



Network High Speed Mini Dome

User Manual

Issue

V1.0

Date

2014-06-10

Precautions

Precautions

Fully understand this document before using this device, and strictly observe rules in this document when using this device. If you install this device in public places, provide the tip "You have entered the area of electronic surveillance" in an eye-catching place. Failure to correctly use electrical products may cause fire and severe injuries. To prevent accidents, carefully read the following context:

Symbols

This document may contain the following symbols whose meanings are described accordingly.

Symbol	Description
 DANGER	It alerts you to fatal dangers which, if not avoided, may cause deaths or severe injuries.
 WARNING	It alerts you to moderate dangers which, if not avoided, may cause minor or moderate injuries.
 CAUTION	It alerts you to risks. Neglect of these risks may cause device damage, data loss, device performance deterioration, or unpredictable results.
 TIP	It provides a tip that may help you resolve problems or save time.
 NOTE	It provides additional information.

DANGER

To prevent electric shocks or other dangers, keep power plugs dry and clean.

WARNING

- Strictly observe installation requirements when installing the device. The manufacturer shall not be held responsible for device damage caused by users' non-conformance to these requirements.
- Strictly conform to local electrical safety standards and use power adapters that are marked with the LPS standard when installing and using this device. Otherwise, this device may be damaged.

- Use accessories delivered with this device. The voltage must meet input voltage requirements for this device.
- If this device is installed in places with unsteady voltage, ground this device to discharge high energy such as electrical surges in order to prevent the power supply from burning out.
- When this device is in use, ensure that no water or any liquid flows into the device. If water or liquid unexpectedly flows into the device, immediately power off the device and disconnect all cables (such as power cables and network cables) from this device.
- Do not focus strong light (such as lighted bulbs or sunlight) on this device. Otherwise, the service life of the image sensor may be shortened.
- If this device is installed in places where thunder and lightning frequently occur, ground the device nearby to discharge high energy such as thunder strikes in order to prevent device damage.



CAUTION

- Avoid heavy loads, intensive shakes, and soaking to prevent damages during transportation and storage. The warranty does not cover any device damage that is caused during secondary packaging and transportation after the original packaging is taken apart.
- Protect this device from fall-down and intensive strikes, keep the device away from magnetic field interference, and do not install the device in places with shaking surfaces or under shocks.
- Clean the device with a soft dry cloth. For stubborn dirt, dip the cloth into slight neutral cleanser, gently wipe the dirt with the cloth, and then dry the device.
- Do not jam the ventilation opening. Follow the installation instructions provided in this document when installing the device.
- Keep the device away from heat sources such as radiators, electric heaters, or other heat equipment.
- Keep the device away from moist, dusty, extremely hot or cold places, or places with strong electric radiation.
- If the device is installed outdoors, take insect- and moisture-proof measures to avoid circuit board corrosion that can affect monitoring.
- Remove the power plug if the device is idle for a long time.
- Before unpacking, check whether the fragile sticker is damaged. If the fragile sticker is damaged, contact customer services or sales personnel. The manufacturer shall not be held responsible for any artificial damage of the fragile sticker.

Special Announcement

All complete products sold by the manufacturer are delivered along with nameplates, operation instructions, and accessories after strict inspection. The manufacturer shall not be held responsible for counterfeit products.

This manual may contain misprints, technology information that is not accurate enough, or product function and operation description that is slightly inconsistent with the actual product. The manufacturer will update this manual according to product function enhancement or changes and regularly update the software and hardware described in this manual. Update information will be added to new versions of this manual without prior notice.

This manual is only for reference and does not ensure that the information is totally consistent with the actual product. For consistency, see the actual product.

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1 Device Port and Description

1.1 Product Appearance

Figure 1-1 shows the multi-head cable used by a mini dome camera. Table 1-1 describes cores of the multi-head cable.

Figure 1-1 Multi-head cable



Table 1-1 Multi-head cable description

Element	Description
Network access port (NIC)	Connects to a standard Ethernet cable.
Power supply (DC 12V)	Connects to a 12 V direct current (DC) power supply.

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1.2 Features

Network Features

- Support complete TCP/IP protocol suite.
- Support video, and alarm data.
- Provides a built-in web browser and supports access using Internet explorer.
- Supports network data transmission and remote access.
- Support Point-to-Point protocol over Ethernet (PPPoE), Dynamic Host configuration protocol (DHCP), and Dynamic Domain Name System (DDNS). protocols.
- Support remote upgrade and maintenance.

Image Processing Features

- Support multiple streams. Single-stream model or dual-stream mode can be selected based on the site requirement. Encoding parameters for the main stream and sub stream be configured separately.
- Support dynamic stream parameters based on different image quality requirement.
- Support independent hardware compression and constant bit rate (CBR) and variable bit rate (VBR) Videos can be compressed using the Motion Joint Photographic Experts Group (MJPEG) or H.264 standard. The frame rate and image quality can be configured

I/O Features

- Provides a 10/100 Mbits/s self-adaptive Ethernet port.

Other Features

- Support the heartbeat function that allows the management host to learn the running status of the IP camera in real time.
- Supports level-based user rights management. Hardware Installation

2 Installing a Dome Camera

2.1 Installation Modes

A mini dome camera supports wall-mounted and suspension installation modes. Figure 2-1 shows mounting bracket and suspension installation modes, as shown in Figure 2-2.



NOTE

To prevent the water flow into the dome camera, please make sure that the multi-head cable is not exposed.

The following describes how to install a dome camera in wall-mounted mode.

Figure 2-1 Mounting bracket (unit: mm)

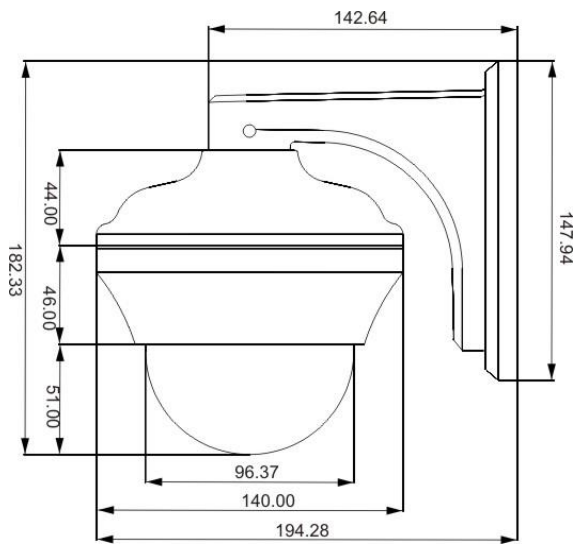
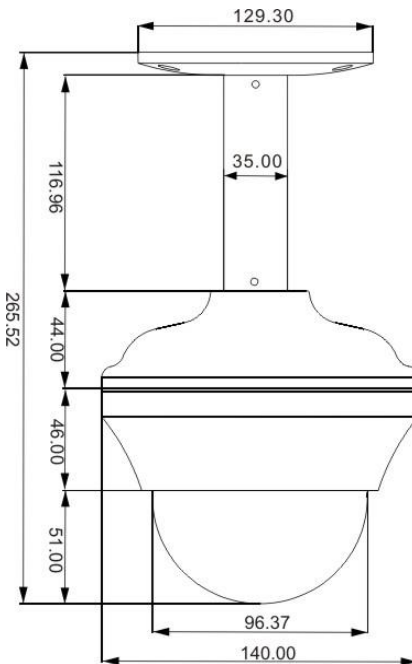


Figure 2-2 Suspension installation (unit: mm)



2.1.1 Installing a Dome in a wall-mounting Mode

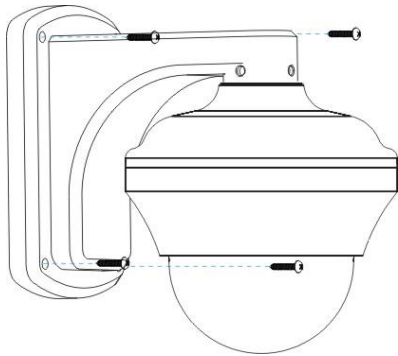
Open the package and carefully take out the dome camera and accessories.

Procedure

- Step 1** Determine the positions of installation holes based on the installation dimensions of the bracket and mark the holes. Use a percussion drill bit with a diameter of 8 mm to drill four holes that are 60 mm deep.
- Step 2** Drive four expansion bolts into the holes.

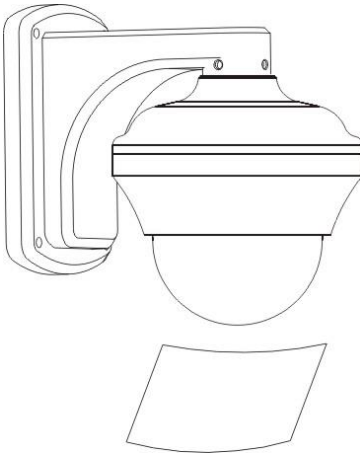
Step 3 Align the dome IPC with the bracket. Mount the IPC on the bracket and rotate the IPC clockwise so that the holes on the bracket are aligned with the screw holes on the installation base of the IPC. Then, lock four screws between the bracket and the IPC, as shown in Figure 2-3.

Figure 2-3 Fixing the main body of the high-speed dome IPC onto the bracket



Step 4 Remove protective vinyl sheet from the dome cover, as shown in Figure 2-4.

Figure 2-4 Removing the protective vinyl sheet

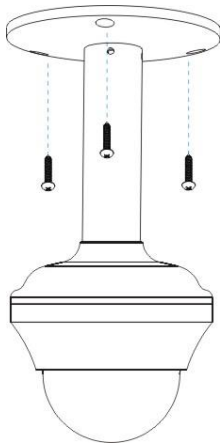


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2.1.2 Installing the IPC on the Ceiling

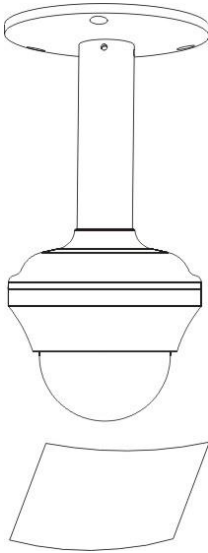
- Step 1** Determine the positions of installation holes on the ceiling based on the installation dimensions of the bracket and mark the holes. Use a percussion drill bit with a diameter of 8 mm to drill four holes that are 60 mm deep.
- Step 2** Drive four expansion bolts into the holes.
- Step 3** Align the dome IPC with the bracket. Mount the IPC on the bracket and rotate the IPC clockwise so that the holes on the bracket are aligned with the screw holes on the installation base of the IPC. Then, lock three screws between the bracket and the IPC, as shown in Figure 2-5.

Figure 2-5 Fixing the main body of the high-speed dome IPC onto the bracket



Step 4 Remove protective vinyl sheet from the dome cover, as shown in Figure 2-6.

Figure 2-6 Removing the protective vinyl sheet



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3 Quick Configuration

3.1 Login and Logout



CAUTION

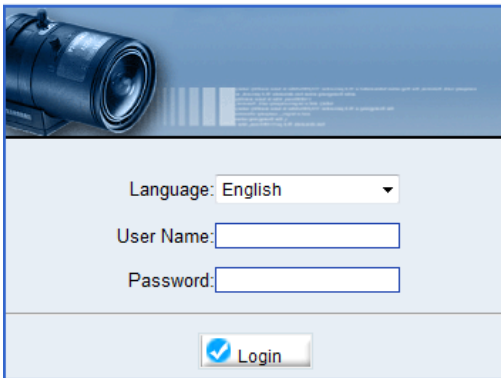
You must use Internet Explorer 6 or a later version to access the web management system; otherwise, some functions may be unavailable.

Login system

Step 1 Open the Internet Explorer, enter the IP address of IP camera (default value: 192.168.0.120) in the address box, and press Enter.

The login page is displayed, as shown in Figure 3-1.

Figure 3-1 Login page



Step 2 Input the User and password.

 NOTE

- The default name is **admin**. The default password is **admin**. Change the password when you log in the system for first time to ensure system security.
- You can change the system display language on the login page.

Step 3 Click Login.

The main page is displayed.

---End

logout

To logout of system, click Sign out in the upper right corner of the main page, the login page is display after you log out of the system.

3.2 Main page layout

On the main page, you can view real-time video, set parameter, Video parameter, Video control, PTZ control, PTZ Configure and log out of the system. Figure 3-2 is shown the main page layout.

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Figure 3-2 Main page layout

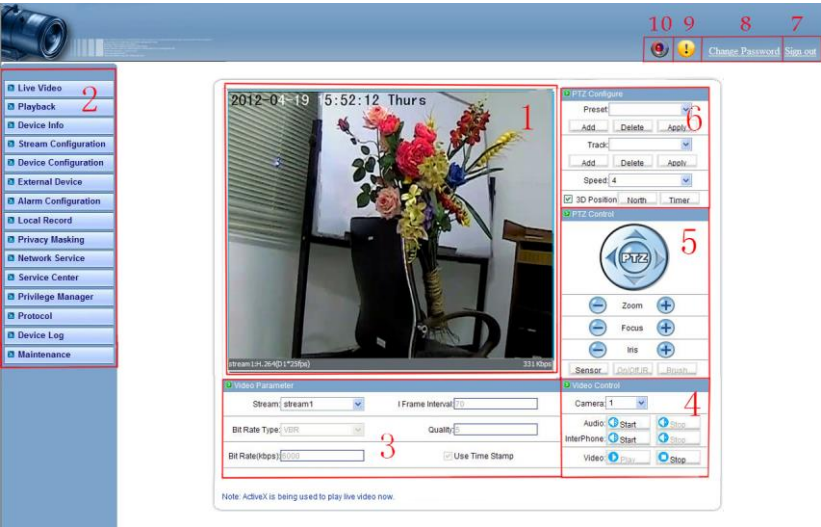


Table 3-1 Elements on the main page

N O.	Element	Description
1	Real-time video area	Real-time videos are displayed in this area, You can also set sensor parameters.
2	Menu area	You can choose a menu to set device parameters, including the device information, video streams, alarm setting, and privacy mask function.
3	Video area	Video parameters, such as the I frame interval, bit rate type, bit rate, and quality, are display.
4	Video control area	You can perform the following operation in this area: • Switch between cameras.

N O.	Element	Description
		Start or stop playing Videos.
5	PTZ control	You can control the camera direction, zoom in or out, and change the focal length and aperture for a dome camera or a camera connected to an external PTZ. NOTE Currently the automatic aperture adjustment function is not support.
6	PTZ configuration area	you can perform the following operation in this area: - Add, delete, and invoke the presents and tacks. - Adjust the PTZ rotation speed. - Enable or disable 3D position. - Set the direction to due north. - Set the PTZ timer. NOTE - PTZ timer function as a time trigger. When it is activated, the PTZ rotates according to presents and tracks as scheduled. - The PTZ timer use the time set in camera. Ensure the time is correct. - This function is available only to a camera with PTZ or camera connected to external PTZ.
7	Sign out	You can click this button to return to the login page.
8	Change password	You can click this button to change the password.
9	Fault icon	When the device encounters an exception, the fault icon  is displayed. You can click  to view the fault information.
10	Alarm icon	When the device generates an alarm, the alarm icon  is displayed. You can click  to view the alarm

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N O.	Element	Description
		information. Note When the device accepts an alarm signal, the alarm icon will display within 10s in the web management system.

3.3 Browsing Video

User can browse the real-time video in the web management system.

Preparation

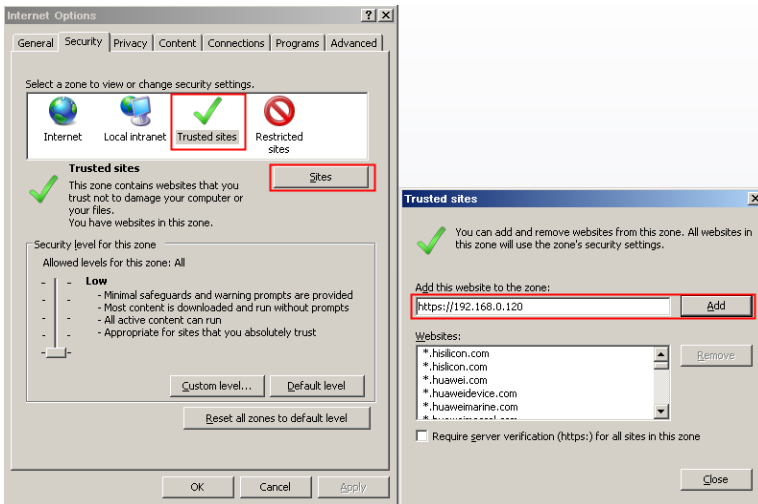
To ensure the real-time video can be play properly, you must perform the following operation when you log in to the web for the first time:

1. Open the Internet Explorer. **Choose Tools > Internet options > Security > Trusted sites > Sites.**

In the display dialog box, click **Add**, as shown in Figure 3-3.

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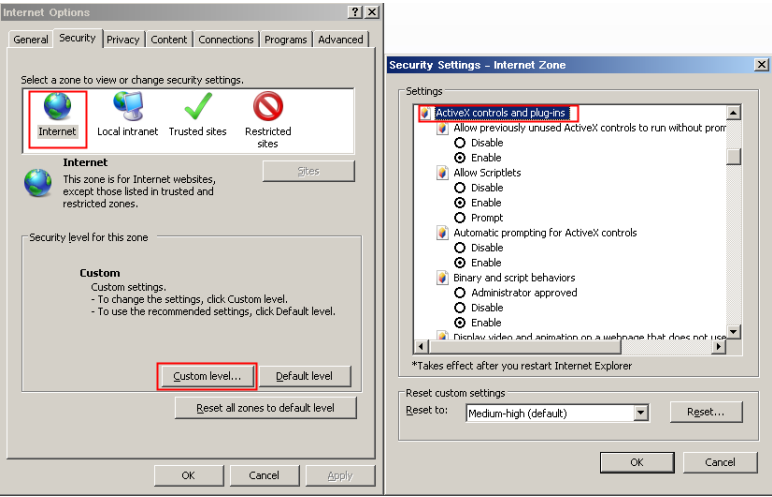
Figure 3-3 Adding the a trusted site



- In the Internet Explorer, choose Tool > Internet Options > Security > Customer level, and set Download unsigned ActiveX control and initialize and script ActiveX controls not marked as safe for scripting under ActiveX controls and plug-ins to Enable, as shown in Figure 3-4.

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level5,h16,1st level6,h17,1st level7,h18,1st
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Figure 3-4 Configuring ActiveX control and plug-ins



3. Download and install the player control as prompted.

NOTE

The login page is display when the control is loaded.

3.3.1 Download the right control in the Internet Explorer

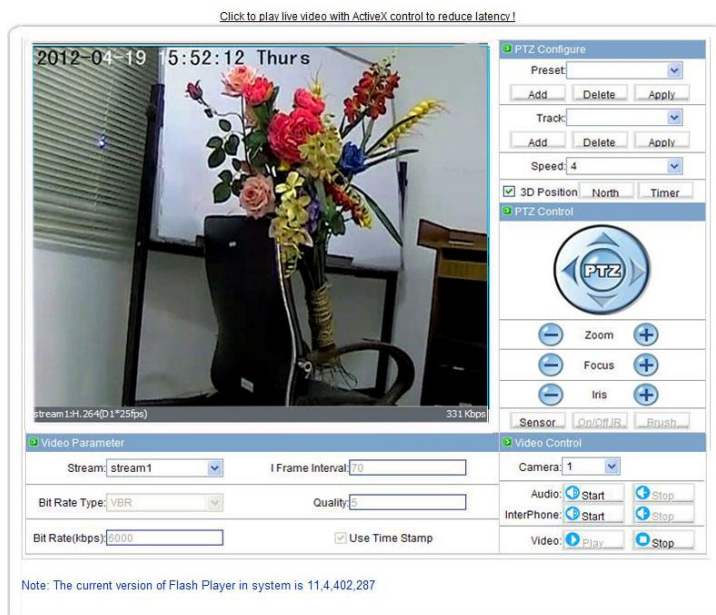
Preparation

- User uses the Internet Explorer browse video.
- Real-time video page pop-ups the message “clicks to play live video with ActiveX control to reduce latency” as shown in Figure 3-5.

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Figure 3-5 Change the ActiveX



Click the message, jump to download ActiveX control interface, once downloading is complete, you can watch more fluent video screen.

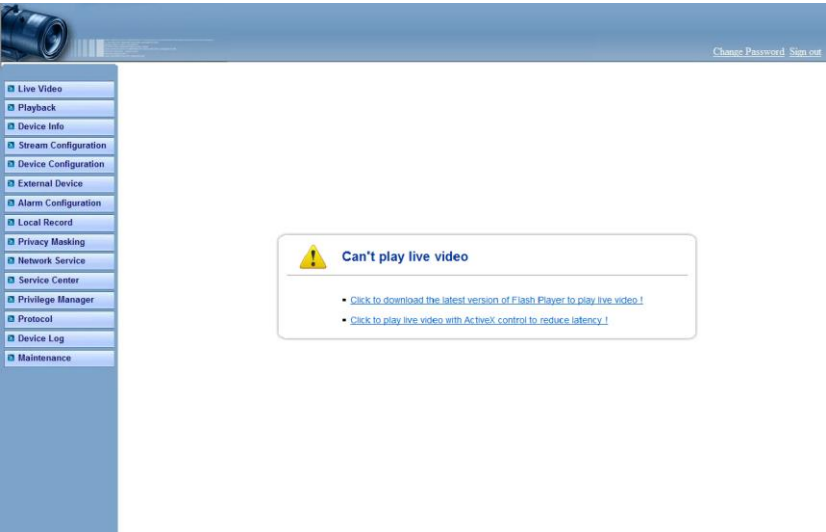
Unable to display video picture, and need to download and install the control

Preparation

- User uses the IE Explorer browse video.
- Real-time video page pop-up the message “click to download the latest version of Flash Play live video” and “click to play video with ActiveX control to reduce latency” as shown in Figure 3-6.

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level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1

Figure 3-6 Download control tips



Click the message” click to play live video with ActiveX control to reduce latency”, jump download Adobe Flash Player Plugin control interface, once downloading is complete, you can watch video screen.

Click the message “click to download the latest version of Flash Play live video”, jump to download ActiveX control interface, once downloading is complete, you can watch more fluent video screen.

3.3.2 In the Google, Firefox, or Safari browsers watch real-time video

Google, Firefox, and Safari browsers only support Adobe Flash Player Plugin to play video. When Adobe Flash Plugin control version is too low, browser will automatically clew you to download the latest control.

3.4 Setting Local Network Parameters

Description

Local network parameters include:

- IP protocol
- IP address
- Subnet mask
- Default gateway
- Dynamic Host Configuration Protocol (DHCP)
- Preferred Domain Name System (DNS) server
- Alternate DNS server

Procedure

Choose **Device Configuration > Local Network**.

The **Local Network** page is displayed, as shown in Figure 3-7.

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level5,h16,1st level6,h17,1st level7,h18,1st
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Figure 3-7 Local Network page

Local Network

IP Protocol

IP Protocol: IPv4

IP Address

☐ Device obtains an IP Address automatically

☒ Device uses the following IP Address

IP Address:192.168.8.66

Subnet Mask:255.255.255.0

Default Gateway:192.168.8.1

DHCP IP

DHCP IP:

DNS

Preferred DNS Server:192.168.0.1

Alternate DNS Server:192.168.0.2

MTU

MTU:1500

Note: The MTU scope is 800-1500. Please don't modify it casually.

OK

Step 4 Set the parameters according to Table 3-2.

Table 3-2 Local network parameters

Parameter	Description	Setting
IP Protocol	IPv4 is the IP protocol that uses an address length of 32 bits.	[Setting method] Select a value from the drop-down list box. [Default value] IPv4
Device obtain an IP address automatically	The device automatically obtains the IP address from the DHCP server.	[Setting method] Click the option button. NOTE To query the current IP address of the device, you must query it on the platform based on the device name.
DHCP IP	IP address that the DHCP server assigned to the device.	N/A
IP Address	Device IP address that can be set as required.	[Setting method] Enter a value manually. [Default value] 192.168.0.120
Subnet Mask	Subnet mask of the network adapter.	[Setting method] Enter a value manually. [Default value] 255.255.255.0
Default Gateway	This parameter must be set if the client accesses the device through a gateway.	[Setting method] Enter a value manually. [Default value] 192.168.0.1

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level2,h13,1st level3,h14,1st level4,h15,1st
level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1

Parameter	Description	Setting
Preferred DNS Server	IP address of a DNS server.	[Setting method] Enter a value manually. [Default value] 192.168.0.1
Alternate DNS Server	IP address of a domain server. If the preferred DNS server is faulty, the device uses the alternate DNS server to resolve domain names.	[Setting method] Enter a value manually. [Default value] 192.168.0.2
MTU	Set the maximum value of network transmission data packets.	[Setting method] Enter a value manually. NOTE The MTU value is range from 800 to 1500, the default value is 1380, Please do not change it arbitrarily.

Step 5 Click OK.

- If the message "Network Parameter Updated" is displayed, click OK. The system saves the settings. The message "Set network params success, Please login system again" is displayed. Use the new IP address to log in to the web management system.
- If the message "Invalid IP Address", "Invalid Subnet Mask", "Invalid default gateway", "Invalid primary DNS", or "Invalid space DNS" is displayed, set the parameters correctly.

 NOTE

- If you set only the **Subnet Mask**, **Default Gateway**, **Preferred DNS Server**, and **Alternate DNS Server** parameters, you do not need to log in to the system again.
- You can click **Reset** to set the parameters again if required.

----End

4 Function Menus

4.1 OSD Menu

You can do personalized settings, such as the Preset position, Intermittent Cruise, Regional Cruise (Cruising between Points), Preset Cruise (group cruise), Auto Cruise, and other features.

Call Preset 95 to open OSD menu.

4.2 Preset Retention

Some of the presets can be reserved for the special use, see in Table 4-1.

Table 4-1 Call the PTZ camera's particular preset

Preset	Description
Call 95 preset	Enter the OSD menu
Call 83 preset	Clear all presets
Call 96 preset	360 Intermittent cruise
Call 97 preset	Regional cruise (cruising between points): Area between two preset cruise
Call 82/98 presets	Preset cruise (Group Cruise)
Call 99 preset	360 auto cruise

4.3 Preset

A maximum of 256 presets can be configured.

- Set Preset

Error! Use the Home tab to apply 标题
1,heading 1,h:1,h:1app,level 1,Level 1
Head,H1,h1,Huvudrubrik,Title1,l1,1st
level,Section Head,Sec1,h11,1st level1,h12,1st
level2,h13,1st level3,h14,1st level4,h15,1st
level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1Error! Use the Home tab to apply 标
题 1,heading 1,h:1,h:1app,level 1,Level 1
Head,H1,h1,Huvudrubrik,Title1,l1,1st
level,Section Head,Sec1,h11,1st level1,h12,1st
level2,h13,1st level3,h14,1st level4,h15,1st
level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1

Set Preset [1~256].

- Run Preset

Call Preset [1~256].

- Delete Preset

Call Preset 83 to clear all presets.

4.4 Intermittent Cruise

Run to do the 360 auto cruise in the horizontal direction at a constant speed intermittent cruise, speed from 1(Slowest) to 32(Fastest).

- Set Intermittent Cruise

Use OSD to set Intermittent Cruise.

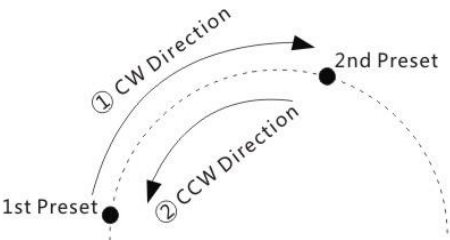
- Call Intermittent Cruise

Call Preset 96 to Intermittent Cruise.

4.5 Regional Cruise (Cruising between points)

Move the camera loop between two preset positions. Camera clockwise move from the first preset to the second preset, and also move from the second point in the counterclockwise direction back to the first point. Speeds range from 1 (slowest) to 32 (fastest).

Figure 4-1 Regional cruise (cruising between points)

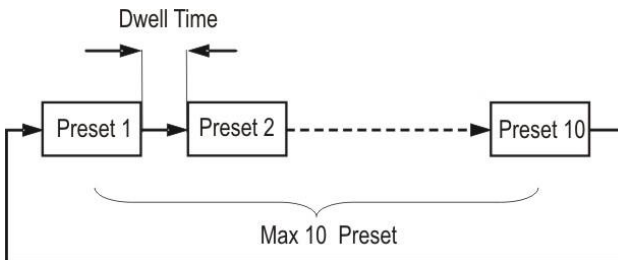


- Set Regional cruise (cruising between points): 1 group
Use the OSD menu to set the Regional cruise (cruising between points).
- Run Regional cruise (cruising between points):
Call number 97 Preset.
- Delete Regional cruise (cruising between points)
Use the OSD menu to delete.

4.6 Preset Cruise (Group Cruise)

Run the Preset: You can adjust the order, the largest store 10 preset positions, dwell time can be adjusted between presets, ranging from 5 to 250 seconds. As shown in Figure 4-2.

Figure 4-2 Preset Cruise (Group Cruise)



- Set preset cruise (Group Cruise): A total of three groups
Use the OSD menu to set preset cruise (group cruise).
- Run preset cruise (Group Cruise):
Call number 82 or number 98 presets.
- Delete preset cruise (Group Cruise)
Use the OSD menu to delete.

Error! Use the Home tab to apply 标题
1,heading 1,h:1,h:1app,level 1,Level 1
Head,H1,h1,Huvudrubrik,Title1,l1,1st
level,Section Head,Sec1,h11,1st level1,h12,1st
level2,h13,1st level3,h14,1st level4,h15,1st
level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1Error! Use the Home tab to apply 标
题 1,heading 1,h:1,h:1app,level 1,Level 1
Head,H1,h1,Huvudrubrik,Title1,l1,1st
level,Section Head,Sec1,h11,1st level1,h12,1st
level2,h13,1st level3,h14,1st level4,h15,1st
level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1

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4.7 Auto Cruise

The camera can autorun horizontally cruise at a speed of 360-degree continuous cyclic scanning.

- Set Auto Cruise

Do not need to set up, the system has been set.

- Call Auto Cruise

Call Preset 99.

4.8 Other Functions

- POWER UP Action

Auto-run specified action after power on. Actions include: Auto Cruise, Intermittent Cruise, Regional Cruise (Between points Cruise), Preset 1, Preset 8, Preset cruise (group cruise).

- PARK ACTION

This feature allows the camera automatically placed in a specific location. If the camera is not operated temporarily, it will run automatically the specified action. Actions include: Auto Cruise, Intermittent Cruise, Regional Cruise (Between points Cruise), Preset 1, Preset 8, revert to the most recent action, Preset cruise (Group cruise). The idle time can be defined, from 5 to 250 seconds.

4.9 General Rules of Menu Operation

- Use UP/DOWN to select each submenu.
- Press IRIS+ to enter the submenu.
- Press IRIS+ button to go return when UP/DOWN to the BACK option.
- Use UP/DOWN or LEFT/RIGHT to change settings.
- Exit the menu: Use the UP / DOWN buttons to select EXIT, or press IRIS-key.

4.9.1 MAIN MENU

The OSD main menu is displayed as shown in Figure 4-3.

Figure 4-3 Main menu

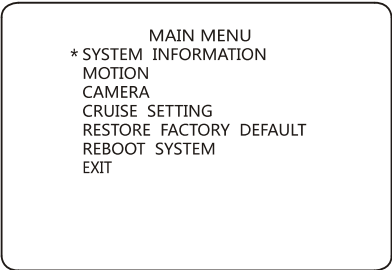


Table 4-2 describes the function options on the OSD main menu.

Table 4-2 OSD Main Menu Description

Name	Description
SYSTEM INFORMATION	System Information Display.
MOTION	PTZ settings.
CAMERA	Camera settings.
CRUISE SETTING	Preset cruise (group cruise) settings.
RESTORE FACTORY DEFAULT	Reset the PTZ, restore to the factory default settings.
REBOOT SYSTEM	System restart, to re-power-on reset.
EXIT	Exit the menu.

Error! Use the Home tab to apply 标题
1,heading 1,h:1,h:1app,level 1,Level 1
Head,H1,h1,Huvudrubrik,Title1,l1,1st
level,Section Head,Sec1,h11,1st level1,h12,1st
level2,h13,1st level3,h14,1st level4,h15,1st
level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1Error! Use the Home tab to apply 标
题 1,heading 1,h:1,h:1app,level 1,Level 1
Head,H1,h1,Huvudrubrik,Title1,l1,1st
level,Section Head,Sec1,h11,1st level1,h12,1st
level2,h13,1st level3,h14,1st level4,h15,1st
level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1

4.9.2 SYSTEM INFORMATION

System Information menu: Displays basic information, as shown in Figure 4-4.

Figure 4-4 System Information menu

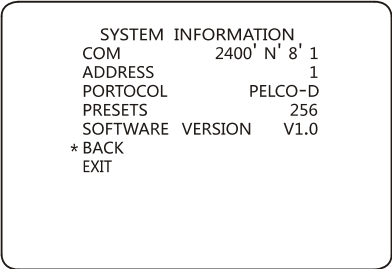


Table 4-3 describes the function options on the system information menu.

Table 4-3 System Information Description

Name	Description
COM	Serial information: Displayed baud rate , parity, data bits, stop bits of the serial port.
ADDRESS	Dome address, show the address coding.
PORTOCOL PELCO-D	Control protocol, display Communication Protocol
PRESETS	Display preset number.
SOFTWARE VERSION	Software version.
BACK	Return to the main menu.
EXIT	Exit menu settings.

4.9.3 MOTION

PTZ setup menu is displayed as shown in Figure 4-5.

Figure 4-5 PTZ setup menu

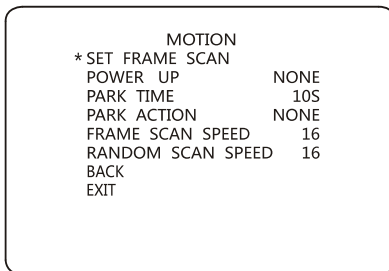


Table 4-4 describes the function options on the PTZ setup instructions menu.

Table 4-4 PTZ setup instructions

Name	Description
SET FRAME SCAN	Set the starting position and end position of Regional Cruise (Cruising between points).
POWER UP	Power-action setting. Actions include: NONE: No action; AUTO SCAN: auto cruise; RANDOM SCAN: Intermittent cruise; FRAME SCAN: Regional cruise (cruising between points) PRESET1: Preset 1; PRESET8: Preset 8; CRUISE: Preset cruise (group cruise).
PARK TIME	Idle time setting, 0~ 255 seconds.
PARK ACTION	Power-action setting. Actions include: NONE: No action;

Error! Use the Home tab to apply 标题
1,heading 1,h:1,h:1app,level 1,Level 1
Head,H1,h1,Huvudrubrik,Title1,l1,1st
level,Section Head,Sec1,h11,1st level1,h12,1st
level2,h13,1st level3,h14,1st level4,h15,1st
level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1Error! Use the Home tab to apply 标
题 1,heading 1,h:1,h:1app,level 1,Level 1
Head,H1,h1,Huvudrubrik,Title1,l1,1st
level,Section Head,Sec1,h11,1st level1,h12,1st
level2,h13,1st level3,h14,1st level4,h15,1st
level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1

Name	Description
	AUTO SCAN: auto cruise; RANDOM SCAN: Intermittent cruise; FRAME SCAN: Regional cruise (cruising between points) PRESET1: PRESET1; PRESET8: PRESET8; REAPEAT LAST: Return to action recently; CRUISE: Preset cruise (group cruise).
FRAME SCAN SPEED	Set the speed of Regional cruise (cruising between points), speed from 1(Slowest) to 32(Fastest).
RANDOM SCAN SPEED	Set Intermittent Cruise, speed from 1(Slowest) to 32(Fastest).
BACK	Return Main menu
EXIT	Exit Menu

4.9.4 CAMERA Settings

Camera menu operation rules:

- Use the UP / DOWN keys to select.
- Use LEFT / RIGHT keys to change the value of some function.
- Use IRIS + button or wait 30 seconds automatically return to previous menu (PTZ menu).

Camera settings page is displayed as shown in Figure 4-6.

Figure 4-6 Camera Settings

CAMERA MENU A		CAMERA MENU B	
CAMERA ID	000	BRIGHTNESS	12
IRIS	AUTO	SHARPNESS	04
SHUTTER	AUTO	MIRROR	OFF
AGC	MIDDLE	FLIP	OFF
WDR	OFF	NEGATIVE	OFF
DNR	OFF	OSD	ON
DAY & NIGHT	AGC	OUTPUT	1080 / 25P
FOCUS	AUTO	FACTORY	OFF
BUAD RATE	9600		
NEXT			

Table 4-5 describes the function options on the camera settings menu.

Table 4-5 Camera settings description

CAMERA MENU A	
Name	Description
CAMERA ID	Camera address. Fixed value, cannot be changed.
IRIS	Camera aperture. Fixed value, cannot be changed.
SHUTTER	Electronic shutter. Adjusted value: 1/60,1/120,1/250,1/500,1/1000,1/2000,1/4000,1/10K
AGC	Auto Gain Control. Available AGC options are MAX, MIDDLE and MIX.
WDR	WDR function. Available WDR options are ON and OFF.
DNR	DNR function. Available DNR options are ON and OFF.
DAY&NIGHT	Day / night function. Available DAY&NIGHT options are BW, AGC and COLOR.
FOCUS	Focus mode. Available FOCUS options are MANU, KEY and AUTO.
BUAD RATE	Communication baud rate, cannot be changed. The default value is 9600.

Error! Use the Home tab to apply 标题
1,heading 1,h:1,h:1app,level 1,Level 1
Head,H1,h1,Huvudrubrik,Title1,l1,1st
level,Section Head,Sec1,h11,1st level1,h12,1st
level2,h13,1st level3,h14,1st level4,h15,1st
level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1Error! Use the Home tab to apply 标
题 1,heading 1,h:1,h:1app,level 1,Level 1
Head,H1,h1,Huvudrubrik,Title1,l1,1st
level,Section Head,Sec1,h11,1st level1,h12,1st
level2,h13,1st level3,h14,1st level4,h15,1st
level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1

CAMERA MENU A	
Name	Description
NEXT	Next page.
CAMERA MENU B	
BRIGHTNESS	Used to set the picture brightness level. The level ranges from 0 to 127, and the default value is 12.
SHARPNESS	Used to set the picture sharpness level. The level ranges from 0 to 15, and the default value is 04.
MIRROR	Level mirroring. Available MIRROR options are ON and OFF.
FLIP	Vertically inverted function. Available FLIP options are ON and OFF.
NEGATIVE	Negative film image feature. Available NEGATIVE options are ON and OFF.
OSD	Zoom Lens info settings. Available OSD options are ON and OFF.
OUTPUT	PAL: 1080/25P; NTSC: 1080/30P. The default value is 1080/25P.
FACTORY	Reset to factory default setting. Available FACTORY options are ON and OFF.

4.9.5 Preset CRUISE (Group CRUISE) Setting

Preset Cruise (Group Cruise) setting page is displayed as shown in Figure 4-7.

Figure 4-7 Preset Cruise (Group Cruise) Setting

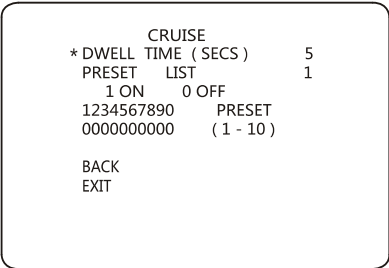


Table 4-6 describes the function options on the camera settings menu.

Table 4-6 Preset Cruise (Group Cruise) Setting Description

Name	Description
DWELL TIME(SECS)	Cruise waiting time between presets,range:5~250 Seconds.
PRESET LIST	Preset cruising list. Total three pages, each can select 10 presets.
1 ON 0 OFF 1234567890 PRESET 0000000000 (1~10)	Select the involved presets, parameters 0 or 1.To change setting by pressing IRIS+: press 1 for the selection, 0 skipped.
BACK	Return Main Menu
EXIT	Exit OSD setting

4.9.6 RESTORE FACTORY DEFAULT

PTZ reset function. Select after entering: YES or NO. YES→Auto reboot and restore PTZ to factory default setting after waiting about 30 seconds, NO→ Cancel reset.

Error! Use the Home tab to apply 标题
1,heading 1,h:1,h:1app,level 1,Level 1
Head,H1,h1,Huvudrubrik,Title1,l1,1st
level,Section Head,Sec1,h11,1st level1,h12,1st
level2,h13,1st level3,h14,1st level4,h15,1st
level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1Error! Use the Home tab to apply 标题
1,heading 1,h:1,h:1app,level 1,Level 1
Head,H1,h1,Huvudrubrik,Title1,l1,1st
level,Section Head,Sec1,h11,1st level1,h12,1st
level2,h13,1st level3,h14,1st level4,h15,1st
level5,h16,1st level6,h17,1st level7,h18,1st
level8,h111,1

4.9.7 REBOOT SYSTEM

Reboot system.

5 Specifications

Table 5-1 lists the technical specifications of the mini dome.

Table 5-1 Technical specification

Items	Parameters	Specifications
Module Specifications	Sensor	1/2.8 Exmor CMOS Sensor
	Pixel	2MP
	Resolution	1920×1080
	Video Format	PAN: 1920×1080p/25fps; NTSC: 1920×1080p/30fps
	Synchronizati on	Inter-sync
	Lens	4.9mm(wide) - 49mm(tele)
	Foucus	Auto/Manual/Keyboard
	Optical Zoon	10x
	Horizontal viewing angle	Near 53.2° , Far 5.65°
	SNR	>50dB
	Illumination	0.1Lux/F1.6 (Color), 0.01Lux/F1.6 (Black/White)
	Auto-Gain	Low/Mid/High
	WDR	On/Off
	DNR	On/Off
	Day/Night	COLOR, B/W, AGC
Funtions	Horizontal range	360 degree continuous rotation

Error! Use the Home tab to apply 标题1,heading 1,h:1,h:1app,level 1,Level 1Head,H1,h1,Huvudrubrik,Title1,l1,1st level,Section Head,Sec1,h11,1st level1,h12,1st level2,h13,1st level3,h14,1st level4,h15,1st level5,h16,1st level6,h17,1st level7,h18,1st level8,h111,1Error! Use the Home tab to apply 标题1,heading 1,h:1,h:1app,level 1,Level 1Head,H1,h1,Huvudrubrik,Title1,l1,1st level,Section Head,Sec1,h11,1st level1,h12,1st level2,h13,1st level3,h14,1st level4,h15,1st level5,h16,1st level6,h17,1st level7,h18,1st level8,h111,1

Items	Parameters	Specifications
	Horizontal speed	0.5-300° / sec
	Vertical range	0-90 degrees, mechanical flip
	Preset	256
	Preset Speed	300 degrees / sec.
	Preset cruise	Supports 30 presets, preset dwell time can be set
	Other cruise	Intermittent cruise, auto cruise
	Other features	Power-on action, free action
Network functions	Network Interface	RJ-45, 10/100Base-T
	Video encoding format	H.264(ISO/IEC 14496-10) high/baseline profile
	Rate Control	CBR、VBR
	Image Coding	Maximum 1920×1080p@30fps
	Multi-stream	Supported
	Image overlay	Time, date, channel number, channel name and custom text
	Motion Detection	Support
	Heartbeat mechanism	Support
	Alarm and event processing	Can trigger events according to the plan, Motion detection or External Input. Support uploading image and notification by FTP、Email and HTTPS
	Network Transmission Control	Flow control technology of Embedded network bandwidth adaptive

Items	Parameters	Specifications
	WebServer	Embedded WebServer, support real-time monitoring through a browser, support parameter configuration
	Network protocol	IPv4、RTP/RTCP、TCP/UDP、HTTPS、DHCP、DNS、FTP、DDNS、PPPOE、SMTP
	Security	Password protection, support for multi-level user, multi-level group management
General Specific ations	Power supply	DC12V/2A
	Power	15W(MAX)
	Working temperature and humidity	-10℃ - 50℃ , Humidity <90%
	Protection Level	IP66(Outdoor Speed dome), Lightning protection, anti-surge, anti-breakthrough
	Storage Environment	-40-85℃ Humidity 0-95%
	Bracket	Outdoor wall bracket, Indoor ceiling mount bracket
	Installation	Wall, Ceiling etc.
	Size	125(L)×124(H) mm
	Weight	1.3KG(With Bracket)

6 Troubleshooting

Table 6-1 describes the common faults and solutions.

Table 6-1 Common fault and solution

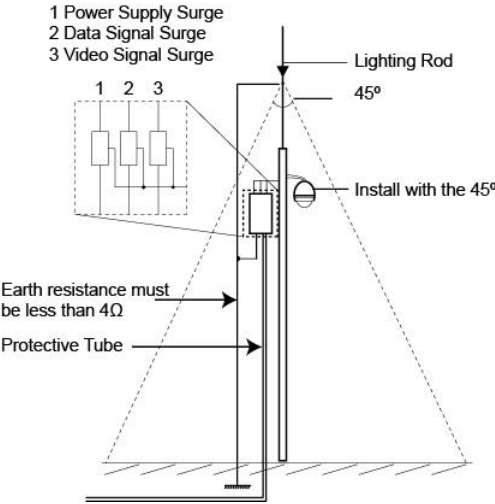
Problems	Possible Causes	Remedies
No action when power is switched on	Power supply fault	Replace
	Bad connection of the power	Correct
	Transformer damaged	Replace
Abnormal self-check. But with images	Mechanical failure	Repair
	Camera inclined	Reinstall
	Power supply not enough	Replace
Normal self-check but no images	Bad connection of the video	Press to connect well
	Camera damaged	Replace
Normal self-check but out of control	RS485 bus bad connection	Check the RS485 connection
	Dome ID setup is wrong	Reselect
	Protocol setup is wrong	Reset and Switch ON again
Vague image	Bad connection of the video	Press to connect well
	Power supply not enough	Replace
Dome camera out of control	Self check error	Switch ON again
	Bad connection of control	Press to connect well

	Bad control of matrix	Switch ON again
Lens of Dome out of control	In manual state	Use the control command to set the lens of dome into manual state.
Use IR Remote controller on DVR but out of control	Address of IR Remote controller error	Correct
	IR Remote controller no battery	Change battery

A Lightning Proof and Surge Signal Proof

The product adopts TVS lightning proof technology to prevent from damage by lightning strike below 1500 W and impulse signals such as surge; but it is also necessary to abide by the following precautions to ensure electrical safety based on practical circumstances:

- Keep the communication cables at least 50 meters away from high voltage equipment or cables.
- Make outdoor cable laying-out under eaves as possible as you can.
- In open area shield cables in steel tube and conduct a single point ground to the tube. Trolley wire is forbidden in such circumstances.
- In strong thunderstorm or high faradic zone (such as high voltage transformer substation), extra strong lightning proof equipment must be installed.
- Take the building lightning proof requirements into account to design the lightning proof and grounding of outdoor equipment and cable laying-out in accordance with the national and industrial standards.
- The system must be grounded with equal potentials. The earth ground connection must satisfy the anti-interference and electrical safety requirements and must not be short connected with high voltage electricity net. When the system is grounded separately, the resistance of down conductor should be $\leq 4\Omega$ and the sectional area of down conductor should be $\geq 25\text{mm}^2$ (refer to Figure E.1).



B

Declaration on Hazardous Substances in
Electronic Information Products

Part	Hazardous Substances					
	Pb	Hg	Cd	Cr6+	PBB	PBDE
Mechanical part	×	○	○	○	○	○
Board/circuit module	×	○	○	○	○	○
Connector	×	○	○	○	○	○
Support devices	×	○	○	○	○	○
○: Indicates that the concentration of the hazardous substance contained in all the homogeneous materials of this part is below the limit requirement of the SJ/T 11363-2006 standard. ×: Indicates that the concentration of the hazardous substance contained in all the homogeneous materials of this part is above the limit requirement.						

101-500-0114-01