

JVC[®]
PROFESSIONAL

DZ-VCA3U

1/3" 3-CCD Micro HD Camera



*Endoscope and Endoscope Adapter not included.

High Definition Endoscopy:

The world's smallest and lightest separate type high-definition camera for medical endoscopic application

- Compact, lightweight design. Camera head: 100g (0.22lbs)
- Lens mount: Standard C mount

High picture quality with spatial offset technology and digital processing

- HD Resolution: HD Spatial Offset Technology 1318 x 988 x 3 = 4,000,000 pixels
- High resolution: 750 TV lines horizontal, 700 TV lines vertical
- The first in the world! S-XGA progressive moving picture output (1125/60p)

HD camera for endoscopic application

- Sharpness adjustment corresponding to the quality of each endoscope
- Increased sensitivity with frame recursive type of noise reduction circuit
- Sterilization Compatibility: ETO, Steris and Sterrad

Supports various recording media

- HD recording: W-VHS (1125/60i)
- Multiple Video Outputs: Y, Pb, Pr 1080i (1125/60i), SXGA Progressive Scan, DV (6 Pin IEEE 1394 Fire Wire), Composite BNC and S-video

FEATURES

- **Compact, lightweight design**

Thanks to 1/3-inch CCDs, the camera head's outer dimensions have been reduced to a compact 44 (W) x 51.4 (H) x 57.7 (D) mm and it weighs only 100g.

- **High resolution**

A total of three VGA 1/3-inch CCDs are used (each for R, G and B). With digital signal processing, this camera is able to produce extremely high horizontal resolution. The aspect ratio is 4:3.

- **System construction**

HDTV studio standard (compliant with ITU-R Rec. 709) sync signals are used, allowing recorded picture to be played back with high picture quality when an HDTV VCR such as the W-VHS VCR is used.

- **Automatic sensitivity control**

The automatic sensitivity control combines ALC and electronic iris (ALC+EI) to allow trouble-free shooting over a tremendous range of light intensity.

- **Electronic shutter function**

A built-in electronic shutter of up to 1/10000 sec allows capture and analysis of fast-moving subjects.

- **Flicker-free mode**

Greatly reduces the flickering caused by shooting with fluorescent lighting in locations with 50-Hz power.

- **Color bar generator**

A full color bar generator is built in for easy system adjustment.

- **Automatic internal/external sync switching**

Useful for systematic operations, such as multicamera video processing, in combination with other devices.

- **2 line detail corrector provided as standard**

Detail compensation is performed both horizontally and vertically to assure sharp, clear pictures. The detail is balanced (H & V) to assure natural sharpness.

SPECIFICATIONS

MICRO HD CAMERA DZ-VCA3U

CAMERA HEAD SECTION

Image sensing device:

1/3-inch PS-CCD (350,000 pixels) x 3

Shooting system:

3-CCD system

Color separation optical system:

1/3 type F1.4 3-color separation prism

Number of effective pixels :

659 (horizontal) x 494 (vertical), 330,000 pixels approximately

Camera output:

19 pins

Lens mount :

C mount (flange back: 17.526 mm in air)

Dimensions:

Camera head: 44 (W) x 51.4 (H) x 57.7 (D) mm (1-6/8" x 2-1/16" x 2-2/8") (not including protrusion and camera cable etc)

Weight:

Camera head: 100 g (0.22 lbs.)

Classification:

Type CF applied part

CAMERA CONTROL UNIT SECTION

Number of scanning lines :

1125 (980 effective)

Scanning system :

2:1 interlace (HD OUT, NTSC OUT)
Progressive (SXGA OUT)

Scanning frequency:

HD OUT 33.71625kHz (horizontal), 59.94 Hz (vertical)
SXGA OUT 67.4325kHz (horizontal), 59.94 Hz (vertical)
NTSC OUT 15.73425kHz (horizontal), 59.94 Hz (vertical)

Aspect ratio:

4:3

Sensitivity:

F6.8, 2000 lx

Minimum subject illuminance :

5 lx

Sync system :

Internal sync/external sync

External sync signal input :

Composite sync signal of ± 0.3 Vp-p, 75 ohms,
BNC x 1 (BTA S-001 HDTV standard compliant)

Color bar :

Full field color bar

Detail correction :

Horizontal dual-edged (7-step variable)
Vertical dual-edged (7-step variable)

Electronic shutter speed :

1/60 s (normal), 1/100 s (flicker-free), 1/175 s,
1/250 s, 1/375 s, 1/500 s, 1/1000 s,
1/2000s, 1/4000s, 1/10000s

Video output:

SXGA signal : R/G/B 0.7 Vp-p, 75 ohms HD/VD
TTL D-Sub mini 15 pin
HD signal : Y 1 Vp-p Pb/Pr 0.7 Vp-p 75 ohms BNC x 3
NTSC signal : VBS 1 Vp-p 75 ohms BNC Y/C 1
Vpp 75 ohms S terminal

Camera input:

19 pins

Date indication:

Menu system 1) Year, month, day 2) Day, month,
year 3) Month, day, year

Time indication:

Menu system, hour : minute: second

Power:

120V AC 0.7A 60Hz

Classification of insulation:

Class I

Operating environment :

+5°C to +35°C (41°F to 95°F), 35 % 75%

Storage environment:

-20°C to +50°C (-4°F to 102°F), 35 % 80%

Dimensions:

280 (W) x 140 (H) x 300.6 (D) mm
(11-3/16" x 5-9/16" x 11-13/16")
(excluding the protrusion and switches etc)

Weight:

5.5 kg (12.1 lbs.)

Accessories:

Power cord x 1
Instruction manual x 1
Warranty card x 1

Design and specifications subject to change without notice.

JVC®

JVC PROFESSIONAL PRODUCTS COMPANY
DIVISION OF JVC AMERICAS CORP.
1700 Valley Road Wayne, NJ 07470
TEL: 973-317-5000 1-800-582-5825 FAX: 973-317-5030

<http://www.jvc.com/pro>