

# HDC-1700

HD Camera System

# HDCU-1700

Camera Control Unit

# SONY

# 4K



Sony introduces the new HDC-1700 Dual-format HD Camera System equipped with sophisticated three-chip 2/3-inch CCD image sensors and the latest 16-bit A/D converter to provide superior picture quality. The HDC-1700 supports HD and SD signal formats including 1080/50i, 1080/59.94i, 720/50p, and 720/59.94p. For flexibility, there are many HDC Series accessories that can be utilized, such as optional HD viewfinders and large lens adaptors. And the HDC-1700 is a truly cost-effective camera that also delivers genuine user-friendliness.

## Upgrade Program For 4K **NEW**

With the optional HKCU-2040 4K/HDR Processor Board and HZC-PRV20 Signal Format Software, the HDC-1700 can be upgraded to create 4K resolution images as well as 4K Live HDR (High Dynamic Range) images.

## Superb Image Quality with Cutting-edge Technologies

With 2/3-inch CCD image sensors, the newly developed digital signal processor (DSP) LSI provides superior S/N levels as well as better functionality. Also, a 16-bit A/D converter produces optimal visual imagery and enhanced black reproduction.

## Adaptive Matrix Function

With the Adaptive Matrix function, images with well-balanced details can be reproduced even in strong monochromatic light conditions, such as at stage events.

## Auto Lens Chromatic Aberration Compensation (ALAC-2)

With the newly designed DSP LSI, the ALAC-2 function automatically compensates for lens chromatic aberration. ALAC-2 works in both horizontal and vertical directions.

\* Lenses need to be corresponded to ALAC feature.

## Options Expand Usage

There are many optional accessories for the HDC-1700, including the HKC-DF20 Dual Optical Filter Unit, HZC-PSF20 Signal Format Software (1080/23.98p, 24p, 25p, 29.97p), and HZC-PRV20 Signal Format Software (1080/50p, 59.94p). These options support a range of different shooting scenes and requirements.

## Spirit Level

With the MEMS-Acceleration Sensor, the horizontal level can be displayed on the viewfinder screen, which helps particularly with wide-angle shooting

## HDLA Large Lens Adaptor Maximizes Operability

HDLA-1500, HDLA-1505, and HDLA-1507 adaptors maximize the operability of the HDC-1700. These optional adapters provide flexibility when applications require a large studio lens, and camera operators want to maintain hard camera control. They facilitate simple connectivity without time-consuming wiring and adjustments.

## Optical Fiber Transmission

The HDC-1700 is capable of long-distance signal transmission up to 2,000 meters (6,562 feet) with the HDCU-1700 Camera Control Unit, and up to 4,000 meters (13,123 feet) with the HDCU-2000. The HDC-1700 is interchangeable with the HDC-2000 Series in a system.

## HDCU-1700 Camera Control Unit (CCU)

The HDC-1700 can be configured with the HDCU-1700 camera control unit (CCU), which is a 19-inch half-rack size portable CCU for fiber cable connection. The HDCU-1700 CCU can control camera menu settings and display fiber condition on the front panel. It has an expansion slot for the four HD/SD SDI outputs board; and the option board slot is used for HKCU option cards to expand the CCUs output capability to include VBS out, PIX out, WFM out, and component video out. Optional HKCU-2007 is required to output 1080/50p, 59.94p signals.



## Optional Accessories

All accessories that are used with the HDC-1500 and HDC-2500 Series can be used with the HDC-1700.

\*1 Viewable area, measured diagonally.



**HKC-T1500**  
HD CCD Block Adaptor



**RCP-1500**  
Remote Control Panel



**RCP-1000**  
Remote Control Panel



**MSU-1000**  
Master Setup Unit



**MSU-1500**  
Master Setup Unit



**HDVF-EL20**  
2.0-inch\*1 OLED Viewfinder



**HDVF-20A**  
2.0-inch\*1 CRT B/W Viewfinder



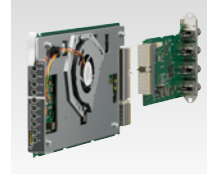
**HDVF-L750**  
7-inch\*1 LCD Color Viewfinder



**HDVF-L770**  
7-inch\*1 LCD Color Viewfinder



**HDVF-EL75/EL70**  
7.4-inch\*1 Color HD Viewfinder



**HKCU-2040**  
4K/HDR Processor Board



**HDLA-1500**  
Large Lens Adaptor  
(to attach the HDVF-EL70/700A)



**HDLA-1505**  
Large Lens Adaptor  
(to attach the HDVF-EL75/L770/L750/  
C730W/550/C550W)

### Options for HDC-1700

- HKC-DF20** Dual Optical Filter Unit
- HZC-PSF20** 1080/23.98p, 24p, 25p, 29.97p Signal Format Software
- HZC-PSF20M** 1080/23.98p, 24p, 25p, 29.97p Signal Format Software (30-day limited period)
- HZC-PSF20W** 1080/23.98p, 24p, 25p, 29.97p Signal Format Software (7-day limited period)
- HZC-PRV20** 1080/50p, 59.94p Signal Format Software
- HZC-PRV20M** 1080/50p, 59.94p Signal Format Software (30-day limited period)
- HZC-PRV20W** 1080/50p, 59.94p Signal Format Software (7-day limited period)

### Options for HDCU-1700

- HKCU-1001** SD Encoder Unit (VBS out, WF out, PIX out)
- HKCU-1003** Multi Interface Unit (VBS out, WF out, PIX out, component video out)
- HKCU-2007** HD SDI Output Expansion Unit (HD SDI out)
- HKCU-2040** 4K/HDR Processor board (3840/50p, 59.94p, 2SI/SQD, Level A/B)

## Specifications

HDC-1700	
<b>General</b>	
Power requirement	240 V AC, 1.4 A (max.), 180 V DC, 1.0 A (max.), 12 V DC, 7 A (max.)
Operating temperature	-20°C to +45°C (-4°F to +113°F)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
Mass	4.5 kg (9 lb 15 oz)
<b>Camera section</b>	
Pickup device	3-chip 2/3-inch type Progressive CCD
Effective picture elements	1920 x 1080 (H x V)
Signal format	1080/50i, 1080/59.94i, 720/50p, 720/59.94p 1080/50p*2, 1080/59.94p*2 1080/23.98p*3, 1080/24p*3, 1080/25p*3, 1080/29.97p*3
Spectrum system	F1.4 prism system
Built-in filters	(ND) 1: CLEAR, 2: 1/4ND, 3: 1/16ND, 4: 1/64ND, 5: CROSS
Sensitivity	F10 (1080/59.94i mode), F11 (1080/50i mode) (at 2000 lx, 89.9% reflectance)
Signal-to-noise ratio (typical)	Typical -60 dB
<b>Input/Output</b>	
SDI output	BNC (x1) (HD-SDI / SD-SDI)
Prompter output / Genlock input	BNC (x1), 1 Vp-p, 75 Ω
Test output	BNC (x1), 1 Vp-p, 75 Ω
Mic input	XLR 3-pin (x1) (female)
Audio input (Ch1, Ch2)	XLR 3-pin (x2) (female)
Intercom 1 / Intercom 2	XLR 5-pin (x2) (female)
Earphone output	Stereo mini-jack 3-pin (x1)
Return control input	6-pin (x1)
Tracker	10-pin (x1)
Crane	12-pin (x1)
Remote	8-pin (x1)
Lens	12-pin (x1)
Viewfinder	20-pin (x1)
CCU	Optical / electrical multi-connector (x1)
DC input	XLR 4-pin (x1) (DC 10.5 to 17V)
DC output	Mini type 4-pin (x1) (DC 10.5 V to 17V, max. 0.5 A)
USB	Type A 4-pin (x1)

HDCU-1700	
<b>General</b>	
Power supply	100 V AC to 240 V AC, 50/60 Hz
Operating temperature	-10°C to +40°C (14°F to 104°F)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
Dimensions (W x H x D)	202 x 127 x 410 mm (8 x 5 x 16 1/4 inches) (excluding protrusions)
Mass	6.7 kg (14 lb 12 oz)
<b>Input/Output</b>	
Camera	Optical / electrical multi-connector (x1), 180V DC power supply
Intercom/Italy/PGM	D-sub 25-pin (x1) female
RCP/CNU	8-pin (x1)
TRUNK A	12-pin (x1)
LAN (RCP/MSU)	RJ-45 8-pin (x1)
SDI (HD/SD) / VBS return input	BNC (x3) ( HD / SD)
Prompter input	BNC (x2), loop-through output, VBS, 1 Vp-p, 75 Ω
Reference input	BNC (x2), loop-through output
Audio output (Ch1, Ch2)	XLR 3-pin (x2) (male), 0 dBu / -20 dBu / +4 dBu
Mic remote	D-sub 15-pin (x1)
Sync output	BNC (x1)
Character output	BNC (x1)
HD-SDI / SD-SDI output	BNC (x4)

\*2 HZC-PRV20 is required.

\*3 HZC-PSF20 is required.



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