960H Vandal Dome Camera

DWC-V562D

DWC-V562DIR

User Manual

960H Value

ABOUT MANUAL

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

11192012

PRECAUTIONS

- 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 a 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

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.

DW

Table of Contents

FEATURES*

DWC-V562D / DWC-V562DIR

- 1/3" 960H High Resolution CCD
- 700 TV Lines
- 2.8 ~ 11mm Varifocal Auto Iris Lens
- Electronic Day and Night
- HME (Highlight Masking Exposure)
- AGC / SMART BLC / AWB
- Night-Up
- Mirror Image Control
- Programmable Privacy Zones (8) & Motion Detection
- Easy Icon Driven OSD Menu with Built-In Joystick
- Auto Sensing 12VDC or 24VAC with Line Lock
- Secondary Video-BNC Output
- Video Test Output Included
- IP66 Certified (Weatherproof)
- 85ft Range IR with Intelligent Camera Sync, Smart IR (DWC-V562DIR)

PARTS & DESCRIPTIONS*
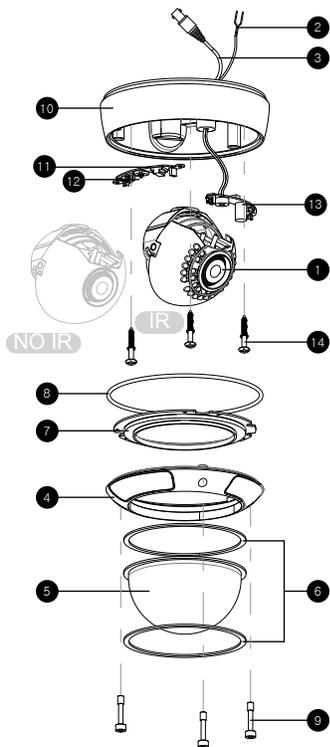
1. **Lens**

2. **Power Input Connector**
   12VDC/24VAC Dual Voltage

3. **Video Output Connector - BNC**

4. **Upper Case**

5. **Dome Cover**

6. **Dome Cover Rubber**

7. **Mounting Plate**

8. **Upper Ring**

9. **Assembly Screws**

10. **Camera Base**

11. **Control Board**

12. **Joystick**

13. **Power Board**

14. **Mounting Screws**

DIMENSIONS IN MILLIMETERS (INCHES)*

See below for diagrams of the exact dimensions for Surface Mount Housing.
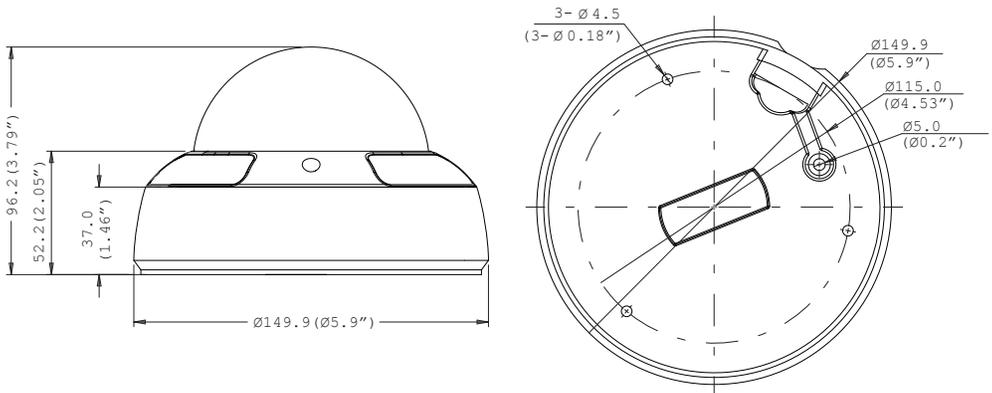
INSTALLATION*

Included with Value Line Vandal Dome Camera

1. User Manual
2. Mounting Template
3. Second Video Jack
4. Three (3) Screws and Three (3) Dry Wall Anchors
5. L-Wrench

Vandal Dome Camera
DWC-V562D
DWC-V562DIR

User Manual

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

Mounting Template

Ø5.0

Ø15.0

Ø144.0

VD101
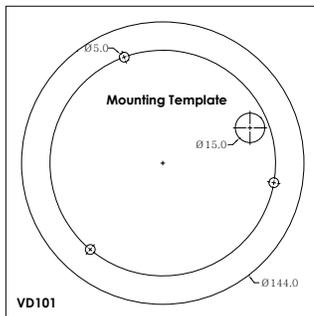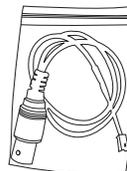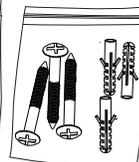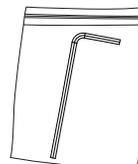
BASE INSTALLATION*

1. Pull wires through and make connections. Refer to page 9. Use mounting template to mount camera with dry wall mounts and wood screws.

2. Adjust the camera's 3-Axis Gimbal, zoom, and focus. See pages 10-11 for details.

3. Use the joystick to adjust the OSD menu. See pages 12~23 for details.

4. Secure the dome cover to the camera base by using the assembly screws. Make sure the camera is tightly secured to avoid damage to the camera module.

CONNECTING TO MONITORS*

12VDC/24VAC

CCTV Monitor

IR

NO IR

Right

Up   Down

Left

2nd Video Output

Monitor

11.8in
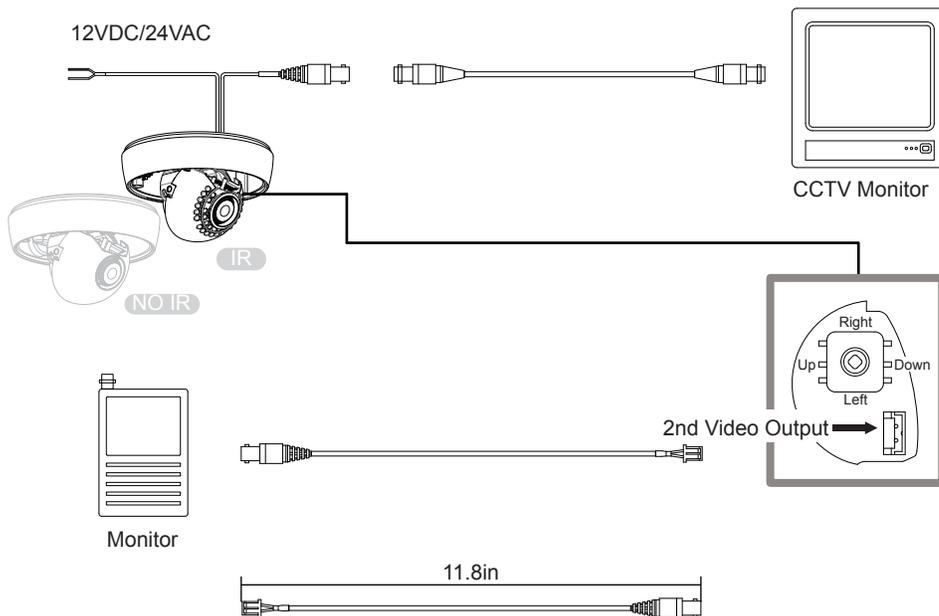
- Power connection - 12VDC/24VAC Dual Voltage. (Auto polarity detection and protection.)
- All cameras are equipped with a second video output on the camera's Control Board for easy on-site configuration.

ADJUSTING THE CAMERA*

ZOOM
FOCUS

IR

Zoom: Tele ⬅ - ➡ Wide
Focus: Far ⬅ - ➡ Near

NO IR
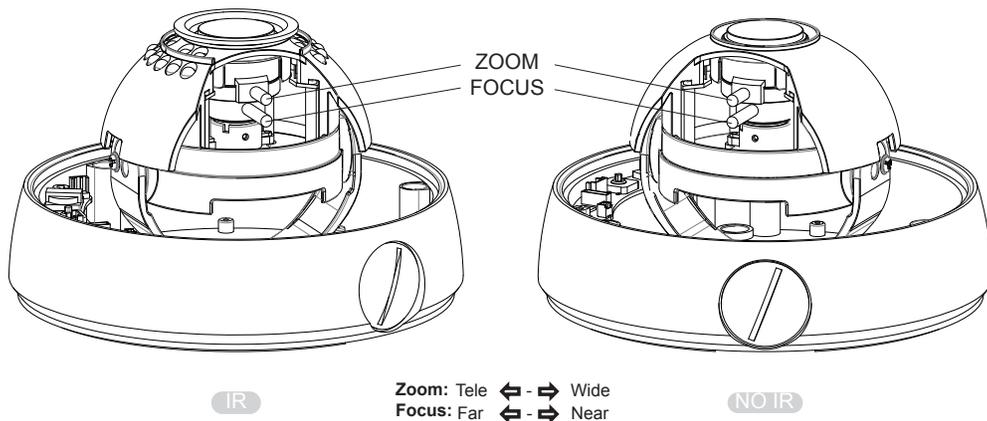
1. Loosen the zoom and focus handles by rotating them counter-clockwise.

2. Adjust the field of view by moving the handle to the RIGHT (tele) to zoom in, or to the LEFT (wide) to zoom out.

3. Adjust the focus the same way as described above AFTER the desired zoom position is established.

4. Once the desired adjustments have been made, please tighten the handles back by turning them clockwise.

ADJUSTING THE 3-AXIS GIMBAL*

The Gimbal mechanism yields maximum rotation and placement as shown below.
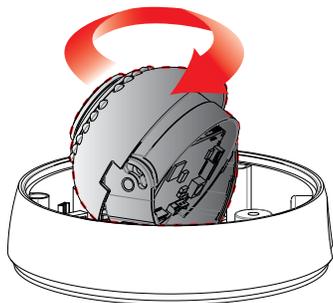
1 **Rotation 360º**
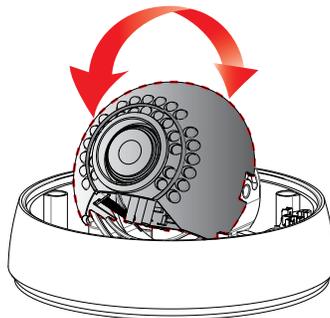
2 **Tilting 60º**
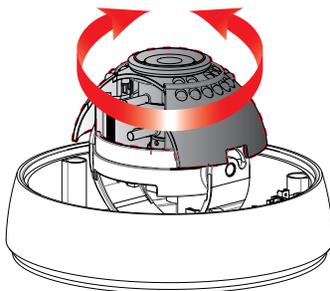
3 **Panning 360º**

MODULE OSD MENU*

EXPOSURE	COLOR	DAY NIGHT
LENS MANUAL, DC BACKLIGHT OFF / BLC / HME /D-WDR AGC OFF / LOW / MID / HIGH / HIGHEST 2D-DNR OFF / LOW / MIDDLE / HIGH EXIT JUMP SAVE & EXIT / EXIT	WB MODE AWC / ATW / MANUAL / PUSH RED GAIN 0~255 BLUE GAIN 0~255 COLOR MODE NORMAL / COOL / WARM EXIT JUMP SAVE & EXIT / EXIT	DAY & NIGHT AUTO / COLOR / B&W NIGHT C. 0~100. NIGHT A. 0~100 EXIT JUMP SAVE & EXIT / EXIT

FUNCTION	MOTION	PRIVACY
MIRROR MIRROR / OFF SHARPNESS 0~30 GAMMA MANUAL / 0.45 / 0.60 / 1.0 SLC OFF / ON NIGHT-UP OFF / ON EXIT JUMP SAVE & EXIT / EXIT	AREA SET AREAS 1~4 OFF / ON SENSITIV. 1~30 SHOW INDI. OFF / ICON / TRACE EXTER-OUT. OFF / ON EXIT JUMP SAVE & EXIT / EXIT	MASK1 OFF / ON MASK2 OFF / ON MASK3 OFF / ON MASK4 OFF / ON MASK5 OFF / ON MASK6 OFF / ON MASK7 OFF / ON MASK8 OFF / ON EXIT JUMP SAVE & EXIT / EXIT

SET-UP	EXIT	
TITLE OFF / ON DPC SET OFF / AUTO MONITOR MODE1 / MODE2 LANGUAGE ENGLISH / 繁體中文 / 简体中文 / 日本語 DEUTSCH / FRENCH / ITALIAN / RUSSIAN SPANISH / DUTCH OSD COLOR BLUE / GREEN / CYAN / RED / MAGENTA / YELLOW / PURPLE / GRAY COMMUNICA. OFF / ON FACTORY SET. NO / YES EXIT JUMP SAVE & EXIT / EXIT	SAVE & EXIT EXIT	

⊚ EXPOSURE

![EXPOSURE menu screen showing LENS MANUAL, BACKLIGHT OFF, AGC OFF, 2D DNR LOW, EXIT JUMP]

LENS

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

DC   DC mode supports the auto-iris varifocal
lens.

Note:
Both MANUAL and DC mode have FOCUS TARGET.
You can adjust the focus by finding the highest number on the FOCUS TARGET. See page 10 for Focus information.

![LENS-MANUAL screen with ELC LEVEL 027, E. SHUTTER AUTO, RETURN, FOCUS TARGET [0000]] ![LENS-DC screen with DC LEVEL 027, E. SHUTTER DC-AUTO, RETURN, FOCUS TARGET [0000]]
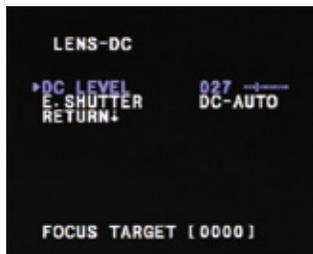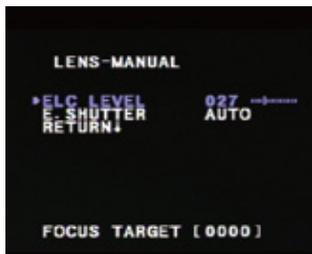
ELC levels and DC levels are adjustable. The higher number, the brighter the image.

E. Shutter sets the shutter speed levels from 1/60 to 1/100000.
AUTO and DC-AUTO are the default shutter speeds for both indoor and outdoor use.
Select 1/100FLC to run camera in flickerless mode.

👁 EXPOSURE

BACKLIGHT

OFF

BLC **BACKLIGHT COMPENSATION**
Select MANUAL or SMART. **SMART** is recommended.

If MANUAL is selected, you can adjust the BLC levels in four areas of the scene (Top, Bottom, Left, Right). Increase the BLC levels to make the image brighter.

If SMART is selected, the camera will automatically adjust the BLC zone. BLC levels to choose from include: LOWEST, LOW, MID, HIGH.

HME **HIGHLIGHT MASKING EXPOSURE**
HME masks highlights to allow objects to appear clearly on the screen. If ON is selected, HME levels are adjustable. The lower the number, the darker the masking areas.

D-WDR **DIGITAL WIDE DYNAMIC RANGE**
D-WDR is one of the backlight compensation functions. You can adjust the D-WDR levels from 0-20. The lower the number, the brighter the backlight.

EXPOSURE

AGC (Auto Gain Control)

OFF/ LOW / MID / HIGH / HIGHEST

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.

2D-DNR (Digital Noise Reduction)

OFF/ LOW / MIDDLE / HIGH

2D-DNR reduces the noise on the screen in low light conditions and allows for clearer images, even at night.

EXIT_JUMP

SAVE & EXIT   Exit the OSD after saving the current settings.
EXIT   Exit the OSD without saving.

COLOR

WB MODE
AWC	Auto White Balance Control mode compensates for color temperature changes between 2000K and 18000K.
ATW	Auto Tracking White Balance Control mode compensates for color temperature changes between 2500K and 9500K.
MANUAL	Users can control the white balance manually by changing RED GAIN and BLUE GAIN (see below).
PUSH	Push Lock fixes the white balance based on current lighting.

RED GAIN
0~255   Adjusts the amount of red in the image.

BLUE GAIN
0~255   Adjusts the amount of blue in the image.

COLOR MODE
NORMAL	Color is similar to actual color.
COOL	Color has more blue.
WARM	Color has more red.

EXIT_JUMP
SAVE & EXIT	Exit the OSD after saving the current settings.
EXIT	Exit the OSD without saving.

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☼ DAY & NIGHT

DAY&NIGHT

▸D&N MODE   AUTO⏎
NIGHT C.   050 ──┤──
NIGHT A.   050 ──┤──
EXIT JUMP↓

D&N MODE

AUTO   Camera switches between day and night automatically depending on light level. Camera will stay in color mode when there is enough light. Camera will switch to B&W at night or other low light environments.

COLOR   Camera always stays in day/color mode.

B&W   Camera always stays in night mode.

If AUTO is selected, please define the following settings:
▪ BURST: ON/OFF. If ON is selected, the camera provides a color burst signal in night mode. If OFF, no color burst signal is provided.
▪ COLOR → B&W: Adjusts the light level at which the camera switches from day (color) to night (B&W) mode. The higher the number, the lower the light level.
▪ B&W → COLOR: Adjusts the light level at which the camera switches from night (B&W) to day (color) mode. This number should be lower than the value of COLOR → B&W above.
▪ SMART IR: ON/OFF. If using IR LEDs, ON is recommended.
▪ READ TIME: Time interval delay before switching from day mode to night mode. It is adjustable from 3 seconds to 12 seconds.
▪ EX_IR INT.: AUTO/EXT. If using IR LEDs built into the camera, select AUTO. If using external IR LEDs separately, select EXT.

D&N-AUTO

▸BURST   ON
COLOR->B&W   028 ────┤──
B&W->COLOR   012 ──┤────
SMART IR   ON⏎
READ TIME.   003 ─┤─────
EX_IR INT.   AUTO
RETURN↓

NIGHT C.

0~100   Color will be reduced in low light conditions.
         (This level cannot be adjusted when 2D-DNR is ON.)

NIGHT A.

0~100   Edge sharpness will be reduced in low light conditions.
         (This level cannot be adjusted when 2D-DNR is ON.)

EXIT_JUMP

SAVE & EXIT   Exit the OSD after saving the current settings.
EXIT   Exit the OSD without saving.

FUNCTION

MIRROR
OFF
MIRROR   Flips the image horizontally.

SHARPNESS
0~30   Sets the image sharpness. The higher the number, the sharper the image.

GAMMA
0.45/ 0.6/ 1.0 / MANUAL   Controls the output signal level. The higher the setting, the darker the dark colors will be. 0.45 is default.

SLC (Side Light Compensation)
OFF/ ON   Increases brightness on sides of the image.

NIGHT-UP
OFF/ ON   Adjusts sensitivity in low light conditions by set-up level. If ON is selected, the set-up level becomes higher and the images become brighter.

EXIT_JUMP
SAVE & EXIT   Exit the OSD after saving the current settings.
EXIT   Exit the OSD without saving.

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 MOTION

The camera can detect the movement and display an alarm on the screen when movement is detected.

AREA SET
AREA 1,2,3,4   OFF/ON
                If ON, motion areas can be selected and moved accordingly. Select Areas 1-4 and adjust using controls for TOP, BOTTOM, LEFT, or RIGHT.

SENSITIV.
1~30

Sensitivity level of the motion detection is adjustable.
Motion detection will be more sensitive at a higher number.

SHOW INDI.
OFF/ ICON/
TRACE

Set the Show Indicator to OFF, ICON, or TRACE.
If ICON is selected, a bell will appear in the upper right hand corner when motion is detected. If TRACE is selected, the area where motion was detected will be highlighted.

EXTER OUT
OFF/ ON

ALARM SIGNAL EXTERNAL OUTPUT
If ON is selected, you can set how long the alarm is displayed on the screen when motion is detected (0~15 seconds).

EXIT_JUMP
SAVE & EXIT
EXIT

Exit the OSD after saving the current settings.
Exit the OSD without saving.

PRIVACY

You can hide some parts of the screen for privacy masking.
A total of 8 different privacy masking zones are available.

MASK 1~ MASK 8
OFF / ON   Select ON or OFF for each mask
(MASKS 1-8).

If ON is selected, you can set the area to be masked and the
shape and color of the mask.

▪ START POINT:
Select the START POINT to adjust the size of the
privacy zone.
L_TOP - Left Top
R_TOP - Right Top
L-BOT - Left Bottom
R_BOT - Right Bottom
▪ MODIFY:
After selecting the START POINT, you can modify the
size of the privacy zone by moving the joystick left or right.
▪ POSITION:
You can move the privacy zone by moving the joystick left or right.
▪ COLOR SET:
Privacy Zones can be set with 8 different colors -
GRAY, BLACK, WHITE, RED, GREEN, BLUE,
MAGENTA, CYAN.

TX SET-UP

TITLE

OFF
ON   If ON is selected, you can display the camera title on the screen.

*CLR: Clear the title.
*POS: Position the title on the screen.

SETUP

TITLE   ON
DPC SET   OFF
MONITOR   MODE1
LANGUAGE   ENGLISH
OSD COLOR   BLUE
COMMUNICA.   ON
FACTORY SET   NO
EXIT JUMP

USER TITLE

ABCDEFGHIJKLMNOP
QRSTUVWXYZ012345
6789 !"#$%&'( )*+
,-./:;<=>?@[\ ]^_

← → CLR POS RET

DPC (Dead Pixel Cancellation)

OFF
AUTO   Dead Pixel Cancellation automatically removes defective pixels in real time.

DPC-AUTO

WHITE THR.   150
BLACK THR.   030
DPC LEVEL   030
RETURN

If AUTO is selected, you can define the following:
*WHITE THR.: Cancels the white defective pixels.
*BLACK THR.: Cancels the black defective pixels.
*DPC LEVEL: Adjusts the sensitivity level of the dead pixel cancellation.

Note: Adjust the WHITE THR., BLACK THR. and DPC LEVELS at the same time.

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$\boxed{\text{T\$}\atop\text{SET}}$ SET-UP

MONITOR
MODE 1 / MODE 2   MODE 1 is the default. If the displayed image is not good enough, try MODE 2.

LANGUAGE
Total of 10 different languages are supported - ENGLISH, MANDARIN (CHINESE 1), CANTONESE (CHINESE 2), JAPANESE, DEUTCH, FRENCH, ITALIAN, RUSSIAN, SPANISH, AND DUTCH.

OSD COLOR
Total of 8 different OSD Menu Color available - BLUE, GREEN, CYAN, RED, MAGENTA, YELLOW, PURPLE and GRAY.

COMMUNICATION
OFF / ON

If ON is selected, you can define the following:

*PROTOCOL: PELCO-D only.
*CAMERA ID: Provide the ID no. on the camera (0~255).
*BAUDRATE: 9600bps is the default.
There are a total 4 choices - 2400bps, 4800bps, 9600bps, and 19200bps.

FACTORY SET
If selected, the camera reverts back to factory default settings.
Note: FACTORY SET does not affect the LENS, DAY & NIGHT, CAMERA ID, and DPC settings.

EXIT_JUMP
SAVE & EXIT   Exit the OSD after saving the current settings.
EXIT   Exit the OSD without saving.

EXIT

EXIT

SAVE & EXIT	Exit the OSD after saving the current settings.
EXIT	Exit the OSD without saving.

TROUBLESHOOTING

Before sending your camera for repair, check the following or contact one of our technical specialists.

No VIDEO
Check the coaxial cable and make sure it is connected securely.
Check the lens' iris adjustment on the menu setup of the camera.
Check the power supply and make sure the camera has the proper voltage and current.

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. 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 two (2) 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 two (2) 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 8:30AM 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 AND EXCLUSIONS*

There are no express warranties except as listed above.
The Warrantor will not be liable for incidental or consequential
damages (including without limitation or damage to recording media),
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 address listed on the last page.

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	960H Sharp CCD
Total Pixels	1020 (H) x 507 (V), 520K Pixels
Scanning System	2 : 1 Interlace
Frequency	15.734KHz (H), 59.95Hz (V)
Synchronization	Internal
Horizontal Resolution	650 TV Lines [Color], 700 TV Lines [B/W]
Minimum Illumination	F1.2 (30IRE): 0.3 Lux [Color]
	F1.2 (30IRE): 0.0 Lux [B/W]
S/N Ratio	52dB (AGC off)
Video Output	CVBS: 1.0Vp-p / 75 Ω
LENS	
Focal Length	2.8-11mm
Lens Type	DC Auto Iris
IR Distance	85ft Range
OPERATIONAL	
Lens	MANUAL, DC (000-100)
Backlight Compensation	OFF, BLC, HME, DIGITAL WDR
Auto Gain Control	OFF, LOW, MID, HIGH, HIGHEST
White Balance	AWC, ATW, MANUAL, PUSH
Color Mode	NORMAL, COOL, WARM
Day and Night	AUTO, COLOR, B&W
Mirror	OFF, MIRROR

OPERATIONAL	
Sharpness	0-30
Gamma	MANUAL, 0.45, 0.60, 1.00
Side Light Compensation	OFF, ON (0-30)
Night Up	OFF, ON
Motion Detection	OFF, ON (4 Programmable Zones)
Privacy Zones	OFF, ON (8 Programmable Zones)
Title	OFF, ON (Up to 16 Characters)
Dead Pixel Cancellation	OFF, AUTO
Communication Protocol	PELCO-D
ENVIRONMENTAL	
Operating Temperature	-10℃ ~ 55℃ (14℉ ~ 131℉)
Operating Humidity	Less than 90% (Non-Condensing)
Storage Temperature	-20℃ ~ 70℃ (-4℉ ~ 158℉)
IP Rating	IP66 (Protects against dust and high pressure water.)
ELECTRICAL	
Power Requirement	Dual (DC12V & AC24V)
Power Consumption	DC12V: 1.9W / LED ON 5.7W
	AC24V: 2.0W / LED ON 5.3W
MECHANICAL	
Housing Material	Aluminum
Dome Cover Material	Polycarbonate
Dimensions	⌀149.9 X 96.2 mm (⌀5.9 X 3.79 in)
Weight	2.10 lbs

*Specification is subject to change without prior notice.

MEMO

MEMO

MEMO