

# Power Supply Unit

## Operating Instructions

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

## HXCE-FB70

## WARNING

**To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.**

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

**THIS APPARATUS MUST BE EARTHED.**



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

**WARNING: THIS WARNING IS APPLICABLE FOR USA ONLY.**

If used in USA, use the UL LISTED power cord specified below.  
**DO NOT USE ANY OTHER POWER CORD.**

Plug Cap	Parallel blade with ground pin (NEMA 5-15P Configuration)
Cord	Type SJT, three 16 or 18 AWG wires
Length	Minimum 1.5 m (4 ft. 11in.), Less than 2.5 m (8 ft. 3 in.)
Rating	Minimum 10A, 125V

Using this unit at a voltage other than 120V may require the use of a different line cord or attachment plug, or both. To reduce the risk of fire or electric shock,

refer servicing to qualified service personnel.

**WARNING: THIS WARNING IS APPLICABLE FOR OTHER COUNTRIES.**

1. Use the approved Power Cord (3-core mains lead)/Appliance Connector/Plug with earthing-contacts that conforms to the safety regulations of each country if applicable.
2. Use the Power Cord (3-core mains lead)/Appliance Connector/Plug conforming to the proper ratings (Voltage, Ampere).

If you have questions on the use of the above Power Cord/Appliance Connector/Plug, please consult a qualified service personnel.

### **For kundene i Norge**

Dette utstyret kan kobles til et IT-strømfordelingssystem.

### **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 Environment: E4 (controlled EMC environment, ex. TV studio).

### **For the customers in Europe, Australia and New Zealand**

### **WARNING**

This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

### **For the customers in Europe**

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.

This apparatus shall not be used in the residential area.

---

# Table of Contents

<b>Overview .....</b>	<b>5</b>
<b>Names and Functions of Parts .....</b>	<b>6</b>
<b>System Configuration .....</b>	<b>8</b>
<b>Important Notes on Operation .....</b>	<b>9</b>
<b>Specifications .....</b>	<b>10</b>
General .....	10
Supplied Accessories .....	10
Optional Accessories .....	10
Other peripheral devices .....	11

---

# Overview

The HXCE-FB70 Power Supply Unit connects to the HXCU-FB70 HD Camera Control Unit and CA-FB70 HD Camera Adaptor, and supplies power to the CA-FB70.

## **Long distance transmission via optical fiber cable**

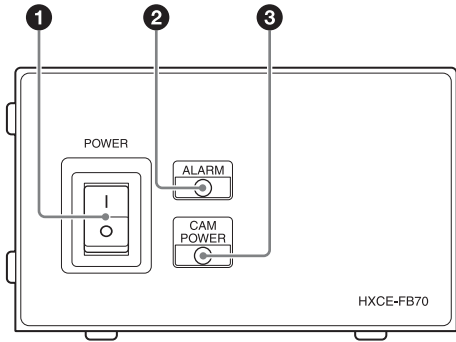
When you connect the unit and the HXCU-FB70 HD Camera Control Unit via a pair of single-mode optical fiber cables with LC connectors, the connection distance can be extended up to 10 km (32,800 ft).

When you connect the unit and CA-FB70 HD Camera Adaptor via an optical composite cable, the connection distance with power supply can be extended up to 250 m (820 ft) <sup>1)</sup>.

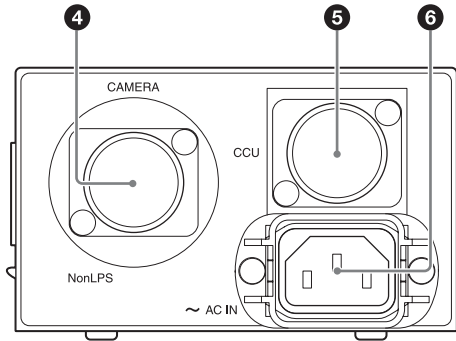
- 1) The available distance for power supply varies depending on the model of the camera/camcorder that are connected to the CA-FB70, and total power consumption of the connected peripherals of the camera/camcorder such as lens, accessories, etc. For details, see the operating instructions of the CA-FB70.

# Names and Functions of Parts

## Front



## Rear



**1 POWER switch**

Turns on or off the power. In the “I” position, the power is on. In the “O” position, the power is off.

**2 ALARM indicator**

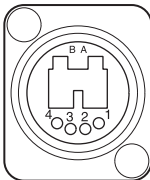
Lights in red when an error occurs on the unit or camera system.

**3 CAM POWER indicator**

Lights when the unit supplies power to the camera/camcorder.

**4 CAMERA connector (optical multi connector)**

Connect to the CA-FB70 HD Camera Adaptor using an optical composite cable. Power supply, all camera/camcorder signals, such as control signal, video signal and audio signal, can be transmitted.



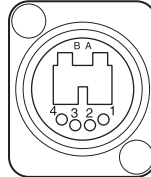
Pin No.	Signal name
A	Optical INPUT
B	Optical OUTPUT
1	DC OUT (GND)
2	NC
3	NC
4	DC OUT (+48 V)

**CAUTION**

CAMERA connector is non LPS (Limited Power Source) circuit. This connector is connected to the CA-FB70.

**5 CCU connector (optical fiber connector)**

Connect to the CCU using a single-mode optical fiber cable. All signals (except power supply) can be transmitted by a pair of single-mode optical fiber cables.



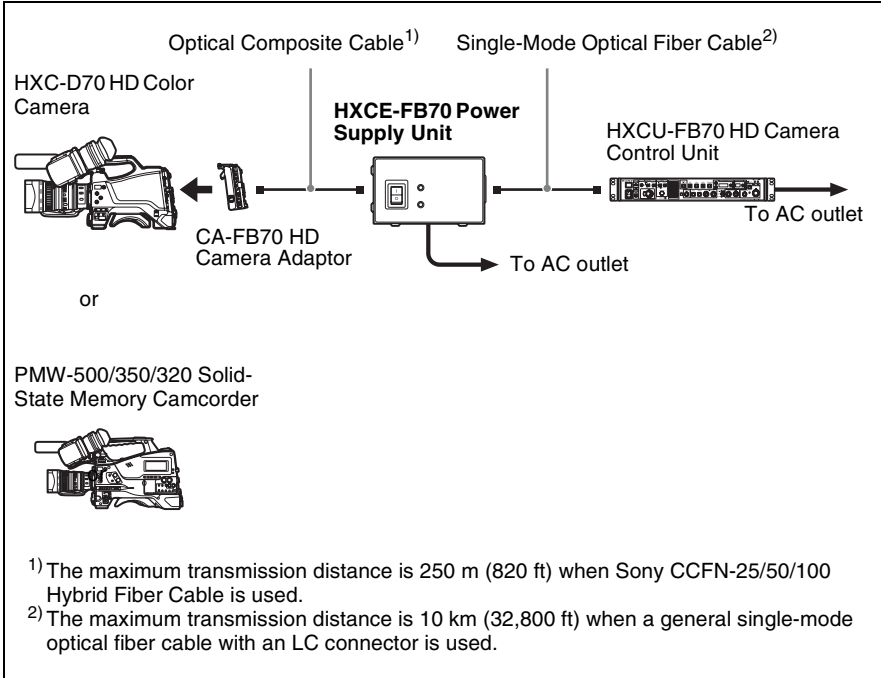
Pin No.	Signal name
A	Optical INPUT
B	Optical OUTPUT
1	NC
2	NC
3	NC
4	NC

**6 AC IN connector**

Use an optional power cord to connect to an AC outlet. To fasten the power cord to the unit, use an optional plug holder.

# System Configuration

Examples of devices and parts that may be used with the HXCE-FB70 are shown below.





---

# Important Notes on Operation

## Use and storage locations

Store in a level, ventilated place. Avoid using or storing the adaptor in the following places.

- In excessive heat or cold. Operating temperature range is 5°C to 40°C (41°F to 104°F).
- Remember that in summer in warm climates the temperature inside a car with the windows closed can easily exceed 50°C (122°F).
- In damp or dusty locations
- Locations where the adaptor may be exposed to rain
- Locations subject to violent vibration
- Near strong magnetic fields
- Close to radio or TV transmitters producing strong electromagnetic fields.
- In direct sunlight or close to heaters for extended periods

## Do not subject to strong shocks

Do not drop the adaptor or subject it to strong shocks. The adaptor may be damaged.

## Do not wrap in a cloth or other covering during operation

Internal temperatures may rise, causing malfunctions.

## Maintenance

Clean the cabinet and panels by wiping lightly with a soft, dry cloth. If they are very dirty, use a cloth dampened with a small amount of neutral detergent, then wipe dry. Avoid the use of volatile solvents such as thinners, alcohol, benzene, and insecticides. They may

damage the surface finish or cause it to peel off.

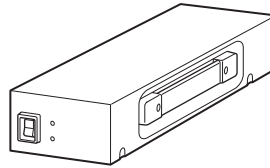
## Note on Handling Optical Fiber Cables

The minimum bend radius and maximum pulling tension for an optical fiber cable are specified. Be sure to use the cable within the specified values.

If the end of the cable is soiled, it may disrupt transmission. Clean the end with a fiber optic cleaner before connection.

## On placement

When using the adaptor, be sure to place it as shown in the below figure.



---

# Specifications

---

## General

### Power requirements

AC 100 V - 240 V, 50/60 Hz

### Power consumption

1.5 A (max.)

### Inrush current

(1) Maximum possible inrush current at initial switch-on (Voltage changes caused by manual switching):

37 A peak, 7 A r.m.s. (240 V AC)

(2) Inrush current after a mains interruption of five seconds (Voltage changes caused at zero-crossing):

9 A peak, 3 A r.m.s. (240 V AC)

### Input/Output connector

CAMERA: optical multi connector

CCU: optical fiber connector

### Operating temperature

5°C to 40°C (41°F to 104°F)

### Storage temperature

-20°C to +60°C (-4°F to +140°F)

### Dimensions

104 × 62 × 360 mm (4 1/8 × 2 1/2 × 14 1/4 in) (w/h/d, projecting parts are not included)

Mass Approx. 2.3 kg (5 lb 1.1 oz)

---

## Supplied Accessories

### Operating Instructions

Japanese/English (1)

CD-ROM (1)

Warranty booklet (1)

---

## Optional Accessories

CCFN-25/50/100 Hybrid Fiber Cable

CCFN-JC1 Joint Adaptor

United States and Canada: Plug holder B (2-990-242-01)

Other areas: Plug holder C (3-613-640-01)

United States and Canada: Power cord set (1-551-812-XX)

Other areas: Power cord set (1-782-929-XX)

Service manual

Connectors for optical/electric composite cables:

- NEUTRIK® opticalCON DUO (to the "CAMERA" connector on Power Supply Unit)
- NEUTRIK® opticalCON DUO (to the "CCU" connector on CAMERA ADAPTOR)

### Caution on the optical/electric composite cable:

For connection between a power supply unit and camera adaptor, be sure to use an optical/electric signal composite cable with the connectors specified in this manual in order to comply with the limit for EMC regulations.

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.

---

**Other peripheral devices**

CA-FB70 HD Camera Adaptor

HXCU-FB70 HD Camera Control Unit

<http://www.sony.net/>

Sony Corporation