AJ-HPX2700 Supplement Operation Manual

(ver 1.02)

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Panasonic Corporation

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Normal Recording

REC START button or VTR button at the lens starts recording of video and sound on the P2 card. A cluster of data that consists of video and sound generated through a shooting action, together with such added information as meta data, is called a “clip”.

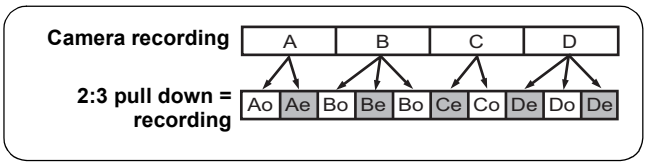
Normal Recording and Native Recording

In the unit, the camera’s recording method is selectable between the native recording method with the frame rate unchanged and the normal recording method pulling the frame rate down to 59.94 or 50 frames.

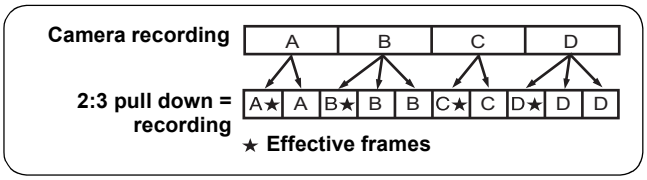
Normal recording (Pull-down recording)

Images at 24P (23.98P: referred to as 24P) are pulled down in 2:3 mode. Images at 30P (29.97P: referred to as 30P) are pulled down in 2:2 mode and recorded as 59.94i or 59.94P (referred to as 60i and 60P). Images at 25P are recorded as 50i or 50P with 2:2 pulled down. 1080i supports 24PA (2:3:3:2 Advanced Pull down) as well.
AVC-Intra does not support pull-down recording.

Example of 24P Over 60i



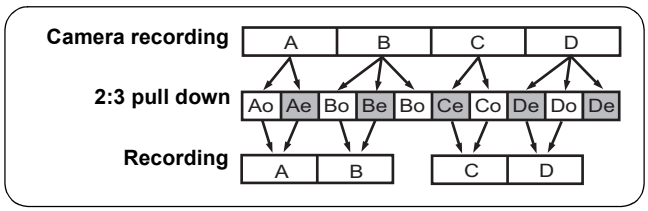
Example of 720P 24P Over 60P



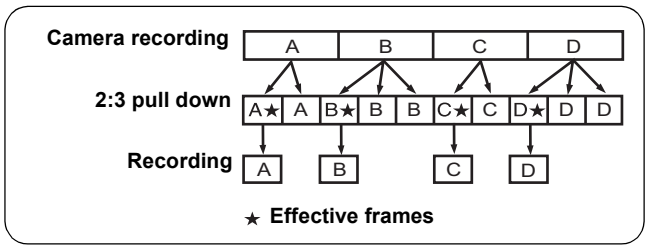
Native recording

This recording method extracts and records effective frames at the frame rates of the AVC-Intra recording in 1080i, and DVCPRO HD and AVC-Intra recording in 720P.
For 720P, it is possible to record images where the length is 2 to 2.5 times longer than the pull-down recording.
Even in native recording, the rate for outputting camera images and playback images is 59.94 or 50 frames that are pulled down.

Example of 1080-24PN (Native)

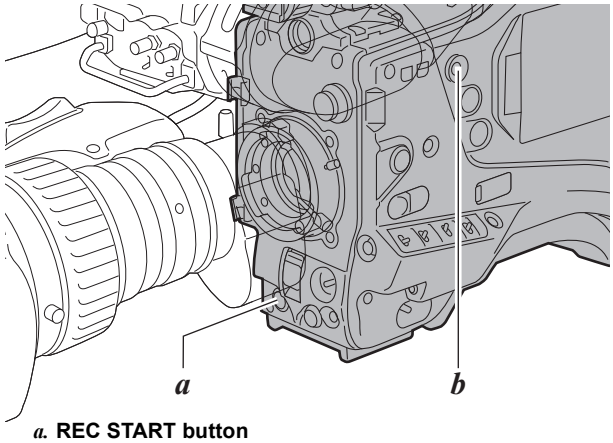


Example of 720-24PN (Native)



◆Notes

- The recording will start from the top frame of a 5-frame cycle for 24P/24PA recording, a 4-frame cycle for 24P native recording or a 2-frame cycle for 30P and 25P native recording of 720P, respectively. Therefore, the time code may be discontinued when recording clips continuously in another mode in which the recording cycle is different.
- Even if a P2 card has just been inserted, or the power has been just turned on, you can start recording using the internal memory of unit. In this case, recording cannot be stopped until the P2 card is recognized. If the inserted card is not recognized as a recordable P2 card, the record in internal memory is instantly discarded, and the message “CANNOT REC” is displayed on the viewfinder. Press the MODE CHECK button to check P2 card status (displayed in viewfinder).



a. **REC START button**
b. **MODE CHECK button**

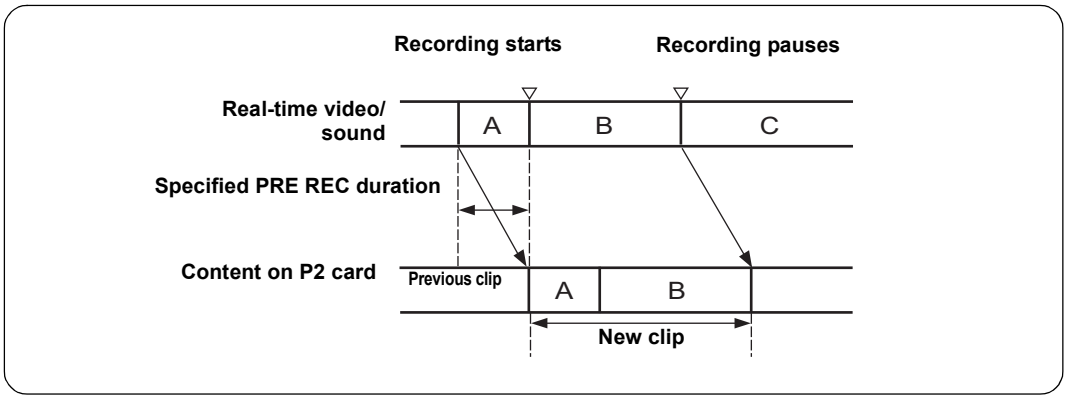
PRE RECORDING function

The internal memory of your unit is capable of storing several seconds of video and sound data coming from the camera. This capability can be used to record video and sound several seconds before either the REC START button or VTR button at the lens is pressed to start recording. To use this function, the menu option PRE REC MODE must be set to “ON”. The storage duration of the internal memory can be set from the menu option PRE REC TIME. PRE REC MODE and PRE REC TIME menu options can be found in the <REC FUNCTION> screen on the SYSTEM SETTING page.

The function of the menu option PRE REC MODE may be assigned to a desired user button by using any one of the menu options USER MAIN SW, USER1 SW, USER2 SW, MARKER SEL, or TEXT MEMO SW.
These options can be found in the <USER SW> screen on the CAM OPERATION page.
The following is the option for PRE REC TIME.

1-8SEC (for AVC-Intra100/50 or DVCPRO HD)

Specify the duration for which data may be recorded before either the REC START button or VTR button at the lens is pressed.



◆Notes

- **“P-REC” indication when the PRE REC MODE menu option is set to “OFF”**
  After recording is stopped, the “P-REC” indication remains displayed until all video and sound are recorded on the P2 card, even if the PRE REC MODE menu option is set to “OFF”. For details of the “P-REC” display, refer to [28. INTERVAL REC/PRE RECORDING indication/SD memory card remaining free space] (page 81) in [Viewfinder Status Indication Layout].
- Immediately after the power is turned on, the menu option PRE REC TIME is selected and/or the storage duration is changed, the content in internal memory will be undefined. In these situations, the video or sound will not be recorded for the duration specified, even if either the REC START button or VTR button at the lens is pressed to start recording.
- A P2 card that has been just inserted takes some time to recognize. In this situation, video or sound may not be recorded for the duration specified, even if either the REC START button or VTR button at the lens is pressed to start a recording.
- The internal memory does not store video or sound when a playback or recording review is being performed. For this reason, no video or sound can be recorded during such operation.
- When recording starts, the time code (TCG) display may not update until the unit recognizes the P2 card.
- During native VFR recording and INTERVAL REC operation, the PRE RECORDING is not available.

Variable Frame Rate (VFR) Recording Function

This unit can shoot at a lower frame rate (undercrank) or higher frame rate (overcrank) in the 720P mode. The native (PN) recording mode or standard (OVER) recording can be selected.

Native VFR Recording

1 Open the <SYSTEM MODE> screen from the SYSTEM SETTING page using the menu.
Set SYSTEM MODE to “720-59.94P (60P/50P)”, REC FORMAT to “AVC-I 100/24PN”, and VFR to “ON”.
Set FRAME RATE suitable for desired way of shooting.
Any frame from 1 (1P) to 60 (60P) can be selected.

2 Press the REC START button to begin recording in the VFR mode.

It is possible to select a combination of AVC-I 100, AVC-I 50, DVCPROHD, 30P, 25P and 24P as recording formats. For more details, refer to [Recording formats and output connector signal formats] (page 47) and [SYSTEM SETTING] (page 165).

◆**Notes**

- When SYSTEM MODE is set to “720-59.94P”, setting REC FORMAT to “DVCPROHD/30PN”, “AVC-I 100/30PN” or “AVC-I 50/30PN” results in operation at DVCPROHD/29.97PN, AVC-I 100/29.97PN or AVC-I 50/29.97PN respectively. Setting REC FORMAT to “DVCPROHD/24PN” or “AVC-I 50/24PN” results in operation at DVCPROHD/23.98PN or AVC-I 50/23.98PN.
  Similarly, when SYSTEM MODE is set to “720-60P”, setting REC FORMAT to “DVCPROHD/24PN”, “AVC-I 100/24PN” or “AVC-I 50/24PN” results in operation at DVCPROHD/24PN, AVC-I 100/24PN or AVC-I 50/24PN respectively.
- Note the following when native recording with VFR.
  – It is not possible to switch between P2 cards.
  – It is not possible to use PRE RECORDING, LOOP REC, INTERVAL REC and proxy recording.
  – There is no 1394 output when recording or waiting to record.
  – During recording, it is not possible to switch VFR “ON”/“OFF”.
  – Recording of audio is only possible when the frame rate is set to the same frame rate as set in the REC FORMAT (24PN: 24 frames, 30PN: 30 frames, and 25P: 25 frames).
  When it is set to other frame rates, audio meter in the display window or viewfinder of the unit will move, but it will not be recorded to the P2 card since embedded audio is superimposed on the HD SDI signal.
  – The time code is fixed by the Rec run.
  – Thumbnail screens may be produced one frame later than in the video recorded to the P2 card. It should be noted that this does not indicate a fault.

Standard VFR Recording (Pull-down Recording)

1 Open the <SYSTEM MODE> screen from the SYSTEM SETTING page using the menu.
Set SYSTEM MODE to “720-59.94P (50P)”, REC FORMAT to “AVC-I 100/60P”, and VFR to “ON”.
Set FRAME RATE suitable for desired way of shooting.
Any frame from 1 (1P) to 60 (60P) can be selected.

2 Press the REC START button to begin recording in the VFR mode (OVER 60P).

It is possible to select a combination of AVC-I 100, AVC-I 50, DVCPROHD, 60P and 50P as recording formats. For more details, refer to [Recording formats and output connector signal formats] (page 47) and [SYSTEM SETTING] (page 165).

Recording a fast-moving subject with the frame rate set to a low value using the 60P (or 50P) recording format produces images which can be played back to achieve a flow effect.

◆**Notes**

- When SYSTEM MODE is set to “720-59.94P”, setting REC FORMAT to “DVCPROHD/60P”, “AVC-I 100/60P” or “AVC-I 50/60P” results in operation at DVCPROHD/59.94P, AVC-I 100/59.94P or AVC-I 50/59.94P respectively. Setting REC FORMAT to “DVCPROHD/24PN” or “AVC-I 50/24PN” results in operation at DVCPROHD/23.98PN or AVC-I 50/23.98PN.
- When active frames are extracted using the frame converter to perform overcrank or undercrank recording, it is not possible to play back audio.
- Note the following for standard VFR recording.
  – It is not possible to switch between P2 cards.
  – It is possible to combine standard VFR recording with PRE RECORDING, LOOP REC, INTERVAL REC or proxy recording.
  – There is 1394 output when recording or waiting to record.
  – During recording, it is not possible to switch VFR “ON”/“OFF”.
  – Audio is recorded.

To change the frame rate while recording in VFR

It is possible to change the frame rate while recording in VFR.

1 Open the <OPTION MENU> screen from the OPTION page. OPTION page can be opened by pressing the MENU button while pressing the LIGHT button.
Set the RATE SET AT REC to “ON”.
Close the menu screen by pressing the MENU button.

2 Frame rate can be changed to match the intention of the recording by pressing the synchro scan adjustment switch (+/–) while the frame number display (number in white) in the VF screen is flashing by pressing the JOG dial button. It is also possible to instantly switch to any frame rate by using the FRAME RATE function of the USER switch.

◆**Note**

In Native VFR recording, when RATE SET AT REC is set to “ON”, audio cannot be recorded to the P2 card. Delay of audio is almost matched to the delay of the image when the frame rate is changed. Audio that is superimposed on the HD SDI signal will be muted when the delay for the audio is changed.

Examples of VFR Recording Function Use

Standard Speed Shooting for Film Production

When producing for the cinema screen, a frame rate of 24 fps (24 frames per sec) matching the rate at which films are played back is normal (1× speed). When settings below are used, the recorded material will play back as a film. By using the 720P progressive and the cine-like gamma, film-like images can be achieved.

Standard Settings for Film Production

SYSTEM MODE setting			Recording Frame Rate
SYSTEM MODE	**Other settings**		
720-60P	**REC FORMAT**	AVC-I 100/24PN (AVC-I 50/24PN) (DVCPROHD/24PN)	24 frames
	VFR	OFF	
	FRAME RATE	24FRAME	
1080-24PsF	**REC FORMAT**	AVC-I 100/24PN (AVC-I 50/24PN)	
	CAMERA MODE	24P	

Standard Speed shooting for Commercial and TV production

When producing commercials and TV shows for HDTV/SDTV broadcasts, a frame rate of 30 fps (30 frames per second) (or 25 fps (25 frames per second) at 50 Hz), is the norm (1× speed). When the settings below are used, the recorded material will play back as a television broadcast. Commercials and music clips can be recorded with film-like image quality, and a frame rate suitable for television broadcasting.

Standard settings for commercials and TV shows

System frequency	SYSTEM MODE setting			Recording Frame Rate
	SYSTEM MODE	**Other settings**		
59.94 Hz	720-59.94P	**REC FORMAT**	AVC-I 100/30PN (AVC-I 50/30PN) (DVCPROHD/30PN)	29.97 frames
		VFR	OFF	
		FRAME RATE	30FRAME	
	1080-59.94i	**REC FORMAT**	AVC-I 100/30PN (AVC-I 50/30PN) (AVC-I 100/60i) (AVC-I 50/60i) (DVCPROHD/60i)	
		CAMERA MODE	30P	
50 Hz	720-50P	**REC FORMAT**	AVC-I 100/25PN (AVC-I 50/25PN) (DVCPROHD/25PN)	25 frames
		VFR	OFF	
		FRAME RATE	25FRAME	
	1080-50i	**REC FORMAT**	AVC-I 100/25PN (AVC-I 50/25PN) (AVC-I 100/50i) (AVC-I 50/50i) (DVCPROHD/50i)	
		CAMERA MODE	25P	

Undercrank Shooting

This way of shooting provides the quick motion effects used, for instance to realize speeding clouds, a person standing stationary in the blur of a moving crowd, and kung-fu moves. For example, when the scenes have been shot using the 24P recording format for specifying playback frames, the speed of the quick motion effects can be doubled by setting the VFR recording frame rate to 12 fps.

Standard settings for undercrank shooting

System frequency	SYSTEM MODE setting			Recording Frame Rate
	SYSTEM MODE	Other settings		
59.94 Hz	720-59.94P	**REC FORMAT**	AVC-I 100/24PN (AVC-I 50/24PN) (DVCPROHD/24PN)	1 - 23 frames
		VFR	ON	
		FRAME RATE	Set to 23FRAME or lower	
50 Hz	720-50P	**REC FORMAT**	AVC-I 100/25PN (AVC-I 50/25PN) (DVCPROHD/25PN)	1 - 24 frames
		VFR	ON	
		FRAME RATE	Set to 24FRAME or lower	
60 Hz	720-60P	**REC FORMAT**	AVC-I 100/24PN (AVC-I 50/24PN) (DVCPROHD/24PN)	1 - 23 frames
		VFR	ON	
		FRAME RATE	Set to 23FRAME or lower	

- When REC FORMAT is set to “DVCPROHD/60P” or “DVCPROHD/50P”, the quick motion effects can be obtained by using a nonlinear editing system to process what has been recorded.

Overcrank shooting

This way of shooting provides slow motion effects used in car chases, action scenes, climactic scenes and other dramatic moments. For example, when scenes have been shot using the 30P recording format for specifying the playback frames, the speed of the slow motion effects can be halved by setting the recording frame rate to 60 fps. Images in the 720P progressive format will create smooth slow motion sequences with a high picture quality.

Standard settings for overcrank shooting

System frequency	SYSTEM MODE setting			Recording Frame Rate
	SYSTEM MODE	Other settings		
59.94 Hz	720-59.94P	**REC FORMAT**	AVC-I 100/24PN (AVC-I 50/24PN) (DVCPROHD/24PN)	25 - 60 frames
		VFR	ON	
		FRAME RATE	Set to 25FRAME or higher	
50 Hz	720-50P	**REC FORMAT**	AVC-I 100/25PN (AVC-I 50/25PN) (DVCPROHD/25PN)	26 - 50 frames
		VFR	ON	
		FRAME RATE	Set to 26FRAME or higher	
60 Hz	720-60P	**REC FORMAT**	AVC-I 100/24PN (AVC-I 50/24PN) (DVCPROHD/24PN)	25 - 60 frames
		VFR	ON	
		FRAME RATE	Set to 25FRAME or higher	

- When REC FORMAT is set to “DVCPROHD/60P” or “DVCPROHD/50P”, the slow motion effect can be obtained by using a nonlinear editing system to process what has been recorded.

Flow Effect Shooting

This way of shooting provides a flow effect and may, for instance, be used to shoot a subject on a far side of a road with a stream of fast-moving cars as the flow, in such a way that the stationary subject comes into focus though the cars.

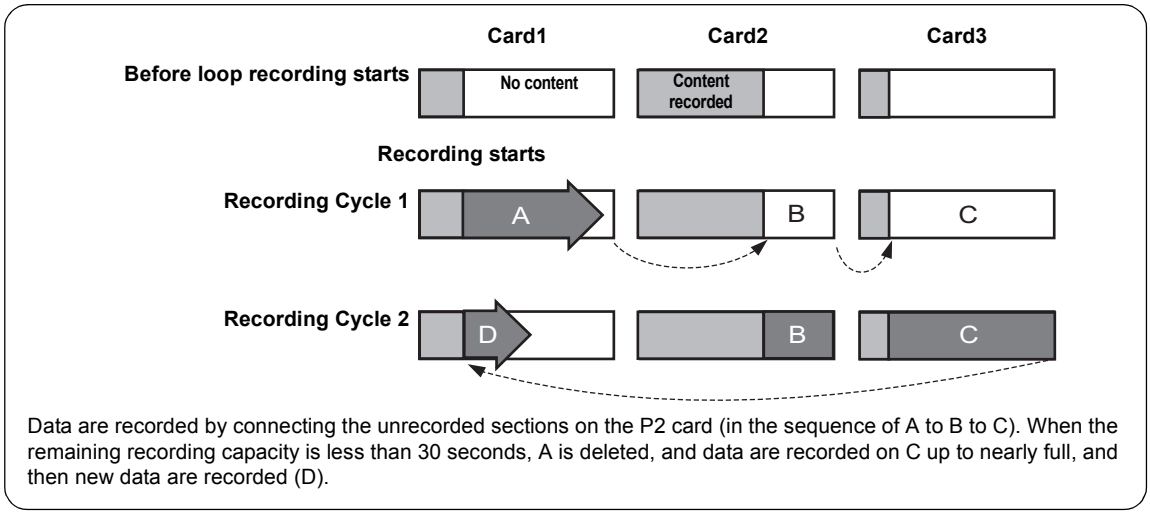
Standard settings for flow effect shooting

System frequency	SYSTEM MODE setting			Recording Frame Rate
	SYSTEM MODE	Other settings		
59.94 Hz	720-59.94P	**REC FORMAT**	AVC-I 100/60P (AVC-I 50/60P) (DVCPROHD/60P)	1 - 60 frames
		VFR	ON	
		FRAME RATE	Set to 23FRAME or lower	
50 Hz	720-50P	**REC FORMAT**	AVC-I 100/50P (AVC-I 50/50P) (DVCPROHD/50P)	1 - 50 frames
		VFR	ON	
		FRAME RATE	Set to 24FRAME or lower	

Loop Recording

When two or more P2 card slots contain cards, this function allows the target P2 card to be switched in order. Even when the free space of a P2 card is used up, this function continues recording while erasing existing data.

To use this function, the menu option LOOP REC MODE must be set to “ON”. The option LOOP REC MODE can be found in the <REC FUNCTION> screen on the SYSTEM SETTING page.



Data are recorded by connecting the unrecorded sections on the P2 card (in the sequence of A to B to C). When the remaining recording capacity is less than 30 seconds, A is deleted, and data are recorded on C up to nearly full, and then new data are recorded (D).

◆Notes

- When the loop recording capability is used, each P2 card must have at least 1 minute of free space.
- During loop recording, the P2 card access LEDs for all target P2 cards illuminate in orange. Note that if any of the target P2 card is removed, loop recording stops.
- When the menu option LOOP REC MODE is set to “ON”, the viewfinder and display window both show “LOOP”. However, when only one card is inserted, or when each card has less than 1 minute of free space, the loop recording capability does not work, even if the option LOOP REC MODE is set to “ON”. If this is the case, the indication “LOOP” flashes in the viewfinder and on the display window.
- When the menu option LOOP REC MODE is set to “ON”, the space remaining on the P2 card is displayed as an estimated recording time for the current recording format. When LOOP REC is stopped immediately after deleting an old recording, the actual time remaining may be shorter than the displayed time.
- When you set LOOP REC MODE to “ON”, VFR is set to “OFF”.
- During native VFR recording and use of the INTERVAL REC function, the LOOP REC function is not available.

Terminating the Loop Recording Mode

You can terminate the loop recording mode by either:

- Turning off the POWER switch of unit; or
- Setting the menu option LOOP REC MODE to “OFF”.

Interval Recording

It is possible to record in intervals of one frame as the shortest length by using the internal memory of the unit.
To use this option, open the <REC FUNCTION> screen from the SYSTEM SETTING page, and set the interval recording mode, REC TIME, PAUSE TIME and TAKE TOTAL TIME for the menu option INTERVAL REC MODE. When the settings are finalized, TOTAL REC TIME needed on the P2 card is automatically calculated and displayed.

The following are the options for INTERVAL REC MODE:

OFF: No interval recording performed.
ON: Interval recording performed.
ONE SHOT:
Performs “one-shot” recording for the duration specified under the REC TIME option by pressing either the REC START button or VTR button at the lens.

◆Notes

- When executing interval recording, data cannot be output with IEEE1394. When the 1394 CONTROL is set to “BOTH”, it is also impossible to control external devices.
- When you set INTERVAL REC to “ON” or “ONE SHOT”, VFR is set to “OFF”.
  (When an item including any of the 24PN, 25PN or 30PN modes is selected using the REC FORMAT menu option.)
- The shortest recording time, stand-by time, and the set value of the cut-off unit frame number* may vary with the recording method as follows.

Recording method		Unit frame number
1080i	60i, 50i 30P, 25P (Pull down) 30PN, 25PN (Native)	1 frame
	24P, 24PA (Pull down)	5 frames
	24PN (Native)	4 frames
720P	60P, 50P 30P, 25P (Pull down)	1 frame
	30PN, 25PN (Native)	2 frames
	24P (Pull down)	5 frames
	24PN (Native)	4 frames

* For instance, interval recording is at every 24 frames since frames are cut off every 2 frames even if the REC TIME is set to 1 second (=25 frames) in the 25PN mode of 720P.

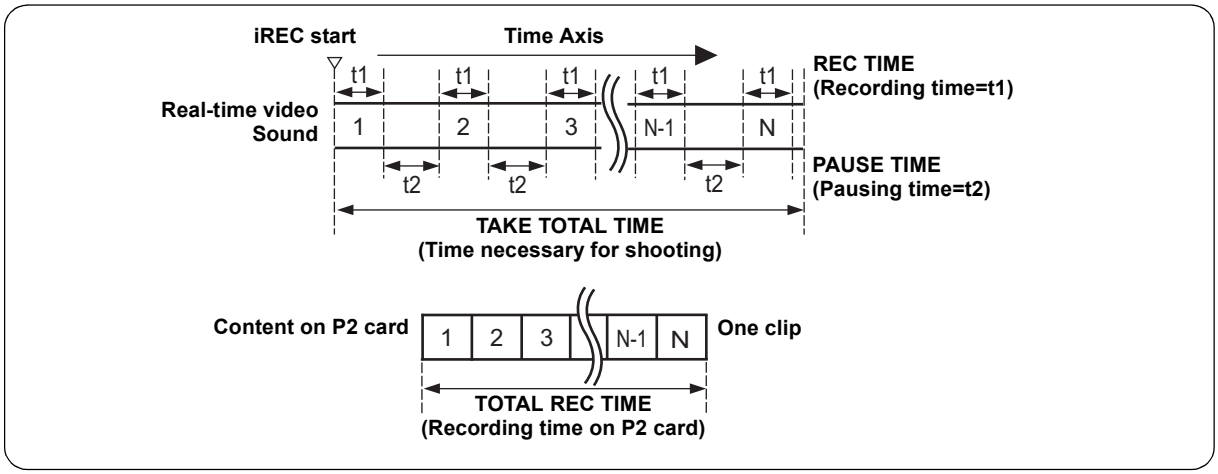
Shooting procedures when INTERVAL REC is ON

1 Following basic operations of shooting and recording according to [Basic Procedures], lock the camera securely.

2 Check that “i” is blinking in the display, and that the interval recording mode is selected.

3 Press either REC START button or VTR button at the lens.

Interval recording starts. Recording automatically stops after the specified TAKE TOTAL TIME, and the entire recording is generated as one clip.
“i” starts blinking in the display when the internal recording mode is selected. “iREC” illuminates after recording starts. “iREC” blinks during a pause.
The display in the viewfinder is the same as that in the display window.
The tally lamp illuminates during recording. If PAUSE TIME is set at 2 minutes or longer, the tally lamp illuminates at 5-second intervals to indicate that it is paused. The tally lamp also blinks 3 seconds before recording starts.



For continuous recording

Press either the REC START button or VTR button at the lens, again. Interval recording resumes.

To stop recording

Press the STOP button. Recording stops. Then, the camera accesses the P2 card to record the video stored in memory before recording stops. The record from the beginning of the interval recording to the moment of pressing the STOP button is generated as one clip.

To stop the Interval recording mode

- Setting the menu option INTERVAL REC MODE to “OFF”.

When INTERVAL REC HOLD is set to “OFF”, the mode returns to ordinary recording mode if the POWER switch of the unit is turned off.
If INTERVAL REC HOLD is set to “ON”, the interval recording mode will not change even if the POWER switch is turned off.

Shooting procedures for the ONE SHOT mode of INTERVAL REC

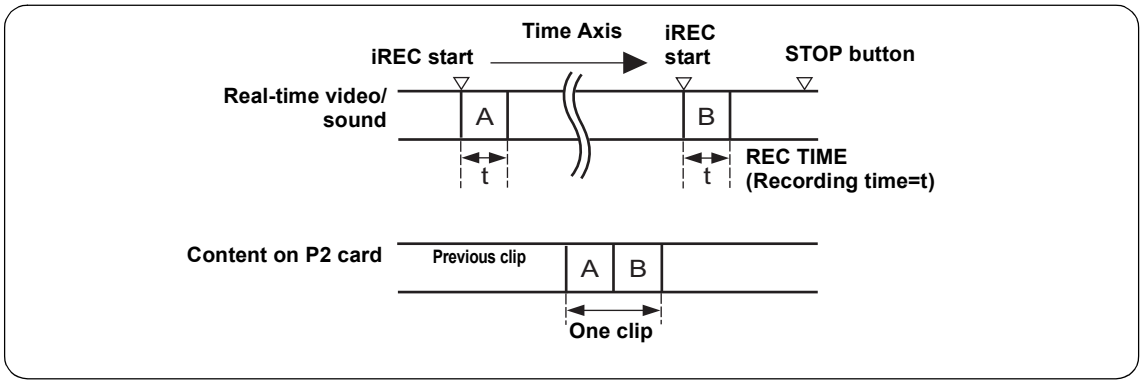
After setting the INTERVAL REC mode, follow these steps:

1 Following basic operations of shooting and recording according to [Basic Procedures], lock the camera securely.

2 Press either the REC START button or VTR button at the lens.
The unit automatically goes into ONE SHOT pause mode after the specified REC TIME.

3 Performs recording for the duration specified under the REC TIME option by pressing either the REC START button or VTR button at the lens, and returns to ONE SHOT pause mode.

4 Press the STOP button.
The video and sound stored in memory are generated as one clip.



To check the previous recording during a pause

Press the RET button at the lens to put the unit into REC REVIEW mode. ONE SHOT operation continues after the REC REVIEW.

To divide clips or to change the P2 card used for recording

Even during ONE SHOT mode, clips will not be generated on the P2 card until the STOP button is pressed. Press the STOP button, and stop ONE SHOT mode operation.

To stop the ONE SHOT mode of INTERVAL REC

- Set the menu option INTERVAL REC MODE to “OFF”.

When INTERVAL REC HOLD is set to “OFF”, the mode returns to ordinary recording mode if the POWER switch of the unit is turned off.
If INTERVAL REC HOLD is set to “ON”, the interval recording mode will not change even if the POWER switch is turned off.

During INTERVAL REC mode general notes

- **Sound**
  By selecting “ON”/“OFF” for the menu option AUDIO REC in the <REC FUNCTION> screen, it is possible to specify whether or not sound will be recorded during interval recording.
- **Record/playback buttons**
  During interval recording, all operation buttons other than STOP (REW, FF, PLAY/PAUSE) are disabled. However, during a pause in ONE SHOT mode, REC REVIEW can be executed with the RET button on the lens.
- **If the POWER switch is turned [OFF] during recording**
  If the unit is turned off during interval recording, the video stored in memory is recorded onto the P2 card, and then the unit automatically turns off.
- **To start emergency recording during a pause**
  If the REC START button is assigned to one of the USER MAIN, USER 1, USER 2, MARKER SELECT and TEXT MEMO button in advance, emergency recording can be started during a pause by holding down the relevant button. Pause time measurement continues after such emergency recording.

◆Note

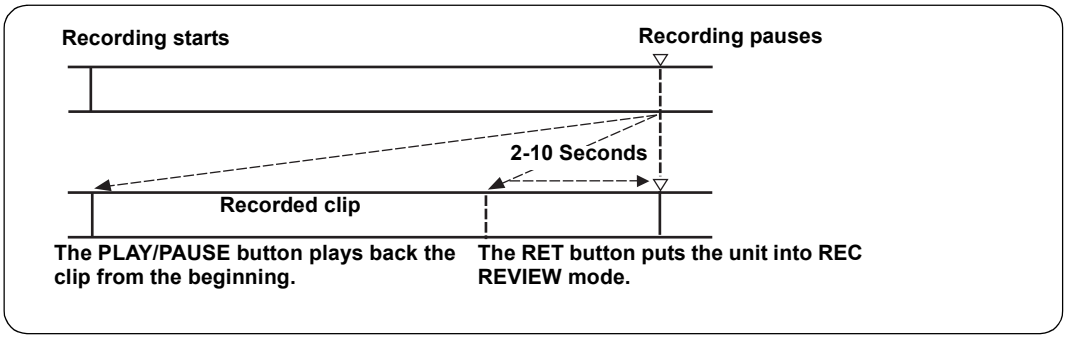
However, this function does not work in native recording with VFR operation.

- **Time code indication**
  When recording starts, the time code (TCG) display may not update until the unit recognizes the P2 card.
- **Removing cards**
  During INTERVAL REC mode operation, the P2 card access LED for the target P2 card blinks in orange. Do not remove the P2 card during this status. If you should remove the card accidentally, restore clips. However, even if the clips are restored, the last 3 to 4 seconds of the recording (up to a maximum of about 10 seconds if the P2 card is removed while recording onto multiple P2 cards) may be lost. For more information on how to fix clips, see [Restoring Clips] (page 129).
- **Thumbnail operation and menu operation**
  Thumbnail operation does not work during the INTERVAL REC mode operation. Press the STOP button before operating thumbnails.
  When standby time is set to 1 minute or more or when in ONE SHOT mode, the following restrictions apply even though the menu can be operated during stand-by mode.
  – The respective settings of SYSTEM MODE, REC FORMAT, CAMERA MODE, PC MODE and VFR cannot be changed.
  – The respective settings for SD CARD READ/WRITE, LENS FILE CARD R/W, READ USER DATA, and READ FACTORY DATA cannot be executed.

Recording Review Function

When recording is paused, pressing the RET button automatically locates the last 2 seconds of video just recorded, and the viewfinder provides video playback. Thus, it is possible to check whether the recording has been performed correctly.
After playback, the unit is again ready to start recording.
The picture location/playback duration can be increased to up to 10 seconds by continuously pressing the RET button. For short clips, however, when the start of a clip is located, continuously pressing the RET button does not play back any clips before that clip.

The function of the RET button may be assigned to a desired user button by using one of the menu options USER MAIN SW, USER1 SW, USER2 SW, MARKER SEL or TEXT MEMO SW. These options can be found in the <USER SW> screen on the CAM OPERATION page.
When recording is paused, pressing the PLAY/PAUSE button plays back the last recorded clip, from the beginning. After completion of playback, the unit enters the stopped state.



◆Notes

- Set the menu option RET SW (found in the <SW MODE> screen on the CAM OPERATION page) to “R.REVIEW”.
- When the HD SDI A · B switch on the side panel is positioned at [MEM], the video for REC REVIEW is output from the video output connectors (HD SDI A · B and MON OUT connectors), and also to the viewfinder.
  Note that when a backup device is connected to back up the video the pictures for REC REVIEW are backed up.

Adjustments and Settings for Recording

Multi Format

Video system and Recording format

The unit employs a progressive scan (full pixel reading) CCD system.
With combinations of the SYSTEM MODE and CAMERA MODE menu options on the <SYSTEM MODE> screen on the SYSTEM SETTING page, you can select an video system from among 23 types.
In any video system, the CCD operates in progressive (non-interlace) scan mode.

Selecting a recording signal and method

SYSTEM MODE menu option

Allows you to select a combination of system frequency (59.94 Hz, 50 Hz, 60 Hz, 23.98 Hz and 24 Hz) and signaling system (1080i or 720P). When a change has been made to the SYSTEM MODE option, the viewfinder indicates “TURN POWER OFF”. Then, turn the POWER switch of the unit off and wait 5 seconds or longer before turning the unit on again.

CAMERA MODE menu option

Selecting a shooting mode when the signal format is 1080i. For information about the behavior for each setting, see [Recording formats and output connector signal formats] (page 47).

◆Note

When the camera has been switched from 60i, 60P, or 30P to 24P or 24PA, video may produce noise for a moment because the pull-down 5-frame cycle is adjusted. This is not an abnormal condition.

REC FORMAT menu option

Used to select the recording format

AVC-I 100
The AVC-Intra100 format is used to record video. The native recording format applies to the 30PN, 24PN and 25PN modes.

AVC-I 50
The AVC-Intra50 format is used to record video. The native recording is applied to the 30PN, 24PN and 25PN modes.

DVCPROHD
The DVCPRO HD format is used to record video. The native recording is for the 30PN, 24PN and 25PN modes.

◆Note

When “AVC-I 50” or “AVC-I 100” is selected, the 24PA mode cannot be selected.

VFR menu option

When the signal format is 720P, you can select whether to perform VFR recording.

ON Enables variable frame rate shooting at the frame rate set in FRAME RATE.
OFF The frame rate is determined according to the REC FORMAT setting.

FRAME RATE menu option

When the VFR menu option is set to “ON”, it is possible to shoot using the frame rate set in this menu option. When the VFR menu option is set to “ON”, pressing the jog dial button displays the frame rate on the upper left of the viewfinder screen as a blinking number. It is then possible to change the frame rate setting without opening the FRAME RATE menu option by pressing the SYNCHRO SCAN adjustment buttons (+/-). Note, however, that this operation is not available when the FRATE function has been set to on using a user button.

Recording formats and output connector signal formats

The table below shows the formats used to record signals from the CCD and externally input signals along with the formats for signals output from the output connectors.

Menu setting					Operating state					
SYSTEM MODE	REC FORMAT	CAMERA MODE	VFR	FRAME RATE	Recording format/frame rate	Recording TC frame number/mode	Audio recording	Video output format	Input/output TC frame number/mode	1394 output
1080-59.94i	DVCPROHD/60i	60i	Not shown	Not shown	59.94i	30 frames	○	1080-59.94i	30 frames	60i
		30P			29.97P Over 59.94i			1080-29.97PsF Over 59.94i 2:2		30P Over 60i
		24P			23.98P Over 59.94i 2:3			1080-23.98PsF Over 59.94i 2:3		24P Over 60i
		24PA			23.98P Over 59.94i 2:3:3:2			1080-23.98PsF Over 59.94i 2:3:3:2		24PA Over 60i
	AVC-I 100/60i AVC-I 50/60i	60i			59.94i			1080-59.94i		No output
	AVC-I 100/30PN AVC-I 50/30PN	30P			29.97P-29.97PN (Native)			1080-29.97PsF Over 59.94i 2:2		
	AVC-I 100/24PN AVC-I 50/24PN	24P			23.98P-23.98PN (Native)	24 frames		1080-23.98PsF Over 59.94i 2:3		
1080-23.98PsF	AVC-I 100/24PN AVC-I 50/24PN	24P			23.98P-23.98PN (Native)			1080-23.98PsF Over 47.96i 2:2	24 frames	
1080-24PsF	AVC-I 100/24PN AVC-I 50/24PN	24P			24P-24PN (Native)			1080-24PsF Over 48i 2:2		
1080-50i	DVCPROHD/50i	50i	Not shown	Not shown	50i	25 frames	○	1080-50i	25 frames	50i
		25P			25P Over 50i 2:2			1080-25PsF Over 50i 2:2		25P Over 50i
	AVC-I 100/50i AVC-I 50/50i	50i			50i			1080-50i		No output
	AVC-I 100/25PN AVC-I 50/25PN	25P			25P-25PN (Native)			1080-25PsF Over 50i 2:2		
720-59.94P	DVCPROHD/60P	Not shown	OFF	Disabled	59.94P	30 frames	○	720-59.94P	30 frames	60P
			ON	1FRAME-60FRAME	1-59.94P Over 59.94P			720-∗∗P Over 59.94P		∗∗P Over 60P
	DVCPROHD/30PN		OFF	Disabled	29.97P-29.97PN (Native)			720-29.97P Over 59.94P 2:2		For EE: No output Playback: Over 60P
			ON	1FRAME-60FRAME	1-59.94P - 29.97PN (Native)	30 frames R-RUN only	–*2	For EE: 720-∗∗P Over 59.94P Playback: 720-29.97P Over 59.94P 2:2	30 frames R-RUN only	
	DVCPROHD/24PN		OFF	Disabled	23.98P-23.98PN (Native)	24 frames	○	720-23.98P Over 59.94P 2:3	30 frames	
			ON	1FRAME-60FRAME	1-59.94P - 23.98PN (Native)	24 frames R-RUN only	–*2	For EE: 720-∗∗P Over 59.94P Playback: 720-23.98P Over 59.94P 2:3	30 frames R-RUN only	
	AVC-I 100/60P AVC-I 50/60P		OFF	Disabled	59.94P	30 frames	○	720-59.94P	30 frames	No output
			ON	1FRAME-60FRAME	1-59.94P Over 59.94P			720-∗∗P Over 59.94P		
	AVC-I 100/30PN AVC-I 50/30PN		OFF	Disabled	29.97P-29.97PN (Native)			720-29.97P Over 59.94P 2:2		
			ON	1FRAME-60FRAME	1-59.94P - 29.97PN (Native)	30 frames R-RUN only	–*2	For EE: 720-∗∗P Over 59.94P Playback: 720-29.97P Over 59.94P 2:2	30 frames R-RUN only	
	AVC-I 100/24PN AVC-I 50/24PN		OFF	Disabled	23.98P-23.98PN (Native)	24 frames	○	720-23.98P Over 59.94P 2:3	30 frames	
			ON	1FRAME-60FRAME	1-59.94P - 23.98PN (Native)	24 frames R-RUN only	–*2	For EE: 720-∗∗P Over 59.94P Playback: 720-23.98P Over 59.94P 2:3	30 frames R-RUN only	
720-60P	DVCPROHD/24PN	Not shown	OFF	Disabled	24P-24PN (Native)	24 frames	○*1	720-24P Over 60P 2:3	30 frames	No output (or playback)
			ON	1FRAME-60FRAME	1-60P -24PN (Native)	24 frames R-RUN only	–*2	For EE: 720-∗∗P Over 60P Playback: 720-24P Over 60P 2:3	30 frames R-RUN only	
	AVC-I 100/24PN AVC-I 50/24PN		OFF	Disabled	24P-24PN (Native)	24 frames	○*1	720-24P Over 60P 2:3	30 frames	No output
			ON	1FRAME-60FRAME	1-60P -24PN (Native)	24 frames R-RUN only	–*2	For EE: 720-∗∗P Over 60P Playback: 720-24P Over 60P 2:3	30 frames R-RUN only	
720-50P	DVCPROHD/50P	Not shown	OFF	Disabled	50P	25 frames	○	720-50P	25 frames	50P
			ON	1FRAME-50FRAME	1-50P Over 50P			720-∗∗P Over 50P		∗∗P Over 50P
	DVCPROHD/25PN		OFF	Disabled	25P-25PN (Native)			720-25P Over 50P		For EE: No output Playback: Over 50P
			ON	1FRAME-50FRAME	1-50P -25PN (Native)	25 frames R-RUN only	–*2	For EE: 720-∗∗P Over 50P Playback: 720-25P Over 50P 2:2	25 frames R-RUN only	
	AVC-I 100/50P AVC-I 50/50P		OFF	Disabled	50P	25 frames	○	720-50P	25 frames	No output
			ON	1FRAME-50FRAME	1-50P Over 50P			720-∗∗P Over 50P		
	AVC-I 100/25PN AVC-I 50/25PN		OFF	Disabled	25P-25PN (Native)			720-25P Over 50P		
			ON	1FRAME-50FRAME	1-50P -25PN (Native)	25 frames R-RUN only	–*2	For EE: 720-∗∗P Over 50P Playback: 720-25P Over 50P 2:2	25 frames R-RUN only	

○: Supported
–: Not supported

*1 The audio sampling frequency is 48.048 KHz.

*2 Recording of audio is only possible when the frame rate is set to the same frame rate as set in the REC FORMAT (24PN: 24 frames, 30PN: 30 frames, and 25PN: 25 frames). However, recording of audio is not be possible for VFR when the RATE SET AT REC is set to "ON".

Menu setting					Supported Recording Functions			
SYSTEM MODE	REC FORMAT	CAMERA MODE	VFR	FRAME RATE	PRE RECORDING	PROXY	LOOP REC	INTERVAL/ ONE SHOT
1080-59.94i	DVCPROHD/60i	60i	Not shown	Not shown	○	○	○	○
		30P						
		24P						
		24PA						
	AVC-I 100/60i AVC-I 50/60i	60i						
	AVC-I 100/30PN AVC-I 50/30PN	30P						
	AVC-I 100/24PN AVC-I 50/24PN	24P						
1080-23.98PsF	AVC-I 100/24PN AVC-I 50/24PN	24P						
1080-24PsF	AVC-I 100/24PN AVC-I 50/24PN	24P						
1080-50i	DVCPROHD/50i	50i	Not shown	Not shown	○	○	○	○
		25P						
	AVC-I 100/50i AVC-I 50/50i	50i						
	AVC-I 100/25PN AVC-I 50/25PN	25P						
720-59.94P	DVCPROHD/60P	Not shown	OFF	Disabled	○	○	○	○
			ON	1FRAME-60FRAME				
	DVCPROHD/30PN		OFF	Disabled	○	○	○	○
			ON	1FRAME-60FRAME	–	–	–	–
	DVCPROHD/24PN		OFF	Disabled	○	○	○	○
			ON	1FRAME-60FRAME	–	–	–	–
	AVC-I 100/60P AVC-I 50/60P		OFF	Disabled	○	○	○	○
			ON	1FRAME-60FRAME				
	AVC-I 100/30PN AVC-I 50/30PN		OFF	Disabled	○	○	○	○
			ON	1FRAME-60FRAME	–	–	–	–
	AVC-I 100/24PN AVC-I 50/24PN		OFF	Disabled	○	○	○	○
			ON	1FRAME-60FRAME	–	–	–	–
720-60P	DVCPROHD/24PN	Not shown	OFF	Disabled	○	○	○	○
			ON	1FRAME-60FRAME	–	–	–	–
	AVC-I 100/24PN AVC-I 50/24PN		OFF	Disabled	○	○	○	○
			ON	1FRAME-60FRAME	–	–	–	–
720-50P	DVCPROHD/50P	Not shown	OFF	Disabled	○	○	○	○
			ON	1FRAME-50FRAME				
	DVCPROHD/25PN		OFF	Disabled	○	○	○	○
			ON	1FRAME -50FRAME	–	–	–	–
	AVC-I 100/50P AVC-I 50/50P		OFF	Disabled	○	○	○	○
			ON	1FRAME-50FRAME				
	AVC-I 100/25PN AVC-I 50/25PN		OFF	Disabled	○	○	○	○
			ON	1FRAME-50FRAME	–	–	–	–

○: Supported
–: Not supported

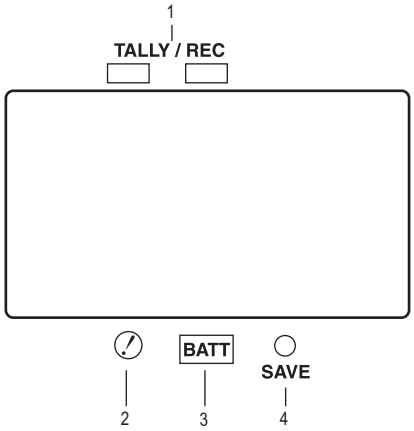
◆Note

During playback, the formats for clips in the same system mode are switched automatically and played back.

Viewfinder Screen Status Displays

In addition to video images, the viewfinder displays lamps and text that indicate the settings and operating status of the unit, together with messages, a center marker, a safety zone marker and the camera ID.

Lamps in the Viewfinder Screen



The above viewfinder is the AJ-HVF21G (for further information on your optional viewfinder model, see the relevant instruction manual).

1. TALLY/REC (recording) Lamp
This lamp stays illuminated in red during recording, and starts blinking if any abnormal action occurs.
For more information, see [Warning System] (page 155).

2. Abnormal Operating Status Warning Lamp
This lamp comes on when the unit is in any of the abnormal operating statuses specified through the <!LED> menu screen.
For statuses that activate the lamp, see the options in the [!LED] (page 183).

3. BATT (battery) Lamp
This lamp starts blinking a few minutes before the battery charge starts to run out, and stays illuminated after the battery is completely flat. The battery should be replaced before it is nearly flat, so that operation will not be interrupted.
For more information, see [Warning System] (page 155).

4. SAVE Lamp
In the normal setting:
The lamp stays on when the SAVE switch is positioned at [ON] and the output of video and audio is power-saved.

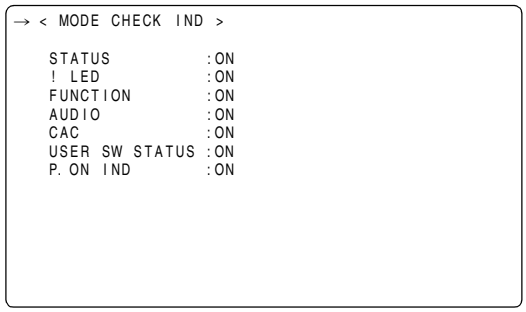
When the menu option SAVE LED is set to "P2CARD":
The lamp starts blinking when the P2 card remaining free space is getting low.
The menu option SAVE LED can be found in the <VF INDICATOR3> screen on the VF page.

Mode Check Screen Displays (MODE CHECK button function)

The viewfinder can display a screen that allows you to check the settings and status of the unit.
Each press of the MODE CHECK button switches the screen as follows:

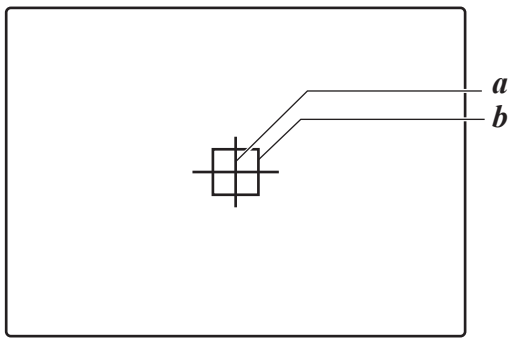
STATUS screen → !LED screen → FUNCTION screen → AUDIO screen → CAC screen → USER SW STATUS screen → No indication

Each screen is displayed for about 5 seconds. A press of the MODE CHECK button switches the current screen.
Whether or not to display each screen is specified through the <MODE CHECK IND> screen, which is accessible from the VF page.



Y GET Area Display

Y GET detection area is displayed on the viewfinder screen, LCD monitor, and monitor output when the Y GET function is enabled after assigning the Y GET function to the USER button.
However, Y GET detection area is not displayed in the monitor output unless the center marker is displayed.



a. **Center marker**
b. **Y GET detection area**

Selecting Viewfinder Display Information

To select the information items you want to have displayed in the viewfinder screen, go to the <VF INDICATOR1>, <VF INDICATOR2> and <VF INDICATOR3> screens from the VF page, and turn on or off the appropriate options, or specify desired values.
For directions on setting the options, see [Setting Menu Options] (page 163).

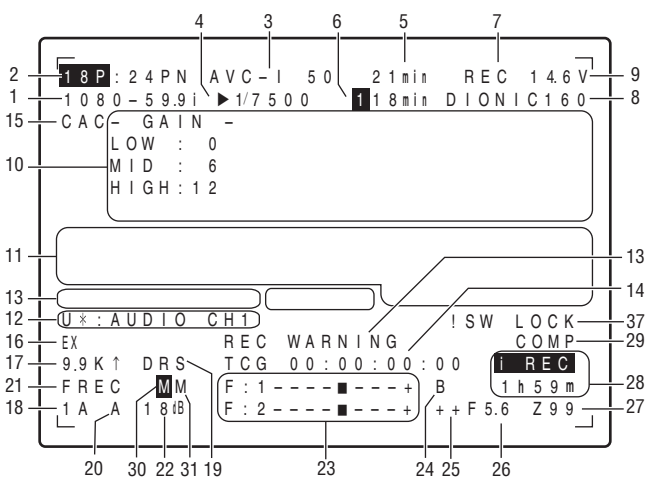
```
→ < VF INDICATOR1 >

   EXTENDER      :ON
   SHUTTER       :ON
   FILTER        :ON
   WHITE         :ON
   GAIN          :ON
   IRIS          :IRIS
   CAMERA ID     :BAR
   ID POSITION   :UPPER L
   DATE/TIME     :OFF
   ZOOM LVL      :ON
   COLOR TEMP    :ON
   SYSTEM MODE   :ON
   REC FORMAT    :ON
   FRAME RATE    :ON
```

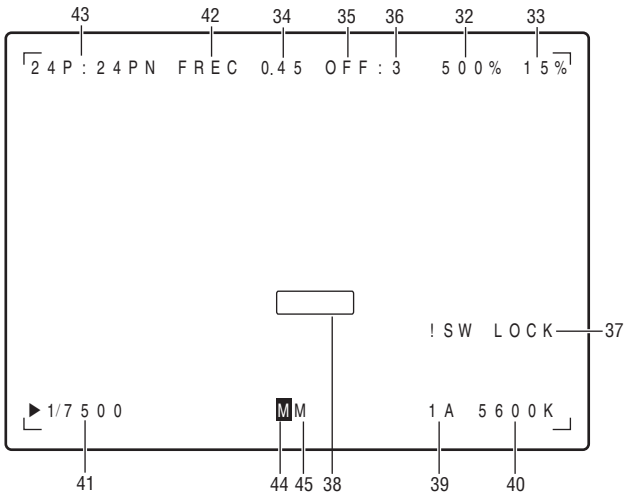
```
→ < VF INDICATOR2 >

   CAC                :ON
   GAMMA MODE         :ON
   DRS                :ON
   VF GAMMA           :ON
   MONITOR GAMMA      :ON
```

```
→ < VF INDICATOR3 >

   P2CARD REMAIN      :TOTAL
   BATTERY            :ON
   AUDIO LVL          :ON
   TC ON COLOR BAR    :OFF
   TC                 :OFF
   SYSTEM INFO        :NORMAL
   COMPRESSION        :ON
   SAVE LED           :SAVE
   REC STATUS         :OFF
   PROXY REC          :OFF
```

Viewfinder Status Indication Layout

The indications are arranged as illustrated below.





For more information, see the following pages.

Information Item	Indication	Status
1. System mode	1080-59.9i 1080-23.9PsF 1080-24.0PsF 1080-50i 720-59.94P 720-60P 720-50P	This indicates the mode that the unit operates in. 1080-59.94 interlace mode 1080-23.98 segment frame mode 1080-24 segment frame mode 1080-50 interlace mode 720-59.94 progressive mode 720-60 progressive mode 720-50 progressive mode
2/43. Frame number for shooting and recording	∗∗P: ∗∗i At native recording ∗∗P: ∗∗PN	The shooting frame number is displayed next to the recording frame number (including native recording) and the recording type (progressive/interlacing). Examples: In the case of 24PN recording and 12 frame shooting, “12P:24PN” is displayed. In the case of 12P Over 59.94i, “12P:60i” is displayed. When the VFR function is “ON”, the shooting frame number is displayed with black and white reversed. When operating in SYNCHRO SCAN mode, the shooting frame number blinks.
3. REC FORMAT	DVCPROHD AVC-I100 AVC-I50	This indicates the recording mode. ◆**Note** DVCPROHD is also displayed in the native recording. DVCPRO HD recording (including native recording) AVC-Intra100 recording AVC-Intra50 recording
4/41. Shutter speed/ mode	▶1/∗∗.∗, ▶∗∗∗.∗d ▶▶1/∗∗∗.∗ 1/50 (1/60) - 1/2000, HALF, ∗∗∗.∗d	This indicates that the shutter speed is set to SYNCHRO SCAN. This indicates that the shutter speed is set to SYNCHRO SCAN2. This indicates that a fixed shutter speed has been set.
5. P2 card remaining free space	∗∗∗min END WP LOOP INFO P2 ∗/∗	The indication “∗∗∗min” stays illuminated under normal conditions or blinks when the remaining level is near zero. When the card space is used up, “END” blinks. WP is illuminated when the P2 card is write-protected. LOOP is illuminated when the LOOP REC mode is set. When loop recording cannot be performed, for example because the P2 card has no free space, the indication blinks. P2 card being recognized. Total free space/capacities of the P2 cards (when MODE CHECK is being performed). ◆**Note** When the menu option P2CARD REMAIN is set to “ONE-CARD”, the number of the P2 card slot that contains the target card is indicated, together with the remaining space. For more information, see [P2 Card Remaining Free Space/capacity Indication] (page 82). With lower frame rates under VFR operation during native recording, the display period may lengthen for the indication that little space remains on the P2 card.
6. P2 card remaining free space (when MODE CHECK is being performed)	1 ∗∗∗min	The number of the P2 card slot that contains the target card and the remaining free space are indicated (when MODE CHECK is being performed). In LOOP REC mode, an indication of estimated recording time appears. For more information, see [Loop Recording] (page 40). This indication also appears when the target P2 card has been switched with a user button. ◆**Note** Under VFR operation in native recording, the amount of free space increases as the frame rate is lowered.
7. Unit REC indication	REC	When an external device is controlled through the 1394 connection (when the 1394 CONTROL option is set to “BOTH”), the recording status of the unit is displayed using characters. The indication stays illuminated during recording. This is displayed when the menu option REC TALLY of the <OPTION MODE> screen is set to “CHAR”. This can also be displayed during the recording using the unit alone. This is displayed when the menu option REC STATUS of the <VF INDICATOR3> screen is set to “ON”.

Information Item	Indication	Status
8. Battery type (when MODE CHECK is being performed)	PRO14 - AC ADPT	Battery type, selected through a menu option. “AC ADPT” indicates when an external DC power supply has been input.
9. Battery remaining level/voltage	∗∗.∗V ∗∗∗% EMP MAX	Battery remaining level in tenths of a volt The battery level of batteries having a level indicating function is displayed as a percentage. Where the battery has a level indicating function, this indicates that the battery is empty. Where the battery has a level indicating function, this indicates that the battery is fully charged.
10. MODE CHECK Indication Area (STATUS: Master gain)	LOW/MID/HIGH –3 to 30	Value set for the master gain Example: LOW: 0
(Cause of !LED illumination: displayed full-screen) • Indications selected through the menu option !LED are marked with [!]. • Indications which may activate the !LED are marked with [!].	GAIN (0dB) SHUTTER WHITE PRE. EXTENDER B.GAMMA MATRIX COLOR COR. FILTER	Gain status Shutter status White balance status Extender status (EX2 or OFF) BLACK GAMMA status (ON or OFF) MATRIX status (A, B, or OFF) Color correction status (ON or OFF) Filter status
(FUNCTION: HD SDI A · B)	OUTPUT: MEM/CAM/OFF CHAR: ON/OFF	Position of OUTPUT SEL switch. Indicates current setting of HD SDI A · B CHAR. HD SDI A · B CHAR is set from the <OUTPUT SEL> screen of the SYSTEM SETTING page.
(FUNCTION: MON OUT)	OUTPUT: MEM/CAM/OFF SELECT: VBS/HD SDI CHAR: ON/OFF	Position of OUTPUT SEL switch. Indicates current setting of MONITOR OUT. MONITOR OUT is set from the <OUTPUT SEL> screen of the SYSTEM SETTING page. Indicates current setting of MON OUT CHARACTER switch.
(FUNCTION: P2CARD STATUS)	TOTAL SLOT1/SLOT2/SLOT3/ SLOT4/SLOT5 OP-SLOT	Total remaining free space/capacities of the P2 cards loaded in P2 card slots 1 - 5. Status and remaining free space/capacity of each card. The numbers denote the P2 card slot numbers. The card status is indicated as: ACTIVE/ACCESSING/INFO READING/FULL/PROTECTED/ NOT SUPPORTED/FORMAT ERROR/NO CARD/PROXY For details of statuses, see [P2 card access LED and status of P2 cards] (page 31). Indicates optional slot status. The card status is indicated as: PROXY/NO CARD/NOT SUPPORTED
(AUDIO: Enabling or disabling the FRONT AUDIO LEVEL control)	CH1: ON/OFF CH2: ON/OFF	If the FRONT AUDIO LEVEL control is in effect for channel 1, then “ON” is indicated. If not, “OFF” is indicated. If the FRONT AUDIO LEVEL control is in effect for channel 2, then “ON” is indicated. If not, “OFF” is indicated.
(AUDIO: Phantom power status for the microphone)	FRONT: ON/OFF REAR: ON/OFF	Phantom power status of the front microphone Phantom power status of the rear microphone For more information, see [MIC/AUDIO2] (page 193).
(AUDIO: Input signal and level for each channel)	FRONT/W.L./REAR CH1/2/3/4	Input signal and level for each channel

Information Item	Indication	Status
11. Camera Warning and Report Area (Related to AWB, ABB and switch settings)	AWB A ACTIVE AWB B ACTIVE AWB A OK ∗.∗K AWB B OK ∗.∗K AWB BREAK ∗.∗K AWB NG COLOR TEMP LOW COLOR TEMP HIGH LEVEL OVER LOW LIGHT TIME OVER AWB PRESET ∗.∗K CHECK FILTER ABB ACTIVE ABB OK ABB BREAK ABB NG B-SHD READY B-SHD ACTIVE B-SHD OK B-SHD BREAK B-SHD NG	AWB being performed on Ch A. AWB being performed on Ch B. AWB successful on Ch A. AWB successful on Ch B. AWB action aborted by user. AWB action failed. The second line indicates the status. Color temperature too low. Color temperature too high. Brightness too high. Brightness too low. Action timed-out. AWB cannot be performed because the AWB switch is position at [PRST] or the super gain is enabled. Make sure the FILTER control is positioned correctly. ABB being performed. ABB action successful. ABB action aborted by user. ABB action failed. Black shading accepted (by holding down the ABB switch during ABB adjustment). Black shading being adjusted. Black shading adjustment successful. Black shading adjustment aborted by user. Black shading adjustment failed.
(Switch changeover indication)	WHITE: # ∗.∗K AUTO KNEE: ON/OFF GAIN: ∗∗dB SS: 1/∗∗∗∗, ∗∗∗.∗d, ▶∗∗∗.∗d SS: ▶ 1/∗∗∗∗, ▶▶1/∗∗∗ ND: ∗/CC: ∗∗K EXTENDER: ON/OFF/∗∗K IRIS: ∗∗ F ∗.∗ DRS: ON/OFF	The WHITE BAL switch has been switched. # is replaced with A, B or PRE. AUTO KNEE switch has been switched to [ON] or [OFF]. Gain has been switched with the GAIN selector switch or a user button. When the shutter speed has been switched, the shutter speed is indicated. Shutter speed is in SYNCHRO SCAN mode. This appears when the filter setting has been selected. Lens extender has been turned on or off. Indicated when the iris override correction value is to be changed. The dynamic range stretcher has been switched.
(Low light warning)	LOW LIGHT	Brightness too low.
(Y GET value)	∗∗∗.∗%	With the Y GET ON setting, the output brightness level near the center marker is displayed as “%”.
12. User button functions UM: USER MAIN button U1: USER 1 button U2: USER 2 button U3: MARKER SELECT button U4: TEXT MEMO button	INH I.OVR ON/OFF S.BLK –∗∗/OFF B.GAMMA ON/OFF Y GET ON/OFF DRS ON/OFF ASSIST ON/OFF C.TEMP ON/OFF VFR ON/OFF FRATE ON/OFF VF GAM ON/OFF AUDIO CH1 AUDIO CH2 REC SW RET SW PRE REC SLOT SEL USB HOST/DEVICE/OFF VF MARK A/B/OFF TEXT MEMO	User buttons disabled. Iris override can be set (the iris override setting is on). Status of super black (on or off). When it is on, the set value is also indicated. Status of black gamma (shade correction for the black level): on or off Indicates whether the Y GET function is on or off. Indicates whether the dynamic range stretcher function is on or off. Indicates whether the focus assist function is on or off. Indicates the mode for changing the color temperature with the jog dial button is on or off. Indicates whether the VFR function is on or off. Indicates whether the frame rate set in USR SW F.RATE is being applied. Indicates whether the monitor gamma function is enabled for the viewfinder. Input signal to be recorded on audio channel 1 has been switched. Input signal to be recorded on audio channel 2 has been switched. User button acts as REC switch. User button acts as RET switch. Indicates that PRE RECORDING mode has been switched on or off. Switch that changes the target card is set. USB action status has been switched. Displayed when the marker displayed in the viewfinder and on the LCD screen has been changed. Indicates whether the TEXT MEMO function is on or off.

Information Item	Indication	Status
13. System information and warnings	SYSTEM ERROR-∗∗	Something abnormal is happening to the internal computer communications or reference signal. No further recording or playback can be performed. ∗∗ is replaced with an error code. For more information, see [Error Codes] (page 158).
	TURN POWER OFF	P2 card has been removed while being accessed (recorded, played back, or formatted), and subsequent operation is disabled.
	CARD ERR ∗	An error has occurred while recording data to or playing data from a P2 card. In the actual indication the ∗ is replaced by the slot number of the P2 card that triggered the error.
	REC WARNING	Something abnormal is happening to video and/or audio being recorded.
	BACKUP BATT EMPTY	Backup battery needs replacing.
	FAN STOP	The fan is locked and halted.
	WIRELESS-RF	RF signal from the wireless receiver is degraded.
	EOM	P2 card has no free space.
	BOS	Playback position is at the start of all the clips.
	EOS	Playback position is at the end of all the clips.
	CANNOT REC	Indicates that it is not possible to record to a P2 card directly after insertion or switching on the power. Detailed information is provided on the FUNCTION screen of MODE CHECK. See the relevant section of the 10. MODE CHECK indication area.
	CANNOT PLAY	Clip cannot be played back perhaps because no P2 card is loaded, or the P2 card contains no clips.
	COMM ERROR	Displayed when disconnection between microcomputers continues for a specified period or longer.
	TEXT MEMO	Text memo has been added.
	TEXT MEMO INVALID	Text memo has not been successfully added.
	MARK ON/OFF	Shot mark has been added or deleted. For information on shot marks, see [Shot Mark Function] (page 45).
	SHOT MARK INVALID	This is displayed when shot marks cannot be added.
	UPDATING	Clip information is being updated. Playback operation disabled.
	USB DEVICE	The unit is in USB DEVICE mode. When communication is disabled, the indication blinks.
	USB HOST	Indicates that the unit is set to the USB HOST mode. When the external hard disk is not successfully recognized, then the indication blinks.
	THUMBNAIL OPEN	Thumbnail is being manipulated.
	1394 INITIAL ERROR	Displayed when the connection of the DVCPRO connector is abnormal.
	PROXY REC P2&SD	Displayed when proxy recording on either the P2 card or the SD memory card starts (when AJ-YAX800G is attached, the PROXY REC item on the <VF INDICATOR3> screen is turned on).
	PROXY REC P2	Displayed when proxy recording on the P2 card starts (when AJ-YAX800G is attached, the PROXY REC item on the <VF INDICATOR3> screen is turned on).
	NEAR END (SD)	When the remaining free space on the SD Memory card drops below 1 minute during proxy recording, the message is displayed (when AJ-YAX800G is attached).
	EOM (SD)	Displayed when full capacity is reached during proxy recording on the SD memory card (when AJ-YAX800G is attached).
	PROXY CARD ERROR	Displayed when proxy recording stops because of failure on either the video encoder card or the stream. Check the video encoder card or avoid use of proxy recording. (When AJ-YAX800G is attached.)
	SD CARD WRITE ERR	Displayed when a failure occurs on the SD memory card during proxy recording, and only recording on the SD memory card stops (when AJ-YAX800G is attached).
	TC REGEN	The RET button was pressed to regenerate the time code as the time code for the last clip recorded on a P2 card.
	SLOT SEL	This blinks while the recording slots of P2 cards are switched after pressing the user button where the SLOT SEL function is assigned.
	SLOT SEL INVALID	This is displayed if the recording slots of P2 cards cannot be switched when the user button where the SLOT SEL function is assigned is pressed.
	DIR NG CARD SLOT1/2/3/4/5	This is displayed when a P2 card with an irregular directory structure is inserted or when beginning or ending a recording to an inserted card having such a directory structure.
	RUN DOWN CARD SLOT1/2/3/4/5	This is displayed when the recording starts or completes with a P2 card on which the maximum number of overwrites has been exceeded, or when data is recorded after inserting such a P2 card.
	AUDIO NOT RECORDING	This is displayed when audio is not being recorded on the P2 card even if the audio level meter is moving.

Information Item		Indication	Status
14.	**Time code indication**	TCG 12:59:59:20 TCR 12:59:59:20 (V)UBG AB CD EF 00 (V)UBR 12 34 56 78 CTL –1:59:59:20	TCG (time code generator value) TCR (time code reader value) UBG VUBG (User bits generator value) UBR VUBR (User bits reader value) Displays CTL count.
15.	**CAC**	CAC	This is displayed when CAC is operating normally.
16.	**Extender**	EX	Lens extender used.
17/40.	**Color temperature**	∗.∗K	Color temperature assigned to [A], [B], and [PRST] of the WHITE BAL switch (this is a value stored at AWB performance or a value set through the menu option).
18/39.	**Filter position**	1 - 4 A - D –	This indicates the position of the ND filter. This indicates the position of the CC filter. This indicates that the filter has not been set to a proper position.
19.	**Dynamic range stretcher mode**	DRS	This is displayed when the function for compressing the video levels of sections with high brightness to stretch the dynamic range has been selected.
20.	**WHITE BAL switch position**	A B P	WHITE BAL switch positioned at [A]. WHITE BAL switch positioned at [B]. WHITE BAL switch positioned at [PRST].
21/42.	**Gamma Indication**	HD SD FLK1 FLK2 FLK3 FREC VREC	This indicates the gamma used in the unit.
22.	**Gain value**	∗∗dB	Current gain value.
23.	**Audio input channel and level meter**	- - - - ■- - - - + F W R	Selected channel together with its audio level. AUDIO IN switch is positioned at [FRONT]. AUDIO IN switch is positioned at [W.L.] (wireless) AUDIO IN switch is positioned at [REAR].
24.	**Super black ON**	B	Super black ON.
25.	**Iris override indication**	+ + + (No indication) – – –	Correction phase of the iris override (when active) + +: On the open side by 1 +: On the open side by 0.5 – –: On the closed side by 1 –: On the closed side by 0.5 No indication: Standard status

Information Item		Indication	Status
26.	**Iris, F value**	NC OPEN F1.7 - F16 CLOSE	Lens cable is not connected. Lens iris is at maximum. Lens iris value Lens iris closed. ◆**Note** These indications are provided when the lens is capable of indicating the iris value. When the iris is being overridden, they blink.
27.	**Zoom indication**	Z00 - Z99	Zoom degree is indicated. This indication is not provided for a lens that does not return the zoom position, even if the indication is set to on.
28.	**INTERVAL REC/ PRE RECORDING indication/SD memory card remaining free space**	i iREC (blink) iREC (blink) ∗∗h∗∗m/∗∗s P-REC (blink) SD ∗∗h ∗∗m END	Displayed before and after operation during INTERVAL REC mode. Displayed during INTERVAL REC operation. Displays the pause time before the next recording during INTERVAL REC. Indicated while pre-recorded video and audio are being recorded on the P2 card. If the user button is set to perform the PRE RECORDING function, either “P-REC OFF” or the specified duration “1s - 8s” is displayed when the PRE RECORDING mode is switched by pressing the user button. If a video encoder card (AJ-YAX800G, optional) is attached, the remaining free space on the SD Memory card will be displayed when the MODE CHECK button is pressed during proxy recording. “END” is displayed when there is no remaining free space.
29.	**Compression mode**	COMP	This appears when setting the mode for suppressing distortion of compressed video images that may occur when dark parts are shot. (Only for the DVCPRO HD at 720P)
30/44.	**VF-GAMMA**	M	This is only enabled when “FILM-REC” has been selected in the GAMMA MODE SEL menu option. Video shot in the FILM-REC gamma mode is converted to high-contrast video and supplied to the viewfinder. GAMMA MODE SEL can be selected from the screen <GAMMA> in the PAINT page.
31/45.	**MON-GAMMA**	M	This is only enabled when “FILM-REC” has been selected in the GAMMA MODE SEL menu option. Video shot in the FILM-REC gamma mode is converted to high-contrast video and supplied to the MON OUT output. GAMMA MODE SEL can be selected from the screen <GAMMA> in the PAINT page.
32.	**F-REC DYNAMIC LVL indication**	200% 300% 400% 500% 600%	This indicates the dynamic range at FILM-REC. At other times, it indicates knee-slope.
33.	**F-REC BLACK STR LVL indication**	00% - 30%	This indicates the level of black stretch at FILM-REC. At other times, it indicates knee-point.
34.	**MASTER GAMMA indication**	0.30 - 0.75	This indicates the master gamma level.
35.	**BLACK GAMMA setting**	–8 - OFF - +8	This indicates the gamma curve setting for dark locations on the screen.

Information Item	Indication	Status
36. B.GAMMA RANGE	1 2 3	This indicates the level (upper limit) of the compression/expansion.
37. Switch lock setting	!SW LOCK	This is displayed when any of the side switches (GAIN, OUTPUT and AWB switches) are operated with SIDE SW LOCK in a locked state. Note that it is not displayed during when AJ-RC10G is connected and in operation.
38. Exposure Indication	–4 –3■■ –3■ –3 –2■■ –2■ –2 –1■■ –1■ –1 ±0 +0■ +0■■ +1 +1■ +1■■ +2 +2■ +2■■ +3 +3■ +3■■ +4 +4■ +4■■ +5	When GAMMA MODE SEL has been set to “FILM-REC” and STATUS MODE to “FILM-REC”, executing the Y GET operation measures brightness in proximity to the center marker. The measured value is displayed as an exposure level. A measured output signal of 30% is displayed as ±0 (normal). This value is then adjusted by +1 STOP for every doubling of the amount of incident light and by –1 STOP for every halving of the amount incident light. Each ■ represents 1/3 STOP. GAMMA MODE SEL is set from the <GAMMA> screen of the PAINT page. STATUS MODE is set from the <VF DISPLAY> screen of the VF page.

P2 Card Remaining Free Space/capacity Indication

Status of unit	Recording status	Menu option P2CARD REMAIN*1	5. P2 card remaining free space indication*2	6. P2 card remaining free space indication (during MODE CHECK)*2
Under normal conditions	Other than LOOP REC mode	TOTAL	The total remaining free space of all P2 cards loaded in the P2 card slots is indicated in minutes. Example: 30min	Not provided
		ONE-CARD	The number of the P2 card slot holding the target P2 card, together with that card’s remaining free space indicated in minutes. Example: 1 8min	Not provided
		OFF	Not provided	Not provided
	LOOP REC mode	TOTAL/ONE-CARD	Indicated as “LOOP”	Not provided
		OFF	Not provided	Not provided
During MODE CHECK	Other than LOOP REC mode	TOTAL/ONE-CARD/ OFF	The total remaining free space and capacities of all P2 cards loaded in the P2 card slots are indicated in minutes. Example: 20/40	The number of the P2 card slot holding the target P2 card, together with that card’s remaining free space, indicated in minutes. Example: 1 8min
	LOOP REC mode		Indicated as “LOOP”	The estimated recording time is indicated in minutes. Example: 7min

*1 The menu option P2CARD REMAIN can be found in the <VF INDICATOR3> screen on the VF page.
*2 If the remaining free space or memory capacity is 9999 min or more, [9999min] is displayed.

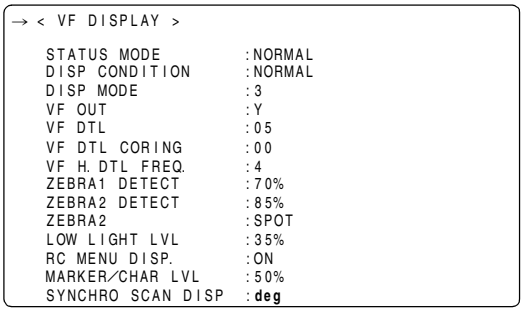
Indications Available in the Viewfinder Screen

	Selectable between on and off through menu options	Provided when the appropriate status is encountered.	Provided during MODE CHECK*	Can be switched off.	Provided during playback
1. System mode	○	–	●	○	–
2. Frame number for shooting and recording	○	–	●	○	–
3. REC FORMAT	○	–	●	○	–
4. Shutter speed/mode	○	○	●	○	–
5. P2 card remaining free space	○	–	●	○	–
6. P2 card remaining free space (when MODE CHECK is being performed)	–	–	●	○	–
7. Unit REC indication	○	○	–	○	–
8. Battery type (when MODE CHECK is being performed)	–	–	●	○	–
9. Battery remaining level/voltage	○	–	●	○	–
10. MODE CHECK Indication Area	–	–	○	○	–
11. Camera Warning and Report Area	–	○	○	○	–
12. User button functions	–	○	○	○	–
13. System information and warnings	○	○	●	○	○
14. Time code indication	○	–	●	○	○
15. CAC	○	○	●	○	–
16. Extender	○	○	●	○	–
17. Color temperature	○	○	●	○	–
18. Filter position	○	–	●	○	–
19. Dynamic range stretcher mode	○	–	●	○	–
20. WHITE BAL switch position	○	–	●	○	–
21. Gamma Indication	○	–	●	○	–
22. Gain value	○	–	●	○	–
23. Audio input channel and level meter	○	–	All 4ch input information	○	–
24. Super black ON	○	○	●	○	–
25. Iris override indication	○	○	●	○	–
26. Iris, F value	○	–	●	○	–
27. Zoom indication	○	–	●	○	–
28. INTERVAL REC/PRE RECORDING indication/SD memory card remaining free space	–	○	●	–	–
29. Compression mode	○	○	○	○	–
30. VF-GAMMA	○	○	●	○	–
31. MON-GAMMA	○	○	●	○	–
32. F-REC DYNAMIC LVL indication	–	○	–	–	–
33. F-REC BLACK STR LVL indication	–	○	–	–	–
34. MASTER GAMMA indication	–	○	–	–	–
35. BLACK GAMMA setting	–	○	–	–	–
36. B.GAMMA RANGE	–	○	–	–	–
37. Switch lock setting	–	○	–	–	–
38. Exposure Indication	–	○	–	–	–
39. Filter position	–	○	–	–	–
40. Color temperature	–	○	–	–	–
41. Shutter speed/mode	–	○	–	–	–
42. Gamma Indication	–	○	–	–	–
43. Frame number for shooting and recording	–	○	–	–	–
44. VF-GAMMA	–	○	–	–	–
45. MON-GAMMA	–	○	–	–	–

* ○: Not provided when the menu option STATUS is set to “OFF”, which can be found in the <MODE CHECK IND> screen on the VF page.
●: Provided regardless of the menu option setting.

Display Modes and Setting Changes/adjustment Result Messages

The messages that appear on the viewfinder screen to indicate changes to settings and adjustment results may be limited, or set not to appear, through the menu option DISP MODE. This menu option can be found in the <VF DISPLAY> screen on the VF page.
For directions on navigating the menu, see [Setting Menu Options] (page 163).



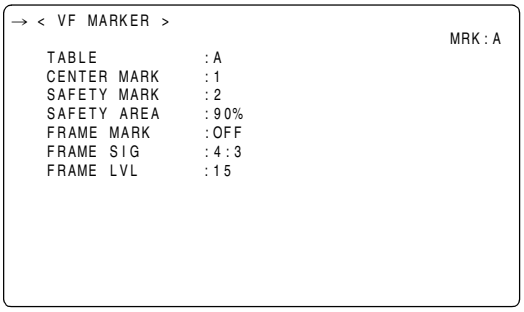
Setting change/adjustment messages and DISP MODE settings

Message appears when:	Message	DISP MODE settings		
		1	2	3
CC filter/ND filter changed.	ND: n (n=1, 2, 3, 4), CC: m (m=A, B, C, D)	○	○	●
Gain changed.	GAIN: n dB (n=–3, 0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30)	○	○	●
WHITE BAL switch re-positioned.	WHITE: n (n=A, B, PRE)	○	○	●
OUTPUT/AUTO KNEE switch positioned at [AUTO KNEE] or [OFF].	AUTO KNEE: ON (or OFF)	○	●	●
Shutter speed/mode changed.	1/180.0 deg (or 1/172.8 deg, 1/144.0 deg, 1/120.0 deg, 1/90.0 deg, 1/45.0 deg, 1/∗∗∗∗, ▶1/∗∗∗∗, ▶∗∗∗.∗ deg, ▶▶1/∗∗∗)	○	●	●
White balance adjusted (AWB performed).	Example: AWB A OK 3.2 K	○	●	●
Black balance adjusted (ABB performed).	Example: ABB OK	○	●	●
Extender selected.	Example: EXTENDER ON	○	○	●
User button selected.	Example: UM: SLOT SEL	○	●	●
Iris being overridden.	Example: ++ F 5.6	○	●	●

●: Message appears.
○: Message does not appear.

Setting the Marker Displays

The center, safety zone, safety zone area and frame markers may be set to on or off, along with specifications of the marker types. To set and select markers, go to the <VF MARKER> screen from the VF page and select the appropriate options.
For directions on navigating the menu, see [Setting Menu Options] (page 163).



◆Note

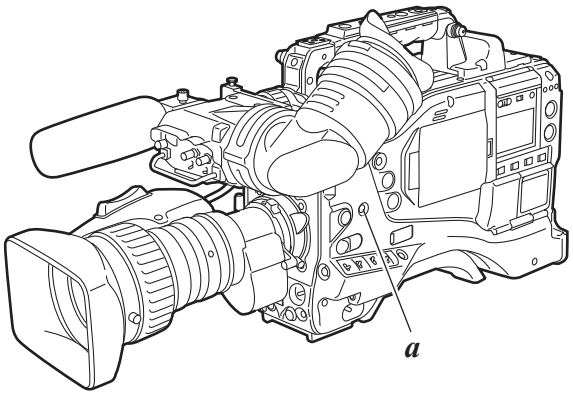
The indication “MRK: A” at the upper right of the screen shows the current indication status. To view TABLE B, press the MARKER SELECT button. This changes the indication to “MRK: B”, allowing you to view the settings.

Marker Check Screen Displays (MARKER SELECT button function)

The viewfinder can display a screen that allows you to view the marker settings of the unit.
Pressing the MARKER SELECT button on the unit switches the marker indication as follows.

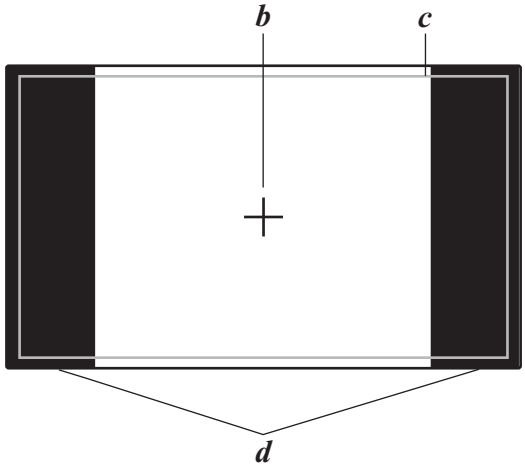
Marker A → Marker B → No marker

If the menu option FRAME SIG is set to “16:9” as the information of Marker A and “4:3” as the information of Marker B, then the 16:9 and 4:3 view angles can easily be checked with the button, as required.



a. **MARKER SELECT button**

Markers



b. **Center marker**
c. **Safety zone**
d. **The view angle specified through the menu option FRAME SIG is displayed.**

Checking Return Video Signal in the Viewfinder

The viewfinder displays the return video signal input to the GENLOCK IN connector while the RET button at the lens is held down.
Note, however, that the return video signal cannot be viewed unless the signal format set using SYSTEM MODE matches the input signal to the GENLOCK IN connector.
To enable this capability, select “CAM RET” for the menu option RET SW. This option can be found in the <SW MODE> screen on the CAM OPERATION page.

◆Note

1080-23.98P, 1080-24P and SD format signals cannot be viewed.

```
< SW MODE >

→ RET SW            :R. REVIEW
  S. BLK LVL        :-10
  AUTO KNEE SW      :ON
  SHD. ABB SW CTL   :OFF
  COLOR BARS        :SMPTE
  RC CHECK SW       :R. REVIEW
  SIDE SW LOCK      :OFF
```

Warning System

Warning Description Tables

If a problem is detected immediately after the power is turned on, or during operation, this will be indicated by the WARNING lamp, lamps inside the viewfinder and a warning tone.

◆Note

The WARNING lamp has the highest priority, followed by the tally lamp, and then the warning tone. When multiple errors occur simultaneously a higher priority indication will be triggered. The [WIRELESS-RF], however, may not be indicated, depending on the menu setting.

1. System Errors

Display window indication	The error code lights up.
WARNING lamp	Blinks 4 times per second.
Tally lamp	Blinks 4 times per second.
Viewfinder	The “SYSTEM ERROR” indication and the error code light up.
Warning tone	Beeps continuously.
Warning description	An error in the reference signal or the communication.
Recording/playback operation	The operation stops.
Countermeasures	Please confirm [Error Codes] (page 158) and consult your distributor.

2. Card removal error

Display window indication	Error code “E-30” blinks.
WARNING lamp	Blinks 4 times per second.
Tally lamp	Blinks 4 times per second.
Viewfinder	The “TURN POWER OFF” indicator lights up.
Warning tone	Continues to beep.
Warning description	The P2 card being accessed has been removed, resulting in an error in the internal memory of the unit.
Recording/playback operation	Cannot be performed.
Countermeasures	Turn off the power to the unit. If there is an error in a clip on the removed P2 card, repair the clip.

3. Battery Empty

Display window indication	All 7 bar indicators for battery remaining capacity start blinking.
WARNING lamp	Lights up.
Tally lamp	Blinks once per second.
Viewfinder	The BATT LED lights up.
Warning tone	Beeps continuously.
Warning description	The battery has run out.
Recording/playback operation	The operation stops.
Countermeasures	Replace the battery.

4. P2 Card Fully Recorded

Display window indication	All 7 bar indicators for remaining MEDIA capacity start blinking.
WARNING lamp	This lamp will illuminate continuously until an operation is made after recording.
Tally lamp	This lamp will flash 4 times every second until an operation is made after recording.
Viewfinder	The “END” indicator blinks. When a write protected P2 card has been inserted, the “WP” indicator lights up.
Warning tone	This tone will sound continuously until an operation is made after recording.
Warning description	The P2 cards are recorded to maximum capacity.
Recording/playback operation	The recording stops.
Countermeasures	Delete the clips in the P2 card or insert a new P2 card.

5. Image Sequence Error (24P, 30P, 25P)

Display window indication	“E-40” appears in the time code display field.
WARNING lamp	Blinks 4 times per second.
Tally lamp	Blinks 4 times per second while recording continues.
Viewfinder	The “REC WARNING” indicator lights up.
Warning tone	Beeps 4 times per second while recording continues.
Warning description	There are abnormal conditions in the image sequence of the 24P, 30P, or 25P mode.
Recording/playback operation	Images can be recorded and played back, but some frames may be dropped or the sequences of TC and UB may shift.
Countermeasures	Confirm the recording/playback operation after turning off the power supply once and then turning it on again. If the error is not corrected after executing this procedure, contact the dealer.

6. Recording Error

Display window indication	“00:00:00:11” appears in the time code display field. Even after recording is stopped, this display continues to blink until the next operation is performed.
WARNING lamp	Blinks 4 times per second while recording continues.
Tally lamp	Blinks 4 times per second while recording continues.
Viewfinder	The “REC WARNING” indicator lights up.
Warning tone	Beeps 4 times per second while recording continues.
Warning description	This indicates a failure either in the P2 card recording or the recording circuit. This is displayed when attempting to record clips where the total quantity exceeds the upper limit (1000 pieces) for a single P2 card.
Recording/playback operation	The recording may stop or continue.
Countermeasures	Confirm the recording/playback operation after turning off the power supply once and then turning it on again. If the recording cannot be performed normally, change the P2 card.

7. Low Wireless Signal Reception

Display window indication	No display.
WARNING lamp	Blinks 4 times per second (during pause and recording).
Tally lamp	Blinks 4 times per second while recording continues.
Viewfinder	The “WIRELESS-RF” indicator lights up while recording continues.
Warning tone	Beeps 4 times per second while recording continues.
Warning description	This error indicates poor wireless audio reception conditions.
Recording/playback operation	Continues to operate without receiving the wireless microphone signal.
Countermeasures	Check the microphone power supply and the reception status of the wireless receiver.

8. 1394 Error

Display window indication	The “1394 E-92” indicator in the display window blinks.
WARNING lamp	Blinks 4 times per second while recording continues.
Tally lamp	Blinks 4 times per second while recording continues.
Viewfinder	“1394 INITIAL ERROR” indicator lights up (during pause and recording).
Warning tone	Beeps 4 times per second while recording continues.
Warning description	This indicates a failure of the DVCPRO connector.
Recording/playback operation	Signals cannot be controlled or supplied to the device connected to the DVCPRO connector. However, recording and playback can be performed on the unit.
Countermeasures	Check the connection between the IEEE1394 cable and the DVCPRO connector, settings of any external device and menus, and the turn on the power again. If the warning indication is still illuminated, consult your distributor.

9. Battery Nearly Empty

Display window indication	One of the bars in the battery remaining indicator starts blinking.
WARNING lamp	Blinks once per second.
Tally lamp	Blinks once per second.
Viewfinder	The “BATT” LED blinks.
Warning tone	Beeps 4 times per second.
Warning description	The battery is about to run out.
Recording/playback operation	Continues to operate.
Countermeasures	Replace the battery as required.

10. P2 Card Nearly Full

Display window indication	One of the bars for remaining MEDIA capacity starts blinking.
WARNING lamp	Blinks once per second while recording continues.
Tally lamp	Blinks once per second while recording continues.
Viewfinder	The P2 card remaining capacity indicator blinks.
Warning tone	Beeps once per second while recording continues.
Warning description	The total remaining capacity of all the P2 cards is 2 minutes or less.
Recording/playback operation	Continues to operate.
Countermeasures	Replace the cards. If there is an empty card slot, insert a new card.

11. P2 Card Error

Display window indication	If the error occurs during recording, “00:00:00:11” appears in the time code display field. The indication continues to flash after recording is stopped and until the next operation is performed. There is no indication if the error occurs during playback.
WARNING lamp	If the error occurs during recording, the lamp flashes 4 times per second for a period of about 3 seconds after recording stops. The lamp does not light if the error occurs during playback.
Tally lamp	If the error occurs during recording, the lamp flashes 4 times per second for a period of about 3 seconds after recording stops. The lamp does not light if the error occurs during playback.
Viewfinder	A flashing “CARD ERR ∗” appears. In the actual indication the ∗ is replaced by the slot number of the P2 card that triggered the error.
Warning tone	If the error occurs during recording, the tone sounds 4 times per second for a period of about 3 seconds after recording stops. The tone does not sound if the error occurs during playback.
Warning description	An error has occurred while recording data to or playing data from a P2 card.
Recording/playback operation	Stop recording or playback.
Countermeasures	Replace the affected P2 card.

12. FAN STOP

Display window indication	No display.
WARNING lamp	Blinks 4 times per second.
Tally lamp	No display.
Viewfinder	The “FAN STOP” indicator blinks while recording continues.
Warning tone	It does not sound.
Warning description	The fan is at rest because something is wrong with it.
Recording/playback operation	The unit continues to operate. However, when the unit operates with the fan stopped, then the temperature inside rises. While the unit continues to operate, clips may not be recorded or played back properly.
Countermeasures	Immediately stop using the unit and consult your distributor.

13. PROXY CARD ERROR

Display window indication	No display.
WARNING lamp	Flashes 4 times per second for a period of about 3 seconds.
Tally lamp	Flashes 4 times per second for a period of about 5 seconds.
Viewfinder	The “PROXY CARD ERROR” indicator light up.
Warning tone	It does not sound.
Warning description	Proxy recording stops because of failure on either the video encoder card or the stream.
Recording/playback operation	The unit continues to operate.
Countermeasures	Check the video encoder card or avoid use of proxy recording.

Error Codes

The following error codes are displayed in the display window if an error occurs in the camera:
Confirm the type of warning and refer to the details in the [Warning Description Tables] (page 155) for countermeasures.

Code No.	Description	Type of warnings
E-11	Video initialization error	1. System Errors
E-27	Recording control error	1. System Errors
E-30	P2 card removal error	2. Card removal error
E-34	LCD microcontroller error	1. System Errors
E-38	P2 streaming microcontroller error	1. System Errors
E-39	Abnormal initialization of the AVC-Intra codec	1. System Errors
E-3F	Microprocessor error in the camera control circuit	1. System Errors
E-40	Image sequence error (in case of 24P, 30P and 25P)*, GENLOCK error	5. Image Sequence Error (24P, 30P, 25P)
E-63	Something is wrong with the system control microprocessor.	1. System Errors
E-6F	Reference signal error.	1. System Errors
00:00:00:11	Recording error on a P2 card	6. Recording Error/11. P2 Card Error

* When ABB is implemented while recording in 24P, 30P, 25P modes, E-40 is displayed. In this case, after recording has stopped, pressing the REC START button or STOP button causes the message to disappear.

Card Warning Code

Code No.	Description	Recording	Indication in display window
E-70	The directory structure on the P2 card is not supported. ([DIR NG CARD (Slot No.)] is indicated on the viewfinder.)	Operation continues. However, back up data on the P2 card as soon as possible, and format the card before using it again.	A warning code blinks once every 2 seconds on the time code display section of the display window.
E-71	The maximum number of overwrites on the P2 card has been exceeded. ([RUN DOWN CARD (Slot No.)] is indicated on the viewfinder.)	Operation continues. However, recording or playback may not operate correctly. It is recommended that you replace the P2 card with another one.	

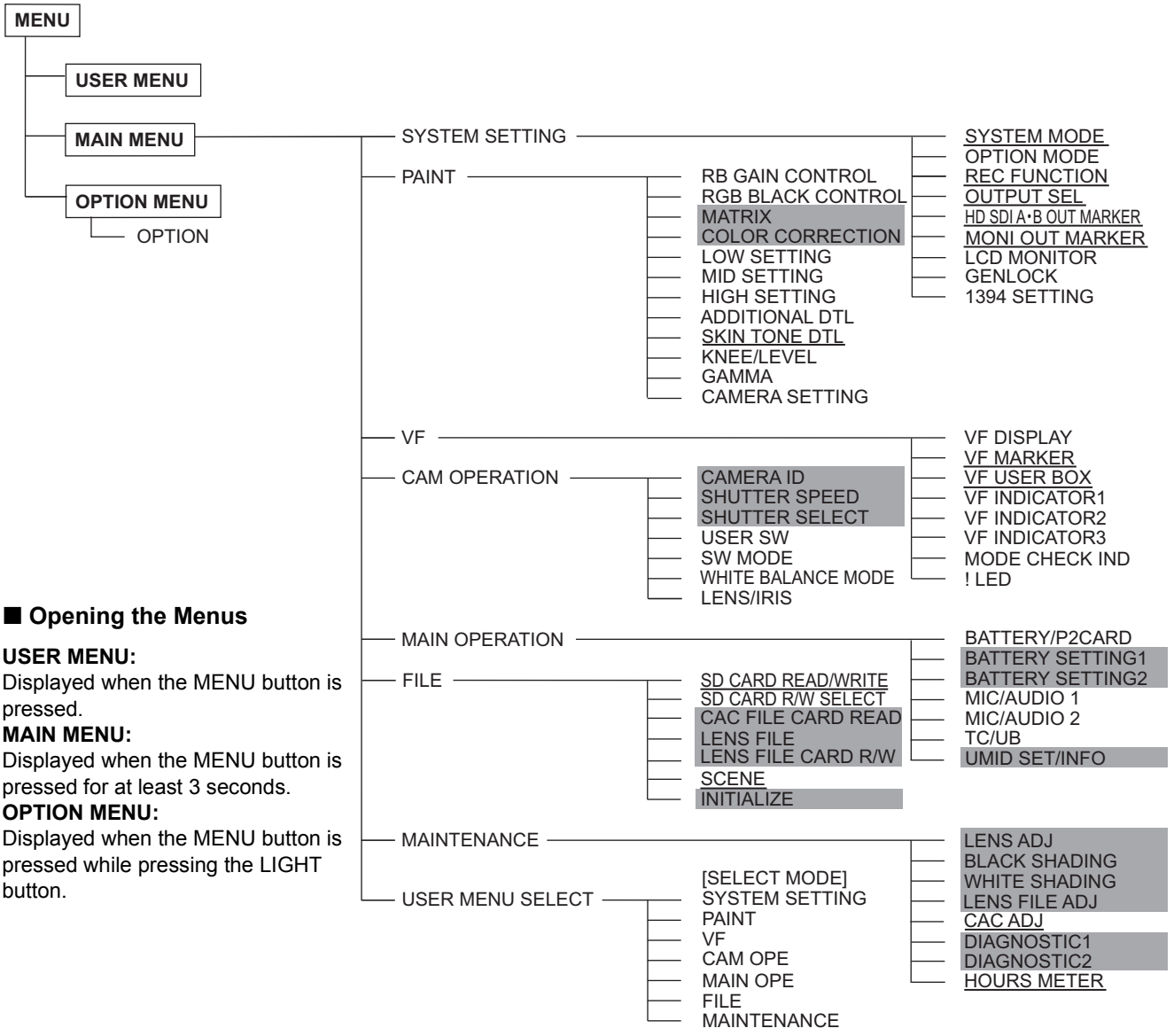
Warning and Error Display for Thumbnail Operation and USB HOST MODE

Item	Message	Description	Measure
Thumbnails	CANNOT ACCESS!	Data cannot be accessed because it is corrupted or for other reasons.	Restore media and clips to normal state before access.
	WRITE PROTECTED!	The P2 or SD card is write protected.	Insert write-enabled media.
	CARD FULL!	The P2 or SD card is full.	Insert media with sufficient capacity.
	NO CARD!	No P2 or SD card is inserted.	Insert compatible media.
	NO FILE!	The designated file is not found.	Check the file.
	CANNOT COPY!	Images cannot be copied.	Check the conditions for copying.
	CANNOT DELETE !	Contents version mismatch prevents deletion.	Match devices and contents version.
	UNKNOWN CONTENTS FORMAT!	Warning displayed to indicate contents version mismatch.	Match devices and contents version.
	CANNOT FORMAT!	P2 card problem prevents formatting.	Check P2 card.
	CANNOT REPAIR!	Data cannot be repaired since content that cannot be repaired is selected.	Check selected content.
	CANNOT RE-CONNECT!	A clip that does not span multiple P2 cards cannot be reconnected.	Check selected content.
	INVALID VALUE!	Entered data was invalid.	Enter data in a valid range.
	UNKNOWN DATA!	The metadata character code is invalid.	Use UTF-8 for the metadata character code. Use the viewer to enter correct characters.
	CANNOT REPAIR IN SELECTION!	Some of the selected clip could not be repaired.	
	NO SD CARD!	No SD card is inserted.	Insert an SD card.
	NO COPY TO SAME CARD!	A clip cannot be copied to the card storing the original clip.	Copy the selected clip to a card that does not contain the original clip.
	SAME CLIP IS SELECTED!	The clip cannot be copied because a clip that has already been copied and the original clip have been selected.	Confirm the selected clip and release either the source clip or the destination clip and then execute the copy operation.
	USER CLIP NAME MODIFIED!	Characters in the clip name had to be deleted in adding the counter value.	The user clip name plus the counter value can only contain up to 100 bytes. Characters in the clip name are automatically deleted when the total exceeds 100 bytes.
	TOO MANY CLIPS!	Too many clips are selected.	Reduce the number of selected clips.
	LACK OF REC CAPACITY!	There is not enough recording capacity left on the card.	Insert a card with sufficient recording capacity.
	CANNOT CHANGE!	Any thumbnails that cannot be produced on the AVC-Intra100 or AVC-Intra50 and displayed in gray cannot be changed at the text memo position.	Set SYSTEM MODE according to the clips.
	MISSING CLIP!	A shot mark will be added to the clips recorded on multiple P2 cards when all P2 cards are not inserted yet.	Insert all P2 cards with recorded clips, and confirm that the ! incomplete clip indicators disappear, and then add shot marks.
Soft keyboard	CANNOT CHANGE!	[PERSON] will be entered while the text memo is not available.	Enter [TEXT] before entering [PERSON].
	CANNOT SET! INVALID VALUE!	The entered value is incorrect.	Change the value.

Item	Message	Description	Measure
HDD (USB HOST mode)	HDD CAPACITY FULL!	Not enough space left on the hard disk.	There is not enough space on the connected hard disk. Use a new hard disk or formatted hard disk.
	TOO MANY PARTITIONS!	There are too many partitions.	Hard disks can handle up to 23 partitions. Use a new hard disk or formatted hard disk.
	HDD DISCONNECTED!	The unit is not connected to a hard disk.	Reconnect the USB cable. If the hard disk does not operate normally, turn it off and turn it back on again.
	CANNOT FORMAT!	The hard disk cannot be initialized.	Connect another hard disk drive.
	TOO MANY TARGETS!	Multiple devices are connected.	Disconnect devices, turn off the unit and turn it back on again.
	UNKNOWN DEVICE CONNECTED!	The connected DVD drive is not compatible.	Disconnect devices, turn off the unit and turn it back on again.
	CANNOT ACCESS TARGET!	An error occurred during hard disk access.	Check hard disk status and connection.
	CANNOT RECOGNIZE HDD!	The destination target cannot be properly recognized.	Reboot the hard disk or connect a different hard disk.
	CANNOT ACCESS CARD!	An error occurred during P2 card access.	Check P2 card.
	MISMATCH COMPONENT!	Copying is not possible since the model number of the destination card does not match that of the source card.	Use a P2 card with the same model number or import video in clip units.
	P2 CARD IS UNFORMATTED!	The P2 card is not formatted.	Use a formatted P2 card.
	CARD IS EMPTY! CANNOT COPY!	The P2 card selected for copying is empty.	Copying is not performed since the card is empty.
	VERIFICATION FAILED!	The compare check after copying failed.	Copy the data again.
	PLEASE FORMAT P2 CARD!	This warning indicates that data could not be imported from a hard disk to a P2 card because the P2 card contained recorded data.	You cannot copy to a P2 card that contains data. Format the card on a P2 device and copy again.

Menu

Menu Configuration



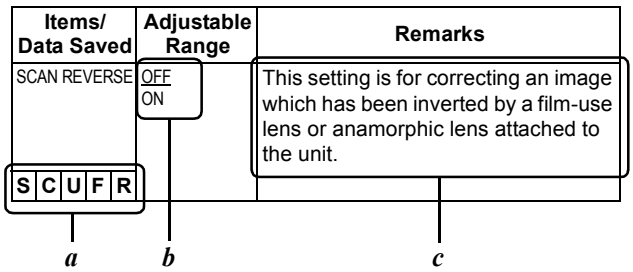
■ Opening the Menus

USER MENU:
Displayed when the MENU button is pressed.
MAIN MENU:
Displayed when the MENU button is pressed for at least 3 seconds.
OPTION MENU:
Displayed when the MENU button is pressed while pressing the LIGHT button.

◆Notes

- The items highlighted in grey cannot be selected by <USER MENU SELECT>.
- The underlined items can only be selected by <USER MENU SELECT> as one whole page (with all sub-items). Individual sub-items cannot be selected separately.

About Menu Description Tables



a. The following letters indicate whether the modified menu data is saved to or read out from the memory.
The – indicates that the data cannot be saved or read.
S = Can be saved and read as scene file data.
C = Can be saved or read using SD CARD READ/WRITE.
U = Can be saved and read as user data.
Please refer to [SCENE] (page 197) and [INITIALIZE] (page 197).
F = Can be read using READ FACTORY DATA.
Please refer to [INITIALIZE] (page 197).
R = Can set whether or not to store changes using the RC DATA SAVE menu option.
Please refer to [Connection of the remote control unit (AJ-RC10G)] (page 117).

b. This section shows the adjustable range of the set value, and available options for this item.

c. About the settings available for this item.

USER MENU: USER MENU is factory-set. The menu can be configured to suit your preferences by specifying each option according to your purposes and frequency of use, through the <USER MENU SELECT> screen, which is accessible from the MAIN MENU page.
For more information, see [Selecting Options for USER MENU] (page 164).
To display USER MENU, press the MENU button.

MAIN MENU: Allows you to set all options on the settings menu.
This menu has a category-by-category structure, layered according to purposes and frequency of use.
To display MAIN MENU, press the MENU button for 3 seconds or longer.

SYSTEM SETTING:
This option is used to specify recording signal, recording system, etc.

PAINT: This option is used to fine-adjust images while monitoring the output waveform of the camera, using the waveform monitor. Normally, this adjustment requires assistance from a video engineer.
This option may be performed by an external remote control. However, it is valid when the unit is used as a stand-alone device.

VF: Used to select the information items to be displayed in the viewfinder screen.

CAM OPERATION:
Used to change settings according to the conditions for the subject.

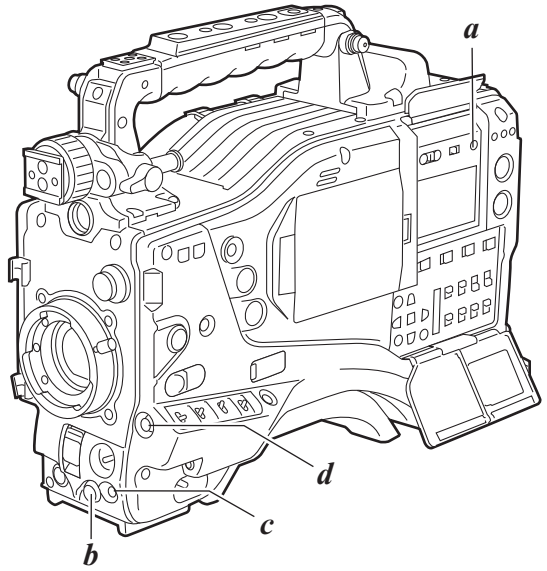
MAIN OPERATION:
Used to specify recording-related items, such as audio settings, time code, battery and P2 card remaining amounts.

FILE: Used to specify file-related items such as SD memory card reading/writing and lens file settings.

MAINTENANCE:
Used to specify maintenance-related items.

USER MENU SELECT:
Used to edit USER MENU.

OPTION MENU:
Provides options which may be needed if functions are added in the future.
To display OPTION MENU, hold down the LIGHT button and press the MENU button.
For more information, contact your distributor.



a. **LIGHT button**
b. **Jog dial button**
c. **MENU button**
d. **SHOT MARKER/MENU CANCEL button**

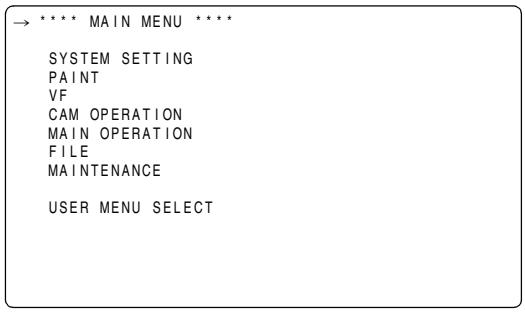
Setting Menu Options

The menu options are set with the MENU and jog dial buttons.
The menu comprises main menu, sub-menus and options menus.
The data specified through menu options are written and saved in the internal memory of the unit.
This section describes how to set options in MAIN MENU.
The other menus can be configured in the same manner (the method of displaying the menu screen depends on the particular menu).

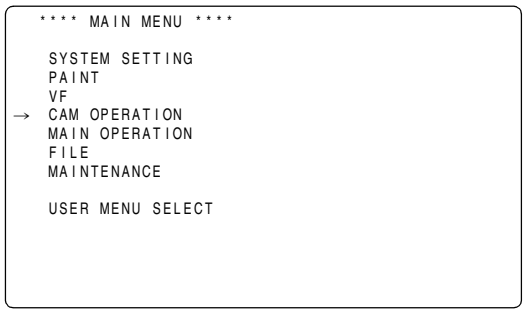
◆ Note

When the unit is in thumbnail mode, the viewfinder displays “THUMBNAIL OPEN”, disabling navigation through the menu.

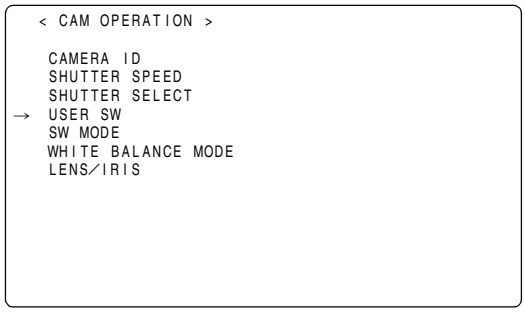
1 Press the MENU button for 3 seconds or longer.
The MAIN MENU screen appears, together with its options.



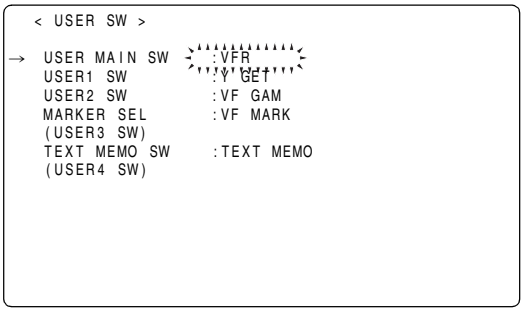
2 Turn the jog dial button to move the mark (→) to a desired menu option. Then, press the jog dial button to display the sub-menu screen.



3 Turn the jog dial button to move the mark (→) to a desired menu option. Then, press the jog dial button to display the options screen.



4 Turn the jog dial button to move the mark (→) to a desired option. Then, press the jog dial button. The value starts blinking.



5 Turn the jog dial button to change the value.

To increase the value:
Turn the jog dial button clockwise, as seen from the front of the camera.

To decrease the value:
Turn the jog dial button anti-clockwise, as seen from the front of the camera.
Each turn of the dial switches the value by one step. A quick turn changes the value rapidly; a slow turn makes a fine adjustment.

To turn an option on or off:
To select “ON”, turn the jog dial button clockwise, as seen from the front of the camera.
To select “OFF”, turn the jog dial button anti-clockwise, as seen from the front of the camera.

To return the changed set value to the previous one:
To return the changed value to the previous one, press the SHOT MARKER/MENU CANCEL button once while the changed value is flashing and “PUSH CANCEL BACK TO PREV” will appear. Press the SHOT MARKER/MENU CANCEL button again to return the set value to the value before the change.

◆Notes

- The following menu items cannot be canceled using the SHOT MARKER/MENU CANCEL button.
  - Pages on the USER MENU SELECT screen
  - Pages on the FILE screen
  - CAMERA ID
  - Part of the WHITE BALANCE MODE pages
  - BATTERY SETTING1, 2
  - UMID SET/INFO
- In the 1080-23.98P and 1080-24P modes, the menu displayed on the LCD monitor may blink. This is normal, and does not indicate that a fault has occurred.

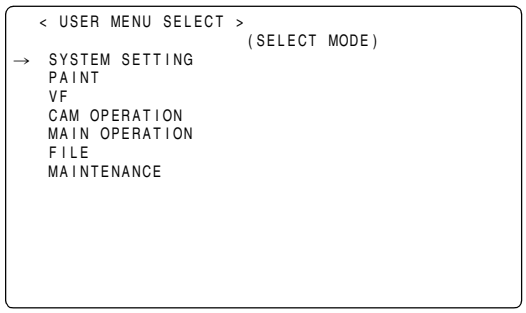
6 Press the jog dial button.
The value stops blinking and is accepted.

7 To change the settings for other options on the same page, repeat steps ***4*** - ***6***.

8 When the settings are finalized, press the MENU button.
This terminates the menu option setting mode and returns the unit to normal operation mode.

Selecting Options for USER MENU

Go to the USER MENU SELECT page from MAIN MENU. Then, open relevant menu screens to select options to add to USER MENU.
Only the selected options are displayed as options in USER MENU.
For information about how to navigate this menu, see [Setting Menu Options] (page 163).



◆ **Note**

Options with [∗] are effective. The number of options that can be added to USER MENU is 14×3=42 (3 pages of options) for camera-related options, and 14 (1 page of options) for memory-related options. Note, however, that the number of options that can be added is reduced if menu options not normally displayed in the selected mode are added.

Menu Description Tables

SYSTEM SETTING

The ____ in the Adjustable Range column indicates the preset mode.

SYSTEM MODE

Items/ Data Saved	Adjustable Range	Remarks
SYSTEM MODE S C U F R	1080-59.94i 1080-23.98PsF 1080-24PsF 1080-50i 720-59.94P 720-60P 720-50P	For setting the system frequency. When this item is switched, turn off the POWER switch on the unit and then turn it on again. ◆**Notes** • When USB DEVICE mode is selected, no change can be made to this option. • When the remote control unit (AJ-RC10G) is connected, this item is not displayed.
REC FORMAT S C U F R		Used to set the codec mode and the recording/shooting mode. **DVCPROHD:** Recording is performed using DVCPRO HD codec. **AVC-I 100:** Recording is performed using AVC-Intra100 codec. **AVC-I 50:** Recording is performed using AVC-Intra50 codec.
	DVCPROHD/60i AVC-I 100/60i AVC-I 100/30PN AVC-I 100/24PN AVC-I 50/60i AVC-I 50/30PN AVC-I 50/24PN	Used when SYSTEM MODE is set to 1080-59.94i. When DVCPROHD/60i is selected, it is possible to refine the shooting mode selection by setting CAMERA MODE.
	AVC-I 100/24PN AVC-I 50/24PN	Used when SYSTEM MODE is set to 1080-23.98PsF or 1080-24PsF.
	DVCPROHD/50i AVC-I 100/50i AVC-I 100/25PN AVC-I 50/50i AVC-I 50/25PN	Used when SYSTEM MODE is set to 1080-50i. When DVCPROHD/50i is selected, it is possible to refine the shooting mode selection by setting CAMERA MODE.
	DVCPROHD/60P DVCPROHD/30PN DVCPROHD/24PN AVC-I 100/60P AVC-I 100/30PN AVC-I 100/24PN AVC-I 50/60P AVC-I 50/30PN AVC-I 50/24PN	Used when SYSTEM MODE is set to 720-59.94P. When shooting using VFR, the shooting frame number is set in accordance with the FRAME RATE setting.
	DVCPROHD/24PN AVC-I 100/24PN AVC-I 50/24PN	Used when SYSTEM MODE is set to 720-60P. When shooting using VFR, the shooting frame number is set in accordance with the FRAME RATE setting.
	DVCPROHD/50P DVCPROHD/25PN AVC-I 100/50P AVC-I 100/25PN AVC-I 50/50P AVC-I 50/25PN	Used when SYSTEM MODE is set to 720-50P. When shooting using VFR, the shooting frame number is set in accordance with the FRAME RATE setting.

Items/ Data Saved	Adjustable Range	Remarks
CAMERA MODE S C U F R	(DVCPROHD/ 60i of 1080-59.94i) 60i 30P 24P 24PA (DVCPROHD/ 50i of 1080-50i) 50i 25P (Modes other than the above) 24P 25P	When using the DVCPRO HD recording format in the 1080-60i or 1080-50i modes, the pull-down method (conventional camera mode) will be set. ◆**Note** This option is not displayed when 720P has been selected.
VFR S C U F R	ON OFF	This is for setting the variable frame rate. This option is only displayed when 720P has been selected. **ON:** Operates with a variable frame rate. Operates with a frame rate set using FRAME RATE. **OFF:** Operates with a fixed frame number. Operates with a frame rate set using REC FORMAT. ◆**Note** When INTERVAL REC or LOOP REC is set, this setting is set to “OFF”.
FRAME RATE S C U F R	(720-59.94P, 720-60P) 1FRAME : 24FRAME : 60FRAME (720-50P) 1FRAME : 25FRAME : 50FRAME	This is for setting the shooting frame number during VFR operation. This setting is only displayed when 720P has been selected. When the mode has been changed using other settings and the frame rate value set here exceeds the maximum frame rate allowed by the set mode, the maximum frame rate is changed to the maximum frame rate of the set mode.

Items/ Data Saved	Adjustable Range	Remarks
USR SW F.RATE S C U F R	(720-59.94P, 720-60P) 1FRAME : 24FRAME : 60FRAME (720-50P) 1FRAME : 25FRAME : 50FRAME	When the FRATE function has been assigned to a user button, the starting frame rate under VFR operation is set. This setting is only displayed when 720P has been selected. When the mode has been changed using other settings and the frame rate value set here exceeds the maximum frame rate allowed by the set mode, the maximum frame rate is changed to the maximum frame rate of the set mode.
SCAN REVERSE S C U F R	ON OFF	This setting is for correcting an image which has been inverted by a film-use lens or anamorphic lens attached to the unit.
PC MODE SEL – – – F –	USB HOST USB DEV.	This is for setting the operations mode of this unit when PC MODE is set to “ON” and an external device is connected to the USB connector. **USB HOST:** Allows data transfer from the unit to the USB-connected device. **USB DEV.:** Allows data transfer from the USB-connected device to the unit. ◆**Note** When the PC MODE menu option is set to “ON”, no change can be made to this option.
PC MODE – – – F –	ON OFF	Used to enable or disable the mode that allows the unit to be connected to a PC or an external hard disk drive via USB 2.0. **ON:** Sets the unit to the mode selected through the PC MODE SELECT menu option. **OFF:** Disables the PC MODE for normal operation. ◆**Note** Once the power is turned off, the option is always set to “OFF” when the power is turned on next time.

OPTION MODE

Items/ Data Saved	Adjustable Range	Remarks
REC TALLY – C U F –	RED GREEN CHAR	Select the method for displaying the recording status of unit when controlling an external VTR by setting 1394 CONTROL items to “BOTH”. Select the 1394 CONTROL item on the <1394 SETTING> screen on the SYSTEM SETTING page. **RED:** The red tally lamp lights up. **GREEN:** The green tally lamp lights up. **CHAR:** The viewfinder displays “REC” in characters.
ACCESS LED – C U F –	OFF SLOT SIDE LCD SIDE BOTH	Specify whether or not to enable the P2 card access LEDs. **OFF:** Disables both LEDs above the slots and on the side panel. **SLOT SIDE:** Enables the LED above the slots and disables the LED on the side panel. **LCD SIDE:** Enables the LED on the side panel and disables the LED above the slots. **BOTH:** Enables both LEDs above the slots and on the side panel.
P.OFF GPS DATA – C U F –	HOLD CLEAR	Select whether or not to hold the UMID GPS position information while the power is turned off, thereby keeping this information as status data holding the previous value until the power is turned on again, which enables a new measurement to start. **HOLD:** Hold and save the data. **CLEAR:** Clear the data when the power is turned off, and save zero (No-Info) from the next power-on until a new measurement is completed.
SDI METADATA – C U F –	ON OFF	Used to specify whether or not to output metadata (UMID) to HD SDI.
SAVE SW (AUD OUT) – C U F –	ON OFF	Select whether or not to forcibly disable the audio output when the SAVE ON/OFF switch is set to [ON]. **ON:** Disable audio output. **OFF:** Enable audio output.
SAVE SW (LCD) – C U F –	ON OFF	Select whether or not to automatically turn off the LCD monitor when the SAVE ON/OFF switch is set to [ON]. **ON:** Turn off LCD monitor. **OFF:** Do not turn off LCD monitor.
COMPRESSION MODE – C U F –	NORMAL DARK	Select a compression mode for the 720P mode (Only for recording DVCPRO HD for 720-59.94P, 720-60P and 720-50P). **NORMAL:** The normal shooting mode is selected. **DARK:** Compressed video distortion that occurs in dark areas is lowered, which may increase distortion in other areas.

Items/ Data Saved	Adjustable Range	Remarks
INTERVAL REC MODE – C U F –	<u>OFF</u> ON ONE SHOT	Sets INTERVAL REC function. **OFF:** INTERVAL REC is not performed. **ON:** Uses internal memory to perform interval recording. **ONE SHOT:** Performs “one-shot” recording for the duration specified under REC TIME, and then stops. ◆**Note** This item cannot be changed when “ON” is selected in LOOP REC MODE.
INTERVAL REC HOLD – C U F –	ON <u>OFF</u>	Selects whether INTERVAL REC MODE settings are retained or not when the power is turned off once. **ON:** Retain **OFF:** Do not retain. The INTERVAL REC MODE is “OFF” whenever the power is turned on again.
REC TIME* – C U F –	<u>00s01f</u> : 59s29f	Set recording time for INTERVAL REC (1 cut). ◆**Note** However the settings can be made frame by frame, and the numbers of the cut-off unit frames for the shortest time period and the set time on the actual operation may vary with the recording method. For details, refer to [Interval Recording] (page 41).
PAUSE TIME* – C U F –	00h00m00s01f : <u>00h04m59s29f</u> : 23h59m59s29f	Specify pause time for INTERVAL REC. ◆**Note** However the settings can be made frame by frame, and the numbers of the cut-off unit frames for the shortest time period and the set time on the actual operation may vary with the recording method. For details, refer to [Interval Recording] (page 41).
TAKE TOTAL TIME – C U F –	NONE : 5day	Specify the time needed for INTERVAL REC. Select from “NONE” (continue until operation is manually stopped) to 5 days.
TOTAL REC TIME* – – – – –	<u>NONE</u> 00m00s01f : 99m59s29f OVER100min	Display total recorded time for INTERVAL REC. The setting cannot be changed using this option. Displays the recording time (recording time needed for the P2 card) calculated using REC TIME, PAUSE TIME, and TAKE TOTAL TIME. ◆**Note** A value based on actual processing is displayed.
AUDIO REC – C U F –	ON <u>OFF</u>	Select whether or not sound will be recorded during INTERVAL REC.
START DELAY – C U F –	<u>0SEC</u> : 10SEC	Set the delay after pressing REC START to start recording in INTERVAL REC.

* This variable range is the numerical values for 59.94 Hz. For 50 Hz, the frame rate is up to 24f. The frame rate is up to 23f in 24PN (Native) mode.

Items/ Data Saved	Adjustable Range	Remarks
PRE REC MODE – C U F –	ON <u>OFF</u>	Select whether or not to enable PRE RECORDING. **ON:** PRE RECORDING enabled. **OFF:** PRE RECORDING disabled. ◆**Note** Specify the PRE RECORDING time by using the menu option PRE REC TIME.
PRE REC TIME – C U F –	1SEC : <u>8SEC</u>	Set PRE RECORDING. **1-8SEC:** Set the length of time that can be retrospectively recorded before the REC START button is pressed.
LOOP REC MODE – – – F –	ON <u>OFF</u>	Select whether or not to enable LOOP REC. This setting can be used with PRE RECORDING features. **ON:** Enable LOOP REC. **OFF:** Disable LOOP REC. ◆**Notes** • After the power is turned off, this item will default to “OFF” the next time the power is turned on. • This item cannot be changed when “ON” or “ONE SHOT” is selected in INTERVAL REC MODE.
REC START – C U F –	ALL <u>NORMAL</u>	Select operating modes that allow recording to start. **ALL:** Allow recording to start during stop, recording pause, and playback. **NORMAL:** Allow recording to start during stop and recording pause. ◆**Note** Even if this is set to “ALL”, the operation is “NORMAL”, when “ON” or “ONE SHOT” is selected in INTERVAL REC MODE.
P.ON REC SLOT SEL – C U F –	<u>HOLD</u> SLOT1	Select the recording order of the slot when the power is turned on. **HOLD:** The recording order starts with the card previously selected when the power was turned off. **SLOT1:** The recording order starts with the card that is inserted in slot 1 when the power is turned on.

◆**Note**

Displayed REC TIME, PAUSE TIME and TOTAL REC TIME are translated into either drop-frame or non-drop-frame according to the mode of operation.

TAKE TOTAL TIME is actual time. Therefore, TOTAL REC TIME may incorporate fractions, depending on the settings.

Example of drop-frame

REC TIME	02s00f
PAUSE TIME	02s00f
TAKE TOTAL TIME	40min
TOTAL REC TIME	19m59s06f

OUTPUT SEL

Items/ Data Saved	Adjustable Range	Remarks
OUTPUT ITEM – C U F –	MENU ONLY TC STATUS	Set the character contents superimposed onto the output signals for the HD SDI A · B connector and MON OUT connector. **MENU ONLY:** Displays only when the menu characters are superimposed. No display appears when other characters are superimposed. **TC:** Display the time code. (Displays the menu when menu characters are superimposed.) Note that when "1080-23.98PsF" or "1080-24PsF" has been selected in the SYSTEM MODE menu option, the frame digits will not be updated correctly. **STATUS:** Display the same characters superimposed on the viewfinder signal. (Displays the menu when menu characters are superimposed.)
HD SDI A · B CHAR – C U F –	ON OFF	Select whether to superimpose characters on the HD SDI A · B connector. (The character content output from the HD SDI A · B and MON OUT connectors is the same.) **ON:** The characters are superimposed. **OFF:** The characters are not superimposed.
MONITOR OUT – C U F –	VBS HD SDI	Select the output signal on the MON OUT connector.
MONITOR GAMMA – C U F –	ON OFF	This sets whether to perform telecine conversion correction on the MON OUT, RC OUT, and LCD OUT signals when GAMMA MODE SEL is set to "FILM-REC". **ON:** Correction is performed. **OFF:** Correction is not performed.

Items/ Data Saved	Adjustable Range	Remarks
VF/LCD CHAR – C U F –	VF-OFF LCD-OFF ON	This sets whether to superimpose characters on the video shown on the LCD monitor and in the viewfinder. Note, however, that the characters are output to one of the MON OUT, VF OUT and LCD OUT signals.
VF MODE – C U F –	MEM CAM	Select the image to display in the viewfinder. **MEM:** Display the playback image in the playback mode. Display the camera image at other times. **CAM:** Always display the camera image.
VF SEL – C U F –	MONO COLOR	Select the video signal that is output to the viewfinder connector. **MONO:** Output the Y signal alone to the viewfinder connector. **COLOR:** Output the Y, P_B, and P_R signals to the viewfinder connector.
THUMBNAIL OUT – C U F –	ON OFF	Select whether or not to output clip thumbnails displayed on the LCD monitor to the MON OUT (VBS) signal and the REMOTE connector. **ON:** Enable output. **OFF:** Disable output. ◆**Note** Even when the MON OUT OUTPUT SEL switch is in the [CAM] position, thumbnails are output when this option is set to "ON".
DOWNCON MODE – C U F –	S-CROP LT-BOX SQUEEZE	For setting the mode of the down converter output signals.

HD SDI A · B OUT MARKER

Items/ Data Saved	Adjustable Range	Remarks
MARKER SW – C U F R	ON OFF	Switches the marker on and off.
CENTER MARK – C U F R	OFF 1 2 3 4	Switch the center mark. **OFF:** Do not display center mark. **1:** + (large) **2:** Hollow (large) **3:** + (small) **4:** Hollow (small)
SAFETY MARK – C U F R	OFF 1 2	Select the frame type for the safety zone marker. **OFF:** Do not display frame. **1:** Box  **2:** Corner frame 
SAFETY AREA – C U F R	80% : 90% : 100%	For setting the size of the safety zone marker. It is possible to set the size by units of 1% with a fixed ratio between of width and height.
FRAME MARK – C U F R	ON OFF	Set the frame marker to “ON” or “OFF”.
FRAME SIG – C U F R	4:3 13:9 14:9 VISTA CNSCO	Set the frame marker. The VISTA ratio is 16:8.65. The CNSCO ratio is 16:6.81.
USER BOX – C U F R	ON OFF	For setting whether to include the user box in the signal from the HD SDI A · B connector.
USER BOX WIDTH – C U F R	1 : 13 : 100	For setting the width of the user box.
USER BOX HEIGHT – C U F R	1 : 13 : 100	For setting the height of the user box.
USER BOX H POS – C U F R	–50 : +00 : +50	For setting the horizontal position of the user box center.
USER BOX V POS – C U F R	–50 : +00 : +50	For setting the vertical position of the user box center.

MONI OUT MARKER

Items/ Data Saved	Adjustable Range	Remarks
CENTER MARK – C U F R	OFF 1 2 3 4	Switch the center mark. **OFF:** Do not display center mark. **1:** + (large) **2:** Hollow (large) **3:** + (small) **4:** Hollow (small)
SAFETY MARK – C U F R	OFF 1 2	Select the frame type for the safety zone marker. **OFF:** Do not display frame. **1:** Box  **2:** Corner frame 
SAFETY AREA – C U F R	80% : 90% : 100%	For setting the size of the safety zone marker. It is possible to set the size by units of 1% with a fixed ratio between of width and height.
FRAME MARK – C U F R	ON OFF	Set the frame marker to “ON” or “OFF”.
FRAME SIG – C U F R	4:3 13:9 14:9 VISTA CNSCO	Set the frame marker. The VISTA ratio is 16:8.65. The CNSCO ratio is 16:6.81.
USER BOX – C U F R	ON OFF	For setting whether to include the user box in the signal from the MON OUT connector.
USER BOX WIDTH – C U F R	1 : 13 : 100	For setting the width of the user box.
USER BOX HEIGHT – C U F R	1 : 13 : 100	For setting the height of the user box.
USER BOX H POS – C U F R	–50 : +00 : +50	For setting the horizontal position of the user box center.
USER BOX V POS – C U F R	–50 : +00 : +50	For setting the vertical position of the user box center.

LCD MONITOR

Items/ Data Saved	Adjustable Range	Remarks
BRIGHTNESS – C U F –	–7 : <u>+0</u> : +7	Adjust the LCD monitor brightness.
COLOR LEVEL – C U F –	–7 : <u>+0</u> : +7	Adjust the LCD monitor chroma level.
CONTRAST – C U F –	–7 : <u>+0</u> : +7	Adjust the LCD monitor contrast.
BACKLIGHT – C U F –	<u>NORMAL</u> HIGH	Adjust the backlight. **NORMAL:** Mode normally used **HIGH:** This is brighter than NORMAL.
SELF SHOOT – C U F –	NORMAL <u>MIRROR</u>	Select whether or not to change the LCD monitor to mirror image. **NORMAL:** Do not change to mirror image. **MIRROR:** Change to mirror image.

GENLOCK

Items/ Data Saved	Adjustable Range	Remarks
GENLOCK – C U F R	<u>INT</u> EXT	Switch the camera synchronizing signal. **INT:** Synchronize with the internal reference signal regardless of the reference signal input to the GENLOCK IN connector. **EXT:** Synchronize with the reference signal input to the GENLOCK IN connector.
GL PHASE – C U F R	<u>HD SDI</u> COMPOSIT	For selecting the output signals that lock phases to the signals that are input in the GENLOCK IN connector. Note, however, that in 1080-23.98PsF mode and 1080-24PsF mode, the phase is locked to HD SDI even if “COMPOSIT” has been selected. **HD SDI:** For locking the HD SDI output signals to the GENLOCK input. For the down converter output signals, the start position of the video delays by about 90 lines. **COMPOSIT:** For locking the down converter output signals to the GENLOCK input. For the HD SDI output signals, the start position of the video gains by about 90 lines.
H PHASE COARSE – – – – –	–100 : <u>+000</u> : +100	Perform coarse phase adjustment for horizontal hold when configuring a system.
H PHASE FINE – – – – –	–100 : <u>+000</u> : +100	Perform fine phase adjustment for horizontal hold when configuring a system.

1394 SETTING

Items/ Data Saved	Adjustable Range	Remarks
1394 SPEED – C U F –	S100 S200 <u>S400</u>	For setting the transfer rate of signals output from the DVCPRO connector. **S100:** 100 Mbps **S200:** 200 Mbps **S400:** 400 Mbps
1394 IN CH – C U F –	0 : 63 <u>AUTO</u>	For setting the input channel of signals input to the DVCPRO connector. **0 - 63:** To fix to the designated value **AUTO:** To follow the settings of the externally connected devices
1394 OUT CH – C U F –	0 : 63 <u>AUTO</u>	For setting the output channel of signals output from the DVCPRO connector. **0 - 63:** To fix to the designated value **AUTO:** To follow the settings of the externally connected devices
1394 CONTROL – C U F –	<u>OFF</u> BOTH	For setting the control for recording start/stop operations of external devices that are connected to the DVCPRO connector. **OFF:** Do not control the externally connected devices. **BOTH:** To control both the unit and the externally connected devices
1394 CMD SEL – C U F –	<u>REC_P</u> STOP	For setting the control of recording stop operations of the external devices that are connected to the DVCPRO connector. **REC_P:** Operation to pause recording **STOP:** Stopping operation

PAINT

The ____ in the Adjustable Range column indicates the preset mode.

RB GAIN CONTROL

Items/ Data Saved	Adjustable Range	Remarks
R GAIN AWB PRE* S C U F R	–200 : <u>+000</u> : +200	For setting the Rch gain when the WHITE BAL switch is in the [PRST] position.
B GAIN AWB PRE* S C U F R	–200 : <u>+000</u> : +200	For setting the Bch gain when the WHITE BAL switch is in the [PRST] position.
R GAIN AWB A* S C U F R	–200 : <u>+000</u> : +200	For setting the Rch gain when the WHITE BAL switch is in the [A] position.
B GAIN AWB A* S C U F R	–200 : <u>+000</u> : +200	For setting the Bch gain when the WHITE BAL switch is in the [A] position.
R GAIN AWB B* S C U F R	–200 : <u>+000</u> : +200	For setting the Rch gain when the WHITE BAL switch is in the [B] position.
B GAIN AWB B* S C U F R	–200 : <u>+000</u> : +200	For setting the Bch gain when the WHITE BAL switch is in the [B] position.
AWB A GAIN OFFSET* S C U F R	ON <u>OFF</u>	For setting the values of the Rch gain and the Bch gain when the auto white balance is executed as the WHITE BAL switch is in the [A] position. **ON:** To retain the values set in the items of R GAIN AWB A and B GAIN AWB A **OFF:** The values of the Rch gain and the Bch gain is set to “0”.
AWB B GAIN OFFSET* S C U F R	ON <u>OFF</u>	For setting the values of the Rch gain and the Bch gain when the auto white balance is executed as the WHITE BAL switch is in the [B] position. **ON:** To retain the values set in the items of R GAIN AWB B and B GAIN AWB B **OFF:** The values of the Rch gain and the Bch gain is set to “0”.

RGB BLACK CONTROL

Items/ Data Saved	Adjustable Range	Remarks
MASTER PED* S C U F R	–200 : <u>+000</u> : +200	For setting the level of the master pedestal.
R PEDESTAL* S C U F R	–100 : <u>+000</u> : +100	For setting the pedestal level of the Rch.
G PEDESTAL* S C U F R	–100 : <u>+000</u> : +100	For setting the pedestal level of the Gch.
B PEDESTAL* S C U F R	–100 : <u>+000</u> : +100	For setting the pedestal level of the Bch.
PEDESTAL OFFSET* S C U F –	ON <u>OFF</u>	For setting the pedestal levels of the Rch, the Gch and the Bch when the auto black balance is adjusted. **ON:** To retain the values set in the respective items of R PEDESTAL, G PEDESTAL, and B PEDESTAL **OFF:** The pedestal levels of the Rch, the Gch and the Bch are set to “0”.
R FLARE* S C U F R	–100 : <u>+000</u> : +100	For adjusting the flare level of the Rch. Adjustment values in this item are added to the flare adjustment value that is adjusted on <LENS FILE ADJ> screen.
G FLARE* S C U F R	–100 : <u>+000</u> : +100	For adjusting the flare level of the Gch. Adjustment values in this item are added to the flare adjustment value that is adjusted on <LENS FILE ADJ> screen.
B FLARE* S C U F R	–100 : <u>+000</u> : +100	For adjusting the flare level of the Bch. Adjustment values in this item are added to the flare adjustment value that is adjusted on <LENS FILE ADJ> screen.

* If the remote control unit is connected, settings made from the menu are disabled. (The set value is displayed.)

MATRIX

Items/ Data Saved	Adjustable Range	Remarks
■MATRIX TABLE S C U F R	A B	For selecting the color correction table for the linear matrix.
MATRIX R-G S C U F R	–63 : +14 : +63	For performing the linear matrix adjustment. (red/green)
MATRIX R-B S C U F R	–63 : +02 : +63	For performing the linear matrix adjustment. (red/blue)
MATRIX G-R S C U F R	–63 : –01 : +63	For performing the linear matrix adjustment. (green/red)
MATRIX G-B S C U F R	–63 : +04 : +63	For performing the linear matrix adjustment. (green/blue)
MATRIX B-R S C U F R	–63 : +02 : +63	For performing the linear matrix adjustment. (blue/red)
MATRIX B-G S C U F R	–63 : –06 : +63	For performing the linear matrix adjustment. (blue/green)
■L MATRIX TABLE S C U F R	OFF A B	For selecting the color correction table when the GAIN switch is in the [L] position.
■M MATRIX TABLE S C U F –	OFF A B	For selecting the color correction table when the GAIN switch is in the [M] position.
■H MATRIX TABLE S C U F –	OFF A B	For selecting the color correction table when the GAIN switch is in the [H] position.

◆Notes

- The items indicated by ■ are the setting items for PAINT MENU SW(■) R/W in the <SD CARD R/W SELECT> screen. The items without ■ are the setting items for PAINT MENU LEVEL R/W.
  Please refer to [SD CARD R/W SELECT] (page 195) for more information.
- In the preset mode, the linear matrix data of MATRIX TABLE B are all set to “+00”.

COLOR CORRECTION

Items/ Data Saved	Adjustable Range	Remarks
R (SAT) S C U F R	–63 : +00 : +63	For performing the color saturation correction of red.
R-Mg (SAT) S C U F R	–63 : +00 : +63	For performing the color saturation correction between red and magenta.
Mg (SAT) S C U F R	–63 : +00 : +63	For performing the color saturation correction of magenta.
Mg-B (SAT) S C U F R	–63 : +00 : +63	For performing the color saturation correction between magenta and blue.
B (SAT) S C U F R	–63 : +00 : +63	For performing the color saturation correction of blue.
B-Cy (SAT) S C U F R	–63 : +00 : +63	For performing the color saturation correction between blue and cyan.
Cy (SAT) S C U F R	–63 : +00 : +63	For performing the color saturation correction of cyan.
Cy-G (SAT) S C U F R	–63 : +00 : +63	For performing the color saturation correction between cyan and green.
G (SAT) S C U F R	–63 : +00 : +63	For performing the color saturation correction of green.
G-Yl (SAT) S C U F R	–63 : +00 : +63	For performing the color saturation correction between green and yellow.
Yl (SAT) S C U F R	–63 : +00 : +63	For performing the color saturation correction of yellow.
Yl-R (SAT) S C U F R	–63 : +00 : +63	For performing the color saturation correction between yellow and red.

Items/ Data Saved	Adjustable Range	Remarks
R (PHASE) S C U F R	–63 : +00 : +63	For performing the hue correction for red.
R-Mg (PHASE) S C U F R	–63 : +00 : +63	For performing the hue correction between red and magenta.
Mg (PHASE) S C U F R	–63 : +00 : +63	For performing the hue correction for magenta.
Mg-B (PHASE) S C U F R	–63 : +00 : +63	For performing the hue correction between magenta and blue.
B (PHASE) S C U F R	–63 : +00 : +63	For performing the hue correction for blue.
B-Cy (PHASE) S C U F R	–63 : +00 : +63	For performing the hue correction between blue and cyan.
Cy (PHASE) S C U F R	–63 : +00 : +63	For performing the hue correction for cyan.
Cy-G (PHASE) S C U F R	–63 : +00 : +63	For performing the hue correction between cyan and green.
G (PHASE) S C U F R	–63 : +00 : +63	For performing the hue correction for green.
G-Yl (PHASE) S C U F R	–63 : +00 : +63	For performing the hue correction between green and yellow.
Yl (PHASE) S C U F R	–63 : +00 : +63	For performing the hue correction for yellow.
Yl-R (PHASE) S C U F R	–63 : +00 : +63	For performing the hue correction between yellow and red.
■COLOR CORRECT S C U F R	ON OFF	For switching on/off of the 12-axis independent color correction of the position selected with the GAIN switch ([L], [M], [H]).

LOW SETTING

Items/ Data Saved	Adjustable Range	Remarks
■MASTER GAIN S C U F R	–3dB : 0dB : 30dB	Select the master gain from –3, 0, 3, 6, 9, 12, 15, 18, 21, 24, 27, or 30 dB.
H.DTL LEVEL S C U F R	00 : 05 : 63	For performing the horizontal detail correction level setting.
V.DTL LEVEL S C U F R	00 : 07 : 31	For performing the vertical detail correction level setting.
DTL CORING S C U F R	00 : 04 : 60	For performing the noise elimination level setting for detail.
H.DTL FREQ. S C U F R	00 : 18 : 31	For performing the horizontal detail frequency selection.
LEVEL DEPEND. S C U F R	0 1 : 5	For setting the LEVEL DEPEND. When the Y-detail is emphasized, details of dark sections are compressed. If the numerical value is larger, details of bright sections are also compressed.
MASTER GAMMA S C U F R	0.30 : 0.45 : 0.75	For setting the master gamma. (0.01 step)
BLACK GAMMA S C U F R	–8 : OFF : +8	For setting the gamma curve for the dark portion. **–8 to –1:** The dark portion is compressed. **OFF:** Standard state **+1 to +8:** The dark portion is extended.
B.GAMMA RANGE S C U F R	1 2 3	For setting the upper limit of compression/expansion. **1:** Approximately 20% **2:** Approximately 30% **3:** Approximately 40%
■MATRIX TABLE S C U F R	OFF A B	For selecting the color correction table for the linear matrix.
■COLOR CORRECT S C U F R	ON OFF	For switching on/off of the 12-axis independent color correction.

◆Notes

- The items indicated by ■ are the setting items for PAINT MENU SW(■) R/W in the <SD CARD R/W SELECT> screen. The items without ■ are the setting items for PAINT MENU LEVEL R/W.
  Please refer to [SD CARD R/W SELECT] (page 195) for more information.

- When shooting with the MASTER GAIN set to “–3dB”, coloring phenomena may occur in portions of the video with high brightness.
  The coloring phenomena can be reduced by switching the OUTPUT/AUTO KNEE switch to [CAM/AUTO KNEE OFF], setting the MANUAL KNEE menu option of the <KNEE/LEVEL> screen to “ON”, and then changing the following menu options.
  – When “HD”, “SD”, “FILMLIKE1”, “FILMLIKE2” or “FILMLIKE3” has been selected in the GAMMA MODE SEL menu option of the <GAMMA> screen, reduce the value in the KNEE MASTER SLOPE menu option of the <KNEE/LEVEL> screen.
  – When “FILM-REC” has been selected in the GAMMA MODE SEL menu option of the <GAMMA> screen, reduce the value in the F-REC DYNAMIC LVL menu option of the <GAMMA> screen.
  – When “VIDEO-REC” has been selected in the GAMMA MODE SEL menu option of the <GAMMA> screen, reduce the value in the V-REC KNEE SLOPE menu option of the <GAMMA> screen.

MID SETTING

Items/ Data Saved	Adjustable Range	Remarks
■MASTER GAIN S C U F –	–3dB : 3dB : 30dB	Select the master gain from –3, 0, 3, 6, 9, 12, 15, 18, 21, 24, 27, or 30 dB.
H.DTL LEVEL S C U F –	00 : 05 : 63	For performing the horizontal detail correction level setting.
V.DTL LEVEL S C U F –	00 : 07 : 31	For performing the vertical detail correction level setting.
DTL CORING S C U F –	00 : 08 : 60	For performing the noise elimination level setting for detail.
H.DTL FREQ. S C U F –	00 : 18 : 31	For performing the horizontal detail frequency selection.
LEVEL DEPEND. S C U F –	0 1 : 5	For setting the LEVEL DEPEND. When the Y-detail is emphasized, details of dark sections are compressed. If the numerical value is larger, details of bright sections are also compressed.
MASTER GAMMA S C U F –	0.30 : 0.45 : 0.75	For setting the master gamma. (0.01 step)
BLACK GAMMA S C U F –	–8 : OFF : +8	For setting the gamma curve for the dark portion. **–8 to –1:** The dark portion is compressed. **OFF:** Standard state **+1 to +8:** The dark portion is extended.
B.GAMMA RANGE S C U F R	1 2 3	For setting the upper limit of compression/expansion. **1:** Approximately 20% **2:** Approximately 30% **3:** Approximately 40%
■MATRIX TABLE S C U F –	OFF A B	For selecting the color correction table for the linear matrix.
■COLOR CORRECT S C U F –	ON OFF	For switching on/off of the 12-axis independent color correction.

HIGH SETTING

Items/ Data Saved	Adjustable Range	Remarks
■MASTER GAIN S C U F –	–3dB : <u>6dB</u> : 30dB	Select the master gain from –3, 0, 3, 6, 9, 12, 15, 18, 21, 24, 27, or 30 dB.
H.DTL LEVEL S C U F –	00 : <u>05</u> : 63	For performing the horizontal detail correction level setting.
V.DTL LEVEL S C U F –	00 : <u>07</u> : 31	For performing the vertical detail correction level setting.
DTL CORING S C U F –	00 : <u>12</u> : 60	For performing the noise elimination level setting for detail.
H.DTL FREQ. S C U F –	00 : <u>18</u> : 31	For performing the horizontal detail frequency selection.
LEVEL DEPEND. S C U F –	0 : <u>3</u> : 5	For setting the LEVEL DEPEND. When the Y-detail is emphasized, details of dark sections are compressed. If the numerical value is larger, details of bright sections are also compressed.
MASTER GAMMA S C U F –	0.30 : <u>0.45</u> : 0.75	For setting the master gamma. (0.01 step)
BLACK GAMMA S C U F –	–8 : <u>OFF</u> : +8	For setting the gamma curve for the dark portion. **–8 to –1:** The dark portion is compressed. **OFF:** Standard state **+1 to +8:** The dark portion is extended.
B.GAMMA RANGE S C U F R	<u>1</u> 2 3	For setting the upper limit of compression/expansion. **1:** Approximately 20% **2:** Approximately 30% **3:** Approximately 40%
■MATRIX TABLE S C U F –	OFF <u>A</u> B	For selecting the color correction table for the linear matrix.
■COLOR CORRECT S C U F –	ON <u>OFF</u>	For switching on/off of the 12-axis independent color correction.

◆Note

The items indicated by ■ are the setting items for PAINT MENU SW(■) R/W in the <SD CARD R/W SELECT> screen. The items without ■ are the setting items for PAINT MENU LEVEL R/W.

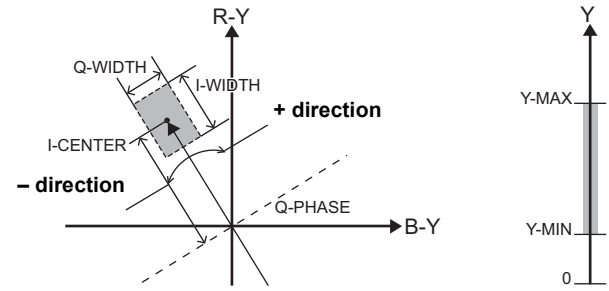
Please refer to [SD CARD R/W SELECT] (page 195) for more information.

ADDITIONAL DTL

Items/ Data Saved	Adjustable Range	Remarks
KNEE APE LVL S C U F R	<u>OFF</u> 1 : 5	For changing the detail level of the high brightness portion.
DTL GAIN(+) S C U F R	–31 : <u>+00</u> : +31	Adjust the detail level toward + (upwards).
DTL GAIN(–) S C U F R	–31 : <u>+00</u> : +31	Adjust the detail level toward the – (downwards).
DTL CLIP S C U F R	00 : <u>54</u> : 63	For setting the level for clipping the detail signals.
DTL SOURCE S C U F R	<u>(R+G)/2</u> (G+B)/2 2G+R+B /4 (3G+R)/4 R G	For setting the proportion of the RGB signal components that provide the detail.
V DTL FREQ S C U F R	360TV 450TV 540TV <u>630TV</u> 720TV	For selecting the vertical detail frequency. • The frequency notation is the value converted in 720P.
H.DTL LINE MIX S C U F R	<u>0H</u> 1H 2H	For setting the number of scanning lines to be added to the video signals in order to generate the horizontal detail signals.
MASTER DTL S C U F R	–31 : <u>+00</u> : +31	For revising the master detail level.

Items/ Data Saved	Adjustable Range	Remarks
■SKIN TONE DTL S C U F R	OFF A B AB	For selecting the skin color table for enabling the skin tone detail. The skin color table is provided in the DETECT TABLE item. By enabling the skin tone detail, it is possible to shoot human skin more accurately.
■ZEBRA VF S C U F R	ON OFF	For the setting to display the zebra pattern in the skin tone area displayed in the viewfinder screen. The zebra pattern is displayed when this item is turned “ON” and the <SKIN TONE DTL> screen is opened. The zebra pattern indicates the area which is selected in the SKIN TONE DTL item.
■ZEBRA HD SDI A · B S C U F R	ON OFF	For setting to include the skin tone zebra in the HD SDI A · B signal. The zebra pattern is displayed when this item is turned “ON” and the <SKIN TONE DTL> screen is opened. The zebra pattern indicates the area which is selected in the SKIN TONE DTL item.
■ZEBRA MONI S C U F R	ON OFF	For setting to include the skin tone zebra in the MON OUT signal. The zebra pattern is displayed when this item is turned “ON” and the <SKIN TONE DTL> screen is opened. The zebra pattern indicates the area which is selected in the SKIN TONE DTL item.
DETECT TABLE S C U F R	A B	For selecting the skin color table for subjects to which the skin tone table applies.
SKIN TONE GET – – – – –		For fetching the color information of “A” or “B”, which is selected in the DETECT TABLE item, near the center marker. When this function is executed, data from I CENTER to Q PHASE are fetched automatically. The fetched data will be the table data of “A” or “B”, which is selected in the DETECT TABLE item. It is impossible to obtain color information of both “A” and “B” at the same time.
SKIN DTL EFFECT S C U F R	0 : 16 : 31	For setting the effect level of the skin tone detail.

Items/ Data Saved	Adjustable Range	Remarks
Y MAX S C U F R	000 : 190 : 255	For setting the maximum value of brightness for enabling the skin tone.
Y MIN S C U F R	000 : 010 : 255	For setting the minimum value of brightness for enabling the skin tone.
I CENTER S C U F R	000 : 035 : 255	For setting the center position on the I-axis (for setting an area that enables skin tone).
I WIDTH S C U F R	000 : 055 : 255	For setting the area width for enabling the skin tone on the I-axis of which the center is the I CENTER.
Q WIDTH S C U F R	00 : 10 : 90	For setting the area width for enabling the skin tone on the Q-axis of which the center is the I CENTER.
Q PHASE S C U F R	–180 : +000 : +179	For setting phases of the area for enabling skin tone as setting the standard to the Q-axis.



= SKIN TONE AREA

◆Note

The items indicated by ■ are the setting items for PAINT MENU SW(■) R/W in the <SD CARD R/W SELECT> screen. The items without ■ are the setting items for PAINT MENU LEVEL R/W.
Please refer to [SD CARD R/W SELECT] (page 195) for more information.

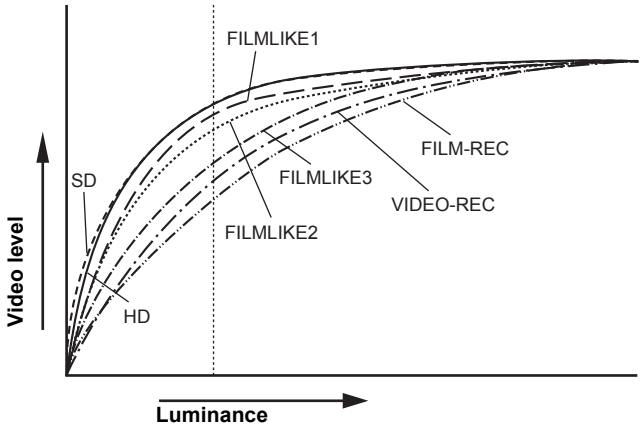
Items/ Data Saved	Adjustable Range	Remarks
MASTER PED S C U F R	–200 : +000 : +200	Set the master pedestal.
■MANUAL KNEE S C U F R	ON OFF	Set the mode when the AUTO KNEE switch is [OFF]. The KNEE MASTER POINT/KNEE MASTER SLOPE set value is enabled when this setting is “ON”.
KNEE MASTER POINT S C U F R	70.0% : 93.0% : 107.0%	For setting the knee point position in increments of 0.5% steps.
KNEE MASTER SLOPE S C U F R	00 : 85 : 99	For setting the inclination of the knee.
■WHITE CLIP S C U F R	ON OFF	Set the WHITE CLIP feature to “ON” or “OFF”. The WHITE CLIP LVL set value is enabled when this setting is “ON”.
WHITE CLIP LVL S C U F R	90% : 109%	Set WHITE CLIP level.
A.KNEE POINT S C U F R	80% : 93% : 107%	Set the AUTO KNEE point position in 1% steps. This setting is enabled when the OUTPUT/AUTO KNEE selector switch is set to [CAM/AUTO KNEE ON].
A.KNEE LVL S C U F R	100 : 107 : 109	Set the AUTO KNEE level.
A.KNEE RESPONSE S C U F R	1 : 4 : 8	Set the AUTO KNEE response speed. The smaller the setting value, the faster the response speed.
CHROMA LEVEL S C U F R	OFF –99% : +00% : +40%	For setting the chroma level of the PR signals and the PB signals. If this is set to “OFF”, the color elements of video signals are eliminated.
DRS EFFECT DEPTH S C U F R	1 2 3	Set the compression level of the high-brightness component of DRS. If the numerical value is larger, the compression level of the high-brightness component increases.
■HI-COLOR SW S C U F R	ON OFF	For switching the mode on/off which enables the dynamic color range to be expanded.
HI-COLOR LEVEL S C U F R	1 : 32	For selecting the level of the dynamic color range when in the mode which allows expansion of the dynamic color range.

◆Notes

- The items indicated by ■ are the setting items for PAINT MENU SW(■) R/W in the <SD CARD R/W SELECT> screen. The items without ■ are the setting items for PAINT MENU LEVEL R/W.
  Please refer to [SD CARD R/W SELECT] (page 195) for more information.
- When “FILM-REC” or “VIDEO-REC” is selected in the GAMMA MODE SEL menu option on the <GAMMA> screen, the KNEE MASTER SLOPE and KNEE MASTER POINT menu option settings are disabled.

GAMMA

Items/ Data Saved	Adjustable Range	Remarks
MASTER GAMMA S C U F R	0.30 : 0.45 : 0.75	Set the master gamma in 0.01 steps.
R GAMMA S C U F R	–15 : +00 : +15	Set the Rch gamma.
B GAMMA S C U F R	–15 : +00 : +15	Set the Bch gamma.
GAMMA MODE SEL S C U F R	HD SD FILMLIKE1 FILMLIKE2 FILMLIKE3 FILM-REC VIDEO-REC	For selecting the gamma mode. **HD:** Video gamma characteristics for HD (High Definition) **SD:** The gain in the dark section is higher than the HD gamma. **FILMLIKE1:** In this setting gradations in highlit areas can be expressed better than the HD gamma. **FILMLIKE2:** In this setting gradations in highlit areas can be expressed better than when FILMLIKE1 is selected. **FILMLIKE3:** In this setting gradations in highlit areas can be expressed better than when FILMLIKE2 is selected. **FILM-REC:** The cinema gamma characteristics for film applications. **VIDEO-REC:** The cinema gamma characteristics for video applications.



- When the GAMMA MODE SEL item is used for FILMLIKE3, the following settings are recommended.
  MANUAL KNEE: "ON"
  KNEE MASTER POINT: "85.0%"
  KNEE MASTER SLOPE: "50"
- AUTO KNEE is not performed when the GAMMA MODE SEL menu option is set to "FILM-REC" or "VIDEO-REC".

AUTO KNEE is not performed when AJ-RC10G is connected, but the LED of the AJ-RC10G button is lit by pressing the A.KNEE ON button.

Items/ Data Saved	Adjustable Range	Remarks
F-REC DYNAMIC LVL S C U F R	200% 300% 400% 500% 600%	For setting the dynamic range when GAMMA MODE SEL has been set to "FILM-REC". When GAMMA MODE SEL has not been set to "FILM-REC", this setting cannot be changed.
F-REC BLACK STR LVL S C U F R	00% : 30%	For setting the amount of black stretch when GAMMA MODE SEL has been set to "FILM-REC". When GAMMA MODE SEL has not been set to "FILM-REC", this setting cannot be changed.
V-REC KNEE SLOPE S C U F R	150% 200% 250% 300% 350% 400% 450% 500% 550% 600%	For setting the amount of knee-slope when GAMMA MODE SEL has been set to "VIDEO-REC". When GAMMA MODE SEL has not been set to "VIDEO-REC", this setting cannot be changed.
V-REC KNEE POINT S C U F R	30% : 107%	For setting knee point when GAMMA MODE SEL has been set to "VIDEO-REC". When GAMMA MODE SEL has not been set to "VIDEO-REC", this setting cannot be changed.

■CAMERA SETTING

Items/ Data Saved	Adjustable Range	Remarks
DETAIL S C U F R	ON OFF	For switching on/off of the detail signals.
GAMMA S C U F R	ON OFF	For switching on/off of the gamma correction.
TEST SAW S C U F R	ON OFF	Switch the test signal on or off.
FLARE S C U F R	ON OFF	Set the flare correction to on or off.
H-F COMPE. S C U F R	ON OFF	For switching on/off of the aperture correction.

◆Note

All items in CAMERA SETTING are setting targets of the item PAINT MENU SW(■) R/W in the <SD CARD R/W SELECT> screen.

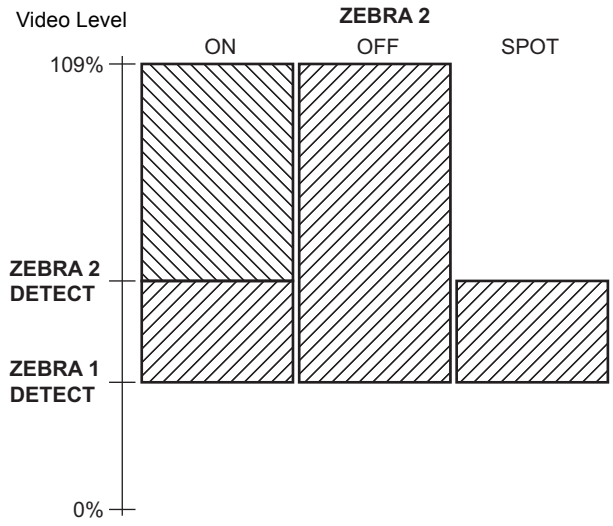
VF

The ____ in the Adjustable Range column indicates the preset mode.

VF DISPLAY

Items/ Data Saved	Adjustable Range	Remarks
STATUS MODE – C U F R	NORMAL FILM-REC	For selecting the status display mode of the viewfinder. **NORMAL:** Normal status display **FILM-REC:** Status display for FILM-REC ◆**Note** Setting STATUS MODE to “FILM-REC” disables the DISP CONDITION and DISP MODE settings.
DISP CONDITION – C U F R	NORMAL HOLD	**NORMAL:** Display status constantly. **HOLD:** Display status only when the MODE CHECK switch is pressed.
DISP MODE – C U F R	1 2 3	Set the DISP MODE. Switch the camera’s Warning/Message indication. Please refer to [Display Modes and Setting Changes/adjustment Result Messages] (page 84) for more information.
VF OUT – C U F R	Y NAM R G B	For selecting the video signals to display in the viewfinder screen. **Y:** Brightness signal **NAM:** Output signal with the highest level among R, G, and B signals. **R:** Rch signal **G:** Gch signal **B:** Bch signal
VF DTL – C U F R	00 : 05 : 10	For setting the detail level of the viewfinder screen. The details of the signals for the viewfinder are further enhanced. If “0” is selected, then the detail is the same as that for the main line.
VF DTL CORING – C U F R	00 : 15	For setting the noise elimination level for detail in the viewfinder signal.
VF H.DTL FREQ. S C U F R	1 : 4 : 6	For selecting the horizontal detail frequency in the viewfinder signal.
ZEBRA1 DETECT – C U F R	0% : 70% : 109%	Set the ZEBRA1 detection level (IRE value).
ZEBRA2 DETECT – C U F R	0% : 85% : 109%	Set the ZEBRA2 detection level (IRE value).
ZEBRA2 – C U F R	OFF SPOT ON	Set the ZEBRA2 to “ON”, “OFF”, or “SPOT”.
LOW LIGHT LVL – C U F R	OFF 10% 15% 20% 25% 30% 35%	Set the camera incoming light volume at which to display “LOW LIGHT”.
RC MENU DISP. – C U F R	ON OFF	For the setting to display the menu in the viewfinder screen when the remote control unit is connected to the unit.
MARKER/CHAR LVL – C U F R	50% 60% 70% 80% 90% 100%	Adjust the brightness of markers and characters displayed on the viewfinder.
SYNCHRO SCAN DISP. – C U F R	sec deg	Set the units for the SYNCHRO SCAN mode display. **sec:** Display using time. **deg:** Display using opening angle of the shutter.

ZEBRA Pattern Display



VF MARKER

Items/ Data Saved	Adjustable Range	Remarks
TABLE – C U F R	A B	Select the VF MARKER setting table. First, select table “A” or “B”, then set the items below for each table.
CENTER MARK – C U F R	OFF 1 2 3 4	Switch the center mark. **OFF:** Do not display center mark. **1:** + (large) **2:** Hollow (large) **3:** + (small) **4:** Hollow (small)
SAFETY MARK – C U F R	OFF 1 2	Select the frame type for the safety zone marker. **OFF:** Do not display frame. **1:** Box  **2:** Corner frame 
SAFETY AREA – C U F R	80% : 90% : 100%	For setting the size of the safety zone marker. It is possible to set the size by units of 1% with a fixed ratio between of width and height.
FRAME MARK – C U F R	ON OFF	Set the frame marker to “ON” or “OFF”.
FRAME SIG – C U F R	4:3 13:9 14:9 VISTA CNSCO	Set the frame marker. The VISTA ratio is 16:8.65. (1.85:1) The CNSCO ratio is 16:6.81 (2.35:1).
FRAME LVL – C U F R	0 : 15	Set the level outside the frame marker. Note that the level does not change on the LCD monitor. **0:** Equivalent to signal off. (Blanking status) **15:** Same brightness as center area.

◆Note

The safety zone marker and the frame marker are not displayed on the LCD monitor if “S-CROP” or “LT-BOX” is selected in DOWNCON MODE.

VF USER BOX

Items/ Data Saved	Adjustable Range	Remarks
USER BOX – C U F R	ON OFF	For setting whether the user box is displayed in the viewfinder or not.
USER BOX WIDTH – C U F R	1 : 13 : 100	For setting the width of the user box.
USER BOX HEIGHT – C U F R	1 : 13 : 100	For setting the height of the user box.
USER BOX H POS – C U F R	–50 : +00 : +50	For setting the horizontal position of the user box center.
USER BOX V POS – C U F R	–50 : +00 : +50	For setting the vertical position of the user box center.

- The user box can be displayed in any position as a boxtype cursor.

◆Note

The user box is not displayed on the LCD monitor if “S-CROP” or “LT-BOX” is selected in DOWNCON MODE.

VF INDICATOR1

Items/ Data Saved	Adjustable Range	Remarks
EXTENDER – C U F R	ON OFF	For selecting “ON” or “OFF” for the extender display.
SHUTTER – C U F R	ON OFF	Set the shutter speed indication to “ON” or “OFF”.
FILTER – C U F R	ON OFF	Set the filter No. indication to “ON” or “OFF”.
WHITE – C U F R	ON OFF	Set the AWB PRST/A/B indication to “ON” or “OFF”.
GAIN – C U F R	ON OFF	For selecting “ON” or “OFF” for the indication of the currently selected gain.
IRIS – C U F R	OFF IRIS	**OFF:** Disable the iris value indication. **IRIS:** Enable the iris value indication. • The display of the iris value and the display of the iris override are interlinked. When the iris override is changed, it is forcibly displayed for 3 seconds.
CAMERA ID – C U F R	OFF BAR	For setting to record the camera ID. **OFF:** The camera ID is not recorded. **BAR:** The camera ID is recorded when the color bar signals are recorded.
ID POSITION – C U F R	UPPER R UPPER L LOWER R LOWER L	For setting the position to display the camera ID. **UPPER R:** Upper right. **UPPER L:** Upper left. **LOWER R:** Lower right. **LOWER L:** Lower left.
DATE/TIME – C U F R	ON OFF	For selecting an option to display year/ month/day and hour/minute/second simultaneously when the camera ID is displayed.
ZOOM LVL – C U F R	ON OFF	Set the zoom position indication to “ON” or “OFF”.
COLOR TEMP – C U F R	ON OFF	Set the color temperature indication to “ON” or “OFF”.
SYSTEM MODE – C U F R	ON OFF	For selecting “ON” or “OFF” for the system mode and REC mode display.
REC FORMAT – C U F R	ON OFF	For selecting “ON” or “OFF” for the recording format display.
FRAME RATE – C U F R	ON OFF	For selecting “ON” or “OFF” for the frame rate display.

VF INDICATOR2

Items/ Data Saved	Adjustable Range	Remarks
CAC – C U F R	ON OFF	For selecting “ON” or “OFF” for the CAC function display.
GAMMA MODE – C U F R	ON OFF	Select whether the gamma mode is to be displayed or not.
DRS – C U F R	ON OFF	For selecting “ON” or “OFF” for the dynamic range stretcher function display.
VF GAMMA – C U F R	ON OFF	For selecting “ON” or “OFF” for the viewfinder gamma display.
MONITOR GAMMA – C U F R	ON OFF	For selecting “ON” or “OFF” for the monitor gamma display.

Items/ Data Saved	Adjustable Range	Remarks
P2CARD REMAIN – C U F R	OFF ONE-CARD TOTAL	Select the indication mode for the P2 card's remaining capacity. **OFF:** Disable the remaining capacity indication. **ONE-CARD:** Display the remaining capacity of the P2 card currently used for recording. **TOTAL:** Display the total remaining capacity of all P2 cards in slots.
BATTERY – C U F R	ON OFF	Set the battery voltage indication to "ON" or "OFF".
AUDIO LVL – C U F R	ON OFF	Set the audio lever meter indication to "ON" or "OFF".
TC ON COLOR BAR – C U F R	ON OFF	Select whether the time code is to be displayed or not on the color bar.
TC – C U F R	OFF TCG TCR TCG/TCR	Select the time code to display. **OFF:** Disable the time code display. **TCG:** Display the time code generator value in recording mode. **TCR:** Display the time code reader value in playback mode. **TCG/TCR:** Display the time code generator value in recording mode, and the time code reader value in playback mode.
SYSTEM INFO – C U F R	OFF ALWAYS NORMAL	Select the method of displaying system information and warnings. **OFF:** Display no warnings other than "TURN POWER OFF" and "SYSTEM ERROR". **ALWAYS:** Always display warnings. **NORMAL:** Display warnings for 3 seconds only when problems occur.
COMPRESSION – C U F R	ON OFF	Specify whether to enable or disable the compression indication when the unit is in compression mode. (Only for DVCPRO HD in 720P) **ON:** When the COMPRESSION MODE menu option on the <OPTION MODE> screen is set to "DARK", "COMP" is indicated. **OFF:** No indication is given.

Items/ Data Saved	Adjustable Range	Remarks
SAVE LED – C U F R	SAVE P2CARD	Set the SAVE lamp function. **SAVE:** The lamp lights up when the SAVE ON/OFF switch is set to [ON] and the output system assigned in [OPTION MODE] (page 166) is in the save mode. **P2CARD:** The lamp blinks in synch with the warning message when the P2 card's remaining recording capacity is getting low.
REC STATUS – C U F R	ON OFF	Select whether or not to enable "REC" indication in the viewfinder and on the LCD monitor during recording. **ON:** REC indication enabled. **OFF:** REC indication not enabled. ◆**Note** This option is useful when unit is used independently. When the 1394 CONTROL menu option on the <1394 SETTING> screen is set to "BOTH", then the setting of the REC TALLY menu option on the <OPTION MODE> screen is used.
PROXY REC – C U F R	ON OFF	When a video encoder card (AJ-YAX800G, optional) is attached, proxy recording information is displayed when recording starts. **ON:** Display indicating whether proxy recording is to be performed on the P2 card only, or on both the P2 card and the SD memory card. **OFF:** Proxy recording information is not displayed.

MODE CHECK IND

Items/ Data Saved	Adjustable Range	Remarks
STATUS – C U F R	ON OFF	For the setting to display the status screen when the MODE CHECK button is pressed.
!LED – C U F R	ON OFF	For the setting to indicate causes for turning on the ⏲ lamp on the viewfinder is displayed when the MODE CHECK button is pressed. The causes for turning on the ⏲ lamp are displayed with ❗.
FUNCTION – C U F R	ON OFF	For the setting to display the FUNCTION screen when the MODE CHECK button is pressed.
AUDIO – C U F R	ON OFF	For the setting to display the AUDIO screen when the MODE CHECK button is pressed.
CAC – C U F R	ON OFF	For the setting to display the CAC screen when the MODE CHECK button is pressed.
USER SW STATUS – C U F R	ON OFF	For the setting to display the functions assigned to the user buttons when the MODE CHECK button is pressed.
P.ON IND – C U F R	ON OFF	For the setting to display the status screen immediately after turning on the power of the unit. ◆**Note** Even if it is set to “ON” in this item, the status screen is not displayed immediately after turning on the power of the unit when the STATUS item is set to “OFF”.

!LED

Items/ Data Saved	Adjustable Range	Remarks
GAIN (0dB) – C U F R	ON OFF	For the setting to turn the ⏲ lamp on the viewfinder on when the GAIN is set to a value other than “0 dB”.
SHUTTER – C U F R	ON OFF	For the setting to turn the ⏲ lamp on the viewfinder on when the electronic shutter is activated.
WHITE PRESET – C U F R	ON OFF	For the setting to turn the ⏲ lamp on the viewfinder on when the WHITE BAL switch is set to the [PRST] position.
EXTENDER – C U F R	ON OFF	For the setting to turn the ⏲ lamp on the viewfinder on when the lens extender is activated.
B.GAMMA – C U F R	ON OFF	For the setting to turn the ⏲ lamp on the viewfinder on when the BLACK GAMMA is activated.
MATRIX – C U F R	ON OFF	For the setting to turn the ⏲ lamp on the viewfinder on when the color correction table for the linear matrix is selected.
COLOR CORRECTION – C U F R	ON OFF	For the setting to turn the ⏲ lamp on the viewfinder on when the 12-axis independent color correction is selected.
FILTER – C U F R	ON OFF	For the setting to turn the ⏲ lamp on the viewfinder on when the filter combination is anyone other than 3200 K and CLEAR.

CAM OPERATION

The ____ in the Adjustable Range column indicates the preset mode.

CAMERA ID

Items/ Data Saved	Adjustable Range	Remarks
ID1 – C U F –	****** ****	Setting 1 for the CAMERA ID recorded on color bars. Up to 10 characters are allowed for this setting.
ID2 – C U F –	****** ****	Setting 2 for the CAMERA ID recorded on color bars. Up to 10 characters are allowed for this setting.
ID3 – C U F –	****** ****	Setting 3 for the CAMERA ID recorded on color bars. Up to 10 characters are allowed for this setting.

◆**Note**

This setting is canceled when READ FACTORY DATA is selected.

SHUTTER SPEED

Items/ Data Saved	Adjustable Range	Remarks
SYNCHRO SCAN – C U F –	ON OFF	Allocate SYNCHRO SCAN as a shutter speed selectable by the shutter switch.
SYNCHRO SCAN2 – C U F –	ON OFF	Allocate SYNCHRO SCAN2 as a shutter speed selectable by the shutter switch. When SYNCHRO SCAN2 has been allocated, the speed will only be displayed in seconds.
POSITION1 – C U F –	ON OFF	Allocate the shutter speed set by POSITION1 SEL in the <SHUTTER SELECT> screen as the shutter speed selectable by the shutter switch.
POSITION2 – C U F –	ON OFF	Allocate the shutter speed set by POSITION2 SEL in the <SHUTTER SELECT> screen as the shutter speed selectable by the shutter switch.
POSITION3 – C U F –	ON OFF	Allocate the shutter speed set by POSITION3 SEL in the <SHUTTER SELECT> screen as the shutter speed selectable by the shutter switch.
POSITION4 – C U F –	ON OFF	Allocate the shutter speed set by POSITION4 SEL in the <SHUTTER SELECT> screen as the shutter speed selectable by the shutter switch.
POSITION5 – C U F –	ON OFF	Allocate the shutter speed set by POSITION5 SEL in the <SHUTTER SELECT> screen as the shutter speed selectable by the shutter switch.
POSITION6 – C U F –	ON OFF	Allocate the shutter speed set by POSITION6 SEL in the <SHUTTER SELECT> screen as the shutter speed selectable by the shutter switch.

SHUTTER SELECT

Items/ Data Saved	Adjustable Range	Remarks
POSITION1 SEL **For 59.94 Hz** **For 50 Hz** – C U F –	1/60 1/100 1/120 1/250 1/500 1/1000 1/2000 HALF 180.0deg 172.8deg 144.0deg 120.0deg 90.0deg 45.0deg 1/50 1/60 1/120 1/250 1/500 1/1000 1/2000 HALF 180.0deg 172.8deg 144.0deg 120.0deg 90.0deg 45.0deg	For setting the shutter speed for POSITION1.
POSITION2 SEL **For 59.94 Hz** **For 50 Hz** – C U F –	1/60 1/100 1/120 1/250 1/500 1/1000 1/2000 HALF 180.0deg 172.8deg 144.0deg 120.0deg 90.0deg 45.0deg 1/50 1/60 1/120 1/250 1/500 1/1000 1/2000 HALF 180.0deg 172.8deg 144.0deg 120.0deg 90.0deg 45.0deg	For setting the shutter speed for POSITION2.

Items/ Data Saved	Adjustable Range	Remarks
POSITION3 SEL **For 59.94 Hz** **For 50 Hz** – C U F –	1/60 1/100 1/120 1/250 1/500 1/1000 1/2000 HALF 180.0deg 172.8deg 144.0deg 120.0deg 90.0deg 45.0deg 1/50 1/60 1/120 1/250 1/500 1/1000 1/2000 HALF 180.0deg 172.8deg 144.0deg 120.0deg 90.0deg 45.0deg	For setting the shutter speed for POSITION3.
POSITION4 SEL **For 59.94 Hz** **For 50 Hz** – C U F –	1/60 1/100 1/120 1/250 1/500 1/1000 1/2000 HALF 180.0deg 172.8deg 144.0deg 120.0deg 90.0deg 45.0deg 1/50 1/60 1/120 1/250 1/500 1/1000 1/2000 HALF 180.0deg 172.8deg 144.0deg 120.0deg 90.0deg 45.0deg	For setting the shutter speed for POSITION4.

Items/ Data Saved	Adjustable Range	Remarks
POSITION5 SEL **For 59.94 Hz** **For 50 Hz** – C U F –	1/60 1/100 1/120 1/250 1/500 1/1000 1/2000 HALF 180.0deg 172.8deg 144.0deg 120.0deg 90.0deg 45.0deg 1/50 1/60 1/120 1/250 1/500 1/1000 1/2000 HALF 180.0deg 172.8deg 144.0deg 120.0deg 90.0deg 45.0deg	For setting the shutter speed for POSITION5.
POSITION6 SEL **For 59.94 Hz** **For 50 Hz** – C U F –	1/60 1/100 1/120 1/250 1/500 1/1000 1/2000 HALF 180.0deg 172.8deg 144.0deg 120.0deg 90.0deg 45.0deg 1/50 1/60 1/120 1/250 1/500 1/1000 1/2000 HALF 180.0deg 172.8deg 144.0deg 120.0deg 90.0deg 45.0deg	For setting the shutter speed for POSITION6.

◆Note

By setting the shutter speed on the time axis (1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000), the frame rate can be varied while keeping the exposure constant.
This is equivalent to Ramping (compensating for changes in frame rate using shutter angle) in a conventional film camera.

USER SW

Items/ Data Saved	Adjustable Range	Remarks
USER MAIN SW – C U F R	INH I.OVR S.BLK B.GAMMA Y GET DRS ASSIST C.TEMP VFR FRATE VF GAM AUDIO CH1 AUDIO CH2 REC SW RET SW PRE REC SLOT SEL PC MODE	Allocate the USER MAIN button. For descriptions of the functions, see [Assigning Functions to User Buttons] (page 56).
USER1 SW – C U F R	INH I.OVR S.BLK B.GAMMA Y GET DRS ASSIST C.TEMP VFR FRATE VF GAM AUDIO CH1 AUDIO CH2 REC SW RET SW PRE REC SLOT SEL PC MODE	Allocate the USER 1 button. For descriptions of the functions, see [Assigning Functions to User Buttons] (page 56).
USER2 SW – C U F R	INH I.OVR S.BLK B.GAMMA Y GET DRS ASSIST C.TEMP VFR FRATE VF GAM AUDIO CH1 AUDIO CH2 REC SW RET SW PRE REC SLOT SEL PC MODE	Allocate the USER 2 button. For descriptions of the functions, see [Assigning Functions to User Buttons] (page 56).
MARKER SEL (USER3 SW) – C U F R	INH Y GET ASSIST VF GAM VF MARK REC SW RET SW PRE REC SLOT SEL PC MODE	Allocate the MARKER SELECT button. For descriptions of the functions, see [Assigning Functions to User Buttons] (page 56).
TEXT MEMO SW (USER4 SW) – C U F R	INH Y GET ASSIST VF GAM REC SW RET SW PRE REC SLOT SEL PC MODE TEXT MEMO	Allocate the TEXT MEMO button. For descriptions of the functions, see [Assigning Functions to User Buttons] (page 56).

Items/ Data Saved	Adjustable Range	Remarks
RET SW – C U F R	R.REVIEW CAM RET	For setting the function when the user button on the unit, to which the RET button of the lens or the RET SW function is allocated, is pressed. **R.REVIEW:** Rec review function It is possible to check a last few seconds of the records taken. **CAM RET:** Return video function It is possible to confirm the return video signals (analog HD Y signals) supplied to the GENLOCK IN connector on the unit by using the viewfinder. ◆**Notes** • When video signals in a format different from that for the video mode of the unit, return video is not properly displayed. • When the GENLOCK item (the <GENLOCK> screen on the SYSTEM SETTING page) is set to “INT”, the return video image may be displayed as slightly shaking horizontally.
S.BLK LVL – C U F R	OFF –10 –20 –30	For setting the super black level.
AUTO KNEE SW S C U F R	OFF ON DRS	For selecting on/off of the AUTO KNEE function and DRS function. When it is set to “OFF”, the AUTO KNEE may not function even if the AUTO KNEE switch is turned on. When the DRS is selected and the AUTO KNEE switch is positioned to [ON], the DRS function turns on.
SHD.ABB SW CTL – C U F R	ON OFF	For the setting to adjust the black shading automatically when the AUTO W/B BAL switch is held to the [ABB] side for 8 seconds or more.

Items/ Data Saved	Adjustable Range	Remarks
COLOR BARS – C U F R	SMPTE FULL BARS SPLIT ARIB	For selecting the color bar to be used. **SMPTE:** Color bar complied with the SMPTE standards **FULL BARS:** Full color bar **SPLIT:** SPLIT color bar for SNG (Satellite News Gathering) **ARIB:** Color bar complied with the ARIB standards
RC CHECK SW – C U F R	R.REVIEW PLAY	For specifying what the unit does when the REC check button on the remote control unit is pressed. **R.REVIEW:** The unit performs rec review. **PLAY:** The unit performs playback.
SIDE SW LOCK – C U F R	ON OFF	For selecting whether to disable the switches (GAIN, OUTPUT and AWB switches) on the side of the unit. When this setting is changed from “OFF” to “ON”, the set states of the switches are preserved. While this setting is “ON”, the switches remain disabled. **ON:** Switches are disabled. **OFF:** Switches are not disabled.

WHITE BALANCE MODE

Items/ Data Saved	Adjustable Range	Remarks
FILTER INH – C U F R	ON OFF	For selecting independently whether memory data for white balance (Ach, Bch) is retained or not for the respective CC filters. **ON:** Regardless of the CC filter, data for the memories (2 memories) for Ach and Bch is retained. **OFF:** The memory data (8 memories) for Ach and Bch is retained for the respective CC filters.
SHOCKLESS AWB – C U F R	OFF FAST NORMAL SLOW1 SLOW2 SLOW3	For setting the length of time for transiting to the switched position of white balance, when the position of the WHITE BAL switch is changed. **OFF:** To transit instantly **FAST:** About 1 second **NORMAL:** About 2 seconds **SLOW1:** About 3 seconds **SLOW2:** About 10 seconds **SLOW3:** About 20 seconds
AWB AREA – C U F R	25% 50% 90%	For switching the detection area for executing the automatic adjustment of white balance. **25%:** An area near the screen center equivalent to 25% of the screen is detected. **50%:** An area near the screen center equivalent to 50% of the screen is detected. **90%:** An area equivalent to 90% of the screen is detected.
TEMP PRE SEL SW – – – F –	VAR 3.2K/5.6K	For changing the detection area on which automatic white balance adjustment is performed. **VAR:** From 2300K↓ to 9900K↑ is selectable. **3.2K/5.6K:** The detection area is fixed to 3200K or 5600K.
COLOR TEMP PRE – – – F –	2300K↓ : 3200K : 9900K↑	For setting the color temperature when the WHITE BAL switch is set to the [PRST] position. • Since the range of color temperatures that can be set will vary with the CC filter position, a numerical value cannot be changed even if the color temperature is changed when a high color temperature is set.
AWB A TEMP – – – F –	2300K↓ : 3200K : 9900K↑	For setting the color temperature when the WHITE BAL switch is set to the [A] position. If the automatic adjustment of white balance is executed in the [A] position, the color temperature at that time is memorized in the position of the WHITE BAL switch [A].
AWB B TEMP – – – F –	2300K↓ : 3200K : 9900K↑	For setting the color temperature when the WHITE BAL switch is set to the [B] position. If the automatic adjustment of white balance is executed in the [B] position, the color temperature at that time is memorized in the position of the WHITE BAL switch [B].

LENS/IRIS

Items/ Data Saved	Adjustable Range	Remarks
A.IRIS LEVEL – C U F R	000 : 045 : 100	Set the target value for auto iris.
A.IRIS PEAK/ AVE – C U F R	000 : 030 : 100	Determine the peak-to-standard ratio for the auto iris. A larger value sets the auto iris to respond to the peak in the iris detection window, while a smaller value sets it to respond to the average value in the window.
A.IRIS WINDOW – C U F R	NORM1 NORM2 CENTR	Select the auto iris detection window. **NORM1:** The window closer to the center of the screen. **NORM2:** The window closer to bottom of the screen. **CENTR:** The spot window in the center of the screen.
IRIS GAIN – C U F R	CAM LENS	Select which unit controls IRIS GAIN. ◆**Note** Lenses with an extender, such as ×2, ×0.8 sold before FUJINON DIGI POWER, perform iris compensation while enabling the extender. Therefore, if this setting is switched to “CAM”, the camera’s iris control will not operate properly.
IRIS GAIN VALUE – C U F R	01 : 10 : 20	Set the adjustable value for IRIS GAIN. This setting is effective when “CAM” is selected for IRIS GAIN.

The ____ in the Adjustable Range column indicates the preset mode.

BATTERY/P2CARD

Items/ Data Saved	Adjustable Range	Remarks
BATTERY SELECT – C U F –	PROPAC14 TRIMPAC14 HYTRON50 HYTRON140 DIONIC90 DIONIC160 NP-L7 ENDURA7 ENDURA10 ENDURA-D PAG L95 BP-L65/95 NiCd14 TYPE A TYPE B	Select the battery to use. Remaining capacity detection is also performed according to the selected battery. The variable range is changed by the item settings selected on the [BATTERY SETTING1] (page 190) and [BATTERY SETTING2] (page 191) menus. The initial value for “TYPE A” is set to “DIONIC90” while the same for “TYPE B” is set to “HYTRON140”. When BP-GL65 or BP-GL95, a battery made of Sony, is used, set this to “BP-L65/95”.
EXT DC IN SELECT – C U F –	AC_ADPT PROPAC14 TRIMPAC14 HYTRON50 HYTRON140 DIONIC90 DIONIC160 NP-L7 ENDURA7 ENDURA10 ENDURA-D PAG L95 BP-L65/95 NiCd14 TYPE A TYPE B	Set the remaining capacity detection type when a battery is connected to the DC IN connector. Remaining capacity detection is also performed according to the selected battery type. The variable range is changed by the item settings selected on the [BATTERY SETTING1] (page 190) and [BATTERY SETTING2] (page 191) menus. Analog voltage is displayed on the viewfinder screen. When BP-GL65 or BP-GL95, a battery made of Sony, is used, set this to “BP-L65/95”.
BATT NEAR END ALARM – C U F –	ON OFF	Select whether or not to set the alarm to beep when the battery level is low.
BATT NEAR END CANCEL – C U F –	ON OFF	If set to “ON”, the warning tone and indication can be canceled by pressing the MODE CHECK button when BATT NEAR END ALARM is triggered.
BATT END ALARM – C U F –	ON OFF	Select whether or not to set the alarm to beep when the battery is empty.
BATT REMAIN FULL – C U F –	70% 100%	Set the display of the remaining battery level indicator bar in the display window when a battery with this function is used. **70%:** Indicate FULL at 70% capacity. **100%:** Indicate FULL at 100% capacity.

Items/ Data Saved	Adjustable Range	Remarks
CARD NEAR END ALARM – C U F –	ON OFF	Select whether or not to set the alarm to beep when the space remaining on the P2 card is small.
CARD NEAR END TIME – C U F –	2min 3min	Set the time at which to indicate that there is little space remaining on the P2 card.
CARD END ALARM – C U F –	ON OFF	Select whether or not to set the alarm to beep when the P2 card is full.
CARD REMAIN/ ■ – C U F –	3min/■ 5min/■	Set the length of time for one segment (■) of the P2 card’s remaining capacity indicator bars. **3min/■:** One segment represents 3 minutes. **5min/■:** One segment represents 5 minutes.

Items/ Data Saved	Adjustable Range	Remarks
PROPAC14 – C U F –	✳ •	Enable selection under BATTERY SELECT. ✳: Enable selection. •: Disable selection.
	AUTO MANUAL	Select auto or manual to set the NEAR END voltage. **AUTO:** Set voltage automatically. **MANUAL:** Set voltage manually.
	11.0 : 13.8 : 15.0	When “MANUAL” is selected in the menu above, set the NEAR END voltage in 0.1 V steps.
TRIMPAC14 – C U F –	✳ •	Enable selection under BATTERY SELECT. ✳: Enable selection. •: Disable selection.
	AUTO MANUAL	Select auto or manual to set the NEAR END voltage. **AUTO:** Set voltage automatically. **MANUAL:** Set voltage manually.
	11.0 : 13.6 : 15.0	When “MANUAL” is selected in the menu above, set the NEAR END voltage in 0.1 V steps.
HYTRON50 – C U F –	✳ •	Enable selection under BATTERY SELECT. ✳: Enable selection. •: Disable selection.
	AUTO MANUAL	Select auto or manual to set the NEAR END voltage. **AUTO:** Set voltage automatically. **MANUAL:** Set voltage manually.
	11.0 : 13.5 : 15.0	When “MANUAL” is selected in the menu above, set the NEAR END voltage in 0.1 V steps.
HYTRON140 – C U F –	✳ •	Enable selection under BATTERY SELECT. ✳: Enable selection. •: Disable selection.
	AUTO MANUAL	Select auto or manual to set the NEAR END voltage. **AUTO:** Set voltage automatically. **MANUAL:** Set voltage manually.
	11.0 : 13.5 : 15.0	When “MANUAL” is selected in the menu above, set the NEAR END voltage in 0.1 V steps.

Items/ Data Saved	Adjustable Range	Remarks
DIONIC90 – C U F –	✳ •	Enable selection under BATTERY SELECT. ✳: Enable selection. •: Disable selection.
	AUTO MANUAL	Select auto or manual to set the NEAR END voltage. **AUTO:** Set voltage automatically. **MANUAL:** Set voltage manually.
	11.0 : 13.6 : 15.0	When “MANUAL” is selected in the menu above, set the NEAR END voltage in 0.1 V steps.
DIONIC160 – C U F –	✳ •	Enable selection under BATTERY SELECT. ✳: Enable selection. •: Disable selection.
	AUTO MANUAL	Select auto or manual to set the NEAR END voltage. **AUTO:** Set voltage automatically. **MANUAL:** Set voltage manually.
	11.0 : 13.2 : 15.0	When “MANUAL” is selected in the menu above, set the NEAR END voltage in 0.1 V steps.
NP-L7 – C U F –	✳ •	Enable selection under BATTERY SELECT. ✳: Enable selection. •: Disable selection.
	AUTO MANUAL	Select auto or manual to set the NEAR END voltage. **AUTO:** Set voltage automatically. **MANUAL:** Set voltage manually.
	11.0 : 13.2 : 15.0	When “MANUAL” is selected in the menu above, set the NEAR END voltage in 0.1 V steps.
ENDURA7 – C U F –	✳ •	Enable selection under BATTERY SELECT. ✳: Enable selection. •: Disable selection.
	AUTO MANUAL	Select auto or manual to set the NEAR END voltage. **AUTO:** Set voltage automatically. **MANUAL:** Set voltage manually.
	11.0 : 13.2 : 15.0	When “MANUAL” is selected in the menu above, set the NEAR END voltage in 0.1 V steps.

Items/ Data Saved	Adjustable Range	Remarks
ENDURA10	∗ •	Enable selection under BATTERY SELECT. ∗: Enable selection. •: Disable selection.
	AUTO MANUAL	Select auto or manual to set the NEAR END voltage. **AUTO:** Set voltage automatically. **MANUAL:** Set voltage manually.
	11.0 : 13.2 : 15.0	When “MANUAL” is selected in the menu above, set the NEAR END voltage in 0.1 V steps.
– C U F –		
ENDURA-D	∗ •	Enable selection under BATTERY SELECT. ∗: Enable selection. •: Disable selection.
	AUTO MANUAL	Select auto or manual to set the NEAR END voltage. **AUTO:** Set voltage automatically. **MANUAL:** Set voltage manually.
	11.0 : 13.2 : 15.0	When “MANUAL” is selected in the menu above, set the NEAR END voltage in 0.1 V steps.
– C U F –		
PAG L95	∗ •	Enable selection under BATTERY SELECT. ∗: Enable selection. •: Disable selection.
	AUTO MANUAL	Select auto or manual to set the NEAR END voltage. **AUTO:** Set voltage automatically. **MANUAL:** Set voltage manually.
	11.0 : 13.5 : 15.0	When “MANUAL” is selected in the menu above, set the NEAR END voltage in 0.1 V steps.
– C U F –		
BP-GL65/95	∗ •	Enable selection under BATTERY SELECT. ∗: Enable selection. •: Disable selection.
	AUTO MANUAL	Select auto or manual to set the NEAR END voltage. **AUTO:** Set voltage automatically. **MANUAL:** Set voltage manually.
	11.0 : 13.5 : 15.0	When “MANUAL” is selected in the menu above, set the NEAR END voltage in 0.1 V steps.
– C U F –		

BATTERY SETTING2

Items/ Data Saved	Adjustable Range	Remarks
NiCd14	∗ •	Enable selection under BATTERY SELECT. ∗: Enable selection. •: Disable selection.
NEAR END	11.0 : 13.8 : 15.0	Set the NEAR END voltage in 0.1 V steps.
END	11.0 : 13.4 : 15.0	Set the END voltage in 0.1 V steps.
– C U F –		
TYPE A	∗ •	Enable selection under BATTERY SELECT. ∗: Enable selection. •: Disable selection.
FULL	12.0 : 15.1 : 17.0	Set the voltage to display the FULL indication in 0.1 V steps.
NEAR END	11.0 : 13.6 : 15.0	Set the NEAR END voltage in 0.1 V steps.
END	11.0 : 12.9 : 15.0	Set the END voltage in 0.1 V steps.
– C U F –		
TYPE B	∗ •	Enable selection under BATTERY SELECT. ∗: Enable selection. •: Disable selection.
FULL	12.0 : 15.5 : 17.0	Set the voltage to display the FULL indication in 0.1 V steps.
NEAR END	11.0 : 13.5 : 15.0	Set the NEAR END voltage in 0.1 V steps.
END	11.0 : 13.1 : 15.0	Set the END voltage in 0.1 V steps.
– C U F –		

- The remaining battery level is indicated in percentage when a battery with this function is installed on the unit.

Items/ Data Saved	Adjustable Range	Remarks
FRONT VR CH1 – C U F –	OFF FRONT W.L. REAR ALL	Select whether or not to enable the FRONT AUDIO LEVEL control for the signal selected as the input signal to AUDIO IN CH1. **OFF:** Disabled for any input selected. Recording level does not change by turning the volume control. **FRONT:** Only enabled when [FRONT] is selected. **W.L.:** Only enabled when [W.L.] (wireless) is selected. **REAR:** Only enabled when [REAR] is selected. **ALL:** Enabled for any input selected.
FRONT VR CH2 – C U F –	OFF FRONT W.L. REAR ALL	Select whether or not to enable the FRONT AUDIO LEVEL control for the signal selected as an input signal to AUDIO IN CH2. **OFF:** Disabled for any input selected. Recording level does not change by turning the volume control. **FRONT:** Only enabled when [FRONT] is selected. **W.L.:** Only enabled when [W.L.] (wireless) is selected. **REAR:** Only enabled when [REAR] is selected. **ALL:** Enabled for any input selected.
MIC LOWCUT CH1 – C U F –	OFF FRONT W.L. REAR	Select the microphone low cut filter for input CH1. **OFF:** The microphone low cut filter is disabled for any input. **FRONT:** The microphone low cut filter is enabled when the front microphone is selected. **W.L.:** The microphone low cut filter is enabled only when the wireless microphone is selected. **REAR:** The microphone low cut filter is enabled only when the rear microphone is selected.
MIC LOWCUT CH2 – C U F –	OFF FRONT W.L. REAR	Select the microphone low cut filter for input CH2. **OFF:** The microphone low cut filter is disabled for any input. **FRONT:** The microphone low cut filter is enabled when the front microphone is selected. **W.L.:** The microphone low cut filter is enabled only when the wireless microphone is selected. **REAR:** The microphone low cut filter is enabled only when the rear microphone is selected.
MIC LOWCUT CH3 – C U F –	OFF FRONT W.L. REAR	Select the microphone low cut filter for input CH3. **OFF:** The microphone low cut filter is disabled for any input. **FRONT:** The microphone low cut filter is enabled when the front microphone is selected. **W.L.:** The microphone low cut filter is enabled only when the wireless microphone is selected. **REAR:** The microphone low cut filter is enabled only when the rear microphone is selected.
MIC LOWCUT CH4 – C U F –	OFF FRONT W.L. REAR	Select the microphone low cut filter for input CH4. **OFF:** The microphone low cut filter is disabled for any input. **FRONT:** The microphone low cut filter is enabled when the front microphone is selected. **W.L.:** The microphone low cut filter is enabled only when the wireless microphone is selected. **REAR:** The microphone low cut filter is enabled only when the rear microphone is selected.
LIMITER CH1 – C U F –	ON OFF	Select the limiter. The limiter is enabled when AUDIO SELECT CH1 switch is set to [MAN].
LIMITER CH2 – C U F –	ON OFF	Select the limiter. The limiter is enabled when AUDIO SELECT CH2 switch is set to [MAN].
AUTO LEVEL CH3 – C U F –	ON OFF	Select the level setting method. For more information, see [CH3 and CH4 Recording Levels] (page 59)
AUTO LEVEL CH4 – C U F –	ON OFF	Select the level setting method. For more information, see [CH3 and CH4 Recording Levels] (page 59)
TEST TONE – C U F –	OFF NORMAL ALWAYS CHSEL	Select the test signal. **OFF:** Disable test tone output. **NORMAL:** Test tone signals are output to all of CH1 - CH4 when the OUTPUT/AUTO KNEE selector switch has been switched to [BARS] and CH1 of the AUDIO IN switch has been switched to [FRONT]. **ALWAYS:** Test tone signals are always output to all of CH1 - CH4 when the OUTPUT/AUTO KNEE selector switch has been switched to [BARS]. **CHSEL:** Output test tone to the channels where the AUDIO IN switch CH1 or CH2 is set to [FRONT] when OUTPUT/AUTO KNEE selector switch is set to [BARS]. The test tone is not output to CH3 and CH4.

◆Note

The frequency characteristics when the microphone low cut filter is applied are 200 Hz to 10 kHz.

MIC/AUDIO2

Items/ Data Saved	Adjustable Range	Remarks
FRONT MIC POWER – C U F –	ON OFF	Select the phantom power supply for the front microphone.
REAR MIC POWER – C U F –	ON OFF	Select the phantom power supply for the rear microphone. When “OFF” is selected, no phantom power is supplied even if the LINE/MIC/+48V selector switch is set to [+48V].
MONITOR SELECT – C U F –	STEREO MIX	When the MONITOR select switch is set to [ST] (stereo), select the signal format for the monitor output.
FRONT MIC LEVEL – C U F –	–40dB –50dB	Select the front microphone input level.
REAR MIC CH1 LVL – C U F –	–50dB –60dB	Select the rear microphone input level.
REAR MIC CH2 LVL – C U F –	–50dB –60dB	Select the rear microphone input level.
REAR LINE IN LVL – C U F –	–3dB 0dB +4dB	Select the rear line input level.
AUDIO OUT LVL – C U F –	–3dB 0dB +4dB	Select the audio output level.
HEADROOM – C U F –	18dB 20dB	Set the headroom (standard level).
WIRELESS WARN – C U F –	ON OFF	Select whether or not to enable the alarm to trigger for poor wireless receiver reception.
WIRELESS TYPE – C U F –	SINGLE DUAL	Select the type of wireless receiver. **SINGLE:** Select a single channel wireless receiver. **DUAL:** Select a 2-channel wireless receiver.

TC/UB

Items/ Data Saved	Adjustable Range	Remarks
TC MODE – C U F –	DF NDF	Set the time code mode. **DF:** Drop frame. **NDF:** Non drop frame. ◆**Note** When the unit operates at 50 Hz or in 24P or 24PA mode, the non-drop frame is always used.
UB MODE – C U F –	USER TIME DATE EXT TCG FRM RATE REGEN	Select the user bits mode. **USER:** Select UB value set in the LCD section. **TIME:** Select local time (hours, minutes, seconds). **DATE:** Select local date and time (2 last digits of year, month, date, time). **EXT:** The user bits input to the TC IN connector are recorded. If reading fails, USER value is retained. **TCG:** TCG value enters UB. **FRM RATE:** Select the shooting information (e.g. frame rate) for the camera. For more information, see [Frame rate information recorded in user bits] (page 63). When clips recorded in native mode are played back, the frame rate information recorded in users bits in the VAUX area is output. **REGEN:** Read out value stored in the card and record value continuously. ◆**Note** When the unit is in 720P mode, “FRM RATE” is always selected.

Items/ Data Saved	Adjustable Range	Remarks
VITC UB MODE – C U F –	USER/EXT TIME DATE TCG FRM RATE REGEN	Select the user bits mode for VAUX TC (VITC). **USER/EXT:** If UB MODE is set to “EXT”, the EXT value is recorded. If not, USER value set by UB is recorded. **TIME:** Select local time (hours, minutes, seconds). **DATE:** Select local date and time (2 last digits of year, month, date, time). **TCG:** TCG value enters UB. **FRM RATE:** Select camera shooting information (frame rate, etc.). For more information, see [Frame rate information recorded in user bits] (page 63). **REGEN:** Read out value stored in card and record value continuously. ◆**Note** When the unit operates in 24P, 24PA, 720P, and Native mode, the “FRM RATE” is fixed.
TCG SET HOLD – C U F –	ON OFF	On/off switching for the feature that always starts recording (when the power is turned on again) the TCG value that was set before the power is turned off.
FIRST REC TC – C U F –	PRESET REGEN	For selecting whether the time code is regenerated to the value on the P2 card when first recording after switching on the power, inserting the P2 card or changing the P2 card that is the recording target. **PRESET:** Use the unit’s internal time code. **REGEN:** For clips recorded on the recording-target P2 card, regenerate the time code as the time code of the clip that has the most recent date and time. ◆**Notes** • Set the date and time accurately. For guidance on setting, see [Setting the Internal Clock’s Date and Time] (page 65). • During operation in either 24P or 24PA mode, regeneration of the value of the card recorded in drop-frame is not permitted.
P.OFF LCD DISPLAY – C U F –	ON OFF	For selecting whether to allow the time code of the LCD monitor to be set and the counter to be displayed when the power is off. **ON:** It is possible to set the time code and display the counter when the power is off. **OFF:** Power-down LCD monitor while camera power is turned off. Setting and indication disabled.
TC OUT – C U F –	TCG TCG/TCR	Select the time code to be output to the time code output connector. **TCG:** Always output time code generator value. **TCG/TCR:** Output time code generator value in recording mode, and time code reader value in playback mode.
TC DISP SEL – C U F –	24F 30F	Select the display format for the time code frame digits. (For 1080-59.94i or 720-59.94P only) For details, refer to [Recording time code and user bits] (page 61). **24F:** Convert time code frame digits into 24 frames for display. **30F:** Display time code frame digits in 30 frames.
TC VIDEO SYNCHRO – C U F –	0 1 2 3	For setting to correct the time code according to the delay of video signals. **0:** Do not correct. **1:** To delay the time code to be input according to the timing of the video images. **2:** To forward the time code to be output according to the timing of the video images. **3:** To delay the time code to be input and forward the time code to be output, respectively, according to the timing of the video images. For details, refer to [Externally Locking the Time Code] (page 67).
REC REVIEW REGEN – C U F –	ON OFF	For selecting whether the time code is regenerated to the value on the P2 card or not, when subsequent recording starts after setting the RET SW item on the <SW MODE> screen to “R.REVIEW” and pressing the RET button on the lens or the user button on the unit on which the RET SW function is assigned. **ON:** The time code is regenerated. **OFF:** The time code is not regenerated.

UMID SET/INFO

Items/ Data Saved	Adjustable Range	Remarks
COUNTRY – C U F –	NO-INFO	Input the user’s country. “NO-INFO” is displayed until the input completes.
ORGANIZATION – C U F –	NO-INFO	Input the user’s organization or company name. “NO-INFO” is displayed until the input completes.
USER – C U F –	NO-INFO	Input the user name. “NO-INFO” is displayed until the input completes.
DEVICE NODE – – – – –		Indicate the product ID number.

◆**Note**

Please refer to [Setting UMID Information] (page 72) for the UMID information setting.

FILE

The ____ in the Adjustable Range column indicates the preset mode.

SD CARD READ/WRITE

Items/ Data Saved	Adjustable Range	Remarks
R.SELECT – – – F –	1 : 8	Select the file number to read out.
READ – – – – –		Read out the data from the SD memory card.
W.SELECT – – – F –	1 : 8	Select the file number to write in.
WRITE – – – – –		Write the unit's menu data to the SD memory card.
CARD CONFIG – – – – –		Format the SD memory card.
TITLE READ – – – – –		Read out the title of the data recorded on the SD memory card.
TITLE1 - 8 – – – – –	********	Up to 8 letters can be set for the title name.

◆Note

For a USB DEVICE mode, errors occur even if the respective items for SD CARD READ/WRITE are executed, since it does not access an SD memory card. Set PC MODE to "OFF" and then execute the operation again.

SD CARD R/W SELECT

Items/ Data Saved	Adjustable Range	Remarks
SYSTEM MODE R/W – – – F –	ON OFF	Select whether or not to include the settings for the options on the <SYSTEM MODE> screen when reading out or writing to the SD memory card.
ID READ/WRITE – – – F –	ON OFF	Select whether or not to include the CAMERA ID when reading out or writing to the SD memory card.
USER MENU SELECT R/W – – – F –	ON OFF	Select whether or not to include the settings on the USER MENU SELECT page when reading out or writing to the SD memory card.
SYSTEM MENU R/W – – – F –	ON OFF	Select whether or not to include the set values on all screens except the <SYSTEM MODE> screen on the SYSTEM SETTING page and the set values on the OPTION MENU page when reading out or writing to the SD memory card.
PAINT MENU LEVEL R/W – – – F –	ON OFF	Select whether or not to include the adjusted values on the PAINT page when reading out or writing to the SD memory card.
PAINT MENU SW(■) R/W – – – F –	ON OFF	Select whether or not to include the set values on the PAINT MENU page when reading out or writing to the SD memory card.
VF MENU R/W – – – F –	ON OFF	Select whether or not to include the set values on the VF page when reading out or writing to the SD memory card.
CAM OPE MENU R/W – – – F –	ON OFF	Select whether or not to include the set values on the CAM OPERATION page when reading out or writing to the SD memory card.
MAIN OPE MENU R/W – – – F –	ON OFF	Select whether or not to include the set values on the MAIN OPERATION page when reading out or writing to the SD memory card.
MAINTE MENU R/W – – – F –	ON OFF	Select whether or not to include the set values on the MAINTENANCE page when reading out or writing to the SD memory card.

CAC FILE CARD READ

Items/ Data Saved	Adjustable Range	Remarks
CARD FILE SELECT – – – F –	01 : 32	For selecting the number of the chromatic aberration correction file on the SD memory card that will be read or deleted.
READ – – – – –		For reading CAC file from the SD memory card. When selected, the following FILE READ screen appears.
DELETE – – – – –		For deleting a CAC file from the SD memory card.
TITLE READ – – – – –		For reading the name of a CAC file on the SD memory card.
TITLE SCROLL – – – – –	01 : 25	For scrolling through the CAC files on the SD memory card. Select this option using the cursor. Press the jog dial button, and then turn the jog dial button to scroll through the CAC files.
01: - 32: – – – – –		For displaying up to 32 file names, each up to 27 characters in length.

FILE READ screen

Items/ Data Saved	Adjustable Range	Remarks
TITLE		For displaying the name of a CAC file set using READ from the <CAC FILE CARD READ> screen.
YES		For storing a CAC file read from the SD memory card to the internal memory of the unit.
NO (CANCEL)		For canceling storage of a CAC file read from the SD memory card to the internal memory of the unit.
MEM STORE NO.	EMPTY 01 : 32	**EMPTY:** For searching through the internal memory of the unit in numerical order when storing data and only stores data in free locations. **01 - 32:** For storing data at selected number. When a CAC file already exists at the selected number, it is overwritten.
TITLE SCROLL	01 : 25	For scrolling through the CAC files in the internal memory of the unit. Select this option using the cursor. Press the jog dial button, and then turn the jog dial button to scroll through the CAC files.
01 - 32		For displaying up to 32 file names, each up to 27 characters in length.

LENS FILE

Items/ Data Saved	Adjustable Range	Remarks
FILE NO. – – – F –	01 : 64	Select the lens file number.
READ – – – – –		Read the lens file data.
WRITE – – – – –		Write the lens file data.
RESET ALL – – – – –		For resetting the all data of the lens file.
TITLE SCROLL – – – – –	01 : 59	Scrolls through the lens files.
TITLE – – – – –	****** ******	Up to 12 letters can be set for the title name.
01 - 64 – – – – –		For displaying up to 64 file names.

LENS FILE CARD R/W

Items/ Data Saved	Adjustable Range	Remarks
CARD FILE SELECT – – – F –	1(01-08) 2(09-16) 3(17-24) 4(25-32) 5(33-40) 6(41-48) 7(49-56) 8(57-64)	For selecting the number of the lens file in the SD memory card.
READ – – – – –		For reading the lens file data from the SD memory card.
WRITE – – – – –		For writing the lens file data into the SD memory card.
TITLE READ – – – – –		For reading the title of the lens file in the SD memory card.
TITLE1 - 8 – – – – –	****** ******	For setting a title consisting of not more than 12 characters.

◆Note

For a USB DEVICE mode, errors occur even if the respective items of LENS FILE CARD R/W are executed, since it does not access an SD memory card. Set PC MODE to “OFF” and then execute the operation again.

SCENE

Items/ Data Saved	Adjustable Range	Remarks
READ USER DATA – – – – –		Read out the data from the user area in the memory.
SCENE SEL – – – F –	01 : 16	Select the scene file.
READ – – – – –		Read the scene file.
WRITE – – – – –		Write the scene file.
RESET – – – – –		Reset the scene file values to the initial values.
TITLE SCROLL – – – – –	01 : 12	Scrolls through the scene files.
TITLE 1-5 – – – – –		Create the scene file title.
01: - 16: – – – – –		For displaying up to 16 file names.

◆Note

For a USB DEVICE mode, errors occur even if the READ USER DATA item is executed, since it does not access an SD memory card. Set PC MODE to “OFF” and then execute the operation again.

INITIALIZE

Items/ Data Saved	Adjustable Range	Remarks
READ FACTORY DATA – – – – –		The menu (MAIN MENU, OPTION MENU) values are all reset to factory settings. **◆Note** The settings for the following are not reset to the factory-set values. • Scene file • User data • Lens file • Black shading data
WRITE USER DATA – – – – –		Save the user preference menu data in the camera’s internal memory.

◆Note

For a USB DEVICE mode, errors occur even if the READ FACTORY DATA item is executed, since it does not access an SD memory card. Set PC MODE to “OFF” and then execute the operation again.

MAINTENANCE

The ____ in the Adjustable Range column indicates the preset mode.

LENS ADJ

Items/ Data Saved	Adjustable Range	Remarks
F2.8 ADJ – – – – –	ON OFF	The iris is only set to F2.8 when this item set to “ON”. (Adjustment to F2.8 will be executed on the lens)
F16 ADJ – – – – –	ON OFF	The iris is only set to F16 when this item set to “ON”. (Adjustment to F16 will be executed on the lens)

BLACK SHADING

Items/ Data Saved	Adjustable Range	Remarks
CORRECT – C U F R	ON OFF	On/off switching for digital black shading compensation.
DETECTION (DIG) – – – – –	–	Execute digital black shading compensation.

WHITE SHADING

Items/ Data Saved	Adjustable Range	Remarks
CORRECT – C U F R	ON OFF	On/off switching for white shading compensation.
R H SAW R H PARA R V SAW R V PARA G H SAW G H PARA G V SAW G V PARA B H SAW B H PARA B V SAW B V PARA – – – F –	–255 : +000 : +255	For executing the white shading compensation manually. The sawteeth-shaped waveform and the parabola waveform of the respective RGB channels are adjusted in the horizontal direction and the vertical direction.

LENS FILE ADJ

Items/ Data Saved	Adjustable Range	Remarks
RB GAIN CTRL RESET – – – F –	ON OFF	**ON:** The gains of Rch and Bch adjusted in <RB GAIN CONTROL> screen are reset. Furthermore, the flare levels of Rch, Gch and Bch that are adjusted on <RGB BLACK CONTROL> screen are reset. **OFF:** The gains of Rch and Bch adjusted in <RB GAIN CONTROL> screen are enabled. Furthermore, the flare levels of Rch, Gch and Bch that are adjusted on <RGB BLACK CONTROL> screen are enabled.
LENS R GAIN OFFSET – – – F –	–200 : +000 : +200	For compensating Rch sensitivity of the lens used.
LENS B GAIN OFFSET – – – F –	–200 : +000 : +200	For compensating Bch sensitivity of the lens used.
LENS R FLARE – – – F –	000 : 100	For adjusting the flare level of Rch.
LENS G FLARE – – – F –	000 : 100	For adjusting the flare level of Gch.
LENS B FLARE – – – F –	000 : 100	For adjusting the flare level of Bch.

- Data adjusted on the <LENS FILE ADJ> screen can be stored on an SD memory card as a lens file.

CAC ADJ

Items/ Data Saved	Adjustable Range	Remarks
CAC CONTROL – – U F R	ON OFF	**ON:** Enable chromatic aberration correction **OFF:** Disable chromatic aberration correction
CAC FILE DELETE – – – – –	–	Deletes the CAC file stored in the internal memory of the unit, and selected using CAC FILE NO.
CAC FILE NO. – – – F –	01 : 32	Selects a CAC file when manual correction is in use. Also, selects CAC file for deletion when deleting CAC files using CAC FILE DELETE.
TITLE SCROLL – – – F –	01 : 25	Scrolls through CAC files. Select this option using the cursor. Press the jog dial button, and then turn the jog dial button to scroll through the CAC files.
01: – – – – –		For displaying up to 32 file names, each up to 27 characters in length.
02: – – – – –		For displaying up to 32 file names, each up to 27 characters in length.
03: – – – – –		For displaying up to 32 file names, each up to 27 characters in length.
04: – – – – –		For displaying up to 32 file names, each up to 27 characters in length.
05: – – – – –		For displaying up to 32 file names, each up to 27 characters in length.
06: – – – – –		For displaying up to 32 file names, each up to 27 characters in length.
07: – – – – –		For displaying up to 32 file names, each up to 27 characters in length.
08: – – – – –		For displaying up to 32 file names, each up to 27 characters in length.

DIAGNOSTIC1

Items/ Data Saved	Adjustable Range	Remarks
CAMSOFT MAIN – – – – –		Displays the version of the main software for the camera microprocessor.
CAM TABLE – – – – –		Displays the version of the camera block settings table.
PULSE FPGA – – – – –		Displays the version of the program for driving the CCD.
UCIF FPGA – – – – –		Displays the version of the program for the microprocessor interface FPGA.
FM FPGA – – – – –		Displays the version of the program for the frame memory control FPGA.
CHAR FPGA – – – – –		Displays the version of the program for the HD signal I/O control FPGA.
DC FPGA – – – – –		Displays the version of the program for the SD signal I/O control FPGA.

DIAGNOSTIC2

Items/ Data Saved	Adjustable Range	Remarks
SYSCON SOFT – – – – –		Display the software version for the system control microprocessor.
LCD SOFT – – – – –		Display the software version for the LCD microprocessor.
P2CS OS – – – – –		Display the OS version for the streaming controller.
P2CS AP – – – – –		Display the application version for the streaming controller.
SH4CTRL FPGA – – – – –		Display the program version for the streaming control FPGA.
PRCCTRL FPGA – – – – –		Displays the version of the program for the PRE RECORDING control FPGA.
SYSIF FPGA – – – – –		Display the program version for the serial interface FPGA.
AVC-I SOFT – – – – –		Display the control software version of the AVC-I board.
AVC-I FPGA – – – – –		Display the FPGA program version of the AVC-I board.

HOURS METER

Items/ Data Saved	Adjustable Range	Remarks
OPERATION – – – – –		Display total hours the camera power has been turned on.
P.ON TIMES – – – – –		Display total number of times the POWER switch has been turned on.

OPTION MENU

The ____ in the Adjustable Range column indicates the preset mode.

OPTION

Items/ Data Saved	Adjustable Range	Remarks
ENG SECURITY – – – – –	ON OFF	Select whether or not to prohibit opening the menu screen. **ON:** Menu screen cannot be opened. Please consult your distributor to release the setting. **OFF:** Menu screen can be opened.
FRAME RATE UB – C – – –	FRM RATE MENU	For setting the user bits to record when the video system is set to 24P or 24PA, or when the recording format is set to 720P. For details, refer to [Recording time code and user bits] (page 61). **FRM RATE:** For recording the shooting information (frame rate etc.) of the camera. **MENU:** This follows the settings in the UB MODE item and the VITC UB MODE item of <TC/UB> screen. However, the camera shooting information is always recorded when recording in native mode.
1394 CONFIG – C – – –	DFLT(000) 001 : 255	This is the menu for expanding the DVCPRO connector. Use with “DFLT” in normal operation.
1394 GAP COUNT – C – – –	0 : 40 : 63	For setting the interval between packets.
AUDIO OUT DELAY – C – – –	DELAYED THROUGH	Select whether or not to delay audio, headphone and speaker outputs. **DELAYED:** Delay audio output in synchronization with video output. **THROUGH:** Output audio input without delay. This setting prevents echo effect between the sound source and audio output when the sound source is near the unit.
FAN MODE – – – – –	OFF AUTO	For setting the operation mode of the fan **OFF:** The fan always stops. **AUTO:** The fan will run automatically when the temperature in the unit increases. ◆**Note** Once the power is turned off, this will always be set to “AUTO” whenever the power is turned on. If the unit is operated as the fan stops, the temperature in the unit will increase, and data may not record or play back properly. Use the unit after setting this item to “AUTO” for normal operation.
RATE SET AT REC – C U F –	ON OFF	For setting if the frame rate can be changed or not during VFR recording. **ON:** Frame rate can be changed. **OFF:** Frame rate cannot be changed. ◆**Note** When set to “ON”, audio will not be recorded to the P2 card during VFR operation in Native recording mode, whatever the frame rate setting.

AREA SETTING

Items/ Data Saved	Adjustable Range	Remarks
AREA SELECT – – – – –	NTSC NTSC (J) PAL	**NTSC:** Selects an NTSC area outside Japan. **NTSC (J):** Selects Japan. **PAL:** Selects a PAL area.
■AREA SET – – – – –	–	For changing the area setting selected using AREA SELECT. For more details about settings used in different areas, refer to [Color TV Standard Settings (Settings for frame frequency)] (page 13).