HDCU-3500

IP-ready Camera Control Unit (CCU) for HDC-3500 4K/HD system camera

Overview

The HDCU-3500 Camera Control Unit is designed for operation with the Sony HDC-3500 and HDC-3500 4K/HD system cameras. It provides interfaces to external equipment and power supply to the camera in a compact, portable half rack width 3U form factor that’s ideal for OB production environments.

A 12G-SDI and 4K output is available via an optional software license HZCU-UHD35. The CCU also provides a pathway for IP operation with HDC Series optical fibre studio cameras.

IP Tally support (TSL UMD v5.0) is featured as standard, while CCU menu settings can be conveniently adjusted remotely via a network.

*1 For more details on the JT-NM Tested program in March 2020 and test results, please go to https://jt-nm.org/jt-nm_tested.

*2 For more details on the JT-NM Tested program at IBC 2019 and its test results please see http://jt-nm.org/jt-nm_tested.
Features

Compact body, powerful capability
This CCU realize 4K and IP in half lack size compact body.

Ready for IP
The optional HKCU-SFP50 IP Interface Kit adds ST 2110
4K/HD IP video/audio and IP intercam capabilities.

High quality long distance signal transmission
Combined with the optional HKCU-SM50 interface kit, the
compact HDCU-3500 can be directly connected to the
HDC-3500 or HDC-3100 using 3G Single Mode Fibre
(SMF) for long distance transmission up to 10 km,
making it ideal for space-limited operations such as OB
trucks.

Wide range of HDC camera support
HDCU-3500 support not only HDC-3500, HDC-3100 but
existing HDC-2500 series natively. Moreover, with
hardware options, HDCU-3500 is capable of connecting
to HDC-5500, the flagship 4K camera.

MENU setting from web browser
The CCU support menu control from web browser. The
status monitoring of multiple CCU, setting file
import/export and remote firmware update enhance the
efficiency and convenience of the operation.

Recording and real-time network transfer
With the recording option HKCU-REC55, the HDCU-3500
can record the live feed inside CCU. The file can be
transfered to USB SSD or network storage in real-time
during recording. Therefore, when the shooting operation
is finished, the file is already transferred to portable SSD
or NAS.
## Specifications

### General

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Power requirements</strong></td>
<td>100 V to 240 V AC, 50 / 60 Hz</td>
</tr>
<tr>
<td><strong>Current consumption</strong></td>
<td>4.5 A (max.)</td>
</tr>
<tr>
<td><strong>Operating temperature</strong></td>
<td>-10 °C to +40 °C (14 °F to +104 °F)</td>
</tr>
<tr>
<td><strong>Storage temperature</strong></td>
<td>-20 °C to +60 °C (-4 °F to +140 °F)</td>
</tr>
<tr>
<td><strong>Mass</strong></td>
<td>Approx. 6.3 kg (13 lb 14 oz)</td>
</tr>
</tbody>
</table>

### Input/output connectors

<table>
<thead>
<tr>
<th>Connector Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAMERA FIBER</td>
<td>Optical fiber connector (x1)</td>
</tr>
<tr>
<td>CAMERA TRIAX</td>
<td>No</td>
</tr>
<tr>
<td>INTERCOM / TALLY / IO PORT</td>
<td>D-sub 50-pin connector (x1), INTERCOM (PROD/ENG), 4 W: 0 dBu, RTS: 0 dBu, CC: –14 dBu, PGM, 3 systems, 0dBu–20dBu, TALLY (R, G, Y), FLAG</td>
</tr>
<tr>
<td>RCP / CNU</td>
<td>8-pin multi-connector (x1)</td>
</tr>
<tr>
<td>TRUNK</td>
<td>12-pin (x1)</td>
</tr>
<tr>
<td>LAN-COM</td>
<td>8-pin (x1)</td>
</tr>
<tr>
<td>NETWORK TRUNK</td>
<td>8-pin (x1)</td>
</tr>
<tr>
<td></td>
<td>3G / HD / SD-SDI I / O, BNC (x4), 3G-SDI: SMPTE ST424 /</td>
</tr>
</tbody>
</table>
### Input connectors

<table>
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<tr>
<th>Connector</th>
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</tr>
</thead>
<tbody>
<tr>
<td><strong>AC IN</strong></td>
<td>AC 100 V to 240 V (x1)</td>
</tr>
<tr>
<td><strong>SDI RET 1 to 4</strong></td>
<td>BNC (x4), 3G-SDI: SMPTE ST424 / 425, 2.970 Gbps / 2.967 Gbps, HD-SDI: SMPTE ST292, 1.485 Gbps / 1.4835 Gbps, SD-SDI: SMPTE ST259, 270 Mbps</td>
</tr>
<tr>
<td><strong>PROMPTER and PROMPTER 2 / VBS-RET</strong></td>
<td>BNC (x2), loop-through output during 1CH mode, terminate internally at 75 Ω during 2CH mode, analog signal, 1.0 Vp-p, 75 Ω</td>
</tr>
</tbody>
</table>

### Output connectors

<table>
<thead>
<tr>
<th>Connector</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AUDIO OUT CH1, CH2</strong></td>
<td>XLR 3-pin, male (x2), 0dBu / –20 dBu / +4 dBu</td>
</tr>
<tr>
<td><strong>CHARACTER / ABS /</strong></td>
<td>NC (x1), VBS, 1 Vp-p, 75 Ω, AES/EBU format</td>
</tr>
<tr>
<td>EBU</td>
<td>VBS / HD and AES / EBU selectable</td>
</tr>
<tr>
<td>-----</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>SDI OUT 1 to 4</td>
<td>3G / HD / SD SDI OUTPUT, BNC (x4), 3G-SDI: SMPTE ST424 / 425 Level-A / B, 0.8 Vp-p, 75 Ω, 2.970 Gbps / 2.967 Gbps, HD-SDI: SMPTE ST292, 0.8 Vp-p, 75 Ω, 1.485 Gbps / 1.4835 Gbps, SD-SDI: SMPTE ST259, 0.8 Vp-p, 75 Ω, 270 Mbps, 3G-SDI / HD-SDI / SD-SDI, character signal selectable</td>
</tr>
</tbody>
</table>

| UHD SDI A, B | 12G / 3G / HD SDI OUTPUT, BNC (x2) 12G SDI: SMPTE ST2082, 0.8 Vp-p, 75 Ω, 11.88 Gbps / 11.868 Gbps * 12G SDI can be selected by installing the HZCU-UHD35. 3G SDI: SMPTE ST424 / 425 Level-A / B, 0.8 Vp-p, 75 Ω, 2.970 Gbps / 2.967 Gbps HD SDI: SMPTE ST292, 0.8 Vp-p, 75 Ω, 1.485 Gbps / 1.4835 Gbps |

| UHD SDI C, D | 12G / 3G / HD SDI I / O, BNC (x2) 12G SDI: SMPTE ST2082, 0.8 Vp-p, 75 Ω, 11.88 Gbps / 11.868 Gbps * 12G SDI can be selected by installing the HZCU-UHD35. 3G SDI: SMPTE ST424 / 425 Level-A / B, 0.8 Vp-p, 75 Ω, 270 Mbps, 3G-SDI / HD-SDI / SD-SDI, character signal selectable |
2.970 Gbps / 2.967 Gbps  
HD SDI: SMPTE ST292, 0.8 Vp-p, 75 Ω, 1.485 Gbps/1.4835 Gbps

<table>
<thead>
<tr>
<th>Supplied accessories</th>
<th>Number plates (1 set), Before Using this Unit (1), Operating Instructions (CD-ROM) (1)</th>
</tr>
</thead>
</table>

| Optional accessories | United States and Canada: Power cord set (1-551-812-XX) Other areas: Power cord set (1-782-929-XX)  
United States and Canada: Plug holder B (2-990-242-01) Other areas: Plug holder C (3-613-640-01)  
CCA-5-3 Connection Cable (3 meters), CCA-5-10 Connection Cable (10 meters) |

Related products

**HDC-3500**  
Three 2/3-inch 4K CMOS sensors portable system camera for fibre operation

**HDC-3170**  
Three 2/3-inch CMOS sensors portable system camera for triax operation

**HDC-3100**  
Three 2/3-inch CMOS sensors portable system camera for fibre operation

**HZCU-SNMP50**  
SNMP Agent license for HDCU-5500, 3500, 3170 and HDCU-3100 camera control unit
HDC-2500
3G double-speed multi format HD system camera

HDC-2400
3G multi format HD system camera

HDC-1700
Multi format HD portable system camera

HZCU-CNFG50
ember+ protocol license for HDCU-5500, 3500, 3170 and 3100 camera control units

HDVF-EL30
OLED 0.7-inch colour Full HD viewfinder with 3.5-inch sub-LCD

HDVF-EL75
7.4-inch OLED Viewfinder for portable cameras

PWS-110NM1
IP Live System Manager Station

BVM-HX310 v1.1
TRIMASTER HX™ Professional Master Monitor

HKCU-REC55
Recording option for HDCU-5500 and HDCU-3500 CCU

PWA-RCT1
Recording Control Software for PWS-4500, HKCU-REC55 and HKCU-REC50

HZCU-UHDR50
4K Recording License for HDCU-5000/5500/3500

PWAL-RCT50
CCU recording control option for PWA-RCT1

HZCU-UHD35
4K HDR software license for HDCU-3500

HZCU-DHR50
DNxHD Codec License for HDCU-5000, HDCU-5500 and HDCU-3500 camera control

HDCE-TX30
IP camera extension adaptor for remote live production (transmitter)

RCP-3500
Remote-control panel for HDC/HSC/HXC series cameras
RCP-3501
Remote-control panel for HDC/HSC/HXC series cameras

MSU-3000
Master setup unit, multi camera remote control panel for system cameras (horizontal type)

MSU-3500
Master setup unit, multi camera remote control panel for system cameras (vertical type)