



# ***CV-M536/M538/M539***

## ***Remote Head Monochrome CCD Camera***



- *High resolution monochrome 1/2" Hyper HAD IT CCD sensor*
- *CCIR: 752 (h) x 582 (v) pixels. EIA: 768 (h) x 494 (v) pixels*
- *Remote head  $\varnothing$ 17. 2 m, 5 m or 10 m cable lengths*
- *Cable to M538/M539 camera head is detachable*
- *Improved dynamic range and smear performance*
- *Extreme sensitivity. High S/N ratio  $>56$  dB*
- *Interlaced or non-interlaced scanning*
- *Field or frame integration mode*
- *Electronic shutter or asynchronous trigger shutter*
- *Continuous variable shutter in trigger mode 2*
- *Long time integration with external VD pulses*
- *HD/VD synchronization input or output – 75 Ohm or TTL level*
- *Exposure Enable (EEN) and Write Enable (WEN) output*
- *Frame grabber friendly interface*

***The leading manufacturer in high performance camera solutions***

# Specifications for CV-M536/M538/M539

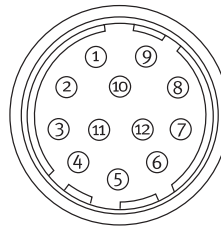
## Specifications CV-M536/M538/M539C CV-M536/M538/M539E

Scanning system	625 lines 25 frames sec.	525 lines 30 frames sec.
CCD sensor	Monochrome 1/2" Hyper HAD IT CCD	
Sensing area for video	6.5 mm (h) x 4.8 mm (v)	
Picture elements effective	752 (h) x 582 (v)	768 (h) x 494 (v)
Elements in video out	737 (h) x 572 (v)	758 (h) x 484 (v)
Cell size	8.6 (h) x 8.3 (v) $\mu\text{m}$	8.4 (h) x 9.8 (v) $\mu\text{m}$
Resolution (horizontal)	560 TV lines	570 TV lines
Resolution (vertical)	570 TV lines	480 TV lines
Sensitivity	0.5 Lux, F1.4	
S/N ratio	>56 dB (AGC off, Gamma 1)	
Video output	Composite VBS signal 1.0 Vpp, 75 Ohm	
Gamma	0.45 - 1.0	
Gain	Manual - automatic. 0 to +15 dB	
Scanning	2:1 interlace - non-interlace	
Accumulation	Field - frame	
Synchronization	int. X-tal. Ext. HD/VD or random trig.	
HD sync. input/output	4V, 75 Ohm*	
VD sync. input/output	4V, 75 Ohm*	
Trigger input	4V, 75 Ohm*	
WEN out (Write Enable)	4V, 75 Ohm	
EEN out (Exposure Enable)	4V, 75 Ohm	
Pixel clock output (optional)	4V, 75 Ohm, sine	
Internal shutter	Off, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000 sec.	
Trigger shutter	1/60, 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000 sec.	
Ext. continuous variable shutter	1/77 to 1/10,000 sec. (trigger mode 2)	
Long time exposure	1 field to (Ext. VD pulse interval)	
Operating temperature	-5°C to +45°C	
Humidity	20 - 80% non-condensing	
Power	12V DC $\pm 10\%$ . 3.6W (M536), 3.3W (M538/M539)	
Dimensions (control unit)	40 x 50 x 80 mm (HxWxD)	
Weight (control unit)	210 g	
Dimensions (camera head)	$\phi 17$ x 60 mm (536)	
Dimensions (camera head)	$\phi 17$ x 95 mm (538, 539)	
Weight (camera head)	10 g (536), 15 g (538, 539)	
Lens mount	M15.5 x 0.5	

\*) HD sync. VD sync./Trigger in or out by internal straps. Inputs TTL or 75 Ohm terminated by internal straps.

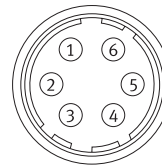
## Connection Description

### DC-IN/SYNC.



- Pin 1 Ground  
 2 +12V DC  
 3 Ground  
 4 Video output  
 5 Ground  
 6 HD in/HD out  
 7 VD in/VD out  
 8 Ground  
 9 N.C. Y/Pixel clock out  
 10 Ground  
 11 +12V DC  
 12 Ground

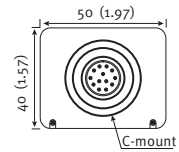
### TRIGGER



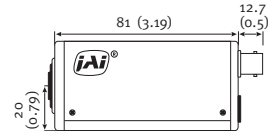
- Pin 1 N.C.  
 2 EEN output  
 3 Ground  
 4 N.C.  
 5 Trig. input  
 6 WEN pulse output

## Dimensions

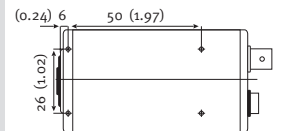
### Front view



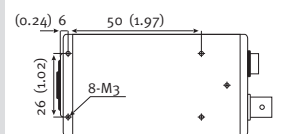
### Side view



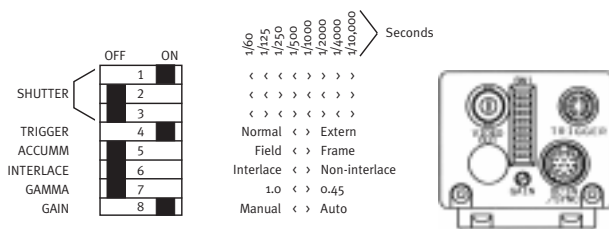
### Bottom view



### Top view



## Switch Setting

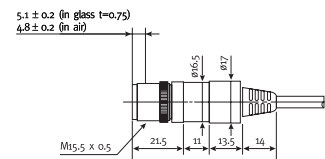


## Ordering Information

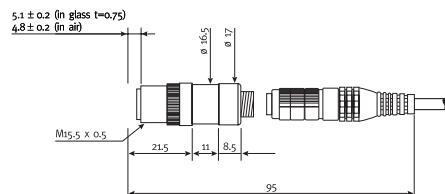
CV-M536 1/2" Monochrome Remote Head Camera CCIR/EIA 2 m Cable  
 CV-M538 1/2" Monochrome Remote Head Camera CCIR/EIA 5 m Cable  
 CV-M539 1/2" Monochrome Remote Head Camera CCIR/EIA 10 m Cable  
 OP-735 Special Lens 7.5 mm

## Camera Head Dimensions

### CV-M536



### CV-M538/M539



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