

HITACHI

Full Digital Multi-Standard Camera
SK-3300 series

Lightweight portable camera head 4.7 kg approx.



SK-3300 series Performance

The new Hitachi multi-standard camera SK-3300 series are the broadcast camera suited for the new generation of digital broadcast with various television formats with 2,200,000-pixel FIT CCD. (SK-3100P with 2,200,000-pixel IT CCD.)

Due to both digital optical fiber transmission between camera head and CCU, and built-in up and down converters, the CU-3300 CCU provides any format serial digital interface (SDI) of 1080i, 480i, 575i, 720p or 480p and can construct a flexible full digital system. (The software can be changed to handle progressive output (720p or 480p) optionally.)

Hitachi adopted the low-power digital processing (DSP) with 12bit A/D converter. It makes high resolution, a super signal-to-noise ratio and high quality video performance possible, thanks to vari-

ous kinds of function for improvement of picture quality functions and significantly reduced power consumption.

Hitachi newly designed compact and lightweight portable camera head housing 4.7 kg approx. (with view finder) and an extended forward handle with perfect balance of camera weight against any camera angle for panning, tilting or back and forth. The flat outside panel without heat-sink allows easy side holding camera angle .

The height of compact CCU is 2 units (88mm) in full rack size. In addition, the power consumption of camera is sharply reduced to 150VA. Hitachi integrated more circuits of HDTV, SDTV and power supply into 3 plug-in units of CCU, and realized high reliability and easy maintenance.

Key Features

The compact and lightweight portable camera head SK-3300P/SK-3100P

- Hitachi newly designed a camera head housing 4.7 kg approx. (with View Finder) and an extended forward handle with perfect balance against any camera angle for panning, tilting or back and forth.
- Hitachi realized the flat out-side without heat-sink with easy side holding camera angle .

2.2 million pixel FIT-CCD and IT-CCD

- A newly developed 2.2 million pixel FIT-CCD and IT-CCD (SK-3100P) provides high sensitivity : 2,000 lx/F8, high resolution 1,000 TV lines, high S/N more than 54 dB (56 dB TYP) and Vertical smear less than -125dB (FIT-CCD only).

The low-power digital processing (DSP) with 12 bit A/D converter

- Thanks to adoption of the new generation low power one-chip DSP with 12bit A/D converter, various kinds of function, high picture quality and low power consumption are achieved. 6-independent, linear and fresh-tone Masking. Knee-saturation etc.

Self diagnosis

- The CU-3300 can detect error in digital optical fiber transmission between camera head and CCU.

The 2units (88mm) height compact CCU CU-3300

- The height of compact CCU is 2units (88mm) in full rack size. In addition, the power consumption of camera is sharply reduced to 150VA.
- Hitachi integrated more circuits of HDTV, SDTV and power supply into 3 plug-in units of CCU, and realized high reliability and easy maintenance.
- Due to both digital optical fiber transmission between camera head and CCU, and built-in high quality up and down converters , the CU-3300 CCU provides any format serial digital interface (SDI) of 1080i, 480i, 575i, 720p or 480p. (The software can be changed to handle progressive output (720p or 480p) optionally. The CCU unit must be replaced.)
- DTL and Masking functions for HDTV signal and NTSC signal or PAL signal are independently accommodated by dual Processing .
- Digital NTSC and PAL encoder realized high reliability and easy maintenance.
- Monitor out-puts are available for full digital system HD-SDI, D1 with super impose for camera information status
- The same signal timing of D1 and VBS
- The stable returning picture is available due to built-in frame synchronizer. The input return signal is available for various format of return signal.

SK-3300P / SK-3100P / CU-3300



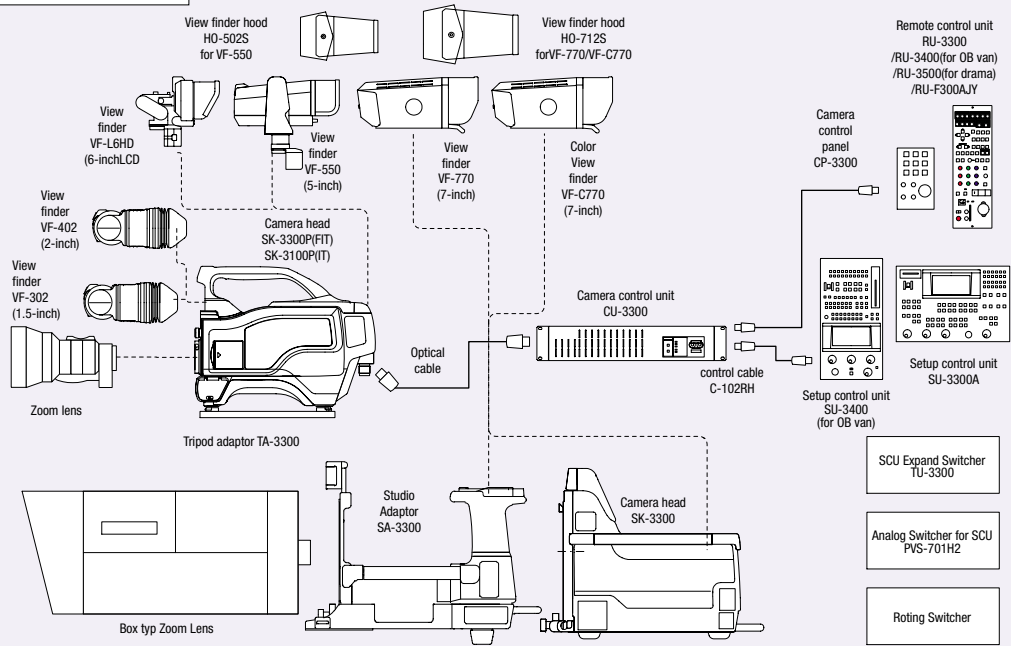
SK-3300P / SK-3100P



CU-3300

System Configurations

SK-3300/SK-3300P/SK-3100P



Accessories



SA-3300 STUDIO ADAPTOR

Convertible flexibility for complete studio use The combination of studio field adapter, 7 inch color or black/white view finder and Box type Zoom lens converts to a full studio use camera.

The studio adaptor SA-3300 can be easily built-up at a few minutes with SK-3300P/SK-3100P.

SU-3300A SET UP CONTROL UNIT

The setup control unit SU-3300A access and complete control up to 12 SK-3300. The built-in liquid crystal display (LCD) panel and touch screen allows quick and easy operation.

The half rack SU-3400 setup control unit for OB van can be used like as SU-3300A.



VF-L6HD 6inch LCD VIEW FINDER

The view finder VF-L6HD (6inch LCD) can be direct dock-able with SK-3300P/SK-3100P for a small studio use camera.

The 5 inch view finder VF-550 also can be direct dock-able with SK-3300P / SK-3100P.



RU-F300AJY



RU-3300



RU-3300 REMOTE CONTROL UNIT

The remote control unit RU-3300 easily adjusts SK-3300 with the LED optical switch and rotary encoder.

The RU-3400 remote control unit for OB van can control color temperature in one touch.

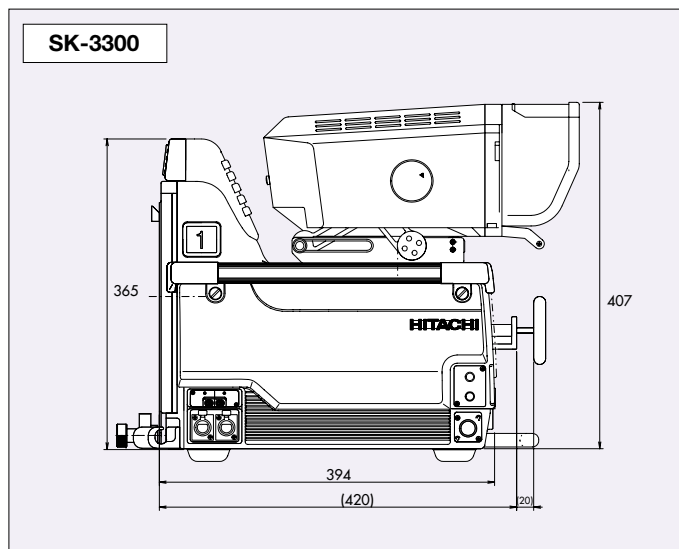
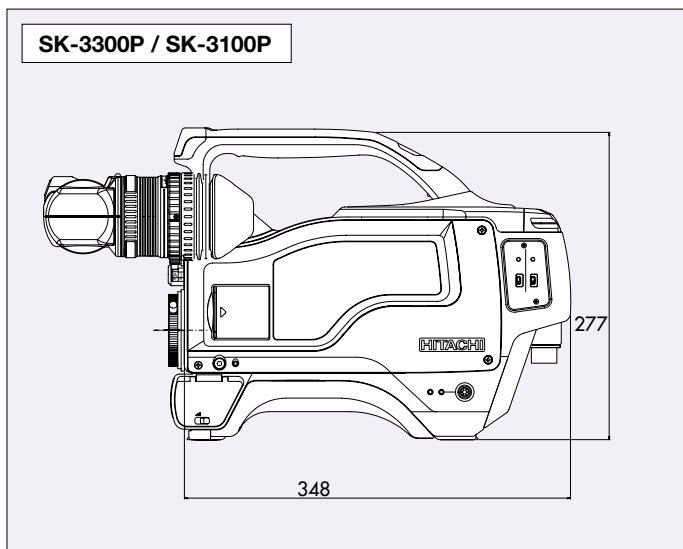
The RU-3500 remote control unit for drama can control cooling fan to high/low/off.

Specification

Systems	HDTV 1920 x 1080 Field frequency : 60 / 59.94 / 50 Hz
Imaging device	2/3" 2.2M pixel FIT-CCD sensor (SK-3100P 2.2 Mpixel IT CCD sensor)
Sensitivity	2000 lx F8.0 3200K, 89.9%
Signal-to-noise ratio	56 dB typ more than 54 dB (HD-SDI decoded Y : 27.6MHz) NTSC 62 dB typ / PAL 60 dB typ
Horizontal resolution	HD 1000 TV Lines typ SD 900 TV Lines typ
Power consumption	SK-3300 Camera Head 60 W approx. (without view finder) SK-3300P Camera Head 45 W approx. (with 2inch view finder) SK-3100P Camera Head 40 W approx. (with 2inch view finder) CCU 150+50VA approx.
Dimensions & Mass	Portable Camera Head : 115(W) x 278(H) x 365(D) mm 4.7 kg (10 lb) approx. (with view finder) CCU : 430(W) x 88(H) x 450(D) mm 15 kg (33 lb) approx.

Head outputs	
Line	HD-SDI
RET	HD-SDI
PROMPT	D1 or VBS
Audio	x2
Head inputs	
Mic	x2
CCU outputs	
HD-SDI	: LINEx3, PIX, WFM
NTSC (480i) or PAL (575i)	: LINE D1x3, VBS x 3, R, G, B (or Y,PB,PR) : PIX D1 x 2 or VBS x 2 : WFM D1 or VBS
Audio	x2
CCU inputs	
RET	HD-SDIx4 SDTV D1 x 4 or VBS x 4
PROMPT	SDTV D1 or VBS
Gen-lock	BB or HDTV Tri-sync

Dimensions



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These products are manufactured at a factory which has received quality control system certification in accordance with the ISO international standards.



CERTIFICATE No. JMI-0062
ISO 9001/BS 5750 P11
EN 29001/JIS 29001

Specification are subject to change without notice.