SAMSUNG TECHWIN

High Resolution Compact Flat Dome Camera

User Manual



SALES NETWORK

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SCV-2010F

Caution

THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A DIGITAL DEVICE, PURSUANT TO PART 15 OF FCC RULES. THESE LIMITS ARE DESIGNED TO PROVIDE REASONABLE PROTECTION AGAINST HARMFUL INTERFERENCE WHEN THE EQUIPMENT IS OPERATED IN A COMMERCIAL ENVIRONMENT.

THIS EQUIPMENT GENERATES, USES, AND CAN RADIATE RADIO FREQUENCY ENERGY AND, IF NOT INSTALLED AND USED IN ACCORDANCE WITH THE INSTRUCTION MANUAL, MAY CAUSE HARMFUL INTERFERENCE TO RADIO COMMUNICATIONS. OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE IN WHICH CASE THE USER WILL BE REQUIRED. TO CORRECT THE INTERFERENCE AT HIS OWN EXPENSE.



IC COMPLIANCE NOTICE

THIS CLASS A DIGITAL APPARATUS MEETS ALL REQUIREMENTS OF THE CANADIAN INTERFERENCE, CAUSING EQUIPMENT REGULATIONS OF ICES-003.

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)



Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal

Correct disposal of batteries in this product

(Applicable in the European Union and other European countries with separate battery return systems.) This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

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Important Safety Instructions

- Read these instructions
- Keep these instructions.
- Heed all warnings.
- 4. Follow all instructions 5. Do not use this apparatus near water
- 6. Clean only with dry cloth.
- 7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. 8. Do not install pear any heat sources such as radiators, heat registers, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the
- provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet. 10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus
- 13. Unplug this apparatus when a card is used. Use caution when moving the cart/ apparatus combination to avoid injury
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as powersupply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped

Features



By adopting a diagonal 6mm(1/3") 410,000(NTSC) pixel, 470,000(PAL) pixel SONY CCD, the camera produces clear picture quality with a horizontal resolution of 600 TV lines for color.

Excellent Sensitivity

The built-in high sensitivity COLOR CCD produces a clear image even in 0.04 Lux or lower illumination.





RISK OF ELECTRIC SHOCK.DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL



THIS SYMBOL INDICATES THAT DANGEROUS VOLTAGE CONSISTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT.



THIS EXCLAMATION POINT SYMBOL IS INTENDED TO ALERT THE USER TO THE PRESENCE OF IMPORTANT OPERATING AND MAINTENANCE (SERVICING) INSTRUCTIONS IN THE LITERATURE ACCOMPANYING THE APPLIANCE

- TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
- TO PREVENT INJURY. THIS APPARATUS MUST BE SECURELY ATTACHED TO THE FLOOR/WALL IN ACCORDANCE WITH THE INSTALL ATION INSTRUCTIONS.

- 1. BE SUBE TO USE ONLY THE STANDARD ADAPTER THAT IS SPECIFIED IN THE SPECIFICATION SHEET. USING ANY OTHER ADAPTER COULD CAUSE FIRE, ELECTRICAL SHOCK, OR DAMAGE TO THE PRODUCT.
- 2. INCORRECTLY CONNECTING THE POWER SUPPLY OR REPLACING BATTERY MAY CAUSE EXPLOSION, FIRE, ELECTRIC SHOCK OR DAMAGE TO THE PRODUCT 3. DO NOT CONNECT MULTIPLE CAMERAS TO A SINGLE ADAPTER, EXCEEDING THE CAPACITY MAY CAUSE ABNORMAL HEAT.

4. SECURELY PLUG THE POWER CORD INTO THE POWER RECEPTACLE. INSECURE CONNECTION MAY CAUSE FIRE.

- 5. WHEN INSTALLING THE CAMERA, FASTEN IT SECURELY AND FIRMLY. THE FALL OF CAMERA MAY CAUSE PERSONAL INJURY.
- 6. DO NOT INSTALL THE UNIT IN HUMID, DUSTY, OR SOOTY LOCATIONS, DOING SO MAY CAUSE FIRE OR FLECTBIC SHOCK.
- 7. IF ANY UNUSUAL SMELLS OR SMOKE COME FROM THE UNIT, STOP USING THE PRODUCT. IN SUCH CASE, IMMEDIATELY DISCONNECT THE POWER SOURCE AND CONTACT THE SERVICE CENTER, CONTINUED USE IN SUCH A CONDITION MAY CAUSE FIRE OR ELECTRIC SHOCK.

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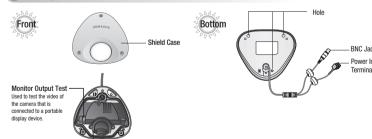
The high-performance W-V DSP chip effectively removes low-light gain noise and afterimage to provide clear images even in dark environments.

Pan and Tilt

Pan and tilt are available after installing camera.

SSNR3 Function (Samsung Super Noise Reduction)

Component Names and Functions



Accessories

Lens Cover



















8. IF THIS PRODUCT FAILS TO OPERATE NORMALLY, CONTACT THE NEAREST SERVICE CENTER. NEVER DISASSEMBLE OR MODIFY THIS PRODUCT IN ANY WAY, (SAMSUNG IS NOT LIABLE FOR PROBLEMS CAUSED BY UNAUTHORIZED MODIFICATIONS OR ATTEMPTED REPAIR.)

9. WHEN CLEANING, DO NOT SPRAY WATER DIRECTLY ONTO PARTS OF THE PRODUCT, DOING SO MAY CAUSE FIRE OR ELECTRIC SHOCK.

CAUTION

- 1, DO NOT DROP OBJECTS ON THE PRODUCT OR APPLY STRONG BLOWS TO IT, KEEP AWAY FROM A LOCATION SUBJECT TO EXCESSIVE VIBRATION OR MAGNETIC INTERFERENCE.
- 2 DO NOT INSTALL IN A LOCATION SUBJECT TO HIGH TEMPERATURE (OVER 50°), LOW TEMPERATURE (BELOW -10°), OR HIGH HUMIDITY. DOING SO MAY CAUSE FIRE OR ELECTRIC SHOCK.
- 3. IF YOU WANT TO RELOCATE THE ALREADY INSTALLED PRODUCT, BE SURE TO TURN OFF THE POWER AND
- 4. REMOVE THE POWER PLUG FROM THE OUTLET WHEN THERE IS A LIGHTING STORM, NEGLECTING TO DO SO MAY CAUSE FIRE OR DAMAGE TO THE PRODUCT.
- 5. KEEP OUT OF DIRECT SUNLIGHT AND HEAT RADIATION SOURCES. IT MAY CAUSE FIRE.
- 6. INSTALL IT IN A PLACE WITH GOOD VENTILATION.
- 7. AVOID AIMING THE CAMERA DIRECTLY TOWARDS EXTREMELY BRIGHT OBJECTS SUCH AS SUN. AS THIS MAY DAMAGE THE CCD IMAGE SENSOR.
- 8. APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL BE PLACED ON THE APPARATUS.
- 9. THE MAINS PLUG IS USED AS A DISCONNECT DEVICE AND SHALL STAY READILY OPERABLE AT ANY TIME.
- 10. DO NOT EXPOSE THE CAMERA TO RADIOACTIVITY, RADIOACTIVITY EXPOSURE MAY DAMAGE THE CCD.

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO

- 1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND
- 2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

High Resolution Compact Flat Dome Camera 3 User Guide

Installation

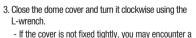
Disassembling

Using the L-wrench provided, loosen 3 screws by turning them counterclockwise and separate the dome cover.

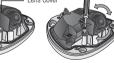


Installing Camera

- 1. Use the screws to secure the camera to the ceiling.
- 2. Loosen the screws slightly on both sides of the lens cover to adjust the lens in a desired angle. Then, tighten up the screws.









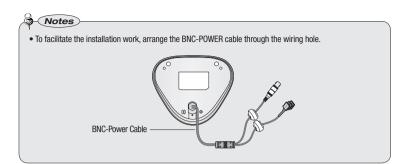
- The recommended screws are 4mm Tapping screws.
- · The screws should not be larger than 4mm.

problem with waterproofing. (IP66)

- · When fastening the two screws, be careful not to damage the dome components.
- · Arrange the cables properly lest that they be stuck between or peeled off. Otherwise, it may cause damage to the camera or a fire.

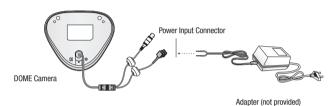
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Connecting to Power

• Connect the adapter to the power input connector as shown in the figure below. Use a DC 12V. (The Adapter is not provided with the Dome Camera.)



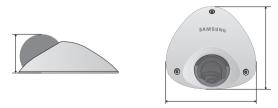
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Troubleshooting

If you have trouble operating your camera, refer to the following. If the guidelines do not enable you to solve the problem, contact an authorized technician.

- The image on the screen is dim.
- Check if the lens are stained. If dirty, clean the lens with soft, clean cloth.
- The image is dimmer at night than daytime. If the focus is not right, adjust it at daytime.
- The contrast on the screen is too weak.
- Adjust the contrast feature of the monitor.
- If the camera is exposed under too strong light, change the camera position.
- Adjust the lens BACK FOCUS again.
- The camera is not work properly, and the surface of the camera case is hot.
- Check that you have connected the camera to a proper power (DC 12V±10%).

Dimension



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For DC Power Type

Resistance of copper wire [at 200°(68°F)]

Copper wire size (AWG)	Copper wire size (AWG) #24(0.22mm²)		#20(0.52mm²)	#18(0.83mm²)	
Resistance (Ω / m)	0.078	0.050	0.030	0.018	
Voltage Drop (V/m)	0.028	0.018	0.011	0.006	

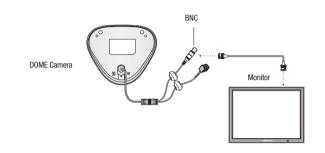
- As the voltage drop according to the length of the cable in the above table, a camera may malfunction if there is an excessively long cable run.

 * Voltage for camera operation: DC 12V+10%
- * Voltage drops in the above table are variable according to types of cable manufacturer.

Connection to Monitor

Connect the VIDEO-OUT jack to the VIDEO-IN jack of monitor.

- As a connecting method varies according to instruments, refer to the manual supplied with the instrument.
- Connect the cable after power is turned off.



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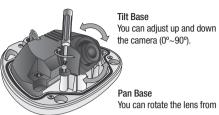
Specification

	SCV-2010FN	SCV-2010FP		
VIDEO				
Imaging Device	1/3" Super HAD CCD	1/3" Super HAD CCD		
Total Pixels	811(H) x 508(V)	795(H) x 596(V)		
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)		
Scanning System	2:1 Interlace			
Synchronization	Internal			
Frequency	H:15.734KHz/V:59.94Hz	H: 15.625KHz / V : 50.00Hz		
Horizontal Resolution	Color: 600 TV lines			
Min. Illumination	Color: 0.04Lux (Sens-up, 2x)			
S / N (Y signal)	52dB (AGC off, Weight on)			
Video Output	CVBS : 1.0 Vp-p / 75Ω composite			
LENS				
Focal Length (Zoom Ratio)	3.0mm			
Max. Aperture Ratio	F2.0			
Angular Field of View	H:89.5°/V:67.2°			
Pan / Tilt				
Pan Range	±10°			
Tilt Range	0° ~ 90°			
OPERATIONAL				
On Screen Display	Multi-language Support by Coaxial Cable English, Japanese, Spanish, French, Portuguese, Korean	Multi-language Support by Coaxial Cable English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese		
Camera Title	Off / On (Displayed 15 characters)			
Day & Night	Auto (Electrical) / Color / B/W	Auto (Electrical) / Color / B/W		
Backlight Compensation	BLC / HLC / OFF			

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Panning & Tilting Control

You can adjust the Panning and Tilting angle freely. (Panning angle: ±10°, Tilting angle: 0°~90°)



- You can rotate the lens from ±10°
- 2) Adjustment Tilting angle: After attaching the dome camera to a ceiling, adjust the tilting angle for better monitoring area by rotating the Tilt Base. The tilting angle can be adjusted to 0° from 90° freely. (based the

monitoring area by rotating the Pan Base. The panning angle can be adjusted $\pm 10^{\circ}$ freely.

1) Adjustment Panning angle: After attaching the dome camera to a ceiling, adjust the panning angle for better

Notes

- If you want to adjust the lens angle, loosen the screws slightly on both sides of the lens cover to prevent possible damage to the camera before the adjustment.
- This dome camera is to be installed on the ceiling by factory default.
- If the camera is tilted more than 90°, captured screen may be obscured.

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Specification

	SCV-2010FN	SCV-2010FP		
Dynamic Range	SSDR (Off /On)			
Digital Noise Reduction	SSNRIII (Off/On)			
Digital Image Stabilization	Off / On			
Motion Detection	Off / On (8 programmable zones)			
Privacy Masking	Off / On (12 programmable zones)			
Sens-up (Frame Integration)	2x ~ 512x			
Gain Control	low/high/off			
White Balance	ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)			
Electronic Shutter Speed	1/60 ~ 1/120,000 sec	1/50 ~ 1/120,000 sec		
Digital Zoom	Off / On (1x ~ 16x)			
Flip / Mirror (Reverse)	H-Rev (Off/On), V-Rev (Off/On)			
Communication	Coaxial Control (SPC-300 compatible)			
Protocol	Pelco-C (Coaxitron)			
ENVIRONMENTAL				
Operating Temperature / Humidity	-10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH			
ELECTRICAL				
Input Voltage	DC 12V±10%			
Power Consumption	1.8W			
MECHANICAL				
Color/Material	Body: Ivory / Aluminum			
Dimension (W X H X D)	W125.2 x H52 x D115.2mm			
Weight	410g			
Water Resistance	IP 66			

** The specification for this product may change without prior notice for product improvement.

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Camera Operation

Built-in functions of the SCV-2010F Camera include the following

Auto Functions	Setting	Descriptions
Electronic Shutter Speed	ESC	The shutter is controlled according to the brightness of screen by automatically.
WHITE BALANCE	ATW	It can be used within the color temperature range 1,700K \sim 11,000K.
BACKLIGHT	OFF	It helps view a desired area of picture at the backlight condition.
GAIN CONTROL	HIGH	The gain increases or decreases within the range of 6dB~34dB.
SSNR3 (Noise Reduction)	ON	There is sufficient reduction in noise levels without causing much ghost imaging.
SENS-UP	AUT0	It helps maintain a bright, clear screen image by automatically detecting changes in the level in low light levels without causing much ghost imaging.
SHARPNESS	ON	The outline of the video image becomes cleaner and more distinctive.
LENS SHADE	ON	It helps correct shading of Lens.

* If you need to control OSD menu, It needs coaxial controller.

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