Optical Fiber Camera System Digital Triax Camera System





Sony newly introduces a variety of transmission options along with more flexible operation of professional live camera systems.

The CA-FB70 Optical Fiber Camera Adaptor and the CA-TX70 Digital Triax Camera Adaptor can be attached to the HXC-D70 Digital Multi-core Transmission Camera as well as to PMW-320/350/500 camcorders. The CA-FB70 provides excellent picture quality as well as flexible integration, while the CA-TX70 offers outstanding reliability especially in tough field operation.

CA-FB70

Optical Fiber Camera Adaptor

HXCU-FB70

Optical Fiber Camera Control Unit

HXCE-FB70

Power Supply Unit

CA-TX70

Digital Triax Camera Adaptor

HXCU-100

Digital Triax Camera Control Unit

HKCU-FP1

Front Control Panel for HXCU-100

CA-FB70 Optical Fiber Camera Adaptor

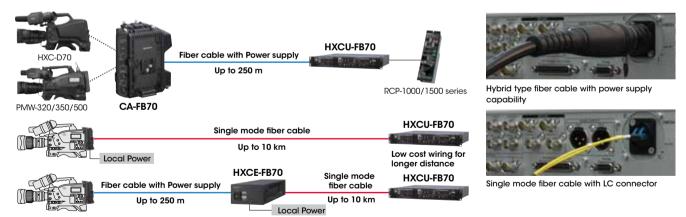


Flexible Integration with Optical Fiber Cables

The CA-FB70, HXCU-FB70 Optical Fiber CCU, and HXCE-FB70 Power Supply Extension Unit all have a unique connector for fiber cable connection as standard. The CA-FB70 can accept either a standard optical LC-Duplex connector (for cost-effective single-mode fiber cable), or a rugged-type connector (for connection to power and fiber composite cable such as CCFN-25/50/100). This enables flexible integration for a variety of applications such as

(1) up to 250 m connection between the CA-FB70 and HXCU-FB70 with power and signal transmission, (2) up to 10 km connection between the CA-FB70 and HXCU-FB70 with only signal transmission, and (3) the HXCE-FB70 can be located between the CA-FB70 and HXCU-FB70.

*Note Distance capability for the case power supply depends on the combination of camera and accessories. For more details, please contact your nearest Sony sales office.



HXCU-FB70: Optical Fiber Camera Control Unit (CCU)

The HXCU-FB70 is a dedicated CCU for the CA-FB70. The front panel incorporates commonly used controls for picture adjustment and color matching in multiple camera operation. The rear panel includes a variety of input and output connectors which are convenient for live event production.





HXCU-FB70 Rear

HXCE-FB70: Power Supply Extension Unit

The HXCE-FB70 is beneficial for building a flexible system which needs longer wiring (more than 250 m) but also requires a power supply to the camera. The HXCE-FB70 has the same power supply capability as the HXCU-FB70, and can pass all signals between the CA-FB70 and HXCU-FB70 through either a single-mode optical fiber cable or a hybrid optical/power cable.



HXCE-FB70 Front



HXCE-FB70 Rear

COMMON FEATURES OF THE CA-FB70 AND CA-TX70

Expanded Transmission Flexibility for HXC-D70 cameras

The HXC-D70 system camera has a unique rear-panel design; various types of adaptors can be attached to expand the functionality of this camera. By utilizing this capability, either the CA-FB70 or CA-TX70 can add advanced signal transmission to the HXC-D70, via optical fiber or triax cable, respectively. This delivers greater flexibility and choice in various live camera applications.

Professional Interfaces for Live Operation

Along with these transmission capabilities, the new adaptors provide essential interfaces and several functions for live camera operation, such as tally signals, a viewfinder display showing one of four sources of return signals, an intercom function that supports both PROD and ENG lines, and more.

Cable-less Connection

CA-FB70 and CA-TX70 adaptors offer simple and direct connectivity to the HXC-D70 camera and also to PMW-320/350 and PMW-500 shoulder camcorders (No cable clusters).

- *1 A specific firmware version is required for the HXC-D70, PMW-320/350, or PMW-500 to attach the CA-FB70 or CA-TX70. Please contact your nearest Sony sales office for details.
- *2 When combining PMW-320/350/500 camcorders and the CA-FB70 or the CA-TX70,TC (timecode), REC trigger signals are unavailable on the SDI output from the camera control unit (CCU). For more details, please contact your nearest Sony office.
- *3 CBK-HD02 is required when the CA-FB70 or CA-TX70 is configured with PMW-500. CBK-CE01 is required when the CA-FB70 or CA-TX70 is configured with PMW-350/320.

CA-TX70 Digital Triax Camera Adaptor

Durable solution for outside live production



Digital Triax System for Rugged Field Operation

With the new CA-TX70 Digital Triax Camera Adaptor, the HXC-D70 camera and PMW-320/350/500 camcorders can work with the HXCU-100 Digital Triax CCU. This system is capable of extending the cable length up to 600 m* 4 between a camera and a CCU with a durable triax cable — a type of cable that is well accepted by professional users for its excellent reliability, especially in rugged use.





^{*5} Optional Front Control Panel HKCU-FP1 is available.

Specifications

CA-FB70	
General	
Power supply	DC 48 V via CCU connector / DC 11 V to 17 V via DC Input
Power consumption	Max. 75 W (at DC 48 V), Max. 70 W (at DC 12 V) (including power supply for camera)
Operation temperature	-10°C to +45°C (14°F to 113°F)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
Dimensions (W x H x D)	158 x 171 x 92 mm (6 1/4 x 6 3/4 x 3 5/8 inches)
Mass	0.8 Kg (1 lb 12 oz)
Inputs/Outputs	
Camera/Camcorder	50-pin (x1)
CCU	Optical Multi connector
Prompter output	BNC (x1), 1 Vp-p, 75Ω
Intercom	XLR 5-pin, female (x1)
DC input	XLR 4-pin (x1)
DC output	4-pin (x1)
Supplied accessories	
	Operation instructions (1), CD-ROM (1), Cable clamp belt (1set), Accessary shoe kit (1), Warranty booklet (1), CA bracket (1), Screws for CA bracket (2)

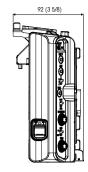
CA-TX70	
General	
Power supply	DC 180 V via CCU Connector
Power consumption	Max. 95 W (including power supply for camera)
Operation temperature	-10°C to +45°C (14°F to 113°F)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
Dimensions (W x H x D)	142 x 174.8 x 139.7 mm (5 5/8 x 7 x 5 1/2 inches)
Mass	1.65 Kg (3 lb 10 oz)
Inputs/Outputs	
Camera/Camcorder	50-pin (x1)
CCU	Triax connector
Prompter output	BNC (x1), 1 Vp-p, 75 Ω
Intercom	XLR 5-pin, female (x1)
Return control	6-pin (x1)
Supplied accessories	
	Operation instructions (1), CD-ROM (1), Cable clamp belt (1set), Accessary shoe kit (1), Warranty booklet (1), CA bracket (1), Screws for CA bracket (2)

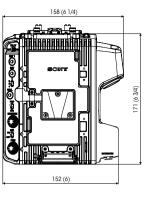
General	
Power supply	AC 100 V to 240 V, 50/60 Hz
Operation temperature	5°C to 40°C (41°F to 104°F)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
Dimensions (W x H x D)	482 x 66 x 365 mm (19 x 2 5/8 x 14 3/8 inches, 1.5U rack-mount size)
Mass	6.5 Kg (14 lb 5.3 oz)
Inputs/Outputs	,
Camera	Optical Multi connector
Intercom/Tally/PGM	D-sub 25-pin, female (x1) Intercom (PROD and ENG), 4W/RTS/CC, 0 dBu Tally (R and G) PGM x 1 system, -20/0/+4 dBu
Remote	8-pin (x1)
Trunk	D-sub 9-pin (x1), female, RS-232C system (Only for HXC-D70 camera)
LAN	RJ-45 8-pin (x1) Control
SDI output	BNC (x4) HD/SD selectable at each pair of two outputs
Analog video output	BNC (x3) Selectable from HD (Y/Pb/Pr or R/G/B) or SD (Y/Cb/Cr or R/G/B)
S-Video (Y/C) output	Mini DIN 4-pin (x1)
VBS output	BNC (x2)
HDMI monitor output	Type A 19-pin (x1), HDMI version : Ver. 1.3
PIX (monitor, VBS) output	BNC (x1)
Sync output	BNC (x1)
Audio outputs	XLR 3-pin (x2)
Return input (VBS)	BNC (x2)
Return input (SDI)	BNC (x2) HD/SD selectable
Prompter input (VBS)	BNC (x1) with loop-through output BNC (x1)
Reference input and loop-through	BNC (x1) with loop-through output BNC (x1) HD: SMPTE-274M. tri-level sync, 0.6 Vp-p., 75 Ω SD: Black burst (NTSC: 0.286 Vp-p., 75 Ω/PAL: 0.3 Vp-p., 75 Ω)
Intercom headset	XLR 5-pin (x1)
Supplied accessories	
	Number plates (1 seat), Operation instructions (1), CD-ROM (1), Warranty booklet (1

HXCE-FB70	
General	
Power supply	AC 100 V to 240 V, 50/60 Hz
Operation temperature	5°C to 40°C (41°F to 104°F)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
Dimensions (W x H x D)	104 x 62 x 360 mm (4 1/8 x 2 1/2 x 14 1/4 inches)
Mass	2.3 Kg (5 lb 1.1 oz)
Inputs/Outputs	
Camera	Optical Multi connector (x1)
CCU	Optical Multi connector (x1)
Supplied accessories	
	Operation instructions (1) CD-ROM (1) Warranty booklet (1)

Dimensions

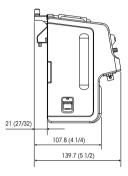
CA-FB70

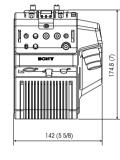




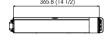
Unit: mm (inches)

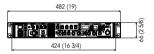
CA-TX70





HXCU-FB70





HXCE-FB70





Optional Accessories

CCFN-100:100m length, Power and Optical fiber hybrid cableCCFN-JC1:Coupler for cascade connection of CCFN cablesCCFN-50:50m length, Power and Optical fiber hybrid cableHKC-LC01:Lemo-type Fiber Connector Kit for CA-FB70 / HXCE-FB70CCFN-25:25m length, Power and Optical fiber hybrid cableHKC-LC02:Lemo-type Fiber Connector Kit for HXCU-FB70 / HXCE-FB70

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