

# Indoor Dome IR Camera

DWC-D3361WTIR



## ABOUT MANUAL

Before installing and using the camera, please read this manual carefully.  
Be sure to keep it handy for future reference.



## PRECAUTIONS

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- Do not open or modify.
- Do not open the case except during maintenance and installation, for it may be dangerous and can cause damages.
- Do not put objects into the unit.
- Keep metal objects and flammable substances from entering the camera.  
It can cause fire, short-circuits, or other damages.
- Be careful when handling the unit.
- To prevent damages, do not drop the camera or subject it to shock or vibration.
- Do not install near electric or magnetic fields.
- Protect from humidity and dust.
- Protect from high temperature.
- Be careful when installing near the ceiling of kitchen or a boiler room, as the temperature may rise to high levels.
- Cleaning:  
To remove dirt from the case, moisten a soft cloth with a soft detergent solution and wipe.
- Mounting Surface:  
The material of the mounting surface must be strong enough to support the camera.

## FCC COMPLIANCE

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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 residential environment. This equipment generates, uses, and radiates radio frequency energy; and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications.

**WARNING:** Changes or modifications are not expressly approved by the manufacturer.

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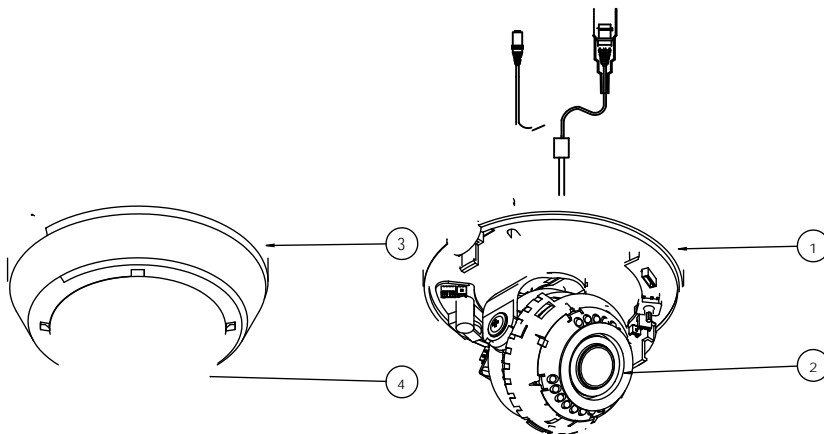
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## FEATURES\*

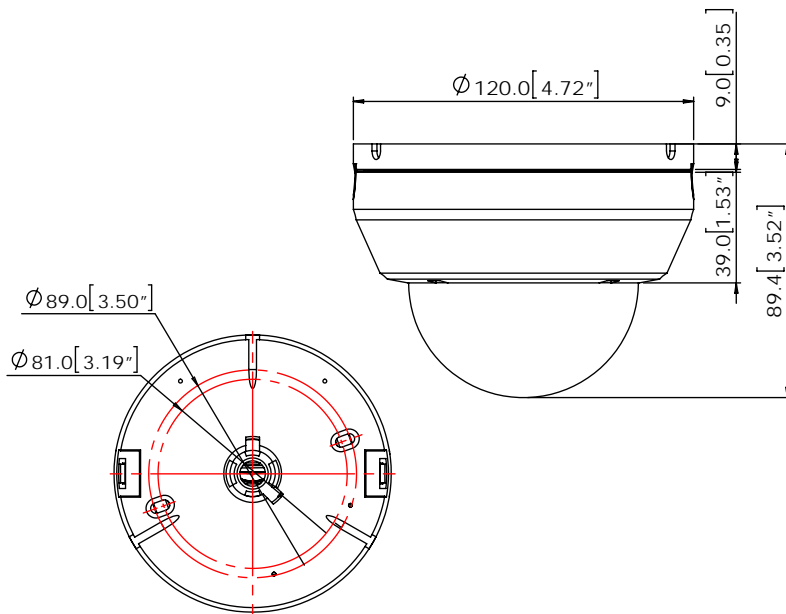
- 1/3" 760H CMOS Sensor Chip (760 Horizontal Pixels)
- 690TVL
- 2.8~12mm Varifocal Auto Iris Lens
- 100ft Range IR with Intelligent Camera Sync
- TDN (True Day & Night) with IR Cut Filter
- WDR (Wide Dynamic Range)
- 2D DNR (2D Digital Noise Reduction)
- Smear Cancellation
- AGC / AWB
- Easy Icon Driven OSD Menu with Built-in Joystick
- Auto Sensing 24VAC/12VDC

## PARTS & DESCRIPTION\*

- ❶ Bottom Case
- ❷ Camera Gimbal
- ❸ Upper Case
- ❹ Dome Cover



## DIMENSIONS IN MILLIMETERS (IN)\*



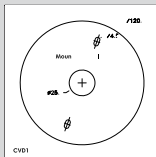
## INSIDE THE BOX\*

### Included with your Camera

- ❶ User Manual
- ❷ Mounting Template
- ❸ 4 Machine Screws and 4 Dry Wall Anchors
- ❹ L-Key
- ❺ Secondary Video-BNC Cable



❶



❷



❸

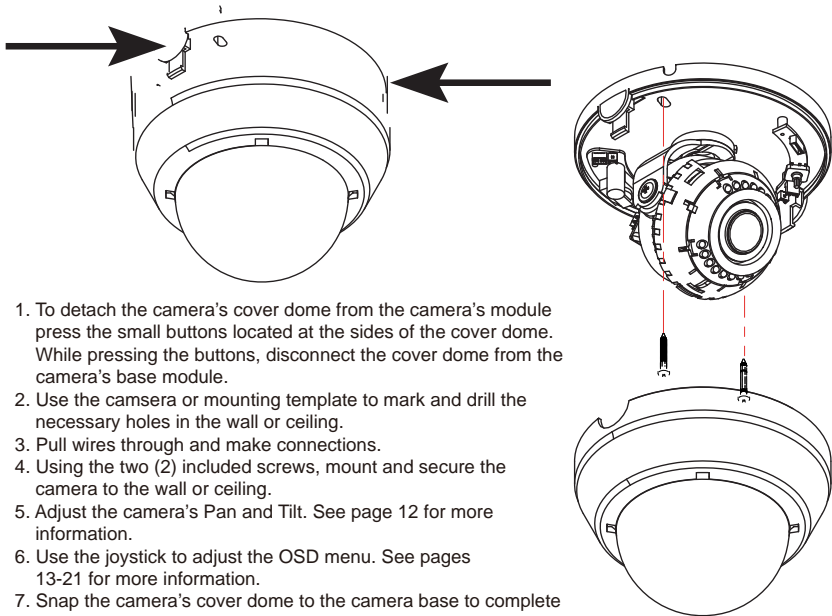


❹



❺

## EASY INSTALLATION\*

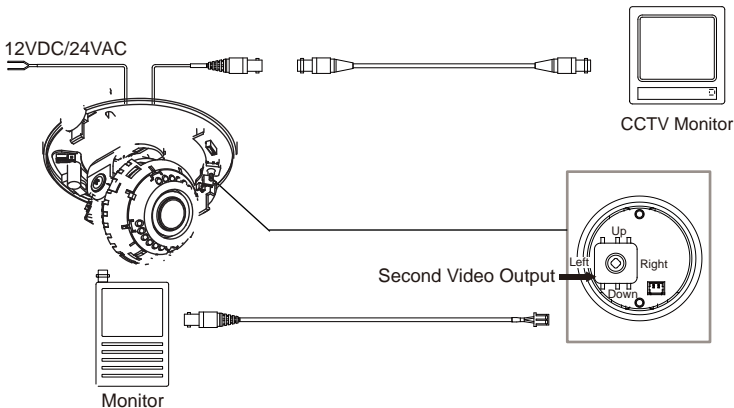


1. To detach the camera's cover dome from the camera's module press the small buttons located at the sides of the cover dome. While pressing the buttons, disconnect the cover dome from the camera's base module.
2. Use the camera or mounting template to mark and drill the necessary holes in the wall or ceiling.
3. Pull wires through and make connections.
4. Using the two (2) included screws, mount and secure the camera to the wall or ceiling.
5. Adjust the camera's Pan and Tilt. See page 12 for more information.
6. Use the joystick to adjust the OSD menu. See pages 13-21 for more information.
7. Snap the camera's cover dome to the camera base to complete the installation.



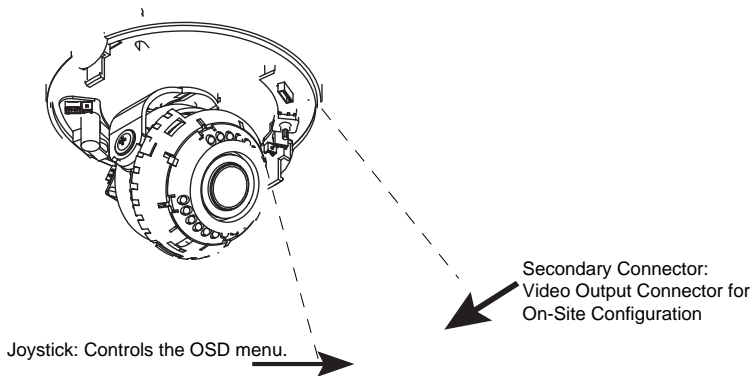
## CONNECTING TO MONITORS\*

Use the diagram below to connect to a Monitor or CRT Monitor properly.



- Power Connection - 12VDC/24VAC Dual Voltage (Auto Polarity Detection and Protection)
- All cameras are equipped with a second video output for on-site configuration.

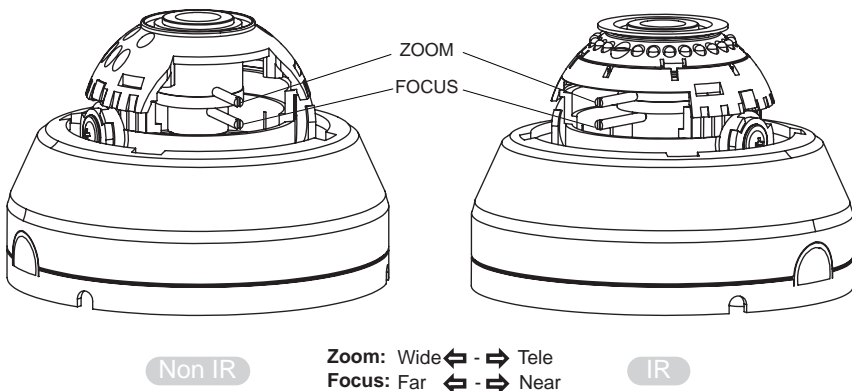
## CONTROL BOARD\*



- 1 Remove the camera's lens cover by rotating it counter-clockwise.
- 2 Use the Joystick to control the camera's OSD options.

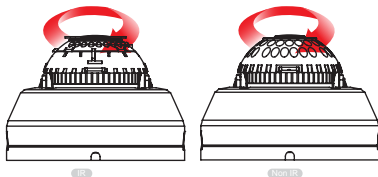
## ADJUSTING THE CAMERA LENS\*

Follow the instructions provided below to make any lens adjustments.

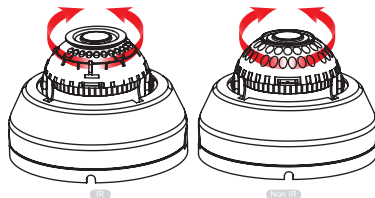


- ❶ To adjust the field of view, use the L-Key to turn the zoom screw (located on the bottom of the camera) counter-clockwise to zoom in, or clockwise to zoom out.
- ❷ Adjust the focus the same way as described above AFTER the desired zoom position is established.

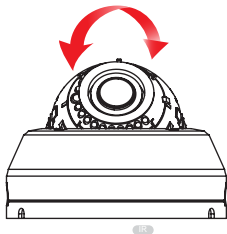
## ADJUSTING THE CAMERA GIMBAL\*



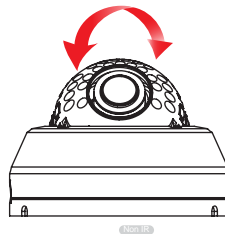
**1** Rotation 360°



**2** Panning 360°



**3** Tilting 55° IR LED



**3** Tilting 65°

## MODULE OSD MENU\*

EXPOSURE	COLOR	DAY & NIGHT
<ul style="list-style-type: none"> <li>— LENS MANUAL / DC</li> <li>— BRIGHTNESS 1 ~ 10</li> <li>— WDR LOW / MIDDLE / HIGH</li> <li>— AGC LOW / MIDDLE / HIGH</li> <li>— EXIT JUMP SAVE &amp; EXIT / EXIT</li> </ul>	<ul style="list-style-type: none"> <li>— WB MODE ATW / INDOOR / OUTDOOR</li> <li>— COLOR GAIN 1 ~ 10</li> <li>— EXIT JUMP SAVE &amp; EXIT / EXIT</li> </ul>	<ul style="list-style-type: none"> <li>— D&amp;N MODE AUTO / COLOR / ETX.</li> <li>— EXIT JUMP SAVE &amp; EXIT / EXIT</li> </ul>
FUNCTION	SETUP	EXIT
<ul style="list-style-type: none"> <li>— CONTRAST 1 ~ 10</li> <li>— 2DNR LEVEL1 / LEVEL2 / LEVEL3</li> <li>— MIRROR NONE / H/V / H/V</li> <li>— SHARPNESS 1 ~ 10</li> <li>— EXIT JUMP SAVE &amp; EXIT / EXIT</li> </ul>	<ul style="list-style-type: none"> <li>— WHITE LEVEL 1 ~ 10</li> <li>— SYNC LEVEL 1 ~ 10</li> <li>— PEDESTAL LEVEL 1 ~ 10</li> <li>— BURST 1 ~ 10</li> <li>— OSD GB OFF / ON</li> <li>— EXIT JUMP SAVE &amp; EXIT / EXIT</li> </ul>	<ul style="list-style-type: none"> <li>— SAVE &amp; EXIT RESTORE &amp; EXIT</li> </ul>



## EXPOSURE

### LENS

Manual

Manual mode supports the fixed board lens or the manual iris lens.

DC

DC mode supports the auto-iris varifocal lens.



### BRIGHTNESS

Adjust the camera's brightness from 0~10. The higher the number, the brighter the image will appear.





## EXPOSURE

### WDR (Wide Dynamic Range)

Enables the camera to capture clear images even when there are both very bright and very dark areas in the camera's field of view. Select from the following options:

LOW / MIDDLE (Default) / HIGH.



### AGC (Auto Gain Control)

AGC enhances the picture brightness in low light conditions. A higher level AGC setting makes the images brighter; however, it could increase the amount of noise.

Set the AGC level from the following options: LOW / MIDDLE / HIGH (Default).





## COLOR

### WB MODE

- ATW** Set as the camera's default value. Auto Tracking White Balance Control mode compensates for color temperature changes between 2500K and 9500K.
- OUTDOOR** Select this option if the camera is to be mounted outside in an open area.
- INDOOR** Select this option if the camera is to be mounted inside a closed area.

### COLOR GAIN

Set the Color Gain level from 1~10.







## DAY & NIGHT

### D&N MODE

- AUTO** In AUTO mode, camera switches between day and night automatically depending on light level.
- COLOR** If COLOR is selected, camera always stays in day/color mode.
- EXT** For best IR LEDs performance, select this option as default.



## FUNCTION

### CONTRAST

- 1~10** Set the level of contrast. The higher the contrast, the brighter the image will appear.  
The lower the contrast, the darker the image will appear.



### 2D DNR (Digital Noise Reduction)

- 2D-DNR reduces the noise on the screen in low light conditions and allows for clearer images, even at night.  
Select the 2D DNR level from 1~3 (Set to Level 1 as default).





## FUNCTION

### MIRROR

The mirror option allows you to flip the camera's image horizontally and vertically to adjust the camera's view after installation. Chose from the following options:

NONE / H / V / H, V.

V - Flip- turns the camera upside down.

H - Flip- Mirors the camera horizonatl.

H, V - Flip- turns the camera's image upside down and rotates is horizontally.



NONE



H - Flip



V-Flip

### SHARPNESS

1 ~ 10 Sets the image sharpness. The higher the number, the sharper the image.





## SETUP

### WHITE LEVEL

Adjust the camera's White Levels from 1 ~ 10. The higher the number, the stronger white colors in the camera's Field of View will appear.

The camera is set by default to the optimal White Level and therefore it is recommended not to change the original settings.

### SYNC LEVEL.

Set the camera's sync signal level value from 1 to 10.1 ~ 10.

The camera is set by default to the optimal sync signal and therefore it is recommended not to change the original settings.

### PEDESTAL LEVEL

Adjusts the camera's Brightness Levels from 1 ~ 10. The camera is set by default to the optimal Pedestal Level and therefore it is recommended not to change the original settings.





## SETUP

### BURST

Setting the color signal level value from 1 to 10. The camera is set by default to the optimal burst level and therefore it is recommended not to change the original settings.



### OSD BG

You can add a dark background behind the OSD to better view the OSD options when the camera's image is too bright and the OSD text is not seen properly.

If ON is selected, a semi-transparent square will appear in the center of the camera's display, allowing you to better view and manage your OSD options.





## EXIT

### EXIT

**SAVE** Exit the OSD menu after saving the recent changes.

**RESET** Exit the OSD menu after resetting the camera to its default settings.



## **TROUBLESHOOTING**

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Before sending your camera for repair, check the following or contact our technical specialist.

### **FOR NO VIDEO**

Check the coaxial cable and make sure it is connected securely.

Check the lens' iris adjustment at the camera's OSD menu.

Check the power supply and make sure the camera has the proper voltage and current.

### **FOR OUT-OF-FOCUS VIDEO**

Check the clear dome cover and the lens for dirt or fingerprints. Use a soft cloth and gently clean. Check the lens' manual focal and zoom adjustment. The use of a field test monitor is recommended.

## WARRANTY INFORMATION\*

Digital Watchdog (referred to as “the Warrantor”) warrants the Digital Watchdog Camera against defects in materials or workmanship as follows:

**LABOR:** For the initial five (5) years and one (1) year on IR LED from the original purchase date, if the camera is determined to be defective, the Warrantor will repair or replace the unit with a new or refurbished product at its option at no charge.

**PARTS:** In addition, the Warrantor will supply replacement parts for the initial five (5) years and one (1) year on IR LED.

To obtain warranty or out of warranty service, please contact a Technical Support Representative at **1-866-446-3595** Monday through Friday from 9:00AM to 8:00PM Eastern Standard Time.

A purchase receipt or other proof of the original purchase date is required before warranty service is rendered. This warranty only covers failures due to defects in materials and workmanship which arise during normal use. This warranty does not cover damage which occurs in shipment or failures which are caused by products not supplied by the Warrantor or failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, faulty installation, set-up adjustments, improper antenna, inadequate signal pickup, maladjustment of consumer controls, improper operation, power line surge, improper voltage supply, lightning damage, rental use of the product or service by anyone other than an authorized repair facility or damage that is attributable to acts of God.

## LIMITS & EXCLUSIONS\*

There are no express warranties except as listed. The warrantor will not be liable for incidental or consequential damages (including damage to recording media without limitation) resulting from the use of these products or arising out of any breach of the warranty. All express and implied warranties, including the warranties of merchantability and fitness for particular purpose, are limited to the applicable warranty period set forth above.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the exclusions or limitations listed above may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state-to-state.

If the problem is not handled to your satisfaction, then write to the following address:

Digital Watchdog, Inc.  
ATTN: RMA Department  
5436 W. Crenshaw Street  
Tampa, FL 33634

Service calls which do not involve defective materials or workmanship as determined by the Warrantor, in its sole discretion, are not covered. Costs of such service calls are the responsibility of the purchaser.



## SPECIFICATIONS\*

VIDEO	
Image Sensor	760H CMOS
Total Pixels	756(H) X 504(V)
Scanning System	2 : 1 Interlace
Frequency	15.734KHz (H), 59.95Hz (V)
Synchronization	Internal
Horizontal Resolution	690 TV Lines
Minimum Illumination	F1.2 (30IRE): 0.0 Lux
S/N Ratio	58dB (AGC off)
Video Output	CVBS: 1.0Vp-p / 75 $\Omega$
LENS	
Focal Length	2.8~12 mm
Lens Type	Varifocal Auto Iris Lens
IR Distance	100ft Range IR
OPERATIONAL	
Shutter Speed	1/60~1/66,000, AUTO
Brightness	1~10
WDR	Low / Middle / High
Auto Gain Control	Low / Middle / High
DNR	Level 1 ~ 3
White Balance	ATW/ OUTDOOR/ INDOOR

OPERATIONAL	
Day and Night	AUTO/ COLOR/ EXT
Mirror	NONE/ H/ V/ H,V
Contrast	1~10
Sharpness	1 ~ 10
White Level	1~10
ENVIRONMENTAL	
Operating Temperature	-10°C ~ 50°C (14°F ~ 122°F)
Operating Humidity	Less than 90% (Non-Condensing)
ELECTRICAL	
Power Requirement	Dual Voltage (DC12V, 24VAC)
Power Consumption	DC12V: 1.8W, 150mA, LED On: 4.3W, 358mA
	AC24V: 1.8W, 75mA, LED On: 4.3W, 180mA
MECHANICAL	
Housing Material	Plastic
Dimensions	120 x 89.4 mm (4.7 X 3.52 in)
Weight	0.5 lbs

\*Spec I | | | | | | | |

**MEMO\***



5436 W Crenshaw St. Tampa, FL 33634

Tel : 866-446-3595 / 813-888-9555

Fax : 813-888-9262

[www.Digital-Watchdog.com](http://www.Digital-Watchdog.com)

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Technical Support Hours : Monday-Friday

9:00am to 8:00pm EST