



DXC-C33P

3 CCD small-sized remote head type camera

The Ideal camera for space-limited applications such as medical, research and industrial fields

The Sony DXC-C33/C33P incorporates a DV output terminal which allows the camera to output images by DV format. A DV output terminal is first introduced to the DXC Series, and also first to this type of cameras.

In spite of its compact body, this model inherits superb picture quality of the DXC Series. Its horizontal resolution is 800 TV lines and the minimum illumination is 2000 lux at F8. Also, various features such as Dynalatitude function, Partial enhance are provided to this model. The camera head can be remotod up to 30 meters from the camera control unit.

The DXC-C33/C33P also has medical approval.

Features

Camera head Dimensions

The size of the camera head is the smallest of the 1/3 type 3CCD-class cameras. Dimensions are : 32x38x40

Outstanding Picture quality

Adoption of 1/3 type 3CCD allows the camera to realize 2000 lux at F8, S/N ratio 62 dB and achieve a horizontal resolution of 800 TV lines.

Dynalatitude function

Automatically adjusts contrast corresponding to the brightness signal level of the entire image.

Partial enhance

Allows a particular color to be selected, and its hue, saturation and detail altered.

10 bit DSP

Capturing superior pictures by adopting full Digital Signal Processing (DSP) due to the optimized digital signal processing, sharpness of the picture has been further improved.

HD/VD and VBS synchronization capability

External triggering (Vertical, horizontal and VBS) capability for synchro flash or multi camera operation

I-link compatibility

The user can digitally transfert mages without alteration to an I-link peripheral like a recorder or a computer.

C mount

The camera head can be equipped with industrial and medical C-mont lenses available form various manufacturers.

Benefits

Ultra small 3CCD camera head

Can be installed in space-limited locations or surgical microscopes and slit lamps

High color reproduction

The 3CCD camera head allows capture of detailed images of objects with 800 TV lines resolution

Digital interface : DV out

Video signals can be recorded to i.LINK interface-equipped VTR with no quality deterioration.

Head remotable from camera control unit

With dedicated cable, the camera head can be re-moted up to 30 meters distance.

Dynalatitude function

Clear images can be captured if both bright and dark areas exist within an image.

Frame memory capability

Built-in frame memory can provide a freeze image and a remarkable enhancement in sensitivity

Partial enhance

Some designated part or color can be softened or emphasized.

RS-232C interface

All functions can be easily controlled by external computer or with the optional RM-C950 remote control panel

External synchronization

Allows for multiple camera operation and triggering for industrial applications.

Technical Specifications

Image device	1/3 type IT (Interline Transfer) CCD
Sensing area	4.8 (H) x 3.6 (V) mm
Scanning system	2:1 interlaced, 625 lines
Effective picture elements	752(H) x 582(V)
Horizontal frequency	PAL:15.625kHz
Vertical frequency	PAL:50Hz
Sync system	Internal or External with VBS or HD/VD
Phase control	H/ SC phase control
Horizontal resolution	850TV lines
Lens mount	C mount
Flange back	17.526mm in air
Sensitivity	F8.0 at 2000lux(3200K)
Minimum illumination	4lux (F2, GAIN:HYPER)
S/N ratio:	PAL:61 dB (Typical)
Gain	STEP/ AGC/ HYPER selectable STEP: 0~24dB by 1dB step AGC: 0~24dB (Limit value: 6dB, 12dB, 18dB, 24dB selectable) HYPER: 30dB
Electronic shutter	OFF/ STEP/ VARIABLE/ CCD IRIS/ KNOB selectable OFF (NTSC:1/60s, PAL:1/50s) STEP: OFF (NTSC:1/60s, PAL:1/50s), FL(NTSC:1/100s, PAL:1/120s), 1/125s, 1/250s, 1/500s, 1/1000s, 1/2000s, 1/4000s, 1/10000s, 1/20000s, 1/40000s, 1/100000s, 0.1s, 0.2s, 0.3s, 0.5s, 1.0s, 1.5s, 2.0s, 2.5s, 3.0s, 3.5s, 4.0s, 5.0s, 6.0s, 7.0s, 8.0s VARIABLE: in high-speed mode PAL: 310/625 to 1/625H, OFF in low-speed mode 254 to 1 frames for field mode 255 to 2 frames for frame mode CCD IRIS: 1/60s~1/100000s (Limit value: 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/20000, 1/40000, 1/100000 variable)
Lens	Manual Iris
AE area	Multi/ Large/ Medium/ Spot/ Slit/ Manual selectable
AE level	Variable
AE speed	Fast/ Mid/ Slow selectable
AE detect	Average/ Peak selectable
Contrast Effect	Manual/ DynaLatitude/ DCC+ selectable
Knee Point	High/ Normal/ Low selectable (Contrast Effect: Manual)
Black stretch	Variable (Contrast Effect: Manual)
Gamma	ON/ OFF (Variable at ON)
Pedestal	Master and R/B Manual adjustable
Black balance	ABB
White balance	AWB/ ATW NORMAL/ ATW WIDE/ MANUAL/ 3200K/ 5600K selectable AWB or ATW R/B Paint, MANUAL R/B Gain

ATW area	NORMAL/ MANU selectable
ATW speed	FAST/ NORMAL/ SLOW selectable
Detail level	ALL/ TARGET/ OFF (Variable at ALL or TARGET)
Detail Frequency	HIGH/ MID/ LOW selectable
Linear matrix	ALL/ TARGET/ OFF
Linear matrix MODE	STANDARD/ R Enhance/ G Enhance/ B Enhance/ Manual selectable
Partial Enhance	ALL/ IN/ OUT selectable
CCD integration mode	FIELD/ FRAME selectable
Shading Compensation	OFF / ON (Manual control)
Trigger Polarity	Positive edge trigger / Negative edge trigger selectable
Baud rate	19200/ 9600/ 4800/ 2400/ 1200 selectable
Sync	RGB/ G/ OFF selectable
Strobe	Slave
User File	A/ B switchable (Two pattern memories)
Scene File	STANDARD/ MICROSCOPE/ FULL AUTO/ STROBE/FILE A or B
Output signal	i.LINK (DV): conforms to IEEE1394-1995 VBS: 1.0Vp-p, 75 ohm, sync negative RGB: 0.7Vp-p, 75 ohm, sync switchable SYNC: 2Vp-p, 75 ohm Y: 1.0Vp-p, 75 ohm C: PAL 0.3Vp-p, 75 ohm, without sync
Operating temperature	-5°C to 45°C
Storage temperature-	20°C to 60°C
Power supply	100-240V AC, 50/60Hz
Power consumption	Max. 18W
Dimensions	CHU: 32 (W) x 38 (H) x 40 (D) mm CCU: 200 (W) x 88 (H) x 247 (D) mm
Weight	CHU: 48g CCU: 2.5kg
Connectors	DV OUT (6 pin connector) RGB/SYNC (9 pin D-sub) VIDEO OUT (BNC) S-VIDEO (4 pin mini DIN) FS/ TRIG IN (Stereo Mini jack) REMOTE (8 pin mini DIN) AC Inlet Camera (20 pin)

Supplied Accessories

Operation instruction manual
Panel sheet for RMC-950
Lens cap
Plug adaptor
AC power cable
Tripod adaptor