

# Starlight D2363TIR

## User Manual Version #2: Camera with ICON Menu



## **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 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.

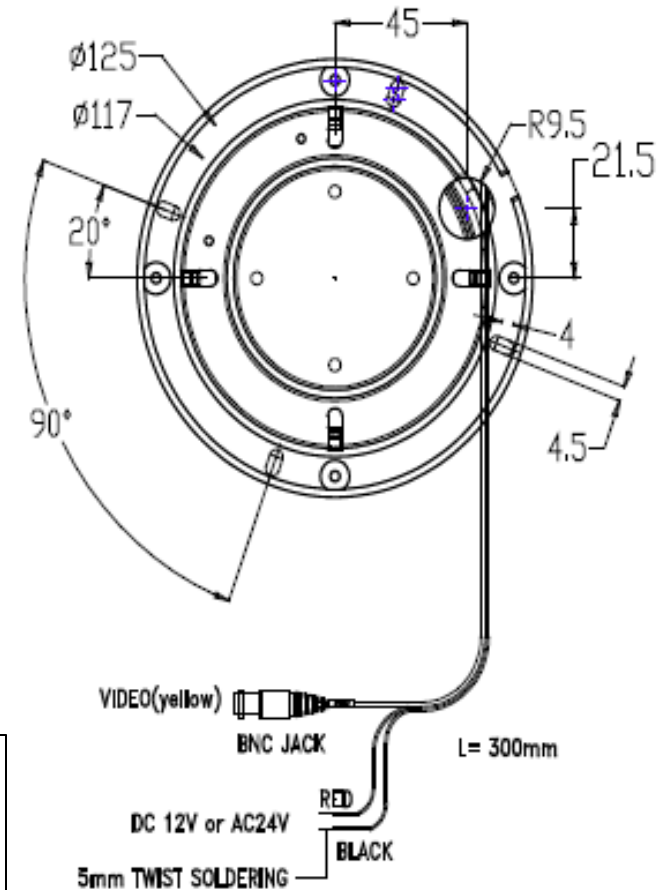
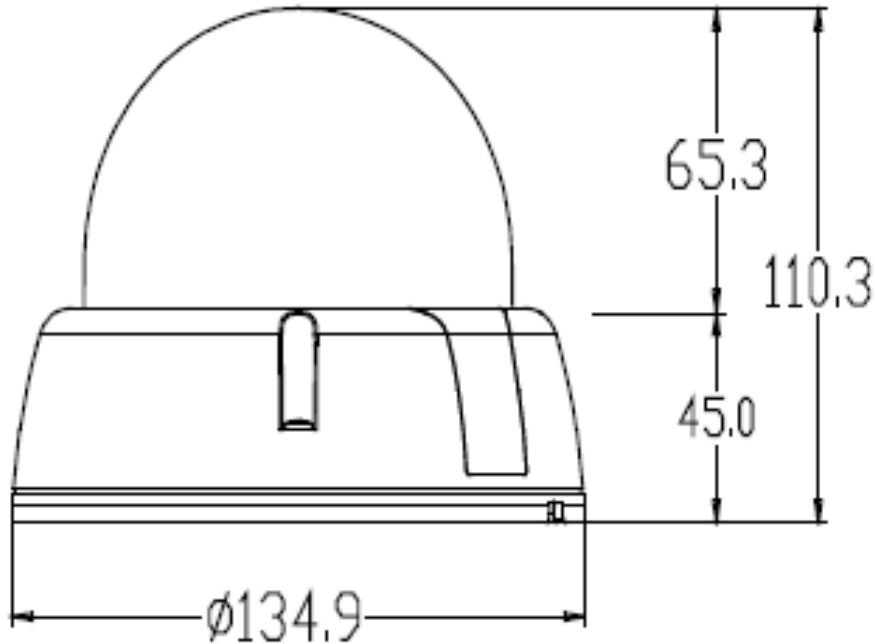
# FEATURES

- 1/3" Sony Super HAD II CCD
- High Resolution 560 TV Lines
- 3.3 ~ 12mm Varifocal Auto Iris Lens
- 100ft Range IR with Intelligent Camera Sync
- True Day & Night / TDN5 (Electro Magnetic Mechanism)
- Star-Light (Super Low Light Technology)
- DRC (Dynamic Range Compressor)

Dark spots in images particularly become more visible without overexposing the bright spots to create one perfect image.

- 3D-DNR (3D Digital Noise Reduction)  
Produces less noise and more color during low-light application.
- HME (Highlight Mask Exposure)  
Masks overly exposed light to produce a true video image of any environment.
- BLC (Back Light Compensation)
- Programmable Privacy Zone (6) & Motion Detection
- Easy Icon Driven OSD Menu with Built-In Joystick
- Auto Sensing 12VDC or 24VAC with Line Lock
- No Fog or Condensation under Any Weather Condition

# DIMENSION (mm) & POWER REQUIREMENT



## POWER REQUIREMENT:

12VDC @1A  
24VAC @ .500mA

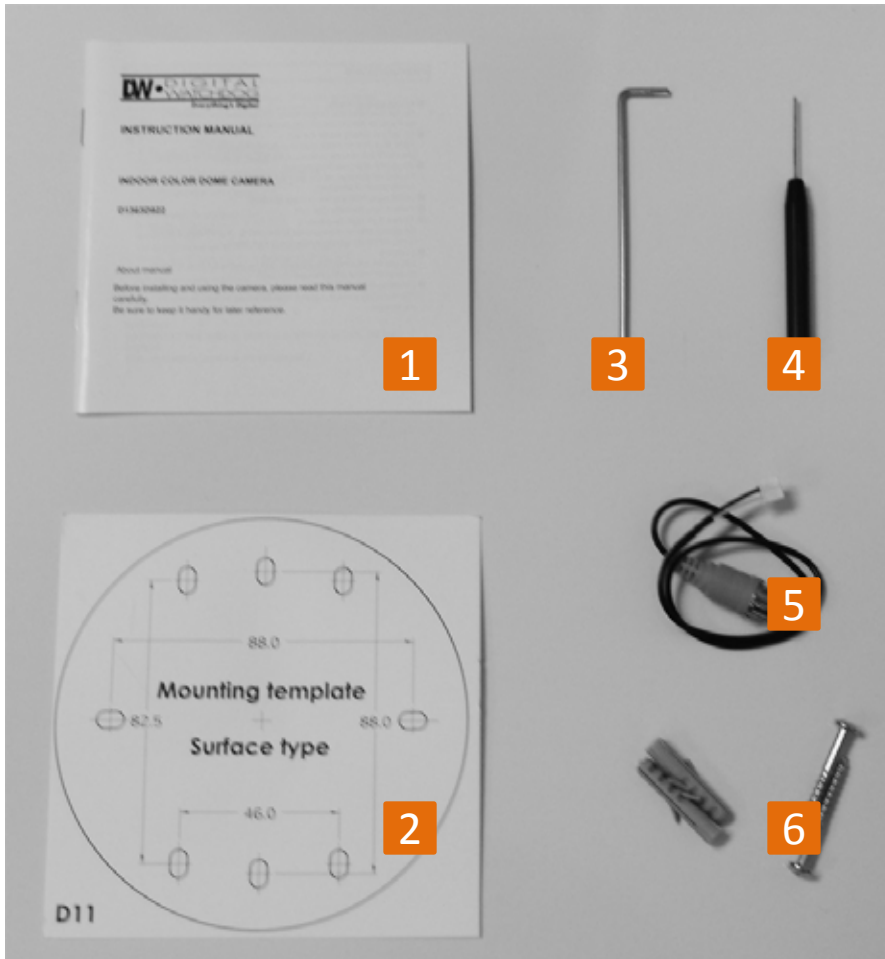
## Power Wire Maximum Distance

Wire Gauge	12VDC	24VAC
24 AWG	80ft	323ft
22 AWG	128ft	513ft
20 AWG	203ft	815ft
18 AWG	323ft	1295ft
16 AWG	514ft	2056ft
14 AWG	816ft	3264ft
12 AWG	1295ft	5183ft
10 AWG	2057ft	8228ft

## COAXIAL CABLE TYPE MAXIMUM DISTANCE

RG59/ U	750feet
RG6/U	1,000feet
RG11/U	1,500feet

# INSTALLATION



## Included with DW Indoor Dome Camera:

1. User Manual
2. Mounting Template
3. Security L-Key
4. Single Sided Hex Key
5. Secondary BNC Cable for a Field Monitor
6. Four (4) Screws and Four (4) Dry Wall Anchors

## Camera Installation

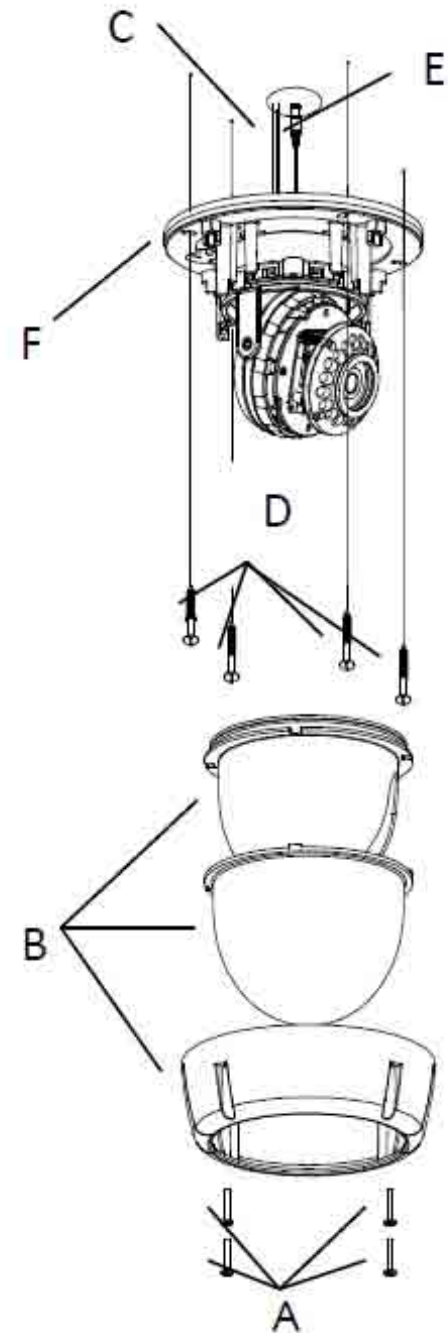
Use the mounting template to mount the camera.

Using the security L-key to loosen the four screws that secure the vandal proof dome cover, Remove the vandal proof dome cover to access the screw holes to mount the camera.

**NOTE:** Keep the lens and the vandal proof cover free from dust or fingerprint.

# INSTALLATION

- A. Loosen the fixing screw using the L Wrench that came with the camera.
- B. Separate the upper case and the base case.
- C. Cut a hole in the ceiling for routing the cables.
- D. Place the camera horizontally on the ceiling, drill the screw holes at the marked four positions.
- E. Pass the power cable and video cable from the camera unit through the hole in the ceiling.
- F. Align the screw holes of the camera unit with the holes in the ceiling. Secure the four screws.
- G. Install and adjust the camera unit.
- H. Adjust the dome liner to show the lens through the camera window. Attach it to the base.
- I. Put the upper case and the base together.
- J. Tighten the screws with the L Wrench.



# CONNECTION

DC12V / AC24V

Video Output

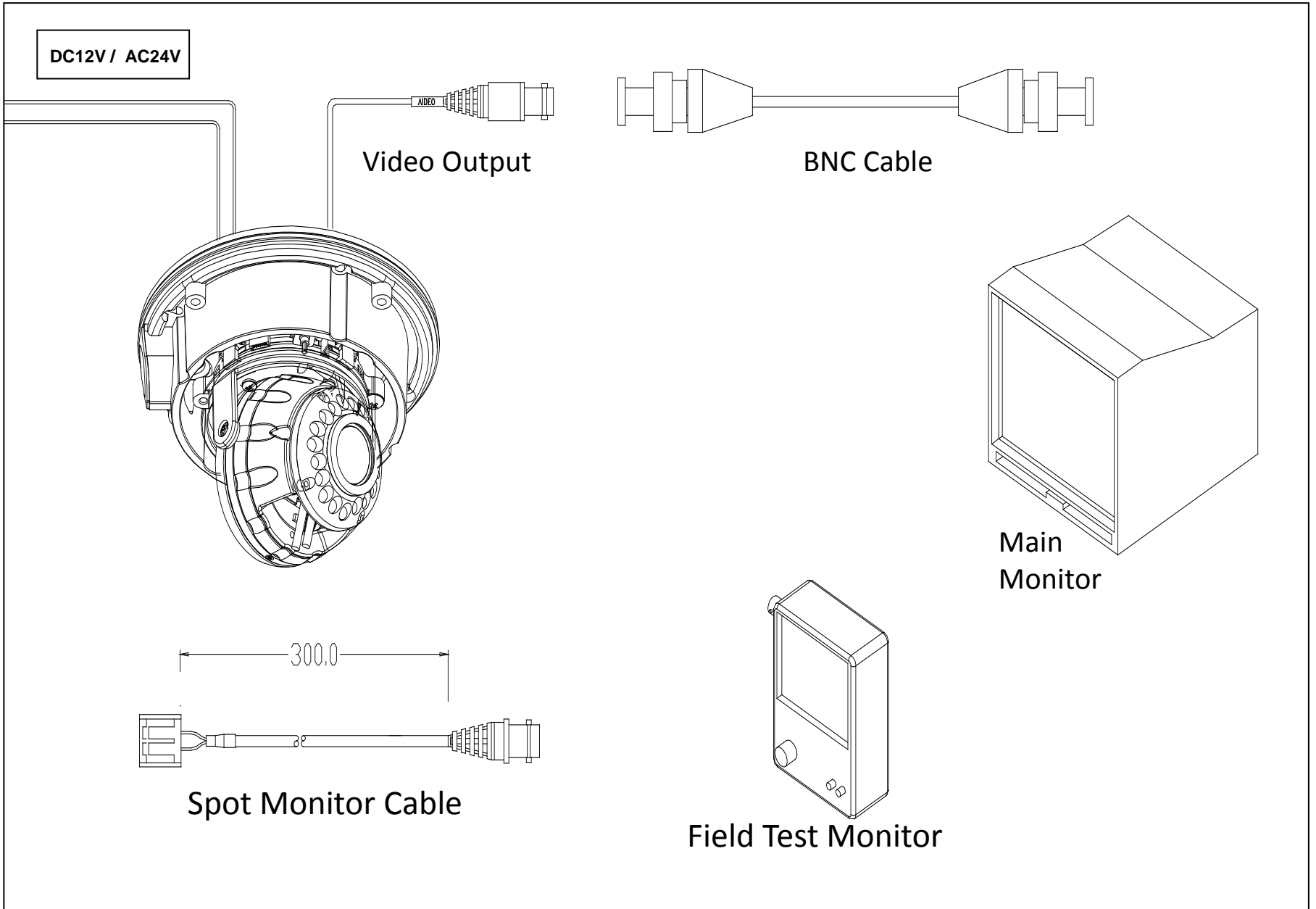
BNC Cable

Main  
Monitor

300.0

Spot Monitor Cable

Field Test Monitor



# LENS ADJUSTMENT

B.Focus lever

A. Zoom Lever



A. Move the Zoom Lever until you get the desired position.

B. Move the Focus Lever until you get the desired focus.



# EXPOSURE

<b>LENS</b>	DC (0~100) / MANUAL / VIDEO. (DC Lens is recommended.)
<b>SHUTTER</b>	1/160 / 1/100 / FLC / 1/250 ~ 10000 / SENS-UP x2 ~ x250
<b>BLC</b>	OFF / ON BLC (Back Light Compensation)
<b>AGC</b>	HIGH / MIDDLE / LOW / OFF AGC (Auto Gain Control)
<b>MAX-DR</b>	OFF / ON (0 ~ 20) (Electronic Wide Dynamic Range)
<b>STAR-LIGHT</b>	AUTO (x2 ~ x250) / OFF (x32 is recommended.)
<b>EXIT JUMP</b>	EXIT / SAVE&EXIT / FACTORY RESET

# COLOR

<b>WB MODE</b>	AWC / ATW / MANUAL / PUSH LOCK
<b>R-Y GAIN</b>	0 ~ 100
<b>B-Y GAIN</b>	0 ~ 100

# DAY & NIGHT

<b>Day &amp; Night Mode</b>	<b>AUTO / COLOR / BW / EX-CONT</b> <b>COLOR ----&gt; BW</b> : Switching from color to BW; if the number is higher, the camera will only switch during a super low light condition. <b>BW ----&gt; COLOR</b> : Switching from BW to color; this number should always be lower than COLOR to BW <b>Read Time</b> : Time interval to switch from Color to Black-and-White
	COLOR
	B&W: (BURST:OFF/ON) When the burst is OFF will make less noise
<b>C-SUP</b>	<b>Color Suppression</b> :Color will be reduced at low illumination, if the C-SUP Level is higher. 0 ~ 100 (Not Available when DNR is On.)
<b>A-SUP</b>	<b>Aperture Suppression</b> : The sharpness of the edges will be reduced at low illumination, if A-SUP Level is higher. 0 ~ 100 (Not Available when DNR is On.)
<b>EXIT JUMP</b>	EXIT / SAVE&EXIT / FACTORY SET

# FUNCTION

<b>MIRROR</b>	OFF / MIRROR / V-FLIP / ROTATE
<b>SHARPNESS</b>	0 ~ 31
<b>GAMMA</b>	0.05 ~ 1.00 / USER
<b>FREEZE</b>	OFF / ON
<b>NEGATIVE</b>	OFF / ON
<b>3D-DNR</b>	OFF / LOW / MIDDLE / HIGH 3D-DNR (3D Digital Noise Reduction)
<b>D-ZOOM</b>	OFF / ON (x1.0 ~ x32 PTZ)
<b>SLC</b>	OFF / ON SLC (Side Light Compensation)
<b>HME</b>	OFF / ON HME (Highlight Masking Exposure)
<b>DIS</b>	OFF / ON DIS (Digital Image Stabilizer)
<b>EXIT JUMP</b>	EXIT / SAVE&EXIT / FACTORY SET


# MOTION (OMNI-Focus Lens Only)

<b>MOTION</b>	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
<b>EXIT JUMP</b>	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

# SETUP

**CAMERA ID**

0 ~ 255

**TITLE**

OFF / ON

**DPC**

OFF / AUTO  
DPC (Dead Pixels Cancellation)

**MONITOR**

CRT / LCD

**LANGUAGE**

English, Japanese, Chinese

**BAUDRATE**

2400 / 4800 / 9600 / 14400 / 19200 / 38400.  
**Protocol is Pelco-D** (fixed cannot be changed; hardcoded into the DSP)

**OMNI LENS**

OFF / 1 ~ 10 (for OMNI-PLUS CAMERA only)

**EXIT JUMP**

EXIT / SAVE&EXIT / FACTORY SET

# SYNC

**SYNC**

INTERNAL / AUTO

**V-PHASE**

0 ~ 199

**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:



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)

[technicalsupport@dwcc.tv](mailto:technicalsupport@dwcc.tv)

*Technical Support Hours: Monday-Friday*

*8:30am to 8:00pm Eastern Time*



Camera TYPE	Color / BW	D2363TIR
	Mount	Surface
Image	Device	Super HAD II CCD
	Size	1/3"
	Pixels-Total	811(H) x 508 (V)
Scanning	Pixels-Effective	768(H) x 494 (V)
	System	525 line, 2:1 Interlace
	Horizontal Frequency Internal Mode	15,734Hz
	Vertical Frequency Internal Mode	59.94Hz
Min. Scene Illumination	IR-LED On	0.0 Lux
	IR Distance	100ft Range
Functions	BLC	ON / OFF
	AGC	HIGH / MIDDLE / LOW / OFF
	DRC	OFF / INDOOR / OUTDOOR
	Mirror	OFF / MIRROR / V-FLIP / ROTATE
	STAR-LIGHT	AUTO (x2 ~ x250) / OFF
	3D-DNR	OFF / ON (0~100)
	HME	OFF / ON
	Privacy Zone	6 Programmable Zone / Size
Lens	Focal Length	3.3~12mm Varifocal Auto Iris Lens
Resolution	Horizontal	560 TV Lines [Color]; 580 TV Lines [BW]
Video Output	VBS 1.0Vp-p	VBS 1.0Vp-p(75 Load)
S/N Ratio	S/N Ratio	50dB
OSD	OSD	YES
Environmental Conditions	Operating Temperature	-10°C ~ +55°C(14°F ~ 131°F)
	Humidity	Less than 90%
Power	Power Requirement	12VDC / 24VAC
	Power Consumption	1.96 [W] / 2.2 [W] LED Off; 4.3 [W] / 3 [W] LED On
Physical Specifications	Dimensions	110.3 ~ 134.9mm
	Weight	0.8lbs
	Nema Type	IP66
	Certifications	FCC, RoHS, CE

# **Starlight D2363TIR Indoor Dome Camera**

**User Manual Version #1:  
Camera without ICON Menu**



## **ABOUT MANUAL**

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

# CAMERA SETTINGS

SETUP	
LENS	[DC] - Brightness (DC Lens is recommended.)
	Manual. Shutter is available.
SHUTTER	FLK (Flicker Free)
	ESC (Electronic Shutter Control) - Brightness Adjustment
	Manual Adjustment
WHITE BALANCE	ATW 1800K ~10500K (ATW is recommended).
	Manual Adjustment
	AWC (Auto White Balance)
BACKLIGHT	OFF / LOW / MIDDLE / HIGH
AGC	NORMAL / HIGH / OFF (When the AGC is Off, DNR is not available.)
DNR	LOW / MIDDLE / HIGH / OFF
SENS-UP	AUTO x2 ~ x128 / OFF
SPECIAL	
CAMERA ID	OFF / ON
DAY NIGHT	AUTO / BW / EXTERNAL / COLOR
SYNC	INTERNAL / LINE
MOTION DETECTION	OFF / ON
PRIVACY	OFF / ON
MIRROR	OFF / ON
SHARPNESS	OFF / ON Level Adjustment
RESET	
RETURN	Return to main setup.

# SPECIFICATIONS:



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Model No.	D2363TIR Series	
Image	Mount	Surface
	Device	Super HAD CCD
	Size	1/3"
Scanning	Pixels-Total	811 (H) x 508 (V)
	Pixels-Effective	768 (H) x 494( V)
	System	525 line, 2:1Interlace
Min. Scene Illumination	Horizontal Frequency Internal Mode	15,734Hz
	Vertical Frequency Internal Mode	59.94Hz
	IR-ED on	0 Lux
Functions	Sens-up	AUTO / OFF ( x128 )
	DNR	OFF / LOW / MIDDLE / HIGH
	AGC	ON / OFF (Gain Adjust)
	AWB	ATW / AWC / Manual
	Motion Detection	ON / OFF (Area / Sensitivity / Trace ON/OFF)
	Privacy Zone	4 Programmable Zone / Size
	Lens	Focal Length
Resolution	Horizontal	540 TV Lines [at TDN (B/W) :570 TV Lines]
Video Output	VBS 1.0Vp-p	VBS 1.0Vp-p(75 Load)
S/N Ratio	S/N Ratio	50dB
OSD	OSD	YES
Environmental Conditions	Operating Temperature	-10°C ~ +55°C(14°F ~ 131°F)
	Humidity	Less than 90%
Power	Power Requirement	12VDC / 24VAC (60Hz)
	Power Consumption	12VDC: 239mA (LED OFF), 507mA (LED ON) 24VAC: 220mA (LED OFF), 366mA (LED ON)
Physical Specification	Dimensions(φ x H)	134.9 x 110.3mm