

HITACHI

Hitachi Broadcasting System



Digital Camera Systems

NEW!

Fully Digital Multi-Standard Cameras

SK-3000 Series

Features

Multi-standard cameras of new age adaptable to various TV formats including 1080i, 480i, 480P and 720P

- Thanks to the newly developed 2,200,000-pixel FIT CCD, high picture quality is realized.
Horizontal resolution of 1000 TVL
Sensitivity of f8 at 2000 lx
Signal-to-noise ratio of 54dB
Dynamic range of 5 to 6 times
- Newly developed one-chip DSP.
0.35um, 1,800,000-gate DSP.
Up to 30-bit operation.
- Provides both SDTV and HDTV format
CCU outputs: HDTV analog outputs (Y, Pb, Pr), and SDI signal (optional)
When a down-converter is built in the CCU, the analog signal (16:9/4:3) of NTSC (480i), and D1 or D2 signal can be output.
- High quality digital optical fiber transmission.
Optical serial digital transmission (1.5 G bit/s)
Fully digitized from the camera head through CCU output.
- Small in size and light in weight.
Thanks to the use of 2/3-inch CCD and one-chip DSP, size and weight are equal to the existing models.



Studio/Field Adaptor

NEW!

SA-3000



Features

Studio/field adaptor for portable multi-standard camera SK-3000P.

- Usable as a studio/field camera with a 7-inch color or B/W viewfinder and a box type lens.
- Control functions equal to a studio camera are provided.
 - Monitor selector: Y, R, G, B, RET VIDEO, 4 systems.
 - Filter selector: ND: 100, 25, 6.3 %, cross
CD: 3200, 4300, 5600, 6300 K
 - VF display: Zoom, focus, center marker, box, cross.
 - 2 CH intercom.
 - Picture-in-picture.
 - Script tally.
 - AC output (117 V).

Digital Cameras

SK-2700 Series



Features

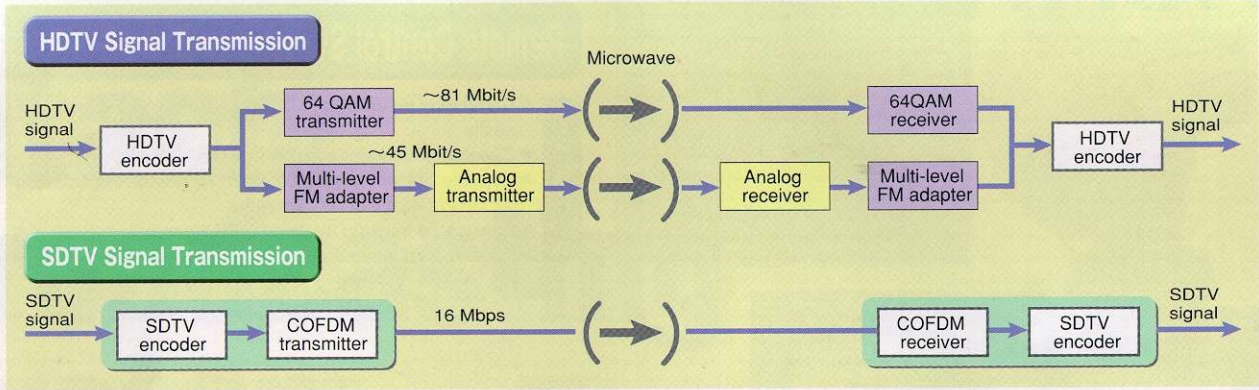
Thanks to the newly developed DSP, digital signal processor (DSP) processing of 20 to 30 bits is realized in the camera head. Further, thanks to the 12-bit A/D converter and the new DSP (0.35 um, 1,800,000-gate), the basic performance is improved and new functions are added, resulting in the high picture quality.

- High picture quality due to one-chip LSI (0.35 um, 1,800,000-gate).
- Digital processing: 12-bit A/D converter, 20 to 30 bit processing.
- Newly developed 2/3-inch 640,000-pixel FIT CCD (4:3/16:9)/NTSC, or 600,000-pixel FIT CCD.
- New functions including 2 flesh tone details, flesh tone masking, and slim aperture (See Note).
- In addition to the conventional ultra-wideband triax system, the newly developed digital triax system can provide a fully digital camera.

Note: Following functions are provided.

6-vector independent masking/linear matrix, chroma saturation, high chroma aperture, RGB DTL, 360-deg. DTL, variable DTL frequency, special gamma, etc.

Hitachi Digital Transmission System



NEW!



FR7G05-Z12

64QAM Digital Microwave Link

Features

- Analog/digital combination design.
- Trellis coding and viterbi decoding.
- High performance auto-equalizer eliminates multi-path distortion, resulting in stable transmission.
- Modulation: 64/32/16QAM/QPSK, and FM.
- Transmission bit rate: 81Mbps at 64QAM.
- Output power: Digital: 0.5/0.1 W
Analog: 5/1 W
- Jointly developed with JAPAN BROADCASTING CORPORATION (NHK).

NEW!

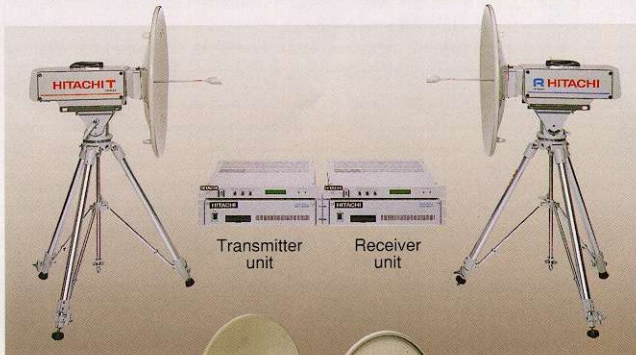


FR8M1-Z11

COFDM Microwave Link

Features

- Built-in MPEG2 codec.
Video: Analog or D1 serial digital
Audio: Analog or AES/EBU
- Transmission bit rate: 16Mbps
- Modulation: DQPSK-COFDM
- AC/DC operation.



DM-M1

Multi-Level FM Adapter

Features

- Usable analog microwave link equipment for digital transmission.
- Modulation: 8FSK/4FSK
- Transmission bit rate: 45Mbps at 8FSK
20Mbps at 4FSK
- Built-in random test signal generator.



FR-Z6

Compact Dual-Band Microwave Link

Features

- 7/10 GHz microwave link
- 4 output levels selectable
5, 1, 0.5, 0.1 W
- Stand-alone operation of RF head available

Video Systems for News Gathering, Program Production and Transmission



Remote Control System for Base Station

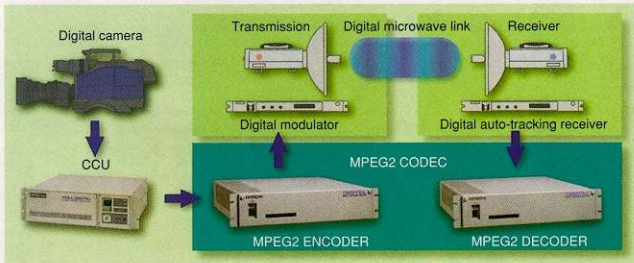
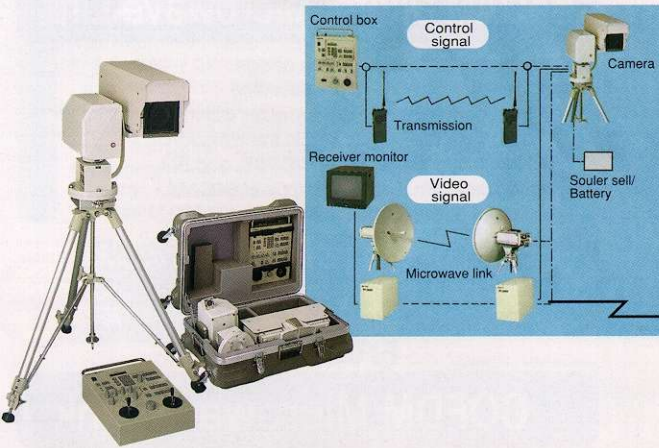
Features

- Capable of installing a microwave receiving base station easily.
- Capable of concentrated control by TC-F2 PC.
- Capable of identifying base stations, branch stations and helicopters easily on PC screen.
- Easily auto tracking by using GPS signals.
- Touch-panel monitor operation.

Information Camera System

Features

- Most effective for on-site information gathering at emergency or disaster cases.
- Easy on-site information gathering.
- Easy transportation, installation and removal.



Small-Sized HDTV Mobile Unit

Features

- Most suitable for gathering regional news, information on sports, weather, etc.
- Production of high quality broadcast materials ideal for digital ground broadcast.
- Storage of high quality video materials.
- 10-input, 292M serial digital switcher DSK/chroma key/wipe.
- High quality digital video transmission can be provided by the optional microwave relay equipment, digital modems and MPEG2 codec.

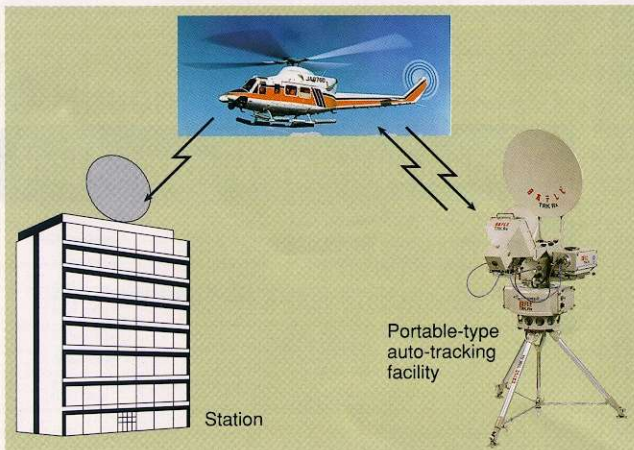


Helicopter TV Transmission System

Features

This is a TV receiving system automatically tracking a helicopter using SHF band. With this system, it is possible to transmit video information being gathered by a helicopter.

- State-of-the-art video transmission system.
- Easily installed on-board equipment suitable for gathering video information in an emergency case.
- Portable base station.
- Applications: Police agencies, self-governing bodies, fire defence agencies, Maritime Safety Agency, TV stations.



Separate Type Digital Camera

SK-27PWA

NEW!



Features

Optical block can be separated from the camera head for mounting onto a helicopter, a mini-crane, a small-sized camera mount, etc.

- 640,000-pixel FIT CCD (4:3/16:9 switchable).
- Functions of the SK-2700P series available.
- High stability and high reliability due to one-chip digital signal processor (DSP).
- Various picture quality improvement functions available due to DSP.
- Lightweight optical block weighting only 1.5kg.
- A 1.5 or 2 inch viewfinder, microphone and handle can be mounted on the optical block.

Digital Color Camera

Z-3000W

NEW!

TRIAX/MULTI



TU-Z3



RU-Z3



Features

16:9/4:3 switchable camera using a 2/3-inch 640,000-pixel CCD.

- Newly developed one-chip digital signal processor (DSP).
- Improved gradation characteristic, color rendition and resolution.
- The electronics from video processing through the encoder section are fully digitized.
- Noise reduction function.
- New die-cast aluminium chassis: Lightweight, low center of gravity, improved operability.
- New triax TU-Z3, New base station RU-Z3 (D1 output), new camera adaptor CA-ZD1 (D1 output). Dockable to various VTRs using a VTR adaptor and inner module.

Triax

TU-Z3

- High picture and sound quality: Transmission of up to 1.5 km.
- Video signals: Y, P_B, P_R component signals, FM modulation
- Sound signal: Digital transmission system.
- 2 AUX inputs, promptor input, D1 output (option), AC/DC operation.

Base Station

RU-Z3

- D1 output provided.
- Single coax cable transmission.
- Transmission error detectable at receiver side.

Camera Adaptor

CA-ZD1

- D1 output provided.
- Connectable to various digital VTRs.
- Dockable VTRs.

Adaptor or inner module	VTR
IM-Z3D	Betacam SP/SX
IM-Z3P	DVCPRO
IM-Z3S	DVCAM
IM-Z3J	DIGITAL S-VHS

DOCKABLE



DVCPRO One-Piece Camera/Recorder

Z-V1A



Features

Camera recorder consisting of a 2/3-inch 3-CCD camera and a DVCPRO format VTR.

- Newly developed 2/3-inch 410,000-pixel CCD.
- High sensitivity of f8 at 2000 lx and high signal-to-noise ratio of 63dB.
- One-chip digital signal processor (DSP).
- Usable under a variety of shooting conditions.
- Set-up card system. Set-up data stored instantly.
- Digital recording system.
- REVIEW function.
- Playback function.
- Time code lockable externally.
- Dolby noise reduction system.

Special Application Camera

High Sensitivity Digital Color Camera

HV-D3



Features

- The HV-D3 is a high sensitivity 3-CCD digital color camera equipped with electronic sensitivity enhancement function consisting of integration time control and frame memory.
- Capable of increasing sensitivity up to 128 times the normal sensitivity.
 - Minimum illumination of 0.001 lx (f1.4, 50% video output).
 - High quality picture with less noise in the integration mode due to the built-in thermoelectric cooling system and circular type noise reduction function.
 - One-chip VLSI used for digital signal processing section.
 - High horizontal resolution of 850 TVL (Y channel).
 - A variety of CCD drive functions including 7-step electronic shutter, lock scan, auto electronic shutter and CCD frame mode.
 - Compact and low power consumption.

3-CCD Digital Color Camera

HV-D15



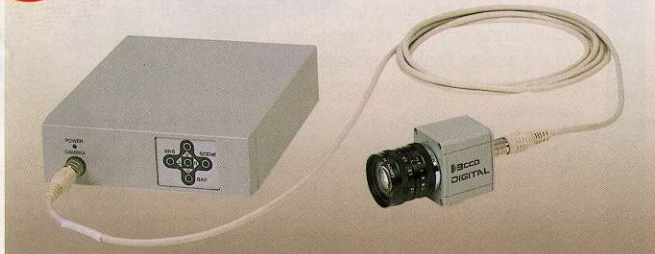
Features

- The HV-D15 is a 3-CCD digital color camera featuring high picture quality and high stability, because the HV-D15 uses 3 1/2-inch 410,000-pixel CCDs and a single chip VLSI which processes digitally the signal from the processor section through the encoder section.
- One-chip VLSI used for video signal processing section.
 - High resolution of 800 TVL, high signal-to-noise ratio of 63 dB, and high sensitivity (minimum illumination of 3 lx).
 - Digital noise reduction.
 - Real-time white balance control.
 - Color correction (masking).
 - RSD-232C interface.

Remote Head 3CCD Color Camera

HV-D27

NEW!



Features

- The HV-D27 is a 3-CCD digital color camera consisting of a compact and lightweight camera head and a camera control unit provided with a single chip VLSI which processes digitally the signal from the processor section through the encoder section. Thanks to the 1/2-inch 410,000-pixel CCD and the digital signal processor, high performance, high picture quality and high stability are ensured.
- C-mount.
 - One-chip VLSI.
 - Digital noise reduction.
 - Color correction (masking).
 - Intelligent ALC.
 - Field-on-Demand.
 - RS-232C interface.

3CCD Color Camera

KP-D8



Features

- The KP-D8 is a 1/3-inch 410,000-pixel CCD digital color camera featuring high resolution and the high sensitivity. The video signal is digitally processed and various control functions are digitally controlled by the built-in microprocessor.
- Ultra compact and one-piece design.
 - High resolution of 470 TVL and high sensitivity. (minimum illumination of 4 lx: f1.2, max AGC)
 - Auto electronic shutter (AES).
 - Auto white balance control.
 - Y/C outputs (Y/C or VBS outputs available).
 - Remote control functions.

CATION : To product ensure safe operation, please read the instruction manual before using this product.

Specification are subject to change without notice.

Hitachi Denshi, Ltd

HITACHI DENSHI (Europa) GmbH

Weiskircher Str. 88

63110 Rodgau, Germany

T. 06106-6992-0

Fax 06106-16906

<http://www.hitachi-denshi.de>

e-mail: webmaster@hitachi-denshi.de

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



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