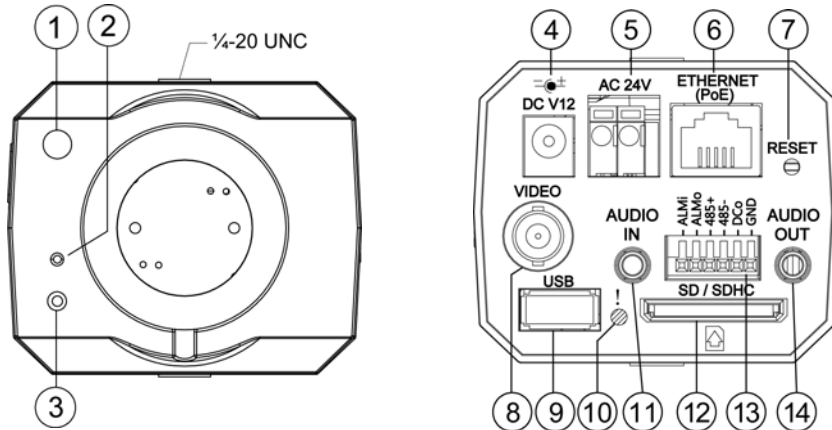


Ultra Low-light Color Cameras-- The Megapixel IP Box Camera

Description of the device

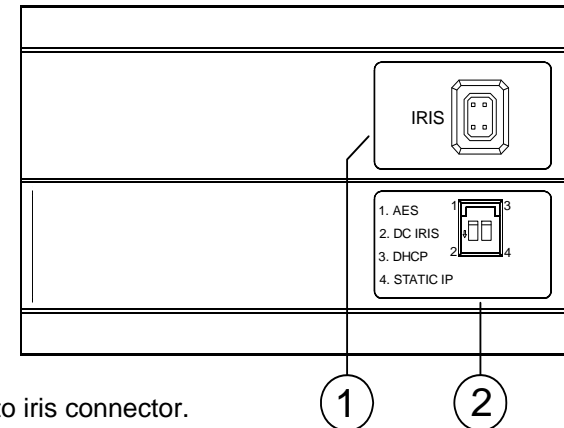
1. Front Panel & Rear Panel



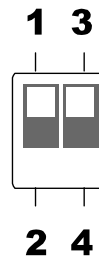
1. **Light Sensor:** Registers the quality of light in the camera's environment and detects with day/ night mode to provide better information concerning the light.
2. **MICROPHONE:** The IP Camera has an additional audio function. The device has a microphone built into its front panel which records sound.
3. **POWER indicator:** Indicates the power status of the unit.
4. **Plug Inlet:** A DC 12V inlet that connects to an external power supply.
5. **Plug Inlet:** An AC 24V inlet that connects to an external power supply.
6. **ETHERNET 10/100 Connector:** 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. **RESET:** Recover to factory default.
8. **VIDEO OUT Connector (BNC):** This output provides the unit's composite video signal to a Composite/Analog input. (This connector is used for service to adjust and improve the image.)
9. **USB port:** The user can use a USB device cable to connect the IP camera to the USB port on the PC.
10. **LED indicator:** The green light indicates the unit is activating and the SD card cannot be removed.

11. **AUDIO IN:** The connector is used to connect the audio output from other devices to the camera.
12. **SD/ SDHC CARD slot:** This is used for system software updating and archiving / accessing critical images.
13. **ALARM I/O:** This is a 6-PIN connector including the ALARM IN/OUT, RS-485, DC OUTPUT and GROUND items for connecting with external devices.
14. **AUDIO OUT:** Provides the camera's audio signal to a speaker or stereo.

2. Flank Panel



1. **IRIS:** Auto iris connector.
This camera works with a DC drive auto iris lens. Please refer to the pin assignment marked on the camera when connecting the auto iris lens
2. **DIP Switch:**



- (1) **AES:** Auto electric shutter.
- (2) **DC IRIS:** Use an auto iris (DC drive)
- (3) **DHCP:** Turn On / Turn Off to use the DHCP protocol. If the switch points upwards, the device can obtain an IP address from the DHCP server via the network.
- (4) **STATIC IP:** If the switch points down, the device can't obtain an IP address from the DHCP server. This option is needed to configure the network communication settings.

Please follow the steps given below to install, configure and set the IP 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 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 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 Camera through "My Network Place"

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

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

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

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

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

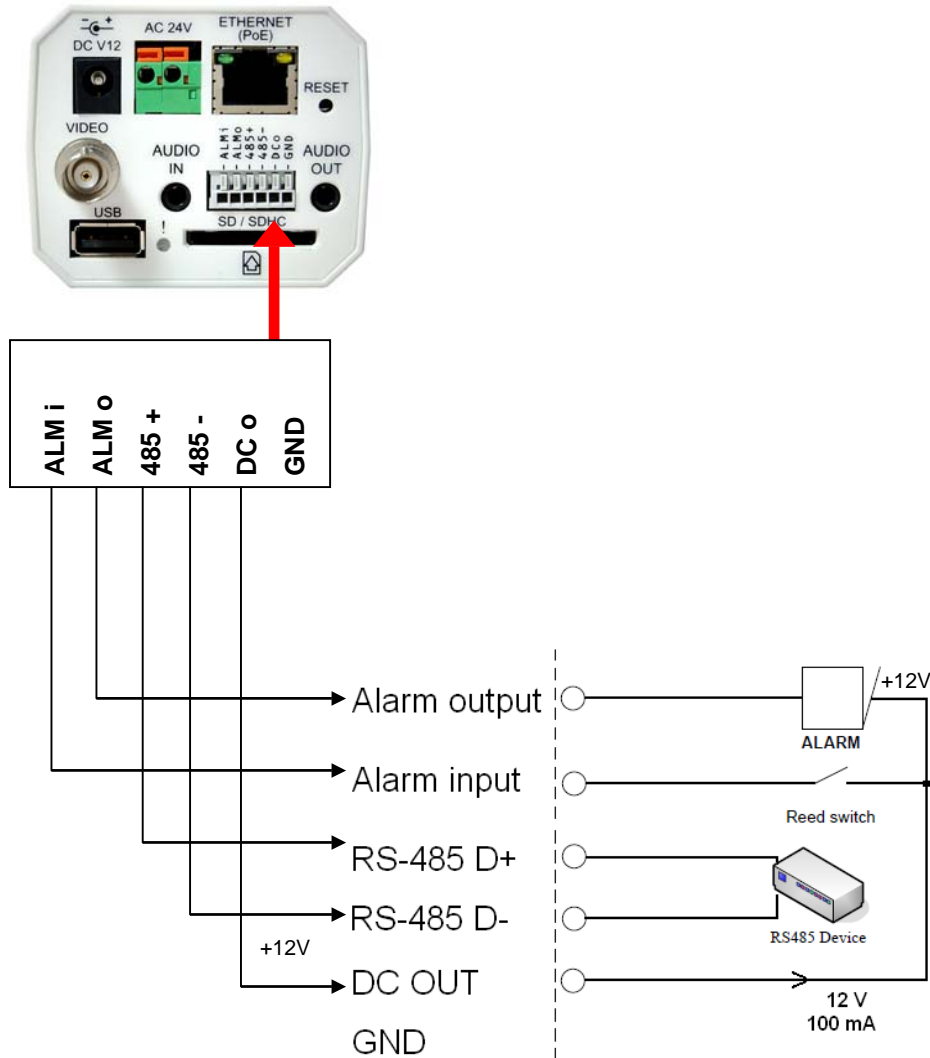
Step 3: When you change any setting, please don't forget to click the "**Submit**" button in each page.

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 Camera will obtain an IP address automatically from the DHCP server.

NOTE: When only one unit of the IP Camera is connected to a computer or LAN, you can freely assign an IP address for the IP Camera. For example, there is a range of IP 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 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.

The Alarm Wiring Diagram



Hardware Installation

1. Plug in the power connection to the IP camera.
2. Plug in the IP camera cable.
3. Confirm the correct network connection status (PC/HUB/ IP camera).
4. In the PC IE Browser, key in the camera's IP online to link up to the live first page.

NOTE: Red light power indicator of the IP Box Camera: it flashes when the power supply is on.

Two-color network indicator:

- (1) It is off when the network is disconnected.
- (2) The green light goes on when the network is connected; the orange light flashes indicate the network connection status.

WARNING

- To prevent fire or shock hazard, avoid exposing this unit to rain or moisture.
- Do not block ventilation openings.
- Do not place anything on top of the unit that might spill or fall into it.
- Do not attempt to service this unit yourself, as opening or removing covers may expose you to dangerous voltage or other hazards. Please refer all servicing to your distributor / retailer.
- Do not use liquid cleaners or aerosols for cleaning.
- To prevent fire or electric shock, do not overload wall outlets or extension cords.
- PoE warning : If the PoE injector is used instead of the supplied power adaptor, all of the wiring to and from the injector must be routed/ installed inside a building/ plant and never routed/ installed outside of the building/ plant.
- Please only select a power adapter or power certified by UL and marked at 24Vac / 60 Hz, minimum 1A, class 2 or LPS.
- Indoor use only.
- Please do not look directly at the shining, reflecting surface of the camera housing. Looking directly could result in eye uncomfortable.
- This product should not be used for the same purposes as consumer electronic devices.
- The interconnecting cables should be placed inside the UL certified Outdoor Use Conduits.

CAUTION

RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE. DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS.

ATTENTION

RISQUE D'EXPLOSION SI LA PILE EST REMPLACÉE PAR UN TYPE INCORRECT. DEBARRASSEZ-VOUS DES PILES USAGÉES EN SUIVANT LES INSTRUCTIONS.

Specifications

Model	Ultra Low-light Color Cameras-- IP Box Camera	
Camera	Image sensor	Sony 1.3M Exmor Sensor
	Lens Mount	CS
	Minimum illumination	Color: 0.05 Lux @ F1.2; B/W: 0.01 Lux @ F1.2
	IR cut filter	Yes
	Day & Night	Auto / Day / Night / Schedule.
	WDR	Yes
Image	Video Compression	H.264 / MPEG4 / MJPEG.
	Resolution	<ul style="list-style-type: none"> • 4:3 - "1280x1024", "1280x960", "1024x768", "800x600", "640x480", "480x360", "320x240" and "176x144". • 16:9 - "1280x720", "800x450", "640x360", "480x270", "320x176" and "176x144".
	Video streaming	30FPS (1280x1024) 30FPS (1280x720) Full color in lowlight.
	Profiles	3 (selectable)
	Image settings	<ul style="list-style-type: none"> - Adjustable image size, quality, and bit rate. - Day / Night mode. - Flip & Mirror. - AGC, AWB, AES. - Time stamp and text caption overlay. - Privacy masks.
	Video management software	SDK, including HTTP-API / ActiveX / ONVIF.
Audio	Audio streaming	Two-way.
	Compression	G.711 / G.726.
	Audio bit rate	G.711 64kbps / G.726 32kbps.
	Inputs / outputs:	1 x input / 1 x output (3.5mm earphone jack).
Network	Security	Multi-level password protections, IP address filtering, HTTPS encryption, User access log.
	Protocols	IPv4, HTTPS, HTTP, TCP, UDP, RTP/RTCP/RTSP, DHCP, NTP, FTP, SMTP, UPnP, ICMP, ARP, DDNS, PPPoE, SAMBA
	Users	Access by 10 simultaneous users.
	Firmware update	SD card / HTTP.
Alarm	Recording	SD card
	Pre-alarm recording	Yes.
	Advanced motion	48 zones. Sensitivity: 0 - 100 %.
	Trigger	<ul style="list-style-type: none"> Motion Detection Schedule Alarm input Ethernet loss
	Notification	SD card recording, SMTP, FTP, HTTP, alarm output.
	RJ-45	10 BASE - T / 100 BASE -TX.
Connectors	Digital I / O	Push-in: 1 x Alarm input / 1 x Alarm output / 1 X DC output (12V DC) / 1 x Ground / 2 x RS-485
	Earphone jack	2x3.5 mm (1xAudio in [mic. in/ line in], 1xAudio out [line output]).
	DIP Switch	1. AES / 2. DC iris / 3. DHCP / 4.Static IP.
	Iris	DC IRIS.
	Reset	Reset for factory default.
	Local storage device	SD / SDHC card slot.
	USB	A-Type (2.0)
General	LED indicators	Power / Network / SD card.
	Power	<ul style="list-style-type: none"> - 12V DC (DC power jack). Approx. 4.8 W. - 24V AC (2 pin terminal block). Approx. 6 W. - PoE: Approx. 6 W. IEEE802.3af compliant 802.3af. Class 2
	Processors	TMS320DM368
	OS	Linux 2.6 kernel.
	Operating conditions	0°C to 50°C (32°F to 122°F).
	Approval	CE, FCC, RoHS, C-Tick.
	Dimensions / Package Weights	56.5 x 68 x 114.5 mm. (H x W x L) / 1 kg
	Accessories included	<ul style="list-style-type: none"> - Quick Installation Guide. - CD x 1 (includes User's Manual). - Power adapter: (Input: 100-240 VAC, 50 / 60 Hz, Output: 12VDC, 1A). - USB cable x 1

*Specifications are subject to change without notice.