



CV-A11

Compact Progressive Scan Monochrome Camera



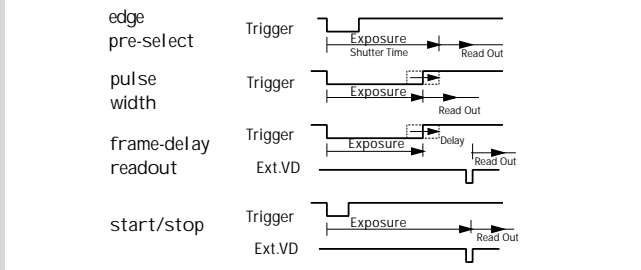
- New compact size 1/3" progressive scan monochrome CCD camera
- 659 (h) x 494 (v) square pixels (VGA format)
- Single channel video output
- High S/N ratio >56 dB
- Extended range of functions and options compared with CV-M10
- Shutter speeds from 1/30 to 1/100,000 second in 15 steps
- Programmable exposure
- Partial scanning 1/2, 1/3 and 1/6 for higher frame rates
- 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 readout 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 95/98/NT software via RS 232C

The leading manufacturer of high performance camera solutions

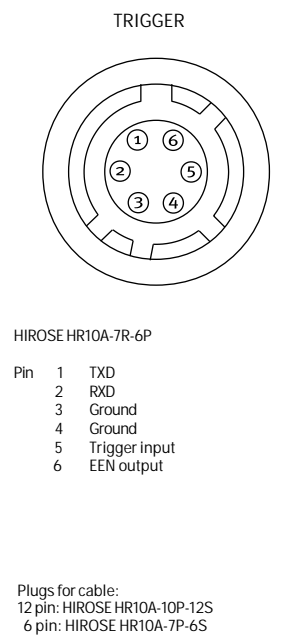
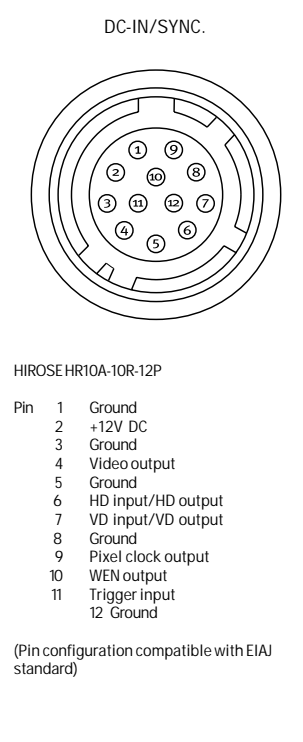
Specifications for CV-A11

Specifications	CV-A11
Scanning system	Progressive 525 lines 30 frames/sec.
CCD sensor	Monochrome 1/3" IT CCD
Sensing area	4.9 (h) x 3.7 (v) mm
Effective pixels	659 (h) x 494 (v)
Pixels in video output	648(h) x 492 (v)
Cell size	7.4 (h) x 7.4 (v) μ m
Resolution horizontal	480 TV lines
Sensitivity on sensor	0.05 Lux, Max gain, 50% video
S/N ratio	>56 dB
Video output (with/without sync.)	Composite VS signal, 1.0 Vpp, 75 Ω Video signal, 0.7 Vpp, 75 Ω
Gamma	0.45 or 1.0
Gain	Manual - Automatic
Gain range	0 to +15 dB
Accumulation	Frame
Synchronization	Int. X-tal. Ext HD/VD or random trigger
Scanning	Progressive scan, 525 lines, 30 frame/sec. partial 1/2, 272 lines, 58 frame/sec. partial 1/3, 215 lines, 73 frame/sec. partial 1/6, 127 lines, 124 frame/sec.
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
Trigger	HD reset/HD non-reset
Shutter	1/30, 1/50, 1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000, 1/20,000, 1/40,000, 1/60,000, 1/80,000, 1/100,000 second
Pulse width control	1.5 H to 1000 H
Start/stop	1/30 to 1/10,000 second
Long time exposure	1 frame to ∞
Programmable exposure	0.5 H to 1023.5 H
Frame delay readout	Time from PWC trigger input to ext. VD input
Smearless readout	Reduced smear at high shutter speeds
Functions controlled by RS 232C	Scanning format, Trigger mode, Readout mode, Shutter speed, Trigger/WEN polarity, Clock/WEN output, Sync. output, 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 internal DIP switches	VD input/output, HD input/output, 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	29 x 44 x 66 mm (HxWxD)
Weight	150 g

Trigger/Readout Modes



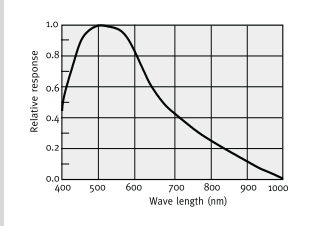
Connection Description



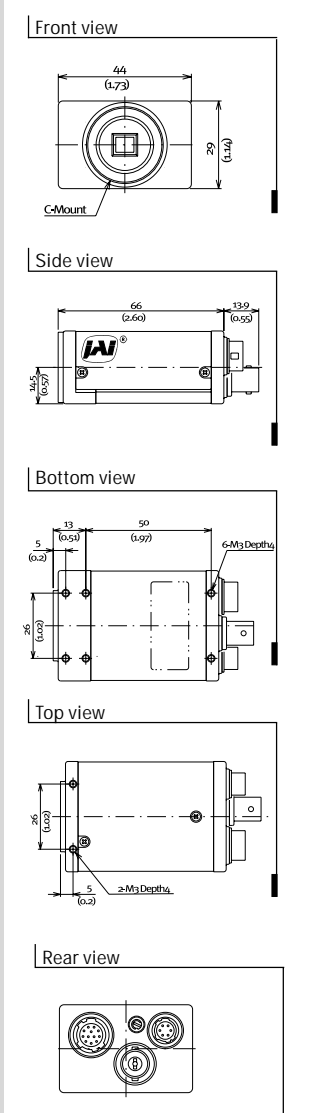
Ordering Information

CV-A11 1/3" Progressive Scan Monochrome Camera
MP40 Tripod Adapter (must be ordered separately)

Spectral Sensitivity



Dimensions



JAI A-S, Denmark
Phone +45 4457 8888
Fax +45 4491 8880
www.jai.com

JAI Corporation, Japan
Phone +81 45 933 5400
Fax +81 45 931 6142
www.jai-corp.co.jp

JAI UK Ltd., England
Phone +44 1442 879 669
Fax +44 1442 879 281
www.jai.com

JAI Vision OY, Finland
Phone +358 9 8256220
Fax +358 9 870 3345

JAI America Inc., USA
Phone (Toll-Free) +1 877 472-5909
Phone +1 949 472-5900
Fax +1 949 472-5908
www.jai.com



THE MECHADEMIC COMPANY

Visit our web site on www.jai.com

Company and product names mentioned in this datasheet are trademarks or registered trademarks of their respective owners. JAI A-S cannot be held responsible for any technical or typographical errors and reserves the right to make changes to products and documentation without prior notification. 31010691.05.01.5000