

SAMSUNG TECHWIN

SAMSUNG

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SAMSUNG

Outstanding 24-Hour image 580TVL / 700TVL



High Resolution Day & Night Dome Camera SID-460 User's Manual

Thank you for purchasing a SAMSUNG CCD CAMERA.
Before attempting to connect or operate this product,
please read these instructions carefully and save this manual for future use.

ENGLISH

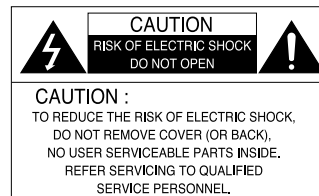
Before operating the camera, confirm the camera model and proper input power voltage. In order to that you can understand this manual thoroughly, we'll introduce our model description.

■ SID-460 SERIES

- NTSC MODEL
SID-460N
- PAL MODEL
SID-460P

■ MODEL DESCRIPTION

- SID-460X
└─ SIGNAL SYSTEM
- SIGNAL SYSTEM
N → NTSC MODEL
P → PAL MODEL



The lightning flash with an arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

INFORMATION - This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the 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.

WARNING - Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

WARNING - To prevent electric shock and risk of fire hazards:

- ◆ Do NOT use power sources other than that specified.
- ◆ Do NOT expose this appliance to rain or moisture.

This installation should be made by a qualified service person and should conform to all local codes.

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Features

Ultra High Resolution

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 580 TV lines for color.

Excellent Sensitivity

The built-in high sensitivity COLOR CCD enable a clear image even in 0.15Lux(COLOR), 0.0006 Lux (Color, 256x Sens-up), 0.001 Lux (B/W) or lower illumination.

SSNR (Samsung Super Noise Reduction) Function

The high performance W-IV DSP chip dramatically reduces the gain noise in digital image processing, producing clear, sharp images in low lighting environments.

Day & Night

The camera identifies whether it is day or night and automatically switches to the appropriate mode, depending on its environment. By day, the camera switches to color mode in order to maintain optimal color. At night, it switches to B/W mode so as to obtain better picture definition.

DIS (Digital Image Stabilizer)

The DIS function compensates for any camera movement, to produce more stable pictures.

Sub Monitor Function

The sub monitor function enables easy adjustment of the camera angle within the monitoring range during its installation.

3-Axis camera mechanism

The SID-460 is especially incredibly flexible to install with its 3-axis camera construction, which makes the camera wall or slope mountable.

Miscellaneous Functions

HLC(High Light Compensation), SENS-UP, FREEZE, FLIP (H/V-REV), D-ZOOM, SHARPNESS, MOTION DETECTION and PRIVACY functions are provided.

RS-485 Communication Control Support

Remote OSD menu control via an RS-485 interface is supported.

OSD

The camera control is convenient by using 7 different foreign language O.S.D.
 - NTSC : Korean, English, Spanish, Japanese
 - PAL : English, French, German, Spanish, Italian, Chinese



Samsung Techwin cares for the environment at all product manufacturing stages to preserve the environment, and is taking a number of steps to provide customers with more environment-friendly products. The Eco mark represents Samsung Techwin's will to create environment-friendly products, and indicates that the product satisfies the EU RoHS Directive.

Warnings & Cautions

This information is provided to ensure your safety and to prevent any losses, financial or otherwise. Please read it carefully and use the product accordingly.

- * For product inquiries, please contact the retail shop where you bought the camera. The use of equipment such as an aerial ladder while providing after-sales service shall be at your expense.
- * Separate the power plug when thunder crashes or lighting flashes.
- * This product is support equipment for surveillance system. Therefore, we can't compensate for material loss and/or personal injuries by robbery, fire, natural disaster or something like this type.

Warning/Attention/Special Mark Messages

	Ignoring this information may result in material loss and/or serious personal injuries including death.		Ignoring this information may result in material loss and/or a slight injuries.
	Indicates "Never Allowed."		Indicates "No Disassembling."



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

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

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 this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract.

This product should not be mixed with other commercial wastes for disposal.

Precautions

Do not install under extreme temperature conditions.



Use only under temperature conditions between -10°C and $+50^{\circ}\text{C}$. Provide good ventilation when using in high temperature conditions.

Do not install in high humidity environment.



May lower image quality.

Do not install under unstable lighting conditions.



Severe lighting changes or flickering may hinder normal camera operation.

Avoid touching the camera lens.



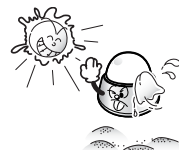
The lens is the most important component of the camera. Be careful not to smear it with fingerprints.

Do not drop the camera or subject it to physical shock.



May cause a product malfunction.

Never keep the camera face to strong light directly.



May damage the CCD.

Precautions

Do not expose the camera to radioactivity.

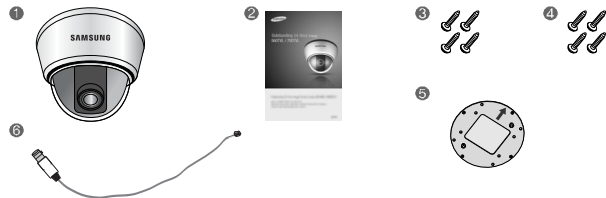


If it is exposed to radioactivity, For heated CCD, it will be out of order.

Notes

- If the camera is exposed to spotlight or object reflecting strong light, smear or blooming may occur.
- Please check that the power satisfies the normal specification before connecting the camera.

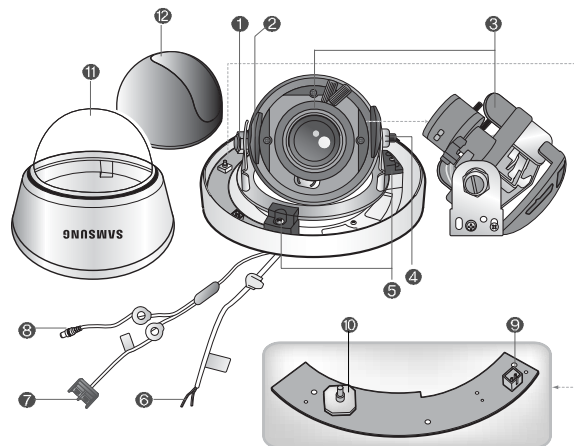
Components and Accessories



- ① SID-460
- ② Instruction Manual
- ③ M4 Machine Screw 4EA
- ④ Installation Video Output Cable

- ⑤ M4 Tapping Screw 4EA
- ⑥ Adapter plate

Overview



- ① Pan Base : control panning angle of camera
- ② Rotate Base : control rotating angle of camera
- ③ X2.5 Vari-focal Lens Module
- ④ Rotate Base Holding Screw : fix rotated position
- ⑤ Pan Base Holding Screws (Color : Silver) : fix panned position
- ⑥ RS-485 Control Cable : The detailed description refers to p14
- ⑦ Power Input Connector
- ⑧ Video Output Jack
- ⑨ Video Output Terminal to Monitor
- ⑩ Function Setup Button
display the menu on the screen and move the cursor to four directions to confirm status or after changing a selected item.
- ⑪ Dome Cover
- ⑫ Shield Case

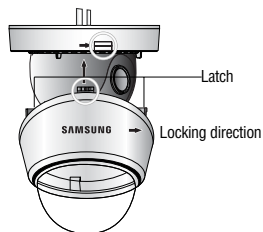
Installation

Installation

Notes

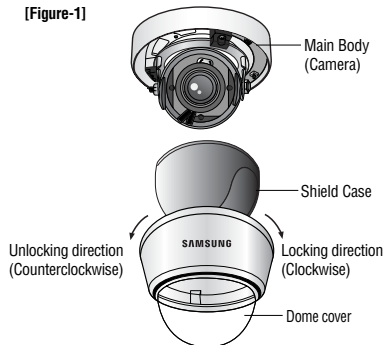
- The installation should be done by qualified service personnel or system installers.
- If the ceiling material is not strong enough to hold the installation screws, the camera may fall off. Reinforce the ceiling as needed.

- 1) Separate the dome cover by clockwise rotation.
- 2) Separate the shield case by pulling from the camera body.



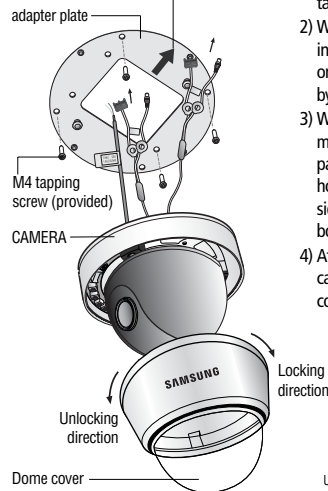
[Figure-1]

* To install the dome cover on the camera body, turn the latches in locking direction as shown in the figure 1.

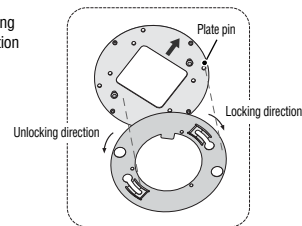


When installing on a adapter plate

An arrow for installing directions



- 1) Place the bracket provided on the installation surface and fix it with the M4 tapping screws (provided).
- 2) When placing the camera body on the plate, insert the plate pin into the mounting hole on the body as shown in figure-1 and fix it by turning clockwise.
- 3) When placing the camera body on the plate, make sure the power and the BNC cables pass through their respective designated holes. (When placing the cable through its side, thread it through the hole at the bottom.)
- 4) After installation and adjustment of the camera are complete, secure the dome cover by turning it clockwise.

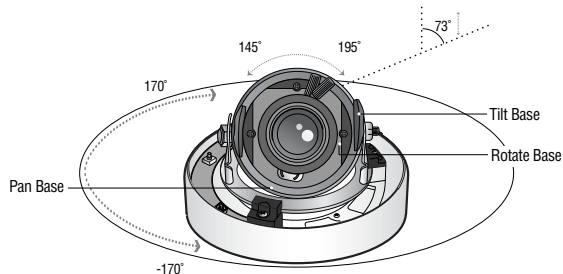


[Figure-1]

Notes

- Please locate an arrow on bracket for installing direction that you wish to observe Area and then fix it with the M4 tapping screws.

Adjust the panning and tilting, rotating while watching the monitor



1) You can adjust camera to any direction by using Pan, Tilt, Rotate mechanism.

- Pan Base moves by 170° to each side direction and 340° on the whole.
- Tilt Base covers total 146° angle (73° to each side).
- Angle range of Rotate Base is the same as that of Pan Base. But One side range is 195° and another is 145°.

2) Methods of adjustment

• The case of wall installation

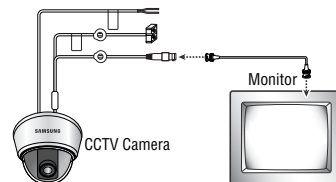
- 1 After mounting the camera on a wall, adjusting the panning angle so that the camera can face the direction to monitor when tilting.
- 2 And then adjust the tilting angle by rotating the tilt base.
- 3 Loosen the rotate base hold screw and adjust rotate base for the best monitoring.
- 4 Tighten the rotate base hold screw.

• The case of ceiling installation

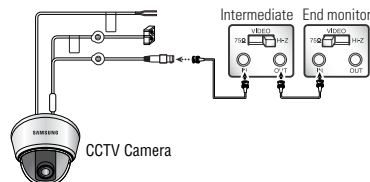
- 1 After mounting the camera on a ceiling, adjusting the panning angle for better monitoring area by rotating the pan base.
- 2 And then adjust the tilting angle by rotating the tilt base.

Connecting Monitor

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

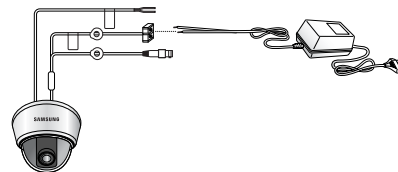


- As the connecting method varies with the instruments, refer to the manual supplied with the instrument.
- If necessary, you can connect the monitor to the REMOTE jack on the back of your camera.
- Only connect the cable when the power is turned off.
- Set the 75Ω / Hi-Z selection switch as shown below if you have an intermediate device.



Connecting to Power

Connect the adaptor to the power input connector as shown in the figure below. The recommended adaptor specification for SID-460N/SID-460P is DC 12V / 500mA.



Connection

When the resistance value of copper wire is at [20°C(68°F)]

Copper wire size (AWG)	#24(0.22mm ²)	#22(0.33mm ²)	#20(0.52mm ²)	#18(0.83mm ²)
Resistance (Ω / m)	0.078	0.050	0.030	0.018
Voltage Drop (V/m)	0.028	0.018	0.011	0.006

- As shown in the table above, voltage decreases as the wire gets longer. Therefore use of an excessively long adaptor output line for connection to the camera may affect the performance of the camera.

*Standard voltage for camera operation : DC 12V ± 10%

*There may be some deviation in voltage drop depending on the type of wire and the manufacturer.

Notes

- Be sure to connect power only after all the installation is complete.
- Note that DC adaptor is not supplied with camera.
- Ground should be connected to the GND terminal.

485 Control Board Connection Port	RS-485 Control Port
(+) CONNECTION TERMINAL	RED (TRX+)
(-) CONNECTION TERMINAL	WHITE (TRX-)

* RS-485 Communication establishment initial value

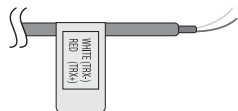
Item	Camera ID	BAUD RATE	UART MODE	PET PKT
Initial value	1	9600	8-NONE-1	ENABLE

Notes

- When you construct external control systems for a camera control, please use to the SAMSUNG TECHWIN PROTOCOL or PELCO-D PROTOCOL.
- When you connecting to RS-485 control cable, please peel off the outer skin inside the RS-485 control cable.

RS-485 communication control

Connecting to RS-485 Control Cable



CONTROL CABLE	SPEC
RED (TRX+)	RS-485 +
WHITE(TRX-)	RS-485 -

Using a RS-485 communication, it will be able to control the OSD menu at the SAMSUNG TECHWIN System Controller or DVR.

(1) The case which it controls from the PC

Using a RS-485 converter, It connects to RS-485 control cable outside camera and serial cable EX) SERIAL PORT OF THE PC(COM1) → SERIAL CABLE → RS-485 CONVERTER → RS-485 CONTROL CABLE

(2) The case which it controls from the DVR or System Controller

It connects the RS-485 control cable in the connection terminal of 485 control boards which are connected with the DVR or System Controller.

Operating Your Camera

Menu Configuration

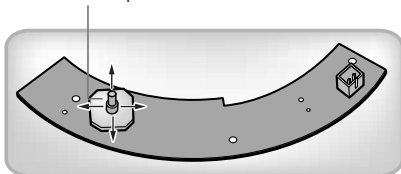
	Setup Menu				
LENS	• DC				
EXPOSURE	• SHUTTER	• AGC	• SENS-UP	• RETURN	
WHITE BALANCE	• ATW	• MANUAL	• AWC → SET		
	• OUTDOOR	• INDOOR			
BACKLIGHT	• OFF	• BLC	• HLC		
SSNR	• ON	• OFF			
DAY/NIGHT	• COLOR	• B/W	• AUTO		
IMAGE ADJUSTMENT	• FREEZE	• V-REV	• H-REV		
(IMAGE ADJ.)	• D-ZOOM	• SHARPNESS	• RETURN		
SPECIAL	• CAMTITLE	• MOTION DET	• PRIVACY		
	• DIS	• COMM ADJ	• LANGUAGE		
	• RESET	• RETURN			
EXIT					

Operating Your Camera

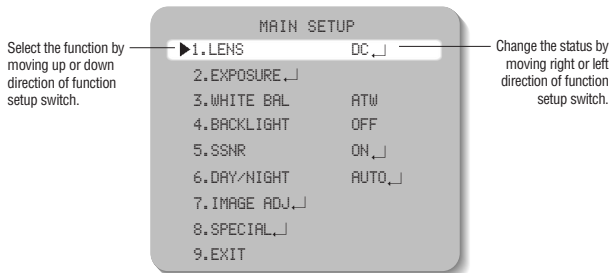
Menu Setup

Use the Function Setup switch on back of the camera.

Function Setup switch



1. Press the Function Setup switch.
 - Main setup menu is displayed on the monitor screen.



2. Select a desired function using the Function Setup switch.
 - Place the cursor over a desired item.
3. Set up a selected item by using the Function Setup switch.
4. To finish the setting, select 'EXIT' and press the Function Setup switch.

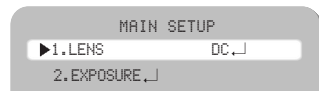
Notes

- An item with the icon also has sub menus. To select a sub menu, select an item with the icon and press the Function Setup switch.
- An item with the --- icon is unavailable due to function settings.

LENS

Using this function, you can control screen brightness.

1. When the SETUP menu screen is displayed, select 'LENS' by using the Function Setup switch so that the arrow indicates 'LENS'.

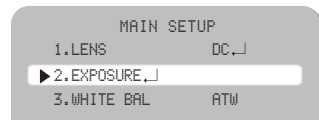


- DC : Select Auto Iris Lens

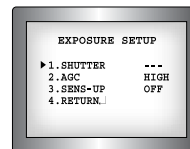
- When DC is selected, you can control screen brightness. The range of brightness control is between 1 and 70. Adjust the brightness appropriately for optimal screen brightness.



EXPOSURE



1. When the SETUP menu screen is displayed, select 'EXPOSURE' by using the Function Setup switch so that the arrow indicates 'EXPOSURE'.
2. Select a desired mode using the Function Setup switch.



Operating Your Camera

⦿ **SHUTTER** : Because of using built-in dc lens, shutter speed is fixed at 1/60(50) basically.

- A.FLK : Select this when you experience picture flicker, which can happen when there is a clash with the frequency of the installed lighting.



Notes

- When the SHUTTER is set to MANUAL or A.FLK mode, SENS-UP will be disabled.

⦿ **AGC (AUTO GAIN CONTROL)** :

The higher the gain level, the brighter the screen - but the higher the noise.

- OFF : Deactivates the AGC function.
- LOW : Allows automatic gain control from 5.3dB to 32dB.
- HIGH : Allows automatic gain control from 5.3dB to 37dB.

⦿ **SENS-UP** :

When it is night or dark, the camera automatically detects the light level and maintains a clear picture if this mode is activated.

- OFF : Deactivates the SENS-UP function.
- AUTO : Activates the SENS-UP function.



⦿ **RETURN** : Select this to save the changes in the EXPOSURE menu and return to the SETUP menu.



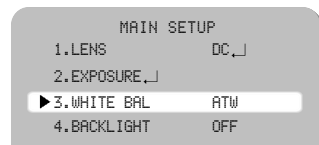
Notes

- If you press the SET button in 'AUTO' mode, You can adjust brightness by increasing or decreasing the shutter speed. (X2~X256)
- Note that the higher the zoom level, the brighter the screen, but the more likely it is that an after-image will appear.
- Although Noise, Spots, and Whitish symptoms may occur in SENS-UP operation when the zoom level is increased, this is normal.

White Balance (White Bal.)

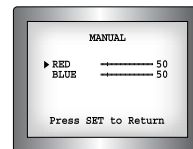
Use the White Balance function to adjust the screen color.

1. When the SETUP menu screen is displayed, select 'White Bal.' by using the Function Setup switch so that the arrow indicates 'White Bal.' .
2. Select a desired mode using the Function Setup switch.



※ Select one of the following 5 modes, as appropriate for your purpose.

- ⦿ **ATW** : Select this when the color temperature is between 1800°K and 10500°K
- ⦿ **INDOOR** : Select this when the color temperature is between 4500°K and 8500°K.
- ⦿ **OUTDOOR** : Select this when the color temperature is between 1800°K and 10500°K. (sodium light inclusion)
- ⦿ **AWC** → **SET** : To find the optimal setting for the current luminance environment in this mode, set the point the camera towards a sheet of white paper and press the SET button. If the environment changes, readjust it.
- ⦿ **MANUAL** : Select this to fine-tune White Balance manually. Set White Balance first by using the ATW or AWC mode. After that switch to MANUAL mode, fine-tune the White Balance and then press the Function Setup switch.



Notes

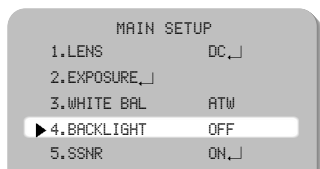
- White Balance may not work properly under the following conditions. In this case select the AWC mode.
 - ① When the color temperature of environment surrounding the subject is out of the control range (e.g. clear sky, or sunset)
 - ② When the ambient illumination of the subject is dim.
 - ③ If the camera is directed towards a fluorescent light or is installed in a place where illumination changes dramatically, the White Balance operation may become unstable.

Operating Your Camera

BACKLIGHT

This camera is designed so that it delivers a distinctive subject and background at the same time, even when the subject is in backlight, unlike conventional cameras, by adopting a proprietary W-IV DSP chip.

1. When the SETUP menu screen is displayed, select 'BACKLIGHT' by using the Function Setup switch so that the arrow indicates 'BACKLIGHT'.



2. Select a desired mode using the Function Setup switch depending on the camera purpose.

- BLC : Enables a user to directly select a desired area from a picture, and to view the area more clearly.



BLC ON

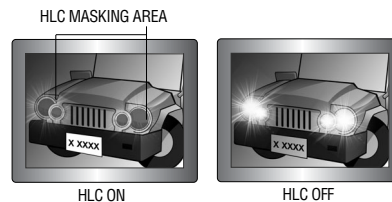


BLC OFF

- HLC (High Light Compensation) :

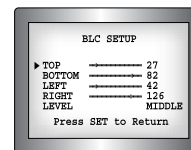
If there is a high light installed in a limited environment such as an apartment parking garage or gas station entrance, removing the high light makes it possible to view car license plates efficiently.

- DAY : In normal daylight conditions, the HLC is not activated.
- NIGHT : If a high light that is larger than a certain size is present on the screen, remove the high light to see license plates clearly.



- OFF : Not being used

3. Select a desired mode using the Function Setup switch and press the switch.
 - Select 'BLC' to adjust the area to be enhanced and enhancement level.



- HLC : Enable a user to select a mask color of high light area from a picture.



Notes

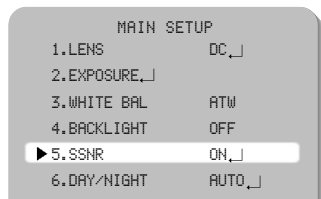
- Because there can be a difference in the effectiveness of HLC according to the amount of light area in the screen, optimize the installation angle for the best HLC performance.
- In a dark environment, the HLC is only activated when a high light that is larger than a certain area is present.
- The HLC is not activated in light or overly dark conditions.

Operating Your Camera

SSNR

This function reduces the background noise in a low luminance environment.

- When the SETUP menu screen is displayed, select 'SSNR' by using the Up and Down buttons so that the arrow indicates 'SSNR'.



- Select a desired mode using the Function Setup switch.
 - OFF : Deactivates SSNR. Noise is not reduced.
 - ON : Activates SSNR so that noise is reduced.
- Set the SSNR mode to 'ON' and press the Function Setup switch. Then you can adjust the noise reduction level.



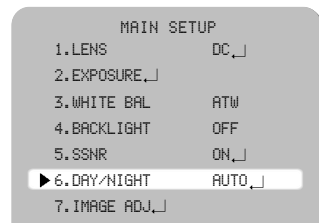
Notes

- You cannot set the SSNR to 'ON' or 'OFF' when the AGC mode of the EXPOSURE menu is 'OFF'.
- When adjusting the noise reduction level of the SSNR mode, remember that the higher the level set, the more the noise level will be reduced but that after image may also occur.

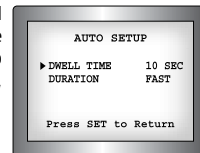
DAY/NIGHT

You can display pictures in color or black and white.

- When the SETUP menu screen is displayed, select 'DAY/NIGHT' by using the Function Setup switch so that the arrow indicates 'DAY/NIGHT'.



- Select a desired mode using the Function Setup switch according to the picture display you want.
 - COLOR : The picture is always displayed in color.
 - B/W : The picture is always displayed in black and white.
 - AUTO : The mode is switched to 'Color' in a normal environment, but switches to 'B/W' mode when ambient illumination is low. To set up the switching time or speed for AUTO mode, press the Function Setup switch.



- DWELL TIME : You can select the duration time about changing the day/night mode.
 - 5s, 7s, 10s, 15s, 20s, 30s, 40s, 50s, 60s
- DURATION : You can select brightness of illumination about changing the day/night mode.

	Color → B/W	B/W → Color
Fast	2.5 lux	4 lux
Slow	0.8 lux	6 lux

* The brightness of illumination is changeable by installed environment.

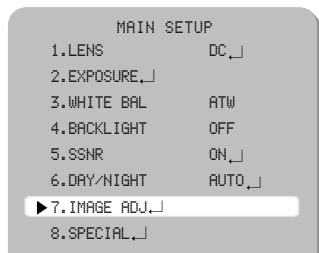
Operating Your Camera

Notes

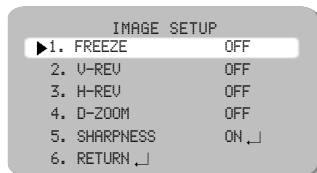
- You cannot control the DAY/NIGHT menu when AGC in the EXPOSURE menu is 'OFF'. At this time, the exchange between DAY mode and NIGHT mode operates as like selecting 'COLOR' mode.
- The OSD key does not work for 3 seconds when switching to Color or B/W, to ensure stable camera operation.
- The camera may focus less well under infrared illumination than under normal illumination.
- Since the camera may not focus as well under infrared illumination at night as it does under normal illumination, install an Extra-low Dispersion Lens to obtain sharp pictures

IMAGE ADJ.

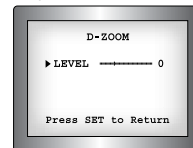
1. When the SETUP menu screen is displayed, select 'IMAGE ADJ.' by using the Function Setup switch so that the arrow indicates 'IMAGE ADJ.'



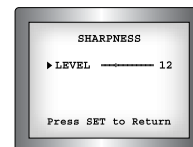
2. Select a desired mode using the Function Setup switch.



- FREEZE : You can view still or moving pictures.
- V-REV : You can flip the picture vertically on the screen.
- H-REV : You can flip the picture horizontally on the screen.
- D-ZOOM : You can use a digital zoom of x1~x10.



- SHARPNESS : As you increase this value, the picture outline becomes stronger and clearer. Adjust this value appropriately depending on the sharpness of the picture.



- RETURN : Select this to save the settings for the IMAGE ADJ. menu and to return to the SETUP menu.

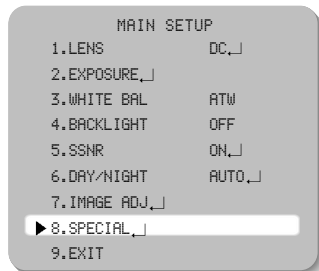
Notes

- When H-REV or V-REV is selected, any text in the picture also will be flipped horizontally or vertically.
- If you increase the SHARPNESS level too high, the picture may become distorted or noise may appear.

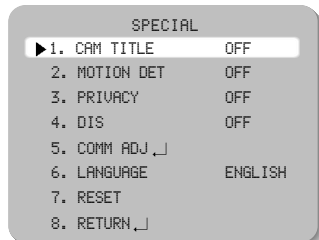
Operating Your Camera

SPECIAL

1. When the SETUP menu screen is displayed, select 'SPECIAL' by using the Function Setup switch so that the arrow indicates 'SPECIAL'.



2. Select a desired mode using the Function Setup switch.

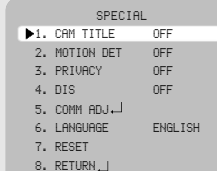


- ⦿ CAM TITLE : If you enter a title, the title will appear on the monitor.

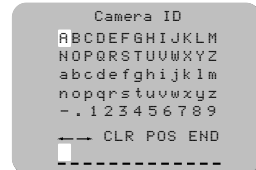
- 1 If the SPECIAL menu screen is displayed, use the Function Setup switch so that the arrow indicates 'CAM TITLE'.
- 2 Set it to 'ON' by using the Function Setup switch.

Notes

- When the CAM TITLE menu is 'OFF', no title will be displayed on the monitor screen even if you enter one.



- ④ Press the Function Setup switch.



- ④ Use the Function Setup switch to move to a desired letter and select the letter by pressing the switch. Repeat this to enter multiple letters. You can enter up to 15 letters.

Notes

- If you move the cursor to CLR and press the Function Setup switch, all the letters are deleted. To edit a letter, change the cursor to the bottom left arrow and press the Function Setup switch. Move the cursor over the letter to be edited, move the cursor to the letter to be inserted and then press the Function Setup switch.

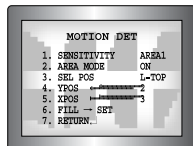
- ⑤ Enter a title, move the cursor to 'POS' and press the Function Setup switch. The entered title appears on the screen. Select the position to display the title on the screen by using the Function Setup switch and press. When the position is determined, select 'END' and press the Function Setup switch to return to the SPECIAL menu.



Operating Your Camera

② MOTION DET:

This product has a feature that allows you to observe movement of objects in 8 different areas on the screen, and the words 'MOTION DETECTED' appear on the screen when movement is detected. you can monitor activity more efficient.



① When the SPECIAL menu screen is displayed, press the Function Setup switch so that the arrow indicates 'MOTION DET'.

② Set up the mode using the Function Setup switch.

- SENSITIVITY : You can select up to 8 MD areas. When SENSITIVITY number is high, motion detection sensitivity is increased to recognize even small movement.
- AREA MODE : Determines whether to use the MD area selected in SENSITIVITY.
- SEL POS : Determines which of the 4 vertices of each MD area is to be used.
- YPOS : Determines the coordinate of the vertical axis for SEL POS.
- XPOS : Determines the coordinate of the horizontal axis for SEL POS.
- FILL → SET : Fills in a selected MD area. Fills in a selected MD area. The color of filling is sequentially selected as brown, orange, blue, cyan, yellowish green, yellow and red.
- RETURN : Select this to save the MOTION DET menu settings and return to the SPECIAL menu.

Notes

- MD areas show only MOTION DET menu. Therefore, MD areas don't display on the monitor screen.

② PRIVACY : Hide an area you want to hide on the screen.

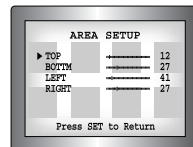
① When the SPECIAL menu screen is displayed, press the Function Setup switch so that the arrow indicates 'PRIVACY'.

② Set up the mode using the Function Setup switch.



- AREA SEL : You can select up to 8 MD areas.

- AREA MODE : Determines whether to use the area selected in the AREA SEL, and the size and position of the area.



- MASK COLOR : Determine area color. You can select Gray, Green, Red, Blue, Black, White.

- TRANSP : Determine the transparency of selected area as controlling number from 0 to 3.

- RETURN : Select this to save the PRIVACY menu settings and return to the SPECIAL menu.

② DIS (Digital Image Stabilizer) :

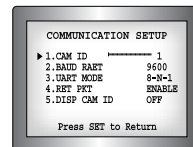
This function mitigates any picture movement due to external factors such as wind.

Notes

- The chance of resolution decrease is existed because DIS function uses the digital zoom.
- DIS doesn't operate when background illumination is too low.
- DIS doesn't operate when object pattern is monotonic as like sky or white wall.

② COMM ADJ (Communication Adjustment):

This function sets up the camera communication status when controlling the camera through an external control device.



① When the SPECIAL menu screen is displayed, press the Function Setup switch so that the arrow indicates 'COMM ADJ'.

② Set up the mode using the Function Setup switch.

- CAM ID : Determines the camera's identification number (between 0 and 255).
- BAUD RATE : You can select 2400/4800/9600/19200/38400/57600 bps.
- UART MODE : You can select NONE, EVEN or ODD for the parity bits.
- RET PKT : Determines whether to send a command back to the controller device when a communication control command is sent to the camera.
- DISP CAM ID : Display camera title on top left corner of the screen.

Operating Your Camera

- **LANGUAGE** : You can select the menu language according to your requirements.
- **RESET** : Resets the camera settings to the factory defaults. Communication status and language is not initialized.
- **RETURN** : Select this to save the SPECIAL menu settings and return to the SPECIAL menu.

EXIT

Press the Function Setup switch in the EXIT menu to save the current settings and exit the SET menu.

Troubleshooting

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

- **Nothing appears on the screen.**
 - ▶ Check that the power cord and line connection between the camera and monitor are fixed properly.
 - ▶ Check that you have properly connected VIDEO cable to the camera VIDEO output jack.
- **The image on the screen is dim.**
 - ▶ Is lens stained with dirt? Clean your lens with soft, clean cloth.
 - ▶ Set the monitor to proper condition.
 - ▶ If the camera is exposed to too strong light, change the camera position.
- **The image on the screen is dark.**
 - ▶ Adjust the contrast feature of the monitor.
 - ▶ If you have an intermediate device, set the 75Ω / Hi-z properly.
- **The camera is not working properly, and the surface of the camera is hot.**
 - ▶ Check that you have properly connected the camera to an appropriate power source.
- **The DAY/NIGHT menu does not work.**
 - ▶ Check that AGC of EXPOSURE SETUP menu is 'OFF'.

Troubleshooting

- **The SENS-UP function does not work.**
 - ▶ Check that AGC of EXPOSURE SETUP menu is 'OFF'.
 - ▶ Check that SHUTTER of EXPOSURE SETUP menu is 'A.FLK' or 'MANUAL'.
- **The Motion Detection function does not work.**
 - ▶ Check that MOTION DEF of SPECIAL SETUP menu is 'OFF'.
- **Color is not correct.**
 - ▶ Check the setting of WHITE BAL SETUP menu .
- **The screen flickers continually.**
 - ▶ Check that direction of camera turns toward the Sun.
- **RS-485 communication fails.**
 - ▶ Check the polarity between RS-485 Control Port and RS-485 cable.

485 Control Board Connection Port	RS-485 Control Port
(+) CONNECTION TERMINAL (TRX+)	485+
(-) CONNECTION TERMINAL (TRX-)	485-

- ▶ Check the RS-485 Communication establishment initial value

* RS-485 Communication establishment initial value

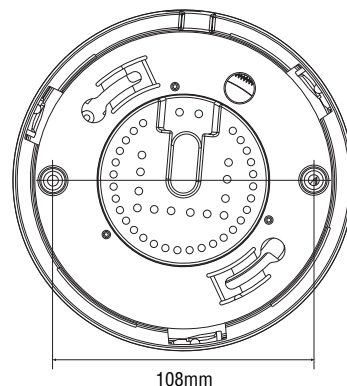
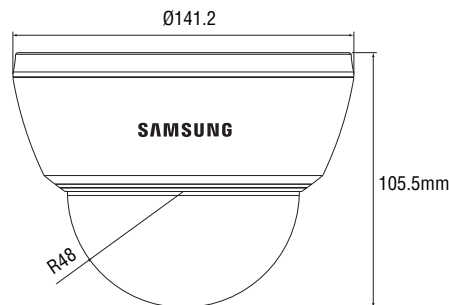
Item	Camera ID	BAUD RATE	UART MODE	PET PKT
Initial value	1	9600	8-NONE-1	ENABLE

- ▶ We recommend that you make ground connect between camera and controller in order to maintain safety communication control.

Specifications

		SID-460N	SID-460P
POWER	Input voltage	DC12V	
	Power consumption	2.5W	
CCD	Size	1/3 inch, Diagonal 6mm Super HAD CCD	
	Total Pixels	811(H) x 508(V)	795(H) x 595(V)
	Effective Pixels	768(H) x 494(V)	752(H) x 582(V)
Sync	Scanning System	2:1 Interlace	
	Frequency	Horizontal:15.734 KHz Vertical:59.94 Hz	Horizontal:15.625 KHz, Vertical:50.00 Hz
O.S.D		Korean, English, Japanese, Spanish	English, French, Germany, Spanish, Italy, Chinese
E L E C T R I C A L	Back-light Compensation	BLC / HLC / OFF	
	Resolution	Color : 580 TV Lines ↑ , B/W : 700 TV Lines ↑	
	S/N (Y signal)	52 dB (AGC Off, Weight ON)	
	Min. Illumination	0.15 Lux (Color), 0.0006 Lux (Color, 256x Sens-up), 0.001 Lux (B/W)	
	White Balance	ATW / AWC / Manual / Outdoor / Indoor (1800°K ~ 10,500°K)	
	Electronic Shutter Speed	1/60 Fixed / A.FLK	
	Sens-up	AUTO / OFF (Selectable limit x2 ~ x256)	
	Gain Control	LOW/HIGH/OFF	
	SSNR	ON / OFF (1~32 Level)	
	Motion Detection	ON / OFF (8 Zone, ALARM Output)	
	PRIVACY	ON / OFF (8 Zone)	
	V-REV (Mirror)	ON / OFF	
	H-REV (Flip)	ON / OFF	
	FREEZE	ON / OFF	
	SHARPNESS	ON / OFF (Level Adjustable)	
Digital Zoom	Day & Night	COLOR / Black& White / AUTO	
	DIS	ON / OFF	
Communication		RS-485 (2400, 4800, 9600, 19200, 38400, 57600 bps selectable) (STW Protocol, Pelco-D Protocol available)	
Built-in Lens		x2.5 Vari-focal Lens (F1.2 f3.8~9.5mm)	
Lens angle of view		37.3° ~ 95.5°	
Monitoring angle	PAN	Manual 0° ~ 340°	
	TILT	Manual 0° ~ 146°	
Operating Temperature/Humidity		-10°C to +50°C / 30% to 80% RH	
Dimension		Ø141.2 X 105.5 mm	
Weight		525g	

Dimension



DECLARATION OF CONFORMITY

Application of Council Directive(s)	<u>89 / 336 / EEC</u>
Manufacturer's Name	<u>SAMSUNG TECHWIN CO., LTD</u>
Manufacturer's Address	<u>SAMSUNG TECHWIN CO., LTD</u> <u>42, SUNGJU-DONG CHANGWON-CITY,</u> <u>KYUNGNAM, KOREA, 641-716</u>
European Representative Name	<u></u>
European Representative Address	<u></u>
Equipment Type/Environment	<u>CCTV Camera</u>
Model Name	<u>SID-460P</u>
Beginning Serial NO.	<u>S8300001</u>
Year of Manufacture	<u>2008. 3. 1</u>
Conformance to	<u>EN 50081-1 : 1992</u> <u>EMC-Directive 89/336 EEC and 92/31/EEC</u> <u>EN 50130-4 : 1996</u>

We, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s).

Manufacturer	SAMSUNG TECHWIN CO., LTD	Legal Representative in Europe
Signature	<i>Han Seug Kim</i>	Signature
Full Name	HAN SEUG KIM	Full Name
Position	QUALITY CONTROL MANAGER	Position
Place	CHANGWON, KOREA	Place
Date	2008. 3. 1	Date