

❖ CV-A50 IR

Monochrome Interlaced Near-IR



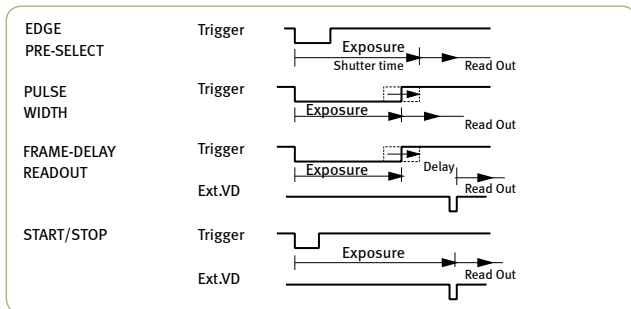
- Compact size 1/2" monochrome CCD camera
- CCIR: 752 (h) x 582 (v) pixels. EIA: 768 (h) x 494 (v) pixels
- Improved sensitivity, dynamic range and smear performance
- High S/N ratio up to 60 dB
- Shutter speeds from Off to 1/10,000 sec.
- Programmable exposure
- Interlaced or non-interlaced scanning. Field or frame accumulation
- Internal, external HD/VD or random trigger synchronization
- Edge pre-select, pulse width control, start/stop trigger modes
- Long time exposure with external VD pulse interval
- Frame-delay read out in connection with pulse width controlled shutter
- Exposure enable EEN, write enable WEN and pixel clock output
- Short ASCII commands for fast mode setup via serial port
- Setup by Windows NT/2000/XP software via RS 232C



Specifications for CV-A50 IR

Specifications	CCIR	EIA
Scanning system	625 lines 25 frames/sec.	525 lines 30 frames/sec.
Sensor	Monochrome 1/2" IT CCD	
Active area	6.4 (h) x 4.8 (v) mm	
Active pixels	752 (h) x 582 (v)	768 (h) x 494 (v)
Readout mode	737 (h) x 575 (v)	758 (h) x 486 (v)
Cell size	8.6 (h) x 8.3 (v) μ m	8.4 (h) x 9.8 (v) μ m
Resolution horizontal	570 TV lines	
Sensitivity	0.02 Lux, Max gain, 50% video	
S/N ratio	59 dB	60 dB
Video output	Composite VS signal, 1.0 Vpp, 75 Ω	
Gamma	0.45 or 1.0	
Gain	Manual - Automatic	
Gain range	0 to +15 dB	
Accumulation	Field - Frame	
Synchronization	Int. X-tal. Ext HD/VD or random trigger	
Scanning	2:1 interlaced, non-interlaced	
HD sync. input/output	4 V, 75 Ω	
Trigger input	4 V, 75 Ω	
WEN output (write enable)	4 V, 75 Ω	
EEN out. (exposure enable)	4 V, 75 Ω	
Pixel clock output	4 V, 75 Ω	
Shutter	(Off), 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000 sec.	
Pulse width control	1.5 H to 1000 H	
Start/stop	1/50 to 1/10,000 sec. 1/60 to 1/10,000 sec.	
Long time exposure	1 field to ∞	
Programmable exposure	2.5 H to 252.5 H	
Frame delay readout	Time from PWC trigger input to ext. VD input	
Functions controlled by RS 232C	Scanning format, Trigger mode, Shutter speed, Trigger/WEN polarity, Accumulation, Shutter mode, Programmable exposure, AGC level, White clip, Setup, Manual gain, AGC/manual gain, Internal/potentiometer gain set, Gamma, Pixel clock, Commands and internal adjustments.	
Functions controlled by DIP switches	VD input/output, HD input/output, internal HD and VD 75 Ω termination on/off	
Operating temperature	-5°C to +45°C	
Humidity	20 - 80% non-condensing	
Storage temp./humidity	-25°C to 60°C./20% - 90 %	
Power	12V DC \pm 10%. 1.5 W	
Lens mount	C-mount	
Dimensions (H x W x D)	29 mm x 44 mm x 66 mm	
Weight	150 g	

Trigger/Readout Modes

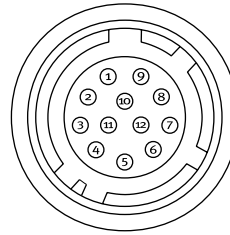


Ordering Information

CV-A50IR C 1/2" Near-IR monochrome CCD camera, CCIR
 CV-A50IR E 1/2" Near-IR monochrome CCD camera, EIA
 MP-40 Tripod Adapter (must be ordered separately)
 MP-70 Angle Adapter (must be ordered separately)

Connection Pin-out

DC-In / SYNC.



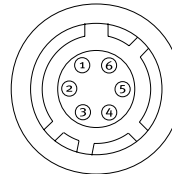
HIROSE HR10A-10R-12P

Pin

- 1 Ground
- 2 +12V DC
- 3 Ground
- 4 Video output
- 5 Ground
- 6 HD input/HD output
- 7 VD input/VD output
- 8 Ground
- 9 Pixel clock output
- 10 WEN output
- 11 Trigger input
- 12 Ground

(Pin configuration compatible with EIAJ standard)

RS-232/TRIGGER



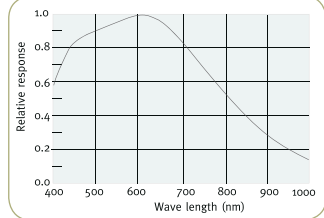
Pin

- 1 TXD
- 2 RXD
- 3 Ground
- 4 Ground
- 5 Trigger input
- 6 EEN output

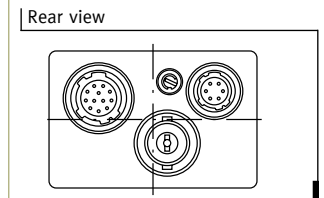
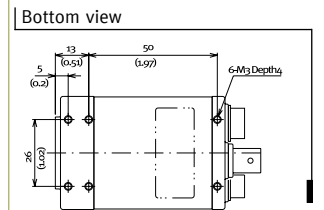
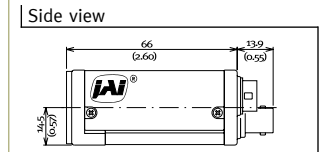
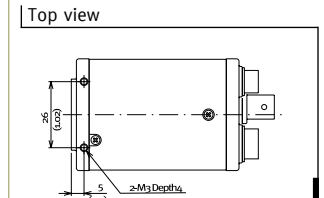
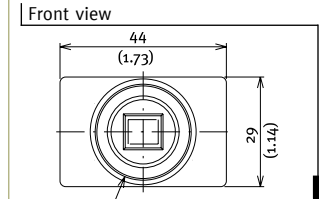
Plugs for cable:

12 pin: HIROSE HR10A-10P-12S
 6 pin: HIROSE HR10A-7P-6S

Spectral Response



Dimensions



Company and product names mentioned in this database are trademarks or registered trademarks of their respective owners. JAI AS cannot be held responsible for any technical or typographical errors and reserves the right to make changes to products and documentation without prior notification.

Europe, Middle East & Africa
 Phone +45 4457 8888
 Fax +45 4491 3252

Asia Pacific
 Phone +81 45 440 0154
 Fax +81 45 440 0166

Americas
 Phone (Toll-Free) 1 800 445 5444
 Phone +1 408 383 0300



See the possibilities

Visit our web site on www.jai.com