

Star-Light™ Pano 6MP HD over Coax™ bullet camera

DWC-PB753WTW



 **STAR-LIGHT PANO™**

Super Low Light Panoramic View HD-Analog Cameras

User Manual ver.: 03/20

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

Contents

INTRODUCTION

- 03 Safety information
- 08 Features
- 09 Product and accessories
- 10 Parts names
- 11 Dimensions

INSTALLATION

- 12 Installation
- 14 Connecting the camera to monitors
- 14 Control board
- 16 Adjusting the camera's angle

OSD MENU

- 17 Menu tree
- 19 OSD menu - Exposure
- 22 OSD menu - Color
- 23 OSD menu - Day and night
- 24 OSD menu - Function
- 25 OSD menu - Motion
- 27 OSD menu - Privacy
- 29 OSD menu - Setup
- 31 OSD menu - Exit

APPENDIX

- 32 Troubleshooting
- 33 Product Specifications
- 35 Limits and exclusions
- 36 Warranty

Safety Information



CAUTION
RISK OF ELECTRIC SHOCK.
DO NOT OPEN



CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol indicates that dangerous voltage consisting a risk of electric shock is present within this unit.



This exclamation point symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance

WARNING

To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

WARNING

1. Be sure to use only the standard adapter that is specified in the specification sheet.
Using any other adapter could cause fire, electrical shock, or damage to the product.
2. Incorrectly connecting the power supply or replacing battery may cause explosion, fire, electric shock, or damage to the product.
3. Do not connect multiple cameras to a single adapter.
Exceeding the capacity may cause abnormal heat generation or fire.
4. Securely plug the power cord into the power receptacle. Insecure connection may cause fire.
5. When installing the camera, fasten it securely and firmly.
A falling camera may cause personal injury.
6. Do not place conductive objects (e.g. screw drivers, coins, metal things, etc.) or containers filled with water on top of the camera. Doing so may cause personal injury due to fire, electric shock, or falling objects.

Safety Information

7. Do not install the unit in humid, dusty, or sooty locations.
Doing so may cause fire or electric shock.
8. If any unusual smells or smoke come from the unit, stop using the product.
In such case, immediately disconnect the power source and contact the service center.
Continued use in such a condition may cause fire or electric shock.
9. If this product fails to operate normally, contact the nearest service center.
Never disassemble or modify this product in any way.
10. When cleaning, do not spray water directly onto parts of the product.
Doing so may cause fire or electric shock.

PRECAUTION

Operating

- Before using, make sure power supply and all other parts are properly connected.
- While operating, if any abnormal condition or malfunction is observed, stop using the camera immediately and contact your dealer.

Handling

- Do not disassemble or tamper with parts inside the camera.
- Do not drop the camera or subject it to shock or vibration as this can damage the camera.
- Clean the clear Lens cover with extra care. Scratches and dust can ruin the quality of the camera image.

Installation and Storage

- Do not install the camera in areas of extreme temperature, exceeding the allowed range.
- Avoid installing in humid or dusty environments.
- Avoid installing in places where radiation is present.
- Avoid installing in places where there are strong magnetic fields and electric signals.
- Avoid installing in places where the camera would be subject to strong vibrations.
- Never expose the camera to rain or water.

Important Safety Instructions

1. Read these instructions.
 - All these safety and operating instructions should be read before the product is installed or operated.
2. Keep these instructions.
 - The safety, operating and use instructions should be retained for future reference.
3. Heed all warnings.
 - All warnings on the product and in the operating instructions should be adhered to.
4. Follow all instructions.
 - All operating and use instructions should be followed.
5. Do not use this device near water.
 - For example : near a bath tub, wash bowl, kitchen sink, laundry tub, in a wet basement, near a swimming pool, etc.
6. Clean only with dry cloth.
 - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
 - Slots and openings in the cabinet are provided for ventilation, to ensure reliable operation of the product, and to protect it from over-heating. The openings should never be blocked by placing the product on bed, sofa, rug or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided and the manufacturer's instructions have been adhered to.
8. Do not install near any heat sources such as radiators, heat registers, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Important Safety Instructions

11. Only use attachments/accessories specified by the manufacturer.

12. Use only with cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus.

When a cart is used, use caution when moving the cart / apparatus combination to avoid injury from tip-over.



13. Unplug this apparatus during lightning storms or when unused for long periods of time.

14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Disposal of Old Appliances



1. When this crossed-out wheel bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.
2. All electrical and electronic products should be disposed of separately from the municipal waste stream in accordance to laws designated by the government or the local authorities.
3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.
4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.



This equipment has been tested and found to comply with the limits for a Class A 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 commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

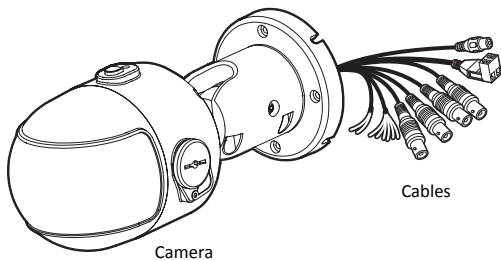
Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Features

- Analog HD over Coax® technology with HD-Analog signal support
- Star-Light™ super low light technology
- 3x 2.1MP/1080p 1/3" image sensor at real-time 30fps
- 6MP 180° panoramic camera
- 3x 4.3mm fixed lenses
- Digital wide dynamic range (D-WDR)
- OSD control via coaxial (UTC)
- Smart DNR™ 3D digital noise reduction
- True day/night mechanical IR cut filter
- De-Fog™ extreme weather image compensation
- Highlight masking exposure (HME)
- Auto sensing 24VAC/12VDC with line lock
- Easy icon driven OSD menu with built-in joystick
- Programmable Privacy Zones
- Auto gain control (AGC)
- Backlight compensation (BLC)
- Dynamic range compressor (DRC) reveals low light detail
- Auto white balance (AWB)
- IP66 environmental-rated dust-tight and water-resistant
- 5 year warranty

Product & Accessories

✳ Please check if all the camera and accessories are included in the package.



Torque wrench



Test video cable



Sunshield and
Sunshield screws



Mounting template



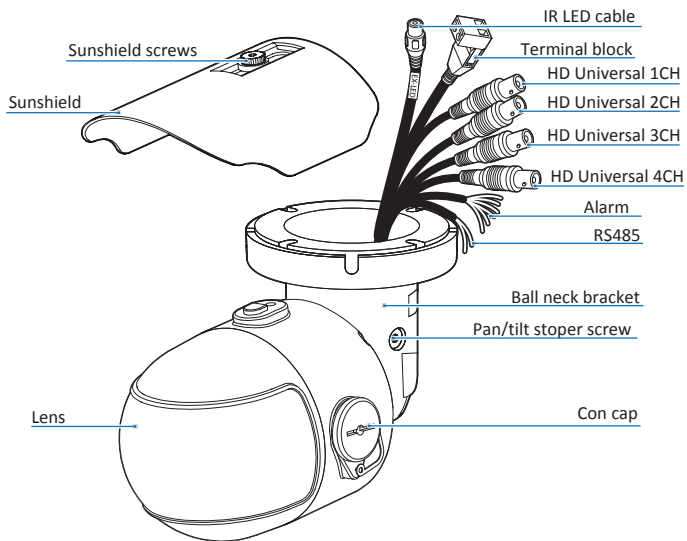
Quick setup
guide



Screws and
plastic anchors-4pcs

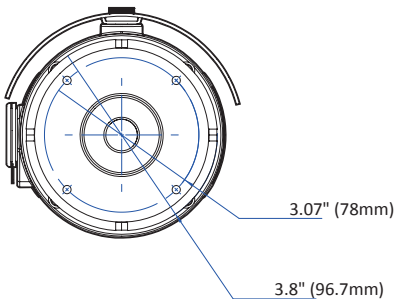
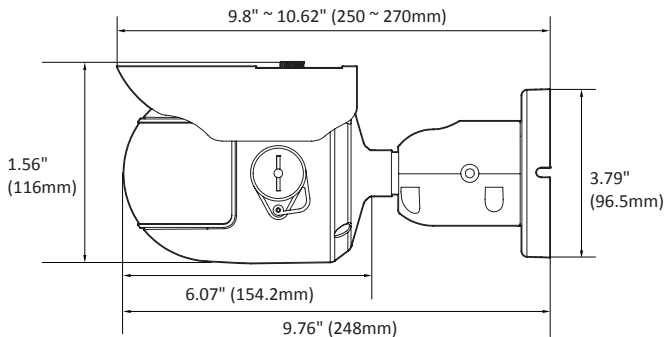
✳ NOTE : The 'test video cable' is used to test the camera by connecting to a portable display.

Part name



Dimension

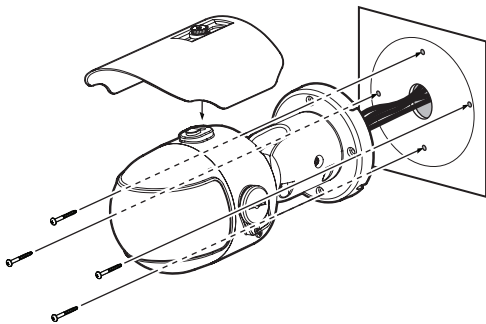
Unit: inches (mm)



Installation - Instructions

Before installing your camera, you have to read the following cautions.

1. You have to check whether the location can bear five times of the weight of your camera.
2. Don't let the cable to be caught in improper place or the electric line cover to be damaged. Otherwise it may cause a breakdown or fire.
3. When installing your camera, don't allow any person to approach the installation site.
If you have any valuable things under the place, move them away.



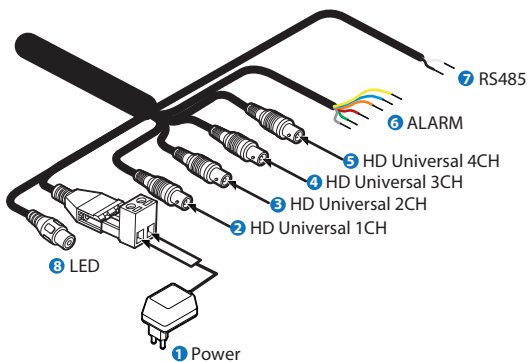
- 1 Using the Template sheet, make the cabling hole on the wall/ceiling.
- 2 Connect the cables respectively.
- 3 Fix the camera on the wall/ceiling by screw provided.
- 4 By using the test video cable, check the screen during installation.
- 5 Attach the sunshield to the bottom case by using sunshield screws.

⚠ **NOTE** : Loosen the Pan/Tile stoper screw a little before fixing the camera.

Installation - Cabling

Use the diagram below to connect the camera to external devices:

- 1 Power** : connect the camera to a proper power supply.
- 2 ~ 4 HD Universal BNC Outputs 1~3** : Connect each of the camera's lenses as a separate output to a DVR supporting HD Universal signal. On the DVR side, each lens will be set as a different channel.
- 5 HD Universal Output 4** : Connect all 3 of the camera's lenses as a single output to a DVR supporting HD Universal signal. On the DVR side, the camera's full panoramic view will appear on a single channel.



Installation - Cabling

Use the diagram below to connect the camera to external devices:

6 Alarm

1# DOUT +	ORANGE
1# DOUT -	RED
2# DOUT +	YELLOW
2# DOUT -	BLUE
3# DOUT +	GREEN
3# DOUT -	GRAY

7 RS485 : Connect the camera to a controller or the DVR using RS485.

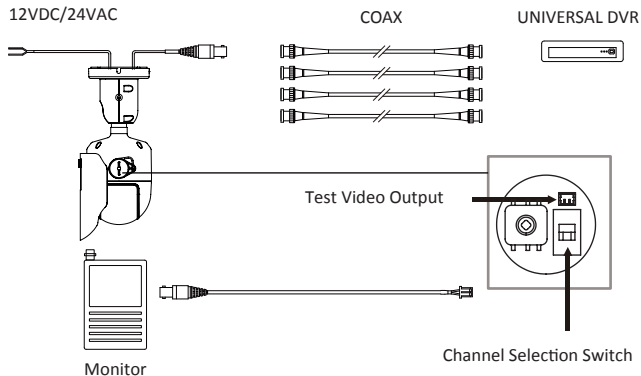
- 1) WHITE Cable : RS485 -
- 2) BLACK Cable : RS485 +

8 LED : Connect the camera to a IR Sunshield EX-LED Cable.

Set LED On/Off when connected to camera's LED cable.

Connecting to monitors

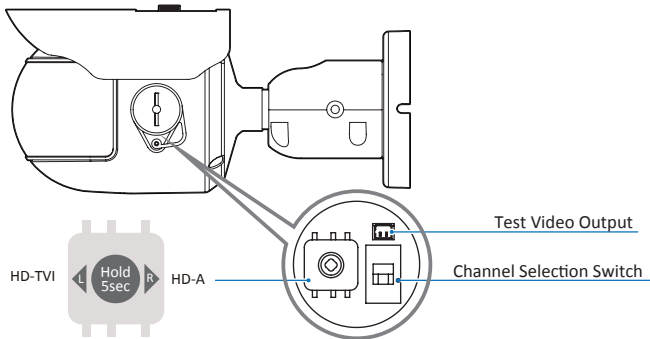
Use the diagram below to connect to a Monitor or CRT Monitor properly.



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

⚠ **NOTE :** Test Video Output will display video for 60 seconds.

Control Board



- OSD Joystick : The function setting and video output can be adjusted with OSD joystick. (default : HD-A)

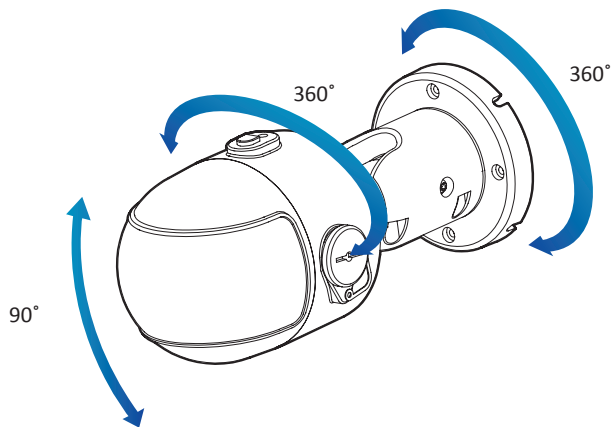
Image Mode

Switches to HD-TVI mode when press OSD Joystick to left 5sec or longer.

Switches to HD-A mode when press OSD Joystick to right 5sec or longer.

- Remove the con cap by rotating it counter-clockwise.
- Use the Joystick to control the camera's OSD options.

Adjusting the Camera angle



⚠ **Warning:**

- Do not rotate more than 360 °
- Do not unnecessarily twist too many times.

OSD Menu Tree



EXPOSURE

LENS	BRIGHTNESS / SHUTTER / FOCUS ADJ.
BACKLIGHT	OFF / HME / BLC / WDR
DRC	OFF / LOW / MIDDLE / HIGH
DEFOG	OFF / ON
AGC	0 ~ 10
STARLIGHT	OFF / x2 ~ x32
3D DNR	OFF / LOW / MIDDLE / HIGH
EXIT JUMP	SAVE & EXIT / EXIT



COLOR

WHITE BAL.	AUTO / AUTO-EX / PRESET / MANUAL
COLOR GAIN	0 ~ 20
EXIT JUMP	SAVE & EXIT / EXIT



DAY & NIGHT

MODE	AUTO / COLOR / BW
CDS THRES	0 ~ 20
CDS MARGIN	0 ~ 20
EXIT JUMP	SAVE & EXIT / EXIT



FUNCTION

SHARPNESS	0 ~ 10
EXIT JUMP	SAVE & EXIT / EXIT



MOTION

DET. WINDOWS	
SENSITIVITY	0 ~ 10
MOTION OSD	OFF / ON
TEXT ALARM	OFF / ON
EXIT JUMP	SAVE & EXIT / EXIT

OSD Menu Tree



PRIVACY

BOX	OFF / ON
POLYGON	OFF / ON
EXIT JUMP	SAVE & EXIT / EXIT



SETUP

CAM ID	1 ~ 250
CAM TITLE	OFF / ON
FREQUENCY	50Hz / 60Hz
LANGUAGE	ENG / CHN / CHN(S) / JPN
DEFECT DET	ON
INITIAL	ON
EXIT JUMP	SAVE & EXIT / EXIT



EXIT

SAVE & EXT	
EXIT	

4th BNC OUTPUT PANORAMIC OSD MENU

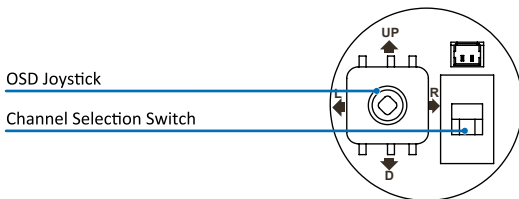
MOTION	OFF / ON
PATROL	OFF / ON
STITCH	FIX / CAM1+ / CAM2+ / CAM3+
EXIT	

How to access the Camera's OSD Menus

The camera has three separate sensors, each with its own OSD menu and settings. When adjusting the camera's settings, each lens/sensor will have their own set of values and settings and will be set separately.

In addition, the camera offers a 4 BNC output of a combined 180° view as a single camera output. This output has an additional Panoramic OSD menu with special settings including stitching and motion and patrol setup.

- 1 To access each sensor's OSD menus select one of the following options :
The camera has four (4) BNC outputs, each supporting UTC (Up the Coax) communication. When the camera is connected to a DVR supporting UTC communication, you can access the camera's OSD menu directly from the DVR.
- 2 The camera supports RS485 communication, allowing to control the camera remotely.
- 3 In the camera's external control board, there is a switch next to the joystick controller. The switch determines which of the three (3) sensor will be displayed in the test BNC output. When selected, the selected sensor's display will appear in the Test video out for 60 sec.

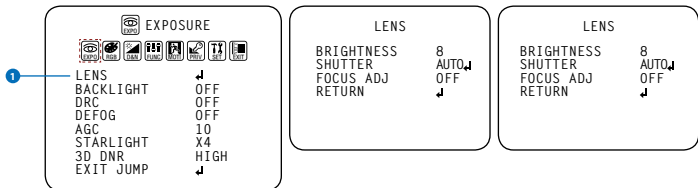


NOTE : Option 3 does not support access to the fourth Panoramic OSD menu. Please use UTC or RS485 cabling to access those options.

OSD Menu_Exposure

1 LENS

The camera's lens mode is set by default to AUTO. This allows the camera's iris automatically



Under the LENS sub-menu, you can adjust the following settings :

1. BRIGHTNESS

Adjust the camera's brightness from 0~20. The higher the number, the brighter the image will appear.

2. SHUTTER

Set the shutter speed to AUTO, Manual, or FLC (Flicker-less mode).

* If AUTO is selected, select from the following options :

- NORMAL : Set when the camera is installed in an indoor environment.
- DEBLUR : Set when the camera is installed in an outdoor environment.

* If Manual is selected, set the shutter speed from the options :

- 1/30, 1/60, 1/120 ~ 1/30000.

3. FOCUS ADJ (Focus Adjustment)

When on, the default level is set automatically by controlling lens focus and based on the installation and environment circumstances.

OSD Menu_Exposure

2 BACKLIGHT

OFF

HME (HIGHLIGHT MASKING EXPOSURE)

HME allows objects to appear clearly on the screen by masking extremely bright areas.

To setup HME, set the level and color.

The lower the setting, the darker the masking areas have to be.
Select from : 0 ~ 10.

Color : Set the color of the HME mask.

Select from : BLACK / WHITE / YELLOW / CYAN / GREEN /
MAGENTA / RED / BLUE

BLC (BACK LIGHT COMPENSATION)

If BLC is selected, adjust the size and position of the mask:

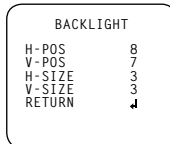
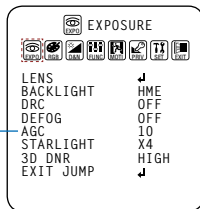
- H-POS : Move the Zone position left or right.
The higher the number, the zone will move to the right.
- V-POS : Move the Zone position up or down.
The higher the number, the zone will move down.
- H-Size : Reset the zone's size horizontally. The higher the number, the right side panel will move further to the right.
- V-Size : Reset the zone's size vertically. The higher the number, the bottom side panel will move further down.

WDR (Wide Dynamic Range)

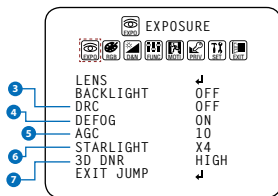
If WDR is selected, adjust the WDR level (Weight) in the sub-menu.

Select from Low, Middle, or High (Default).

- ⚙️ If WDR or DEFOG are enabled, the DRC settings are set automatically and will not be available for adjustment.



OSD Menu_Exposure



3 DRC (DYNAMIC RANGE COMPRESSOR)

DRC enables dark areas in images to become more visible without overexposing the bright areas to create one perfect image. Select from : OFF / ON

4 DEFOG

Allows the camera to process a scene that is obscured by fog or weather conditions and provides a visibly improved image. AUTO / Manual : Select AUTO to have the WDR and DRC levels adjusted automatically.

Set the DEFOG level from LOW / MIDDLE / HIGH.

5 AGC (AUTO GAIN CONTROL)

0 ~ 10

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.

6 STARLIGHT

OFF / x2 ~ x32 (Default : x4)

Automatically activates slow shutter function when the image is too dark. High values are not recommended as they may causes the image to lag. Starlight menu cannot be controlled if the SHUTTER setting is above 1/60.

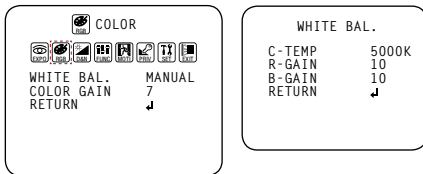
7 3D DNR (3D DIGITAL NOISE REDUCTION)

OFF / LOW / MIDDLE / HIGH

3D-DNR reduces the noise on the screen in low light conditions and allows for clearer images, even at night.

OSD Menu_Color

WB MODE



AUTO

Auto Tracking White Balance Control mode compensates for color temperature changes between 2400K° and 11000K°.

AUTO-EX

Auto White Balance Control mode compensates for color temperature changes lower than 2000K° and higher than 12000K°.

PRESET

Preset fixes the white balance based on the current lighting automatically.

MANUAL

Users can control the white balance manually by changing RED GAIN and BLUE GAIN. (see blow)

C-TEMP : Select the color temperature for the white balance setup.

If enabled, the Red and Blue Gain settings will be set automatically according to the C-TEMP selected.

Select from 3000K, 5000K, or 8000K. The default value is 5000K.

RED GAIN : 0 ~ 20. Adjusts the amount of red in the image.

The default value is 10.

BLUE GAIN : 0 ~ 20. Adjust the amount of blue in the image.

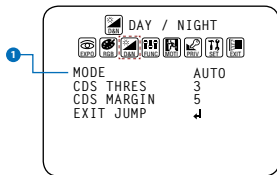
The default value is 10.

COLOR GAIN Set the color gain from 0~20. The default value is 7.

OSD Menu_Day & Night

Day & Night Setup menu is available on the 2nd sensor only. Setting adjusted in the 2nd sensor will be applied to the 1st and 3rd sensor.

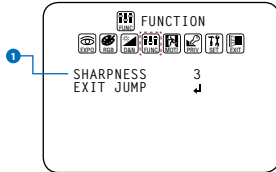
D&N MODE



1. MODE

- 1. **AUTO** : The camera will switch between color and B/W based on the AGC levels.
 - CDS Threshold : Marks the light level at which the camera will switch between color and B/W. The lower the value, the camera will require less light (more darkness) to switch to Night Mode.
 - CDS Margin : The value added to the CDS Threshold. Adjust this based on the environment in which the camera is installed. If the margin is too low, the camera will switch from color to B/W and back.
 - EXT. LED : If set to AUTO: the LEDs are enabled/ disabled by the CDS Sensor on the LED Board. If disabled, the camera's LEDs are disabled manually.
 - DELAY : Set the time interval delay before switching from day mode to night mode.
 - SMART IR : Enable Smart IR and set the level. Higher values will make Smart IR stronger.
- 2. **COLOR** : The camera will remain in COLOR mode regardless of the lighting environment.
- 3. **B/W** : The camera will remain in B/W mode regardless of the lighting environment.

OSD Menu_Function

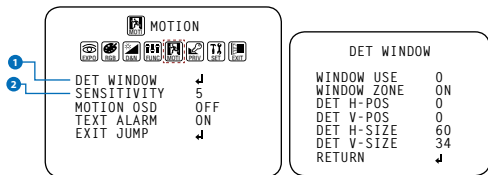


1 SHARPNESS

0 ~ 10 - Sets the image sharpness. The higher the number, the sharper the image.

OSD Menu_Motion

The camera can detect motion and display an alarm on the screen. Motion detection settings must be adjusted for each sensor.



1 DET WINDOW

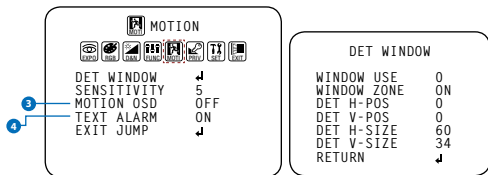
- WINDOW USE : Enable or disable the selected motion zone.
- WINDOW ZONE : Select a zone to setup from the 4 zones available.
- DET H-POS : Move the zone left or right.
The higher the number, the zone will move to the right.
- DET V-POS : Move the zone up or down.
The higher the number, the zone will move down.
- DET H-SIZE : Adjust the zone's size horizontally.
The higher the number, the right side panel will move further to the right.
- DET V-SIZE : Adjust the zone's size vertically.
The higher the number, the bottom side panel will move further down.

2 SENSITIVITY

The smaller the movement you want to detect, the higher the sensitivity value must be.

OSD Menu_Motion

The camera can detect motion and display an alarm on the screen. Motion detection settings must be adjusted for each sensor.



3 MOTION OSD

If enabled, the text MOTION ZONE will appear on the screen indicating the area of motion detection.

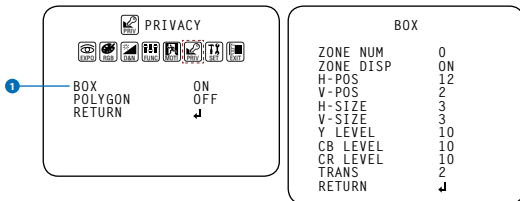
4 TEXT ALARM

Setup a text to appear on the screen when motion is detected explaining the alarm situation.

- WINDOW MOTION: Will appear when a motion alarm is detected.
- CAMERA MOVING : Will appear if the camera is shaken abruptly.
- BRIGHT CHANGE : Will appear if the brightness in the scene changes suddenly and drastically.

OSD Menu_Privacy

You can hide some parts of the screen for privacy masking. A total of 24 different privacy masking zones are available, including 16 square zones and 8 polygon shaped zones.

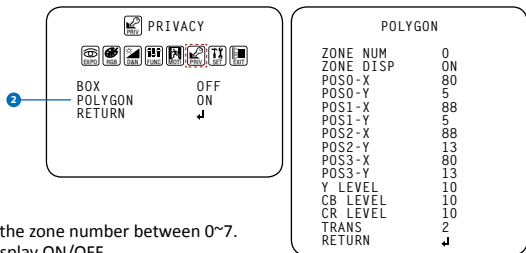


1 BOX

- ZONE NUM : Select the zone number between 0~15.
 - ZONE DISP : Zone display ON/OFF
 - H-POS : Move the Zone position Left or right.
The higher the number, the zone will move to the right.
 - V-POS : Move the Zone position up or down.
The higher the number, the zone will move down.
 - H-SIZE : Reset the zone's size horizontally.
The higher the number, the right side panel will move further to the right.
 - V-SIZE : Reset the zone's size vertically.
The higher the number, the bottom side panel will move further down.
 - Y-LEVEL : The higher the number, the brighter the color will appear.
 - CR-LEVEL : The higher the number, the more red tone will be added to the zone's color.
The lower the number, the more green will be added to the zone's color.
 - CB-LEVEL : The higher the number, the more red tone will be added to the zone's color.
The lower the number, the more red will be added to the zone's color.
- * High CB Level + High CR Level = Pink
* High CB Level + Low CR Level = Sky Blue
* Low CB Level + High CR Level = Orange
- TRANSPARENCY : Set the mask's transparency level from 0~3. The default value is 2.

OSD Menu_Privacy

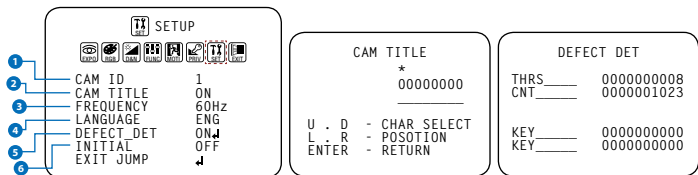
You can hide some parts of the screen for privacy masking. A total of 24 different privacy masking zones are available, including 16 square zones and 8 polygon shaped zones.



2 POLYGON

- ZONE NUM : Select the zone number between 0~7.
- ZONE DISP : Zone display ON/OFF.
- POS0-X : Move the mask's upper left angle left to right.
- POS0-Y : Move the mask's upper left angle up and down.
- POS1-X : Move the mask's upper right angle left to right.
- POS1-Y : Move the mask's upper right angle up and down.
- POS2-X : Move the mask's lower right angle left to right.
- POS2-Y : Move the mask's lower right angle up and down.
- POS3-X : Move the mask's lower left angle left to right.
- POS3-Y : Move the mask's lower left angle up and down.
- Y LEVEL : The higher the number, the brighter the color will appear.
- CR LEVEL : The higher the number, the more red tone will added to the zone's color.
The lower the number, the more green will be added to the zone's color.
- CB LEVEL : The higher the number, the more red tone will be added to the zone's color.
The lower the number, the more red will be added to the zone's color.
- * High CB Level + High CR Level = Pink
- * High CB Level + Low CR Level = Sky Blue
- * Low CB Level + High CR Level = Orange
- TRANSPARENCY : Set the mask's transparency level from 0~3. The default value is 2.

OSD Menu_Setup



1 CAM ID

CAM ID helps to control each camera OSD by external UTC or RS485 communication. The CAM ID can be reset from 1 to 250 from the default value. When resetting, it should be set so that it does not overlap with other cameras, and when it is set to duplicate, it becomes impossible to control the camera. OSD Joystick can be used to set the OSD of camera # 1 / camera # 2 / camera # 3 OSD setting of camera # 4 is available only in UTC / RS485 communication. UTC communication / RS485 communication becomes OSD setting disabled after CAM ID is duplicated, and it can be set with OSD Joystick.

2 CAM TITLE

Add a name to the camera. Set the title by using the OSD joystick.

3 FREQUENCY

When the camera's image has flickering issues, change the frequency value to adjust the image. Frequency setup menu is available on the 1st sensor only. Settings adjusted in the 1st sensor will be applied to the other sensor accordingly.

4 LANGUAGE

Select from the following : English (Default), Chinese, Chinese (S) and Japanese.

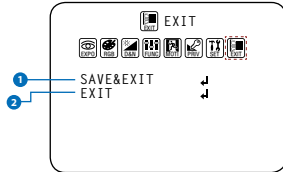
5 DEFECT DET

The camera can detect and correct dead pixels in the image. Press the select button and set the threshold level. The camera will detect and adjust the pixels automatically.

6 INITIAL

Reset the camera to its default settings. Press and hold the select button for five (5) seconds.

OSD Menu_Exit



1 SAVE & EXIT

Exit the OSD menu after saving the recent changes.

2 EXIT

Exit the OSD menu without saving any changes.

4th BNC Output Panoramic OSD Menu

The function setting can be adjusted with remote control through RS485 or UTC.

MENU		
MOTION	:	ON
PATROL	:	OFF
STITCH	:	FIX
EXPOSE	:	SEPARATE
CAM_ID	:	4
EXIT		
CAM1	CAM2	CAM3

MENU		
MOTION	:	OFF
PATROL	:	SLOW
STITCH	:	FIX
EXPOSE	:	SEPARATE
CAM_ID	:	4
EXIT		
CAM1	CAM2	CAM3

1 MOTION

When enabled, the camera will focus into the sensor's display where motion is detected. This feature is available only in the 4th BNC output, when the camera's image is displayed as a 180° view as a single camera output. The focused area will be shown in the top screen above the panoramic camera view. This motion alarm is not related to the individual channel motion setup. To enable, change the value to ON.

2 PATROL

When enabled, a white frame will appear in the panoramic image, moving from left to right. The frame's view will be displayed in the top screen above the panoramic camera view. This feature is available only in the 4th BNC output, when the camera's image is displayed as a 180° view as a single camera output. OFF / SLOW / FAST

ⓘ If MOTION and PATROL are both enabled, the camera will zoom into a motion area and track motion across the camera's view. Once no motion is detected after ten (10) seconds, the camera will return to PATROL mode.

4th BNC Output Panoramic OSD Menu

MENU		
MOTION	:	OFF
PATROL	:	OFF
STITCH	↓	CAM1
EXPOSE	:	SEPARATE
CAM_ID	:	4
EXIT	↓	

CAM1	CAM2	CAM3

Stitching adjustment on CAM1

MENU		
MOTION	:	OFF
PATROL	:	OFF
STITCH	↓	CAM2
EXPOSE	:	SEPARATE
CAM_ID	:	4
EXIT	↓	

CAM1	CAM2	CAM3

Stitching adjustment on CAM2

MENU		
MOTION	:	OFF
PATROL	:	OFF
STITCH	↓	CAM3
EXPOSE	:	CENTER
CAM_ID	:	4
EXIT	↓	

CAM1	CAM2	CAM3

Stitching adjustment on CAM3

MENU		
MOTION	:	OFF
PATROL	:	OFF
STITCH	↓	FIX
EXPOSE	:	CENTER
CAM_ID	:	4
EXIT	↓	

CAM1	CAM2	CAM3

FIX Changes

3 STITCH

Use this menu to adjust the stitching between each of the cameras as needed. You can adjust each individual camera's position by selecting the camera name and move the image up, down, left and right to align with the camera next to it. Once the individual cameras' position is properly adjusted, select FIX and exit the STITCH menu to save the stitching changes. It is not recommended to manually adjust the camera's stitching. The camera's stitching is pre-set in the factory settings.

4 EXPOSE

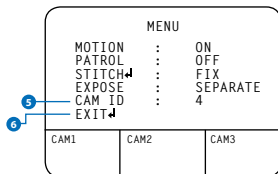
You can select whether camera # 1 / camera # 2 / camera # 3 controls each IRIS in each camera or channel 2 in channel 4 panorama image (bottom image).

EXPOSE_SEPARATE: Camera # 1 / Camera # 2 / Camera # 3 control IRIS respectively (each channel controls IRIS)

EXPOSE_CENTER: Control IRIS control of camera # 1 / camera # 3 with camera # 2 (camera 2 controls camera # 1 / camera # 3 as well)

4th BNC Output Panoramic OSD Menu

The function setting can be adjusted with remote control through RS485 or UTC.



5 CAM ID

CAM ID helps to control each camera OSD by external UTC or RS485 communication. The CAM ID can be reset from 1 to 250 from the default value. When resetting, it should be set so that it does not overlap with other cameras, and when it is set to duplicate, it becomes impossible to control the camera. OSD Joystick can be used to set the OSD of camera # 1 / camera # 2 / camera # 3 OSD setting of camera # 4 is available only in UTC / RS485 communication. UTC communication / RS485 communication becomes OSD setting disabled after CAM ID is duplicated, and it can be set with OSD Joystick.

6 EXIT

When all setup is complete, press the EXIT to save all changes and exit the menu.

Troubleshooting

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

Check OSD Joystick switch inside the camera's housing and confirm the switch's position matches the signal connection type. See page 16, HD-TVI / HD-A switching mode.

FOR OUT-OF-FOCUS VIDEO

Check the Front case cover and the lens for dirt or fingerprints.

Use a soft cloth and gently clean.

The use of a field test monitor is recommended.

Specifications

VIDEO	
Image Sensor	1/2.86" CMOS Sensors x 3
Active Pixels	1944(H) x 1212(V) x 3
Scanning System	Progressive scan
Frequency	60Hz / 50Hz
Signal Technology	6.0 Megapixel Universal (3x2MP Sensors)
Synchronization	Internal
Resolution	6.0 Megapixel (3x 1920x1080 Sensors)
Minimum Scene Illumination	F2.0 (30IRE): 0.06 Lux (Color)
	F2.0 (30IRE): 0 Lux (B&W)
Video Output	Universal 6MP (1080p 30fps x 3) 4ch / 180° Panoramic view
LENS	
Focal Length & Lens Type	4.3mm, Fixed Lens
OPERATIONAL	
Alarm Output	3 Alarm Output
Shutter Speed	1/30(25) - 1/30,000
Backlight	OFF/HME/BLC/WDR
Starlight	OFF, x2 - x32
Wide Dynamic Range(WDR)	LOW/MIDDLE/HIGH
Digital Noise Reduction	OFF/LOW/MIDDLE/HIGH
White Balance	AUTO/AUTO-EX/PRESET/MANUAL

Specifications

OPERATIONAL (CONT.)		
Day and Night		AUTO / COLOR / BW
Auto Gain Control		0 ~ 10
Motion Detection		ON/OFF (4 Zones per Camera, Total 12 Motion Zone)
Privacy Zones		ON/OFF (Box : 16 Zones, Polygon : 8 Zones, Total 72 Privacy Masks)
Remote Control		RS485 / UTC
ENVIRONMENTAL		
Operating Temperature		-20°C ~ 50°C (-4°F ~ 122°F)
Operating Humidity		No more than 90% (Non-Condensing)
IP Rating		IP66
Other Certifications		FCC, CE, ROHS
ELECTRICAL		
Power Requirements		DC12V / AC24V Dual Voltage
Power Consumption	DC12V	7.5W
	AC24V	7.5W
MECHANICAL		
Housing Material and Dimensions		Aluminum, 252.5 x 116mm (9.94 x 3.23Ø in)
Weight		3.08 lbs

MEMO*



Complete Surveillance Solutions

East Coast Headquarters Office: 5436 W Crenshaw St, Tampa, FL 33634

West Coast Headquarters Office: 16220 Bloomfield Ave., Cerritos, CA 90703

PH: 866-446-35951 FAX: 813-888-9262

www.Digital-Watchdog.com Technical Support:

USA & Canada +1 (904) 999-1309

International 1+ (813) 888-9555

French Canadian 1+ (514) 360-1309

Support Hours: Monday-Friday 9:00am to 8:00pm EST