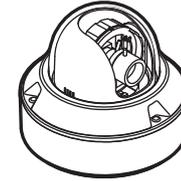


Ver.1.1 / 2009.09

# Anti-Vandal Dome Camera

## *User's Manual*



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

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(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.

## Safety Information

|  |  |   |
|--|--|---|
|   | <b>CAUTION</b><br>RISK OF ELECTRIC SHOCK.<br>DO NOT OPEN |  |
| <b>CAUTION:</b><br>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

1. 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
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 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.
6. Do not place conductive objects (e.g. screw drivers, 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.
8. 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.
9. If this product fails to operate normally, contact the nearest service center. Never disassemble or modify this product in any way.
10. 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 shock 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°C), low temperature (below -10°C), 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 then move or reinstall it.
4. Remove the power plug from the outlet when 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.
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.

## Important Safety Instructions

### 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.
8. 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 cart is used. Use caution when moving the cart/apparatus combination to avoid injury from tip-over.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply 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.



## Contents

- 6 Features
- 7 Product & Accessories
- 8 Part Names & Functions
- 10 Installation

### OSD Menu

- 13 Main Menu & Icons
- 14 CAMERA SETUP
- 21 INTELLIGENCE
- 22 PRIVACY ZONE SETUP
- 23 OTHER SET & COMMUNICATION
- 24 SYSTEM INFORMATION & LANGUAGE
- 25 Dimension
- 26 Specifications

## Features

### High Resolution

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

### Intelligent Motion Detection & Tracking *(For specific models only)*

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 (Wide Dynamic Range - *For specific models only*)

WDR utilizes high shutter speed in bright areas and low shutter speed in dark areas increasing the range of luminance. The camera finds the best picture conditions in any environment and automatically gives a necessary light level compensation, so you can always obtain the clearest picture, the finest detail, and perfect light contrast.

### High Sensitivity

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

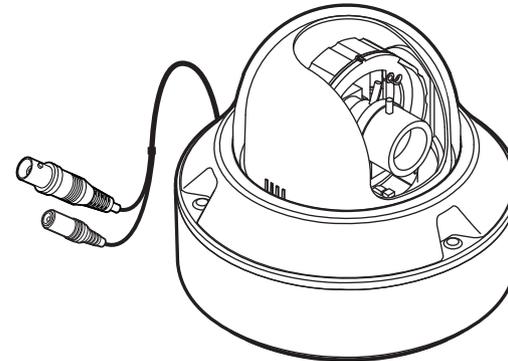
### OSD(On Screen Display) Menu

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

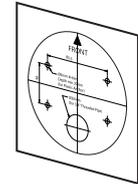
### Coaxial Cable Communication *(For specific models only)*

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.

## Product & Accessories



Camera



Template Sheet



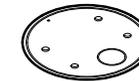
Video Cable(RCA)



Screw & Plastic Anchor-4pcs



Torx Wrench



Rubber Gasket

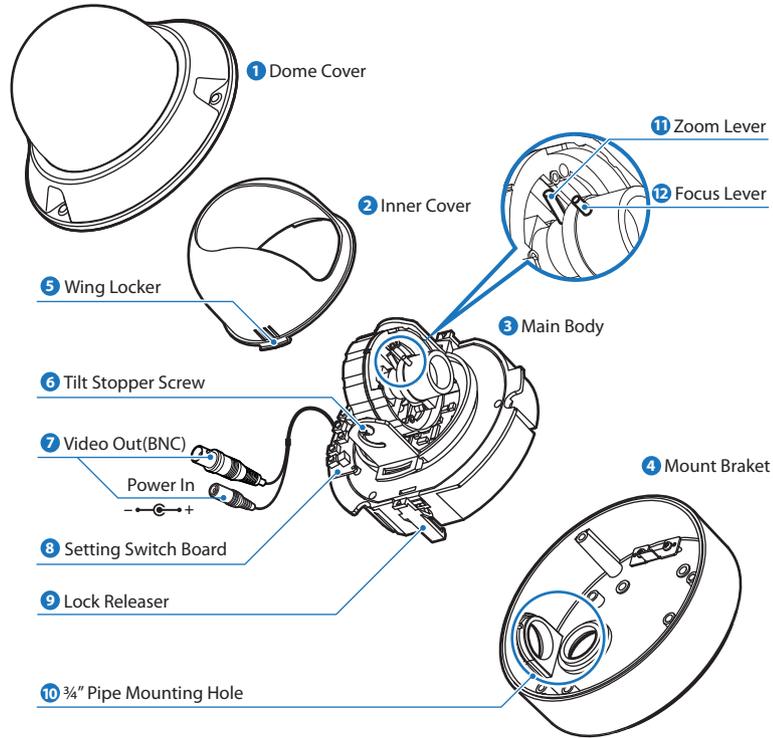


User's Manual

### 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.

## Part Name & Functions



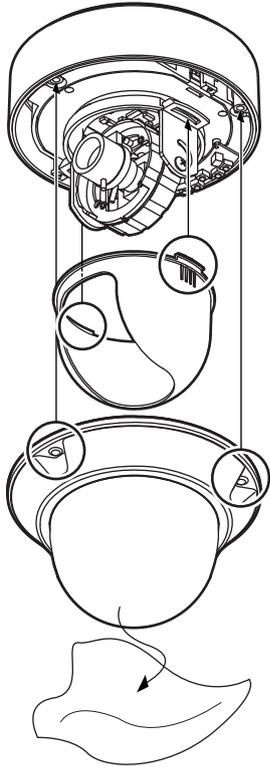
- 1 Dome Cover**  
Covers the inner cover, lens, and main body to protect them.
- 2 Inner Cover**  
Cover the main body to protect it.
- 3 Main Body**  
Includes a lens, a switch board, a PCB board, screws and such.
- 4 Mount Bracket**  
Used as a ceiling or wall fixture. It is fixed using three long tall screws provided in the package.
- 5 Wing Locker**  
Push a long thin screw driver into its narrow spot and press it inward when you want to remove the inner cover.
- 6 Tilt Stopper Screw**  
Using this screw, the slope of the lens can be adjusted and fixed.
- 7 Cable**  
Connect the Video connector to BNC cable and Power connector to power adapter.
- 8 Setting Switch Board**  
Use the LEFT, RIGHT, DOWN, UP, SET switch to select OSD menu item.



- 9 Lock Releaser**  
Push it outward and rotate the main body in UNLOCK direction when you want to remove the Mount bracket from the Main body or to remove the installed camera from the Mount bracket.
- 10 3/4" Pipe Mounting Hole**  
Pass the power cable and video cable from the camera unit through this hole.
- 11 Zoom Lever**  
Using this lever, the lens zoom can be adjusted and fixed.
- 12 Focus Lever**  
The lens focus can be adjusted by rotating it left or right. Rotate it clockwise for fixing.



## Installation



- 8 **Attaching Shield Cover**  
After placing two hooks of the shield cover onto two slots in the camera mechanism, press shield cover upward to fix it to the mechanism.
- 9 **Attaching the Dome cover**
  - After placing dome cover on to the bracket properly, tighten three TORX screws.
  - Remove the protection vinyl sheet to finish the mounting.

## OSD - Main Menu & Icons



### 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.

### COMMUNICATION

Configures the settings regarding the UART communication.

### SYSTEM INFO.

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

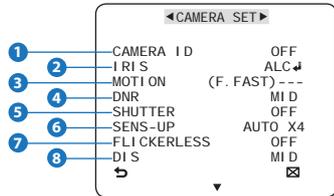
### LANGUAGE

Select a preferred one from the supported languages.

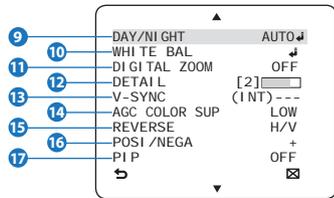
### Icons in the Menu

| Icon | Name   | Explanation  |
|------|--------|--|
|      | Exit   | Exits the menu setting. Before you exits the menu setting, select SAVE to save your settings, or select QUIT to cancel.                            |
|      | Return | 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. |
|      | Delete | 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. |

# OSD - CAMERA SET



(Up Switch) ▲ (Down Switch) ▼



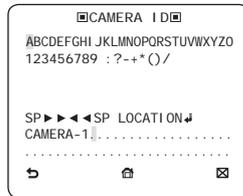
❏ Setup the general functions of zoom camera module.  
Use the ▲▼◀▶ switch to select a menu item.

❏ If Sens-Up menu is set as OFF, menu ❸ becomes "AGC". If Sens-Up menu is set as ON, menu ❸ becomes "MOTION".

## ❶ CAMERA ID

Value: 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.

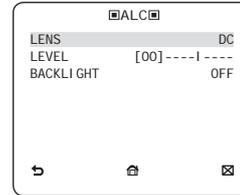
## ❷ IRIS

Value: ALC, ELC

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

### 1. ALC (Automatic Light Control)

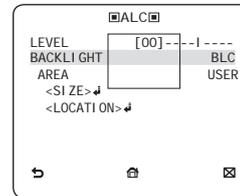
❶ If you press the SETUP switch with an ALC based sub menu selected, you will see the appropriate screen.



The LENS menu is used if you select a type of the AI lens. For normal operation, you must select DC for a DC-type lens, and select VIDEO for a VIDEO type lens.

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

❷ If you set the BACKLIGHT option to BLC (Back Light Compensation), you will see a menu where you can set the BLC area. You can set the desired BLC zone by defining the size and the 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 function to improve the sharpness of the image in such a high contrast scene.

## 2. ELC (Electronic Light Control)

❶ If you press the SETUP switch when the ELC sub menu is selected, the corresponding screen appears. You can make the ELC (Electronic Light Control) function active or not.

❷ In similar to ALC setting, you can specify the BLC area.

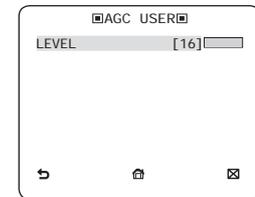
## ❸ AGC (Auto Gain Control)

Value: OFF, VERY LOW, LOW, MID, HIGH, VERY HIGH, USER, FIX

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

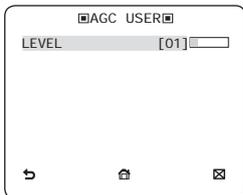
The AGC (Auto Gain Control) menu is used to set the AGC level of the camera. When the AGC is active, the camera automatically increases the sensitivity by amplifying the Video signal when the strength of the signal falls below the normal value.

If 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.

## OSD - CAMERA SET



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 option to BLC

### NOTE:

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

- If FLICKERLESS is set to ON, the AGC FIX mode will be disabled.

### 3 MOTION

Value: S.SLOW, SLOW, NORM, FAST, F.FAST

**This is available only if the SENS-UP menu is set to AUTO.**

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.

### 4 DNR (Digital Noise Reduction)

Value: OFF, LOW, MID, HIGH, USER(1~16)

You can configure the DNR 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.

### 5 SHUTTER

Value: 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 set the fixed high-speed electronic shutter, auto high speed electronic shutter and external high speed electronic shutter(EXT).

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 IRIS mode is set to ELC, the SHUTTER menu will be deactivated as you adjust the brightness using the electronic shutter.

- 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.

### 6 SENS-UP

Value: 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, 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

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 option is set to fixed electronic shutter or EXT mode, the SENS-UP menu will be deactivated.

- If FLICKERLESS is set to ON, the FIX mode of the SENS-UP menu will be disabled.

- If the IRIS menu is set to ELC, the electronic shutter will control the brightness so the SENS-UP function can not be set to FIX mode, but to OFF or AUTO mode.

- If the SHUTTER menu is set to AUTO, the SENS-UP menu can be set to either OFF or AUTO mode.

### 7 FLICKERLESS

Value: 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 IRIS function is set to ELC, the Flickerless menu will be deactivated. If the SHUTTER menu is set to AUTO, FIX or EXT mode, the Flickerless menu will be deactivated.

- 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.

### 8 DIS (Digital Image Stabilization)

Value: 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.

### 9 DAY/NIGHT

Value: DAY, NIGHT, AUTO, EXT

#### 1. DAY

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

#### 2. 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.

## OSD - CAMERA SET

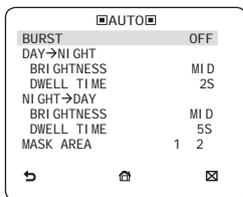
If BURST is set to ON, the Burst signal will output together with the black-and-white composite video signal. If BURST is set to OFF, the Burst signal does not output.

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

### 3. 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.



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

You can select from LOW, MID and HIGH for the brightness of DAY->NIGHT, which is a brightness level in switching from the color filter to Black-and-White. Closing to LOW from HIGH will switch the filter in a low contrast scene.

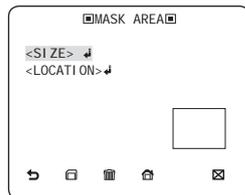
The DWELL TIME of DAY->NIGHT is a time required to determine the need for switching the filter.

You can select from LOW, MID and HIGH for the brightness of NIGHT->DAY, which is a brightness level in switching from the Black-and-White filter to color. Closing to LOW from HIGH will switch the filter in a low contrast scene.

The DWELL TIME of NIGHT->DAY is a time required to determine the need for switching the filter.

The MASK menu is used to prevent a filter switch error or inability of determining the switch in existence of a high spot light source at night.

If you press the SETUP switch in item 1 or 2 of the MASK 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 used only for determining the filter switch and any excessive bright area at night will be masked.

#### NOTE:

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

### 4. EXT

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

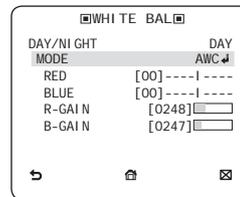
## 10 WHITE BAL

Value: DAY, NIGHT

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

### 1. 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:

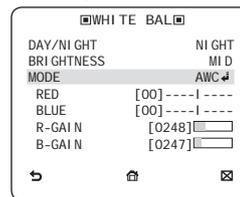
- You can set the values of R-GAIN and B-GAIN only in AWC mode.

### 2. NIGHT

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

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.



#### 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 mode1):

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.

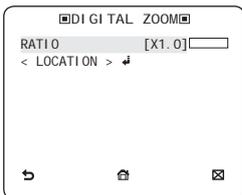
## OSD - CAMERA SET

### 11 DIGITAL ZOOM

Value: OFF, ON

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:

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

### 12 DETAIL

Value: 0 ~ 3

Controls the horizontal or vertical distinction.

### 13 V-SYNC

Value: 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.

### 14 AGC COLOR SUP

Value: LOW, MID, HIGH

Adjust the color scheme according to the AGC value.

### 15 REVERSE

Value: OFF, H, V, H/V

Mirrors video signals horizontally, vertically, or both.

### 16 POSI/NEGA

Value: +, -

Output as it is or mirror the video brightness signal.

### 17 PIP

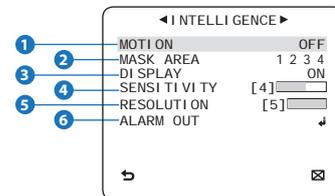
Value: OFF, ON

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.

## OSD - INTELLIGENCE



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

### 1 MOTION

Value: OFF, TRACKING, DETECTION

#### 1. TRACKING

Detects and tracks a moving object.

#### 2. DETECTION

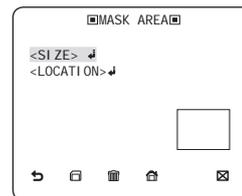
Detects a moving object.

### 2 MASK AREA

Value: 1 ~ 4

Specify a detection exception area to mask.

Select a mask number and specify the size and position.



### 3 DISPLAY

Value: OFF, ON

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

### 4 SENSITIVITY

Value: 1 ~ 7

Set the sensitivity of the motion detection.

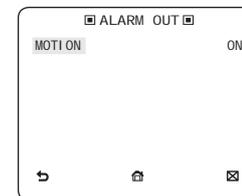
### 5 RESOLUTION

Value: 1 ~ 5

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

### 6 ALARM OUT

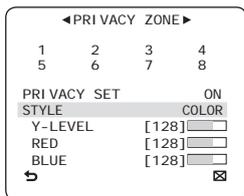
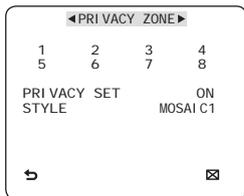
If you set a desired menu item to ON, the camera will sound an alert if it detect the appropriate motion



## OSD - 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 8 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 8.

Select one from PRIVACY 1~8 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.

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.

You can move the position of the overall area.

① By pressing the SETUP switch in <POSITION>, you can move the overall position of the privacy zone.

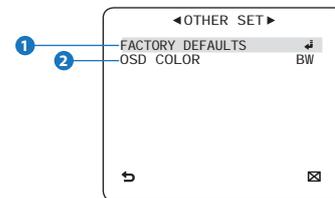
② Use the ▲▼◀▶ switch to move the position and press the SETUP switch to confirm it

### 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 8th PRIVACY ZONE is specified, the LINE function of FENCE will be deactivated.

## OSD - OTHER SET & COMMUNICATION



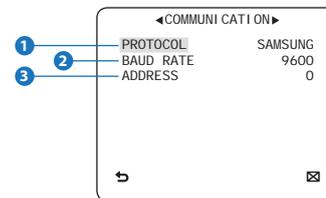
### 1 FACTORY DEFAULTS

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.

### 2 OSD COLOR

Value: BW, R/G/B

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



The COMMUNICATION menu is used to configure the settings regarding UART communications.

Use the connector of the camera to connect to UART

Refer to Hardware Spec.

### 1 PROTOCOL

Select a communication protocol.

### 2 BAUD RATE

Select a baud rate.

### NOTE:

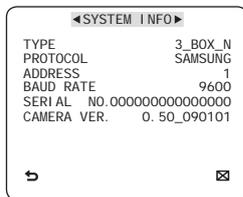
- The baud rate differs, depending on the specified protocol

### 3 ADDRESS

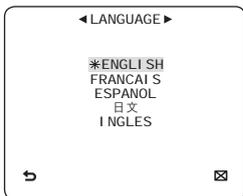
Value: 0 ~ 255

Select a address number.

## OSD - SYSTEM INFORMATION & LANGUAGE



You can view the system information including the protocol, address, baud rate, serial number, camera version.



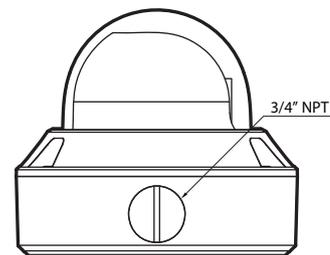
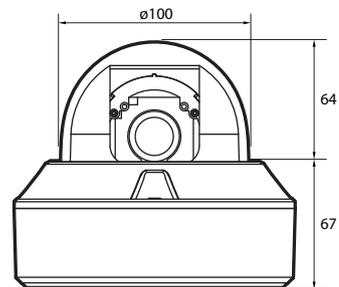
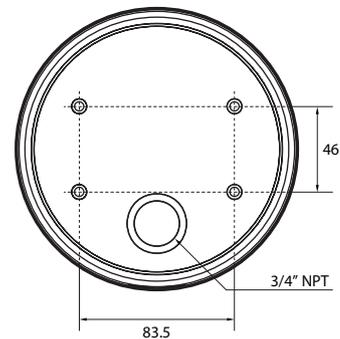
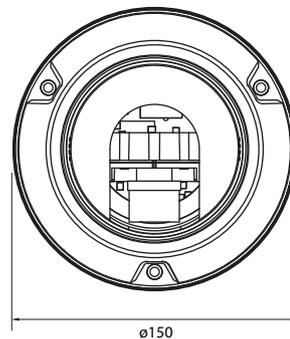
The camera supports 5 different languages. Select a preferred language.

### Initial Configuration

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

## Dimension

Unit: mm



# Specifications

| Items                |                       | NTSC                              |        | PAL           |        |
|----------------------|-----------------------|-----------------------------------|--------|---------------|--------|
| Image Sensor         | Device                | 1/3" SONY Super HAD CCD           |        |               |        |
|                      | Total pixel           | 811 x 508                         |        | 795 x 596     |        |
|                      | Effective             | 768 x 494                         |        | 752 x 582     |        |
| Sync.                | Internal H/V          | 15,734 / 59.94Hz                  |        | 15,625 / 50Hz |        |
|                      | Line lock H/V         | 15,750 / 60Hz                     |        | 15,625 / 50Hz |        |
| Performance          | Horizontal Resolution | 600 TV Lines                      |        |               |        |
|                      | Minimum Illumination  | (lux)                             | 50 IRE | 25IRE         | 15 IRE |
|                      |                       | Sens Off                          | 0.4    | 0.2           | 0.12   |
|                      |                       | Sens Up x256                      | 0.001  | 0.0007        | 0.0004 |
| S/N Ratio            | 52dB                  |                                   |        |               |        |
| lens                 | Iris Control          | DC Auto Iris Type                 |        |               |        |
|                      | Options               | F 1.4 / DC 2.8 ~ 12 mm            |        |               |        |
| Camera Posture Setup |                       | 3 Axis (Pan / Tilt / Rotation)    |        |               |        |
| Functions            | Privacy Zone          | 8 (Polygonal Method)              |        |               |        |
|                      | Day & Night           | Output the Filter changing signal |        |               |        |
|                      | Motion Detection      | Off / On (Advanced)               |        |               |        |
|                      | D-Zoom                | x1~x10 (x0.1 STEP)                |        |               |        |
|                      | High Speed Shutter    | 1/60 (1/50) ~ 1/10Ksec            |        |               |        |
|                      | Flickerless           | Off / On                          |        |               |        |
|                      | Sens Up(Low Shutter)  | x2 ~ x256                         |        |               |        |
|                      | BLC                   | Off / On (Area Setting)           |        |               |        |

|                          |                       |  |
|--------------------------|-----------------------|--|
| Functions                | AGC                   | Off / On (Max.Level Setting)             |
|                          | ALC                   | AI Lens (DC / VIDEO)                     |
|                          | ELC                   | Off / On (~ 1/200Ksec)                   |
|                          | Line Lock             | Off / On (Phase Control)                 |
|                          | Camera ID             | Off / On (Max. 54ea / 2Line)             |
|                          | White Balance         | ATW1 / ATW2 / AWC / MANUAL               |
|                          | DNR                   | Off / On (Adaptive 3D+2D)                |
|                          | DIS                   | Off / On                                 |
|                          | Etc. Function         | Detail, Reverse(H / V), Posi / Nega, PIP |
| Power                    | Requirement           | DC+12V±10%                               |
|                          | Consumption           | Less than 3W                             |
| Environmental Conditions | Operating Temperature | Absolute : -10°C ~ +50°C                 |
|                          | Humidity              | Less than 90%                            |
|                          | Weather Proof         | IP 66                                    |
| Physical Specification   | Anti-vandal           | AL-die cast, Poly Carbonate              |
|                          | Dimensions            | 150 ø x 131 mm (Dome 100 ø)              |
|                          | Weights               | 900g                                     |

## IR Camera

|        |                        |
|--------|------------------------|
| IR LED | 18pcs IR LED installed |
|--------|------------------------|

IR Camera specification is applied only for IR model.