

SONY

HD MULTI-PURPOSE CAMERA

HXC-P70



Exmor

Sony is pleased to introduce an affordable compact Point-of-View (POV) HD multi-purpose camera, the HXC-P70 – a portable companion camera system that integrates seamlessly with the popular HXC-D70 camera system. Following form and functionality similar to that of the proven high-end HDC-P1, this new HXC-P70 camera is equipped with three 2/3-inch Exmor CMOS sensors with high sensitivity. As a standalone or systemized studio camera, the HXC-P70 offers very high-quality full-HD 1080i or 720p pictures. As a true companion camera, the same precise adjustments found on the HXC-D70 Series are available utilizing the same remote control panels (RCP) and control surfaces developed for Sony's HXC Series system cameras.

The most unique feature of the HXC-P70 is the direct integration of fiber cable connection into the camera, and subsequent connection to the HXCU-FB70 camera control unit. You can use either a hybrid-type fiber cable or single-mode fiber cable, depending on system configurations. The compact and lightweight HXC-P70 is an ideal POV camera for a wide range of applications that need HD-quality images to be captured at angles and locations that are impossible for traditional HD cameras. Weighing only 1.5 kg, the HXC-P70 is easy to install in production environments such as on a crane, helicopter, pan/tilt head, or in underwater housing. With cutting-edge performance, operability, and system flexibility, the HXC-P70 is a cost-effective, high-performance multi-purpose camera that can be utilized in a wide range of applications.



HXC-P70



Superb three 2/3-inch-type CMOS sensors

Images from the HXC-P70 feature high picture quality equivalent to that of the well-reputed HXC-D70 (HD/SD system camera). Both cameras share the same image sensor, achieving a high sensitivity of F12 (at 1080/59.94i) or F13 (at 1080/50i) while keeping a very high signal-to-noise ratio. The HXC-D70 makes fewer material demands – it has a mechanism for direct connection of fiber cable and an electrical color correction (CC) filter.



HXC-D70
Companion system camera

Integrated ND filter, electrical CC filter, and TLCS

The HXC-P70 is equipped with a neutral density (ND) optical servo filter unit and electrical color correction (CC) filter. Along with ND filter selection, the CC filter can be controlled locally or from a remote control panel and offers four color temperature settings. The total level control system (TLCS) function provides automatic control of gain/iris/shutter, and is a highly effective tool to cope with changing lighting conditions.

Expandable operability with the HXCU-FB70

The HXCU-FB70 optical fiber camera control unit (CCU) enables precise control of HXC-P70 picture adjustments and ensures easy and precise color matching among HXC-D70 and HXC-P70 cameras.



HXCU-FB70 Front



HXCU-FB70 Rear

Long-distance transmission up to 10 km

The hybrid-type optical fiber cable can extend the distance between the camera and the HXCU-FB70 CCU to a maximum of 500 m* while supplying the required power. Using single-mode fiber (SMF) cables, this distance can extend up to 10 km (with local power supply). The HXC-P70 can utilize the SMF cable infrastructure that's often available in many buildings, which means you can install the camera system quickly and easily.

*Note: Fiber cable extension up to 500 m is available when you are also using a portable lens.

Slow shutter with 64-frame accumulation and +48 dB gain-up

Utilizing the slow shutter function, frame accumulation is possible up to 64 frames.* In combination with the +48 dB gain-up function, very bright pictures are available even in very dark environments. These unique features can be used in wider roles such as surveillance, conferencing, houses of worship, security, and other unmanned applications.

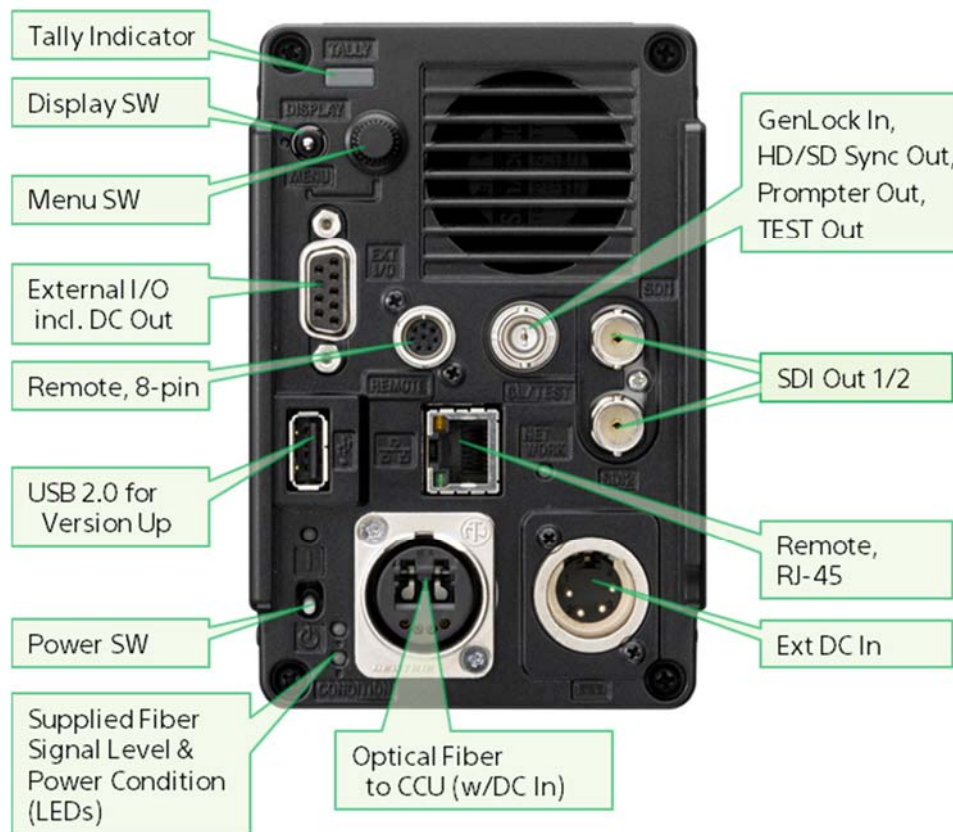
Note*: This is available only in HD1080 mode. It does not work in HD720 mode.

Useful 2x or 4x Digital Extender

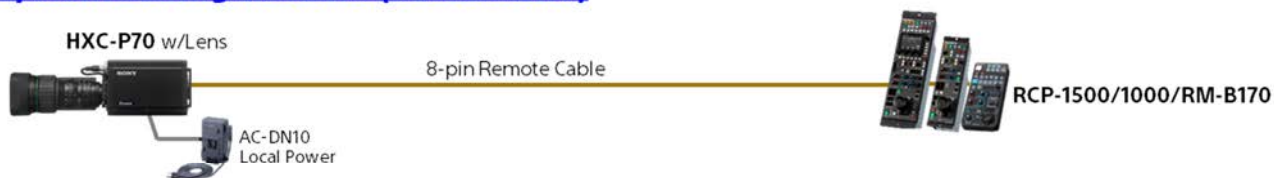
The digital extender function expands the size of the image by a factor of two or four in the center of the image sensor's captured image. This function works without any decrease in sensitivity, unlike a conventional optical extender function which typically results in an F-number drop.

Versatile camera interfaces

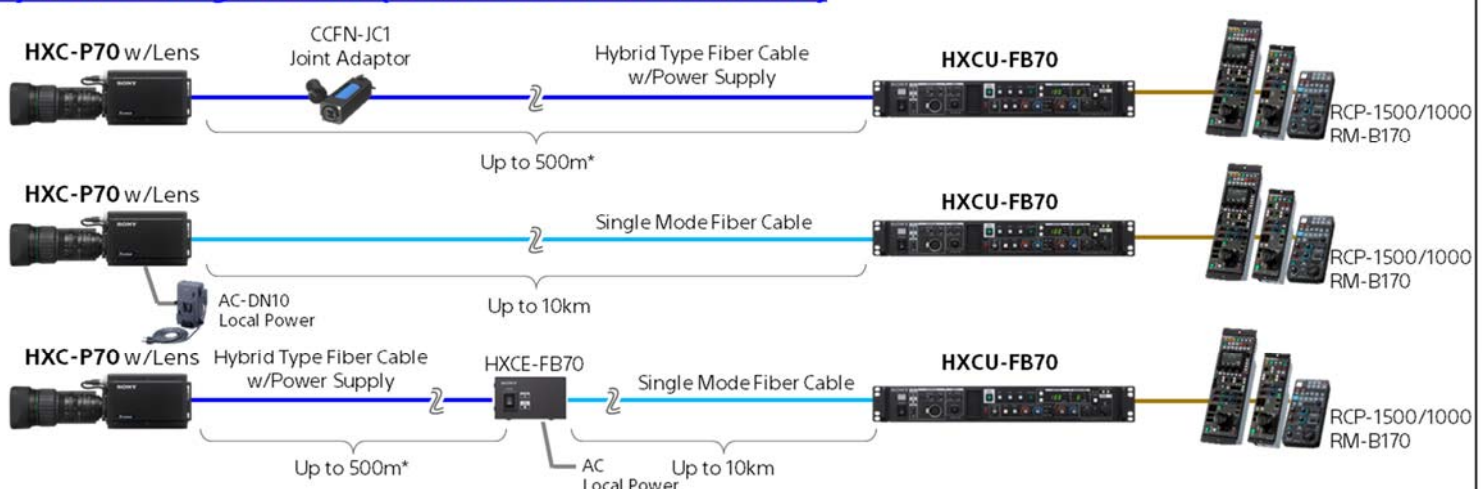
The HXC-P70 provides a wide range of inputs and outputs via the onboard connector panel, including two HD/SD-SDI outputs, a return signal output, prompter signal output, and test (VBS analog) signal output, etc. Moreover, there are Ethernet interfaces for remote control, trunk line, and assignable lines on the D-sub 9-pin connector and remote 8-pin connectors.



System Configurations (Standalone)



System Configurations (Cable Extension with CCU)



*Note: Using Sony's CCFN hybrid-type fiber cables with a joint adaptor between the HXC-P70 with a portable lens (not a large lens) and the HXCU-FB70, the operational distance can be extended up to 500 m (including the power supply).

Optional Accessories



CCFN-25/50/100/150/200/250
Hybrid-type Optical Fiber Cable



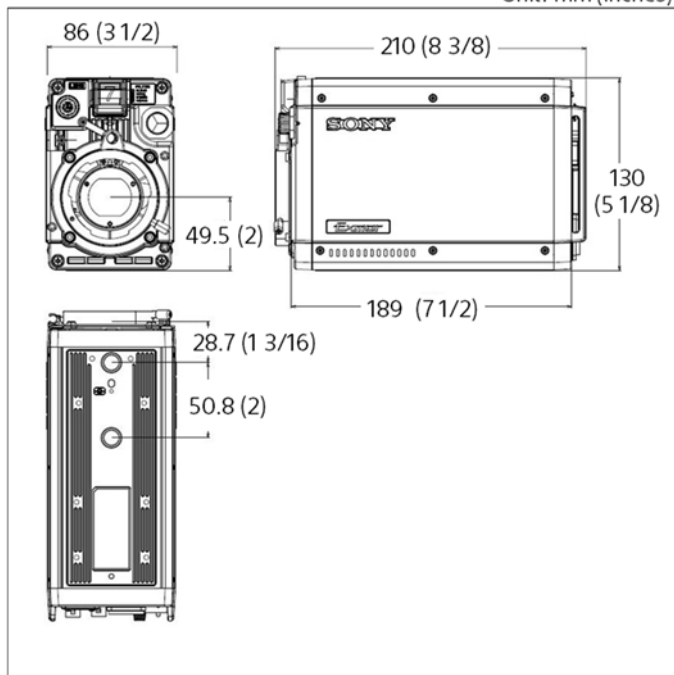
CCFN-JC1
Neutrik Cable Coupler



HXCE-FB70
Power Supply Extension Unit

Dimensions

Unit: mm (inches)



Specifications

General	
Power requirements	CCU : DC 48 V, 1.7 A (max), Ext.DC In : DC 12 V, 3.6 A (max.)
Power consumption	17 W
Operating temperature	−10°C to +45°C (14°F to 113°F)
Storage temperature	−20°C to +60°C (−4°F to +140°F)
Mass	Approx. 1.5 kg (3 lb 4 oz)
Camera section	
Pickup device	3-chip 2/3-inch type CMOS
Effective picture elements (H x V)	1920 x 1080
Signal format	HD: 1080/59.94i, 1080/50i, 1080/29.97PsF, 1080/25PsF, 720/59.94p, 720/50p SD: 480/59.94i, 576/50i
Spectrum system	F1.4 prism system
Lens mount	Sony 2/3-inch type bayonet mount
Built-in filters	CC: Electrical ND: 1; CLEAR, 2; 1/4ND, 3; 1/16ND, 4; 1/64ND
Sensitivity (at 2000 lx, 3200K, 89.9% reflectance)	F12 (59.94 Hz), F13 (50 Hz)
Signal-to-noise ratio	Typical 59 dB *1 (1080/59.94i)
Modulation depth	HD: 45% or higher at 27.5 MHz (1080i)
Horizontal resolution	1,000 TV lines or higher
Shutter speed	1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 sec (59.94i mode) 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000 sec (50i mode)
Shutter Speed (Slow Shutter (SLS))	2, 3, 4, 5, 6, 7, 8, 16, 32, 64-frame accumulation (Only for HD 1080 mode)
Inputs/Outputs	
Mic Input	−60 dBu to −20 dBu, Balance, via D-sub 9-pin, female (x1)
DC Input	XLR-type 4-pin (x1), DC 10.5 V to 17 V
DC Output	DC 10.5 V to 17 V, 1.5 A (max.) via D-sub 9-pin
SDI Output	BNC (x2) HD-SDI or SD-SDI selectable
CCU	Optical fiber (x1), for single mode fiber cable
EXT Input/Output	D-sub 9-pin (female) (x1)
Distance of power supply (with HXCU-FB70)	500 m (max.) by CCFN Sony hybrid type fiber cable with portable lens installed
Distance of fiber cable (with HXCU-FB70)	10 km (max.) by single mode fiber cable with local power supply
Remote	8-pin (x1)
Lens	12-pin (x1)
LAN	RJ-45 (x1) 10BASE-T, 100BASE-TX
USB	USB 2.0 (x1)
Supplied accessories	
Tally number plate (1set), Operation guide (1), Operation manual (CD-ROM 1)	

Note *1 The value is in NS (Noise Suppressor) : ON mode.

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