

# Installation Guide

## **OSD MENU GUIDE**

# I. General Cautions



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.

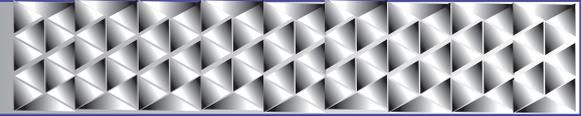
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**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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## 3. General Features

- ◆ 1/3" 470K SONY SUPER HAD CCD  
Minimum illumination 0.00006 Lux(Sens-Up On) S/N Ratio 52dB
  
- ◆ High Resolution of 600 TV Lines(Colour) and 700 TV Lines(B/W)  
This camera has realized high resolution of 600TV lines and 700TV lines using the top-notch full digital image processing, 12 Bit A/D serial signal processing and special algorithm technologies.
  
- ◆ DNR(Digital Noise Reduction, 2D + 3D)  
The DNR technology eliminates noise thus generating a distinct and clear image. The function of DNR utilizes both an adaptive 2D filter reducing noise in the brightness of the image and an adaptive 3D filter reducing noise caused by movement.
  
- ◆ DAY & NIGHT(Output the filter changing signal)  
The function of DAY/NIGHT has outputs the filter changing signal with detecting the illumination condition. DAY & NIGHT operation feature an "AUTO" mode which switches between day & night mode automatically based upon the level of illumination of the scene.
  
- ◆ Privacy Mask Function(Polygonal method, 4 points)  
Privacy masking allows for the 'blinking' for the specific areas of a scene, where the viewing or recording of image is prohibited or undesired. The technology of privacy masking function allows for the user defined setting of a four points polygonal mask, which is overlaid onto the video signal output.
  
- ◆ OSD(On Screen Display)  
This camera supports the OSD function which is used with multi-language. The camera can be controlled by selecting user's desired mode on the monitor screen.
  
- ◆ CCVC(Camera Control Via Coaxial cable )  
This camera can be controlled by remote controller that overlaps the coaxial cable ( for a transfer of the video signal ) with the control signal.  
During installation or reset the osd menu, this helps you control the communication controller (optional) without additional cabling.  
**Coaxial Remote Controller - Option**

## 4. Precautions

Do not install the camera in extreme temperature conditions.



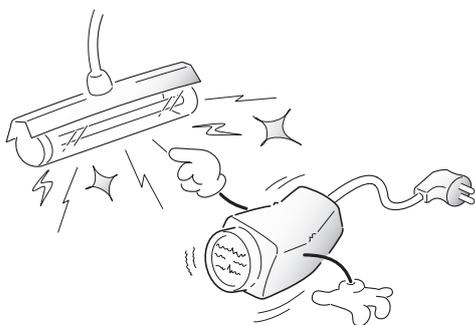
Only use the camera under conditions where temperatures are between  $-10^{\circ}\text{C}$  and  $+50^{\circ}\text{C}$ . Be especially careful to provide ventilation when operating under high temperatures.

Do not install or use the camera in an environment where the humidity is high.



It can cause the image quality to be poor.

Do not install the camera under unstable lighting conditions.



Severe lighting change or flicker can cause the camera to work improperly.

Do not touch the front lens of the camera.



It is one of the most important parts of the camera. Be careful not to be stained by fingerprint.

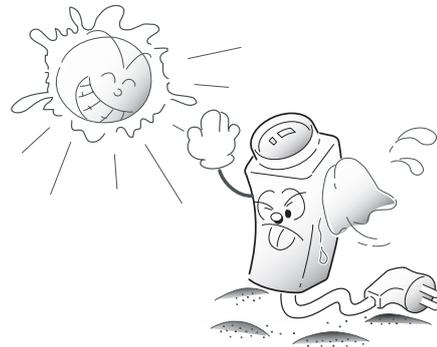
## 4. Precautions

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



It can cause malfunctions to occur.

Never keep the camera face to strong light directly.



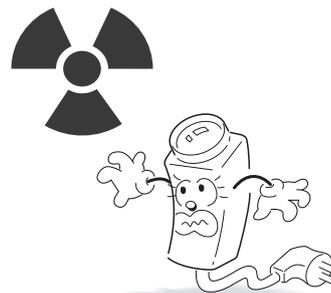
It can damage the CCD.

Do not expose the camera to rain or spill beverage on it.



If it gets wet, wipe it dry immediately.  
Liquids can contain minerals that corrode the electronic components.

Do not expose the camera to radioactivity.



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



### Note

- 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.

# 5. Safety Instructions

## Precautions for Use

- ☞ Please read this manual thoroughly before using this camera to become familiar with the correct operation procedures.

## Warranty

- ☞ This camera is supplied with a two year warranty effective from the day of purchase on a return to base basis(RTB).  
Our standard Returns Procedure needs to be followed for warranty repairs.
- ☞ Keep the camera box and packing in case the product needs to be returned.

## Cautions When Using

- ☞ Do not open the camera body and touch any electrical parts to avoid possible electric shocks.
- ☞ Do not insert objects into the camera body to prevent fire hazards and electric shock.
- ☞ Do not touch the camera with wet hands to avoid electric shock.
- ☞ Do not disconnect the power cord from a power plug when still connected to the outlet.
- ☞ Always disconnect the power by removing the plug from the power socket.
- ☞ If the camera emits a burning smell, immediately disconnect it from the power source and report the problem to your distributor where you have purchased it.

## Cautions When Install

- ☞ Only apply power after installation of the product.
- ☞ Do not install the camera in a position facing directly at a strong light source.
- ☞ Do not install or use the camera in areas of high humidity.
- ☞ Do not install near any cooling or heating equipment.
- ☞ Do not install the camera in dusty environments.
- ☞ Do not install the camera in places where the camera is subjected to physical shocks.
- ☞ This products must be used with a regulated DC 12V or AC 24V adaptor for power.

# 6. Menu Set-Up

## Menu Set Up



OSD OPERATION	( SET-UP	UP	DOWN	LEFT	RIGHT )
<b>CAMERA SET</b>	◆ CAMERA ID	◆ IRIS	◆ MOTION	◆ DNR	
	◆ SHUTTER	◆ SENS-UP	◆ FLICKERLESS	◆ DIS	
	◆ DAY / NIGHT	◆ WHITE BAL	◆ DIGITAL ZOOM	◆ DETAIL	
	◆ V-SYNC	◆ AGC COLOR SUP		◆ REVERSE	
	◆ POSI / NEGA	◆ PIP			
<b>INTELLIGENCE</b>	◆ MOTION	◆ MASK AREA	◆ DISPLAY		
	◆ SENSITIVITY	◆ RESOLUTION	◆ ALARM OUT		
<b>PRIVACY ZONE</b>	◆ MOTION	◆ STYLE			
<b>OTHER SET</b>	◆ FACTORY DEFAULTS		◆ OSD COLOR		
<b>COMMUNICATION</b>	◆ PROTOCOL	◆ BAUD RATE	◆ ADDRESS		
<b>SYSTEM INFO</b>					
<b>LANGUAGE</b>	◆ ENGLISH	◆ FRANCES	◆ ESPANOL		
	◆ JAPANES	◆ PORTUGUES			
<b>EXIT</b>					

## Using Icons



- **(EXIT)**  
Exits the menu setting.  
Before you exits the menu setting, select SAVE to save your settings, or select QUIT to cancel.
- **(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.
- **(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.

# 6. Menu Set-Up

## OSD Main Menu Set Up

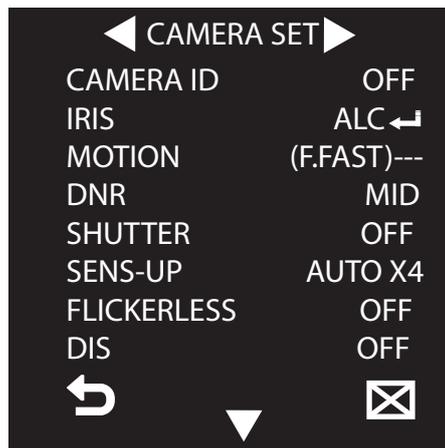
Menu items can be selected by using the OSD buttons on the camera

### Camera Set

1. Press the OSD Set Up button for a second until the OSD displays on screen.
  - The Set Up menu will be displayed on the monitor.



2. Press Down button to select the required function using the Up and Down buttons.
  - Move the status bar to select the desired feature by pressing the Up or Down button.

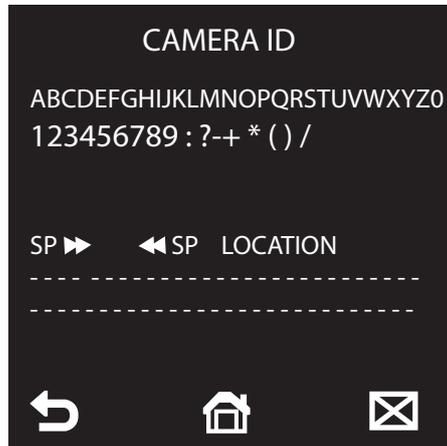


3. Changing Menu Settings Using the Left or Right buttons.
  - Available values or status are displayed by pressing the Left or Right button. Press the buttons until desired value/status is displayed.
4. After completing the setting, move the indicator bar to  and press the SET button to EXIT.

## 6. Menu Set-Up

### Camera ID

- CAMERA ID : Press the Right button to activate the Camera ID function.
1. Move the cursor to Camera ID using the Up or Down button on the SETUP menu screen.
  2. Select the desired mode using the Left or Right button.



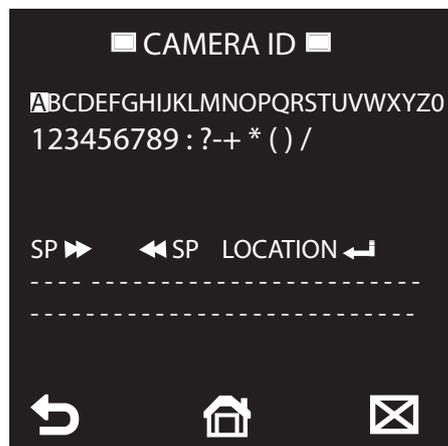
- CAMERA ID :When input, the Camera ID is displayed on the monitor.
- 1) Move the cursor to CAMERA ID using the Up or Down button on the SETUP menu screen.
  - 2) Set to ON using the Left or Right button.



#### Note

- When CAMERA ID is set to OFF, the Camera ID is not displayed on the monitor .
- Use the ▲ ▼ ◀ ▶ or Set Up button to Left, Right, Up and Down button .

- 3) Press the Left or Right button to select required characters and press the setup button.



## Camera ID

4) The Camera ID can be up to 54 alphanumeric characters in length.

① Move the cursor to choose an alphanumeric character.



② Choose character in the displayed range A~Z, a~z, 0~9 using the Up, Down, Left and Right buttons.

③ Select the desired character by pressing the SETUP button.

— The cursor moves to the next position after character input, by pressing the SETUP button.

④ Repeat the above steps until the Camera ID has been created.



### Note

● In cases where the wrong Camera ID has been input.....

Move the cursor onto the wrong character and press the setup button to input correct characters again by using the ▲ ▼ ◀ ▶ or Set Up button to Left, Right, Up, Down button and repeat the above steps to input the characters again.

5) To select the position where the Camera ID should be displayed on the screen.

① Move the cursor to LOCATION and press the SET button.

② Created camera ID is displayed. → CAM1

③ Select a new position by using the four directional buttons, Press the SET button to confirm the position.



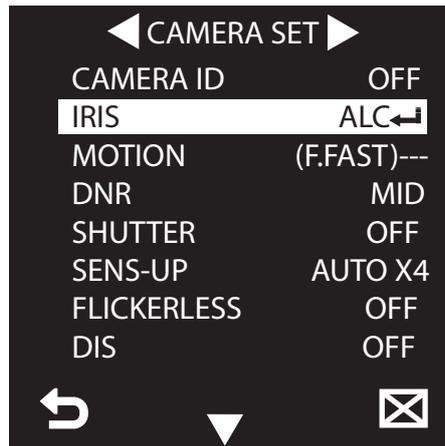
6) Move the cursor to ↶ and press the SET button after completing the above process.

## IRIS

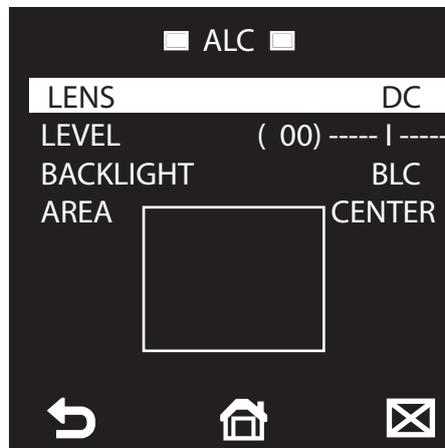
- 1) Move the cursor to IRIS and press the Right button to select ALC or ELC adjustment.  
The IRIS menu is used when required to adjust the intensity of radiation incoming to the camera.

### ◆ ALC (Automatic Light Control)

- ① Press the Set Up button to select ALC mode.



- ② Set the desired lens type by pressing the Right button.



→ DC : DC Auto Iris Lens

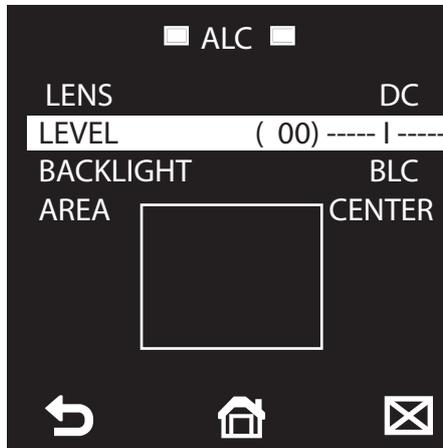


### Note

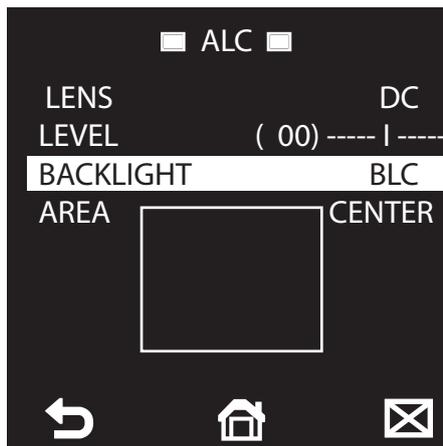
- Select Video for Video type lens.
- When DC is selected, the brightness can be adjusted. the brightness control range is -32 ~ +32.

## IRIS

- ③ Move the status bar to Level by using down button to adjust required brightness level . the Level can be adjusted by using the Left and Right button .  
" + " will increase the brightness and " - " will decrease it.



- ④ Move the status bar to BACKLIGHT by using down button to adjust BLC area and position. BLC ON / OFF functions can be selectable by using the Right button.



### Note

- In case of BLC OFF, please push the Right button to activate the BLC ON and then area and position mode can be appeared for adjustment of required BLC block size.



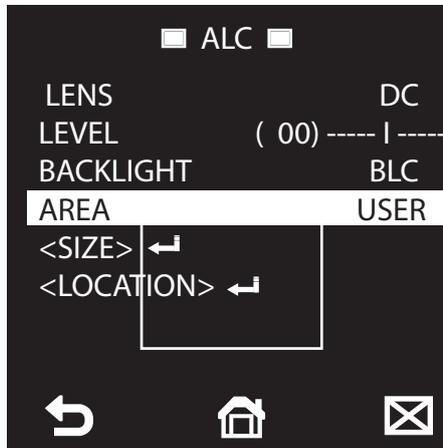
BLC ON



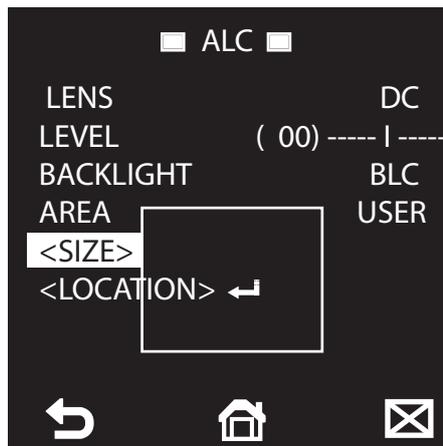
BLC OFF

## IRIS

- ⑤ Move the status bar to Area by using down button and set to USER to adjust required position and block size using the Right button .



- ⑥ Move the status bar to <SIZE> by using down button and press the SETUP Button to increase or decrease the block size by using the UP, DOWN, LEFT and RIGHT.



- ♣ Press SETUP button to save adjusted function data.

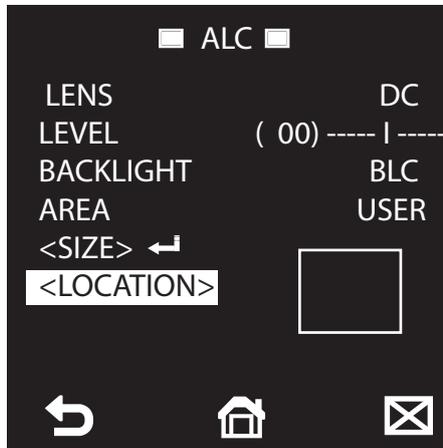


### Note

- Right Button : Increasing the length of the block.
- Left Button : Decreasing the length of the block.
- Up Button : Increasing the height of the block.
- Down Button : Decreasing the height of the block.

## IRIS

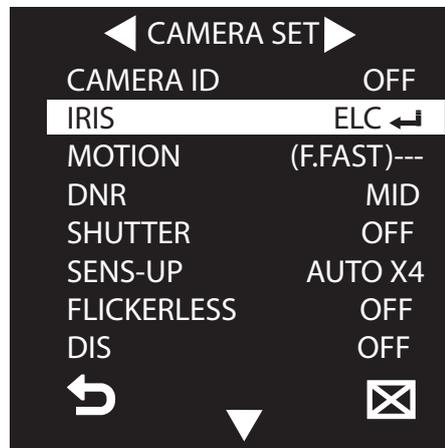
- ⑦ Move the status bar to <Location> using down button and press the SEPUP button to adjust the place where to put the BLC block position by using Left, Right, Up and Down button.



- ♣ Press SETUP button to save adjusted BLC block position and move the status bar to ↶ get back previous menu.

### ◆ ELC (Electronic Light Control)

- ① Press the Right button to select ELC mode.



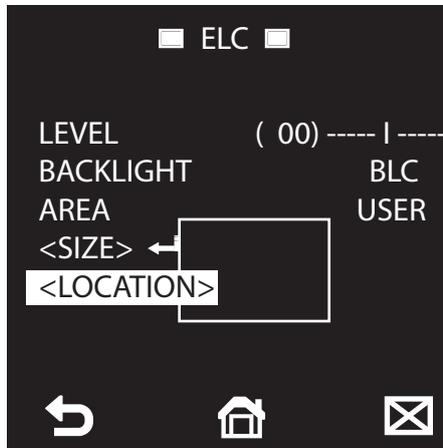
- ♣ Press SETUP button to adjust ELC level value.



### Note

- The ELC level can be adjusted from the level control range -32 ~ +32.
- Other controls can be adjusted like same way ALC control.

## IRIS

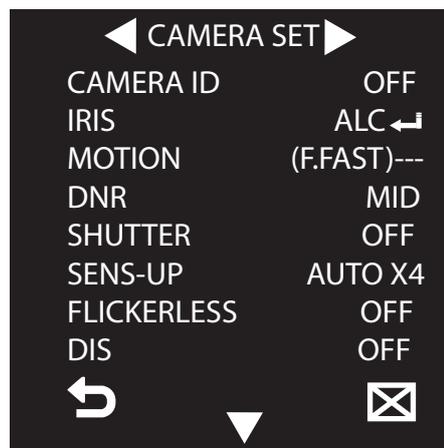


- ♣ Press SETUP button to save adjusted BLC block position and move the status bar to ↩ get back previous menu.

## MOTION

- ① MOTION DETECTION(MD): 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. Desired selecting can be made from S.SLOW, SLOW, NORM, FAST and F. FAST by using Right button.



- ♣ If you monitor a fast moving object in a low contrast condition, select F. Fast. S. SLOW can be selected for slow moving object in the same lighting condition.



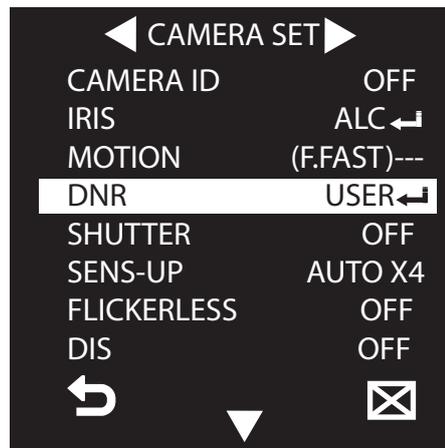
## Note

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

## DNR

DNR(Digital Noise Reduction) is especially useful for severely distorted screen.

- ① Move the status bar to DNR using the Up or Down button on the SETUP menu screen.
- ② Select the desired level of noise reduction using the Right button.
  - HIGH : High reduction of noise but ghosting is likely to occur.
  - MIDDLE : Medium level of the noise reduction, most effective with a minimal ghost effect.
  - LOW : Low reduction of noise without any ghosting.
  - OFF : DNR is disabled.
  - USER : Able to adjust required DNR level.



- ③ Select USER and press the SET UP button to control the DNR level from 1~16.

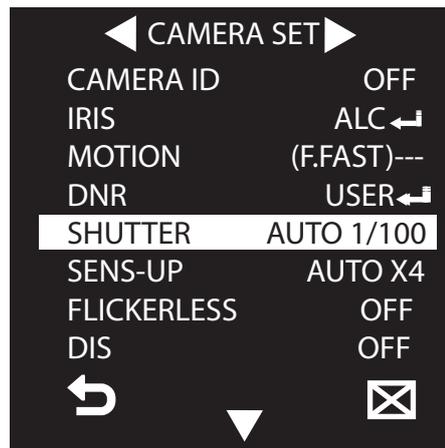


## 6. Menu Set-Up

### SHUTTER

The SHUTTER menu is used to set desired electronic shutter speed.

- ① Move the status bar to SHUTTER using the Up or Down button on the SETUP menu screen.
  - ② Select OFF or AUTO to adjust desired mode by pressing Right button.
- AUTO : 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.
  - OFF : SHUTTER mode is disabled.



#### Note

- If IRIS mode is set to ELC, the SHUTTER and FLICKERLESS will be deactivated.
- If the SENS-UP function is set to AUTO, only functions of OFF and AUTO are available in the SHUTTER menu.
- If the SENS-UP function is set to OFF, AUTO, FIXED and OFF mode are available in the SHUTTER menu.

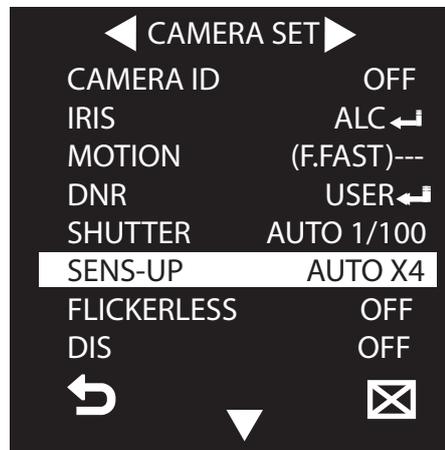
### SENS - UP

SENS-UP mode is automatically detects the ambient level of darkness in the dark or low contrast condition to extend the accumulated time, keeping the image bright and sharp, it can be also used as FIX mode..

- ① Move the status bar to SHUTTER using the Up or Down button on the SETUP menu screen.
- ② Select OFF or AUTO to adjust desired mode by pressing Right button.

## 6. Menu Set-Up

- AUTO : 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 : 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.
- OFF : SENS-UP mode is disabled.



### Note

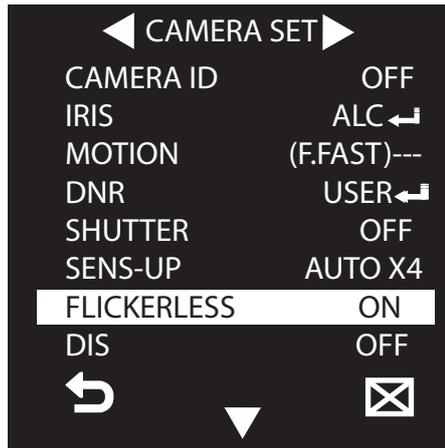
- If the SHUTTER mode is set to fixed electronic shutter mode, the SENS-UP menu will be deactivated.
- If FLICKERLESS is set to ON, the FIX mode of the SENS-UP menu will be disabled.
- If the IRIS menu is set to ELC, the electronic shutter will control the brightness. Therefore, SENS-UP function can not be set to FIX mode but to OFF or AUTO mode can be activated.
- If the SHUTTER menu is set to AUTO, the SENS-UP menu can be set to either OFF or AUTO mode.

## FLICKERLESS

FLICKERLESS is used to be fixed shutter speed 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.

- ON : Activate the FLICKERLESS function.
  - OFF : Deactivate the FLICKERLESS function.
- ① Move the status bar to FLICKERLESS using the Up or Down button on the SETUP menu screen.
  - ② Press the Right button to select ON or OFF.

## 6. Menu Set-Up



### Note

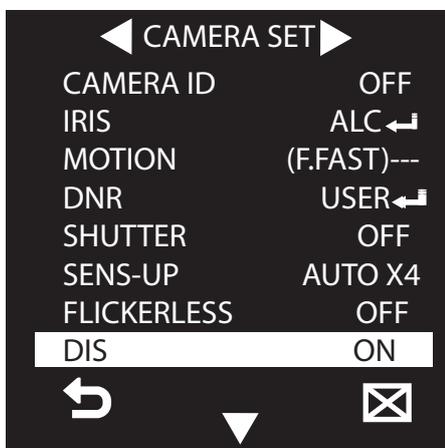
- If the IRIS function is set to ELC, the Flickerless menu will be deactivated. If the SHUTTER menu is set to AUTO, FIX or EXT mode, the Flickerless mode will be deactivated.
- If the SENS-UP mode is set to FIX mode, the FLICKERLESS function will be disabled.
- If the AGC mode is set to FIX mode, the FLICKERLESS function will be disabled.

## DIS

Digital Image Stabilization will be set the anti - shake compensation.

- ON : Activate the DIS function.
- OFF : Deactivate the DIS function.

- ① Move the status bar to DIS using the Up or Down button on the SETUP menu screen.
- ② Press the Right button to select ON or OFF.



## 6. Menu Set-Up



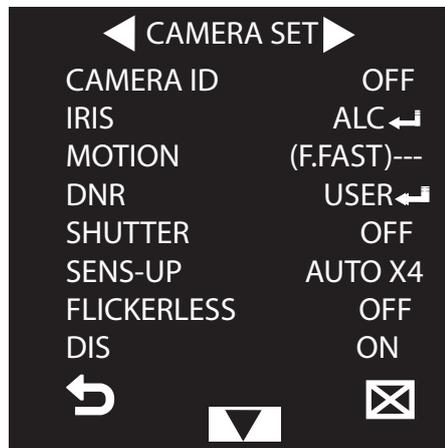
### Note

- If the DIS function is set to ON, the compensation area will be enlarged as set in the digital zoom factor.
- If the digital zoom factor is set to greater than the enlarged zoom factor for the compensation, the DIS function will be deactivated.

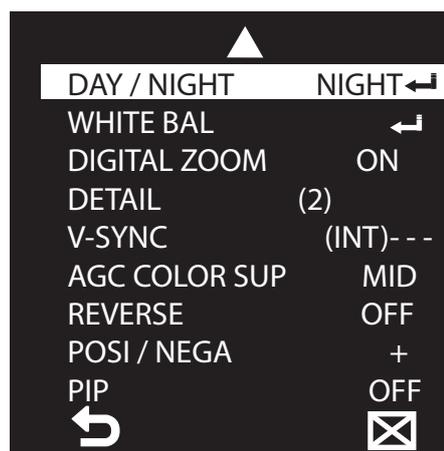
## DAY / NIGHT

- DAY / NIGHT : DAY, NIGHT, AUTO, EXT.

① Move the status bar to DAY / NIGHT by pressing Down button on the SETUP menu screen.



② Press the Right button to select OFF, DAY, NIGHT, AUTO or EXT.



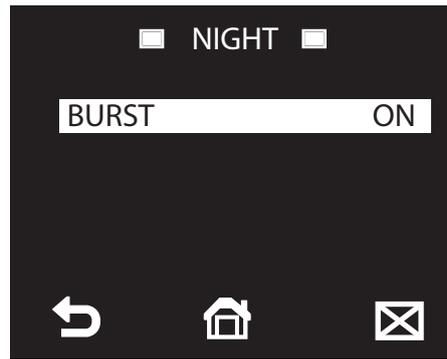
#### ◆ DAY

It will be fixed to DAY mode regardless of the ambient conditions.

#### ◆ NIGHT

It will be fixed to Black & White mode regardless of the ambient conditions.  
At Night mode, press the SETUP button to set the BUSRT ON or OFF.

## 6. Menu Set-Up

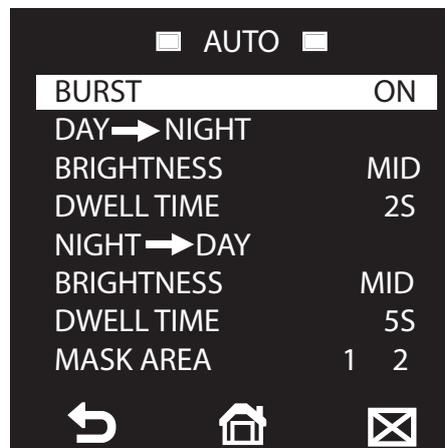


### Note

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

### ◆ AUTO

The camera will automatically switching between DAY and NIGHT mode by the lighting condition. At AUTO menu, press the SETUP button to adjust desired sub menu values.



### Note

DAY → NIGHT : NIGHT → DAY

- The BRIGHTNESS level can be adjusted using Right button from LOW, MID and HIGH which is switching the brightness level from the Black & White filter to color.
- The DWELL TIME is a requirement time to determine switching the filter.
- The MASK is used to prevent a filter switching error or inability of determining the switch in existence of a high spot light source at night.

## 6. Menu Set-Up

### ◆ MASK AREA

- Mask 1 and 2 can be specified simultaneously.
- ① Move the status bar to MASK AREA using the Up or Down button on the SETUP menu screen.
  - ② Press the Right button to select 1 and/or 2 and press the SETUP button to adjust desired size and location .



### Note

- The mask is used for determining the filter switch and any excessive bright area at night will be masked.
- If BACKLIGHT is set to BLC, the MASK AREA function will be deactivated.

### ◆ EXT

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

## WHITE BALANCE

- The color scheme can be adjusted by using the WHITE BALANCE function.

- ① Move the status bar to WHITE BAL using the Up or Down button on the SETUP menu screen.
- ② Press the Right button to select DAY or NIGHT for adjusting desired color on the WHITE BAL.

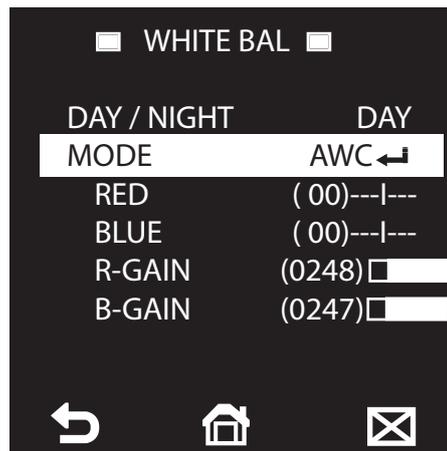


## 6. Menu Set-Up

### ◆ DAY

In DAY mode, desired values of RED and BLUE can be adjusted.

- 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 are from approx. 2,500K to 9,500K.
- ATW2: The color temperature ranges are from approx. 1,800K to 10,500K.
- AWC (Auto White Balance Control):  
Auto White Balance will perform once in the appropriate item position using SETUP button.



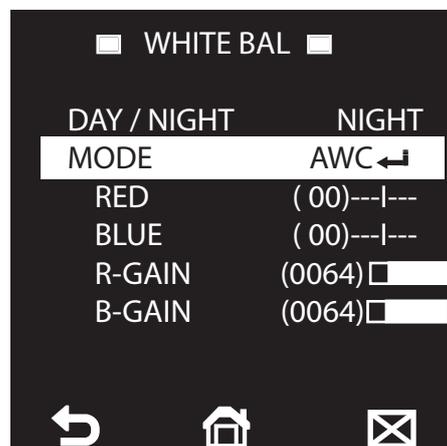
### Note

- Desired R-GAIN and B-GAIN can be controlled in only AWC mode.

### ◆ NIGHT

NIGHT mode can be used when it required to set the white balance differently according to the ambient luminance..

- ① Move the status bar to using the Up or Down button on the SETUP menu screen.
- ② Press the Right button to adjust desired red color values on the WHITE BAL using Left or Right Button.



## 6. Menu Set-Up



### Note

- In the NIGHT , the 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.
- When AGC is set to OFF or FIX, the NIGHT menu is disabled.

- ♣ RED : Strength of the red color.
- ♣ BLUE : Strength of the blue color.
- ♣ R-GAIN/B-GAIN : Color temperature can be adjusted manually.
- ♣ BRIGHTNESS : Select a brightness level in switching from setting in DAY mode to setting in NIGHT mode.

## DIGITAL ZOOM



- Desired digital zoom and position can be controlled by using the Left ,Right and SETUP button.
- ① Move the status bar to DIGITAL ZOOM using the Up or Down button on the SETUP menu screen.

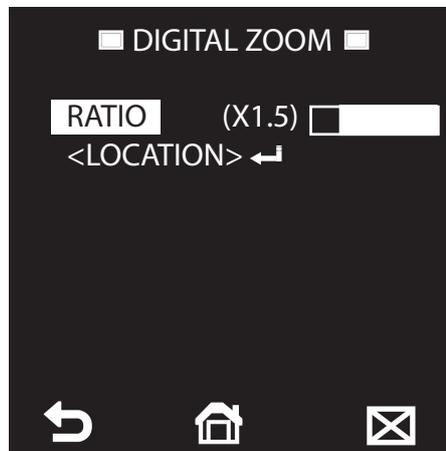


### Note

- When the zoom factor and position are defined, the digital zoom function will operate.
- The DIGITAL ZOOM function enlarges the pixels which can cause deterioration of the quality.

## 6. Menu Set-Up

- ② Press the Right button to select ON and press the SETUP button to adjust desired ratio and location .
- ③ Press the Right button to adjust Zoom from x1 ~x10.

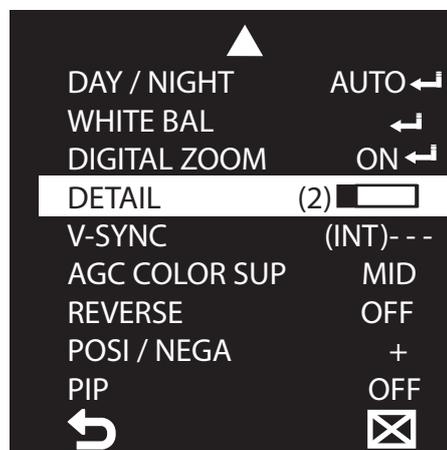


### Note

- If you press the SETUP button in the condition where the image is enlarged as much as the ratio setting, invisible area of the effective screen can be watched as well using the ▲▼◀▶ buttons.

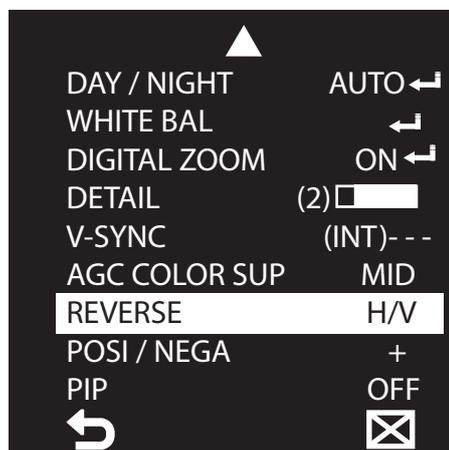
## DETAIL

- ① Move the status bar to DETAIL using the Up or Down button on the SETUP menu screen. Ranges are from 0 to 3.
- Desired horizontal and vertical distinction can be controlled by using the Left and Right button.



## REVERSE

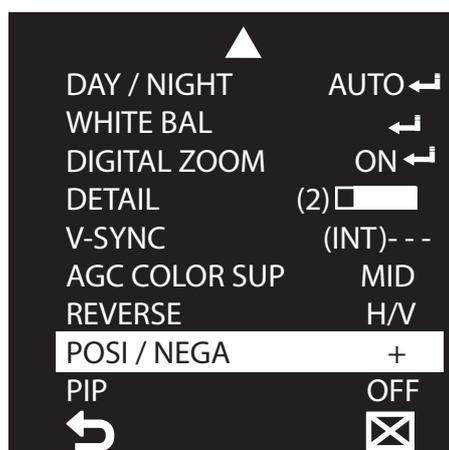
- ① Move the status bar to REVERSE using the Up or Down button and press Right button to adjust desired picture position.



- ♣ H : Horizontal mirror video signal.
- ♣ V : Vertical mirror video signal.
- ♣ H/V : Mirror video signal.
- ♣ OFF : Deactivated.

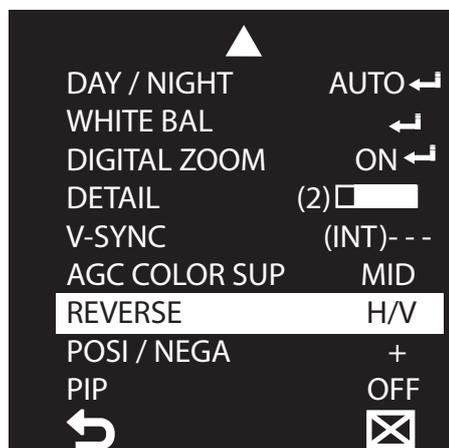
## POSI/NEGA

- ① Move the status bar to POSI/NEGA using the Up or Down button and press Right button to adjust desired mode.



## REVERSE

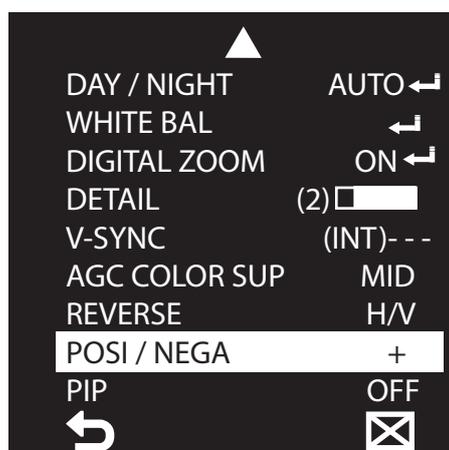
- ① Move the status bar to REVERSE using the Up or Down button and press Right button to adjust desired picture position.



- ♣ H : Horizontal mirror video signal.
- ♣ V : Vertical mirror video signal.
- ♣ H/V : Mirror video signal.
- ♣ OFF : Deactivated.

## POSI/NEGA

- ① Move the status bar to POSI/NEGA using the Up or Down button and press Right button to adjust desired mode.



## 6. Menu Set-Up



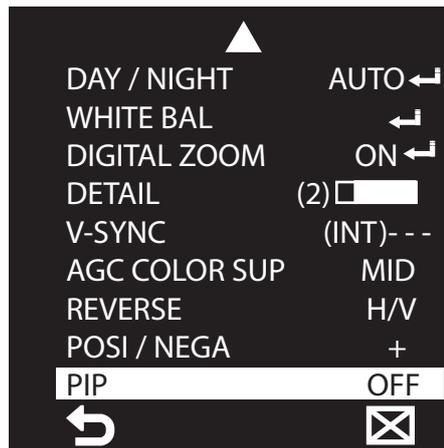
POSITIVE(+)



NEGATIVE(-)

### PIP

- ① Move the status bar to PIP using the Up or Down button and press Right button to use the PIP ON/OFF mode.



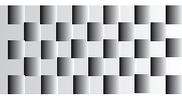
### Note

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

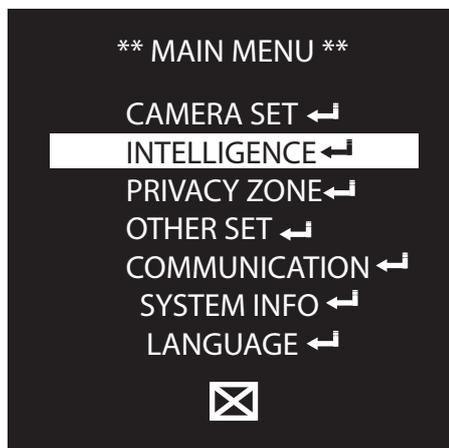


PIP ON

### INTELLIGENCE



- ① Move the status bar to INTELLIGENCE using the Up or Down button and press SETUP button to set the desired mode.

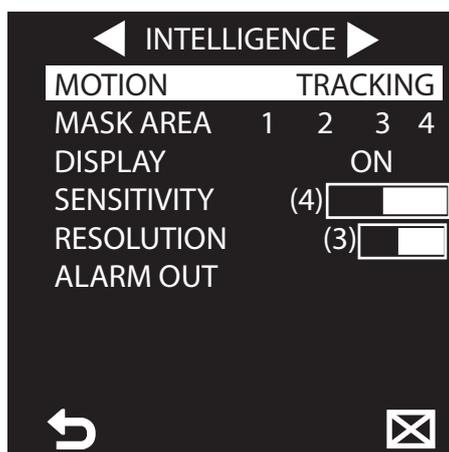


### MOTION



- The motion detection and tracking functions can be adjusted in INTELLIGENCE menu.

- ① Press the Right button to select functions of DETECTION, TRACKING or MOTION OFF.

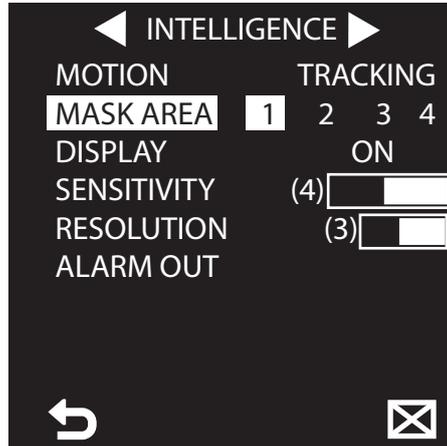


- TRACKING : Detects and tracking a moving object.
- DETECTION : Detects a moving object.
- OFF : Deactivate of the motion detection.

### MASK AREA

- Specifying a detection exception area to mask.

① Press the Right button to select a mask number and adjust the size and position.



② Press the SETUP button after select each number to adjust the size and position.



- ◀ Left Button : Decreasing the mask area frame horizontally.
- ▶ Right Button : Increasing the mask area frame horizontally.
- ▲ Up Button : Increasing the mask area frame vertically.
- ▼ Down Button : Decreasing the mask area frame vertically.

③ Press the SETUP button to exit after finish the adjust the masking area frame size.

### MASK AREA

- ① Move the status bar to LOCATION to set the position of masking area frame.



- ② Press the SETUP button to select position of the masking area frame.

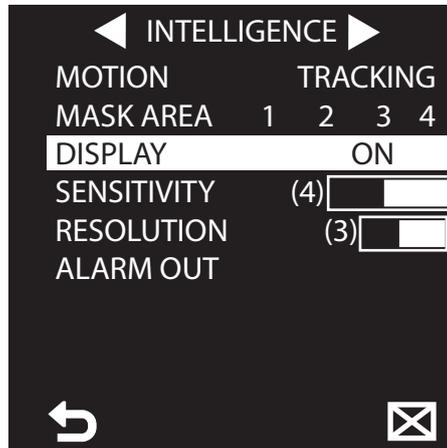


- ◀ Left Button : Moving the mask area frame to LEFT side.
- ▶ Right Button : Moving the mask area frame to RIGHT side.
- ▲ Up Button : Moving the mask area frame to UPPER side.
- ▼ Down Button : Moving the mask area frame to Lower side.

- ③ Press the SETUP button to exit after finish the adjust the masking area position.

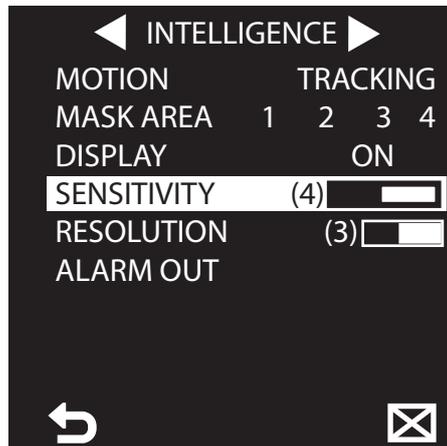
### DISPLAY

- ① Move the status bar to DISPLAY to select motion detection displaying on the screen by using the Right button.



### SENSITIVITY

- ① Move the status bar to SENSITIVITY by using Up and Down button and press the Right button to adjust sensitivity of the motion detection from 1 to 7.



### RESOLUTION

- ① Move the status bar to RESOLUTION by using Up and Down button and press the Right button to adjust sensitivity of the motion detection from 1 to 5.

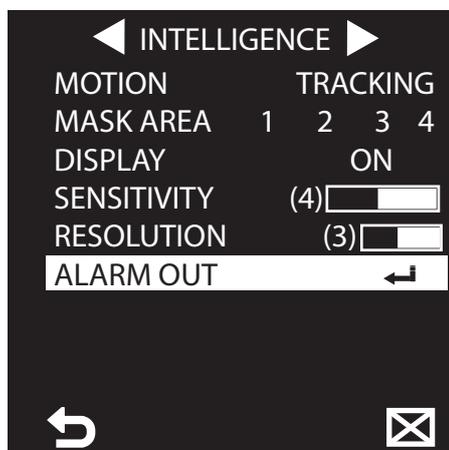


#### Note

- If the SENSITIVITY is set to high, the camera can be detected even a trivial movement of the object.

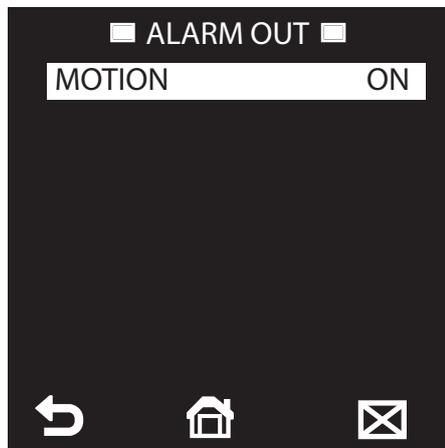
### ALARM OUT

- ① Move the status bar to ALARM OUT by using Up and Down button and press the SETUP button to set the alarm function.



## 6. Menu Set-Up

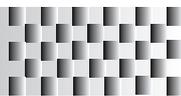
- ② Set the alarm ON by using the Right button and the camera will sound an alert when detect the motion in ALARM mode.



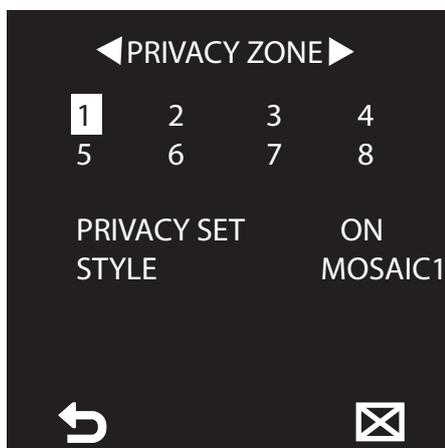
### Caution

- Originally alarm out put mode is not available from the factory default, please discuss with your distributor where you purchased the camera and Alarm out put function should be **OPTIONAL**.

## PRIVACY ZONE

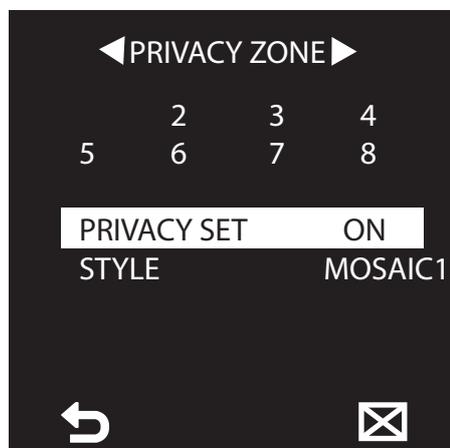


- The PRIVACY function will protect the privacy by screening the privacy area during monitoring. The 8 privacy zones are specified.
- ① Move the status bar to PRIVACY ZONE using the Up or Down button and press SETUP button to set the desired privacy zone number.

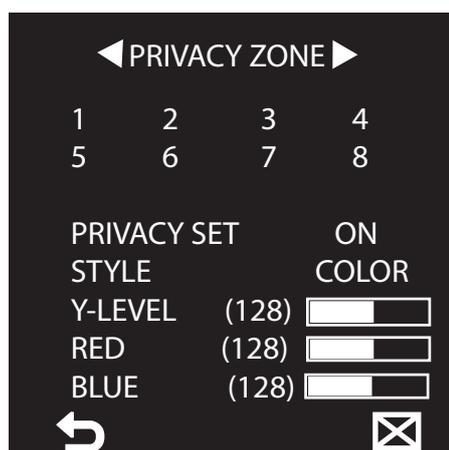


## 6. Menu Set-Up

- ② Move the status bar to PRIVACY to select ON and OFF by using the Right button.



- ③ Move the status bar to STYLE to select MOSAIC style.



♣ MOSAIC STYLE: MOSAIC1, MOSAIC2, MOSAIC3, MOSAIC4 and adjustable COLOR.

- Y-LEVEL can be adjusted from 0 to 200
- RED: Color can be adjusted from 0 to 210
- BLUE: Color can be adjusted from 0 to 210

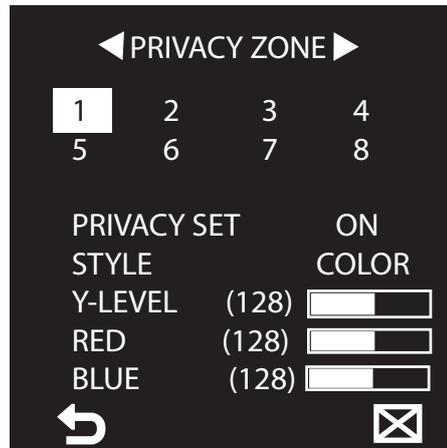


### Note

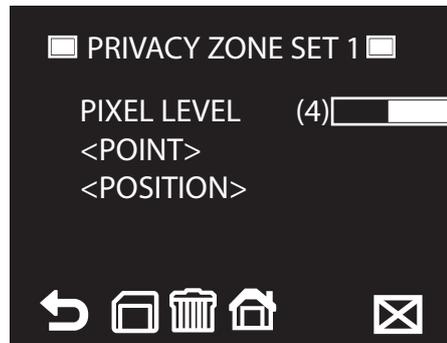
- In case of more than one PRIVACY ZONE is specified and the PRIVACY SET is to set to ON, the PIP function will be deactivated.
- In case of the 12th PRIVACY ZONE is specified, the LINE function of FENCE will be deactivated.

## 6. Menu Set-Up

- ④ Select one number from PRIVACY 1 through 8 by using the ▲ ▼ ◀ ▶ buttons.



- ⑤ Press the SETUP button with selected number to adjust PIXEL LEVEL, POINT and POSITION. PIXEL-LEVEL can be adjusted from 1 to 8



### ♣ How to set the point

Set each position of the 4 points.

- Press the SETUP button in <POINT> and the points can be appeared in the PRIVACY ZONE. Press the SETUP button each time and available points will move.
- Use the ▲ ▼ ◀ ▶ buttons to set the position of each point. Set each position of the four points and press the SETUP button to complete the positioning.

### ♣ How to set the position

Move the position of the overall area

- Press the SETUP button in <POSITION> and move the overall position of the PRIVACY ZONE.
- Use the ▲ ▼ ◀ ▶ buttons to move the position and press the SETUP button to confirm it.



### Note

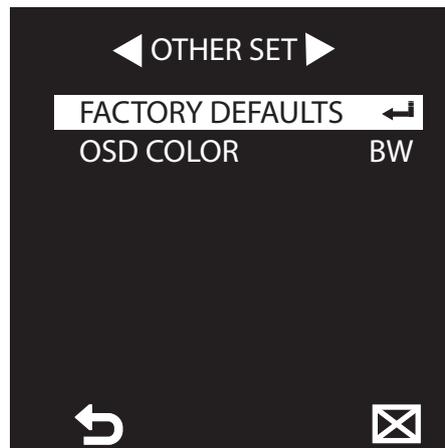
- In case of more than one PRIVACY ZONE is specified and the PRIVACY SET is to set to ON, the PIP function will be deactivated.
- In case of the 12th PRIVACY ZONE is specified, the LINE function of FENCE will be deactivated.

## 6. Menu Set-Up

### OTHER SET

#### FACTORY DEFAULTS

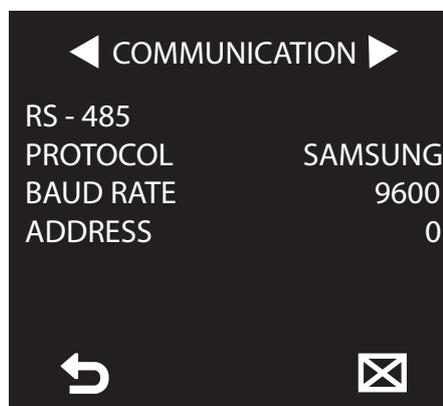
- All the setting values should be restored to the factory default. Meanwhile, the PROTOCOL, BAUD RATE, ADDRESS and LANGUAGE will not be restored to the default.
- ① Move the status bar to OTHER SET using the Up or Down button and press SETUP button to set the OSD color and factory defaults.



- OSD (On Screen Display) COLOR: Character color of the OSD  
BW : Black & White                      R : Red Color  
G : Green Color                            B : Blue Color

### COMMUNICATION

- The COMMUNICATION menu is used to configure the settings regarding UART communication. Use the connector of the camera to connect to UART.  
Use the ▲ ▼ ◀ ▶ buttons to specify the protocol and baud rate for communication.



## 6. Menu Set-Up

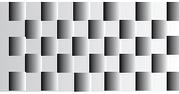
- ◆ PROTOCOL : SAMSUNG, PELCO-D/P, VICON, PANASONIC, PHILIPS, ERNA, DIAMOND VCLTP, KALATEL.
- ◆ BAUD RATE : 2400, 4800, 9600, 19200, 38400 : Select baud rate 2400
- ◆ ADDRESS : 0 ~ 255 : Select an address.



### Caution

- Basically communication mode is not available from the factory default, please discuss with your distributor where you purchased the camera and Alarm out put function should be **OPTIONAL**.

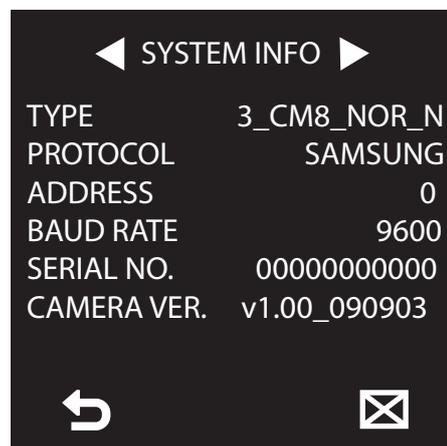
## SYSTEM INFORMATION



- All of the SYSTEM INFORMATION can be verified from the system information.
- ① Move the status bar to SYSTEM INFO using Up and Down buttons.

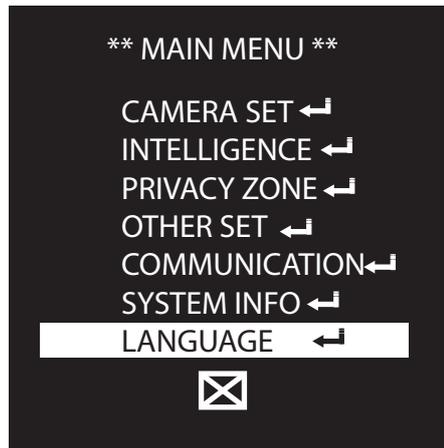


- ② Press the SETUP button to verify the camera system information.



### LANGUAGE

- The camera supports 5 different languages for user's convenience. Desirable Language Can be selected.
- ① Move the status bar to LANGUAGE using Up and Down buttons.



- ② Press the SETUP buttons and select desired language by using Up and Down button.

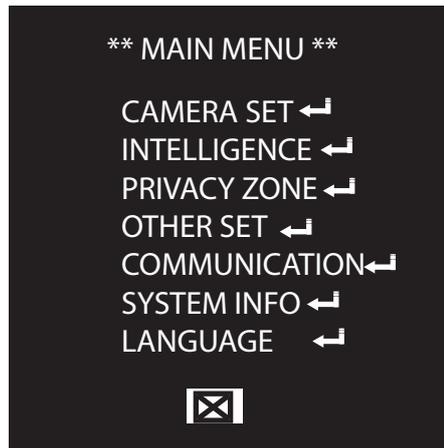


## 6. Menu Set-Up

### EXIT

- After complete all required function settings, move the status bar to  save the data.

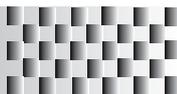
- ① Move the status bar to  using Down buttons.



- ② Press the SETUP buttons and select SAVE by using Left and Right button for a second and all the datas will save and exit automatically.



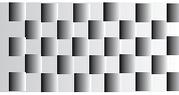
## FACTORY DEFAULTS



- Initial factory defaults configuration table

FUNCTIONS	STATUS
CAMERA ID	OFF
IRIS	ALC
AGC	VERY HIGH
MOTION	(FFAST)
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

## TROUBLE SHOOTINGS



PROBLEM	POSSIBLE CAUSE
Nothing appears on the screen.	<ul style="list-style-type: none"> <li>▶ Check the power cable, power supply output and video connection between the camera and monitor.</li> </ul>
The image on the screen is dim.	<ul style="list-style-type: none"> <li>▶ Are the camera lens or the lens glass dirty? Clean the lens /glass with a soft clean cloth.</li> <li>▶ Adjust the monitor controls, as required.</li> <li>▶ If the camera is facing a very strong light, change the camera position.</li> <li>▶ Adjust the lens focus.</li> </ul>
The image on the screen is dark.	<ul style="list-style-type: none"> <li>▶ Adjust the contrast control of the monitor.</li> <li>▶ If there is an intermediate device, correctly set the 75 Ω / Hi-z.</li> </ul>
The camera is not working properly and the surface of the camera is hot.	<ul style="list-style-type: none"> <li>▶ Check the camera is correctly connected to an appropriate regulated power source.</li> </ul>
Motion Detection is not activated.	<ul style="list-style-type: none"> <li>▶ Has MOTION DET been set to ON in the menu?</li> <li>▶ Has MD AREA been properly defined?</li> </ul>
The colour of the picture is not correct.	<ul style="list-style-type: none"> <li>▶ Check the settings in WHITE BALANCE menu.</li> </ul>
The image on the screen flickers.	<ul style="list-style-type: none"> <li>▶ Make sure that the camera isn't facing direct sunlight or fluorescent lighting. If necessary, change the camera position.</li> </ul>
The SENS-UP does not working.	<ul style="list-style-type: none"> <li>▶ Check that the AGC setting in the EXPOSURE menu isn't set to OFF.</li> <li>▶ Check the EXPOSURE menu and make sure SHUTTER is set to ESC.</li> </ul>

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