## Model 68A01-1

## OPERATING MANUAL

## Day/Night Dome Camera (Indoor/Outdoor)

Before installing and using the camera, please read the instructions thoroughly and retain them for reference.

## Features

- 1/3" SONY Super-HAD
- 3.7-12mm Auto Iris Lens
- Water resistance IP 66 protection
- Wide Range Viewing 3D Covert Bracket Design
- E-Z Installation with Attached Cap Design
- Anti-Scratch Cover Coating



## Specifications

| Description | Indoor Dome Camera |
| :---: | :---: |
| Power requirements | 12VDV / 24VAC Dual Voltage |
| Synchronization | Internal / Line-lock Auto Detect |
| Image device | 1/3" SONY Super HAD CCD |
| Scanning system | $\mathrm{P}: 625$ lines, $\mathrm{N}: 525$ lines 2:1 interlace |
| Picture elements | NTSC: $542 \times 492$ |
| Horizontal resolution | 420 TV Lines |
| Current drain | 500mA, @12VDC |
| Minimum Illumination | 0 Lux under IR illumination |
| IR wavelength | 700-1100nm (built in 850 nm ) |
| OLPF switching | Auto switching |
| S/N Ratio | Better than 50 dB |
| Gain Control | ON/OFF Switchable |
| Focal Length | 3.7-12mm@ F1.4 |
| White Balance | AWB |
| Gamma | 0.45 |
| BL Compensation | ON/OFF Switchable |
| Product Material | Metal |
| Video Output | 1Vp-p, $75 \Omega$ composite |
| Vandal Proof | 10 Pounds of Sledgehammer Durability |
| Environmental Rating | IP 66 |
| Operating temperature | $-10^{\circ} \mathrm{C}-50^{\circ} \mathrm{C}\left(14^{\circ} \mathrm{F}-122^{\circ} \mathrm{F}\right)$ |

[^0]
## Part Name and Descriptions

A. Camera
B. PC Assembly
C. Back Conduit Entry
D. Side Conduit Entry
E. Housing Mounting Holes
F. Security Screws
G. Conduit Entry Plug
H. Inner Cover Adjustment


## Installation

1. Remove dome cover by loosening 4 security screws (use wrench provided).
2. Use the wall anchors and screws provided to mount the housing to a sturdy surface.


## Caution

1. Do not touch the surface of the image sensor. If it is touched accidentally, it must be cleaned using a cloth moistened with alcohol.
2. Before operation, ensure that the supply voltage is correct as specified.
3. Avoid focusing on the sun directly.
4. Do not attempt to service this unit yourself unless you are authorized to do so. Opening or removing cover may exposure you to dangerous voltage or other hazards.

## Connectors

- Red wire: connects to +12VDC / 24VAC power source

> o (a) Power Source

- Black wire: connects to 12VDC Ground / 24VAC power source
o (a) Power Sources
- BNC connector: connects to video encoder/monitor
o (b) Video out, (c) Ground


## Configuration

(d) DC Level: Used to adjust the brightness of the video screen.
(e) Phase Adjustment: Used to synchronize the power signal and video signal if the camera is powered from an AC power source.
(f) Dip Switch: Used to configure various settings as described below.


| DIP SWITCH | $\boldsymbol{-}-$ DIP SWITCH OFF | DIP SWITCH ON $\boldsymbol{-}$, |
| :---: | :--- | :--- |
| 1 | AI (Auto Iris) | AES (Auto Electrical Shutter) |
| 2 | BLC OFF (Backlight Compensation) | BLC ON (Backlight Compensation) |
| 3 | SUP AGC (Super Automatic Gain Control) | AGC (Automatic Gain Control) |
| 4 | FL ON (Flicker On) | FL OFF (Flicker Off) |

Al (Auto Iris): Auto Iris Lens is used
AES (Auto Electrical Shutter): Auto Iris Lens is not used
BLC (Backlight Compensation) OFF: Disables this function
BLC (Backlight Compensation) ON: When light is captured and the surroundings are dark, BLC will brighten the image and compensate using the surrounding light.

SUP AGC (Super Automatic Gain Control): Used in a low light environment
AGC (Automatic Gain Control): Used in a standard light environment
FL (Flicker) On: Suppresses flickering if present
FL (Flicker) Off: Disables this function

Dip Switches 5-8 adjust the delay time for when the camera switches from color to black and white under IR illumination.

| DELAY TIME | 1 sec | 5 sec | 10 sec | 20 sec | 30 sec | 40 sec | 50 sec | 1 m in |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | - | - | - | - | - | - | - | - |
| 6 | - | - | - | - | - | - | - | - |
| 7 | - | - | - | - | - | - | - | - |
| 8 | - | - | - | - | - | - | - | - |


| DELA Y TIME | 1.5 m in | 2 min | 2.5 m in | 3 m in | 3.5 m in | 4 m in | 4.5 m in | 5 m in |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 | $\rightarrow$ | - | $\cdots$ | - | $\cdots$ | - | - | $\rightarrow$ |
| 6 | $\rightarrow$ | - | $\rightarrow$ | - | $\cdots$ | - | $\rightarrow$ | - |
| 7 | $\rightarrow$ | $\rightarrow$ | $\pm$ | $\pm$ | $\rightarrow$ | - | - | $\pm$ |
| 8 | - | $-$ | $\rightarrow$ | $-$ | - | - | - | - |

## Adjusting the Camera Zoom and Focus

To adjust the zoom and/or focus of the camera:

1. Loosen the zoom ring thumbscrew
2. Turn the zoom ring to set the desired zoom
3. Tighten the zoom ring thumbscrew
4. Loosen the focus ring thumbscrew
5. Turn the focus ring to set the desired focus
6. Tighten the focus ring thumbscrew


## 3-Axis Gimbal Adjustments

1. Adjust Horizontal angle:

Turn the platform to adjust the horizontal angle B (90 degrees), and C (180 degrees)
2. Adjust Vertical angle:

Turn the platform to adjust the vertical angle A (90 degrees)



[^0]:    * Must use specified and regulated 12VDC/24VAC power supply.
    * Specifications are subject to change without any prior notice.

