

# HDC-4300

4K/HD System Camera



## Overview

The HDC-4300 puts you in total control of your content. For the first time, one camera platform is all you need to handle 4K, HD and super slow motion – helping you generate maximum returns on today’s production budgets.

Delivering uncompromised image quality, the HDC-4300 integrates seamlessly with HD infrastructures and accessories as well as the world’s most advanced 4K Live Production workflows. Optional software upgrades let you add amazing 4K 2x and HD 8x super slow motion and 4K image capture to standard HD outputs. All the flexibility and control you demand are right there in a single high-performance platform.

The HDC-4300 joins Sony’s widely acclaimed HDC Series family of Live Production solutions. Operation is reassuringly familiar to operators and cameramen, so you’re up and running faster without expensive re-training. The HDC-4300 is fully compatible with a wide range of existing products and workflows, including viewfinders, large lens adaptors and camera control units. There’s no need for investment in additional accessories, keeping costs and inventory down.

Featured in the HDC-4300, cutting-edge Sony technological innovation and unparalleled hands-on Live Production experience are crystallised in the design of the world’s first three 2/3-inch 4K imaging device. This advanced optical system supports the next-generation ITU-R BT.2020 colour gamut, enabling 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 there.

HDC-4300 is a proud member of the Netflix Post Technology Alliance program. Sony is committed to work closely with Netflix to innovate production workflows and support the needs of the global production and post production communities.

## Features

Thanks to the 2/3-inch camera mount, the HDC-4300 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.

With optional software the HDC-4300 has the function of capturing 4K images. For the HDC-4300, Sony has brought together its leading-edge technologies and deep

experience to design and build the world's first three 2/3-inch 4K imagers with ultra-precision alignment technology used to mount the chips to a newly-developed prism. This new 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.

The HDC-4300'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/BPU-4500A, producing the same quality in the images as one at the normal speed. Captured images can be recorded to the PWS-4500 4K/HD multi-port AV storage unit for super slow motion replay\*.

\*Some third-party manufacturer servers may also be used. For 4K 2x and HD 8x slow motion replay, the following condition is required: The PWS-4500 system with optional software PWSL-HF45 ; the BPU-4000/BPU-4500A with optional software SZC-4002

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 and 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 and 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

The HDC-4300 is designed to fit into the growing Sony 4K Live Production environment alongside the PMW-F55 and F65 live camera configurations. With an optional software upgrade, the HDC-4300 enables 4K capture for multiple 4K and HD outputs, working directly with the BPU-4000 baseband processor unit and the HDCU-2000 or HDCU-2500 camera control units.

The HDC-4300 is part of Sony's acclaimed and widely adopted HDC Series family of Live Production solutions and benefits from direct compatibility with its wide range of accessories, including viewfinders, large lens adaptors, remote control panels and camera control units.

## Specifications

General	
Power requirements	AC 240 V, 1.4 A (max.), DC 180 V, 1.0 A (max.), DC 12 V, 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 Approx. 5.0 kg (11 lb 0.37 oz) (unit only)

### Camera section

Pickup device	3-chip 2/3-inch type CMOS
Spectrum system	F1.4 prism
Built-in filters	ND: 1 : CLEAR, 2 : 1/4ND, 3 : 1/8ND, 4 : 1/16ND, 5 : 1/64ND CC: A : CROSS, B : 3200K, C : 4300K, D : 6300K
Sensitivity	F8.0 (2000 lx, 89.9% reflection)
Signal-to-noise ratio	-62 dB (HD/59.94i)
Horizontal resolution	2000 TV lines (at center) in 4K, 5% or higher modulation

### Input/output connectors

BPU	Optical/electrical multi-connector (1)
Audio input (CH1, CH2)	XLR-type 3-pin, female (1 each) For MIC: -60 dBu (can be set to a value up to -20 dBu using the menu or from the HDCU2000/2500), balanced For LINE: 0 dBu, balanced
Mic input	XLR-type 3-pin, female (x 1)
Return control	6-pin (x1)
Prompter/Genlock	BNC (x1), 1 Vp-p, 75 Ω
Prompter 2	BNC (x1), 1 Vp-p, 75 Ω
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, 0.5 A (max.) 2-pin (x1), DC 10.5 V to 17 V, 2.5 A (max.) (Limitations may apply, depending on the load and input conditions.)
Test out	BNC (x1)
SDI (1, 2)	BNC (1 each)
SDI Monitor	BNC (x1)
Earphone	Stereo mini jack (x1)
Tracker	10-pin (x1)
Crane	12-pin (x1)
Intercom (1, 2)	XLR-type 5-pin, female (1 each)
Remote	8-pin (x1)

Network trunk	RJ-45 8-pin (x1)
Lens	12-pin (x1)
Viewfinder	20-pin (x1)
USB	USB 2.0, Type A, 4-pin (x1)

**Supplied accessories**

Supplied accessories	Operation manual (1), Cable clamp belt (1set), Number plates (1set), Screws (+B3x8) (2)
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**Product contains pre-installed software**

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

Related products

 <p><b>PVM-X550</b> 55-inch 4K TRIMASTER EL™ OLED high grade picture monitor</p>	 <p><b>PVM-A250</b> 25-inch TRIMASTER EL™ OLED high grade picture monitor</p>	 <p><b>BVM-F250A</b> 24.5-inch TRIMASTER EL™ OLED reference monitor with wide viewing angle</p>	 <p><b>HDCU-2000</b> Full-rack-size Camera Control Unit for HDC Series cameras</p>
 <p><b>HDCU-2500</b> Half-rack-size Camera Control Unit for HDC Series cameras</p>	 <p><b>PWA-RCT1</b> Recording Control Software for PWS-4500, HKCU-REC55 and HKCU-REC50</p>	 <p><b>MVS-8000X</b> 4K, HD, 3G, SD Multi-Format Production Switcher Processor</p>	 <p><b>HDCU-4300</b> Compact, combined Camera Control Unit and 4K / HD baseband processor unit for HDC-4300 camera</p>
 <p><b>PWS-4500</b> 4K / HD multi-port AV storage unit for IP network</p>	 <p><b>RCP-3100</b> Joystick type of remote control panel for HDC/HSC/HXC series cameras. 5 units in 19-inch EIA rack.</p>	 <p><b>PVM-A170</b> 17-inch TRIMASTER EL™ OLED high grade picture monitor</p>	 <p><b>PVM-X300</b> 30-inch 4K TRIMASTER™ LCD professional monitor</p>
			

**BPU-4000**

4K base band processor unit



**HDLA-1505**

HD Large Lens Adaptor



**HDLA-1500**

HD Large Lens Adaptor



**BVM-X300 V2**

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



**PVM-A250 v2.0**

25-inch TRIMASTER EL™ OLED high grade picture monitor



**SZC-2001 / SZC-2001M / SZC-2001W**

HD Cut-Out Upgrade for BPU Series products



**HDRC-4000**

HDR Production Converter Unit



**HKCU-SM100**

CCU extension adaptor



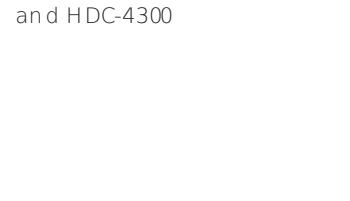
**HDC-P43**

4K/HD POV Camera



**SZC-4002 / SZC-4002M / SZC-4002W**

HFR Upgrade for F65, F55 and HDC-4300



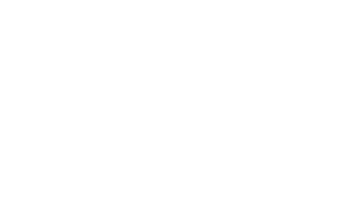
**PWS-110PR1**

Short-depth Production Control Workstation



**SZC-4001 / SZC-4001M / SZC-4001W**

4K Upgrade for HDC-4300



**PVM-A170 v2.0**

17-inch TRIMASTER EL™ OLED high grade picture monitor





## Gallery

