SONY

HXC-FB80
HD Portable Camera

HXC-P70
HD Multi-Purpose Camera

HXCU-FB80
4K/HD Camera Control Unit **4K**

Affordable camera system with 4K upscaling, HD HDR*

Sony presents a brilliant studio solution for faith, education, government, industry and small market broadcasters. The affordable HXC-FB80 portable camera and HXC-P70 point-of-view camera advance your productions with fresh imaging possibilities, additional output configurations and innovative options for control.

Upgrade your output with the companion HXCU-FB80 camera control unit. Here's a 3G platform, 4K upscaling, 12G-SDI output and HD High Dynamic Range (HDR) using Hybrid Log-Gamma technology.*

Enhance your on-air look with three 2/3-inch type Exmor® CMOS sensors. Sensitivity is F12 at 59.94 Hz in 1080 mode, while signal-to-noise ratio is -60 dB. Extend your reach with an optical fiber output that supports cable runs of up to 10,000 meters (6 miles).

Take control with Sony's existing remote control panels (RCPs) and master setup units (MSUs), sold separately. Or connect a computer running Sony's HZC-RCP5 remote control software, sold separately.

* 4K upscaling and HD HDR require HXCU-FB80, sold separately. HD HDR requires firmware upgrade. Planned availability in Summer 2018.
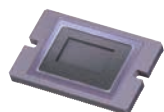
HXC-FB80

HXC-FB80HN

HXC-FB80KN

HXC-FB80SN

HXCU-FB80

4K

HXCU-FB80N

Three Sony® 2/3-Inch Exmor CMOS sensors

Achieve stunning picture quality even in low light, thanks to three 2/3-inch Exmor CMOS sensors. Resolution is 1920 x 1080. Sensitivity is F13 at 50 Hz and F12 at 59.94 Hz in 1080 mode. Typical signal-to-noise ratio is -60 dB.

Exmor
FULL HD 3CMOS

3G platform: up to 1080/59.94p

Built on a 3G platform, the camera achieves a maximum frame rate 1080/50.94p in addition to 50p, 29.97PsF, 25PsF and 23.98PsF.

4K upscaling and HD HDR* support with HXCU-FB80

Advance your imagery with 4K (3840 x 2160) upscaling. The HXCU-FB80 camera control unit, sold separately, outputs 4K signals via 12G-SDI interface using quad 3G-SDI. The control unit also supports HD High Dynamic Range (HDR),* simplifying operations with Hybrid Log-Gamma (HLG) technology.

4K

* HD HDR requires firmware upgrade. Planned availability in Summer 2018.

HD video trunk and HD prompter

To simplify your cabling, the camera head can double up two camera signals on one 3G fiber cable to the camera control unit. In addition to traditional analog composite prompter support, you can connect an HD-SDI prompter from the CCU.

3G/HD/SD-SDI

HD Video Trunk

HD Prompter

Model Variations

HXC-FB80 camera
- HXC-FB80HN Body only
- HXC-FB80KN Body + Lens Kit + Viewfinder + Microphone
- HXC-FB80SN Body + Lens Kit + Large Viewfinder

HXCU-FB80 CCU
- HXCU-FB80N

2

HXC-FB80

Hybrid cable up to 600 meters

Powering the camera from the camera control unit (CCU), you can run hybrid cable up to 600 m (2,000 feet).

Single-mode fiber cable up to 10,000 meters

When you power the camera locally, you can extend cable runs up to 10,000 meters (6 miles) using single-mode fiber (SMF) cable. Many facilities already incorporate SMF cable, enabling quick and easy installation.

Powerful image control

Skin-tone detail
To flatter your talent, you can selectively reduce the detail for three different hue or chroma ranges. So everybody looks good.

Knee saturation
Protect skin tones from harsh highlights with the adjustable hue and chroma of Knee saturation.

Effective Hyper gamma
Achieve gentle highlight roll-off with four hyper gamma settings in addition to seven standard gamma settings.

Adaptive Matrix
Extreme lighting, such as harsh monochromatic blue lights can exceed the color conversion range of conventional camera matrix. Sony's Adaptive Matrix brings the image under control.

And more
The roster of controls includes Black Gamma, Multi-Matrix, Low Key Saturation, Master White Gain and Extended Clear Scan Shutter.

Natural Skin-tone Detail OFF

Natural Skin-tone Detail ON
Simulated images

Knee Saturation OFF

Knee Saturation ON
Simulated images

Servo ND Filter

You can operate the motor-driven Neutral Density (ND) filter and the electrical Color Correction (CC) filter by a remote control panel or camera control unit, sold separately.

Total Level Control System (TLCS)

For surveillance and unattended capture under changing lighting conditions, TLCS provides automatic, unified control of gain, iris and shutter. You get appropriate picture levels across a huge range of ambient light.

Digital Extender

For additional reach on distant subjects, Digital Extender achieves x2 or x4 magnification. You can operate the function mode using the camera control unit (CCU), remote control panel (RCP) or via Sony Simple Camera Protocol.
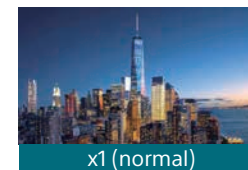
x1 (normal)   x2   x4

Kit includes HD viewfinder, HD lens and microphone

The HXC-FB80KN package includes the 3.5-inch* QHD Color LCD Viewfinder, which offers better and easier focusing than comparable viewfinders, plus portable HD 20x zoom lens and monaural electret condenser microphone.
* Viewable area measured diagonally.

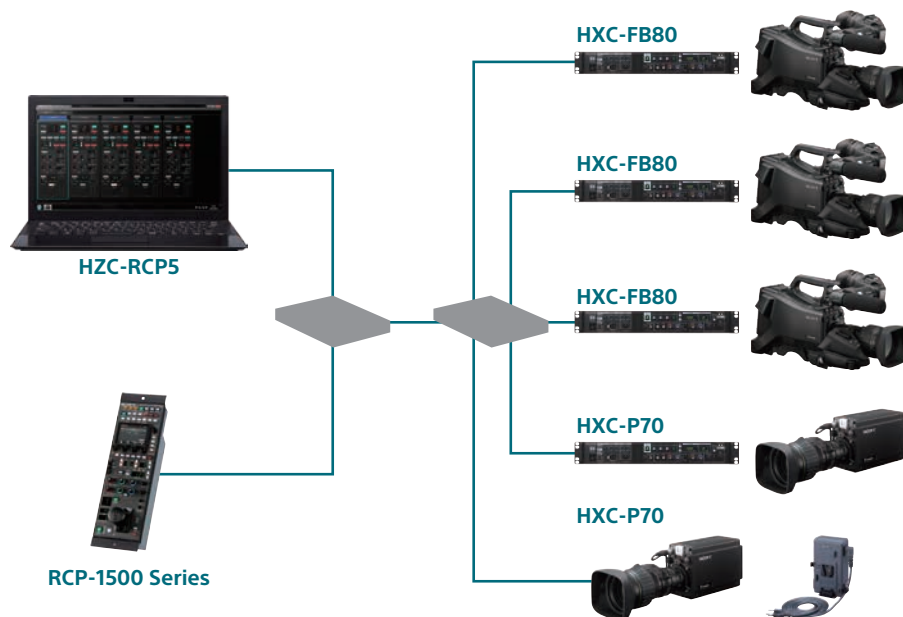## Slow Shutter with 8-frame accumulation and +12 dB gain*
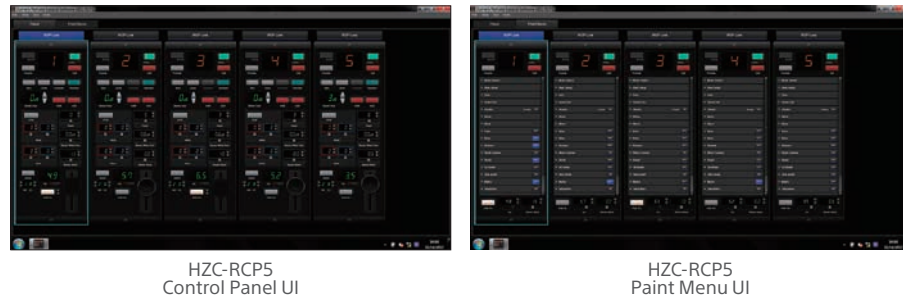
The camera achieves proper exposure in even in very dark environments. Slow Shutter accumulates up to 8 frames while +12 dB gain amplifies even weak signals. The combination delivers pictures that are appropriately exposed, acceptably sharp and low in noise.
* HD1080 mode only. Not available in HD720 mode.

HXC-FB80

HZC-RCP5 PC remote control

Now you can operate the camera from a laptop. In combination with an RCP-1500 Series remote control unit (sold separately) and a LAN connection, the HZC-RCP5 software enables individual operation of up to five cameras simultaneously. With the HXC-P70 point of view camera, you can connect the PC with or without the CCU. Requires Windows® 7, 8.1 or 10 operating systems.

HZC-RCP5
Control Panel UI

HZC-RCP5
Paint Menu UI

HXC-FB80

HXC-FB80

HXC-FB80

HXC-P70

HXC-P70

HZC-RCP5

RCP-1500 Series

Multi Camera System Control Connection Example

Versatile inputs and outputs

Additional connections include video trunk, 8-pin remote (RS422) and an SDI IN/OUT that supports prompter input.

- Tally Indicators
- Tally Switch
- LEMO Connector (HXC-FB80 L models)
- Optical Connector (CCFN or SMF)
- Remote 8-pin
- Test Output
- 3G/HD-SDI Output
- HD Prompter Output /HD Video Trunk Input
- Prompter Output/Genlock Input
- DC Output

- PGM Level /Assignable Button
- Return 2 Selector
- Return 1 Button
- Intercom Audio Level
- Intercom Mic Switch
- Call Button
- Earphone (Stereo Mini)
- DC Input
- Audio Input XLR ch1/2 (Line/Mic)

Simultaneous control of up to 24 cameras

You can control up to 24 HXC-FB80 or HXC-P70 cameras via a LAN cable or remote cable. Use Sony's optional MSU-1500 or MSU-1000 master setup unit or the optional HZC-CSM10 PC-based master setup software, all sold separately.

MSU-1500

MSU-1000

HXC-P70
HD point-of-view camera

HXC-P70H

HXC-P70H with optional lens kit

Cable runs up to 10,000 meters

Powered from the camera control unit, sold separately, the HXC-P70 and a portable lens can connect via up to 500 meters (1,600 feet) of hybrid fiber cable. When you power the camera locally, you can use up to 10,000 meters (6 miles) of single-mode fiber (SMF) cable. Because many venues already have SMF built in, installation can be quick and easy.

Slow Shutter with 64-frame accumulation and +48 dB gain

Ideal for surveillance and security as well as auditoriums, conferences, houses of worship, and other unattended applications, the HXC-P70 achieves proper exposure in even in severely dark environments. Slow Shutter accumulates up to 64 frames,* while +48 dB gain amplifies even weak signals. The combination delivers pictures that appropriately exposed, acceptably sharp and low in noise.
* HD1080 mode only. Not available in HD720 mode.

Servo ND Filter, Electrical CC Filter

You can operate the motor-driven Neutral Density (ND) filter and the electrical Color Correction (CC) filter by a remote control panel or camera control unit, sold separately. The camera offers four color temperature settings.
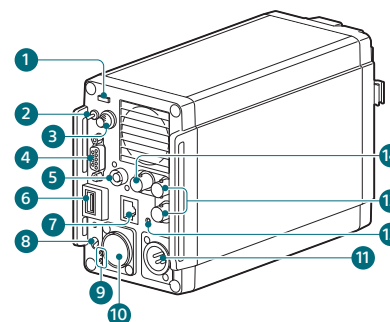
Total Level Control System (TLCS)

For surveillance and unattended capture under changing lighting conditions, TLCS provides automatic, unified control of gain, iris and shutter. You get appropriate picture levels across a huge range of ambient light.

Ethernet port

An Ethernet port enables you to connect a Sony RCP remote control panel, sold separately, directly to the camera. The camera also provides the traditional 8-pin remote connector.

Robust connections and mounting

Connections include two HD/SD-SDI outputs, a return signal output, prompter signal output, test (VBS analog) signal output, trunk line and assignable functions on the D-sub 9-pin connector.

1. Tally Indicator
2. Display switch
3. Menu switch
4. EXT I/O
5. REMOTE
6. USB
7. REMOTE, RJ-45
8. POWER switch
9. CONDITION of supplied Fiber Signal Level & Power (LEDs)
10. CCU connector
11. DC IN
12. NETWORK indicator
13. SDI Out 1/2
14. GENLOCK/TEST

To facilitate upside-down mounting, the camera's top and bottom plates are mechanically identical, with the same screws holes in the same positions.

Remote control

HXCU-FB80 4K/HD camera control unit

Sony has enhanced the matching HXCU-FB80 camera control unit, sold separately. The upgraded 3G platform enables 1080 signals at frame rates up to 59.94p. Anticipate the future with 4K (3840 x 2160) upscaling and 12G-SDI output (quad 3G-SDI interfaces). Heighten the viewer experience with HD High Dynamic Range (HDR) using Hybrid Log-Gamma (HLG) technology.*

* HDR requires firmware upgrade, expected Summer 2018.


HXCU-FB80 Front

HXCU-FB80N Rear (Neutrik)

SMF cable

Hybrid fiber cable

## HD Video Trunk with embedded audio

Sony simplifies your cable infrastructure. Thanks to the 3G platform of the HXC-FB80, you can connect two cameras to the CCU over a single fiber cable. For example, you can connect the output of an HXC-P70 into the HD Video Trunk of the HXC-FB80. The fiber cable can then carry the output of both cameras to the HXCU-FB80.

HXC-P70
AC-DN10
FB80 HD video +P70 HD trunk video
HXCU-FB80
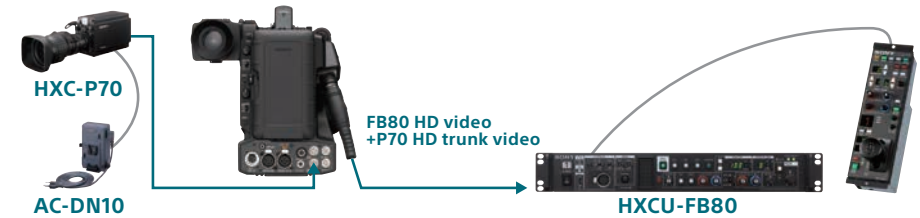
Double remote control*

Sony will further enhance* this HD video trunk function, supporting a remote control for the second video camera through the HXCU-FB80.

* Requires future firmware upgrade.

HXC-P70
AC-DN10
FB80 HD video +P70 HD trunk video
HXCU-FB80
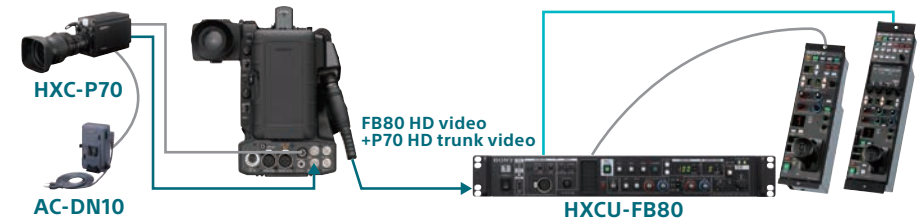
Choice of controllers

Operate the camera from Sony's familiar remote control panels, the RCP-1500 and RCP-1000 Series, as well as the RM-B170, RM-150 and HZC-RCP5 remote control software. (All sold separately.)

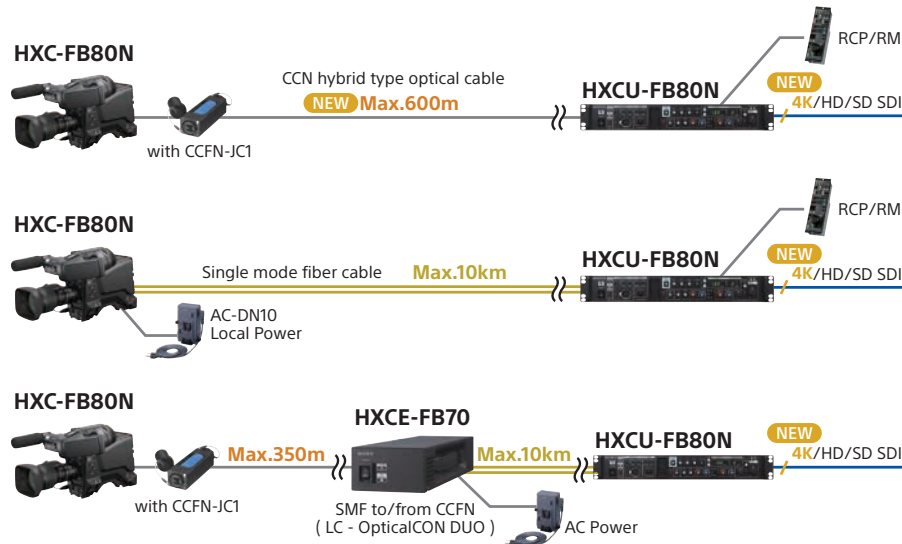RCP-1500 Series   RCP-1530   RCP-1000 Series   RM-B170   HZC-RCP5

Connecting to the CCU

Flexible connections

If you can power the camera locally, take advantage of single-mode fiber cable runs up to 10,000 meters (6 miles). If you power the camera from the CCU, you can use hybrid fiber cable up to 600 meters (2,000 feet). For the best of both worlds, the HXCE-FB70 enables you to combine long cable runs and remote power. For triax installations, use the CA-TX70 camera adaptor with the HXCU-TX70 triax CCU, both sold separately.

HXC-FB80N

CCN hybrid type optical cable
NEW Max.600m

with CCFN-JC1

HXCU-FB80N **NEW**
4K/HD/SD SDI

RCP/RM

HXC-FB80N

Single mode fiber cable Max.10km

AC-DN10
Local Power

HXCU-FB80N **NEW**
4K/HD/SD SDI

RCP/RM

HXC-FB80N

HXCE-FB70

Max.350m Max.10km

with CCFN-JC1

SMF to/from CCFN
(LC - OpticalCON DUO) AC Power

HXCU-FB80N **NEW**
4K/HD/SD SDI

HXCE-FB70 power supply extension unit

Now you can combine the long-distance cabling of single-mode fiber with the remote power flexibility of hybrid fiber. The HXCE-FB70 enables you to run up to 10,000 meters of single-mode fiber to the CCU, then supply power and run an additional 350 meters of hybrid fiber to the camera head. The HXCE-FB70 supplies the same power to the camera as the HXCU-FB80 and passes all the same signals.
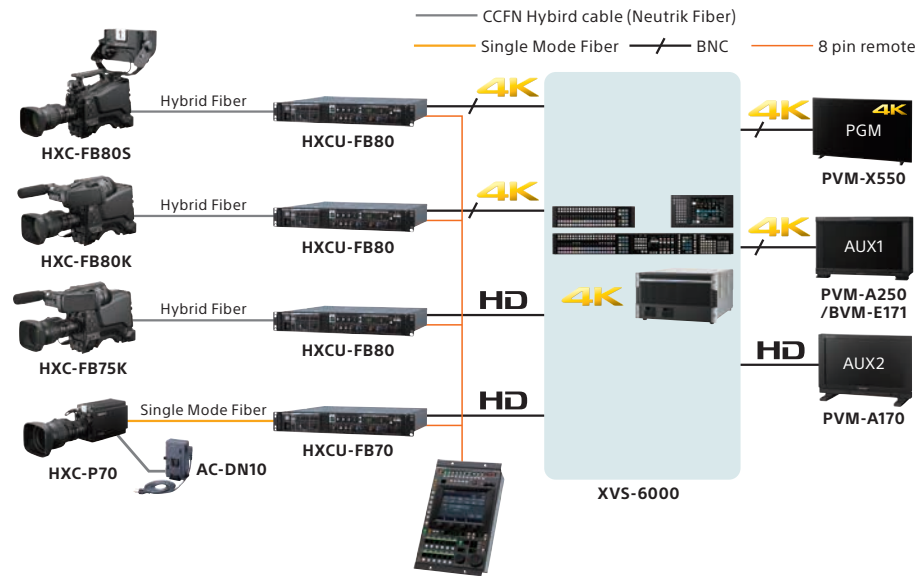
HXCE-FB70 Front

HXCE-FB70 Rear

System examples

4K studio

Thanks to the 4K upscaling output of the camera control unit, the HXC-FB80 portable camera and HXC-P70 point-of-view camera perform beautifully with Sony's 4K switchers and 4K monitors in a total 4K live production environment. As you'd expect, the common image sensor makes camera matching easy.

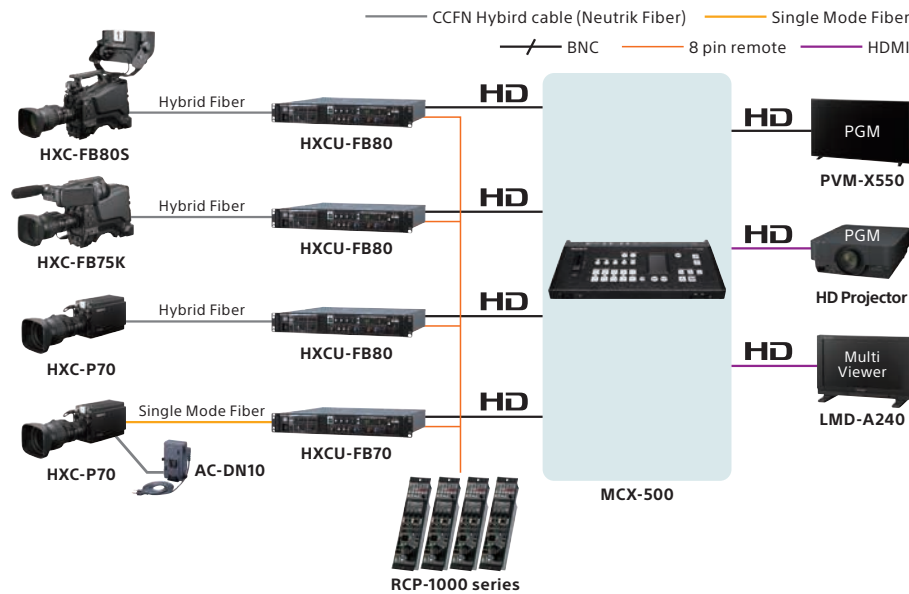## 4K small conference/presentation

You can also achieve 4K operation with the HXC-FB80 combined with the HXCU-FB80 using any lower-cost 4K/HD switcher that has 12G-SDI or quad 3G-SDI inputs.
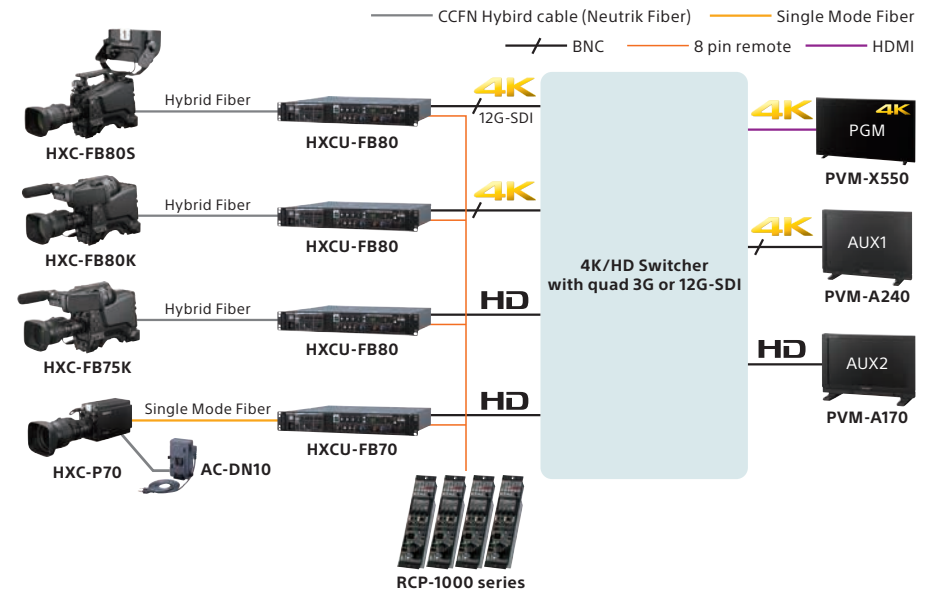
System examples

HD large conference/presentation

The HXC-FB80 and HXCU-FB80 can work in traditional HD systems with such legacy models as the HXC-FB75K.

HD HDR public viewing/presentation

High Dynamic Range has the power to captivate audiences with brighter highlights, deeper shadow detail and greater immediacy. The combination of the HXC-FB80 camera and HXCU-FB80 camera control unit provides end-to-end HDR operation* in the HD domain using Hybrid Log-Gamma (HLG) technology. In addition, the HDRC-4000 HDR production converter brings conventional SDR sources into the HLG domain. Connect HDR compatible monitors and TVs for powerful presentations.

* HDR requires firmware upgrade, expected Summer 2018.
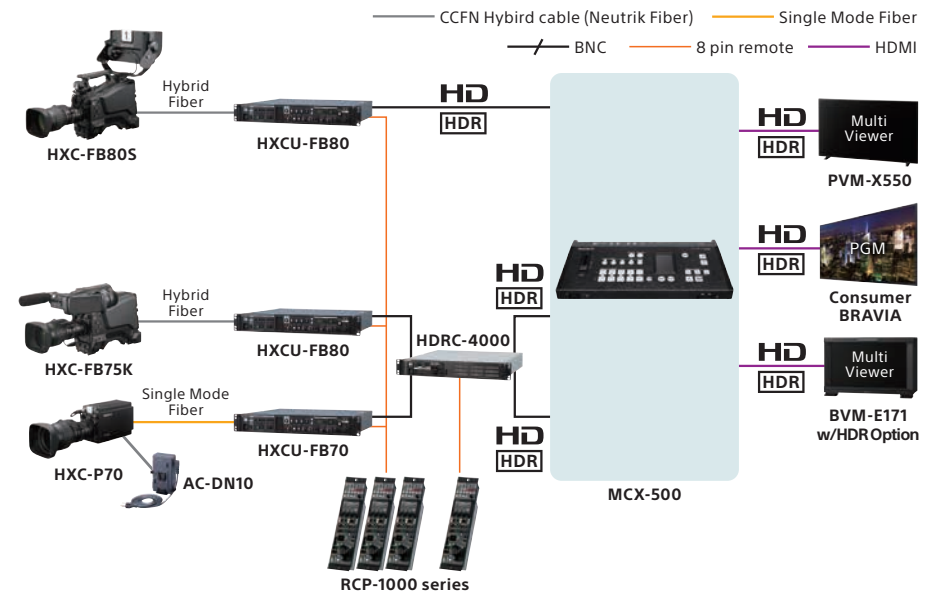
Specifications

		HXC-FB80SN	HXC-FB80KN	HXC-FB80HN
General	Power Consumption	Approx. 32W (Camera body with supplied viewfinder)	Approx. 22W (Camera body with supplied viewfinder)	Approx.19W (Camera body only)
	Operating Temperature	14°F to +113°F (-10°C to +45°C)		
	Storage Temperature	-4°F to +140°F (-20°C to +60°C)		
	Dimensions (W x H x D)*1	(with Lens&VF)*3 11 5/8 x 17 1/8 x 22 1/2 inches (with Lens&VF)*3 295 x 433 x 571 mm	(with Lens&VF)*2 10 x 10 1/2 x 20 7/8 inches (with Lens&VF)*2 254 x 266 x 529 mm	(Body) 6 3/8 x 10 1/2 x 12 3/8 inches (Body) 160 x 266 x 314 mm
	Weight	(with Lens&VF) Approx. 14 lb 16 oz (with Lens&VF) Approx. 6.8 kg	(with Lens&VF) Approx. 12 lb 9 oz (with Lens&VF) Approx. 5.7 kg	(Body) Approx. 7 lb 8 oz (Body) Approx. 3.4 kg
Camera Section	Pickup Device	3-chip 2/3-inch type CMOS		
	Effective Picture Elements	1920 x 1080 (H x V)		
	Signal Format	HD: 1080/59.94p, 1080/59.94i, 1080/50p, 1080/50i, 1080/29.97PsF, 1080/25PsF, 1080/23.98PsF, 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	F12 (59.94 Hz), F13 (50 Hz) (at 2000 lx, 3200K, 89.9% reflectance)		
	Signal-to-noise Ratio	Typical 60dB*4 (1080/59.94i)		
	Horizontal Resolution	1,000 TV lines or higher		
	Gain	-3, 0, 3, 6, 9, 12 dB		
	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-frame accumulation (only in 1080 mode at 59.94i/p, 50i/p, 29.97PsF, 25PsF, 23.98PsF)		
Input/Output	Audio Input (CH1/CH2)	XLR type: 3-pin, female (x2) MIC IN: -60dBu (Up to -20dBu can be set by using menu or HXCU-FB80), balanced LINE IN: 0dBu, balanced		
	Prompter/Genlock	BNC (x1); Gen-Lock In or Prompter Out		
	Test Output	BNC (x1); TEST Out (Analog output with/without characters), or HD/SD Sync Out		
	SDI Input/Output	BNC (x1); for HD Prompter Out or HD Video Trunk In		
	SDI Output	BNC (x1); 3G/HD-SDI or SD-SDI selectable		
	CCU	(N); Optical Fiber (x1), CCFN Cable or Single Mode Fiber Cable (LC type) (L); Optical Fiber (x1), Lemo Cable		
	Distance of Power Supply	(N); 600m (max.) by CCFN Sony Hybrid Type Fiber Cable (with Portable Lens and HXCU-FB80) (L); 600m (max) by Lemo Cable (with Portable Lens and HXCU-FB80)		
	Distance of Fiber Cable by Local Power Supply	(N); 10km (max.) by Single Mode Fiber Cable (LC type) (with HXCU-FB80) (L); 10km (max.) *5 by Lemo Cable (with HXCU-FB80)		
	Intercom	XLR type: 5-pin, female (x1)		
	Earphone Output	Stereo mini jack (x1)		
	Lens	12-pin (x1)		
	Viewfinder	20-pin (x1), for HDVF only		
	Remote	8-pin (x1)		
	TRUNK Input/Output	TRUNK LINE D-sub 9-pin, female (x1) : RS-232C, or Remote 8-pin : RS-422A		
	EXT Input/Output	(in TRUNK I/O) D-sub 9-pin, female (x1)		
	USB	USB 2.0 (x1)		
	DC Input	XLR-type 4-pin (x1), DC 10.5 V to 17 V		
	DC Output	4-pin (x1), DC 10.5 V to 17 V, 1.5 A (max.)		
Viewfinder Display	Screen Size	155.5 x 87.5 mm (7-inch diagonal)	8.8 cm (3.5-inch diagonal)	-
	Aspect Ratio	16:9	16:9	-
	Picture Elements	1920(H) x 1080(V) RGB stripe array	960(H) x 3 x 540(V) RGB stripe array	-
Lens	Lens Mount	2/3-inch type Sony Bayonet		-
	Focal Length	11/32 inches (8.2 mm) to 6 1/2 inches (164 mm)		-
	Zoom (Ratio)	Servo/Manual selectable (20x)		-
	Maximum Relative Aperture	1: 1.9		-
	Iris	Auto/Manual selectable		-
	Focus	Full manual focus 900 mm to ∞ (MACRO OFF), 10 mm to ∞ (MACRO ON, Wide)		-
	Filter Thread	M82 mm, pitch 0.75 mm		-
	Macro	On/Off switchable		-
Supplied Accessories	Supplied Accessories	Camera Operation Guide (1), Operating Instructions (CD-ROM 1), Lens Mount Cap (1), Flange back adjustment chart (1), Cable clamp belt (1), Warranty booklet (1)		
		7-inch Large Viewfinder (1), Viewfinder Operation Guide (1), Viewfinder Operation Manual (CD-ROM 1), 2/3-inch type HD Portable Lens (1), V-shoe (1), Viewfinder Hood (1), Viewfinder Cable 20pin (1), Tally Number Plate (0~9)	Portable Viewfinder (1), 2/3-inch type HD Portable Lens (1), Microphone (1), Windscreen (1)	-

*1 The values for dimensions are approximate.
*2 The value for width is in the minimum position of viewfinder's slide mechanism.
*3 The values for dimensions are in the maximum height position of viewfinder's slide mechanism without hood.
*4 The value is in NS (Noise Suppressor) : ON mode.
*5 Fasten the ground terminal of local power supply device of camera head to earth as CCU side.

HXC-P70

General	Power Requirements	CCU: DC48V, 1.7A (max.)
		Ext.DC In: DC12V, 3.6A (max.)
	Power Consumption	17W
	Operating Temperature	14°F to +113°F
		-10°C to +45°C
	Storage Temperature	-4°F to +140°F
		-20°C to +60°C
	Dimensions (W x H x D)*1	3 1/2 x 5 1/8 x 8 3/8 inches
		(86 x 130 x 210 mm)
	Weight	Approx. 3 lb 4 oz
		Approx. 1.5 kg
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"-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 60dB*2 (1080/59.94i)
	Horizontal Resolution	1,000 TV lines or higher
	Gain	-3, 0, 3, 6, 9, 12, 18, 24, 30, 36, 42, 48 dB
	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)
	GL/Test	BNC (x1); Gen-Lock In, HD/SD Sync Out, Prompter Out,
		or TEST Out (Analog output with characters)
	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
	Lens	12-pin (x1)
	Remote	8pin (x1)
		RJ-45 (x1), Ether 10BASE-T, 100BASE-TX
	TRUNK Input/Output	(in EXT I/O) D-sub 9-pin, female (x1)
	EXT Input/Output	D-Sub 9pin, female (x1) RS-232C
	USB	USB 2.0 (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
Supplied Accessories	Supplied Accessories	Operation Guide (1), Operation Manual (CD-ROM 1),
		Tally Number Plate (1)

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

HXCE-FB70

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

HXCU-FB80N

General	Power Requirements	AC 100 V to 240 V, 2.2A (max), 50/60 Hz
	Operating Temperature	5°F to +104°F (5°C to +40°C)
	Storage Temperature	-4°F to +140°F (-20°C to +60°C)
	Dimensions (W x H x D)*1 (W: without Rack Mounting Bracket)	19 (16 3/4) x 2 5/8 x 14 1/2 inches
		(482 (424) x 66 x 366 mm)
	Weight	Approx. 13 lb 11 oz (Approx. 6.2 kg)
	Signal Format	4K 2160 : 59.94p, 50p (2SI, SQD, Level-A/B)
		HD 1080: 59.94p, 59.94i, 50p, 50i, 29.97PsF, 25PsF, 23.98PsF,
		HD 720 : 59.94p, 50p
		SD 480 : 59.94i, 576: 50i
Input/Output	Camera	(N); Optical Fiber (x1), CCFN Cable or Single Mode Fiber Cable (LC type)
		(L); Optical Fiber (x1), Lemo Cable
	Distance of Power Supply	(N); 600m (max.)
		by CCFN Sony Hybrid Type Fiber Cable (with Portable Lens and HXC-FB80),
		(N); 1,000m (max.)
		by CCFN Sony Hybrid Type Fiber Cable (with Portable Lens and HXC-P70)
		(L); 600m (max.)
		by Lemo Fiber Cable (with Portable Lens and HXC-FB80)
	Distance of Fiber Cable by Local Power Supply	(N); 10km (max.)
		by Single Mode Fiber Cable (LC type) (with HXC-FB80)
		(L); 10km (max.) *2
		by Lemo Fiber Cable (with HXC-FB80)
	Intercom (on the front panel)	XLR type: 5-pin, female (x1)
	Intercom/Tally/Program	D-sub 25-pin, female (x1)
		• INTERCOM (PROD, ENG), 4Wire/RTS/Clear-Com, 0 dBu
		• PGM 1 system, -20/0/+4 dBu
		• TALLY (R, G)
		• PREVIEW
	Remote	8-pin (x1)
	Trunk	D-sub 9-pin, female (x1)
		RS-232C/RS-422A, 1 system
	LAN	8-pin (x1)
	Reference	BNC (x2), Out: Loop-Through
	Prompter	BNC (x2), Out: Loop-Through
Input	AC In	(x1), AC 100 V to 240 V
	Return In VBS1, VBS2	BNC (x2)
	Return In SDI1, SDI2	BNC (x2)
		HD-SDI, 1080: 59.94i, 50i, 29.97PsF, 25PsF, 23.98PsF,
		720: 59.94p, 50p
		SD-SDI, 480 : 59.94i, 576: 50i
	HD Prompter In	BNC (x1)
Output	SDI Out (SLOT-1) HD/SD	BNC (x4), HD-SDI/SD-SDI selectable
	SDI Out (SLOT-2) 3G/4K/HD Trunk	BNC (x4) :
		4K, 3G-SDI 1 to 4: SMPTE ST425-5, Level-A/B: 2160/59.94p, 2160/50p,
		1080/59.94p, 1080/50p,
		4K, 12G-SDI 1, 2: SMPTE ST2082-1: 2160/59.94p, 2160/50p,
		HD/3G-SDI: SMPTE ST425-1: 1080/59.94p, 1080/50p,
		HD-SDI 3, 4: SMPTE ST292-1, HD Trunk 1080/59.94i, 1080/50i,
		4K/3G/HD Trunk: Selectable
	VBS1, 2	BNC (x2)
	Pix	BNC (x1)
	Sync	BNC (x1), HD SYNC/SD SYNC selectable
	Audio Out CH-1, CH-2	XLR-type 3-pin, male (x2), 0/-20 dBu
Supplied Accessories	Supplied Accessories	Tally Number Plate 1 Set (0 to 9),
		Operating Instructions Camera Operation Manual CD-ROM (1),
		Operation Guide (1), Warranty booklet (1)

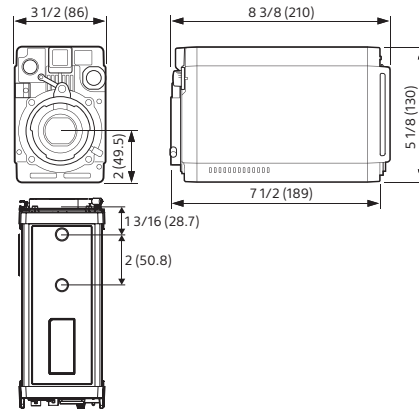*1 The values for dimensions are approximate and excluding the protrusions.
*2 Fasten the ground terminal of local power supply device of camera head to earth as CCU side.
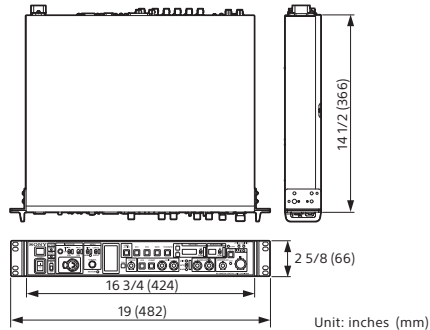
Dimensions

HXC-FB80

6 3/8 (160)   13 1/8 (333)

8 7/8 (224)   10 1/2 (266)

10.5 (4 1/4)

5 3/4 (144)   12 3/8 (314)

HXC-P70

3 1/2 (86)   8 3/8 (210)

2 (49.5)   5 1/8 (130)

7 1/2 (189)

1 3/16 (28.7)

2 (50.8)

HXCU-FB80

14 1/2 (366)

16 3/4 (424)

19 (482)

2 5/8 (66)
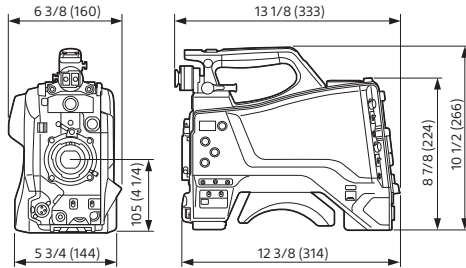
Unit: inches (mm)

Optional Accessories

HDVF-L750
7-inch[1]
LCD Color Viewfinder

HDVF-L770*[2]
7-inch[1]
LCD Color Viewfinder

HDVF-EL75*[2]
7.4-inch[1]
OLED Color Viewfinder

HDVF-EL20
OLED 0.7-inch[1] Color
HD viewfinder

HDVF-EL30
OLED 0.7-inch[1] Color
Full HD viewfinder with
3.5-inch[1] sub-LCD

HDVF-L10
LCD Color Viewfinder

CAC-12
Mic Holder

ECM-678/674/673
Shotgun Electret
Condenser Microphone

AC-DN2B
AC Adaptor

AC-DN10
AC Adaptor

RCP-1000/1001
Remote Control Panel

RCP-1500/1501/1530
Remote Control Panel

RM-B170
Remote Control Unit

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

CCFN-JC1
Neutrik Cable Coupler

MSU-1000
Master Setup Unit

MSU-1500
Master Setup Unit

HKCU-FP2
CCU Control Panel
(for HXCU-TX70)

CNA-1
Camera Control
Network Adaptor

HXCU-FB70
Optical Fiber
Camera Control Unit

HXCE-FB70
Power Supply
Extension Unit

CA-TX70
Digital Triax
Camera Adaptor

HXCU-TX70
Triax Cable
Camera Control Unit

BVM-X300
BVM-X300
30-inch[1] OLED 4K HDR
Master Monitor

PVM-X550
55-inch[1]
OLED 4K HDR Picture
Monitor

BVM-E171
17-inch[1] OLED
Master Monitor

**LMD-A240/A220/
A170**
LCD Picture Monitor

LMD-B240/B170
LCD Picture Monitor

HDRC-4000
HDR Production
Converter Unit

VCT-14
Tripod Adaptor

CBK-SP01
Soft Shoulder Pad

HKC-LC01
LEMO 3K.93C. Connector
for HXC-FB75

HKC-LC02
LEMO 3K.93C. Connector
for HXCU-FB70, HXCE-FB70

HZC-RCP5
Remote Control Software
for Windows 7, 8.1, 10

J-712-156-0A
SONY Camera
Test Charts

HZC-CSM10
Camera System Management Software

MS-15
Canon Semi-Servo Control Kit (Focus and Zoom)

*1 Viewable area measured diagonally
*2 For mounting of the viewfinder, please contact your nearest Sony or dealer's office.

V-2662 (MK20232V2)   Issued in USA (3/18)