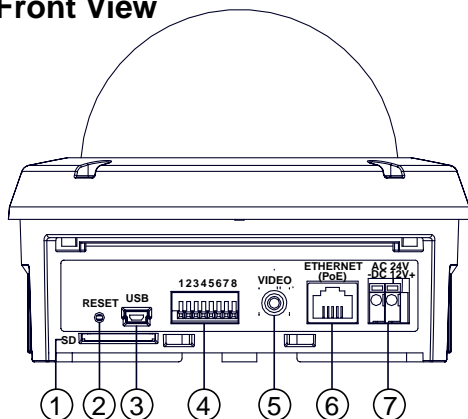


3-Axis Vandal-proof IP Dome Camera

DESCRIPTION OF THE DEVICE

1. The Front View



1. SD CARD slot:

This is used for system software updating and archiving / accessing critical images.

2. RESET:

Recover to factory default.

3. 5pin MINI USB Port:

The user can use a USB device cable to connect the IP camera to the USB port on the PC.

4. GPIO:

This is an 8-PIN connector including the **RS485+/-**, **ALARM IN/OUT**, **ALARM RESET**, **AUDIO IN/OUT** and **GROUND** items for connecting with external devices.

5. VIDEO OUT Connector:

The connector provides the unit's composite video signals to a monitor.

6. ETHERNET (PoE):

This is a standard RJ-45 connector for 10/100 Mbps Ethernet networks. PoE (Power over Ethernet) function: Provides power to the device via the same cable as used for the network connection.

7. Plug Inlet:

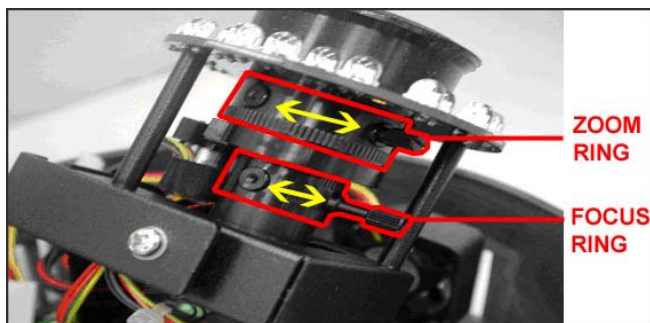
An AC 24V or a DC 12V inlet that connects to an external power supply.

- | |
|-------------|
| 1.RS485+ |
| 2.RS485- |
| 3.GND |
| 4.ALM-OUT |
| 5.ALM-IN |
| 6.ALM-RST |
| 7.AUDIO-IN |
| 8.AUDIO-OUT |

2. Lens Adjustment

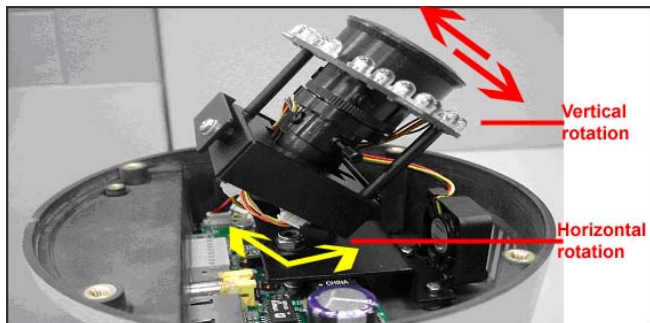
Before adjusting the lens, the user has to remove the cover of the dome. 1) Loosen the screws holding the camera mount and then 2) carefully lift the cover up. After all adjustments completion, attach the dome cover to the camera.

I. Focus adjustment:



- (1) Loosen the fixing screws on the Zoom ring and Focus ring.
- (2) Adjust the angle of view with the Zoom ring and adjust the focus with the Focus ring for the best picture resolution.
- (3) After lens adjustment completion, tighten both the Zoom ring fixing screw and the Focus ring fixing screw.

II. Adjust the camera angle:



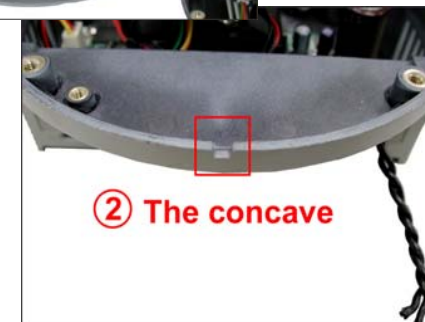
The camera angle can be adjusted manually for horizontal rotation and vertical rotation.

Note: The default angle between the lens and the camera pedestal is approximately 45° .

3. Cover Attaching

To attach the dome to the base, please do as steps (1) and (2).

- (1) Note that the protrusion (the convex-shaped fitter) ① that reaches right up to the edge of the ring on the dome cover must align with the concave ② on the dome body.
- (2) Screw the dome cover and the body together.



Please follow the steps given below to install, configure and set the IP Dome Camera.

1. Check the IP class of your PC

Step 1: From the **Start** menu, point to **Settings**, and then click **Control Panel**.

Step 2: When **Control Panel** appears, double-click the **Network Connections** icon. The **Network Connections** dialog box appears.

Step 3: Click the **Protocols** tab in the **Network Connections** dialog box.

Step 4: When the **Local Area Connection Properties** dialog box shows up, choose **Internet Protocol (TCP/IP)** and click **Properties**.

Step 5: In the **Internet Protocol (TCP/IP) Properties** dialog box, choose **Use the following IP Address** to indicate that you do not wish to use DHCP, and assign IP Address 192.168.1.200 with Subnet mask 255.255.255.0. Click **OK** when you finish it.

Step 6: Choose Close to finish the modification.

2. Install UPnP Packets of your PC

As described before, Microsoft Windows XP[®] doesn't start the UPnP service by default; however, we have to install some packets before we initialize it. The following steps will help you to install them.

Step 1: From the **Start** menu, point to **Set Program Access and Default**, and then click it.

Step 2: When the **Add or Remove Programs** dialog box appears, click the **Add/Remove Windows Components** button.

Step 3: Check the **Network Services** in the **Windows Component Wizard** dialog box, and then click **Details...**

Step 4: Check **UPnP User Interface**, and choose **OK**.

Step 5: When the original **Network Component Wizard** dialog box returns, click **Next**.

Step 6: After about one minute the UPnP installation will be done, and choose **Finish** to close it.

3. Turn on Services of your PC

After installation, we should turn on the relative services to start the UPnP protocol. The following procedures will teach you how to do it.

Step 1: From the **Start** menu, point to **Settings**, and then click **Control Panel**.

Step 2: When **Control Panel** appears, double-click the **Administrative Tools** icon. The **Administrative Tools** dialog box appears.

Step 3: Click the **Services** icon in the **Administrative Tools** dialog box.

Step 4: When the **Services** dialog box shows up, double click the **SSDP Discovery Service** icon.

Step 5: Choose **Automatic** in the **Startup type**, and click **OK** to start it.

Step 6: When the **Services** dialog box appears again, double click the **Universal Plug and Play Device Host** icon.

Step 7: Choose **Automatic** in the Startup type, press the **Start** button, and click **OK** to start it.

Step 8: Restart your system.

4. Set the static IP address in the IP Dome Camera.

Step 1: Plug in its power connection.

Step 2: Plug the USB connector in your PC and in the USB socket in the rear of the dome lens.

Step 3: A window pops up asking if you want to "Run the program", "Open folder to view files", or "Take no action". Choose "Run the program" and click "**OK**", and the "USB configuration" window will pop up.

Step 4: Set the Network setting and type in the IP address you desire. Before you change the IP address, you should note the factory default Static IP address (192.168.1.168).

Step 5: After changing the IP address, click the "**Apply**" button in the "**USB Configuration**" window.

Step 6: A message pops up asking you to affirm the action as "**OK**".

Step 7: Click "**OK**", and remove the USB connection from your PC.

Step 8: Click "**Exit**" at the bottom of the "**USB Configuration**" window to close the window. Or, choose the "**Launch**" button to see the local camera images directly.

Step 9: Before clicking "**Launch**", check your PC's IP address and use the Network connector (RJ-45) to link up with your camera.

Step 10: If you can see the images, it means the IP setting is complete.

5. Scan IP Dome Camera through "My Network Place"

Step 1: After your installation and starting services, the UPnP protocol will take effect. You can scan all **IP Dome Camera** in My Network Place.

Step 2: Just double click the **IP Dome Camera** icon, and the video live stream will pop up automatically without assigning any IP address in Microsoft Internet Explorer.

6. Change the IP Dome Camera's control and operational settings.

Step 1: Type in the IP address in the IE Browser. You will now see the IP Dome camera' images.

Step 2: Use the buttons below the images to enter any other operational settings pages.

Step 3: When you change any setting, please don't forget to click the "**Submit**" button in each page.

NOTE: Enable DHCP Function: This function can only work if the LAN, which the unit is connected to, has a DHCP server. If the DHCP server is working, the IP Dome Camera will obtain an IP address automatically from the DHCP server.

NOTE: When only one unit of the IP Dome Camera is connected to a computer or LAN, you can freely assign an IP address for the IP Dome Camera. For example, there is a range of IP Dome Camera IP addresses from 192.168.1.1 to 192.168.1.255. You can pick one for use from the range of the IP. It's not necessary to set MASK and GATEWAY; leave the settings as default.

When an IP Dome Camera is connected to a WAN, you must acquire a unique, permanent IP address and correctly configure the MASK and GATEWAY settings according to your network architecture. If you have any questions regarding those settings, please consult a qualified MIS professional or your ISP.

Specifications

Model		3-Axis Vandal-proof IP Dome Camera	
		DAY & NIGHT MODE	DAY MODE
Video system	System	PAL/ NTSC	
	Video sensor	1/3" Sony Super HAD CCD	
	Horizontal resolution	520 TV lines	
	Lens	Vari-focal 3.3~12mm	
	Auto-iris	DC drive	
	Min. illumination	IR Off: 0.5 Lux @ F1.2 / IR On: 0 lux.	NA
	Camera adjustment angle	Pan: 0~360° / Tilt: 0~180°	
	Day & Night	Yes (mechanical IR-cut filter)	NA
	IR distance	20M	NA
Image system	Video compression	MJPEG or MPEG4 selectable	
	Resolutions	4CIF / 2CIF / CIF	
	Frame rate	MJPEG: 30(25) FPS at all resolutions.	
		MPEG4: 30(25)/24/15/10/5 FPS at all resolutions.	
	Image quality	5 levels	
	Image configurations	Contrast, Brightness, AWB, BLC, Sharpness, Saturation, Mirror, Private mask (3 areas).	
		Built-in motion detection (96 zones / 5 levels)	
Audio	One-way audio (audio-in), 8Khz, sample rate.		
Network system	Interface	Ethernet (RJ-45 wired, 10 /100 BaseTX, MDIX supported)	
	Protocols	HTTP, TCP, DHCP, UPnP, ARP, DNS, DynDNS, SNTP, PPPoE, RTP, RTSP, *SMTP, *FTP.	
	Security	Multiple authorities levels / IP address filtering	
	Users	8 simultaneous users access	
	Firmware update	upgrade via SD card, HTTP, FTP, USB	
Application	PC site	Free bundle recording software	
	System integration	Software development kit (HTTP-API / ActiveX control / customized web page tool)	
Alarm management	Alarm triggered by built-in motion detection / external alarm input / Network disconnection		
	Alarm notification by ANNP / e-mail* / FTP* / SD card / alarm output		
	Pre-alarm: 100 pictures		
Connectors	Alarm output	1.0Vp-p, 75ohm, composite, negative, BNC x 1	
	Ethernet	RJ-45 x 1	
	Push-in jack (8 pins)	alarm input x 1 / alarm output x 1/ alarm reset x 1 / audio input x 1 / audio output x1 / RS-485 x2 / GND x 1	
	SD card slot	update / alarm and schedule recording.	
	USB	update / configuration	
	Power jack	x 1	
Others	LED indicator	Network / Power indicator	
	Power requirement	DC12V (8.4W) / AC24V / PoE (IEEE 802.af)	
	Temperature	0 – 50°C	
	Dimensions (mm)	152.9 (D) x 116.3 (H)	
	Approvals	FCC / CE / RoHS	
	Accessories	CD x 1	
		Quick installation manual x 1	
Power adapter x 1			
USB connection line x 1			

*FTP and SMTP functions are for PAL version only.

**Specifications are subject to change without notice.