

Analog Series

Cased



Cube

Board

Remote Head

Sentech offers an extensive range of Analog cameras in board, cased and OEM configurations. These cameras have been designed for a wide range of applications: microscopy, medical equipment, endoscopic equipment, otoscopes, spectrometers, physically abusive environments, hand held instrumentation, inter-oral cameras, bar code readers and even sophisticated machine vision systems. Our cameras are feature rich, provide excellent images and proven dependable performance.

Analog Overview

Models	Sensor			Type		Hor. TV Lines		
	1/4"	1/3"	1/2"	Color	B/W	330	480	570
Cased Color								
STC-620 / 625			■	■				■
STC-630 / 635		■		■				■
STC-640 / 645	■			■				■
STC-N63 / P63		■		■				■
Cased B/W								
STC-E42A / C42A			■		■			■
STC-E43A / C43A		■			■			■
Board Color								
STC-620 / 625			■	■				■
STC-630 / 635		■		■				■
STC-640 / 645	■			■				■
STC-DN64 / DP64	■			■				■
STC-N54 / P54	■			■		■		
STC-N63 / P63		■		■				■
STC-N64 / P64	■			■				■
STC-N632 / P632		■		■				■
Board B/W								
STC-170 / 175		■			■			■
STC-172 / 177			■		■			■
STC-E631 / C631		■			■			■
Remote Head								
STC-R640 / R645	■			■				■

Analog Series

Color Models

Cased



NTSC / PAL Models

STC-N63 / P63 1/3" CCD



BJ Model

- POWER JACK FOR POWER IN
- BNC CONNECTOR (VIDEO OUT)
- AUTO IRIS LENS CONNECTION (DC DRIVEN)
- AUTO IRIS LEVEL ADJUSTMENT



BT Model

- TERMINAL BLOCK (SPRING LOADED) FOR POWER IN
- BNC CONNECTOR (VIDEO OUT)
- AUTO IRIS LENS CONNECTION (DC DRIVEN)
- AUTO IRIS LEVEL ADJUSTMENT



CC Model

- 12 PIN HIROSE POWER, VIDEO OUT, Y/C OUT, EXT HD/VD SYNC
- BNC CONNECTOR (VIDEO OUT)
- PUSH-TO-SET/AUTO WHITE BALANCE
- RS-232C SERIAL I/O FOR USER DSP PROGRAMMING



CJ Model

- POWER JACK FOR POWER IN
- BNC CONNECTOR (VIDEO OUT)
- Y/C CONNECTOR (Y/C VIDEO OUT)
- PUSH-TO-SET / AUTO WHITE BALANCE
- RS-232C SERIAL I/O FOR USER DSP PROGRAMMING



CT Model

- TERMINAL BLOCK (SPRING LOADED) FOR POWER IN BNC CONNECTOR (VIDEO OUT)
- Y/C CONNECTOR (Y/C VIDEO OUT)
- PUSH-TO-SET/AUTO WHITE BALANCE
- RS-232C SERIAL I/O FOR USER DSP PROGRAMMING

NTSC / PAL Models

1/2" CCD STC-620 / 625

1/3" CCD STC-630 / 635

1/4" CCD STC-640 / 645



A Model

- POWER JACK
- RCA CONNECTOR (VIDEO OUT)
- MANUAL CONTROLS: COLOR, BRIGHTNESS, SHARPNESS, GAMMA



AS Model

- 12PIN HIROSE: POWER, Y/C OUT
- BNC CONNECTOR (VIDEO OUT)
- MANUAL CONTROLS: COLOR, BRIGHTNESS, SHARPNESS, GAMMA



BJ Model

- POWER JACK
- BNC CONNECTOR (VIDEO OUT)
- DC AUTO IRIS LENS CONNECTOR



BT Model

- POWER TERMINAL
- BNC CONNECTOR (VIDEO OUT)
- AUTO IRIS LEVEL CONTROL
- DC AUTO IRIS LENS CONNECTOR



CC Model

- 12PIN HIROSE: POWER, Y/C OUT, HD/VD IN
- BNC CONNECTOR (VIDEO OUT)
- Y/C CONNECTOR (Y/C OUT)
- RS-232C MINI JACK DSP SET UP CAMERA CONTROL



CT Model

- POWER TERMINAL
- BNC CONNECTOR (VIDEO OUT)
- Y/C CONNECTOR (Y/C OUT)
- RS-232C MINI JACK DSP CTRL
- DC AUTO IRIS LENS CONNECTOR
- AUTO IRIS LEVEL CONTROL

Specifications

Color Cased Models

NTSC PAL	STC-N63 STC-P63
Image Sensor:	1/3" CCD (ICX638BK) / 1/3" CCD (ICX639BK)
Horizontal Resolution:	480 TV Lines
Signal Format:	NTSC / PAL
Effective Picture Element:	768 (H) x 494 (V) / 752 (H) x 582 (V)
Horizontal Frequency:	15.734 kHz / 15.625 kHz
Vertical Frequency:	59.94 Hz / 50.00 Hz
Scanning System:	2:1 Interlace
Sync System:	Internal / External (select models)
Serial Communication:	RS-232C Serial I/O Port (select models)
Electronic Shutter:	1/60 Fixed (Programmable via DSP)
Electronic Iris:	1/60 (1/50) ~ 1/100,000
Auto Iris Lens Connector:	DC Type (select models)
Minimum Illumination:	0.17 Lux @ F1.2, 20 IRE 0.14 Lux @ F1.2, 20 IRE 0.53 Lux @ F1.2, 50 IRE 0.47 Lux @ F1.2, 50 IRE
White Balance:	ATW / Manual / Push-to-Set (select models)
DSP:	10 bit DSP (User Programmable)
Mirror Image:	ON/OFF (DSP or Dip Switch Selectable)
S/N Ratio:	>48dB (AGC Off)
Gain:	AGC / Fixed (via DSP)
Gamma:	0.45 (Adjustable via DSP)
Negative / Positive:	N/A
Backlight:	On/Off (DIP switch selectable)
Video Output:	Composite Video or Y/C (select models)
Lens Mount:	CS Mount (C-Mount with adaptor)
Input Voltage:	12Vdc +/- 10%
Power Consumption:	1.80W; 150mA
Operating Temperature:	-10° ~ 45°C (14° ~ 113°F)
Storage Temperature:	-30° ~ 60°C (-22° ~ 140°F)
Dimensions:	36 (W) x 36 (H) x 37.35 (D) mm (1.44" x 1.44" x 1.49")
Weight:	70g (2.46oz)

STC-620 STC-625	STC-630 STC-635	STC-640 STC-645
1/2" CCD (ICX418AK) / 1/2" CCD (ICX419AK)	1/3" CCD (ICX408AK) / 1/3" CCD (ICX409AK)	1/4" CCD (ICX228AK) / 1/4" CCD (ICX229AK)
480 TV Lines		
NTSC / PAL		
768 (H) x 494 (V) / 752 (H) x 582 (V)		
15.734 kHz / 15.625 kHz		
59.94 Hz / 50.00 Hz		
2:1 Interlace		
Internal / External (select models)		
RS-232C Serial I/O Port (select models)		
Standard: 1/60 (1/50), 1/125 (1/100), 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000 Extended: 2, 4, 6, 8, 10, 12, 14, 16 fields		
1/60 (1/50) ~ 1/10,000		
N/A		
0.42 Lux @ F1.2, 20 IRE 0.24 Lux @ F1.2, 20 IRE 1.13 Lux @ F1.2, 50 IRE 0.66 Lux @ F1.2, 50 IRE	0.43 Lux @ F1.2, 20 IRE 0.26 Lux @ F1.2, 20 IRE 1.54 Lux @ F1.2, 50 IRE 0.80 Lux @ F1.2, 50 IRE	0.56 Lux @ F1.2, 20 IRE 0.70 Lux @ F1.2, 20 IRE 1.93 Lux @ F1.2, 50 IRE 1.43 Lux @ F1.2, 50 IRE
ATW / Manual / Push-to-Set (select models)		
10 bit DSP (User Programmable)		
N/A		
>45dB (AGC Off)		
AGC / Fixed (via DSP) 0 ~ 30dB		
0.45, 1.0 or Other values (Adjustable via DSP)		
On/Off Selectable		
Back Light compensation at electronic shutter		
Composite Video or Y/C (select models)		
C-Mount	CS Mount (C-Mount with adaptor)	
12Vdc +/- 10%		
3.0W; 250mA		
-10° ~ 45°C (14° ~ 113°F)		
-30° ~ 60°C (-22° ~ 140°F)		
51 (W) x 51 (H) x 55.5 (D) mm (2.4" x 2.4" x 2.22")		
190g (6.70oz)		

Board



NTSC / PAL Models

- STC-N54 / P54 1/4" CCD (Low Res)
- STC-N64 / P64 1/4" CCD (High Res)

NTSC / PAL Models

- 1/3" CCD STC-N632 / P632



Features

- 1/4" COLOR CCD
- 330 TV / 480 TV LINES
- 10-BIT DSP (USER PROGRAMMABLE)
- FIELD INTEGRATION
- 5 LENS OPTIONS INCLUDING CS MOUNT
- SIZE: 26 (W) x 22 (H) x VAR. (D) mm

The STC-DN64 (NTSC) and STC-DP64 (PAL) are extremely small, color cameras with the CCD located on a flexible ribbon. It was designed to fit into instruments the size of a ball point pen.

STC-DN64 / DP64 1/4" CCD

Features

- 1/4" COLOR CCD
- 480 TV LINES
- PROGRAMMABLE DSP
- FIELD INTEGRATION
- CCU BOARD: 48.5 (W) x 10 (H) mm
- CCD HEAD: 13.8 (W) x 10 (H) mm



Features

- 1/3" Color CCD
- Designed For Rugged Environments
- 480 TV Lines
- Programmable DSP
- Micro Lens Lock Mount
- Size: 26 (H) x 26 (W) x Var. (D) mm



Board



NTSC / PAL Models

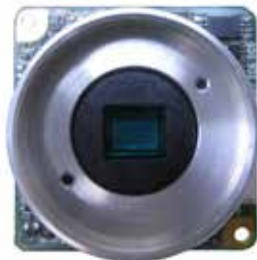
STC-N63 / P63 1/3" CCD

Features

- 1/3" Color CCD
- 480 TV Lines
- 10-Bit Digital Signal Processing
- White Balance (Auto, Manual or Push-to-Set)
- 7 Lens Options Available
- Size: 32 (W) x 32 (H) x Var. (D) mm



Micro Lens Mount



CS Mount

NTSC / PAL Models

1/2" CCD STC-620 / 625

1/3" CCD STC-630 / 635

1/4" CCD STC-640 / 645

Features

- 1/4", 1/3" and 1/2" Color CCD
- 480 TV Lines
- Gamma: 0.45, 1.0 or Other values via DSP
- Gain: Manual / AGC (0 - 30dB)
- 10-Bit DSP, 3rd Generation (User Accessible)
- Negative / Positive Image
- Internal / External Sync (Select Models)
- Y/C (Select Models)
- 7 Lens Options Including CS Mount
- Size: 45 (W) x 45 (H) x Var. (D) mm



CS Mount



Micro Lens Mount



w/o Mount

Specifications

Color Board Models

NTSC PAL	STC-N54 STC-P54	STC-N64 STC-P64	STC-DN64 STC-DP64
Image Sensor:	1/4" CCD (RJ2411AB0PB) 1/4" CCD (RJ2421AB0PB)	1/4" CCD (ICX648BK)A 1/4" CCD (ICX649BK)A	1/4" CCD (ICX228AK) 1/4" CCD (ICX229AK)
Horizontal Resolution:	330 TV Lines	480 TV Lines	
Signal Format:	NTSC / PAL		
Effective Picture Element:	512 (H) x 492 (V) 752 (H) x 582 (V)	768 (H) x 494 (V) 752 (H) x 582 (V)	
Scanning System:	2:1 Interlace		
Sync System:	Internal		
Serial Communication:	Programmable DSP via I ² C		
Electronic Shutter:	Programmable via Serial Communication	Programmable via DSP	
Electronic Iris:	1/60 ~ 1/100,000 / 1/50 ~ 1/100,000		
Auto Iris Lens Connector:	N/A		
Minimum Illumination:	0.5 Lux @ F1.2, 20 IRE 0.3 Lux @ F1.2, 20 IRE	0.52 Lux @ F1.2, 20 IRE 0.24 Lux @ F1.2, 20 IRE	0.52 Lux @ F1.2, 20 IRE 0.24 Lux @ F1.2, 20 IRE
	1.68 Lux @ F1.2, 50 IRE 0.94 Lux @ F1.2, 50 IRE	1.81 Lux @ F1.2, 50 IRE 0.71 Lux @ F1.2, 50 IRE	1.81 Lux @ F1.2, 50 IRE 0.71 Lux @ F1.2, 50 IRE
White Balance:	AWB (2800 ~ 7000k)		AWB / Manual (via DSP)
DSP:	Fully User Programmable with Sentech Software		
Mirror Image:	Normal / Mirror (via DSP)		
S/N Ratio:	>48dB (AGC Off)		
Gain:	AGC / Fixed (via DSP)		
Gamma:	Programmable via DSP		
Video Output:	Composite Video 1.0Vp-p, 75Ω		
Negative / Positive:	N/A		
Backlight:	N/A		
Lens Mount:	CS / Micro Lens Mount	N/A	
Input Voltage:	5Vdc ~ 12Vdc		4.8Vdc ~ 11Vdc
Power Consumption:	0.6W; 120mA at 5Vdc ~ 50mA at 12Vdc		0.65W; 130mA at 5Vdc
Operating Temperature:	-10° ~ 50°C (14° ~ 122°F)	-10° ~ 45°C (14° ~ 113°F)	
Storage Temperature:	-20° ~ 60°C (-4° ~ 140°F)	-30° ~ 60°C (-22° ~ 140°F)	
Dimensions (mm):	26 (W) x 22 (H) x Var. (D) (1.04" x 0.88" x Var.)		Board: 48.5 (W) x 10 (H) Head: 11.8 (W) x 10 (H)
Weight:	70g (0.24 oz)		3g (0.105 oz)

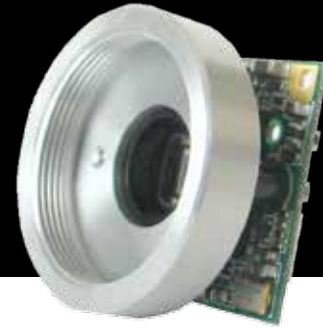
STC-N632 STC-P632	STC-N63 STC-P63	STC-620 STC-625	STC-630 STC-635	STC-640 STC-645
1/3" CCD (ICX638BKA) 1/3" CCD (ICX639BKA)	1/3" CCD (ICX638BKA) 1/3" CCD (ICX639BKA)	1/2" CCD (ICX418AKL) 1/2" CCD (ICX419AKL)	1/3" CCD (ICX408AK) 1/3" CCD (ICX409AK)	1/4" CCD (ICX228AK) 1/4" CCD (ICX229AK)
		480 TV Lines		
		NTSC / PAL		
		768 (H) x 494 (V) 752 (H) x 582 (V)		
		2:1 Interlace		
Internal	Internal / External (select models)	Internal / External (select models)		
Programmable DSP via I ² C	RS-232C Serial I/O Port (select models)	RS-232C Serial I/O Port (select models)		
Programmable via DSP		Standard: 1/60 (1/50), 1/125 (1/100), 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000 Extended: 2, 4, 6, 8, 10, 12, 14, 16 fields		
1/60 ~ 1/100,000 / 1/50 ~ 1/100,000		1/60 ~ 1/10,000 / 1/50 ~ 1/10,000		
N/A	DC Type (select models)	N/A		
0.17 Lux @ F1.2, 20 IRE 0.14 Lux @ F1.2, 20 IRE		0.42 Lux @ F1.2, 20 IRE 0.24 Lux @ F1.2, 20 IRE	0.43 Lux @ F1.2, 20 IRE 0.26 Lux @ F1.2, 20 IRE	0.56 Lux @ F1.2, 20 IRE 0.70 Lux @ F1.2, 20 IRE
0.53 Lux @ F1.2, 50 IRE 0.47 Lux @ F1.2, 50 IRE		1.13 Lux @ F1.2, 50 IRE 0.66 Lux @ F1.2, 50 IRE	1.54 Lux @ F1.2, 50 IRE 0.80 Lux @ F1.2, 50 IRE	1.93 Lux @ F1.2, 50 IRE 1.43 Lux @ F1.2, 50 IRE
AWB / Manual (via DSP)	AWB / Manual / Push-to-Set (via DSP)	AWB / Manual / Push-to-Set (via DSP)		
Fully User Programmable with Sentech Software				
Normal / Mirror (via DSP and Hardware Switch)	ON/OFF (DSP or Dip Switch Selectable)	N/A		
>48dB (AGC Off)		>45dB (AGC Off)		
AGC / Fixed (via DSP)		AGC / Fixed (via DSP) 0 ~ 30dB		
Programmable via DSP				
Composite Video 1.0Vp-p, 75Ω	Composite Video or Y/C (select models)	Composite Video or Y/C (select models)		
N/A		On/Off Selectable		
N/A	On/Off (DIP switch selectable)	Back Light compensation at electronic shutter		
Micro Lens Mount w/ Locking Mechanism	CS / Micro Lens Mount	C / CS / Micro Lens Mount		
7Vdc ~ 13Vdc	12Vdc	12Vdc		
1.0W; 83mA at 12Vdc	1.80W; 150mA	3.0W; 250mA		
		-10° ~ 45°C (14° ~ 113°F)		
-30° ~ 65°C (-22° ~ 149°F)		-30° ~ 60°C (-22° ~ 140°F)		
26 (W) x 26 (H) x Var. (D) (1.04" x 1.04" x Var.)	32 (W) x 32 (H) x Var. (D) (1.28" x 1.28" x Var.)	45 (W) x 45 (H) x Var. (D) (1.77" x 1.77" x Var.)		
12g (0.42oz)	10g (0.35 oz)	45g (1.59oz)		

Analog Series

Monochrome Models

Cased

Board



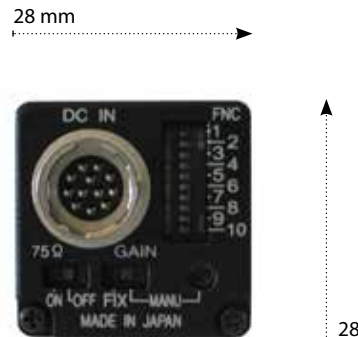
Cased EIA / CCIR Models

STC-E42A / C42A 1/2" CCD

STC-E43A / C43A 1/3" CCD

Features

- 1/2" or 1/3" CCD
- Available in EIA & CCIR Formats
- 570 (EIA) and 560 (CCIR) TV Lines
- Field / Frame Integration
- Internal / External Sync
- Gamma: 0.45 or 1.0
- C-Mount
- 28(W) x 28(H) x 46.3(D) mm
- 12Vdc Power



Board EIA / CCIR Models

1/3" CCD STC- E631 / C631

Remote Head EIA / CCIR Models

1/3" CCD STC-170 / 175

1/2" CCD STC-172 / 177



STC-R170 / R175

is available with
a remote CCD

Features

- DESIGNED FOR RUGGED ENVIRONMENT
- 570 TV LINES
- PROGRAMMABLE DSP
- FIELD INTEGRATION
- CS & C-MOUNT (w/ADAPTER) OR MICRO LENS MOUNT
- SIZE: 26 (W) x 26 (H) mm



CS Mount

Features

- 1/3" AND 1/2" CCD
- INTERNAL / EXTERNAL SYNC. (HD/VD)
- 570 TV LINES (EIA) OR 560 TV LINES (CCIR)
- FIELD / FRAME INTEGRATION
- INTEGRATION HOLD
- INTERLACE / NON-INTERLACE
- CS MOUNT OR MICRO LENS MOUNT

Specifications

Monochrome Cased & Board

Cased

EIA CCIR	STC-E42A STC-C42A	STC-E43A STC-C43A
Image Sensor:	1/2" CCD (ICX418AL) 1/2" CCD (ICX419AL)	1/3" CCD (ICX408AL) 1/3" CCD (ICX409AL)
Horizontal Resolution:	570 TV Lines / 560 TV Lines	
Vertical Resolution:	Field: 350 TV Lines / 410 TV Lines Frame: 485 TV Lines / 575 TV Lines	
Signal Format:	EIA / CCIR	
Frame Rate:	30fps	
Effective Picture Element:	795 (H) x 595 (V) / 752 (H) x 582 (V)	
Chip Size (mm):	7.40 (H) x 5.95 (V)	5.59 (H) x 4.68 (V)
Cell Size (µm):	8.4 (H) x 9.8 (V) / 8.6 (H) x 8.3 (V)	6.3 (H) x 7.4 (V) / 6.5 (H) x 6.25 (V)
Horizontal Frequency:	15.734 kHz / 15.625 kHz	
Vertical Frequency:	59.94 Hz / 50.00 Hz	
Integration Mode:	Field / Frame	
Scanning System:	2:1 Interlace	
Sync System:	Internal / External (Auto Switching)	
Communication:	RS232 via 12 pin connector	
Electronic Shutter:	Dip Switch: 1/60 (50), 1/100 (120), 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10,000 RS232: 1/60 (50) ~ 1/100,000 (Variable at every H and clock)	
Electronic Iris:	N/A	
Minimum Illumination:	0.11 Lux @ F1.2, 50 IRE 0.07 Lux @ F1.2, 50 IRE	0.13 Lux @ F1.2, 50 IRE 0.10 Lux @ F1.2, 50 IRE
Gain:	Manual: 0 ~ 27dB	
S/N Ratio:	56dB (Gain 0dB)	
Gamma:	0.45 / 1.0	
Integration Hold:	N/A	
Video Output:	1.0Vp-p, 75Ω, DC Coupling	
Lens Mount:	C-Mount	
Optical Filter:	No IR cut filter	
Optical Center Accuracy:	Position accuracy in H and V directions: ± 0.31mm Rotational accuracy of H and V: ± 2.1 deg.	
Input Voltage:	12Vdc ± 10%	
Power Consumption:	< 1.8W; 150mA	
Operating Temperature:	-5° ~ 50°C (14° ~ 113°F)	
Storage Temperature:	-30° ~ 65°C (-22° ~ 149°F)	
Dimensions:	28 (W) x 28 (H) x 46.3 (D) mm (1.1" x 1.1" x 1.82")	
Weight:	52g (0.208oz)	

Board

STC-E631 STC-C631	STC-170 STC-175	STC-172 STC-177
1/3" CCD (ICX408AL) 1/3" CCD (ICX409AL)	1/3" CCD (ICX408AL) 1/3" CCD (ICX409AL)	1/2" CCD (ICX418ALL) 1/2" CCD (ICX419ALL)
570 TV Lines	570 TV Lines / 560 TV Lines	
350 TV Lines / 410 TV Lines	Field: 350 TV Lines / 410 TV Lines Frame: 485 TV Lines / 575 TV Lines	
EIA / CCIR		
30fps		
768 (H) x 494 (V) / 752 (H) x 582 (V)		
5.59 (H) x 4.68 (V)		7.40 (H) x 5.95 (V)
6.4 (H) x 7.5 (V) / 6.53 (H) x 6.39 (V)	6.35 (H) x 7.4 (V) / 6.50 (H) x 6.25 (V)	8.4 (H) x 9.8 (V) / 8.6 (H) x 8.3 (V)
15.734 kHz / 15.625 kHz		
59.94 Hz / 50.00 Hz		
Field	Field / Frame	
2:1 Interlace		
Internal	Internal / External Internal / External (HD/VD), Auto Switching by HD Input	
Programmable DSP via I ² C	N/A	
Standard: 1/60 (50), 1/100 (120), 1/250 ~ 1/100,000 Extended: 1/7.5, 1/15, 1/30 (1/6.25, 1/12.5, 1/25)	1/30, 1/60 (50), 1/100 (120), 1/250 ~ 1/10,000 (8 steps)	1/60 (50), 1/100 (120), 1/250 ~ 1/10,000 (8 steps)
1/60 (1/50) ~ 1/100,000	N/A	
0.60 Lux @ F1.2, 50 IRE 0.56 Lux @ F1.2, 50 IRE	0.17 Lux @ F1.2, 50 IRE 0.17 Lux @ F1.2, 50 IRE	0.13 Lux @ F1.2, 50 IRE 0.13 Lux @ F1.2, 50 IRE
AGC / Fixed (Software Selectable)	AGC / Fixed (POT Adjustable)	
>48dB (AGC Off)	>56dB (AGC Off)	
Programmable via DSP	0.45 / 1.0	
N/A	Yes, via Start/Stop TTL Signal, Vertical Reset	
1.0Vp-p, 75Ω		
CS / C (w/ adapter) / Micro Lens Mount		C-Mount
N/A		
N/A		
7Vdc ~ +13Vdc		12Vdc ± 10%
< 1.0W, 83mA at 12Vdc		< 1.32W, 110mA ± 20%
-10° ~ 45°C (14° ~ 113°F)		
-30° ~ 65°C (-22° ~ 149°F)		-30° ~ 60°C (-22° ~ 140°F)
26 (W) x 26 (H) x Var. (D) mm (1" x 1" x Var.)		45 (W) x 45 (H) x Var. (D) mm (1.77" x 1.77" x Var.)
12g (0.42oz)		45g (1.58oz)

Analog Series

Remote Head Color Models

Cased

Board



NTSC / PAL Finished Heads

STC-R640 / R645 1/4" CCD



Straight
CCD

STC-R640HD

Right Angle
CCD

STC-R640LHD

↑ Top of
Scene

STC-R640UHD

↑ Top of
Scene

CCUs

STC-R640AS / R645AS

- Analog Control Knobs for DSP Control Gain, Color, Sharpness and Gamma
- BNC for Video Out
- 12 Pin Hirose (Power & Y/C Out)

STC-R640CC / R645CC

- Push-to-Set White Balance Switch
- RS232 Serial I/O for DSP Programming
- BNC for Video Out & Y/C Connector for Y/C Out
- 12 Pin Hirose (Power In, Y/C Out & HD/VD In)

STC-R640CT / R645CT

- Terminal Strip Power
- Push-to-Set White Balance Switch
- RS232 Serial I/O for DSP Programming
- BNC for Video Out & Y/C Connector for Y/C Out
- BNC for VS Sync



STC-R640AS



STC-R640CC



STC-R640CT

NTSC / PAL Models

1/4" CCD STC-R640 / R645



* For accessories please see pages 98-100

STC-R640 / R645 Features

- Board CCU
- Board CCD
- Without mating cable

STC-R640C / R645C Features

- Board CCU
- Board CCD
- Matting cable available in 2, 3, 5 or 10 meters

STC-R640MC / R645MC STC-R640HD2 / R645HD2 Features

- R640MC / R645MC Board CCU
- R640HD2 / R645HD2 Cased CCD
- Detachable cable via 12pin Hirose

Specifications

Remote Head Color Models

Cased

Models	STC-R640	STC-R645
Image Sensor:	1/4" CCD (ICX228AK)	1/4" CCD (ICX229AK)
Horizontal Resolution:	480 TV Lines	
Signal Format:	NTSC	PAL
Scanning Method:	2:1 Interlace	
Frame Rate:	30 fps	
Effective Picture Element:	768 (H) x 494 (V)	752 (H) x 582 (V)
Horizontal Frequency:	15.734 kHz	15.625 kHz
Vertical Frequency:	59.94 Hz	50.00 Hz
Gain:	AGC / Manual	
S/N Ratio:	> 48dB (AGC:Off)	
Gamma:	0.45 (default), DSP Adjustable (32 steps)	
Sync:	Internal/External VS (CT model) / HD/VD (CC model)	
Minimum Illumination:	1.99 Lux @ F1.2, 50 IRE	2.15 Lux @ F1.2, 50 IRE
White Balance:	Manual / Full Auto / Push-to-Set (CC and CT models only)	
Serial I/O:	RS-232C Controllable (for DSP)	
Electronic Shutter:	1/60 (1/50) ~ 1/10,000 (8 steps)	
Electronic Iris:	1/60 (1/50) ~ 1/10,000	
DSP:	10-Bit, User Programmable	
Video Output:	Composite and Y/C (select models)	
Video Output Level:	1.0Vp-p 75 Ω	
Y/C Output Level:	0.7Vp-p 75 Ω	
Lens Mount:	N/A	
Input Voltage:	+ 12Vdc ± 10%	
Power Consumption:	2.64W; 220mA	
Operating Temperature:	-10° ~ 45°C (14° ~ 113°F)	
Dimensions:	51 (W) x 51 (H) x 55.5 (D) mm (2.04" x 2.04" x 2.22") 10mm Ø (0.39" Ø)	
Weight:	Cased Camera CCU: 190g (6.7 oz)	

Board

Models	STC-R640	STC-R645
Image Sensor:	1/4" CCD (ICX228AK)	1/4" CCD (ICX229AK)
Horizontal Resolution:	480 TV Lines	
Signal Format:	NTSC	PAL
Scanning Method:	2:1 Interlace	
Frame Rate:	30 fps	
Effective Picture Element:	768 (H) x 494 (V)	752 (H) x 582 (V)
Horizontal Frequency:	15.734 kHz	15.625 kHz
Vertical Frequency:	59.94 Hz	50.00 Hz
Gain:	AGC / Manual	
S/N Ratio:	> 48dB (AGC:Off)	
Gamma:	0.45 (default), DSP Adjustable (32 steps)	
Sync:	Internal/External VS	
Minimum Illumination:	1.99 Lux @ F1.2, 50 IRE	2.15 Lux @ F1.2, 50 IRE
White Balance:	Manual / Full Auto / Push-to-Set	
Serial I/O:	RS-232C Controllable (for DSP)	
Electronic Shutter:	1/60 (1/50) ~ 1/10,000 (8 steps)	
Electronic Iris:	1/60 (1/50) ~ 1/10,000	
DSP:	10-Bit, User Programmable	
Video Output:	Composite and Y/C	
Video Output Level:	1.0Vp-p 75 Ω	
Y/C Output Level:	0.7Vp-p 75 Ω	
Lens Mount:	N/A	
Input Voltage:	+ 12Vdc ± 10%	
Power Consumption:	2.64W; 220mA	
Operating Temperature:	-10° ~ 45°C (14° ~ 113°F)	
Dimensions:	45 (W) x 45 (H) x 14 (D) mm (1.77" x 1.77" x 0.55") 8 mm Ø (0.31" Ø)	
Weight:	Board Camera CCU: 45g (1.58oz)	