

**Preliminary**

# HDTV CMOS Digital Camera HV-D30



The HV-D30 HDTV Digital Color Camera from Hitachi incorporates three newly developed HDTV-compatible 1/3-inch, 1.3-megapixel CMOS sensors, thereby achieving high picture quality with smearless imaging.

The multiformat output provides both 1080i and 720p camera outputs.

The camera head of this high cost performance camera is a compact box type head weighing just 600 grams.

A wide range of adjustments can be made remotely, providing versatility that makes the HV-D30 usable as a studio sub-camera, a remotely controlled swivel-mount camera, birds-eye view camera, and in industrial applications such as factory automation, high-end monitoring, and medical applications.

Rear Panel

## Main Features

### Picture Quality

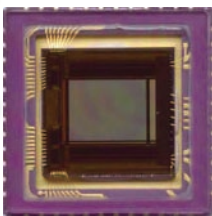
Uses newly developed HDTV-compatible 1/3-inch, 1.3-Megapixel CMOS sensors to provide high-quality, smearless images.

### Compact and Lightweight

The HV-D30 is a compact HDTV camera using 1/3-inch imaging devices and accepting C-Mount lenses. The camera itself weighs just 600 (without lens) and is compact enough to be used almost anywhere as a sub-camera or a special effects camera.

### Multi-Format Output

By switching the operating mode, output is possible to output either 1080i or 720p system HD-SDI video signals. An RGB/YPbPr analog output (D-sub 15-pin) output is also provided.



CMOS Sensor

### Low Power Consumption

The use of CMOS sensors and the latest digital signal processing technology has dramatically reduced power consumption compared with past HDTV cameras.

### Sophisticated Functions and High Performance

Hitachi broadcast cameras feature such diverse digital signal processing technology as gamma, knee, masking, and DTL, these being accessible by up/down switches on the rear panel of the camera head, thereby providing high functionality and performance.

### Remote Control

Various adjustments can be made remotely, either from an optional compact remote control unit, or from a personal computer.



RC-Z3 Remote Control Unit

## Main Specifications

|                       |   |
|-----------------------|---|
| Format                | 720p or 1080i   |
| Imaging Device        | 1/3 inch 1.3 million pixels CMOS  |
| Total Pixels          | 1032 (Horizontal) x 1312 (Vertical)   |
| Effective Pixels      | 1280 (Horizontal) x 720 (Vertical)  |
| Synchronization       | Internal / External (Tri-level sync)  |
| Lens Mount            | C mount (Flange back: 17.526mm in air)  |
| Horizontal Resolution | 720 TV Line   |
| Sensitivity           | 2000 lx / F5.6  |
| S/N                   | 50 dB Typ (HD-SDI output decord, Y-channel, bandwidth: 30MHz)   |
| High gain             | 0, +3, +6, +9, +12, +15, +18dB  |
| Shutter               | 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000 sec  |
| Lock Scan             | 1/62 to 1/1985  |
| HD-SDI Output         | 1 system: SMPTE292M 1.5Gbps   |
| Analog Output         | 1system (D-sub15pin) :<br>Component (Switchable RGB, YPbPr)<br>Y, G 1.0 Vp-p/75 Ω<br>Pb, Pr, R, B 0.7 Vp-p/75 Ω                               |
| Power Supply          | 12 V DC (10.8 V to 14 V)  |
| Power Consumption     | Approx. ?? W  |
| Dimensions            | 65(W) x 65(H) x 130(D) mm   |
| Mass                  | Approx. 600 g (Except lens)   |
| Operation Temperature | -10 to +40 °C   |
| Connector             | HD-SDI output (BNC, 75Ω)x1,<br>D-sub15 pin (Analog output, external 3-level sync) x1<br>Lens control, Serial control<br>DC power supply input |

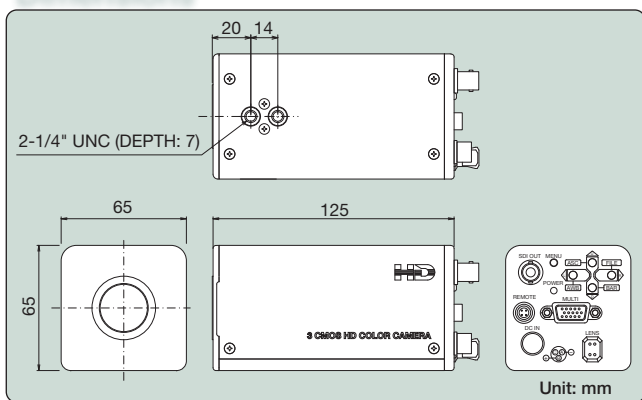
## D-sub15pin Connector Arrangement

| Pin No. | I/O signal | Pin No. | I/O signal            |
|---------|------------|---------|-----------------------|
| 1       | R/R-Y OUT  | 9       | UNREG +12V            |
| 2       | G/Y OUT    | 10      | -                     |
| 3       | B/B-Y      | 11      | GND                   |
| 4       | -          | 12      | RXD                   |
| 5       | GND        | 13      | HD IN/HD OUT/SYNC OUT |
| 6       | VIDEO GND  | 14      | VD IN/GL IN/VD OUT    |
| 7       | VIDEO GND  | 15      | TXD                   |
| 8       | VIDEO GND  |         |                       |

## Accessories

|                     |                                |
|---------------------|--------------------------------|
| AC Adaptor          | IA-60a (I. D. X.)              |
| Remote Control Unit | RC-Z3                          |
| Lens                | Assorted C Mount 1/3 inch lens |

## Dimensions



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

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