# Digital Motion Picture Camera VENICE

Operating Instructions MPC-3610 Firmware Version 4.0



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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

F Mount Lens

metadata frame by frame.

graining (noise).

PL Lens Mount

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.

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

Equipped with the industry-standard PL lens

technology, and lens information is recorded as

mount. The lens mount supports Cooke /i

# 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.

# 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 (El), and frame rate (FPS), making it convenient for the operator to check the status of the unit.

## Paint Control from RM/RCP Units

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.

## High Frame Rate (HFR) Shooting

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

# 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.

# 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 68) 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.

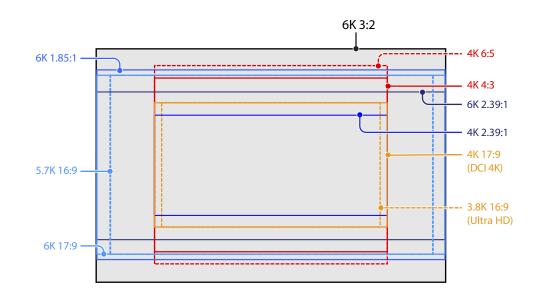
\* Update the firmware to version 3.0 or later.

## 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, 4K 6:5, and 4K 2.39:1.



# 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 72) in the full menu.

Software license	lmager mode	Effective number of pixels (Image pixels)	W × H (mm)	Project frame rate
License not required <sup>1)</sup>	3.8K 16:9	$3840 \times 2160$	$22.8 \times 12.8$	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 17:9	4096 × 2160	$24.3 \times 12.8$	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	$24.3 \times 18.0$	23, 24, 25, 29, 47, 50 <sup>2)</sup> , 59 <sup>2) 3)</sup>
	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
Full Frame License <sup>1)</sup>	5.7K 16:9	5674 × 3192	33.7 × 18.9	23, 24, 25, 29
	6K 2.39:1	6048 × 2534	35.9 × 15.0	23, 24, 25, 29
	6K 17:9	6054 × 3192	36.0 × 19.0	23, 24, 25, 29
	6K 1.85:1	6054 × 3272	36.0 × 19.4	23, 24, 25, 29
	6K 3:2	6048×4032	35.9 × 24.0	23, 24, 25, 29 <sup>2)</sup> , 50 <sup>2) 3)</sup> , 59 <sup>2) 3)</sup>
High Frame Rate License	4K 2.39:1 <sup>2)</sup>	4096 × 1716	24.3 × 10.3	23, 24, 25, 29, 50, 59

# Supported Shooting Frame Rates and De-Squeeze Values

The following table shows the supported shooting frame rates and De-Squeeze values (page 59) in each imager mode.

Fuil Frame License Anamorphic License High Frame Rate License
---

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

 $^{\rm D}$  The Anamorphic license is required to enable ratio settings, other than Off(1.0×), for the de-squeeze function.  $^{\rm 2D}$  When a High Frame Rate License is activated.

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

# Surround View

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

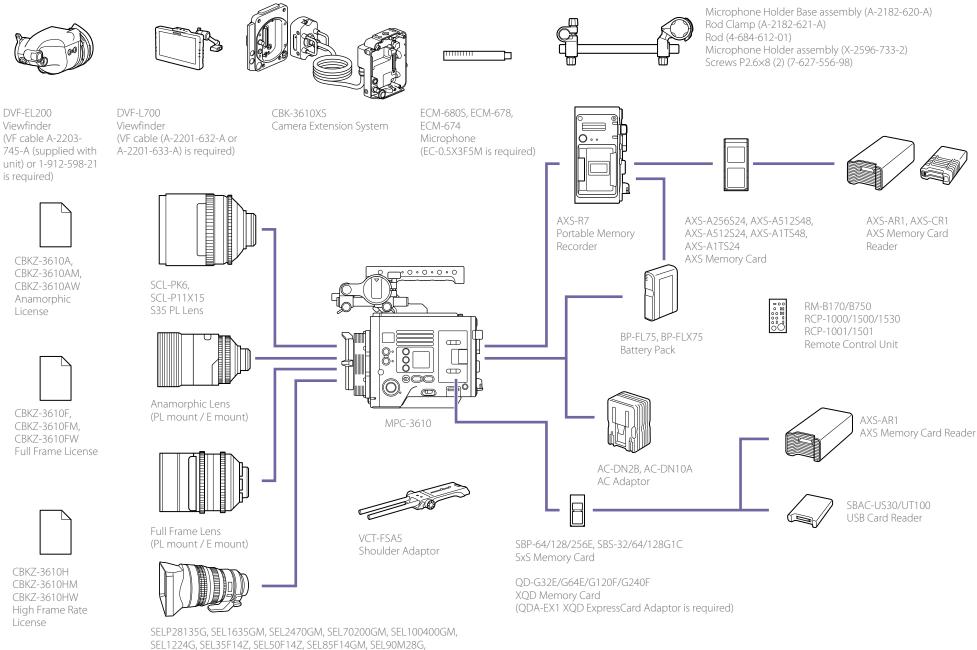
4K 17:9

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.

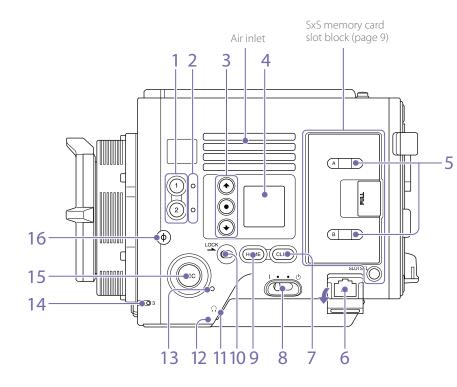
# System Configuration



SEL1224G, SEL35F14Z, SEL50F14Z, SEL85F14GM, SEL90M28G, SEL100F28GM E Mount Lens

# Location and Function of Parts

# **Operator Side**



- ASSIGN (assignable) buttons 1/2 (page 39)
   Assign functions using the EDIT page of the
   user functions screen (page 39).
   The assigned function toggles between on/off
   (enable/disable) or is activated with each
   press.
- 2. ASSIGN (assignable) lamps 1/2 (page 39) 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 76).

### 4. Mini display

Displays various setup items, such as shutter angle, that you can check or modify (page 76).

### 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 79).

### 7. CLIPS button

Press to display the clip screen on the mini display to enable clip operations (page 78). 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 (**U**) 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 76).

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 75).
- 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 75).

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 39)

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 83).

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

### 16. φ mark

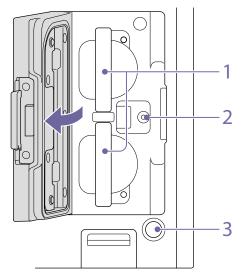
The  $\boldsymbol{\varphi}$  mark is on the same plane as the image sensor.

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)

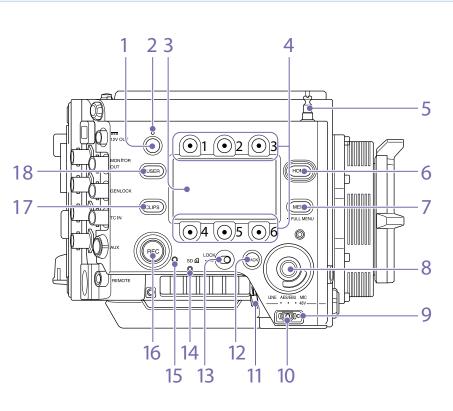
## Assistant Side

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).
- SLOT SELECT (SxS memory card select) button
   Press to switch the active slot.



- ASSIGN (assignable) button 4 (page 39)
   Assign functions using the EDIT page of the
   user functions screen (page 39).
   The assigned function toggles between on/off
   (enable/disable) or is activated with each
   press.
- 2. ASSIGN (assignable) lamp 4 (page 39) 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 31). 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 70) in the full menu.

- 4. Sub display ITEM keys 1 to 6 Controls the operation of functions on the sub display (page 43).
- 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 33). If pressed when the unit is in playback state, the unit transitions to shooting mode.

# 7. MENU (menu display on/off) button (pages 43, 54)

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 33, 43, 54).

#### 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 67) 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 33, 43, 54).

#### 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 83). 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 73). Simultaneously, the clip screen is displayed on the mini display. To switch from playback mode to shooting mode, press the HOME button.

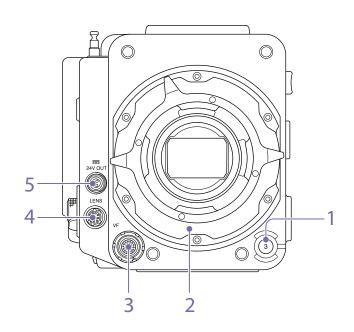
#### 18. USER button

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 39).

### Front



### 1. ASSIGN (assignable) button 3 (page 39)

Assign functions using the EDIT page of the user functions screen (page 39). 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)
- 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 90).

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).

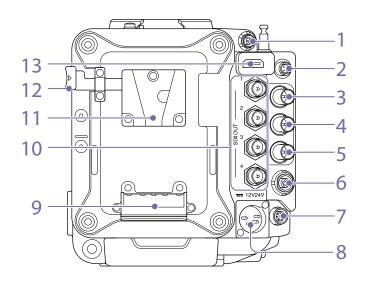
#### 11 V to 17 V input

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 90).

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 90). 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 90).
- 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 91).
- 7. **REMOTE (remote control) connector (8-pin)** Connect to a remote control unit or other external control device.
- 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.

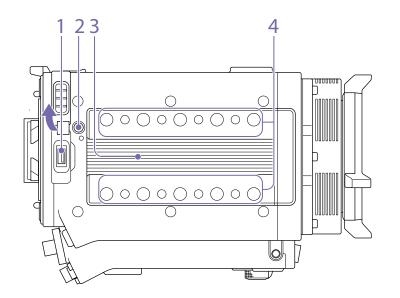


No.	Signal
1	GND
2	NC
3	NC
4	DC IN (11 V to 17 V or 22 V to 32 V)

- 9. Battery attachment terminal (page 16)
- 10. SDI OUT 1 to 4 (serial digital output) connectors (BNC type) (page 90)
- 11. Battery pack mount (page 16)
- 12. Battery release lever (page 16)
- 13. HDMI OUT connector (page 90)

Тор

Bottom



#### 1. External device connector

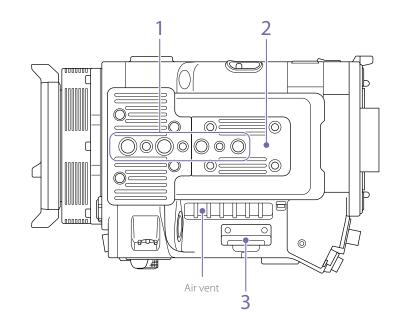
Used for updating an AXS-R7 AXS Recorder (option) when the AXS-R7 is attached to the unit (page 29) or for using camera wireless remote control (page 79) by connecting a CBK-WA02 Wireless LAN Adaptor (option).

### 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



1. Tripod plate attachment holes

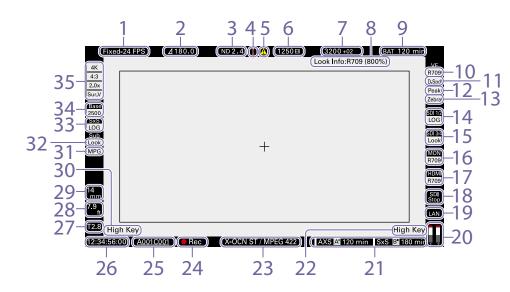
Type of screw: 1/4-20UNC (2) Type of screw: 3/8-16UNC (4) Length of engagement: 9 mm (3/8 inch) or less

- 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 63) 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.

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.

### 3. ND filter indicator

Displays the density of the ND filter. The display value is a LOG (base 10) value (page 55). CLEAR

- 0.3 (1/2)
- 0.6 (1/4)

- 0.9 (1/8) 1.2 (1/16) 1.5 (1/32) 1.8 (1/64) 2.1 (1/128) 2.4 (1/256)
- 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 El 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 68) 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 57).
- 9. Battery capacity/voltage indicator Displays the following indicators according to the type of battery power source.

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

10. VF LUT indicator

Displays the viewfinder LUT (page 56).

11. VF Double Speed Scan indicator

Displays the on/off state of the function for doubling the frame rate of the viewfinder display.

12. VF Peaking indicator

Displays the on/off state of the peaking function of the viewfinder display.

### 13. VF Zebra indicator

Displays the on/off state of the zebra function of the viewfinder display (page 41).

- 14. SDI OUT 1/2 connector LUT indicator Displays the LUT setting of the SDI OUT 1/2 connectors (page 56).
- 15. SDI OUT 3/4 connector LUT indicator Displays the LUT setting of the SDI OUT 3/4 connectors (page 56).
- 16. Monitor LUT indicator

Displays the LUT setting of the Monitor output (page 56).

17. HDMI LUT indicator Displays the LUT setting of the HDMI output

(page 56).

#### 18. 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

### 19. Network connection status indicator

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

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

20. Audio level meter indicators

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

# 21. 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 **D** mark on the left of "AXS" or "SxS" indicates the recording target media.

An indicator **A**<sup>•</sup> 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  $\triangle$  icon is displayed for media if a condition occurs that could impact recording.

- 22. 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).
- 23. Recording media format (codec) indicator Displays the format of the recording on an AXS memory card or an SxS memory card.
- 24. Recording status indicator Displays the following recording operation states of the unit.

Display	Description
Rec	Recording
Stby	Recording standby
Cache	Picture cache recording standby

### 25. 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.

### 26. Time data display

Displays the duration or timecode, depending on the TC/Media category > TC Display setting in the menu (page 44).

### 27. 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.

### 28. Focus position indicator

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

29. Zoom position indicator

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

 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).

#### 31. Simultaneous recording status indicator Displays the sub clip recording format in 1-slot

simultaneous recording mode (page 84).

### 32. SxS Sub LUT indicator

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

### 33. SxS LUT indicator

Displays the LUT setting for SxS recording.

### 34. Base ISO indicator

Displays the configured native sensitivity.

### 35. 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 factor icon (page 44).

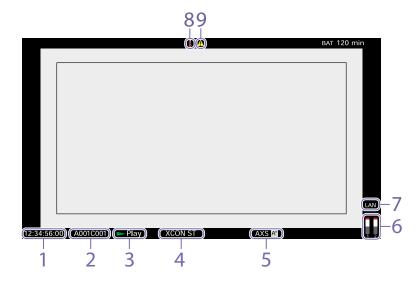
# Menu display and settings on the viewfinder screen

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 66) and VF Function (page 66) 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 44).

### 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.
- 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 (1) 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	Flashing
network connection settings)	
Connected (valid network connection	On
settings)	
Network connection function not	Blank
used	

### 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-FLX75

### AC adaptor

AC-DN2B 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 31) 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 70) 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 71) in the full menu.

#### [Notes]

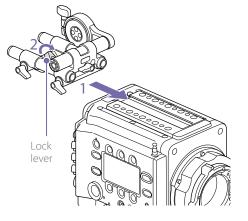
- If the clock setting is cleared because the backup battery fully discharged when no power was supplied (no battery pack and no DC IN connection), the initial setup display will be displayed when you next turn the unit on.
- While the initial setup display is shown, no other operation, except turning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

# Attaching the VF Attachment and Handle

# Attaching the VF Attachment

# Attaching the Handle

- 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.



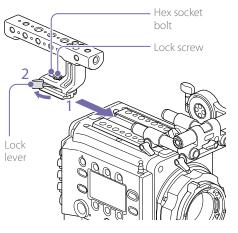
### [Notes]

- 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.

- 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]

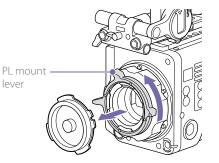
Do not leave the lens facing the sun. Direct sunlight can enter through the lens, be focused in the unit, and cause fire.

### [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 68) 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

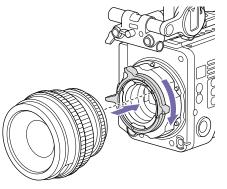
Remove the mount cover from the lens mount by turning the PL mount lever counterclockwise.



#### [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

- 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.

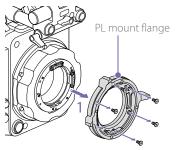
### Shims

The following shims are supplied with the unit.  $0.05 \text{ mm} \times 1$  (circular)  $0.01 \text{ mm} \times 15$  (1/3 arc)

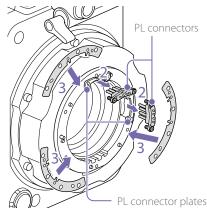
1/3 arc shims should always be used as a set of three shims. Insert shims to increase the flange focal length. The unit is shipped with the flange focal length already adjusted using the following three types of shims. 0.10 mm (circular) 0.05 mm (circular) 0.01 mm (1/3 arc) A seal is attached showing the shim thickness when shipped.

### Adjusting the flange focal length

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

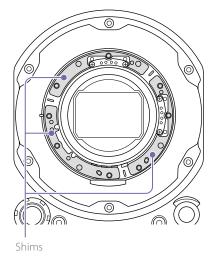


- 2 Loosen the four Phillips screws on both sides of the PL connectors (two locations), and remove the PL connectors and PL connector plates.
- 3 Attach shims to the PL mount adaptor (three locations).



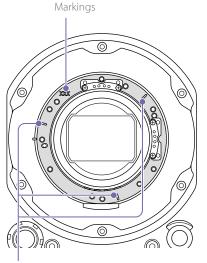
#### When using 1/3 arc shims

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



### When using circular shims

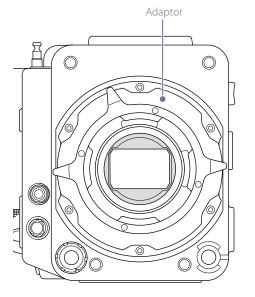
Attach with the surface that has markings on it facing the front.



- 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

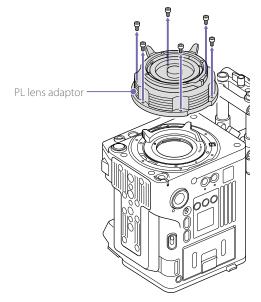
To clean the filter, first remove the adaptor. Exercise care when wiping the adaptor center part (shaded part) with a cloth or other material to prevent fibers adhering to surfaces. If fibers are adhering, wipe off using a soft brush.



# 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.

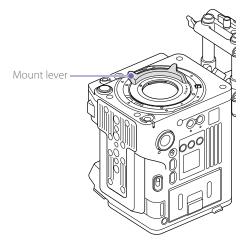


### [Notes]

- 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

Check that the mount lever is in the locked position.

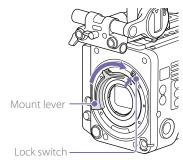


2 Place the PL lens adaptor back in its original position, insert the six hex screws (2.5 mm), and tighten the screws to a tightening torque of 0.8 ± 0.12 N·m using a hex wrench (2.5 mm).

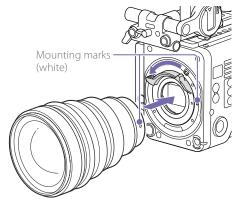
Markings

# 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.



### [Note]

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

### 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.

# 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]

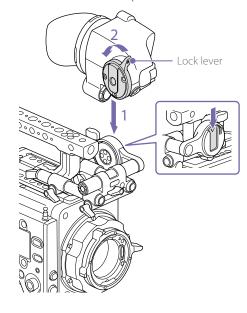
Do not leave the unit with the eyepiece of the viewfinder facing the sun. Direct sunlight can enter through the eyepiece, be focused in the viewfinder, and cause fire.

#### [Notes]

- Attach/remove the viewfinder while the unit is turned off.
- A VF cable (A-2201-632 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.

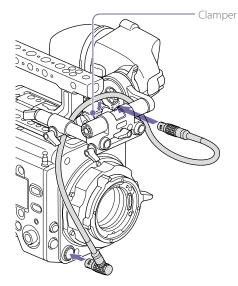
# Attaching a Viewfinder

- 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:

Alight the concave part of the VF connector with the connector mark (red), and fully insert the connector.



[Note] Secure the cable in the clamper as required.

### To remove the viewfinder

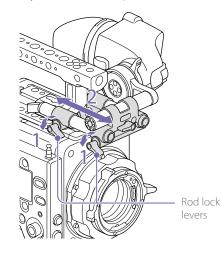
Disconnect the VF connection cable from the viewfinder and unit.

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

- 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.



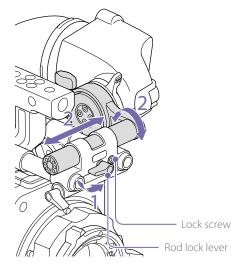
3 Tighten the rod lock levers.

#### [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)

- 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.

Loosen the rotation lock lever on the viewfinder mount.

angle. Rotation lock lever

2 Turn the viewfinder up/down to adjust the

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+

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

- Open the cover of the card slot block (page 9).
- 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 care (writing/reading data)	
Lights in green	Standby (ready for recording or playback using the SxS memory card)	
Off	<ul> <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.

- Select TC/Media category > Format Media in the menu.
- 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.
- 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 31) 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 1 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 5 minutes, 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 62) 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.

## 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

# 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

Slot status	
Accessing the SD card (writing/	
reading data)	
<ul> <li>No SD card is loaded.</li> </ul>	
<ul> <li>The loaded card is invalid.</li> </ul>	

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.

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.

- 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.

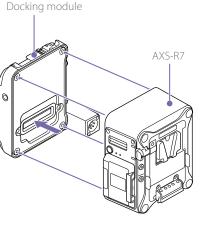
# Using with AXS-R7

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.

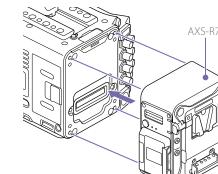
#### [Note]

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



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



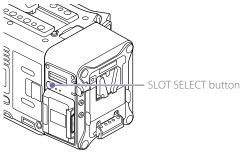
## To remove the AXS-R7

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

3 Close the cover.

# Switching Between AXS Memory Cards



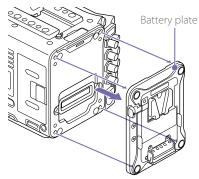


# Attaching the AXS-R7

### [Note]

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

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



Label

2 Insert the AXS memory card into the card slot

with the label facing as indicated below.

Inserting an AXS Memory Card

to open the cover.

Press the memory card slot cover open button

# 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.

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

AXS-R7

# 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 44) 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.

AXS Rec Format	Imager Mode	Shoot	ing frar	ne rate	and S24	/S48 A>	<s mem<="" th=""><th colspan="3">nory card support</th></s>	nory card support		
		24	25	30	48	50	60	75	110	120
X-OCN XT	3.8K 16:9	S24/	S24/	S24/	S24/	S24/	S24/	-	_	_
		S48	S48	S48	S48	S48	S48			
	4K 2.39:1	-	-	-	-	-	-	-	-	S48
	4K 17:9	S24/	S24/	S24/	S24/	S24/	S24/	S48	S48	-
		S48	S48	S48	S48	S48	S48			
	4K 4:3	S24/	S24/	S24/	S48	S48	S48	_	_	-
		S48	S48	S48						
	4K 6:5	S24/	S24/	S24/	-	-	-	-	-	-
		S48	S48	S48						
	5.7K 16:9	S24/	S24/	S48	-	-	-	-	-	-
		S48	S48							
	6K 2.39:1	S24/	S24/	S24/	-	-	-	-	-	-
		S48	S48	S48						
	6K 17:9	S24/	S24/	S48	-	-	-	-	-	-
		S48	S48							
	6K 1.85:1	S24/	S24/	S48	-	-	-	-	-	-
		S48	S48	-						
	6K 3:2	S48	S48	S48	_	_	-	-	-	-
RAW SQ	4K 17:9	S24/	S24/	S24/	S24/	S24/	_	-	-	-
		S48	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 ST	3.8K 16:9	S24/	S24/	S24/	S24/	S24/	S24/	_	-	_
		S48	S48	S48	S48	S48	S48			
	4K 2.39:1	-	-	-	-	_	_	_	_	S48
	4K 17:9	S24/	S24/	S24/	S24/	S24/	S24/	S24/	S48	_
		S48	S48	S48	S48	S48	S48	S48		
	4K 4:3	S24/	S24/	S24/	S24/	S24/	S24/	S48	_	_
		S48	S48	S48	S48	S48	S48			
	4K 6:5	S24/	S24/	S24/	_	_	_	_	_	_
		S48	S48	S48						
	5.7K 16:9	S24/	S24/	S24/	_	_	_	_	_	_
		S48	S48	S48						
	6K 2.39:1	S24/	S24/	S24/	_	_	_	_	_	_
		S48	S48	S48						
	6K 17:9	S24/	S24/	S24/	_	_	_	_	_	_
		S48	S48	S48						
	6K 1.85:1	S24/	S24/	S24/	_	_	-	_	_	_
		S48	S48	S48						
	6K 3:2	S24/	S24/	S24/	S48	S48	S48	_	_	_
		S48	S48	S48						
X-OCN LT	3.8K 16:9	S24/	S24/	S24/	S24/	S24/	S24/	_	_	_
		S48	S48	S48	S48	S48	S48			
	4K 2.39:1	_	_	_	_	_	_	_	_	S24/
										S48
	4K 17:9	S24/	S24/	S24/	S24/	S24/	S24/	S24/	S24/	_
		S48	S48	S48	S48	S48	S48	S48	S48	
	4K 4:3	S24/	S24/	S24/	S24/	S24/	S24/	S24/	_	_
		S48	S48	S48	S48	S48	S48	S48		
	4K 6:5	S24/	S24/	S24/	_	_	_	_	_	_
		S48	S48	S48						
	5.7K 16:9	S24/	S24/	S24/	_	_	_	_	_	_
		S48	S48	S48						
	6K 2.39:1	S24/	S24/	S24/	_	_	-	_	_	_
		S48	S48	S48						
	6K 17:9	S24/	S24/	S24/	_	_	_	_	_	_
		S48	S48	S48						
	6K 1.85:1	S24/	S24/	S24/	_	_	_	_	_	_
		S48	S48	S48						
	6K 3:2	S24/	S24/	S24/	S24/	S24/	S48	_	_	_
		S48	S48	S48	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.

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.
- 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 31) 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 62) 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 44) to Rec Off before performing this operation.

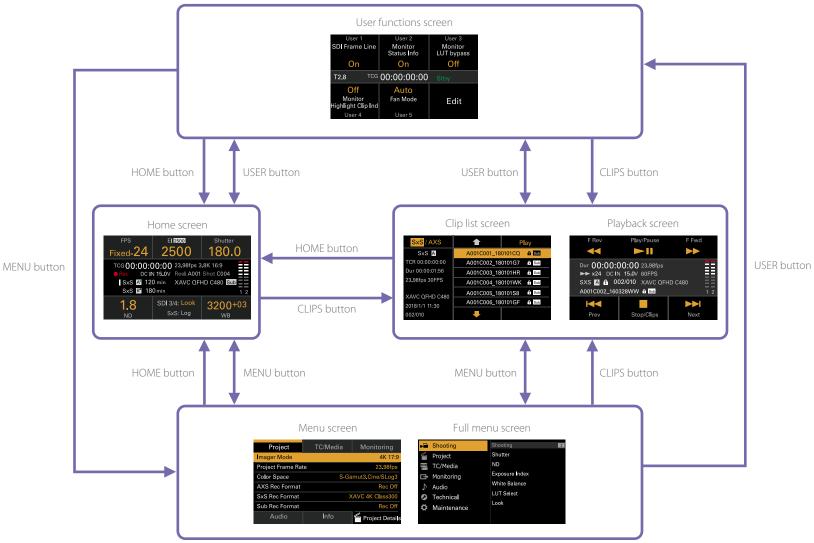
Prepare a USB flash drive updater according to the update procedure for the AXS-R7.

- 2 Insert the USB flash drive updater in the external device connector (page 12).
- 3 Execute the AXS-R7 update function using Maintenance > Firmware > FW Update-AXS-R7 (page 72) in the 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.

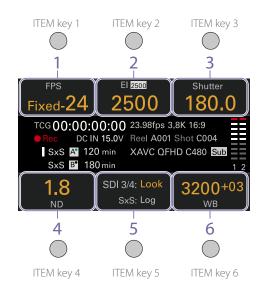


## Home Screen

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 39). Press an ITEM key to select the corresponding item. The ITEM keys for functions displayed in orange text color are enabled.

### 1. FPS

Displays and sets the video frame rate.

2. 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 68) is set to On in the full menu.

3. Shutter

Displays and sets the shutter speed/shutter angle of the electronic shutter.

4. ND Filter

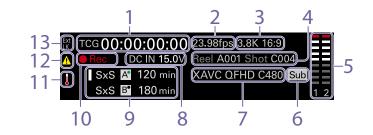
Displays and sets the ND filter position.

5. LUT

Displays and sets the monitor LUT.

6. WB (White Balance) Displays and sets the white balance.

### Status display area



### 1. Time data display

Displays the duration or timecode, depending on the TC/Media category > TC Display setting in the menu (page 44). Displays the type of data currently shown in the time data display, as follows. TCG: Recorded timecode TCR: Playback timecode Dur: Duration

- 2. Frame rate indicator Displays the value of the Project category > Project Frame Rate setting in the menu (page 44).
- 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".
- 5. Audio level meters

Displays the audio recording or playback levels. The numbers 1 and 2 Indicate channels 1 and 2.

6. 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.

- 7. Recording format (codec) indicator Displays the format of the recording on an AXS memory card or an SxS memory card (page 48).
- 8. 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.

### 10. Recording status indicator

Displays the following recording operation states of the unit.

Display	Description
Stby	Recording standby
• Rec	Recording
• Cache	Picture cache recording standby

### 11. 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. 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**

1.8

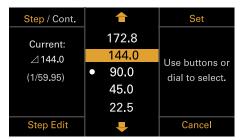


2 Select the item to set using the ITEM keys 1 to 6. The setting value for items that can be

SDI 3/4: Look

SxS: Log

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 1 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 70) 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  $\rightarrow$  Low  $\rightarrow$  Mid  $\rightarrow$  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  $\rightarrow$  Mid  $\rightarrow$  Low  $\rightarrow$  Minimum with the current setting as the base point.

### [Note]

1 2

3200+03

WB

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 68) 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 El display area. In this mode, the El display area is grayed out, and the El value and gain value cannot be changed. However, the Base ISO setting can be switched.

In this case too, the LUT display area is graved output and cannot be operated.

- 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 68) is set to On in the full menu. Set these using the remote control unit (page 86).
  - Shutter display area
  - WB display area

# 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.

On the settings selection screen, move the cursor to the setting you want to change or delete, and press the Step Edit button (ITEM kev 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.

### [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).



## **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:	22	
FPS 26	23	Use buttons or
Project:	24	dial to select.
23 <b>.</b> 98fps	25	
	• 26	
Variable/ Fixed	₽	Cancel

#### [Note] Audio is not recorded in "Select FPS" mode.

# **El Operation**

## Changing the El value

You can change the El value using ITEM key 2 on the Home screen.

Press ITEM key 2 on the Home screen. The El setup screen appears.

	<b></b>	Set
Current:	250	
El 500	320	Use buttons or
Latitude H:	400	dial to select.
6.0 Stops	• 500	
Base ISO:500	640	
Change Base	Ŧ	Cancel

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

		Set
Current:	250	
El 500	320	Use buttons or
Latitude H:	• 400	dial to select.
6.0 Stops	500	
Base ISO:500	640	
Change Base	Ŧ	Cancel

## Switching the Base ISO

You can switch the Base ISO by pressing ITEM key 4 on the El setup screen.

- Press ITEM key 4 on the El setup screen. The Base ISO switching screen appears.
- 2 Press the two Change buttons (ITEM key 1 and ITEM key 3) simultaneously.

Change		Change			
	Change Base ISO?				
	ISO 500 → ISO 2500				
Press bo	Press both Change buttons together,				
		Cancel			
The Base ISO is changed (page 38).					

# 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.

Auto White Bal.		Set
Current:	3200 +00	
3200 K	• 3200 <sup>+03</sup>	Use buttons or
+03	4300 +00	dial to select.
(User WB)	5500 <sup>+00</sup>	
Step Edit	₽	Cancel

### [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.

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

Page <mark>1</mark> / 2	SDI 1/2	SDI 3/4		
Outputs	Log			
Look 3535-Big v3.cube (3D-CDL) CDL : ColorCollection002 Log : El not applied				
	r Look –			
Edit Look	Monitor HDMI			

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, SxS Rec, and Sub Rec.

- 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.

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

	<b></b>	Select	
Category	Preset	look	
Preset Look	s709		
Load File	₽	Done	

- 2 Press the Select button (ITEM key 3). The items that can be selected are displayed.
- Use the **1** button (ITEM key 2), **4** button (ITEM key 5), or MENU dial to change the setting.
- 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 or Preset Look.

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

- 3 Press the MENU dial or the Select button (ITEM key 3).
- 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 85). PRIVATE\SONY\PRO\LUT\

Insert the SD card into the SD card slot (page 12).

# 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).



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.



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

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.

	<b></b>	Load	
	3535-Big v3.cube		
Load 3D LUT	Rec709 to DCI-XYZ.cube		
Step2:	Raw Viewer_LP2.cube		
	Test0312_El+0.6.cube		
Select File to Load on 03	ACES_RRT709_V1f5_V7.13		
Load on 05			
	<b>I</b>	Back	

- 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 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 85). PRIVATE\SONY\PRO\CDL\

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

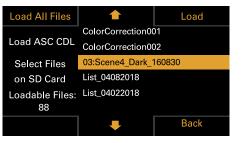
### 3 Press the Load File button (ITEM key 4).



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.

ASC CDL Info		Select		
Category	User 3D LUT			
User 3D LUT	s709.cube			
ASC CDL Process CDL Off				
ASC CDL Select	_ Select 03: Scene4_Dark_160830			
Load File	÷	Done		

Changing the User 3D LUT File

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

Press the Edit Look button (ITEM key 4) on the LUT selection screen.

The Look selection screen appears.

	<b></b>	Select	
Category	User 3D LUT		
User 3D LUT	s709.cube		
Load File	Ŧ	Done	

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

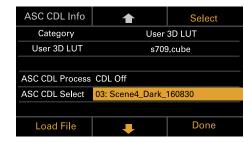


4 Press the MENU dial or Set button (ITEM key 3) to apply the setting.

# Changing the ASC CDL File

You can change the currently selected ASC CDL file.

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

1	Set	
01: sLog2 to Linea	ar.cube	
02: LMT ACES v0.1.1.cube		
03:Scene4_Dark_160830		
04: Binary_Through_17.I3D		
05: Test0312_EI+0.6/Cube		
-	Cancel	
	03:Scene4_Dark_ 04: Binary_Throug	

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

### **Displaying ASC CDL information**

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

- 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 ASC CDL Info button (ITEM key 1).

ASC CDL Info	<b>≜</b>	Select			
Category	User 3D LUT				
User 3D LUT	s709.cube				
ASC CDL Process	ASC CDL Process CDL Off				
ASC CDL Select	03: Scene4_Dark_160830				
Load File	Ŧ	Done			

The ASC CDL information is displayed.

#### 03: Scene4\_Dark\_160830 Input Description: GeneralProducts M1 std thru GP M1 LUT4 R G B Slope 1.000 1.000 1.000

Slope	1.000	1.000	1.000	
Offset	-1,000	-1,000	-1.000	
Power	1,000	1.000	1,000	
Saturation		1.000		
				ОК

### 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

## 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 Codec: 60 fps (max)

ltem	Description		
FPS		variable speed and constant speed shooting tting is determined by the Project category > tting in the menu.	
	Project Frame Rate	Display	
	23.98	Fixed-24	
	24	Fixed-24	
	25	Fixed-25	

29.97

47.95

59.94

50

When "Variable" is selected, the setting changes as follows depending on the Project category > Imager Mode (page 58) setting in the menu.

Fixed-30

Fixed-48

Fixed-50

Fixed-60

Imager Mode	Setting
3.8K 16:9	1 to 60 FPS
4K 17:9	
4K 17:9 <sup>1)</sup>	1 to 60, 66, 72, 75, 88, 90, 96
	100, 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>	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 3:2	1 to 25 FPS
6K 3:2 <sup>1)</sup>	1 to 60 FPS

Item	Description	ltem	Description
Exposure Index	Sets the El 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. Base ISO 500: 125EI/160EI/200EI/250EI/320EI/400EI/ <u>500EI</u> /640EI/800EI/1000EI/1250EI/ 1600EI/2000EI Base ISO 2500: 640EI/800EI/1000EI/1250EI/1600EI/2000EI/ <u>2500EI</u> /3200EI/4000EI/5000EI/ 6400EI/8000EI/1000EI	Page 1 SDI 1/2 (ITEM key 2): Log Display only, as LUT cannot be applied to the SDI 1/2 outp SDI 3/4 (ITEM key 3): Log/Look Selects the LUT to apply to the SDI 3/4 output image. Disabled when Monitoring category > Output Format > S QFHD in the menu. Monitor (ITEM key 5): Log/s709/R709(800%)	
Shutter	Sets the electronic shutter angle/shutter speed. Press the Step/Cont. button (ITEM key 1) to switch between step and continuous selection methods. 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.		Selection becomes Log/Look when Monitoring category > Output Format > SDI 1/2 is set to 4K/QFHD in the menu. HDMI (ITEM key 6): Log/s709/R709(800%) Fixed to Log when Monitoring category > Output Format > 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.
	Displays the following selection options depending on the Technical > System Configuration > Shutter Mode (page 68) setting in the full menu.		Page 2
Angle: Shutter angle indicator Default selection options 360/180/172.8/144/90/45/22.5/11.2/5.6			Viewfinder (ITEM key 2): Log/s709/R709(800%) Selects the LUT to apply to the viewfinder/monitor screen output image.
			SxS Rec (ITEM key 5): Log/Look Disabled when Project category > SxS Rec Format is set to Rec Off in the menu, or fixed to Log when set to XAVC.
	Speed: Shutter speed indicator		Sub Rec (ITEM key 6): Log/Look
	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>		Disabled when Project category > SxS Rec Format is set to Rec Off in the menu.
	[Note]		Page 1/2 common items
	The default speed values for different Project Frame Rate (page 44) 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		Edit Look: Sets a LUT to apply as a Look. s709 / R709(800%) / S-Gamut3.Cine/SLog3 / S-Gamut3/SLog3 / User 3D LUT
	Cont.: Select an angle/speed within the supported range. WB (White Balance		Sets the color temperature/color tone of the white balance.
ND Filter			Default selection options <u>3200K+00</u> /4300K+00/5500K+00 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.

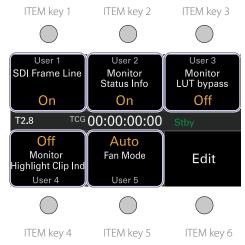
Only when a High Frame Rate License is activated.
 The options are 1/60 and subsequent values when the project frame rate is 59.94, 1/50 and subsequent values when 50.0, 1/30 and subsequent values when 29.97, and 1/25 and subsequent values when 25.0.

# 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]

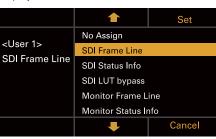
When a lens that supports the iris setting display function is attached, the iris position is displayed in the center left of the user functions screen.

## **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.

		Select
User 1	SDI Frame Line	
User 2	Monitor Status Ir	nfo
User 3	Monitor LUT bypass	
User 4	Monitor Highlight Clip Ind	
User 5	Fan Mode	
Assign Btn 1	VF Highlight Clip	Ind
	+	Done

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 to the tot (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.

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

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

## 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
Press & Hold for Monitor Log <sup>1)</sup>	Disables the LUT applied to the Monitor output image while the key is pressed, and sets Log image quality without applying a LUT.	Setting not retained

Assignable Button setting	Function	State when unit is powered on
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>2)</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 $\rightarrow$ Max $\rightarrow$ Off in Rec/ Auto $\rightarrow$ 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 $\rightarrow$ Side $\rightarrow$ 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
Auto White Balance <sup>2)</sup>	Executes auto white balance.	-
Picture Cache Rec	Turns the picture cache recording function on/off.	Setting retained
Iris Open (1/16 stop) <sup>3)</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.	_

Assignable Button setting	Function	State when unit is powered on
Iris Close (1/16 stop) <sup>3</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.	-

Does not fu essed when Technical > System Configuration > RM/RCP Paint Control set to On in the full menu.

<sup>2)</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 68) is set to On in the full menu. <sup>3)</sup> Does not function if the key is pressed when an RM-B170 or other remote control unit is connected.

## 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
Press & Hold for Monitor Log <sup>1)</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

Assignable Button setting	Function	State when unit is powered on
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>2)</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>1)</sup>	Disables the LUT applied to the viewfinder/ monitor screen output image while the button is pressed, and sets Log 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

Assignable Button setting	Function	State when unit is powered on
Auto White Balance <sup>2)</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>3)</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>3)</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.	-
Rec	Starts/stops recording.	-

<sup>1)</sup> Does not function if the button is pressed when Technical > System Configuration > RM/RCP Paint Control (page 68) is set to On in the full menu.

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 68) is set to On in the full menu.
 Does not function if the button is pressed when an RM-B170 or other remote control unit is connected.

# 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, and sets Log image quality without applying a LUT.	Setting not retained
VF Highlight Clip Ind <sup>2)</sup>	Turns the function to display clipped highlight areas in red in the viewfinder on/off.	Setting retained
VF High/Low Key <sup>2)</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>2)</sup>	Turns the false color function display in a viewfinder on/off.	Setting retained

Assignable Button setting	Function	State when unit is powered on
Picture Cache Rec	Turns the picture cache recording function on/off.	Setting retained
Iris Open (1/16 stop) <sup>3)</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>3)</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.	-
Rec	Starts/stops recording.	-

<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 68) is set to On in the full menu.

<sup>2)</sup> Does not function if the button is pressed when Technical > System Configuration > RM/RCP Paint Control (page 68) is set to On in the full menu.

<sup>3)</sup> Does not function if the button is pressed when an RM-B170 or other remote control unit is connected.

# 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

- 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 44)

Project	TC/Media	Monitoring
Imager Mode		4K 17:9
Project Frame Rate		23.98
Input Color Space	S-G	amut3.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 Ra	te	4K 17:9
Input Color Space	Input Color Space	
AXS Rec Format	AXS Rec Format	
SxS Rec Format	SxS Rec Format	
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	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	<ul> <li>Sets the effective picture size.</li> <li>[Notes]</li> <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> <li>4K 2:39:1 is displayed only when a High Frame Rate license is installed.</li> </ul>
Project Frame Rate	23.98/24/25/29.97/47.95/ 50/59.94	Sets the project frame rate.
Input Color Space	S-Gamut3.Cine/SLog3 / S-Gamut3/SLog3 / Rec.2020/HLG_Rec.2100	Sets the color space. [Note] Rec.2020/HLG_Rec.2100 can be selected only when Technical > System Configuration > RM/RCP Paint Control (page 68) is set to On in the full menu.
AXS Rec Format <sup>1)</sup> (Only when an AXS-R7 is attached)	Rec Off/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>	Rec Off/XAVC 4K Class480/ XAVC 4K Class300/ XAVC QFHD Class480/ XAVC QFHD Class300/ MPEG HD P/MPEG HD i/	Sets the main recording format for SxS memory cards.
	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	
Sub Rec Format <sup>1)</sup>	Rec Off/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		Displays the contents of the Project menu
(ITEM key 6)		(page 58) 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 48).

## TC/Media category

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

ltem		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 o not. Preset R-Run: Timecode advances from specified value only when recording. Int Regen: Timecode continues from tha of the previous clip.
TC Display		Timecode/Duration	Switches the time data indication.
TC Setting (set when switching	Setting (H, M, S, F)		Sets the timecode to a desired value.
to another screen)	Reset		Resets the timecode to 00:00:00:00.
	TC Format	DF/NDF	Sets the timecode format. DF: Drop frame NDF: Non drop frame
	TC Source	Internal/External	Display only.
Cam ID		A 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

ltem	Settings	Description
Format Media	AXS Slot A	Formats the AXS memory card in slot A.
(executed when	AXS Slot B	Formats the AXS memory card in slot B.
switching to another	SxS Slot A	Formats the SxS memory card in slot A.
screen)	SxS Slot B	Formats the SxS memory card in slot B.
	SD Card	Formats the SD card.
Media Details (ITEM key 6)		Displays the contents of the TC/Media menu (page 61) in the full menu.

ltem		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	Info A/Info B/Off	Selects the information to display superimposed on the Monitor output.
	Frame Line	Line A/Line B/ <u>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 63) 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 63).
- 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.

ltem		Settings	Description
VF	Status Info	Info A/Info B/Off	Selects the information to display superimposed on the viewfinder image.
	Frame Line	Line A/Line B/ <u>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	Line A/Line B/ <u>Off</u>	Selects the frame lines to display superimposed on the SDI 1/2 output.
			[Note] Frame lines are only superimposed if the output format is 4K/QFHD.
SDI 3/4	Output	The available settings vary	Selects the SDI 3/4 output format. <sup>1)</sup>
[Note] 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.	Format	depending on the SDI 1/2 setting.	
	Status Info	Info A/ <u>Info B</u> /Off	Selects the information to display superimposed on the SDI 3/4 output.
	Frame Line	Line A/Line B/ <u>Off</u>	Selects the frame lines to display superimposed on the SDI 3/4 output.

<sup>1)</sup> For details about formats available for selection, see "SDI OUT Connector Output Formats" (page 96).

<sup>2)</sup> For details about formats available for selection, see "MONITOR OUT Connector/HDMI OUT Connector Output Formats" (page 100).

#### Audio category

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

Item	Settings	Description
Source Switch	LINE / AES/EBU / MIC	Displays the position of the AUDIO IN switch (page 9) 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.
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 67) 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 seven 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	<ul> <li>Displays the following system information.</li> <li>Date and time</li> <li>Fan rotation speed</li> <li>Sensor detection temperature</li> <li>Hours meter</li> <li>IP Address</li> </ul>
		<ul> <li>[Notes]</li> <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	<ul> <li>Displays the following battery information.</li> <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	Displays the following information for the lens attached to the
		unit.
		Lens model name
		• T value of iris
		[Note]
		The F-stop value is displayed instead of the T-stop value if the T-stop value cannot be obtained.
		Focal length
		Focus distance
		Depth of field
		Serial number
8	Network	Displays the network connection setup information.
		<ul> <li>Status (LAN/Wireless Access Point/Wireless Station/Off)</li> </ul>
		IP Address
		• SSID
		MAC Address
		[Note]
		"0.0.0.0" is displayed if the IP address cannot be obtained.

## 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	ecording 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	X-OCN XT	None	Yes	Yes	Yes	Yes	-	Yes	Yes
(6048×4032)	X-OCN ST	4K XAVC-I Class480	Yes	Yes	Yes	Yes	-	-	-
	X-OCN LT	4K XAVC-I Class300	Yes	Yes	Yes	Yes	-	Yes	Yes
		MPEG HD422 P	Yes	_	Yes	Yes	_	Yes –	_
		MPEG HD422 i	_	_	-	_	_		Yes
		FHD ProRes 422 HQ P	Yes	Yes	Yes	Yes	-       -         -       Yes         -       -         -       Yes         -       -	Yes	
		FHD ProRes 422 P	Yes	Yes	Yes	Yes	-	Yes	Yes
		FHD ProRes 422 Proxy P	Yes	Yes	Yes	Yes	_	Yes	Yes
		FHD ProRes 422 Proxy i	-	-	-	-	-	Yes	Yes
6K 1.85:1	X-OCN XT	None	Yes	Yes	Yes	Yes	-	-	-
(6054×3272)	X-OCN ST	4K XAVC-I Class480	Yes	Yes	Yes	Yes	-	-	-
	X-OCN LT	4K XAVC-I Class300	Yes	Yes	Yes	Yes	-	-	-
		MPEG HD422 P	Yes	-	Yes	Yes	-	-	_
		FHD ProRes 422 HQ P	Yes	Yes	Yes	Yes	-	-	-
		FHD ProRes 422 P	Yes	Yes	Yes	Yes	-	-	
		FHD ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	-	-
6K 17:9	X-OCN XT	None	Yes	Yes	Yes	Yes	_	-	-
(6054×3192)	X-OCN ST	4K XAVC-I Class480	Yes	Yes	Yes	Yes	-	-	-
	X-OCN LT	4K XAVC-I Class300	Yes	Yes	Yes	Yes	-	-	-
		MPEG HD422 P	Yes	_	Yes	Yes	Yes     -     -       Yes     -     Yes       Yes     -     -       -     -     Yes       Yes     -     -       Yes     - <td< td=""><td>-</td><td>_</td></td<>	-	_
		FHD ProRes 422 HQ P	Yes	Yes	Yes	Yes		-	-
		FHD ProRes 422 P	Yes	Yes	Yes	Yes	-	-	_
		FHD ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	-	-
6K 2.39:1	X-OCN XT	None	Yes	Yes	Yes	Yes	-	-	-
(6048×2534)	X-OCN ST	4K XAVC-I Class480	Yes	Yes	Yes	Yes	-	-	-
	X-OCN LT	4K XAVC-I Class300	Yes	Yes	Yes	Yes	-	-	-
		MPEG HD422 P	Yes	-	Yes	Yes	-	-	-
		FHD ProRes 422 HQ P	Yes	Yes	Yes	Yes	-	-	-
		FHD ProRes 422 P	Yes	Yes	Yes	Yes	-	-	-
		FHD ProRes 422 Proxy P	Yes	Yes	Yes	Yes	_	_	_

Effective picture size (Imager Mode)	Main recording format		Project F	Project Frame Rate						
	AXS Rec Format	SxS Rec Format	23.98	24.00	25.00	29.97	47.95	50.00	59.94	
5.7K 16:9	X-OCN XT	None	Yes	Yes	Yes	Yes	-	_	_	
(5674×3192)	X-OCN ST	QFHD XAVC-I Class480	Yes	-	Yes	Yes	-	-	-	
	X-OCN LT	QFHD XAVC-I Class300	Yes	-	Yes	Yes	_	_	-	
		MPEG HD422 P	Yes	-	Yes	Yes	-	-	_	
		FHD ProRes 422 HQ P	Yes	Yes	Yes	Yes	_	-	-	
		FHD ProRes 422 P	Yes	Yes	Yes	Yes	_	-	-	
		FHD ProRes 422 Proxy P	Yes	Yes	Yes	Yes	_	-	-	
4K 6:5	X-OCN XT	None	Yes	Yes	Yes	Yes	-	-	-	
096×3432)	X-OCN ST	4K XAVC-I Class480	Yes	Yes	Yes	Yes	_	-	-	
	X-OCN LT	4K XAVC-I Class300	Yes	Yes	Yes	Yes	-	-	-	
		MPEG HD422 P	Yes	-	Yes	Yes	_	_	_	
		FHD ProRes 422 HQ P	Yes	Yes	Yes	Yes	-	-	-	
		FHD ProRes 422 P	Yes	Yes	Yes	Yes	-	-	-	
		FHD ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	-	-	
4K 4:3	X-OCN XT	None	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
(4096×3024)	X-OCN ST	4K XAVC-I Class480	Yes	Yes	Yes	Yes	-	-	-	
	X-OCN LT	4K XAVC-I Class300	Yes	Yes	Yes	Yes	-	Yes	Yes	
		MPEG HD422 P	Yes	-	Yes	Yes	-	-	-	
		MPEG HD422 i	-	-	-	-	-	Yes	Yes	
		FHD ProRes 422 HQ P	Yes	Yes	Yes	Yes	-	Yes	Yes	
		FHD ProRes 422 P	Yes	Yes	Yes	Yes	_	Yes	Yes	
		FHD ProRes 422 Proxy P	Yes	Yes	Yes	Yes	_	Yes	Yes	
		FHD ProRes 422 Proxy i	_	_	_	_	_	Yes	Yes	
4K 4:3 Surround	X-OCN XT	None	Yes	Yes	Yes	Yes	_	_	_	
(4096×3024)	X-OCN ST	MPEG HD422 P	Yes	_	Yes	Yes	_	_	_	
Picture size	X-OCN LT	FHD ProRes 422 HQ P	Yes	Yes	Yes	Yes	_	_	_	
(4552×3360)		FHD ProRes 422 P	Yes	Yes	Yes	Yes	_	_	_	
		FHD ProRes 422 Proxy P	Yes	Yes	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 17:9	X-OCN XT	None	Yes								
(4096×2160)	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	MPEG HD422 P	Yes	-	Yes	Yes	-	_	_		
		MPEG HD422 i	_	-	-	-	-	Yes	Yes		
		FHD ProRes 422 HQ P	Yes	Yes	Yes	Yes	-	Yes	Yes		
		FHD ProRes 422 HQ i	_	-	-	_	-	Yes	Yes		
		FHD ProRes 422 P	Yes	Yes	Yes	Yes	-	Yes	Yes		
		FHD ProRes 422 i	_	_	-	_	-	Yes	Yes		
		FHD ProRes 422 Proxy P	Yes	Yes	Yes	Yes	_	Yes	Yes		
		FHD ProRes 422 Proxy i	_	-	-	-	-	Yes	Yes		
4K 17:9 Surround	X-OCN XT	None	Yes	Yes	Yes	Yes	-	_	_		
(4096×2160)	RAW SQ	MPEG HD422 P	Yes	-	Yes	Yes	_	_	_		
Picture size (4552×2400)	X-OCN ST	FHD ProRes 422 HQ P	Yes	Yes	Yes	Yes	-	_	_		
	X-OCN LT	FHD ProRes 422 P	Yes	Yes	Yes	Yes	-	_	_		
		FHD ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	_	_		
4K 4096×1716 2.39:1	X-OCN XT X-OCN ST X-OCN LT	None	Yes	Yes	Yes	Yes	_	Yes	Yes		
3.8K (QFHD) 16:9	X-OCN XT	None	Yes	Yes	Yes	Yes	_	Yes	Yes		
(3840×2160)	RAW SQ	QFHD XAVC-I Class480	Yes	_	Yes	Yes	_	_	_		
	X-OCN ST	QFHD XAVC-I Class300	Yes	_	Yes	Yes	_	Yes	Yes		
	X-OCN LT	MPEG HD422 P	Yes	_	Yes	Yes	_	_	_		
		MPEG HD422 i	_	_	_	_	_	Yes	Yes		
		FHD ProRes 422 HQ P	Yes	Yes	Yes	Yes	_	Yes	Yes		
		FHD ProRes 422 HQ i	-	_	_	_	_	Yes	Yes		
		FHD ProRes 422 P	Yes	Yes	Yes	Yes	_	Yes	Yes Yes Yes Yes Yes Yes - - - - Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes		
		FHD ProRes 422 i	-	_	_	_	_	Yes	Yes		
		FHD ProRes 422 Proxy P	Yes	Yes	Yes	Yes	_	Yes	Yes		
		FHD ProRes 422 Proxy i	_	-	_	_	_	Yes	Yes		
3.8K (QFHD) 16:9 Surround	X-OCN XT	None	Yes	Yes	Yes	Yes	-	-	-		
(3840×2160)	RAW SQ	MPEG HD422 P	Yes	-	Yes	Yes	-	-	-		
Picture size	X-OCN ST	FHD ProRes 422 HQ P	Yes	Yes	Yes	Yes	_	_	_		
(4268×2400)	X-OCN LT	FHD ProRes 422 P	Yes	Yes	Yes	Yes	_	_	_		
		FHD ProRes 422 Proxy P	Yes	Yes	Yes	Yes	_	_	_		

### SxS Rec Format and Sub Rec Format combinations

Effective picture size (Imager Mode)	Recording format	Recording format Project Frame Rate							
	SxS main recording format	SxS sub recording format	23.98	24.00	25.00	29.97	47.95	50.00	59.94
	(SxS Rec Format) <sup>1)</sup>	(Sub Rec Format) <sup>2)</sup>							
6K 3:2	4K XAVC-I Class480	None	-	-	-	-	-	-	-
(6048×4032)	4K XAVC-I Class300	None	-	-	-	-	-	-	-
	FHD XAVC-I	None	-	-	-	-	-	-	-
	MPEG HD422 P	None	-	-	-	-	-	-	-
	FHD ProRes 422 HQ P	None	-	-	-	-	-	-	-
	FHD ProRes 422 P	None	-	-	-	-	-	-	-
	FHD ProRes 422 Proxy P	None	-	-	-	-	-	-	-
6K 1.85:1	4K XAVC-I Class480	None	Yes	Yes	Yes	Yes	-	-	-
(6054×3272)		MPEG HD422 P	Yes	-	Yes	Yes	-	-	-
		ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	-	-
	4K XAVC-I Class300	None	Yes	Yes	Yes	Yes	-	-	-
		MPEG HD422 P	Yes	-	Yes	Yes	-	-	-
		ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	-	-
	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	-	-	-
6K 17:9	4K XAVC-I Class480	None	Yes	Yes	Yes	Yes	-	-	-
(6054×3192)		MPEG HD422 P	Yes	-	Yes	Yes	-	-	-
		ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	-	-
	4K XAVC-I Class300	None	Yes	Yes	Yes	Yes	-	-	_
		MPEG HD422 P	Yes	-	Yes	Yes	-	-	_
		ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	-	-
5K 2.39:1	4K XAVC-I Class480	None	Yes	Yes	Yes	Yes	-	-	-
(6048×2534)		MPEG HD422 P	Yes	-	Yes	Yes	-	-	-
		ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	-	_
	4K XAVC-I Class300	None	Yes	Yes	Yes	Yes	-	-	_
		MPEG HD422 P	Yes	-	Yes	Yes	-	-	-
		ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	-	-
	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	_	_	-

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	QFHD XAVC-I Class480	None	Yes	_	Yes	Yes	_	_	_	
(5674×3192)		MPEG HD422 P	Yes	_	Yes	Yes	_	_	_	
		ProRes 422 Proxy P	Yes	-	Yes	Yes	-	-	-	
	QFHD XAVC-I Class300	None	Yes	-	Yes	Yes	-	-	_	
		MPEG HD422 P	Yes	-	Yes	Yes	-	-	_	
		ProRes 422 Proxy P	Yes	_	Yes	Yes	_	_	_	
	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 6:5	4K XAVC-I Class480	None	Yes	Yes	Yes	Yes	_	_	_	
(4096×3432)		MPEG HD422 P	Yes	-	Yes	Yes	_	-	_	
		ProRes 422 Proxy P	Yes	Yes	Yes	Yes	_	_	_	
	4K XAVC-I Class300	None	Yes	Yes	Yes	Yes	_	_	_	
		MPEG HD422 P	Yes	_	Yes	Yes	_	_	_	
		ProRes 422 Proxy P	Yes	Yes	Yes	Yes	_	_	_	
	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	-	-	-	
K 4:3	4K XAVC-I Class480	None	Yes	Yes	Yes	Yes	-	-	-	
4096×3024)		MPEG HD422 P	Yes	-	Yes	Yes	-	-	-	
		ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	-	-	
	4K XAVC-I Class300	None	Yes	Yes	Yes	Yes	-	Yes	Yes	
		MPEG HD422 P	Yes	-	Yes	Yes	-	-	-	
		MPEG HD422 i	-	-	-	-	-	Yes	Yes	
		ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	-	_	
		ProRes 422 Proxy i	-	-	-	-	-	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	
IK 4:3 Surround	MPEG HD422 P	None	Yes	_	Yes	Yes	-	_	-	
4096×3024)	FHD ProRes 422 HQ P	None	Yes	Yes	Yes	Yes	-	_	_	
Picture size 4552×3360)	FHD ProRes 422 P	None	Yes	Yes	Yes	Yes	_	_	-	

Effective picture size (Imager Mode)	Recording format		Project F	rame 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 17:9	4K XAVC-I Class480	None	Yes	Yes	Yes	Yes	-	-	_
4096×2160)		MPEG HD422	Yes	-	Yes	Yes	_	-	_
		ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	-	_
	4K XAVC-I Class300	None	Yes	Yes	Yes	Yes	-	Yes	Yes
		MPEG HD422 P	Yes	-	Yes	Yes	-	-	_
		MPEG HD422 i	-	-	-	-	-	Yes	Yes
		ProRes 422 Proxy P	Yes	Yes	Yes	Yes	-	-	-
		ProRes 422 Proxy i	-	-	-	-	-	Yes	Yes
3.8K (QFHD) 16:9 (3840×2160)	QFHD XAVC-I Class480	None	Yes	-	Yes	Yes	_	-	_
		MPEG HD422 P	Yes	-	Yes	Yes	-	-	-
		ProRes 422 Proxy P	Yes	-	Yes	Yes	-	-	-
	QFHD XAVC-I Class300	None	Yes	-	Yes	Yes	_	Yes	Yes
		MPEG HD422 P	Yes	-	Yes	Yes	-	-	_
		MPEG HD422 i	_	-	-	-	-	Yes	Yes
		ProRes 422 Proxy P	Yes	-	Yes	Yes	_	-	_
		ProRes 422 Proxy i	_	-	-	-	_	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 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 be pressing and holding the MENU button for 2 seconds or longer.

## Menu Structure

#### 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.

#### 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.

### Controls

#### 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.

## Setting Menu Items

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.

#### [Note]

FPS cannot be configured if Project > Basic Setting > SxS Rec Format in the full menu is set to interlaced recording. In this case, the Fixed/Variable Select setting changes to Fixed.

Menu item	Settings	Descriptio	n	
Fixed/Variable Select	Fixed/Variable		ether the FPS setting oting or variable spee	
			ole (fixed) when Project e (page 58) is set to 4K :	5
FPS Select	When Fixed/Variable Select is set to Fixed, one of the following values is displayed. Fixed 24/Fixed 25/Fixed 30/	The default	shooting frame rate. t values vary as show g on the Project Fram	n below
	Fixed 48/Fixed 50/Fixed 60	Project Frame Rate	Default when Fixed/Variable Select is Variable	Display value when Fixed/ Variable Select is Fixed
		59.94	60	Fixed 60
		50	50	Fixed 50
		47.95	48	Fixed 48
		29.97	30	Fixed 30
		25	25	Fixed 25
		24	24	Fixed 24
		23.97	24	Fixed 24

Set to 120 (fixed) when Project > Basic Setting > Imager Mode (page 58) is set to 4K 2.39:1 in the full menu.

#### 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 68) is set to On in the full menu.

Menu item	Settings	Description
Shutter Select	When Shutter Mode (page 68) 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 68) 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 58) 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	Step/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.
Shooting > ND Sets the ND filter	position.	
Menu item	Settings	Description
ND Position	Clear/0.3/0.6/0.9/1.2/1.5/1.8/2.1/ 2.4	Selects the density of the ND filter.

#### Shooting > Exposure Index

Sets the El value.

#### [Note]

Exposure Index is grayed out and the setting cannot be changed when Technical > System Configuration > RM/RCP Paint Control (page 68) is set to On in the full menu.

Menu item	Settings	Description
El Select	The setting changes as follows depending on the Project > Basic Setting > Base ISO (page 58) setting in the full menu. ISO 500: 125El/160El/200El/250El/ 320El/400El/ <u>500El</u> /640El/ 800El/1000El/1250El/1600El/ 2000El ISO 2500: 640El/800El/1000El/1250El/ 1600El/2000El/2500El/ 3200El/4000El/5000El/ 6400El/8000El/10000El	Selects the El value. [Note] The settings are fixed to the following values when Technical > System Configuration > RM/RCP Paint Control (page 68) 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 > 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 > System Configuration > RM/RCP Paint Control (page 68) is set to On in the full menu.

Menu item	Settings	Description
Color Temp. Select	<u>3200K+00</u> /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.

#### [Notes]

- LUT Select is grayed out and the setting cannot be changed when Technical > System Configuration > RM/RCP Paint Control (page 68) is set to On in the full menu.
- The HLG setting is configured (fixed) only when Project > Basic Setting > Input Color Space (page 58) is set to Rec.2020/ HLG\_Rec.2100 in the menu.

Menu item	Settings	Description
SDI 1/2	Log/HLG	Display only, as LUT cannot be applied to the SDI 1/2 output image.
SDI 3/4	Log/ <u>Look</u> //HLG	Selects the LUT to apply to the SDI 3/4 output image.
Monitor	Log/s709/R709(800%)/Look// HLG The default values are given below. When Output Format > SDI 1/2 is 2K/HD: s709 When Output Format > SDI 1/2 is 4K/QFHD: Look	Selects the LUT to apply to the Monitor output image.
HDMI	Log/s709/R709(800%)/Look/ HLG The default values are given below. When Output Format > SDI 1/2 is 2K/HD: s709 When Output Format > SDI 1/2 is 4K/QFHD and HDMI is not 4K/QFHD: Look When Output Format > HDMI is 4K/QFHD: Log	Displays the LUT to apply to HDMI output image.
VF LUT	Log/ <u>s709</u> /R709(800%)	<ul> <li>Selects the LUT to apply to the viewfinder/ monitor screen output image.</li> <li>[Notes]</li> <li>Set to R709(800%) (fixed) when Technical &gt; System Configuration &gt; RM/RCP Paint Control (page 68) is set to On in the full menu.</li> <li>An SDR gain value (-12 dB) is applied to the viewfinder/monitor output image.</li> </ul>
SxS Rec	Log/Look//HLG	Selects the LUT to apply to SDI Main clip recorded video.
Sub Rec	Log/ <u>Look</u> //HLG	Selects the LUT to apply to SDI Sub clip recorded video.

#### 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 68) is set to On in the full menu.

Menu item	Settings	Description	Menu item	Settings	Description
Category	Preset Look/User 3D LUT	Selects the LUT category.	ASC CDL Process	CDL Off/Look-> CDL/CDL ->	Sets whether to app
Preset Look Select	s709 / R709(800%) / S-Gamut3.	Selects the Preset Look.		Look	video. When applyi
	Cine/SLog3 / S-Gamut3/SLog3	Outputs images that are suitable as the starting			processing sequence
		point for color grading or images that are close to			CDL Off: Do not app
		print film quality.			video.
		s709: Cinema color			CDL -> Look: Apply
		R709(800%): Faithful color			Look -> CDL: Apply
		S-Gamut3/SLog3: Wide color space			[Notes]
		S-Gamut3.Cine/SLog3: Color space for digital			<ul> <li>ASC CDL is enabled</li> </ul>
		cinema			selected in Shootin
		[Netes]			full menu.
		[Notes] <ul> <li>Configurable only when Category is set to Preset</li> </ul>			<ul> <li>The conditions unc</li> </ul>
		Look.			options are enable
		<ul> <li>S-Gamut3/SLog3 can be selected only when Project &gt;</li> </ul>			When an ASC CDL CDL Off
		Basic Setting > Input Color Space (page 58) is set to			When an ASC CDL
		S-Gamut3/SLog3 in the full menu.			Look > Catego
User 3D LUT Select	File name (01 to 16) of User 3D	Selects the User 3D LUT file.			Look:
	LUT files stored in internal	[Note]			CDL Off / Look
	memory	Configurable only when Category is set to User 3D LUT.			When an ASC CDL
		configurable only when category is set to user 55 EUT.			Category is set
					Select (page 5 CDL Off / 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 68) is set to On in the full menu.

Menu item	Settings	Description
ASC CDL Process	<u>CDL Off</u> /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.
		<ul> <li>[Notes]</li> <li>ASC CDL is enabled for outputs for which Look is selected in Shooting &gt; LUT Select (page 56) in the full menu.</li> <li>The conditions under which the ASC CDL Process options are enabled are given below.</li> <li>When an ASC CDL file is not selected:     <ul> <li>CDL Off</li> <li>When an ASC CDL file is selected, and Shooting &gt; Look &gt; Category (page 57) is set to Preset Look:</li> <li>CDL Off / Look -&gt; CDL</li> </ul> </li> <li>When an ASC CDL file is selected, Shooting &gt; Look &gt; Category is set to User 3D LUT, and Preset Look Select (page 57) is set to s709:     <ul> <li>CDL Off / Look -&gt; CDL</li> </ul> </li> <li>When an ASC CDL file is selected, Shooting &gt; Look &gt; Category is set to User 3D LUT, and Preset Look Select is not set to s709:     <ul> <li>CDL Off / Look -&gt; CDL</li> </ul> </li> </ul>
ASC CDL Select	No File/Not Selected	Selects the ASC CDL registered in the unit.
ASC CDL Information		Displays information about the ASC CDL 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 68) 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 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).

<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.

## Project Menu

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

Menu item	Settings	Description
Imager Mode	6K 3:2/6K 1.85:1/6K 17:9/	Selects the effective picture size.
	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	<ul> <li>[Notes]</li> <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> <li>4K 2.39:1 is displayed only when a High Frame Rate license is installed.</li> </ul>
Project Frame Rate	23.98/24/25/29.97/47.95/ 50/59.94	Selects the project frame rate.
Input Color Space	<u>S-Gamut3.Cine/SLog3</u> /	Sets the color space.
	S-Gamut3/SLog3 / Rec.2020/HLG_Rec.2100	[Note] Rec.2020/HLG_Rec.2100 can be selected only when Technical > System Configuration > RM/RCP Paint Control (page 68) is set to On in the full menu.
AXS Rec Format (Only when an AXS-R7 is attached)	Rec Off/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/ XAVC 4K Class300/ XAVC QFHD Class480/ XAVC QFHD Class300/ MPEG HD P/MPEG HD i/ ProRes 422 HQ HD P/ ProRes 422 HQ HD i/ ProRes 422 HD P/ ProRes 222 HD i/ ProRes Proxy HD P/ ProRes Proxy HD P/ ProRes Proxy HD i	Selects the video format to be recorded on an Sx memory card.
Sub Rec Format	Rec Off/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	ISO 500/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	Off (1.0×)/1.25×/1.3×/1.5×/ 1.8×/2.0×	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	SxS/Output De-Squeeze							
	Off (1.0×)	1.25×	1.3×	1.5×	1.8×	2.0×			
6K 6048×4032 3:2	Yes	Yes	Yes	Yes	Yes	Yes			
6K 6054×3192 17:9	Yes	Yes	Yes	_	_	Yes			
4K 4096×3432 6:5	Yes	-	_	-	-	Yes			
4K 4096×3024 4:3	Yes	-	Yes	-	-	Yes			
4K 4096×3024 4:3 Surround	Yes	-	Yes	-	-	Yes			
4K 4096×2160 17:9	Yes	Yes	Yes	-	-	Yes			
4K 4096×2160 17:9	Yes	Yes	Yes	_	_	Yes			
Surround									

Project > Special Recording	ng
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oject > Special Recording Makes settings related to picture cache recording.

Menu item	Settings	Description
Cache Rec Select	On/ <u>Off</u>	Turns the picture cache recording function on/off. Picture cache recording is not supported (set to Off and grayed out) in the following cases.
		When XAVC-I Class480 (4K, QFHD) recording format is selected
		<ul> <li>For some combinations of effective picture size and system frequency settings</li> </ul>
		<ul> <li>When AXS Rec Format and SxS Rec Format are both set to Rec Off</li> </ul>
		<ul> <li>During simultaneous AXS and SxS recording</li> </ul>

Project > Special Recording Makes settings related to picture cache recording.						
Menu item	Settings	Description				
Max Cache Rec	2sec/4sec/6sec/8sec/10sec/	Sets the playback duration of video to cache in				
Duration	15sec/24sec/30sec	picture cache memory.				
		The maximum value that can be set for each				
		memory card is given below.				

#### When recording to an SxS memory card

Project Frame Rate						
23.98	24	25	29.97	47.95	50	59.94
_	-	_	_	_	_	_
2	2	2	2	_	_	_
2	2	2	2	_	_	_
_	_	_	_	_	2	2
6	6	6	6	-	2	2
-	-	-	-	-	6	6
15	-	15	15	_	-	_
_	_	_	_	_	15	15
	<b>23.98</b> - 2 2 - 6	23.98         24           -         -           2         2           2         2           -         -           6         6           -         -	-         -         -         -           2         2         2         2           2         2         2         2           -         -         -         -           6         6         6         -           -         -         -         -         -	23.98         24         25         29.97           -         -         -         -           2         2         2         2           2         2         2         2           2         2         2         2           -         -         -         -           6         6         6         6           -         -         -         -	23.98         24         25         29.97         47.95           -         -         -         -         -         -           2         2         2         2         -         -           2         2         2         2         -         -           2         2         2         2         -         -           2         2         2         2         -         -           -         -         -         -         -         -           6         6         6         6         -         -           -         -         -         -         -         -         -	23.98         24         25         29.97         47.95         50           -

Menu item	Settings			Descri	ption					
	When record	ing to an AXS	S memo	nemory card						
	Imager	AXS Rec	Projec	ct Frame Rate						
	Mode	Format	23.98	24	25	29.97	47.95	50	59.94	
	6K	X-OCN XT	4	4	2	2	-	_	_	
	6048×4032	X-OCN ST	8	8	8	6	_	-	-	
	3:2	X-OCN LT	15	15	15	15	_	6	4	
	6K	X-OCN XT	6	6	6	4	_	-	_	
	6054×3272	X-OCN ST	10	10	10	8	-	-	-	
	1.85:1	X-OCN LT	24	24	24	15	-	-	-	
	6K	X-OCN XT	6	6	6	4	-	-	-	
	6054×3192	X-OCN ST	10	10	10	8	-	-	-	
	17:9	X-OCN LT	24	24	24	15	-	-	-	
	6K	X-OCN XT	10	10	10	6	-	-	-	
	6048×2534	X-OCN ST	15	15	15	10	-	-	-	
	2.39:1	X-OCN LT	30	30	30	24	-	-	-	
	5.7K	X-OCN XT	6	6	6	4	-	-	-	
	5674×3192	X-OCN ST	10	10	10	8	-	-	-	
16:9	X-OCN LT	24	24	24	15	-	-	-		
	4K 4096×3432	X-OCN XT	10	10	10	8	-	-	-	
		X-OCN ST	15	15	15	15	-	-	_	
	6:5	X-OCN LT	30	30	30	30	-	-	_	
	4K	X-OCN XT	15	15	10	10	4	4	2	
	4096×3024	X-OCN ST	24	24	24	15	8	8	6	
	4:3	X-OCN LT	30	30	30	30	15	15	15	

Menu item	Settings		Settings Description									
	Imager	AXS Rec	Projec	t Frame	e Rate							
	Mode	Format	23.98	24	25	29.97	47.95	50	59.94			
	4K	X-OCN XT	15	15	10	10	-	_	_			
	4096×3024 4:3 Surround	X-OCN ST	24	24	24	15	-	_	_			
		X-OCN LT	30	30	30	30	_	_	_			
	4K	RAW SQ	24	24	24	15	8	8	6			
	4096×2160	X-OCN XT	24	24	24	15	8	8	6			
	17:9	X-OCN ST	30	30	30	30	15	15	10			
		X-OCN LT	30	30	30	30	30	30	24			
	4K 4096×2160 17:9	RAW SQ	24	24	24	15	-	-	-			
		X-OCN XT	24	24	24	15	-	-	_			
		X-OCN ST	30	30	30	30	-	-	-			
	Surround	X-OCN LT	30	30	30	30	-	-	-			
	4K	X-OCN XT	30	30	30	24	-	10	10			
	4096×1716	X-OCN ST	30	30	30	30	_	15	15			
	2.39:1	X-OCN LT	30	30	30	30	_	30	30			
	3.8K(QFHD) 3840×2160	X-OCN XT	24	24	24	15	_	8	6			
		X-OCN ST	30	30	30	30	-	15	10			
	16:9	X-OCN LT	30	30	30	30	-	30	24			
	3.8K(QFHD)	X-OCN XT	24	24	24	15	-	-	-			
	3840×2160	X-OCN ST	30	30	30	30	-	-	-			
	16:9 Surround	X-OCN LT	30	30	30	30	-	-	-			

#### Project > Assignable Button

Assigns functions to assignable buttons.

For details about assigning functions, see "User Functions Screen" (page 39).

Menu item	Settings	Description			
<1>	page 39	Assigns a function to assignable button 1.			
<2>	page 39	Assigns a function to assignable button 2.			
<3>	page 39	Assigns a function to assignable button 3.			
<4>	page 39	Assigns a function to assignable button 4.			
<vf a=""></vf>	page 39	Assigns a function to assignable button A on the viewfinder (DVF-EL200).			
<vf b=""></vf>	page 39	Assigns a function to assignable button B on the viewfinder (DVF-EL200).			
<vf c=""></vf>	page 39	Assigns a function to assignable button C on the viewfinder (DVF-EL200).			
<user 1=""></user>	page 39	Assigns a function to ITEM key 1.			
<user 2=""></user>	page 39	Assigns a function to ITEM key 2.			
<user 3=""></user>	page 39	Assigns a function to ITEM key 3.			
<user 4=""></user>	page 39	Assigns a function to ITEM key 4.			
<user 5=""></user>	page 39	Assigns a function to ITEM key 5.			
Project > All File Makes setting	s 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.			

## TC/Media Menu

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

Menu item	Settings	Description
Mode	Preset F-Run (Ext-Lk)/ <u>Preset</u> <u>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	<u>DF</u> /NDF	Selects the timecode format. DF: Drop frame NDF: Non drop frame
TC Source	Internal/External	Displays the TCG sync source.
Time Data Display	Timecode/Duration	Selects the time data to display.
TC/Media > Clip Nar Sets clip names. (		er + 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

SxS Slot B

SD Card

Execute/Cancel

Execute/Cancel

Sets clip names. (Clip name: Camera ID + Reel Number + Shot Number + date + random string)

Menu item	Settings	Description
SxS Root Folder Name	XDROOT/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.
		<ul> <li>[Notes]</li> <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 M Formats media.	edia	
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	Execute/Cancel	Initializes the AXS memory card in slot B (execute by selecting Execute).
(Only when an AXS-R7 is attached)		by selecting Execute).

by selecting Execute).

by selecting Execute).

Execute).

Initializes the SxS memory card in slot B (execute

Formats the SD card (execute by selecting

TC/Media > Update Media Updates the media's management file.		
Menu item	Settings	Description
AXS Slot A (Only when an AX is attached)	Execute/Cancel S-R7	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 AX is attached)	Execute/Cancel S-R7	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.

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 96).
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 96).
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 100).
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 100).
Makes settings On/Off setting On: Checkbox s		
Makes settings On/Off setting On: Checkbox s Off: Checkbox o	related to information and frame lines is selected using a checkbox (excluding selected	
Makes settings On/Off setting On: Checkbox s Off: Checkbox of Menu item	related to information and frame lines is selected using a checkbox (excluding selected cleared Settings Status Info ( <u>On</u> /Off,	g Frame Line on Playback).           Description           Selects the information to display superimposed
Makes settings On/Off setting On: Checkbox s	related to information and frame lines is selected using a checkbox (excluding selected cleared Settings	Frame Line on Playback).           Description           Selects the information to display superimposed on the viewfinder/monitor screen output image Selects the frame lines to display superimposed
Makes settings On/Off setting On: Checkbox of Off: Checkbox of Menu item VF	related to information and frame lines is selected using a checkbox (excluding selected cleared Settings Status Info (On/Off, Info. A/Info. B) Frame Line (On/Off,	Prame Line on Playback).  Description Selects the information to display superimposed on the viewfinder/monitor screen output image Selects the frame lines to display superimposed on the viewfinder/monitor screen output image Selects the information to display superimposed
Makes settings On/Off setting On: Checkbox of Off: Checkbox of Menu item VF SDI SDI 1/2 SDI 3/4	related to information and frame lines is selected using a checkbox (excluding selected cleared Settings Status Info ( <u>On</u> /Off, <u>Info. A</u> /Info. B) Frame Line (On/ <u>Off, Line A</u> /Line B) Status Info ( <u>On</u> /Off,	Prame Line on Playback).  Description Selects the information to display superimposed on the viewfinder/monitor screen output image Selects the frame lines to display superimposed on the viewfinder/monitor screen output image
Makes settings On/Off setting On: Checkbox of Off: Checkbox of Menu item VF SDI SDI 1/2 SDI 1/2 SDI 3/4 [Note] The display changes according to the Outp Format > SDI 1/2 and	related to information and frame lines is selected using a checkbox (excluding selected cleared Settings Status Info (On/Off, Info. A/Info. B) Frame Line (On/Off, Line A/Line B) Status Info (On/Off, Info. A/Info. B) Frame Line (On/Off, Line A/Line B) Status Info (On/Off, Line A/Line B)	Prame Line on Playback).         Description         Selects the information to display superimposed on the viewfinder/monitor screen output image         Selects the frame lines to display superimposed on the viewfinder/monitor screen output image         Selects the information to display superimposed on the SDI 3/4 output signal.         Selects the frame lines to display superimposed
Makes settings On/Off setting On: Checkbox s Off: Checkbox of Menu item	related to information and frame lines is selected using a checkbox (excluding selected cleared Settings Status Info (On/Off, Info. A/Info. B) Frame Line (On/Off, Line A/Line B) Status Info (On/Off, Info. A/Info. B) Frame Line (On/Off, Line A/Line B) Status Info (On/Off, Line A/Line B)	<ul> <li>Frame Line on Playback).</li> <li>Description</li> <li>Selects the information to display superimposed on the viewfinder/monitor screen output image.</li> <li>Selects the frame lines to display superimposed on the viewfinder/monitor screen output image.</li> <li>Selects the information to display superimposed on the SDI 3/4 output signal.</li> <li>Selects the frame lines to display superimposed</li> </ul>

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 ( <u>On</u> /Off) Info. B ( <u>On</u> /Off)	Selects whether to display the project in the output information set for Status Info A and Status Info B.
	Timecode Info. A (On/ <mark>Off)</mark> Info. B ( <u>On</u> /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/ <mark>Off</mark> ) 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/ <mark>Off</mark> ) Info. B ( <u>On</u> /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 ( <u>On</u> /Off) Info. B (On/ <u>Off</u> )	Selects whether to display the viewfinder status in the output information set for Status Info A and Status Info B.
	Lens Status Info. A ( <u>On</u> /Off) Info. B ( <u>On</u> /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 ( <u>On</u> /Off) Info. B (On/ <u>Off</u> )	Selects whether to display the remote control status in the output information set for Status Info A and Status Info B.

#### 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 Frame Line A/B Setup Center Marker Selects whether to display the center marker in the output information set for Frame Line A and Line A (On/Off) Line B (On/Off) Frame Line B. Option (Cross/Open Cross/ Selects the display form (Cross/Open Cross/Dot) Dot) of the center marker. Aspect Ratio Selects whether to display the aspect ratio marker in the output information set for Frame Line A Line A (On/Off) Line B (On/Off) and Frame Line B. Option (17:9/16:9/15:9/14:9/ Selects the mode (17:9/16:9/15:9/14:9/13:9/4:3/ 13:9/4:3/1.66:1/1.85:1/2:1/ 1.66:1/1.85:1/2:1/2.35:1/2.39:1) when displaying 2.35:1/2.39:1) the aspect ratio marker. Selects whether to display the aspect safety zone Aspect Safety Zone in the output information set for Frame Line A Line A (On/Off) Line B (On/Off) and Frame Line B. Selects the size (percentage of the entire screen) Option (80%/90%/92.5%/95%) of the aspect safety zone marker. Picture Area Selects whether to display the picture area in the Line A (On/Off) output information set for Frame Line A and Line B (On/Off) Frame Line B. Selects whether to display the safety zone in the Safety Zone output information set for Frame Line A and Line A (On/Off) Line B (On/Off) Frame Line B. Option Selects the range (80%/90%/92.5%/95%) of the (80%/90%/92.5%/95%) safety zone. User Frame Line Selects whether to display the user frame lines in Line A (On/Off) the output information set for Frame Line A and Line B (On/Off) Frame Line B. Color Sets the display color of frame lines. Option (White/Yellow/Cyan/ Green/Magenta/Red/Blue) Surround View Type Selects the display form of the Surround View Option (Line/Mask/ marker. Line&Mask) 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.

#### 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 Settings Menu item Description Aspect Ratio Type Selects the display form of the aspect ratio marker. Option (Line/Mask/ Line: Displays lines with color set by Color. Line&Mask) 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 Selects the brightness of the image outside the marker when Aspect Ratio Type or Surround View Option (0 to 15 (12)) Type is set to Mask. Frame Line on Playback Turns the function to superimpose frame lines Option (On/Off) during playback on/off. Monitoring > Monitor Display Makes settings related to monitor display. Menu item Settings Description Focus Distance Format Meter/Feet Selects the focus position display units. Monitoring > Frame Line Makes settings related to lines and markers displayed on the output image. Menu item Settings Description Center Marker Selects the display form of the center marker. Cross/Open Cross/Dot Aspect Ratio 17:9/16:9/15:9/14:9/13:9/4:3/1.66: Selects the mode when displaying the aspect 1/1.85:1/2:1/2.35:1/2.39:1 ratio marker. Aspect Safety Zone 80%/90%/92.5%/95% Selects the size (percentage of the entire screen) of the aspect safety zone marker. Safety Zone 80%/90%/92.5%/95% Selects the safety zone range. Color White/Yellow/Cyan/Green/ Selects the display color of frame lines. Magenta/Red/Blue Surround View Type 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.

Red

On/Off

Menu item	Settings	Description
Aspect Ratio Type	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	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 F Makes settings re	rame Line lated to the user frame lines.	
Menu item	Settings	Description
Width	3 to 479 ( <u>240</u> )	Sets the user frame line width (distance from the center to the left and right edges).
Height	3 to 269 ( <u>135</u> )	Sets the user frame line height (distance from the center to the top and bottom edges).
H Position	Max. –476 to 476 ( <u>±0</u> )	Sets the horizontal position of the center of the user frame lines. The setting range becomes narrower as the Width setting increases above 3.
V Position	Max. –266 to 266 ( <u>±0</u> )	Sets the vertical position of the center of the user frame lines. The setting range becomes narrower as the Height setting increases above 3.
Monitoring > False ( Makes settings re	<b>Color</b> Plated to false colors.	
[Note] False Color is grayed out (page 68) is set to On in		when Technical > System Configuration > RM/RCP Paint Contro
Menu item	Settings	Description
Level	Preset/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.

Turns the display of red on/off.

		when Technical > System Configuration > RM/RCP Paint Control
(page 68) is set to On in the		
Menu item	Settings	Description
Red Upper Limit	0.0% to 109.0% ( <mark>96.1%</mark> ) (0.1% increments)	Sets the upper limit for display in red.
Red Lower Limit	0.0% to 109.0% ( <mark>93.4%</mark> ) (0.1% increments)	Sets the lower limit for display in red.
Yellow	<u>On</u> /Off	Turns the display of yellow on/off.
Yellow Upper Limit	0.0% to 109.0% ( <mark>93.4%</mark> ) (0.1% increments)	Sets the upper limit for display in yellow.
Yellow Lower Limit	0.0% to 109.0% ( <mark>91.3%</mark> ) (0.1% increments)	Sets the lower limit for display in yellow.
Orange	<u>On</u> /Off	Turns the display of orange on/off.
Orange Upper Limit	0.0% to 109.0% ( <mark>90.6%</mark> ) (0.1% increments)	Sets the upper limit for display in orange.
Orange Lower Limit	0.0% to 109.0% ( <mark>87.7%</mark> ) (0.1% increments)	Sets the lower limit for display in orange.
Pink	<u>On</u> /Off	Turns the display of pink on/off.
Pink Upper Limit	0.0% to 109.0% ( <mark>58.0%</mark> ) (0.1% increments)	Sets the upper limit for display in pink.
Pink Lower Limit	0.0% to 109.0% (54.3%) (0.1% increments)	Sets the lower limit for display in pink.
Light Pink	On/Off	Turns the display of light pink on/off.
Light Pink Upper Limit	0.0% to 109.0% ( <mark>50.8%</mark> ) (0.1% increments)	Sets the upper limit for display in light pink.
Light Pink Lower Limit	0.0% to 109.0% ( <mark>47.8%</mark> ) (0.1% increments)	Sets the lower limit for display in light pink.
Cyan	On/Off	Turns the display of cyan on/off.
Cyan Upper Limit	0.0% to 109.0% ( <u>46.5%</u> ) (0.1% increments)	Sets the upper limit for display in cyan.
Cyan Lower Limit	0.0% to 109.0% ( <mark>43.8%</mark> ) (0.1% increments)	Sets the lower limit for display in cyan.
Green	On/Off	Turns the display of green on/off.
Green Upper Limit	0.0% to 109.0% ( <mark>42.2%</mark> ) (0.1% increments)	Sets the upper limit for display in green.
Green Lower Limit	0.0% to 109.0% (38.9%) (0.1% increments)	Sets the lower limit for display in green.
Light Blue	On/Off	Turns the display of light light blue on/off.
Light Blue Upper Limit	0.0% to 109.0% ( <u>34.4%</u> ) (0.1% increments)	Sets the upper limit for display in light blue.

#### 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 68) is set to On in the full menu.

(page 00) is set to off in the			
Menu item	Settings	Description	
Light Blue Lower Limit	0.0% to 109.0% ( <u>24.6%</u> )	Sets the lower limit for display in light blue.	
	(0.1% increments)		
Blue	<u>On</u> /Off	Turns the display of blue on/off.	
Blue Upper Limit	0.0% to 109.0% ( <mark>5.6%</mark> )	Sets the upper limit for display in blue.	
	(0.1% increments)		
Blue Lower Limit	0.0% to 109.0% ( <u>3.5%</u> )	Sets the lower limit for display in blue.	
	(0.1% increments)		
Purple	<u>On</u> /Off	Turns the display of purple on/off.	
Purple Upper Limit	0.0% to 109.0% ( <u>3.5%</u> )	Sets the upper limit for display in purple.	
	(0.1% increments)		
Purple Lower Limit	-7.3% to 109.0% ( <del>-7.3%</del> )	Sets the lower limit for display in purple.	
	(0.1% increments)		
Reset	Execute/Cancel	Resets the on/off setting and threshold of each	
		color (execute by selecting Execute).	

Monitoring > VF Disp Makes settings rela	<b>lay</b> ated to the viewfinder display.	
Menu item	Settings	Description
VF LUT	Log/ <u>s709</u> /R709(800%)	Selects the LUT to apply to the viewfinder/ monitor screen output image.
Status Info	Info. 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/ <u>Off</u>	Selects the frame lines to display superimposed on the viewfinder/monitor screen output image.
VF Magnifier Ratio	<u>×2.0</u> / ×4.0 / ×2.0/×4.0	Selects the focus magnification ratio for the viewfinder.
Color	–99 to <u>±0</u> to +99	Adjusts the color depth of the viewfinder image.
Monitoring > VF Fund Makes settings rela	<b>ction</b> ated 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	Normal/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.

Monitoring > VF Funct Makes settings relat	<b>ion</b> ed to viewfinder functions.	
Menu item	Settings	Description
Zebra Select	<u>1</u> /2/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% ( <mark>61%</mark> )	Sets the display level of zebra 2.
Assign <vf a=""></vf>	page 39	Assigns a function to assignable button A on the viewfinder (DVF-EL200).
Assign <vf b=""></vf>	page 39	Assigns a function to assignable button B on the viewfinder (DVF-EL200).
Assign <vf c=""></vf>	page 39	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	Auto/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.

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	CH-1/CH-2, CH-3/CH-4	Sets the audio output channels to either channels 1 and 2 or channels 3 and 4.
Headphone Mono/ST	Mono/Stereo	Sets the headphones output to monaural (Mono) or stereo (Stereo).

#### Audio > Audio Monitor

Makes settings re	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 Audio > Audio Cont	0 to 99	Adjusts the monitor audio level.	

Makes settings rela	ted to audio input/output.	
Menu item	Settings	Description
Alarm Level	<u>0</u> to 99	Adjusts the alarm audio level.
		[Note] This also sets the audio level of the beep emitted when recording starts/stops if Technical > Switch & Rec Light > Rec Start/Stop Beep is set to On in the full menu.
Input Limiter Mode	Off/-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).

## Technical Menu

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

Technical > Test Sign Makes settings rela		
Menu item	Settings	Description
Color Bars	On/ <u>Off</u>	Turns color bars on/off.
		[Note] 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	ARIB/SMPTE	Selects the type of color bars.
1KHz 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.
Technical > Switch & Makes settings rela	<b>Rec Light</b> ated 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	without Rec Button/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	On/Off	Turns the REC lamp on/off.
Rec Start/Stop Beep	On/ <u>Off</u>	Turns the function to emit a beep sound when recording starts and stops on/off.

#### Technical > System Configuration Makes settings related to control of the unit.

Menu item	Settings	Description
Fan Control	Auto / Max / Off in Rec/Auto /	Selects the fan control mode.
	Off in Rec/Max	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.

Menu item	Settings	Description
RM/RCP Paint Control	On/ <u>Off</u>	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, the RM/RCP Paint Control setting is not changed.
SDI Rec Remote Trigger	Off / 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.
SD HDMI	On/ <u>Off</u>	Turns the function to set the HDMI output signal to SD format on/off.
Shutter Mode	Speed/Angle	Selects the operating mode of the electronic shutter.
	ted to screen flip and noise reductio	
Menu item	Settings	Description Turns the screen flip function on/off.
Flip Image	Normal/Horizontal Flip	[Note] AXS recording images are stored unflipped.
NR(4K 17:9/16:9 AXS)	On/ <u>Off</u>	Turns the 4K 17:9/16:9 AXS recording image noise reduction on/off.
NK(4K 17:9/16:9 AXS)	On/ <u>Off</u>	reduction on/off. [Note] Set to Off (fixed) when the following functions are enabled. • Select FPS
х	iguration	reduction on/off. [Note] Set to Off (fixed) when the following functions are enabled. • Select FPS • SxS/Output De-Squeeze: Settings other than Off(1.0×)
Technical > Lens Conf Makes settings rela Menu item	<b>iguration</b> ted to lenses. Settings	reduction on/off. [Note] Set to Off (fixed) when the following functions are enabled. • Select FPS • SxS/Output De-Squeeze: Settings other than Off(1.0x) • Flip Image: Horizontal Flip Description
Technical > Lens Cont Makes settings rela	<b>iguration</b> ted to lenses.	reduction on/off. [Note] Set to Off (fixed) when the following functions are enabled. • Select FPS • SxS/Output De-Squeeze: Settings other than Off(1.0x) • Flip Image: Horizontal Flip

Menu item	Settings	Description
Lens 12pin	On/Off	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.	<u>Auto</u> /Off	Sets whether to compensate for a drop in peripheral lighting when a compatible lens is attached.
E-Mt Chro. Aber. Comp.	Auto/Off	Sets whether to compensate for chromatic aberration in peripheral lighting when a compatible lens is attached.
Technical > Authentica Makes basic settings	ation s 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. Set to "mpc3610" by factory default.
Technical > Network Makes settings relat	ed to the network.	
Makes settings relat	ed to the network. Settings	Description
Makes settings relat Menu item		Description Turns the network connection on/off.
	Settings	Turns the network connection on/off. Enables/disables DHCP. When set to [On], an IP address is automatically
Makes settings relat Menu item Setting	Settings LAN/Wireless/ <u>Off</u>	Turns the network connection 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

enu item	Settings	Description
/ireless	Network Mode ( <u>Access Point</u> / Station)	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	<ul><li>When Network Mode is set to Access Point Displays the SSID for the wireless connection to the unit.</li><li>When Network Mode is set to Station Displays/configures the SSID of the connection destination access point.</li></ul>
		[Note] Valid characters for display and entry: Alphabetic (A to Z, a to z) Numeric (0 to 9@()) Symbols (!"#\$%&**+,/;;<=>?[\]^`{[]~)
	Password	<ul> <li>When Network Mode is set to Access Point</li> <li>Displays the password for wireless connection to the unit.</li> <li>When Network Mode is set to Station</li> <li>Displays/configures the password of the connection destination access point.</li> </ul>
		[Note] Valid characters for display and entry: Alphabetic (A to Z, a to z) Numeric (0 to 9@—()) Symbols (!"#\$%&*+,/;;<=>?[\]^`{]}~)
	WPS (Execute/Cancel)	Starts connection setup using WPS (execute by selecting Execute).
	Channel (Auto(5GHz)/Auto/CH1/	Sets the channel of the access point.
	CH2/CH3/CH4/CH5/CH6/CH7/ CH8/CH9/CH10/CH11)	<ul> <li>[Notes]</li> <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>

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Menu item	Settings	Description
	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: obtain automatically, DHCP/Off:	Enter the IP address of the unit. Enabled only when DHCP is [Off].
	<u>192.168.1.50</u> )	[Note] Configurable only when Network Mode is set to Station.
	Subnet Mask (DHCP/On: obtain automatically, DHCP/Off:	Enter the subnet mask of the unit. Enabled only when DHCP is [Off].
	<u>255.255.255.0</u> )	[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	o 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 rela	ted to batteries.	
Menu item	Settings	Description
	5% to 100% (5% increments)	Sets the threshold value at which the remaining battery capacity indicator starts flashing when
Near End:Info Battery		using an InfoLithium battery.
Near End:Info Battery End:Info Battery	<u>0%</u> to 5%	using an InfoLithium battery. Sets the threshold value for displaying the "Battery End" warning when using an InfoLithium battery.

Menu item	Settings	Description
End:Sony Battery	11.0V 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 ( <u>11.8V</u> ) (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	11.0V 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 Voltag Sets alarms relating	e Alarm to external DC supply voltage.	
Menu item	Settings	Description
DC Low Voltage1	11.5V 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	11.0V 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	22.5V 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	22.0V 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 Di Makes settings relat		
Menu item	Settings	Description
Brightness level	High/Mid/Low/Minimum	Adjusts the brightness of the sub display and mini display.
Technical > Genlock Makes settings relat	ted to genlock.	
Menu item	Settings	Description
Input Source	HD SDI/Analog	Selects the genlock input signal. HD SDI: Digital Analog: Analog

Makes settings related to genlock.		
Menu item	Settings	Description
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 S	<b>iet</b> ted to the built-in clock.	
Menu item	Settings	Description
Time Zone	UTC + 14:00 to UTC Greenwich to UTC – 12:00 (30-minute increments)	Selects the difference in time from UTC (Greenwich Mean Time) in increments of 30 minutes.
Date Mode	YYMMDD/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 > Langua Selects the display	age 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 Displays the accum		
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).

Menu item	Settings	Description
Reset	Execute/Cancel	Initializes all unit settings (execute by selecting Execute).
Maintenance > License Installs software op	•	
Menu item	Settings	Description
Install: <target_ license&gt;</target_ 	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 > Firmwa Displays the versior	are n of the unit and AXS-R7, and updat	es 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).

Maintenance > Firmware Displays the version of the unit and AXS-R7, and updates the unit.		
Menu item	Settings	Description
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).

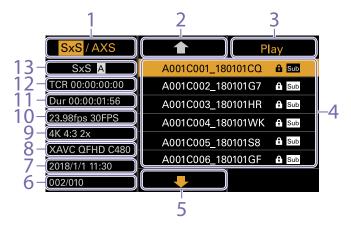
# Clip Operations on the Sub Display

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.

lcon	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

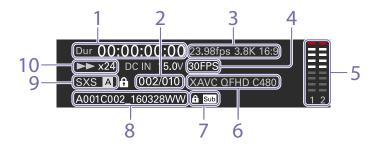
Play back at high speed in the forward direction.

### 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

     Image: Clip with a created sub clip
     Clip with a created sub clip

     Image: Clip with a created sub clip
     Clip with a created sub 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.

# 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.

Insert the SxS memory card to play.

 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 74).

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 46) in the menu.

### Cueing up

To play from the start of a clip, press the Prev button on the sub display (page 74). 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 73) on the sub display.

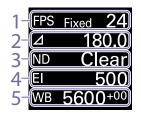
### Cases where playback on the unit is not supported

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 Imager Mode is set to 6K 3:2 and Project Frame Rate is set to 59.94P or 50P
- When Imager Mode is set to 4K 4:3 and Project Frame Rate is set to 59.94P or 50P

# 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 (El), or displays 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 68) 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 68) is set to On in the full menu. In this mode, the El value cannot 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 68) is set to On in the full menu. Set these using the remote control unit (page 87).

ShutterWB (White Balance)

# Controls

### HOME button (page 8)

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

ITEM key 1 ( $\uparrow$ ) (page 8) Press to select items on the Home screen.

ITEM key 2 (●) (page 8) Press to apply the selected item.

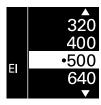
ITEM key 3 (♣) (page 8) Press to select items on the Home screen.

### Basic Operation

- 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.

- 5 Press the button (ITEM key 2) to apply the setting.
- 6 Press the HOME button to hide the cursor.

4K 2.39:1 1)

120 FPS

Home Screer	n Items on the Mini Display		ltem	Description		
				Imager Mode	Setting	
	ems and corresponding setting values are re shown underlined and in <b>bold</b> text.	given below.		4K 4:3 Surround View 4K 6:5 5.7K 16:9	1 to 30 FPS	
Item Description			6K 2.39:1			
FPS	Sets the shooting frame rate.	variable speed and constant speed shooting c		6K 17:9 6K 1.85:1		
	the Home screen (page 37) of t			6K 3:2	1 to 25 FPS	
	When "Fixed" is selected, the se	tting is determined by the Project category >		6K 3:2 <sup>1)</sup>	1 to 60 FPS	
	Project Frame Rate (page 44) se	etting in the menu.	Exposure Index	Setting > Base ISO (page 58) s	hanges as follows depending on the Project > Basic etting in the full menu.	
	Project Frame Rate D	Display		ISO 500: 125EI/160EI/200EI/250EI/320EI/400EI/ <u>500EI</u> /640EI/800EI/1000EI/ 1250EI/1600EI/2000EI ISO 2500:		
	23.98 F	ixed 24				
	24 F	ixed 24				
	25 F	ixed 25		640EI/800EI/1000EI/1250EI/1600EI/2000EI/2500EI/3200EI/4000EI/ 5000EI/6400EI/8000EI/10000EI Sets the electronic shutter angle/shutter speed. Select from preset values registered as shutter steps.		
	29.97 F	ixed 30				
	47.95 F	ixed 48	Shutter			
	50 F	ixed 50				
	59.94 F	ixed 60		[Note] Not available when the electronic shutter operation is set to Continuous.		
	Project category > Imager Mod	When "Variable" is selected, the setting changes as follows depending on the Project category > Imager Mode (page 58) setting in the menu.			on options depending on the Technical > System e (page 68) setting in the full menu. ator	
	Imager Mode	Setting		360.0/ <u>180.0</u> /172.8/144.0/9		
	3.8K 16:9 4K 17:9	1 to 60 FPS		Speed (SS): Shutter speed indi 1/24, 1/25, 1/30, 1/48, 1/5	icator 0, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000 <sup>2)</sup>	
	4K 17:9 <sup>1)</sup>	1 to 60, 66, 72, 75, 88, 90, 96, 100, 110 FPS	ND Filter	Sets the density of the ND filte Clear/0.3/0.6/0.9/1.2/1.5/1	er. The following settings are available. 1.8/2.1/2.4	
	3.8K 16:9 Surround View 4K 17:9 Surround View 4K 4:3	1 to 48 FPS	WB (White Balance)	Sets the color temperature of Select from preset values regis <u>3200K+00</u> /4300K+00/550	stered as WB steps.	
	4K 4:3 <sup>1)</sup>	1 to 60, 66, 72, 75 FPS	<sup>1)</sup> Only when a High Fram	e Rate License is activated.		
			, , ,			

<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 73) 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 (1) is pressed while playback is paused. Fast reverses the clip when ITEM key 1 (1) is pressed during playback.

# Playing

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

- Insert the SxS memory card to play.
- 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 78). 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 46) 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 82)
- Control playback on the unit (page 82)
- Configure shooting settings on the unit (page 82)
- Control the lens attached to the unit (page 82)
- Configure and operate assignable buttons on the unit (page 82)

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 supported devices, OS, and browsers are shown in the following table.

Device	OS	Browser
Computer	Microsoft Windows 8.1/	Chrome
	Microsoft Windows 10	
	macOS 10.13/10.14	Safari

Device	OS	Browser
Smartphone	Android 8.x/9.0	Chrome
	iOS 11.x/12.x	Safari
Tablet	Android 6.x/7.x	Chrome
	iOS 11.x/12.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: 11, 12 Chrome: V69

# 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.

- 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 69) 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 69) 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

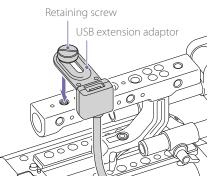
The unit can connect to devices using wireless LAN connection by attaching the CBK-WA02 Wireless LAN Adaptor (option) to the unit.

### Attaching the CBK-WA02

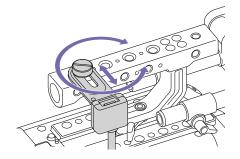
### [Note]

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

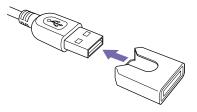
Attach the USB extension adaptor to the point shown in the following diagram, and turn the retaining screw clockwise to secure it in position.



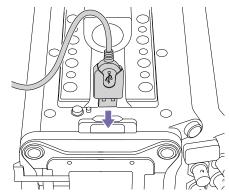
You can adjust the position of the USB extension adaptor over the range shown in the following diagram.



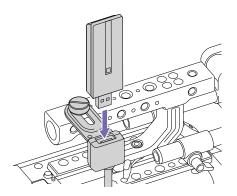
2 Attach the protective cap (supplied) to the USB connector of the USB extension adaptor.



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

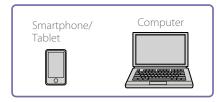


# 4 Insert the CBK-WA02 into the USB connector of the USB extension adaptor.



### 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.

### [Note]

The steps will vary depending on the device used.

Set Technical > Network > Setting (page 69)

2 Set Technical > Network > Wireless > Network

Mode (page 69) in the full menu to Access

Select Technical > Network > Wireless > WPS

Select Execute by turning the MENU dial, then

Network Settings or Wi-Fi Settings preferences.

5 Open the device Network Settings or Wi-Fi

6 Press the WPS push button in the device

The steps will vary depending on the device used.

Connecting using SSID and password on the device

in the full menu to Wireless.

Settings, and turn Wi-Fi on.

(page 69) in the full menu.

Connect by entering the SSID and password on

Set Technical > Network > Setting (page 69)

2 Set Technical > Network > Wireless > Network

Mode (page 69) in the full menu to Access

3 Open the device Network Settings or Wi-Fi

4 Select the unit's SSID from the Wi-Fi network

SSID list, then enter a password to connect.

> Network > Wireless > SSID and Password

For the unit's SSID and password, see Technical

in the full menu to Wireless.

(page 69) in the full menu.

Settings, and turn Wi-Fi on.

press the MENU dial.

Point.

3

4

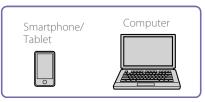
[Note]

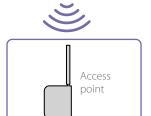
the device.

Point.

## 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.

Turn the access point on.

2 Turn the unit on.

3 Set Technical > Network > Setting (page 69) in the full menu to Wireless.

- 4 Set Technical > Network > Wireless > Network Mode (page 69) in the full menu to Station.
- 5 Select Technical > Network > Wireless > WPS (page 69) in the full menu.
- 6 Select Execute by turning the MENU dial, then press the MENU dial.
- 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.

- Set Technical > Network > Setting (page 69) in the full menu to Wireless.
- 2 Set Technical > Network > Wireless > Network Mode (page 69) in the full menu to Station.
- Set the following items in Technical > Network > Wireless (page 69) 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.

- Set Technical > Network > Setting (page 69) in the full menu to Wireless.
- 2 Set Technical > Network > Wireless > Network Mode (page 69) in the full menu to Station.
- 3 Select Technical > Network > Wireless > Scan Networks (page 69) 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.
- 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.

- Connect the unit and device as described in "Connecting the Unit and Device via Wired LAN" or "Connecting the Unit and Device via Wireless I AN"
- 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 46) 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.

Enter the user name and password (Technical > Authentication (page 69) 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 and Lens screen. Select the Camera tab to display the Camera screen, and select the Lens tab to display the Lens screen.

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



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 El display area switches to become the Gain display area and restrictions apply to the items (page 33) that can be operated when Technical > System Configuration > RM/RCP Paint Control (page 68) is set to On in the full menu.

- Shooting settings (page 31) FPS, El, Shutter, ND, LUT, WB
- Camera status display (page 31) Operating status, time data, audio level meter, clip name, recording format, media status/ free space, battery voltage/remaining battery capacity

### l ens screen



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

### Full Menu screen

Select Full Menu in the Global Menu to display the full menu screen in order to configure items (page 55).

#### [Note]

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

# Camera screen = Camera Contr

ΞF	Full Menu			D : A Camera • Connected Lock -
	É Project	2		.2-1
6			Imager Mode	4K 17:9
-	Special Recording		Project Frame Rate	23.98
	All File		Input Color Space	S-Gamut3.Cine/SLog3
	TC/Media	3	SxS Rec Format	XAVC 4K Class300
0	Timecode		Sub Rec Format	Rec Off
	Clip Name Format		Base ISO	ISO 500
		4		
	Output Format			
	OSD Appearance			
	Monitor Display			
	Frame Line			

## OSS (Open Source Software) Information screen

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

### Playback screen

			ID : A Camera	Connected	Lock →
Assign					
TF Highlight Clip Ind	2 Not Assign	ad 3	Not Assigned	4 Not Assig	ned
VF Focus Magnifier	B VF False C	olor 😢	VF Status Info		
٨					
A		F Rev	Play/Pause	F Fwd	HOME
		PAUSE BAT	07:00 23.98tps 16.4 V 24FPS 01 / 001 XAVC 4K C	300	
		A001C001_18	0109D1		
	CLIPS				
		Prev	Stop/Clips	Next	

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 74) F Rev, Play/Pause, F Fwd, Prev, Stop/Clips, Next
- Playback status display (page 74) 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 73).)

### 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.

## Playing

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 73).)

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 33)

## 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 68) 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 40)

"Functions that can be Assigned to Viewfinder (DVF-EL200) Assignable Buttons A to C" (page 42)

#### [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

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.

- Make sure that the necessary devices are attached to the unit and power is supplied to them.
- 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\_XXXXXXX" exists on the AXS memory card, the next created clip will be named "B002C004\_XXXXXXX."
- 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 TC/ Media category > Clip Naming 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\_XXXXXXX," the next clip will be named "F001CXXX\_XXXXXXX." 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 48).

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.

# 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 59) set to On in the full menu, video of duration set by Project > Special Recording > Max Cache Rec Duration (page 59) 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 59.
- 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 39). 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

By pressing the FOCUS MAG button of the viewfinder (DVF-EL200, DVF-L700) attached to the unit, you can expand the center part of the viewfinder, making it is easier to adjust the focus. The magnified display does not affect the recorded image or output signal.

Normal focus magnification reduces the resolution because it simply magnifies a part of the displayed image. However, the two-times (×2) focusing by the unit provides focus magnification while maintaining the display resolution by cutting out the portion to magnify from the 4K signal instead of the recorded image or other output signal. Four-times (×4) focus magnification selection is also supported using the 4K image cutout function.

The FOCUS MAG button magnification sequence can be changed using Monitoring > VF Display > VF Magnifier Ratio (page 66) in the full menu. When VF Magnifier Ratio is set to  $\times 2.0/\times 4.0$ , the magnification sequence each time you press assignable buttons 1 to 4 assigned with VF Focus Magnifier is  $\times 2.0 \rightarrow \times 4.0 \rightarrow \times 1.0 \rightarrow \times 2.0$ .

#### [Note]

In High Frame Rate mode (shooting frame rate of 61 fps or higher), the  $\times 2$  focus display image resolution decreases because cutout display from a 4K image is not supported.

# 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 39, 40) 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 68) 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 40) 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 68) 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	Signal level	
color	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%	41.5% to 45.4%
	(18% gray + 1 stop)	(18% gray + 1 stop)
Cyan	43.8% to 46.5%	36.3% to 39.6%
Green	38.9% to 42.2%	30.4% to 34.4%
	(18% gray)	(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 65).
- 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 > RW/RCP Paint Control (page 68) 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 66) 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 17:9 Surround (23.98p, 24p)
 4K 4:3 (23.98p, 24p)

## 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 35).

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/S-Log3, set Project category > Basic Setting > Input Color Space (page 58) in the menu to S-Gamut3. Cine/S-Log3.

Save the User 3D LUT file in the following directory on the SD card. PRIVATE\SONY\PRO\LUT\

# 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\

# Connecting a Remote Control Unit

When an RM-B170 Remote Control Unit, RCP-1001/1501 Remote Control Panel, or other control unit is connected, some functions can be controlled from that unit.

# Connecting a Remote Control Unit

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 Remote Control Panel.

# Releasing Remote Control Mode

Turn off the unit, and disconnect the remote control unit.

## Setting the Paint Function

Technical > System Configuration > RM/RCP Paint Control (page 68) must be set to On in the full menu to enable the paint function.

# Main Functions Controllable using the RCP-1001/1501 or RM-B170/B750

### Table legend

The following indicate remote control support on the display.

Yes: Control supported

### -: Control not supported

tem	Sub-item	Sub-item	Selection option	RCP-1001	RCP-1501	RM-B170	RM-B750
Shooting	FPS	Fixed/Variable Select	On/Off	-	Yes	Yes <sup>1)</sup>	Yes
		FPS Select	1FPS to 110FPS	_	Yes	Yes <sup>1)</sup>	Yes
	Shutter Select 2)	Shutter ON/OFF	On/Off	_	Yes	Yes	Yes
		ECS ON/OFF	On/Off	_	Yes	Yes	Yes
		Shutter Speed	Values registered for Step.	_	Yes	Yes	Yes
		·	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				
		ECS Frequency	_	-	Yes	Yes	Yes
	ND	ND Position	1: (CLEAR)	Yes	Yes	Yes	Yes
			2: (0.3 density)				
			3: (0.6 density)				
			4: (0.9 density)				
			5: (1.2 density)				
			6: (1.5 density)				
			7: (1.8 density)				
			8: (2.1 density)				
			9: (2.4 density)				

ltem	Sub-item	Sub-item	Selection option	RCP-1001	RCP-1501	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
Paint <sup>2)</sup>	Switch Status	Gamma	On/Off	_	Yes	Yes <sup>1)</sup>	Yes
		Black Gamma <sup>5)</sup>	On/Off	_	Yes	Yes <sup>1)</sup>	Yes
		Flare	On/Off	_	Yes	Yes 1)	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 1)	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 1)	Yes
	Black Gamma	Setting	On/Off	_	Yes	Yes 1)	Yes
		Range	Low/L.Mid/H.Mid	_	Yes	_	Yes
		Master Black Gamma	-99 to ±0 to +99	_	Yes	Yes 1)	Yes
Technical	Test Signals	Color Bars On/Off	On/Off	Yes	Yes	Yes	Yes
Rec	-	-	-	_	_	Yes	Yes
Play	_	-	_	_	_	Yes	Yes
Stop	_	-	_	_	_	Yes	Yes
F.Rev	_	-	_	_	_	Yes	Yes
F.Fwd	_	_	_	_	_	Yes	Yes
Rec Review	_	-	_	_	_	Yes	Yes
Next	_	-	_	_	_	Yes	_
<sup>p</sup> rev.	_	-	_	_	_	Yes	_
Gain <sup>2)</sup>	Gain(Step)	-	-6dB/-3dB/0dB/3dB/6dB/9dB/12dB/15dB/18dB	Yes	Yes	Yes	Yes
White Mode <sup>2)</sup>	Preset ON/OFF	-	On/Off	_	_	Yes	Yes
ris	Iris Level	-	(Control range of target lens)	Yes	Yes	Yes	Yes
	Close	_	On/Off	Yes	Yes	_	Yes
Zoom <sup>6)</sup>	Remote	_	On/Off	_	Yes 1)	Yes <sup>1)</sup>	_
	Speed	_	_	_	_	_	_
	Tele to Wide	_	_	_	Yes 1)	Yes <sup>1)</sup>	_
	Zoom Value[%]	_	_	_	Yes <sup>1)</sup>	Yes <sup>1)</sup>	_
	Focal Length[mm]	_	_	_	Yes 1)	Yes <sup>1)</sup>	_

Item	Sub-item	Sub-item	Selection option	RCP-1001	RCP-1501	RM-B170	RM-B750
Focus <sup>6)</sup>	Remote	_	On/Off	_	Yes 1)	Yes 1)	_
	Focus Position	_	_	_	Yes 1)	Yes 1)	_
	Focus Value[%]	_	_	_	Yes 1)	Yes 1)	_
	Focus Length[m]	_	_	_	Yes 1)	Yes 1)	-

<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 68) 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 ±99, it may not be possible to display the correct Color Temp Balance value for the R/B Gain value.
 <sup>5)</sup> Configurable only when Project > Basic Setting > Input Color Space (page 58) is set to Rec.2020/HLG\_Rec.2100 in the menu.

<sup>6</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

When a connected external device does not support a REC

MONITOR OUT Connector (BNC Type)

Set the output format using the Monitoring menu

Use a commercially available 75-ohm coaxial cable

Audio and timecode are not superimposed on this output.

trigger signal, the device cannot be operated.

Outputs an HD SDI signal.

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 63).

#### [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 63).

Use a commercially available 75-ohm coaxial cable for connection.

#### [Note]

Check that the ground connection between the unit and external device is securely arounded 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 75ohm 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 68) in the menu to HD SDI Remote I/F or Parallel Rec.

# HDMI OUT Connector (Type A

### Connector)

(page 63).

[Note]

for connection.

[Note]

Set the output format using the Monitoring menu (page 63).

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. 1

3

4

Signal	I/O	Specification
UNREG GND	-	GND for UNREG
REC TALLY	OUT	Open-collector
		output
		(Max. 50 mA)
		Low: REC
REC TRIGGER	IN	Open or +5 V DC:
		Normal
		GND: Active (REC)
UNREG +12 V	OUT	+11 V to 17 V DC
OUT		output
		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

# 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 output a REC Tally signal and input a REC Trigger signal through the 24V OUT connector.



No.	Signal	Specification
1	GND	
2	24V-AUX	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
3	R/S	2.07

(	OUT	Open-collector	2
		output	
		(Max. 50 mA)	
		Low: REC	
GER	IN	Open or +5 V DC:	
		Normal	
		GND: Active (REC)	
2 V	OUT	+11 V to 17 V DC	
		output	
		11 V to 17 V input	3

current: 0.8 A

# 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.

#### [Notes]

- If the reference signal is unstable, genlock is not possible.
- The subcarrier is not synchronized.

# 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 70) in the full menu.

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
59.94P	1920×1080 59.94i
	720×486 59.94i

You can check the genlock status using Technical > Genlock > Reference Lock Type (page 71) in the menu.

# 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).

- Set TC/Media > Timecode > Mode (page 61) 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 screen. 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 61) 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, highpower 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.

## 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 62) 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
- Power consumption of the DVF-EL200: Approx. 2.5 W
- ③ Power consumption of the CBK-3610XS: Approx. 3.9 W

### $Y [W] = X [V] \times 9.0 [A]^{1)} - (60 + (1) + (2) + (3))^{2} [W]$

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.

### Notes on Security

- 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 69).

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 48).

### 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/	XAVC-I 4K Class300/	4096×2160P 12G	-	4096×2160P YPbPr 12G	4096×2160P YPbPr 12G	No output	No output		
	4K 2.39:1 <sup>1)</sup> / 4K 4:3/	4:3/	4096×2160P Square Level B	4096×2160P Square Level B		4096×2160P YPbPr 3G Level B-DL				
	4K 17:9		4096×2160P 2SI Level B	4096×2160P 2SI Level B		4096×2160P YP	bPr 3G Level B-DL			
			2048×1080P	1920×1080P Level B	2048×1080P	2048×1080P	1920×1080P YPbPr 3G Level B	1920×1080P YPbPr 3G Level B		
				<u>1920×1080i</u>	YPbPr 3G Level B-DL	YPbPr 3G Level B-DL	1920×1080i YPbPr 1.5G	1920×1080i YPbPr 1.5G		
			1920×1080P Level B	1920×1080P Level B	1920×1080P	1920×1080P	1920×1080P YPbPr 3G Level B	1920×1080P YPbPr 3G Level B		
				1920×1080i	YPbPr 3G Level B-DL	YPbPr 3G Level B-DL	1920×1080i YPbPr 1.5G	1920×1080i YPbPr 1.5G		
			<u>1920×1080i</u>	<u>1920×1080i</u>	1920×1080i YPbPr 1.5G	1920×1080i YPbPr 1.5G	1920×1080i YPbPr 1.5G	1920×1080i YPbPr 1.5G		
	3.8K 16:9	XAVC-I QFHD Class300/	3840×2160P 12G	-	3840×2160P YPbPr 12G	3840×2160P YPbPr 12G	No output	No output		
		Rec Off	3840×2160P Square Level B	3840×2160P Square Level B	3840×2160P YPbPr 3G Level B-DL					
			3840×2160P 2SI Level B	3840×2160P 2SI Level B	3840×2160P YPbPr 3G Level B-DL					
			1920×1080P Level B	1920×1080P Level B	1920×1080P	1920×1080P	1920×1080P YPbPr 3G Level B	1920×1080P YPbPr 3G Level B		
				<u>1920×1080i</u>	YPbPr 3G Level B-DL	YPbPr 3G Level B-DL	1920×1080i YPbPr 1.5G	1920×1080i YPbPr 1.5G		
			<u>1920×1080i</u>	<u>1920×1080i</u>	1920×1080i YPbPr 1.5G	1920×1080i YPbPr 1.5G	1920×1080i YPbPr 1.5G	1920×1080i YPbPr 1.5G		
	6K 3:2/ 4K 4:3/	ProRes 422 HQ HD P/ ProRes 422 HD P/	1920×1080P Level B	1920×1080P Level B	1920×1080P	1920×1080P	1920×1080P YPbPr 3G Level B	1920×1080P YPbPr 3G Level B		
	4K 17:9/	ProRes 422 Proxy HD P		1920×1080i	YPbPr 3G Level B-DL	YPbPr 3G Level B-DL	1920×1080i YPbPr 1.5G	1920×1080i YPbPr 1.5G		
3.8k	3.8K 16:9	MPEG 1920×1080i/ProRes 422 HQ HD i/ ProRes 422 HD i/ ProRes 422 Proxy HD i	1920×1080i	1920×1080i	1920×1080i YPbPr 1.5G	1920×1080i YPbPr 1.5G	1920×1080i YPbPr 1.5G	1920×1080i 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	4K 4:3/4K 17:9	RAW SQ/ X-OCN XT/ X-OCN ST/ X-OCN LT/	4096×2160P Square	4096×2160P Square		4006×2160D V			
			Level B	Level B	4096×2160P YPbPr 3G Level B				
			4096×2160P 2SI Level	4096×2160P 2SI Level	4096×2160P YPbPr 3G Level B				
		Rec Off	B	В					
			2048×1080P Level B	<u>1920×1080P</u>		PbPr 3G Level B		P YPbPr 1.5G	
<b>.</b>			<u>1920×1080P</u>	<u>1920×1080P</u>		PYPbPr 1.5G	1920×10801	P YPbPr 1.5G	
Project			Monitoring > Output		Output format	(0) 0	(D) 2	601.4	
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 1.85:1/	XAVC-I 4K Class480/	4096×2160P 6G	-	4096×2160P YPbPr 6G	4096×2160P YPbPr 6G	No output	No output	
	6K 2.39:1/ 6K 3:2/	XAVC-1 4K Class300/ Rec Off	4096×2160P 2SI	-	4096×2160P YPbPr 3G Level B-DS No output No output				
	6K 17:9/		4096×2160P Square	4096×2160P Square		4096×2160	P YPbPr 1.5G		
	5.7K 16:9/ 4K 2.39:1 <sup>1)</sup> / 4K 4:3/			1920×1080P	2048×1080PsF YPbPr 1.5G	2048×1080PsF	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	
			2048×1080PsF	1920×1080PsF		YPbPr 1.5G	1920×1080PsF	1920×1080PsF	
	4K 6:5/				4000 40000	4000 40000	YPbPr 1.5G	YPbPr 1.5G	
	4K 17:9		1920×1080P	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	
					1920×1080PsF	1920×1080PsF	1920×1080PsF	1920×1080PsF	
			<u>1920×1080PsF</u>	1920×1080PsF	YPbPr 1.5G	YPbPr 1.5G	YPbPr 1.5G	YPbPr 1.5G	
	3.8K 16:9	XAVC-I QFHD Class480/	3840×2160P 6G	_	3840×2160P YPbPr 6G	3840×2160P YPbPr 6G	No output	No output	
		XAVC-I QFHD Class300/ Rec Off	3840×2160P 2SI	-	3840×2160P YPb	Pr 3G Level B-DS	No output	No output	
		RECUII	3840×2160P Square	3840×2160P Square		3840×2160	P YPbPr 1.5G	1	
			1920×1080P	1920×1080P	1920×1080P	1920×1080P	1920×1080P	1920×1080P	
					YPbPr 1.5G	YPbPr 1.5G	YPbPr 1.5G	YPbPr 1.5G	
			<u>1920×1080PsF</u>	1920×1080PsF	1920×1080PsF YPbPr 1.5G	1920×1080PsF YPbPr 1.5G	1920×1080PsF YPbPr 1.5G	1920×1080PsF YPbPr 1.5G	
	6K 2.39:1/ 6K 3:2/	MPEG 1920×1080P/ ProRes 422 HQ HD P/ ProRes 422 HD P/ ProRes 422 Proxy HD P	1920×1080P	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	
			<u>1920×1080PsF</u>	1920×1080PsF	1920×1080PsF YPbPr 1.5G	1920×1080PsF YPbPr 1.5G	1920×1080PsF YPbPr 1.5G	1920×1080PsF YPbPr 1.5G	

Project			Monitoring > Output	t 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 1.85:1/	XAVC-I 4K Class480/	4096×2160P 6G	_	4096×2160P YPbPr 6G	4096×2160P YPbPr 6G	No output	No output
	6K 2.39:1/	XAVC-I 4K Class300/	4096×2160P 2SI	_	4096×2160P YPb	Pr 3G Level B-DS	No output	No output
	6K 3:2/	Rec Off	4096×2160P Square	4096×2160P Square		4096×2160	PYPbPr 1.5G	
	6K 17:9/ 4K 2.39:1 <sup>1)</sup> /		2048×1080P	<u>1920×1080P</u>	2048×1080PsF YPbPr 1.5G	2048×1080PsF YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G
4K 4:3/ 4K 6:5/ 4K 17:9	4K 6:5/		1920×1080P	— <u>1920×1080P</u>	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G
	41(17.9		1920×1080PsF		1920×1080PsF YPbPr 1.5G	1920×1080PsF YPbPr 1.5G		
		ProRes 422 HQ HD P/ ProRes 422 HD P/ ProRes 422 Proxy HD P	1920×1080P	— <u>1920×1080P</u>	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G
			1920×1080PsF		1920×1080PsF YPbPr 1.5G	1920×1080PsF YPbPr 1.5G		
	3.8K 16:9	Rec Off	3840×2160P 6G	_	3840×2160P YPbPr 6G	3840×2160P YPbPr 6G	No output	No output
			3840×2160P Square	3840×2160P Square		3840×2160	P YPbPr 1.5G	
			3840×2160P 2SI	-	3840×2160P YPbPr 3G Level-B	3840×2160P YPbPr 3G Level-B	No output	No output
			1920×1080P		1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G		
			<u>1920×1080PsF</u>	<u>1920×1080P</u>	1920×1080PsF YPbPr 1.5G	1920×1080PsF YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.50

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
23.98	6K 2.39:1/	XAVC-I 4K Class480/ XAVC-I 4K Class300/	4096×2160P 6G	-	4096×2160P YPbPr 6G	4096×2160P YPbPr 6G	No output	No output
			4096×2160P 2SI	-	4096×2160P YPb	Pr 3G Level B-DS	No output	No output
	6K 3:2/	Rec Off	4096×2160P Square	4096×2160P Square		4096×2160	P YPbPr 1.5G	
5.7K 16:9/ 4K 2.39:1 <sup>11</sup> / 4K 4:3/ 4K 6:5/ 4K 17:9 3.8K 16:9			2048×1080P	_	2048×1080PsF YPbPr 1.5G	2048×1080PsF YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G
	4K 4:3/		1920×1080P	1020-10900	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P	1920×1080P
	4K 17:9		<u>1920×1080PsF</u>	— <u>1920×1080P</u>	1920×1080PsF YPbPr 1.5G	1920×1080PsF YPbPr 1.5G	YPbPr 1.5G	YPbPr 1.5G
	3.8K 16:9	XAVC-I QFHD Class480/ XAVC-I QFHD Class300/ Rec Off	3840×2160P 6G	-	3840×2160P YPbPr 6G	3840×2160P YPbPr 6G	No output	No output
			3840×2160P 2SI	_	3840×2160P YPb	Pr 3G Level B-DS	No output	No output
			3840×2160P Square	3840×2160P Square	3840×2160P YPbPr 1.5G			
			1920×1080P	1020-10900	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P	1920×1080P
			<u>1920×1080PsF</u>	- <u>1920×1080P</u>	1920×1080PsF YPbPr 1.5G	1920×1080PsF YPbPr 1.5G	YPbPr 1.5G	YPbPr 1.5G
	6K 1.85:1/ 6K 2.39:1/ 6K 3:2/ 6K 17:9/ 5.7K 16:9/	MPEG 1920×1080P/ ProRes 422 HQ HD P/ ProRes 422 HD P/ ProRes 422 Proxy HD P	1920×1080P	_ <u>1920×1080P</u>	1920×1080P YPbPr 1.5G	1920×1080P YPbPr 1.5G	1920×1080P	1920×1080P YPbPr 1.5G
	4K 4:3/ 4K 6:5/ 4K 17:9/ 3.8K 16:9		<u>1920×1080PsF</u>		1920×1080PsF YPbPr 1.5G	1920×1080PsF YPbPr 1.5G	YPbPr 1.5G	

<sup>1)</sup> SxS Rec Format is set to Rec Off when Imager Mode is set to 4K 2.39:1.

# 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 48).

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

Project			Monitoring > Output Fo	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/	XAVC-I 4K Class300/			1020-10000114	4096×2160P		4096×2160P	
	4K 2.39:1/	Rec Off	4000 21000 120		1920×1080P Level A	1920×1080P	1920×1080P YPbPr 3G Level A	1920×1080P	
	4K 4:3/		4096×2160P 12G	-	1020-1000	4096×2160P		4096×2160P	
4K 17:9	4K 17:9				<u>1920×1080i</u>	1920×1080i	1920×1080i YPbPr 1.5G	1920×1080i	
			4096×2160P 2SI		1020-100001	4096×2160P		4096×2160P	
				4096×2160P 2SI	1920×1080P Level A	1920×1080P	1920×1080P YPbPr 3G Level A	1920×1080P	
					1020×1020;	4096×2160P	1920×1080i YPbPr 1.5G	4096×2160P	
					<u>1920×1080i</u>	<u>1920×1080i</u>	1920×106011PDP11.5G	1920×1080i	
			4096×2160P Square	1000 v21000 Causas	1920×1080P Level A	1920×1080P	1920×1080P YPbPr 3G Level A	1920×1080P	
			4090X2100P Square	4096×2160P Square	<u>1920×1080i</u>	<u>1920×1080i</u>	1920×1080i YPbPr 1.5G	1920×1080i	
			2048×1080P	1920×1080P Level B	1920×1080P Level A	1920×1080P	1920×1080P YPbPr 3G Level A	1920×1080P	
			2048X1080P	<u>1920×1080i</u>	<u>1920×1080i</u>	<u>1920×1080i</u>	1920×1080i YPbPr 1.5G	1920×1080i	
			1920×1080P	1920×1080P Level B	1920×1080P Level A	1920×1080P	1920×1080P YPbPr 3G Level A	1920×1080P	
				1920×1080i	<u>1920×1080i</u>	<u>1920×1080i</u>	1920×1080i YPbPr 1.5G	1920×1080i	
			<u>1920×1080i</u>	<u>1920×1080i</u>	<u>1920×1080i</u>	<u>1920×1080i</u>	1920×1080i YPbPr 1.5G	1920×1080i	

Project			Monitoring > Output Form	at		Output format		
Project Frame Rate	Imager Mode	SxS Rec Format	SDI 1/2	SDI 3/4	Monitor	HDMI	Monitor Out	HDMI
	3.8K 16:9	XAVC-I QFHD Class300/			1020×1000D Laval A	3840×2160P		3840×2160P
		Rec Off	2040-21600 126		1920×1080P Level A	1920×1080P	1920×1080P YPbPr 3G Level A	1920×1080P
			3840×2160P 12G	-	1020-1000	3840×2160P	1020×1000: VPED= 1.5C	3840×2160P
					<u>1920×1080i</u>	1920×1080i	1920×1080i YPbPr 1.5G	1920×1080i
					1020×1020D Laval A	3840×2160P	1920×1080P YPbPr 3G Level A	3840×2160P
			3840×2160P 2SI	3840×2160P 2SI	1920×1080P Level A	1920×1080P	1920X 1080P YPDPF 3G Level A	1920×1080P
					1920×1080i	3840×2160P	1920×1080i YPbPr 1.5G	3840×2160P
					<u>1920×10801</u>	<u>1920×1080i</u>	1920X10801 (PDP1 1.5G	1920×1080i
			2040-216006	3840x2160P Square -	1920×1080P Level A	1920×1080P	1920×1080P YPbPr 3G Level A	1920×1080P
			3840×2160P Square	SO4UXZIOUP SQUALE	<u>1920×1080i</u>	<u>1920×1080i</u>	1920×1080i YPbPr 1.5G	1920×1080i
			1020-10000	1920×1080P Level B	1920×1080P Level A	1920×1080P	1920×1080P YPbPr 3G Level A	1920×1080P
			1920×1080P	<u>1920×1080i</u>	<u>1920×1080i</u>	<u>1920×1080i</u>	1920×1080i YPbPr 1.5G	1920×1080i
			<u>1920×1080i</u>	<u>1920×1080i</u>	<u>1920×1080i</u>	<u>1920×1080i</u>	1920×1080i YPbPr 1.5G	1920×1080i
	6K 3:2/ 4K 2.39:1/	2.39:1/         ProRes 422 HD P/           4:3/         ProRes 422 Proxy HD P	1920×1080P	1920×1080P Level B	1920×1080P Level A	1920×1080P	1920×1080P YPbPr 3G Level A	1920×1080P
	4K 4:3/		1920/10001	<u>1920×1080i</u>	<u>1920×1080i</u>	<u>1920×1080i</u>	1920×1080i YPbPr 1.5G	1920×1080i
	4K 17:9/ 3.8K 16:9	ProRes 422 HQ HD i/ ProRes 422 HD i/ ProRes 422 Proxy HD i	1920×1080i	1920×1080i	1920×1080i	1920×1080i	1920×1080i YPbPr 1.5G	1920×1080i
		MPEG 1920×1080i			1920×1080i	1920×1080i	1920×1080i YPbPr 1.5G	1920×1080i
			1920×1080i	1920×1080i		720×480P <sup>1)2)</sup>	No output	720×480P
					-	720×576P <sup>1)3)</sup>	No output	720×576P
Project			Monitoring > Output Form	at			Output format	
Project Frame Rate	Imager Mode	AXS Rec Format	SDI 1/2	SDI 3/4	Monitor	HDMI	Monitor Out	HDMI
7.95	4K 4:3/4K 17:9	RAW SQ/	4096×2160P Square Level B	4096×2160P Square Level B	<u>1920×1080P</u>	<u>1920×1080P</u>	1920×1080P YPbPr 1.5G	1920×1080P
		X-OCN XT/	4096×2160P 2SI Level B	4096×2160P 2SI Level B	_			
		X-OCN ST/	2048×1080P	<u>1920×1080P</u>	-			
		X-OCN LT/ Rec Off	1920×1080P	1920×1080P	_			

Project			Monitoring > Output Fo	ormat			Output format	
Project Frame Rate	Imager Mode	SxS Rec Format	SDI 1/2	SDI 3/4	Monitor	HDMI	Monitor Out	HDMI
9.97/25	6K 1.85:1/	XAVC-I 4K Class480/			1020, (10000	4096×2160P		4096×2160P
	6K 2.39:1/	XAVC-I 4K Class300/	1006 21600 66		1920×1080P	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
	6K 3:2/	Rec Off	4096×2160P 6G	-	1000 10000 5	4096×2160P	1000 10000 EV/DLD 1.5C	4096×2160P
	6K 17:9/				<u>1920×1080PsF</u>	1920×1080PsF	1920×1080PsF YPbPr 1.5G	1920×1080Ps
	5.7K 16:9/ 4K 2.39:1/		-		1020 10000	4096×2160P	1020-1000D.VDL D. 1.5C	4096×2160P
	4K 4:3/		1000-01000-001	_	1920×1080P	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
	4K 6:5/		4096×2160P 2SI		1020-10000-5	4096×2160P		4096×2160P
	4K 17:9				<u>1920×1080PsF</u>	1920×1080PsF	1920×1080PsF YPbPr 1.5G	1920×1080Ps
			4000-21000	1000-01000	1920×1080P	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
			4096×2160P Square	4096×2160P Square	1920×1080PsF	1920×1080PsF	1920×1080PsF YPbPr 1.5G	1920×1080Ps
			2040-410000-5	1920×1080P	1920×1080P	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
			2048×1080PsF	1920×1080PsF	1920×1080PsF	1920×1080PsF	1920×1080PsF YPbPr 1.5G	1920×1080Ps
			1920×1080P	1920×1080P	1920×1080P	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
			1920×1080PsF	1920×1080PsF	1920×1080PsF	1920×1080PsF	1920×1080PsF YPbPr 1.5G	1920×1080Ps
	3.8K 16:9	XAVC-I QFHD Class480/			1020. 10000	3840×2160P	1000-10000-00-0-1-50	3840×2160P
		XAVC-I QFHD Class300/	2040-2160066		1920×1080P	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
		Rec Off	3840×2160P 6G	-	1020-10000-5	3840×2160P		3840×2160P
					<u>1920×1080PsF</u>	1920×1080PsF	1920×1080PsF YPbPr 1.5G	1920×1080Ps
			3840×2160P 2SI	_	1920×1080P	3840×2160P	1000 10000 \(DL D. 1.50	3840×2160P
						1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
					<u>1920×1080PsF</u>	3840×2160P		3840×2160P
						1920×1080PsF		1920×1080Ps
			2040-216006	20.40: .21.600.6	1920×1080P	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
			3840×2160P Square	3840×2160P Square	1920×1080PsF	1920×1080PsF	1920×1080PsF YPbPr 1.5G	1920×1080Ps
			1920×1080P	1920×1080P	1920×1080P	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
			1920×1080PsF	1920×1080PsF	1920×1080PsF	1920×1080PsF	1920×1080PsF YPbPr 1.5G	1920×1080Ps
	6K 1.85:1/ 6K 2.39:1/ 6K 3:2/ 6K 17:9/ 5.7K 16:9/ 4K 2.39:1/ 4K 4:3/ 4K 6:5/ 4K 17:9/ 3.8K 16:9	MPEG 1920×1080P/ ProRes 422 HQ HD P/ ProRes 422 HD P/ ProRes 422 Proxy HD P	1920×1080P	1920×1080P	1920×1080P	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
			<u>1920×1080PsF</u>	1920×1080PsF	1920×1080PsF	1920×1080PsF	1920×1080PsF YPbPr 1.5G	1920×1080Ps

Project			Monitoring > Output Fo	ormat			Output format	
Project Frame Rate	Imager Mode	SxS Rec Format	SDI 1/2	SDI 3/4	Monitor	HDMI	Monitor Out	HDMI
24	6K 1.85:1/	XAVC-I 4K Class480/ XAVC-I 4K Class300/	4096×2160P 6G		1920×1080P	4096×2160P	1920×1080P YPbPr 1.5G	4096×2160P
	6K 2.39:1/		4090X2100P 0G	-	1920×10001	<u>1920×1080</u>	1920×1080F 1FDF1 1.5G	1920×1080P
	6K 3:2/	Rec Off	4096×2160P 2SI –		1020-410200	4096×2160P	1920×1080P YPbPr 1.5G	4096×2160P
	6K 17:97 4K 2:39:17 4K 4:37 4K 6:57 4K 17:9	(17:9/	4090X2100P 251	-	<u>1920×1080P</u>	<u>1920×1080P</u>	1920×1080P (PDP) 1.5G	1920×1080P
			4096×2160P Square	4096×2160P Square	<u>1920×1080P</u>	<u>1920×1080P</u>	1920×1080P YPbPr 1.5G	1920×1080P
			2048×1080P	<u>1920×1080P</u>	<u>1920×1080P</u>	<u>1920×1080P</u>	1920×1080P YPbPr 1.5G	1920×1080P
			1920×1080P	<u>—— 1920×1080P</u>	1920×1080P	<u>1920×1080P</u>	1920×1080P YPbPr 1.5G	1920×1080P
			1920×1080PsF		1920X1060P		1920×1080F 1FDF1 1.5G	1920X1060P
		ProRes 422 HQ HD P/ ProRes 422 HD P/	1920×1080P	1000 10000	1020×10800	1020×10800	1920×1080P YPbPr 1.5G	1920×1080P
		ProRes 422 Proxy HD P	<u>1920×1080PsF</u>	<u>— 1920×1080P</u>	<u>1920×1080P</u>	<u>1920×1080P</u>		
	3.8K 16:9	Rec Off	2040-2160066		1020-10000	3840×2160P		3840×2160P
			3840×2160P 6G	-	<u>1920×1080P</u>	1920×1080P	1920×1080PsF YPbPr 1.5G	1920×1080PsF
			3840×2160P Square	3840×2160P Square	<u>1920×1080P</u>	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
			2040-021600-201		1020-10000	3840×2160P		3840×2160P
			3840×2160P 2SI –	<u>1920×1080P</u>	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P	
			1920×1080P	1020-10200	1020×1020D=E	1020-10800		1020-10000
			1920×1080PsF	<u>— 1920×1080P</u>	<u>1920×1080PsF</u>	<u>1920×1080P</u>	1920×1080P YPbPr 1.5G	1920×1080P

Project			Monitoring > Output Fe	ormat			Output format	
Project Frame Rate	Imager Mode	SxS Rec Format	SDI 1/2	SDI 3/4	Monitor	HDMI	Monitor Out	HDMI
23.98	6K 1.85:1/ XAVC-I	XAVC-I 4K Class480/	4096×2160P 6G	_	102010000	4096×2160P	1920×1080P YPbPr 1.5G	4096×2160P
	6K 2.39:1/				<u>1920×1080P</u>	1920×1080P		1920×1080P
	6K 3:2/	Rec Off	4000-21000-201		1020-10000	4096×2160P	1000 10000 VDL D. 1.5C	4096×2160P
	6K 17:9/		4096×2160P 2SI	-	<u>1920×1080P</u>	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
	5.7K 16:9/ 4K 2.39:1/		4096×2160P Square	4096×2160P Square	<u>1920×1080P</u>	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
	4K 2:39.17 4K 4:3/		2048×1080P	1920×1080P	1920×1080P	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P
	4K 6:5/		1920×1080P					
	4K 17:9		1920×1080PsF	<u> 1920×1080P</u>	<u>1920×1080P</u>	<u>1920×1080P</u>	1920×1080P YPbPr 1.5G	1920×1080P
	3.8K 16:9	XAVC-I QFHD Class480/	/ 3840×2160P 6G		<u>1920×1080P</u>	3840×2160P	1920×1080 YPbPr 1.5G	3840×2160P
	XAVC-I QFHD Class3	XAVC-I QFHD Class300/		-		1920×1080P		1920×1080P
		Rec Off	3840×2160P 2SI	_	<u>1920×1080P</u>	3840×2160P	- 1920×1080P YPbPr 1.5G	3840×2160P
						1920×1080P		1920×1080P
		3840×2160P Square	3840×2160P Square	1920×1080P	1920×1080P	1920×1080P YPbPr 1.5G	1920×1080P	
			1920×1080P					
			1920×1080PsF	<u> 1920×1080P</u>	<u>1920×1080P</u> <u>1920×1080P</u>	1920×1080P YPbPr 1.5G	1920×1080P	
	6K 1.85:1/ 6K 2.39:1/ 6K 3:2/ 6K 17:9/ 5.7K 16:9/	MPEG 1920×1080P/ ProRes 422 HQ HD P/ ProRes 422 HD P/ ProRes 422 Proxy HD P	1920×1080P					
	4K 2.39:1/ 4K 4:3/ 4K 6:5/ 4K 17:9/ 3.8K 16:9		<u>1920×1080PsF</u>	<u>1920×1080P</u>	<u>1920×1080P</u>	<u>1920×1080P</u>	1920×1080P YPbPr 1.5G	1920×1080P

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.
 When Project Frame Rate is 59.94.
 When Project Frame Rate is 50.0.

# 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 70).

# **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	g Display
vvunnin	y Dispidy

				1.1
When one of the following	messages occurs.	use the following	table to resolve the	proplem.

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 1)	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	An error was detected in the battery pack.
Please Change Battery	Replace with a normal battery pack.
Backup Battery End	The remaining capacity of the backup battery is
Please Change	insufficient.
	Replace the backup battery.
Cannot Use SxS(A)*	A memory card that has been partitioned or a
Please Change	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)*	A card using a different file system or an unformatted
Unsupported File System	card was inserted.
	The card cannot be used in the unit, and must be
	replaced or formatted using the unit.
Media Error	An error occurred with the memory card. The card
SxS(A)* Needs to be Restored	requires restoration.
	Restore the card.
SxS(A)* Error	Recording or playback stopped because an error
Recording Stopped	occurred on the memory card.
Playback Stopped	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	Unsupported AXS memory was detected.
Change AXS(A) to AXS S48 Memory	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	The type of the connected lens does not match the
Please Check "Lens IF" Setting	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	There are 2 days remaining before the license for the
(XXXX: Type of license, Y: Number of days remaining)	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.

\* "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

Yes: Saved No: Not saved -: Not saved (temporary setting)

ltem	Sub-item	File type All
Look File	Load User 3D LUT	-
	Reset User 3D LUT	-
	Reset All User 3D LUTs	-
	Load ASC CDL	-
	Reset ASC CDL	-
	Reset All ASC CDLs	-

<sup>1)</sup> Selection options added or edited by a user are also saved.

# Shooting Menu

ltem	Sub-item	File type	
		All	
FPS	Fixed/Variable Select	Yes	
	FPS Select	Yes	
Shutter <sup>1)</sup>	Shutter Select	Yes	
	Step/Cont. Select	Yes	
	Add/Change Step	Yes	
	Delete Step	Yes	
ND	ND Position	Yes	
Exposure Index	El Select	Yes	
White Balance <sup>1)</sup>	Color Temp. Select	Yes	
	Add/Change Step	Yes	
	Delete Step	Yes	
	Auto White Balance	_	
_UT Select	SDI 1/2	Yes	
	SDI 3/4	Yes	
	Monitor	Yes	
	HDMI	Yes	
	VF LUT	Yes	
	SxS Rec	Yes	
	Sub Rec	Yes	
Look	Category	Yes	
	Preset Look Select	Yes	
	User 3D LUT Select	Yes	
	ASC CDL Process	Yes	
	ASC CDL Select	Yes	
	ASC CDL Information	_	

# Project Menu

# TC/Media Menu

Item	Sub-item	File type
		All
Basic Setting	Imager Mode	Yes
	Project Frame Rate	Yes
	Input Color Space	Yes
	AXS Rec Format	Yes
	SxS Rec Format	Yes
	Sub Rec Format	Yes
	Base ISO	Yes
	SxS/Output De-Squeeze	No
Special Recording	Cache Rec Select	Yes
	Max Cache Rec Duration	Yes
Assignable Button	<1>	Yes
	<2>	Yes
	<3>	Yes
	<4>	Yes
	<vf a=""></vf>	Yes
	<vf b=""></vf>	Yes
	<vf c=""></vf>	Yes
	<user 1=""></user>	Yes
	<user 2=""></user>	Yes
	<user 3=""></user>	Yes
	<user 4=""></user>	Yes
	<user 5=""></user>	Yes
All File	Load SD Card	-
	Save SD Card	_
	File ID	Yes
	Format SD Card	_

ltem	Sub-item	File type
		All
Timecode	Mode	Yes
	Manual Setting	_
	Reset	_
	TC Format	Yes
	TC Source	_
	Time Data Display	Yes
Clip Name Format	Camera ID	Yes
	Reel Number	Yes
	Camera Position	Yes
	SxS Root Folder Name	Yes
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	_

# Monitoring Menu

ltem	Sub-item	File type All	
Output Format	SDI 1/2	Yes	
	SDI 3/4	Yes	
	Monitor	Yes	
	HDMI	Yes	
OSD Appearance	VF	Yes	
	SDI	Yes	
	SDI 1/2		
	SDI 3/4		
	Monitor	Yes	
	HDMI	_	
	Status Info A/B Setup	Yes	
	Frame Line A/B Setup	Yes	
Monitor Display	Focus Distance Format	Yes	
Frame Line	Center Marker	Yes	
	Aspect Ratio	Yes	
	Aspect Safety Zone	Yes	
	Safety Zone	Yes	
	Color	Yes	
	Surround View Type	Yes	
	Aspect Ratio Type	Yes	
	Mask Level	Yes	
	Frame Line on Playback	Yes	
User Frame Line	Width	Yes	
	Height	Yes	
	H Position	Yes	
	V Position	Yes	

ltem	Sub-item	File type
		All
False Color	Level	Yes
	Red	Yes
	Red Upper Limit	Yes
	Red Lower Limit	Yes
	Yellow	Yes
	Yellow Upper Limit	Yes
	Yellow Lower Limit	Yes
	Orange	Yes
	Orange Upper Limit	Yes
	Orange Lower Limit	Yes
	Pink	Yes
	Pink Upper Limit	Yes
	Pink Lower Limit	Yes
	Light Pink	Yes
	Light Pink Upper Limit	Yes
	Light Pink Lower Limit	Yes
	Cyan	Yes
	Cyan Upper Limit	Yes
	Cyan Lower Limit	Yes
	Green	Yes
	Green Upper Limit	Yes
	Green Lower Limit	Yes
	Light Blue	Yes
	Light Blue Upper Limit	Yes
	Light Blue Lower Limit	Yes
	Blue	Yes
	Blue Upper Limit	Yes
	Blue Lower Limit	Yes
	Purple	Yes
	Purple Upper Limit	Yes
	Purple Lower Limit	Yes
	Reset	_
VF Display	VF LUT	Yes
	Status Info	Yes
	Frame Line	Yes
	VF Magnifier Ratio	Yes
	Color	Yes

tem	Sub-item	File type	Audio Menu		
		All			
VF Function	Double Speed Scan	Yes			
	Peaking Frequency	Yes	Item	Sub-item	File type
	Zebra	Yes			All
	Zebra Select	Yes	Audio Input	CH-1 Audio Select	Yes
	Zebra1 Level	Yes		CH-2 Audio Select	Yes
	Zebra1 Aperture Level	Yes		CH-1 Audio Level	Yes
	Zebra2 Level	Yes		CH-2 Audio Level	Yes
	Assign <vf a=""></vf>	Yes		MIC Reference	Yes
	Assign <vf b=""></vf>	Yes	Audio Monitor	Monitor CH	Yes
	Assign <vf c=""></vf>	Yes		Monitor Level	Yes
			Audio Configuration	Alarm Level	Yes
				Input Limiter Mode	Yes

AGC Level

AGC Mono/Stereo

MIC Input Mono/Stereo

Monitor Output CH Pair

Phantom Power +48V

Headphone Mono/ST

Yes

Yes

Yes

Yes

Yes

Yes

# Technical Menu

ltem	Sub-item	File type	
		All	
Test Signals	Color Bars	Yes	
	Color Bars Type	Yes	
	1kHz Tone on Color Bars	Yes	
	Test Saw	Yes	
Switch & Rec Light	Lock Operator Side	Yes	
	Lock Assistant Side	Yes	
	Rec Light	Yes	
	Rec Start/Stop Beep	Yes	
System Configuration	Fan Control	Yes	
-	RM/RCP Paint Control	Yes	
	SDI Rec Remote Trigger	Yes	
	SD HDMI	Yes	
	Shutter Mode	Yes	
Special Configuration	Flip Image	Yes	
	NR(4K 17:9/16:9 AXS)	Yes	
Lens Configuration	PL-Mt Interface Position	Yes	
	Lens 12pin	Yes	
	E-Mount Shading Comp.	Yes	
	E-Mt Chro. Aber. Comp.	Yes	
Authentication	User Name	No	
	Password	No	
Network	Setting	Yes	
	LAN	Yes	
	Wireless	Yes 1)	
APR	APR	_	
	Reset	_	
Battery	Near End:Info Battery	Yes	
	End:Info Battery	Yes	
	Near End:Sony Battery	Yes	
	End:Sony Battery	Yes	
	Near End:Other Battery	Yes	
	End:Other Battery	Yes	
	Detected Battery	_	

ltem	Sub-item	File type	
		All	
DC Voltage Alarm	DC Low Voltage1	Yes	
	DC Low Voltage2	Yes	
	DC(24V) Low Voltage1	Yes	
	DC(24V) Low Voltage2	Yes	
Control Display	Brightness level	Yes	
Genlock	Input Source	Yes	
	Reference Lock Type	_	

<sup>1)</sup> The following items are not saved.Scan Networks

SSID

Password

WPS

MAC AddressRegenerate Password

# Maintenance Menu

Item	Sub-item	File type	
		All	
Clock Set	Time Zone	Yes	
	Date Mode	Yes	
	Date	_	
	Time	_	
Language	Select	Yes	
Hours Meter	Camera(System)	_	
	R7 Recorder(System)	_	
	Camera(Resettable)	_	
	R7 Recorder(Resettable)	_	
	Reset-Cam(Resettable)	_	
	Reset-R7(Resettable)	_	
Reset to Default	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 68) is set to On in the full menu, the following remote control unit items (page 87) are also saved in an All-settings file.

- Black
- Flare
- Gamma<sup>1)</sup> • Black Gamma 1)
- Gain
- <sup>1)</sup> Except when set to S-Log3.

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http://www.sony.net/Products/Linux/common/ search.html

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For the content of these licenses, connect the unit to a network and view the OSS Information screen (page 82) on the web remote control screen.

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# Specifications

## **General Specifications**

Approx. 3.9 kg (8 lb 9.6 oz) (excluding Mass handle, VF attachment, bottom cover) Dimensions See page 116. 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) 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, OFHD) MPEG HD422 (HD) Apple ProRes 422 HQ (HD) Apple ProRes 422 (HD) Apple ProRes 422 Proxy (HD) Recording format (audio) LPCM 8CH (2CH recording/playback), 24-bit, 48 kHz Recording project frame rate RAW SO (when the AXS-R7 is attached): 4K 17:9/3.8K 16:9 59.94P/50P/29.97P/25P/24P/ 2398P 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 OFHD: 3840×2160 29.97P/25P/ 23.98P XAVC-I Class300: 4K: 4096×2160 59.94P/50P/29.97P/25P/24P/ 23.98P OFHD: 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 HO: 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 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 MPFG2 HD422 Approx. 108 minutes when using SBS-64G1A/B

Apple ProRes 422 HQ (HD) 23.98P Approx. 33 minutes when using SBP-64A/B/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

#### [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) Ruilt-in filters

uiit-in	tilters	

		ND filter A		
		Clear	0.3	0.6
			(1/2)	(1/4)
ND filter B	Clear	Clear	0.3	0.6
			(1/2)	(1/4)
	0.9	0.9	1.2	1.5
	(1/8)	(1/8)	(1/16)	(1/32)
	1.8	1.8	2.1	2.4
	(1/64)	(1/64)	(1/128)	(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) Operating Instructions (CD-ROM) (1)

### **Optional Accessories**

0.7-inch type viewfinder DVF-EL200 7-inch type viewfinder DVF-L700 VF cable for attaching DVF-L700 A-2201-632-A or A-2201-633-A Camera Extension System CBK-3610XS Wireless LAN Adaptor CBK-WA02 Remote Control Unit RM-B170/B750 RCP-1000/1500/1530 RCP-1001/1501 Portable Memory Recorder AXS-R7 SxS memory cards (SxS Pro+/SxS-1) SBP-64/128/256E, SBS-32/64/128G1C Card Reader SBAC-US30, SBAC-UT100, AXS-AR1

Shoulder Adaptor (attaches to VCT-14 using V shoe) VCT-FSA5

#### PL mount lens

SCL-PK6/F (Feet), SCL-PK6/M (Meters) (6-lens kit: 20, 25, 35, 50, 85, 135 mm), SCL-P11X15 (11 mm to 16 mm zoom)

E mount lens

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

#### Battery Pack

BP-FL75, BP-FLX75

### AC Adaptor

AC-DN2B, 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 XQD memory cards (QDA-EX1 XQD to SxS ExpressCard Adaptor required) QD-S64E, QD-S32E, QD-N64, QD-M128A, QD-M64A, QD-M32A, QD-G128A/E, QD-G64A/E, QD-G32A/E

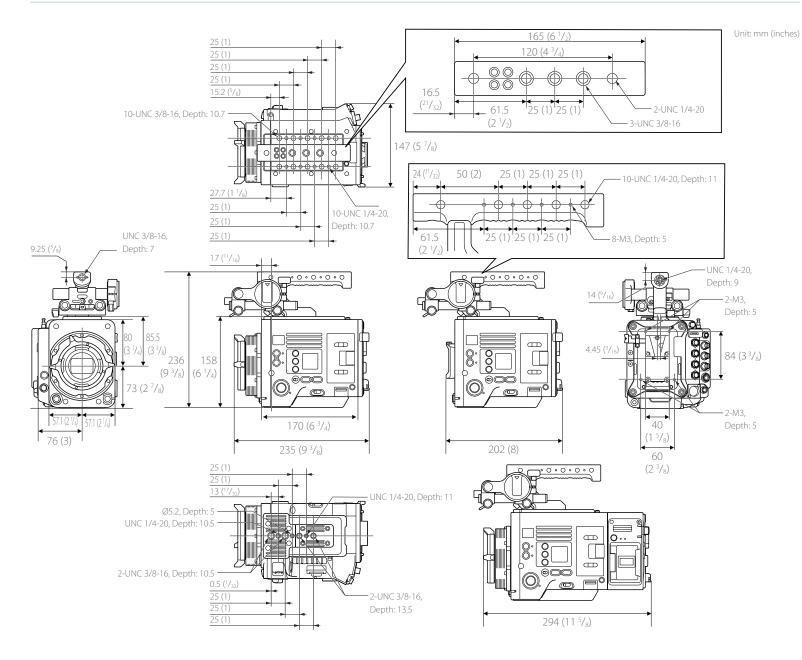
Design and specifications are subject to change without notice.

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## Dimensions



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