SNAP-IT
Indoor Dome Camera

DWC-D4363D

DWC-D4363TIR

DWC-D4367WD

DWC-D4367WTIR

DWC-D4382TIR

DWC-D4365T

ABOUT MANUAL

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

03022011

PRECAUTIONS

- Do not open or modify.
- Do not open the case except during maintenence 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

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 manufacture.

TROUBLESHOOTING

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

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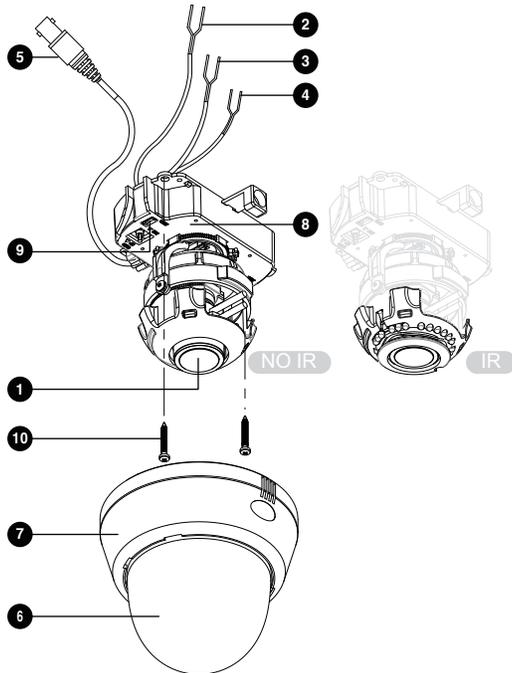Check the lens' iris adjustment at the menu setup of the camera.
Check the power supply and make sure the camera has the proper voltage and current.

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. Field test monitor is recommended.

PART & DESCRIPTIONS*

1. Lens

2. Power Input Connctor
   12VDC/24VAC Dual Voltage

3. UTP

4. RS 485

5. Video Output Connector - BNC

6. Bubble

7. Upper Case

8. Camera Control Board

9. 2nd Video Connector

10. Mounting Screws

NOTE : These assembly screws located on the dome
cover and not with mounting hardware.
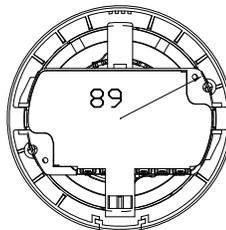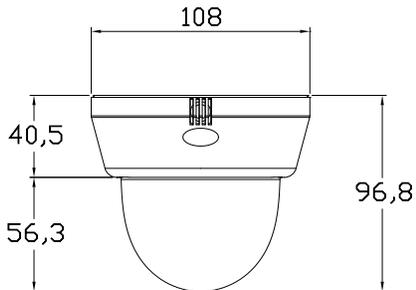
INSTALLATION*

Included with DW Indoor Dome Camera

1. User Manual
2. Mounting Template
3. Two(2) Screw and Two(2) Dry Wall Anchors
4. 2nd Video Jack
5. IR Remote Controller

DWC-D4382TIR
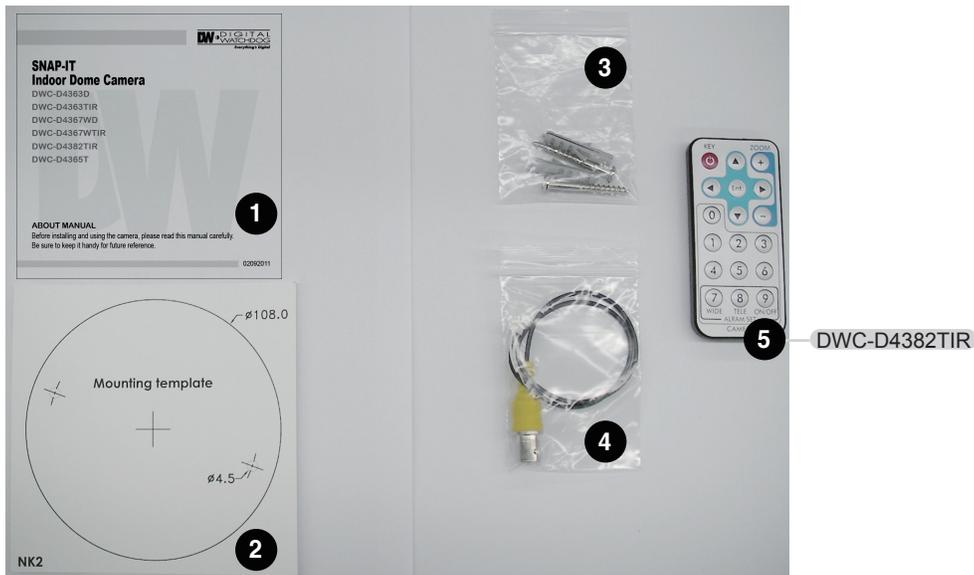
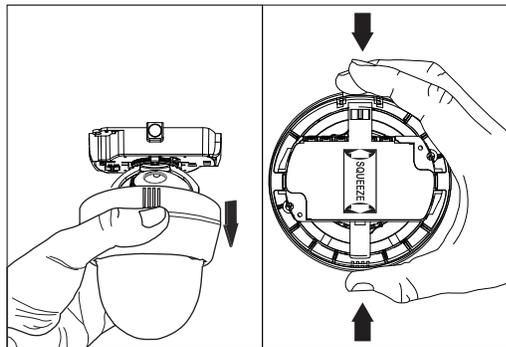# DIMENSIONS IN MILLIMETERS*

Surface Mount Indoor

108

40,5

56,3

96,8

89

TOP VIEW

108

SQUEEZE
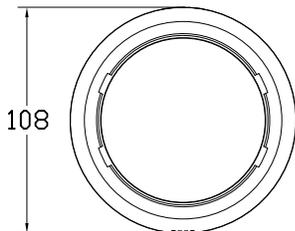
BASE INSTALLATIONS*

OSD
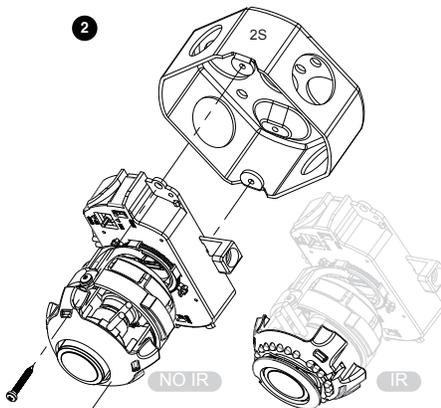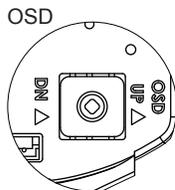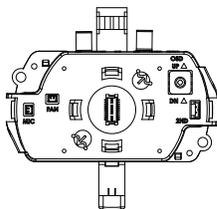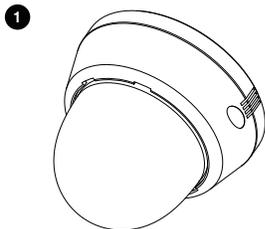
Philips #8-32 x 0.75

Surface Mount

MOUNTING ON ELECTRICAL JUNCTION BOX*

2S

NO IR

IR

Philips #8-32 x 0.75
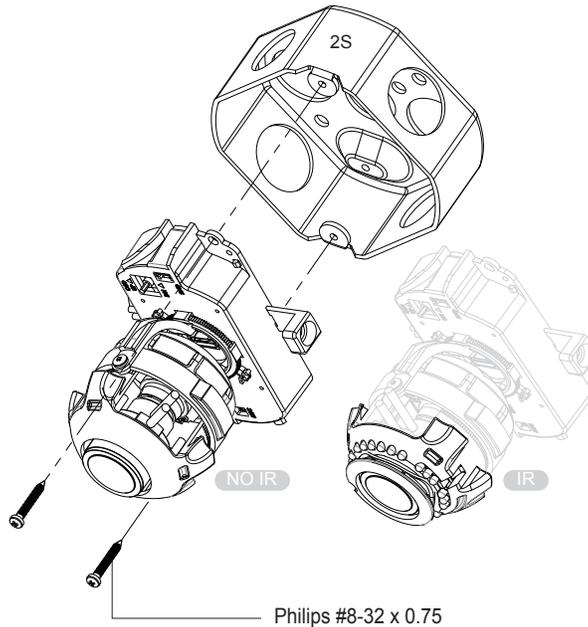
NOTE : Screws required for electrical junction boxes are not supplied.These
screws are readily available at well-stocked electrical supply store.

CONNECTING TO MONITORS*

DC 12V / AC 24V

CCTV Monitor

IR   NO IR

Up

Left   Right

Down

2nd Video Output

Monitor

300.0
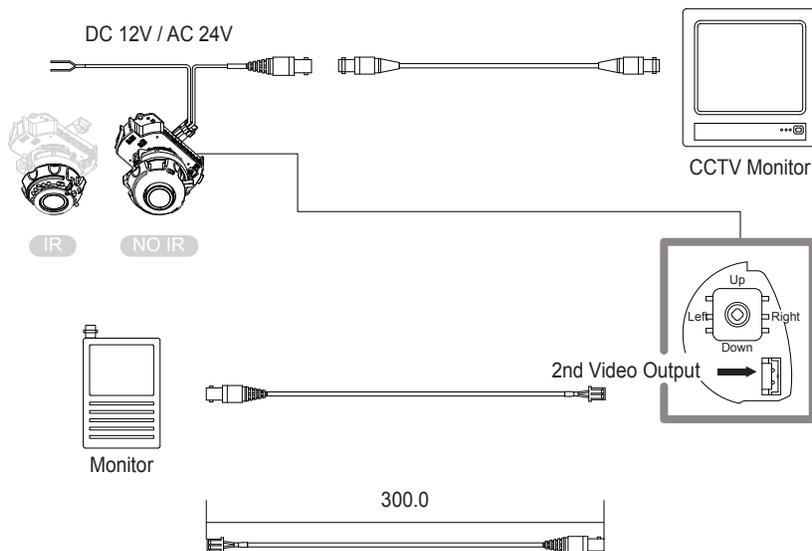
- Power Connection - 12V DC / 24V AC Dual Voltage(Auto Polarity Detection and Protection)
- All cameras are equipped with a 2nd video output on the camera Main Board.

ADJUSTING THE VARI-FOCAL DC AUTO IRIS LENS*

Follow the instructions provided below to make any lens adjustments

ZOOM
FOCUS

DWC-D4363D
DWC-D4367WD
DWC-D4365T

DWC-D4363TIR
DWC-D4367WTIR
DWC-D4382TIR

Zoom: Tele ⇐ - ⇒ Wide
Focus: Far ⇐ - ⇒ Near

NO IR   IR
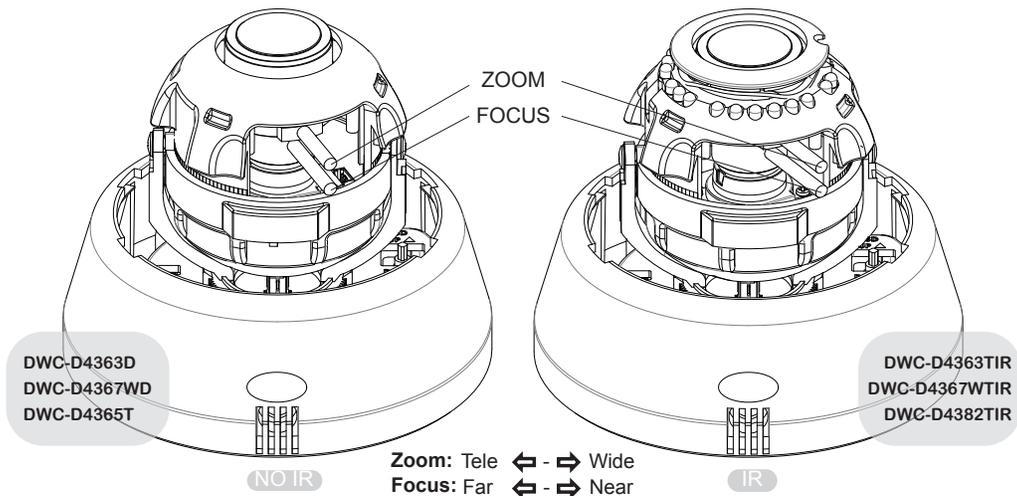
1. Loosen the Zoom & Focus screws.
2. Using the screw, move it RIGHT or LEFT to the desired position.
3. Once the desired adjustments have been made, tighten the screw to lock in place.
4. Adjust the Field of View by moving the screw towards the RIGHT(Tele) to zoom in, or towards the LEFT(Wide) to zoom out.
5. Adjust the Focus the same way as described above after the desired zoom position is estabilished.

ADJUSTING 3-AXIS GIMBAL*

The Gimbal mechanism yields maximum rotation and placement ad show below.
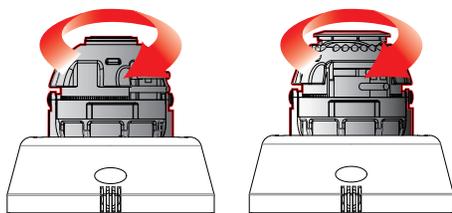
NO IR   IR

1 Rotation 360°
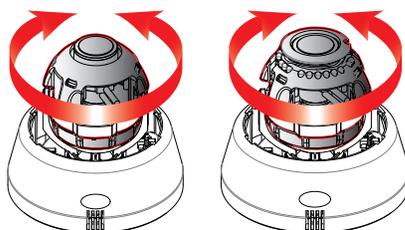
NO IR   IR

3 Panning 360°
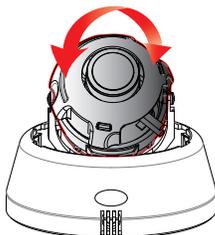
NO IR

2 Tilting 90°
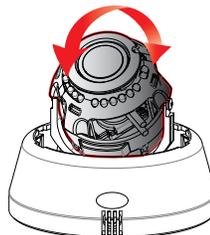
IR

4 Tilting 82°

FEATURES*

D4363D

- 1/3" Sony Super HAD Ⅱ CCD
- 560 TV Lines
- 3.3~12mm Varifocal Auto Iris Lens
- Electronic Day and Night
- Star-Light (Super Low Light Technology)
- 3D-DNR (3D Digital Noise Reduction)
- DRC (Dynamic Range Compressor)
- HME (Highlight Masking Exposure)
- AGC / BLC / AWB
- 32X Digital Zoom / Negative Imaging
- UTP / RS485 Built-In
- Programmable Privacy Zone(8) & Motion Detection(4)
- Easy Icon Driven OSD Menu with Built-In Joystick
- Auto Sensing 12VDC or 24VAC with Line Lock
- Secondary Video-BNC Output

MODULE OSD MENU*

EXPOSURE	COLOR	DAY&NIGHT
BRIGHTNESS SHUTTER BLC / HME AGC STARLIGHT NIGHT-UP	WB MODE R-Y GAIN B-Y GAIN	D&N MODE C_SUP A_SUP
FUNCTION	MOTION	PRIVACY
MIRROR SHARPNESS GAMMA FREEZE NEGATIVE D-ZOOM 3D DNR DRC	MOTION	PRIVACY
SYNC	SETUP	EXIT
SYNC	TITLE EDIT PC CONTROL (RS485 Control) LANGUAGE MONITOR OSD COLOR OMNI LENS DEFECT	EXIT SAVE & EXIT FACTORY RESET

📷 EXPOSURE	
BRIGHTNESS	0 ~ 100
SHUTTER	1/60 / FLK / 1/250 ~ 10000 / SENS-UP x2 ~ x256
BLC/HME	OFF / BLC / HME
AGC	HIGH / MIDDLE / LOW / OFF AGC(Auto Gain Control)
STARLIGHT	AUTO(x2 ~ x256) / OFF
NIGHT-UP	NORMAL / HIGH
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
📷 COLOR	
WB MODE	AWC / AWT / PUSH LOCK / MANUAL / INDOOR / OUTDOOR
R-Y GAIN	0 ~ 100
B-Y GAIN	0 ~ 100
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
📷 DAY & NIGHT	
Day & Night Mode	AUTO : READ TIME(3~63) / S-LEVEL(0~100) / E-LEVEL(0~100) **COLOR ➝ B&W** : Switching from COLOR to BW; If the number is higher, the camera will only switch during a super low light condition **B&W ➝ COLOR** : Switching from BW to COLOR; This number should be always lower than COLOR to BW **Read Time** : time interval to switch from COLOR to BW
	COLOR
	B&W Mode : BURST (OFF / ON) There is less noise when the BURST is OFF. SMART IR (OFF / ON)
C_SUP	**Color Suppression** : Color will be reduced at low illumination, if the C-SUP Level is set higher. 0 ~ 63
A_SUP	**Aperture Suppression** : The sharpness of the edges will be reduced at low illumination, if A-SUP level is set higher. 0 ~ 15
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

▦ FUNCTION	
MIRROR	OFF / MIRROR / V-FLIP / ROTATE
SHARPNESS	0 ~ 31
GAMMA	0.05 ~ 1.00
FREEZE	OFF / ON
NEGATIVE	OFF / ON
D-ZOOM	OFF / ON (x1.0 ~ x32 PTZ)
3D DNR	ON (0~100) / OFF 3D Digital Noise Reduction
DRC	OFF / INDOOR / OUTDOOR Dynamic Range Compressor
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
▦ MOTION (OMNI-Plus Camera Only)	
MOTION	OFF ⤴
	ON AREA SELECT (AREA 1~4) AREA SET (POSITION / SIZE) SENSITIVITY (0~40) MOTION TRACE (OFF / ON) MOTION VIEW (OFF / ON) RETURN
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
▦ PRIVACY	
PRIVACY	OFF
	ON ⤴ AREA SELECT (1~8) AREA SET (POSITION / SIZE) COLOR (0~15) RETURN
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

⊠ SYNC	
SYNC	INTERNAL / LINE
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
⊠ SETUP	
TITLE EDIT	OFF / ON
PC CONTROL (RS485 Control)	CAM ID / ID DISPLAY (OFF/ON) / BAUDRATE (2400 / 4800 / 9600) The protocol is fixed pelco-D.
LANGUAGE	ENG / KOR / JPN / CHN1 / CHN2 / RUS / FRAN / SPAN / ITAL
MONITOR	CRT / LCD Select LCD only if the camera is directly connected to the LCD monitor.
OSD COLOR	0 ~ 15
OMNI LENS	OFF (OMNI-Plus Camera Only)
	ON ⤴ ALARM / READ TIME / ALARM ZOOM / STAND BY / RETURN
DEFECT	WHITE DEFECT CANCEL MODE
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
⊠ EXIT	
EXIT	
SAVE & EXIT	
FACTORY RESET	

SPECIFICATIONS*

MODEL	DWC-D4363D	
General Spec	NTSC	PAL
CCD Type	1/3" 410K Pixels Color	1/3" 470K Pixels Color
Total number of pixels	811(H) X 508(V)	795(H) X 596(V)
Minimum Illumination	0.14Lux (F1.2, 30IRE-COLOR)	
	0Lux (LED ON)	
Resolution	560 TV Lines (COLOR)	
	580 TV Lines (BW)	
Electric Spec		
Voltage	DC 12[V] (11.0[V] ~ 20.0[V])	
	AC 24[V] (20.0[V] ~ 30.0[V])	
Power Consumption	DC 12V: 2.3W / AC 24V: 2.5W	
COMMON		
General Spec	NTSC	PAL
Shutter speed	1/60s - 1/100,000s	1/50s - 1/100,000s
S/N Ratio	52dB or More(AGC OFF)	
Gamma	0.45	
Sync System	Internal / Line Lock	
Mechanical Spec		
Operation Temperature	-10℃ ~ +50℃ (14°F ~ 131°F)	
Storage Temperature	-20℃ ~ +70℃	
Operation Humidity	Under 90% (Non-condensing)	

FEATURES*

D4363TIR

- 1/3" Sony Super HAD Ⅱ CCD
- 560 TV Lines
- 3.3~12mm Varifocal Auto Iris Lens
- 100ft Range IR with Intelligent Camera Sync
- TDN (True Day and Night / TDN5)
- Star-Light (Super Low Light Technology)
- DRC (Dynamic Range Compressor)
- 3D-DNR (3D Digital Noise Reduction)
- HME (Highlight Masking Exposure)
- AGC / BLC / AWB
- 32X Digital Zoom / Negative Imaging
- UTP / RS485 Built-In
- Programmable Privacy Zone(8) & Motion Detection(4)
- Easy Icon Driven OSD Menu with Built-In Joystick
- Auto Sensing 12VDC or 24VAC with Line Lock
- Secondary Video-BNC Output

MODULE OSD MENU*

EXPOSURE	COLOR	DAY&NIGHT
─ BRIGHTNESS ─ SHUTTER ─ BLC / HME ─ AGC ─ STARLIGHT ─ NIGHT-UP	─ WB MODE ─ R-Y GAIN ─ B-Y GAIN	─ D&N MODE ─ C_SUP ─ A_SUP

FUNCTION	MOTION	PRIVACY
─ MIRROR ─ SHARPNESS ─ GAMMA ─ FREEZE ─ NEGATIVE ─ D-ZOOM ─ 3D DNR ─ DRC	─ MOTION	─ PRIVACY

SYNC	SETUP	EXIT
─ SYNC	─ TITLE EDIT ─ PC CONTROL (RS485 Control) ─ LANGUAGE ─ MONITOR ─ OSD COLOR ─ OMNI LENS ─ DEFECT	─ EXIT ─ SAVE & EXIT ─ FACTORY RESET

▣ EXPOSURE	
BRIGHTNESS	0 ~ 100
SHUTTER	1/60 / FLK / 1/250 ~ 10000 / SENS-UP x2 ~ x256
BLC/HME	OFF / BLC / HME
AGC	HIGH / MIDDLE / LOW / OFF AGC(Auto Gain Control)
STARLIGHT	AUTO(x2 ~ x256) / OFF
NIGHT-UP	NORMAL / HIGH
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
▣ COLOR	
WB MODE	AWC / AWT / PUSH LOCK / MANUAL / INDOOR / OUTDOOR
R-Y GAIN	0 ~ 100
B-Y GAIN	0 ~ 100
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
▣ DAY & NIGHT	
Day & Night Mode	AUTO : READ TIME(3~63) / S-LEVEL(0~100) / E-LEVEL(0~100) **COLOR ⟶ B&W** : Switching from COLOR to BW; If the number is higher, the camera will only switch during a super low light condition **B&W ⟶ COLOR** : Switching from BW to COLOR; This number should be always lower than COLOR to BW **Read Time** : time interval to switch from COLOR to BW
	COLOR
	B&W Mode : BURST (OFF / ON) There is less noise when the BURST is OFF. SMART IR (OFF / ON)
C_SUP	**Color Suppression** : Color will be reduced at low illumination, if the C-SUP Level is set higher. 0 ~ 63
A_SUP	**Aperture Suppression** : The sharpness of the edges will be reduced at low illumination, if A-SUP level is set higher. 0 ~ 15
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

FUNCTION

MIRROR	OFF / MIRROR / V-FLIP / ROTATE
SHARPNESS	0 ~ 31
GAMMA	0.05 ~ 1.00
FREEZE	OFF / ON
NEGATIVE	OFF / ON
D-ZOOM	OFF / ON (x1.0 ~ x32 PTZ)
3D DNR	ON (0~100) / OFF 3D Digital Noise Reduction
DRC	OFF / INDOOR / OUTDOOR Dynamic Range Compressor
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

MOTION (OMNI-Plus Camera Only)

MOTION	OFF ↰
	ON AREA SELECT (AREA 1~4) AREA SET (POSITION / SIZE) SENSITIVITY (0~40) MOTION TRACE (OFF / ON) MOTION VIEW (OFF / ON) RETURN
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

PRIVACY

PRIVACY	OFF
	ON ↰ AREA SELECT (1~8) AREA SET (POSITION / SIZE) COLOR (0~15) RETURN
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

☀ SYNC	
SYNC	INTERNAL / LINE
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
SETUP	
TITLE EDIT	OFF / ON
PC CONTROL (RS485 Control)	CAM ID / ID DISPLAY (OFF/ON) / BAUDRATE (2400 / 4800 / 9600) The protocol is fixed pelco-D.
LANGUAGE	ENG / KOR / JPN / CHN1 / CHN2 / RUS / FRAN / SPAN / ITAL
MONITOR	CRT / LCD Select LCD only if the camera is directly connected to the LCD monitor.
OSD COLOR	0 ~ 15
OMNI LENS	OFF (OMNI-Plus Camera Only)
	ON ↲ ALARM / READ TIME / ALARM ZOOM / STAND BY / RETURN
DEFECT	WHITE DEFECT CANCEL MODE
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
EXIT	
EXIT	
SAVE & EXIT	
FACTORY RESET	

SPECIFICATIONS*

MODEL	DWC-D4363TIR	
General Spec	NTSC	PAL
CCD Type	1/3" 410K Pixels Color	1/3" 470K Pixels Color
Total number of pixels	811(H) X 508(V)	795(H) X 596(V)
Minimum Illumination	0.14Lux (F1.2, 30IRE-COLOR)	
	0Lux (LED ON)	
Resolution	560 TV Lines (COLOR)	
	580 TV Lines (BW)	
Electric Spec		
Voltage	DC 12[V] (11.0[V] ~ 20.0[V])	
	AC 24[V] (20.0[V] ~ 30.0[V])	
Power Consumption	LED OFF (DC12V-2.3W / AC24V-2.5W)	
	LED ON (DC12V-4.8W / AC24V-4.9W)	
COMMON		
General Spec	NTSC	PAL
Shutter speed	1/60s - 1/100,000s	1/50s - 1/100,000s
S/N Ratio	52dB or More(AGC OFF)	
Gamma	0.45	
Sync System	Internal / Line Lock	
Mechanical Spec		
Operation Temperature	-10℃ ~ +50℃ (14°F ~ 131°F)	
Storage Temperature	-20℃ ~ +70℃	
Operation Humidity	Under 90% (Non-condensing)	

FEATURES*

D4367WD

- 1/3" Sony Super HAD Ⅱ CCD
- 580 TV Lines
- 3.3~12mm Varifocal Auto Iris Lens
- Electronic Day and Night
- Star-Light (Super Low Light Technology)
- EWDR (Electronic Wide Dynamic Range)
- 3D-DNR (3D Digital Noise Reduction)
- HME (Highlight Masking Exposure)
- SLC (Side Light Compensation)
- AGC / BLC / AWB
- Negative Imaging
- 3X Digital Zoom
- Mirror Image Control
- UTP / RS485 Built-In
- Programmable Privacy Zone (6) & Motion Detection
- Easy Icon Driven OSD Menu with Built-In Joystick
- Auto Sensing 12VDC or 24VAC with Line Lock
- Secondary Video-BNC Output

MODULE OSD MENU*

EXPOSURE	COLOR	DAY&NIGHT
BRIGHTNESS SHUTTER BLC AGC MAX_DR STARLIGHT	WB MODE R-Y GAIN B-Y GAIN	D&N MODE C_SUP A_SUP
FUNCTION	MOTION	PRIVACY
MIRROR SHARPNESS GAMMA FREEZE NEGATIVE 3D DNR D-ZOOM SLC HME DIS	MOTION	MASK 1 MASK 2 MASK 3 MASK 4 MASK 5 MASK 6
SYNC	SETUP	EXIT
SYNC	CAMERA ID TITLE DPC MONITOR LANGUAGE BAUDRATE OMNI LENS	EXIT SAVE & EXIT FACTORY SET

EXPOSURE	
BRIGHTNESS	0 ~ 99
SHUTTER	1/60 / 1/100 / FLC / 1/250 ~ 100000 / SENS-UP x2 ~ x256
BLC	OFF / ON BLC (Back Light Compensation)
AGC	HIGH / MIDDLE / LOW / OFF AGC (AUTO GAIN CONTROL)
MAX_DR	OFF / ON (0~20) (Electronic Wide Dynamic Range)
STARLIGHT	AUTO (x2 ~ x256) / OFF (x32 is recommended for low light application.)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY RESET
COLOR	
WB MODE	AWC / ATW / MANUAL (AWC is recommended.)
R-Y GAIN	0 ~ 255
B-Y GAIN	0 ~ 255
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY RESET
DAY & NIGHT	
Day & Night Mode	AUTO / COLOR / BW / EX-CONT **COLOR ⟶ BW** : Switching from COLOR to BW; If the number is higher, the camera will only switch during a super low light condition. **BW ⟶ COLOR** : Switching from BW to COLOR; This number should be always lower than COLOR to BW **Read Time** : time interval to switch from COLOR to BW
	COLOR
	B&W : (BURST : OFF/ON) When the burst is OFF, the picture will have less noise.
C_SUP	**Color Suppression** : Color will be reduced at low illumination, if the C_SUP Level is higher. 0 ~ 100 (not available when 3D-DNR is on)
A_SUP	**Aperture Suppression** : Edge sharpness will be reduced at low illumination, if A_SUP Level is higher. 0 ~ 100 (not available when 3D-DNR is on)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

FUNCTION	
MIRROR	OFF / MIRROR / V-FLIP / ROTATE
SHARPNESS	0 ~ 49
GAMMA	0.45 ~ 1.00 / USER
FREEZE	OFF / ON
NEGATIVE	OFF / ON
3D DNR	OFF / LOW / MIDDLE / HIGH 3D DNR (3D Digital Noise Reduction)
D-ZOOM	OFF / ON(x1.0 ~ x3.0 Digital PTZ)
SLC	OFF / ON SLC (Side Light Compensation)
HME	OFF / ON HME (Highlight Masking Exposure)
DIS	OFF / ON DIS (Digital Image Stabilizer)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
MOTION	
MOTION	OFF / ON
	SET WINDOW
	ALL SET (Set the Entire Screen)
	ALL CLEAR (Clear the Entire Screen)
	SENSITIVITY (1 ~ 120)
	SHOW INDICATOR (OFF / ICON / TRACE)
	DELAY OUT(1 ~ 15) Motion Alarm Zoom-In Delay
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

PRIVACY		
	MASK 1 OFF / ON ↑	
	MASK 2 OFF / ON ↑	
	MASK 3 OFF / ON ↑	
	MASK 4 OFF / ON ↑	
	MASK 5 OFF / ON ↑	
	MASK 6 OFF / ON ↑	
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET	
SYNC		
SYNC MODE	INTERNAL / AUTO	
V_PHASE	0 ~ 199	
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET	
SETUP		
CAMERA ID	0 ~ 254 (RS485 ID)	
TITLE	OFF / ON	
DPC	OFF / AUTO DPC (Dead Pixel Cancellation)	
MONITOR	CRT / LCD (Select LCD only if the camera is directly connected to LCD monitor.)	
LANGUAGE	English / Chinese	
BAUDRATE	2400 / 4800 / 9600 / 14400 / 19200 / 38400 **The protocol is Pelco-D.** Fixed and cannot be changed.(Hardcoded onto the DSP.)	
OMNI LENS	OFF / 1 ~ 10 (OMNI-Plus Camera Only)	
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET	
EXIT		
EXIT	Exit the menu	
SAVE & EXIT	Exit the menu and save the setting	
FACTORY SET	Reset the menu setting to factory default	

SPECIFICATIONS*

MODEL	DWC-D4367WD	
General Spec	NTSC	PAL
CCD Type	1/3" 410K Pixels Color	1/3" 470K Pixels Color
Total number of pixels	811(H) X 508 (V)	795(H) X 596(V)
Minimum Illumination	0.14Lux (F1.2, 30IRE-COLOR)	
	0Lux (LED ON)	
Resolution	580 TV Lines (COLOR)	
	600 TV Lines (BW)	
Electric Spec		
Voltage	DC 12[V] (11.0[V] ~ 20.0[V])	
	AC 24[V] (20.0[V] ~ 30.0[V])	
Power Consumption	DC12V:2.1W / AC24V:2.2W	
COMMON		
General Spec	NTSC	PAL
Shutter speed	1/60s - 1/100,000s	1/50s - 1/100,000s
S/N Ratio	50dB or More(AGC OFF)	
Gamma	0.45	
Sync System	Internal / Line Lock	
Mechanical Spec		
Operation Temperature	-10℃ ~ +50℃ (14°F ~ 131°F)	
Storage Temperature	-20℃ ~ +70℃	
Operation Humidity	Under 90% (Non-condensing)	

FEATURES*

D4367WTIR

- 1/3" Sony Super HAD Ⅱ CCD
- 580 TV Lines
- 3.3~12mm Varifocal Auto Iris Lens
- 100ft Range IR with Intelligent Camera Sync
- TDN (True Day and Night / TDN5)
- Star-Light (Super Low Light Technology)
- EWDR (Electronic Wide Dynamic Range)
- 3D-DNR (3D Digital Noise Reduction)
- HME (Highlight Masking Exposure)
- SLC (Side Light Compensation)
- AGC / BLC / AWB
- Negative Imaging
- 3X Digital Zoom
- UTP / RS485 Built-In
- Programmable Privacy Zone (6) & Motion Detection
- Easy Icon Driven OSD Menu with Built-In Joystick
- Auto Sensing 12VDC or 24VAC with Line Lock
- Secondary Video-BNC Output

MODULE OSD MENU*

EXPOSURE	COLOR	DAY&NIGHT
BRIGHTNESS SHUTTER BLC AGC MAX_DR STARLIGHT	WB MODE R-Y GAIN B-Y GAIN	D&N MODE C_SUP A_SUP
FUNCTION	**MOTION**	**PRIVACY**
MIRROR SHARPNESS GAMMA FREEZE NEGATIVE 3D DNR D-ZOOM SLC HME DIS	MOTION	MASK 1 MASK 2 MASK 3 MASK 4 MASK 5 MASK 6
SYNC	**SETUP**	**EXIT**
SYNC	CAMERA ID TITLE DPC MONITOR LANGUAGE BAUDRATE OMNI LENS	EXIT SAVE & EXIT FACTORY SET

☐ EXPOSURE	
BRIGHTNESS	0 ~ 99
SHUTTER	1/60 / 1/100 / FLC / 1/250 ~ 100000 / SENS-UP x2 ~ x256
BLC	OFF / ON BLC (Back Light Compensation)
AGC	HIGH / MIDDLE / LOW / OFF AGC (AUTO GAIN CONTROL)
MAX_DR	OFF / ON (0~20) (Electronic Wide Dynamic Range)
STARLIGHT	AUTO (x2 ~ x256) / OFF (x32 is recommended for low light application.)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY RESET
☐ COLOR	
WB MODE	AWC / ATW / MANUAL (AWC is recommended.)
R-Y GAIN	0 ~ 255
B-Y GAIN	0 ~ 255
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY RESET
☐ DAY & NIGHT	
Day & Night Mode	AUTO / COLOR / BW / EX-CONT **COLOR → BW** : Switching from COLOR to BW; If the number is higher, the camera will only switch during a super low light condition. **BW → COLOR** : Switching from BW to COLOR; This number should be always lower than COLOR to BW **Read Time** : time interval to switch from COLOR to BW
	COLOR
	B&W : (BURST : OFF/ON) When the burst is OFF, the picture will have less noise.
C_SUP	**Color Suppression** : Color will be reduced at low illumination, if the C_SUP Level is higher. 0 ~ 100 (not available when 3D-DNR is on)
A_SUP	**Aperture Suppression** : Edge sharpness will be reduced at low illumination, if A_SUP Level is higher. 0 ~ 100 (not available when 3D-DNR is on)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

FUNCTION	
MIRROR	OFF / MIRROR / V-FLIP / ROTATE
SHARPNESS	0 ~ 49
GAMMA	0.45 ~ 1.00 / USER
FREEZE	OFF / ON
NEGATIVE	OFF / ON
3D DNR	OFF / LOW / MIDDLE / HIGH 3D DNR (3D Digital Noise Reduction)
D-ZOOM	OFF / ON(x1.0 ~ x3.0 Digital PTZ)
SLC	OFF / ON SLC (Side Light Compensation)
HME	OFF / ON HME (Highlight Masking Exposure)
DIS	OFF / ON DIS (Digital Image Stabilizer)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
MOTION	
MOTION	OFF / ON
	SET WINDOW
	ALL SET (Set the Entire Screen)
	ALL CLEAR (Clear the Entire Screen)
	SENSITIVITY (1 ~ 120)
	SHOW INDICATOR (OFF / ICON / TRACE)
	DELAY OUT(1 ~ 15) Motion Alarm Zoom-In Delay
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

PRIVACY	
	MASK 1 OFF / ON ↱
	MASK 2 OFF / ON ↱
	MASK 3 OFF / ON ↱
	MASK 4 OFF / ON ↱
	MASK 5 OFF / ON ↱
	MASK 6 OFF / ON ↱
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
SYNC	
SYNC MODE	INTERNAL / AUTO
V_PHASE	0 ~ 199
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
SETUP	
CAMERA ID	0 ~ 254 (RS485 ID)
TITLE	OFF / ON
DPC	OFF / AUTO DPC (Dead Pixel Cancellation)
MONITOR	CRT / LCD (Select LCD only if the camera is directly connected to LCD monitor.)
LANGUAGE	English / Chinese
BAUDRATE	2400 / 4800 / 9600 / 14400 / 19200 / 38400 **The protocol is Pelco-D.** Fixed and cannot be changed.(Hardcoded onto the DSP.)
OMNI LENS	OFF / 1 ~ 10 (OMNI-Plus Camera Only)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
EXIT	
EXIT	Exit the menu
SAVE & EXIT	Exit the menu and save the setting
FACTORY SET	Reset the menu setting to factory default

SPECIFICATIONS*

MODEL	DWC-D4367WTIR	
General Spec	NTSC	PAL
CCD Type	1/3" 410K Pixels Color	1/3" 470K Pixels Color
Total number of pixels	811(H) X 508 (V)	795(H) X 596(V)
Minimum Illumination	0.14Lux (F1.2, 30IRE-COLOR)	
	0Lux (LED ON)	
Resolution	580 TV Lines (COLOR)	
	600 TV Lines (BW)	
Electric Spec		
Voltage	DC 12[V] (11.0[V] ~ 20.0[V])	
	AC 24[V] (20.0[V] ~ 30.0[V])	
Power Consumption	LED OFF (DC12V:2.1W / AC24V:2.2W)	
	LED ON (DC12V:4.5W / AC24V:4.6W)	
COMMON		
General Spec	NTSC	PAL
Shutter speed	1/60s - 1/100,000s	1/50s - 1/100,000s
S/N Ratio	50dB or More(AGC OFF)	
Gamma	0.45	
Sync System	Internal / Line Lock	
Mechanical Spec		
Operation Temperature	-10℃ ~ +50℃ (14°F ~ 131°F)	
Storage Temperature	-20℃ ~ +70℃	
Operation Humidity	Under 90% (Non-condensing)	

FEATURES*

D4382TIR

- 1/3" Sony Super HAD Ⅱ CCD
- 580 TV Lines
- OMNI-Focus 2.9~8.5mm 3X Motorized Zoom,Auto Iris
- 70ft Range IR with Intelligent Camera Sync
- TDN (True Day and Night / TDN5)
- Star-Light (Super Low Light Technology)
- EWDR (Electronic Wide Dynamic Range)
- 3D-DNR (3D Digital Noise Reduction)
- HME (Highlight Masking Exposure)
- AGC / BLC / AWB
- Negative Imaging
- 3X Digital Zoom
- UTP / RS485 Built-In
- Programmable Privacy Zone (6) & Motion Detection
- Easy Icon Driven OSD Menu with Built-In Joystick
- Auto Sensing 12VDC or 24VAC with Line Lock
- Secondary Video-BNC Output

MODULE OSD MENU*

EXPOSURE	COLOR	DAY&NIGHT
BRIGHTNESS SHUTTER BLC AGC MAX_DR STARLIGHT	WB MODE R-Y GAIN B-Y GAIN	D&N MODE C_SUP A_SUP
FUNCTION	**MOTION**	**PRIVACY**
MIRROR SHARPNESS GAMMA FREEZE NEGATIVE 3D DNR D-ZOOM SLC HME DIS	MOTION	MASK 1 MASK 2 MASK 3 MASK 4 MASK 5 MASK 6
SYNC	**SETUP**	**EXIT**
SYNC	CAMERA ID TITLE DPC MONITOR LANGUAGE BAUDRATE OMNI LENS	EXIT SAVE & EXIT FACTORY SET

🔳 EXPOSURE	
BRIGHTNESS	0 ~ 99
SHUTTER	1/60 / 1/100 / FLC / 1/250 ~ 100000 / SENS-UP x2 ~ x256
BLC	OFF / ON BLC (Back Light Compensation)
AGC	HIGH / MIDDLE / LOW / OFF AGC (AUTO GAIN CONTROL)
MAX_DR	OFF / ON (0~20) (Electronic Wide Dynamic Range)
STARLIGHT	AUTO (x2 ~ x256) / OFF (x32 is recommended for low light application.)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY RESET
🔳 COLOR	
WB MODE	AWC / ATW / MANUAL (AWC is recommended.)
R-Y GAIN	0 ~ 255
B-Y GAIN	0 ~ 255
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY RESET
🔳 DAY & NIGHT	
Day & Night Mode	AUTO / COLOR / BW / EX-CONT **COLOR ⟶ BW** : Switching from COLOR to BW; If the number is higher, the camera will only switch during a super low light condition. **BW ⟶ COLOR** : Switching from BW to COLOR; This number should be always lower than COLOR to BW **Read Time** : time interval to switch from COLOR to BW
	COLOR
	B&W : (BURST : OFF/ON) When the burst is OFF, the picture will have less noise.
C_SUP	**Color Suppression** : Color will be reduced at low illumination, if the C_SUP Level is higher. 0 ~ 100 (not available when 3D-DNR is on)
A_SUP	**Aperture Suppression** : Edge sharpness will be reduced at low illumination, if A_SUP Level is higher. 0 ~ 100 (not available when 3D-DNR is on)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

🔲 FUNCTION	
MIRROR	OFF / MIRROR / V-FLIP / ROTATE
SHARPNESS	0 ~ 49
GAMMA	0.45 ~ 1.00 / USER
FREEZE	OFF / ON
NEGATIVE	OFF / ON
3D DNR	OFF / LOW / MIDDLE / HIGH 3D DNR (3D Digital Noise Reduction)
D-ZOOM	OFF / ON(x1.0 ~ x3.0 Digital PTZ)
SLC	OFF / ON SLC (Side Light Compensation)
HME	OFF / ON HME (Highlight Masking Exposure)
DIS	OFF / ON DIS (Digital Image Stabilizer)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
🔲 MOTION	
MOTION	OFF / ON
	SET WINDOW
	ALL SET (Set the Entire Screen)
	ALL CLEAR (Clear the Entire Screen)
	SENSITIVITY (1 ~ 120)
	SHOW INDICATOR (OFF / ICON / TRACE)
	DELAY OUT(1 ~ 15) Motion Alarm Zoom-In Delay
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

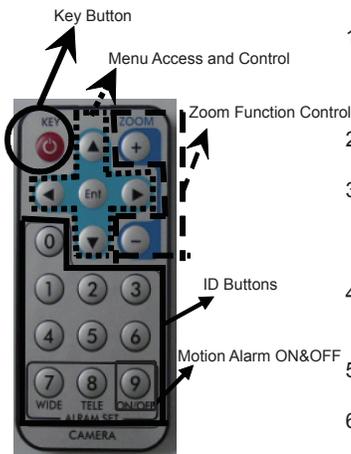| PRIVACY		
	MASK 1 OFF / ON ↱	
	MASK 2 OFF / ON ↱	
	MASK 3 OFF / ON ↱	
	MASK 4 OFF / ON ↱	
	MASK 5 OFF / ON ↱	
	MASK 6 OFF / ON ↱	
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET	
SYNC		
SYNC MODE	INTERNAL / AUTO	
V_PHASE	0 ~ 199	
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET	
SETUP		
CAMERA ID	0 ~ 254 (RS485 ID)	
TITLE	OFF / ON	
DPC	OFF / AUTO DPC (Dead Pixel Cancellation)	
MONITOR	CRT / LCD (Select LCD only if the camera is directly connected to LCD monitor.)	
LANGUAGE	English / Chinese	
BAUDRATE	2400 / 4800 / 9600 / 14400 / 19200 / 38400 **The protocol is Pelco-D.** Fixed and cannot be changed.(Hardcoded onto the DSP.)	
OMNI LENS	OFF / 1 ~ 10 (OMNI-Plus Camera Only)	
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET	
EXIT		
EXIT	Exit the menu	
SAVE & EXIT	Exit the menu and save the setting	
FACTORY SET	Reset the menu setting to factory default	

SPECIFICATIONS*

MODEL	DWC-D4382TIR	
General Spec	NTSC	PAL
CCD Type	1/3" 410K Pixels Color	1/3" 470K Pixels Color
Total number of pixels	811(H) X 508 (V)	795(H) X 596(V)
Minimum Illumination	0.14Lux (F1.2, 30IRE-COLOR)	
	0Lux (LED ON)	
Resolution	580 TV Lines (COLOR)	
	600 TV Lines (BW)	
Electric Spec		
Voltage	DC 12[V] (11.0[V] ~ 20.0[V])	
	AC 24[V] (20.0[V] ~ 30.0[V])	
Power Consumption	LED OFF (DC12V:2.1W / AC24V:2.2W)	
	LED ON (DC12V:4.5W / AC24V:4.6W)	
COMMON		
General Spec	NTSC	PAL
Shutter speed	1/60s - 1/100,000s	1/50s - 1/100,000s
S/N Ratio	50dB or More(AGC OFF)	
Gamma	0.45	
Sync System	Internal / Line Lock	
Mechanical Spec		
Operation Temperature	-10℃ ~ +50℃ (14°F ~ 131°F)	
Storage Temperature	-20℃ ~ +70℃	
Operation Humidity	Under 90% (Non-condensing)	

REMOTE CONTROL*

Key Button

Menu Access and Control

Zoom Function Control

ID Buttons

Motion Alarm ON&OFF

<Remote Control Picture>

■ REMOTE CONTROL Instructions

1) Set the camera ID in OSD menu.(The default setting is "001")
   NOTE : If the camera ID is modified, the new camera ID must
   be set, and the power must be turned ON and OFF. Then the
   camera is able to recognize the new ID.
2) Press the "KEY" and the camera turns into the standby image.
   The LED flickers for 20 seconds.
3) Input ID number of CAMERA to Remote Controller ID number.
   After you input the ID number, LED light is turned on, and the
   remote controller is ready to set the camera.
   NOTE : The ID number must be 3-digit.
4) ZOOM IN (+) / ZOOM IN (-) Key
   These are for controlling lens zoom, and selecting the zooming
   area of alarm function.
5) Select the desired area where you wish to observe the movement of
   objects. And then select the zooming range by pressing "7" wide key.
6) Please save alarm generating zooming range by "8" tele key.
   If ALARM generating zoom range is smaller than ALARM
   standby range, ALARM Zoom range setting will not be saved.
7) If select "9" ON/OFF key, product operates automatically
   from tele to wide 1 time, and then the alarm function starts.
8) Please press "9" key to cancel the alarm function or to
   reselect the alarm zooming area.

NOTE :
Press [KEY] + [ID] (Default is "001" for ID=1)
Press [ENT] to access the Menu
Note : The camera ID is a 3-digit number.

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FEATURES*

D4365T

- 1/3" Pixim Seawolf CMOS Sensor
- 690 Horizontal TV Lines
- 3.3~12mm Varifocal Auto Iris Lens
- TDN (True Day and Night / TDN5)
- Powerful Wide Dynamic Range
- 3D-DNR (3D Digital Noise Reduction)
- Ultra Low Light Sensitivity
- Smear Canceling Circuit
- Low Power Consumption
- UTP / RS485 Built-In
- Programmable Privacy Zone(6) & Motion Detection(4)
- Easy Driven OSD Menu with Built-In Joystick
- Auto Sensing 12VDC or 24VAC with Line Lock
- Secondary Video-BNC Output

MODULE OSD MENU*

EXPOSURE	COLOR	DAY&NIGHT
─ BRIGHTNESS ─ AE PREFERENCE ─ BLC ─ WDR ─ AGC ─ STARLIGHT ─ METER ZONE	─ WB MODE ─ COLOR GAIN	─ D&N MODE

FUNCTION	MOTION	PRIVACY
─ MIRROR ─ SHARPNESS ─ GAMMA ─ 3D DNR ─ D-ZOOM	─ MOTION	─ PRIVACY

SYNC	SETUP	EXIT
─ SYNC	─ PC CONTROL ─ TITLE ─ LANGUAGE ─ MONITOR ─ OMNI LENS ─ FLUORESCENT ─ DIGITAL VIDEO OUT	─ EXIT ─ SAVE & EXIT ─ FACTORY RESET

EXPOSURE	
BRIGHTNESS	-48 ~ 60
AE PREFERENCE	OUTDOOR / INDOOR
BLC	OFF / BLC (PERCENTILE 10 ~ 50)
WDR	LOW / NORMAL / MEDIUM / HIGH / CUSTOM
AGC	LOW / MEDIUM / HIGH / CUSTOM
STARLIGHT	x2 ~ x64 / OFF
METER ZONE	ADJUST ZONE 1 / ADJUST ZONE 2
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
COLOR	
WB MODE	AWC / ATW(2,000K ~ 11,000K) / PUSH LOCK / MANUAL(KELVIN : 2,000K ~ 11,000K / R/B:RED : -20 ~ 20 BLUE : -20 ~ 20)
COLOR GAIN	-8 ~ 8
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
DAY & NIGHT	
D&N MODE	AUTO / AUTO(EXT) / COLOR / B&W
	- AUTO Mode:(READ TIME:0~255/S-LEVEL:0~60/E-LEVEL:0~60/BW AGC:0~60)
	- AUTO(EXT) Mode:(Option-IR LED Mode)
	- COLOR Mode
	- B&W Mode
	BW BURST (OFF / ON)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

FUNCTION	
MIRROR	OFF / MIRROR / V-FLIP / ROTATE
SHARPNESS	-8 ~ 8
GAMMA	25(0.25) ~ 100(1.0)
3D DNR	MOVIE / INFO
D-ZOOM	ZOOM : 1(x1.0) ~ 12(x8)
	PAN(-100~100) / TILT(-100~100)(Digital Zoom/Pan using the camera mini joystick)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
MOTION	
MOTION	OFF / ON (ACTIVITY THR (0 ~ 255))
	SET MOTION ZONES ⏎
	- 1 ZONE / 1 ~ 2 ZONE / 1 ~ 3 ZONE / 1 ~ 4 ZONE
	- ADJUST ZONE 1 (MOVE/MAKES WIDE/MAKES NARROW)
	- ADJUST ZONE 2 (MOVE/MAKES WIDE/MAKES NARROW)
	- ADJUST ZONE 3 (MOVE/MAKES WIDE/MAKES NARROW)
	- ADJUST ZONE 4 (MOVE/MAKES WIDE/MAKES NARROW)
	RETURN
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
PRIVACY	
PRIVACY	OFF
	ON ⏎
	- AREA 1 OFF/ON ⏎ (MOVE/MAKES WIDE, MAKES NARROW)
	- AREA 2 OFF/ON ⏎ (MOVE/MAKES WIDE, MAKES NARROW)
	- AREA 3 OFF/ON ⏎ (MOVE/MAKES WIDE, MAKES NARROW)
	- AREA 4 OFF/ON ⏎ (MOVE/MAKES WIDE, MAKES NARROW)
	- AREA 5 OFF/ON ⏎ (MOVE/MAKES WIDE, MAKES NARROW)
	- AREA 6 OFF/ON ⏎ (MOVE/MAKES WIDE, MAKES NARROW)
	RETURN
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

SYNC	
SYNC	INT1(SYNC to 59.94Hz)/INT2(SYNC to 60.01Hz)/LL(LL LIMIT/V PHASE/RETURN)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
SETUP	
PC CONTROL	CAM ID : 1 ~ 255
	ID DISPLAY : OFF / ON
	PROTOCOL : PELCO-D
	BAUDRATE : 2400 / 4800 / 9600 / 19200
	RETURN
TITLE	OFF / ON ↲ (TITLE/ID POSITION(UP-LEFT/UP-CENTER/UP-RIGHT/DOWN-LEFT/DOWN-CENTER/DOWN-RIGHT)
LANGUAGE	ENGLISH
MONITOR	CRT / LCD
OMNI LENS	OFF
	ON ↲ ALARM OFF ALARM ON (READ TIME(5~15)/ALARM ZOOM(4~214)/STAND BY(0~214)/RETURN)
FLUORESCENT	OFF / CRR(Manual Lens,Color Rolling/Flickerless Mode)/CRR2 (DC Lens, Color Rolling Mode)
DIGITAL VIDEO OUTPUT	DIGITAL OUT : OFF / ON
	FIELD ORDER : NORMAL / REVERSE
	FRAME RPT : OFF / 2x / FREEZE
	RETURN
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
EXIT	
EXIT	
SAVE & EXIT	
FACTORY RESET	

SPECIFICATIONS*

MODEL	DWC-D4365T	
General Spec	NTSC	PAL
CCD Type	1/3" 420K Pixels Color	
Total number of pixels	768(H) X 548(V)	
Minimum Illumination	0.22Lux (F1.2, 30IRE-COLOR)	
	0Lux (LED ON)	
Resolution	H: 690 TV Lines Effective	
Electric Spec		
Voltage	DC 12[V] (11.0[V] ~ 20.0[V])	
	AC 24[V] (20.0[V] ~ 30.0[V])	
Power Consumption	DC12V-3.1W / AC24V-3.2W	
COMMON		
General Spec	NTSC	PAL
Shutter speed	1/25 ~ 1/30,720 sec	
S/N Ratio	53dB or More(AGC OFF)	
Gamma	0.45	
Sync System	Internal / Line Lock	
Mechanical Spec		
Operation Temperature	-10℃ ~ +50℃ (14°F ~ 131°F)	
Storage Temperature	-20℃ ~ +70℃	
Operation Humidity	Under 90% (Non-condensing)	

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 next 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.