

HXC-P70

Affordable, three 2/3-inch Exmor CMOS sensor, full HD/SD compact system camera with direct optical fibre cable connection



Overview

Compact, lightweight “POV” camera with lower power consumption, plus optical fibre connections

The HXC-P70 is a point-of-view “POV” camera developed for a wide range of more affordable applications than the HDC-P1, thanks to a longer cable distance extension and a higher sensitivity, in addition to its compact size, light weight and lower power consumption.

The HXC-P70 allows direct connection to the HXCU-FB70 camera control unit by optical fibre cable, in addition to two HD/SD-SDI outputs. The hybrid type fibre cable can extend the distance from the CCU up to 500 m, while supplying the required power. If a single-mode fibre cable is connected, the distance can extend up to 10 km with a local power supply.

The HXC-P70 adopts the same three 2.2-million pixels 2/3-inch type CMOS sensors as used on Sony high end camera such as the HXC-D70 and delivers high sensitivity of F12 at 59.94Hz or F13 at 50Hz. In addition, the camera uses an electrical CC filter alongside a servo motorized optical ND filter. These help to reduce the power consumption and make for an affordable total system with the CCU, cables, and remote controller. The

camera is ideal for a wide variety of applications, from production studio and event hall/stadium work, to wider applications such as surveillance, conference and house of worship installations.

High sensitivity and low noise

Incorporates high quality three 2/3-inch Exmor CMOS sensors, plus integrated motorised ND Filter and electrical CC filter.

Optical fibre transmission with direct cable connection

Up to 500m by the hybrid type optical fibre cable with power supply and up to 10km by the single-mode fibre cable with local power supply.

HXCU-FB70 Camera Control Unit

Connects to the HXCU-FB70 for precise remote control.

Low power consumption

Power saving design provides low power consumption of 17W.

This product contains pre-installed software and requires the purchase of licence keys to activate some functions.

Features

Superb three 2/3-inch-type CMOS sensors

Keeping the same compact and lightweight body as the HDC-P1, the HXC-P70 achieves a cost reduction while providing the high picture quality equivalent to the reputable HXC-D70 HD/SD system camera by using the same image sensor. It achieves high sensitivity of F12 (at 1080/59.94i) or F13 (at 1080/50i) while keeping low noise ratio.

Integrated ND filter / Electrical CC filter, and TLCS

The HXC-P70 is equipped with a Neutral Density (ND)

optical servo filter unit and electrical Colour Correction (CC) filter. The electrical CC filter can be controlled from the remote control panel, which allows you to assign with four different colour temperatures. In addition to the filter functions, thanks to the TLCS (Total Level Control System) function, gain/iris/shutter is automatically controlled by the ambient brightness, making it very efficient for nature shooting or surveillance use from morning to night.

Expandable operability with HXCU-FB70

Connecting the HXC-P70 with the HXCU-FB70 optical fibre camera control unit (CCU) enables precise remote control in picture adjustment and colour matching of cameras, while also monitoring the SDI output signal.

Long-distance transmission up to 10 km

The hybrid type optical fibre cable can extend the distance from the HXCU-FB70 camera control unit up to 500 m while supplying the required power. In the case of connection with a single-mode fibre cable (SMF), it can extend up to 10 km, if you are using a local power supply. Using the SMF already laid as infrastructure in many facilities enables you to install the camera system quickly and easily.

Beneficial digital extender by 2x or 4x

The digital extender function expands the size of the image by a factor of two or four times in the centre of the image sensor's captured image. This function works without a decrease in sensitivity, such as an F-number drop, which typically occurs when using conventional optical extender functions.

Specifications

General

Power Requirements	CCU: DC48V, 1.7A (max.) Ext.DC In: DC12V, 3.6A (max.)
Power Consumption	17W
Operating 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) *[1]	86 x 130 x 210 mm 3 1/2 x 5 1/8 x 8 3/8 inches
Mass	Approx. 1.5 kg Approx. 3 lb 4 oz

Camera Section

Pickup Device	3-chip 2/3-inch type CMOS
Effective Picture Elements	1920 x 1080 (H x V)
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
CC: Electrical	

Built-in Filters	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 60dB *[2] (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 HD1080 mode)

Input/Output

Mic Input	-60dBu to -20dBu, Balance, via D-Sub 9pin, 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 9pin

SDI Output	BNC (x2) HD-SDI or SD-SDI selectable
CCU	Optical Fiber (x1), for Single Mode Fiber Cable
Distance of Power Supply (with HXCU-FB70)	500m (max.) by CCFN Sony Hybrid Type Fiber Cable with Portable Lens Installed
Distance of Fiber Cable (with HXCU-FB70)	10km (max.) by Single Mode Fiber Cable with Local Power Supply
Remote	8pin (x1) RJ-45 (x1), Ether 10BASE-T, 100BASE-TX
Lens	12-pin (x1)
USB	USB 2.0 (x1)
EXT Input/Output	D-Sub 9pin, female (x1)

Supplied Accessories

Supplied Accessories	Tally Number Plate (1 set) Operation Guide (1) Operation Manual (CD-ROM 1)
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Notes

Note	*[1] The values for dimensions are approximate. *[2] The value is in NS (Noise Suppressor) : ON mode.
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Related products



HXCE-FB70

Power supply extension unit for HXC-D70 and PMW-320/350/400/500 camcorders



BRC-X400

IP 4K Pan-Tilt-Zoom Camera with NDI®*|HX capability



BRC-X1000

4K Pan Tilt Zoom camera with 1.0-type Exmor R CMOS sensor (colour availability may vary by country)



RCP-3501

Remote-control panel for HDC/HSC/HXC series cameras



BRC-H800

Full HD Pan Tilt Zoom camera with 1.0-type Exmor R CMOS sensor (colour availability may vary by country)



MSU-3000

Master setup unit, multi camera remote control panel for system cameras (horizontal type)



RCP-3500

Remote-control panel for HDC/HSC/HXC series cameras



BRC-H900

Full HD robotic studio camera with 1/2-type Exmor 3CMOS sensor and 14x optical zoom



MSU-3500

Master setup unit, multi camera remote control panel for system cameras (vertical type)



HXCU-FB70

Fibre CCU for CA-FB70 adapter for HXC-P70, HXC-D70 and PMW-320/350/400/500 camcorders

Gallery

