

# SONY



## HXC-FB80

HD Portable Camera

# 4K

## HXCU-FB80

4K/HD Camera Control Unit



Preliminary

### Three 2/3-inch Exmor® CMOS sensor HD color studio camera

The HXC-FB80 is a cost-effective high-performance HD portable camera with three Sony 2/3-inch Exmor CMOS sensors offering excellent sensitivity and full-HD picture quality. Built on a 3G-SDI platform, the HXC-FB80 is capable of 1080/50p, 59.94p signal processing while maintaining low power consumption.

In combination with the HXCU-FB80N\* 4K/HD Camera Control Unit, the HXC-FB80 offers future-proof expandability including 4K upscale and HD HDR support (HLG, Hybrid Log-Gamma)\*\*. The HXC-FB80 is compatible with the optional HZC-RCP5 PC-based Remote Control Panel which allows for flexibility in system operation.

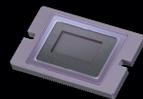
\* HXC-FB80 camera comes standard with a Neutrik connector interface. An optional Lemo conversion kit is available.

\*\* Requires firmware upgrade planned to be available June 2018.

#### Full HD Exmor CMOS sensors

Incorporating three 2/3-inch Exmor CMOS sensors, the HXC-FB80 offers stunning full-HD picture quality and sensitivity of F13 in 50 Hz and F12 in 59.94 Hz at 1080 mode with a signal-to-noise ratio of -60 dB, enhancing shooting in low light settings.

The HXC-FB80 can comfortably output 3G-SDI signals including 1080/50p and 59.94p. The new processor can also support 1080/23.98 PsF in addition to 25 PsF and 29.97 PsF.



**Exmor**  
FULL HD 3CMOS

#### Future-Proof up-scalable 4K and HD HDR Support

Combined with the HXCU-FB80 CCU, the camera's output is 4K up-scalable and capable of HD HDR (HLG, Hybrid Log-Gamma). HD-HDR support requires firmware upgrade planned to be available June 2018. 4K up-scale in the CCU will be available at launch.

#### MCS (Multi Camera System) capabilities

The HXCU-FB80 CCU provides support for up to 24 units, forming a complete Multi Camera System.

## Long Cable Extension and Choice of Fiber Interface

Using a hybrid Fiber camera cable and improved power supply unit, the distance between the camera head and CCU can be extended up to 600m. If combined with the HXC-P70H, it can extend up to 1,000m. In addition to the Neutrik connector interface, a LEMO connector interface is available for the camera head and CCU.

## Long-distance transmission up to 10km with single-mode fiber cable

Transmission can be extended up to 10km using a local power supply with single-mode fiber cable (SMF).

## Wide range of image control functionality

The HXC-FB80 comes equipped with a number of creative image control features such as MultiMatrix, Skin Tone Detail, Low Key Saturation, Knee Saturation, and Auto Lens Aberration Compensation (ALAC).

## ND Filter by Servo Motor

Along with an electrical CC filter, the ND filter can be remotely controlled either by external RCP/RM or via the CCU because of the newly adopted filter servo motor in the camera head.

## HD Video Trunk and HD Prompter

HXC-FB80 and HXCU-FB80 system design is based on a 3G-HD platform. The camera head can pass an additional 1080/50i, 59.94i signal to the HXCU-FB80 while operating at 1.5G (1080/50i, 59.94i). The HXCU-FB80 can send an additional HD-Prompter Video signal to the HXC-FB80 even while the camera is operating in 1080/50p, 59.94p, or 4K mode.

## Specifications

	Model Code			
		HXC-FB80HN	HXC-FB80KN	HXC-FB80SN
<b>General</b>	Power Consumption	Approx.19W (Camera body only)	Approx. 22W (with viewfinder)	Approx. 32W (with viewfinder)
	Dimensions (W x H x D) <sup>1)</sup>	6 3/8 x 10 1/2 x 12 3/8 inches	(with Lens & VF) <sup>2)</sup> 10 x 10 1/2 x 20 7/8 inches	(with Lens & VF) <sup>3)</sup> 11 5/8 x 17 1/8 x 22 1/2 inches
<b>Camera Section</b>	Weight	(Body) Approx. 7 lb 8 oz	(with Lens & VF) Approx. 12 lb 9 oz	(with Lens & VF) Approx. 14 lb 16 oz
	Pickup Device	3-chip 2/3-inch type CMOS		
	Effective Picture Elements	1920 x 1080 (H x V)		
	Signal Format	HD: 1080/59.94p, 59.94i, 50p, 50i, 29.97PsF, 25PsF, 23.98PsF, 720/59.94p, 720/50p SD: 480/59.94i, 576/50i		
	Lens Mount	Sony 2/3-inch type bayonet mount		
	Sensitivity	F12 (59.94 Hz), F13 (50 Hz) [at 2000 lx, 3200 K, 89.9% reflectance]		
<b>Input/Output</b>	Signal-to-noise Ratio	Typical 60dB <sup>2)</sup> (1080/59.94i)		
	Audio Input	XLR type: 3-pin, female (x2)		
	Prompter/Genlock	BNC (x1)		
	SDI Input/Output	BNC (x1) SMPTE ST292-1, for HD Prompter Out or HD Video Trunk In		
	Test Output	TEST Out (Analog output with/without characters), or HD/SD Sync Out		
	SDI Output	BNC (x1) SMPTE ST425-1/ST292-1/259M; 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 (with Portable Lens and HXCU-FB80)	(N): 600m (max.) by CCFN Sony Hybrid Type Fiber Cable (L): 600m (max.) by Lemo cable		
	Distance of Fiber Cable by Local Power Supply (with HXCU-FB80)	(N): 10km (max.) by Single Mode Fiber Cable (LC type)		
	Intercom	XLR type: 5-pin, female (x1)		
<b>Viewfinder Display</b>	TRUNK Input/Output	TRUNK LINE D-sub 9-pin, female (x1) : RS-232C, or Remote 8pin : RS-422A		
	EXT Input/Output	(in TRUNK I/O) D-sub 9-pin, female (x1)		
<b>Lens</b>	Screen Size	-	8.8 cm diagonal (3.5 inch)	155.5 x 87.5mm (7 inch diagonal)
	Aspect Ratio	-	16:9	16:9
	Picture Elements	-	960 (H) x 3 x 540 (V) RGB stripe array	1920 (H) x 1080 (V) RGB stripe array
	Lens Mount	-	2/3-inch type Sony Bayonet	
<b>Lens</b>	Focal Length	-	11/32 inches (8.2 mm) to 6 1/2 inches (164 mm)	
	Zoom	-	20x, Servo/Manual selectable	

<sup>1)</sup> The values for dimensions are approximate and excluding the protrusions.

<sup>2)</sup> The value is in NS (Noise Suppressor) : ON mode.

<sup>3)</sup> The values for dimensions are in the maximum height position of viewfinder's slide mechanism without hood.

<sup>4)</sup> The value for width is in the minimum position of viewfinder's slide mechanism.

	Model Code	
		HXCU-FB80N
<b>General</b>	Dimensions (W x H x D) <sup>1)</sup> (without handles)	19 (16 3/4) x 2 5/8 x 14 1/2 inches
	Weight	Approx. 13 lb 11 oz
<b>Signal Format</b>	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
	Camera	(N): Optical Fiber (x1), CCFN Sony Hybrid Cable or Single Mode Fiber Cable (LC type) (L): Optical Fiber (x1), Lemo Cable
<b>Input/Output</b>	Distance of Power Supply	(N): 600m (max.) by CCFN Sony Hybrid Type Fiber Cable (L): 600m (max.) by Lemo Cable
	Distance of Fiber Cable by Local Power Supply	(N): 10km (max.) by Single Mode Fiber Cable (LC type)
<b>Output</b>	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: 2160/59.94p, 50p, 1080/59.94p, 50p, 4K/12G-SDI 1, 2: 2160/59.94p, 50p, HD 3G-SDI: 1080/59.94p, 50p, HD-SDI 3, 4: HD Trunk 1080/59.94i, 50i, 4K/3G/HD Trunk: Selectable

<sup>1)</sup> The values for dimensions are approximate and excluding the protrusions.

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