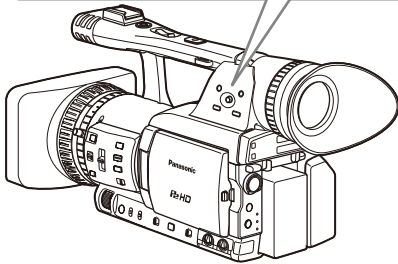
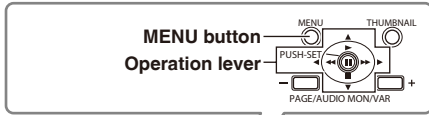


Panasonic Broadcast

AG-HPX170 Menu Information

Using the setup menus

Use the setup menus to change the settings to suit the scenes you are shooting or what you are recording.



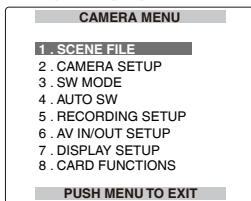
Using the menus

- If the thumbnail menu is displayed, press the THUMBNAIL button to release the display. (Page 66)
- The menu items indicated in the blue characters cannot be used.

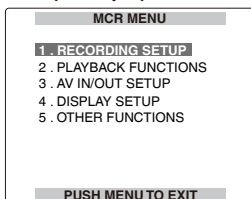
1 When the unit is in other than playback or recording mode, press the MENU button.

The following is displayed on the viewfinder and LCD screen.

CAM mode (Example)



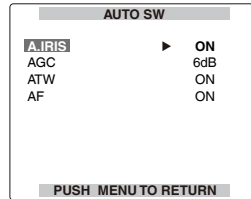
MCR mode (Example)



2 Push the Operation lever in the ▲ or ▼ direction to move the highlight to the setting you want.

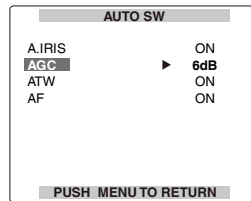
3 Press the Operation lever (or push it in the ► direction) to display the items.

Example:



4 Push the Operation lever in the ▲ or ▼ direction to move to the setting you want.

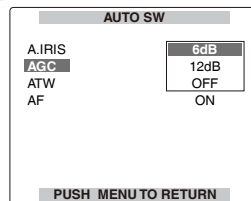
Example:



5 Press the Operation lever to confirm the setting.

To change a value, push the Operation lever in the ▲ or ▼ direction to change as necessary.

Example:



6 To change other settings, repeat steps 4 and 5.

When you finish, press the MENU button to return to the function screen.

7 To change other functions, repeat steps 2 to 5.

When you exit the menu mode, press the MENU button again to return to the normal screen.

Initializing the menu settings

The menu settings contain both the user file settings and the scene file settings. You can initialize them separately.

To initialize the user file (i.e. all the settings other than the scene file settings)

Select INITIAL in USER FILE of the OTHER FUNCTIONS screen. The current menu settings of user file will return to the factory settings.

To initialize the scene file

From the 6 scene files, select the one you want to initialize with the scene dial. Then in the SCENE FILE screen, LOAD/SAVE/INIT, select INITIAL. The settings for only the selected scene file are returned to the factory settings.

- This does not effect the other scene files.

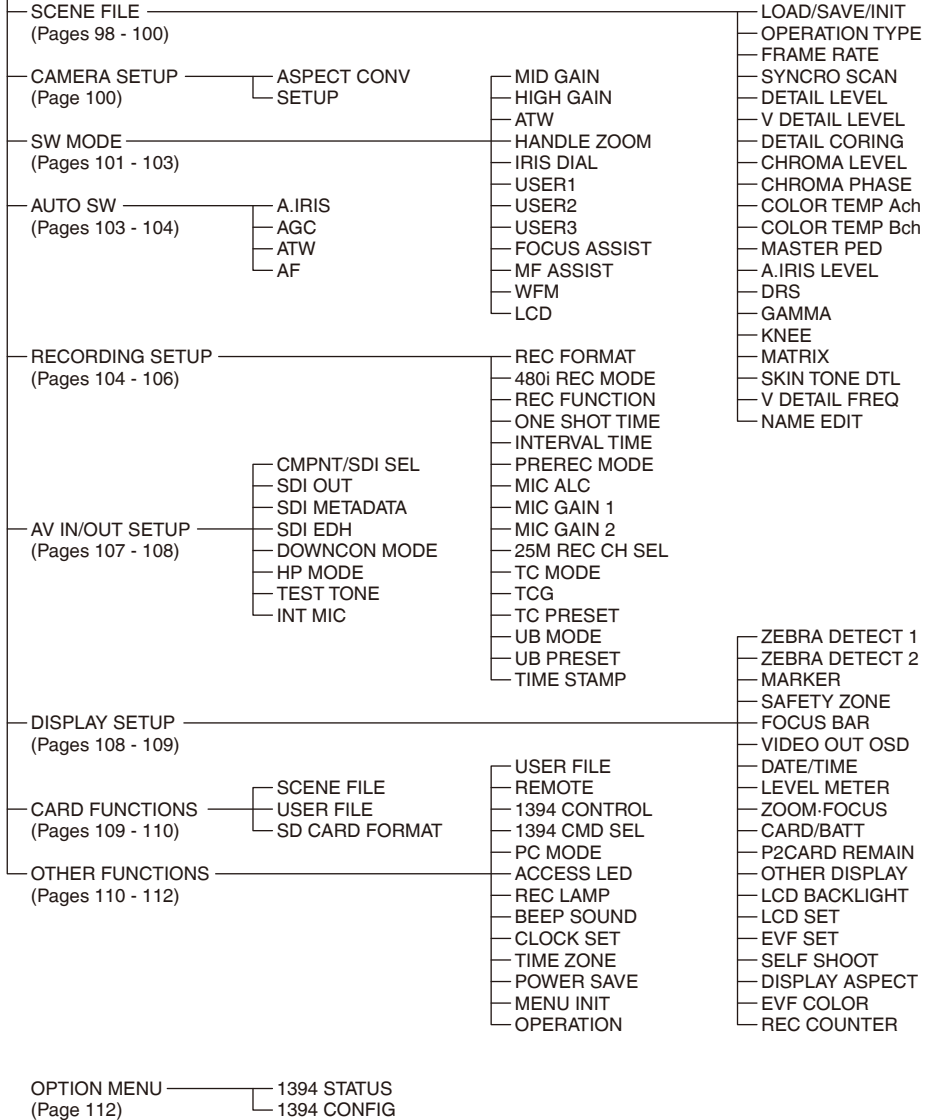
To simultaneously initialize the user file and the scene files

Select YES under MENU INIT on the OTHER FUNCTIONS screen. This returns the user file and the 6 scene files to their factory settings.

Setup menu structure

CAM (camera) mode menu

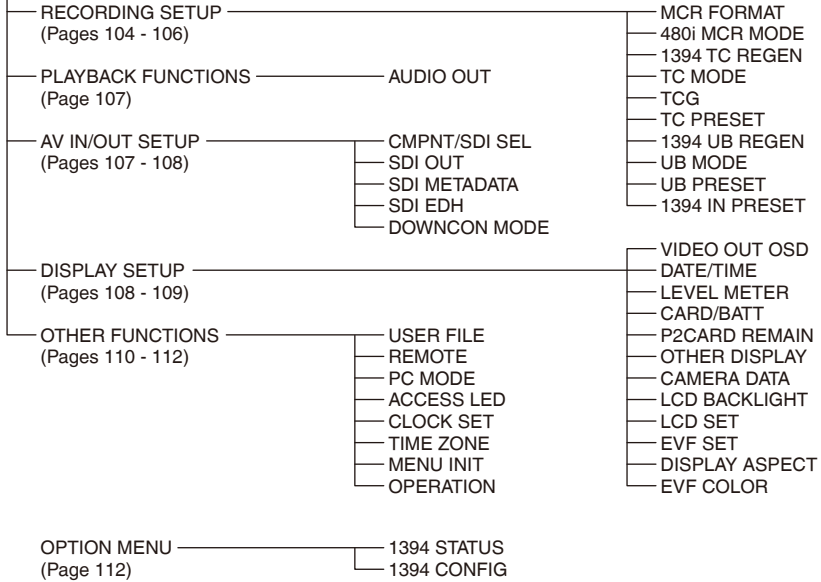
CAMERA MENU



Setup menu structure (continued)

MCR (playback) mode menu

MCR MENU



Setup menu list

SCENE FILE screen

Item	Display mode	Description of settings
LOAD/SAVE/INIT	(Camera)	<p>LOAD: Loads the scene file settings saved using SAVE.</p> <p>SAVE: Saves the changed scene file settings.</p> <p>INITIAL: The settings of the scene file selected with the scene file dial are returned to the factory settings.</p>
OPERATION TYPE	(Camera)	<p>Switches the shutter and frame rate operation to the video type or film type.</p> <p>VIDEO CAM: SYNCRO SCAN is displayed using 1/n units.</p> <p>FILM CAM: SYNCRO SCAN is displayed as an angle.</p>
FRAME RATE	(Camera)	<p>Selects the shooting interval and exposure time when 720P and FILM CAM is selected. The DEFAULT value is dependent on the frame rate of the recording format.</p> <p>DEFAULT, 12, 15, 18, 20, 21, 22, 24, 25, 26, 27, 28, 30, 32, 34, 36, 40, 44, 48, 54, 60 FRAME</p>
SYNCRO SCAN	(Camera)	<p>Adjusts the synchro scan shutter speed used for shooting images on a TV screen, etc.</p> <p>Pushing the Operation lever the ▲ or ▼ direction and holding it down will cause the values to change at a faster rate.</p> <p>When VIDEO CAM is selected as the OPERATION TYPE option setting:</p> <ul style="list-style-type: none"> • 60P/60i: 1/60.0...1/249.8 • 30P/30PN: 1/30.0...1/48.0...1/249.8 • 24P/24PA/24PN: 1/24.0...1/48.0...1/249.8 <p>When FILM CAM is selected as the OPERATION TYPE option setting: The shutter speed is displayed as an angle such as "180.0 d." 10.0 deg...180.0 deg...360.0 deg (the angle can be changed in increments of 0.5 degrees)</p>
DETAIL LEVEL	(Camera)	<p>Adjusts the level of the image outline correction (in the horizontal and vertical directions).</p> <p>-7...0...+7</p>
V DETAIL LEVEL	(Camera)	<p>Adjusts the level of outline correction in the vertical direction.</p> <p>-7...0...+7</p>
DETAIL CORING	(Camera)	<p>Adjusts the level of noise reduction of the detail signal.</p> <p>-7...0...+7</p> <p>Set to – for a clearer image. Noise increases slightly. Set to + to reduce noise.</p>
CHROMA LEVEL	(Camera)	<p>Adjusts the chroma level.</p> <p>-7...0...+7</p>
CHROMA PHASE	(Camera)	<p>Makes fine adjustments to the chroma phase.</p> <p>-7...0...+7</p>
COLOR TEMP Ach	(Camera)	<p>Makes fine adjustments to the color temperature (after white balance Ach adjustment).</p> <p>-7...0...+7</p>
COLOR TEMP Bch	(Camera)	<p>Makes fine adjustments to the color temperature (after white balance Bch adjustment).</p> <p>-7...0...+7</p>
MASTER PED	(Camera)	<p>Adjusts the master pedestal (black level of the image) as the basis for images.</p> <p>-100...0...+100</p>
A.IRIS LEVEL	(Camera)	<p>Sets the desired AUTO IRIS level.</p> <p>-10...0...+10</p>

SCENE FILE screen (continued)

Item	Display mode	Description of settings
DRS	(Camera)	<p>Selects the DRS (Dynamic Range Stretcher) function. This function compresses the video signal level to extend the dynamic range making it possible to correctly render highlight areas without overexposure and loss of detail that would otherwise occur.</p> <p>OFF, 1, 2, 3</p> <ul style="list-style-type: none"> • Larger values indicate a higher compression level of highlight areas. • Only effective in 60i and 60P VIDEO CAM. • In slow shutter mode, the options are shown in blue and you cannot make selection.
GAMMA	(Camera)	<p>Selects gamma curve.</p> <p>HD NORM: This gamma setting is suitable for HD shooting.</p> <p>LOW: LOW: Makes a mellow image using the gamma curve which has a gentle incline in low-brightness curve. The contrast sharpens.</p> <p>SD NORM: This is the normal video setting, carried over from the DVX100 series.</p> <p>HIGH: Expands the tone of dark parts and makes a brighter image using the gamma curve which has a sharp incline in low-brightness curve. The contrast softens.</p> <p>B.PRESS: Makes the contrast shaper than LOW.</p> <p>CINE-LIKE_D: Makes a cinema-like image.</p> <p>CINE-LIKE_V: Makes a cinema-like image with emphasized contrast. When you select CINE-LIKE gamma, we recommend to set the lens aperture lower than normal image level (approximately 1/2) to enjoy the full benefit of the function.</p>
KNEE	(Camera)	<p>To avoid overexposure, select the compression level (knee point) of the high intensity video signals received through CCD.</p> <p>AUTO: Sets the level automatically according to the received signals.</p> <p>LOW: Low setting (Compression starts at approx. 80%)</p> <p>MID: Medium setting (Compression starts at approx. 90%)</p> <p>HIGH: High Setting (Compression starts at approx. 100%).</p>
MATRIX	(Camera)	<p>Selects the MATRIX table suitable for the desired color expression during shooting.</p> <p>NORM1: Suitable for shooting in the open air or under a halogen lamp.</p> <p>NORM2: Suitable for brighter colors than the NORM1 mode.</p> <p>FLUO: Suitable for shooting under fluorescent light indoors.</p> <p>CINE-LIKE: Suitable for cinema-like image.</p>
SKIN TONE DTL	(Camera)	<p>Sets the skin tone details. Select ON to reduce the skin tone details and soften the skin tone.</p> <p>ON OFF</p>

Setup menu list (continued)

SCENE FILE screen (continued)

Item	Display mode	Description of settings
V DETAIL FREQ	(Camera)	<p>Sets the vertical detail for shooting in 480i progressive mode.</p> <p>THIN: Makes the detail thin.</p> <p>MID: Makes the detail slightly thicker.</p> <p>THICK: Makes the detail thicker.</p> <p>When images were shot in the progressive mode in which the vertical detail is set as "THIN" or "MID" and are played on a monitoring television (60i interlace), you will see flickers caused on horizontal lines and almost horizontal oblique lines. When playing back images in the progressive mode or when editing images or performing other postprocessing, images with a higher resolution will be obtained with the THIN or MID setting than with the THICK setting.</p>
NAME EDIT	(Camera)	Edits the name of the selected scene file you have selected with the scene file dial.

CAMERA SETUP screen

Item	Display mode	Description of settings
ASPECT CONV	(Camera)	<p>elects the aspect ratio of the image you record in 480i format. This item cannot be selected when the 1080i or 720P recording format is used. (Page 41)</p> <p>SIDE CROP: Crops the right and left edges of the image.</p> <p>LETTER BOX: Adds black bands at the top and bottom of the image.</p> <p>SQUEEZE: Squeezes the image horizontally.</p>
SETUP	(Camera)	<p>Switch the setup level of video signals in 480i format using a P2 card.</p> <p>0%: Setup is switched to 0% for both the camera output and the recording.</p> <p>7.5%A: Setup is switched to 7.5% for the camera output and 0% for the recording.</p>

SW MODE screen

Item	Display mode	Description of settings
MID GAIN	(Camera)	Sets the gain value assigned to the M position of the GAIN switch. 0dB, 3dB, 6dB, 9dB, 12dB
HIGH GAIN	(Camera)	Sets the gain value assigned to the H position of the GAIN switch. 0dB, 3dB, 6dB, 9dB, 12dB
ATW	(Camera)	Sets the operation of the ATW (Auto Tracking White Balance) function assigned to the WHITE BAL switch. When the ATW function is set to the AUTO/MANUAL switch or USER button, the operation remains effective. Ach: Activates the ATW function when the WHITE BAL switch is set to A. Bch: Activates the ATW function when the WHITE BAL switch is set to B. PRST: Activates the ATW function when the WHITE BAL switch is set to PRST. OFF: Deactivates the ATW function.
HANDLE ZOOM	(Camera)	Sets the zoom speed assigned to each setting position of the HANDLE ZOOM switch. L/OFF/H: Sets LOW (low speed)/OFF/HIGH (high speed) to the 1/2/3 position. (Zoom is disabled when set to OFF.) L/M/H: Sets LOW (low speed)/MID (medium speed)/HIGH (high speed) to the 1/2/3 position. L/OFF/M: Sets LOW (low speed)/OFF/MID (medium speed) to the 1/2/3 position. (Zoom is disabled when set to OFF.)
IRIS DIAL	(Camera)	Sets the rotation direction and the aperture control of the IRIS dial. (In MANUAL IRIS mode) DOWN OPEN: The iris opens when the IRIS dial is turned downward. UP OPEN: The iris opens when the IRIS dial is turned upward.

Setup menu list (continued)

SW MODE screen (continued)

Item	Display mode	Description of settings
USER1	(Camera)	<p>Selects the function assigned to the USER1 button.</p> <p>REC CHECK: Performs Rec Check.</p> <p>SPOTLIGHT: Auto iris control for the spotlight ON/OFF.</p> <p>BACKLIGHT: Auto iris control for the backlight compensation. (Page 42)</p> <p>BLACKFADE: Blackfade (Page 42)</p> <p>WHITEFADE: Whitefade (Page 42)</p> <p>ATW: ATW function ON/OFF.</p> <p>ATWLOCK: Fixes the white balance value when the button is pressed during ATW. Press again to perform ATW.</p> <p>GAIN: 18dB Press the button to set the gain value to 18 dB. This setting takes effect with the 60i and 60P recording formats only. It is not valid when the recording frame rate is less than 54 fps or when the slow shutter mode (1/15) is established.</p> <ul style="list-style-type: none"> • When the gain value is set to 18 dB or set from 18 dB to another value, the image can be disordered for a moment. • If the unit is being used in the MANUAL mode or AUTO mode, set the AGC item on the AUTO SW screen of the setting menu to OFF to use this function. <p>D.ZOOM: Changes the ratio of the DIGITAL ZOOM function. Each press of the button changes the ratio in the following order: OFF (x1) → x2 → x5 → x10 → OFF (x1). (Page 30)</p> <p>TEXT MEMO: Records text memos (with P2 cards) (Page 44)</p> <p>SHOT MARK: Shot mark recording (Page 44)</p> <p>LVL METER: Switches the display channels of the audio level meter. (When Ch1/Ch2 and Ch3/Ch4 are displayed)</p> <p>LAST CLIP: Deletes the last recorded clip. (Page 45)</p> <p>PRE REC: Turns the PRE REC function ON or OFF.</p> <p>F.RATE+: Changes the frame rate.</p> <p>F.RATE-: Changes the frame rate.</p>
USER2	(Camera)	<p>Selects the function assigned to the USER2 button. The settings are the same as USER1 above.</p> <p>BACKLIGHT</p>
USER3	(Camera)	<p>Selects the function assigned to the USER3 button. The settings are the same as USER1 above.</p> <p>TEXT MEMO</p>

SW MODE screen (continued)

Item	Display mode	Description of settings
FOCUS ASSIST	(Camera)	<p>Allocates a function to the FOCUS ASSIST button.</p> <p>EXPANDED: Magnifies the center portion of the image.</p> <p>GRAPH: Displays a frequency distribution graph at the top right in the viewfinder and LCD monitor.</p> <p>BOTH: Magnifies the center portion of the image and displays a histogram.</p>
MF ASSIST	(Camera)	<p>Automatically sets the last focus during manual focusing.</p> <p>ON: Automatically sets the last focus.</p> <ul style="list-style-type: none"> • The focus may not be set correctly if the last focus differs considerably from the manually set focus. • You cannot operate using the remote control connected to the CAM REMOTE jack. <p>OFF: The focus is not adjusted automatically.</p>
WFM	(Camera)	<p>Switches the waveform display that appears when the WFM button is pressed.</p> <p>WAVE: Displays a waveform.</p> <p>VECTOR: Opens a vector display.</p> <p>WAVE/VECT: Each press of the button, switches the settings in the following order: OFF → WAVE (waveform) → VECTOR (vector) → OFF.</p>
LCD	(Camera)	<p>Allocates a function to the LCD button.</p> <p>LCD REV: Flips the LCD image vertically and horizontally.</p> <p>OVERSCAN: Switches between overscan and underscan of the LCD/viewfinder image. This button toggles between the overscan and underscan image at each press.</p> <p>LCD BL: Switches the brightness of the LCD backlight.</p> <ul style="list-style-type: none"> • The brightness of the backlight set using LCD BL is retained when functions assigned using the LCD button change.

AUTO SW screen

Item	Display mode	Description of settings
A.IRIS	(Camera)	<p>ON: Performs the auto iris control in auto mode. The IRIS button is deactivated.</p> <p>OFF: Deactivates the auto iris control in auto mode. This performs the iris control selected with the IRIS button.</p>

Setup menu list (continued)

AUTO SW screen (continued)

Item	Display mode	Description of settings
AGC	(Camera)	Sets the Auto Gain Control when the ON is selected in A.IRIS. 6dB: Performs the Auto Gain Control (max. 6 dB) in auto mode. 12dB: Performs the Auto Gain Control (max. 12 dB) in auto mode. OFF: Does not perform the Auto Gain Control in auto mode. Initiates the control of the gain selected by the GAIN switch.
ATW	(Camera)	ON: Performs the ATW (Auto Tracing White Balance) function in auto mode. You cannot select ON/OFF of the ATW function with the WHITE BAL switch or the USER button when this is selected. However, if ATWLOCK is assigned to the USER button, you can set the white balance value with the USER button. OFF: Does not perform the white balance function in auto mode. This performs the white balance function selected with the WHITE BAL switch.
AF	(Camera)	ON: Performs auto focusing in auto mode. You cannot use the FOCUS switch and PUSH AUTO button when this is selected. OFF: Does not perform auto focusing in auto mode. This performs the focusing selected with the FOCUS switch or PUSH AUTO button.

RECORDING SETUP screen

Item	Display mode	Description of settings
REC FORMAT	(Camera)	Selects the recording format. 1080i/60i, 1080i/30P, 1080i/24P, 1080i/24PA, 720P/60P, 720P/30P, 720P/24P, 720P/30PN, 720P/24PN, 480i/60i, 480i/30P, 480i/24P, 480i/24PA
MCR FORMAT	(MCR)	Selects playback or a 1394 input format. 1080i/60i, 720P/60P, 720P/30PN, 720P/24PN, 480i/60i
480i REC MODE	(Camera)	Select the recording mode for a 480i recording format. DVCPRO50, DVCPRO, DV
480i MCR MODE	(MCR)	Selects format for playback or 1394 input in the 480i recording format. DVCPRO50, DVCPRO, DV
REC FUNCTION	(Camera)	Selects the special recording mode. (Pages 46 - 48) NORMAL, INTERVAL, ONE SHOT, LOOP
ONE-SHOT TIME	(Camera)	Selects the one-shot recording time. (Page 47) 1F, 2F, 4F, 8F, 16F, 1s
INTERVAL TIME	(Camera)	Selects the interval time for interval recording. (Page 46) 2F, 4F, 8F, 16F, 1s, 2s, 5s, 10s, 30s, 1m, 5m, 10m
PREREC MODE	(Camera)	Sets PRE RECORDING to ON or OFF. (Page 46) ON, OFF
MIC ALC	(Camera)	Sets mic level auto control to ON or OFF. (Page 52) ON, OFF Set to ON to reduce distortion at high input levels. This setting does not change the audio signal recording level. Use the AUDIO control knob to adjust the audio signal recording level.
MIC GAIN 1	(Camera)	Sets the input level of the external microphone connected to the INPUT 1 terminal. (Page 51) -50dB, -60dB

RECORDING SETUP screen (continued)

Item	Display mode	Description of settings
MIC GAIN 2	(Camera)	<p>Sets the input level of the external microphone connected to the INPUT 2 terminal. (Page 51)</p> <p>-50dB, -60dB</p>
25M REC CH SEL	(Camera)	<p>Selects the recording audio channel for DVCPRO and DV formats. (Page 51)</p> <p>2CH, 4CH</p> <p><Notes></p> <ul style="list-style-type: none"> • Even when 4CH is selected as this item's setting, the signals will be input to two channels (always CH1 and CH2) when there are two 1394 input channels. • Similarly, even when 4CH is selected, the 1394 output signals will be delivered to two channels (always CH1 and CH2).
1394 TC REGEN	(MCR)	<p>Selects the time code used for recording the signal from equipment connected to the 1394 terminal.</p> <p>ON: Records using the time code of the signal input through the 1394 terminal.</p> <p>OFF: Records using the time code set in TC MODE/TCG.</p> <ul style="list-style-type: none"> • If you select ON here, this has priority over the settings in TC MODE/TCG. • If there is no input to the 1394 terminal, the camera follows the settings in TC MODE/TCG.
TC MODE	(Camera) (MCR)	<p>Selects the correction mode of the internal time code generator.</p> <p>DF: Uses the drop frame mode.</p> <p>NDF: Uses the non-drop frame mode.</p> <ul style="list-style-type: none"> • The non-drop frame mode will be used when you set recording frame rate of recording format to 24P, 24PA or 24PN.
TCG	(Camera) (MCR)	<p>Sets the mode in which you advance the time code.</p> <p>FREE RUN: The time code is advanced regardless of the operation mode.</p> <ul style="list-style-type: none"> • When setting a frame rate other than 24P during operation with the 720P/24PN format, the FREE RUN operation for the time code will not be performed, and the REC RUN operation will be performed instead. It is the same when setting a frame rate other than 30P during operation with the 720P/30PN format. <p>REC RUN: The time code is advanced only when recording.</p>
TC PRESET	(Camera) (MCR)	<p>Sets the initial time code.</p> <ul style="list-style-type: none"> • Set the frame value to 0 or a multiple of 5 when you set recording frame rate of recording format to 24P, 24PA or 24PN. If any other value, the recorded time code will mis-match.
1394 UB REGEN	(MCR)	<p>Selects the user information used when recording the signals from equipment connected to the 1394 terminal.</p> <p>ON: Records using the user information of the signal input through the 1394 terminal.</p> <p>OFF: Records using the user information set in UB MODE.</p> <ul style="list-style-type: none"> • If you select ON here, this has priority over the setting in UB MODE. • The user information is recorded only when the signal contains the user information. • If there is no input to the 1394 terminal, the camera follows the UB MODE settings.

Setup menu list (continued)

RECORDING SETUP screen (continued)

Item	Display mode	Description of settings
UB MODE	(Camera) (MCR)	<p>Set the content for user information.</p> <p>USER: Records the information of user.</p> <p>TIME: Records the time at recording.</p> <p>DATE: Records the date at recording.</p> <p>TCG: Records the values of the time code generator.</p> <p>FRM. RATE: Records the frame rate information for frame conversion.</p> <p style="text-align: center;"> * * 0 * * * * * a b c d </p> <p>a: Checking information for user information</p> <p>b: Frame sequence No.</p> <ul style="list-style-type: none"> • 0 to 4 are displayed in the 24P/24P (ADV) mode. • F is displayed in the 60i/30P mode. <p>c: Frame rates</p> <ul style="list-style-type: none"> • Frame rate (60/30/24) • I/P ID • Conversion data • Frame rate coefficient <p>d: Recording management data</p> <ul style="list-style-type: none"> • Frame update information • REC START/STOP information <p><Note></p> <p>To play back a clip recorded with native recording To change 1394 output user information to frame rate information, change this setting to FRM.RATE and play back the clip. The user information displayed on the screen at this time is changed to frame rate information.</p>
UB PRESET	(Camera) (MCR)	Sets the user information. Select USER in UB MODE.
1394 IN PRESET	(MCR)	<p>Synchronizes the internal TCG value with the TC of 1394 input when you press the TC SET button.</p> <p>ON: The synchronization mode is on.</p> <p>OFF: The synchronization mode is off.</p>
TIME STAMP	(Camera)	<p>Determines whether or not date and time information will be superimposed on the image.</p> <p>ON: Superimposes date and time information on the image.</p> <p>OFF: Does not superimpose date and time information on the image.</p> <p><Note> When DATE/TIME on the DISPLAY SETUP screen is set to OFF, the date and time information is not superimposed.</p>

PLAYBACK FUNCTIONS screen

Item	Display mode	Description of settings
AUDIO OUT	(MCR)	<p>Sets the audio signals to output from the AUDIO OUT pin jack when the P2 card or the tape is played back.</p> <p>CH1 - CH2: CH1 output = CH1 signals, CH2 output = CH2 signals</p> <p>CH1: CH1 output = CH1 signals, CH2 output = CH1 signals</p> <p>CH2: CH1 output = CH2 signals, CH2 output = CH2 signals</p> <p>CH3 - CH4: CH1 output = CH3 signals, CH2 output = CH4 signals</p> <p>CH3: CH1 output = CH3 signals, CH2 output = CH3 signals</p> <p>CH4: CH1 output = CH4 signals, CH2 output = CH4 signals</p>

AV IN/OUT SETUP screen

Item	Display mode	Description of settings
CMPNT/SDI SEL	(Camera) (MCR)	<p>Selects the type of component terminal or SDI connector.</p> <p>AUTO: Monitor with D4 terminal (720P/1080i/480i output)</p> <p>1080i: Monitor with D3 terminal (1080i/480i output)</p> <p>480i: Monitor with D1 terminal (480i output)</p> <p>Only video recorded at 720P is cross-converted to 1080i. Cross-conversion does not take place in other cases.</p>
SDI OUT	(Camera) (MCR)	<p>Selects video output from component terminal or SDI OUT terminal.</p> <p>ON: Video is not output via the component terminal but from the SDI connector.</p> <p>OFF: Video is output via the component terminal but not from the SDI connector.</p>
SDI METADATA	(Camera) (MCR)	<p>Determines whether or not metadata is superimposed on SDI signals during HD-SDI output.</p> <p>ON: Superimposes metadata.</p> <p>OFF: Does not superimpose metadata.</p>
SDI EDH	(Camera) (MCR)	<p>Determines whether or not EDH is superimposed on SD-SDI signals during SD-SDI output.</p> <p>ON: Superimposes EDH.</p> <p>OFF: Does not superimpose EDH.</p>
DOWNCON MODE	(Camera) (MCR)	<p>Switches down-conversion output mode.</p> <p>SIDE CROP: Crops the right and left edges of the images with the 4:3 aspect ratio.</p> <p>LETTER BOX: Adds black bands at the top and bottom of the images, and the images with the 16:9 aspect ratio are displayed in the 4:3 aspect ratio.</p> <p>SQUEEZE: Select this option for 16:9 aspect ratio images. When viewed on a 4:3 aspect ratio monitor, images are squeezed horizontally.</p>
HP MODE	(Camera)	<p>Selects the sound heard through the headphones.</p> <p>LIVE: The sound which has been input from the microphone is output as is. This setting is selected when delays in the sound are annoying.</p> <p>RECORDING: The sound in the status which is to be recorded (the sound synchronized with the images) is output.</p>
TEST TONE	(Camera)	<p>Determines whether or not a test tone is output to channels 1, 2, 3 and 4 when BARS is set to ON.</p> <p>ON: Outputs a test tone to channels 1, 2, 3 and 4.</p> <ul style="list-style-type: none"> The reference level is -12 dB. <p>OFF: Does not output a test tone.</p>

Setup menu list (continued)

AV IN/OUT SETUP screen (continued)

Item	Display mode	Description of settings
INT MIC	(Camera)	Determines whether or not input from the internal microphone is used during recording. ON: Uses internal microphone input. OFF: Does not use internal microphone input.

DISPLAY SETUP screen

Item	Display mode	Description of settings
ZEBRA DETECT 1	(Camera)	Selects the brightness level of the left-leaning zebra patterns on the screen. 50%, 55%, 60%, 65%, 70%, 75%, 80%, 85%, 90%, 95%, 100%, 105%
ZEBRA DETECT 2	(Camera)	Selects the brightness level of the right-leaning zebra patterns on the screen. 50%, 55%, 60%, 65%, 70%, 75%, 80%, 85%, 90%, 95%, 100%, 105%, OFF <Note> The zebra patterns do not appear if you select OFF.
MARKER	(Camera)	Select ON to display the marker. (Page 40) ON, OFF To display the marker, press the ZEBRA button.
SAFETY ZONE	(Camera)	Sets SAFETY ZONE to ON or OFF. OFF, 90%, 4:3, 13:9, 14:9
FOCUS BAR	(Camera)	Turns the FOCUS ASSIST bar display ON or OFF. ON, OFF When set to ON, the FOCUS ASSIST bar can be displayed.
VIDEO OUT OSD	(Camera) (MCR)	Select ON to output the information displayed on the screen together with the signals from the VIDEO IN/OUT jack. ON, OFF
DATE/TIME	(Camera) (MCR)	Sets whether to display the date and time on the screen and whether to output from the VIDEO IN/OUT jack. OFF: The date and time are not displayed. TIME: The time is displayed. DATE: The date is displayed. TIME&DATE: The time and date are displayed.
LEVEL METER	(Camera) (MCR)	Select ON to display the audio level meter. ON, OFF
ZOOM-FOCUS	(Camera)	Selects the unit of zoom and focus values. OFF, NUMBER, mm/feet, mm/m <Note> Use the mm/feet or mm/m display only as a general guideline since it is not entirely accurate.
CARD/BATT	(Camera) (MCR)	Select ON to display the remaining P2 card recording capacity and remaining battery charge. ON, OFF
P2CARD REMAIN	(Camera) (MCR)	Determines how remaining P2 card capacity is displayed. ONE-CARD: Displays how much space is left on the P2 card that is currently being recorded. TOTAL: Displays the total amount of space that is left on P2 cards inserted in the camera.

DISPLAY SETUP screen (continued)

Item	Display mode	Description of settings
OTHER DISPLAY	(Camera) (MCR)	Select how much information to display on the screen. (Page 93) OFF, PARTIAL, ALL
CAMERA DATA	(MCR)	When set to ON, camera-recorder data (image stabilizer, aperture, gain value) made during shooting is displayed in playback of clips recorded in the DV format. ON, OFF <Note> Appears only when 480i REC MODE (Page 104) is set to DV.
LCD BACKLIGHT	(Camera) (MCR)	Adjusts the backlight of the LCD monitor. Select HIGH for brighter backlight. HIGH, NORMAL, LOW
LCD SET	(Camera) (MCR)	Adjusts the display level of the images on the LCD monitor. (Page 22) LCD COLOR LEVEL, LCD BRIGHTNESS, LCD CONTRAST
EVF SET	(Camera) (MCR)	Adjusts the display level of the images on the viewfinder. (Page 22) EVF COLOR LEVEL, EVF BRIGHTNESS, EVF CONTRAST
SELF SHOOT	(Camera)	Selects the LCD mirror mode for self-portrait shooting. Select MIRROR to reverse left and right at self-portrait shooting. (Page 40) NORMAL, MIRROR
DISPLAY ASPECT	(Camera) (MCR)	Selects the aspect ratio of the LCD monitor and the viewfinder. AUTO: Changes automatically to the appropriate ratio according to the recording or play mode information. 4:3: Fixed at 4:3. <Note> Black bands appear at the top and bottom of the screen when images are displayed at a 16:9 aspect ratio. No parts of the images are missing.
EVF COLOR	(Camera) (MCR)	Selects color or black and white images on the viewfinder. ON: Color OFF: Black and white
REC COUNTER	(Camera)	Selects counter operation during recording. TOTAL: Continues counting until card is reset with the COUNTER RESET button. CLIP: Resets the counter at start of recording and counts the time of each recording session.

CARD FUNCTIONS screen

Item	Display mode	Description of settings
SCENE FILE	(Camera)	Reads/writes scene files from/to the SD memory card. FILE SELECT: You can specify the file numbers of the files to be read/written. READ: You can read the setting values of the scene files (1 to 4) from the SD memory card by specifying the file number. WRITE: Saves the current setting values of the scene files (1 to 4) to the SD memory card. TITLE RELOAD: Updates the title list.
USER FILE	(Camera)	Reads/writes user files (excluding scene files) from/to the SD memory card. FILE SELECT: You can specify the file numbers of the files to be read/written. READ: You can read the setting values of the user files (1 to 4) from the SD memory card by specifying the file number. WRITE: Saves the current setting values of the user files (1 to 4) to the SD memory card. TITLE RELOAD: Updates the title list.

___ indicates the factory setting.

Setup menu list (continued)

CARD FUNCTIONS screen (continued)

Item	Display mode	Description of settings
SD CARD FORMAT	(Camera)	Formats the SD memory cards.

OTHER FUNCTIONS screen

Item	Display mode	Description of settings
USER FILE	(Camera) (MCR)	<p>LOAD: Loads the settings in a previously stored user file.</p> <p>SAVE: Saves the updated user file settings.</p> <p>INITIAL: Returns the user settings in the user file to the factory settings. After a LOAD or INITIAL operation, turn the POWER switch off and then back on again to make the new settings available.</p> <ul style="list-style-type: none"> • An INITIAL operation does not change the TIME_ZONE settings (Page 111).
REMOTE	(Camera) (MCR)	<p>Sets the operations of the supplied remote control unit. (Remote control setup. (Page 18))</p> <p>OFF: Operations are not accepted from any remote control.</p> <p>1: Accepts commands from the remote control set for "operation mode 1".</p> <p>2: Accepts commands from the remote control set for "operation mode 2".</p>
1394 CONTROL	(Camera)	<p>Sets the control method for backup recording using a backup unit connected to the 1394 terminal.</p> <p>OFF: The backup unit is not controlled.</p> <p>EXT: The backup unit can be controlled by the START/STOP button. The images shot by the camera recorder are recorded by the backup unit. Note that the camera recorder does not record them.</p> <p>BOTH: The images shot by the camera recorder are recorded by both the camera recorder and backup unit.</p> <p>CHAIN: When the camera recorder's media approaches its end during shooting, the backup unit in the recording stand-by mode automatically starts recording images.</p>
1394 CMD SEL	(Camera)	<p>Sets how the START/STOP button works for the backup unit.</p> <p>REC P: This switches between recording and pause.</p> <p>STOP: This switches between recording and stop.</p> <p><Note> If the backup unit does not have a rec pause function, select STOP.</p>
PC MODE	(Camera) (MCR)	<p>Selects the terminal for data transfer. (You cannot select USB and 1394 at the same time.)</p> <p>USB DEVICE: Mode for sending files using the USB connector.</p> <p>1394 DEVICE: Mode for sending files using the 1394 connector.</p> <p>1394 HOST: Mode for copying files from the P2 card onto an external hard disk drive using the 1394 connector.</p>

OTHER FUNCTIONS screen (continued)

Item	Display mode	Description of settings																																																																																																												
ACCESS LED	(Camera) (MCR)	Sets the access lamp to ON or OFF. ON: The lamp lights up and blinks as per the regular specifications. OFF: The lamp is OFF in all circumstances.																																																																																																												
REC LAMP	(Camera)	Sets lighting of the tally lamp. OFF: The tally lamp does not light. FRONT: Front tally lamp (microphone side) lights. REAR: Rear tally lamp (viewfinder side) lights. BOTH: Both tally lamps light.																																																																																																												
BEEP SOUND	(Camera)	Turns the beep sound ON or OFF. ON OFF When ON is selected, the beep is sounded when the memory of the P2 card has been used up during recording. When the beep is sounded, the audio signals from the output connector are muted before the beep sound is output.																																																																																																												
CLOCK SET	(Camera) (MCR)	Sets the camera-recorder's calendar.																																																																																																												
TIME ZONE	(Camera) (MCR)	Adds to or deducts from GMT the time value of -12:00 to +13:00 in 30-minute steps. (As an exception, you can set +12:45.) Refer to the table below. 0:00																																																																																																												
		<table border="1"> <thead> <tr> <th>Time difference</th> <th>Area</th> <th>Time difference</th> <th>Area</th> </tr> </thead> <tbody> <tr> <td>00:00</td> <td>Greenwich</td> <td>- 00:30</td> <td></td> </tr> <tr> <td>- 01:00</td> <td>Azores Islands</td> <td>- 01:30</td> <td></td> </tr> <tr> <td>- 02:00</td> <td>Mid-Atlantic</td> <td>- 02:30</td> <td></td> </tr> <tr> <td>- 03:00</td> <td>Buenos Aires</td> <td>- 03:30</td> <td>Newfoundland Island</td> </tr> <tr> <td>- 04:00</td> <td>Halifax</td> <td>- 04:30</td> <td></td> </tr> <tr> <td>- 05:00</td> <td>New York</td> <td>- 05:30</td> <td></td> </tr> <tr> <td>- 06:00</td> <td>Chicago</td> <td>- 06:30</td> <td></td> </tr> <tr> <td>- 07:00</td> <td>Denver</td> <td>- 07:30</td> <td></td> </tr> <tr> <td>- 08:00</td> <td>Los Angeles</td> <td>- 08:30</td> <td></td> </tr> <tr> <td>- 09:00</td> <td>Alaska</td> <td>- 09:30</td> <td>Marquesas Islands</td> </tr> <tr> <td>- 10:00</td> <td>Hawaii</td> <td>- 10:30</td> <td></td> </tr> <tr> <td>- 11:00</td> <td>Midway Island</td> <td>- 11:30</td> <td></td> </tr> <tr> <td>- 12:00</td> <td>Kwajalein</td> <td>+ 11:30</td> <td>Norfolk Island</td> </tr> <tr> <td>+ 13:00</td> <td></td> <td>+ 10:30</td> <td>Lord Howe Island</td> </tr> <tr> <td>+ 12:00</td> <td>New Zealand</td> <td>+ 09:30</td> <td>Darwin</td> </tr> <tr> <td>+ 11:00</td> <td>Solomon Islands</td> <td>+ 08:30</td> <td></td> </tr> <tr> <td>+ 10:00</td> <td>Guam</td> <td>+ 07:30</td> <td></td> </tr> <tr> <td>+ 09:00</td> <td>Tokyo</td> <td>+ 06:30</td> <td>Rangoon</td> </tr> <tr> <td>+ 08:00</td> <td>Beijing</td> <td>+ 05:30</td> <td>Bombay</td> </tr> <tr> <td>+ 07:00</td> <td>Bangkok</td> <td>+ 04:30</td> <td>Kabul</td> </tr> <tr> <td>+ 06:00</td> <td>Dacca</td> <td>+ 03:30</td> <td>Tehran</td> </tr> <tr> <td>+ 05:00</td> <td>Islamabad</td> <td>+ 02:30</td> <td></td> </tr> <tr> <td>+ 04:00</td> <td>Abu Dhabi</td> <td>+ 01:30</td> <td></td> </tr> <tr> <td>+ 03:00</td> <td>Moscow</td> <td>+ 00:30</td> <td></td> </tr> <tr> <td>+ 02:00</td> <td>Eastern Europe</td> <td>+ 12:45</td> <td>Chatham Islands</td> </tr> <tr> <td>+ 01:00</td> <td>Central Europe</td> <td></td> <td></td> </tr> </tbody> </table>	Time difference	Area	Time difference	Area	00:00	Greenwich	- 00:30		- 01:00	Azores Islands	- 01:30		- 02:00	Mid-Atlantic	- 02:30		- 03:00	Buenos Aires	- 03:30	Newfoundland Island	- 04:00	Halifax	- 04:30		- 05:00	New York	- 05:30		- 06:00	Chicago	- 06:30		- 07:00	Denver	- 07:30		- 08:00	Los Angeles	- 08:30		- 09:00	Alaska	- 09:30	Marquesas Islands	- 10:00	Hawaii	- 10:30		- 11:00	Midway Island	- 11:30		- 12:00	Kwajalein	+ 11:30	Norfolk Island	+ 13:00		+ 10:30	Lord Howe Island	+ 12:00	New Zealand	+ 09:30	Darwin	+ 11:00	Solomon Islands	+ 08:30		+ 10:00	Guam	+ 07:30		+ 09:00	Tokyo	+ 06:30	Rangoon	+ 08:00	Beijing	+ 05:30	Bombay	+ 07:00	Bangkok	+ 04:30	Kabul	+ 06:00	Dacca	+ 03:30	Tehran	+ 05:00	Islamabad	+ 02:30		+ 04:00	Abu Dhabi	+ 01:30		+ 03:00	Moscow	+ 00:30		+ 02:00	Eastern Europe	+ 12:45	Chatham Islands	+ 01:00	Central Europe		
Time difference	Area	Time difference	Area																																																																																																											
00:00	Greenwich	- 00:30																																																																																																												
- 01:00	Azores Islands	- 01:30																																																																																																												
- 02:00	Mid-Atlantic	- 02:30																																																																																																												
- 03:00	Buenos Aires	- 03:30	Newfoundland Island																																																																																																											
- 04:00	Halifax	- 04:30																																																																																																												
- 05:00	New York	- 05:30																																																																																																												
- 06:00	Chicago	- 06:30																																																																																																												
- 07:00	Denver	- 07:30																																																																																																												
- 08:00	Los Angeles	- 08:30																																																																																																												
- 09:00	Alaska	- 09:30	Marquesas Islands																																																																																																											
- 10:00	Hawaii	- 10:30																																																																																																												
- 11:00	Midway Island	- 11:30																																																																																																												
- 12:00	Kwajalein	+ 11:30	Norfolk Island																																																																																																											
+ 13:00		+ 10:30	Lord Howe Island																																																																																																											
+ 12:00	New Zealand	+ 09:30	Darwin																																																																																																											
+ 11:00	Solomon Islands	+ 08:30																																																																																																												
+ 10:00	Guam	+ 07:30																																																																																																												
+ 09:00	Tokyo	+ 06:30	Rangoon																																																																																																											
+ 08:00	Beijing	+ 05:30	Bombay																																																																																																											
+ 07:00	Bangkok	+ 04:30	Kabul																																																																																																											
+ 06:00	Dacca	+ 03:30	Tehran																																																																																																											
+ 05:00	Islamabad	+ 02:30																																																																																																												
+ 04:00	Abu Dhabi	+ 01:30																																																																																																												
+ 03:00	Moscow	+ 00:30																																																																																																												
+ 02:00	Eastern Europe	+ 12:45	Chatham Islands																																																																																																											
+ 01:00	Central Europe																																																																																																													

Setup menu list (continued)

OTHER FUNCTIONS screen (continued)

Item	Display mode	Description of settings
POWER SAVE	(Camera)	<p>Selects the power-saving mode when the Operation lever, MENU button, THUMBNAIL button, PAGE/AUDIO MON/VAR button, DISP/MODE CHK button, USER1-3 buttons and EVF DTL button have not been operated for 5 minutes or so.</p> <p>ON: The camera-recorder's power is set to OFF.</p> <p>OFF: The unit remains stopped without turning off its power.</p> <ul style="list-style-type: none"> • When connection is made with an external device using the 1394 cable and the communication mode is established in this way, the power will not be set off even when none of the above buttons has been operated. • The power will not be turned off when a P2 card has not been installed, even if ON has been selected.
MENU INIT	(Camera) (MCR)	<p>Returns the menu settings to the factory settings.</p> <ul style="list-style-type: none"> • The time zone setting will not be changed.
OPERATION	(Camera) (MCR)	Displays the power-on time (a 5-digit figure).

OPTION MENU screen

This menu is displayed when the DISP/MODE CHK button is held down, and after the details of the shooting status are displayed, the MENU button is then pressed. Use it to check the connection status during nonlinear editing.

Item	Display mode	Description of settings
1394 STATUS	(Camera) (MCR)	<p>1394 status display screen appears.</p> <p>FORMAT: Format of the signals which are input or output.</p> <p>RATE: Transfer rate of the signals which are input or output.</p> <p>60/50: System of the signals which are input or output.</p> <p>CH: Value of the channels in which the signals are input or output.</p> <p>SPEED: Transfer speed of the signals which are input or output.</p> <p>STATUS: Status of the signals which are input or output using the 1394 digital interface.</p> <p>VIDEO: Status of the video signals which are input or output.</p> <p>AUDIO: Status of the audio signals which are input or output.</p>
1394 CONFIG	(Camera) (MCR)	<p>1394 extended menus appear.</p> <p>DFLT: Normally, DFLT is used.</p> <p>1-255</p>