

# HDCU-3100

IP enabled next generation Camera Control Unit



**NETWORKED LIVE**

## Overview

### Add IP production capabilities to system cameras

The HDCU-3100 camera control unit adds IP capabilities to our full range of broadcast and studio system cameras, from the flagship 4K HDC-4300 to the HDC-2000/1700 series and HSC fibre system cameras.

Connecting to compatible cameras via optical fibre cable, the compact HDCU-3100 supplies power to the camera, performs signal processing and provides an interface with external equipment.

Combined with the HKCU-SFP30 option board, designed for the SMPTE ST 2110 Professional Media Over Managed IP Network suite of standards, the HDCU-3100 camera control unit supports essential functionalities required for live IP production including tally, intercom and return.

By installing the optional 4K/HDR Processor Board HKCU-UHD30, the HDCU-3100 can output 4K signals when connected with an HDC-Series System Camera. In addition, adding the optional 12G-SDI Interface Kit HKCU-SDI30 allows transfer of 4K signals through a single BNC cable.

\*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](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](http://jt-nm.org/jt-nm_tested).

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

## Features

### Compact and versatile

The 1.5 RU-size Camera Control Unit creates a standardised 19-inch rack system that is ideal for space-limited production areas.

### IP functionality for live production

The optional HKCU-SFP30 interface kit adds essential functionality required for IP live production such as Tally, Intercom and Return.

### Eight built-in SDI outputs

The HDCU-3100 is equipped with eight built-in SDI outputs, including four 3G-SDI outputs. A built-in USB connector slot and support of 12G-SDI will both be available in future updates.

### 4K output option

By installing an optional 4K/HDR Processor Board HKCU-UHD30, the HDCU-3100 can output 4K signals when connected to an HDC-Series System Camera. In addition the HDCU-3100 with an optional 12G-SDI Interface Kit HKCU-SDI30 can transfer 4K signals through a single BNC cable.

### High quality long distance signal transmission

The optical fibre transmission system maintains high picture quality across cable runs of up to 2000 m. Combined with the HKCU-SM30 interface kit, the compact HDCU-3100 can be directly connected on Single Mode Fibre (SMF) for long distance transmission up to 10Km, making it ideal for space-limited operations like OB Trucks.

### 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.

## Specifications

General	
Power requirements	100 V to 240 V AC, 50/60 Hz
Current consumption	4.5 A (max.)
Operating temperature	5 °C to 40 °C (41 °F to 104 °F)
Storage temperature	-20 °C to +60 °C (-4 °F to +140 °F)
Weight	Approx. 7.3 kg (16 lb. 1.5 oz.)
Input/output connectors	
CAMERA	Optical fiber connector (x1)
INTERCOM/TALLY/IO PORT	D-sub 50-pin connector (x1) INTERCOM (PROD/ENG), 4 W: 0 dBu, RTS: 0 dBu, CC: -14 dBu PGM, 3 systems, 0 dBu/-20 dBu TALLY (R, G, Y) FLAG
RCP / CNU	8-pin multi-connector (x1)
TRUNK	12-pin (x1)
LAN-COM	8-pin (x1)
NETWORK TRUNK	8-pin (x1)
SDI OUT	SDI OUT 1 to 4 : 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

## Input/output connectors

SDI I/O	SDI I/O 1 to 4 : 3G/HD/SD SDI I/O BNC (x4) 3G-SDI: SMPTE ST424/425 Level-A/B, 0.8 Vp-p, 75 $\Omega$ , 2.970 Gbps/2.967 Gbps HD-SDI: SMPTE ST292, 0.8 Vp-p, 75 $\Omega$ , 1.485 Gbps/1.4835 Gbps SD-SDI: SMPTE ST259, 0.8 Vp-p, 75 $\Omega$ , 270Mbps
SDI RET	SDI RET 1 to 4 : 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
REFERENCE IN/OUT	BNC (x2), loop-through output HD: 3-level sync, 0.6 Vp-p, 75 $\Omega$ , SD: 2-level sync, 0.3 Vp-p, 75 $\Omega$
PROMPTER 1 PROMPTER 2/VBS-RET	BNC (x2), loop-through output during 1CH mode, terminate internally at 75 $\Omega$ during 2CH mode, analog signal, 1.0 Vp-p, 75 $\Omega$
AUDIO OUT	AUDIO OUT CH1, CH2 : XLR 3-pin, male (x2), 0 dBu/-20 dBu/+4 dBu
CHARACTER / AES / EBU	BNC (x1), VBS: 1 Vp-p, 75 $\Omega$ , AES/EBU: 0.5 Vp-p, 75 $\Omega$
AC IN	100 V to 240 V AC (x1)

## Supplied accessories

Supplied accessories	Number plates (1 set), Before Using this Unit (1), Operating Instructions (CD-ROM) (1)
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# Related products



## HDC-2000B

3G double-speed multiformat HD studio system camera (black)



## HDC-2000W

3G double-speed multiformat HD studio system camera (beige)



## 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



## BPU-4000

4K base band processor unit



## BPU-4500A

4K/HD baseband processor unit for IP network production



## MSU-1000

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



## RCP-1000

Joystick type of simple Remote Control Panel for HDC/HSC/HXC series cameras.6 units in 19-inch EIA rack.



## HZCU-CNFG50

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



## HZCU-SNMP50

SNMP Agent license for HDCU-5500, 3500, 3170 and HDCU-3100 camera control unit



## HDC-3100

2/3-type 3-CMOS sensor portable system camera for fibre operation



## HDC-3500

2/3-type 4K 3-CMOS sensor portable system camera with HD 4x HFR capability



## HKCU-SDI30

12G-SDI Interface Kit



## HKCU-SM30

Single Mode Fibre Extension Kit



## HKCU-UHD30

4K HDR Processor Board Kit



## 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



## 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)



## HDC-3200

2/3-type 4K 3-CMOS sensor portable system camera with HD 2x HFR capability



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