

HDC-4300

4K/HD System Camera



Overview

Flexible, no-compromise production in 4K and HD

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.

Seamless integration with existing workflows

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.

Amazing colour and imagery with next-generation innovation

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.

Netflix Post Technology Alliance

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

Direct installation of B4-mount lenses

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.

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

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.

High Frame Rate capture for 4K 2x and HD 8x super slow motion

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

HD cutout 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 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

Smooth and easy migration from HD to 4K

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.

Seamless integration into Sony HD workflows

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

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|---------------|---------------------------|
| 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

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|------------------------|---|
| 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 |

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|-----------------|--|
| 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)

Product contains pre-installed software

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

Related products



PWA-RCT1

Recording Control Software for PWS-4500, HKCU-REC55 and HKCU-REC50



BPU-4000

4K base band processor unit



HDCU-2000

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



HDCU-2500

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



HDLA-1500

HD Large Lens Adaptor



HDLA-1505

HD Large Lens Adaptor



MVS-8000X

4K, HD, 3G, SD Multi-Format Production Switcher Processor



PVM-X300

30-inch 4K TRIMASTER™ LCD professional monitor



BVM-F250A

24.5-inch TRIMASTER EL™ OLED reference monitor with wide viewing angle



HKCU-SM100

CCU extension adaptor



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

4K Upgrade for HDC-4300



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

HFR Upgrade for F65, F55 and HDC-4300



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

HD Cut-Out Upgrade for BPU Series products



PVM-X550

55-inch 4K TRIMASTER EL™ OLED high grade picture monitor



HDCU-4300

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



HDC-P43

4K/HD POV Camera



BVM-X300V2

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



PWS-4500

Next-generation 4K/HD live production server with IP technology



PWS-110PR1

Short-depth Production Control Workstation



HDRC-4000

HDR Production Converter Unit



PVM-A250



PVM-A170



RCP-3100



HDLA-

v2.0

25-inch TRIMASTER
EL™ OLED high grade
picture monitor



HDLA- 3505

Large Lens Adaptor

v2.0

17-inch TRIMASTER
EL™ OLED high grade
picture monitor

Joystick type of
remote control panel
for HDC/HSC/HXC
series cameras.
5 units in 19-inch EIA
rack.

3501

Large Lens Adaptor

Gallery

