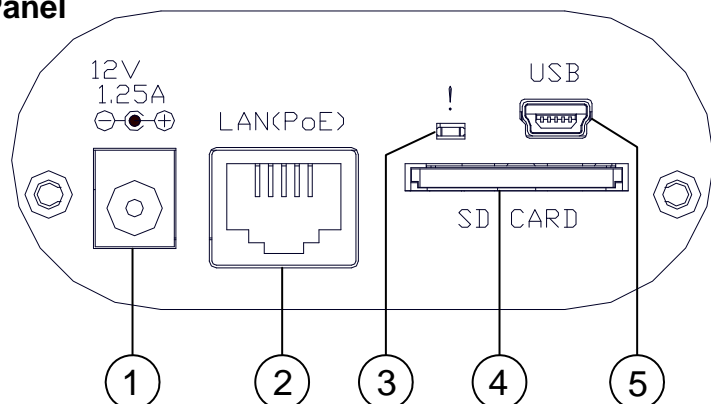


# Video Server Encoder

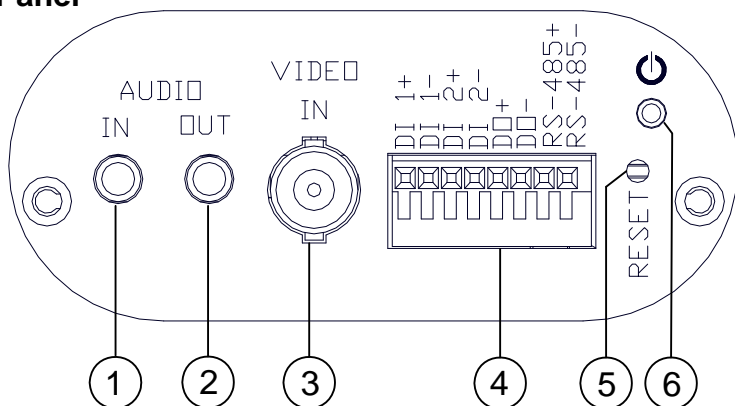
## DESCRIPTION OF THE DEVICE

### 1. Front Panel



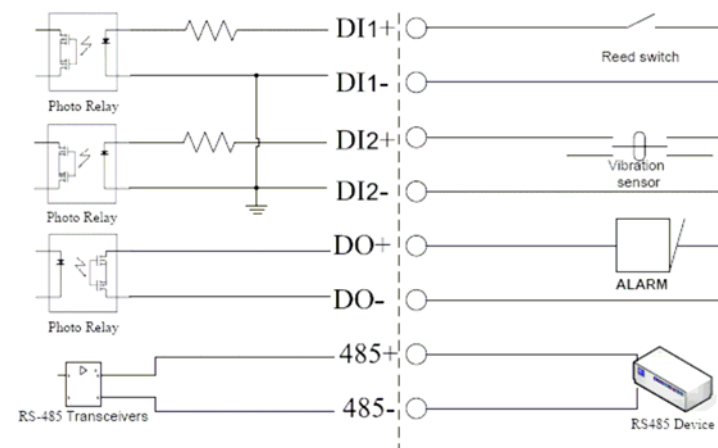
1. **Plug Inlet:** A DC 12V inlet that connects to an external power supply.
2. **ETHERNET 10/100 Connector:** This is a standard RJ-45 connector for 10/100 Mbps Ethernet networks. PoE (Power over Ethernet) function: Provides power to the device via the same cable as used for the network connection.
3. **SD indicator:** The green light indicates the SD card cannot be removed.
4. **SD/ SDHC CARD slot:** This is used for updating system software and archiving / accessing critical images.
5. **USB port:** The user can use a USB device cable to connect the Video Server to the USB port on the PC.

### 2. Rear Panel



1. **AUDIO IN:** The connector is used to connect the audio output from other devices to the Video Server.
2. **AUDIO OUT:** Provides the Video Server's audio signal to a speaker or stereo.
3. **Video in connectors:** The BNC connector is used to connect to the video output from the camera.
4. **ALARM I/O:** This is an 8-PIN connector including the **DIGITAL IN/OUT** and **RS-485** items for connecting with external devices.
5. **RESET:** Recover to factory default.
6. **POWER indicator:** Indicates the power status of the unit.

### 3 The DI/DO Schematic



**DI:** Receives signals from a reed switch, vibration sensor, or any other external security device.

**DO:** Connects to an alarm or buzzer.

**485+/485-:** Connects to an RS-485 interface for controlling auxiliary equipment such as an external camera enclosure for pan, tilt, and zoom functionality.

## **Please follow the steps given below to install, configure and set the Video Server.**

### **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<sup>®</sup> 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 Video Server.**

**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 device.

**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 device 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 Video Server.

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

### **5. Scan Video Server through "My Network Place"**

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

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

### **6. Change the Video Server's control and operational settings.**

**Step 1:** Type in the IP address in the IE Browser. You will now see the Video Server' 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 Video Server will obtain an IP address automatically from the DHCP server.

**NOTE: When only one unit of the Video Server is connected to a computer or LAN, you can freely assign an IP address for the Video Server. For example, there is a range of Video Server 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 Video Server 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	Video Server Encoder	
Image system	Video compression	Simultaneous H.264 & MPEG4 & MJPEG video streaming.
		Simultaneous multi-profile video stream.
		Controllable frame rate and bandwidth
	Resolutions	NTSC: D1 (720x480), CIF (352x240), QCIF (176x120) PAL: D1 (720x576), CIF (352x288), QCIF (176x144)
	Frame rate	Up to 30/25 (NTSC/PAL) in all resolutions.
Audio	Number of tracks	Mono 1 channel
	Audio Codec	G.711u/ G.726
	Audio sample rate	8kHz
	Audio bit rate	G.711u 64kbps/ G.726 32kbps
	Audio output	1K ohms
	Audio input	Built-in Microphone or LINE in 10k ohms 1.0Vpp
	2-Way Audio	Yes
Software	ActiveX support	Yes
	PC System Requirement	Microsoft Windows 2000 / Microsoft Windows XP / Microsoft Windows 7
	Multi-lingual UI	English / Traditional Chinese / Simplified Chinese / Czech / Dutch / Finland / French / German / Italian / Polish / Portuguese / Spain / Swedish / Hungarian / Rumanian / Turkish
	Update	SD card / HTTP
Network	Support protocols	IPv4, APR, TCP, UDP, ICMP, DHCP, DNS, SMTP, FTP, HTTP, PPPoE, IP filtering, UPnP, RTP/RTSP/RTCP, HTTPS, Samba, NTP, DDNS
	Security	Multiple authorities levels
		IP filtering
	Users	8 simultaneous user access
Port function	Video input x 1 (BNC)	
	Ethernet 10BaseT/100BaseT, RJ-45 x 1	
	audio input x1 / audio output x1	
	8-pin push-in block for: alarm input x 2 / alarm-out x1 / RS-485+-(2 pins)	
	USB port x 1	
	Reset button x 1	
	SD card slot x 1	
Alarm function	Alarm triggers	Motion Detection/ Schedule/ Alarm input/ Ethernet loss/ Network/ Remote digital alarm input
	Alarm video buffers	48MB pre-alarm and post alarm
Hardware	Processors	Texas Instruments TMS320DM365 / High performance 32-bit RISC CPU
	DDRII memory	DDRII
	DDRII memory	256 Mbytes
	Flash memory	32 Mbytes
	Real-time clock	Built-in
	Watchdog	Yes
Miscellaneous	LED indicator	Power / Status
	Dimensions (mm)	80 (W) x 105 (D) x 34 (H)
	Power	DC 12V (1.25A) / Power over Ethernet (IEEE 802.3af)
	Temperature	0°C ~ 45°C
	Approvals	CE/FCC/RoHS
	Package include	CD x 1
		Quick installation guide x 1
		Power adapter x 1

\*Specifications are subject to change without notice.