

Solid-State Memory Camcorder

Supplement

PMW-350K

PMW-350L

XDCM EX
CINEALTA

SxS
Exmor
FULL HD 3CMOS

HDMI
i

Table of Contents

Foreword	3
Using an External Hard Disk.....	3
Attaching/Removing the PHU-220R	3
Formatting the PHU-220R	4
Restoring the PHU-220R	5
Using a Media Adaptor	5
XQD Memory Cards	5
“Memory Stick” media/SDHC Cards	6
Operating via the REMOTE Connector.....	7
Adjusting the Camcorder from the Remote Control Unit.....	7
Operating the Menu from the RM-B150/B170.....	9
Operating the Menu from the RM-B750.....	9
Functions That Can Be Controlled from the RM-B150/B170/B750	10
Functions That Can Be Controlled from the RCP-1001/1501.....	20
Using a Wi-Fi Adapter	22
Fixing the CBK-WA01	22
Making a Wi-Fi Connection.....	23
Using the Web Menu	24
Using Live Logging Functions.....	26
Output Formats and Limitations	27
Video Formats and Output Signals	27
Output Signals and Operation Restrictions When a Camcorder System is Configured (in HD Mode Only)	36

Foreword

This document contains the following supplementary information about the PMW-350K/350L (called “the camcorder” below).

- Using an External Hard Disk
- Using a Media Adaptor
- Operating via the REMOTE Connector
- Functions That Can Be Controlled from the RM-B150/B170/B750
- Functions That Can Be Controlled from the RCP-1001/1501
- Using a Wi-Fi Adapter
- Output Formats and Limitations
- Output Signals and Operation Restrictions When a Camcorder System is Configured (in HD Mode Only)

Using an External Hard Disk

You can use an optional PHU-220R Professional Hard Disk Unit with this camcorder.

Notes

- High-speed playback may not be possible with the PHU-220R.
- When using the Slow & Quick Motion function with the PHU-220R, you cannot perform slow motion shooting.

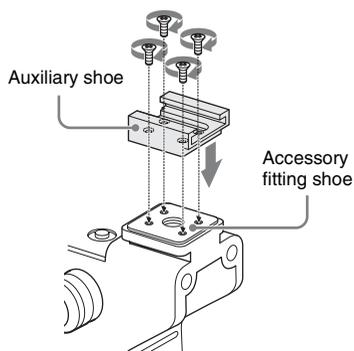
Attaching/Removing the PHU-220R

Recording/playback can be made using the PHU-220R in the same manner as with SxS memory cards if you connect the PHU connection cable of the PHU-220R to an SxS memory card slot of the camcorder.

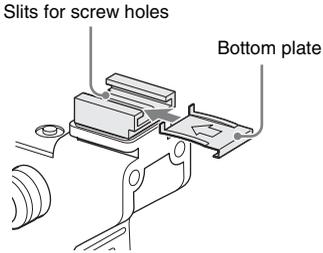
To mount the hard disk unit on the camcorder

By using the cold shoe kit (an auxiliary shoe, four screws, and a bottom plate) supplied with the camcorder, you can mount the hard disk unit on the accessory fitting shoe of the camcorder.

- 1** Secure the auxiliary shoe to the accessory fitting shoe with the four screws.



2 Fit the bottom plate (spring type) into the auxiliary shoe.



Insert the bottom plate from the end where the slits for the screw holes of the auxiliary shoe are not open.

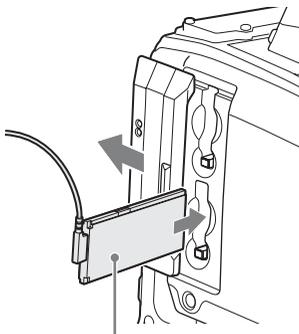
If you secure the auxiliary shoe in the direction opposite that shown in the above figure with the slit open end forward, insert the bottom plate from the direction opposite to that shown in the figure.

3 Attach the shoe adapter (supplied with the PHU-220R) to the hard disk unit, mount the unit to the auxiliary shoe on the camcorder, and secure it with the lock lever of the shoe adapter.

For details, refer to the Operating Instructions of the PHU-220R.

To connect the PHU connection cable

1 Open the cover of the card slot block and insert the PHU connection cable into a slot.



Insert so that the cable extends upward.

2 Turn on the PHU-220R.

The POWER indicator of the PHU-220R lights in green.

Subsequently, the ACCESS lamp of the camcorder lights in orange then changes to green once the unit is ready for use.

Notes

- The cover of the card slot block cannot be closed with the PHU-220R connected.
- Bundle the cable so that it will not accidentally become entangled with nearby objects.

To disconnect the PHU connection cable

Operate in the same manner as when you remove an SxS memory card from the slot.

Formatting the PHU-220R

To format a PHU-220R when you connect it

When you connect an unformatted PHU-220R, or connect a PHU-220R that is formatted to different specifications, or power the camcorder on with an unformatted PHU-220R connected, or exit mass storage mode with an unformatted PHU-220R connected, a message appears on the viewfinder screen asking if you want to format the device. If the message appears, turn the MENU knob to select “Execute”, and then press the knob.

Notes

- The format confirmation message does not appear if you are currently setting other information.
- The format confirmation message may disappear if the camcorder needs to display other information. It reappears after the other information has been set.

To format a PHU-220R from a menu

You can format a PHU-220R by using OPERATION >Format Media in the setup menu. This command is available when the PHU-220R is already formatted, unformatted, and formatted in an unsupported format.

- 1 Select OPERATION >Format Media in the setup menu.
- 2 Select [Media(A)] (slot A) or [Media(B)] (slot B).
- 3 Turn the MENU knob to select [Execute], and press the knob.

The format confirmation message appears on the viewfinder screen.

4 Turn the MENU knob to select [Execute], and then press the knob.

For information about menu operations, refer to the Operating Instructions of the camcorder.

Formatting begins.

During restoration, an in-progress message and status bar (%) are displayed, and the ACCESS lamp lights in orange.

When formatting is completed, a completion message is displayed for three seconds.

Restoring the PHU-220R

If an error occurs with data on the PHU-220R for some reason, the hard disk must be restored.

If a PHU-220R that needs to be restored is connected, a message that prompts you to execute restoration is displayed on the viewfinder screen.

To restore the hard disk

Turn the MENU knob to select “Execute”, and then press the knob.

The restoration begins automatically.

During restoration, an in-progress message and status bar (%) are displayed, and the ACCESS lamp lights in orange.

When restoration is completed, a completion message is displayed for three seconds.

If restoration fails

- A PHU-220R on which an error occurred may become usable again through repeated formatting.
- In some cases, some clips cannot be restored. Playback of clips that can be restored becomes possible again.

Using a Media Adaptor

XQD Memory Cards

By using an optional QDA-EX1 XQD ExpressCard Adapter, you can insert an XQD memory card into the SxS memory card slot and use it instead of an SxS memory card.

For details on using a QDA-EX1 XQD ExpressCard Adapter, refer to the instruction manual supplied with it.

Notes

- High-speed playback may not be properly achieved with an XQD memory card.
- Slow Motion recording by the Slow & Quick Motion recording function cannot be made with an XQD memory card.
- Not all XQD memory cards are guaranteed to work with this camcorder. For compatible memory cards, contact your Sony dealer.

Formatting

When you use an XQD memory card with this camcorder, formatting is required.

An XQD memory card to be used with this camcorder must be formatted using the format function of this camcorder.

It is also necessary to format an XQD memory card for use if a caution message is displayed when you mount the XQD memory card.

For an XQD memory card that was formatted with another system unsupported by this camcorder, the message “Unsupported File System” is displayed on the LCD monitor/viewfinder screen.

Format the XQD memory card as instructed below.

To execute formatting

Using “Format Media” in the OPERATION menu, specify the slot, then select “Execute.” On a confirmation message, select “Execute” again.

Formatting begins.

An in-progress message and status bar (%) are displayed, and the access lamp lights in red.

When formatting is completed, a completion message is displayed for three seconds.

Note

When formatting, all data in an XQD memory card including protected images are erased and cannot be restored.

Connection between the camcorder and a computer

To use an XQD memory card in which data have been recorded with an XDCAM EX-series product, insert it into the slot of the camcorder and connect between the computer and this camcorder using a USB cable.

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

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

“Memory Stick” media/SDHC Cards

Use of the optional MEAD-MS01 or MEAD-SD01 Media Adaptor permits you to insert a “Memory Stick” (with MEAD-MS01) or an SDHC card (with MEAD-SD01) to the SxS memory card slot of the camcorder and use it for recording and playback in the same way as with an SxS memory card.

Usable “Memory Stick”

“Memory Stick PRO-HG Duo” HXA series

Usable SDHC card

Class 10 SDHC card

For details on use of the MEAD-MS01/SD01 Media Adaptor, refer to the Operating Instructions of the adaptor.

Notes

- High-speed playback may not be properly achieved with a “Memory Stick” or an SDHC card.
- When using the Slow & Quick Motion function with the “Memory Stick” or an SDHC card, you cannot perform slow motion shooting.

Formatting

When you use a “Memory Stick” or an SDHC card with this camcorder, formatting is required. A “Memory Stick” or an SDHC card to be used with this camcorder must be formatted using the format function of this camcorder.

It is also necessary to format a “Memory Stick” or an SDHC card for use if a caution message is displayed when you mount the “Memory Stick” or SDHC card.

For a “Memory Stick” or an SDHC card that was formatted with another system unsupported by this camcorder, the message “Unsupported File System” is displayed on the LCD monitor/EVF screen.

Format the “Memory Stick” or SDHC card as instructed below.

To execute formatting

- 1 **Select OPERATION >Format Media in the setup menu.**
- 2 **Select [Media(A)] (slot A) or [Media(B)] (slot B).**
- 3 **Turn the MENU knob to select [Execute], and press the knob.**
The format confirmation message appears on the viewfinder screen.
- 4 **Turn the MENU knob to select “Execute”, and then press the knob.**

For information about menu operations, refer to the Operating Instructions of the camcorder.

Formatting begins.

An in-progress message and status bar (%) are displayed, and the ACCESS lamp lights in orange. When formatting is completed, a completion message is displayed for three seconds.

Note

In formatting, all data in a “Memory Stick” or MEAD-SD01, including protected images, are erased and cannot be restored.

Connection between the camcorder and a computer

To use a “Memory Stick” or MEAD-SD01 in which data have been recorded with an XDCAM EX series product, establish USB connection between the computer and this camcorder and insert it into the slot of the camcorder, or use a specified USB card reader¹⁾.

1) For details on the specified USB card reader, visit the Sony Professional Products web site.

To use a media formatted with this camcorder in the slots of other devices

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

- “Memory Stick” and  MEMORY STICK™ are trademarks of Sony Corporation.
- “Memory Stick PRO-HG Duo” and MEMORY STICK PRO-HG DUO are trademarks of Sony Corporation.
- “XQD” is a registered trademark of Sony Corporation.

Operating via the REMOTE Connector

When the RM-B150/B170/B750 Remote Control Unit, the RCP-1001/1501 Remote Control Panel, or other control unit is connected, some camcorder functions can be controlled from these units.

You can use the RM-B750’s display or a video monitor connected to the MONITOR connector of the remote control unit to control the camcorder by menu operations and monitor the camcorder picture.

To connect

Using the remote cable (10 m (33 ft)) supplied with the remote control unit, connect between the REMOTE connector (8-pin) of the camcorder and the camera connector of the remote control unit. When you turn on the camcorder after the connection, the camcorder enters Remote Control mode.

Adjusting the Camcorder from the Remote Control Unit

You can control menu and recording operations from the remote control unit.

For the functions that can be controlled from the remote control unit, see “Functions That Can Be Controlled from the RM-B150/B170/B750” on page 10, or “Functions That Can Be Controlled from the RCP-1001/1501” on page 20.

Notes

- Remote Control operations cannot be made if USB connection to the camcorder is enabled.
- Do not connect or disconnect the remote control unit when the camcorder is on.

The following controls of the camcorder becomes inoperative when the remote control unit is connected.

- GAIN selector
- WHITE BAL switch
- AUTO W/B BAL switch
- SHUTTER selector
- OUTPUT/DCC switch

- Buttons and switches to which the Turbo Gain function has been assigned, including the ASSIGN. 1/3 switches, the ASSIGNABLE 4 switch, the COLOR TEMP. button, and the ASSIGNABLE 5 switch.
- REC START button: the VTR button on the lens, and buttons and switches to which the function has been assigned using OPERATION >Assignable SW in the setup menu, including the ASSIGN. 1/3 switches, the ASSIGNABLE 4 switch, the COLOR TEMP. button, and the ASSIGNABLE 5 switch (when MAINTENANCE >Camera Config >RM Rec Start in the setup menu is set to [RM]).

To release Remote Control mode

Turn off the camcorder and disconnect the remote control unit.

The settings on the controls on the camcorder become valid.

To connect the monitor to the RM-B150/B170/B750

The MONITOR connector (BNC type) of the RM-B150/B170/B750 outputs a composite signal. To connect a monitor to the MONITOR connector on the RM-B150/B170/B750, use the black cable supplied with the RM-B150/B170/B750.

Camera image quality adjustment items when the RM-B150/B170/B750 is connected

When the RM-B150/B170/B750 is connected, the parameters for camera image quality adjustment items (paint data) are reset to the parameters that were specified the last time that RM-B150/B170/B750 was connected.

Function of the recording start/stop buttons when the RM-B150/B170/B750 is connected

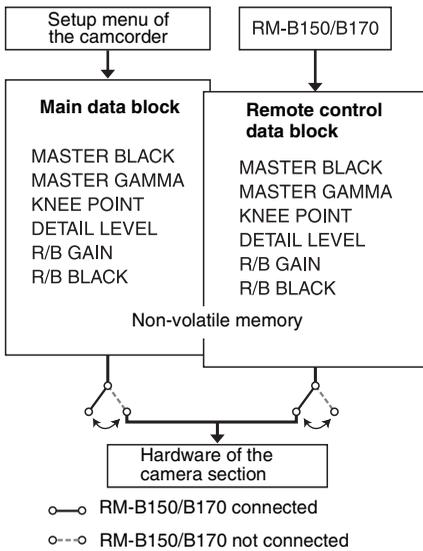
When the RM-B150/B170/B750 is connected, you can make a setting to determine which of the recording start/stop buttons you will use. This setting is made using MAINTENANCE >Camera Config >RM Rec Start in the setup menu.

Relationship between the setting of the RM Rec Start item and the function of recording start/stop buttons

Recording start/stop function	Settings of RM Rec Start		
	RM	CAM	PARA
Camcorder's REC START button	Disabled	Enabled	Enabled
Lens' VTR button	Disabled	Enabled	Enabled
Buttons and switches to which the recording start/stop function has been assigned (ASSIGN. 1/3 switches, ASSIGNABLE 4 switch, COLOR TEMP. button, and ASSIGNABLE 5 switch)	Disabled	Enabled	Enabled
Remote control unit's VTR button	Enabled	Disabled	Enabled

Structure of the paint adjustment data

The non-volatile memory of the camcorder used for storing paint adjustment data consists of two regions as shown below: one is the "main data block" that is used when a remote control unit is not connected, and the other is the "remote control data block" that is used when a remote control unit is connected. Paint adjustment data is automatically selected and output to the camera section depending on whether or not a remote control unit such as the RM-B150/B170 is connected.



When a remote control unit is connected to the camcorder, the “remote control data block” is selected as the current paint data block, and the paint adjustment parameters that were in effect the last time the remote control unit was used are recalled.

The settings of the absolute value rotational controls ¹⁾ and absolute value switches ²⁾ are overwritten by those on the remote control unit after the remote control unit is connected.

When the remote control unit is disconnected from the camcorder, the “main data block” becomes effective. Thus the camcorder will return to the settings that were in effect before the remote control unit was connected.

- 1) **Absolute value rotational controls:** The data corresponding to the angular position of controls is output. Rotational controls for which the data corresponding to the amount of their rotation is output are called relative value controls.
- 2) **Absolute value switches:** Like toggle switches or slide switches (except most momentary switches), the switches (or knobs) whose positions must coincide with their functions are called absolute value switches. When MAINTENANCE >Camera Config >RM Common Memory is set to [On] in the setup menu, you can use settings of the paint adjustment data stored in the main data block even if you connect the remote control unit. In this case, the settings stored in the main data block will be renewed when you change the settings on the remote control unit. Thus, the

settings of the paint data made with the remote control unit can be retained even if the remote control unit is removed. However, if the switch position on the remote control unit differs from the one on the camcorder, the switch position on the camcorder takes precedence over that on the remote control unit.

Also, it is possible to keep the settings that are in effect before you connect the remote control unit. In this case, you should set the control knob to the relative value mode on the remote control unit.

For details, refer to the Operation Manual supplied with the remote control unit.

Operating the Menu from the RM-B150/B170

- 1 **Set the DISPLAY switch to MENU.**
The camcorder menus can be displayed on a video monitor connected to the MONITOR connector of the RM-B150/B170.
- 2 **Select and set the menu items, using the MENU SELECT knob and the CANCEL/ENTER switch.**
- 3 **When the settings are completed, set the DISPLAY switch to ON or OFF to exit the menu.**

For details on operations of the RM-B150/B170, refer to the Operation Manual of the RM-B150/B170.

Operating the Menu from the RM-B750

- 1 **Press and light the MONITOR button then press the VF MENU button.**
The camcorder menus can be displayed on the RM-B750's display or a video monitor connected to the MONITOR connector of the RM-B750.
- 2 **Select and set the menu items, using the MENU SELECT knob, ENTER button, and CANCEL button.**
- 3 **When the settings are completed, press the VF MENU button to exit the menu.**

For details on operations of the RM-B750, refer to the Operation Manual of the RM-B750.

Functions That Can Be Controlled from the RM-B150/B170/B750

You can adjust the functions in the following table by using menu operations, adjustment knobs, switches, and the touch panel (RM-B750 only) on the RM-B150/B170/B750.

For details on operations, refer to the operation manual of the RM-B150/B170/B750.

How to Read the Table

In the RM-B150, RM-B170, and RM-B750 columns of the table below, “Yes” and “No” mean the following.

Yes: The operation can be performed from the unit.

No: The operation cannot be performed from the unit.

Menu items	Sub-item	Setting	Description	RM-B150	RM-B170	RM-B750
Gain	Step Gain	–	Sets the master gain.	Yes	No	No
	L/M/H	Low/Mid/High	Switches between three gain levels, when the master gain has been set from a menu.	Yes ^{a)}	No	No
	Step	–3/0/3/6/9/12/18/24/30/36/42dB	Sets the master gain.	Yes ^{a)}	Yes	Yes
Bars	Bars	On/Off	Turns color bar output on or off.	Yes	Yes	Yes
Shutter	Step Shutter Setting	On/Off	Turns the step shutter function on or off.	Yes	Yes	Yes
	Step Shutter Speed	–	Sets the step shutter speed.	Yes	Yes	Yes
	ECS Setting	On/Off	Turns ECS on or off.	Yes	Yes	Yes
	ECS Frequency	–	Selects the ECS frequency.	Yes	Yes	Yes
	SLS Setting	On/Off	Turns SLS on or off.	No	Yes	Yes/No ^{b)}
	SLS Speed	–	Sets the SLS speed (number of frames).	No	Yes	Yes ^{b)}
DCC	DCC	On/Off	Turns DCC on or off.	Yes	Yes	Yes
	DCC Point	–99 to ±0 to +99	Adjusts the DCC minimum knee point.	Yes ^{d)}	Yes ^{d)}	Yes ^{b) d)}
White Balance	AWB	Start/Stop	Starts execution of auto white balance adjustment, or stops execution.	Yes	Yes	Yes
	White Memory	A/B/C/Preset	Switches the auto white balance memory.	Yes	Yes	Yes
	ATW	On/Off	Turns ATW on or off.	Yes ^{c)}	Yes	Yes
	5600K	On/Off	Turns color temperature conversion on or off.	No	Yes	Yes
Black	ABB	Start/Stop	Starts execution of auto black balance adjustment, or stops execution.	Yes	Yes	Yes

Menu items	Sub-item	Setting	Description	RM-B150	RM-B170	RM-B750
Iris	Iris Mode	Auto/Manual	Selects the iris mode.	Yes	Yes	Yes
	Iris Speed	-99 to ± 0 to +99	Specifies the control speed (speed of reaction to changes in the video). (Larger values specify quicker reaction times.)	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	Iris Level	-99 to ± 0 to +99	Adjusts the level of the auto iris target value.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	Iris APL Ratio	-99 to ± 0 to +99	Adjusts the mix ratio of auto iris detection peak value and average value.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	Iris Window Ind	On/Off	Turns on or off the function that displays a frame marker for the auto iris detection window.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	Close	On/Off	Turns forcible iris closing on or off.	No	No	Yes
Rec Function	Slow & Quick	On/Off	Turns the Slow & Quick Motion function on or off.	Yes ^{d)}	Yes	Yes ^{b) d)}
	Frame Rate	The available settings vary depending on the Format >HD System Line setting.	When the Slow & Quick setting is On, sets the frame rate for Slow & Quick Motion shooting.	Yes	Yes	Yes ^{b) d)}
Camcorder Menu	Menu	On/Off	Operates the camcorder menu.	Yes	Yes	Yes
	Cancel/Presets	Cancel/Presets		Yes	Yes	Yes
	Select/Set	Select (Up/Down)/Set		Yes	Yes	Yes
Panel Active	Panel Active	On/Off	Enables (On) or disables (Off) panel operations.	Yes	Yes	Yes
Standard	Standard	On/Off	Selects standard mode.	Yes	Yes	Yes
ND Filter	ND Filter	Display only	Turns the display of ND filter settings on or off. (The settings cannot be changed, only displayed.)	No	No	No
CC Filter	CC Filter	A/B/C/D	Selects a CC filter.	Yes	Yes	Yes
Extender IND	Extender	On/Off	Turns the lens extender indication on or off. (The settings cannot be changed, only displayed.)	No	No	No
Call	Call	On/Off	Enables (On) or disables (Off) calls from externally connected equipment.	No	Yes	No

Menu items	Sub-item	Setting	Description	RM-B150	RM-B170	RM-B750
Media	Rec	Start/Stop	Starts or stops recording.	Yes	Yes	Yes
	Play	Play/Pause	Starts playback.	Yes	Yes	Yes
	FREV	–	Starts high-speed reverse playback.	Yes	Yes	Yes
	FFWD	–	Starts high-speed playback.	Yes	Yes	Yes
	Stop	–	Stops playback.	Yes	Yes	Yes
	Rec Review	–	Starts a recording review.	Yes	Yes	Yes
	PREV	–	Jumps to the first frame of the current clip.	Yes	Yes	Yes
	NEXT	–	Jumps to the first frame of the next clip.	Yes	Yes	Yes
	Freeze Mix	–	Execute the freeze mix function.	Yes	Yes	Yes
Switch Status	Gamma	On/Off	Turns gamma correction on or off.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	Black Gamma	On/Off	Turns black gamma correction on or off.	Yes	Yes	Yes ^{d)}
	Matrix	On/Off	Turns linear matrix correction and user matrix correction on or off.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	Knee	On/Off	Turns knee correction on or off.	Yes ^{d)}	Yes	Yes ^{d)}
	White Clip	On/Off	Turns white clip correction on or off.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	Detail	On/Off	Turns detail correction on or off.	Yes ^{d)}	Yes	Yes ^{d)}
	Flare	On/Off	Turns flare correction on or off.	Yes	Yes	Yes ^{d)}
	Test Saw	On/Off	Turns the test saw signal on or off.	Yes	Yes	Yes
White	R Gain<A>	–99 to ±0 to +99	Specifies the white balance R gain value saved in memory A.	Yes	Yes	Yes
	B Gain<A>	–99 to ±0 to +99	Specifies the white balance B gain value saved in memory A.	Yes	Yes	Yes
	R Gain	–99 to ±0 to +99	Specifies the white balance R gain value saved in memory B.	Yes	Yes	Yes
	B Gain	–99 to ±0 to +99	Specifies the white balance B gain value saved in memory B.	Yes	Yes	Yes

Menu items	Sub-item	Setting	Description	RM-B150	RM-B170	RM-B750
Black	Master Black	-99 to ± 0 to +99	Specifies the master black level.	Yes	Yes	Yes
	R Black	-99 to ± 0 to +99	Specifies the R black level.	Yes	Yes	Yes
	B Black	-99 to ± 0 to +99	Specifies the B black level.	Yes	Yes	Yes
Flare	Flare	On/Off	Turns flare correction on or off.	Yes	Yes	Yes ^{d)}
	R Flare	-99 to ± 0 to +99	Sets the R flare correction level.	Yes	Yes	Yes
	G Flare	-99 to ± 0 to +99	Sets the G flare correction level.	Yes	Yes ^{d)}	Yes ^{d)}
	B Flare	-99 to ± 0 to +99	Sets the B flare correction level.	Yes	Yes	Yes
Gamma	Gamma	On/Off	Turns gamma correction on or off.	Yes ^{d)}	Yes	Yes ^{d)}
	Step Gamma	0.35 to 0.45 to 0.90 (in steps of 0.05)	Specifies a gamma correction value in steps of 0.05.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	Master Gamma	-99 to ± 0 to +99	Specifies the master gamma level.	Yes	Yes	Yes
	R Gamma	-99 to ± 0 to +99	Specifies the R gamma level.	Yes ^{d)}	Yes ^{d)}	Yes
	G Gamma	-99 to ± 0 to +99	Specifies the G gamma level.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	B Gamma	-99 to ± 0 to +99	Specifies the B gamma level.	Yes ^{d)}	Yes ^{d)}	Yes
	Gamma Select	When Gamma Category is STD: 1 DVW 2 $\times 4.5$ 3 $\times 3.5$ 4 240M 5 R709 6 $\times 5.0$	Select the gamma table to use in gamma correction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
				When Gamma Category is HG: 1 3250 2 4600 3 3259 4 4609	Yes	Yes ^{d)}
Gamma Category	STD/HG	Selects use of standard gamma (STD) or HyperGamma (HG).	Yes ^{d)}	Yes ^{d)}	Yes ^{b) d)}	
Black Gamma	Black Gamma	On/Off	Turns black gamma correction on or off.	Yes ^{a)}	Yes	Yes
	Gamma Level	-99 to ± 0 to +99	Specifies the master black gamma level.	Yes ^{a)}	Yes ^{d)}	Yes
	Range	Low/L.Mid/ H.Mid/High	Selects the black gamma correction effective range.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}

Menu items	Sub-item	Setting	Description	RM-B150	RM-B170	RM-B750
Knee	Knee	On/Off	Turns knee correction on or off.	Yes ^{d)}	Yes	Yes ^{d)}
	Knee Point	50% to 95.0% to 109% (in steps of 1%)	Specifies the knee point.	Yes	Yes	Yes ^{d)}
	Knee Slope	-99 to ±0 to +99	Specifies the knee slope.	Yes	Yes ^{d)}	Yes ^{d)}
	Knee Saturation	On/Off	Turns the knee saturation function on or off.	Yes	Yes ^{d)}	Yes ^{d)}
	Knee Saturation Level	-99 to ±0 to +99	Specifies the knee saturation level.	Yes	Yes ^{d)}	Yes ^{d)}
White Clip	White Clip	On/Off	Turns white clipping adjustment on or off (Off = fixed as 109%).	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	White Clip Level	[NTSC Area] or [NTSC(J) Area] is selected for Country 90.0% to 108.0% to 109.0% [PAL Area] is selected for Country 90.0% to 105.0% to 109.0%	Specifies the white clip level.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}

Menu items	Sub-item	Setting	Description	RM-B150	RM-B170	RM-B750	
Detail(HD mode)/ Detail(SD mode)	Detail	On/Off	Turns detail adjustment on or off.	Yes ^{d)}	Yes	Yes ^{d)}	
	Level	–99 to ±0 to +99	Specifies the detail level.	Yes ^{a)}	Yes	Yes	
		H/V Ratio	–99 to ±0 to +99	Specifies the mix ratio between the H detail level and the V detail level.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	Crispensing	–99 to ±0 to +99	Specifies the crispensing level.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	Level Depend	On/Off	Turns the level depend function on or off.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	Level Depend Level	–99 to ±0 to +99	Specifies the level depend level.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	Frequency	–99 to ±0 to +99	Specifies the central frequency for H detail signal. Larger values give finer details.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	Knee Aperture	On/Off	Turns the linear knee aperture function on or off.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	Knee Aperture Level	–99 to ±0 to +99	Specifies the knee aperture level.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	Limit	–99 to ±0 to +99	Specifies the detail limiter values for both the white-side and black-side direction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	White Limit	–99 to ±0 to +99	Specifies the white-side detail limiter value.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	Black Limit	–99 to ±0 to +99	Specifies the black-side detail limiter value.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	Skin Detail	Skin Detail	On/Off	Turns skin detail correction on or off.	Yes ^{a)}	Yes ^{d)}	Yes
		Area Detection	Color detection screen	Detects the color to be targeted by skin detail correction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
Area Indication		On/Off	Turns on or off the function that displays a zebra pattern in the area targeted by skin detail correction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
Level		–99 to ±0 to +99	Specifies the skin detail level.	Yes ^{a)}	Yes ^{d)}	Yes	
Saturation		–99 to ±0 to +99	Specifies the saturation of the color targeted by skin detail correction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
Hue		0 to 359	Specifies the hue of the color targeted by skin detail correction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
Width		0 to 40 to 90	Specifies a range for the hue of the color targeted by skin detail correction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	

Menu items	Sub-item	Setting	Description	RM-B150	RM-B170	RM-B750	
Matrix	Matrix	On/Off	Turns the matrix correction function on or off.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	Preset Matrix	On/Off	Turns the preset matrix function on or off.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	Preset Select	1/2/3/4/5/6	Selects a preset matrix. 1: SMPTE-240M equivalent 2: ITU-709 equivalent 3: SMPTE WIDE equivalent 4: NTSC equivalent 5: EBU equivalent 6: ITU-601 equivalent	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	User Matrix	On/Off	Turns the user matrix function on or off.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	User Matrix R-G	-99 to ±0 to +99	Specifies a freely defined R-G user matrix.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	User Matrix R-B	-99 to ±0 to +99	Specifies a freely defined R-B user matrix.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	User Matrix G-R	-99 to ±0 to +99	Specifies a freely defined G-R user matrix.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	User Matrix G-B	-99 to ±0 to +99	Specifies a freely defined G-B user matrix.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	User Matrix B-R	-99 to ±0 to +99	Specifies a freely defined B-R user matrix.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	User Matrix B-G	-99 to ±0 to +99	Specifies a freely defined B-G user matrix.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
	Multi Matrix	Multi Matrix	On/Off	Turns the multi matrix correction function on or off.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
		Area Indication	On/Off	Turns on or off the function that displays a zebra pattern in the color area targeted by multi matrix correction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
		Axis	B/B+/MG-/MG/MG+/R/R+/YL-/YL/YL+/G-/G/G+/CY/CY+/B-	Specifies a color targeted by multi matrix correction (16-axis mode).	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
Hue		-99 to ±0 to +99	Specifies the hue of the color targeted by multi matrix correction for each 16-axis mode.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	
Saturation		-99 to ±0 to +99	Specifies the saturation of the color targeted by multi matrix correction for each 16-axis mode.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}	

Menu items	Sub-item	Setting	Description	RM-B150	RM-B170	RM-B750
V Modulation	V Modulation	On/Off	Turns V modulation shading on or off.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	Master V Modulation	-99 to ±0 to +99	Specifies the master V modulation.	Yes ^{a)}	Yes ^{d)}	Yes
	R V Modulation	-99 to ±0 to +99	Specifies the V modulation level of R signal.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	G V Modulation	-99 to ±0 to +99	Specifies the V modulation level of G signal.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	B V Modulation	-99 to ±0 to +99	Specifies the V modulation level of B signal.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
Low Key Saturation	Low Key Saturation	On/Off	Turns low key saturation correction on or off.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	Level	-99 to ±0 to +99	Specifies the saturation of colors in low luminance areas.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
Noise Suppress	Noise Suppress	On/Off	Turns noise suppression on or off.	Yes ^{d)}	Yes ^{d)}	Yes ^{b) d)}
White Shading	R/G/B White H Saw	-99 to ±0 to +99	Specifies a SAW white shading correction value for the horizontal direction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	R/G/B White H Para	-99 to ±0 to +99	Specifies a parabola white shading correction value for the horizontal direction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	R/G/B White V Saw	-99 to ±0 to +99	Specifies a SAW white shading correction value for the vertical direction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	R/G/B White V Para	-99 to ±0 to +99	Specifies a parabola white shading correction value for the vertical direction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}

Menu items	Sub-item	Setting	Description	RM-B150	RM-B170	RM-B750
Black Shading	R/G/B Black H Saw	-99 to ± 0 to +99	Specifies a SAW black shading correction value for the horizontal direction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	R/G/B Black H Para	-99 to ± 0 to +99	Specifies a parabola black shading correction value for the horizontal direction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	R/G/B Black V Saw	-99 to ± 0 to +99	Specifies SAW black shading correction value for the vertical direction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	R/G/B Black V Para	-99 to ± 0 to +99	Specifies a parabola black shading correction value for the vertical direction.	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	Auto Black Shading	Start/Cancel		Executes auto black shading compensation.	Yes ^{d)}	Yes ^{d)}
Scene	<input type="checkbox"/> 1	Standard	File number and file ID	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	<input type="checkbox"/> 2	Standard	File number and file ID	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	<input type="checkbox"/> 3	Standard	File number and file ID	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	<input type="checkbox"/> 4	Standard	File number and file ID	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	<input type="checkbox"/> 5	Standard	File number and file ID	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
	Scene Recall	Execute/Cancel		Loads a scene file (execute by selecting [Execute]).	Yes ^{d)}	Yes ^{d)}
	Scene Store	Execute/Cancel	Saves a scene file (execute by selecting [Execute]).	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
Reference	Reference Store	Execute/Cancel	Stores the current setting of reference file items in the reference file that is maintained in internal memory (execute by selecting [Execute]).	Yes ^{d)}	Yes ^{d)}	Yes ^{d)}
Shot Mark	Shot Mark1	-	Set a Shot Mark1.	No	Yes	No
	Shot Mark2	-	Set a Shot Mark2.	No	Yes	No

a) RM Configuration Menu

b) Depending on RM-B750 version

c) When OPERATION >White Setting >White Switch in the setup menu is set to [ATW]

d) The camcorder's built-in menu can be operated from the RM-B150/B170/B750.

Adjustments of the lens functions

When the optional exclusive lens is used, the following functions can also be controlled from the RM-B150/B170/B750.

Function	Operation on the lens	RM-B150	RM-B170	RM-B750
Iris adjustment	Iris ring	Yes	Yes	Yes
Iris close	–	No	No	Yes
Switching between auto iris and manual iris	IRIS switch	Yes	Yes	Yes
Zooming	Zoom ring	No	Yes	No
Focus adjustment	Focus ring	No	Yes	No

Functions That Can Be Controlled from the RCP-1001/1501

You can adjust the functions in the following table by using menu operations, adjustment knobs, switches, and the touch panel on the RCP-1001/1501.

For details on operations, refer to the operation manual of the RCP-1001/1501.

How to Read the Table

In the RCP-1001, and RCP-1501 columns of the table below, “Yes” and “No” mean the following.

Yes: The operation can be performed from the unit.

No: The operation cannot be performed from the unit.

Menu items	Sub-item	Setting	Description	RCP-1001/1501
Gain	Step Gain	–	Sets the master gain.	Yes
	L/M/H	Low/Mid/High	Switches between three gain levels, when the master gain has been set from a menu.	No
	Step	–3/0/3/6/9/12/18/24/30/36/42dB	Sets the master gain.	Yes
Bars	Bars	On/Off	Turns color bar output on or off.	Yes
White Balance	AWB	Start/Stop	Starts execution of auto white balance adjustment, or stops execution.	Yes
	ATW	On/Off	Turns ATW on or off.	Yes
	5600K	On/Off	Turns color temperature conversion on or off.	Yes
Black	ABB	Start/Stop	Starts execution of auto black balance adjustment, or stops execution.	Yes
Iris	Iris Mode	Auto/Manual	Selects the iris mode.	Yes
	Iris Level	–99 to ±0 to +99	Adjusts the level of the auto iris target value.	Yes
	Close	On/Off	Turns forcible iris closing on or off.	Yes
Camcorder Menu	Menu	On/Off	Operates the camcorder menu.	Yes
	Cancel/Preset	Cancel/Preset		Yes
	Select/Set	Select (Up/Down)/Set		Yes
Panel Active	Panel Active	On/Off	Enables (On) or disables (Off) panel operations.	Yes
Standard	Standard	On/Off	Selects standard mode.	Yes
ND Filter	ND Filter	Display only	Turns the display of ND filter settings on or off. (The settings cannot be changed, only displayed.)	Yes
CC Filter	CC Filter	A/B/C/D	Selects a CC filter.	Yes
Call	Call	On/Off	Enables (On) or disables (Off) calls from externally connected equipment.	Yes

Menu items	Sub-item	Setting	Description	RCP-1001/1501
Switch Status	Gamma	On/Off	Turns gamma correction on or off.	Yes
	Black Gamma	On/Off	Turns black gamma correction on or off.	Yes
	Matrix	On/Off	Turns linear matrix correction and user matrix correction on or off.	Yes
	Knee	On/Off	Turns knee correction on or off.	Yes
	White Clip	On/Off	Turns white clip correction on or off.	Yes
	Detail	On/Off	Turns detail correction on or off.	Yes
	Flare	On/Off	Turns flare correction on or off.	Yes
	Test Saw	On/Off	Turns the test saw signal on or off.	Yes
White	R Gain<A>	-99 to ±0 to +99	Specifies the white balance R gain value saved in memory A.	Yes
	B Gain<A>	-99 to ±0 to +99	Specifies the white balance B gain value saved in memory A.	Yes
	R Gain	-99 to ±0 to +99	Specifies the white balance R gain value saved in memory B.	Yes
	B Gain	-99 to ±0 to +99	Specifies the white balance B gain value saved in memory B.	Yes
Black	Master Black	-99 to ±0 to +99	Specifies the master black level.	Yes
	R Black	-99 to ±0 to +99	Specifies the R black level.	Yes
	B Black	-99 to ±0 to +99	Specifies the B black level.	Yes
Detail(HD mode)/ Detail(SD mode)	Level	-99 to ±0 to +99	Specifies the detail level.	Yes

Using a Wi-Fi Adapter

Mounting an optional CBK-WA01 Wi-Fi Adapter on this camcorder allows a Wi-Fi connection between a computer and the camcorder.

For details about the CBK-WA01, refer to the Mounting Instructions and Operating Instructions supplied with the CBK-WA01.

Making a Wi-Fi connection between a computer and the camcorder enables you to do the following.

- You can transfer planning metadata and other files between a computer and this camcorder.
- You can also use the Live Logging function to add shot marks to the video currently being shot.

Notes

- Check the firmware version of your camcorder to make sure that the camcorder supports the Wi-Fi adapter.

For details, contact your Sony dealer or your Sony service representative.

- In order to use the Wi-Fi connection feature, you must install an optional CBK-UPG02 Installation Key.

When installing the CBK-UPG02, refer to the INSTALLATION MANUAL and INSTALLATION GUIDE supplied with the CBK-UPG02.

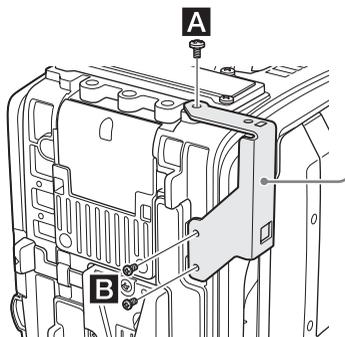
Fixing the CBK-WA01

Notes

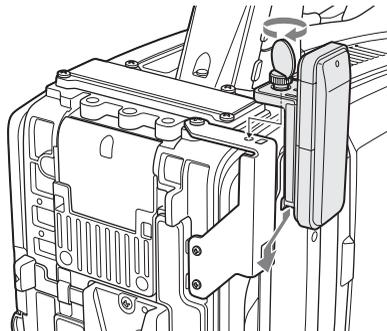
- Before attaching or removing the CBK-WA01, turn the power of the camcorder off.
- It may be impossible to stow the camcorder attached with the CBK-WA01 in a carrying case.

- 1 Attach the Wi-Fi adapter fixing bracket to the camcorder, and fix the bracket with the supplied three screws (A: +B M3×6 screw, B: +B M2.6×5 Type1 screws).**

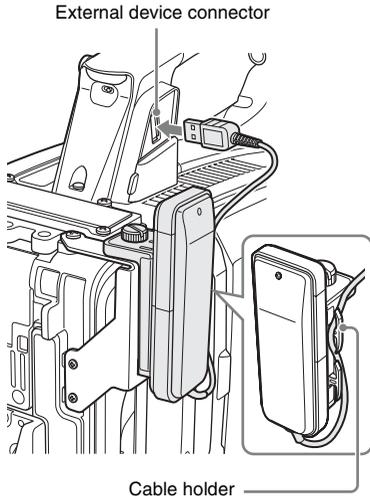
Wi-Fi adapter fixing bracket



- 2 Insert the protrusion on the backside of the CBK-WA01 into the hole on the bracket, and tighten the screw to fix the CBK-WA01 to the bracket.**



- 3 Connect the cable of the CBK-WA01 to the external device connector on the camcorder, and store the excess length of the cable in the cable holder.**



Making a Wi-Fi Connection

Two types of Wi-Fi connections are available. In “ad-hoc mode”, you can make a peer-to-peer Wi-Fi connection between a computer and a camcorder. In “infrastructure mode”, you can make Wi-Fi connections between a computer and multiple camcorders via a wireless LAN access point (building a LAN).

To make a network setting

Change settings under MAINTENANCE >Network Setting in the setup menu as required.

Item	Setting
DHCP	Setting that specifies whether to acquire the IP address automatically from a DHCP server Enabled: Acquire automatically. Disabled: Do not acquire automatically (factory default setting).
IP Address	IP address ^{a)} (factory default setting: 192.168.1.10)
Subnet Mask	Subnet mask (factory default setting: 255.255.255.0)
Default Gateway	Default gateway (factory default setting: 0.0.0.0)
User Name	User name for log-in (factory default setting: admin)
Password	Password for log-in (factory default setting: model name “pmw-350”)

a) The IP address determined by DHCP server is displayed here.

When you have changed a setting

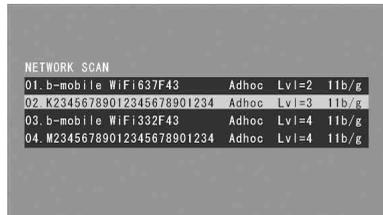
Set the Set item to [Execute]. When a confirmation message appears, turn the MENU knob to select “Execute” and press the knob.

To make a connection in ad hoc mode

- 1 Refer to “Settings on the Computer” under “Making a Wi-Fi Connection to Your Computer (Ad hoc Mode)” in the Operating Instructions supplied with the CBK-WA01 to make settings on the computer.
- 2 Start a connection on the computer.
- 3 Set MAINTENANCE >Wi-Fi Setting >Wi-Fi to [Enable] in the setup menu.
- 4 Set MAINTENANCE >Wi-Fi Setting >Scan Networks to [Execute] and press the MENU knob.

The camcorder starts scanning for a network connection.

When networks are detected, the NETWORK SCAN list appears.



- 5 Turn the MENU knob to select a network and press the knob.
The MAINTENANCE menu appears again.
- 6 Confirm that the settings for the Wi-Fi Setting item conform to the network setting on the computer.

SSID (network name): Selected network name

Network Type (connection mode): Adhoc
CH (channel): 1

Authentication (network authentication):
Depending on the settings on the computer, Open, Shared or WPA

Encryption (data encryption): Depending the settings on the computer, Disable, WEP, TKIP or AES

WEP Key Index (key index): 1 when Encryption is set to [WEP]

Input Select (key input format): Depending the network key (or security key), ASCII5, ASCII13, HEX10 or HEX26 when Encryption is set to [WEP], ASCII8-63 or HEX64 Encryption is set to [TKIP] or [AES]

7 Set the Key item to the network key (or security key) set on the computer and press the MENU knob.

8 Set the Set item to [Execute] and press the MENU knob.

The message “Wi-Fi Setting Executing...” appears and the camcorder starts connection. If the connection to the computer is complete, then the message changes to “Wi-Fi Setting OK”.

Black squares appear in the Wi-Fi Status column to show the connection status. (The number of squares shows the level of connection status.) In the Wireless Mode column, the IEEE802.11 standard of the established connection appears (802.11b, 802.11g or 802.11n).

Tip

It is also possible to make a connection by accessing a network connection started on the camcorder from the computer.

To terminate the connection

Terminate the connection on the computer.

To revert to the default settings (reset)

If you have trouble making a connection, or you want to start over, you can reset your Wi-Fi connection settings to their defaults.

Set MAINTENANCE >Network Setting >Net Config Reset in the setup menu to “Execute” and press the MENU knob.

If the reset is executed, the message “Net Config Reset Done” appears.

The camcorder attempts to connect to the network using a MAC address as the SSID

To make a connection in infrastructure mode

Setting up the wireless LAN access point
The following settings are required.

- Network ID (SSID)
- Encryption method
- Network key (Key)

For details about setting up the wireless LAN access point.

To find and connect to a wireless LAN from the camcorder

Perform the same procedure in “To make a connection in ad hoc mode” (page 23) excluding the following.

- Do not perform steps 1 and 2.
- The settings made in step 7 change as follows.
SSID (network name): Selected network connection name

Network Type (connection mode): Infra
Ch (channel): Auto

Authentication (network authentication):
Depending the settings on the computer, Open, Shared, WPA or WPA2

Encryption (data encryption): Depending the settings on the computer, Disable, WEP, TKIP or AES

WEP Key Index (key index): 1 when Encryption is set to [WEP]

Input Select (key input format): Depending the network key (or security key), ASCII5, ASCII13, HEX10 or HEX26 when Encryption is set to [WEP], ASCII8-63 or HEX64 Encryption is set to [TKIP] or [AES]

Using the Web Menu

You can operate the Web menu built in the camcorder from a computer when it is connected to the camcorder via a Wi-Fi connection.

Example Web menu

Product Information	
Model Name	PMW-350
Serial No.	2010

Network	
MAC Address	XX-XX-XX-XX-XX-XX
IP Address	192.168.1.200
Subnet Mask	255.255.255.0

Wi-Fi Status	
Wireless Mode	11g
SSID	00:13:A9:68:D6:AA
Type	Adhoc
Channel	1
Authentication	Open
Data Encryption	WEP

Planning Metadata

Upload

XMPilot ©2010 Sony Corporation

Product Information

- Model name
- Serial No.

Network

- MAC Address
- IP Address
- Subnet Mask

Wi-Fi Status

- Wireless Mode
- SSID
- Type
- Channel
- Authentication (network authentication)
- Data Encryption (data encryption)

Planning Metadata

Clicking “Upload” displays the Planning Metadata screen which allows upload of a planning metadata file (see page 25).

Note

The configuration of items displayed in the Web menu varies depending on the browser you are using.

To display the Web menu

- 1 **Launch a web browser on the computer, and navigate to “<http://<camcorder's IP address>> (setting of Maintenance >Network Setting >IP Address in the setup menu)”.**

Example (when the IP address is “192.168.1.10”): Type “<http://192.168.1.10/>” in the address bar.

If the connection is complete, a dialog appears asking you to enter the user name and password.

- 2 **Enter the user name and password, and click [OK].**

User name: admin

Password: pmw-350 (Lower-case the model name.)

To upload a planning metadata file

- 1 **Insert a media such as an SxS memory card.**

- 2 **Click “Upload” in the Web menu.**

The Planning Metadata screen appears.

Planning Metadata

Select

Execute

Status: Waiting.

XMPilot ©2010 Sony Corporation

- 3 **Click “Select” to show Choose File dialog.**

- 4 **Select the planning metadata file you want to upload, and then click “Open”.**
The path of the selected file appears.

- 5 **Click “Execute”.**

The planning metadata file is loaded into the camcorder’s memory and stored in the media.

“OK” appears in the Status field when the transfer is complete.

To upload a planning metadata file automatically

In the planning metadata file you want to load automatically, add a “load” property to the PlanningMetadata tag and set the value of the property to “True”.

When you display the Web menu and insert a media, the planning metadata file is immediately loaded into the camcorder’s memory.

Example: <PlanningMetadata ...sp
sp `load="true"` sp sp version="1.00">

For details on the planning metadata, refer to the Operating Instructions supplied with the camcorder.

Using Live Logging Functions

The Live Logging function allows you to record shot marks using a computer while you are shooting. That is, you can use a computer to record shot marks on the video being shot while you are monitoring the video output from this camcorder.

Output Formats and Limitations

Video Formats and Output Signals

The format of signals output from the VIDEO OUT, HD/SD SDI OUT, and HDMI connectors varies according to the HD/SD mode, the current recording and playback video formats, and the output signal specified by OPERATION >Input/Output >Output & i.LINK in the setup menu. (Depending on the above conditions, some limitations may also apply to signal output and input.)

Video formats and output signals, as specified by Input/Output settings (when OPERATION >Format >Country is set to [NTSC Area] or [NTSC Area(J)])

Video format	Input/Output settings				Output signal (i.LINK (HDV/DV) is I/O signal)			
	Output& i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
HQ 1920/ 59.94i& HQ 1440/ 59.94i	HD&HDV	-	i.LINK	Enable	Muting			Input/output disabled
			Camera/ i.LINK	Enable/ Disable	1920×1080/ 59.94i	1920×1080/ 59.94i	1920×1080/ 59.94i Y signal	
SD&HDV	-	-	i.LINK	Enable	Muting			Input/output disabled
			Camera/ i.LINK	Enable/ Disable	720×480/ 59.94i	720×480/ 59.94i	Composite 720×480/ 59.94i	
			Camera/ i.LINK	Enable/ Disable	720×480/ 59.94i	720×480/ 59.94i	Composite 720×480/ 59.94i	
			Camera/ i.LINK	Enable/ Disable	720×480/ 59.94i	720×480/ 59.94i	Composite 720×480/ 59.94i	
SD&DV	-	-	i.LINK	Enable	720×480/ 59.94i	720×480/ 59.94i	Composite 720×480/ 59.94i	DV (720×480/ 59.94i)
			Camera/ i.LINK	Enable/ Disable				Input/output disabled
480P	-	-	i.LINK	Enable	Muting			Input/output disabled
			Camera/ i.LINK	Enable/ Disable	720×480/ 59.94P	720×480/ 59.94P	Output disabled	
			Camera/ i.LINK	Enable/ Disable				

Video format	Input/Output settings			Output signal (i.LINK (HDV/DV) is I/O signal)				
	Output & i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
SP 1440/59.94i	HD&HDV	-	i.LINK	Enable	1920×1080/	1920×1080/	1920×1080/	HDV (1440×1080/ 59.94i)
			Camera	Enable	59.94i	59.94i	59.94i Y signal	
			Camera/ i.LINK	Disable				
	SD&HDV	-	i.LINK	Enable	720×480/	720×480/	Composite	HDV (1440×1080/ 59.94i)
			Camera	Enable	59.94i	59.94i	720×480/ 59.94i	
			Camera/ i.LINK	Disable				
	SD&DV	-	i.LINK	Enable	720×480/	720×480/	Composite	DV (720×480/ 59.94i)
			Camera	Enable	59.94i	59.94i	720×480/ 59.94i	
			Camera/ i.LINK	Disable				
	480P	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	Muting			
			Camera/ i.LINK	Disable		720×480/ 59.94P	Output disabled	
HQ 1920/ 29.97P& HQ 1440/ 29.97P	HD&HDV	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	1920×1080/	1920×1080/	1920×1080/	
			Camera/ i.LINK	Disable	29.97PsF	29.97PsF	29.97PsF Y signal	
	SD&HDV	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	720×480/	720×480/	Composite	
			Camera/ i.LINK	Disable	29.97PsF	29.97PsF	720×480/ 29.97PsF	
	SD&DV	-	i.LINK	Enable	720×480/	720×480/	Composite	DV (720×480/ 29.97PsF)
			Camera	Enable	29.97PsF	29.97PsF	720×480/ 29.97PsF	
			Camera/ i.LINK	Disable				
	480P	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	Muting			
			Camera/ i.LINK	Disable		720×480/ 59.94P	Output disabled	

Video format	Input/Output settings				Output signal (i.LINK (HDV/DV) is I/O signal)			
	Output & i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
HQ 1920/ 23.98P & HQ 1440/ 23.98P	HD&HDV	PsF	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	1920×1080/	1920×1080/	1920×1080/	
			Camera/	Disable	23.98PsF	23.98PsF	23.98PsF Y signal	
	Pull	Down	i.LINK	Enable	Muting			
			Camera	Enable	1920×1080/	1920×1080/	1920×1080/	
			Camera/	Disable	59.94i	59.94i	59.94i	
			i.LINK		2:3 pull down	2:3 pull down Y	2:3 pull down	
	SD&HDV	-	i.LINK	Enable	Muting			
			Camera	Enable	720×480/	720×480/	Composite	
			Camera/	Disable	59.94i	59.94i	720×480/	
i.LINK				2:3 pull down	2:3 pull down	59.94i 2:3 pull down		
SD&DV	-	i.LINK	Enable	Muting				
		Camera	Enable	720×480/	720×480/	Composite		
		Camera/	Disable	59.94i	59.94i	720×480/		
		i.LINK		2:3 pull down	2:3 pull down	59.94i 2:3 pull down		
480P	-	i.LINK	Enable	Muting				
		Camera	Enable	Muting	720×480/	Output		
		Camera/	Disable		59.94P	disabled		
		i.LINK						

Video format	Input/Output settings			Output signal (i.LINK (HDV/DV) is I/O signal)				
	Output & i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
SP 1440/ 23.98P	HD&HDV	PsF cannot be selected	Pull	i.LINK Enable	1920×1080/	1920×1080/	1920×1080/	HDV
			Down	Camera Enable	59.94i	59.94i	59.94i	(1440×1080/
					2:3 pull down	2:3 pull down	2:3 pull down Y signal	59.94i
				Camera/ i.LINK Disable				2:3 pull down)
								Input/output disabled
	SD&HDV	-		i.LINK Enable	720×480/	720×480/	Composite	HDV
				Camera Enable	59.94i	59.94i	720×480/	(1440×1080/
					2:3 pull down	2:3 pull down	59.94i	59.94i
				Camera/ i.LINK Disable				2:3 pull down)
								Input/output disabled
	SD&DV	-		i.LINK Enable	720×480/	720×480/	Composite	DV
				Camera Enable	59.94i	59.94i	720×480/	(720×480/
				2:3 pull down	2:3 pull down	59.94i	59.94i	
			Camera/ i.LINK Disable				2:3 pull down)	
							Input/output disabled	
480P	-		i.LINK Enable	Muting				Input/output
			Camera Enable	Muting		720×480/	Output	disabled
			Camera/ i.LINK Disable			59.94P	disabled	
HQ 1280/ 59.94P	HD&HDV	-		i.LINK Enable	Muting			Input/output
				Camera Enable	720×480/	720×480/	720×480/	disabled
				Camera/ i.LINK Disable	59.94P	59.94P	59.94P Y signal	
	SD&HDV	-		i.LINK Enable	Muting			
				Camera Enable	720×480/	720×480/	Composite	
				Camera/ i.LINK Disable	59.94i	59.94i	720×480/	
					P→i conversion	P→i conversion	P→i conversion	
	SD&DV	-		i.LINK Enable	720×480/	720×480/	Composite	DV
				Camera Enable	59.94i	59.94i	720×480/	(720×480/
					P→i conversion	P→i conversion	59.94i	59.94i
				Camera/ i.LINK Disable				P→i conversion)
								Input/output disabled
480P	-		i.LINK Enable	Muting			Input/output	
			Camera Enable	Muting		720×480/	Output	disabled
			Camera/ i.LINK Disable			59.94P	disabled	

Video format	Input/Output settings			Output signal (i.LINK (HDV/DV) is I/O signal)				
	Output & i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
HQ 1280/ 29.97P	HD&HDV	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	720×480/	720×480/	720×480/	
			Camera/ i.LINK	Disable	59.94P	59.94P	59.94P Y signal	
	SD&HDV	-	i.LINK	Enable	Muting			
			Camera	Enable	720×480/	720×480/	Composite	
			Camera/ i.LINK	Disable	29.97PsF	29.97PsF	720×480/ 29.97PsF	
	SD&DV	-	i.LINK	Enable	720×480/	720×480/	Composite	DV (720×480/ 29.97PsF)
			Camera	Enable	29.97PsF	29.97PsF	720×480/ 29.97PsF	
			Camera/ i.LINK	Disable				
	480P	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	Muting	720×480/	Output	
			Camera/ i.LINK	Disable		59.94P	disabled	
HQ 1280/ 23.98P	HD&HDV	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	720×480/	720×480/	720×480/	
			Camera/ i.LINK	Disable	59.94P	59.94P	59.94P 2:3 pull down Y signal	
	SD&HDV	-	i.LINK	Enable	Muting			
			Camera	Enable	720×480/	720×480/	Composite	
			Camera/ i.LINK	Disable	59.94i	59.94i	720×480/ 59.94i 2:3 pull down	
	SD&DV	-	i.LINK	Enable	Muting			
			Camera	Enable	720×480/	720×480/	Composite	
			Camera/ i.LINK	Disable	59.94i	59.94i	720×480/ 59.94i 2:3 pull down	
	480P	-	i.LINK	Enable	Muting			
			Camera	Enable	Muting	720×480/	Output	
			Camera/ i.LINK	Disable		59.94P	disabled	
DVCAM/ 59.94i	HD&HDV and SD&HDV cannot be selected							
	SD&DV	-	i.LINK	Enable	720×480/	720×480/	Composite	DV (720×480/ 59.94i)
			Camera	Enable	59.94i	59.94i	720×480/ 59.94i	
			Camera/ i.LINK	Disable				
480P cannot be selected								

Video format	Input/Output settings			Output signal (i.LINK (HDV/DV) is I/O signal)				
	Output& i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
DVCAM/ 29.97P	HD&HDV and SD&HDV cannot be selected							
	SD&DV	–	i.LINK Camera	Enable Enable	720×480/ 29.97PsF	720×480/ 29.97PsF	Composite 720×480/ 29.97PsF	DV (720×480/ 29.97PsF)
			Camera/ i.LINK	Disable				Input/output disabled
480P cannot be selected								

Video formats and output signals, as specified by Input/Output settings (when OPERATION >Format >Country is set to [PAL Area])

Video format	Input/Output settings			Output signal (i.LINK (HDV/DV) is I/O signal)				
	Output& i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
HQ 1920/ 50i&HQ 1440/50i	HD&HDV	–	i.LINK Camera	Enable Enable	Muting 1920×1080/			Input/output disabled
			Camera/ i.LINK	Disable	50i	50i	50i Y signal	
	SD&HDV	–	i.LINK Camera	Enable Enable	Muting 720×576/50i	720×576/ 50i	Composite 720×576/50i	Input/output disabled
			Camera/ i.LINK	Disable				
	SD&DV	–	i.LINK Camera	Enable Enable	720×576/50i	720×576/ 50i	Composite 720×576/50i	DV (720×576/ 50i)
			Camera/ i.LINK	Disable				Input/output disabled
	576P	–	i.LINK Camera	Enable Enable	Muting Muting			Input/output disabled
			Camera/ i.LINK	Disable		720×576/ 50P	Muting	

Video format	Input/Output settings			Output signal (i.LINK (HDV/DV) is I/O signal)				
	Output & i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
SP 1440/50i	HD&HDV	-	i.LINK	Enable	1920×1080/	1920×1080/	1920×1080/	HDV (1440×1080/50i)
			Camera	Enable	50i	50i	50i Y signal	
			Camera/ i.LINK	Disable				
	SD&HDV	-	i.LINK	Enable	720×576/50i	720×576/	Composite	HDV (1440×1080/50i)
			Camera	Enable		50i	720×576/50i	
			Camera/ i.LINK	Disable				
	SD&DV	-	i.LINK	Enable	720×576/50i	720×576/	Composite	DV (720×576/50i)
			Camera	Enable		50i	720×576/50i	
			Camera/ i.LINK	Disable				
	576P	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	Muting		720×576/50P	
			Camera/ i.LINK	Disable			Output disabled	
HQ 1920/25P& HQ 1440/25P	HD&HDV	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	1920×1080/	1920×1080/	1920×1080/	
			Camera/ i.LINK	Disable	25PsF	25PsF	25PsF Y signal	
	SD&HDV	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	720×576/	720×576/	Composite	
			Camera/ i.LINK	Disable	25PsF	25PsF	720×576/25PsF	
	SD&DV	-	i.LINK	Enable	720×576/	720×576/	Composite	DV (720×576/25PsF)
			Camera	Enable	25PsF	25PsF	720×576/25PsF	
			Camera/ i.LINK	Disable				
	576P	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	Muting		720×576/50P	
			Camera/ i.LINK	Disable			Output disabled	

Video format	Input/Output settings			Output signal (i.LINK (HDV/DV) is I/O signal)				
	Output & i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
HQ 1280/ 50P	HD&HDV	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	720×576/50P	720×576/50P	720×576/50P Y signal	
			Camera/ i.LINK	Disable				
	SD&HDV	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	720×576/50i	720×576/50i	Composite	
			Camera/ i.LINK	Disable	P→i conversion	P→i conversion	P→i conversion	
	SD&DV	-	i.LINK	Enable	720×576/50i	720×576/50i	Composite	DV (720×576/50i (P→i conversion))
			Camera	Enable	P→i conversion	P→i conversion	P→i conversion	
			Camera/ i.LINK	Disable				
	576P	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	Muting	720×576/50P	Output disabled	
			Camera/ i.LINK	Disable				
HQ 1280/ 25P	HD&HDV	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	720×576/50P	720×576/50P	720×576/50P Y signal	
			Camera/ i.LINK	Disable				
	SD&HDV	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	720×576/25PsF	720×576/25PsF	Composite	
			Camera/ i.LINK	Disable	25PsF	25PsF	720×576/25PsF	
	SD&DV	-	i.LINK	Enable	720×576/25PsF	720×576/25PsF	Composite	DV (720×576/25PsF)
			Camera	Enable	25PsF	25PsF	720×576/25PsF	
			Camera/ i.LINK	Disable				
	576P	-	i.LINK	Enable	Muting			Input/output disabled
			Camera	Enable	Muting	720×576/50P	Output disabled	
			Camera/ i.LINK	Disable				
DVCAM/50i	HD&HDV and SD&HDV cannot be selected							
50i	SD	-	i.LINK	Enable	720×576/50i	720×576/50i	Composite	DV (720×576/50i)
			Camera	Enable				
			Camera/ i.LINK	Disable				
576P cannot be selected								

Video format	Input/Output settings			Output signal (i.LINK (HDV/DV) is I/O signal)				
	Output& i.LINK	23.98P Output	Source Select	i.LINK I/O	HD/SD SDI OUT	HDMI	VIDEO OUT	i.LINK (HDV/DV)
DVCAM/ 25P	HD&HDV and SD&HDV cannot be selected							
	SD	–	i.LINK Camera/	Enable Enable	720×576/ 25PsF	720×576/ 25PsF	Composite 720×576/ 25PsF	DV (720×576/ 50i)
			Camera/ i.LINK	Disable				Input/output disabled
	576P cannot be selected							

Output Signals and Operation Restrictions When a Camcorder System is Configured (in HD Mode Only)

The table below shows output signals from the camcorder and operation restrictions to the camcorder when it is connected with a camera adaptor and camera extension unit to configure a shooting and recording system.

When the camcorder is equipped with an XDCA-55 HD Camera Adaptor, full HD signals complying with the HD-SDI standard are transferred to the camera adaptor.

Note

When configuring a camcorder system with a camera adaptor and camera extension unit, install the optional CBK-CE01 50 Pin Interface and Digital Extender and set OPERATION >Format >HD/SD to [HD] in the setup menu.

Settings of Rec Format and System Frequency under OPERATION >Format in the setup menu	SDI outputs to the camera adaptor	System format of the camera adaptor and camera extension unit	Operation restrictions to the camcorder	
			Genlock	Return video display
HQ1920/59.94i	1920×1080/59.94i	1920×1080/59.94i	Available	Available
HQ1440/59.94i				
SP1440/59.94i				
HQ1920/29.97P	1920×1080/29.97PsF			
HQ1440/29.97P				
SP1440/23.98P	1920×1080/59.94i (2-3PD)			
HQ1920/23.98P ^{a)}	Output disabled	Not supported	Unavailable	Unavailable
HQ1920/23.98P ^{b)}	1920×1080/59.94i (2-3PD)	1920×1080/59.94i	Available	Unavailable
HQ1440/23.98P ^{a)}	Output disabled	Not supported	Unavailable	Unavailable
HQ1440/23.98P ^{b)}	1920×1080/59.94i (2-3PD)	1920×1080/59.94i	Available	Unavailable
HQ1920/50i	1920×1080/50i	1920×1080/50i	Available	Available
HQ1440/50i				
SP1440/50i				
HQ1920/25P	1920×1080/25PsF			
HQ1440/25P				
HQ1280/59.94P	1280×720/59.94P	1920×1080/59.94i	Available	Available
HQ1280/50P	1280×720/50P	1920×1080/50i	Available	Available

a) PsF output

b) PD output

