

# USER MANUAL

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## STAR LIGHT DIGITAL NOISE REDUCTION

### ICR DAY/NIGHT

## DIGITAL COLOR CCD CAMERA

### 1/3" HI. RESOLUTION

### 12VDC/ 24VAC, 100V~240VAC

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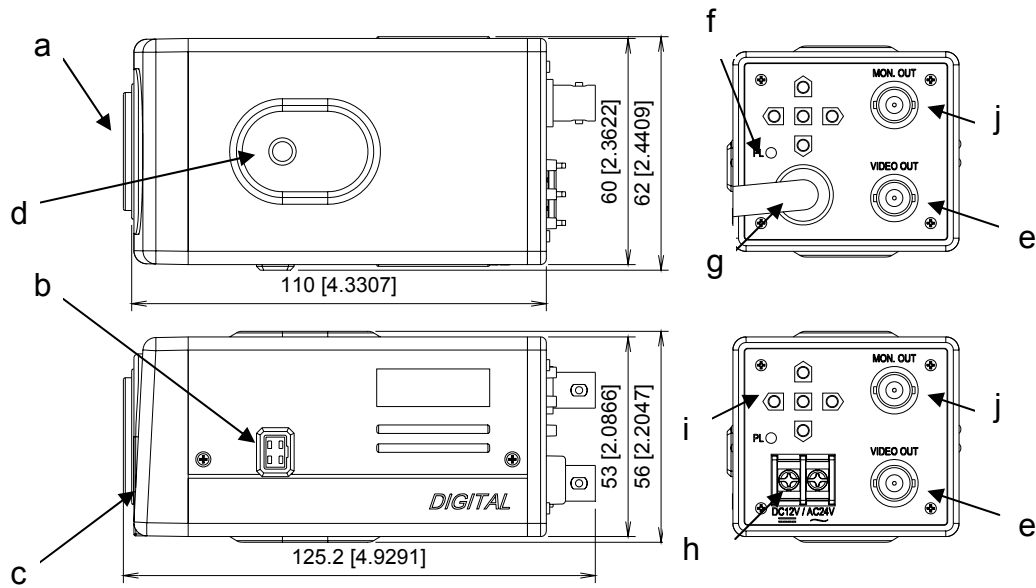
#### 1. General description

This 1/3" Day/Night color CCD camera, with high resolution (470/410 k) picture elements, is equipped with a mechanical IR cut filter and advanced Digital Signal processor to provide an unprecedented optimal image with vivid and stable true color picture

#### 2. Major Features

- a. Fully automatic Digital Noise Reduction (auto start in low light)
- b. True Day Night ICR switching
- c. 4 Areas Privacy Masking
- d. 8 x 6 Motion Detection Matrix
- e. Vivid High Resolution 540 TV Lines day mode and 570 TV Lines night mode
- f. Digital "Zoom" "Tilt" support
- g. Wide White Tracing balance Range : 1800~10500 °K
- h. Mirror/ Flip / Rotate Function
- i. Full functions OSD user interface

### 3. Name of parts and functions



- a. (CS) mount adapter  
If a CS mount lens is to be used, remove the C mount ring.
- b. Auto iris lens connector (MINI JACK) See section 3.1 auto-iris connector.
- c. Flange focal lock screw
- d. Camera mounting screw hole  
Standard photographic pan-head screw size (1/4"-20)
- e. Video output terminal (BNC)  
This connector is used to provide video signal output.
- f. Power LED
- g. AC Power Cord
- h. DC 12V or AC24V & DC 12V terminal block
- i. OSD Switching buttons
- j. Monitor video output terminal (BNC)

### 3.1. Auto Iris Lens Connector

- Use the accompanying auto iris lens connector plug.

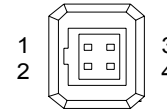
For auto iris lens without EE amp. ( DC Type )

The connector drawing shows external view from camera.

Set the lens iris selector switch to “DC” position.

Connector cable lead definition:

- 1.Damping coil ( - )      2.Dampling coil ( + )
- 3.Driving coil ( + )      4.Driving coil ( - )



Connect the leads as shown above; please refer to the instructions of the lens for more detail.

### 3.2. Power Terminal

#### 3.2.1 AC 24V/DC 12V model

This terminal block accepts both polarity protected AC 24V and DC 12V.



#### 3.2.2 AC 100V~240V model

For AC 100~240V models, the camera is equipped with a universal switching power supply. It adapts power source input from 100VAC to 240VAC

## 4. OSD Main Menu

### 4.1 EXPOSURE:

Select Lens type, Brightness, Shutter speed, AGC, Sense Up in “Sub Menu”

- ◆ Lens type: Select ELC (electronic Light control) or DC
- ◆ Brightness: Select “0” to “60”
- ◆ Backlight: Select “OFF” or “ON”
- ◆ Shutter: When Lens type set to DC, Select shutter speed as below.  
1/50(PAL), 1/60(NTSC), FLC (Flickness), 1/250, 1/500, 1/1000, 1/2000,  
1/4000, 1/10000
- ◆ AGC: Set the AGC max gain in  
OFF: 0 dB  
Low: 4 dB  
Mid: 12dB  
High: 18dB
- ◆ Sense Up: Set camera to” Off” , x2, x4, x8, x16, x32 frame integration

#### 4.2 WHITE BALANCE:

Select ATW, AWC, MANUAL modes

- ◆ AWC: This mode can calculate and Fixed the white balance, when the camera set in AWC mode , please move the cursor to “Push Auto” mode then set as “Push”, camera will calculate white balance then lock on to AWC mode
- ◆ RED/Blue gain can be adjusted when the camera set to “Manual” mode (0 ~ 127),

#### 4.3 DAY/NIGHT:

This mode is setting the details operation of Day/Night switch

- ◆ D/N mode: DNRM series has 4 modes: Auto, Day, Night, EXT selectable

#### 4.4 MOTION DETECTION:

DNRM series has User configurable 8 x 6 sector matrix

- ◆ DETECT MODE:  
Set the camera Motion detection ON or OFF
- ◆ DETECT AREA:  
The 48 mask areas appear overlaid on the camera picture with the blinking cursor in the upper left corner, use right /left button to move the cursor to an area where the backlight is bright and press UP/DOWN button to mask or cancel the area
- ◆ SENSITIVITY:  
Adjust for level (0-8) to optimize the sensitivity of detection
- ◆ ALARM TIME:  
Set Alarm Screen display time (1 ~ 60s)

#### 4.5 PRIVACY:

Perform settings of up to eight privacy zones where you wish to veil the monitor screen

- ◆ AREA: There are 4 areas can be used
- ◆ Mask: Turn ON or OFF of Privacy Masking
- ◆ Level: Adjust the brightness of Masking Area
- ◆ Top/Down/Left/Right: Adjust the zone scale

#### 4.6 OPTION:

- ◆ TITLE: Assign a name to the camera using up to 10 characters to display it overlaying on the camera picture at the selected position
- ◆ NEGA/POSI:  
Set the camera negative or positive color.
- ◆ SHARPNESS:  
Adjust the picture sharpness (0~15)
- ◆ MIRROR:  
Specify whether to horizontally, vertical, rotate reverse the camera picture
- ◆ ZOOM:  
Set the camera 1 to 4x "Digital Zoom"
- ◆ PAN/TILT:  
Set the "Digital" pan/tilt when the camera turn on the digital zoom
- ◆ PHASE  
Adjust the sync phase when the camera set in "Line Lock" mode.

#### 4.7 DISPLAY

- ◆ This section can set "TITLE", "MOTION DECTION", "CAMERA ID" display ON or OFF

#### 4.8 SYNC:

- ◆ Select a sync mode (internal or line lock)

## **5. Infra-Red Illuminator**

Under low light condition, ordinary color camera cannot achieve a clear picture when working with IR projector. This camera is specially designed with the capability to accept most IR projector to create a crystal clear mono picture when in a completely dark area.

The range of Infrared wavelength is from 700nm to 1100nm.

The focus may slightly vary with IR wavelength due to the lens diffraction to long-wave, while installing the camera with IR projector, please check the focus under IR projector and normal light condition, and regulate to its best focusing position.

It is recommended to adjust lens aperture accordingly to increase the depth of field in order to compensate the lens diffraction.

\*For best operation please utilize an IR illuminator for night vision to avoid the focus shift.

## 6. Specifications

Power requirements	DC 12V / AC 24V	AC 100~240V
Synchronization	INT / Line-Lock ( for AC POWER )	
Image device	1/3" SONY Super HAD CCD	
Picture elements	PAL: 752(H) x 582(V), NTSC: 768(H) x 494(V)	
Scanning system	PAL: 625 lines, NTSC: 525 lines, 2:1 interlace	
Horizontal resolution	540 TV Lines ( color mode )	
	570 TV Lines ( b&w mode )	
Min. illumination	0.5 lux @F1.5( 30IRE , Factory settings )	
	0.01lux @F1.5(b&w mode, 30IRE , sense up x32 )	
IR wavelength	700~1100nm	
OLPF switching	Auto switching	
Aperture correction	Horizontal & Vertical 2H enhancer	
Signal to noise ratio	Better than 50 dB	
Sense UP	UP to 32x	
Privacy Masking	4 Areas	
Auto iris shutter	Auto iris mode: PAL:1/50 sec, NTSC: 1/60 sec.	
Auto electronic shutter	AES: 1/50(60) ~1/120,000 sec.	
DNR	Auto Start in Low light	
White balance	ATW	
Gamma correction	0.45	
BL compensation	Auto detect	
Phase adjustment	V phase adjustment( $\pm 90^\circ$ ), AC model	
Video output	1Vp-p, 75 $\Omega$ composite, BNC connector	
Lens mount	Accept C/CS mount	
Auto iris lens	Accept DC servo iris lens	
Power Consumption	6W	
Operating temperature	-10°C ~50°C (14°F ~ 122°F)	
Weight	0.55kg	
Dimensions	60 x 53 x 110mm (W x H x D)	

\*Specifications are subject to change without notice.

**Warning : To prevent fire or electric shock hazard, do not expose the appliance to rain or moisture.**

OME33DNRM-1531