Remote Control Unit

Operating Instructions
Before operating the unit, please read this manual thoroughly and retain it for future reference.

RM-B170

© 2012 Sony Corporation
For the customers in the U.S.A.
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

All interface cables used to connect peripherals must be shielded in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For the customers in Canada
This Class A digital apparatus complies with Canadian ICES-003.

For the customers in Europe
This product with the CE marking complies with the EMC Directive issued by the Commission of the European Community. Compliance with this directive implies conformity to the following European standards:
- EN55103-1: Electromagnetic Interference (Emission)
- EN55103-2: Electromagnetic Susceptibility (Immunity)

This product is intended for use in the following Electromagnetic Environments: E1 (residential), E2 (commercial and light industrial), E3 (urban outdoors), E4 (controlled EMC environment, ex. TV studio).

The manufacturer of this product is Sony Corporation, 1-7-1 Konan, Minato-ku, Tokyo, 108-0075 Japan. The Authorized Representative for EMC and product safety is Sony Deutschland GmbH, Hedelfinger Strasse 61, 70327 Stuttgart, Germany. For any service or guarantee matters please refer to the addresses given in separate service or guarantee documents.
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Overview

The RM-B170 Remote Control Unit is designed for remote control of Sony studio or portable-type color video cameras and camcorders. The unit can be directly connected to a camera or camcorder as a portable-type remote control unit, or it can be connected to a CCU for use as a simple remote control panel. The unit can control a camera from a distance of up to 100 m (328 feet) when connected directly to the camera.

Features

The principal features of the RM-B170 are as follows:

Operability suitable for basic camera operations
The remote control unit is provided with essential control functions for basic operations of a camera. The operation buttons and controls are located on the front panel of the unit according to function and frequency of use. A guard to prevent unintended operation is provided around the buttons whose erroneous operation may seriously affect camera operation or setups. The buttons with illumination are easy to see even in a dark place, indicating the operation status by flashing or lighting.

Media control functions
This unit can control media inserted in the recorder connected to a camera or those in a camcorder. The unit also supports the operation of clips of nonlinear media.

Control of automatic adjustment functions of the camera
Automatic black/white balance adjustment of the camera can be performed from this unit.

Control of the ECS/shutter function of the camera
The ECS (Extended Clear Scan) and electronic shutter functions of the camera can be turned ON/OFF from this unit. The ECS frequency and shutter speed are also adjusted from the unit.

Slow shutter function supported
This unit can set the number of accumulated frames for a camera equipped with the SLS (Slow Shutter) function.

Parallel operation with another control panel
When this unit is connected to a camera via a camera control unit, the camera can be concurrently controlled from this unit and another remote control panel, such as the MSU-1000/1500–series Master Setup Unit or RCP-1000/1500-series Remote Control Panel.

Customized functions
This unit can be set up in various ways, to suit the operation form and frequency of use of the functions.

• Assignable buttons
Various functions can be assigned to two assignable buttons.

• Operational and call buzzers
The sound volume of the buzzers can be adjusted or muted as necessary.

• Brightness of indicators
The brightness of the indicators can be adjusted according to usage conditions. Suprerluminosity LEDs employed in this unit improve visibility outdoors, when compared with conventional models.
Names and Functions of Parts

Operation Panel

1. Tally indicators
2. Function operation block
3. Function/menu operation block
4. SHOT MARK button
5. White/black balance control block
6. Iris/master black control block
7. MEDIA operation block
8. Filter/gain operation block

Note
Some functions are not operable for some connected camera models. For details, consult your Sony dealer.

1. Tally indicators

Camera number
The supplied number plate can be attached here.

Red (R) tally lamp
This lamp lights in red when a red tally signal is supplied to the camera.

Green (G) tally lamp
This lamp lights in green when a green tally signal is supplied to the camera.
**Function operation block**

1. **AWB (Auto White Balance) button**
   
   Press this button to start auto white balance adjustment. It lights during adjustment and goes dark when adjustment is completed. If you press the button during adjustment, the automatic adjustment is canceled and the button flashes. To turn the button dark, press it again.

2. **ABB (Auto Black Balance) button**
   
   Press this button to start auto black balance adjustment. It lights during adjustment and goes dark when adjustment is completed. If you press the button during adjustment, the automatic adjustment is canceled and the button flashes. To turn the button dark, press it again.

3. **Assignable 1 button**
   
   Various functions can be assigned to this button. For the functions assignable to this button, see “Basic Menu” in “Settings on the RM Configuration Menu” (page 15).

4. **AUTO KNEE button**
   
   This button turns the auto knee function ON/OFF.

5. **A (memory A) button**
   
   Press and light this button to obtain the white balance setting stored in memory A of the camera (Memory A mode). Press and turn the button dark to release Memory A mode.

6. **B (memory B) button**
   
   Press and light this button to obtain the white balance setting stored in memory B of the camera (Memory B mode). Press and turn the button dark to release Memory B mode.

7. **PRESET button**
   
   Press and light this button to set the white balance to the preset value of the camera (Preset mode). Press and turn the button dark to release Preset mode.

8. **BARS (color bar output) button**
   
   Press and light this button to run the color-bar signal generator on the camera and output the specified signal.

**Notes**

- In Preset mode, manual white balance adjustment with the WHITE controls and auto white balance adjustment with the AWB button are disabled.
- When the control mode of the WHITE controls is set to Absolute mode, the memory A and B buttons and the AWB button are disabled.

**Note**

When the control mode of the BLACK controls is set to Absolute mode, auto black balance adjustment with the ABB button is disabled.
Function/menu operation block

- **CHARACTER select button**
  When the button is not lit, the unit is in RM Function Operation mode.
  Press and light this button to set the unit to Camera Menu mode. In Camera Menu mode, the menu displayed on the viewfinder or on the video signal output from the monitor connector can be controlled from this unit.

- **DETAIL/MENU button**
  In RM Function Operation mode, press and light this button to enable the Detail function. The current detail level is displayed on the adjustment value indicator and the detail level can be adjusted with the adjustment knob (rotary encoder).
  In Camera Menu mode, press and light this button to display the camera’s menu on the monitor connected via the MONITOR connector.

- **SHUTTER/DISPLAY button**
  In RM Function Operation mode, press and light this button to enable the Shutter function. The current shutter speed is displayed on the adjustment value indicator and the shutter speed can be adjusted with the adjustment knob (rotary encoder).
  In Camera Menu mode, press and light this button to enable the character display function on the camera.

- **ECS (Extended Clear Scan) button**
  In RM Function Operation mode, press and light this button to enable the ECS function. The current ECS frequency is displayed on the adjustment value indicator and the ECS frequency can be adjusted with the adjustment knob (rotary encoder).
  An ECS frequency of 5 digits or more is expressed in scientific E notation.
  Example: 12000 Hz → 1.2E4

- **SLS (Slow Shutter)/CANCEL button**
  In RM Function Operation mode, press and light this button to enable the SLS function. The currently set number of accumulated frames is displayed on the adjustment value indicator and the number of accumulated frames can be adjusted with the adjustment knob (rotary encoder).
  In Camera Menu mode, press and light this button to cancel the set value.

- **Assignable 2/ENTER button**
  In RM Function Operation mode, press and light this button to enable the function assigned to this assignable button. The currently set value is displayed on the adjustment value indicator and the value can be adjusted with the adjustment knob (rotary encoder).
  In Camera Menu mode, press and light this button to confirm the set value.

  *For the functions assignable to this button, see “Basic Menu” in “Settings on the RM Configuration Menu” (page 15).*

- **ON button**
  In RM Function Operation mode, press this button to turn ON/OFF the function(s) of the DETAIL, SHUTTER, ECS, SLS, and assignable 2 buttons that are enabled (that is, the buttons that are lit).
In RM Configuration Menu mode, press this button to check the sound volume during buzzer volume adjustment.

Adjustment value indicator
In RM Function Operation mode, this indicator displays the adjustment value of the selected function.
In RM Configuration Menu mode, the indicator displays the set value of the selected item.

Note
In RM Function Operation mode, for some functions the adjustment value displayed on the adjustment value indicator may differ from that displayed on the camera’s indicator.

Adjustment knob (rotary encoder)
In RM Function Operation mode, use this knob to adjust the selected function.
In Camera Menu mode, use this knob to select the menu item and change the setting.
In RM Configuration Menu mode, use this knob to set the selected item.

SHOT MARK button
Press this button during recording or playback to record shot mark 1.

White/black balance control block

WHITE (white balance) controls
Use these controls to adjust the white balance manually. The left control is for the R signal and the right control is for the B signal.
The adjustment mode of the controls is specified at the factory as Relative mode, which can be changed to Absolute mode using the RM Configuration menu.
For details, see “Detail Menu” in “Settings on the RM Configuration Menu” (page 17).

BLACK (black balance) controls
Use these controls to adjust the black balance manually. The left control is for the R signal and the right control is for the B signal.
The adjustment mode of the controls is specified at the factory as Relative mode, which can be changed to Absolute mode using the RM Configuration menu.
For details, see “Detail Menu” in “Settings on the RM Configuration Menu” (page 17).

Iris/master black control block

ACTIVE (panel active) button
Use this button to select the control mode for the connected camera system.
With the factory setting, the control mode is cyclically switched among FULL, PART, and LOCK modes each time the button is pressed.
**FULL mode:** All controls from this unit are enabled (panel active status). Both this button and the IRIS/MB ACTIVE indicator light.

**PART mode:** Controls only from the iris/master black control block are enabled (iris/master black active status). This button goes dark, but the IRIS/MB ACTIVE indicator stays lit.

**LOCK mode:** All controls from this unit are disabled (lock status). Both this button and the IRIS/MB ACTIVE indicator go dark.

The function of this button can be changed to switch only between FULL and LOCK modes using the RM Configuration menu.

*For details, see “Detail Menu” in “Settings on the RM Configuration Menu” (page 17).*

**② IRIS/MB ACTIVE (iris/master black active) indicator**

This indicator lights when the control mode selected with the ACTIVE button is FULL or PART. When this indicator is lit, iris/master back controls from this unit are enabled.

**⑤ AUTO IRIS button**

Press and light this button to automatically adjust the iris according to the amount of input light. If you press the button when lit, it goes dark and manual iris adjustment is enabled.

**④ IRIS control**

When the AUTO IRIS button is not lit, you can adjust the iris manually by turning this control.

When the AUTO IRIS button is lit, you can fine-adjust the reference value for automatic iris adjustment.

The control mode of the IRIS control is specified at the factory as Absolute mode, which can also be changed to Relative mode using the RM Configuration menu.

*For details, see “Detail Menu” in “Settings on the RM Configuration Menu” (page 17).*

**⑥ IRIS indicator**

This indicator displays the iris setting as a f-number. “CLS” is displayed when the lens is closed.

**Note**

For some connected camera models, the setting value displayed on the IRIS indicator may differ from that displayed on the camera’s indicator.

**① EXT (extender) indicator**

This indicator lights when a lens extender is used.

The function of the indicator can be changed so that it lights when the digital extender function is turned on using the RM Configuration menu.

*For details, see “Detail Menu” in “Settings on the RM Configuration Menu” (page 17).*

**⑦ MASTER BLACK control**

Use this control to adjust the master black level manually.

The control mode of the MASTER BLACK control is specified at the factory as Absolute mode, which can also be changed to Relative mode using the RM Configuration menu.

*For details, see “Detail Menu” in “Settings on the RM Configuration Menu” (page 17).*

**⑧ ALARM indicator**

This indicator flashes or lights in red when a system error occurs and the self-diagnosis function is operating on the camera head or CCU.
10 Names and Functions of Parts

MEDIA operation block

a. (rewind) button
Press and light this button to start a rewind operation.

b. (playback/pause) button
Press and light this button to start a playback operation. When you press the button when lit, it goes dark and playback stops temporarily.

c. (fast-forward) button
Press and light this button to start a fast-forward operation.

d. START/STOP button
Press and light this button to start a recording operation. When you press the button when lit, it goes dark and recording stops.

e. (reverse clip jump) button
Press this button to jump to the beginning of the current clip. Press this button and the button simultaneously to jump to the first image of the clip recorded first.

f. (stop) button
Press to stop a playback, fast-forward, or rewind operation.

g. (forward clip jump) button
Press this button to jump to the beginning of the next clip. Press this button and the button simultaneously to jump to the last image of the clip recorded last.

h. REC REVIEW (recording review) button
Press and light this button to execute a recording review operation.

Notes
- When the START/STOP button is lit, the other buttons in the MEDIA operation block are deactivated. To activate the other buttons, first press the START/STOP button to cancel Recording mode, then press the relevant button.
- A part of the MEDIA operation functions of this unit may be disabled depending on the combination of camera and recorder. For details, consult your Sony dealer.

Filter/gain operation block

a. ND (ND filter) select switch and indicator
Use this switch to select the ND filter. Press the switch upward to change the ND filter in order and downward to change the ND filter in the reverse order. The ND indicator displays the currently selected ND filter.

Note
This switch is disabled for a camera not equipped with an ND filter servo system or a camera without ND filters.
CC (color temperature conversion filter) select switch and indicator
Use this switch to select the CC filter. Press the switch upward to change the CC filter in order and downward to change the CC filter in the reverse order. The CC indicator displays the currently selected CC filter.

Note
This switch is disabled for a camera not equipped with a CC filter servo system or a camera without CC filters.

MASTER GAIN/menu item select switch and indicator
In RM Function Operation mode, use this switch to select the master gain value. Press the switch upward for higher values and downward for lower values. The MASTER GAIN indicator displays the currently selected master gain value. In RM Configuration Menu mode, use this switch to select menu items. The currently selected item is displayed on the MASTER GAIN indicator.

Connector Panel

@CAMERA connector (8-pin)
Connect to the camera, using the supplied remote control cable.

bMONITOR connector (BNC)
Connect to a color monitor to observe the analog video signal from the camera.
Operating the Camera’s Menu

The RM-B170 enables you to operate the menu of the connected camera. For the camera’s menu operations, use the function/menu operation block of this unit.

Operating procedure

1 Press and light the CHARACTER button.
   The function/menu operation block of this unit enters Camera Menu mode.

2 Press and light the MENU button.
   The camera’s menu is displayed on the image output from the MONITOR connector.

   **Note**
   To display the menu on the image output from the MONITOR connector, you may have to set the connected camera. For details, refer to the Operating Instructions of the connected camera.

3 Operate the menu using the ENTER, CANCEL and adjustment knob.
   *For the menu operation, refer to the Operating Instructions of the connected camera.*
Settings on the RM Configuration Menu

The RM-B170 is provided with the RM Configuration menu, which enables you to select and adjust the functions of the control blocks of the unit and check various information. At the beginning of an RM Configuration menu operation, select “Basic menu” or “Detail menu” and proceed with operations as desired.

For menu operations, use the function/menu operation block and menu item select switch (MASTER GAIN switch) in the filter/gain operation block.

For the menu items, see the tables on page 15 and after.

Starting the RM Configuration Menu

To operate the Basic menu
Hold the CHARACTER button and press the ENTER button.
The CHARACTER button flashes and the unit enters RM Configuration Menu (Basic menu) mode.

To operate the Detail menu
Hold the CHARACTER button and turn on the power of the RM-B170. (Connect the RM-B170 to a camera, then turn on the power of the camera. Or connect the remote control cable to the RM-B170 when the power of the camera is turned on.) The CHARACTER button flashes and the unit enters RM Configuration Menu (Detail menu) mode.
Basic Operation of the RM Configuration Menu

1. Press the menu item select switch (MASTER GAIN switch) upward or downward to display the desired item on the MASTER GAIN indicator.

2. Turn the adjustment knob (rotary encoder) to change the setting value on the adjustment value indicator.

   When the setting value is a digit (digits), turn the adjustment knob clockwise for a higher value and counterclockwise for a lower value. Turn the knob fast to change the value rapidly and slowly for fine adjustment.

3. Press the ENTER button to register the setting value.

   If you press the CANCEL button before pressing the ENTER button, the setting value returns to the value before changing.

   If you operate the menu item select switch before pressing the ENTER button, the setting value returns to the value before changing and another menu item is selected.

To continue setting of another item
Repeat steps 1 to 3.

To exit the menu mode
Press the flashing CHARACTER button.

To return the setting value to the factory setting
Select the item whose setting you wish to return to the factory setting with the menu item select switch. Then press and hold the CANCEL button for two seconds or more to reset the setting value to the factory setting. Press the ENTER button to register the setting value.
## Basic Menu

(A boxed value under “Setting” indicates the factory setting.)

<table>
<thead>
<tr>
<th>Item indication (on MASTER GAIN indicator)</th>
<th>Setting (on adjustment value indicator)</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator brightness LU</td>
<td>1 - 5 - 10</td>
<td>Sets the brightness of the indicators. A higher value makes the display brighter, and a lower value makes it darker.</td>
</tr>
<tr>
<td>Buzzer volume (for click) b1</td>
<td>0 - 5 - 10</td>
<td>Sets the sound volume that occurs when operating (click volume). A higher value increases the sound volume, and a lower value decreases it. To check the volume during setting, press the ON button.</td>
</tr>
<tr>
<td>Buzzer volume (for call) b2</td>
<td>0 - 5 - 10</td>
<td>Sets the sound volume for call. A higher value increases the sound volume, and a lower value decreases it. To check the volume during setting, press the ON button.</td>
</tr>
</tbody>
</table>
| ASSIGNABLE 1 a) A1                        | 0 - 9                                    | Assigns a function to the assignable 1 button.  
0: NO ASSIGN (no function assigned)  
1: STANDARD (calling up the standard paint data)b)  
2: CALL (functioning as call button)  
3: TEST (selecting test signal)  
4: ATW (auto-tracing white balance function)  
5: 5600K (selecting 5600K electric filter)  
6: FREEZE MIX (selecting freeze mixing display)  
7: SHOT MARK 2 (setting of shot mark 2)  
8: D.EXT (x2) (selecting a double digital extender)  
9: D.EXT (x3) (selecting a triple digital extender) |
<table>
<thead>
<tr>
<th>Item</th>
<th>Item indication (on MASTER GAIN indicator)</th>
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<th>Function</th>
</tr>
</thead>
</table>
| ASSIGNABLE 2 a) | A2 | 0 - 9 | Assigns a function to the assignable 2 button.  
0: NO ASSIGN (no function assigned)  
1: MW GAIN (adjusting the master white gain)  
2: KNEE (turning ON/OFF and performing the master knee point adjustment)  
3: M GAMMA (turning ON/OFF and performing the master gamma adjustment)  
4: BLACK GAMMA (adjusting the master black gamma)  
5: MASTER FLARE (turning ON/OFF and performing the master flare adjustment)  
6: SATURATION (turning ON/OFF and performing the saturation adjustment)  
7: S&Q (turning ON/OFF the slow & quick motion function and selecting a recording frame rate for slow & quick motion recording)  
8: ZOOM (selecting remote/local mode and performing focal distance adjustment)  
9: FOCUS (selecting remote/local mode and performing focus adjustment) |

a) * Once you have assigned a function to the assignable 1 or 2 button, label the button with the supplied function label to prevent erroneous operation.  
* Before changing a function to be assigned to the assignable 1 or 2 button, check if the status of the currently assigned function on the camera (ON/OFF status and adjustment value) is identical to what you intended. This is why the status of that function may not be controlled from both the Remote Control Unit and the camera after its assignment has been released.  
b) To perform this function, press and hold the assignable 1 button for one second or more.
## Detail Menu

(A boxed value under “Setting” indicates the factory setting.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Item indication (on MASTER GAIN indicator)</th>
<th>Setting (on adjustment value indicator)</th>
<th>Function</th>
</tr>
</thead>
</table>
| WHITE VR CTRL         | 1 | REL, AbS | Selects the control mode of the WHITE controls.  
                      |                                       |                                                                           | REL: Relative mode  
                      |                                       |                                                                           | AbS: Absolute mode  |
| WHITE VR SCALE        | 2 | 1, 2, 4 | Selects the adjustment range of the WHITE controls in Relative mode.  
                      |                                       |                                                                           | 1: 1/1  
                      |                                       |                                                                           | 2: 1/2  
                      |                                       |                                                                           | 4: 1/4  |
| BLACK VR CTRL         | 3 | REL, AbS | Selects the control mode of the BLACK controls.  
                      |                                       |                                                                           | REL: Relative mode  
                      |                                       |                                                                           | AbS: Absolute mode  |
| BLACK VR SCALE        | 4 | 1, 2, 4 | Selects the adjustment range of the BLACK controls in Relative mode.  
                      |                                       |                                                                           | 1: 1/1  
                      |                                       |                                                                           | 2: 1/2  
                      |                                       |                                                                           | 4: 1/4  |
| MASTER BLACK VR CTRL  | 5 | REL, AbS | Selects the control mode of the MASTER BLACK control.  
                      |                                       |                                                                           | REL: Relative mode  
                      |                                       |                                                                           | AbS: Absolute mode  |
| MASTER BLACK VR SCALE | 6 | 1, 2, 4 | Selects the adjustment range of the MASTER BLACK control in Relative mode.  
                      |                                       |                                                                           | 1: 1/1  
                      |                                       |                                                                           | 2: 1/2  
                      |                                       |                                                                           | 4: 1/4  |
| IRIS VR CTRL          | 7 | REL, AbS | Selects the control mode of the IRIS control.  
                      |                                       |                                                                           | REL: Relative mode  
                      |                                       |                                                                           | AbS: Absolute mode  |
| IRIS VR SCALE         | 8 | 1, 2, 4 | Selects the adjustment range of the IRIS control in Relative mode.  
                      |                                       |                                                                           | 1: 1/1  
                      |                                       |                                                                           | 2: 1/2  
<pre><code>                  |                                       |                                                                           | 4: 1/4  |
</code></pre>
<table>
<thead>
<tr>
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<th>Setting (on adjustment value indicator)</th>
<th>Function</th>
</tr>
</thead>
</table>
| IRIS AUTO RANGE      | 9                                         | OFF, On                                | Selects if the minimum and maximum values of the adjustment range of the IRIS control in Absolute mode are to be set automatically according to the lens file data.  
  OFF: The iris is adjusted within the values set with IRIS MIN and IRIS MAX items on this Detail menu.  
  ON: The iris is automatically adjusted according to the lens file data of the camera (effective only with a camera equipped with an automatic detection facility). |
| IRIS MIN             | 10                                        | CLS, 22.9 - 1.0                        | Sets the minimum adjustment value (f) of the IRIS control in Absolute mode.  
  CLS: Close |
| IRIS MAX             | 11                                        | CLS, 22.9 - 1.4 -1.0                   | Sets the maximum adjustment value (f) of the IRIS control in Absolute mode.  
  CLS: Close |
| ACTIVE MODE          | 12                                        | 2, 3                                   | Selects the control mode of the ACTIVE button.  
  2: FULL and LOCK modes are switched alternately each time the ACTIVE button is pressed.  
  3: FULL, PART, and LOCK modes are switched cyclically each time the ACTIVE button is pressed. |
| EXT INDICATOR MODE   | 13                                        | L, Ld                                  | Selects the lighting mode of the EXT indicator.  
  L: Links to the lens extender.  
  Ld: Links to the lens extender or the digital extender of the camera. |
| SHUTTER              | 14                                        | F, A                                   | Selects the display form of the shutter speed.  
  F: Frame rate  
  A: Angular speed |
| ZOOM                 | 15                                        | PEr, dIS                               | Selects the display form of the zoom position.  
  PEr: Percent  
  dIS: Distance |
<table>
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<tr>
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<th>Setting (on adjustment value indicator)</th>
<th>Function</th>
</tr>
</thead>
</table>
| FOCUS  | 16                                         | PEr, dIS                                 | Selects the display form of the focus position.  
                                          |                                             | PEr: Percent  
                                          |                                             | dIS: Distance |
| VERSION| VS                                         | (display only)                           | Displays the software version. |
| CLEAR  | CL                                         | no, yES                                  | Resets all the settings made by the RM  
                                          |                                             | Configuration menu to the default  
                                          |                                             | settings (factory settings).  
                                          |                                             | 1 Select “yES” and press the ENTER  
                                          |                                             | button.  
                                          |                                             | The indication “yES” flashes on the  
                                          |                                             | adjustment value indicator.  
                                          |                                             | 2 Press the ENTER button again.  
                                          |                                             | All the settings are reset to the default  
                                          |                                             | settings.  
                                          |                                             | To cancel the reset operation, press the  
                                          |                                             | CANCEL button before performing step  
                                          |                                             | 2. |

**FOCUS**

- **16**: PEr, dIS
- **PEr**: Percent  
- **dIS**: Distance

**VERSION**

- **VS**: (display only)

**CLEAR**

- **CL**: no, yES

1. Select “yES” and press the ENTER button.  
The indication “yES” flashes on the adjustment value indicator.
2. Press the ENTER button again.  
All the settings are reset to the default settings.

To cancel the reset operation, press the CANCEL button before performing step 2.
Specifications

**General**

Power requirements
10.5 V to 30 V DC (supplied from the camera)

Power consumption
3 W

Maximum cable length
100 m (328 feet)

Operating temperature
–20 °C to +45 °C (–4 °F to +113 °F)

Storage temperature
–20 °C to +60 °C (–4 °F to +140 °F)

Mass
Approx. 470 g (1 lb 1 oz)

**Inputs/Outputs**

<table>
<thead>
<tr>
<th>Input/Output</th>
<th>Detail</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMERA</td>
<td>8-pin multiconnector (1)</td>
</tr>
<tr>
<td>MONITOR</td>
<td>BNC (1)</td>
</tr>
<tr>
<td>EXT I/O</td>
<td>D-sub 9-pin (1)</td>
</tr>
</tbody>
</table>

**Dimensions**

Unit: mm (inches)

M2.6 Depth=4 mm, Thread (4)
Supplied accessories
Number plate (1)
Function label (1)
Special remote control cable (10 m)
Operating Instructions (1)
CD-ROM (including Operating Instructions) (1)
Warranty (1)

Optional accessories
CCA-5-3 Remote Cable (3 m)
CCA-5-10 Remote Cable (10 m)
CCA-5-30 Remote Cable (30 m)

Design and specifications are subject to change without notice.

Note
Always verify that the unit is operating properly before use. SONY WILL NOT BE LIABLE FOR DAMAGES OF ANY KIND INCLUDING, BUT NOT LIMITED TO, COMPENSATION OR REIMBURSEMENT ON ACCOUNT OF THE LOSS OF PRESENT OR PROSPECTIVE PROFITS DUE TO FAILURE OF THIS UNIT, EITHER DURING THE WARRANTY PERIOD OR AFTER EXPIRATION OF THE WARRANTY, OR FOR ANY OTHER REASON WHATSOEVER.