

ADVANCED HIGH RESOLUTION DAY&NIGHT CAMERA SK-B140 MANUAL

Features

- This camera can distinguish daytime and night. And it changes its mode according to intensity of illumination. It can watch an object at most suitable mode, "Color in daytime, and B/W at night". Also you can select the level of filter change according to light condition as follow.

	Level 1	Level 2	Level 3
Night mode	8Lux	5Lux	3Lux
Day mode	18Lux	15Lux	13Lux

- You can adjust all functions by semi-OSD.
- This camera has extra video output for test monitor.
- This camera supports advanced high resolution by HQ1 DSP of SONY Corp.
- You can connect 24V AC or 12V DC regardless polarity. Line-Lock function is available when you use 24V AC power.
- You can use the included external CDS sensor when you install this camera in a housing.

Caution and Warning

- Do not install the camera outdoors. Use weatherproof housing for outdoor.
- Choose an ideal location for the camera, since the camera unit must be protected against moisture and vibration.
- Be careful not to scratch the camera unit, especially lens glass.
- Use the camera under proper temperature. (-10°C ~ +50°C)
- Handle with care. Dropping it can cause serious damage to the camera.
- Avoid any direct sun light into the lens.
- Use the adaptor regulated 12V DC, 500mA or 24V AC, 500mA.
- If the photoconductive sensor is obstructed, D&N operation could not work properly. If you can not ensure intensity of light, install the included external sensor at an open place.
- The filter could be seen on the screen as installing. In this case, turn off and on the camera.



▷ Example of correct installation:
Be opened in front of the sensor



▷ Example of incorrect installation:
Do not obstruct the sensor



▷ Example of the external sensor installation:
Install the included external sensor at an open place, if you can not ensure intensity of light

If the product is to be put out of operation definitively, take it to a local recycling plant for a disposal which is not harmful to the environment.

Description of operation

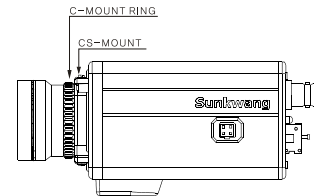
- Remove the protective rubber before installing a CS mount lens.
(If you use a C mount lens, add a C mount ring.-option)
- Connect the Video output jack to the monitor Video in jack.
- Connect power supply. Check the voltage.

Lens connection

※ The lens is not supplied with this camera

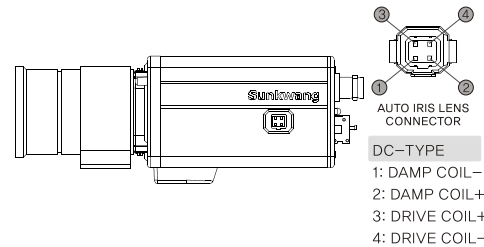
▶ Manual iris lens

- Before mounting a lens, please check whether it is a C mount or CS mount lens.
- CS mount lens : After removing the protective rubber, attach the lens.
- C mount lens : Before installing the lens, attach the C mount ring to the camera.
- Set the ALC/ELC mode to ELC by OSD.



▶ Auto iris lens

- Attach a DC lens as like the manual lens connection.
- Connect the lens plug to the auto iris connector on the right side of the camera.
- Set the ALC/ELC mode to ALC and adjust DC level by OSD.



Accessories

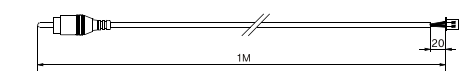
- ▷ HEXAGON WRENCH 1.5mm L TYPE ▷ EXTERNAL PHOTOCONDUCTIVE SENSOR



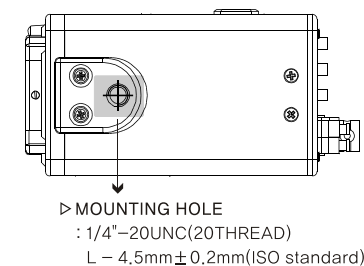
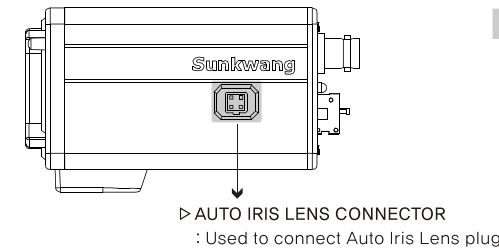
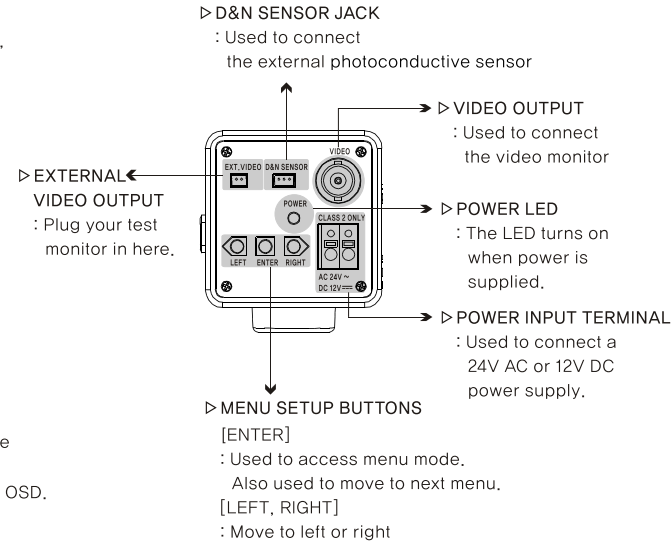
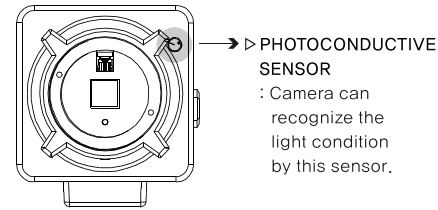
- ▷ CLAMP QUICK DQC-102 ▷ C MOUNT RING -(option)



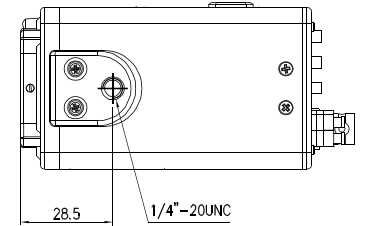
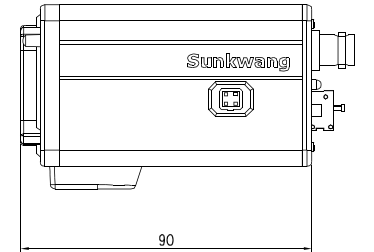
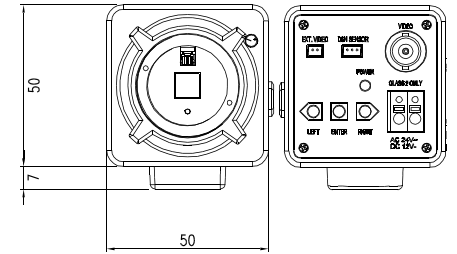
- ▷ EXTRA VIDEO TEST CABLE-(option)



Overview



Dimension



Troubleshooting guide

Before calling service, check the following points for possible misuse.

Problem	Check point
Too dark or bright picture	Readjust the Contrast or Brightness controls on the monitor.
No Power	Check for power connection.
Poor picture quality	Clean the camera lens. Readjust lens focus.
Shrinking picture	Check the condition of the Power sources.

If you can't correct the problem after going through this chart, contact a service professional for further assistance.

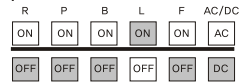
Specifacaton

Mandel No.	SK-B140	SK-B140X
Type	TRUE DAY&NIGHT CCD CAMERA	
Image sensor	1/3" COLOR SONY SUPER HAD CCD	1/3" COLOR SONY EXview HAD CCD
Effective pixel	768(H) x 494(V)PIXEL(NTSC) 752(H) x 582(V)PIXEL(PAL)	
Cell size	6.35μm(H) x 7.4μm(V)(NTSC) 6.5μm(H) x 6.25μm(V)(PAL)	
Resolution	Color : 550 TV-LINE , B/W : 600TV-LINE	
TV Type	NTSC, PAL	
Sync.type	Internal/External(Line-Lock)	
Scanning system	2:1 Interlace	
Scanning frequency (Horizontal)	INT: 15.734KHz(NTSC), 15.625KHz(PAL) L/L: 15.750KHz(NTSC), 15.625KHz(PAL)	
Scanning frequency (Vertical)	INT: 59.94Hz(NTSC), 50Hz(PAL) L/L: 60Hz(NTSC), 50Hz(PAL)	
Video output	1.0Vp-p(Sync,Negative) Termination 75Ω	
Gamma characteristic	γ=0.45 Typ.	
Min.illumination	0.05 Lux (at F/1.2)	0.01 Lux (at F/1.2)
S/N Ratio	45dB over(AGC OFF)	
Test Illuminance Area	Average test illuminance by front view	
Shutter	1/50(1/60) ~ 1/100,000 sec	
Voltage	Regulated 12V DC / 24V AC	
Current consumption	350mA(at 12V DC, 24V AC)Max.	
Reverse polarity protection	Non-polarity	
Lens mount	CS Mount	
Operation temp.	-10℃ ~ 50℃	
Preservation temp.	-20℃ ~ 60℃	
Dimension	50mm(W) x 57mm(H) x 95mm(L)	
Weight	Approx.300g	

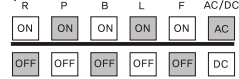
OSD Menu

Factory setting

12V DC input



24V AC input



* Display for factory set will last for 5 sec

* How to set OSD menu

⇩ ENTER: Move to next menu

⇩ LEFT: Move to left

⇩ RIGHT: Move to right

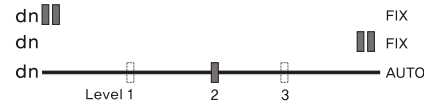
* OSD color

-NTSC: yellowish green

-PAL: sky blue

OSD Menu

1. Day & Night



Fixed at Day mode

Fixed at Night mode

Filter changing level selecting mode.

Level 1: 8/18 Lux(D→N / N→D)

Level 2: 5/15 Lux(D→N / N→D)

Level 3: 3/13 Lux(D→N / N→D)

2. DC LEVEL

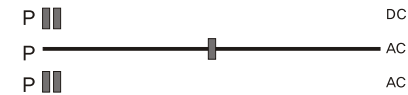


DC level control

30 levels adjustable

(*Not adjustable at ELC mode)

3. Phase

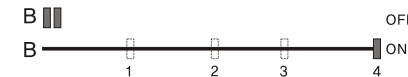


Not controllable at DC 12V input (Internal Sync.)

Phase controllable at AC 24V input(Line-Lock)

Internal Sync mode at AC 24V input

4. BLC



Normal Image(Default)

Back Light Compensation ON(Level selectable)

5. ALC/ELC



ALC mode(Default)

: Shutter speed 1/50(1/60)sec

for auto iris lens

ELC mode

: Electric shutter speed

1/50(1/60)~1/100,000sec for fixed

(or manual) iris lens

6. FLK

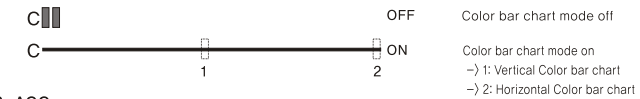


Flickerless off(Default)

Flickerless on

-> PAL : 1/120[sec], NTSC : 1/100[sec]

7. CHART



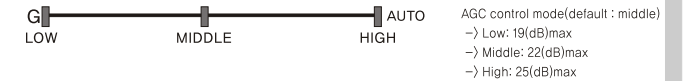
Color bar chart mode off

Color bar chart mode on

-> 1: Vertical Color bar chart

-> 2: Horizontal Color bar chart

8. AGC



AGC control mode(default : middle)

-> Low: 19(dB)max

-> Middle: 22(dB)max

-> High: 25(dB)max

9. MIRROR



Mirror mode off(Default)

Mirror mode on
(Reverse image)

*RESET

Push "LEFT & RIGHT" buttons for 3sec to set the factory default.

※ All specification is subject to change without notice to improve the quality.