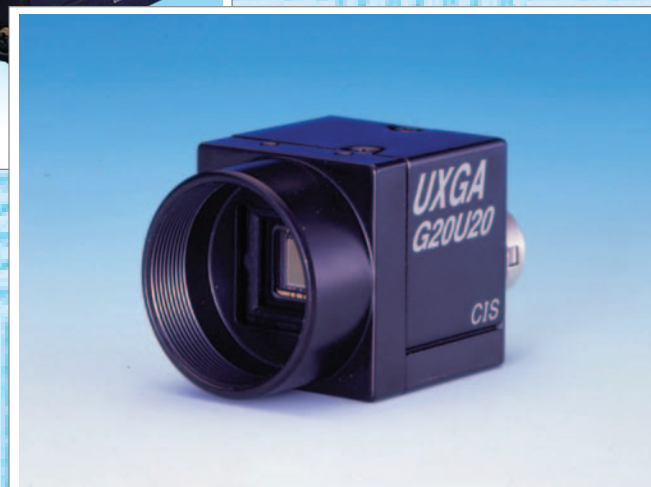


Camera and Imaging Systems



CIS corporation

Progressive Scan Color Camera (Camera Link) series



FEATURES

- 1 Camera Link Output
- 2 Electronic Shutter
- 3 Gain Setting
- 4 Random Trigger
- 5 Remote Control(Camera Link)



TYPE

VCC-8850CL 2.00million pixels **UXGA**

- 1 1/1.8"CCD 2.00million pixels Progressive Scan
- 2 Frame rate 12 f/s

VCC-8750CL 1.45million pixels **SXGA**

- 1 1/2"CCD 1.45million pixels Progressive Scan
- 2 Frame rate 15 f/s

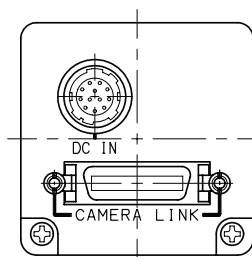
VCC-8550CL 800K pixels **XGA**

- 1 1/3"CCD 800K pixels Progressive Scan
- 2 Frame rate 30 f/s

VCC-8350CL 330K pixels **VGA**

- 1 1/2"CCD 330K pixels Progressive Scan
- 2 Frame rate 60 f/s

REAR PANEL



12Pin Assignment

Pin No.	Internal Sync mode
1	GND
2	DC+12V IN
3	N, C
4	N, C
5	N, C
6	N, C
7	N, C
8	N, C
9	N, C
10	N, C
11	N, C
12	N, C

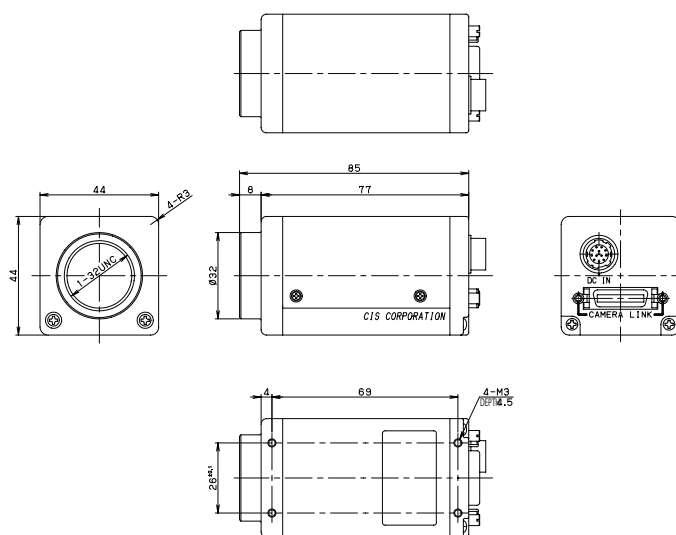
Camera Link

Pin No.	IN/OUT signal	Pin No.	IN/OUT signal
1	GND	14	GND
2	X0-	15	X0+
3	X1-	16	X1+
4	X2-	17	X2+
5	Xclk-	18	Xclk+
6	X3-	19	X3+
7	SerTFC+	20	SerTFC-
8	SerTFC-	21	SerTFC+
9	CC1- (TRIG IN)	22	CC1+ (TRIG IN)
10	CC2+ (HD IN)	23	CC2- (HD IN)
11	CC3- (VD IN)	24	CC3+ (VD IN)
12	CC4+	25	CC4-
13	GND	26	GND

SPECIFICATIONS

	VCC-8850CL	VCC-8750CL	VCC-8550CL	VCC-8350CL	Remarks
Image Format	UXGA	SXGA	XGA	VGA	
Power Consumption	4.3W max	4.0W max	4.0W max	5.0W max.	
Power Supply	DC 12V				
Pick Up.	Interline Progressive CCD				
Image Device.	1/1.8inch CCD	1/2 inch CCD	1/3 inch CCD	1/2 inch CCD	
Effective Pixels	1628(H) × 1236(V)	1392(H) × 1040(V)	1034(H) × 779(V)	659(H) × 494(V)	
Pixels in Video Output	1620(H) × 1220(V)	1360(H) × 1024(V)	1024(H) × 768(V)	648(H) × 492(V)	
Horizontal Scanning Frequency	15.625KHz	16.759KHz	23.622KHz	31.468KHz	
Pixel Frequency	30.000MHz	30.000MHz	30.000MHz	24.545MHz	
Video Output Signal	Camera Link				
Sensitivity	2000Lux, more than F5.6				706 nit(3200K)
S/N Ratio	more than 48dB (0dB / γOFF / Aperture OFF)				RGB signal
Color Temp.	3200 ± 50°K				
Gamma Adjustment	OFF(1.0)				
Gain	0dB, 6dB, MANUAL(0 ~ 12dB)				
Shutter	1/12, 1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000	1/15, 1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000	1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000	1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/12000	
Color Balance	3200°K, 5600°K, MANUAL (2600°K ~ 9000°K)				
Trigger System	Random Trigger system V-SYNC : RESET TYPE				
Lens Mount	C-mount				
Remote Control	Camera Link				
Operating Temperature	0°C ~ +40°C (spec.guaranteed) Humidity 20 ~ 80% -5°C ~ +45°C (operation.guaranteed) Humidity 20 ~ 80%				with no dew
Weight	approx. 175g				
Dimensions	44(W) × 44(H) × 77(L)				except the protruding part

DIMENSIONS



High Resolution Progressive Scan Color Camera series



FEATURES

- 1 Analog RGB Output
- 2 Electronic Shutter
- 3 Gain Setting
- 4 External Sync (HD/VD), External Trigger
- 5 Random Trigger
- 6 Remote Control

TYPE

VCC-8850A 2.00million pixels **UXGA**

- 1 1/1.8"CCD 2.00million pixels Progressive Scan
- 2 Frame rate 12 f/s

VCC-8750A 1.45million pixels **SXGA**

- 1 1/2"CCD 1.45million pixels Progressive Scan
- 2 Frame rate 15 f/s

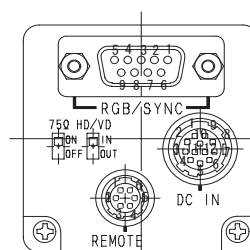
VCC-8550A 800K pixels **XGA**

- 1 1/3"CCD 800K pixels Progressive Scan
- 2 Frame rate 30 f/s

VCC-8350A 330K pixels **VGA**

- 1 1/2"CCD 330K pixels Progressive Scan
- 2 Frame rate 60 f/s

REAR PANEL



9Pin Dsub

PIN NO.	IN/OUT signal
1	GND
2	GND
3	R OUT
4	G OUT
5	B OUT
6	N.C
7	SYNC OUT
8	GND
9	GND

6Pin Assignment

PIN NO.	IN/OUT signal
1	EIA-232C TDX OUT
2	EIA-232C RXD IN
3	GND
4	N.C
5	N.C
6	N.C

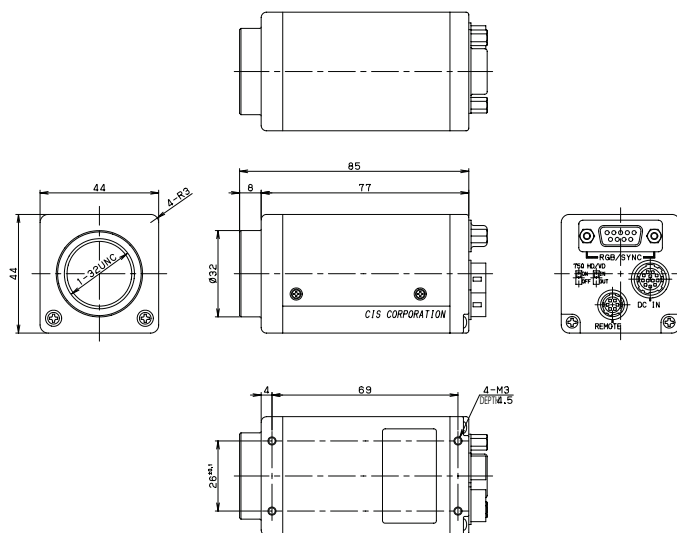
12Pin Assignment

PIN NO.	Internal Sync mode	External Sync mode	External trigger mode
1	GND	GND	GND
2	DC +12V IN	DC +12V IN	DC +12V IN
3	GND	GND	GND
4	N.C	N.C	N.C
5	GND	GND	GND
6	HD OUT	HD IN	HD IN or HD OUT
7	VD OUT	VD IN	Don't Connect
8	GND	GND	GND
9	N.C	N.C	N.C
10	WEN OUT	WEN OUT	WEN OUT
11	Don't Connect	Don't Connect	Trigger IN
12	GND	GND	GND

SPECIFICATIONS

	VCC-8850A	VCC-8750A	VCC-8550A	VCC-8350A	Remarks
Image Format	UXGA	SXGA	XGA	VGA	
Power Consumption	5.3W max	5.0W max	4.9W max	6.5W max.	
Power Supply	DC 12V				
Pick Up.	Interline Progressive CCD				
Image Device.	1/1.8 inch CCD	1/2 inch CCD	1/3 inch CCD	1/2 inch CCD	
Effective Pixels	1628(H) × 1236(V)	1392(H) × 1040(V)	1034(H) × 779(V)	659(H) × 494(V)	
Pixels in Video Output	1620(H) × 1220(V)	1360(H) × 1024(V)	1024(H) × 758(V)	648(H) × 492(V)	
Horizontal Scanning Frequency	15.625KHz	16.759KHz	23.622KHz	31.468KHz	
Pixel Frequency	30.000MHz	30.000MHz	30.000MHz	24.545MHz	
Video Output Signal	Analog RGB 1/12s	Analog RGB 1/15s	Analog RGB 1/30s	Analog RGB 1/60s	1Vp-p
Sensitivity	2000Lux, more than F5.6				706 nit(3200K)
S/N Ratio	more than 48dB (0dB / γOFF / Aperture OFF)				RGB signal
Color Temp.	3200 ± 50°K				
Gamma Adjustment	OFF (1.0)				
Gain	0dB, 6dB, MANUAL (0 ~ 12dB)				
Shutter	1/12, 1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000	1/15, 1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000	1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000	1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/12000	
Color Balance	3200°K, 5600°K, MANUAL (2600°K ~ 9000°K)				
External Sync. System	External / Internal Sync changeable Internal Sync System output : HD / VD / WEN (Effective frame signal) External Sync system : HD / VD Random Trigger system : V-SYNC RESET TYPE				
Lens Mount	C-mount				
Remote Control	RS232C				
Operating Temperature	0°C ~ +40°C (spec. guaranteed) Humidity 20 ~ 80% -5°C ~ +45°C (operation. guaranteed) Humidity 20 ~ 80%				with no dew
Weight	approx. 175g				
Dimensions	44(W) × 44(H) × 77(L)				except the protruding part

DIMENSIONS



High Resolution Progressive Scan Color Camera series



TYPE

VCC-8850V 2.00million pixels UXGA

- 1 1/1.8"CCD 2.00million pixels Progressive Scan
- 2 Frame rate 12 f/s

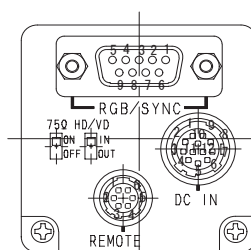
VCC-8750V 1.45million pixels SXGA

- 1 1/2"CCD 1.45million pixels Progressive Scan
- 2 Frame rate 15 f/s

FEATURES

- 1 Analog RGB Output
- 2 Electronic Shutter
- 3 Gamma Adjustment (0.45/1.0)
- 4 External Sync (HD/VD), External Trigger
- 5 Random Trigger
- 6 Remote Control

REAR PANEL



9Pin Dsub

PIN NO.	IN/OUT signal
1	GND
2	GND
3	R OUT
4	G OUT
5	B OUT
6	N.C
7	SYNC OUT
8	GND
9	GND

6Pin Assignment

PIN NO.	IN/OUT signal
1	EIA-232C TDX OUT
2	EIA-232C RXD IN
3	GND
4	N.C
5	485
6	-485

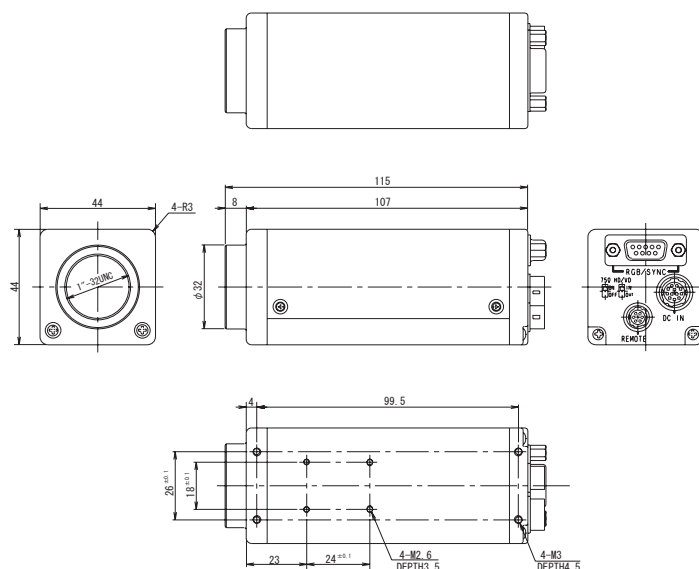
12Pin Assignment

PIN NO.	Internal Sync mode	External Sync mode	External trigger mode
1	GND	GND	GND
2	DC +12V IN	DC +12V IN	DC +12V IN
3	GND	GND	GND
4	N.C	N.C	N.C
5	GND	GND	GND
6	HD OUT	HD IN	HD IN or HD OUT
7	VD OUT	VD IN	Don't Connect
8	GND	GND	GND
9	N.C	N.C	N.C
10	WEN OUT	WEN OUT	WEN OUT
11	Don't Connect	Don't Connect	Trigger IN
12	GND	GND	GND

SPECIFICATIONS

	VCC-8850V	VCC-8750V	Remarks
Image Format	UXGA	SXGA	
Power Consumption	6.0W max	5.5W max	
Power Supply	DC 12V		
Pick Up.	Interline Progressive CCD		
Image Device.	1/1.8inch CCD	1/2 inch CCD	
Effective Pixels	1628(H) × 1236(V)	1392(H) × 1040(V)	
Pixels in Video Output	1620(H) × 1220(V)	1360(H) × 1024(V)	
Horizontal Scanning Frequency	15.625KHz	16.759KHz	
Pixel Frequency	30.000MHz	30.000MHz	
Video Output Signal	Analog RGB 1/12s	Analog RGB 1/15s	1Vp-p
Sensitivity	2000Lux , more than F5.6		706 nit(3200K)
S/N Ratio	more than 48dB (0dB / yOFF / Aperture OFF)		RGB signal
Color Temp.	3200 ± 50°K		
Gamma Adjustment	ON(0.45) / OFF(1.0)		
Gain	0dB, 6dB, MANUAL (0 ~ 12dB)		
Shutter	1/12, 1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000	1/15, 1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000	
Color Balance	3200°K, 5600°K, MANUAL(2600°K ~ 9000°K)		
External Sync. System	External / Internal Sync changeable Internal Sync System output : HD / VD / WEN (Effective frame signal) External Sync system : HD / VD Random Trigger system : V-SYNC RESET TYPE		
Lens Mount	C-mount		
Remote Control	RS232C / RS485		
Operating Temperature	0°C ~ +40°C (spec. guaranteed) Humidity 20 ~ 80%		with no dew
Weight	approx. 240g		
Dimensions	44(W) × 44(H) × 107(L)		except the protruding part

DIMENSIONS



Progressive Scan Camera (Camera Link) series



FEATURES

- 1 Camera Link Output
- 2 High Frame rate Scan
- 3 Electronic Shutter
- 4 External Trigger
- 5 Gain Setting



TYPE

VCC-F30U25CL 2.00million pixels UXGA

- 1 1/1.8"CCD 2.00million pixels Progressive Scan
- 2 Frame rate 30 f/s
- 3 Digital RGB Output

VCC-G30U21CL 2.00million pixels UXGA

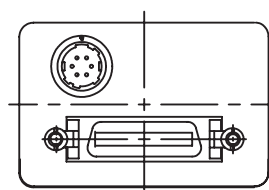
- 1 1/1.8"CCD 2.00million pixels Progressive Scan
- 2 Frame rate 30 f/s
- 3 Digital B/W Output

High Frame rate Scan

It is possible to output a picture in a screen perpendicular direction at high speed than the read-out period usual by reading only some area, such as centers 1/2.



REAR PANEL



6Pin Assignment

Pin No	IN/OUT Signal
1	DC+12V IN
2	DC+12V IN
3	RS232C Rx/D
4	RS232C Rx/D
5	GND
6	GND

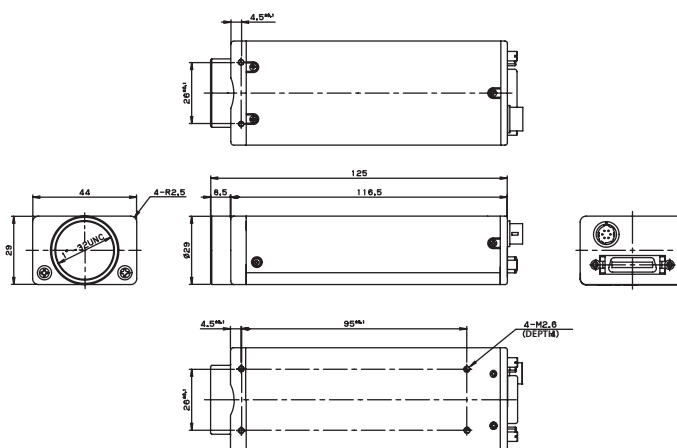
Camera Link

Pin No	IN/OUT Signal	Pin No	IN/OUT Signal
1	GND	14	GND
2	X0-	15	X0+
3	X1-	16	X1+
4	X2-	17	X2+
5	Xclk-	18	Xclk+
6	X3-	19	X3+
7	SerTC+	20	SerTC-
8	SerTFG-	21	SerTFG+
9	CC1-(TRIG IN)	22	CC1+(TRIG IN)
10	CC2+	23	CC2-
11	CC3-	24	CC3+
12	CC4+	25	CC4-
13	GND	26	GND

SPECIFICATIONS

	VCC-F30U25CL	VCC-G30U21CL	Remarks
Image Format	UXGA		
Power Consumption	5.5W max	4.5W max	
Power Supply	DC 12V		
Pick Up	Interline Progressive CCD		
Image Device	1/1.8inch CCD		SONY ICX274AQ
Effective Pixels	1688(H) × 1248(V)		
Pixels in Video Output	1620(H) × 1220(V)		
Horizontal Scanning Frequency	37.594KHz		
Pixel Frequency	72.000MHz		
Video Output Signal	Camera Link		
Minimum Illumination	approx. 40.0 Lux	approx. 4.0 Lux	
Sensitivity	2000Lux		706 nit(3200K)
S/N Ratio	more than F5.6	more than F11	RGB signal
Color Temp.	3200 ± 50°K		
Gamma Adjustment	OFF(1.0)		
Gain	0dB, 6dB, MANUAL(0 ~ 12dB)		
Shutter	OFF, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000		
Color Balance	3200°K, 5600°K, MANUAL (2600°K ~ 9000°K)		
Trigger System	Random Trigger system V-SYNC : RESET TYPE		
Lens Mount	C-mount		
Remote Control	Camera Link		
Operating Temperature	0°C ~ +40°C (spec.guaranteed) Humidity 20 ~ 80%		with no dew
	-5°C ~ +45°C (operation.guaranteed) Humidity 20 ~ 80%		
Weight	approx. 180g		
Dimensions	44(W) × 29(H) × 116.5(L)		except the protruding part

DIMENSIONS



Channel Link Output Camera series



TYPE

VCC-F32U25CL 2.00million pixels UXGA (color)

- 1 1/1.8"CCD 2.00million pixels Progressive Scan
- 2 Frame rate 30f/s
- 3 RGB Output

VCC-F32U29CL 2.00million pixels UXGA (color)

- 1 1/1.8"CCD 2.00million pixels Progressive Scan
- 2 Frame rate 30f/s
- 3 RAW Data Output

VCC-G32U21CL 2.00million pixels UXGA (B/W)

- 1 1/1.8"CCD 2.00million pixels Progressive Scan
- 2 Frame rate 30f/s
- 3 Analog 10bit Output (Option)

FEATURES

- 1 Small 26 pin connector
- 2 Connection with the Frame Grabber board dealing with a camera link is possible by the exclusive cable (Option).
- 3 High Frame rate Scan
- 4 External Trigger
- 5 Remote Control
- 6 44(W)×29(H)×71.5(L) approx.140g

REAR PANEL

12Pin Assignment(DC IN)
HR10A-10R-12PB

PIN No	IN/OUT Signal
1	GND
2	DC+12V IN
3	GND
4	NC
5	GND
6	HD IN/OUT(RXD)
7	VD IN/OUT(TXD)
8	GND
9	NC
10	WEN OUT
11	TRG IN
12	GND

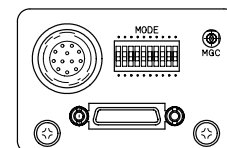
Rear panel DIP switch mode

NO	OFF	ON	Name	Mode
1	•		E0	Electronic Shutter
2	•		E1	
3	•		E2	
4	•		MODE 0	Trigger mode
5	•		MODE 1	
6	•		SCAN	High Frame rate Scan
7	•		GAMMA	Option
8	•		----	Non
9	•		8bit/10bit	8bit/10bit change
10	•		IN/OUT	HD/VD Input&Output change

• It sets up at the time of shipment.

Small 26Pin Assignment

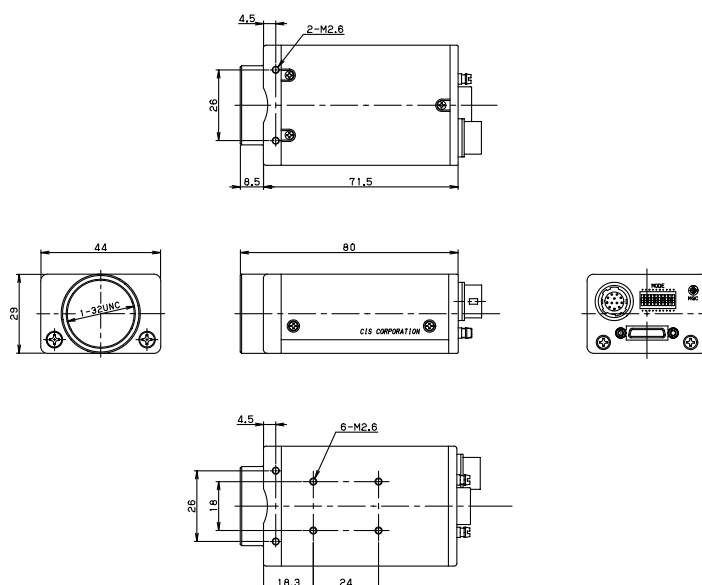
PIN No	IN/OUT signal	PIN No	IN/OUT signal
1	GND	14	GND
2	X0 -	15	X0 +
3	X1 -	16	X1 +
4	X2 -	17	X2 +
5	Xclk -	18	Xclk +
6	X3 -	19	X3 +
7	SerTC +	20	SerTC -
8	SerTFG +	21	SerTFG -
9	CC1 -(TRIG IN)	22	CC1 +(TRIG IN)
10	CC2 +	23	CC2 -
11	CC3 -	24	CC3 +
12	CC4 +	25	CC4 -
13	GND	26	GND



SPECIFICATIONS

	VCC-F32U25CL	VCC-F32U29CL	VCC-G32U21CL	Remarks
Image Format	UXGA			
Power Consumption	4.5W max		3.5W max	
Power Supply	DC 12V			
Pick Up	Interline Progressive CCD			
Image Device	1/1.8inch CCD			SONY ICX274AQ
Effective Pixels	1688(H) × 1248(V)			
Pixels in Video Output	1620(H) × 1220(V)			
Horizontal Scanning Frequency	37.500KHz			
Pixel Frequency	72.000MHz			
Video Output Signal	Channel Link			
Minimum Illumination	approx. 40.0 Lux		approx. 4.0 Lux	
Sensitivity	2000Lux			706 nit(3200K)
Gamma Adjustment	OFF(1.0)			
Gain	0dB, 6dB, MANUAL(0 ~ 12dB)			
Shutter	OFF, 1/60, 1/90, 1/120, 1/500, 1/1000, 1/5000, 1/10000			
Trigger System	Random Trigger system V-SYNC : RESET TYPE			
Lens Mount	C-mount			
Remote Control	Channel Link			
Operating Temperature	0°C ~ +40°C (spec.guaranteed) Humidity 20 ~ 80%			with no dew
	-5°C ~ +50°C (operation.guaranteed) Humidity 20 ~ 80%			
Weight	approx. 140g			
Dimensions	44(W) × 29(H) × 71.5(L)			except the protruding part

DIMENSIONS



Small Channel Link Output B/W Camera G21 series



TYPE

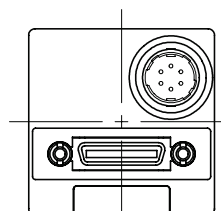
VCC-G21V31CL 330K pixels VGA

- 1 1/3" CCD 330K pixels Progressive Scan
- 2 Non-Interlace 60f/s (Frame)
- 3 Interlace 120f/s (Field)
- 4 High Frame Scan

FEATURES

- 1 Small 26 pin connector
- 2 Connection with the Frame Grabber board dealing with a camera link is possible by the exclusive cable (Option).
- 3 Remote Control
- 4 29(W)×29(H)×29(L) approx.50g

REAR PANEL



6Pin Assignment(DC IN)
HR10A-7R-6PB

PIN No	IN/OUT signal
1	DC +12V IN
2	N.C.
3	RS-232C RXD
4	RS-232C TXD
5	N.C.
6	GND

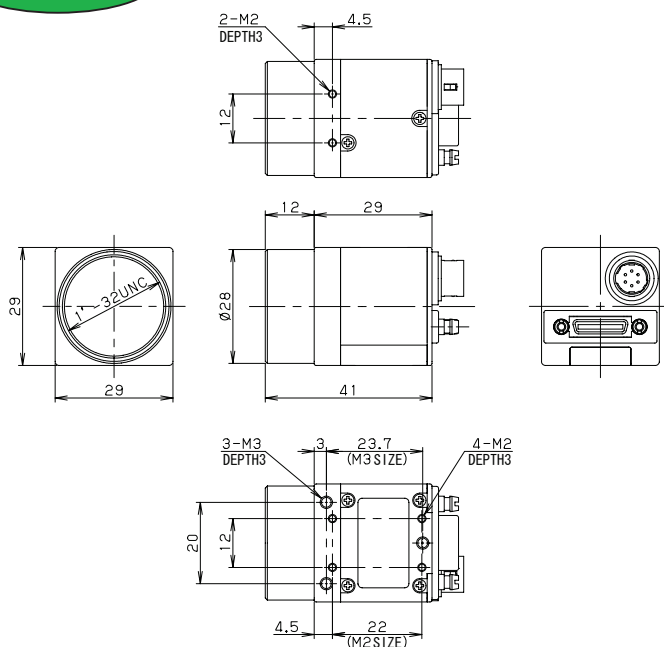
Small 26Pin Assignment

PIN No	IN/OUT signal	PIN No	IN/OUT signal
1	GND	14	GND
2	X0 -	15	X0 +
3	X1 -	16	X1 +
4	X2 -	17	X2 +
5	Xclk -	18	Xclk +
6	X3 -	19	X3 +
7	SerTC +	20	SerTC -
8	SerTFG +	21	SerTFG -
9	CC1 -(TRIG IN)	22	CC1 +(TRIG IN)
10	CC2 +	23	CC2 -
11	CC3 -	24	CC3 +
12	CC4 +	25	CC4 -
13	GND	26	GND

SPECIFICATIONS

	VCC-G21V31CL	Remarks
Image Format	VGA	
Power Consumption	2.0W max	
Power Supply	DC 12V	
Pick Up.	Interline Progressive CCD	
Image Device.	1/3inch CCD	
Effective Pixels	659(H) × 499(V)	
Pixels in Video Output	648(H) × 494(V)	
Horizontal Scanning Frequency	31.468KHz	
Pixel Frequency	24.545MHz	
Video Output Signal	Channel Link	
Minimum Illumination	approx. 1.0 Lux	
Sensitivity	2000Lux, more than F22	706 nit(3200K)
Color Temp.	3200 ± 50°K	
Gain	0dB, MANUAL(0 ~ 12dB)	
Shutter	OFF, 1/120, 1/200, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/20000	
Random Trigger Shutter	1/4 ~ 1/20000	
High Frame rate	60f/s, 90f/s, 120f/s, 180f/s	
Trigger System	Random Trigger system	
Lens Mount	C-mount	
Remote Control	Channel Link	
Operating Temperature	0°C ~ +40°C (spec.guaranteed) Humidity 20 ~ 80% -5°C ~ +45°C (operation.guaranteed) Humidity 20 ~ 80%	with no dew
Weight	approx. 50g	
Dimensions	29(W) × 29(H) × 29(L)	except the protruding part

DIMENSIONS



Small Channel Link Output B/W Camera G22 series



TYPE

VCC-G22V31CL 330K pixels VGA

- 1/3" CCD 330K pixels Progressive Scan
- Frame rate 120f/s

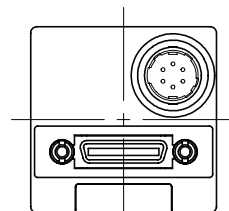
VCC-G22S21CL 1.45million pixels SXGA

- 1/2" CCD 1.45million pixels Progressive Scan
- Frame rate 25f/s

FEATURES

- Pixel Frequency 49MHz
- Small 26 pin connector
- Connection with the Frame Grabber board dealing with a camera link is possible by the exclusive cable (Option).
- Remote Control
- 29(W)×29(H)×29(L) approx.50g

REAR PANEL



6Pin Assignment(DC IN)
HR10A-7R-6PB

PIN No	IN/OUT signal
1	DC +12V IN
2	N.C.
3	RS-232C RXD
4	RS-232C TXD
5	N.C.
6	GND

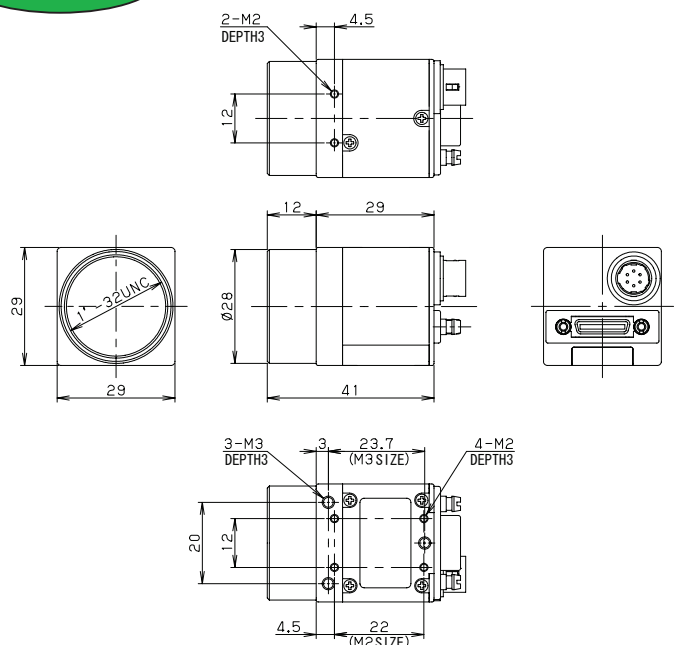
Small 26Pin Assignment

PIN No	IN/OUT signal	PIN No	IN/OUT signal
1	GND	14	GND
2	X0 -	15	X0 +
3	X1 -	16	X1 +
4	X2 -	17	X2 +
5	Xclk -	18	Xclk +
6	X3 -	19	X3 +
7	SerTC +	20	SerTC -
8	SerTFG +	21	SerTFG -
9	CC1 -(TRIG IN)	22	CC1 +(TRIG IN)
10	CC2 +	23	CC2 -
11	CC3 -	24	CC3 +
12	CC4 +	25	CC4 -
13	GND	26	GND

SPECIFICATIONS

	VCC-G22V31CL	VCC-G22S21CL	Remarks
Image Format	VGA	SXGA	
Power Consumption	2.0W max	-----	
Power Supply	DC 12V		
Pick Up.	Interline Progressive CCD		
Image Device.	1/3 inch CCD	1/2 inch CCD	
Effective Pixels	659(H) × 494(V)	1392(H) × 1040(V)	
Pixels in Video Output	648(H) × 494(V)	1360(H) × 1040(V)	
Horizontal Scanning Frequency	62.936KHz	27.425KHz	
Pixel Frequency	49.090MHz		
Video Output Signal	Channel Link		
Minimum Illumination	approx. 1.0 Lux	approx. 2.0 Lux	
Sensitivity	2000Lux		F1.4 Gain max
	more than F22	more than F16	
Color Temp.	3200 ± 50°K		
Gain	0dB, MANUAL(0 ~ 12dB)		
Shutter	OFF, 1/120, 1/200, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/20000	OFF, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10000	
Random Trigger Shutter	1/4 ~ 1/20000	1/4 ~ 1/10000	
Trigger System	Random Trigger system		
Lens Mount	C-mount		
Remote Control	Channel Link		
Operating Temperature	0°C ~ +40°C (spec.guaranteed) Humidity 20 ~ 80%		with no dew
	-5°C ~ +50°C (operation.guaranteed) Humidity 20 ~ 80%		
Weight	approx. 50g		
Dimensions	29(W) × 29(H) × 29(L)		except the protruding part

DIMENSIONS



Small Progressive Scan B/W Camera series



FEATURES

- 1 Electronic Shutter
- 2 Random Trigger
- 3 External Sync (HD/VD), External Trigger
- 4 High Frame rate Scan
- 5 Analog VS Output
- 6 29(W) × 29(H) × 29(L) approx. 44g

TYPE

VCC-G20U20 2.00million pixels UXGA

- 1 1/1.8"CCD 2.00million pixels Progressive Scan
- 2 Frame rate 15 f/s

VCC-G20S20 1.45million pixels SXGA

- 1 1/2"CCD 1.45million pixels Progressive Scan
- 2 Frame rate 15 f/s

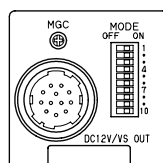
VCC-G20X30 800K pixels XGA

- 1 1/3"CCD 800K pixels Progressive Scan
- 2 Frame rate 30f/s

VCC-G20V30 330K pixels VGA

- 1 1/3"CCD 330K pixels Progressive Scan
- 2 Frame rate 60f/s, 30f/s
- 3 2 : 1 Interlace

REAR PANEL



12Pin Assignment

PIN No.	Internal Sync mode	External Sync mode	External trigger mode
1	GND	GND	GND
2	DC +12V	DC +12V	DC +12V
3	GND	GND	GND
4	VIDEO OUT	VIDEO OUT	VIDEO OUT
5	GND	GND	GND
6	HD OUT	HD IN	HD IN
7	VD OUT	VD IN	(VD IN)
8	GND	GND	GND
9	NC	NC	NC
10	WEN OUT	WEN OUT	WEN OUT
11	(TRIGGER IN)	(TRIGGER IN)	TRIGGER IN
12	GND	GND	GND

() signal is invalid.

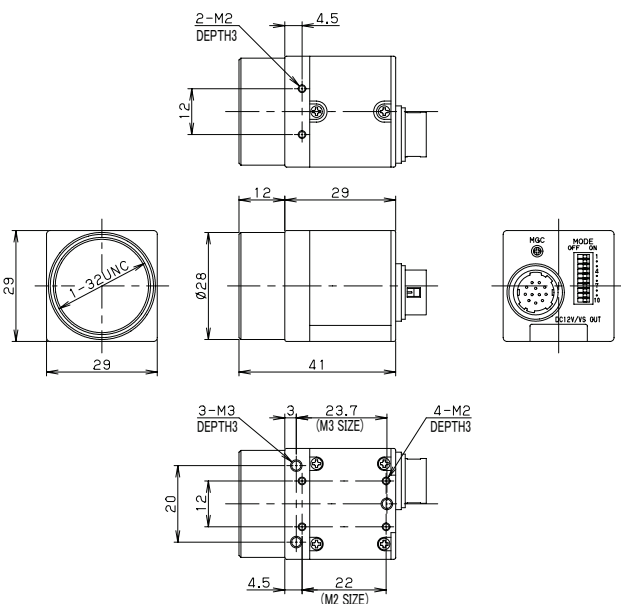
Rear panel switch mode

SW	VCC-G20V30	VCC-G20X30	VCC-G20S20	VCC-G20U20	Shipment setup	
1	SW1:OFF SW2:OFF SW3:OFF ~ SW1:ON SW2:ON SW3:ON 8Step shutter Fixed shutter speed setup				OFF	
2	OFF ~ 1/20000 or		OFF ~ 1/10000			
3	OFF ~ 1/10000					
4	SW4:OFF SW5:OFF Standard operation SW4:OFF SW5:ON Random Trigger (Fixed shutter value exposure) SW4:ON SW5:OFF Random Trigger (Trigger pulse width exposure)				Standard operation	
5						
6	SW6:OFF SW7:OFF High Frame rate OFF SW6:OFF SW7:ON High Frame rate 1/2 SW6:ON SW7:OFF High Frame rate 1/4 SW4:ON SW7:ON High Frame rate 1/6				OFF	
7						
8	OFF Non-Interlace ON 2:1 Interlace		BINNING ON/OFF (Perpendicular mixture read-out)		OFF	
9	Pixel frequency change OFF:24M ON:12M		Monitoring Mode ON/OFF		---	OFF
10	HD/VD Input-and-output change OFF:Output ON:Input				Input	

SPECIFICATIONS

	VCC-G20U20	VCC-G20S20	VCC-G20X30	VCC-G20V30	Remarks
Image Format	UXGA	SXGA	XGA	VGA	
Power Consumption	2.2 W Max			2.0 W Max	
Power Supply	DC 12V ±10%				
Pick Up.	Interline Progressive CCD				
Image Device.	1/1.8 inch CCD	1/2 inch CCD	1/3 inch CCD		
Effective Pixels	1628(H) ×1236(V)	1392(H) × 1040(V)	1034(H) × 779(V)	659(H) × 494(V)	
Pixels in Video Output	1620(H) × 1220(V)	1360(H) × 1040(V)	1024(H) × 772(V)	648(H) × 494(V)	
Horizontal Scanning Frequency	18.75 KHz	16.00 KHz	23.622 KHz	31.469 KHz	15.734 KHz
Pixel frequency	36.000 MHz	28.636 MHz	30.000 MHz	24.545 MHz	12.272 MHz
Video Output Signal	1 Vpp Analog Composit Signal				75Ω terminus
Minimum Illumination	approx. 1.51 Lux		approx. 1.01 Lux		approx. 0.51 Lux
Sensitivity	400 Lux				Gain 0dB
	more than F8		more than F5.6		more than F8
S/N ratio	54 dB		56 dB		Gain 0dB
Color Temp.	3200 ± 50°K				
Gain	0dB, MANUAL (0dB ~ 12dB)				
Shutter	OFF, 1/120, 1/300, 1/600, 1/1250, 1/2500, 5000, 1/10000	OFF, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000	OFF, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10000	OFF, 1/200, 1/500, 1/1000, 1/2000, 1/4000, 1/8000	OFF, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000
Random Trigger Shutter	1/4~ 1/10000	1/4 ~ 1/10000	1/4 ~ 1/10000	1/4 ~ 1/20000	1/4 ~ 1/10000
High Frame rate	30f/s, 60f/s, 90f/s	30f/s, 60f/s, 90f/s	60f/s, 120f/s, 180f/s	120f/s, 240f/s, 360f/s	60f/s, 120f/s, 180f/s
Sync. System	External / Internal Sync manual change External Sync system : VS, Sync, HD / VD Random Trigger system : V Sync Reset				
Other Function	Binning	Binning / Monitoring		2 : 1 Interlace	
Lens Mount	C-mount				
Operating Temperature	0°C ~ +40°C (spec.guaranteed) Humidity 20 ~ 80% -5°C ~ +45°C (operation.guaranteed) Humidity 20 ~ 80%				with no dew
Weight	approx. 44g				
Dimensions	29(W)×29(H)×29(L)				except the protruding part

DIMENSIONS



Small Non-TV-format B/W Camera series



TYPE

VCC-G20V30X 330K pixels VGA

- 1 1/3"CCD 330K pixels Progressive Scan
- 2 29(W)×29(H)×29(L) approx.44g

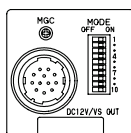
VCC-G25V30 330K pixels VGA

- 1 1/3"CCD 330K pixels Progressive Scan
- 2 29(W)×29(H)×67(L) approx.75g

FEATURES

- 1 Frame rate
30f/s (1N MODE), 60f/s (1I MODE)
- 2 External Sync (HD/VD), External Trigger
- 3 Restart/Reset Trigger

REAR PANEL



12Pin Assignment

PIN No.	IN/OUT signal
1	GND
2	DC +12V
3	GND
4	VIDEO OUT
5	GND
6	HD IN/OUT
7	VD IN/OUT
8	GND
9	TRIG IN
10	NC
11	NC
12	GND

Rear panel DIP switch mode

NO	OFF	ON	Name	Mode
1	•		E2	Electronic Shutter
2	•		E1	
3	•		E0	
4	•		INTERLACE	1N_MODE/1I_MODE
5	•		MODE 2	FUNCTION 3bit NORMAL_MODE / R.R_MODE / TRIGGER_MODE
6	•		MODE 1	
7	•		MODE 0	
8	•		GAIN	FIX 0dB / Manual -3~-15dB
9	•		-----	non
10	•		IN/OUT	HD/VD Input&Output

•It sets up at the time of shipment.

Functional setup

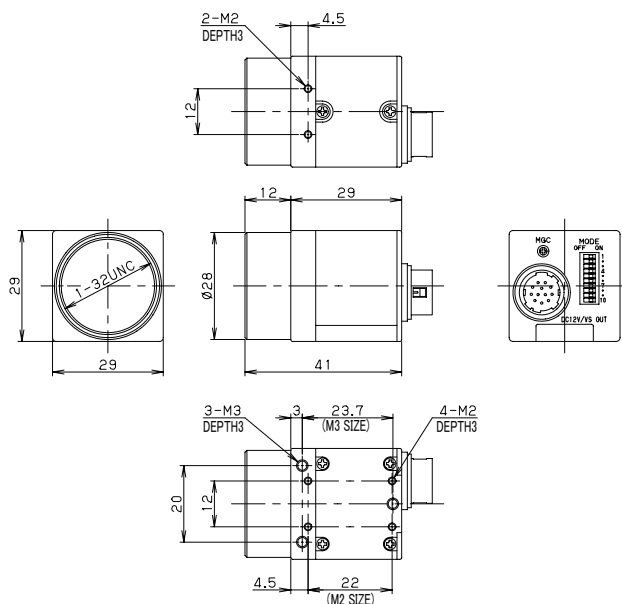
Function	Normal Mode	Restrat-Reset Mode	Tigger Mode (Sync Reset Type)	Tigger Mode (Sync Reset Type)
Fixed Switch Shutter	○	×	○	○
Pulse Width Shutter	×	×	○	○
2:1 Interlaced Scan	○	○	○*1	○*1
External HD/VD Input	○ HD/VD	○ HD/VD	○ HD/VD	○ HD/VD
Internal HD/VD Output	○	×	○	×

*1: At the time of trigger shutter operation, only Odd Field is possible for read-out.

SPECIFICATIONS

	VCC-G20V30X	VCC-G25V30	Remarks
Image Format	VGA		
Power Consumption	1.8 W Max		
Power Supply	DC 12V ±10%		
Pick Up.	Interline Progressive CCD		
Image Device.	1/3 inch CCD		
Effective Pixels	659(H) ×494(V)		
Pixels in Video Output	648(H) ×494(V)		
Horizontal Scanning Frequency	15.734 KHz		
Pixel frequency	12.272 MHz		
Video Output Signal	1 Vpp Analog Composit Signal		75Ω terminus
Minimum Illumination	approx. 0.5 Lux		F1.4 Gain max
Sensitivity	400 Lux		Gain 0dB
	more than F8		
S/N ratio	56 dB		Gain 0dB
Color Temp.	3200 ± 50°K		
Gain	0dB, MANUAL (-3dB ~ 15dB)		
Shutter	OFF, 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000		
Random Trigger Shutter	1/4 ~ 1/100000		
Sync. System	External / Internal Sync manual change External Sync system : VS, Sync, HD / VD Random Trigger system : V Sync Reset		
Other Function	Restart/Reset		
Lens Mount	C-mount		
Operating Temperature	0°C ~ +40°C (spec.guaranteed) Humidity 20 ~ 80% -5°C ~ +45°C (operation.guaranteed) Humidity 20 ~ 80%		with no dew
Weight	approx. 44g	approx. 75g	
Dimensions	29(W)×29(H)×29(L)	29(W)×29(H)×67(L)	except the protruding part

DIMENSIONS



Small TV-format B/W Camera series



TYPE

VCC-G20E20 380K pixels EIA

- 1 1/2"CCD 380K pixels Interlace
- 2 Horizontal Resolution 570TV Line
- 3 2 : 1 Interlace / Non-Interlace
- 4 Standard Speed / Double Speed
(60Field / 120Field)
- 5 Restart/Reset

VCC-G20E30 380K pixels EIA

- 1 1/3"CCD 380K pixels Interlace
- 2 Horizontal Resolution 570TV Line
- 3 2 : 1 Interlace / Non-Interlace
- 4 Standard Speed / Double Speed
(60Field / 120Field)
- 5 Restart/Reset

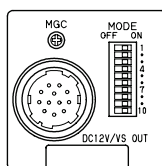
SPECIFICATIONS

	VCC-G20E20		VCC-G20E30		Remarks
Image Format	EIA				
Power Consumption	2.0 W Max				
Power Supply	DC 12V ±10%				
Pick Up.	1/2 Interline IT CCD				
Image Device.	1/2 inch CCD		1/3 inch CCD		
Effective Pixels	768(H) × 494(V)				
Pixels in Video Output	752(H) × 485(V)				
Horizontal Scanning Frequency	31.469 KHz	15.734 KHz	31.469 KHz	15.734 KHz	
Pixel frequency	28.636 MHz	14.318 MHz	28.636 MHz	14.318 MHz	
Video Output Signal	1 Vpp Analog Composit Signal				75Ω terminus
Minimum Illumination	approx. 0.5 Lux				
Sensitivity	400 Lux				F1.4 Gain max
	more than F11				
S/N ratio	56 dB				0dB
Color Temp.	3200 ± 50°K				
Gain	0dB, MANUAL (0dB ~ 12dB)				
Shutter	OFF, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/20000	OFF, 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000	OFF, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/20000	OFF, 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000	
Random Trigger Shutter	1/4 ~ 1/20000	1/4 ~ 1/10000	1/4 ~ 1/20000	1/4 ~ 1/10000	
High Frame rate	120f/s, 240f/s, 360f/s	60f/s, 120f/s, 180f/s	120f/s, 240f/s, 360f/s	60f/s, 120f/s, 180f/s	
Sync. System	External / Internal Sync manual change External Sync system : VS, Sync, HD / VD Random Trigger system : V Sync Reset / NON Sync Reset				
Other Function	2 : 1 Interface				
Lens Mount	C-mount				
Operating Temperature	0°C ~ +40°C (spec. guaranteed) Humidity 20 ~ 80% -5°C ~ +45°C (operation guaranteed) Humidity 20 ~ 80%				with no dew
Weight	approx. 44g				
Dimensions	29(W)×29(H)×29(L)				except the protruding part

FEATURES

- 1 Electronic Shutter
- 2 External Sync (HD/VD), External Trigger
- 3 High Frame rate Scan
- 4 2 : 1 Interlace / Non-Interlace
- 5 Analog VS Output
- 6 29(W) × 29(H) × 29(L) approx.44g

REAR PANEL



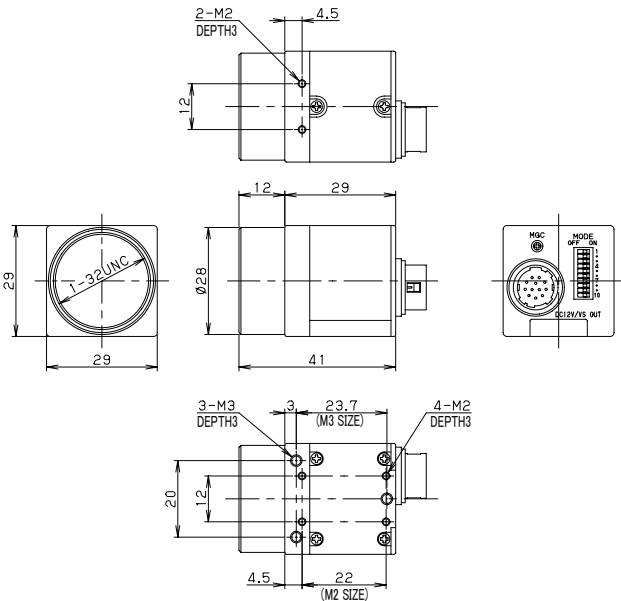
12Pin Assignment

PIN No.	IN/OUT signal
1	GND
2	DC +12V IN
3	GND
4	VIDEO OUT
5	GND
6	HD IN/OUT
7	VD IN/OUT
8	GND
9	NC
10	WEN OUT
11	TRIG IN
12	GND

Rear panel switch mode

SW	VCC-G2E20 / VCC-G2E30	Shipment setup
1	SW1,2,3 OFF OFF OFF ~ ON ON ON 8Step shutter Fixed shutter speed setup	OFF
2	Standard Speed: OFF ~ 1/10000 or	
3	Double Speed: OFF ~ 1/20000	
4	Electric charge Accumulation Mode: OFF Field , ON Frame	OFF
5	SW5:OFF SW6:OFF SW7:OFF Standard Interface SW5:OFF SW6:ON SW7:ON Restart/Reset	OFF
6	SW5:ON SW6:OFF SW7:OFF SW set Trigger(Reset) SW5:ON SW6:OFF SW7:ON SW set Trigger(Non-Reset)	
7	SW5:ON SW6:ON SW7:OFF Pulse set Trigger(Reset) SW5:ON SW6:ON SW7:ON Pulse set Trigger(Non-Reset)	
8	OFF Manual Gain / ON AGC	
9	Pixel frequency change OFF 14.318MHz/ON 28.636MHz	OFF
10	HD/VD Input-and-output change OFF:Output ON:Input	OFF

DIMENSIONS



High Resolution Progressive Scan B/W Camera series



FEATURES

- 1 Analog VS Output
- 2 Electronic Shutter
- 3 Gamma Adjustment (0.45/1.0)
- 4 External Sync (HD/VD), External Trigger
- 5 Random Trigger
- 6 High Frame Rate Scan
(Un-corresponding VCC-880A)

TYPE

VCC-880A 2.00million pixels UXGA

- 1 1/1.8"CCD 2.00million pixels Progressive Scan
- 2 Frame rate 12f/s

VCC-870A 1.45million pixels SXGA

- 1 1/2"CCD 1.45million pixels Progressive Scan
- 2 Frame rate 15 f/s

VCC-850A 800K pixels XGA

- 1 1/3"CCD 800K pixels Progressive Scan
- 2 Frame rate 30f/s

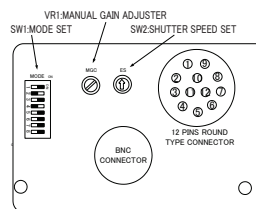
VCC-810 330K pixels VGA

- 1 1/2"CCD 330K pixels Progressive Scan
- 2 Frame rate 60f/s

VCC-810B 330K pixels VGA

- 1 1/2"CCD 330K pixels Progressive Scan
- 2 Frame rate 60f/s
- 3 Head separation type (Standard 2m)
CHU:29(W)×29(H)×29(L)
CCU:44(W)×29(H)×71.5(L)

REAR PANEL



Setting Function

		Standard		Remarks
		OFF	ON	
Gain	SW1-1	0 dB	manual	VR1 : manual
Gamma	SW1-2	OFF (γ=1.0)	ON (γ=0.45)	
VD/HD Input terminus	SW1-3	75-ohm termination	Open	
Trigger Pulse Pole Setting	SW1-4	Negative Edge Trigger	Positive Edge Trigger	

	Standard				Remarks
	SW1-5	SW1-6	SW1-7	SW1-8	
Internal Sync mode	ON	ON	ON	ON	HD / VD OUT
External Sync mode (Normal reset mode)	OFF	ON	ON	ON	HD / VD IN
External Sync mode (Direct reset mode)	ON	OFF	ON	ON	HD / VD IN
Random Trigger mode 1_INT	OFF	OFF	ON	ON	HD / VD / WEN OUT
Random Trigger mode 2_INT	ON	ON	OFF	ON	HD / VD / WEN OUT
Random Trigger mode 1_EXT	OFF	ON	OFF	ON	Trigger / HD IN
Random Trigger mode 2_EXT	ON	OFF	OFF	ON	Trigger / WEN OUT

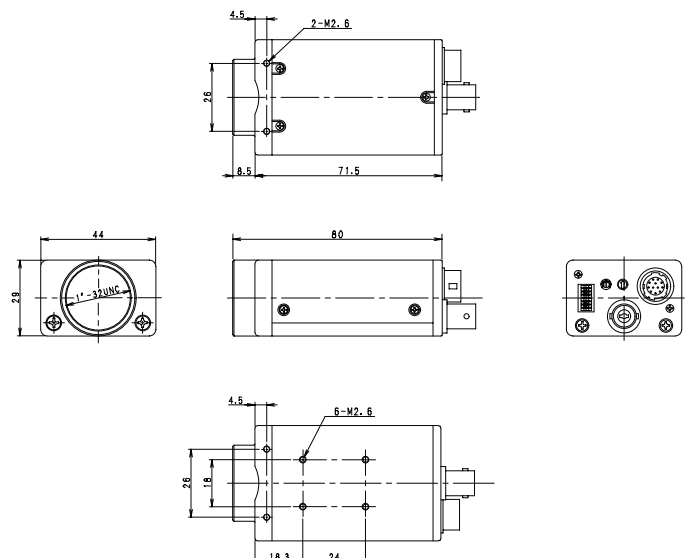
12Pin Assignment

PIN NO.	Internal Sync mode	External Sync mode	External trigger mode
1	GND	GND	GND
2	DC +12V IN	DC +12V IN	DC +12V IN
3	GND	GND	GND
4	VIDEO OUT	VIDEO OUT	VIDEO OUT
5	GND	GND	GND
6	INT. HD OUT	INT. HD IN	INT. / EXT. HD OUT / IN
7	INT. VD OUT	INT. VD IN	INT. / EXT. VD OUT / IN
8	GND	GND	GND
9	NC	NC	NC
10	(WEN OUT)	(WEN OUT)	(WEN OUT)
11	EXT. Trigger IN	EXT. Trigger IN	EXT. Trigger IN
12	GND	GND	GND

SPECIFICATIONS

	VCC-880A	VCC-870A	VCC-850A	VCC-810	VCC-810B	Remarks
Image Format	UXGA	SXGA	XGA	VGA		
Power Consumption	3.7W max					
Power Supply	DC 12V					
Pick Up.	Interline Progressive CCD					
Image Device.	1/1.8 inch CCD	1/2 inch CCD	1/3 inch CCD	1/2 inch CCD		
Effective Pixels	1628(H) × 1236(V)	1392(H) × 1040(V)	1034(H) × 779(V)	659(H) × 494(V)		
Pixels in Video Output	1600(H) × 1200(V)	1378(H) × 1032(V)	1024(H) × 768(V)	648(H) × 493(V)		
Horizontal Scanning Frequency	15.625KHz	15.998KHz	23.622KHz	31.468KHz		
Pixel frequency	30.000MHz	28.636MHz	30.000MHz	24.545MHz		
Video Output Signal	1 Vpp Analog Composit Signal					75Ω terminus
Minimum Illumination	approx. 0.2Lux (MAX GAIN)	approx. 0.1Lux (MAX GAIN)	approx. 0.3Lux (MAX GAIN)	approx. 0.09Lux (MAX GAIN)		Signal level will be 50%
Sensitivity	2000Lux					706nit(3200K)
	more than F16					
S/N ratio	more than 50dB (0dB / γOFF)					VS signal
Color Temp.	3200 ±50°K					
Gain	0dB, MANUAL (0dB ~ 18dB)					
Shutter	OFF(1/12), 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000	OFF(1/15), 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000	OFF(1/30), 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000	OFF, (1/60), 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/12000		
Sync. System	External / Internal Sync manual change External Sync system : VS, Sync, HD / VD Random Trigger system : V Sync Reset					
Lens Mount	C-mount					
Other Function	----	High frame rate Scanning				
Operating Temperature	0°C ~ +40°C (spec.guaranteed) Humidity 20 ~ 80% -5°C ~ +45°C (operation.guaranteed) Humidity 20 ~ 80%					with no dew
Weight	approx. 140g			CCU : approx. 140g CHU : approx. 30g		
Dimensions	44(W) × 29(H) × 71.5(L)			CCU: 44(W) × 29(H) × 71.5(L) CHU: 29(W) × 29(H) × 29(L)		except the protruding part

DIMENSIONS



Interlace B/W Camera series



FEATURES

- 1 Analog Output (EIA / CCIR)
- 2 Electronic Shutter
- 3 Gamma Adjustment (0.45 / 1.0)
- 4 External Sync (HD / VD), External Trigger
- 5 Random Trigger
- 6 Frame / Field Output Selectable

TYPE

VCC-265EIR / VCC-265CIR Double speed Output

- 1 1/2"CCD 380K / 440K pixels EXview HAD CCD*
- 2 Frame rate 60 f/s

VCC-265E / VCC-265C Double speed Output

- 1 1/2"CCD 380K / 440K pixels
- 2 Frame rate 60 f/s

VCC-275EIR / VCC-275CIR

- 1 1/2"CCD 380K / 440K pixels EXview HAD CCD*
- 2 Frame rate 30 f/s

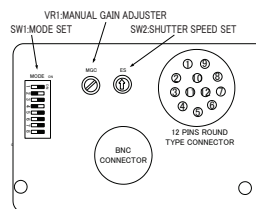
VCC-275E / VCC-275C

- 1 1/2"CCD 380K / 440K pixels
- 2 Frame rate 30 f/s

VCC-277E / VCC-277C

- 1 2/3"CCD 380K / 440K pixels
- 2 Frame rate 30 f/s

REAR PANEL



Setting Function

		Standard		Remarks
		OFF	ON	
Gain	SW1-1	0 dB	manual	VR1 : manual
Gamma	SW1-2	OFF (γ=1.0)	ON (γ=0.45)	
VD/HD Input terminus	SW1-3	75-ohm termination	Open	
Trigger Pulse Pole Setting	SW1-4	Positive Edge Trigger	Negative Edge Trigger	

	Standard				Remarks
	SW1-5	SW1-6	SW1-7	SW1-8	
Internal Sync mode	ON	ON	ON	ON	HD / VD OUT
External Sync mode (Normal reset mode)	OFF	ON	ON	ON	HD / VD IN
External Sync mode (Direct reset mode)	ON	OFF	ON	ON	HD / VD IN
Random Trigger mode 1_INT	OFF	OFF	ON	ON	HD / VD / WEN OUT
Random Trigger mode 2_INT	ON	ON	OFF	ON	HD / VD / WEN OUT
Random Trigger mode 1_EXT	OFF	ON	OFF	ON	Trigger / HD IN
Random Trigger mode 2_EXT	ON	OFF	OFF	ON	Trigger / WEN OUT

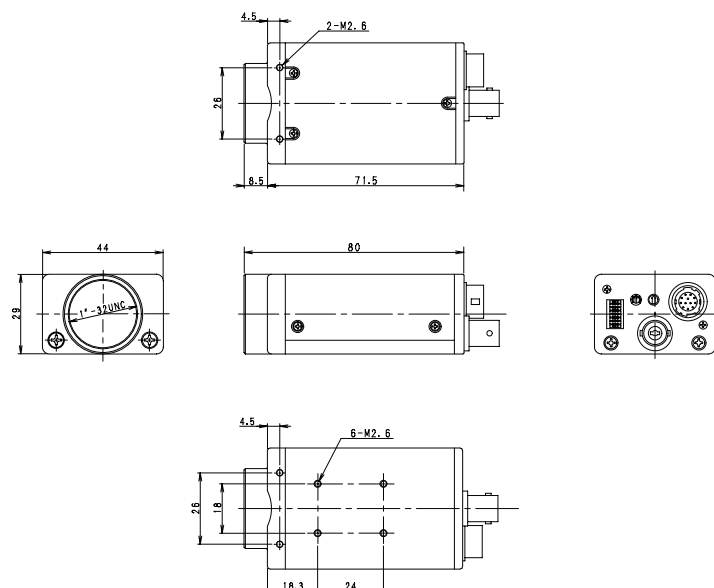
12Pin Assignment

PIN NO.	Internal Sync mode	External Sync mode	External trigger mode
1	GND	GND	GND
2	DC +12V IN	DC +12V IN	DC +12V IN
3	GND	GND	GND
4	VIDEO OUT	VIDEO OUT	VIDEO OUT
5	GND	GND	GND
6	INT. HD OUT	INT. HD IN	INT. / EXT. HD OUT / IN
7	INT. VD OUT	INT. VD IN	INT. / EXT. VD OUT / IN
8	GND	GND	GND
9	NC	NC	NC
10	(WEN OUT)	(WEN OUT)	(WEN OUT)
11	EXT. Trigger IN	EXT. Trigger IN	EXT. Trigger IN
12	GND	GND	GND

SPECIFICATIONS

	VCC-265EIR/CIR	VCC-265E/C	VCC-275EIR/CIR	VCC-275E/C	VCC-277E/C	Remarks
Standard TV System	EIA / CCIR					
Power Consumption	3.7W max					
Power Supply	DC 12V					
Pick Up.	Interline CCD					
Image Device.	1/2 inch CCD				2/3 inch CCD	
Effective Pixels	EIA 768(H) × 494(V), CCIR 752(H) × 582(V)					
Pixels in Video Output	EIA 756(H) × 485(V), CCIR 739(H) × 575(V)					
Horizontal Scanning frequency	31.469KHz		15.734KHz			
Pixel frequency	28.636MHz		14.318MHz			
Video Output Signal	1 Vpp Analog Composit Signal					75Ω terminus
Minimum Illumination	aapprox. 0.03Lux	aapprox. 0.05Lux	aapprox. 0.03Lux	aapprox. 0.1Lux	aapprox. 0.1Lux	Signal level will be 50%
Sensitivity	2000Lux, more than F22					706nit(3200K)
S/N ratio	more than 50dB (0dB/γOFF)					VS signal
Color Temp.	3200±50°K					
Gain	0dB, MANUAL (0dB ~ 15dB)		0dB, MANUAL (0dB ~ 18dB)			
Shutter	OFF(1/60), 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/12000			OFF(1/60), 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/6000		
Sync. System	External / Internal Sync manual change External Sync system : VS, Sync, HD/VD Random Trigger system : V Sync Reset					
Lens Mount	C-mount					
Operating Temperature	0°C ~ +40°C (spec.guaranteed) Humidity 20 ~ 80%					with no dew
	-5°C ~ +45°C (operation.guaranteed) Humidity 20 ~ 80%					
Weight	aapprox. 140g					
Dimensions	44(W) × 29(H) × 71.5(L)					except the protruding part

DIMENSIONS



Interlace Color Camera series



TYPE

VCC-3400NIR / VCC-3400PIR

- 1 1/2" CCD 380K / 440K pixels EXview HAD CCD*
- 2 Minimum illumination 0.15Lux
- 3 Power supply AC24V / DC12V

VCC-3555N / VCC-3555P

- 1 1/3" CCD 380K / 440K pixels Interline
- 2 Minimum illumination 2.5Lux
- 3 Power supply AC24V / DC12V

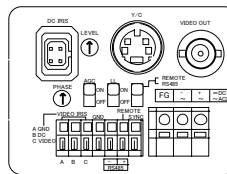
VCC-7555N / VCC-7555P

- 1 1/3" CCD 380K / 440K pixels Interline
- 2 Minimum illumination 1.8Lux
- 3 Dimensions : 50(W)×47(H)×41(L)

FEATURES

- 1 VBS,Y/C Output (NTSC/PAL)
- 2 Electronic Shutter
- 3 External Sync Function VBC/SYNC
- 4 Remote Control (RS232C/RS485).
- 5 Backlight Compensation (Center / Whole)
- 6 Garvanolens Applicable.

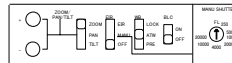
REAR PANEL



VCC-3555N

Name	A pin number and a signal name	Remarks
BNC Connector	1. VIDEO OUT 2. GND	
IRIS Connector	1. DAMP- 2. DAMP+ 3. DRIVE 4. GND	A lens iris is carried out to open at the time of E.IRIS ON.
Terminal board 3P	DC power supply input (AC power supply input) 1. DC+ / AC24V (Red) 2. DC- / AC24V (White) 3. FRAME GND / FRAME GND (Black)	In DC reverse connection, it does not operate.
Terminal board 7P	1. EXT SYNC IN 2. REMOTE/RS485(+) - Changeable by SW. 3. GND (RS485(-)) 4. GND 5. VIDEO IRIS (C): IRIS SIG. 6. VIDEO IRIS (B): DC OUT(+12V) 7. VIDEO IRIS (A): GND	VIDEO IRIS carries out a lens iris to open at the time of E.IRIS ON.
Y/C Connector	1. GND(Y) 2. GND(C) 3. Y OUT 4. C OUT	

SW Panel



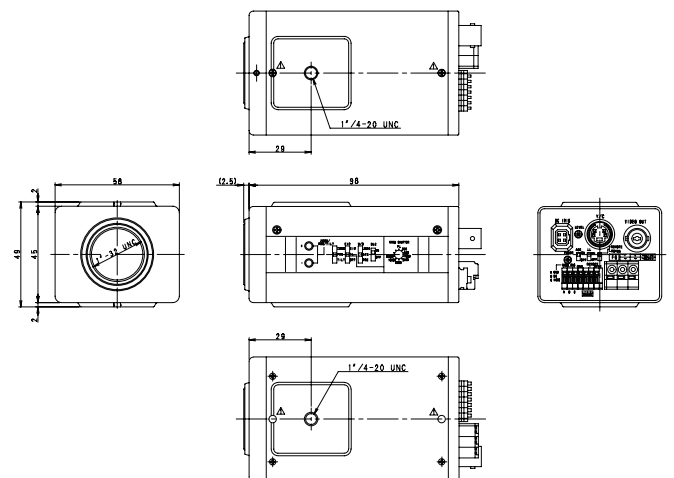
Positions, such as a switch and volume, are states at the time of shipment.

EIR	E.IRIS Shutter range 1/60 ~ 1/30000(NTSC), 1/50 ~ 1/30000(PAL) If equipped with DC IRIS, VIDEO IRIS at the time of E.IRIS, an iris will be carried out to open.	
EIR SW	FL(MANUAL) A setup of a rotary switch becomes effective and changeable to FL, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/20000 is possible.	
AGC SW	OFF 1/60(NTSC) 1/50(PAL) Fixed ON AGC ON Max Gain +24dB OFF AGC OFF (0dB)	
WB SW	LOCK The value of ATW is held. ATW Automatic WB range 2600° ~ 9000° PRE A white balance is fixed to 5600°K Light measurement of AE is set as central light measurement.	
BLC SW	ON 1/5V OFF Light measurement of AE is set as complete light measurement.	It is reflected in E.IRIS, AGC, DC IRIS, VIDEO IRIS.
ZOOM/PAN/TILT SW	Slide SW position +SW ON ZOOM TELE (max +4) WIDE PAN LEFT RIGHT TILT UP DOWN	When having not carried out zoom, PAN/TILT, do not operate. Moreover, if it fills to WIDE, PAN/TILT will return to a center.
LL SW	ON A LineLock synchronization becomes effective at the time of AC power supply input. At the time of DC input, moreover it does not function, a SYNC input is not influenced.	

SPECIFICATIONS

	VCC-3400NIR/PIR	VCC-3555N/P	VCC-7555N/P	Remarks
Standard TV System	NTSC / PAL			
Power Consumption	DC/AC 3.0W MAX (Vin = DC+12V)		1.8W MAX (Vin = DC+12V)	
DC only	6.0W (DC12V)			
Power Requirements	DC 10.5 ~ 15V / AC 24V		DC12V ±10%	
Image Device	1/2 inch CCD	1/3 inch CCD		
Effective picture elements	NTSC 768(H) × 494(V) PAL 752(H) × 582(V)			
Horizontal Resolution	450TV lines			
Minimum Illumination	0.15 Lux	2.5 Lux	1.8 Lux	
	(at the time of F1.2 about conversion and AGC = ON) A signal level is 50%.			
Video Output Signal	1 Vpp Analog Composite Signal			75Ω terminus
	A Y/C separate output and Y output A 1.0Vpp synchronous negative			
	46dB or more			
S/N ratio	Camera conditions AGC : OFF(0dB) γ : OFF Aperture : OFF Measuring instrument side conditions BW 100kHz ~ 4.2MHz			
Gain	AUTO : 0 ~ 42 dB OFF : 0 dB		AUTO : 0dB ~ +39 dB OFF : 0 dB	
Shutter	AUTO : 1/60 ~ 1/30000 MANUAL : OFF, FL, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000, 1/20000		AUTO : 1/60 ~ 1/30000	
Gamma characteristic	0.45			
External synchronous system	DC : VBS / Sync AC : line lock		VBS / Sync	
Auto iris	DC Iris / Video Iris			
White balance	3200°K, 5600°K, AUTO : 2600°K ~ 9000°K		3200°K, AUTO : 2600°K ~ 9000°K	
Electronic zoom	4 times (MAX) Possible at remote control			
Remote Control	RS232C / RS485		RS232C	
	An electronic shutter, AGC, a white balance, and backlight compensation (BLC) Selection of a pattern, the gamma characteristic, electronic zoom, electronic Pan-Tilt			
Backlight compensation function	A standard / central light measurement Change			
Lens Mount	CS-mount			
Operating Temperature	0°C ~ +40°C (spec.guaranteed) 80% or less of humidity			with no dew
	-5°C ~ +45°C (operation.guaranteed) 80% or less of humidity			
ON Screen	---			
Preservation temperature	-25°C ~ +60°C 80% or less of humidity			with no dew
Weight	approx. 250g	approx. 230g	approx. 120g	
Dimensions	58(W) × 45(H) × 98(L)		50(W) × 47(H) × 41(L)	

DIMENSIONS



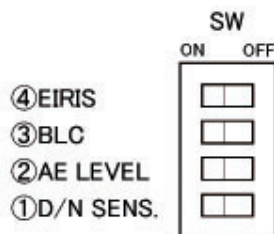
VCC-3555N

Day&Night Functional loading Color camera

VCC-S80N3DN



MODE

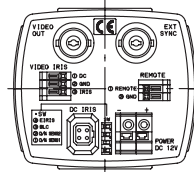


(1) Electronic Iris(EIRIS)	
ON	EIRIS 1/60-1/30000
OFF	1/60
(2) Backlight Compensation(BLC)	
ON	Center
OFF	Whole
(3) AE Level	
ON	Normal
OFF	Low(-3dB)
(4) Day/Night Sense level	
ON	Normal(18dB)
OFF	Low(6dB)

FEATURES

- 1 IR Cut Filter In/Out Function
- 2 Backlight Compensation
- 3 Minimum illumination 0.02 Lux
- 4 Day/Night Sense level adjustment
- 5 External Sync.: SYNC
- 6 Electronic zoom
- 7 Remote Control (RS-232C)

REAR PANEL



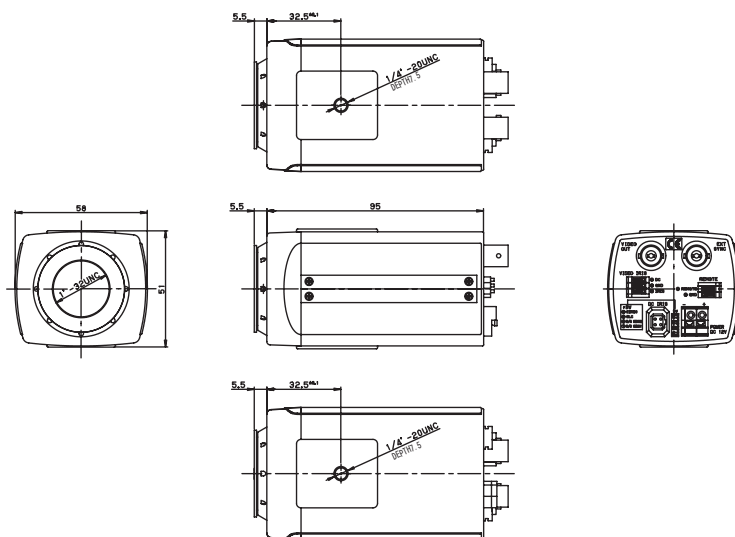
Name	Standard	Remarks
VIDEO OUT	1. VIDEO OUT 2. GND	
EXT SYNC	1. EXT SYNC IN 2. GND	
VIDEO IRIS	1. DC OUT 2. GND 3. IRIS OUT	
REMOTE	1. REMOTE IN 2. GND	
DC IRIS	1. DUMP - 2. DUMP + 3. DRIVE + 4. GND	
POWER DC 12V	1. DC IN 2. GND	

* The output for Video Iris/DC Iris is outputted regardless of E.Iris ON/OFF. For the reason, when you use Video Iris Lens/DC Iris LENS, please use it by E.Iris OFF. E. If it is used by Iris ON, E.Iris and Videolris/DC Iris may work simultaneously and operation may become unstable.

SPECIFICATIONS

Standard	VCC-S80N3DN	Remarks
Power Consumption	2.0 W MAX	
Power Supply	DC12V±10%	
Image Device	1/3 inch CCD	ICX408AK
Effective Pixels	768 (H)×494 (V)	
Horizontal Resolution	450 TV Lines	
Minimum Illumination	0.02 Lux	
Video Output Signal	VBS	75Ωterminus
S/N ratio	more than 48dB	
Gain	Camera conditions AGC : OFF(0dB) γ : OFF Aperture : OFF Measuring instrument side conditions BW 100KHz ~ 5.2MHz	
Shutter	OFF (0dB) / ON (0dB→30dB)	
Gamma characteristic	ON:Electronic Iris , OFF 1/60	
External synchronous system	0.45	
Auto Iris	VS/VBS , SYNC	
Sensitivity	DC Iris	
Garvano	2000 Lux , more than F8	
White Balance	It is.	
DN Sense level	ATW (2600K ~ 9000K)	
Electronic zoom	0dB, 6dB, 12dB, 18dB	
Remote Control	Remote Control	The maximum 4 times
Backlight compensation function	RS-232C	
Lens Mount	An electronic shutter, AGC, a white balance, and backlight compensation (BLC) Selection of a pattern, the gamma characteristic, electronic zoom, electronic Pan-Tilt, Day/Night Sense	
Operating Temperature	Center / Whole	
Preservation temperature	CS-mount	
Weight	0°C ~ +40°C (spec.guaranteed) 80% or less of humidity	with no dew
Dimensions	-5°C ~ +50°C (operation.guaranteed) 80% or less of humidity	with no dew
	-25°C ~ +60pp°C 80% or less of humidity	
	approx. 220 g	
	58 (W)×61 (H)×95 (L)	except the protruding part

DIMENSIONS



Head Separation Progressive Scan Camera series



FEATURES

- 1 High-speed Electronic Shutter
- 2 Low-speed Electronic Shutter (64FLD ~ 2FLD)
- 3 Color Balance Select
- 4 Sensitivity Adjustment Select
- 5 Cable Length : Standard 2m

TYPE

VCC-8700 1.45million pixels SXGA

- 1 1/2"CCD 1.45million pixels Progressive Scan
- 2 Frame rate 7.5 f/s
- 3 Digital RGB Output (24bit EIA-422)

VCC-8500 800K pixels XGA

- 1 1/3"CCD 800K pixels Progressive Scan
- 2 Frame rate 15 f/s
- 3 Digital RGB Output (24bit EIA-422)

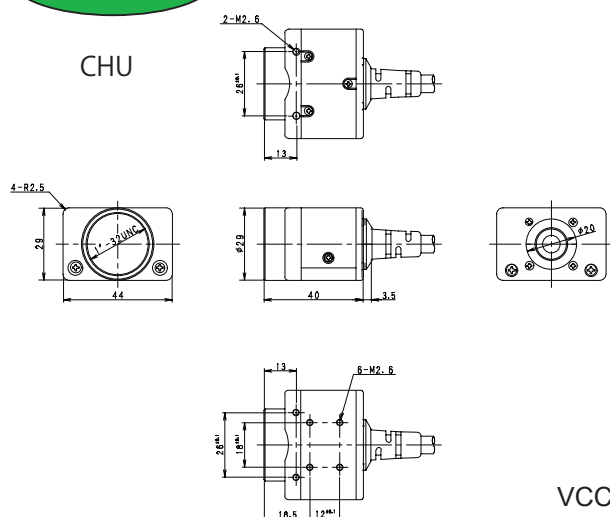
VCC-8500A 800K pixels XGA

- 1 1/3"CCD 800K pixels Progressive Scan
 - 2 Frame rate 15 f/s
 - 3 Analog RGB Output (VESA standard XGA 60 conformity)
- The scan converter is built in to output clear image directly to PC monitor or projector.
- 4 One screen freezing memory is available.

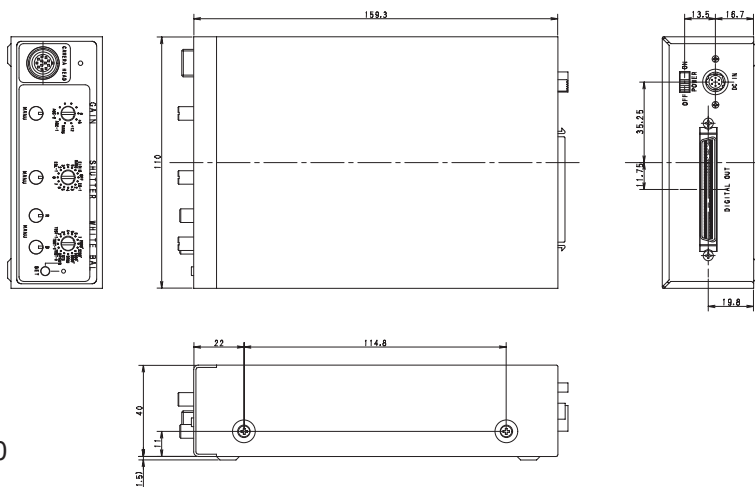
SPECIFICATIONS

	VCC-8700	VCC-8500	VCC-8500A	Remarks
Image Format	SXGA	XGA		
Power Consumption	8.0W max		8.5W max	
Power Supply	DC 12V			
Pick Up Image Device.	Interline Progressive CCD			
	1/2 inch CCD	1/3 inch CCD		
Effective Pixels	1392(H) × 1040(V)	1034(H) × 779(V)	1024(H) × 768(V)	
Pixels in Video Output	1376(H) × 1032(V)	1024(H) × 768(V)	1024(H) × 768(V)	
Horizontal Scanning frequency	7.999KHz	11.811KHz	12.090KHz	
Pixel frequency	14.318MHz	15.000MHz	16.250MHz	
Video Output Signal	Digital RGB 24bit output		Analog RGB	
	8bit × 3 EIA-422			
Minimum Illumination	approx. 3.0Lux (AGC ON)			Signal level will be 50%
Sensitivity	2000Lux , More than F5.6			706 nit(3200K)
S/N ratio	more than 50dB (0dB / γOFF / Aperture OFF)			RGB signal
Color Temp.	3200 ±50°K			
Gain	0dB, 6dB, 12dB, MANUAL, AUTO			
Shutter	OFF, MANU, AUTO, 1/15, 1/30, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 0.2, 0.5, 1, 2, 4	OFF, MANU, AUTO, 1/30, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 0.2, 0.5, 1, 2, 4	OFF, MANU, AUTO, 1/30, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 0.1, 0.2, 0.5, 1, 2	
Color Balance adjustment	2600°K, 3200°K, 5600°K, 9000°K, ATW, ONE-PUSH, MANUAL			
Sync. System	Internal Sync manual			
Lens Mount	C-mount			
Remote Control	---			
Memory	---			
Operating Temperature	0°C ~ +40°C (spec.guaranteed) Humidity 20 ~ 80%			with no dew
	-5°C ~ +50°C (operation.guaranteed) Humidity 20 ~ 80%			
Weight	CCU	approx. 630g	approx. 800g	except cable
	CHU	approx. 120g	approx. 120g	
Dimensions	CCU	110(W) × 40(H) × 160(L)	110(W) × 44(H) × 270(L)	except the protruding part
	CHU	44(W) × 29(H) × 45(L)		

DIMENSIONS



CCU



VCC-8700

Interline image sensor B/W camera

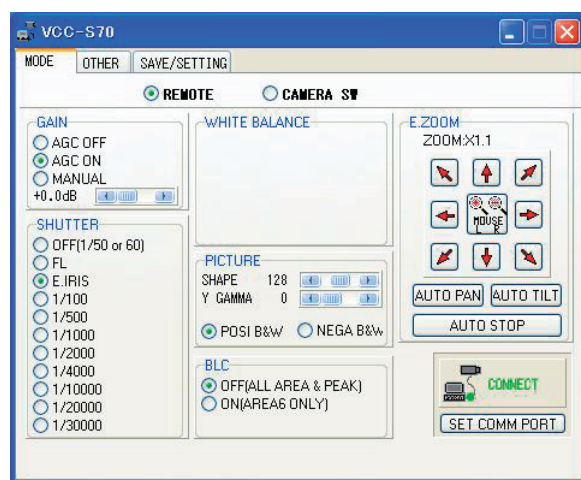
VCC-S70E2IR



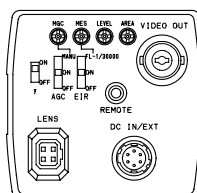
FEATURES

- 1 IR (900nm) : Ratio to former approx. 4 times
- 2 Smear : Ratio to approx. -30 dB
- 3 Camera function : SW of rear panel, and serial communication
- 4 Minimum Illumination : 0.003Lux
- 5 AGC, Electronic Iris, Electronic Shutter
- 6 Backlight Compensation (Center / Whole), gamma selection
- 7 External sync : VS/Sync, HD/VD
- 8 Remote Control (RS-232C)

REMOTE CONTROL SOFTWARE PANEL



REAR PANEL



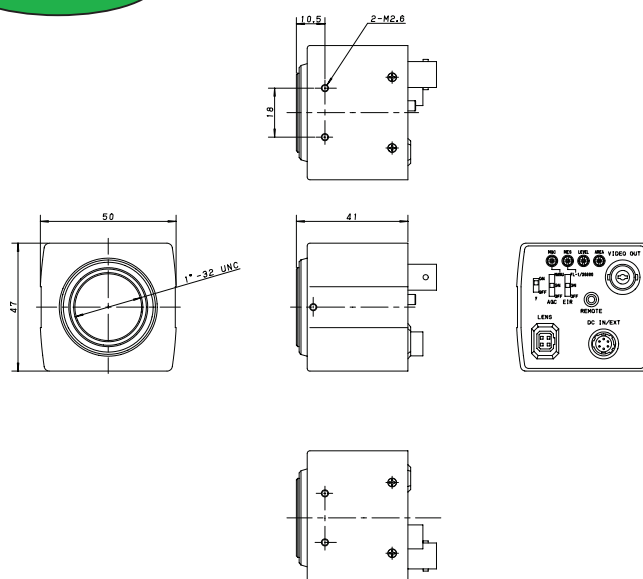
Name	A pin number and a signal name	Remarks
BNC Connector	1. VIDEO OUT 2. GND	
IRIS Connector	1. DC+12V OUT 2. GND 3. N.C 4. IRIS VIDEO	
6Pin Assignment	1. GND 2. EXT VD IN 3. N.C 4. EXT SYNC IN/EXT HD IN 5. GND 6. DC+12V IN	
Mini Jack	1. GND 2. REMOTE	

	Standard	Remarks
γ SW	ON : γ = 0.45 OFF : γ = 1.0	
AGC SW	MANU : AGC 0 ~ +39dB (A+24dB D+15dB Total+39dB) ON : AGC 0 ~ +39dB (A+24dB D+15dB Total+39dB) OFF : 0dB	
EIR SW	F L - 1/30000 : MES A volume left end can be set to FL and it can be made to change from FL to 1/30000 continuously by right rotation. Shutter range EIA : FL (1/100) ~ 1/30000 CCIR : FL (1/120) ~ 1/30000 ON : E IRIS Shutter range EIA : 1/60 ~ 1/30000 CCIR : 1/50 ~ 1/30000 OFF : 1/60s (EIA) / 1/50s (CCIR) Fixation	
LEVEL Volume	It is reflected in E. IRIS, AGC, VIDEO IRIS. Brightness can be adjusted. In addition, the level of the signal inputted into a lens is controlled about VIDEO IRIS.	
AREA Volume	Light measurement area can be adjusted to a center the whole surface - an outer frame. Suitable AE operation united with a photographic subject's environment is controllable. center whole	

SPECIFICATIONS

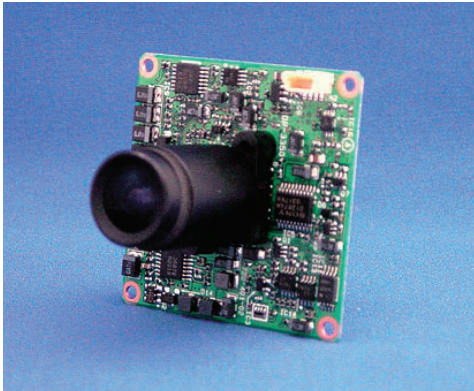
	VCC-S70E2IR	VCC-S70C2IR	Remarks
Standard	EIA	CCIR	
Power Consumption	2.5 W MAX (Vin = DC+12V)		
Power Supply	DC+7 ~ +15V		
Image Device	1/2 inch CCD		
Effective Pixels	768 (H)×494 (V)		
Horizontal Resolution	570 TV Lines		
Minimum Illumination	0.003 Lux		
	(at the time of F1.4 about conversion and AGC = ON) A signal level is 50%.		
Video Output Signal	1 Vpp Analog Composite Signal		75 Ω terminus
	more than 50dB		
S/N ratio	Camera conditions AGC : OFF(0dB) γ : OFF Aperture : OFF Measuring instrument side conditions BW 100KHz ~ 4.2MHz		
Shutter	FL(1/100) ~ 1/30000		
Gamma characteristic	0.45 / 1.0		
External synchronous system	HD / VD , VS / Sync		
Auto iris	DC Iris/Video Iris		
Sensitivity	2000Lux , more than F16		
Electronic zoom	Possible at remote control		
Remote Control	RS-232C		
Backlight compensation function	An electronic shutter, AGC, and backlight compensation (BLC) Selection of a pattern, the gamma characteristic, electronic zoom, electronic Pan-Tilt		
Lens Mount	A standard / central light measurement Change		
	CS-mount		
Operating Temperature	0°C ~ +40°C (spec.guaranteed) 80% or less of humidity		with no dew
	-5°C ~ +50°C (operation.guaranteed) 80% or less of humidity		
Preservation temperature	-25°C ~ +60°C 80% or less of humidity		with no dew
Weight	approx. 130 g		
Dimensions	50 (W)×47 (H)×41 (L)		

DIMENSIONS



Board Color Camera series

DCC-3355N series



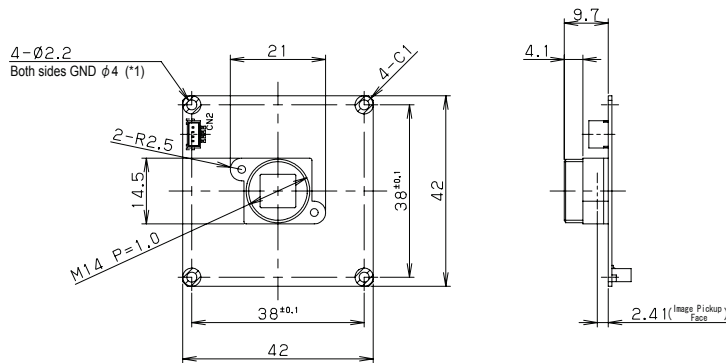
FEATURES 42mm□ 1board

- 1 Electronic zoom
- 2 Remote Control (RS-232C)
(Electronic zoom, AGC, ATW, Electronic Pan-tilt, Negative/ positive)
- 3 VBS,Y/C Output
- 4 AGC, AE, AWB, Backlight Compensation (Center / Whole)
- 5 External Sync. : VBS, SYNC, HD/VD
- 6 Minimum illumination 0.8Lux
- 7 Power supply DC12V

DCC-3355N 1/3"CCD 380K / 440K pixels

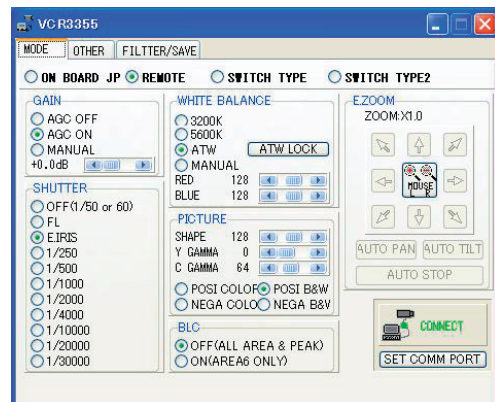
DCC-3350N 1/3"CCD 250K / 290K pixels

DIMENSIONS



*1 The parts protruded from a GND land are not using it at the time of stop hole use of four corners.

REMOTE CONTROL SOFTWARE PANEL



SPECIFICATIONS

	DCC-3355N	DCC-3355P	DCC-3350N	DCC-3350P	Remarks
Standard TV System	NTSC	PAL	NTSC	PAL	
Power Consumption	1.4W MAX(12V)				
Power Supply	DC+10.5 ~+15V				
Pick Up.	Interline 1/3 inch CCD				
Effective Pixels	768(H)×494(V)	752(H)×582(V)	510(H)×492(V)	500(H)×582(V)	
Horizontal Resolution	450 TV lines		330 TV lines		
External synchronous system	VS/VBS or SYNC, HD/VD				
Video Output Signal	1 Vpp Analog Composit Signal Y/C separate output				75Ωterminus
Lens Mount	An exclusive lens				
Minimum Illumination	0.8 Lux (at the time of F1.4 about conversion and AGC = ON) A signal level is 50%.				
S/N ratio	48dB or more Camera conditions AGC : OFF(0dB), γ : OFF, Aperture : OFF Measuring instrument side conditions BW 100KHz~5.2MHz				
Gain (AGC)	ON : 0dB ~ +30dB , OFF : 0dB				
Shutter (ES)	ON: E.IRIS, OFF: 1/60				
Gamma characteristic	0.45				
Sensitivity	2000Lux				
Garvano amplifier	more than F8		more than F11		706 nit (3200°K)
Remote Control	It is.				
Electronic zoom	RS-232C				
Backlight compensation function	It is.				
Operating Temperature	The whole surface / central important light measurement 0°C ~ +40°C (spec.guaranteed) Humidity 20 ~ 80% -5°C ~ +50°C (operation.guaranteed) 80% or less of humidity				with no dew
Preservation temperature	-25°C ~ +60°C (operation.guaranteed) 80% or less of humidity				with no dew
Weight	approx. 20 g				
Dimensions	42mm□ 1board				

I/O CONNECTOR

Pin NO	CN1
1	POWER
2	GND
3	VIDEO OUT
4	GND
5	EXT HD / SYNC
6	GND
7	EXT VD
8	IRIS OUT
9	C OUT
10	Y OUT

Remote Control

Pin NO	CN3
1	REMOTE
2	GND

At the time of Varifocal-lens use.

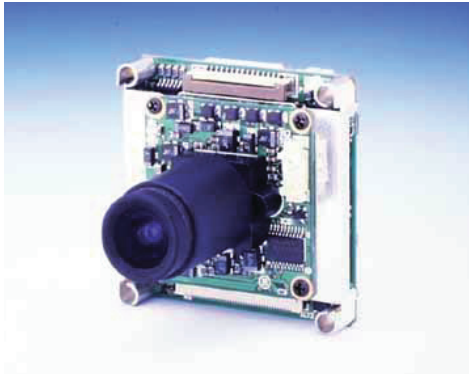
Pin NO	CN2
1	DUMP+
2	DUMP-
3	DRIVE-
4	DRIVE+

1/3 inch lens Angle of view

	Focal length(f)	An open iris diaphragm(F)	Angle of view (Level)	Angle of view (perpendicularity)	Angle of view (diagonal)
CL-23/4	2.3mm	4.0	about 118°	about 88°	about 147°
CL-40/4	4.0mm	4.0	about 70°	about 52°	about 87°
CL-56/3	5.6mm	3.0	about 50°	about 37°	about 63°
CL-80/4	8.0mm	4.0	about 31°	about 24°	about 40°
CL-160/4	16.0mm	4.0	about 16°	about 12°	about 20°
CL-250/5	25.0mm	5.0	about 10°	about 7°	about 12°

Board Color Camera series

DCC-3555N / DCC-3555P serie



FEATURES 32mm□+42mm□ 2boards

- 1 Electronic zoom, Electronic Pan-tilt
- 2 Remote Control.(RS232C)
- 3 VBS, Y/C Output (NTSC/PAL)
- 4 AGC, AE, AWB, Backlight Compensation (Center / Whole)
- 5 External Sync. VBS, SYNC, HD/VD
- 6 Power supply DC12V / DC 6 ~ 15V

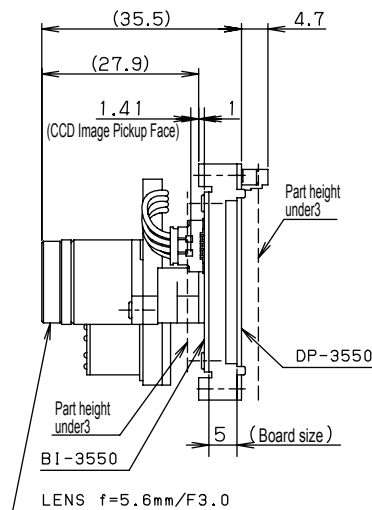
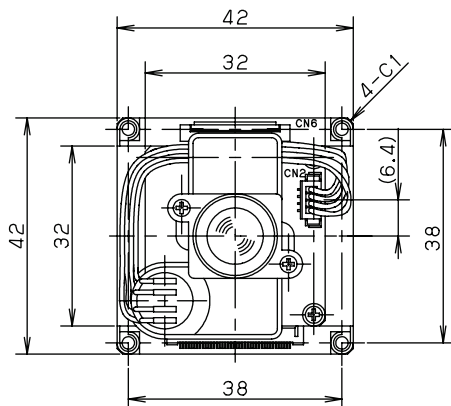
DCC-3555N/P 1/3"CCD 380K / 440K pixels

DCC-3550N/P 1/3"CCD 250K / 290K pixels

DCC-3555NDN/PDN 1/3"CCD 380K / 440K pixels EXview HAD CCD*

DIMENSIONS

DCC-3555NDN



SPECIFICATIONS

	DCC-3555NDN/PDN	DCC-3555N/P	Remarks
Standard TV System	NTSC / PAL		
Power Consumption	1.8W MAX		
Power Supply	DC12V / DC 6 ~ 15V		
Pick Up.	Interline CCD		
Image Device.	1/3 inch CCD		
Effective Pixels	NTSC 768(H)×494(V) PAL 752(H)×582(V)		
External synchronous system	VBS / Sync, HD / VD		
Video Output Signal	1 Vpp Analog Composit Signal		75Ω terminus
Lens Mount	An exclusive lens		
Horizontal Resolution	450TV lines		
Sensitivity	2000Lux		706 nit (3200°K)
Minimum Illumination	0.006Lux (at the time of F1.4 about conversion and AGC +39dB) A signal level is 50%.		
S/N ratio	48dB or more		
Gain (AGC)	Camera conditions AGC : OFF(0dB), γ : OFF, Aperture : OFF Measuring instrument side conditions BW 100KHz ~ 4.2MHz		
Shutter (ES)	ON : 0dB ~ +24dB, OFF : 0dB		
Gamma characteristic	ON: E.IRIS, OFF: 1/60		
Gamma characteristic	0.45		
Gamma amplifier	It is.		
Remote Control	RS-232C		
Electronic zoom	It is.		
Backlight compensation function	The whole surface / central important light measurement		
Preservation temperature	-25°C ~ +60°C (operation.guaranteed) 80% or less of humidity		with no dew
Operating Temperature	0°C ~ +40°C (spec.guaranteed) Humidity 20 ~ 80% -5°C ~ +50°C (operation.guaranteed) 80% or less of humidity		with no dew
Weight	approx. 38g		approx. 35g
Dimensions	32mm□+42mm□ 2board		

I/O CONNECTOR

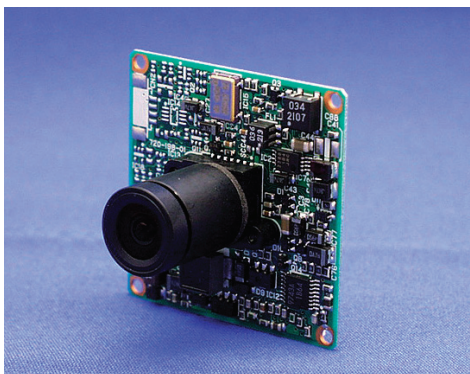
Pin No.	DCC-3555NDN/PDN
1	Y OUT
2	C OUT
3	---
4	EXT HD/SYNC
5	GND
6	EXT VD/LL
7	GND
8	VIDEO OUT
9	GND
10	DC IN(+12V)

1/3 inch lens Angle of view

	Focal length(f)	An open iris diaphragm(F)	Angle of view (Level)	Angle of view (perpendicularity)	Angle of view (diagonal)
CL-23/4	2.3mm	4.0	about 118°	about 88°	about 147°
CL-40/4	4.0mm	4.0	about 70°	about 52°	about 87°
CL-56/3	5.6mm	3.0	about 50°	about 37°	about 63°
CL-80/4	8.0mm	4.0	about 31°	about 24°	about 40°
CL-160/4	16.0mm	4.0	about 16°	about 12°	about 20°
CL-250/5	25.0mm	5.0	about 10°	about 7°	about 12°

Board Color Camera series

DCC-2010AN / DCC-2010AP



FEATURES

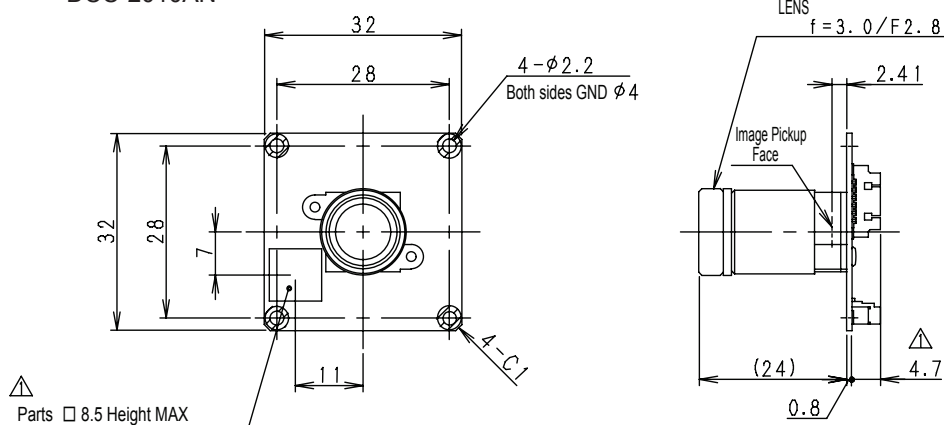
- 1 AGC (0 ~ 24dB)
- 2 AE (1/60 ~ 1/50000), OFF Selectable
- 3 WB, One-push WB.
- 4 BLC. (Central area / All area, light measurement)
- 5 Power supply DC12V
- 6 The flicker generated at AE is minimized.
- 7 Power supply DC5.0V available (DCC-2010AN5V)

DCC-2010AN/AP

1/4" CCD 250K pixels NTSC / 290K pixels PAL 32mm□ 1board

DIMENSIONS

DCC-2010AN



SPECIFICATIONS

	DCC-2010AN/AP	Remarks
Standard TV System	NTSC / PAL	
Power Consumption	1.3W MAX(12V)	
Power Supply	DC+5V or +12V	
Pick Up.	Interline CCD	
Image Device.	1/4 inch CCD	
Effective Pixels	NTSC 510(H)×492(V) PAL 500(H)×582(V)	
External synchronous system	---	
Video Output Signal	1 Vpp Analog Composit Signal	75Ω terminus
Lens Mount	An exclusive lens	
Horizontal Resolution	330TV lines	
Sensitivity	2000Lux	
Minimum Illumination	1.2Lux (at the time of F1.2 about conversion and AGC = ON) A signal level is 50%.	706 nit (3200°K)
S/N ratio	48dB or more Camera conditions AGC : OFF(0dB), γ : OFF, Aperture : OFF Measuring instrument side conditions BW 100KHz ~ 4.2MHz	
Gain (AGC)	0dB ~ +24dB	
Shutter (ES)	ON: E.IRIS(1/60~1/50000) , OFF: 1/60	
Gamma characteristic	0.45	
Garvano amplifier	---	
Remote Control	---	
Electronic zoom	---	
Backlight compensation function	The whole surface / central important light measurement	
Preservation temperature	-25°C ~ +60°C (operation.guaranteed) 80% or less of humidity	with no dew
Operating Temperature	0°C ~ +40°C (spec.guaranteed) Humidity 20 ~ 80% -5°C ~ +50°C (operation.guaranteed) 80% or less of humidity	with no dew
Weight	approx. 15g	
Dimensions	32mm□ 1board	

I/O CONNECTOR

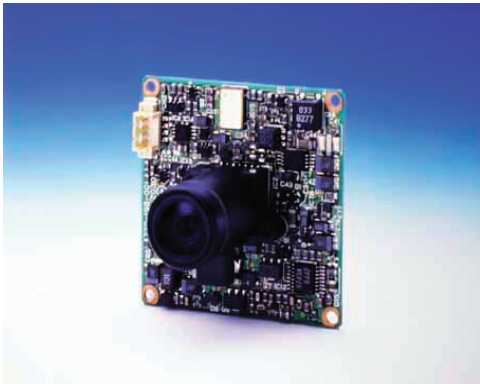
Pin No.	DCC-2010AN/AP
1	ONE PUSH
2	FS MODE
3	WB MODE
4	BLC MODE
5	GND(VIDEO)
6	VIDEO OUT
7	GND(DC)
8	DC IN(+12V)

1/4 inch lens Angle of view

	Focal length(f)	An open iris diaphragm(F)	Angle of view (Level)	Angle of view (perpendicularity)	Angle of view (diagonal)
BC-19/2.8	1.9mm	2.8	about 109°	about 79°	about 138°
BC-30/2.8	3.0mm	2.8	about 65°	about 42°	about 83°
BC-60/2.8	6.0mm	2.8	about 33°	about 24°	about 40°
BC-80/2.8	8.0mm	2.8	about 24°	about 18°	about 29°
BC-120/2.8	12.0mm	2.8	about 16°	about 12°	about 19°
BLS-37/4-4	3.7mm	4.5	about 51°	about 39°	about 64°

Remote Control Board B/W Camera series

DCC-1055E Series



FEATURES 42mm□ 1board

- 1 Minimum illumination 0.02Lux (DCC-1055EIR, DCC-1065EIR)
- 2 Garvano lens applicable
- 3 AGC, AE
- 4 Backlight Compensation (Center / Whole)
(DCC-1055E, DCC-1055EIR)
- 5 External Sync.
VS / Sync (DCC-1055E, DCC-1055EIR)
HD / VD (DCC-1065E, DCC-1065EIR)
- 6 Gamma adjustment
- 7 Electronic shutter

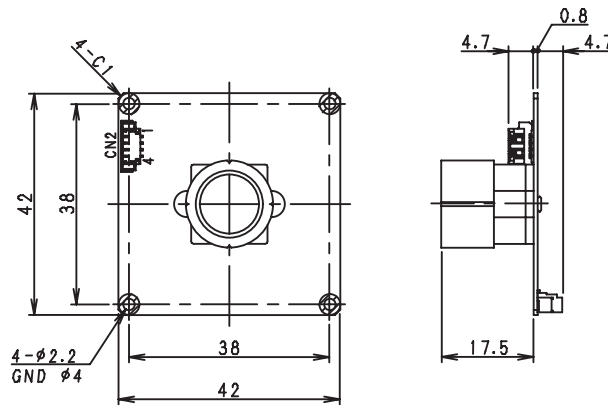
DCC-1055E/RC 1/3"CCD 380K / 440K pixels

DCC-1055EIR/CIR 1/3"CCD 380K / 440K pixels EX view HAD CCD*

DCC-1065E/RC 1/3"CCD 380K / 440K pixels

DCC-1065EIR/CIR 1/3"CCD 380K / 440K pixels EX view HAD CCD*

DIMENSIONS



SPECIFICATIONS

	DCC-1055E	DCC-1055EIR	DCC-1065E	DCC-1065EIR	Remarks
Standard	EIA / CCIR				
Power Consumption	2.4W MAX				
Power Supply	DC12V±10%				
Video Output Signal	1 Vpp Analog Composit Signal				75Ω terminus
Pick Up.	Interline CCD				
Image Device.	1/3 inch CCD				
Effective Pixels	768(H)×494(V)				
	---	EXview HAD CCD*	---	EXview HAD CCD*	
External synchronous system	VS/Sync		HD/VD		
Lens Mount	An exclusive lens (standard f=3.6mm / F=5)				
Serial communication	RS-232C				
Mirror reversal function	It is.		---		
Sensitivity	2000Lux , more than F11				
	0.05Lux	0.02Lux	0.1Lux	0.02Lux	
Minimum Illumination	AGC=ON, F=1.4It converts fairly. Signal level will be 50%				
	53dB or more				
S/N ratio	Camera conditions AGC: OFF(0dB), γ: OFF, Aperture: OFF Measuring instrument side conditions BW 100KHz ~ 4.2MHz				
Gain	ON : 0dB ~ +24dB, OFF : Fixed gain				
	EI: 1/60 ~ 1/30000 s				
Shutter	OFF, FL, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/12000				
Gamma characteristic	1.0 / 0.45				
Garvano amplifier	It is.				
Backlight compensation function	The whole surface / central important light measurement		---		
Preservation temperature	-20°C ~ +60°C (operation guaranteed) 90% or less of humidity				with no dew
Operating Temperature	0°C ~ +40°C (spec.guaranteed) 80% or less of humidity				with no dew
	-20°C ~ +45°C (operation guaranteed) 80% or less of humidity				
Weight	approx. 18g				
Dimensions	42mm× 1board				

I/O CONNECTOR

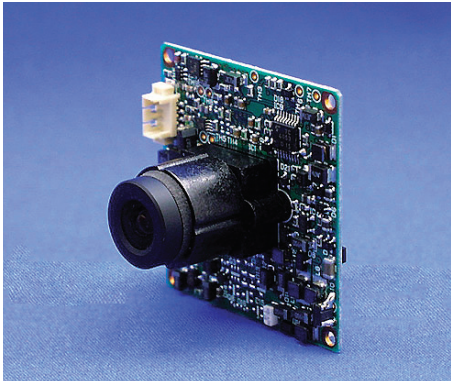
Pin NO.	DCC-1055E	DCC-1065E
1	LEVEL VR	GAIN VR
2	AGC MODE	MGC MODE
3	BLC MODE	---
4	EIRIS MODE	---
5	EXT SYNC	EXT HD
6	IRIS OUT	EXT VD
7	VIDEO GND	VIDEO GND
8	VIDEO OUT	VIDEO OUT
9	DC GND	DC GND
10	DC+12V IN	DC+12V IN

1/3 inch lens Angle of view

	Focal length(f)	An open iris diaphragm(F)	Angle of view (Level)	Angle of view (perpendicularity)	Angle of view (diagonal)
BL-2.5/3	2.5mm	3	about 108°	about 88°	about 135°
BL-3.6/3	3.6mm	3	about 80°	about 59°	about 103°
BL-4.0/5	4.0mm	5	about 69°	about 52°	about 85°
BL-6.0/3	6.0mm	3	about 45°	about 34°	about 57°
BL-8.0/2	8.0mm	2	about 34°	about 26°	about 44°
BL-130/5	13.0mm	5	about 21°	about 16°	about 26°
BL-250/5	25.0mm	5	about 11°	about 8°	about 13°

Board B/W Camera series

BCC-155REIR / BCC-155RCIR

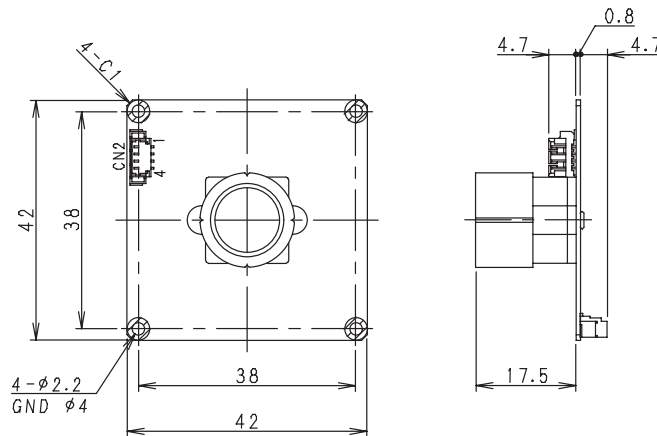


FEATURES 42mm□ 1board

- 1 Minimum illumination 0.02Lux
- 2 Garvano lens applicable
- 3 AGC, AE
- 4 Backlight Compensation (Center / Whole)
- 5 VBS, Y/C Output
- 6 Gamma adjustment
- 7 Electronic shutter (OFF, FL, 1/250 ~ 1/100000 8Step)

BCC-155REIR/RCIR 1/3"CCD 380K / 440K pixels EXview HAD CCD*

DIMENSIONS



SPECIFICATIONS

	BCC-155REIR / RCIR	Remarks
Standard	EIA / CCIR	
Power Consumption	2.0W MAX	
Power Supply	DC12V±10%	
Video Output Signal	1 Vpp Analog Composit Signal	75Ω terminus
Pick Up.	Interline CCD	
Image Device.	1/3 inch CCD	
Effective Pixels	768(H)×494(V)	
	EXview HAD CCD*	
External synchronous system	VS/Sync	
Lens Mount	An exclusive lens (standard f=3.6mm / F=5)	
Serial communication	---	
Mirror reversal function	---	
Horizontal Resolution	570TV lines	
Sensitivity	2000Lux , more than F11	
Minimum Illumination	0.02Lux	
	AGC=ON, F=1.4It converts fairly. Signal level will be 50%	
S/N ratio	56dB or more	
	Camera conditions AGC : OFF(0dB), γ : OFF, Aperture : OFF	
	Measuring instrument side conditions BW 100KHz ~ 4.2MHz	
Gain	ON : 0dB ~ +18dB, OFF : Fixed gain	
Shutter	EI : 1/60 ~ 1/30000 s	
	OFF, FL, 1/250, 1/500, 1/1000, 1/2000, 1/5000, 1/10000, 1/100000	
Gamma characteristic	1.0 / 0.45	
Garvano amplifier	It is.	
Backlight compensation function	The whole surface / central important light measurement	
Preservation temperature	-20°C ~ +60°C (operation.guaranteed) 90% or less of humidity	with no dew
	0°C ~ +40°C (spec.guaranteed) 80% or less of humidity	
Operating Temperature	-20°C ~ +45°C (operation.guaranteed) 80% or less of humidity	with no dew
Weight	approx. 18g	
Dimensions	42mm□ 1board	

I/O CONNECTOR

Pin No.	BCC-155REIR / RCIR
1	LEVEL VR
2	AGC MODE
3	BLC MODE
4	IRIS MODE
5	EXT SYNC
6	IRIS OUT
7	VIDEO GND
8	VIDEO OUT
9	DC GND
10	DC+12V IN

1/3 inch lens Angle of view

	Focal length(f)	An open iris diaphragm(F)	Angle of view (Level)	Angle of view (perpendicularity)	Angle of view (diagonal)
BL-2.5/3	2.5mm	3	about 108°	about 88°	about 135°
BL-3.6/3	3.6mm	3	about 80°	about 59°	about 103°
BL-4.0/5	4.0mm	5	about 69°	about 52°	about 85°
BL-6.0/3	6.0mm	3	about 45°	about 34°	about 57°
BL-8.0/2	8.0mm	2	about 34°	about 26°	about 44°
BL-130/5	13.0mm	5	about 21°	about 16°	about 26°
BL-250/5	25.0mm	5	about 11°	about 8°	about 13°

Camera Link Correspondence Memory converter

MCV-8000



FEATURES

- Our company correspondence camera
 - VCC-8850CL
 - VCC-8750CL
 - VCC-8550CL
 - VCC-8350CL
- Level Aperture compensation to an image
- The continuation output of the still picture at the time of a camera external trigger
- 110(W)×40(H)×142.6(L) approx. 480g

OUTLINE

- Connect our company camera link correspondence camera, and the output of the VGA picture to the monitor of NTSC in the monitor TV dealing with NTSC and PC monitor is possible.
- The camera link through image output connected is possible.

INPUT&OUTPUT

INPUT

- Connection interface: Standard Camera Link connector (3M : 26Pin)

Our company correspondence camera		
TYPE	Image Format	Frame rate
VCC-8350CL	VGA	60f/s
VCC-8550CL	XGA	30f/s
VCC-8750CL	SXGA	15f/s
VCC-8850CL	UXGA	12f/s

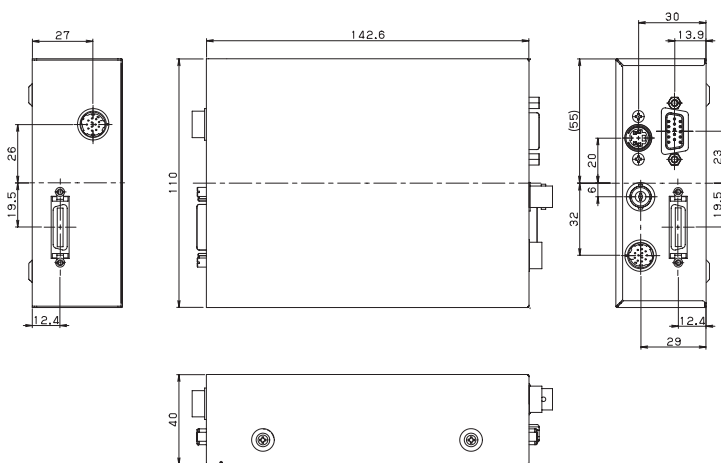
OUTPUT

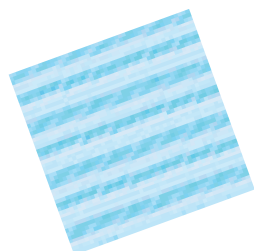
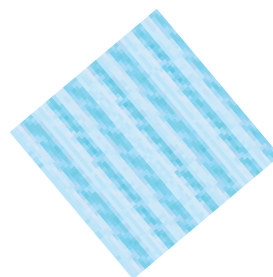
- NTSC : Composite video signal (VBS 1.0Vp-p 75Ω)
It outputs to a TV monitor from a BNC connector
- Y/C : With a S-terminal, it outputs to TV monitor.
- VGA : It outputs to a PC monitor from a 15pin-Dsub connector
- Camera Link : The through output of a connection camera

SPECIFICATIONS

	MCV-8000	Remarks
Standard Monitor System	NTSC RGB	
Power Consumption	2.7 W Max	
Power Supply	DC 12V±10%	
Correspondence camera	VCC-8850CL / VCC-8750CL / VCC-8550CL / VCC-8350CL	Fundamentally, it is the camera link output model of our company.
Picture signal output1	NTSC output : 1 Vpp Analog Composit Signal Y/C Separate output : Y-signal 1Vpp Analog Composit Signal / C-signal BURST Level	
Picture signal output2	RGB Output mode RGB output : Progressive 0.7Vpp HD,VD output : 5V TTL Level NTSC Output mode RGB output : Interface 0.7Vpp HD output : 5V HD+VD TTL Level VD output : 5V VD TTL Level	
Camera Link Input/Output	Camera Link Base Configuration Specification	
External Trigger	12Pin Trigger input : SW(SINK) Camera Link input : Each Camera Conformity Camera Link output : Trigger Output A polar change SW Setup	12 pin input is negative logic.
Color Temp.	3200 ±50°K	
Gain	0dB, MANUAL (0dB~12dB)	
Shutter	OFF, 1/200, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/20000	
Random Trigger Shutter	1/4~1/20000	
High Frame rate	60f/s, 120f/s, 180f/s	
Sync. System	External Trigger Shutter	
Lens Mount	C-mount	
Operating Temperature	0°C ~ +40°C (spec.guaranteed) 80% or less of humidity -5°C ~ +50°C (operation.guaranteed) 80% or less of humidity	with no dew
Weight	approx. 480g	
Dimensions	110(W)×40(H)×142.6(L)	except the protruding part

DIMENSIONS





CIS Corporation

ISO14001 & ISO9001 Certificate

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The products and specifications are subject to change without notice.
EXview HAD CCD is the registered trademark of Sony Corp.