Analog Camera User's Manual

AD-960H & D-960H

Important Safeguards and Warnings

1．Electrical safety

All installation and operation here should conform to your local electrical safety codes.
The power shall conform to the requirement in the SELV (Safety Extra Low Voltage) and the Limited power source is rated 12V DC (24V AC) in the IEC60950-1.
We assume no liability or responsibility for all the fires or electrical shock caused by improper handling or installation.

2．Transportation security

Heavy stress, violent vibration or water splash are not allowed during transportation, storage and installation.

3．Installation

Do not apply power to the camera before completing installation.
Please install the proper power cut-off device during the installation connection.
Always follow the instruction guide the manufacturer recommended.
If this product is installed in the ceiling, please make sure the installation position can sustain the min 50N.

4．Qualified engineers needed

All the examination and repair work should be done by the qualified service engineers.
We are not liable for any problems caused by unauthorized modifications or attempted repair.

5．Environment

This series camera should be installed in a cool, dry place away from direct sunlight or strong light, inflammable, explosive substances and etc.

The working temperature ranges from -10℃ ~ to +60℃. Please keep it away from the electromagnetic radiation object and environment.
Please keep the sound ventilation.
Do not allow the water and other liquid falling into the camera.

6. Accessories

Be sure to use all the accessories recommended by manufacturer.
Before installation, please open the package and check all the components are included.
Contact your local retailer ASAP if something is broken in your package.

7. Daily Maintenance

Please shut down the device and then unplug the power cable before you begin daily maintenance work.
Use the dry soft cloth to clean the device.
If there is too much dust, please use the water to dilute the mild detergent first and then use it to clean the device. Finally use the dry cloth to clean the device.
Please put the dustproof cap to protect the CCD (CMOS) component when you do not use the camera.

1 General Introduction

1.1 Overview

This series analog camera adopts the high sensitivity CCD and advanced circuit design. It is featuring the high quality video, the lowest distortion, low noise and etc. This series product is suitable to be used in surveillance system and video process system.

1.2 Features

- High-performance SONY CCD, high resolution, vivid and impressive video
- Support auto day/night mode switch to realize the monitor both in the daytime and at night.
- Support backlight compensation function (BLC)
- Support auto white balance function. Restore high definition and more reliable video
- High signal to noise ratio (SNR), clear and impressive video,
- The auto electronic shutter is suitable for various surveillance environments.
- Support auto electronic gain control, self-adaptive brightness.
- Auto exposure function
- Support IR function (For IR series product only)
- Advanced X-Y-Z axis structure, support the 355 degrees rotation.(For dome camera series product only)

1.3 Functions

Day/night mode (Color and black/white switch)

This function allows the camera to display the color video in the daytime while the black and white video at the night. It is to enhance camera sensitivity and definition.

ICR

The IR cut removal is to filter the IR light in the daytime and then auto switch to the general fitter at night. This function allows the camera to output the high sensitivity and clear video.

Auto gain function

To output the standard video signal in the different illumination environments, the amplifier needs to adjust in a wide range. The system can enhance the camera sensitivity in low illumination and enhance the video signal output to get the clear and high definition video.

SNR

It is the ratio value between the signal voltage and the noise voltage. The higher the SNR value, the lower the adverse effect. It is to guarantee the clear video.

Auto White Balance

The white balance refers to the camera to restore the white object color. It allows the camera to automatically adjust the color temperature in indoor and outdoor environment, just like our human eyes does.

Auto exposure
System can automatically set shutter speed and iris value according to the snapshot video exposure condition.

Auto electronic shutter
The system can automatically adjust the electronic shutter when the environment light changes.

Waterproof
This series construction shell waterproof level reaches the considerable requirement. It can be installed in the outdoor environment without other protection component.

IR night vision (for the IR series product only)
In the night vision condition, this series product can use the IR light to allow you to see the object or realize the monitor in the low illumination environment.

1.4 Specifications

1.4.1 Mini Dome and Vandal Proof Dome

Please refer to the following sheet for specification.

Model Parameter	Mini Dome Camera	Vandal Proof Dome Camera
	D-960H	AD-960H
Video Processor	1/3" SONY EXview HAD II CCD	
Video Format	PAL/NTSC	
Effective Pixel	PAL: 976 (H) ×582 (V) NTSC: 976 (H) ×494 (V)	PAL: 976 (H) ×582 (V) NTSC: 976 (H) ×494 (V)
Resolution (PAL)	960x576	
Min Illumination	Color:0.1Lux/F1.2	Color: 0.05lux/F1.4
Electronic Shutter	PAL Auto: 1/50s~1/100,000s Manual: 1/50s,1/120s,1/250s,1/500,1/1000s,1/2000s, 1/4000s,1/10,000s	
	NTSC Auto: 1/60s~1/100,000s Manual: 1/60s,1/100s,1/250s,1/500,1/1000s,1/2000s, 1/4000s,1/10,000s	
Lens Type	Default model is 3.6mm. (2.8mm/6mm/8mm is optional)	Default model isφ14 port auto aperture lens 2.8 ~ 12mm, Support ICR lens

Day/Night Switch		Auto	
Synchronization Mode		INT	
Video Output		1Vp-p Composite Output (75 Ohm/BNC)	
SNR		Above 60 dB(AGC OFF)	
White Balance		Auto	
Gain Control		Auto	
BLC		Auto	
OSD Menu Control		Support	
OSD	**LENS**	Manual	DC
	SHUTTER/AGC	Auto/Manual	
	BACKLIGHT (BLC)	Off/BLC/HLC(High light compensation)	
	WHITE BALANCE	ATW/ ANTI CR /manual/push lock/push/user 1/user 2	
	DAY/NIGHT MODE	Auto/external trigger/black and white/color	
	PICTURE ADJUST	Mirror/brightness/contrast/sharpness/hue/gain	
	ATR	Off/luminance/contrast	
	MOTION DETECT	Detect sensitivity/block display/area selection	
	PRIVACY MASK	Area selection/color/transparent/mosaic	
	NR	Level/Y level/C level	
	Camera ID	Character/position	
	Language	English/Japanese and etc	
Working Temperature		-30℃~60℃	
Power		DC12V±10%	DC12V±10% (-A) series product support AC24V±10%/DC12V±10%.
Power Consumption		3W MAX	
Dimension(mm)		φ105×86.3	φ160×118.5
Weight		350g	1000g

2 Framework

2.1 Dimensions

Please note all the units in the following figures are mm.

2.1.1 Mini Dome Camera D-960H

Please refer to the following two figures for the dimension information. See Figure 2-1.

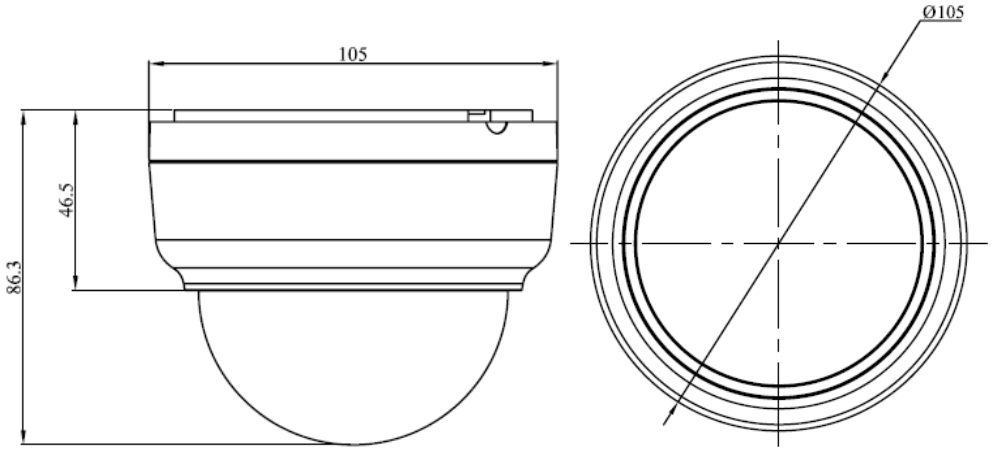

Figure 2-1

Figure 2-2

Figure 2-3

2.1.2 Day/Night High Resolution Dome Camera AD-960H

Please refer to the following figures for detailed information. See Figure 2-4.

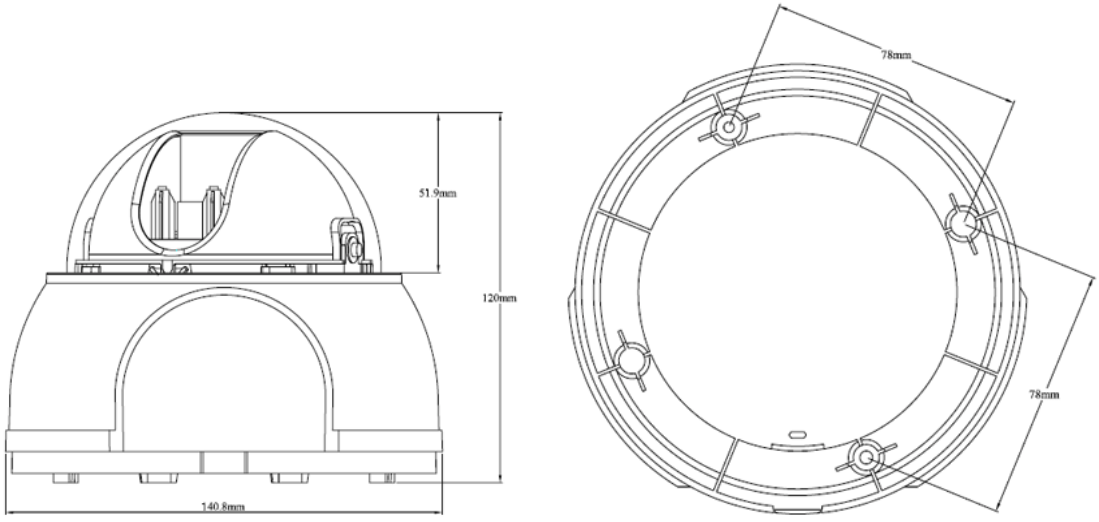

Figure 2-4

2.2 Structure

2.2.1 Mini Dome D-960H

Please refer to the following figure for detailed information. See Figure 2-5.

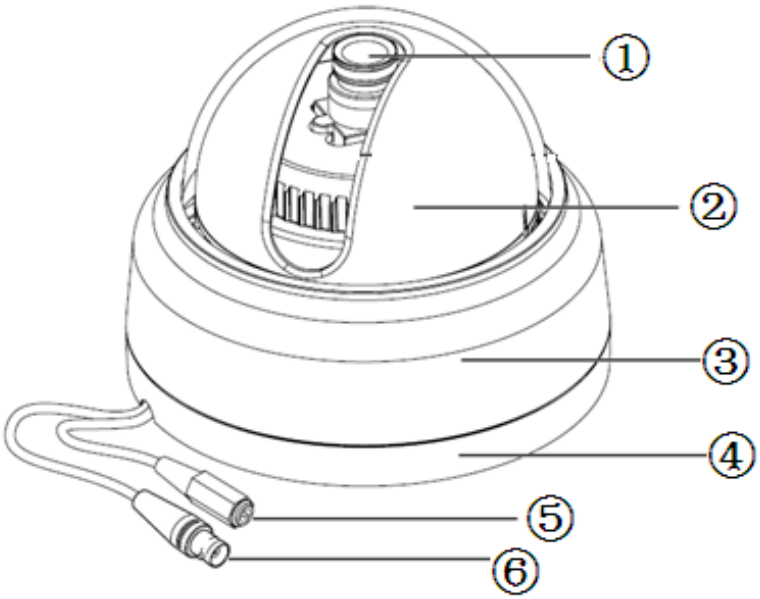

Figure 2-5

2.2.2 Dome Camera

Please refer to the following figure for detailed information. See Figure 2-6.

Figure 2-6

SN	Name	
1	Device lens	N/A
2	Dome camera enclosure	N/A
3	Dome camera side enclosure	N/A
4	Dome camera pedestal	For the dome camera (Figure 2-6), please turn the device upside down to see the pedestal.
5	Power input port	Connect to the DC 12V power to input the power.
6	Video output port	BNC port is to output analog video signal. You can connect to the devices such as the DVR or the NVR
7	Photosensitive component	It is to control the IR light on/off status according to the environment illumination.
8	IR light	It is to send out the IR compensation light to enhance the night vision.

Important

For the dome camera, there are two cable exits, one is at the bottom and one is at the side.

Please use the rubber dustproof plug to secure the idle exit.

The power cable and the video output cable both pull through the cable exit.

Figure 2-7

2.2.3 Day/Night High Resolution Dome Camera AD-960H

Please refer to the following figure for detailed information. See Figure 2-8.

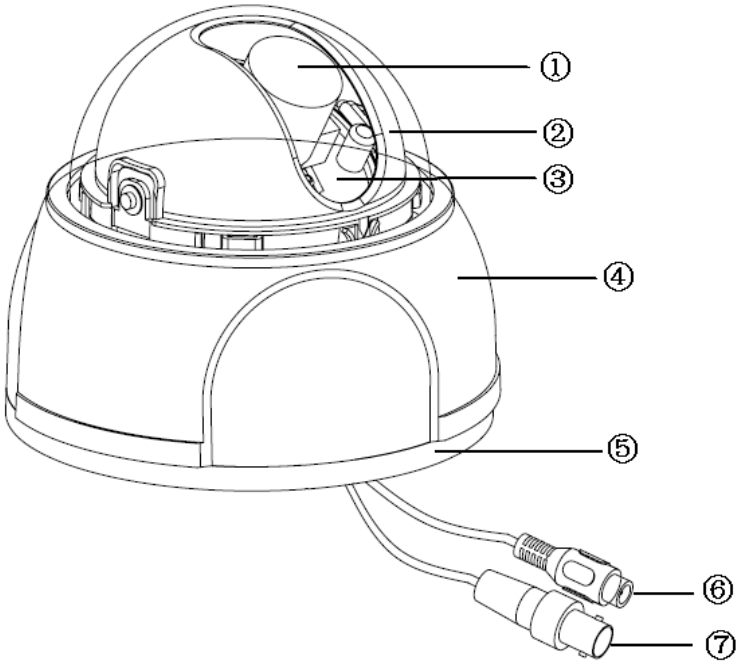

Figure 2-8

Please refer to the following sheet for detailed information.

SN	Name	
1	Device lens	
2	Dome camera inside enclosure	
3	X-Y-Z rotation module	
4	Dome camera enclosure	
5	Installation pedestal	
6	Power input port	Connect to the DC 12+ power to input the power.
7	Power output port	BNC port. It is to output analog video signal. You can connect to the devices such as the DVR or the NVR

3 Installation

3.1 Dome Camera

The dome camera usually mainly uses the in-ceiling installation. Here we take the IR vandal proof dome camera as an example. For other series dome camera, please refer to the similar installation steps too.

Important

Please make sure the installation surface can min support the 3X weight of the camera and the bracket.

3.1.1 Mini and Dome Camera Installation

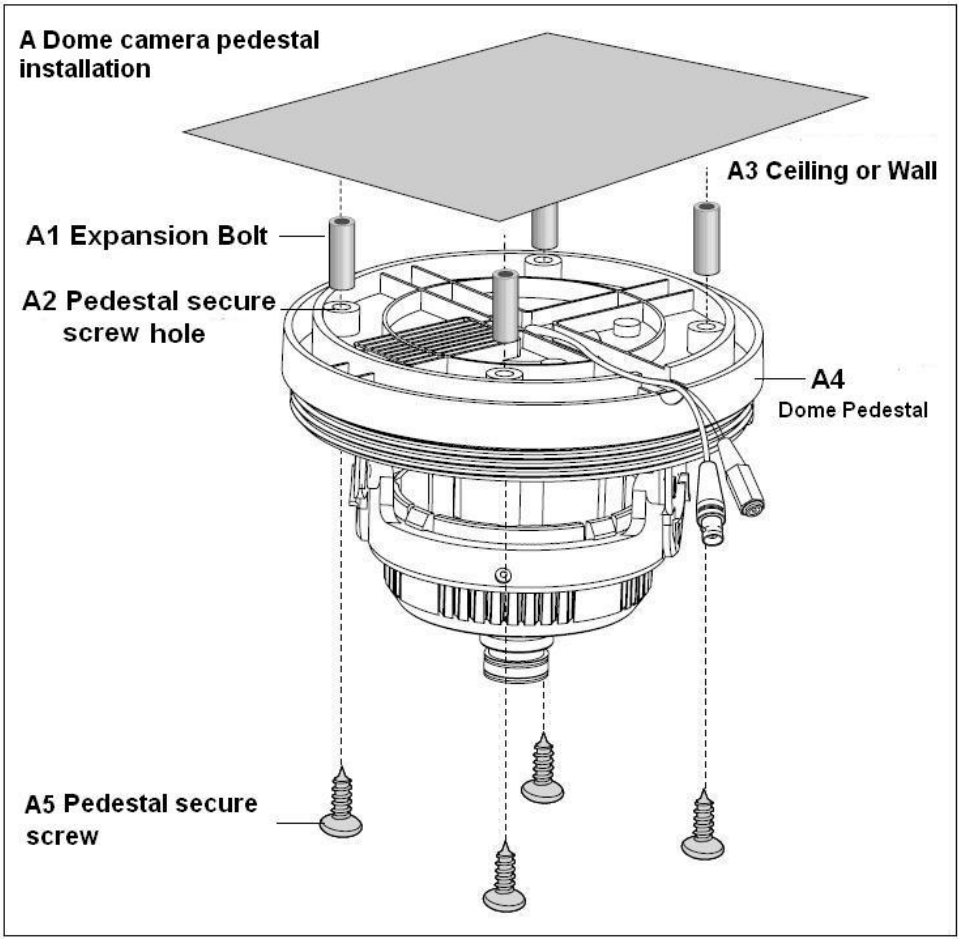

Figure 3-1

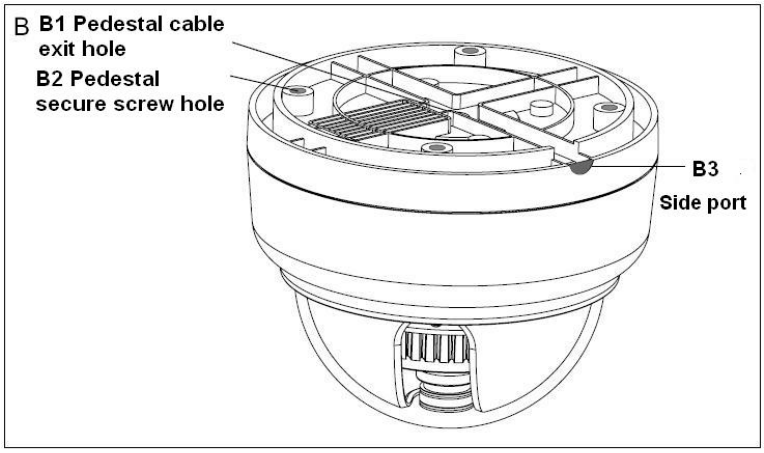

Figure 3-2

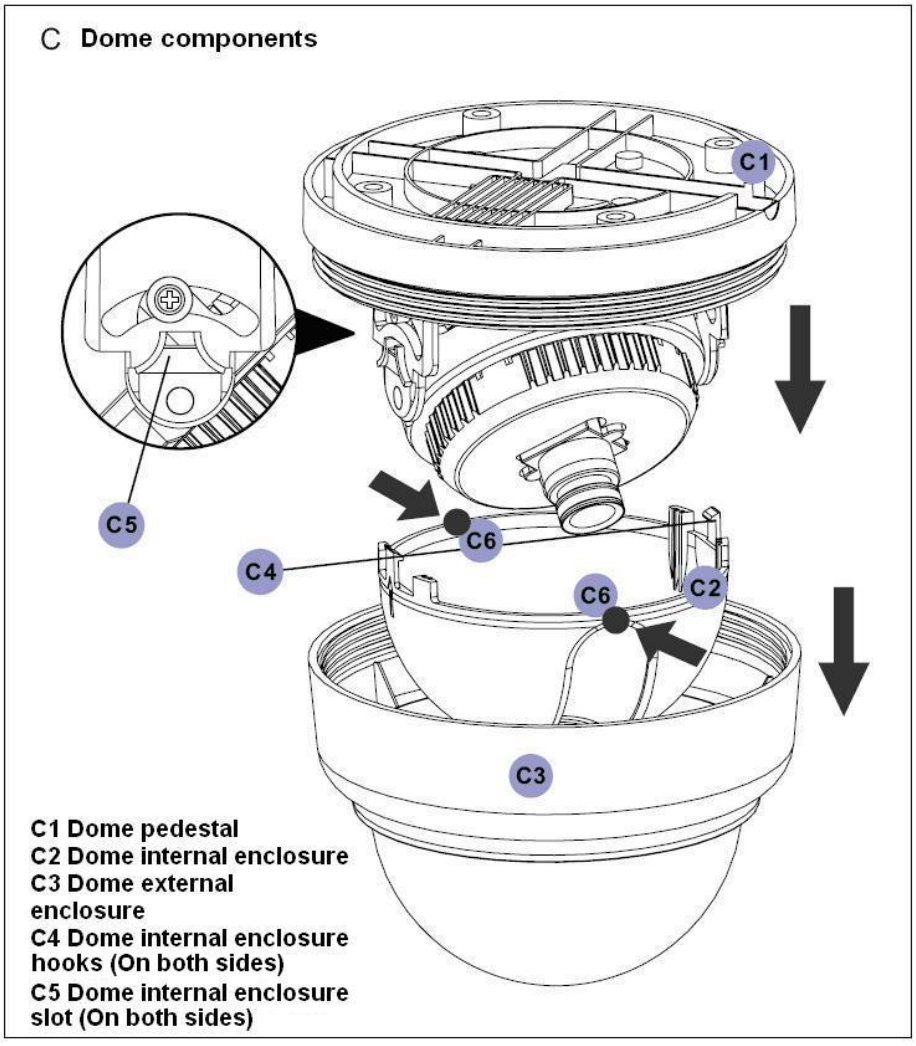

Figure 3-3

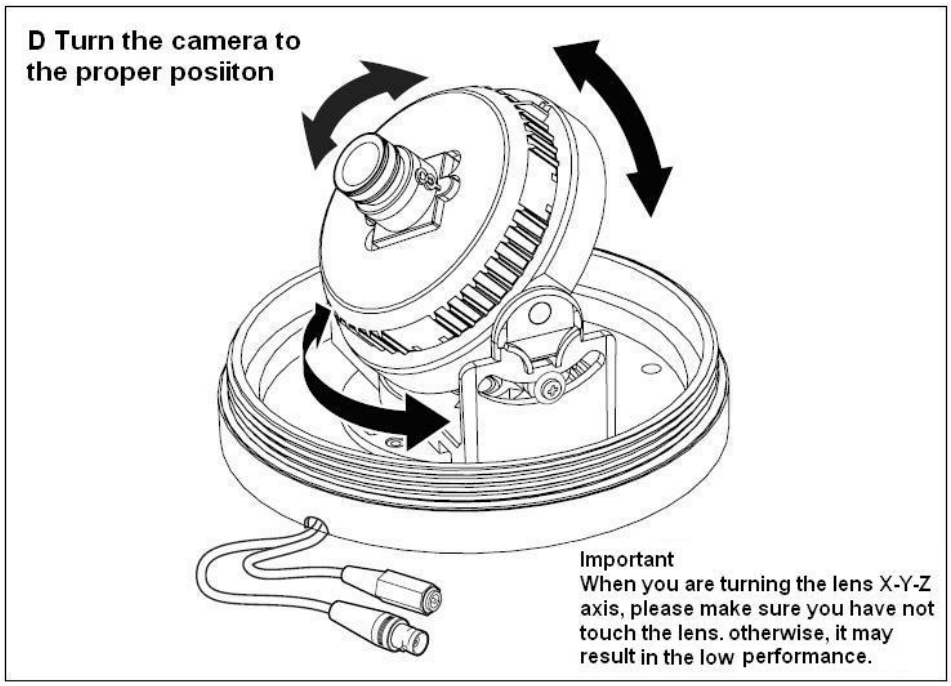

Figure 3-4

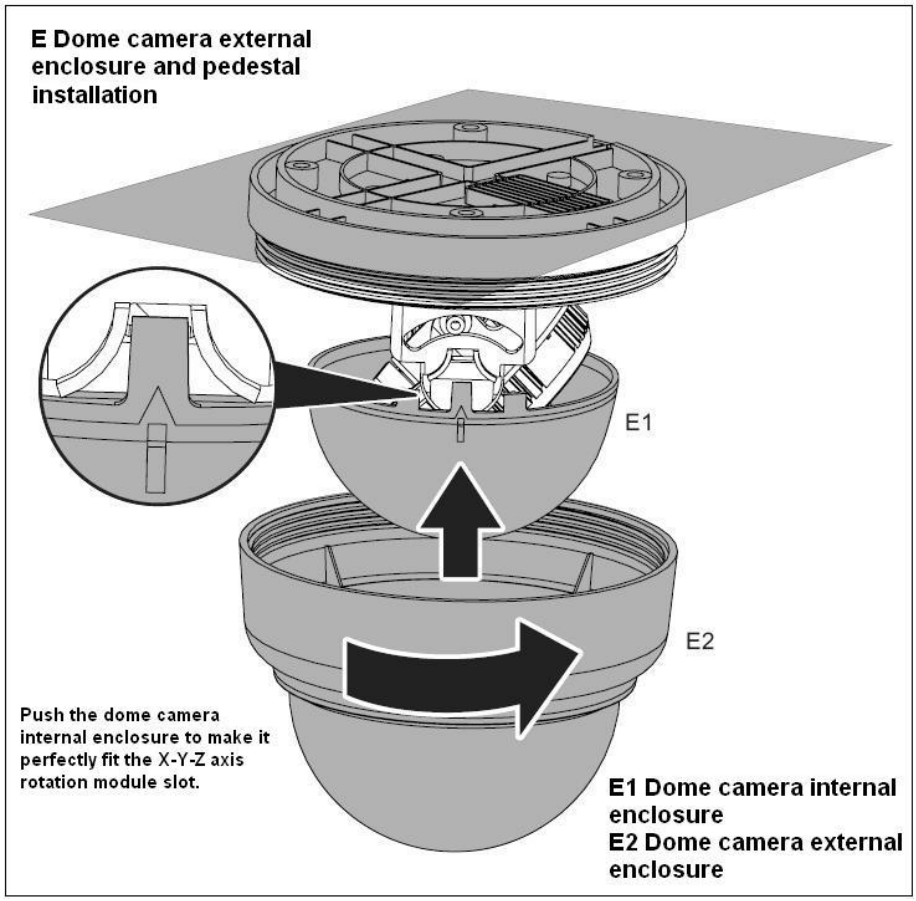

Figure 3-5

Step1

Please take the installation position map in the accessories bag, and then paste it on the ceiling or the wall you want to install the dome camera. Dig four holes in the installation surface and then insert four expansion bolts in the hole. Secure these four bolts firmly.

Step 2

Turn the dome camera external enclosure counter clockwise and the remove. Push the two sides of the dome camera internal enclosure (Please refer to C6 in Figure 3-3) so that the hook drops from the X-Y-Z axis module. Remove the dome camera internal enclosure. Please refer to Figure 3-3.

Step 3

Use the proper tool to open the cable exit side hole in the pedestal (Please refer to B2 in Figure 3-2), and then draw the cable from the cable exit (Please refer to B2 in Figure 3-2) and fix the cable in the pedestal cable channel. Draw the cable port out of the cable channel side hole of the pedestal (Please refer to the B2 in Figure 3-2).

Step 4

Line up the four screw holes in the pedestal to the holes you just dug in the ceiling (wall), then input the four secure screws in the pedestal screw secure holes. Fix the screws firmly to secure the dome camera in the ceiling (wall).

Step 5

Turn the lens or the ring to adjust the camera to the proper direction. Adjust the X-Y-Z axis to turn the camera lens to the proper monitor angle. Please refer to the Figure 3-4.

Step 6

Push the hooks (Please refer to C4 in Figure 3-3) of two sides of the internal enclosure to the slot (Please refer to C5 in Figure 3-3) of the X-Y-Z axis to make the internal enclosure perfectly fit the X-Y-Z axis. After the installation, please make sure the lens port of the internal enclosure is fit the camera lens. Please refer to Figure 3-5 for proper adjustment if necessary.

Step 7

Turn dome camera enclosure clockwise to fasten it on the pedestal.

Step 8

Connect the device video output port to the terminal devices such as the DVR, NVS and etc. Then connect the power cable to the device.

Now you have completed the dome camera installation and cable connection.
You can use the terminal devices such as the DVR, NVS and etc to view the monitor video.

3.1.2 Vandal Proof and Day/Night High Resolution Dome Camera Installation

Please note the following figures are based on the vandal proof dome camera.

Step 1

Use the inner hexagonal wrench (provided) to loose the three inner hexagon screws in the dome cover and then open the cover. See Figure 3-6.

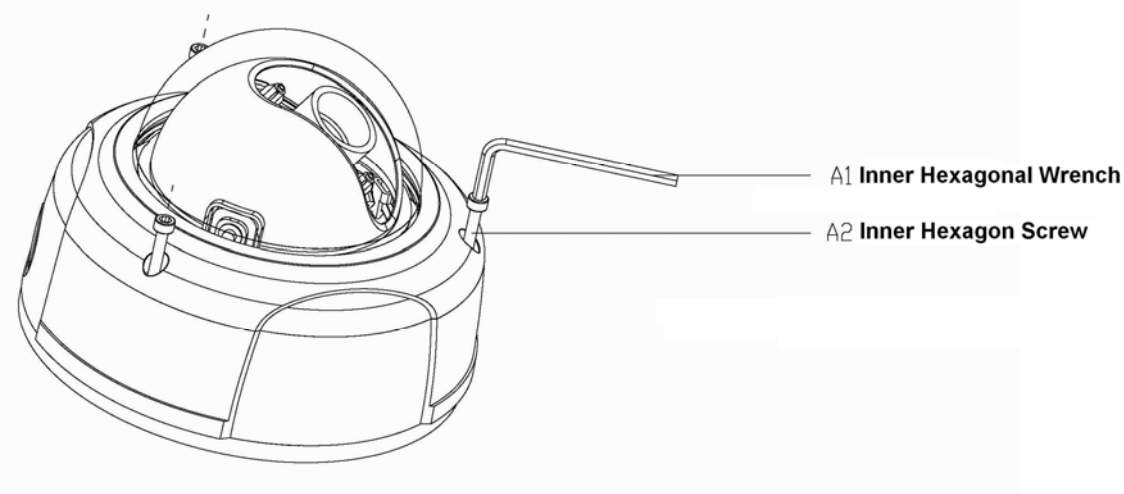

Figure 3-6

Step 2

Use the inner hexagonal wrench (provided) to loose the three inner hexagon screws in the dome and then remove the device installation pedestal. See Figure 3-7.

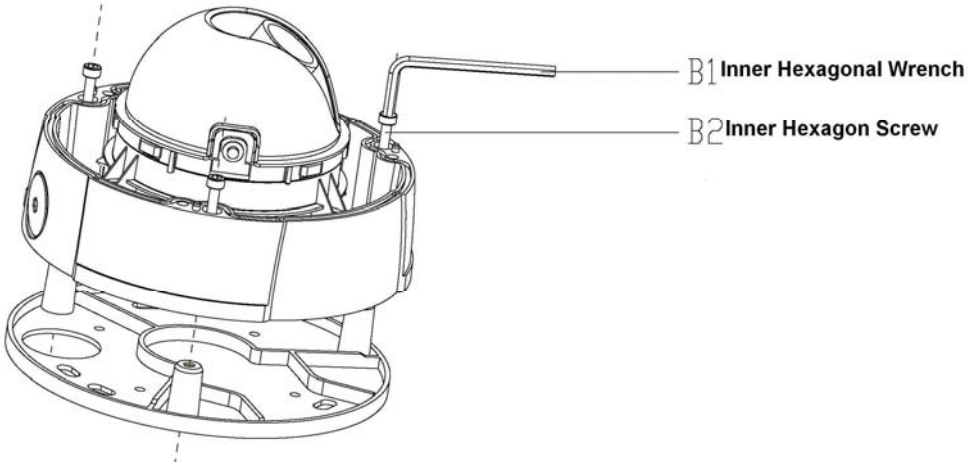

Figure 3-7

Step 3

Take out the installation positioning map from the accessories bag and then paste it on the ceiling or the wall to identify the installation area. Draw out the cable exit and four plastic expansion bolt holes in the installation position according to the device pedestal. Dig the four plastic expansion bolt holes and cable exit. Insert the four plastic expansion bolts into the screw holes

Step 4

Adjust the device installation pedestal to the proper position and then draw the cable through the cable exit you just dug in the ceiling (wall). Line up the four screw holes in the device pedestal to the four plastic expansion bolt holes in the installation position. Put the four self-tapping screws in the four plastic expansion bolts firmly.

Step 5

Adjust the device position and then line up the three inner hexagon screws of the device to the three holes in the installation ceiling (wall). Put the three inner hexagon screws to the screw holes of the device pedestal and then use the inner hexagonal wrench to secure firmly.

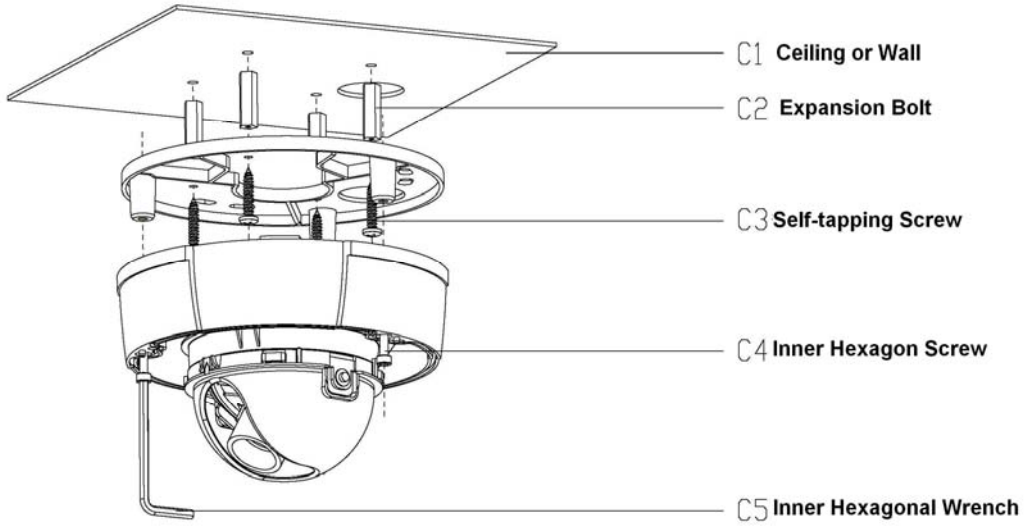

Figure 3-8

Step 6

Push the two sides of the inside enclosure of the dome to remove the tab (D2). Loose the fixed screws (D4) and then turn the X-Y-Z rotation module (D3) to adjust the camera lens to the proper monitor angle. See Figure 3-9.

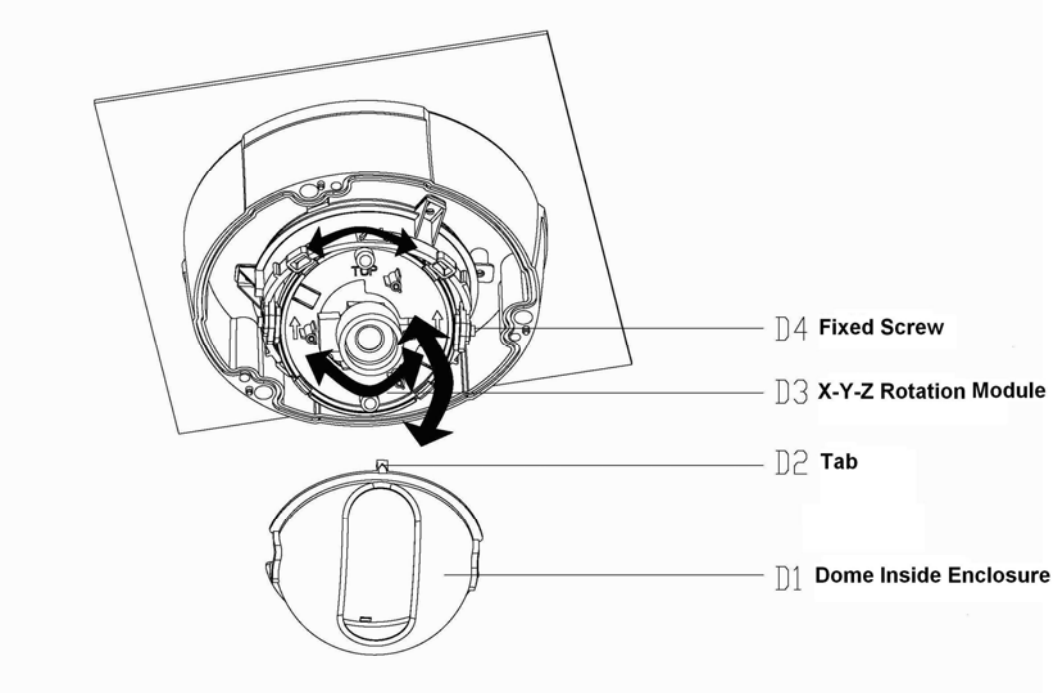

Figure 3-9

Step 7

Put the done inside enclosure back and then put the dome cover back. Line up the three inner hexagon screws to the holes of the device. Use the inner hexagonal wrench to secure the screws to complete the installation. See Figure 3-10.

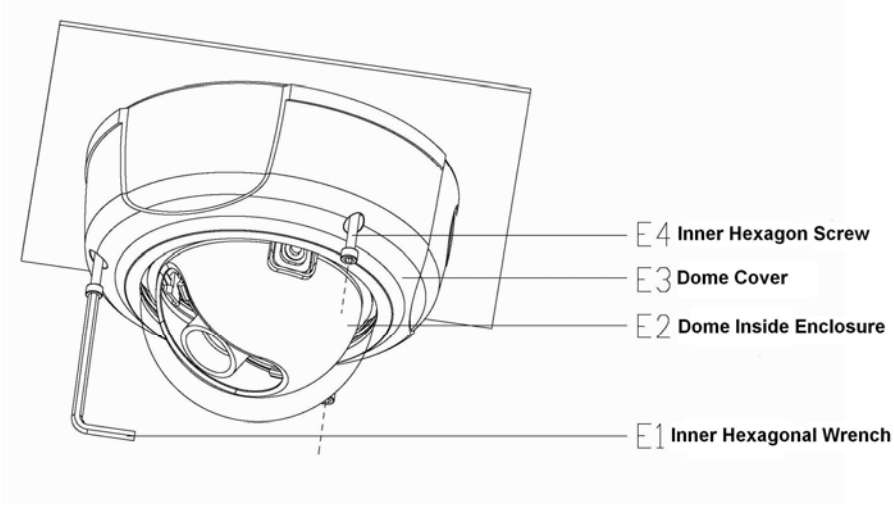

Figure 3-10

3.2 Fixed Camera

Here we take the 50M IR water proof fixed camera as an example. For other series fixed camera, please refer to the similar installation steps too.

Important

Please make sure the installation surface can min support the 3X weight of the camera and the bracket.

Please refer to the steps listed below for installation information.

Step 1

Line up the two installation holes at the bottom of the device shell to the two installation holes of the pendant bracket (in the front). Insert the screws and then secure firmly. Now you have fastened the device in the bracket.

Figure 3-11

Step 2

Dig four holes in the wall (or ceiling) and then insert the four expansion bolts into the holes. Fix these bolts.

Step 3

Line up the four screw holes at the bottom of the pendant bracket to the four installation holes you just dug in the wall (or ceiling). Insert the four screws into the four holes of the bracket (at the bottom). Finally you can secure the bracket in the wall (or ceiling).

Step 4

Connect the device video output port to the terminal devices such as the DVR, NVS and etc. Then connect the power cable to the device.

Now you have completed the device installation and cable connection.

You can use the terminal devices such as the DVR, NVS and etc to view the monitor video.

3.3 Main Menu

Please note this function is for mini dome camera, high resolution dome camera and the vandal proof dome camera only.

Please refer to the following sheet for menu information.

THE 1st MENU		THE 2ND MENU			THE 1st MENU		THE 2ND MENU	
LENS	AUTO ↵	TYPE	DC,VIDEO		ATR	ON↵	LUMINANCE	LOW MIDDLE HIGH
		MODE	AUTO. ON, OFF				CONTRAST	LOW MIDLOW MID MIDHIGH HIGH
		SPEED						
	MANUAL					OFF		
SHUTTER AGC	AUTO ↵	HIGH LUMINANCE			MOTION DETECT	ON↵	DETECT SENSE	000-127
		MODE	SHUTTER+AUTO IRIS AUTO IRIS SHUTTER				BLOCK DISPLAY	ON/OFF/SET↵
		BRIGHTNESS	0-255				MONITOR AREA	ON OFF
		LOW LUMINANCE					AREA SEL	1/4-1/4
		MODE	AUTO GAIN OFF				TOP	000-288
		BRIGHTNESS	×0.25~×1.00				BOTTOM	000-288
	MANUAL ↵	MODE	SHUTTER+AGC				LEFT	000-288
		SHUTTER	1/50~1/10,000				RIGHT	000-288
		AGC	6.00~44.80			OFF		
WHITE BALANCE	USER1 ↵	B-GAIN	0-255		PRIVACY MASK	ON ↵	AREA SEL	1/4~4/4
		R-GAIN	0-255				TOP	000~288
	USER2 ↵	B-GAIN	0-255				BOTTOM	000~288
		R-GAIN	0-255				LEFT	000~468
	ANTI CR						RIGHT	000~468
	PUSH LOCK						COLOR	1~8
	MANUAL ↵	LEVEL	018-040				TRANSPARENT	0.00~1.00
	PUSH						MOSAIC	ON OFF
	ATW↵	SPEED	0-255			OFF		
		DELAY CNT	0-255					
		ATW FRAME	×0.50~×2.00		DAY/NIG	AUTO	BURST	ON

								OFF
		ENVIRONMENT	INDOOR OUTDOOR				DELAY CNT	000-255
BACKLIGHT	OFF				HT	↵	DAY→NIGHT	000-255
	BLC						NIGHT→DAY	000-255
	HLC					B/W↵	BURST	ON OFF
PICT ADJUST		BRIGHTNESS	0-255			COLOR		
		CONTRAST	0-255		NR	↵	NR MODE	OFF，Y/C， Y, C
		SHARPNESS	0-255				Y LEVEL	000-015
		HUE	0-255				C LEVEL	000-015
		GAIN	0-255		CAMERA ID	ON↵		
SYNC	INT					OFF		
LANGUAGE	ENGLISH							
CAMERA RESET								

3.4 Main Interface

Press the menu button for 2 seconds; you can see the OSD menu appear in the monitor.

MENU	
LENS	AUTO↵
SHUTTER/AGC	AUTO↵
WHITE BALANCE	ATW↵
BACKLIGHT	OFF
PICT ADJUST	↵
ATR	OFF
MOTION DETECT	OFF
NEXT↵	
EXIT↵	SAVE ALL

MENU	
PRIVACY MASK	OFF
DAY/NIGHT	AUTO↵
NR	↵
CAMERA ID	OFF
SYNC	INT
LANGUAGE	ENGLISH
CAMERA RESET	
BACK↵	
EXIT↵	SAVE ALL

3.5 Detailed Operation

Use the up/down button to move the cursor to the 1ST MENU, Use the left/right button to set the corresponding parameter. You can click the confirm button to go to the sub-menu if current parameter checked with↵. Select the BACK ↵ to go back to previous menu.

3.5.1 LENS

AUTO IRIS	
TYPE	DC
MODE	AUTO
SPEED	080
RETURN	

Auto ↵

- Mode: The parameter includes DC/VIDEO.
- ✧ The DC is the DC auto iris and the VIDEO is video drive lens.
- ✧ Please connect to the auto iris port when you select the auto iris lens.
- Mode: It includes auto/on/off.
- Speed: Click the left/right button to set the value. The value ranges from 0 to 255.

Manual

It is the manual iris lens.

Important:

The different cameras support various lens type, please refer to the specifications sheet for detailed information.

3.5.2 SHUTTER GAIN

The parameter includes: auto↵, manual↵.

AUTO ↵

AUTO SETUP	
HIGH LUMINANCE	
MODE	SHUTTER+AUTO IRIS
BRIGHTNESS	028
LOW LUMINANCE	
MODE	AGC
BRIGHTNESS	×1.00
RETURN	

- High luminance/low luminance: It is the high brightness/low brightness.
- Mode: The high luminance parameter includes shutter+auto iris, auto iris, and shutter. The low luminance parameter includes auto gain control (AGC), off.
- Brightness: The high luminance parameter ranges from 0 to 255. Please use the left/right button to set. The low luminance parameter includes ×0.25,×0.50,×0.75,×1.00.

Manual ↵

MANUAL SETUP	
MODE	SHUTTER+AGC
SHUTTER	1/50
AGC	6.00
RETURN	

- Shutter: The parameter includes 1/50, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10,000.
- Auto gain: The parameter includes 6.00, 12.00, 18.00, 24.00, 30.00, 36.00, 42.00, and 44.80.

3.5.3 WHITE BALANCE (WB)

The parameter includes: manual↵, anti cr, push lock, user1↵, user2↵, ATW↵.

Manual ↵

MANUAL WB	
LEVEL UP	↵
LEVEL DOWN	↵
PRESET	
RETURN	

User1

USER1 WB	
B-GAIN	030
R-GAIN	033

- B-gain: It is to adjust the blue gain. Please use the left/right button to set. The value ranges from 0 to 255.
- R-gain: It is to adjust the red gain. Please use the left/right button to set. The value ranges from 0 to 255.

Note:

The user2 setup is the same with the user1.

ATW↵

ATW	
SPEED	239
DELAY CNT	003
ATW FRAME	×1.00
ENVIRONMENT	INDOOR
RETURN	

- ATW: It is the auto trace white balance. The camera can adjust the color temperature according to the actual color hue environments.
- Speed: The value ranges from 0 to 255. Please use the left/right button to set.
- Delay control: The value ranges from 0 to 255.Please use the left/right button to set.
- ATW frame: The parameter includes ×0.50、×1.00、×1.50、×2.00.
- Environment: The parameter includes: indoor, outdoor. Please use the left/right button to set.

Push lock

It is to click the OK button to lock the white balance.

Anti-color roll (ANTI CR)

Click it to enable the color roll control function.

3.5.4 HLC/BLC

The backlight compensation parameter includes: OFF, BLC, HLC.

- BLC: This function allows you to see the vivid video in the backlight environment.
- HLC: This function allows you to see the vivid video in the highlight environment.

3.5.5 PICTURE ADJUST

Click the confirm button to go to the sub-menu.

PICT ADJUST	
MIRROR	OFF
BRIGHTNESS	000
CONTRAST	128
SHARPNESS	128
HUE	128
GAIN	128
RETURN	

- Mirror: It is to set the horizontal mirror. The parameter includes on, off.
- Brightness: The value ranges from 0 to 255. Please use the left/right button to set.
- Contrast: The value ranges from 0 to 255. Please use the left/right button to set.
- Sharpness: The value ranges from 0 to 255. Please use the left/right button to set.
- Hue: The value ranges from 0 to 255. Please use the left/right button to set.
- Gain: The value ranges from 0 to 255. Please use the left/right button to set. (**Note: It is the color gain.**)

3.5.6 ATR/ATR-EX

The parameter includes on, off↵.

Select the on button and then click the confirm button to go to the sub-menu.

ATR	
LUMINANCE	MID
CONTRAST	MID
RETURN	

- Luminance: The parameter includes: low, middle, high.
- Contrast: The parameter includes: low, middle low, middle, middle high, high.

3.5.7 MOTION DETECT

The parameter includes: on/off↵.

Select the on button and then click the confirm button, you can go to the sub-menu.

MOTION DETECT	
DETECT SENSE	111
BLOCK DISP	OFF
DETECT AREA	
MONITOR AREA ↵	ON
AREA SEL	1/4
TOP	000
BOTTOM	000
LEFT	000
RIGHT	000
RETURN	

- Detect sensitivity: The value ranges from 000 to 127. Please use the left/right button to set.
- Block: display: The parameter includes on, off, set↵. Click the set button; you can use the direction buttons to set the area to display the block.
- Monitor area: The parameter includes on, off.
- Area selection: The value ranges from 1/4 to 4/4. Please use the left/right button to set. System max supports 4 areas. You can use the up/down/left/right button to set.
- Top: The value ranges from 000 to 288. Please use the left/right button to set.
- Button: The value ranges from 000 to 288. Please use the left/right button to set.
- Left: The value ranges from 000 to 288. Please use the left/right button to set.
- Right: The value ranges from 000 to 288. Please use the left/right button to set.

3.5.8 PRIVACY MASK

The parameter includes on, off↵.

Select the on button and then click the confirm button, you can go to the sub-menu.

PRIVACY	
AREA SEL	1/4
MODE	ON
POSITION	↵
COLOR	RED
TRANP	0.05
MOSAIC	OFF
RETURN	

- Area selection: The value ranges from 1/4 to 4/4. Please use the left/right button to set. System max supports 4 areas. You can use the up/down/left/right button to set.
- Top: The value ranges from 000 to 288. Please use the left/right button to set.
- Bottom: The value ranges from 000 to 288. Please use the left/right button to set.
- Left: The value ranges from 000 to 468. Please use the left/right button to set.
- Right: The value ranges from 000 to 468. Please use the left/right button to set.
- Color: The value ranges from 1 to 8. Please use the left/right button to set.
- Transparent: The parameter includes: 0.00, 0.50, 0.75, and 1.00.
- Mosaic: The parameter includes on, off.

3.5.9 DAY/NIGHT

The parameter includes: auto↵, color, black and white↵.

Auto ↵

DAY/NIGHT MODE	
BURST	ON
DEALY CNT	003
DAY→NIGHT	001
NIGHT→DAY	007
RETURN	

- Burst: The parameter includes on, off.
- Delay control: The value ranges from 000 to 255. Please use the left/right button to set.
- Day-night: It is to set the minimum parameter to switch from the day mode to the night mode. The value ranges from 000 to 255. Please use the left/right button to set.
- Night-day: It is to set the maximum parameter to switch from the night mode to the day mode. The value ranges from 000 to 255. Please use the left/right button to set.

Note:

In day-night mode, the smaller the value, and the hard for the camera to switch to the black and white mode. In night-day mode, the larger the value, and the hard for the camera to switch to the color. Here we recommend the default value. If the system switches back and forth when you are using, please set the value in night-day mode larger and the value in the day-night mode smaller.

Black and white ↵

B/W	
BURST	OFF
RETURN	

- Burst: The parameter includes on, off.

3.5.10 NR (NOISE REDUCE/DE-NOISE)

Click the confirm button to go to the sub-menu.

Select the on button and then click the confirm button, you can go to the sub-menu.

NR	
NR MODE	Y/C
Y LEVEL	004
C LEVEL	004
RETURN	

- NR mode: The parameter includes off, Y/C, Y, C,
- Y level: The value ranges from 000 to 015. Please use the left/right button to set.
- C level: The value ranges from 000 to 015. Please use the left/right button to set.

3.5.11 CAMERA ID

The parameter includes on, off.

Select the on button and then click the confirm button, you can go to the sub-menu. Please use the direction buttons to select the character or the function and then click the confirm button to select.

Use the up/down button to move the cursor to the mark position and then click the confirm button to set the mark position. Please use the left/right button to select the characters and then click the confirm button to select.

CHR1: Library 1.

CHR2: Library 2.

←→↑↓: Select the character you want to modify.

CLR: Clear current character.

POS ↵: Select it to go to the camera mask position interface.

Mark setup

After you go to the camera ID setup interface, use the direction buttons “←→↑↓” to select the initial character of the mark code “0”. Use the direction buttons to select the CHR1 and then use the direction buttons to select character “1”. Click the confirm button to change the initial character “0” as “1” You can repeat the above steps to modify the following three-digit code. Select the character and then click the ‘CLR’, click the confirm button to remove the specified character. Please change the initial mark code “1” as “0”. Now you have completed the camera ID mark code. Use the direction buttons to select “POS ↵” and then click the confirm button, you can go to the position setup interface. Please click the direction buttons to set the camera ID overlay position on the screen. Click the confirm button to exit.

3.5.12 SYNC MODE

The system supports INT setup.

3.5.13 LANGUAGE

The parameter includes: English, Japanese and etc. The default setup is English.

3.5.14 CAMERA RESET

Please select the reset item and then click the confirm button to restore the factory default setup.

3.5.15 OTHERS

Next: Click it to go to the sub-menu.

Back: click it to return to the previous menu.

Return: click it to exit the menu setup interface.

SAVE ALL: Click it to save current setup.

Important

After you completed the setup, please click the “SAVE ALL” button to save current setup and then exit the menu. It is to guarantee the camera setup after the power failure.

3.6 Menu Keys Operation

Please refer to the following figure to operate the keys to set the OSD menu. See Figure 3-12. Here you can see the camera menu keys. Press the key in the middle for 2 seconds, you can call the menu. And then you can click the up/down button to move the cursor and then use the left/right button to select the item.

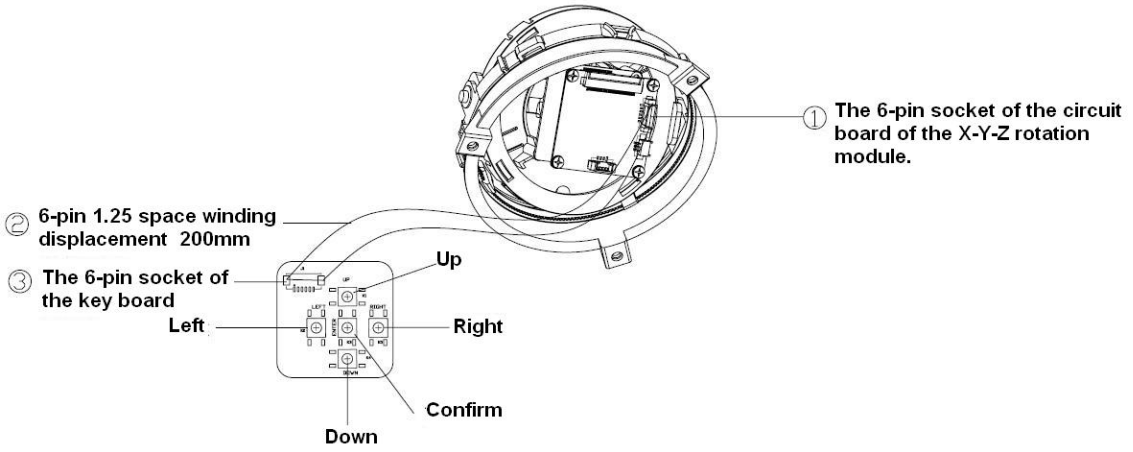

Figure 3-12

Appendix Toxic or Hazardous Materials or Elements

Component Name	Toxic or Hazardous Materials or Elements					
	Pb	Hg	Cd	Cr VI	PBB	PBDE
Circuit Board Component	○	○	○	○	○	○
Device Construction Material	○	○	○	○	○	○
Wire and Cable	○	○	○	○	○	○
Packing Components	○	○	○	○	○	○
Accessories	○	○	○	○	○	○

O: Indicates that the concentration of the hazardous substance in all homogeneous materials in the parts is **below** the relevant threshold of the **SJ/T11363-**2006 standard.

Note

- **This manual is for reference only. Slight difference may be found in the user interface.**
- **All the designs and software here are subject to change without prior written notice.**
- **If there is any uncertainty or controversy, please refer to the final explanation of us.**
- **Please visit our website or contact your local service engineer for more information.**