

ENFORCER[®]

EV-6600-N2BQ (NTSC)

EV-6600-P2BQ (PAL)

12-Inch Mirror Camera

OSD (On-Screen Display) **Manual**



- Camera is mounted behind a mirror for discreet monitoring
- 1/3" Sony Super HAD II CCD
- 600 TV Lines
- 2.8mm Lens
- 12VDC Operation

SLI SECO-LARM

FC CE 

Note: Model numbers that end with "Q" or that have a round green "Q" sticker signify RoHS-compliant products.

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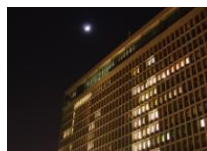
Programmable Features:

• **Exposure**

Manually adjust the shutter speed and automatic gain control (AGC).



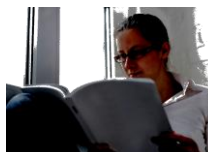
2D-NR OFF



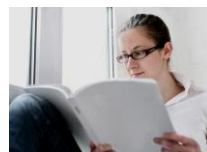
2D-NR ON

• **White Balance**

Adjust the color temperature and image color of the picture



DWDR OFF



DWDR ON

• **Day / Night Mode**

Adjust the level that the camera switches between color and B/W when the ambient light changes

• **Picture Adjustment**

Adjust the camera's brightness, contrast, sharpness, hue, and gain



HLC OFF



HLC ON

• **2D Digital Noise Reduction (2D-NR)**

Adjust for less interference on the screen in an area with low illumination

• **Digital Wide Dynamic Range (DWDR)**

Provide clear images even in circumstances where backlighting can vary excessively



BLC OFF



BLC ON

• **Highlight Compensation (HLC)**

Define target areas and remove spotlights to make certain objects visible

• **Backlight Compensation (BLC)**

Adjust the exposure to properly display the subject in front of a bright light source



Privacy OFF



Privacy ON

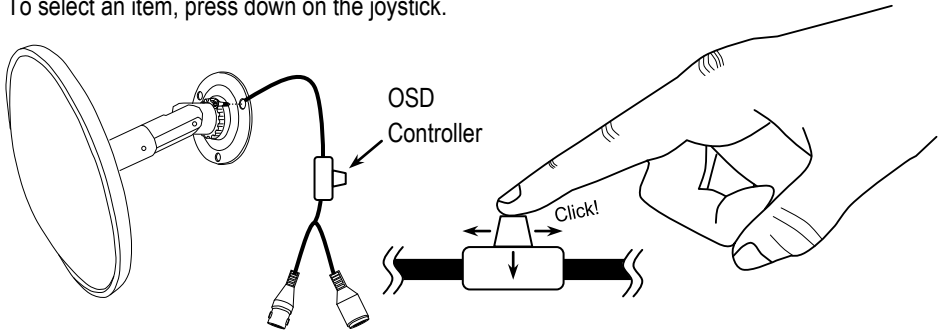
• **Privacy**

Block out or emphasize a certain portion of the image

Note: All screen images in this manual are simulated.

How to Use the OSD Controller:

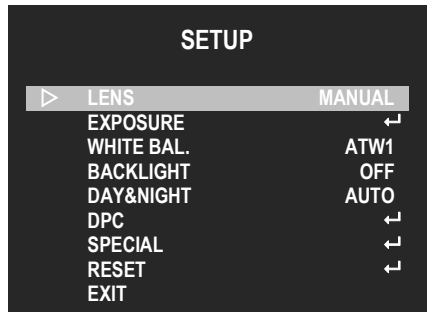
1. Press down on the joystick to open the on-screen display (OSD) menu.
2. Use the joystick to navigate the OSD menu.
3. To select an item, press down on the joystick.



Main Setup Menu:

Menu items can be selected by using the OSD controller.

1. Press in the joystick.
The main SETUP menu will be displayed on the monitor.
2. Move to and highlight the required function by moving the joystick up and down.
3. Select the required function by pressing down on the joystick
4. Change the menu setting by moving the joystick left and right.
5. After choosing the settings, move the cursor to EXIT and press down on the joystick. This saves any changes made to the settings and exits the OSD programming menu.



NOTE: A sub-menu is available where the menu displays ←→.

Menu Diagram:

SETUP MENU	SETTING	SETTING OPTIONS	
1) LENS (see page 5)	MANUAL	Default setting, no options	
	DC	N/A	
	VIDEO	N/A	
2) EXPOSURE (see pages 5-6)	SHUTTER	Auto, Flickerless, or 1/60-sec to 1/100,000-sec	
	BRIGHTNESS	Changes how different levels of brightness are handled	
	AGC	Automatic Gain Control – OFF/LOW/MIDDLE/HIGH No option if DAY&NIGHT set to AUTO	
	DWDR	Digital Wide Dynamic Range – OFF, or adjust the DWDR level	
3) WHITE BAL (see page 7)	ATW1	Automatic Tracking White balance, mode 1	
	ATW2	Automatic Tracking White balance, mode 2	
	AWC→SET	Automatic white balance setting	
	ANTI. CRL	Anti Color Rolling	
4) BACKLIGHT (see page 7)	MANUAL	For setting the color temperature and the red and blue levels	
	BLC	Backlight Compensation – Allows up to 2 areas of the screen to be set to compensate for excess backlighting.	
5) DAY & NIGHT (see page 8)	HLC	Highlight Compensation – Compensates for excessive highlights, has a programmable mask to set where HLC does not apply.	
	AUTO	Sets the level at which the camera switches from day to night or from night to day mode	
	B/W	Sets display to always operate in the B/W mode	
	EXT	N/A	
6) DPC	COLOR	Sets the display to always operate in the COLOR mode	
		Factory use only. Do not use.	
7) SPECIAL (see page 9-11)	CAM TITLE	Allows setting and displaying of an optional name for the camera	
	MOTION	Sets up to 4 separate areas of the screen to flash a grid pattern to draw attention to motion in the protected area	
	PRIVACY	Sets the size, location, and color of up to 8 separate privacy masks.	
	PARK. LINE	Enable and adjust a series of on-screen lines and marks.	
	IMAGE ADJ.	LENS SHAD (Lens Shading Compensation)	Can increase the brightness at the edge of the screen.
		2DNR	Turns Digital Noise Reduction on or off.
		MIRROR	Flips the image on the screen horizontally.
		FONT COLOR	Changes the color of certain on-screen text.
		CONTRAST	Adjusts image contrast.
		SHARPNESS	Adjusts image sharpness.
DISPLAY	Allows setting of lightness and color of CRT or LCD, or according to user preference.		
NEG. IMAGE	Displays the color negative of the image.		
COMM ADJ.	N/A		
LANGUAGE	Choose English, Chinese, Spanish, or Russian.		
VERSION	Displays current software version		
8) RESET (see page 12)	FACTORY	Resets all settings except CAMERA ID to default.	
	RETURN	Exits SETUP menu with or without saving changes.	

Continued on next page

Lens:

This setting is not used.

Exposure:

This function is used to manually adjust the shutter speed, brightness, AGC, and DWDR.

1. Select EXPOSURE on the main SETUP menu screen by pressing in the joystick.
2. Select the exposure setting by moving the joystick UP or DOWN.
3. Program the desired exposure setting by moving the joystick LEFT or RIGHT. Press in the joystick to access a submenu.
4. Select RETURN and press in the joystick to move back one screen.

NOTE: A submenu is available when ← appears.

- A. SHUTTER: Sets camera exposure time.
 - AUTO – Lets the camera automatically set the shutter speed from $1/60$ ~ $1/100,000$ of a second.
 - FLK – Reduces onscreen flickering.
 - Adjustable range: $1/60$, $1/250$, $1/500$, $1/1,000$, $1/2,000$, $1/4,000$, $1/5,000$, $1/10,000$, or $1/100,000$ sec.
- B. BRIGHTNESS: Controls the brightness of the image.
 - Set the brightness level. (Default: 050)
- C. AGC: Controls the Auto Gain Control (AGC) setting.
 - No option if DAY&NIGHT is set to AUTO
 - AGC can be set to OFF, LOW, MIDDLE, or HIGH. (Default: MIDDLE)
- D. DWDR: Adjusts the Digital Wide Dynamic Range (DWDR) of the camera.
 - Choose OFF or ON and adjust the DWDR level. (Default: 035)

EXPOSURE	
▶ SHUTTER	AUTO
BRIGHTNESS	045
AGC	HIGH
DWDR	OFF
RETURN	RET←

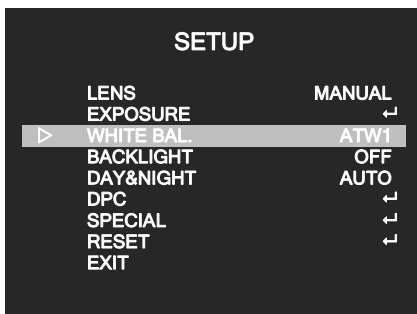
White Balance (WHITE BAL.):

This function adjusts the camera's white balance.

1. Select WHITE BAL. on the main SETUP menu screen.
2. Select the desired white balance mode by moving the joystick LEFT or RIGHT. When ← appears, press the joystick in to access a submenu.
3. Select RETURN and press in the joystick to move back one screen.

NOTE: A submenu is available when ← appears.

- A. ATW1 – Automatic Tracking White, mode 1
- B. ATW2 – Automatic Tracking White, mode 2
- C. AWC→SET – Automatic white balance setting. Point the camera at a white object and press enter. The colors will be balanced based on the object.
- D. ANTI. CRL – Anti-Color Rolling.
- E. MANUAL – Allows COLOR TEMP (color temperature) to be set to INDOOR, OUTDOOR, or MANUAL.
(Default: INDOOR)



NOTE: If the MANUAL setting is chosen, the BLUE and RED levels can be adjusted.

Backlight (Backlight/Highlight Compensation):

This function is used to control the light level to overcome strong back light conditions.

1. Select BACKLIGHT on the main SETUP menu screen.
2. Select the desired backlight mode by moving the joystick LEFT or RIGHT. Press the joystick in to access a submenu.
3. Select RETURN and press in the joystick to move back one screen.

NOTE: A submenu is available when ← appears.

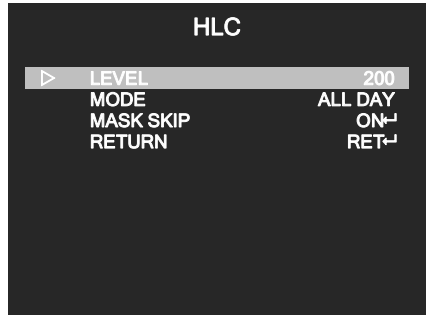
- A. BLC: Program the Backlight Compensation (BLC) function to better display an object in front of a bright light source.
 - AREA SEL – Select one of two areas on the screen to adjust for BLC.
 - AREA STATE – Turn the selected area ON or OFF. (Default: ON)
 - GAIN – Set the GAIN level. (Default: 128)
 - HEIGHT – Adjust the height of the selected area. (Default: 005)
 - WIDTH – Adjust the width of the selected area. (Default: 004)
 - LEFT/RIGHT – Adjust the horizontal position of the selected area. (Default: 006)
 - TOP/BOTTOM – Adjust the vertical position of the selected area. (Default: 005)



Continued on next page

Backlight, continued

- B. HLC: Program the Highlight Compensation (HLC) function to reduce highlights in the image.
- LEVEL – Adjusts the level of the highlights. (Default: 200)
 - MODE – This function is not used.
 - MASK SKIP – Sets up a mask under which the HLC settings do not apply.



HLC OFF



HLC ON

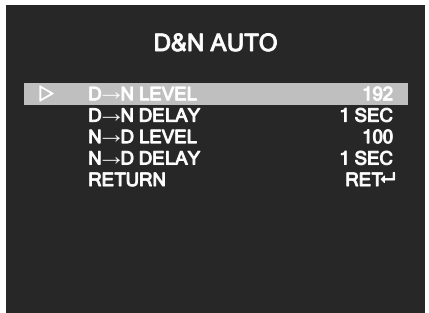
Day & Night:

This function controls how the camera adjusts to color or B/W as the daylight changes.

1. Select DAY&NIGHT on the main SETUP menu screen.
2. Select the desired day & night mode by moving the joystick LEFT or RIGHT. Press the joystick in to access a submenu.
3. Select RETURN and press in the joystick to move back one screen.

NOTE: A submenu is available when ← appears.

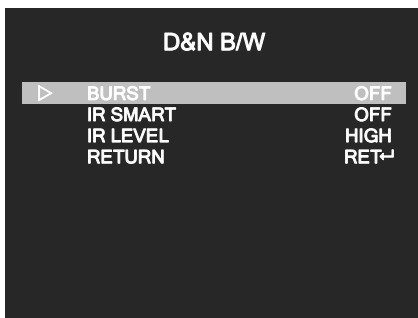
- A. AUTO: Determines how and when the camera shifts between color and B&W modes.
- D→N LEVEL – Sets the light level at which the camera switches to NIGHT mode. (Default: 192)
 - D→N DELAY – Sets 1~30 second delay before the switch to NIGHT mode occurs. (Default: 1 sec)
 - N→D LEVEL – Set the light level at which the camera switches to DAY mode. (Default: 160)
 - N→D Delay – Sets 1~30 second delay before the switch to DAY mode occurs. (Default: 1 sec)



Continued on next page

Day & Night, continued

- B. B/W: Sets the camera into B/W mode.
 - BURST – Turns the BURST mode ON or OFF.
 - IR SMART – Not used.
 - IR LEVEL – Not used.
- C. EXT: Not used
- D. COLOR: Sets the camera into color mode.



DPC:

Factory use only. Do not use.

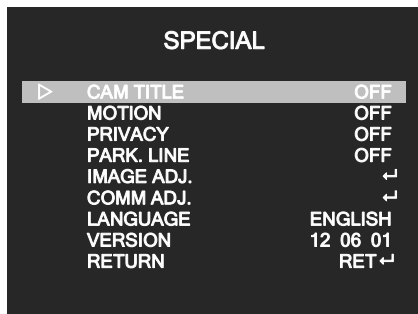
Special:

This function allows for setting of the camera name, motion and privacy masks, and OSD menu language.

1. Select SPECIAL on the main SETUP menu screen by pressing in the joystick.
2. Select the special setting by moving the joystick UP or DOWN.
3. Program the desired exposure setting by moving the joystick LEFT or RIGHT. Press in the joystick to access a submenu.
4. Select RETURN and press in the joystick to move back one screen.

NOTE: A submenu is available when ↵ appears.

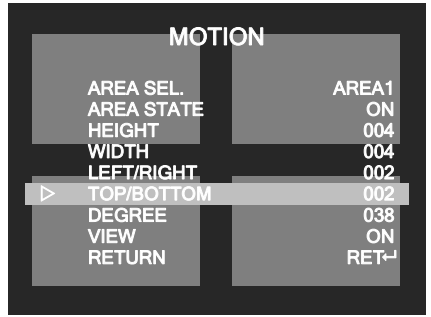
- A. CAM TITLE: Sets a unique, easily-identified name for the camera.
 - Use the arrow keys to highlight and choose letters and numbers for the CAMERA TITLE.
 - ← → – Move the cursor in the CAMERA TITLE.
 - CLR – Clears all text.
 - POS – Choose where on the screen the CAMERA TITLE is displayed.
 - END – Exit the CAM TITLE sub-menu.



Special, continued

B. MOTION: Allows setting of up to 4 areas on the screen where flashing occurs to alert the user of motion in the protected area.

- AREA SEL. – Select one of the 4 motion alarm areas.
- AREA STATE – Turns each area ON or OFF independently.
- HEIGHT – Adjust the height of the selected area
- WIDTH – Adjust the width of the selected area.
- LEFT/RIGHT – Adjust the horizontal position of the selected area
- TOP/BOTTOM – Adjust the vertical position of the selected area.
- DEGREE – Adjust the motion detection sensitivity.
- VIEW – Turns motion detection blocks ON or OFF.



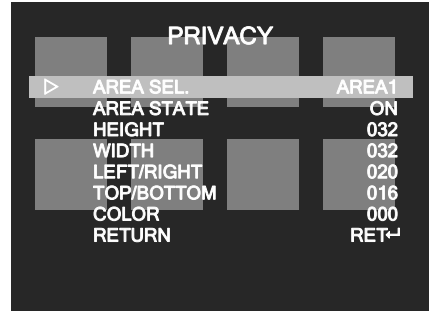
Motion Detection
OFF



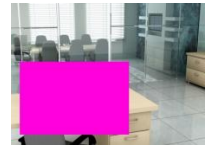
Motion Detection
ON

C. PRIVACY: Allows setting of up to 8 separate on-screen blocks to act as privacy masks.

- AREA SEL. – Select one of the 8 privacy masks.
- AREA STATE – Turns each mask ON or OFF independently.
- HEIGHT – Sets the height of the mask.
- WIDTH – Sets the width of the mask.
- LEFT/RIGHT – Sets the mask's horizontal position.
- TOP/BOTTOM – Sets the mask's vertical position.
- COLOR – Choose one of 15 colors for each privacy mask.



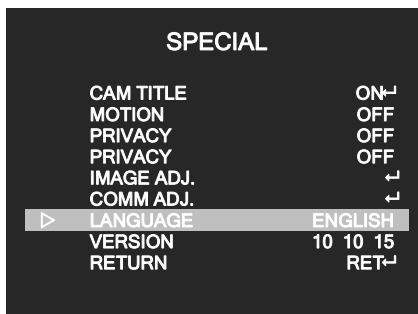
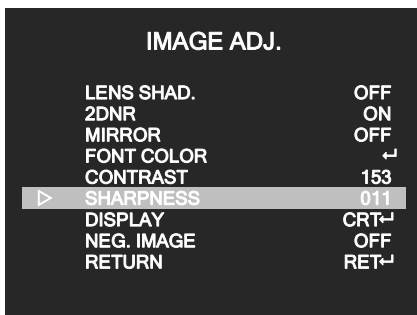
Privacy OFF



Privacy ON

Special, continued

- D. **PARK. LINE:** Enable and adjust a series of on-screen lines and marks.
- E. **IMAGE ADJ.:** Adjusts various aspects of the on-screen image.
- **LENS SHAD.** – Turns Lens Shading Compensation ON or OFF, and adjusts settings.
 - **2D-NR** – Turns 2D Digital Noise Reduction ON or OFF.
 - **MIRROR** – Use to display a mirror image of the display.
 - **FONT COLOR** – Select one of 15 colors for the on-screen fonts.
 - **CONTRAST** – Adjust the contrast of the screen.
 - **SHARPNESS** – Adjust the sharpness of the image
 - **DISPLAY** – Set the display type.
 - **NEG. IMAGE** – Use to display the color or B/W negative of the screen display.
- F. **COMM ADJ.:** Not used.
- G. **LANGUAGE:** Choose English, Chinese, Spanish, or Russian.
- H. **VERSION:** Displays the current version of the camera's software.



Reset:

This function resets all programming options to their factory defaults.

1. Select RESET on the main SETUP menu screen by pressing in the joystick.
2. To reset all programming options except CAM ID, select FACTORY by pressing down on the joystick.
3. Select RETURN and press in the joystick to move back one screen.

NOTE: CAM ID must be cleared manually.

Also Available from SECO-LARM:**Covert PIR Camera**

EV-5620-N3WQ

Features:

- 1/3" Sony Super HAD II CCD
- 600 TV Lines
- 3.7mm Pinhole lens
- 78° Viewing angle
- Covertly hidden in a non-functioning PIR housing

**Covert Ceiling Mount Camera**

EV-6120-N3WQ 480 TV lines

EV-6620-N3WQ 600 TV lines

**Features:**

- 1/3" Sony Super HAD II CCD
- 3.7mm Pinhole lens
- 78° Viewing angle
- Covertly hidden in a smoke detector-style housing

Covert Wall-Plate Camera

EV-5105-N1SQ

Features:

- 1/4" Sony Color CCD
- 600 TV Lines
- 1.5mm Lens
- 170° Viewing angle
- Fits in a single-gang plate or slimline plate
- Weatherproof (IP67)



Troubleshooting:

The screen is blank.

- Check that the camera is powered up.
- Check that the power supply's polarity is correct.
- Check that the monitor is powered up.
- Check that the video cable connecting the camera to the monitor is connected properly.

The screen image is dim.

- Clean the lens using a soft, clean cloth.
- Check that the light source is adequate.

Strong backlight is overpowering the image

- Change the DWDR setting (see page 6).

Image has too much digital noise

- Change 2D-NR setting (see page 11).

The screen image is distorted.

- Change the position of the camera.

Motion detection is not activated

- Activate MOTION (see page 10).
- Properly define the motion detection area.

IMPORTANT

Users and installers of this product are responsible for ensuring this product complies with all national, state, and local laws and statutes related to monitoring and recording audio and video signals. SECO-LARM will not be held responsible for the use of this product in violation of any current laws or statutes.

WARNING

Stop using the camera if you see a malfunction such as smoke or unusual heat, as it could cause fire or electric shock. Do not open the case of this device, as there are no field serviceable components inside.

FCC COMPLIANCE STATEMENT

Information to the user: This equipment has been tested and found to comply with the limits for a class B 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 or her own expense.

WARRANTY: This SECO-LARM product is warranted against defects in material and workmanship while used in normal service for a period of one (1) year from the date of sale to the original consumer customer. SECO-LARM's obligation is limited to the repair or replacement of any defective part if the unit is returned, transportation prepaid, to SECO-LARM.

This Warranty is void if damage is caused by or attributed to acts of God, physical or electrical misuse or abuse, neglect, repair or alteration, improper or abnormal usage, or faulty installation, or if for any other reason SECO-LARM determines that such equipment is not operating properly as a result of causes other than defects in material and workmanship.

The sole obligation of SECO-LARM, and the purchaser's exclusive remedy, shall be limited to replacement or repair only, at SECO-LARM's option. In no event shall SECO-LARM be liable for any special, collateral, incidental, or consequential personal or property damages of any kind to the purchaser or anyone else.

NOTICE

The information and specifications printed in this manual are current at the time of publication. However, the SECO-LARM policy is one of continual development and improvement. For this reason, SECO-LARM reserves the right to change specifications without notice. SECO-LARM is also not responsible for misprints or typographical errors.

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