ENFORCER®

4-in-1 HD TVI, CVI, AHD Analog Cameras

On-Screen Display Manual

EV-Y2251-A2WQ shown

FC CE RoHS

Model	Lens	Resolution	Voltage	Style	Color
EV-Y2251-A2WQ	2.8mm	2MP	12VDC	Turret	White
EV-Y2251-AMWQ	2.8~12 mm	2MP	12VDC	Turret	White

SECO-LARM®

Table of Contents:

Programmable Features

- **Multiple Output Formats**
  Select between multiple different formats: AHD, CVI, TVI, and CVBS.

- **Exposure**
  Adjust the exposure settings, including brightness, and exposure modes.

- **Back Light Compensation (BLC)**
  Adjust the exposure to properly display the subject in front of bright light sources.

- **White Balance**
  Adjust the picture's color temperature/image color.

- **Day & Night**
  Adjust the level of ambient light that triggers the camera to switch between color and B/W modes.

- **Noise Reduction (DNR)**
  Adjust for less interference on the screen in an area with low illumination.

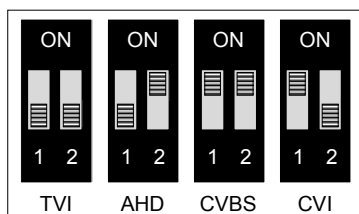**NOTE:** All screen images in this manual are simulated.

BLC OFF

BLC ON

DNR OFF

DNR ON

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Set Format via the DIP Switch

To set the Format via the DIP switch, move the DIP switches to the following combinations.

TVI	AHD	CVBS	CVI

Format	Dip Switch 1	DIP Switch 2
TVI (Default)	OFF	OFF
AHD	OFF	ON
CVBS (Analog)	ON	ON
CVI	ON	OFF

Main Menu

```
MAIN MENU
   AE                    ↵
   AWB                   ↵
   DAY - NIGHT           ↵
   IMAGE ENHANCE         ↵
   VIDEO OUTPUT          ↵
   LANGUAGE         ◀ ENGLISH ▶
   RESET
   SAVE - EXIT
   EXIT
```

NOTE: An ↵ indicates that a submenu is available.

Menu Diagram

Main Menu	Setting	Setting Options
Auto Exposure	Brightness	1~100 (Default: 29)
	BLC	0~7 (Default: 4)
	Global	—
	FLC	—
	Center	—
Auto White Bal	ATW	—
	Manual	0~63 (Default: 40)
		0~63 (Default: 30)
	Gray world	—
Day & Night	EXT	—
	B/W	—
	Color	—
	Contrast	Auto, Manual: 0~20 (Default:10)
	Sharpness	Auto, Manual: 0~20 (Default: 8)
	Saturate	Auto, Manual: 0~20 (Default:10)
	DNR	1~16 (Default: 7)
	2DNR	Auto, Manual: 0~20 (Default: 0)
	3DNR	Auto, Manual: 0~20 (Default: 0)
	TVI	1080P 30FPS, 1080P 25FPS
	CVBS	NTSC, PAL
	AHD	1080P 30FPS, 1080P 25FPS
	CVI	1080P 30FPS, 1080P 25FPS
Language		ENG/ CH1/CH2/ ITA/ RUS/ POR/ POL/ JAP/ KOR/ GRK
Exit		Reset
		Save-Exit
		Exit

Exposure

This function is used to select the camera's exposure settings, including the brightness, and exposure modes.

1. Select Auto Exposure "AE" on the Main Menu screen.
2. Select the desired Exposure operation.

   - **Brightness** – Adjust the camera's brightness from 1~100 (Default: 29).

EXPOSURE
 BRIGHTNESS   ◄ 6 ►
 EXPOSURE MODE   ◄ GLOBAL ►
 RETURN

Exposure (Continued)

EXPOSURE MODE:

- **GLOBAL –** Choose to automatically adjust light level based on environment.
- **BACKLIGHT (BLC) –** Choose to allow the camera to automatically control the light level to overcome strong backlight conditions. Select Back Light Compensation (BLC) to correct the exposure of the subjects that are in front of a strong backlight. Enter the menu to adjust settings.

BLC ON

  - o **LEVEL –** Adjust the BLC level from 0~7 (Default 4).
- **FLC –** This function is used to control the light level to overcome strong front light conditions.
- **CENTER –** This function samples the center of the image to determine the exposure for the entire field of view.

BLC OFF

- **RETURN –** Return to the MAIN MENU screen.

Auto White Balance (AWB)

This function is used to adjust the color temperature and image color of the picture.

1. Select AWB on the Main Menu screen.
2. Select the desired White Balance operation.
3. Adjust the settings.

- **ATW –** Select Automatic Tracking White Balance (ATW) to automatically adjust the white balance color temperature range from 3,200°K~9,200°K when the image color temperature changes.

Auto White Balance (AWB) (Continued)

- **MANUAL –** Select MANUAL to manually adjust the blue and red color temperature values for the area.

  ```
  WB
    MODE      ◄ MWB ►
    RGAIN     ◄ 40 ►
    BGAIN     ◄ 30 ►
    RETURN
  ```

  - o **RED –** Set the red gain value. Adjust from 0~63 (Default: 40).
  - o **BLUE –** Set the blue gain value. Adjust from 0~63 (Default: 10).
- **GRAY WORLD –** This function adjusts the white balance to gray rather than white resulting in better exposure based on the environment.
- **RETURN:** Return to the MAIN MENU screen.

Day and Night

This function is used to adjust the transition between color and black & white modes automatically based on the current lighting conditions.

1. Select DAY & NIGHT on the Main Menu screen.
2. Select the desired Day & Night operation.
3. Adjust the settings.

- **EXT –** Selected External (EXT) mode to automatically adjust between Color and B/W modes by using the integrated IR CDS sensor.
- **B/W –** Select B/W to force the camera to always display in B/W mode.
- **COLOR –** Select COLOR to force the camera to always display in color mode.
- **RETURN –** Return to the MAIN MENU screen.

NOTE: If DAY & NIGHT is set to B/W then WHITE BAL is not available.

Image Enhance

This function accesses the video image to enhance functions such as sharpness, contrast, saturation, and DNR.

1. Select Image Enhance (IE) on the Main Menu screen.
2. Select the desired menu operation.
3. Adjust the settings.

Image Enhance (Continued)

- **CONTRAST –** Adjust the difference between the lightest and darkest parts of an image or video stream.

    o **LEVEL –** Higher values will result in increased difference of light and dark. Adjust from 0~16 (Default: 5). AUTO, Manual: 0~20 (Default: 10).

- **SHARPNESS –** Adjust to increase the contrast of edges in a video or image.

    o **LEVEL –** Higher values will result in increased edge contrast detection. Adjust from 0~16 (Default: 5). AUTO, Manual: 0~20 (Default: 8).

- **SATURATE:** This function is used to increase or decrease the amount of color hue within the frame.

    o **AUTO –** Automatically adjusts color saturation.
    o **MANUAL –** Select the desired setting.
    o **LEVEL –** Adjust from 0~20 (Default 10).

- **2DNR –** Select the 2D Digital Noise Reduction (2DNR) for general lighting conditions. Higher levels of DNR will decrease the noise in the image but also potentially affect the sharpness.

    o **AUTO**
    o **LEVEL –** Adjust from 0~20 (Default 0).

- **3DNR –** Select the 3D Digital Noise Reduction (3DNR) for low lighting conditions. Higher levels of DNR will decrease the noise in the image but also potentially increase after images.

    o **AUTO**
    o **LEVEL –** Adjust from 0~20 (Default 0).

- **RETURN –** Return to the MAIN MENU screen.


```
IMAGE ENHANCE
CONTRAST      ◄ AUTO ►
SHARPNESS     ◄ AUTO ►
SATURATE      ◄ AUTO ►
3DNR          ◄ AUTO ►
2DNR          ◄ AUTO ►
RETURN
```


DNR OFF

DNR ON

Video Output

This function is used to change the Video Output and Video Standards. Select VIDEO OUTPUT on the Main Menu screen.

- **HD:**

  o **TVI –** 1080p/25/30 FPS

  o **CVBS –** NTSC, PAL

  o **AHD –** 1080p/25/30 FPS

  o **CVI –** 1080p/25/30 FPS

- **RETURN –** Return to the MAIN MENU screen.

VIDEO OUTPUT
HD   ◄ TVI ►
VIDEO STANDARD   ◄ 1080p 30 ►
RETURN

Exit

This function is used to save all OSD changes and exit the menu screen, reset all values to their factory defaults, or exit the menu screen without saving any changes.

1. Select EXIT on the Main Menu screen.
2. Select the desired operation.

- **RESET –** Restore all OSD settings to factory defaults and exit the OSD menu.
- **SAVE & END –** Save all OSD changes and exit the OSD menu.
- **EXIT –** Exit the OSD menu without saving any changes.

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.

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.