SCC-B5397 SCC-B5399

DIGITAL COLOR DOME CAMERA

user manual

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imagine the possibilities

Thank you for purchasing this Samsung product. To receive more complete service, please register your product at www.samsungsecurity.com



5

Safety information



CAUTION

RISK OF ELECTRIC SHOCK.
DO NOT OPEN



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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.

WARNING

To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain
or moisture.

WARNING

- Be sure 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
- Incorrectly connecting the power supply or replacing battery may cause explosion, fire, electric shock, or damage to the product.
- Do not connect multiple cameras to a single adapter. Exceeding the capacity may cause abnormal heat generation or fire.
- 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. A falling camera may cause personal injury.
- Do not place conductive objects (e.g. screwdrivers, coins, metal things, etc.) or containers filled with water on top of the camera. Doing so may cause personal injury due to fire, electric shock, or falling objects.
- 7. Do not install the unit in humid, dusty, or sooty locations. Doing so may cause fire or electric shock.
- 2 DIGITAL COLOR DOME CAMERA

Safety information

- 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.
- 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.)
- 3. When cleaning, do not spray water directly onto parts of the product. Doing so may cause fire or electric shock,

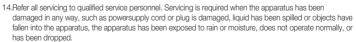
CAUTION

- Do not drop objects on the product or apply strong shock to it. Keep away from a location subject to
 excessive vibrationor magnetic interference.
- Do not install in a location subject to high temperature (over 50°C), low temperature (below -10°C), or high humidity. Doing so may cause fire or electric shock.
- If you want to relocate the already installed product, be sure to turn off the power and then move or reinstall it.
- Remove the power plug from the outlet when then there is a lightning. 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.
- Avoid aiming the camera directly towards extremely bright objects such as sun, as this may damage the CCD image sensor.
- 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.

Safety information

WARNING

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. 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.
- Do not install near 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 the apparatus.
- 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 from tip-over.





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Introduction

FEATURES

High Resolution

 This camera has realized high resolution of 600 lines using the top-notch full digital image processing and special algorithm technologies.

VPS(Virtual Progressive Scan)

 This is an advanced technology that reproduces a sharp progressive image. This is appropriate to high quality recording and file transfer via the Internet.

Intelligent Motion Detection & Tracking

This is an intelligent function that automatically detects a motion of an object. You can set a virtual fence so it displays an alert if an object
passes / enters /exits the virtual fence or virtual area.

❖ WDR

WDR extends the contrast range as it takes a picture of each of dark and bright areas before compositing the two, which is useful if
you take a picture of windows inside a building. Namely, it improves the picture guality of the outdoor scenery as well as indoor.

* XDR (eXtended Dynamic Range)

Actively controls the gamma compensation in the way it operates the ambient luminance contrast in a certain pixel unit to determine
the optimal visibility.

DAY/NIGHT

This function can make the IR Cut filtering function inactive under the illumination below the normal value.

High Sensitivity

It implements images of high sensitivity using the up-to-date SONY Super-HAD Progressive CCD.

❖ Low Illumination

It uses the digital signal technologies such as low illumination and Day/Night functions that make your camera identify objects even in the
worst environment.

Superior Backlight Adjustment

. When an object has a bright illumination or sunlight behind it, this camera automatically improves the shaded object picture quality.

Digital Power Synchronization

 The full digital Line Lock function directly adjusts the vertical camera synchronization to enhance the operationability and reliability of this camera.

Output Signal Setting

 You can set the following Video output signals: Image reversion (Horizontal, Vertical, or both), Privacy, Horizontal/Vertical profiling, and digital zooming.

* OSD(On Screen Display) Menu

. OSD menu is provided to display the status of camera and to configure the functions interactively.

Coaxial Cable Communication

This is a remote control function that overlaps the coaxial cable (for a transfer of the video signal) with the control signal. In installation or repair, this
helps you control the communication controller (optional) without additional cabling.

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Components

Checking components in the package







Camera

Test Monitor Cable

User's Guide

Image	Part name	Standard	Quantity	Usage
	Plastic anchor	HUD 5	4 (EA)	Attach each piece to screw connection holes for strengthening connection
87	ASSY screw machine	BH M5 X L6. (White+o-ring)	8	Used for filling in the holes when installing pipe and wall mount
4	ASSY screw tapping	TH M4xL30 (Black+ o-ring)	4	Used when installing your camera on the ceiling or wall.
_	L-Wrench	TROX T-20	1	Used for assembling/disassembling the Dome cover
*	Template		1	Used for guiding the installation
0	Gasket-pipe hole	T2.5 W56	1	Used to make a wiring hole when installing the camera on the ceiling or wall

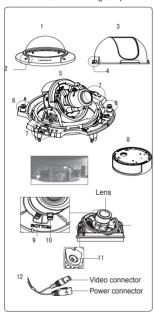
-NOTE

-The test monitor cable is used to test the camera by connecting to a portable display. If you really want to connect the camera to a monitoring display, use the BNC cable.

Introduction

Components of your camera

Your camera has the following components:



- 1. Dome cover: Covers the inner cover, lens, and main body to protect them.
- 2.Cover screw: Use it to assemble or disassemble both dome cover and case.
- 3 Inner cover: Covers the main body to protect it.
- 4. Wing locker: Push a long thin screwdriver into its narrow spot and press it outward when you want to remove the inner cover.
- 5.Main body: Includes a lens, a switch board, a PCB board, screws, and such.
- $6.\mbox{Screws}$ for assembly and disassembly: Using these 2 screws, the Main
- body is closely connected to the Case.
 7.Hooker: By pulling the left/right levers in the
- 7. Hooker: By pulling the lett/right levers in the arrow direction, the Main body can be detached from the Case.
- 8, Case: Used as a ceiling or wall fixture. It is fixed using four screws provided in the package. 9, Zoom lever: Using this lever, the lens zoom can be adjusted and fixed.
- 10. Focus lever: Using this lever, the lens focus can be adjusted and fixed.
- 11.Tilt fixing screw: Using this screw, the slope of the lens can be adjusted and fixed.
- 12. Cable: Connect the Video connector to BNC cable and Power connector to power adapter.

Setting switches



SETUP Switch

This switch is used to set the function or property. When this switch is pressed for at least 2 seconds, the MAIN MENU appears.

- ◀ ► (Left/Right): By pressing this switch left or right, you can move left or right on the menu or change the displayed value.
- ▲ ▼ (Up/Down): By pressing this switch up or down, you can move up or down on the menu.
- : When you press this switch in the menu, the selected function is confirmed. To enter a submenu, press this button.

Installing camera

Before installation

Before installing your camera, you have to read the following cautions:

- · You have to check whether the location (ceiling or wall) can bear five times the weight of your camera.
 - Don't let the cable to be caught in improper place or the electric line cover to be damaged. Otherwise it may
 cause a breakdown or fire. You can use wall mount adaptor (SADT-102WM), and pole mount adaptor (SADT100PM) for installing the camera on the wall or pipeline.
 - When installing your camera, don't allow any person to approach the installation site. If you have any valuable things under the place, move them away.

About the installation holes

A:Use these holes when directly installing your camera on the ceiling or wall.

- imesWhile those are not used, fill in the holes using the screw machine (M5 X L6.) for waterproofing.
- B: Use four holes when directly installing your camera on the junction box × You can use the 4 1/8 diameter round type junction box for assembly. (The junction box, gasket, and cover are separately purchased items.)
- C: Use these holes when installing the wall mount adapter (SADT-102WM)
- * While those are not used, fill in the holes using the screw machine (M5 X I 6) for waterproofing.

The holes that are not used should be tightly sealed up using the screws provided for waterproofing. When the screws don't have rubber rings inside or are not closely attached, note that it can cause waterproofing problem.

For attaching screws, see page 16 "Disassembling/assembling the Main body from the Case."



Installation

Installing on a pipe

Before installation, you have to be familiar with the above cautions and fill in the holes that are not used for installation.

To install your camera bottom on a pipe

1. After connecting the power and video cables, throw them inside the pipeline and screw the male thread pipe into the female pipe thread in your camera tightly to fix the Main body. (In this case, be sure to tape with Teffon tape before assembly for waterproofing. Be careful for the wiring cable not to be stuck in the connection area.)



- 2. Adjust the angle of the camera in search of a better view.
 - Separate the Dome cover using the L-Wrench provided. (To make loose the screws, rotate counterclockwise.)



 Adjust the lens direction. For more information, see page 17 "Adjusting the camera direction."

- 3. Attach the Dome cover. (Screw the connection bolts tightly using the L-Wrench for waterproofing.)
 - * To change the SAMSUNG logo position, move the location of the connection rubber band as show below and rotate for assembly. (The rotation limit is 180 degree.)



Installation

Adjusting the camera direction

When the camera is fixed on the ceiling, you can adjust the camera viewing angle. You can rotate your camera leftward or rightward (Panning), and can change the slope of your camera upward or downward (Tilting).

In case of panning, the rotation limit of your camera is set to 355 degree (100 degree clockwise and 255 degree counterclockwise). The rotation is stopped by the **Stopper** inside of the camera. For panning control, first unfasten two screws located on the bottom and rotate in the direction you want, and then fasten them to fix the camera.

In case of tilting, you can change the slope of your camera from zero to 90 degree. However if the slope angle is under 17 degree, you can encounter a partial image hide problem. To fix the location after adjusting the tilting angle, use the **Tilt fixing screws**.

To adjust the focus and zoom of your camera, use the **Zoom lever** and **Focus lever**. When you install the camera on the inclined ceiling or wall, you can rotate the camera lens to see a correct direction image.

Panning

Tilting



Lens rotation

USING ICONS IN THE MENU

Exits the menu setting.

Before you exits the menu setting, select SAVE to save your settings, or select QUIT to cancel.

• 5 (RET)

Returns to the previous menu.

• @ (HOME)

Returns to the main menu.

□ (SAVE)

Used to save your settings of MASK AREA, PRIVACY ZONE and more. Once you save your settings, they will remain even if you select QUIT in the menu.

• m (DEL)

Used to deletes your settings of MASK AREA, PRIVACY ZONE and more.

Once you delete your settings, they will not be restored even if you select QUIT in the menu.

MAIN MENU

MAIN MENU
PROFILE &
CAMERA SET &
INTELLIGENCE &
PRIVACY ZONE &
OTHER SET &
SYSTEM INFO &
LANGUAGE &

Ø

PROFILE

You can set a mode according to the camera installation conditions.

CAMERA SET

Configure Camera related functions and data.

INTELLIGENCE

You can configure the settings of motion detection, tracking and more.

PRIVACY ZONE

You can configure the privacy related settings.

OTHER SET

You can configure for Factory Defaults, and more.

SYSTEM INFO.

Displays the system information including the camera version and communication settings.

LANGUAGE

Select a preferred one from the supported languages.

PROFILE

*STANDARD ITS BACKLIGHT DAY/NIGHT GAMING CUSTOM

In the PROFILE menu, you can configure the following camera settings at once.

CAMERA	SET Menu						
Previous Menu	Sub-menus	STANDARD	ITS	BACKLIGHT	DAY/NIGHT	GAMING	
VPS		OFF	ON	OFF	OFF	OFF	
IRIS		ALC	ALC	ALC	ALC	ALC	
	ALC	-	-	-	-	-	
	LENS	DC	DC	DC	DC	DC	
	LEVEL	0	0	0	0	0	
	BACKLIGHT	OFF	OFF	WDR	OFF	OFF	
	WDR	-	-	-	-	-	
	WEIGHT	User setting allowed	User setting allowed	MID	User setting allowed	User setting allowed	
	WDR LEVEL	User setting allowed	User setting allowed	0	User setting allowed	User setting allowed	
	WHITE BAL	User setting allowed					
MOTION		(F.FAST)	(F.FAST)	NORM	(F.FAST)	SLOW	
DNR		MID	MID	MID	MID	MID	

CAMERA	CAMERA SET Menu						
Previous Menu	Sub-menus	STANDARD	ITS	BACKLIGHT	DAY/NIGHT	GAMING	
SHUTTER		OFF	AUTO1/250	OFF	OFF	OFF	
SENS-UP		AUTOx4	AUTOx2	AUTOx4	AUTOx4	AUTOx4	
XDR		MID	MID	MID	MID	MID	
DAY/NIGHT		AUTO	AUTO	DAY	AUTO	DAY	
	NIGHT	-	-	-	-	-	
	BURST	OFF	ON	OFF	OFF	OFF	
WHITE BAL		DAY	DAY/NIGHT	DAY	DAY/NIGHT	DAY	
	DAY	-	-	-	-	-	
	MODE	ATW2	ATW1	ATW1	ATW1	ATW1	
	RED	0	0	0	0	0	
	BLUE	0	0	0	0	0	
	NIGHT	-	-	-	-	-	
	BRIGHTNESS	User setting allowed	MID	User setting allowed	MID	User setting allowed	
	MODE	OFF	ATW2	OFF	ATW2	OFF	
	RED	User setting allowed	0	User setting allowed	0	User setting allowed	
	BLUE	User setting allowed	0	User setting allowed	0	User setting allowed	
DETAIL		2	2	2	2	2	

♦ ITS

It will be set automatically so you can easily check the traffic conditions.

❖ BACKLIGHT

It will be set automatically so you can distinguish the object from the background in a severe backlighting scene.

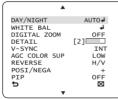
❖ DAY/NIGHT

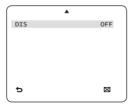
It will be set automatically so it optimizes to the day or night conditions, respectively.

GAMING

CAMERA SETUP

CAMERA SET■ CAMERA TD OFF VPS OFF TRTS ALC 4 MOTTON (F.FAST)---DNR MTD SHUTTER OFF SENS-UP AUTO X4 FLICKERLESS (OFF)---XDR MTD 4 \boxtimes





Setup the general functions of zoom camera module.

Use the ▲ ▼ ◀ ▶ switch to select a menu item.

❖ CAMERA ID [OFF, ON]



The CAMERA ID menu is used for you to assign a unique name to a camera. If you press the SETUP switch with the CAMERA ID menu selected, you will see the appropriate screen.

You can enter up to 54 alphanumeric or special characters for the CAMERA ID. Select LOCATION and press the SETUP switch to move the display position of the CAMERA ID.

❖ VPS [OFF, ON]

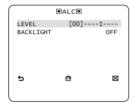
If you set the **VPS** (Virtual Progressive Scan) option, the camera will display the image in progressive format.

❖ IRIS [ALC]

The **IRIS** menu is used if you want to adjust the intensity of radiation incoming to the camera.

· ALC (Automatic Light Control)

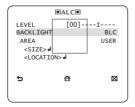
① If you press the SETUP switch with an ALCbased sub menu selected, you will see the appropriate screen.



The **LEVEL** menu is used to adjust the overall brightness, where "+" will increase the brightness and "-" will decrease it.

② If you set the BACKLIGHT option to BLC, you will see a menu where you can set the BLC area.

you can set the desired **BLC** zone by defining the size and location



If you use an ordinary camera in a scene with an intensive backlight, the object will be displayed dark on the monitor affected by the backlight. To solve this problem, you can use the BLC(Back Light Compensation) function to improve the sharpness of the image in such a high contrast scene.

(3) If you set the BACKLIGHT option to WDR, you will see a menu where you can set the WDR options.

You can adjust the shutter speed in $\ensuremath{\mathbf{WDR}}$ LEVEL and the brightness in $\ensuremath{\mathbf{WEIGHT}}.$

You can also select any of OUTDOOR, and INDOOR in WHITE BAL.



WDR(Wide Dynamic Range) extends the gain range of the screen that is mostly useful if you take a simultaneous picture of both indoor and outside of the window. Namely, it improves the sharpness of the picture in outdoor scenery as well as indoor.

Note:

 If you use the VPS (Virtual Progressive Scan) function, the CCD reads differently so you can not use WDR simultaneously.
 If you set VPS to ON, WDR will be automatically set to OFF.

English - 17

AGC [OFF, VERY LOW, LOW, MID, HIGH, VERY HIGH, USER, FIX]

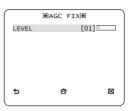
The AGC (Auto Gain Control) menu is used to set the AGC level of the camera. When the AGC is active, the camera automatically increases the sensitivity by amplifying the Video signal when the strength of the signal falls below the normal value.

If OFF or FIX mode is selected in the SENS-UP menu, you can specify the AGC level.

If you press the **SETUP** switch with a **USER** sub menu selected, you will see the appropriate screen.



In **USER** mode, you can break down the level in 16 steps from **VERY LOW** to **VERY HIGH** to your preference.



If you press the **SETUP** switch with a **FIX** sub menu selected, you will see the appropriate screen.

As a fixed value of the AGC gain is used in FIX mode, you can select one of the 16 detailed levels from VERY LOW to VERY HIGH before fixing it.

FIX mode is not available if you set the **BACKLIGHT** function to **WDR**.

Note:

- If the DAY/NIGHT menu of the CAMERA SET is set to AUTO, the AGC menu will be deactivated.
- If FLICKERI ESS is set to ON, the AGC FIX mode will be disabled.

❖ MOTION [S.SLOW, SLOW, NORM, FAST, F.FAST]

The MOTION menu is used to adjust the strength of the AGC level for a control of the camera motion. This is available only if the SENS-UP menu is set to AUTO.

You can select one from S.SLOW, SLOW, NORM, FAST and F.FAST for the AGC level.

If you monitor a fast moving object in a low contrast scene, select F.FAST while select S.SLOW for a hardly moving object in the same lighting condition.

■ Note ·

 If the DAY/NIGHT menu of the CAMERA SET is set to AUTO, the MOTION menu will be deactivated.

❖ DNR [OFF.LOW.MID.HIGH, USER(1~16)]

You can configure the **DNR** (Digital Noise Reduction) related settings.

Reduces the noise on the screen.

This is especially useful for a severely distorted screen.

You can set the level if you set DNR to USER.

❖ SHUTTER

[OFF, AUTO 1/100(PAL:1/120), AUTO 1/250, AUTO 1/500, AUTO 1/1000, AUTO 1/2000, AUTO 1/4000, AUTO 1/10K, 1/100(PAL:1/120), 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10K, EXT]

The SHUTTER menu is used to configure settings of the fixed / auto high-speed electronic shutter.

You can select one of 7 options from 1/100(PAL:1/120) to 1/10K for the fixed high speed electronic shutter, which is mostly used for imaging a fast moving object.

The auto high speed electronic shutter operates as the fixed high speed shutter in a high contrast scene but automatically focuses the target if the iris opens fully in a low contrast scene like in ELC mode. When it gets brighter back, the mode will switch to the fixed high speed electronic shutter mode.

However, the auto high speed shutter operates properly only in a camera featuring a DC or VIDEO lens.

■ Note ·

- If the SENS-UP function is set to AUTO, only items of OFF and AUTO are available in the SHUTTER menu.
- If the SENS-UP mode is set to FIX, the SHUTTER menu will be deactivated.
- If the FLICKERLESS function is set to ON, the SHUTTER menu will be deactivated.

❖ SENS-UP

[OFF, AUTO X2, AUTO X4, AUTO X6, AUTO X8, AUTO X12, AUTO X16, AUTO X24, AUTO X32, AUTO X48, AUTO X64, AUTO X96, AUTO X128, AUTO X256, AUTO X512, FIX X2, FIX X4, FIX X6, FIX X8, FIX X12, FIX X16, FIX X24, FIX X32, FIX X48, FIX X64, FIX X96, FIX X128, FIX X256, FIX X512]

Automatically detects the ambient level of darkness in the dark or low contrast scene to extend the accumulated time, keeping the image bright and sharp; It can be also used as FIX mode.

■ Note ·

- If the SHUTTER menu is set to fixed electronic shutter mode, the SENS-UP menu will not be available.
- If FLICKERLESS is set to ON, the FIX mode of the SENS-UP menu will be disabled.
- If the SHUTTER menu is set to AUTO, the SENS-UP menu can be set to either OFF or AUTO mode.
- If the BACKLIGHT function is set to WDR, the SENS-UP menu can not be set to FIX.

❖ FLICKERLESS [OFF, ON]

If set to **ON**, the shutter speed will be fixed to 1/100(PAL:1/120) second. This will prevent possible screen distortion due to a mismatch between the vertical sync frequency and the blinking frequency of the lighting.

Note :

- If the SHUTTER menu is set to AUTO or FIX mode, the FI ICKERI ESS menu will not be available.
- If the SENS-UP function is set to FIX mode, the Flickerless menu will be deactivated.
- If AGC is set to FIX mode, the FLICKERLESS function will be disabled.

XDR (eXtended Dynamic Range) [OFF, LOW, MID, HIGH]

Actively controls the gamma compensation in the way it operates the ambient luminance contrast in a certain pixel unit to determine the optimal visibility.

Select one from OFF, LOW, MID and HIGH. Closing to HIGH will increase the compensation level.

❖ DAY/NIGHT [DAY,NIGHT,AUTO,EXT]

DAY

If set to **DAY**, it will be fixed to **DAY** mode regardless of the ambient conditions.

NIGHT

If set to **NIGHT**, it will be fixed to Black-and-White mode regardless of the ambient conditions.

If you press the **SETUP** switch with a **NIGHT** sub menu selected, you will see a menu where you can set Burst to **OFF/ON**

If BURST is set to ON, the Burst signal will output together with the black-and-white composite video signal. If BURST is set to OFF, the Burst signal does not output.

You can set the **BURST** option to **OFF/ON**, or select to output the Burst signal in **NIGHT** mode.

AUTO

The camera will automatically switch between **DAY** and **NIGHT** mode, according to the lighting condition.

If you press the **SETUP** switch with an **AUTO**based sub menu selected, you will see the appropriate screen.

	■AUTO■	l
BURST		OFF
DAY→NIGH	T	
BRIGHTNE	SS	MID
DWELL TI	ME	25
NIGHT→DA	Y	
BRIGHTNE	SS	MID
DWELL TI		55
MASK AREA	4	1 2
5	~	⋈
9	107	

You can set the **BURST** option to **OFF/ON**, or select to output the Burst signal in **NIGHT** mode.

The BRIGHTNESS of DAY→NIGHT sets the brightness degree of color to BW switching, for which you can select from LOW, MID, and

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HIGH. As you adjust it from **HIGH** to **LOW**, the screen switches to black and white mode under the darker situation.

DWELL TIME of **DAY**-NIGHT sets the time to maintain switched black and white mode

The BRIGHTNESS of NIGHT→DAY sets the brightness degree of BW to color switching, for which you can select from LOW, MID, and HIGH. As you adjust it from HIGH to LOW, the screen switches to color mode under the darker situation.

DWELL TIME of **NIGHT > DAY** sets the time to maintain switched color mode.

The MASK AREA menu is used to prevent unintended mode switching or inability of determining the switching due to existence of high spot light source at night.

If you press the **SETUP** switch in item 1 or 2 of the **MASK AREA** menu, you will see a menu where you can specify an area to **MASK**.



You can specify MASK 1 and 2 simultaneously.

The MASK is only for determining the mode switching, and any excessive bright area at night will be excluded by the configured MASK.

■ Note ·

 If BACKLIGHT is set to BLC, the MASK AREA function will be deactivated

DAY

This enables an auto switch between **DAY** and **NIGHT** mode using the interface with the external sensor.

❖ WHITE BAL

[DAY/NIGHT]

If you want to adjust the color scheme, use the WHITE BALANCE function.

DAY

In **DAY** mode, you can set the color values of **RED** and **BLUE**. The screen will be displayed in colors according to your settings.



Note :

 You can set the values of R-GAIN and B-GAIN only in AWC mode.

NIGHT

Use the **NIGHT** mode if you want to set the white balance differently according to the ambient

If the NIGHT mode is set to OFF, the white balance will always operate as set in DAY mode; if not to OFF, the camera will switch to as set in DAY/NIGHT mode according to the brightness. In NIGHT mode, you can set the values of RED, BLUE and BRIGHTNESS. The screen will be displayed in colors according to your settings.

■WH:	ITE BAL⊞	`
DAY/NIGHT		NIGHT
BRIGHTNESS		MID
MODE		AWC ♣
RED	[00]	I
BLUE	[00]	I
R-GAIN	[0248]	
B-GAIN	[0247]	
5	a	\boxtimes
(

Note ·

- You can set the values of R-GAIN and B-GAIN only in AWC mode.
- If AGC is set to OFF or FIX, you can not access the NIGHT menu.
- For adjusting the white balance, the following 5 modes are provided:
 - ATW1(Auto Tracing White Balance mode
 1): The camera can automatically adjust the color temperature in real time, according to

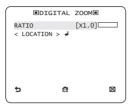
the ambient conditions. The color temperature ranges from approx. 2500K to 9300K.

- ATW2: The color temperature ranges from approx. 2,000K to 10,000K.
- AWC (Auto White Balance Control): If you press the SETUP switch in the appropriate item position, Auto White Balance will perform once.
- 3200K: Set color temperature to 3200K
- 5600K: Set color temperature to 5600K
- RED: Adjusts the strength of the red color.
- BLUE: Adjusts the strength of the blue color.
- R-GAIN/B-GAIN: Enables you to set the current color temperature manually.
- BRIGHTNESS: Select a brightness level in switching from setting in DAY mode to setting in NIGHT mode.

❖ DIGITAL ZOOM [ON/OFF]

You can set the digital zoom factor and position. If you press the SETUP switch with the DIGITAL ZOOM function set to ON, you will see the appropriate screen.

When the zoom factor and position are defined, the digital zoom function will operate.



 LOCATION: If you press the SETUP switch in the condition where the image is enlarged as much as the ratio setting, you can watch an invisible area of the effective screen as well using the ▲ ▼ ◀ ▶ switch.

Note :

 If the digital zoom factor is set to larger than 1x, the FENCE function will be deactivated.

The **DIGITAL ZOOM** function enlarges the pixel itself, which can cause deterioration of the quality.

❖ DETAIL [0~3]

Controls the horizontal or vertical distinction.

❖ V-SYNC

[INT, LINE]

Select the vertical sync mode for INT or LINE.

If you select **INT**, the camera will use the internal synchronization.

If selecting **LINE**, the camera will use the external power source frequency for the synchronization.

You can adjust the LL-PHASE.

Note:

- Use of DC 12V will fix V-SYNC to INT, which can not be changed.
- ❖ AGC COLOR SUP [LOW, MID, HIGH]
 Adjust the color scheme according to the AGC value.

REVERSE [OFF, H, V, H/V] Mirrors video signals horizontally, vertically, or both.

❖ POSI/NEGA

Output as it is or mirror the video brightness signal.

[+, -]

[OFF. ON]

♦ PIP

Displays a sub image together with the main image on the same screen using the Picture In Picture function.

Note:

- If more than one privacy zone is set and the PRIVACY SET is set to ON, the PIP function will be deactivated
- If the INTELLIGENCE function is set to FENCE mode, the PIP menu will be deactivated

❖ DIS [OFF, ON]

Digital Image Stabilization will set the anti-shake compensation.

■ Note ·

 If you set DIS to ON, the compensation area will be enlarged as set in the digital zoom factor.

If you set the digital zoom factor to greater than the enlarged zoom factor for the compensation, the **DIS** function will be deactivated.

INTELLIGENCE



You can set the motion detection and tracking in the INTELLIGENCE menu.

❖ MOTION [OFF,TRACKING,DETECTION]

TRACKING

Detects and tracks a moving object.

DETECTION

Detects a moving object.

Note :

 If it is set to DETECTION, you can not set such functions as FIXED/MOVED and FENCE in the ADVANCED menu.

ADVANCED [OFF, FIXED/MOVED, FENCE]

Detects a motion of an object and displays an image of any moving object before tracking the moving route.

FENCE

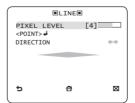
This is to detect if a moving object passes through the specified **LINE** or **AREA**.

In a condition where a moving object is detected in an analysis of the previous and current frames whose movement overlaps a certain area, the system displays "PASS" if the object's center line passes through the line while it displays "ENTER" or "EXIT" if the center point passes through the area.



You can set the position and detection direction of the LINE, and the size and position of the AREA.

- How to set the line

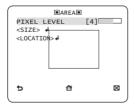


24 - DIGITAL COLOR DOME CAMERA

- ① If you press the SETUP switch with the LINE option set to ON, you can specify the position and detection direction of the line.
- ② If you change the PIXEL LEVEL for setting the position, specify the pixel that moves by a single pressure of the ▲ ▼ ◀ ▶ switch.
- ③ In <POINT>, you can specify the first position of the line by pressing the SETUP switch once, and the second position by pressing the switch again. Use the ▲ ▼ ◀ ▶ switch to specify the position.

Set each position of the two points and press the **SETUP** switch to complete the positioning.

- (4) If you change the **DIRECTION**, you can specify the detection direction. The detection direction based on the defined two points will be displayed on the screen.
- How to set the area



 If you press the SETUP switch with the AREA option set to ON, you can specify the position

- and size of the area.
- ② If you change the PIXEL LEVEL for setting the position, specify the pixel that moves by a single pressure of the ▲▼ ◀ ▶ switch.
- ③ In <SIZE>, press the SETUP switch and use the ▲ ▼ ◀ ▶ switch to adjust the size. Press the SETUP switch again to complete the sizing.
- ④ In <LOCATION>, press the SETUP switch and use the ▲ ▼ ◀ ▶ switch to specify the position. Press the SETUP switch again to complete the positioning.

Note:

- If you set the LINE of the FENCE to ON, PRIVACY 12 will
 not be available.
 Functions of FENCE, PIP, DIS and DIGITAL ZOOM (if the
 digital zoom factor is set to larger than 1x) can not be
 used simultaneously.
- In the boundary of the defined AREA and LINE, a FENCE detection error may occur if two or more moving objects overlap with each other or one object separates in multiple directions.

FIXED/MOVED

If an object on the screen suddenly disappears or an object comes out of nowhere and stays for a certain time, the area will be displayed.

A detection (FIXED/MOVED) error may occur if :

- multiple motions occur continuously in random directions

- a fixed object moves in one position continuously
- a second object screens the first moving object

♦ MASK AREA [1~4]

Specify a detection exception area to mask.

Select a mask number and specify the size and position.



❖ DISPLAY

[ON, OFF]

With the DISPLAY option set to ON, a motion or a set ADVANCED function will be displayed on the screen, if detected,

❖ SENSITIVITY

[1~7]

Set the sensitivity of the motion detection.

RESOLUTION

[1~5]

If setting it to high, the camera can detect even a trivial movement of the target.

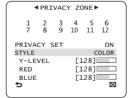
PRIVACY ZONE SETUP



The PRIVACY function will protect your privacy by screening the privacy area that you have specified during monitoring. You can specify up to 12 privacy zones.

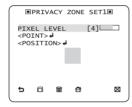
If you set the PRIVACY SET to ON, your PRIVACY ZONE settings will be applied.

You can change the style to adjust the mosaic size and color of the PRIVACY ZONE.



Use the ▲ ▼ ◀ ▶ switch to select one from PRIVACY 1 through 12.

Select one from PRIVACY 1~12 and press the SETUP switch to confirm your setting. You can specify a pixel that moves as you change the PIXEL LEVEL to set the position.



- How to set the point
 You can set each position of the 4 points.
- ① If you press the SETUP switch in <POINT>, you will see the points available in the PRIVACY ZONE. Each time you press the SETUP switch, the points available will move.
- ② Use the ▲ ▼ ◀ ► switch to set the position of each point. Set each position of the four points and press the SETUP switch to complete the positioning.
- How to set the position
 You can move the position of the overall area.

- By pressing the SETUP switch in POSITION>, you can move the overall position of the privacy zone.
- ② Use the ▲ ▼ ◀ ► switch to move the position and press the SETUP switch to confirm it

■ Note ·

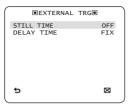
- If more than one PRIVACY ZONE is specified and the PRIVACY SET is set to ON, the PIP function will be deactivated.
- If the 12th PRIVACY ZONE is specified, the LINE function of FENCE will be deactivated.

OTHER SET



❖ EXTERNAL TRG

Set the EXTERNAL TRG menu to ON and press the SETUP switch to display the appropriate screen.



You can set the STILL TIME to 0~4 seconds.

If DELAY TIME is set to FIX, the DELAY TIME will be set in sync with the STILL TIME; if set to USER, the DELAY TIME will be set to your setting.

Note :

 If VPS is set to OFF, the EXTERNAL TRG menu will be deactivated.

❖ FACTORY DEFAULTS

All the settings will be restored to the factory default.

However, the settings of PROTOCOL, BAUD RATE, ADDRESS and LANGUAGE will not be restored to the default.

❖ OSD COLOR [BW, R/G/B]

You can set the OSD(On-screen Display) color to COLOR or B.W.

SYSTEM INFORMATION



You can check the system information such as SFRIAL NO and CAMERA VER.

LANGUAGE



The camera supports 5 different languages. Select a preferred language.

❖ Initial Configuration Table

Camera Configuration					
CAMERA ID	OFF				
VPS	OFF				
IRIS	ALC				
AGC	VERY HIGH				
MOTION	(F.FAST)				
DNR	MID				
SHUTTER	OFF				
SENS-UP	AUTO x4				
FLICKERLESS	(OFF)				
XDR	MID				
DAY/NIGHT	AUTO				
DIGITAL ZOOM	OFF				
DETAIL	[2]				
AGC COLOR SUP	MID				
REVERSE	H/V				
POSI/NEGA	+				
PIP	OFF				
DIS	OFF				
V-SYNC	INT				

SPECIFICATIONS

Items	Sub-items				SCC-B5397N/SCC-5399N					
Camera Type		CCTV Camera (WDR & DAY/NIGHT)								
	Device			1/3" Super-HAD PS CCD						
Image	Pixels	То	tal				811 x	508		
	Pixeis	Effec	ctive				768 x	494		
	System					Inter	lace/Pi	rogressive		
	Scanning Line						525 I	ines		
	Frame					3	30frame	e/1sec		
Scanning	Horizontal	Interna	Mode				15,73	4 Hz		
	Frequency	Line-loc	k Mode				15,75	0 Hz		
	Vertical	Interna	Mode				59.94	1 Hz		
	Frequency	Line-loc	k Mode				60 I	Hz		
		Condition				N	fin. Scene	illumination		
		Sens-up	F No.	Level		DAY		NIGHT		
	<u> </u>	OFF	1.2	50	IRE	0.4	Lux	0.04	Lux	
Min. Scene Illumination	l ⊢	OFF	1.2	30	IRE	0.24	Lux	0.024	Lux	
illumination	I	OFF 512 times	1.2	15 50	IRE IRE	0.12	Lux	0.012	Lux	
		512 times	1.2	30	IRE	0.0005	Lux	0.00005	Lux	
		512 times	1.2	15	IRE	0.00023	Lux	0.00003	Lux	
	Number of I	Privacy Zo	one	12 (Polygonal Method)						
	Day/	Night		DAY/NIGHT/AUTO/EXT						
	Motion [Detection		OFF/Tracking/Detection						
	eXtended Dyna	mic Rang	e(XDR)	Off/On (Level Setting)						
	Wide Dynami	c Range(\	VDR)			(Off/On	(x128)		
Functions	Virtual Progressive Scan(VPS)			Off/On						
	D-Z	D-Zoom				x1 ~	x16 (x	:0.1 STEP)		
	Р				Off/					
	High Spe	ed Shutte	r		1/	60 ~ 1/10Ks	sec (OS	SD/External 0	Contro	0
		erless					Off/			

Items	Sub-items	SCC-B5397N/SCC-5399N
	Sens-Up	x2 ~ x512
	AGC	Off/On (Max.Level Setting)
	Line Lock	Off/On (Phase Control)
	Camera ID	Off/On (Max.54ea/2Line)
	White Balance	ATW1/ATW2/AWC/3200K/5600K
	Digital Noise Reduction(DNR)	Off/On (Adaptive 3D+2D)
	Digital Image Stabilization(DIS)	Off/On
	Intelligent Video	Fixed/Moved, Fence
	Etc. Function	Detail, Reverse(H/V), Posi/Nega
Resolution	Horizontal	600 TV Lines
Resolution	Vertical	350 TV Lines
Video Output	-	VBS 1.0Vp-p, 75 Ω
S/N Ratio	S/N Ratio	Approx. 52dB
Lens	Lens Drive Type	Auto Iris (DC) SCC-B5397: focal length = 2.5 to 6.0mm / Aperture ratio = F 1.2 SCC-B5399: focal length = 2.8 to 11.0mm / Aperture ratio = F 1.2
PAN	Range	0 ~ 355°(100° in CW(Clockwise) direction, 255° in CCW (Counterclockwise) direction)
TILT	Range	0 ~ 90°
Remote Control	Coaxitron (Data On Coax cable)	Yes (with SCX-RD100)
Environmental	Operating Temperature	-10°C ~ +50°C
Conditions	Humidity	Less than 90%
	B B : .	AC24V ± 10%(60Hz ± 0.3Hz)
Power	Power Requirement	DC12V ± 10%
	Power Consumption	About 2.6W
	Dimensions (Ø x H)	150(Ø) x 121(H)mm
Physical Specification	Weight	980g
opeomoation	Color	White
		I and the second

Items	Sub-items				SCC-B5397P/SCC-5399P					
Camera Type	CCTV Camera (WDR & DAY/NIGHT)									
	Device			1/3" Super-HAD PS CCD						
Image	Pixels	То	tal	795 x 596						
	PIXEIS	Effec	ctive				752 x	582		
	System					Inter	lace/P	rogressive		
	Scanning Line						625 I	ines		
	Frame						25fram	e/1sec		
Scanning	Horizontal	Interna	Mode				15,62	5 Hz		
	Frequency	Line-loc	k Mode				15,62	5 Hz		
	Vertical	Interna	Mode				50	Hz		
	Frequency	Line-loc	k Mode				50	Hz		
		•	Condition			N	fin. Scene	illumination		
		Sens-up	F No.		vel	DAY		NIGHT		
		OFF	1.2	50	IRE	0.4	Lux	0.04	Lux	
Min. Scene	l ⊢	OFF	1.2	30 15	IRE	0.24	Lux	0.024	Lux	
illullillation	<u> </u>	512 times	1.2	50	IRE	0.0008	Lux	0.0008	Lux	
		512 times	1.2	30	IRE	0.0005	Lux	0.00005	Lux	1
		512 times	1.2	15	IRE	0.00023	Lux	0.000023	Lux	
	Number of	Privacy Zo	one	12 (Polygonal Method)						
	Day	/Night		DAY/NIGHT/AUTO/EXT						
	Motion	Detection		OFF/Tracking/Detection						
	eXtended Dyna	mic Rang	e(XDR)	Off/On (Level Setting)						
	Wide Dynam	ic Range(\	VDR)	Off/On (x160)						
Functions	Virtual Progre	ssive Scar	(VPS)				Off/	On		
Functions	D-Zoom			Max. x16						
	PIP						Off/	On		
	High Speed Shutter				1/	50 ~ 1/10Ks	sec (OS	SD/External (Contro	d)
	Flick				Off/	On				
	Ser	ns-Up					x2 ~ x	¢512		
	Е	LC				Off/0	On (Are	ea Setting)		-

Items	Sub-items	SCC-B5397P/SCC-5399P						
	AGC	Off/On (Max.Level Setting)						
	Line Lock	Off/On (Phase Control)						
	Camera ID	Off/On (Max.54ea/2Line)						
	White Balance	ATW1/ATW2/AWC/3200K/5600K						
	Digital Noise Reduction(DNR)	Off/On (Adaptive 3D+2D)						
	Digital Image Stabilization(DIS)	Off/On						
	Intelligent Video	Fixed/Moved, Fence						
	Etc. Function	Detail, Reverse(H/V), Posi/Nega						
Resolution	Horizontal	600 TV Lines						
Resolution	Vertical	350 TV Lines						
Video Output	-	VBS 1.0Vp-p, 75 Ω						
S/N Ratio	S/N Ratio	Approx. 52dB						
		Auto Iris (DC)						
Lens	Lens Drive Type	SCC-B5397: focal length = 2.5 to 6.0mm / Aperture ratio = F 1.2						
		SCC-B5399: focal length = 2.8 to 11.0mm / Aperture ratio = F 1.2						
PAN	Range	0 ~ 355°(100° in CW(Clockwise) direction, 255° in CCW (Counterclockwise) direction)						
TILT	Range	0 ~ 90°						
Remote Control	Coaxitron (Data On Coax cable)	Yes (with SCX-RD100)						
Environmental	Operating Temperature	-10°C ~ +50°C						
Conditions	Humidity	Less than 90%						
Power	Power Requirement	AC24V ± 10%(50Hz±0.3Hz) DC12V ± 10%						
	Power Consumption	About 2.6W						
	Dimensions (Ø x H)	150(Ø) x 121(H)mm						
Physical Specification	Weight	980g						
орсолювион	Color	White						



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



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

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them 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 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.