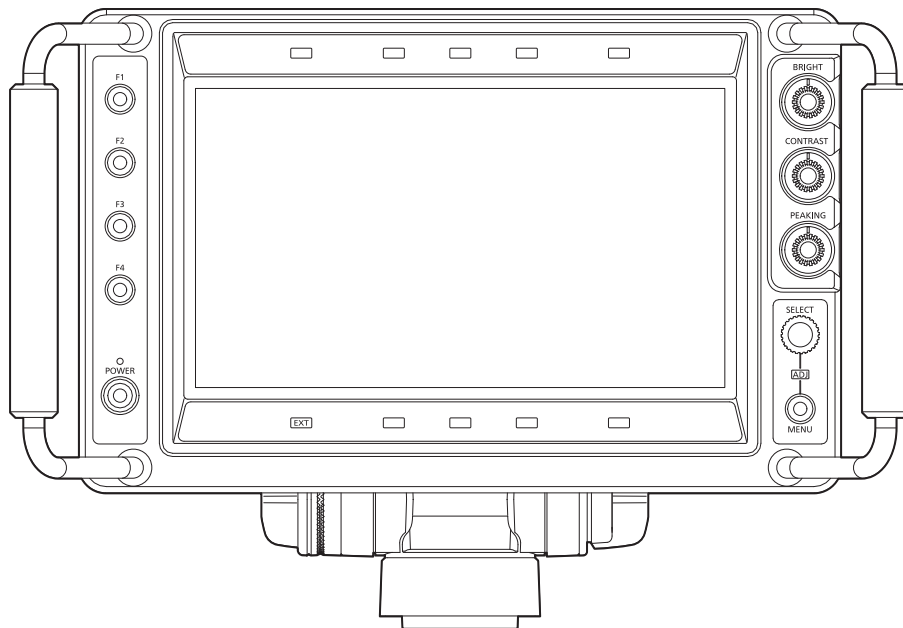


Operating Instructions

LCD View Finder

Model No. **AK-HVF100G**



ENGLISH

Before using this product, be sure to read "Read this first!" (pages 3 to 6).

DEUTSCH

Bitte lesen Sie sorgfältig die „Bitte lesen Sie zuerst diesen Hinweis!“ vor der Nutzung dieses Produkts. (Seiten 7 bis 8).

Weitere Informationen finden Sie auf der Panasonic-Webseite (<https://pro-av.panasonic.net/manual/en/index.html>) und in der Bedienungsanleitung (HTML).

FRANÇAIS

Avant d'utiliser cet appareil, assurez-vous de lire la section « Lire ces informations en premier ! » (pages 9 à 11).

Pour de plus amples informations, visiter le site Web de Panasonic (<https://pro-av.panasonic.net/manual/en/index.html>) et consulter le mode d'emploi (HTML).

ITALIANO

Prima di utilizzare il prodotto, assicurarsi di leggere "Leggere prima quanto segue!" (pagine 12 a 13).

Per maggiori informazioni, per favore visitare il sito web Panasonic (<https://pro-av.panasonic.net/manual/en/index.html>), e fare riferimento alle istruzioni per l'uso (HTML).

ESPAÑOL

Antes de usar este producto, asegúrese de leer "Lea esto primero" (páginas 14 a 16).

Si desea obtener más información, visite el sitio web de Panasonic (<https://pro-av.panasonic.net/manual/en/index.html>) y consulte las instrucciones de funcionamiento (HTML).

Before operating this product, please read the instructions carefully and save this manual for future use.

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- Various names, company names, product names, etc., described in this document are trademark or registered trademark of the respective companies.

How to read this document

■ Illustrations

- The illustration may differ from actual product.

■ Conventions used in this manual

- The phrase within [] indicates the content displayed in the screen.
- Words and phrases in < > brackets indicate design text used on this camera, such as button names.

■ Reference pages

- Reference pages in this document are indicated by (page 00).

Before using the camera

■ LCD

- The LCD monitor is manufactured with high-precision technology and has an effective pixel count of over 99.99%, but there are 0.01% of the pixels either missing or constantly lit (red, blue, green). This is normal and not a cause for concern.
- The LCD protective panel is specially treated. Wiping it or rubbing it vigorously with a hard cloth may scratch or mark its surface.
- The response rate and brightness of the LCD depend on the ambient temperature.

■ Handling

- Do not drop or apply excessive shock or vibration. Doing so may damage it.

■ Operating temperature range

- The picture quality may degrade or there may be adverse effect to internal components when used in locations as follows. Avoid using in such locations.
Cold location that is 0 °C (32 °F) or lower.
Hot location that is 45 °C (113 °F) or higher.

■ Maintenance

- Clean the cabinet and LCD protection panel by gently wiping them with a soft cloth.
To remove stubborn soiling, use a cloth dampened in a weak neutral detergent solution and thoroughly wrung out. Then wipe with a dry cloth.
Any moisture entering the monitor could damage it.
- Never use alcohol, thinner, or benzene to clean this unit.
Doing so may discolor the surface or cause the paint to peel.
- Do not directly expose the monitor to spray detergent. Any moisture entering the monitor could damage it.

■ Connecting/disconnecting the connector

- Be sure to power down the device before connecting or disconnecting the connector.

Features

This unit is an LCD viewfinder equipped with a 9.0-inch LCD panel.

This can be used as a viewfinder for the Studio Handy Camera (AK-UC3000G/AK-UC3000GS, AK-HC5000G/AK-HC5000GS, AK-HC3800G/AK-HC3800GS, AK-HC3500AP/AK-HC3500AE/AK-HC3500AES).

Input of the external DC power supply is required when this unit is mounted to AK-HC3800G/AK-HC3800GS or AK-HC3500AP/AK-HC3500AE/AK-HC3500AES.

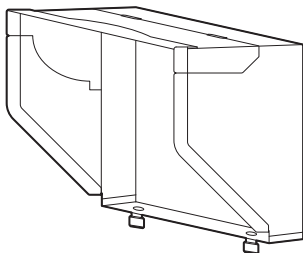
The signal for video format is automatically distinguished and displays the video of the camera.

Setting for various markers, focus assist function, waveform display function, etc., can be set regardless of setting the viewfinder setting on this unit.

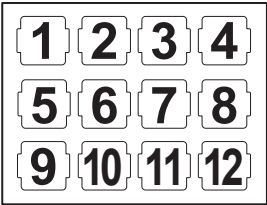
These functions can be assigned to the <F1>/<F2>/<F3>/<F4> buttons, and can be displayed directly by pressing the button.

Accessories

Hood



Camera number sheet (1 to 12)

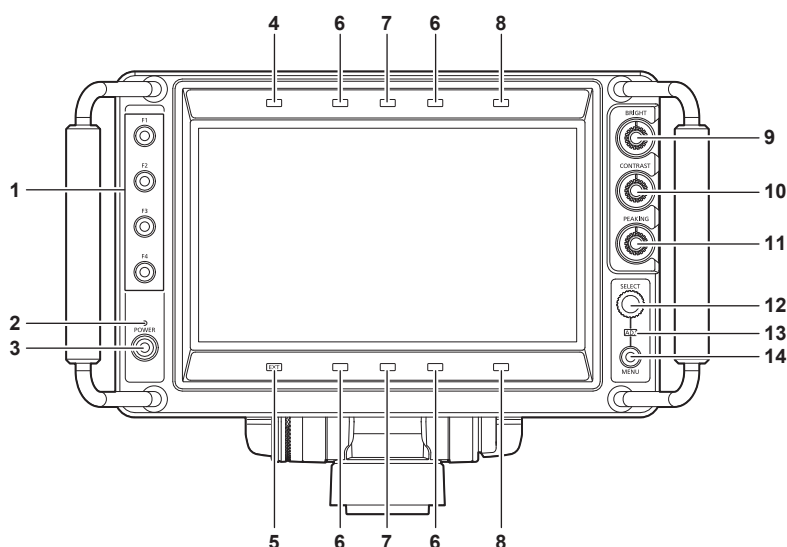


NOTE

- After unpacking the product, dispose of the packing material properly.

Description of parts

Front



1 <F1>/<F2>/<F3>/<F4> buttons

A function can be assigned to each button by [MAIN MENU] → [FUNCTION] → [FUNCTION1] to [FUNCTION4]. The function assigned to each is operated by pressing the button. For details, refer to [FUNCTION] (page 31).

2 <POWER> lamp

The lamp (green) is illuminated when the power is turned on.

Turns off when set to [MAIN MENU] → [SYSTEM CONFIG] → [POWER LED] → [OFF1]/[OFF2].

3 <POWER> switch

This is the switch to turn on/off the power.

The power can be turned off by pressing this switch for two seconds or longer while the power is turned on.

4 Assignable tally lamp

This is illuminated with the condition set in [MAIN MENU] → [SYSTEM CONFIG] → [TALLY ASSIGN].

The brightness can be switched with [MAIN MENU] → [TALLY BRIGHT] → [FRONT TALLY] → [HIGH]/[MID]/[LOW].

5 <EXT> lamp

This is illuminated when the lens extender is used.

The brightness can be switched with [MAIN MENU] → [TALLY BRIGHT] → [FRONT TALLY] → [HIGH]/[MID]/[LOW].

6 Red tally lamp

This is illuminated when the red tally signal is input.

The brightness can be switched with [MAIN MENU] → [TALLY BRIGHT] → [FRONT TALLY] → [HIGH]/[MID]/[LOW].

7 Green tally lamp

This is illuminated when the green tally signal is input.

The brightness can be switched with [MAIN MENU] → [TALLY BRIGHT] → [FRONT TALLY] → [HIGH]/[MID]/[LOW].

8 Yellow tally lamp

This is illuminated when the yellow tally signal is input.

The brightness can be switched with [MAIN MENU] → [TALLY BRIGHT] → [FRONT TALLY] → [HIGH]/[MID]/[LOW].

9 <BRIGHT> knob

This adjusts the brightness of the image.

10 <CONTRAST> knob

This adjusts the contrast of the image.

11 <PEAKING> knob

This adjusts the contour correction of the image.

12 <SELECT> dial button

This is a dial button for menu screen operation.

The cursor will move down when the <SELECT> dial button is turned clockwise. The cursor will move up when turned counterclockwise.

To select a menu item, press the <SELECT> dial button.

Sets the function to assigned with [MAIN MENU] → [FUNCTION] → [ASSIGN].

13 <ADJ> lamp

The lamp (green) is illuminated during adjustment.

This is illuminated when [FUNCTION] → [ASSIGN] is set to anything other than [UNDEF].

14 <MENU> button

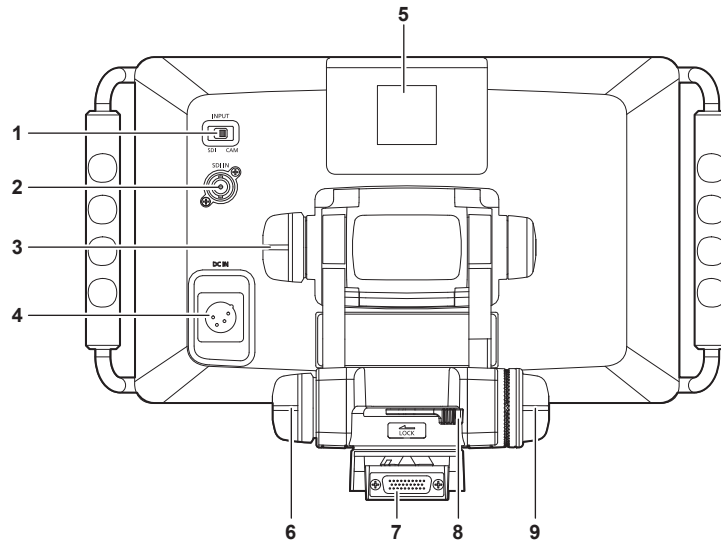
This switches on/off of the menu.



NOTE

- The brightness for assignable tally lamp/<EXT> lamp/red tally lamp/green tally lamp/yellow tally lamp are switched simultaneously when the setting of [FRONT TALLY] is changed.

Rear

**1 <INPUT> switch**

This switches the input (<CAM>/<SDI>).

Supported signal format for each input is as follows.

- <CAM>: 1080/59.94i, 1080/50i
- <SDI>: 1080/59.94p, 1080/50p, 1080/59.94i, 1080/50i, 720/59.94p, 720/50p

2 <SDI IN> terminal

This inputs the SDI signal.

3 Tilt friction knob

This adjusts the operation torque of tilting.

The operation torque is increased when turned more toward the <+> indicated on the knob.

4 <DC IN> terminal

This is the input terminal for the external DC power supply. This is connected with the external DC power supply. (DC 12 V)

The power is supplied from the I/F connector when AK-UC3000G/AK-UC3000GS or AK-HC5000G/AK-HC5000GS is connected to the unit. Input of the external DC power supply is not necessary.

The external DC power supply will be used when the external DC power supply is connected.

Input of the external DC power supply is required when this unit is mounted to AK-HC3800G/AK-HC3800GS or AK-HC3500AP/AK-HC3500AE/AK-HC3500AES.

5 Up tally lamp

This is illuminated with the control signal from the camera.

The brightness can be switched with [MAIN MENU] → [TALLY BRIGHT] → [UP TALLY] → [HIGH]/[LOW]/[OFF].

The camera number sheet (accessory) can be attached.

6 Lift friction knob

This adjusts the operation torque of lifting.

The operation torque is increased when turned more toward the <+> indicated on the knob.

7 Camera I/F connector

This is the terminal to connect to the Studio Handy Camera (AK-UC3000G/AK-UC3000GS, AK-HC5000G/AK-HC5000GS, AK-HC3800G/AK-HC3800GS, AK-HC3500AP/AK-HC3500AE/AK-HC3500AES).

Input of the external DC power supply is required when this unit is mounted to AK-HC3800G/AK-HC3800GS or AK-HC3500AP/AK-HC3500AE/AK-HC3500AES.

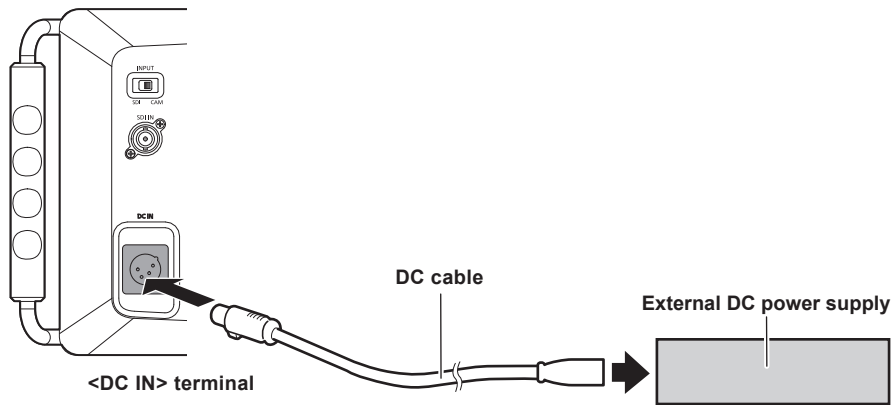
8 Pan lock lever

This will lock/unlock the panning. It is locked when the lever is moved toward <LOCK>, and unlocked by moving in other direction.

9 Lift lock knob

This will lock/unlock the lifting. It is locked when the knob is turned toward <LOCK>, and unlocked when turned to other direction.

Using the external DC power supply



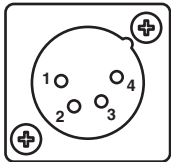
- 1 Connect the <DC IN> terminal of the unit with the external DC power supply.
- 2 Turn on the <POWER> switch on the external DC power supply (when there is a <POWER> switch on the external DC power supply).
- 3 Turn on the power of the unit.

■ **External DC power supply**

Confirm that the output voltage of the external DC power supply is compatible with the rated voltage for this unit before connecting.
Select the output current of the external DC power supply that is above the total current of the connected device with sufficient allowance.
An inrush current is generated when the power of this unit is turned on. Insufficient power supply performance while turning on the power may cause failure. It is recommended to use the external DC power supply that can secure double or more of the total power consumption of this unit. Use 2-wire shielded cable with cable core of AWG18 (nominal cross-section area of 0.824 mm²) or higher as the DC cable.

- Confirm the pin assignments of the DC output terminal of the external DC power supply and the <DC IN> terminal of this unit, and connect with correct polarity.
Connecting +12 V power supply to the GND terminal by mistake may cause fire or failure.

DC IN	
1	UNREG GND
2	Not used
3	Not used
4	+12 V
HA16RA-4P(77) (Hirose Electric Co.)	



Preparation

Mounting to the camera

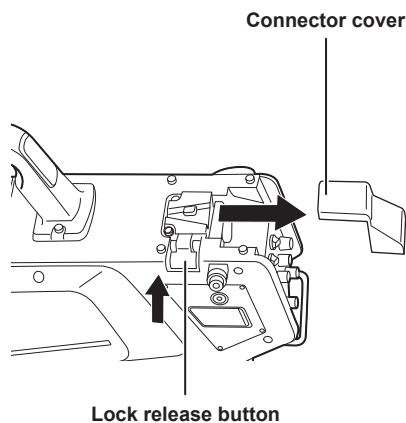


Fig. 1

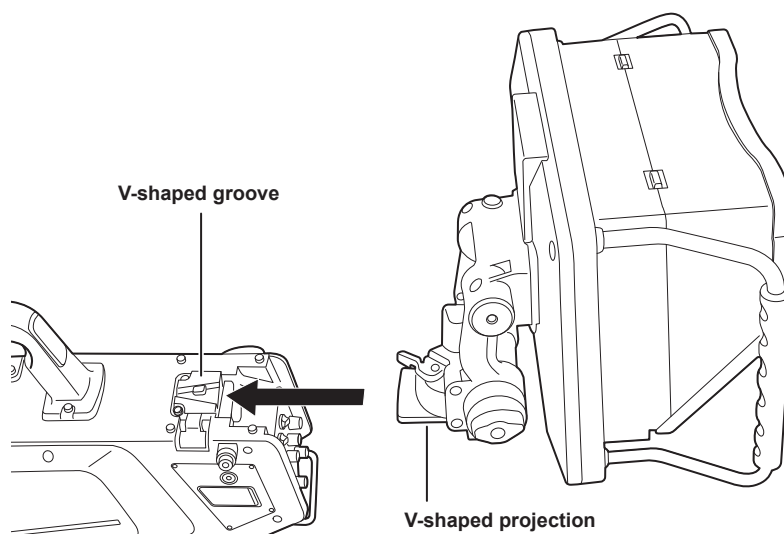


Fig. 2

- 1 Turn off the power of the camera and this unit.
 - 2 Press the lock release button on the camera and remove the connector cover. (Fig. 1)
 - 3 Align the V-shaped projection of this unit to the V-shaped groove on the camera, and slide and push in until it is locked. (Fig. 2)
- Mounting and dismounting become easier by locking the pan lock lever and the lift friction knob on this unit.
Once the mounting is completed, confirm that this unit is securely mounted to the camera.

NOTE

- Do not hold on the hood of this unit when mounting.

■ To dismount

- 1 Turn off the power of the camera and this unit.
- 2 Slide and dismount this unit while pressing the lock release button on the camera.

NOTE

- Do not hold on the hood of this unit when dismounting.

Attaching the hood

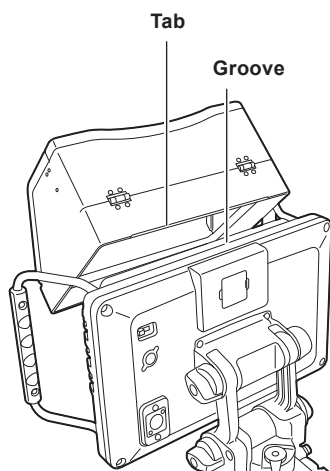


Fig. 1

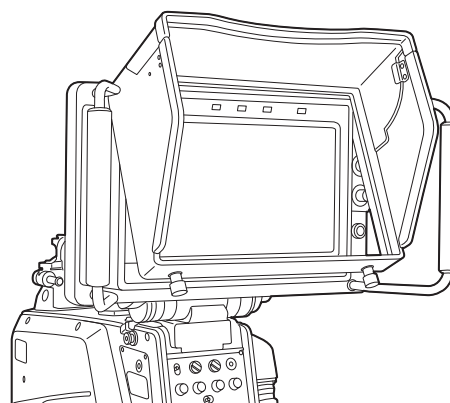


Fig. 2

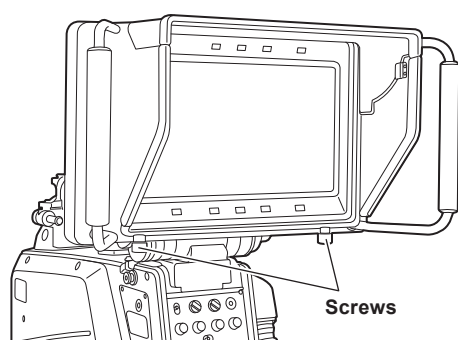
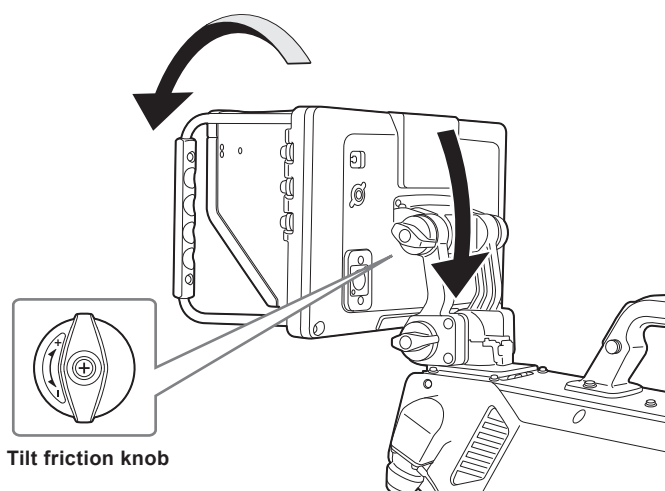


Fig. 3

- 1** Hook the tab on the hood to the groove at the top. (Fig. 1, Fig. 2)
- 2** Fix with the two screws at the bottom of the hood. (Fig. 3)
- To remove
 - 1** Loosen the two screws at the bottom of the hood.
 - 2** After pulling the bottom of the hood slightly forward, pull out upward.

Tilting operation



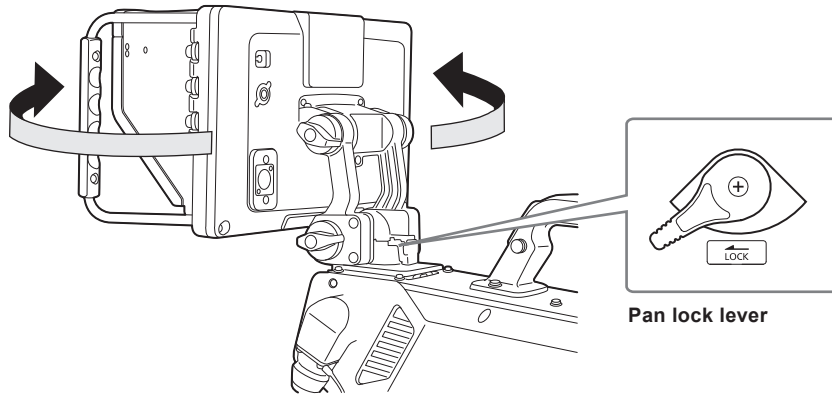
- 1** Turn the tilt friction knob to adjust to appropriate torque.
The operation torque will become larger when turned toward <+> direction.
- 2** Adjust the tilting.

Preparation

NOTE

- Do not hold onto the hood of the unit when adjusting the tilting.

Panning operation



1 Move the pan lock lever to the opposite direction from <LOCK>.

Panning operation is possible when moved to the opposite direction from <LOCK>.

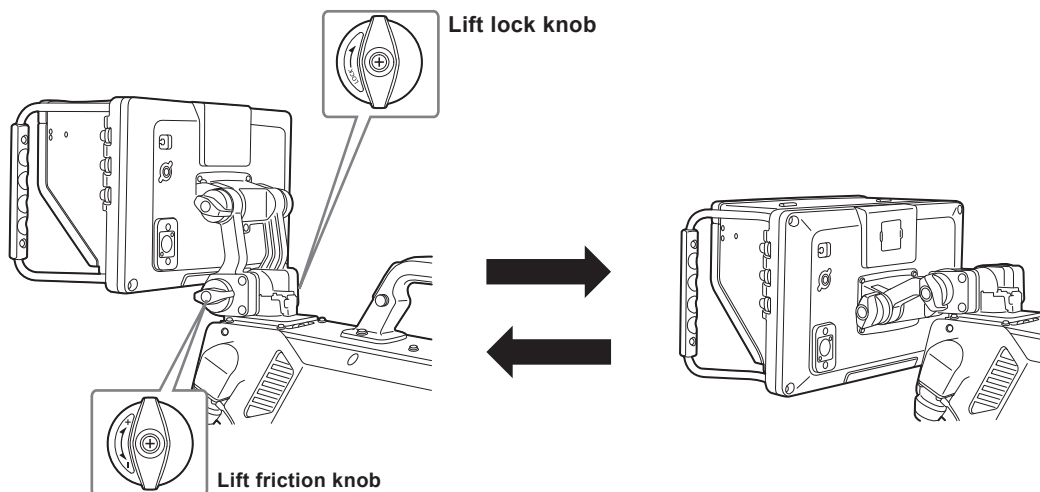
2 Adjust the angle.

To fix in an arbitrary position, move the pan lock lever toward the <LOCK> direction.

NOTE

- Do not hold onto the hood of the unit when adjusting the panning.

Lifting operation



1 Turn the lift lock knob to the opposite direction from <LOCK>.

Lifting operation is possible when turned to the opposite direction from <LOCK>. To fix in an arbitrary position, turn the lift lock knob toward the <LOCK> direction.

2 Turn the lift friction knob to adjust to appropriate torque.

The operation torque will become larger when turned toward <+> direction.

3 Adjust the position holding on the grip.

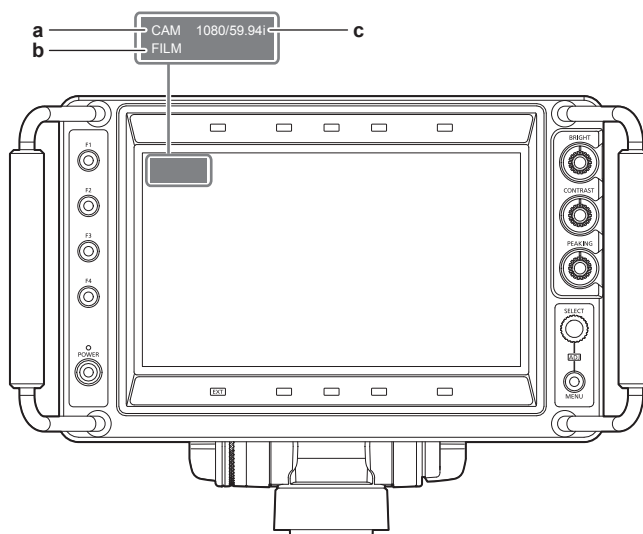
NOTE

- Do not hold onto the hood of the unit when adjusting the lifting.

On-screen display

Information of the operation status, function, image adjustment condition, and menu is displayed in the screen.

Operation status display



a: Input display

Displays the selected input line ([SDI] or [CAM]). (page 20)

Sets the display condition with [MAIN MENU] → [SYSTEM CONFIG] → [STATUS DISPLAY].

b: Film mode display

This is displayed when [MAIN MENU] → [VIDEO CONFIG] → [GAMMA SELECT] → [FILM] is selected.

c: Signal format display

Displays the input signal.

[UNSUPPORT SIGNAL]: A signal that is not supported is input.

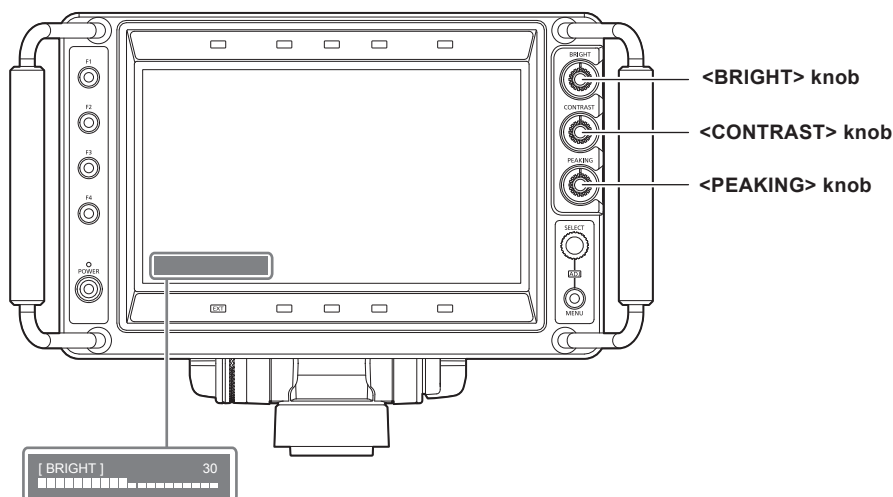
[NO SIGNAL]: Signal is not input.



NOTE

- Condition of status display can be set in [MAIN MENU] → [SYSTEM CONFIG] → [STATUS DISPLAY].
The status display disappears after three seconds in the factory setting.
- The displays for [UNSUPPORT SIGNAL] and [NO SIGNAL] may not display correctly.

Image adjustment knob condition display



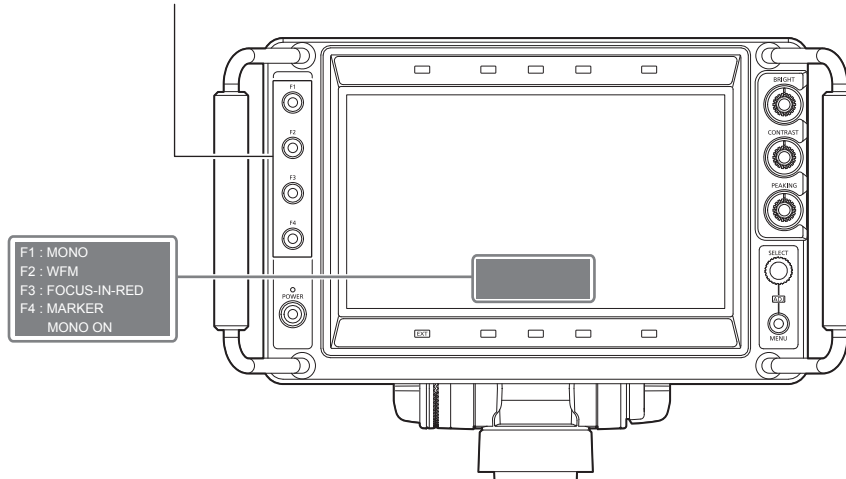
1 Turn the <BRIGHT>/<CONTRAST>/<PEAKING> knob.

The name and its adjustment value for the operating knob are displayed.

- This display disappears after two seconds of inaction.
- The adjustment value displayed in green is factory setting.

Function display

<F1>/<F2>/<F3>/<F4> buttons



1 Press the <F1>/<F2>/<F3>/<F4> button.

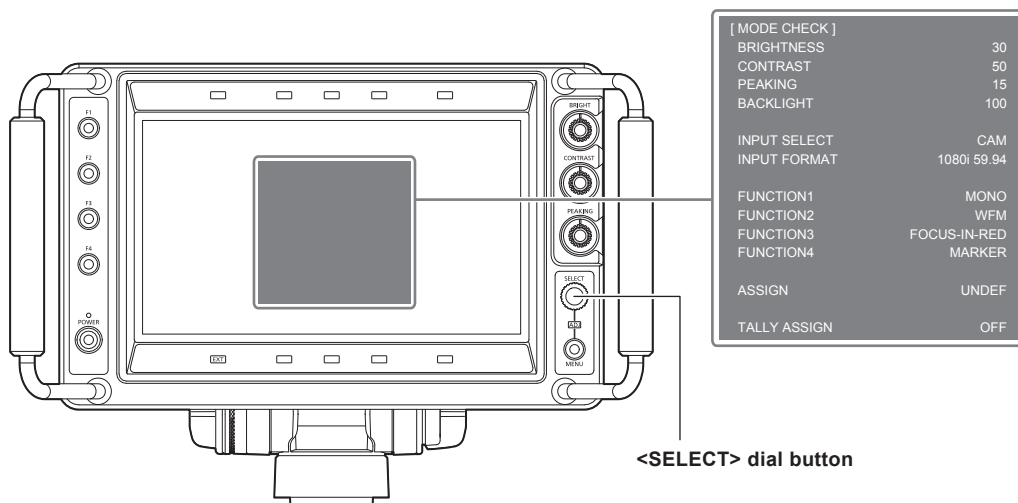
Function assigned to each button and the condition of that function is displayed.

- This display disappears after two seconds of inaction.
- Display condition can be changed with [MAIN MENU] → [FUNCTION] → [FUNCTION DISPLAY].
- The function assigned to each button will memorize the condition before turning off the power even if the power of the unit is turned off. However, [FOCUS-IN-RED] and [CAM MENU] will return to disabled.

Mode check display

Current setting condition can be displayed.

Perform while the menu is not displayed.



<SELECT> dial button

1 Press the <SELECT> dial button.

The setting condition is displayed.

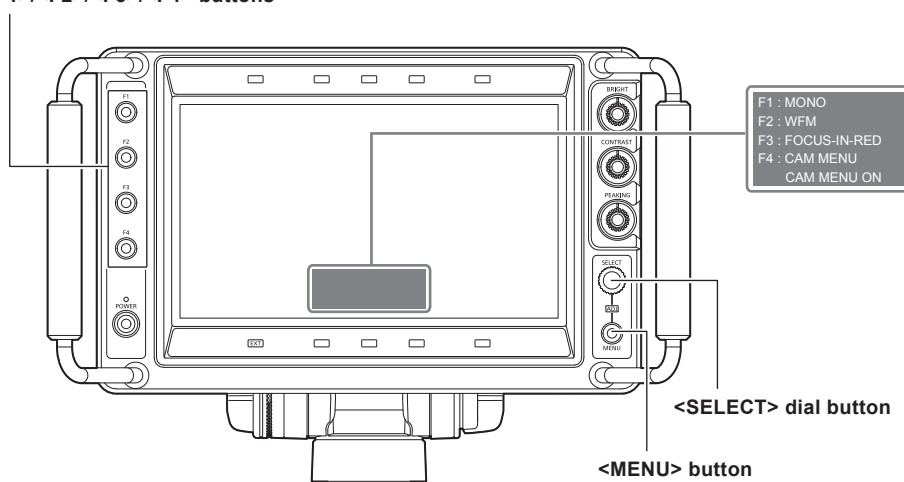
Display disappears when there is approximately two minutes of inaction.

- [BRIGHTNESS]: The value adjusted with the <BRIGHT> knob.
- [CONTRAST]: The value adjusted with the <CONTRAST> knob.
- [PEAKING]: The value adjusted with the <PEAKING> knob.
- [BACK LIGHT]: The value set with [MAIN MENU] → [VIDEO CONFIG] → [BACK LIGHT].
- [INPUT SELECT]: Input selected with the <INPUT> switch.
- [INPUT FORMAT]: Format of the video signal currently input.
- [FUNCTION1]: Function assigned to the <F1> button.
- [FUNCTION2]: Function assigned to the <F2> button.
- [FUNCTION3]: Function assigned to the <F3> button.
- [FUNCTION4]: Function assigned to the <F4> button.
- [ASSIGN]: Function assigned to the <SELECT> dial button.
- [TALLY ASSIGN]: The illumination condition set with [MAIN MENU] → [SYSTEM CONFIG] → [TALLY ASSIGN].

Camera menu display

The menu of the camera (only AK-UC3000G/AK-UC3000GS and AK-HC5000G/AK-HC5000GS) can be operated from this unit.

<F1>/<F2>/<F3>/<F4> buttons



- 1** Set [CAM MENU] to one of the <F1>/<F2>/<F3>/<F4> buttons with [MAIN MENU] → [FUNCTION] → [FUNCTION1]/[FUNCTION2]/[FUNCTION3]/[FUNCTION4].
- 2** Press one of the <F1>/<F2>/<F3>/<F4> buttons that [CAM MENU] is set.
- 3** Press the <MENU> button.
The menu screen of the camera is displayed.
- 4** Turn the <SELECT> dial button and select the item.
- 5** Press the <SELECT> dial button.
For the operating method of the menu, refer to the Operating Instruction of the camera.

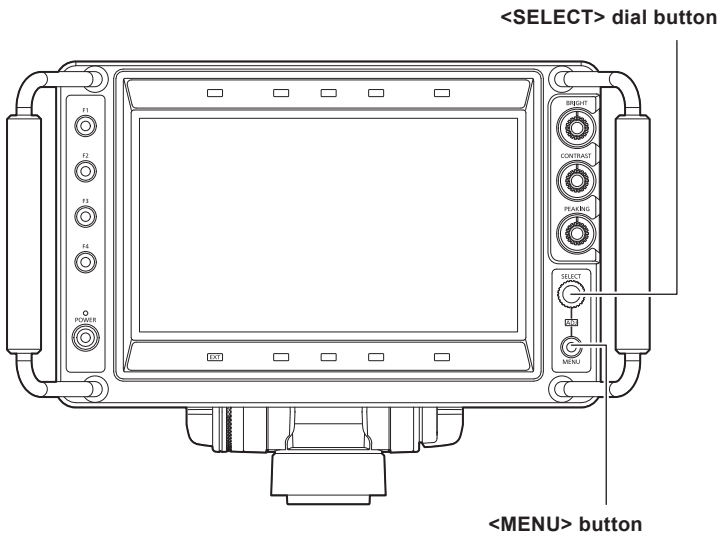
NOTE

- The setting for [CAM MENU] is cleared when the power is turned off.

Menu operations

The menu operation method, structure of the setting menu, and details of the setting menu are described.

Basic operations



[MAIN MENU]		
▶ MARKER		▼
FUNCTION		▼
VIDEO CONFIG		▼
SYSTEM CONFIG		▼
HOURS METER		▼
UP TALLY		▼
FOCUS ASSIST		▼

Fig. 1

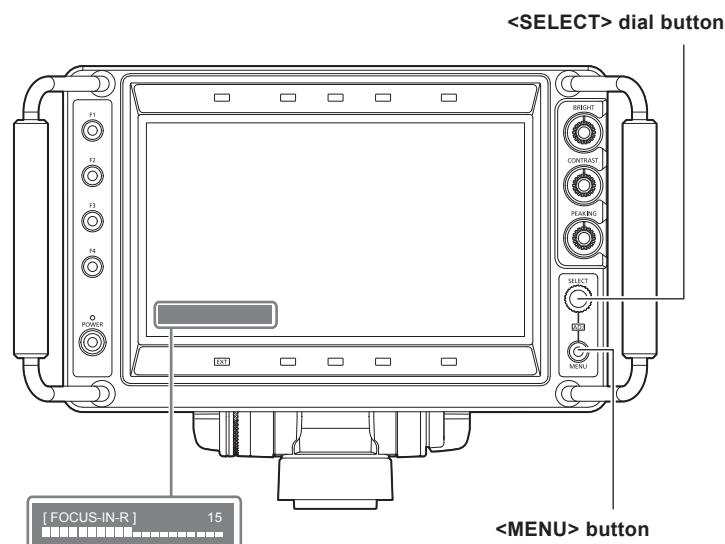
[MARKER]		
▶ EXIT		
MARKER		OFF
ZONE		4:3
4:3		OFF
BACK		NORMAL
CENTER		OFF
CROSS HATCH		OFF
SIZE		120
BOX MARKER		OFF
TYPE		BOX
H POS		960
V POS		540
H SIZE		700
V SIZE		700

Fig. 2

- 1 Press the <MENU> button.**
[MAIN MENU] is displayed. (Fig. 1)
Previous menu is displayed by pressing the <MENU> button when [MAIN MENU] → [SYSTEM CONFIG] → [MENU RESUME] → [ON] is set.
[MAIN MENU] is displayed when the power is turned off once and then turned on again.
- 2 Turn the <SELECT> dial button and select the menu item.**
- 3 Press the <SELECT> dial button.**
The selected item is opened. (Fig. 2)
- 4 Turn the <SELECT> dial button and select the item to set.**
- 5 Press the <SELECT> dial button.**
The setting value changes to green.
- 6 Turn the <SELECT> dial button and change the setting.**
To cancel, press the <MENU> button.
- 7 Press the <SELECT> dial button.**
The setting is confirmed.

NOTE

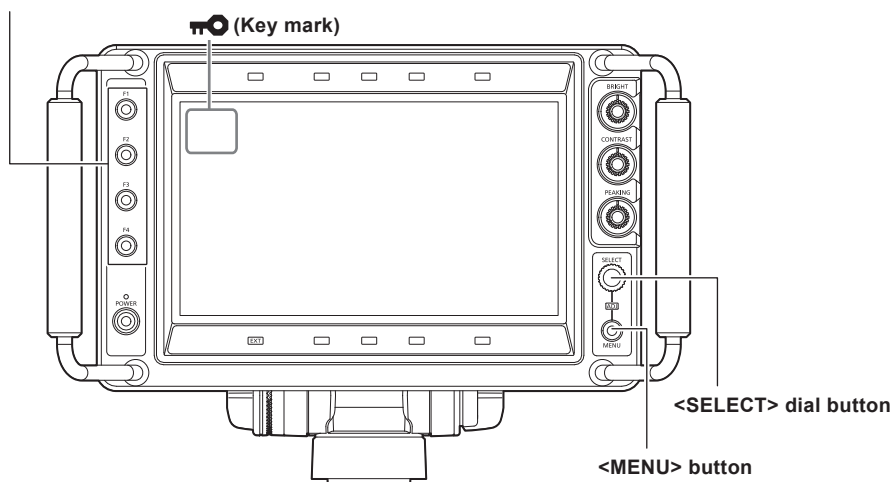
- This display disappears after two minutes of inaction. The value displayed at that time will be confirmed as the setting value when the display disappears.

[ASSIGN] setting ([ASSIGN] condition display)

- 1** Select the function to be assigned to the <SELECT> dial button with [MAIN MENU] → [FUNCTION] → [ASSIGN].
- 2** Press the <SELECT> dial button.
- 3** Press the <MENU> button to close the menu.
- 4** Turn the <SELECT> dial button to change the setting.
The function that is being operated and its adjustment value are displayed.
 - This display disappears after two seconds of inaction.

Key lock setting

Operation of the <F1>/<F2>/<F3>/<F4> button, <SELECT> dial button, and <MENU> button can be disabled. The <POWER> button, <BRIGHT> knob, <CONTRAST> knob, and <PEAKING> knob cannot be disabled.

<F1>/<F2>/<F3>/<F4> buttons

- 1** Press the <SELECT> dial button while operating to display the mode check display, and then press and hold the <MENU> button for three seconds or longer.
A key mark is constantly displayed at the top left of the screen while in key lock.
 - The setting is cleared when the power is turned off.
 - To clear the key lock, press and hold the <MENU> button for three seconds or longer.

Menu structure

[MAIN MENU]	[MARKER]	Performs the setting regarding the marker.
	[FUNCTION]	Performs the setting regarding the operation of the <F1>/<F2>/<F3>/<F4> buttons.
	[VIDEO CONFIG]	Performs the setting regarding the screen.
	[SYSTEM CONFIG]	Performs the setting regarding the system.
	[HOUR METER]	Displays the elapsed time and illuminated time of the backlight.
	[TALLY BRIGHT]	Sets the brightness of the up tally lamp and front tally lamp.

Menu operations

[FOCUS ASSIST]	Sets the function of the focus assist.
----------------	--

Menu list

[MARKER]

Item		Setting content
[EXIT]		Returns to the upper level.
[MARKER]	—	Sets if the marker is displayed in the screen or not. [ON], [OFF] • Factory setting: [OFF] [BOX MARKER] is set to [OFF] when [BOX MARKER] is [ON1]/[ON2] and [MARKER] is set to [ON].
	[ZONE]	Selects the type of marker. [OFF] : Marker is not displayed. [4:3] : Marker of 4:3 size. [13:9] : Marker of 13:9 size. [14:9] : Marker of 14:9 size. [CNSCO2.39] : Marker of 2.39:1 size. [CNSCO2.35] : Marker of 2.35:1 size. [2:1] : Marker of 2:1 size. [VISTA] : Marker of 1.85:1 size. [95%] : Marker of 95% area. [93%] : Marker of 93% area. [90%] : Marker of 90% area. [88%] : Marker of 88% area. [80%] : Marker of 80% area. [USER85%] : Variable area marker between the range of 80% to 100% (in 1% steps) (can be set by pressing the <SELECT> dial button and the setting value changes to light blue) (factory setting is [85%]) • Factory setting: [4:3]
	[4:3]	Selects the type of marker displayed when the image aspect ratio is 4:3. [OFF] : Marker is not displayed. [95%] : Marker of 95% area. [93%] : Marker of 93% area. [90%] : Marker of 90% area. [88%] : Marker of 88% area. [80%] : Marker of 80% area. [USER85%] : Variable area marker between the range of 80% to 100% (in 1% steps) (can be set by pressing the <SELECT> dial button and the setting value changes to light blue) (factory setting is [85%]) • Factory setting: [OFF]
	[BACK]	Sets the background brightness outside the marker set with [ZONE]. [NORMAL] : Normal background. [HALF] : Background brightness is set to 50%. [BLACK] : Background brightness is set to 0% (black). • Factory setting: [NORMAL]
	[CENTER]	Sets if the center marker is displayed or not. [ON], [OFF] • Factory setting: [OFF]
[CROSS HATCH]	—	Sets the display and density of the cross hatch. [OFF] : Does not display. [LOW] : Dim cross hatch is displayed. [HIGH] : Bright cross hatch is displayed. • Factory setting: [OFF]
	[SIZE]	Selects the cross hatch size. [60] : 60 dots and 60 lines [120] : 120 dots and 120 lines • Factory setting: [120]
[BOX MARKER]	—	Sets if the box marker is displayed in the screen or not. Two patterns of [ON1] and [ON2] can be recorded. [ON1], [ON2], [OFF] • Factory setting: [OFF] [MARKER] is set to [OFF] when [MARKER] is [ON] and [BOX MARKER] is set to [ON1]/[ON2].
	[TYPE]	Sets the display type of the box marker. [BOX] : Box type display. [CROSS] : Cross type display. • Factory setting: [BOX]
	[H POS]	Sets the horizontal position to display the box marker. [10]...[1910] (in 10 dots step) • Factory setting: [960]
	[V POS]	Sets the vertical position to display the box marker. [10]...[1070] (in 10 lines step) • Factory setting: [540]
	[H SIZE]	Sets the horizontal size of the box marker. [10]...[1910] (in 10 dots step) • Factory setting: [700]
	[V SIZE]	Sets the vertical size of the box marker. [10]...[1070] (in 10 lines step) • Factory setting: [700]

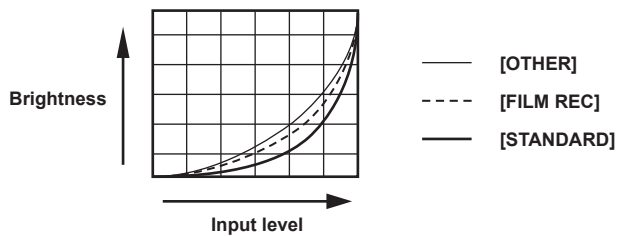
[FUNCTION]

Item	Setting content
[EXIT]	Returns to the upper level.
[FUNCTION1]	Selects the function assigned to the <F1> button. [SCAN]: Switches between the underscan and normal display. [WFM]: Displays the waveform display screen. [MARKER]: Displays the marker. [FOCUS-IN-RED]: Switches the enable/disable of the function to enhance the focused part of the image (disabled when [WFM] is displayed, disabled when there is no input signal, setting is cleared when the power is turned off, and the detection sensitivity can be changed with the <SELECT> dial button during the operation when [FOCUS-IN-RED] is assigned with [MAIN MENU] → [FUNCTION] → [ASSIGN]). [CROSS HATCH]: Switches the cross hatch display. [MONO]: Switches between the color and monochrome display. [UP TALLY]: Switches the on/off of the up tally lamp. [FRONT TALLY]: Switches the brightness of the front tally lamp. [CAM MENU]: Switches the enable/disable of the camera menu operation function (setting is canceled when the power is turned off). [FOCUS ASSIST]: Switches the enable/disable of the focus assist function on the camera. [ZOOM LINK]: Switches the enable/disable of the detail function on the viewfinder linked with the zoom. [UNDEF]: Function is not assigned. • Factory setting: [MONO] [CAM MENU], [FOCUS ASSIST], and [ZOOM LINK] can be operated only when the camera (AK-UC3000G/AK-UC3000GS, AK-HC5000G/AK-HC5000GS) is connected.
[FUNCTION2]	Selects the function assigned to the <F2> button. [SCAN]: Switches between the underscan and normal display. [WFM]: Displays the waveform display screen. [MARKER]: Displays the marker. [FOCUS-IN-RED]: Switches the enable/disable of the function to enhance the focused part of the image (disabled when [WFM] is displayed, disabled when there is no input signal, setting is cleared when the power is turned off, and the detection sensitivity can be changed with the <SELECT> dial button during the operation when [FOCUS-IN-RED] is assigned with [MAIN MENU] → [FUNCTION] → [ASSIGN]). [CROSS HATCH]: Switches the cross hatch display. [MONO]: Switches between the color and monochrome display. [UP TALLY]: Switches the on/off of the up tally lamp. [FRONT TALLY]: Switches the brightness of the front tally lamp. [CAM MENU]: Switches the enable/disable of the camera menu operation function (setting is canceled when the power is turned off). [FOCUS ASSIST]: Switches the enable/disable of the focus assist function on the camera. [ZOOM LINK]: Switches the enable/disable of the detail function on the viewfinder linked with the zoom. [UNDEF]: Function is not assigned. • Factory setting: [WFM] [CAM MENU], [FOCUS ASSIST], and [ZOOM LINK] can be operated only when the camera (AK-UC3000G/AK-UC3000GS, AK-HC5000G/AK-HC5000GS) is connected.
[FUNCTION3]	Selects the function assigned to the <F3> button. [SCAN]: Switches between the underscan and normal display. [WFM]: Displays the waveform display screen. [MARKER]: Displays the marker. [FOCUS-IN-RED]: Switches the enable/disable of the function to enhance the focused part of the image (disabled when [WFM] is displayed, disabled when there is no input signal, setting is cleared when the power is turned off, and the detection sensitivity can be changed with the <SELECT> dial button during the operation when [FOCUS-IN-RED] is assigned with [MAIN MENU] → [FUNCTION] → [ASSIGN]). [CROSS HATCH]: Switches the cross hatch display. [MONO]: Switches between the color and monochrome display. [UP TALLY]: Switches the on/off of the up tally lamp. [FRONT TALLY]: Switches the brightness of the front tally lamp. [CAM MENU]: Switches the enable/disable of the camera menu operation function (setting is canceled when the power is turned off). [FOCUS ASSIST]: Switches the enable/disable of the focus assist function on the camera. [ZOOM LINK]: Switches the enable/disable of the detail function on the viewfinder linked with the zoom. [UNDEF]: Function is not assigned. • Factory setting: [FOCUS-IN-RED] [CAM MENU], [FOCUS ASSIST], and [ZOOM LINK] can be operated only when the camera (AK-UC3000G/AK-UC3000GS, AK-HC5000G/AK-HC5000GS) is connected.

Menu operations

Item	Setting content
[FUNCTION4]	Selects the function assigned to the <F4> button. [SCAN]: Switches between the underscan and normal display. [WFM]: Displays the waveform display screen. [MARKER]: Displays the marker. [FOCUS-IN-RED]: Switches the enable/disable of the function to enhance the focused part of the image (disabled when [WFM] is displayed, disabled when there is no input signal, setting is cleared when the power is turned off, and the detection sensitivity can be changed with the <SELECT> dial button during the operation when [FOCUS-IN-RED] is assigned with [MAIN MENU] → [FUNCTION] → [ASSIGN]). [CROSS HATCH]: Switches the cross hatch display. [MONO]: Switches between the color and monochrome display. [UP TALLY]: Switches the on/off of the up tally lamp. [FRONT TALLY]: Switches the brightness of the front tally lamp. [CAM MENU]: Switches the enable/disable of the camera menu operation function (setting is canceled when the power is turned off). [FOCUS ASSIST]: Switches the enable/disable of the focus assist function on the camera. [ZOOM LINK]: Switches the enable/disable of the detail function on the viewfinder linked with the zoom. [UNDEF]: Function is not assigned. • Factory setting: [MARKER] [CAM MENU], [FOCUS ASSIST], and [ZOOM LINK] can be operated only when the camera (AK-UC3000G/AK-UC3000GS, AK-HC5000G/AK-HC5000GS) is connected.
[ASSIGN]	Selects the function assigned to the <SELECT> dial button when the menu is not displayed. [FOCUS-IN-RED]: Changes the detection sensitivity of the function to enhance the part that is focused in the image. [IN-RED-COLOR]: Switches the display color of the function to enhance the part that is focused in the image. [BACK LIGHT]: Changes the brightness of the LCD backlight. [VF DTL]: Adjusts the detail level of the viewfinder. [MARKER BACK]: Switches the background brightness of outside for the marker set in [MAIN MENU] → [MARKER] → [ZONE]. [BOX MARKER VF]: Switches the enable/disable of the box marker display on this unit. [BOX MARKER CAM]: Switches the enable/disable of the box marker display on the camera. [ZOOM LINK LEVEL]: Switches the detail level of the viewfinder linked with the zoom. [UNDEF]: Function is not assigned. • Factory setting: [UNDEF] [VF DTL], [BOX MARKER CAM], and [ZOOM LINK LEVEL] can be operated only when the camera (AK-UC3000G/AK-UC3000GS, AK-HC5000G/AK-HC5000GS) is connected.
[FUNCTION DISPLAY]	Selects the display setting and the operation setting (one touch, two touches) for the function assigned to the <F1>/<F2>/<F3>/<F4> buttons. [OFF]: Does not display the function. [ON1]: Displays the function simultaneously as setting the operation. (One touch) [ON2]: The function is displayed first, and then the operation is set by pressing the <F1>/<F2>/<F3>/<F4> button. (Two touches) • Factory setting: [ON1]

[VIDEO CONFIG]

Item	Setting content
[EXIT]	Returns to the upper level.
[GAMMA SELECT]	Selects the gamma curve. [STANDARD]: Standard mode. [FILM]: Film mode (displays [FILM] at the top left of the screen). • Factory setting: [STANDARD]
[FILM GAMMA]	Selects the type of the film gamma mode in accordance with the gamma setting on the camera. [FILM REC]: When [FILM REC] is selected. [OTHER]: When anything other than [FILM REC] is selected. Conceptual diagram of gamma curve  The diagram shows a grid with 'Input level' on the x-axis and 'Brightness' on the y-axis. Three curves are plotted: a solid line for [STANDARD], a dashed line for [FILM REC], and a dotted line for [OTHER]. The [FILM REC] curve is the steepest, followed by [STANDARD], and then [OTHER]. • Factory setting: [FILM REC]
[COLOR TEMP.]	Selects the color temperature. [USER 0]...[USER 63]: Variable settings 0 to 63 (equivalent to color temperature of 3000 K to 9300 K) (can be set when the <SELECT> dial button is pressed and the setting value changes to light blue). [D93]: Equivalent to color temperature of 9300 K [D65]: Equivalent to color temperature of 6500 K [D56]: Equivalent to color temperature of 5600 K • Factory setting: [D65]

Item	Setting content
[SHARPNESS MODE]	Selects the edge width of the contour correction (during peaking). [HIGH]: Narrow edge [LOW]: Wide edge • Factory setting: [HIGH]
[SHARPNESS H]	Sets the horizontal contour correction. Adds to the operation of the <PEAKING> knob. [0]...[30] • Factory setting: [0]
[SHARPNESS V]	Sets the vertical contour correction. Adds to the operation of the <PEAKING> knob. [0]...[30] • Factory setting: [0]
[MONO]	Switches between color and monochrome. [OFF]: Color. [ON]: Monochrome. • Factory setting: [OFF]
[SCAN]	Sets the underscan or normal display of the screen. [NORMAL]: Normal display. [UNDER]: Underscan. • Factory setting: [NORMAL]
[BACK LIGHT]	Adjusts the brightness of the LCD backlight. [0]...[100] • Factory setting: [100]

[SYSTEM CONFIG]

Item	Setting content
[EXIT]	Returns to the upper level.
[WFM]	Sets if the waveform of the video signal input to viewfinder is displayed or not. [FOCUS-IN-RED] is disabled when [WFM] is displayed while [FOCUS-IN-RED] is enabled. [OFF]: Not displayed. [WFM]: Displays the waveform of the brightness signal. • Factory setting: [OFF]
[WFM POSITION]	Selects the position of the waveform display when [WFM] is [ON]. [LB]: Bottom left of the screen. [RB]: Bottom right of the screen. [RT]: Top right of the screen. [LT]: Top left of the screen. • Factory setting: [RB]
[TALLY ASSIGN]	Sets the illumination condition of the assignable tally lamp. [OFF]: Turns off. [INPUT SDI]: Turns on when the <INPUT> switch is set to <SDI>. [INPUT CAM]: Turns on when the <INPUT> switch is set to <CAM>. [CAM MENU]: Turns on when the menu operation function of the camera is enabled. Only when the camera (AK-UC3000G/AK-UC3000GS, AK-HC5000G/AK-HC5000GS) is connected. • Factory setting: [OFF]
[MENU RESUME]	Sets the enable/disable of the menu resume function. [OFF], [ON] • Factory setting: [OFF]
[POWER LED]	Sets the illumination condition of the <POWER> lamp. [ON]: Turns on continuously. [OFF1]: Turns off (setting will return to [ON] when the power is turned off/on). [OFF2]: Turns off continuously. • Factory setting: [ON]
[STATUS DISPLAY]	Sets the display condition of the status display. [CONTINUE]: Displays continuously. [3SEC OFF]: Displays for three seconds after changing the condition of the status display, and then disappears. [OFF]: Not displayed. • Factory setting: [3SEC OFF]

[HOUR METER]

Item	Setting content
[EXIT]	Returns to the upper level.
[OPERATION]	Displays the total number of hours the power was turned on. Hours up to 262800 hours [262800H] (approximately 30 years) is displayed. Hours exceeding 262800 hours is displayed as [OVER].
[LCD]	Displays the number of hours the backlight has been on. Hours up to 262800 hours [262800H] (approximately 30 years) is displayed. Hours exceeding 262800 hours is displayed as [OVER].

Maintenance and Inspection

[TALLY BRIGHT]

Item	Setting content
[EXIT]	Returns to the upper level.
[UP TALLY]	Sets the brightness of the up tally lamp. [HIGH]: Turns on (bright). [LOW]: Turns on (dark). [OFF]: Turns off. • Factory setting: [LOW]
[FRONT TALLY]	Sets the brightness of the front tally lamp. [HIGH]: Turns on (bright). [MID]: Turns on (medium). [LOW]: Turns on (dark). • Factory setting: [MID]

[FOCUS ASSIST]

Item	Setting content
[EXIT]	Returns to the upper level.
[FOCUS-IN-RED]	— Sets the enable/disable of the function to enhance the part that is focused in the image on this unit. Disabled while [WFM] is displayed. Disabled when there is no input signal. (setting is canceled when the power is turned off) [OFF], [ON] • Factory setting: [OFF]
	[IN-RED-COLOR] Sets the display color of the function to enhance the part that is focused in the image on this unit. [RED], [GREEN], [BLUE], [WHITE] • Factory setting: [RED]
[ZOOM LINK]	— Sets the enable/disable of the detail function on the viewfinder linked with the zoom. [OFF], [ON] • Factory setting: [OFF] This item can be operated only when the camera (AK-UC3000G/AK-UC3000GS, AK-HC5000G/AK-HC5000GS) is connected.
	[LINK LEVEL] Sets the detail level of the viewfinder linked with the zoom. [LOW], [MID], [HIGH] • Factory setting: [LOW]
[FOCUS ASSIST]	Sets the enable/disable of the focus assist function on the camera. [OFF], [ON] • Factory setting: [OFF] This item can be operated only when the camera (AK-UC3000G/AK-UC3000GS, AK-HC5000G/AK-HC5000GS) is connected.

Maintenance and Inspection

Maintenance and inspection are performed with periodic and appropriate maintenance to maintain the function of the unit in constantly good condition so the customers can use the unit safely.

Make sure to execute the maintenance and inspection for the function of the unit to last long in good condition.

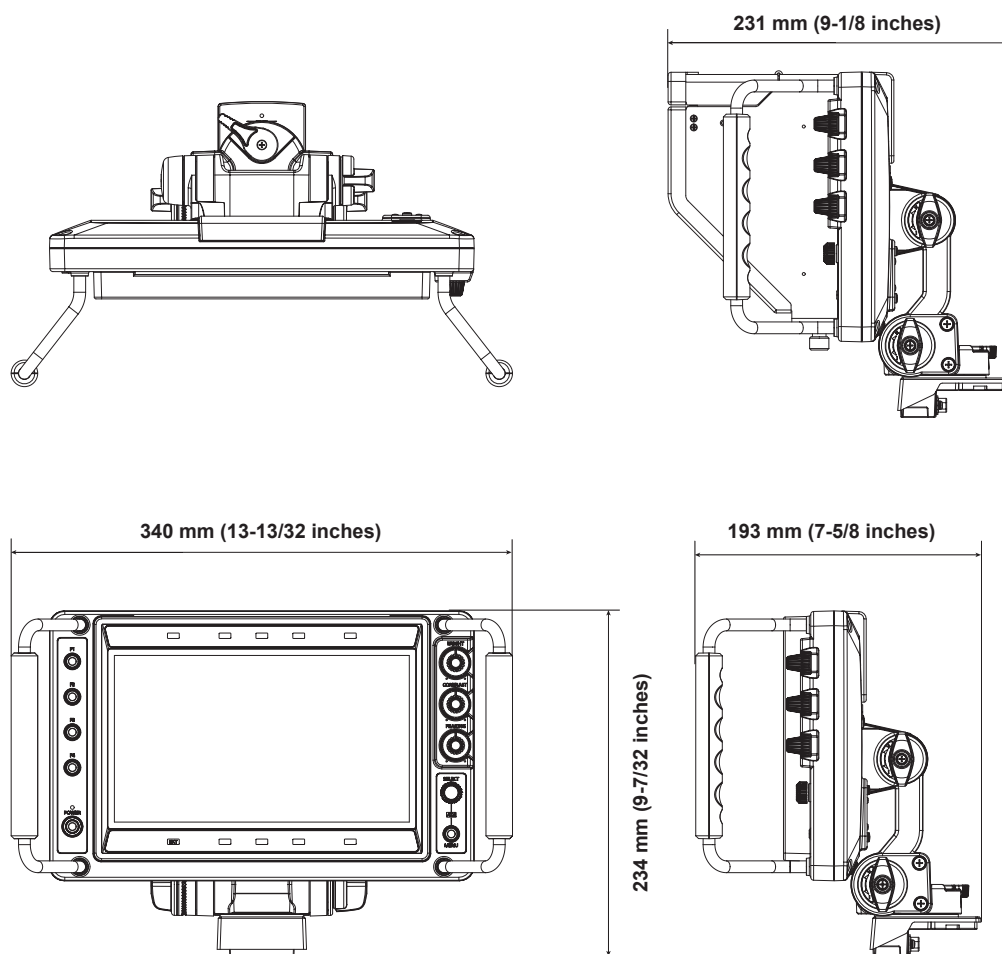
■ Periodic maintenance service

The LCD panel is equipped with a backlight. The backlight is a consumable component that deteriorates and eventually breaks down.

Therefore, it is important to perform a periodic maintenance service on top of the conventional service performed at the time of failure. The performance of the device is maintained in good condition, and unexpected failure due to consumable parts can be avoided by the maintenance service.

Specification

Dimensions



Specifications

General

Power
 DC $\equiv$ 12 V (supplied from camera or XLR)
 Power consumption
 18 W

 indicates safety information.

Ambient operating temperature	0 °C – 45 °C (32 °F – 113 °F)
Storage temperature	–20 °C – 60 °C (–4 °F – 140 °F)
Ambient operating humidity	10% – 85% (no condensation)
Weight	Approx. 2.6 kg (5.73 lbs.) (not including hood) Approx. 3.0 kg (6.61 lbs.) (including hood)
Dimensions (W×H×D)	340 mm×234 mm×193 mm (13-13/32 inches×9-7/32 inches×7-5/8 inches) (not including hood) 340 mm×234 mm×231 mm (13-13/32 inches×9-7/32 inches×9-1/8 inches) (including hood)

Display panel

Dimensions	9.0 inches
Number of pixels	1920×1080 (FHD)
Display color	Approx. 16.77 million colors

Switch function/connector

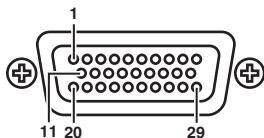
Operation	<POWER> switch <MENU> button <SELECT> dial button <F1>/<F2>/<F3>/<F4> buttons <BRIGHT> knob <CONTRAST> knob <PEAKING> knob <INPUT> switch
Connector	Camera I/F connector (D-sub 29 pins × 1) SDI IN connector (BNC × 1) DC IN connector (XLR 4 pins × 1)

Supported signal format

CAM	1080/59.94i, 1080/50i
SDI	1080/59.94p, 1080/50p, 1080/59.94i, 1080/50i 720/59.94p, 720/50p

Connector pin assignment table

Camera I/F connector (D-sub 29 pins)



1	Y	11	Y GND	21	Not used
2	P _B	12	P _B GND	22	Not used
3	P _R	13	P _R GND	23	Not used
4	CAM DET	14	Not used	24	I2C CLK
5	I2C DATA	15	DGND	25	G TALLY
6	R TALLY	16	Not used	26	P REQ
7	UP TALLY	17	UNREG-GND	27	Not used
8	VF12 V	18	Not used	28	Not used
9	VF12 V	19	FGND	29	Not used
10	VF12 V	20	(LCD ACT)		

D02-29PF-N-F0 (Japan Aviation Electronics Industry)