

**1/3-inch, 1/2-inch  
single CCD type color camera**

## **KP-D20A/B**



***Very small, high quality images, high sensitivity,  
Multi purpose color camera  
KP-D20A/B is smaller than KP-D20 as volume  
1/5 approx. and mass 1/3 approx.***

### **Features**

■ **Small and light weight**

44 (W) × 44 (H) × 49 (D) mm    130 g approx.

■ **High sensitivity**

Minimum illumination (F 1.2, AGC 31 dB)    KP-D20A : 1.5 lx    KP-D20B : 1.0 lx

■ **Y/C outputs and RS-232C Control is provided**

■ **Digital zoom**

The screen can be smoothly enlarged up to 4 times.

■ **Multi Function**

Picture control parameters can also be adjusted with the aid of on-screen menus, thus enabling optimum adjustments to match the application.

## Principal features and Specifications

Item	model	KP-D20A	KP-D20B
Pickup element		Interline transfer type CCD CCD (with on-chip microlenses)	
Total pixels		NTSC : 811 (H) × 508 (V)	PAL : 795 (H) × 596 (V)
Effective pixels		NTSC : 768 (H) × 494 (V)	PAL : 752 (H) × 582 (V)
Scanning area		equivalent to 1/3-inch pickup tube NTSC : 4.88 (H) × 3.66 (V) mm PAL : 4.89 (H) × 3.64 (V) mm	equivalent to 1/2-inch pickup tube NTSC : 6.45 (H) × 4.84 (V) mm PAL : 6.47 (H) × 4.83 (V) mm
Unit cell size		NTSC : 6.35 (H) × 7.4 (V) μm PAL : 6.5 (H) × 6.25 (V) μm	NTSC : 8.4 (H) × 9.8 (V) μm PAL : 8.6 (H) × 8.3 (V) μm
Sync system		Internal	
Video signal output		Composite video : 1.0 Vp-p/75 Ω unbalanced BNC Y/C Y:1.0 Vp-p C:0.3 Vp-p (Burst) 75 ohms unbalanced 4pin (C7648-01-201)	
Remote control		RS-232C Round multi-connector, 4 pin (HR10A-7R-4SB)	
S/N		More than 50 dB (luminance signal, standard gain, enhancer and gamma off)	
Resolution		Horizontal NTSC More than 480 TV lines Vertical NTSC More than 350 TV lines	PAL More than 470 TV lines PAL More than 450 TV lines
Scene illumination range		1.5 to 100,000 lx (F1.2, Auto-iris lens)	1.0 to 100,000 lx (F1.2, Auto-iris lens)
AGC		selectable : off, 6, 12, 21 and 31 dB (factory setting is 21 dB)	
Electronic shutter speed		1/60 (PAL:1/50), 1/100 (PAL:1/120), 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/20000, 1/30000 second, and Auto	
Backlight Compensation		On/off switchable Sensing areas: selectable from 9 areas	
Auto-iris lens outputs		(a)Video signal input type lens Luminance signal:1.0 Vp-p/high impedance Power supply : 12 V DC 60 mA (b)Iris control voltage input (galvanometer) type lens Coupling coil impedance Damper : 1150 Ω ± 10 % , Drive : 190 Ω ± 10 %	
White balance		Selectable auto-tracking (ATW), preset (AWC), manual (MANUAL) (R/B gain adjustment)	
Digital zoom		Enlarged up to 4 times smoothly	
Text display		One line of up to 24 alphanumeric characters selectable display position	
Power supply		12 V DC ± 10%	
Power consumption		220 mA approx. (including Auto-iris lens Power supply)	
Lens mount		CS mount (C mount adaptor (LA-D20AB) optionally)	
Camera mount		Tripod adaptor (TA-D20AB) optionally	
Ambient temperature		-10 to +50 °C (+14 to +122 F), 30 to 80 % RH (Note)	
Storage ambient		-20 to +6 0 °C (-4 to +140 F), 20 to 90 % RH	
Vibration endurance		Less than 29 m/s <sup>2</sup> , 10 to 55 Hz 30 minutes each on XYZ axes	
External dimensions		44 (W) × 44 (H) × 49 (D) mm ( not including lens and protrusions)	
Mass		130 g (4.6 oz) Approx. ( not including lens and protrusions)	

Note : If operate continuously, be sure to use at less than +40 °C (104 F) for long term stable performance.

### Supplied equipment

- Camera ..... 1
- Operating instructions ..... 1

### Optional accessories

- Lens (see operating instructions)
- Lens plug (E4-191J-100)
- Tripod adaptor (TA-D20AB)
- C mount adaptor (LA-D20AB)
- Remote plug (HR10A-7P-4P(01))
- DC IN plug (R03-P3F)
- AC adaptor (AP-130)

### External view

