

# ADVANCED HIGH RESOLUTION DAY&NIGHT CAMERA SK-B141, SK-B161 MANUAL

## Features

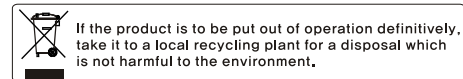
1. This camera can distinguish daytime and night. And it changes its mode according to intensity of illumination. It can watch an object at most suitable mode, "Color in daytime, and B/W at night". Also you can select the level of filter change according to light condition.(Option)
2. You can adjust all functions by OSD.
3. This camera supports the advanced high resolution, (530 TV Line-Color)
4. This camera has "non-polarity" function. You can connect 12V DC regardless polarity.

## Caution and Warning

1. Do not install the camera outdoors. Use weatherproof housing for outdoor.
2. Choose an ideal location for the camera, since the camera unit must be protected against moisture and vibration.
3. Be careful not to scratch the camera unit, especially lens glass.
4. Use the camera under proper temperature. (-10°C ~ +50°C)
5. Handle with care. Dropping it can cause serious damage to the camera.
6. Avoid any direct sun light into the lens.
7. Use the adaptor regulated 12V DC, 300mA.

## Description of operation

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

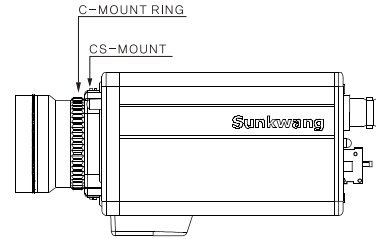


## Lens connection

※ The lens is not supplied with this camera

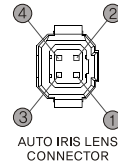
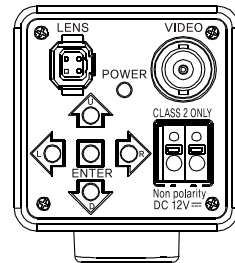
### Manual iris lens

1. Before mounting a lens, please check whether it is a C mount or CS mount lens.
2. CS mount lens : After removing the protective rubber, attach the lens.
3. C mount lens : Before installing the lens, attach the C mount ring to the camera.
4. Set the LENS mode to "manual" by OSD.



### Auto iris lens

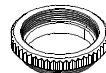
1. Attach a DC lens as like the manual lens connection.
2. Connect the lens plug to the auto iris lens connector on the rear panel of the camera.
3. Set the LENS mode to DC and adjust DC level by OSD.



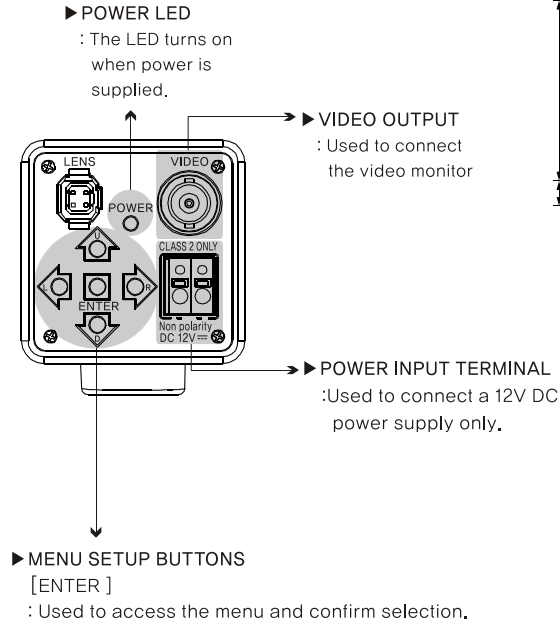
DC-TYPE  
1: DAMP COIL-  
2: DAMP COIL+  
3: DRIVE COIL+  
4: DRIVE COIL-

## Accessories

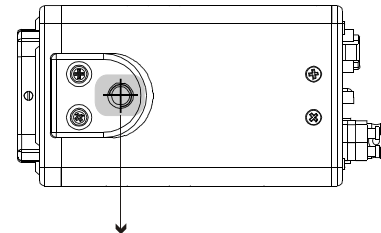
- ▶ HEXAGON WRENCH 1,5mm L TYPE    ▶ C MOUNT RING -(option)



## Overview

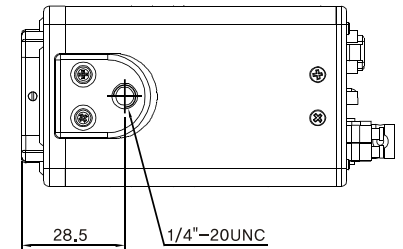
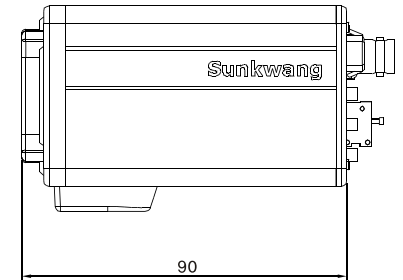
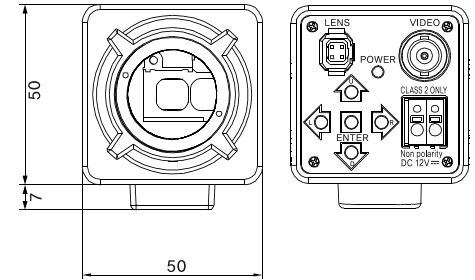


- [Up, Down] : Used to move the cursor to up or down.
- [Left, Right] : Used to move the cursor to left or right and change the value.



▶ MOUNTING HOLE : 1/4"-20UNC(20THREAD)  
L - 4,5mm±0,2mm(ISO standard)

## 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.

## Specification

Model No.	SK-B141	SK-B141X
	SK-B161	SK-B161X
Type	DAY&NIGHT CCD CAMERA	
Image sensor	1/3" COLOR SONY SUPER HAD CCD I	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	6.35 $\mu$ m(H) x 7.4 $\mu$ m(V)(NTSC) 6.5 $\mu$ m(H) x 6.25 $\mu$ m(V)(PAL)	
Resolution	Color : 530 TV-LINE , B/W : 580TV-LINE	
TV Type	NTSC, PAL	
Sync.type	Internal	
Scanning system	2:1 Interlace	
Scanning frequency (Horizontal)	15,734KHz(NTSC), 15,625KHz(PAL)	
Scanning frequency (Vertical)	59.94Hz(NTSC), 50Hz(PAL)	
Video output	1.0Vp-p(Sync,Negative) Termination 75 $\Omega$	
Gamma characteristic	$\gamma=0.45$ Typ.(adjustable)	
Min.illumination	0.01 Lux (at F/1.2)	
D&N	Filter exchange D&N	
	Electric D&N	
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	
Current consumption	Max.150mA(at 12V DC)	
Reverse polarity protection	Non-polarity	
Lens mount	CS Mount	
Operation temp.	-10 $^{\circ}$ C ~ 50 $^{\circ}$ C	
Preservation temp.	-20 $^{\circ}$ C ~ 60 $^{\circ}$ C	
Dimension	50mm(W) x 57mm(H) x 95mm(L)	
Weight	Approx. 300g	

## OSD Menu

OSD MENU	MODE	SUMMARY
LENS	MANUAL, DC	<ul style="list-style-type: none"> <li>MANUAL : Fixed focal and fixed iris lens</li> <li>DC : DC iris (vari-focal) lens</li> <li>- Brightness adjustable</li> </ul>
SHUTTER	AUTO, FLK, FIXED, MANUAL	<ul style="list-style-type: none"> <li>AUTO : Brightness adjustable</li> <li>FIXED : 1/60(1/50), 1/100(1/120), 1/250, 1/500, 1/2000, 1/5000, 1/10,000, 1/100,000 sec. Selectable</li> <li>MANUAL : 1/60(1/50) ~ 1/100,000(256 Steps)</li> </ul>
BLC	OFF, ON	<ul style="list-style-type: none"> <li>64 area selectable, 64 step adjustable</li> </ul>
AGC	OFF, ON	<ul style="list-style-type: none"> <li>256 step adjustable</li> </ul>
WHITE BAL.	ATW, AWB, FIXED MANUAL	<ul style="list-style-type: none"> <li>ATW : Auto tracking white balance</li> <li>AWB : 2,500 ~ 9,500<math>^{\circ}</math>K</li> <li>FIXED : Select 4 kinds fixed mode</li> <li>- MODE1 : 2,500<math>^{\circ}</math>K</li> <li>- MODE2 : 3,100<math>^{\circ}</math>K</li> <li>- MODE3 : 5,100<math>^{\circ}</math>K</li> <li>- MODE4 : 6,500<math>^{\circ}</math>K</li> <li>MANUAL : RED/BLUE 256 step adjustable</li> </ul>
FUNCTION	Refer to the below table	
ADJUST	CONTRAST, SHARPNESS, CB_GAIN, CR_GAIN	<ul style="list-style-type: none"> <li>CONTRAST : 256 step adjustable</li> <li>SHARPNESS : 32 step adjustable</li> <li>CB_GAIN, CR_GAIN : 256 step adjustable</li> </ul>
EXIT		<ul style="list-style-type: none"> <li>Saved all the setting menu, then exit</li> </ul>
FUNCTION	MODE	SUMMARY
RETURN		<ul style="list-style-type: none"> <li>Save the function menu and then return to the SETUP menu.</li> </ul>
CAMERA ID	OFF, ON	<ul style="list-style-type: none"> <li>Maximum length for the name display is limited 15 letters</li> <li>Position is selectable</li> <li>English capital letters, Numeral 0~9, 28 special letters with blank</li> </ul>
MIRROR	OFF, ON	<ul style="list-style-type: none"> <li>Set a horizontal image inversion</li> </ul>
DAY&NIGHT	AUTO, COLOR, B/W	<p><b>AUTO MODE</b></p> <ul style="list-style-type: none"> <li>DELAY : The time required to change at each mode(Color <math>\leftrightarrow</math> B/W) "1" means 0.5 second. (Default : 30 <math>\approx</math> 15 secretary)</li> <li>START LEVEL : The level to change color mode into B/W(Default : 150 <math>\approx</math> 1 Lux)</li> <li>END LEVEL : The level to change B/W mode into Color(Default : 10 <math>\approx</math> 4 Lux)</li> <li>* User can select the value between 0.1Lux and 5Lux.</li> <li>* The changing point is subject to environment.</li> </ul>

		<p>※ Caution</p> <ol style="list-style-type: none"> <li>Start level should be higher than End level, but lower than AGC level.</li> <li>Delay time should be above "10" ("0" means D&amp;N function is off.)</li> </ol>
MOTION	OFF, ON	<ul style="list-style-type: none"> <li>ON MODE</li> <li>- 64 area selectable</li> <li>- Push the set button a few second after areas selected</li> <li>- THRESHOLD : 256 step adjustable</li> <li>- MOTION TRACE : ON/OFF</li> </ul>
PRIVACY	OFF, ON	<ul style="list-style-type: none"> <li>ON MODE : AREA SELECT (4Zones / Size / Color Programmable)</li> </ul>
GAMMA	0.05 ~ 1.00 adjustable on 0.05 step	<ul style="list-style-type: none"> <li>Factory default is 0.45</li> </ul>
LANGUAGE	ENGLISH, KOREAN, JAPANESE, CHINESE	<ul style="list-style-type: none"> <li>Set the language on setup menu</li> </ul>
RESET		<ul style="list-style-type: none"> <li>Reset your camera to factory default condition</li> </ul>

※ Pressing 2 buttons at one time might cause an error. In this case, exit and enter the menu again or turn off and on.

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