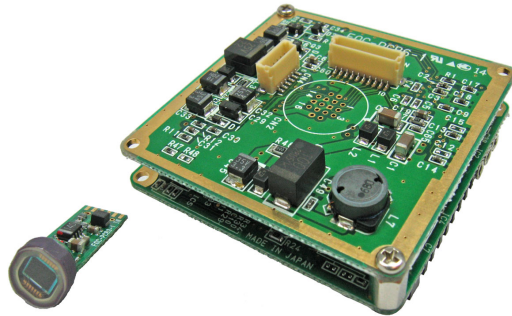


STC-R640

The STC-R640 series is based on SenTech's popular STC-600 series cameras utilizing a 1/4", micro package, high resolution CCD. The CCD can be remoted away from the camera unit by 2, 3, 5, or 10 meters.



STC-R640 OEM Module (without cable)

Image shown not actual size

Features

- 1/4" Color IT CCD
- Internal Sync
- Standard Resolution
- NTSC & PAL Formats
- Electronic Shutter
- Seven Lens Options
- Negative / Positive Image
- White Balance
(Auto or Manual)

Specifications >>

Image Sensor:	Color 1/4" 768 (H) x 494 (V) IT Micro Package CCD (ICX228AKB - NTSC) (ICX229AKB - PAL)
Image Type:	Negative / Positive
Formats:	NTSC & PAL
Scanning System:	2:1 Interlace
Horizontal Frequency:	15.734 kHz
Vertical Frequency:	59.94 Hz
Horizontal Resolution:	480 TV Lines
Sync System:	Internal
DSP (Digital Signal Processing):	10 Bit DSP, 3rd Generation, User Accessible
Video Out:	NTSC or Y/C Out
Gamma:	0.45
White Balance:	Full Auto / Manual Push-to-Set
Gain:	On / Off Selectable
Minimum Illumination:	1.1 Lux @ F 1.2 (AGC: On), 50 IRE
Electronic Shutter:	(Auto Iris) 1/60 to 1/10,000 second
Shutter Integration:	Low Speed 2-16 Fields
S/N Ratio:	>48dB (AGC Off)
Back Light:	On
N/P Exchange:	Selectable
Lenses:	Seven Lens Options Available
White Balance:	Auto or Manual
Power Supply:	12V DC
Power Consumption:	220mA
Operating Temperature:	-10°C ~ 45°C (14°F ~ 113°F)
Storage Temperature:	-30°C ~ 60°C (-22°F ~ 140°F)
Dimensions:	Main Board: 45 (W) x 45 (H) x 21 (D) mm (1.8" x 1.8" x .84") CCD Board Dimensions: 8mm Diameter (length and orientation are variable)

>> STC-R640

Camera Heads



Straight



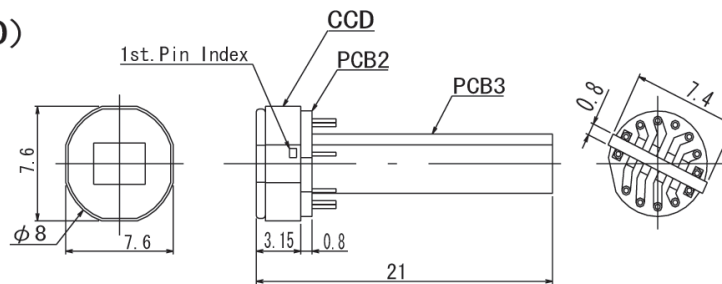
Right Angle



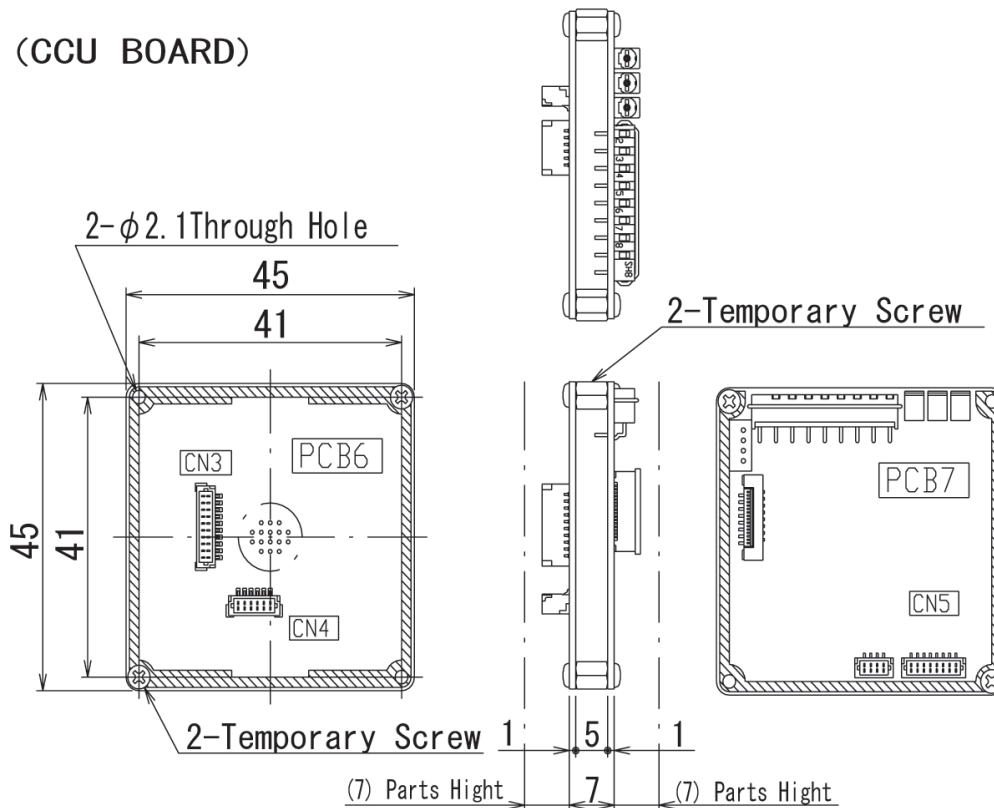
Flex Cable

Mechanical Drawings

(CCD HEAD)



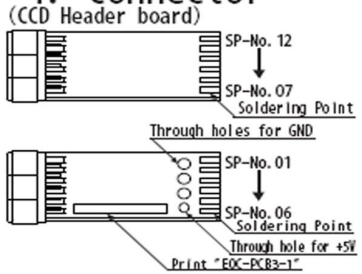
(CCU BOARD)



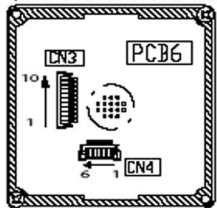
Note: (Dimensions are given in mm)

Mechanical Drawings

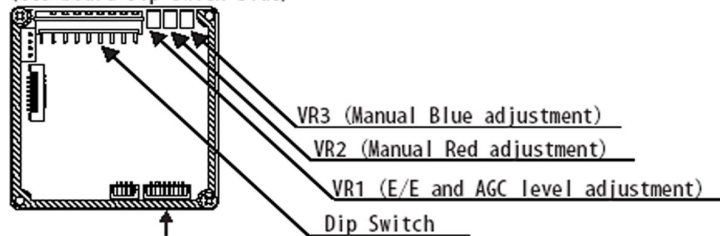
1. Connector



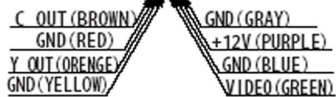
(CCU board cable connection side)



(CCU board Dip switch side)



(NOTE) VR2 and VR3 are active only when the Dip switch No.1 is ON.



CCD Head	Signal	CCD Connector
SP - No. 01	V04	CN3-3
SP - No. 02	H2	CN4-1
SP - No. 03	H1	CN3-1
SP - No. 04	R6	CN4-6
SP - No. 05	V1	CN4-3
SP - No. 06	SUB	CN4-4
SP - No. 07	V03	CN3-4
SP - No. 08	V02	CN3-8
SP - No. 09	V01	CN3-7
SP - No. 10	GND	CN3-9
SP - No. 11	V Out	CN3-10
SP - No. 12	VDD (15V)	CN3-6

(Note 1) Through holes (TH1, TH2, TH3) on the PCB are GND and must be connected on the GND point CN3 and CN4 on the CCU Board (PCB6), CN3-2, CN4-2, and CN4-5.

(Note 2) Through hole for +5V must be connected to the CCU Board (PCB6).

Connector Pin Assignment

PCB6-CN3		PCB6-CN4	
CN3-1	H1	CN4-1	H2
CN3-2	GND	CN4-2	GND
CN3-3	V04	CN4-3	VL
CN3-4	V03	CN4-4	SUB
CN3-5	+5V	CN4-5	GND
CN3-6	VDD	CN4-6	RG
CN3-7	V01		
CN3-8	V02		
CN3-9	GND		
CN3-10	V Out		

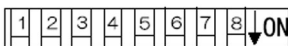
Connector Pin Assignment for STC-R640MC

Pin	Signal
CN2-1	V01
CN2-2	Vout
CN2-3	V03
CN2-4	VDD
CN2-5	V02
CN2-6	GND
CN2-7	V04
CN2-8	+5V
CN2-9	SUB
CN2-10	GND
CN2-11	RG
CN2-12	GND
CN2-13	VL
CN2-14	H1
CN2-15	GND
CN2-16	H2

Connector Model Number

PCB6-CN3	Housing	SHR-10V-S-B	JST
	Header	BM 10B-SRSS-TB	
PCB6-CN4	Housing	SHR-06V-S-B	
	Header	BM06B-SRSS-TB	

2. DIP Switch Designation



2-1. DIP Switch Function

SW NO.	Function	OFF	ON
1	White Balance	Auto	Manual
2	AGC	ON	OFF
3	Shutter Speed Setting	See Table 2	
4			
5	Shutter Mode Setting	See Table 3	
6			
7	Negative/Positive M ord	+	-
8			

2-2. Shutter Speed Setting

Shutter Speed (High Speed)	Shutter Speed (Low Speed)	SW3	SW4	SW5
1/60	2 Field	OFF	OFF	OFF
1/125	4 Field	ON	OFF	OFF
1/250	6 Field	OFF	ON	OFF
1/500	8 Field	ON	ON	OFF
1/1000	10 Field	OFF	OFF	ON
1/2000	12 Field	ON	OFF	ON
1/4000	14 Field	OFF	ON	ON
1/10000	16 Field	ON	ON	ON

2-3. Shutter Mode Setting

Mode	SW6	SW7
High Speed Shutter (See Table 2)	OFF	OFF
Flickerless Shutter (1/100 sec Fixed)	OFF	ON
Low Speed Shutter (See Table 2)	ON	OFF
Electronic Iris	ON	ON