

Camera Adaptor

Operating Instructions

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



CA-TX50/50P

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

For the customers in the USA (for CA-TX50)

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.

The shielded interface cable recommended in this manual must be used with this equipment in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

For the customers in Europe (for CA-TX50P)

This product with the CE marking complies with both the EMC Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC) issued by the Commission of the European Community.

Compliance with these directives implies conformity to the following European standards:

- EN60950: Product Safety
- EN55103-1: Electromagnetic Interference (Emission)
- EN55103-2: Electromagnetic Susceptibility (Immunity)

This product is intended for use in the following Electromagnetic Environment (s):

E1 (residential), E2 (commercial and light industrial), E3 (urban outdoors) and E4 (controlled EMC environment, ex. TV studio).

Table of Contents

Overview	4
Location and Function of Parts	5
Front and Right Side	5
Switches and Knobs on the Rear	6
Connectors and Switches on the Rear and Left Side	8
Mounting on Video Camera	10
Removing from the camera	11
Notes on Use	11
Specifications	12
General	12
Input/output connectors	12
Accessories supplied	12
Accessories not supplied	12

Overview

The CA-TX50/50P Camera Adaptor, which is docked with a DXC-D50 series Color Video Camera, allows connecting the camera to the CCU-TX50/50P Camera Control Unit via a triaxial cable.

Component signal transfer method

This unit enables transfer of Y, R–Y and B–Y signals for high picture quality.

Long-distance transfer

The maximum triaxial cable length that can be used to connect this unit to a camera control unit is max. 750 m (when using a Belden ϕ 8.5 mm cable) or 1125 m (when using a Belden ϕ 13.2 mm cable).

Electrical shock prevention function

To prevent electrical shock, this unit shuts off any high-voltage power supply whenever there is an incomplete connection.

Coaxial cable connection

When necessary, this unit can be connected to a camera control unit via a coaxial cable.*

* This unit's triaxial connector must be refitted to enable connection of a coaxial cable. Consult your Sony dealer for details.

Variety of input/output connectors

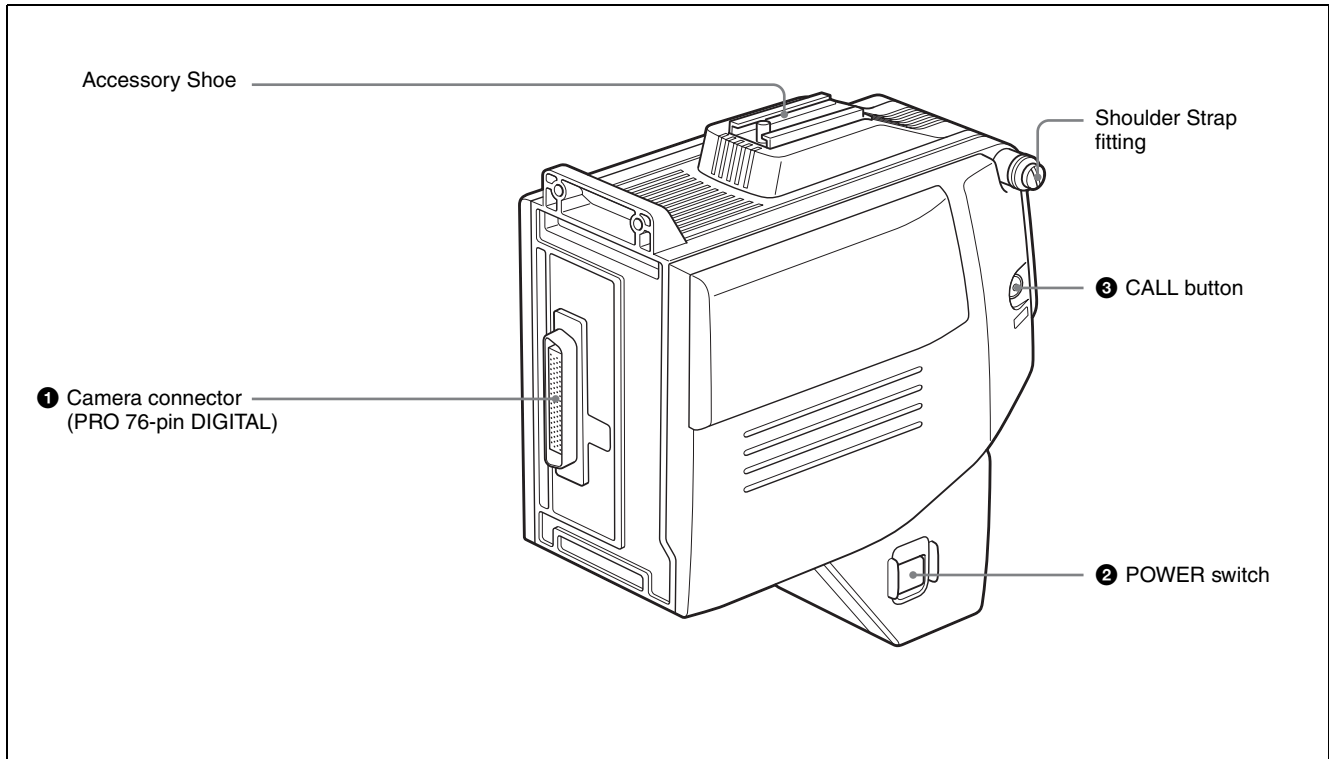
Input/output connectors for the following signals are provided:

- Video signal output/input* for teleprompter
- Return video signal output
- Intercom/program output for connected headset
- Microphone or line-in audio input

* It is required to perform the internal adjustment to change the teleprompter video signal transfer direction to input. Contact your Sony dealer for more information on changing the teleprompter video signal transfer direction.

Location and Function of Parts

Front and Right Side



1 Camera connector (PRO 76-pin DIGITAL)

Connects to the camera's 76-pin connector.

2 POWER switch

Turns this unit's power supply on and off.

To power the unit, set the switch to EXT or CCU according to the type of power source being used.

EXT	Power supplied via an optional AC-DN10 Adaptor connected to the DC IN connector (when this unit is connected to a camera control unit via a coaxial cable)
CCU	Power supplied via camera control unit (when this unit is connected to a camera control unit via a triaxial cable)

Set this to the ○ (OFF) position to turn off the power supply.

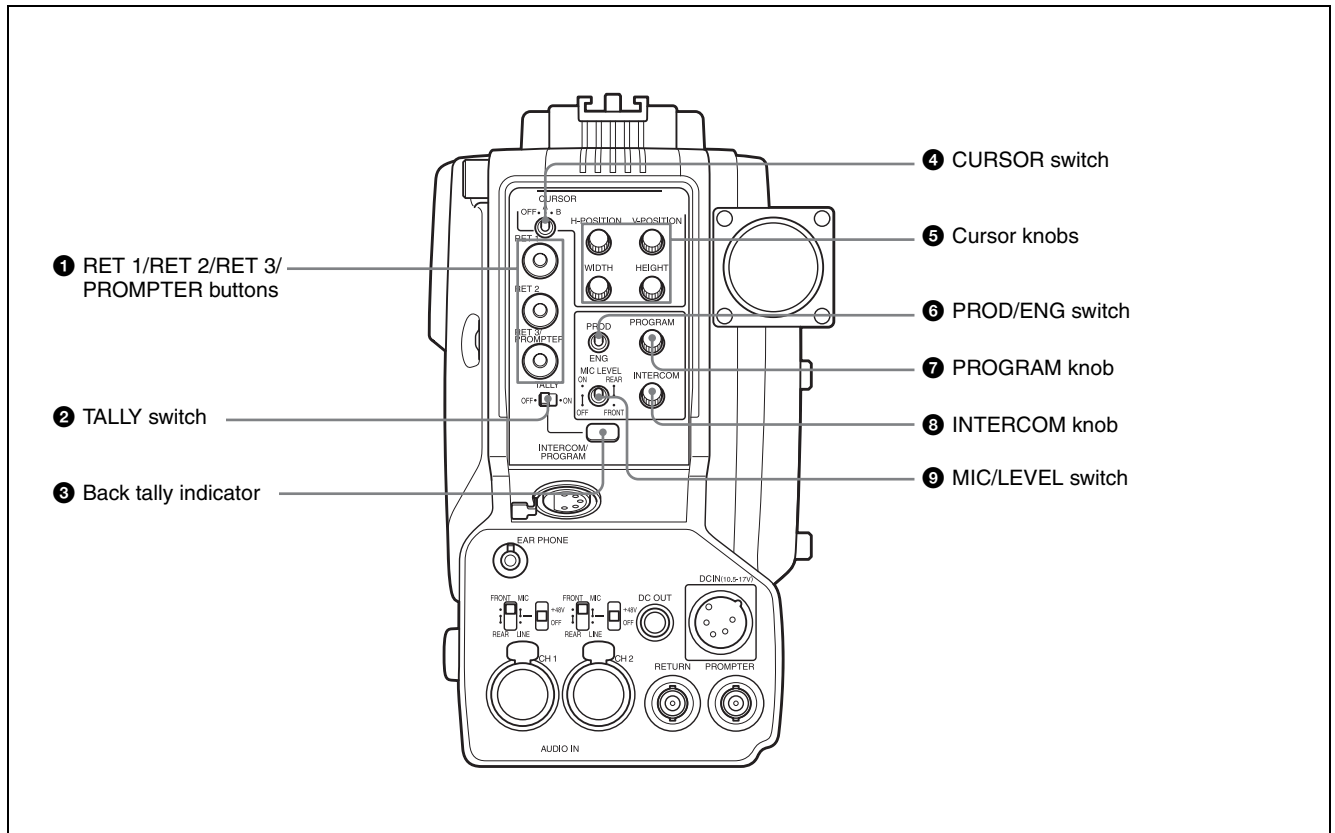
When this unit is connected to a camera control unit via a triaxial cable, the intercom communication function continues to operate even after the power is turned off.

3 CALL button

Press this button to call the operator of the camera control unit or remote control panel. Pressing this button lights the tally indicator (red) or the CALL button (red) on the camera control unit, and on the remote

control panel. This unit's back tally indicator also lights if the TALLY switch is in the ON position.

Switches and Knobs on the Rear



1 RET 1/RET 2/RET 3/PROMPTER buttons

Select the return video signal* to be output from the RETURN connector and to the camera's viewfinder. Press the RET 1, RET 2 or RET 3/PROMPTER button to select the return video signal 1, return video signal 2, or return video signal 3 or the prompter signal from the camera control unit.

To show the shooting picture on the viewfinder screen, release the button. The return video signal which selected last is still output from the RETURN connector if the button is released.

* Return video: Video signals that are sent from a camera to a camera control unit and returned to the same or another camera so that the camera operators can check the recorded image.

2 TALLY switch

Set this switch to the ON position to activate the back tally indicator 3.

3 Back tally indicator

When the TALLY switch 2 is in the ON position, this indicator lights in response to this unit's operating status. During recording, this indicator lights in red. It also lights when the CALL button on the camera control unit or remote control panel has been pressed.

4 CURSOR switch

Selects whether or not to display a box cursor in the DXC-D50 series Color Video Camera's viewfinder.

B: Displays box cursor B.

A: Displays box cursor A.

OFF: No box cursor is displayed.

5 Cursor knobs

When the CURSOR switch 4 is set to A or B, these adjust the position and size of the box cursor that is displayed in the viewfinder of the DXC-D50 series.

H-POSITION: Adjusts the horizontal position of the box cursor.

V-POSITION: Adjusts the vertical position of the box cursor.

WIDTH: Adjusts the width of the box cursor.

HEIGHT: Adjusts the height of the box cursor.

6 PROD/ENG (producer/engineer select) switch

Selects the channel for transferring intercom audio.

PROD: Uses the producer line.

ENG: Uses the engineer line.

Note

When the INCOM selector on the CCU-TX50/50P Camera Control Unit is in the PRIV position, the intercom operates only between the camera and the

camera control unit regardless of the PROD/ENG switch position.

7 PROGRAM knob

Adjusts the program audio reception level.

When using a DXC-D50 series camera, setting the MIC/LEVEL switch **9** to OFF/FRONT will enable this knob to adjust the balance between the program audio and intercom audio levels. Turn clockwise to raise the program audio level, and turn counterclockwise to raise the intercom audio level.

8 INTERCOM knob

Adjusts the intercom audio reception level.

Setting the MIC/LEVEL switch **9** to OFF/FRONT will enable the audio level knob on the DXC-D50 series camera's front panel to adjust both the intercom audio and program audio levels.

Note

If you switch the position of the MIC/LEVEL switch **9**, settings of the program audio reception level and intercom audio reception level are changed. Adjust them again using the PROGRAM knob **7** and INTERCOM knob **8**.

9 MIC/LEVEL switch

Decides the on/off of the intercom microphone and the adjusting method of the reception level.

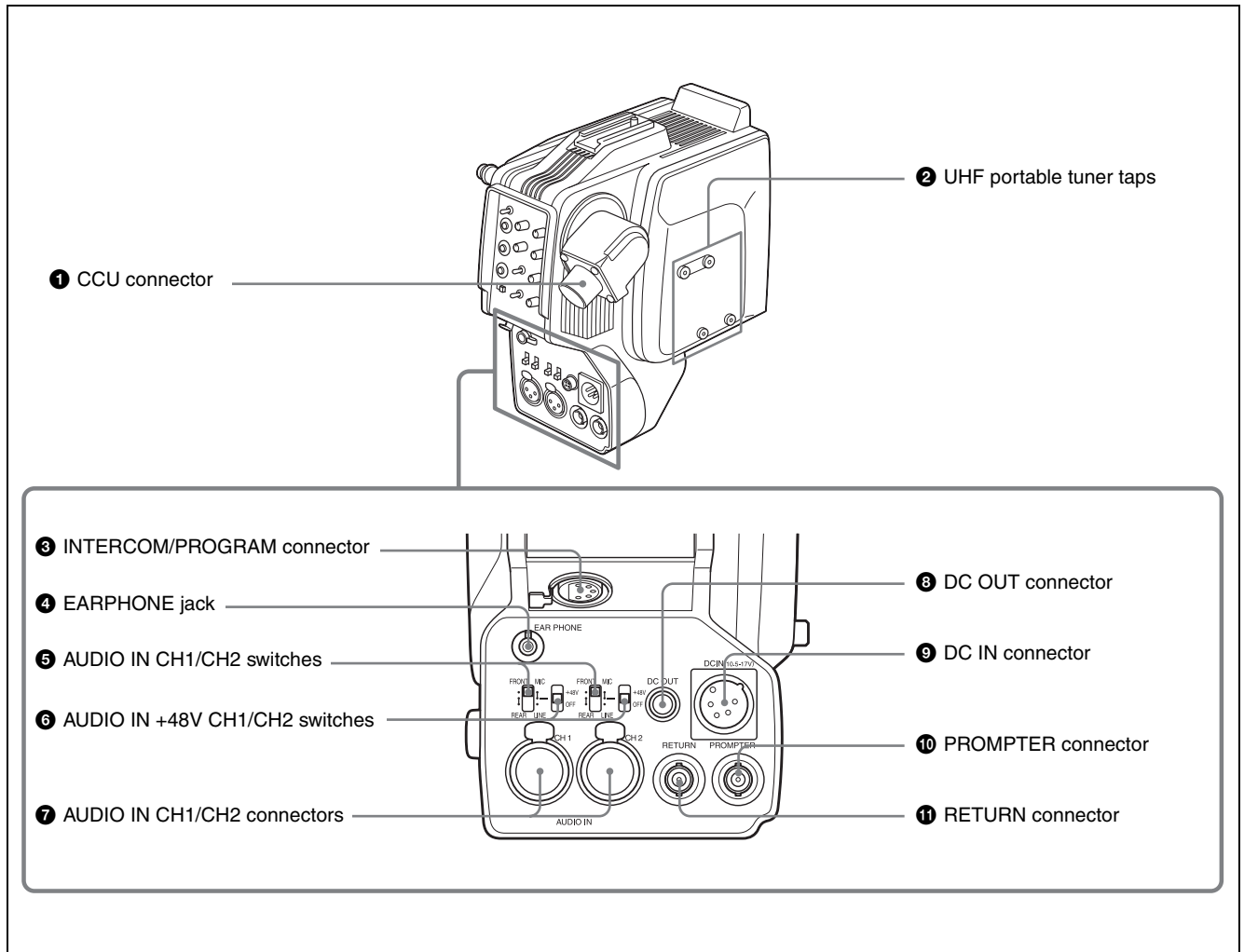
ON/REAR: Sets the intercom microphone to on. The reception level is adjusted using the INTERCOM knob.

OFF/REAR: Sets the intercom microphone to off. The reception level is adjusted using the INTERCOM knob.

OFF/FRONT: Sets the intercom microphone to off. The reception level is adjusted using the camera's front panel.

At this position, while you are pressing the VTR start/stop button on the camera, the microphone of the intercom is on.

Connectors and Switches on the Rear and Left Side



1 CCU (Camera control unit) connector (CA-TX50: Kings triaxial connector, CA-TX50P: Fischer triaxial connector)

Connect a CCU-TX50/50P camera control unit via a triaxial cable. In addition to supporting signal transmission between this unit and the connected camera control unit, the triaxial cable enables this unit to receive its power supply via the camera control unit.

Using a coaxial cable to connect the camera control unit

The CCU connector must be refitted to enable connection of a coaxial cable. Note that connecting a coaxial cable makes it impossible for this unit to receive power from the camera control unit. Use a AC-DN10 AC Adaptor for AC power sources.

Contact your Sony dealer for more information on refitting the CCU connector.

2 UHF portable tuner taps

When using an optional WRR-861*/862 series UHF Portable Tuner, attach (supplied with the WRR-861*/862 series) the portable tuner mounting plate.

For details of attaching and using the WRR-861/862 series, see the Operating Instructions for the WRR-861/862 series.

* WRR-861 series UHF Portable tuner is not available in some areas. For details, contact your Sony dealer.

3 INTERCOM/PROGRAM connector (XLR 5-pin, female)

Connect a headset for monitoring intercom audio or program audio. Normally, a monaural (one-side) headset should be connected.

An internal adjustment can be made to enable both sides of the headset to receive audio, with intercom audio on the left side and program audio on the right side.

Contact your Sony dealer for further information on this internal adjustment.

4 EARPHONE jack (mini jack)

Connect an earphone for monitoring intercom audio.

5 AUDIO IN CH1/CH2 (audio input select) switches

Select the source for signals to be transferred via the camera control unit's channel 1 and channel 2.

FRONT/MIC: Transfers audio from a microphone on the camera to the camera control unit.

REAR/MIC: Transfers audio from a microphone connected to this unit's AUDIO IN (CH1/CH2) connector to the camera control unit.

REAR/LINE: Transfers audio from a line output connected to this unit's AUDIO IN (CH1/CH2) connector to the camera control unit.

6 AUDIO IN +48V CH1/CH2 (power supply select) switches

Selects whether or not to supply power to a microphone connected via the AUDIO IN CH1 and CH2 connectors.

+48V: Supplies +48-V power to microphone.

OFF: Do not supply power to microphone.

Leave this switch in the ON position when using a microphone of phantom powering* type.

Note

Except when a microphone of phantom powering type is used, be sure to set this switch to OFF.

Failing to do so results in that the noise may occur or that the devices connected to the unit may be damaged.

* Phantom powering: Powering method for operating condenser microphones by supplying power via a bias power source and an amplifier. Because no DC voltage is present in the audio channel, it is called "phantom powering".

7 AUDIO IN (CH1/CH2) (audio inputs, channel 1 and channel 2) connectors (XLR 3-pin, female)

Connect external microphones or other equipment as sources for audio to be transferred to the camera control unit's channel 1 or 2.

Set the AUDIO IN CH1/CH2 switch to select the channel for the connected equipment.

8 DC OUT connector (4-pin)

Use this connector when supplying power (DC 10.5 to 17V, Max. 1.5 A) to a WRR-861/862 series UHF Portable Tuner (supplied separately) or an LCD teleprompter unit.

Note

Never connect a unit that has a power consumption rating of more than 18 W.

9 DC IN connector (XLR 4-pin)

When connecting this unit to a camera control unit via a coaxial cable, use this connector for a AC-DN10 AC

Adaptor (supplied separately). Connect the DC power cord of the AC-DN10 to this connector.

10 PROMPTER (teleprompter video signal input/output) connector (BNC type)

Outputs teleprompter video signals* from the camera control unit. (This unit can treat color teleprompter video signals.)

If you have made the internal adjustment to change the teleprompter video signal transfer direction so that signals are transferred from this unit to the camera control unit, this connector becomes the input connector for teleprompter video signals.

Contact your Sony dealer for further information on the internal adjustment to change the teleprompter video signal transfer direction.

* Teleprompter video signals: Video signals for prompter which displays scripts in the television monitor by the camera lens or on the face of a one-way mirror positioned directly in front of the camera lens so that performers can read scripts while looking into the camera lens.

11 RETURN (return video signal output) connector (BNC type)

Outputs return video signals from a camera control unit. Use the RET 1, RET 2 and RET 3/PROMPTER buttons to switch among the three return video signals.

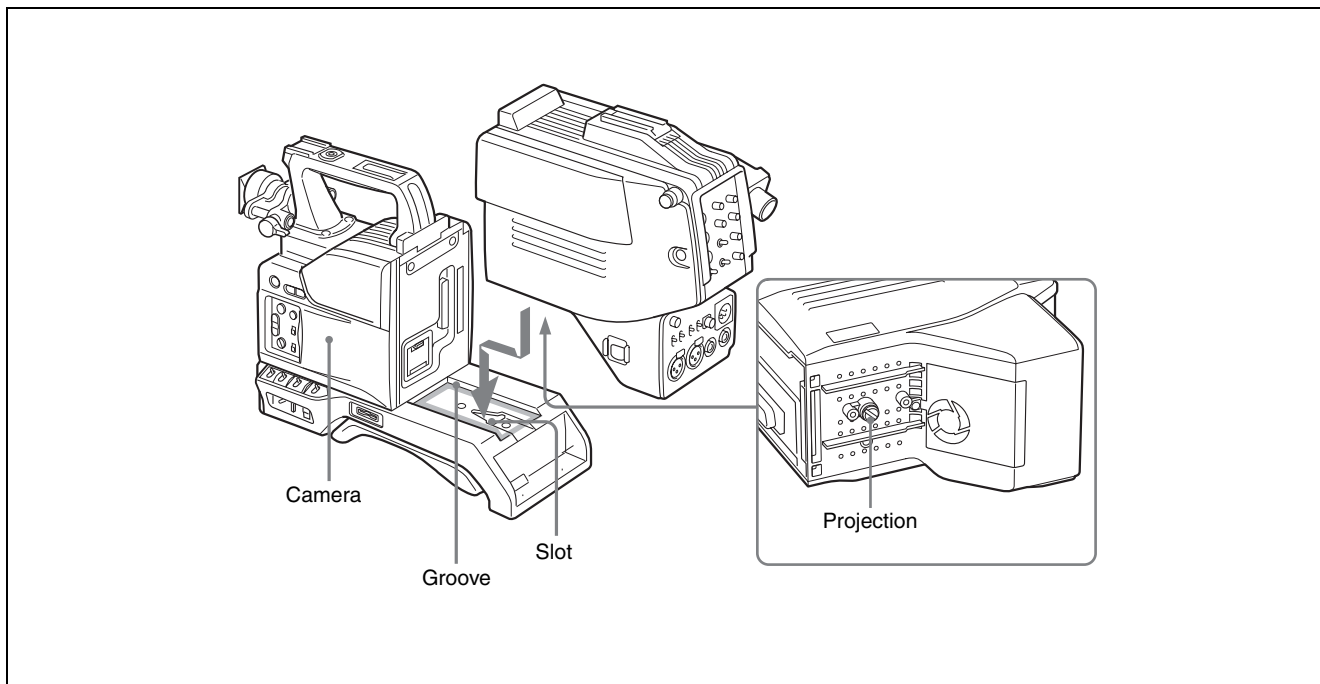
Mounting on Video Camera

This unit is dockable with the DXC-D50 series digital video camera.

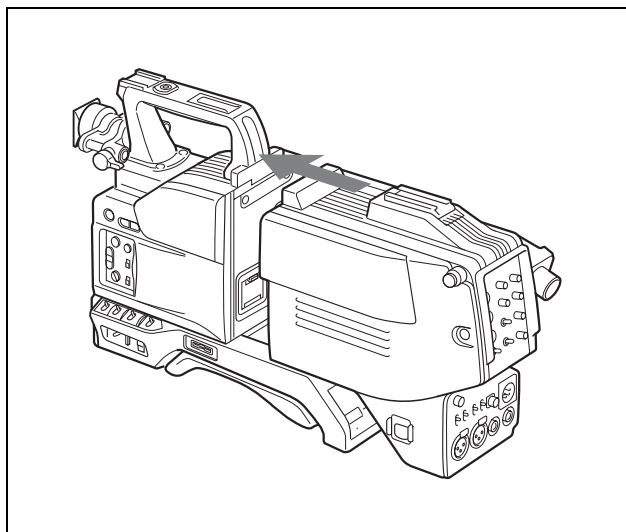
Note

Turn the POWER switch off before mounting the unit on the camera.

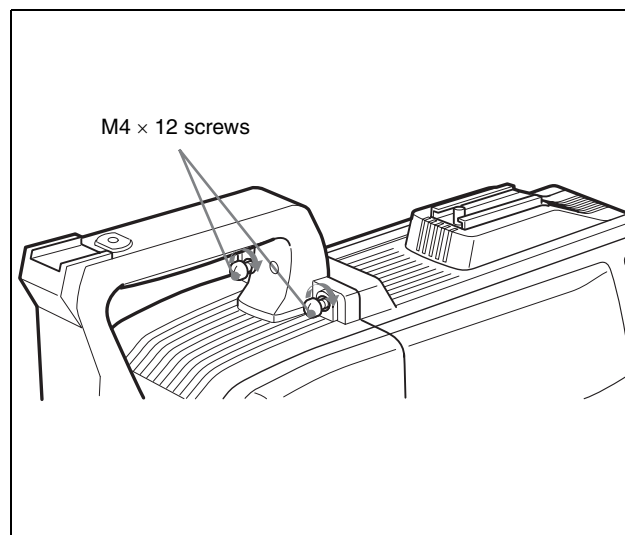
- 1 Fit the projection on the bottom of this unit into the slot on the camera.



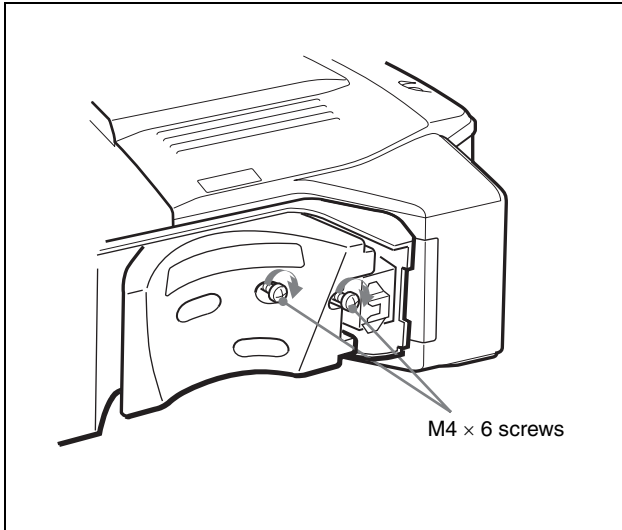
- 2 Slide the unit along the groove on the camera, and press firmly until fixed.



- 3 Tighten the two screws (M4 × 12) in the figure.



- 4** Tighten the two screws (M4 × 6) to fix the shoulder pad.



Note

Slide the shoulder pad to its central position before tightening the screws. Otherwise the screws may not be properly fixed.

Removing from the camera

Follow the procedure above in reverse.

Notes on Use

Use and storage locations

Avoid using or storing the unit in the following places:

- Where it is subject to extremes of temperature (operating temperature: -10°C to $+45^{\circ}\text{C}$ (14°F to 113°F)).
Note that in summer the temperature in a car with the windows closed can reach 50°C (122°F).
- Very damp or dusty places.
- Where rain is likely to reach the unit.
- Places subject to severe vibration.
- Near strong magnetic fields

Near transmitting stations generating strong radio waves.

Avoid violent impacts

Dropping the unit, or otherwise imparting a violent shock to it, is likely to cause it to malfunction.

Do not cover with cloth

While the unit is in operation, do not cover it with a cloth or other material. This can cause the temperature to rise, leading to a malfunction.

After use

Turn the POWER switches on the unit and camera control unit off.

Care

If the body of the unit is dirty, wipe it with a dry cloth. For severe dirt, use a soft cloth steeped in a small amount of neutral detergent, then wipe dry. Do not use volatile solvents such as alcohol or thinners, as these may damage the finish.

Specifications

General

Power requirements

When supplied via the CCU connector:
180 V DC

When supplied via the DC IN
connector: 12 V DC (10.5 to 17 V
DC)

Power consumption

When 180 V DC is supplied via the
CCU connector: max. 0.37 A

When 12 V DC is supplied via the DC
IN connector: max. 4.8 A

Operating temperature

-10°C to +45°C (14°F to 113°F)

Operating humidity

20% to 90%

Storage temperature

-20°C to +60°C (-4°F to 140°F)

Mass

Approx. 2.3 kg (5 lb 1 oz)

External dimensions

206 × 212 × 131 mm
(8 1/8 × 8 3/8 × 5 1/4 inches) (w/h/d)

Input/output connectors

CCU	CA-TX50: Kings triaxial connector (made by Lemo) CA-TX50P: Fischer triaxial connector
PROMPTER	BNC, 1.0 Vp-p, 75 Ω
RETURN	BNC, 1.0 Vp-p, 75 Ω
INTERCOM/PROGRAM	XLR 5-pin Input level: -60 dBs (dynamic) Output level: -∞ to +12 dBs
AUDIO IN CH1/CH2	XLR 3-pin, female, 600 Ω, balanced Input level: -60 dB (for microphone input) or -20 dB (for line input)
DC IN	XLR 4-pin, 10.5 to 17 V DC
DC OUT	4-pin, 10.5 to 17 V DC, max. 1.5 A
Camera connector	PRO 76-pin DIGITAL
EARPHONE	Mini jack

Accessories supplied

Operating Instructions (1)

CD-ROM (including multi-lingual operating
instructions) (1)

Warranty booklet (1)

Accessories not supplied

Triaxial cable (Belden)

AC-DN10 AC Adaptor

WRR-861*/862 series UHF Portable Tuner

DXF-51 viewfinder

* WRR-861 series UHF Portable tuner is not available in some areas.
For details, contact your Sony dealer.

Design and specifications are subject to change without
notice.

