American Dynamics

A Tyco International Company

Quick Setup Guide

illustra 400 IP BOX CAMERA (PoE)

SAFETY PRECAUTIONS

All the following safety and operational instructions to prevent harm or injury to the operator(s) or other persons should be read carefully before the unit is activated.

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, avoid overloading wall outlets or extension cords.
- Indoor use only.
- The installation should be made by a qualified service person.
- 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.
- 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.
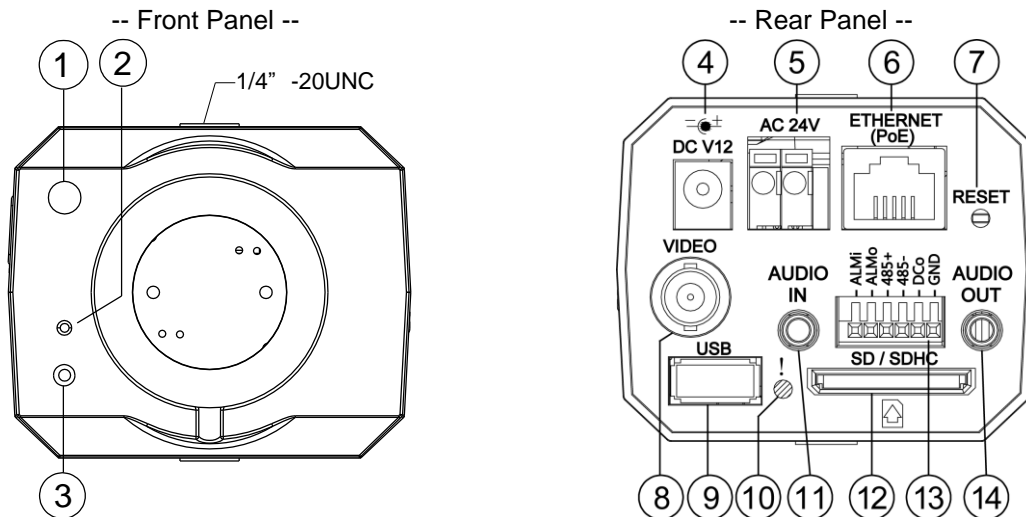
CAUTION

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

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1. Front Panel and Rear Panel

-- Front Panel --

-- Rear Panel --

1. **Light Sensor:** Registers the quality of light in the camera's environment, and controls the iris shuttle 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:** The connector provides the unit's composite video signals to a monitor. (This connector adjusts and improves the images.)

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 updating system software and archiving / accessing critical images.

13. **GPIO:** 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
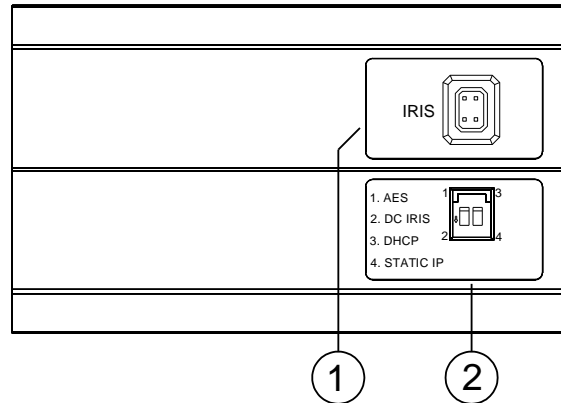
1. **Lens Mount:** This IP camera is used with either a C or a CS lens mount .

2. **DIP Switch:**

1 3	**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 change the setup of the network function (enable/disable) via the network.
2 4	**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. (*In the default factory configuration, this DIP Switch is in the Down position.)

3. The Reset Button

You can use the **Reset button** to return to default, or factory, settings. Press the **Reset Button** for about 10 seconds. Blue screens will be displayed, and a text saying "RESETTING…" will appear. The device auto reboots. All settings are back to default. The following items return back to default.

[SETUP]

Network Setup
a.   LAN Settings
b.   PPPOE Settings

Dynamic DNS
a.   DYNAMIC DNS SETTING

IMAGE SETUP
a.   Privacy Mask Setting
b.   IMAGE SETTINGS

AUDIO AND VIDEO
a.   VIDEO PROFILE 1
b.   VIDEO PROFILE 2
c.   VIDEO PROFILE 3
d.   AUDIO SETTINGS

MOTION DECTION
a.   Video Motion setting

TIME AND DATE
a.   TIME CONFIGURATION
b.   AUTOMATIC TIME CONFIGURATION
c.   SET DATE AND TIME MANUALLY

Event Setup
a.   Server
b.   Media
c.   Event
d.   Recording

[ADVANCED]

DI and DO
a.   DI and DO
b.   LED
c.   VIDEO OUTPUT

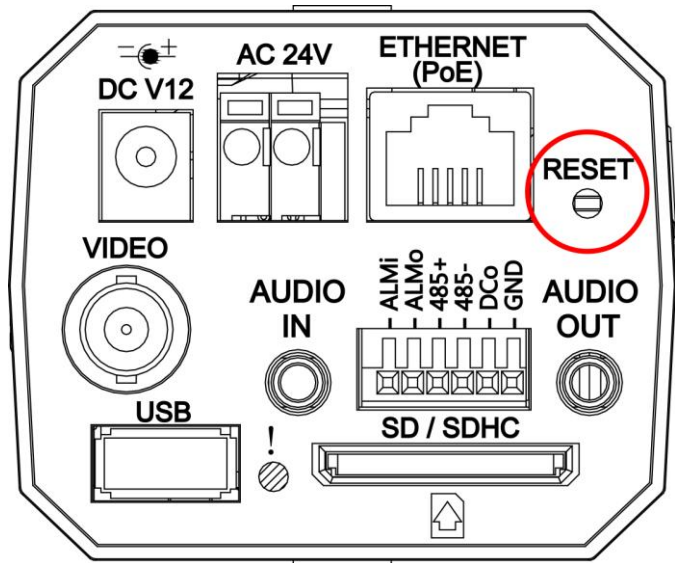RS-485 (for the IP Box Camera only)
a.   RS-485

ICR
b.   ICR

HTTPS
a.   HTTPS

Access List
a.   Allow List
b.   Deny List

4. Install, configure and set the Network Camera

The IP Box Camera default setting is DHCP OFF. Users can build the IP Box Camera working environment with a static IP address. The default static IP is **192.168.1.168.** You can set an IP address for the IP Box Camera if the LAN unit isn't connected to a DHCP server. Or turn on the DHCP setting to use the DHCP protocol if the DHCP server is working in the LAN. The IP Box Camera will obtain an IP address automatically from the DHCP server. The IP Box Camera is linked by its Video Out connection via a BNC connector to a monitor's Video In connection. If this connection is enabled, you will see information on the monitor screen, such as, the IP Box Camera factory default Static IP address.

1. Check the IP class of your PC
Step 1: Select **Settings** from the **Start** menu, and then click **Control Panel**.
Step 2: 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: Select **Internet Protocol (TCP/IP)** and click **Properties**.
Step 5: Select **Use the following IP Address** to indicate that you do not wish to use the DHCP, and assign IP Address 192.168.1.200 with Subnet mask 255.255.255.0. Click **OK** when you finish.
Step 6: Choose **Close** to finish the modification.

2. Install UPnP Packets of your PC
Microsoft Windows XP$^{®}$ does not start the UPnP service by default. Some packets must be installed before it is initialized, as described below.
Step 1: Select **Set Program Access and Default** from the **Start menu**.
Step 2: Click the **Add/Remove Windows Components** button when the **Add or Remove Programs** dialog box appears.
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: Click **Next** when the original **Network Component Wizard** dialog box returns. After about one minute the UPnP installation is complete.
Step 6: Select **Finish** to close.

3. Turn on Services of your PC
After installation, turn on the relative services to start the UPnP protocol. The following procedures will demonstrate this.
Step 1: Select **Settings** from the **Start** menu, and then click **Control Panel**.
Step 2: 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: Double-click the **SSDP Discovery Service icon** when the **Services** dialog box shows up.
Step 5: Choose **Automatic** in the **Startup type**, and click **OK** to start it. The **Services** dialog box appears again.
Step 6: 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 Network camera.
Step 1: Arrange a Network camera and check the camera's left flank panel to find the DIP Switch area and the four positions in it. Push the right-hand switch point down to the Static IP position.
Step 2: Plug in the network camera's power connection.

> **Note: Before linking the USB connector with the camera and your PC, remember to remove the SD card in the camera, otherwise the PC will directly show the SD card's information, not the "USB configuration" window.**

Step 3: Plug in the USB connector into your PC's USB socket, and the other end of the connector into the USB socket in the left flank panel of the camera. A window pops up asking if you want to "Run the program", "Open folder to view files", or " Take no action".

Step 4: Choose "Run the program" and click "**OK**", and the "USB configuration " window will pop up.

Step 5: 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 6: Click the "**Apply**" button in the "**USB Configuration**" window. A message pops up asking you to confirm the action as "**OK**".

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

Step 8: Click "**Exit**" at the bottom of the "**USB Configuration**" window to close the window. Alternatively you can click the "**Launch**" button to see the local camera images immediately. However, you must check your PC's IP address and link to your camera with the network connector (RJ-45) before doing so.

Step 9: If you can see the images, then the IP setting is complete.

5. Scan network camera through "My Network Place"

After your installation and starting services, the UPnP protocol will take effect.

Step 1: Scan all network cameras in My Network Place.

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

6. Change the Network camera's control and operational settings.

Step 1: Enter the IP address in the IE Browser. You will now see the network 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 remember 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, please move the dip switch point up to 3 on the flank panel; now the network camera will obtain an IP address automatically from the DHCP server.

NOTE: The default "User Name" and "Password" are admin and 9999, respectively. If either the user name or the password is incorrect, please check the input data and rectify it as necessary.

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

Quick Setup Guide

Specifications

illustra 400 IP BOX CAMERA (PoE)

Model	ADCi400-X001	Illustra 400 box 2/3MP w-out lens TDN WDR PoE NTSC
	ADCi400-X002	Illustra 400 box 2/3MP w-out lens TDN WDR PoE PAL
Camera	Image sensor	1/3" Sony IMX035 CMOS sensor.
	Lens	C / CS mount.
	Minimum illumination	Color: 0.2 Lux @ F1.4.
	IR cut filer	Yes
	Day & Night	Auto / Day / Night / Schedule.
	WDR	Yes
Image	Video Compression	H.264 / MJPEG.
	Resolution	NTSC: 896x720 (D2), 720x480 (D1), 352x240(CIF), 176x120(QCIF). PAL: 896x720 (D2), 720x576 (D1), 352x288(CIF), 176x144(QCIF).
	Video streaming	- Simultaneous H.264, MJPEG. - Multi-profile: resolution / compression / frame rate / video quality.
	Profiles	3
	Image settings	- 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.711u / G.726.
	Audio bit rate	G.711u 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, SAMBA, FTP.
	Pre-alarm recording	Yes.
	Advanced motion	512 zones. Sensitivity: 0 - 100 %.
	Trigger	Motion Detection Schedule Alarm input Ethernet loss Network/Remote digital alarm input
	Notification	SD card recording, SMTP, FTP, HTTP, alarm output.

Connectors	RJ-45	10 BASE - T / 100 BASE -TX.
	GPIO	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	1 x 3.5 mm (1 x Audio in [mic. in / line in], 1 x Audio 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.
General	LED indicators	Power / Network / SD card.
	Power	- DC 12V (DC power jack) Approx. 4.8 W. - AC 24V (2 pin terminal block) Approx. 6 W. - PoE: Approx. 6 W, IEEE 802.3af compliant class 2
	Processors	TMS320DM365.
	OS	Linux 2.6 kernel.
	Operating conditions	0℃ to 50℃ (32℉ to 122℉).
	Approval	CE, FCC, RoHS.
	Dimensions	56.5 x 68 x 114.5 mm. (H x W x D)
	Accessories included	- Installation Guide. - CD x 1 (includes User's Manual). - Power adapter: (Input: 100-240 VAC, 50 / 60 Hz, Output: 12VDC, 1A). - USB connector line.

* Specifications are subject to change without notice.