

Vandal Dome Camera X12 Zoom V1312XW

User Manual



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ABOUT MANUAL

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

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.

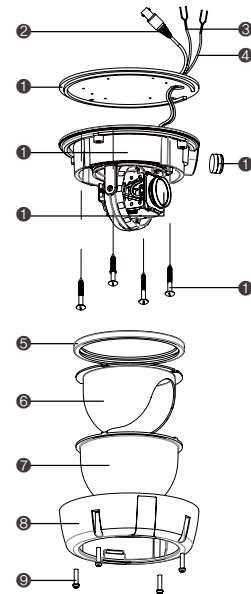
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FEATURES*

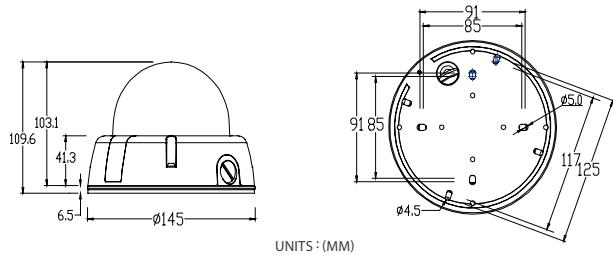
- 1/4" Sony Ex-View HAD Double Scan CCD
- 560TV Lines
- 3.6~44.3mm Varifocal Auto Iris Lens
- 12X Digital Zoom
- Electronic Day and Night with Color Removal Circuit
- WDR (Wide Dynamic Range)
- 3D-DNR (3D Digital Noise Reduction)
- Star-Light a.k.a. Sens-Up (Super Low Light Technology)
- DIS (Digital Image Stabilizer)
- Programmable Privacy Zone (12) & Motion Detection
- AGC / BLC / AWB
- On-Screen Menu Programming with Built-in Joystick
- Secondary Video-BNC Output for Easy Installation
- Auto Sensing 24VAC/12VDC with Line Lock
- RS-485 Built-in

PART & DESCRIPTIONS*

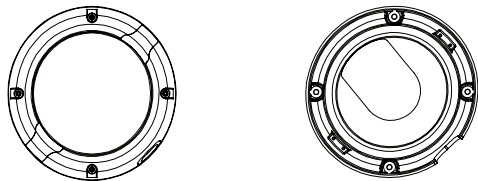


- ① Lens
- ② Video Output Connector - BNC
- ③ Power input Connector
12VDC/24VAC Dual Voltage
- ④ RS485 : BK(D+), WH(D-)
- ⑤ Rubber Band
- ⑥ Black Dome Insert
- ⑦ Bubble
- ⑧ Upper case
- ⑨ Assembly Screws
T20 M4X16
- ⑩ NPT PLUG
- ⑪ Bottom Case
- ⑫ Rubber Pad
- ⑬ Mounting Screws

DIMENSIONS IN MILLIMETERS*



TOP VIEW



INSTALLATION*

Parts Included with DW Camera

1. USER MANUAL
2. MOUNTING TEMPLATE
3. FOUR(4) SCREW AND FOUR(4) DRY WALL ANCHORS
4. 2ND VIDEO JACK

5. L-WRENCH
6. TOOL - 0.89MM
7. TOOL - 1.5/2.0MM

Required Tools (Not Included)

PHILLIPS HEAD SCREWDRIVER



Instructions to Mount the Camera



1. Pull wires through and make connections. Refer to page 13. Use mounting template to mount camera with dry wall mounts and wood screws.



2. Adjust the camera (pan, tilt, zoom). See page 14 for details.



3. Use the joystick to adjust the OSD menu. See page 15, 16, 17 for details.



4. Attach the camera housing to the junction box using the machine screws.

Junction Box Adapter Installation Instructions



1. Check to see all parts are in the box.



2. Use the drywall anchors and wood screws to mount the junction box and rubber gasket to the wall.



3. Insert wires through the wall and make the appropriate connections.



4. Attach the camera to the junction box using the machine screws.



5. Attach the camera housing to the junction box using the machine screws.

Junction Box Adapter Installation Instructions



1. Check to see all parts are in the box.



2. Insert the wires from the camera through the wall mount housing.



3. Attach the camera to the wall mount housing.



4. Use the mounting template to make pilot holes. Use the dry wall anchors and wood screws to attach the assembly to the wall.



5. Attach the camera housing to the fixture.

Pendant Installation Instructions



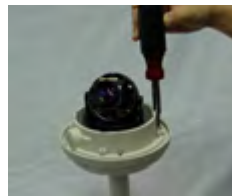
1. Check to see all parts are in the box.



2. Attach the top shield to the pendant mount.



3. Slide the wires from the camera through the pendant mount.



4. Attach the camera to the pendant mount using the machine screws.

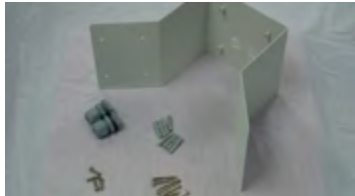


5. Attach the camera housing to the fixture.



6. Use the mounting template to make pilot holes. Mount the camera assembly to the ceiling using wall mount anchors and machine screws.

Corner Mount Installation Instructions



1. Check to see all parts are in the box.



2. Attach the two compression fittings to the corner bracket.



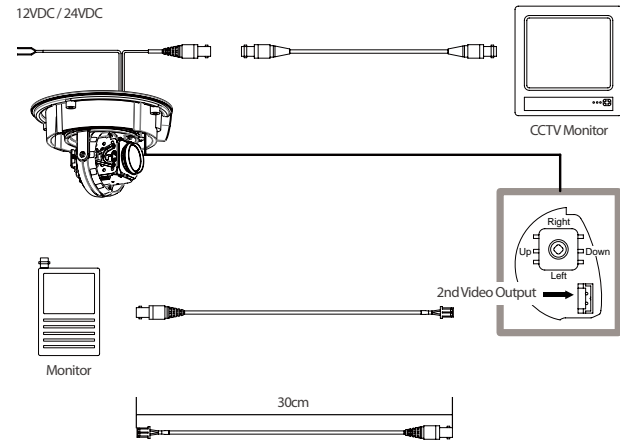
3. Attach the wall mount to the corner bracket with the 4 machine screws.



4. Attach the assembly to a wall corner with dry wall anchors and wood screws.

CONNECTING TO MONITORS*

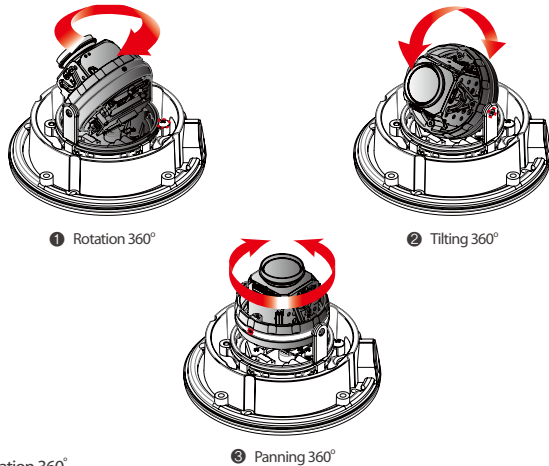
Follow the diagram below to make proper connections to the CRT Monitor or the Monitor.



- Power connection - 12VDC/24VAC Dual Voltage(Auto polarity detection and protection)
- All camera are equipped with a service monitor output on the camera module.

ADJUSTING THE 3-AXIS GIMBAL*

The Gimbal Mechanism Yields Maximum Rotation And Placement As Shown Below.

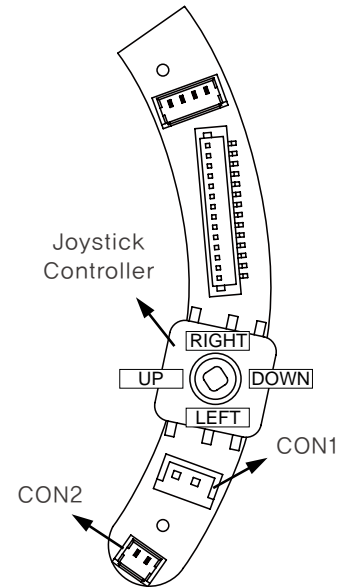


- Z-Axis: Rotation 360°
- Y-Axis: Tilting 90° / 82° IR LED
- X-Axis: Panning 360°

CONTROL BOARD*

CONTROL BOARD FUNCTIONS

1. Joystick Controller - Functional control of O.S.D. (On Screen Display)
2. CON1 - Second Video Output Connector
3. CON2 - RS-485 Connector



MODULE OSD MENU AND GLOSSARY*

MAIN MENU	Description	
CAMERA SET	Camera related functions and data.	
INTELLIGENCE	Motion detection, and more.	
PRIVACY ZONE	Privacy related settings	
PRESET SET	Preset position and Preset ID	
OTHER SET	Configure for Factory Defaults, and more.	
COMMUNICATION	Communication set.	
SYSTEM INFO	Displays the system information.	
LANGUAGE	Select a language on the OSD menu.	
CAMERA SET	Description	Setting Options
CAMERA ID	Make the camera ID and set the place. 54 characters.(2 line)	OFF / ON
IRIS	ALC/MANUAL Iris select. Setting the BLC and WDR function.	ALC(-32~32) / MANUAL(-32~32)
AGC(MOTION)	Setting the Max Gain under the low light.	OFF / ON(Max.Level Setting)
DNR	Digital Noise Reduction : Produces less noise and more color at night.	OFF / LOW / MID / HIGH/ USER(1~16)
SHUTTER	Set the shutter speed. (High shutter speed)	1/60(1/50) ~ 10Ksec
SENS-UP	Super Low Light Technology. Sets the slow shutter speed.	FIX X2 ~ OFF ~ AUTO X256
FLICKERLESS	Shutter speed	OFF / ON
DIS	Digital Image Stabilization : Removes jitters caused by movement or vibrations.	OFF / ON
DAY/NIGHT	DayNight Mode , Level set.	AUTO / EXT / DAY / NIGHT
WHITE BAL	White Balance Mode	ATW1 / ATW2 / AWC / 3200K / 5600K
FOCUS MODE	Select the Focus Mode	MF / ONEAF / AF
ZOOM SPEED	ZOOM Speed set	1~4
DISPLAY ZOOM	ZOOM RATIO display	OFF / ON
DIGITAL ZOOM	Digital Zoom ratio set	OFF ~ X12
DETAIL	Aperture gain set	0~3
V-SYNC	Internal/Linelock mode set	INTERNAL / LINE LOCK
AGC COLOR SUP	AGC Color Suppression : Color will be reduced at the AGC function.	LOW / MID / HIGH
REVERSE	Horizontal/Vertical Reverse	OFF / H / V / HV
POSI/NEGA	Positive or Negative Video output set	- / +
PIP	Picture In Picture at Digital Zoom operation	OFF / ON

INTELLIGENCE	Description	Setting Options
MOTION	Motion detection function	OFF / TRACKING / DETECTION
ADVANCED	Advanced Motion detection function	OFF / FIXED,MOVED
MASK AREA	Set the motion detection exception area	1 ~ 4
DISPLAY	Motion Detection display ON/OFF	OFF / ON
SENSITIVITY	Motion Detection sensitivity	1 ~ 7
RESOLUTION	Motion Detection resolution	1 ~ 5
ALARM OUT	Alarm out set	OFF / ON
PRIVACY ZONE	Description	Setting Options
PRIVACY SET	Set the privacy zone	1~12
STYLE	Set the privacy style	COLOR / MOSAIC 1~4
PRESET	Description	Setting Options
PRESET SET	Set the preset	0 ~ 255
OTHER SET	Description	Setting Options
LANGUAGE	select the language of OSD menu	ENGLISH / FRANCAIS / ESPANOL / JAPANESE / KOREAN / PROTUGUES
FACTORY DEFAULTS	Set the Factory default setting	
OSD COLOR	OSD menu color set	BW / R / G / B
COMMUNICATION	Description	Setting Options
PROTOCOL	Set protocol of RS-485 device.	PELCO-D/HONEYWELL/SAMSUNG-E,T/VICON/ PANASONIC / BOSCH/PELCO-P/GE
BAUD RATE	Set Baud Rate for RS-485 communication.	2400 / 4800 / 9600 / 19200
ADDRESS	Set Camera ID to enable commands from user.	1 ~ 255
SYSTEM INFO	Description	Setting Options
SYSTEM INFO	Camera setting Information	

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.

WARRANTY INFORMATION*

Digital Watchdog (referred to as "the Warrantor") warrants the Camera Series against defects in materials or workmanship as follows.

LABOR : For the initial two (2) years from the date of original purchase, if the camera is determined to be defective, the Warrantor will repair or replace the unit, with 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.

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.

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, 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 above exclusions or limitations 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.

SPECIFICATIONS*

ITEMS	SUB-ITEMS	X12_ZOOM_N		
CCD	Device	SONY 1/4" ExView-HAD PS CCD(ICX-448)		
	Total	811 x 508		
	Effective	768 x 494		
Sync	Inter. H/V	15,734 / 59.94Hz		
	LL H/V	15,750 / 60Hz		
SYSTEM INFO	Horizontal/Vertical Resolution	more than 560(Color)/600(BW) TV Lines		
Performance	Minimum illumination (F1.6/Wide)	Color mode	50 IRE	25 IRE
		Sens Off	1.2 Lux	0.6 Lux
		Sens x256	0.004 Lux	0.002 Lux
		BW mode	50 IRE	25 IRE
		Sens Off	0.12 Lux	0.06 Lux
		Sens x256	0.0004 Lux	0.0002 Lux
	S/N Ratio	52dB		
Lens	focal length, F number	f=3.6~44.3mm, F1.6(Wide)/F2.0(Tele)		
	Drive Type	Auto (DC)		
	M.O.D	Wide: 0.2m , Tele: 0.8m		
	View Angle	Tele: 4.64°(H) x 3.52°(V), Wide: 54.44°(H) x 41.42°(V)		
DFunctions	OSD	E/F/S/J/P , (E/K)	E/F/G/S/I , (E/R/Po/T/Cz), (Chinese)	
	Privacy Zone	12ea (Square)		
	Day&Night	COLOR/BW/AUTO/EXT (with D/N Filter Assy)		
	Motion Detection	Off/On(1ea) ※ Mask Area 4ea		
	D-Zoom	x1~x12 (x0.1 STEP)		
	High Speed Shutter	1/60(1/50) ~ 1/10Ksec		
	Flickerless	Off/On		
	Sens-Up (Star-Light)	x2 ~ x256		

	BLC	Off/On (Area Setting)
	AGC	Off/On (Max.Level Setting)
	ALC(Auto Level Control)	Auto(DC)/Manual (Level Control)
	Line Lock	Off/On (Phase Control)
	Camera ID	Off/On (Max. 54ea/2Line)
	White Balance	ATW1/ATW2/AWC/MANUAL (ATW1 : 2,500 ~ 9,500°K, ATW2 : 2,000 ~ 10,000°K)
	DNR	Off/On (Adaptive 3D+2D)
	DIS	Off/On
	PRESET	Off/On (256ea)
	WDR	Off/On (x128/NTSC, x160/PAL)
	Intelligent Video	Yes (Moved/Fixed)
	Etc. Function	Detail, Reverse(H/V), Posi/Nega, PIP
	Video Output	VBS 1.0V p-p (75ohm Terminated)
Power	Power Input	DC : +10V ~ 16V / AC : 20V ~ 28V
	Power Consumption	DC : Max 2.8[W] AC : Max 3.2[W]
	Operating Temperature	Absolute : -10°C ~ +50°C
	Operating Humidity	Less than 90%

MEMO