

Hi Precision Industrial Single CCD Color Camera. KP-D20A / B



KP-D20A : 1/3" CCD.
KP-D20B : 1/2" CCD.

Features

- ◆ Hi Optical Precision
- ◆ Compact & Light Weight
- ◆ Multifunction & Hi Resolution.

Applications

- ◆ Hi Magnification.
- ◆ Machine Vision.
- ◆ Vision System.

Sales Point

- ◆ **Hi Precision Optical path for Hi magnification applications.
Microscope, Video scope, Machine Vision.**
- ◆ **Light weight and compact design, permit flexibility of usage in most
any application.**
- ◆ **OSD and Push buttons for Easy Access to camera setting.
Gamma, Shutter, DTL, Chroma, Pedestal and etc.**
- ◆ **RS-232C Remote Control Port. Allows remote access of all camera
functions. Changes are stored in the cameras
internal memory.**
- ◆ **BLC (Back Light Control) with 9 selectable gate windows.**
- ◆ **Digital Zoom (Max. 4x) and Text Display (Max. 24).**

Specification

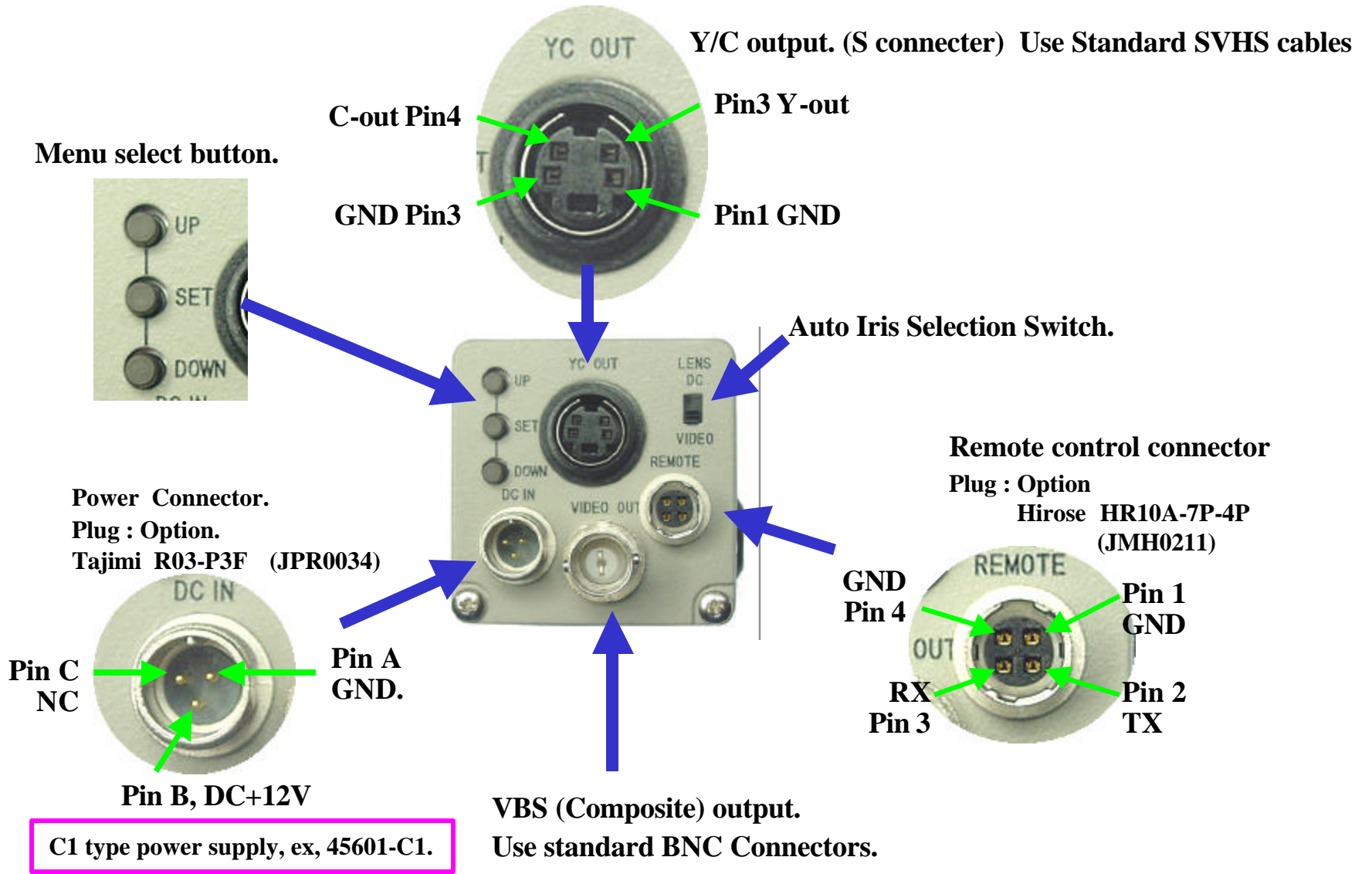
	KP-D20A	KP-D20B
Color System	NTSC	
Imaging Device	1/3"	1/2"
Effective Pixels	768(H) x 494(V) App. 380K Pix.	
Pixel Size	6.35μm(H)x7.4μm(V)	8.4μm(H)x9.8μm(V)
Scanning System	2 : 1 Interaced	
Scanning Frequency	H : 15.734kHz V : 59.94Hz	
Sync system	Internal only	
Resolution	H : 480TVL V : 350TVL	
Min. Illumination	1.5 lx (F1.2)	1.0 lx (F1.2)
S/N	50dB	
Video Output	VBS,Y/C	
Remote control	RS-232C	
Auto Iris	DC / VIDEO	
Lens Mount	CS	
Operation Ambient	-10 degrees to +50 degrees C 30 - 80% RH	
Storage Ambient	-20 degrees to +60 degrees C 20 - 90% RH	
Size	(W x H x D) 44x44x49 mm	
Weight	App. 130g	
Power	DC12V / App. 220mA	
Price L/P	682	945



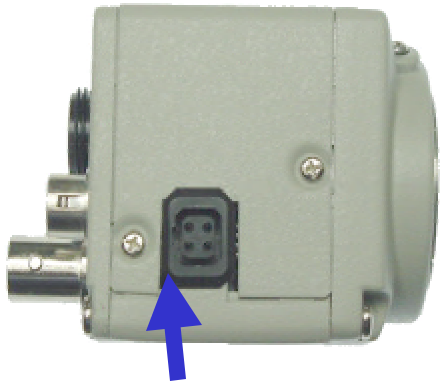
Accessory	Operation Manual

	Option	
Power Plug	R03-P3F	JPR0034
Traipod Adaptor		
C-Mount Adaptor	CS/C Mount Adaptor	8519318-A
Lens Plug	E4-191J-100	JPE0001
Remote Plug	HR10A-7P-4P(01)	JMH0211

Detail on Back of camera.

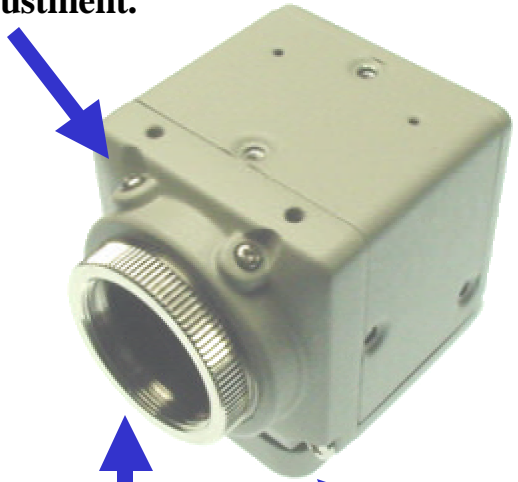


Detail on the Camera.



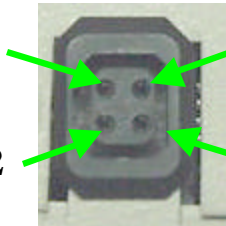
**Auto Iris connector
Plug : Option
E4-191J-100
(JPE0001)**

**Lens mount Fix screw.
Flange back adjustment.**



**Tripod Adaptor. (Option)
Bottom or Top Mounting**

Damp(-) / +12V, Pin 1



Pin 3, Drive(+) / Video

Damp (+) / NC, Pin 2

Pin 4 , Driver(-) / GND

**C-mount Adaptor
(Option)**

**Auto Iris Lens Pin arrangement
are same as EIAJ standard.**

Comparison chart, Industrial Single CCD Color Camera.

1/2 inch CCD, 410K Pixel Class Main specifications.

Main Performance	Hitachi KP-D20B		Sentech STC-620		JAI CV-S3200	
H Resolution.	480 TVL	*	480 TVL	*	450 TVL	
V Resolution	350 TVL		350 TVL		350 TVL	
Min. Sensitivity	1.0 lx (F1.2)		1.0 lx (F1.2)		0.5 lx (F1.2)	*
Signal/Noise S/N	50 dB	*	48 dB		50 dB	*
Video Output.	VBS, Y/C		VBS, Y/C		VBS, Y/C	
Sync	Internal		Int. / H&V (CC), GL (CT)	*	INT / EXT	*
Remote control	RS-232C		None (Cam set) / CC, CT		RS-232C	
Auto Iris	DC / Video		DC / Video		DC / Video	
Lens Mount	CS		CS		CS	
Size	44x44x49	*	51x51x55.5		55x45x97.5	
Weght	App. 130g	*	App. 205g		App. 350g	
Power Voltage.	DC12V		DC12V		DC12V	
Power Consumption.	App. 220 mA	*	App. 250 mA		App. 250mA	
Price						

Comparison chart, Industrial Single CCD Color Camera.

1/2 inch 410K CCD Class

Function	Hitachi KP-D20B	Sentech STC-620	JAI CV-S3200
AGC Set	Off, 6, 9, 12, 21, 31	ON/OFF	ON/OFF
Back Light Correction (BLC)	ON/OFF	ON/OFF	ON/OFF
BLC Area Set.		×	
Shutter Speed Set Step No.	9	8	9
Max. Fix Shutter Speed.	1/30,000	1/10,000	1/10,000
AES.			
White Balance	ATW, Preset, Manual	ATW, Manual	ATW, Preset, Manual
Gamma	0.45 / 1.0	0.45 / 1.0	0.45/0.6/1.0
Color Level Adjustment			×
Hue Adjustment	×	×	×
DTL		×	×
Pedestal Level Adjustment		×	×
Digital Zoom		×	×
Text Display		×	×
Nega / Posi.			×
Hi Sensitive mode / Slow Shutter	Option.	×	
Right / Left. (Mirror)	×	×	

Comparison chart, Industrial Single CCD Color Camera.

1/3 inch 410K Pixel CCD Class

Main Performance	Hitachi	Sentech	JAI	Pulnix
	KP-D20A	STC-630	CV-S3300	TMC-73M
H Resolution.	480TVL	480TVL	450TVL	460TVL
V Resolution	350TVL	350TVL	350TVL	350TVL
Min. Sensitivity	1.5 lx (F1.2)	1.0 lx (F1.2)	2.0 lx (F1.2)	2.5 lx (F1.2)
Signal/Noise S/N	50dB	48dB	50dB	---
Video Output.	VBS, Y/C	VBS, Y/C	VBS, Y/C	VBS
Sync	Internal	HD/ VD(SYNC)	HD/ VD(SYNC)	
Remote control	RS-232C	RS-232C	RS-232C	
Auto Iris	DC/VIDEO	DC	DC/VIDEO	
Lens Mount	CS	CS	CS	---
Size (mm)	44x44x49	51x51x55.5	55x45x97.5	
Weight	App. 130g	---	350g	---
Power Voltage	DC12V	DC12V	DC12V	DC12V
Current	App. 220mA	170mA	250mA	450mA
Price				

Comparison chart, Industrial Single CCD Color Camera.

1/3 inch Single CCD Class Cameras

Function	Hitachi KP-D20A	Sentech STC-630	Pulnix TMC-724	JAI CV-S3300	Pulnix TMC-73M
AGC Set	ON/OFF	ON/OFF	ON/OFF	ON/OFF	ON/OFF
Back Light Correction (BLC)	ON/OFF	ON/OFF	×	ON/OFF	×
BLC Area Set.		×	×		×
Shutter Speed Set Step No.	9	9	2	9	×
Max. Fix Shutter Speed.	1/30000	1/10000	1/1000	1/10000	1/60
AES.			×		
White Balance	ATW,Preset,Manual	ATW,Manual	ATW,Manual	ATW,Preset,Manual	ATW
Gamma	0.45/1.0	0.45/1.0	0.45	0.45/0.6/1.0	0.45
Color Level Adjustment		×	×	×	
Hue Adjustment	×	×		×	
DTL		×	×	×	×
Pedestal Level Adjustment		×	×	×	×
Digital Zoom		×	×	×	×
Text Display		×	×	×	×
Nega / Posi.			×	×	×
Hi Sensitive mode / Slow Shutter			×		×
Right / Left. (Mirror)	×	×	×		×