SONY

HDC-P43

4K/HD POV Camera

Overview

Flexible, no-compromise 4K, HD and super slow motion production

The HDC-P43 is a lightweight Point of View (POV) style camera integrates seamlessly with existing HD infrastructure, lenses and accessories, while giving you the option to create the finest 4K and super slow motion productions.

Perfect as part of a multi-camera shoot or used as a standalone device, the HDC-P43 can be mounted on a crane or operated as a fixed camera position.

As part of Sony's flexible, no-compromise 4K/HD live system, the HDC-P43 helps you generate maximum returns on today's production budgets.

Seamless integration with existing workflows

The HDC-P43 is the companion model to the HDC-4300 system camera, with the same advanced 2/3-inch 4K imaging device and B4-mount lens mount. Operation is reassuringly familiar to camera operators, so you're up and running faster without expensive re-training.

The HDC-P43 is also fully compatible with the wide range of existing products currently being used with the HDC 4300, this includes BPU-4500/BPU-4000 Baseband Processor Units, the

HDCU-4300/HDCU-2000/HDCU-2500 full rack and half rack Camera Control Units, and the RCP series Remote Control Panels.

Choose the level of operation you need

The HDC-P43 works with the BPU-4000/4500 baseband processor units or the HDCU-4300 camera control unit via direct connection by single mode fibre cable, allowing you to activate 4K, HFR and HD Cut Out with the same optional software keys as the HDC-4300. These let you add amazing 4K x2 [*1] and HD 8x super slow motion and 4K image capture to standard HD outputs as and when you want them. All the flexibility and control you demand are right there in a single high-performance platform.

Note *1: 4K x2 is available only with BPU-4000/BPU-4500.

Amazing colour and imagery with next-generation innovation

The HDC-P43's advanced optical system supports the next-generation ITU-R BT.2020 colour gamut, enabling much wider and more precise colour reproduction in live broadcasts. You'll see the difference with vibrant, true-to-life images that make viewers feel as if they're actually there.
Moreover, thanks to S-Log3 process, the High Dynamic Range operation is available for 4K and HD simultaneous live operation.

Features

Direct installation of B4-mount lenses

Thanks to the 2/3-inch camera mount, the HDC-P43 works directly with B4 lenses. The B4-mount supports both HD and 4K lenses, allowing you to use B4-mount high power large lenses to capture sports scenes with a deep depth of field.

Superb 4K capabilities with wide dynamic range and wide colour space

With optional software key SZC-4001, the HDC-P43 has the function of capturing 4K images exactly like the HDC-4300. The HDC-P43 is equipped with the same three 2/3-inch 4K imagers and ultra-precision alignment technology used to mount the chips to an advanced prism. This optical system supports the wide colour gamut of ITU-R BT.2020*, enabling more precise colour reproduction in live broadcasts.

* ITU-R BT.2020 is the specification of video format defined by ITU-R.

High-frame-rate capture for 4K 2x and HD 8x super slow motion

The HDC-P43's real 4K imagers capture at four times the resolution of HD. In HD shooting, this can be used to achieve extreme high-speed image capture at a maximum of 479.52/400 fps with the optional software upgrade*. The frame rates of 59.94/50, 119.88/100 and 179.82/150 fps are available as standard. In 4K shooting, a maximum of 119.88/100 fps can be achieved.

The real-time full digital process is applied to each frame even at high-frame rates in the BPU-4000/4500, producing the same quality in the images as one at the normal speed. Captured images can be recorded to the PWS-4400 or the PWS-4500 4K/HD multi-port AV storage unit for super slow motion replay**.

* With optional software, SZC-4002 for BPU4000/4500.
** Some third party manufacturer servers may also be used.

HD cut out function for clear images*

Sony's innovative software technology enables a full HD image to be cut out from a 4K picture in real-time. Two modes are available: you can select either Zoom & Perspective mode or Simple HD mode. Keeping the camera in a fixed position, any portion of the captured image can be cropped to provide a

close-up HD image to viewers as if the camera had been panned. In Zoom & Perspective mode, one portion can be cut out while performing perspective transformation, according to the lens focal length. In Simple HD mode, two portions can be cut out at the same time.

* With optional software, SZC-2001 for BPU-4000/4500.

Smooth and easy migration from HD to 4K*

The HDC-P43 is designed to fit into the growing Sony 4K live production environment alongside the HDC-4300 live camera configurations. With an optional software upgrade, the HDC-P43 enables 4K capture for multiple 4K and HD outputs, working directly with the BPU-4000/4500 baseband processor units and the HDCU-4300 camera control unit.

* With optional software, SZC-4001.

Seamless integration into Sony HD workflows

The HDC-P43 is part of Sony's acclaimed and widely adopted HDC Series family of live production solutions and benefits from direct compatibility with the companion HDC-4300 system camera and its wide range of accessories, including viewfinders, large lens adaptors, remote control panels and camera control units. The camera is also designed to work with third-party control systems.

Compact and lightweight with low power consumption

The HDC-P43 is compact and lightweight, making it ideal for mounting in many applications, such as on a crane, or operated as a fixed camera position. With low power consumption* and a large fan motor, the camera benefits from lower noise levels.

* The HDC-P43 is powered by local power supply only.

Two remote control optical filters

The HDC-P43 has the same two optical filters as the HDC-4300 – Neutral Density (ND) and Colour Correction (CC) – to provide more flexibility under changing lighting conditions. Both filters are servo driven and are easily controlled remotely via camera command through the BPU-4000/4500 or HDCU-4300.

Specifications

General	
Power Requirements	DC 10.5V - 17V, 6.4A (Max.)
Power Consumption	Approx. 40W
Operating Temperature	-20°C to +45°C -4°F to +113°F
Storage Temperature	-20°C to +60°C -4°F to +140°F
Dimensions (W x H x D)*1	119 x 140 x 212 mm 4 3/4 x 5 5/8 x 8 3/8 inches
Mass	2.0 kg (Body only) 4 lb 7 oz

Camera Section	
Pickup Device	2/3-inch type 9.8M pixels CMOS RGB 3-chip
	4K*2: 4096(H) x 2160(V)

Effective Picture Elements	QFHD*3: 3840(H) x 2160(V) HD: 1920(H) x 1080(V)
Spectrum System	F1.4 prism system
Lens Mount	Sony 2/3-inch type bayonet mount
Built-in Filters	CC: A: CROSS, B:3200K, C: 4300K, D: 6300K ND: 1 : CLEAR, 2: 1/4ND, 3: 1/8ND, 4: 1/16ND, 5: 1/64ND
Servo Filter Control	Yes
Sensitivity (at 2000 lx, 3200K, 89.9% reflectance)	F8.0 (2000 lx, 89.9% reflection) at 4K/59.94p*2 or 4x HD/59.94p*3
Signal-to-noise Ratio	-62dB at HD/59.94i
Horizontal Resolution	2000 TV lines (at center) in 4K*2, 5% or higher modulation
Distortion	Not recognizable except lens distortion

Input/Output

Mic Input	(in EXT I/O 1ch) D-sub 15pin, female (x1)

Fiber Input/Output	ST type connectors for single mode fiber (2)
Prompter	BNC (x1), 1 Vp-p, 75 Ω
SDI Output	BNC (2) for Monitoring (SDI-2 is used for HD Trunk In.)
Distance of Fiber Cable (with BPU)	Approx. 5km
TRUNK Input/Output	(in EXT I/O 2ch RS232C or 1ch RS422A) D-sub 15pin, female (x1)
Network Trunk	RJ-45 8-pin (x1)
EXT Input/Output	D-sub 15Pin (female)
USB	USB 2.0, Type A, 4-pin (x1) for USB Memory
DC Input	XLR-type 4-pin (x1), DC 10.5V to 17V
DC Output	DC 10.5 V to 17 V, 1.5 A (max.) via D-Sub 15pin

Supplied Accessories

	Number Plates (1set) Operation Manual CD-ROM (1) Operation Guide (1)

Notes	
*1	The values for dimensions are approximate.
*2	4K/QFHD format is available with option, SZC-4001
*3	High frame rate is available with option, SZC-4002 at BPU/CCU.

Related products

BPU-4500

4K / HD baseband processor unit for IP network

BPU-4000

4K base band processor unit

HDC-4300

4K/HD System Camera

HDCU-2500

Half-rack-size Camera Control Unit for HDC Series cameras

HDCU-4300

Compact, combined Camera Control Unit and 4K / HD baseband processor unit for HDC-4300 camera

MSU-1000

Master setup unit, multi camera remote control panel for HDC / HSC cameras (horizontal type)

MSU-1500

Master setup unit, multi camera remote control panel for HDC / HSC cameras (vertical type)

PWS-100MG1

Media Gateway Workstation

BVM-X300 V2

30-inch 4K
TRIMASTER EL™ OLED
critical reference
monitor

Gallery