The new DK-H32 HDTV special application camera is ideal for graphics stand, point of view and remote observation applications. Images of the highest quality and stability are assured with the three 2/3” 2.2-million pixels CCDs and a 1.8 million-gate gates single chip DSP. This high-tech DSP, offering 30-bit accuracy, was designed for Hitachi's broadcast camera line to outperform traditional analog signal processing. The DK-H32's functions can easily be controlled remotely from a personal computer or dedicated control panel. Command and communications protocol are available to users wishing to build custom software control applications.
Features

- High S/N with HD-SDI
  Outstanding Signal-to-noise ratio >54dB measured on the HD-SDI (1080i) output.
- 14-bit ADC with the latest generation Hitachi DSP
  High dynamic range and color fidelity are achieved by employing 14-bit analog-to-digital converters on the RGB CCDs' outputs. Hitachi is leading developer for High performance CPU & DSP in Broadcast Fields. Hitachi's highest 0.18μm VLSIC processor with 3 million gates. 30-bit internal processing to provide high dynamic range with superb video stability, Maintenance Free
- High Resolution
  The three 2/3-inch 2.2million pixel CCDs with microlenses and digital signal processing deliver >1000 TV lines horizontal resolution (Y channel).
- Small & light weight head
- Image enhancements from digital processing
  • Dyna chroma and auto-knee
  • Flesh tone detail etc.
  • Variable detail boost frequency
  • 6 vector independently variable masking and linear matrix masking
- Versatile CCD drive functions
  • Five preset electronic shutter speeds
  • Lock scan mode allows flicker-free pickup of a screen display having a different scanning frequency than the Camera.
  • Automatic electronic shutter (AES) mode sets the video signal to a fixed level.
  • Charge control (CC) frame mode improves vertical resolution.
- Improved operational ease
  • Real-time auto white balance detects and automatically compensates for changes in the scene color temperature.
  • A variable white gate permits selection of the area from which real-time auto white balance samples the image. Any light source outside the sampled area will have no effect on the setting of balance.
  • Intelligent automatic level control (ALC)
    Digital light metering utilizes a scene into 7 divided sensing areas and an iris gate area with variable size and position.
  • 2 mode gain control
  • AGC and 3-position programmable high gain switch.
- Bi-directional data transfer
  An RS-232C input is provided on the camera head to allow remote control from a personal computer. An ID number for each camera can be registered allowing multiple cameras to be controlled from a single computer.
- Auxiliary connector for external control
  A simple control box can be connected to the AUX connector for externally controlling the lens zoom/focus and motorized pan/tilt head from a personal computer.
- Three applications files (standard, observe, microscope).
  Pre-programmed files also allow the user to adjust Detail, Masking, knee, and other functions.
- Remote filter wheel
  The optical filter wheel can be controlled with RS232C command protocol.

Specifications

- CCD
  2/3" 2.2 M pixels IT-CCD
- Effective pixels
  1920(H) x 1080(V)
- Aspect ratio
  16:9
- Scan format
  HDTV 1080/59.94i
- Horizontal resolution
  1000TV lines Y out
- Standard sensitivity
  4000 lx / F11
- Minimum illumination
  0.03 lx (F1.4, +18dB, Integration mode)
- S/N
  54 dB HD-SDI, Y: 30 MHz
- Filter wheel
  3200K, 5600K, 5600K +1/16ND, 5600K +1/64ND
- Shutter
  PRESET
  Genlock
  Lock Scan
  AES
  1/100, 1/250, 1/500, 1/1000, 1/2000(S)
  1/60.16 to 1/1985 s
  OFF to 1/1000 s
- Power supply voltage
  12 V DC
- Power consumption
  approx. 22 W
- Dimensions (W x H x D)
  99 mm x 105 mm x 155 mm
- Mass
  approx. 1.5 kg
- Ambient temperature
  0 to +40 °C
- Relative humidity
  -20 to +60 °C

Input signals

- Genlock
  Tri-level sync 0.6 Vp-p ±6dB, 75Ω
- Output signals
  HD-SDI 2 output
  0.8 Vp-p, 75Ω
  (BNC connector)
- Video output
  Y or G 1.0 Vp-p (with sync), 75Ω
  (BNC connector)
  0 or R 0.7 Vp-p, 75Ω
  (BNC connector)
  Tri-level sync 0.8 Vp-p, 75Ω

Serial data output/input (4-pin connector) (internal switch)

- 1.5 Vp-p ±6 dB, high (RU-3300N), RS-232C (For Personal Computer)

Standard composition

- Camera head DK-H31
- Lens Mount Cap
- Operation Manual

Options

- Camera control panel
  RU-3300N
- AC adapter
  IA-60a (I.D.X)

Dimensions

- Depth : 155 mm
- Width : 142 mm
- Height : 153 mm
- Weight : approx. 1.5 kg

Hitachi Kokusai Electric Inc.

Head Office
14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 101-8900, Japan
Phone : (+81) 3-5734-9432, Fax : (+81) 3-5209-5942
URL : http://www.h-kokusai.com

Hitachi Kokusai Electric (Shanghai) Co., Ltd.
Beijing Branch
Room 1413, Beijing Fortune Building, A Dong San Huei, Ben Luo, Chaoyang District, Beijing, China
Phone : (+886) 10-6590-8755, Fax : (+886) 10-6590-8757

Hitachi Kokusai Electric America, Ltd.
Headquarters and Sales and Service Office : 1500 North Park Drive, Woodbury, New York 11797, U. S. A.
Northeast Office : (1) 516-921-7200, Fax : (1) 516-496-3718
West Office : 371 Van Ness Way, Suite 130, Torrance, CA 90501, U. S. A.
Midwest Sales : (1) 310-328-6116, Fax : (1) 310-328-6252
South Sales : (1) 714-255-7877, Fax : (1) 714-255-7877

Hitachi Kokusai Electric Canada, Ltd.
Head Office : 1 Select Avenue Unit#12, Scarborough, Ontario M1V 5J9, Canada
Phone : (1) 416-298-5890, Fax : (1) 416-298-0402
Eastern Office : 5795 Chemin St. Francois St. Laurent, Quebec H4S 1B6, Canada
Phone : (1) 514-352-4687, Fax : (1) 514-353-1684

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

These Specifications are subject to change without notice.