160P <a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	3840x2160P 1920x1080P
				1920x1080P	<a href="#">1920x1080P</a>	<a href="#">1920x1080PsF</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P
			<a href="#">1920x1080PsF</a>						

Project		Monitoring > Output Format				Output format			
Project Frame Rate	Imager Mode	SxS Rec Format	SDI 1/2	SDI 3/4	Monitor	HDMI	Monitor Out	HDMI	
23.98	6K 3:2/ 6K 1.85:1/ 6K 17:9/ 6K 2.39:1/ 5.7K 16:9 <sup>4)</sup> / 4K 6:5/ 4K 4:3/ 4K 17:9/ 4K 2.39:1	XAVC-I 4K Class480/ <u>XAVC-I 4K Class300/</u> Rec Off	4096x2160P 6G	-	<a href="#">1920x1080P</a>	4096x2160P <a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	4096x2160P 1920x1080P	
	4096x2160P 2SI		-	<a href="#">1920x1080P</a>	4096x2160P <a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G		4096x2160P 1920x1080P	
	4096x2160P Square		4096x2160P Square	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>		1920x1080P YPbPr 1.5G	1920x1080P	
	2048x1080P		<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P		
	1920x1080P		<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P		
	<a href="#">1920x1080PsF</a>		<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P		
	5.7K 16:9 <sup>5)</sup> / 3.8K 16:9		XAVC-I QFHD Class480/ <u>XAVC-I QFHD Class300/</u> Rec Off	3840x2160P 6G	-	<a href="#">1920x1080P</a>	3840x2160P <a href="#">1920x1080P</a>	1920x1080 YPbPr 1.5G	3840x2160P 1920x1080P
	3840x2160P 2SI	-		<a href="#">1920x1080P</a>	3840x2160P <a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	3840x2160P 1920x1080P		
	3840x2160P Square	3840x2160P Square		<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>		1920x1080P YPbPr 1.5G	1920x1080P	
	1920x1080P	<a href="#">1920x1080P</a>		<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P		
	<a href="#">1920x1080PsF</a>	<a href="#">1920x1080P</a>		<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P		
	6K 3:2/ 6K 1.85:1/ 6K 17:9/ 6K 2.39:1/ 5.7K 16:9/ 4K 6:5/ 4K 4:3/ 4K 17:9/ 3.8K 16:9	MPEG 1920x1080P/ ProRes 422 HQ HD P/ ProRes 422 HD P/ ProRes 422 Proxy HD P		1920x1080P	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	1920x1080P YPbPr 1.5G	1920x1080P
	<a href="#">1920x1080PsF</a>			<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>	<a href="#">1920x1080P</a>			
		ProRes 4444 HD P <sup>6)</sup>	<a href="#">1920x1080P RGB</a>	<a href="#">1920x1080P</a>	1920x1080P	1920x1080P	1920x1080P YPbPr 1.5G	1920x1080P	

<sup>1)</sup> When AXS Rec Format is set to Rec Off, this output is selected when Technical > System Configuration > SD HDMI is set to On in the menu.

<sup>2)</sup> When Project Frame Rate is 59.94.

<sup>3)</sup> When Project Frame Rate is 50.0.

<sup>4)</sup> SDI 1/2 and SDI 3/4 cannot be set to 4096x2160P.

<sup>5)</sup> SDI 1/2 and SDI 3/4 can be set to 3840x2160P.

<sup>6)</sup> Configurable only for the following effective picture sizes.

- 5.7K 16:9
- 4K 6:5
- 4K 4:3
- 3.8K 16:9

[Note]

4096x2160P and 3840x2160P settings and output are supported when both SxS Rec Format is set to one of the following and AXS Rec Format is not set to Rec Off.

- MPEG HD422 P
- MPEG HD422 i
- FHD ProRes 422 HQ P
- FHD ProRes 422 HQ i
- FHD ProRes 422 P
- FHD ProRes 422 i
- FHD ProRes 422 Proxy P
- FHD ProRes 422 Proxy i

# Error/Warning Indications

If a warning, caution, or operating condition that requires confirmation occurs on the unit, a message is displayed on the sub display, the REC lamp starts flashing, and a warning sound is emitted.

The buzzer is output to the built-in speaker or to the headphones connected via the headphone connector.

When the unit is turned on, a message appears on the sub display screen prompting you to execute APR if the auto adjustment for the image sensor (APR) has not been performed for a certain period of time. In this case, follow the on-screen instructions to execute APR (page 83).

## Error Display

The unit will stop operation when the following kind of display occurs.

Error display indication	Buzzer	REC lamp	Cause and Solution
E + Error code	Intermittent	High-speed flashing	The unit may be defective. Recording stops even if ●REC is displayed on the viewfinder/monitor screen. Turn off the power and check the connected equipment, cables, and media. If the error persists when the unit is turned on again, contact your Sony service representative. (If power cannot be turned off by setting the power switch to OFF, remove the battery pack or the DC IN source.)

## Warning Display

When one of the following messages occurs, use the following table to resolve the problem.

Warning display indication	Buzzer	REC lamp	Cause and Solution
Media Full <sup>1)</sup>	Continuous	High-speed flashing	Clips could not be recorded, copied, or split because there is no remaining capacity on the SxS memory card. Replace immediately.
Battery End <sup>1)</sup>	Continuous	High-speed flashing	The battery pack is dead. Recording is disabled. Stop operation and recharge the battery pack.
Temperature High <sup>1)</sup>	Intermittent	Flashing	The internal temperature is high. Turn off the unit and allow it to cool down before operating it again.

Warning display indication	Buzzer	REC lamp	Cause and Solution
Insufficient Voltage <sup>1)</sup>	Continuous	High-speed flashing	The DC IN voltage is too low. Recording is disabled. Connect another power source.
EXT. I/F Signal Error	Intermittent	High-speed flashing	An error was detected with the signal on the mounting terminal for an expansion unit. Check the connection to the AXS-R7 or other device.
AXS Firmware Mismatch	Continuous	High-speed flashing	The AXS-R7 cannot be operated correctly. Update the firmware version of the AXS-R7.
AXS Recorder Temp. High <sup>1)</sup>	Intermittent	High-speed flashing	The internal temperature of the AXS-R7 is high. Turn off the unit and allow it to cool down before operating it again.
Lens Signal Error	–	–	An error was detected with the signal on the mounting terminal for an expansion unit. Check the connection to the lens or other device.

<sup>1)</sup> Message is not displayed on the monitor screen.

## About temperature warnings

The Temperature High and AXS Recorder Temp. High warnings may be displayed when operating within the guaranteed operating temperature of the unit, depending on the operating mode and usage environment. Recording does not immediately stop when these messages are displayed, but the suggestions given in the Cause and Solution column of the table should be implemented promptly.

## Caution and Operation Confirmation Display

The following caution and operation confirmation messages may appear on the monitor screen or sub display, and warning icons may be displayed and messages displayed in the Info category > Camera Condition in the menu. Follow the instructions provided to resolve the issue.

Display indication	Cause and Solution
Battery Error Please Change Battery	An error was detected in the battery pack. Replace with a normal battery pack.
Backup Battery End Please Change	The remaining capacity of the backup battery is insufficient. Replace the backup battery.
Cannot Use SxS(A)* Please Change	A memory card that has been partitioned or a memory card containing more clips that can be handled by the unit was inserted. The card cannot be used in the unit, and must be replaced.

Display indication	Cause and Solution
Cannot Use SxS(A)* Unsupported File System	A card using a different file system or an unformatted card was inserted. The card cannot be used in the unit, and must be replaced or formatted using the unit.
Media Error SxS(A)* Needs to be Restored	An error occurred with the memory card. The card requires restoration. Restore the card.
SxS(A)* Error Recording Stopped Playback Stopped	Recording or playback stopped because an error occurred on the memory card. If the problem persists, replace the memory card.
Input AES/EBU is Invalid Emphasis	Emphasis signal that is not compatible with the AES/EBU input was input. The unit is compatible with 50u-15u Emphasis only.
Input AES/EBU is not Pro Use	A signal other than Professional Use was input to the AES/EBU input. The unit is compatible with Professional Use only.
Fan Stopped	The fan in the unit has stopped. Avoid use under high temperature conditions. Turn the unit off and contact a Sony service representative.
AXS Recorder Fan Stopped	The fan in the AXS-R7 that is connected to the unit has stopped. Avoid use under high temperature conditions. Remove the AXS-R7 from the unit and contact a Sony service representative.
Unsupported FPS Change AXS(A) to AXS S48 Memory	Unsupported AXS memory was detected. Recording cannot be performed. Change the recording format for the AXS memory card, or change the card to an AXS-A512S48 or AXS-A1TS48.
Abnormal Lens Communication Please Check "Lens I/F" Setting	The type of the connected lens does not match the unit's setting. Check the Technical > Lens Configuration > PL-Mt Interface Position setting in the full menu.
Please Execute APR	The auto adjusting of the image sensor (APR) has not been executed for a certain period. Execute APR by pressing the MENU dial.
XXXX License Y days Remaining (XXXX: Type of license, Y: Number of days remaining)	There are 2 days remaining before the license for the software option will expire.
Lens I/F Error	A fault was detected in the lens I/F communication when an E-mount lens is attached. Check the connection to the E-mount lens.
AXS Rec Format was changed.	The AXS recording format was changed. Check the AXS Rec Format and SxS Rec Format combination (page 53).

Display indication	Cause and Solution
SxS Rec Format was changed.	The SxS recording format was changed. Check the AXS Rec Format and SxS Rec Format combination (page 53).
FPS was set to Fixed.	The frame rate was switched from variable speed to fixed speed. Variable-speed recording is not supported in 1-slot simultaneous recording mode.
Sub Rec was set to Off.	SxS sub recording was turned off. Variable-speed shooting and picture cache mode recording are not available during 1-slot simultaneous recording.
Set the "Password" of "Authentication".	Technical > Authentication > Password (page 82) has not been configured yet. Configure the setting.

\* "SxS(B)" is displayed for the SxS memory card in slot B, "AXS(A)" is displayed for the AXS memory card in slot A of the AXS-R7, and "AXS(B)" is displayed for the AXS memory card in slot B of the AXS-R7.

# Items Saved in Files

## Table legend

Yes: Saved

No: Not saved

–: Not saved (temporary setting)

## Shooting Menu

Item	Sub-item	File type	
		All	Scene
FPS	Fixed/Variable Select	Yes	No
	FPS Select	Yes	No
Shutter <sup>1)</sup>	Shutter Select	Yes	Yes
	Step/Cont. Select	Yes	Yes
	Add/Change Step	–	–
	Delete Step	–	–
	ND	ND Position	Yes
Exposure Index	EI Select	Yes	Yes
Gain	Gain Select	Yes	Yes
White Balance <sup>1)</sup>	Color Temp. Select	Yes	Yes
	Add/Change Step	–	–
	Delete Step	–	–
	Auto White Balance	–	–
LUT Select	SDI 1/2	–	–
	SDI 3/4	Yes	No
	Monitor	Yes	No
	HDMI	–	–
	VF LUT	Yes	No
	SxS Rec	Yes	No
	Sub Rec	Yes	No
	SDR Gain	Yes	No

Item	Sub-item	File type		
		All	Scene	
Look	Category	Yes	No	
	Preset Look Select	Yes	No	
	ACES Select	Yes	No	
	User 3D LUT Select	Yes	No	
	ART Select	Yes	No	
	ART Information	–	–	
	ASC CDL Process	Yes	No	
	ASC CDL Select	Yes	No	
	ASC CDL Information	–	–	
	Look File	Load User 3D LUT	–	–
		Reset User 3D LUT	–	–
Reset All User 3D LUTs		–	–	
Load ART		–	–	
Reset ART		–	–	
Reset All ARTs		–	–	
Load ASC CDL		–	–	
Reset ASC CDL		–	–	
Flicker Reduce	Reset All ASC CDLs	–	–	
	Mode	Yes	No	
	Frequency	Yes	No	

<sup>1)</sup> Selection options added or edited by a user are also saved.

## Project Menu

Item	Sub-item	File type	
		All	Scene
Basic Setting	Imager Mode	Yes	No
	Project Frame Rate	Yes	No
	Input Color Space	Yes	Yes
	AXS Rec Format	Yes	No
	SxS Rec Format	Yes	No
	Sub Rec Format	Yes	No
	Base ISO	Yes	Yes
	SxS/Output De-Squeeze	Yes	No
Special Recording	Cache Rec Select	Yes	No
	Max Cache Rec Duration	Yes	No
Assignable Button	<1>	Yes	No
	<2>	Yes	No
	<3>	Yes	No
	<4>	Yes	No
	<VF A>	Yes	No
	<VF B>	Yes	No
	<VF C>	Yes	No
	<User 1>	Yes	No
	<User 2>	Yes	No
	<User 3>	Yes	No
	<User 4>	Yes	No
	<User 5>	Yes	No
All File	Load SD Card	-	-
	Save SD Card	-	-
	File ID	Yes	No
	Format SD Card	-	-
Scene File	Recall Internal Memory	-	-
	Store Internal Memory	-	-
	Load SD Card	-	-
	Save SD Card	-	-
	File ID	No	Yes
User Gamma	Current Settings	-	-
	Load SD Card	-	-
	Reset	-	-

## TC/Media Menu

Item	Sub-item	File type	
		All	Scene
Timecode	Mode	Yes	No
	Manual Setting	-	-
	Reset	-	-
	TC Format	Yes	No
	TC Source	-	-
	Time Data Display	Yes	No
Clip Name Format	Camera ID <sup>1)</sup>	Yes	No
	Reel Number <sup>1)</sup>	Yes	No
	Camera Position <sup>1)</sup>	Yes	No
	SxS Root Folder Name	Yes	No
Format Media	AXS Slot A	-	-
	AXS Slot B	-	-
	SxS Slot A	-	-
	SxS Slot B	-	-
	SD Card	-	-
Update Media	AXS Slot A	-	-
	AXS Slot B	-	-
	SxS Slot A	-	-
	SxS Slot B	-	-

<sup>1)</sup> When you load an All file, the data saved in internal memory is not overwritten.



## Monitoring Menu

Item	Sub-item	File type	
		All	Scene
Output Format	SDI 1/2	Yes	No
	SDI 3/4	Yes	No
	Monitor	Yes	No
	HDMI	Yes	No
OSD Appearance	VF	Yes	No
	SDI	Yes	No
	SDI 1/2		
	SDI 3/4		
	Monitor	Yes	No
	HDMI	–	–
	Status Info A/B Setup	Yes	No
Frame Line A/B Setup	Yes	No	
Monitor Display	Focus Distance Format	Yes	No
	Monitor Magnifier Ratio	Yes	No
Frame Line	Center Marker	Yes	No
	Aspect Ratio	Yes	No
	Aspect Safety Zone	Yes	No
	Safety Zone	Yes	No
	Color	Yes	No
	Surround View Type	Yes	No
	Aspect Ratio Type	Yes	No
	Mask Level	Yes	No
	Frame Line on Playback	Yes	No
	User Frame Line 1	Select	Yes
Preset Aspect Ratio		Yes	No
Scaling		Yes	No
Preset Aspect Ratio Type		Yes	No
Aspect Ratio(Pixels)		–	–
Width		Yes	No
Height		Yes	No
H Position		Yes	No
V Position		Yes	No
Variable Aspect Type		–	–

Item	Sub-item	File type	
		All	Scene
User Frame Line 2	Select	Yes	No
	Preset Aspect Ratio	Yes	No
	Scaling	Yes	No
	Preset Aspect Ratio Type	–	–
	Aspect Ratio(Pixels)	–	–
	Width	Yes	No
	Height	Yes	No
	H Position	Yes	No
	V Position	Yes	No
	Variable Aspect Type	–	–

Item	Sub-item	File type	
		All	Scene
False Color	Level	Yes	No
	Red	Yes	No
	Red Upper Limit	Yes	No
	Red Lower Limit	Yes	No
	Yellow	Yes	No
	Yellow Upper Limit	Yes	No
	Yellow Lower Limit	Yes	No
	Orange	Yes	No
	Orange Upper Limit	Yes	No
	Orange Lower Limit	Yes	No
	Pink	Yes	No
	Pink Upper Limit	Yes	No
	Pink Lower Limit	Yes	No
	Light Pink	Yes	No
	Light Pink Upper Limit	Yes	No
	Light Pink Lower Limit	Yes	No
	Cyan	Yes	No
	Cyan Upper Limit	Yes	No
	Cyan Lower Limit	Yes	No
	Green	Yes	No
	Green Upper Limit	Yes	No
	Green Lower Limit	Yes	No
	Light Blue	Yes	No
	Light Blue Upper Limit	Yes	No
	Light Blue Lower Limit	Yes	No
	Blue	Yes	No
	Blue Upper Limit	Yes	No
	Blue Lower Limit	Yes	No
	Purple	Yes	No
	Purple Upper Limit	Yes	No
Purple Lower Limit	Yes	No	
Reset	-	-	
VF Display	VF LUT	Yes	No
	Status Info	Yes	No
	Frame Line	Yes	No
	VF Magnifier Ratio	Yes	No
	Color	Yes	No
	SDR Gain	Yes	No

Item	Sub-item	File type	
		All	Scene
VF Function	Double Speed Scan	Yes	No
	Peaking Frequency	Yes	No
	Zebra	Yes	No
	Zebra Select	Yes	No
	Zebra1 Level	Yes	No
	Zebra1 Aperture Level	Yes	No
	Zebra2 Level	Yes	No
	Assign<VF A>	Yes	No
	Assign<VF B>	Yes	No
	Assign<VF C>	Yes	No

## Audio Menu

Item	Sub-item	File type	
		All	Scene
Audio Input	CH-1 Audio Select	Yes	No
	CH-2 Audio Select	Yes	No
	CH-1 Audio Level	Yes	No
	CH-2 Audio Level	Yes	No
	MIC Reference	Yes	No
Audio Monitor	Monitor CH	Yes	No
	Monitor Level	Yes	No
Audio Configuration	Alarm Level	Yes	No
	Input Limiter Mode	Yes	No
	AGC Level	Yes	No
	AGC Mono/Stereo	Yes	No
	MIC Input Mono/Stereo	Yes	No
	Phantom Power +48V	Yes	No
	Monitor Output CH Pair	Yes	No
Headphone Mono/ST	Yes	No	

## Paint Menu

Item	Sub-item	File type	
		All	Scene
Black	Master Black	Yes	Yes
	R Black	Yes	Yes
	B Black	Yes	Yes
Flare	Setting	Yes	Yes
	Master Flare	Yes	Yes
	R Flare	Yes	Yes
	G Flare	Yes	Yes
	B Flare	Yes	Yes
Gamma	Setting	Yes	Yes
	Gamma Category	–	–
	Gamma Select	Yes	Yes
Black Gamma	Setting	Yes	Yes
	Range	Yes	Yes
	Master Black Gamma	Yes	Yes
Knee	Setting	Yes	Yes
	Point	Yes	Yes
	Slope	Yes	Yes
White Clip	Setting	Yes	Yes
	Level	Yes	Yes
Detail	Setting	Yes	Yes
	Level	Yes	Yes
	H/V Ratio	Yes	Yes
	Crispening	Yes	Yes
	Level Depend	Yes	Yes
	Level Depend Level	Yes	Yes
	Frequency	Yes	Yes
	Knee Aperture	Yes	Yes
	Knee Aperture Level	Yes	Yes
	Limit	Yes	Yes
	White Limit	Yes	Yes
	Black Limit	Yes	Yes

Item	Sub-item	File type	
		All	Scene
Matrix	Setting	Yes	Yes
	User Matrix	Yes	Yes
	User Matrix R-G	Yes	Yes
	User Matrix R-B	Yes	Yes
	User Matrix G-R	Yes	Yes
	User Matrix G-B	Yes	Yes
	User Matrix B-R	Yes	Yes
	User Matrix B-G	Yes	Yes
Multi Matrix	Setting	Yes	Yes
	Area Indication	No	No
	Reset	–	–
	Axis	No	No
	Hue	Yes	Yes
	Saturation	Yes	Yes

## Technical Menu

Item	Sub-item	File type	
		All	Scene
Test Signals	Color Bars	Yes	No
	Color Bars Type	Yes	No
	1kHz Tone on Color Bars	Yes	No
	Test Saw	Yes	No
	Test Type	Yes	No
Switch & Rec Light	Lock Operator Side	Yes	No
	Lock Assistant Side	Yes	No
	Rec Light	Yes	No
	Rec Start/Stop Beep	Yes	No
System Configuration	Fan Control	Yes	No
	RM/RCP Paint Control	Yes	No
	SDI Rec Remote Trigger	Yes	No
	3G SDI 1/2/3/4 Output	Yes	No
	SD HDMI	Yes	No
	Shutter Mode	Yes	Yes
	Media Near Full Alarm	Yes	No
Special Configuration	Flip Image	Yes	No
	Audio/Video Delay	Yes	No
	NR(4K 17:9/16:9 AXS)	Yes	Yes
	Level Gauge Adjust	–	–
	Level Gauge Reset	–	–
	360° Shutter Setting	Yes	No
Lens Configuration	PL-Mt Interface Position	Yes	No
	Lens 12pin	Yes	No
	E-Mount Shading Comp.	Yes	No
	E-Mt Chro. Aber. Comp.	Yes	No
Authentication	User Name	No	No
	Password	No	No
Network	Setting	Yes	No
	LAN	Yes	No
	Wireless	Yes <sup>1)</sup>	No
APR	APR	–	–
	Reset	–	–

Item	Sub-item	File type	
		All	Scene
Battery	Near End:Info Battery	Yes	No
	End:Info Battery	Yes	No
	Near End:Sony Battery	Yes	No
	End:Sony Battery	Yes	No
	Near End:Other Battery	Yes	No
	End:Other Battery	Yes	No
	Detected Battery	-	-
DC Voltage Alarm	DC Low Voltage1	Yes	No
	DC Low Voltage2	Yes	No
	DC(24V) Low Voltage1	Yes	No
	DC(24V) Low Voltage2	Yes	No
	Brightness level	Yes	No
Control Display	Brightness level	Yes	No
Genlock	Input Source	Yes	No
	Reference Lock Type	-	-

<sup>1)</sup> The following items are not saved.

- Scan Networks
- SSID
- Password
- WPS
- MAC Address
- Regenerate Password

## Maintenance Menu

Item	Sub-item	File type	
		All	Scene
Clock Set	Time Zone	Yes	No
	Date Mode	Yes	No
	Date	-	-
	Time	-	-
Language	Select	Yes	No
Hours Meter	Camera(System)	-	-
	R7 Recorder(System)	-	-
	Camera(Resettable)	-	-
	R7 Recorder(Resettable)	-	-
	Reset-Cam(Resettable)	-	-
	Reset-R7(Resettable)	-	-
Reset to Default	Reset	-	-
Network Reset	Reset	-	-
License Options	Install: xxx	-	-
	Anamorphic	-	-
	Full-Frame	-	-
	High Frame Rate	-	-
	Unique Device ID	-	-
Firmware	Camera	-	-
	AXS	-	-
	FW Update-camera	-	-
	FW Update-AXS-R7	-	-

### [Note]

When Technical > System Configuration > RM/RCP Paint Control (page 81) is set to On in the full menu, the following remote control unit items (page 106) are also saved in an All-settings file.

- Black
- Flare
- Gamma <sup>1)</sup>
- Black Gamma <sup>1)</sup>
- Gain

<sup>1)</sup> Except when set to S-Log3.

# Recording and Output Metadata List

## Table legend

Opt: Included if information is available (optional)

Yes: Defined

–: Not defined

Item	Notation example in RAW Viewer	RAW/ X-OCN MXF	RAW/ X-OCN XML	XAVC	XAVC XML	ProRes	ProRes XML	MPEG HD	MPEG HD XML	HD-SDI
Creation Date	2019-10-29 11:04:05	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
Last Update	2019-10-30 11:04:05	–	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
UMID	060A2B340101010501010D431300000070BF41D2F494EB7A16DD045A68CDF2E	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
Start	03:36:29:20	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
End	3:36:32 AM:19	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
Duration	12:00:03 AM:00	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
Poster Frame		–	–	–	–	–	–	–	–	–
Recording Mode		–	Yes	–	Yes	–	Yes	–	Yes	–
Drop Frame	NDF	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
Camera	VENICE/CineAltaV	Yes	Yes	Yes	Yes	–	Yes	Yes	Yes	–
Video Codec	X-OCN XT	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
Resolution	6048x4032	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
Aspect Ratio	3:2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
Format FPS	23.98p	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
Capture FPS	23.98p	Yes	Yes	Yes	Yes	–	Yes	Yes	Yes	–
Flip	normal	–	Yes	–	–	–	–	–	–	–
Number of Audio Channels	4	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
Audio Codec	LPCM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
Audio Bit Depth	24	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	–
Audio Sampling Rate	48000	Yes	Yes	Yes	–	Yes	–	Yes	–	–
Auto Exposure Mode	ManualExposureMode	Yes	–	Yes	–	–	–	Yes	–	Yes
Exposure Index	500	Yes	Yes	Yes	–	Yes	–	Yes	–	Yes
Auto Focus Sensing Area Setting	ManualFocusMode	Opt	–	Opt	–	–	–	Opt	–	Opt
ND Filter Wheel	1/4	Yes	Yes	Yes	–	–	–	Yes	–	Yes
Image Sensor Dimension Effective Width	35925um	Yes	–	Yes	–	–	–	Yes	–	Yes
Image Sensor Dimension Effective Height	23950um	Yes	–	Yes	–	–	–	Yes	–	Yes
Image Sensor Readout Mode	ProgressiveFrame	Yes	Yes	Yes	–	–	–	Yes	–	Yes
Shutter Speed Angle	172.50deg	Yes	Yes	Yes	–	–	–	Yes	–	Yes
Shutter Speed Time	1/50sec	Yes	–	Yes	–	–	–	Yes	–	Yes
Camera Master Gain Adjustment	0.00dB	Yes	–	Yes	–	–	–	Yes	–	Yes
ISO Sensitivity	500	Yes	Yes	Yes	–	Yes	–	Yes	–	Yes
Electrical Extender Magnification	100%	Yes	–	Yes	–	–	–	Yes	–	Yes

Item	Notation example in RAW Viewer	RAW/ X-OCN MXF	RAW/ X-OCN XML	XAVC	XAVC XML	ProRes	ProRes XML	MPEG HD	MPEG HD XML	HD-SDI
Auto White Balance Mode	PresetWhiteBalanceSetup	Yes	–	Yes	–	Yes	–	Yes	–	Yes
White Balance	5500	Yes	Yes	Yes	–	Yes	–	Yes	–	Yes
Tint Correction	0.00000	Yes	–	Yes	–	–	–	–	–	Yes
Camera Master Black Level	3.0%	–	–	Yes	–	–	–	Yes	–	Yes
Capture Gamma Equation	scene-linear	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Gamma for CDL	rec709	Yes	Yes	Yes	–	Yes	–	Yes	–	Yes
Color Primaries (Capture Color Primaries)		–	–	Yes	Yes	Yes	–	–	–	Yes
Camera Attributes	MPC-36109999999Version5.00	Yes	Yes	Yes	–	–	–	–	–	Yes
Effective Marker Aspect Ratio	6048:3202	Yes	Yes	Yes	–	–	–	–	–	Yes
User Frame Line 1	1920x1080+0+0	Yes	–	Yes	–	–	–	–	–	Yes
User Frame Line 2	1920x1080+0+0	Yes	–	Yes	–	–	–	–	–	Yes
Active Area Aspect Ratio	6048:4032	Yes	Yes	Yes	–	–	–	–	–	Yes
Pixel Aspect Ratio	1:1	Yes	Yes	Yes	–	Yes	–	–	–	Yes
Image Orientation	normal	Yes	–	Yes	–	–	–	–	–	Yes
Raw Black Code	512	Yes	Yes	–	–	–	–	–	–	–
Raw Gray Code	1504	Yes	Yes	–	–	–	–	–	–	–
Raw White Code	5472	Yes	Yes	–	–	–	–	–	–	–
Gamma for Look	s-log3-cine	Yes	Yes	Yes	–	–	–	–	–	Yes
Color for Look	s-gamut3-cine	Yes	Yes	Yes	–	–	–	–	–	Yes
Pre-CDL Transform	LUT:SL3SG3Ctos709.cube	Yes	Yes	Yes	–	–	–	–	–	Yes
Post-CDL Transform	none	Yes	Yes	Yes	–	–	–	–	–	Yes
Look Process Baked	false	Yes	Yes	Yes	–	–	–	–	–	Yes
Monitoring Characteristics	rec709	Yes	Yes	Yes	–	–	–	–	–	Yes
Monitoring Base Curve	rec709	Yes	Yes	Yes	–	Yes	–	–	–	Yes
Monitoring Color Primaries	rec709	Yes	Yes	Yes	–	–	–	–	–	Yes
Monitoring Coding Equations	rec709	Yes	Yes	Yes	–	–	–	–	–	Yes
Monitoring Descriptions	LUT:SL3SG3Ctos709.cube	Yes	Yes	Yes	–	Yes	–	–	–	Yes
Camera Tilt Angle	2.70000	Yes	–	Yes	–	–	–	–	–	Yes
Camera Roll Angle	1.30000	Yes	–	Yes	–	–	–	–	–	Yes
Focus Distance	2296mm	Opt	–	Opt	–	–	–	–	–	Opt
Aperture Value	3.14	Opt	–	Opt	–	–	–	–	–	Opt
Aperture Ring T Stop Position	2.8 + 3/10	Opt	–	Opt	–	–	–	–	–	Opt
Current Focal Length	0mm	Opt	–	Opt	–	–	–	–	–	Opt
Hyperfocal Distance	219224mm	Opt	–	Opt	–	–	–	–	–	Opt
Near Focus Distance	2273mm	Opt	–	Opt	–	–	–	–	–	Opt
Far Focus Distance	2319mm	Opt	–	Opt	–	–	–	–	–	Opt
Horizontal Field of View	27.9deg	Opt	–	Opt	–	–	–	–	–	Opt





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<http://www.sony.net/Products/Linux/common/search.html>

We would prefer that you do not contact us about the contents of the source code.

For the content of these licenses, connect the unit to a network and view the OSS Information screen (page 95) on the web remote control screen.

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For the content of these licenses, connect the unit to a network and view the OSS Information screen (page 95) on the web remote control screen.

# Specifications

## General Specifications

Mass	Approx. 3.9 kg (8 lb 9.6 oz) (excluding handle, VF attachment, bottom cover)
Dimensions	See page 140.
Power requirements	12 V DC (11 V to 17 V) 24 V DC (22 V to 32 V)
Power consumption	Approx. 60 W (when recording XAVC) (11 V to 17 V) Approx. 220 W (when using AXS-R7 and peripherals) (22 V to 32 V)
Operating temperature	0 °C to 40 °C (32 °F to 104 °F)
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Continuous operating time	Approx. 60 minutes (using BP-FLX75)
Recording format (video)	X-OCN XT (when the AXS-R7 is attached) RAW SQ (4K 17:9, 3.8K 16:9) (when the AXS-R7 is attached) X-OCN ST (when the AXS-R7 is attached) X-OCN LT (when the AXS-R7 is attached) XAVC-I Class480 (4K, QFHD) XAVC-I Class300 (4K, QFHD) MPEG HD422 (HD) Apple ProRes 422 HQ (HD) Apple ProRes 422 (HD) Apple ProRes 422 Proxy (HD) Apple ProRes 4444 (HD)
Recording format (audio)	LPCM 8CH (2CH recording/playback), 24-bit, 48 kHz
Recording project frame rate	RAW SQ (when the AXS-R7 is attached): 4K 17:9/3.8K 16:9 59.94P/50P/29.97P/25P/24P/23.98P

X-OCN (when the AXS-R7 is attached):	6K 3:2 25P/24P/23.98P 6K 17:9/6K 1.85:1/6K 2.39:1/5.7K 16:9/4K 6:5/4K 17:9 Surround View/4K 4:3/4K 4:3 Surround View/3.8K 16:9 Surround View 29.97P/25P/24P/23.98P 4K 17:9/4K 2.39:1/3.8K 16:9 59.94P/50P/29.97P/25P/24P/23.98P 4K 4:3/4K 17:9 47.95P
XAVC-I Class480:	4K: 4096×2160 29.97P/25P/24P/23.98P QFHD: 3840×2160 29.97P/25P/ 23.98P
XAVC-I Class300:	4K: 4096×2160 59.94P/50P/29.97P/25P/24P/23.98P QFHD: 3840×2160 59.94P/50P/29.97P/25P/23.98P
MPEG HD422(50Mbps):	HD: 1920×1080 29.97P/25P/23.98P/59.94i/50i
Apple ProRes 422 HQ:	HD: 1920×1080 23.98P/24P/25P/29.97P/50i/59.94i/50P/59.94P
Apple ProRes 422:	HD: 1920×1080 23.98P/24P/25P/29.97P/50i/59.94i/50P/59.94P
Apple ProRes 422 Proxy (HD)	HD: 1920×1080 23.98P/24P/25P/29.97P/50i/59.94i/50P/59.94P
Apple ProRes 4444 (HD)	HD: 1920×1080 23.98P/24P/25P/29.97P

Recording/playback time	XAVC-I Class480 23.98P Approx. 34 minutes when using SBP-128B/C/D XAVC-I Class300 23.98P Approx. 54 minutes when using SBP-128B/C/D MPEG2 HD422 Approx. 108 minutes when using SBS-64G1A/B Apple ProRes 422 HQ (HD) 23.98P Approx. 33 minutes when using SBP-64B/C/D/E Apple ProRes 422 (HD) 23.98P Approx. 49 minutes when using SBP-64A/B/C/D/E Apple ProRes 422 Proxy (HD) 23.98P Approx. 145 minutes when using SBS-64G1A/B/C Apple ProRes 4444 (HD) 23.98P Approx. 22 minutes when using SBP-64B/C/D/E
-------------------------	--

### [Notes]

- The recording and playback times are for a continuous recording as a single clip. The actual times may be shorter, depending on the number of clips recorded. The recording/playback time may vary due to usage conditions and memory characteristics.
- 6K 3:2 50P/59.94P and 4K 4:3 50P/59.94P X-OCN recording is supported, but playback is not supported on the unit.

## Camera

Imaging device	35 mm full size, single-chip CMOS image sensor
Number of pixels	24.8 M (total)

## Built-in filters

		ND filter A		
		Clear	0.3 (1/2)	0.6 (1/4)
ND filter B	Clear	Clear	0.3 (1/2)	0.6 (1/4)
	0.9 (1/8)	0.9 (1/8)	1.2 (1/16)	1.5 (1/32)
	1.8 (1/64)	1.8 (1/64)	2.1 (1/28)	2.4 (1/256)

ISO sensitivity	ISO 500 (D55 light source) ISO 2500 (D55 light source)
Lens mount	PL-mount (with lens mount adaptor) E-mount (without lens mount adaptor)
Flange focal length	PL-mount: 52 mm E-mount: 18 mm
Latitude	15+ stops

## Input/Output

Audio input	CH-1/CH-2: XLR-type 5-pin (female) (1), LINE / AES/EBU / MIC / MIC+48V selectable
DC input	XLR-type 4-pin (male), 11 V to 17 V or 22 V to 32 V DC
DC output (12 V)	Hirose 4-pin (1), 11 V to 17 V DC (Output voltage: Same as input voltage, Maximum output current: 1.0 A), 22 V to 32 V DC (Output voltage: 15 V, Maximum output current: 0.8 A), Using battery adaptor

### [Notes]

- You can output a REC Tally signal and input a REC Trigger signal through the 12V OUT connector.

- Connect to the 12V OUT connector only devices with current consumption of 1.0 A or lower when the input voltage is 11 V to 17 V, or 0.8 A or lower when the input voltage is 22 V to 32 V.

#### DC output (24 V)

Fischer 3-pin (2),  
 11 V to 17 V DC (Output voltage:  
 24 V, Maximum output current:  
 1.0 A),  
 22 V to 32 V DC (Output voltage:  
 Same as input voltage, Maximum  
 output current: 2.0 A)

#### [Note]

Connect to the 24V OUT connector only devices with current consumption of 1.0 A or lower when the input voltage is 11 V to 17 V, or 2.0 A or lower when the input voltage is 22 V to 32 V.

#### SDI output BNC type (4)

3G-SDI: SMPTE ST424/425 Level B-DL/  
 DS

HD SDI: SMPTE ST292 compliant

#### AUX LEMO 5-pin (1)

#### Viewfinder output

LEMO 26-pin (1)

#### Network RJ45 type (1)

#### Remote control

8-pin (1)

#### MONITOR output

BNC type (1)

HD SDI: SMPTE ST292 compliant

#### Timecode input

TC IN: BNC type (1)

#### GENLOCK input

BNC type (1)

#### HDMI output

Type A (1)

#### External device connector

USB host: Type A (1)

#### Headphones output

Stereo mini jack (1)

#### Speaker output

Monaural

## Media Slots

Type ExpressCard/34 slot (2)  
 SD card slot (1)

## Supplied Accessories

#### VF attachment (1)

Handle (1)

VF cable (A-2203-745-A) (1)

Shim (circular) (4-730-328-11) (1)

Shim (1/3 arc) (4-730-328-21) (15)

E-mount lens cover (1)

Before Using This Unit (1)

## Optional Accessories

#### 0.7-inch type viewfinder

DVF-EL200

#### Camera Extension System

CBK-3610XS

#### Wireless LAN Adaptor

CBK-WA02

#### Remote Control Unit

RM-B170/B750

RCP-1000/1500/1530/3500

RCP-1001/1501/3501

#### Portable Memory Recorder

AXS-R7

#### SxS memory cards (SxS PRO X/SxS PRO+/SxS-1)

SBP-240F/120F/64E,

SBS-32/64/128G1C

#### Card Reader

SBAC-US30, SBAC-T40, AXS-AR1

#### Shoulder Adaptor (attaches to VCT-14 using V

shoe)

VCT-FSA5

#### E-mount lens

SELP28135G, SEL1635GM, SEL2470GM,

SEL70200GM, SEL100400GM,

SEL1224G, SEL35F14Z, SEL50F14Z,

SEL85F14GM, SEL90M28G,

SEL100F28GM

#### Battery Pack

BP-FL75, BP-GL95B

#### AC Adaptor

AC-DN10A

#### Microphone

ECM-680S, ECM-678\*, ECM-674\*

(\*: EC-0.5X3F5M 3-pin XLR to 5-pin

XLR adaptor cable required)

#### Dual Battery Adaptor

BKW-L200 (connection via battery  
 connection adaptor)

#### SDI/HDMI Monitor

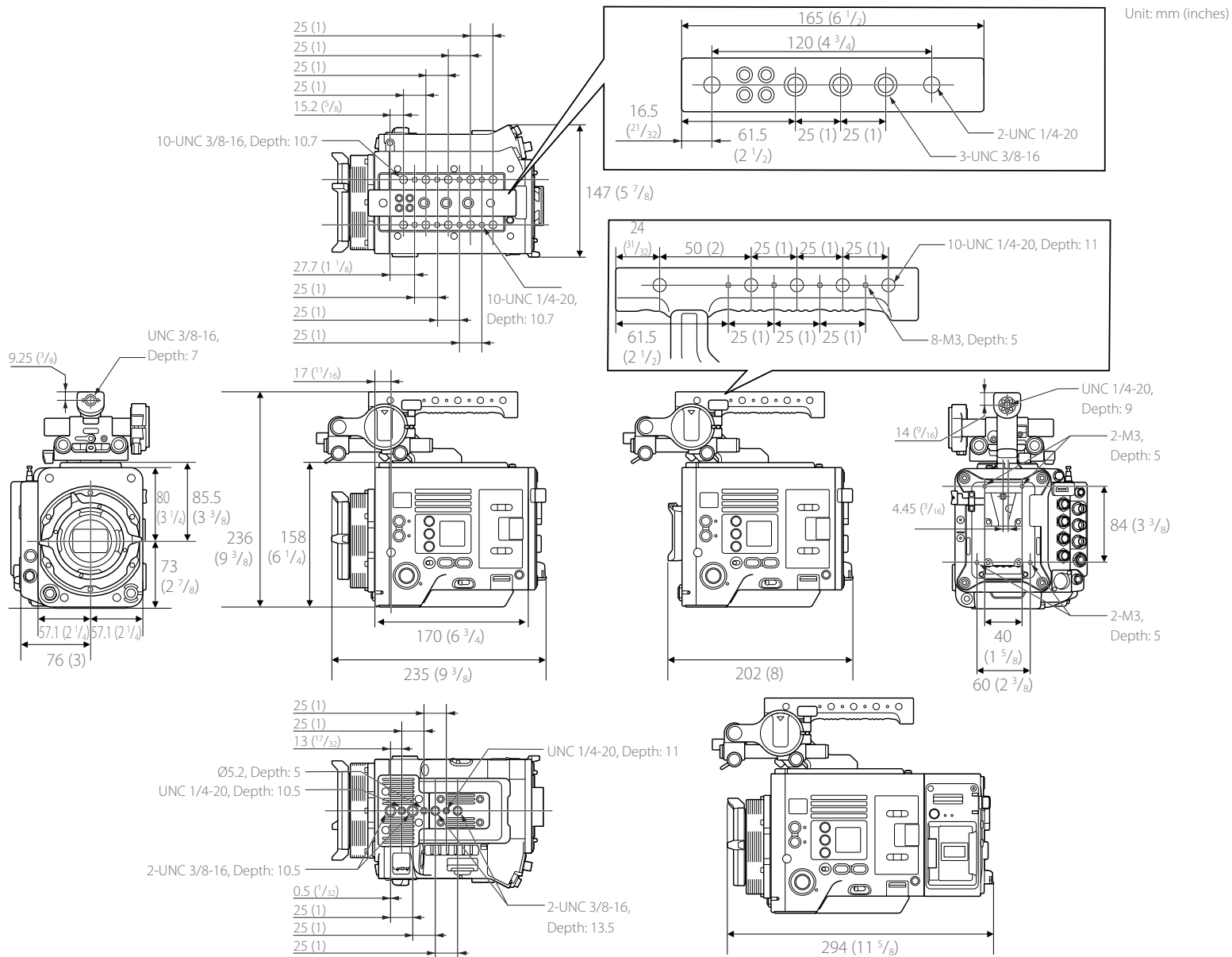
BVM series, PVM series, LMD series

Design and specifications are subject to change without notice.

## Notes

- Always make a test recording, and verify that it was recorded successfully. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF FAILURE OF THIS UNIT OR ITS RECORDING MEDIA, EXTERNAL STORAGE SYSTEMS OR ANY OTHER MEDIA OR STORAGE SYSTEMS TO RECORD CONTENT OF ANY TYPE.
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## Dimensions



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