User's Guide





Megapixel PoE PTZ Internet Camera

Megapixel PoE Day/Night PTZ Internet Camera

TV-IP672P/ TV-IP672PI

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TV-IP672P / TV-IP672PI

Product Overview





TV-IP672P

TV-IP672PI

Package Contents

In addition to your camera, the package includes:

- Multi-Language Quick Installation Guide
- CD-ROM (Utility & User's Guide)
- Network cable (1.5m / 5ft)
- Power adapter (12V DC, 1.25A)

If any package contents are missing or damaged, please contact the retail store, online retailer, or reseller/distributor that the item was purchased.

Features

TV-IP672P

The Megapixel PoE PTZ Internet Camera, model TV- IP672P, provides security over a large area. Pan the camera side-to-side a remarkable 340 degrees and tilt up-and-down 115 degrees from any Internet connection.

No need to install this camera near a power source, power and data are received through a single Ethernet cable using Power over Ethernet (PoE) technology (See TRENDnet PoE Switches and Injectors).

Record 1280 x 800 Megapixel (WXGA) video at up to 30 frames per second (fps). Manage up to four video profiles to record HD video while streaming low resolution video to a compatible smart phone at the same time. Manage up to 32 TRENDnet cameras with the included complimentary camera management software. Advanced features include adjustable motion detection recording areas, email alerts, scheduled recording sessions, pan/tilt Auto-Patrol, H.264/MPEG-4/MJPEG image compression, date-and-time overlays, a Micro-SD card slot for backup storage, two-way audio (speakers not included), an adjustable lens, and four times digital zoom. A wall/ceiling mounting kit is included and the camera's off white housing blends into most environments.

TV-IP672PI

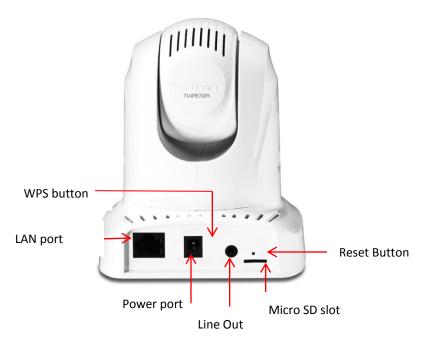
The Megapixel PoE Day/Night PTZ Internet Camera, model TV- IP672PI, provides day and night security over a large area. Pan the camera side-to-side a remarkable 340 degrees and tilt up-and-down 115 degrees from any Internet connection.

Record indoor video in complete darkness for distances of up to 7.5 meters. No need to install this camera near a power source, power and data are received through a single Ethernet cable using Power over Ethernet (PoE) technology (See TRENDnet PoE Switches and Injectors).

Record 1280 x 800 Megapixel (WXGA) video at up to 30 frames per second (fps). Manage up to four video profiles to record HD video while streaming low resolution video to a compatible smart phone at the same time. Manage up to 32 TRENDnet cameras with the included complimentary camera management software. Advanced features include adjustable motion detection recording areas, email alerts, scheduled recording sessions, pan/tilt Auto-Patrol, H.264/MPEG-4/MJPEG image compression, date-and-time overlays, a Micro-SD card slot for backup storage, two-way audio (speakers not included), an adjustable lens, and four times digital zoom. A wall/ceiling mounting kit is included and the camera's off white housing blends into most environments.

Product Hardware Features

Rear Panel View

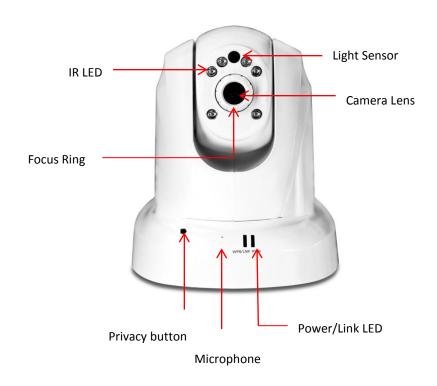


- LAN Port Connect Ethernet cables to your wired network devices.
- **Power Port** Connect the included power adapter from your camera to an available power outlet.

Note: Use only the adapter that came with your camera.

- Reset Button Use an item such as a paperclip to push and hold this button for 3 seconds and release to reset your camera to its factory defaults.
- Line Out Connect speaker to enable audio out
- Micro SD Lot Insert a Micro-SD card to store camera video files.

Front Panel View



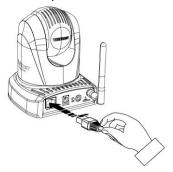
- IR LED Built-in 6 IR LED for night vision uses. (for TV-IP672PI)
- Light Sensor Detects the light source to turn IR on or off.
- Focus Ring Turn to adjust the focus of the camera.
- **Microphone** Built-in microphone for audio can be turn on or off.
- **Privacy button** Turns the camera on/off when necessary.
- **Power** This LED indicator is solid blue when your camera is powered on. Otherwise if this LED indicator is off, there is no power to your camera.
- **Link** This LED indicator is blinking orange when there is connection/data to your camera.

Installation

Wired Connection

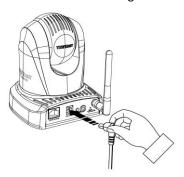
1. Connect the Ethernet Cable

If you intend to use the network camera as a wired device, connect one end of the included Ethernet cable into the **Ethernet** port on the rear panel of the camera and connect the other end to an available port on your network. If you prefer to use the camera on a wireless network, see below for instructions on connecting the power adapter.



2. Attach the Power Supply

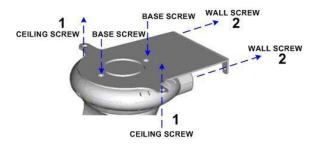
Attach the included power supply to the **DC 12V 1.25A** receptor on the rear panel of the camera and then connect it to a wall outlet or power strip. A blue LED will light up under the lens indicating that the camera has power.



Wall mount installation

To attach the metal plates carry out the following:

- Remove the two rubber pads under the base of the Camera.
- Slide the metal plate onto the base of the camera, making sure that the two holes on the base of the camera align with the two screw holes on the base of the camera.
- Secure the metal plate to the base of the Camera with the two screws provided.
- The camera can now be mounted to the ceiling or a wall. See the diagram below for more information.



Starting the Setup Wizard

Insert the included CD-ROM into your CD/DVD drive. The Install Wizard program will run automatically.

Note: If the Install Wizard does not run, you may have autorun disabled on your machine. In this case, browse to the CD drive and run **InstallWizard.exe** to begin the installation wizard.

Begin by selecting **Setup Wizard** and follow the on-screen steps to continue the installation.



When the installation of the Setup Wizard is complete, run the Setup Wizard:

1. Click **Start > Programs > TRENDnet > SetupWizard > SetupWizard.** The TRENDnet Setup Wizard appears.

Connect an RJ-45 cable from a switch/router to the Ethernet port on the back of the camera and connect the AC power adapter to the camera. Click Next to proceed.



3. From the list of cameras that appears, select the camera you wish to configure and click **Next** to continue. If your camera is not listed, ensure that it is connected to both power and the network and click Ro-Scan to re-scan the network for your camera.



4. Login to your camera by entering the ID and Password. By default, both the ID and Password are set to **admin**. Click Next to continue.



5. Enter a name for the camera in the **Camera Name** field. The name will be used to identify your camera on the network. Enter the correct time for the camera for the time zone it is in. If your camera is in the same time zone as the computer you are using, click the Copy Local Time icon to copy the local time to the camera. Click Next to continue.



6. It is strongly recommended that you change your password to secure the camera from being accessed by others. Check the **Change Password** box and enter the new password in both password fields to confirm the new password. Click Next to continue.



7. Select a connection option: (example uses DHCP connection type)

PPPoE: Select this option if your camera is directly connected to a DSL modem and your ISP requires a PPPoE authentication to the Internet.

DHCP: Select this option if your camera is connected to a router and DHCP is enabled.

Fixed IP: Select this option if your camera is directly connected to a DSL modem and your ISP has supplied you with a fixed IP for your Internet connection.

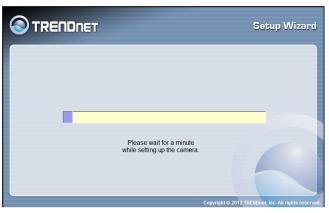
Select the radio button for your connection type and click Next to continue.



8. A summary screen of the settings you have chosen appears. Click Next to continue.



9. After the Setup Wizard configures the camera, the wizard starts to setup process.



10. When the Setup Wizard has finished, the configuration is complete and the following screen appears:

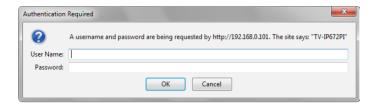


You are now ready to use your camera.

Click the IP address link or the link button to access the camera's advanced configuration page.

Configuration

After completing the Setup Wizard, you are ready to use your camera. The camera's built-in Web configuration utility is designed to allow you to easily access and configure your TV-IP672P or TV-IP672PI camera. Open a web browser such as Internet Explorer® and enter the IP address of your camera. To log in, use the User name admin and the password you created in the Setup Wizard. If you did not create a password, the default password is admin. After entering your password, click **OK**.



The home page for the TV-IP672P or TV-IP672PI appears.



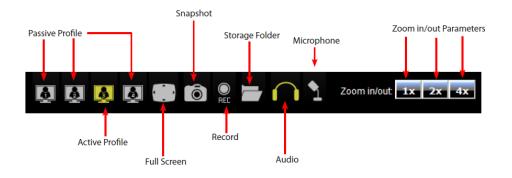
Main Interface



COMPONENT	DESCRIPTION	
1. Live View	This is the Main Screen. This shows whatever the camera is pointed at.	
2. Setup	Setup provides all of the configuration options on the TV-IP672W/WI	
3. Motion Trigger	Click this button to activate motion	
4. Record	Click this button to enable recording	
5. Directional Control the direction of the camera, zoom in or out, and software Pan & Tilt functions.		
Controller	software Pan & Tilt functions.	

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6. Pan	This button pans the camera to the desired position from start to Pan.
7. Patrol	This button functions from start to auto patrol.
8. Stop	This button stops the Pan & Patrol motion.
9. Go to	This drop-down list gives you the option to select the camera you want to configure.
10. Pan Speed	Select the speed of the Pan motion from 1-10. 1 is the lowest as 10 is the highest.
11. Tilt Speed	Select the speed of the Tilt motion from 1-10. 1 is the slowest as 10 is the fastest.
12. Live View	This screen shows the current view from the camera
13. Control Navigational Menu	It contains a list of functions.



COMPONENT	DESCRIPTION	
Passive Profile	This profile, in grey, is inactive.	
Active Profile	This profile, in yellow, is active.	
Full Screen Mode	Screen Mode The viewable screen is expanded to full screen	
Snapshot	Click this button to take a snapshot of your current viewing	
	angle.	

Record	Start recording the current video stream.	
Storage Folder	Select this icon to select the folder where you want to store	
	video feeds.	
Audio	Click this button to toggle between sound and mute.	
Microphone	Click this button to use the microphone on the camera and	
	listen to your viewing angle's surrounding area.	
Zoom	There are different zoom options under Zoom in/out. The	
	viewing angle can be zoomed in from 1 times, 2 times, and 4	
	times.	

Setup Wizard

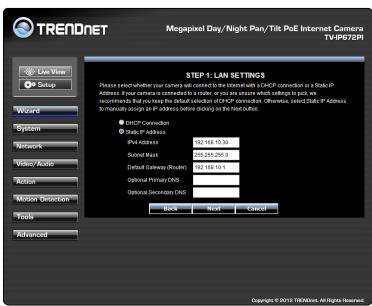
To view the Setup Wizard settings:

- 1. Login to the camera as described in the section **Using the web-based configuration interface.**Click on the **Setup** tab on the left panel.
- 2. Click **Wizard**. The Welcome to Internet Connection Setup Wizard screen appears.

From the menu on the right side of the screen, click **Next** to start the **Setup Wizard**.

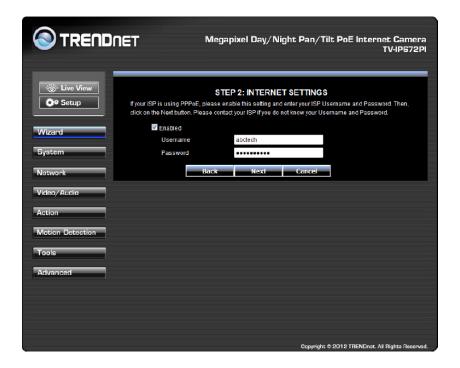
Step 1: LAN Settings

This screen provides two connection options: **DHCP Connection** and **Static IP Address**. In **DHCP Connection** all fields are non-existent cause your router selects an IP address for you. Under **Static IP** address field to enter the IP address details yourself according to what your network provider gave you. Select the appropriate option and click **Next** to continue.



Step 2: Internet Settings

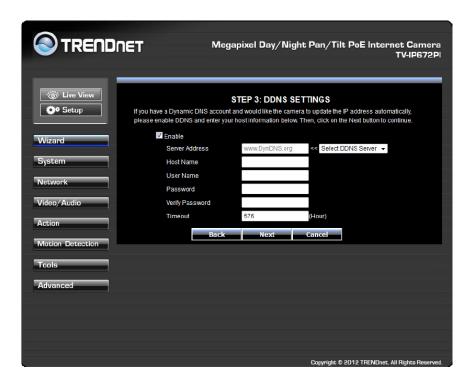
This screen provides **PPPoE** settings and allows the camera to be connected directly to your ADSL modem. Click the **Enable** checkbox to setup **PPPoE**. Enter a username and password. If your internet connection doesn't call for **PPPoE** deselect the Enable checkbox and click **Next**



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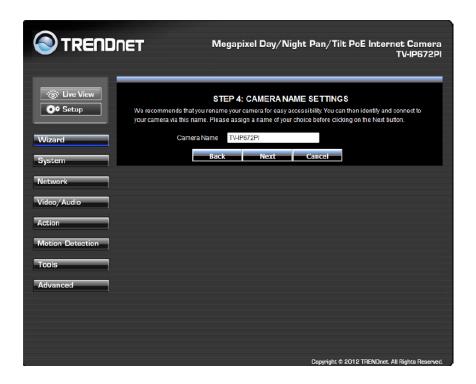
Step 3: DDNS Settings

This screen provides **DDNS settings**. Click the Enable checkbox to setup **DDNS**. Once you have clicked Enable, select your **DDNS Server** and enter your **Server Address**. Enter a **Host Name**, **User Name**, and **Password**. Verify the password by entering your details again and then enter the **Timeout** settings in hours. Click **Next** to continue. If you do not want to use the **DDNS** settings uncheck the **Enable** checkbox and click **Next**.



Step 4: Camera Name Settings

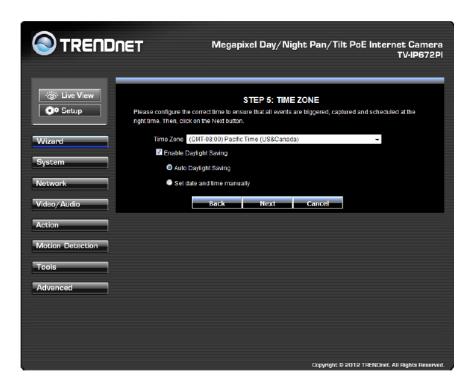
This screen provides **Camera Name settings**. In the **Camera Name** field type the name you wish to assign to the camera and click **Next** to continue.



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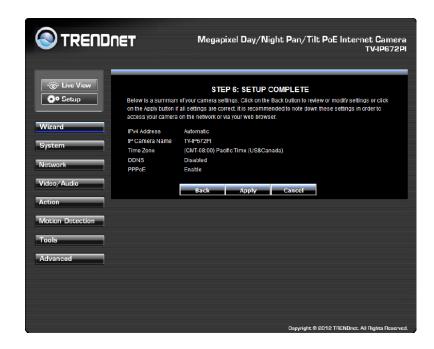
Step 5: Time Zone Settings

This screen provides **Time Zone settings**. From the **Time Zone** drop-down list, select your time zone. Click **Enable Daylight Saving** if you are going to use that time method and select either **Auto Daylight Saving** or **Set date and time manually**. Click **Next** to continue.



Step 6: Setup Complete

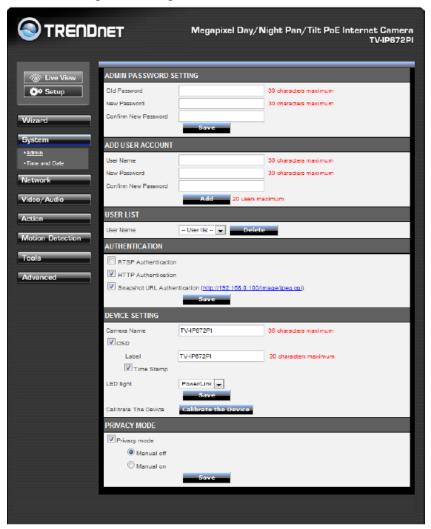
This screen provides **Configuration Settings**. The final screen shows the information you have just configured. Click **Back** to make changes, **Apply** to set the changes and **Cancel** to exit without saving the settings.



The camera will gather and reboot the camera to its new settings

System

System is divided into two main sections – **Admin and Time & Date**. The **Admin** section is where all **Device Management** configurations are handled.



Device Management consists of Admin Password Settings:

Admin Password Settings: Here you can change the administrator password settings. Enter the **Old Password**, **New Password**, and **Confirm New Password** in their respective fields. Click **Save** to continue.

ADMIN PASSWORD SETTING		
Old Password		30 characters maximum
New Password		30 characters maximum
Confirm New Password		
	Save	

Add User Account: Here you can add users who want to view images on the **W/WI** Enter a **User Name**, **Password**, and **Verify the New Password**.Click **Add** to continue.

ADD USER ACCOUNT		
User Name		30 characters maximum
New Password		30 characters maximum
Confirm New Password		
	Add 20 users ma	iximum

User List: Here you can select a user and click the Delete button to remove the user from your list.

USER LIST	
User Name	User list 🔻 Delete

Authentication: Here you have three options to authenticate. **RTSP Authentication**, **HTTP Authentication**, and **Snapshot**. Click the checkbox to enable each authentication process or leave them blank. Click **Save** to continue.

AUTHENTICATION	
RTSP Authentication	
✓ HTTP Authentication	
Snapshot URL Authentication (http://192.168.0.101/image/jpeg.ogi)	
Save	

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The camera allows users to access the video directly

For Internet Explorer, http://camera ip/directview/tvaview.cgi

For Non Internet Explorer, http://camera ip/directview/tvjview.cgi

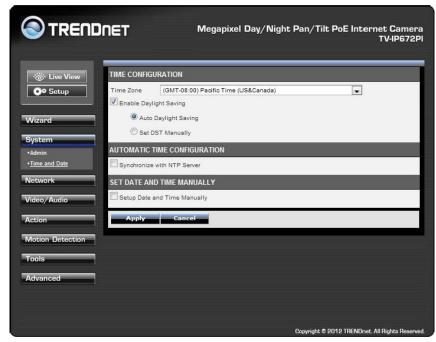
When HTTP Authentication is enabled, user name and password are required to access the direct view page.

Device Settings: Here you can change the **Camera Name**, click **OSD** to enable the **Label Name** and check **Time Stamp** to singe times into your images. The **LED light** has three options from the drop-down list: **Power/Link**, **Off**, or **Flicker**. The options are self-explanatory. Click **Save** to continue.

Privacy Settings: Here you can enable/disable the Privacy button function.



The next configurable section under **System** is **Time and Date**. If you didn't set the time and date settings in the **Setup Wizard**, you can change them here.



Under Time Configuration, select a **Time Zone** from the drop-down list. Click the checkbox next to **Enable Daylight Saving** to enable this function and choose either **Auto Daylight Saving** or **Set DST Manually**. Click **Apply** to continue.



Under Automatic Time Configuration, click the **Synchronize with NTP Server** checkbox if you wish to sync your **W/WI** with your NTP server. Click **Apply** to continue.



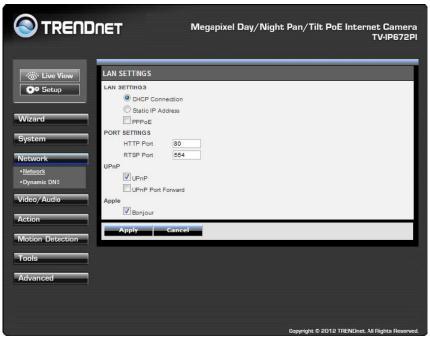
Under Set Date and Time Manually, click the **Setup Date and Time Manually** checkbox if you wish to set the time by yourself. From the drop-down list on all settings, select your time and click **Apply** to continue or click **Copy Your Computer's Time Settings**.



Network

This screen shows the **LAN Settings**. If you didn't set your **LAN settings** in the **Setup Wizard**, you can set them up here.

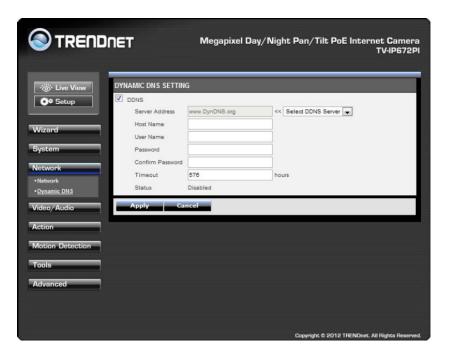
Under LAN Settings, select either DHCP Connection or Static IP Address. If you want to setup PPPoE, click the PPPoE checkbox and enter the Username, Password, confirm the Password and click Apply. The Status will change from Disabled to Enabled.



Under **Port Settings**, select the **HTTP Port** (80 is the default) and also select the **RTSP Port** (554). Under **UPnP**, click the **UPnP** checkbox if you want to enable this function. Click the **UPnP Port Forwarding** checkbox if you want to enable to set the ports. Select the **External HTTP** port and select the **RTSP port**. If you are using a **MAC** check the **Bonjour** checkbox to enable this function. Click **Apply** to set the changes.

Dynamic DNS

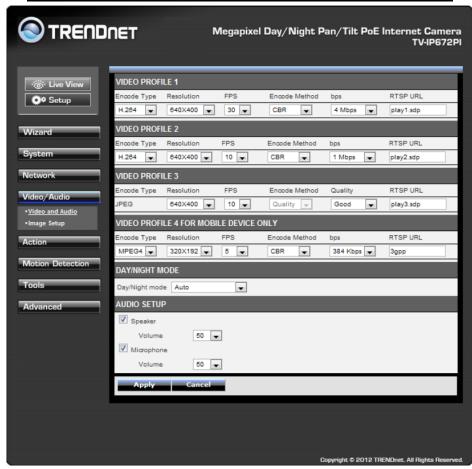
Also under **Network Settings** is **Dynamic DNS**. If you have not enabled this function in the **Setup Wizard** click the **DDNS** checkbox to enable **Dynamic DDNS**. Select your **DDNS** server from the drop-down list and fill in the parameters from these fields: **Host Name**, **User Name**, **Password**, **Confirm Password**, and **Timeout**. Click **Apply** to set these changes and continue.



Video and Audio

This screen shows different video profiles where you can setup different functions for the camera. The audio settings also allow for different settings. Each profile coincides with the profile icons in **Live View**. Setting up each profile individually gives the user better choice.





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Video and Audio

Under each profile settings there are six main functions, **Encoder Type**, **Resolution**, **Frames per Second**, **Encode Method**, **bps**, and **RTSP URL** settings.

Encode Type: This sets the file format and file quality.

Resolution: This is the size of your image.

Frames Per Second: This is the speed at which each frame is captured

bps: Is the transmission speed of your data (4Mbps-64Kbps)

Encode Method: Is your Constant Bit Rate

BPS: Is the transmission speed of your data (4Mbps-64Kbps)

RTSP URL: is the RTSP URL where video streaming is accessed.

Each Profile offers different specifications. Select the specifications that best suite you.



Video Profile One - Options:

- Encode Type H.264 & MPEG4
- Resolution 1280x800/640X400/320X192/160X96
- FPS 30/15/10/5/3/2/1
- Encode Method CBR/Quality
- Bps -

4Mbps/3Mbps/2Mbps/1.5Mbps/1Mbps/768Kbps/512Kbps/384Kbps/256Kbps/12 8Kbps/64Kbps

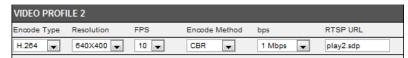
RTSP URL – play1.sdp

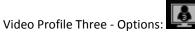




Video Profile Two - Options:

- Encode Type H.264 & MPEG4
- Resolution -640x400/320x192/160x96
- FPS 30/15/10/5/3/2/1
- Encode Method CBR/Quality
- Bps –
 4Mbps/3Mbps/2Mbps/1.5Mbps/1Mbps/768Kbps/512Kbps/384Kbps/256Kbps/12 8Kbps/64Kbps
- RTSP URL play2.sdp





- Encode Type JPEG
- Resolution -1280x800/640X400/320X192/160X96
- FPS 30/15/10/5/3/2/1
- Encode Method –Quality
- Quality Low/Fair/Standard/Good/Excellent
- RTSP URL play3.sdp





Video Profile Four for Mobile Devices Only - Options:

- Encode Type H.264 & MPEG4
- Resolution 640X400/320X192/160X96
- FPS 30/15/10/5/3/2/1
- Encode Method CBR/Quality

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- Bps –
 4Mbps/3Mbps/2Mbps/1.5Mbps/1Mbps/768Kbps/512Kbps/384Kbps/256Kbps/12 8Kbps/64Kbps
- RTSP URL 3gpp



Day/Night Mode

The TV-IP672WI allows users to record data in day and night mode. The TV-IP672WI have LED's for night mode. This section provides day and night options. You can select it to run automatically, manually, in constant day mode or constant night mode.

Audio Setup

The TV-IP672W/TV-IP672WI allows users to record and broadcast audio. Click the Speaker checkbox to change the volume settings on the camera's speaker. Click the Microphone checkbox and select your preference from the volume drop-down list. Click Apply to continue.

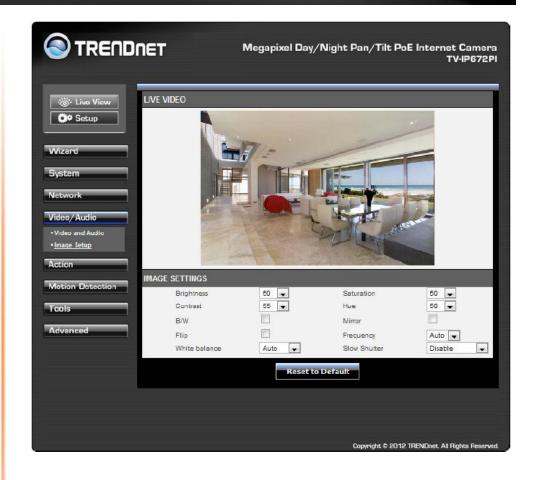


Image Setup

Just like any camera, you are able to make changes to the image settings. With the W/WI, you can change the Brightness, Contrast, color scheme to Black/White, Flip the image, and change the Frequency, Shutter Speed, Saturation, Hue, Mirror, Auto Exposure and White Balancing. The settings can be viewed "live" through the LIVE VIDEO display in the forefront image.

If you wish to discard the changes you made click the **Reset to Default**





<u>Action</u>

Recording

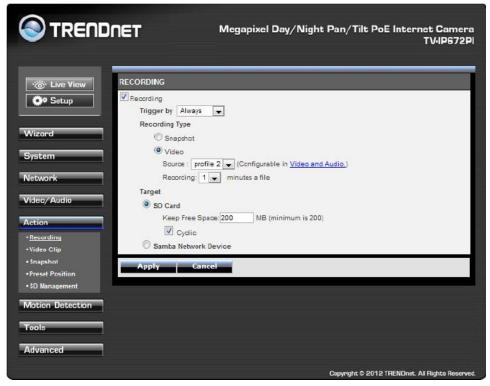
This screen shows the SD Card parameters. You are able to set the recording options on this page. Click the Recording checkbox to enable camera recording. All data is stored on the removable SD card.

There are three main sections:

Trigger By: Always, Motion, Schedule,

Recording: Configure the recording options

SD Card: Recording files size



Trigger By - Always

This option allows you to record constantly. If you select **Always** bear in mind that the **Recording Type** should be **Video** and that the source usually comes from **Profiles 1, 2 or 4** under Source. Make sure the SD Card settings are setup to accommodate the huge storage space required for **Always** connections. Click **Apply** to complete the configuration.



Trigger By - Schedule

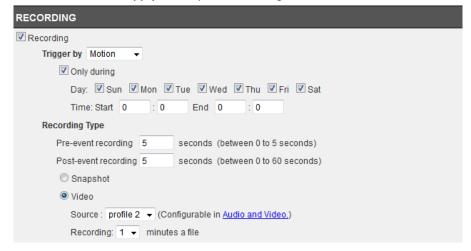
This option allows you to record according to the schedule you setup. If you select **Schedule** a calendar of the days of the week appear. Here you can select from each day's checkbox which days you want to setup and you can create a start and end time. Click **Apply** to complete the configuration.



Trigger By - Motion

This option allows you to record according to the motion parameters you setup. If you select **Motion**, click the **Onlyduring** checkbox. Then a calendar of the days of the week appears. Here you can click one of the day's checkboxes and you can create a start and end time. The Recording Type changes to pre-record or pre-event settings. This means

the camera will start recording before the allotted time schedule. These times can only be set in seconds. Click **Apply** to complete the configuration.



Recording Type

The two main sections here are **Snapshot** and **Video**. **Snapshot** takes a picture from your recorded data and only works with **Profile 3**. **Video** captures source data from **Profiles 1**, **2**, **and 4**. and is configurable in **Video/Audio** settings.

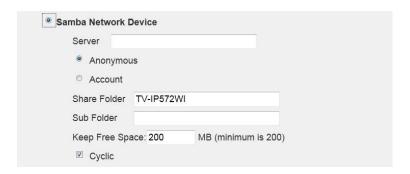
Target - SD Card

These settings depend on the size of your **SD card**. The larger your **SD card** the more storage space you have to record data. Recording data can be recorded in increments of 1-6 minutes. **Cyclic** settings can also be checked.

Target - Samba Network Device

The **Samba Network Device** requires a NAS server or a Linux server to operate. Under **Server**, enter the server address. Click the **Anonymous** radio button to allow anonymous users to send files to the Samba server. Then enter the **Share Folder**, **Sub Folder** (if needed) and enter the disk space needed.

If you click the **Account** radio button then enter a **Username** and **Password**. This will authenticate the user every time they log on to the samba server.



Video Clip

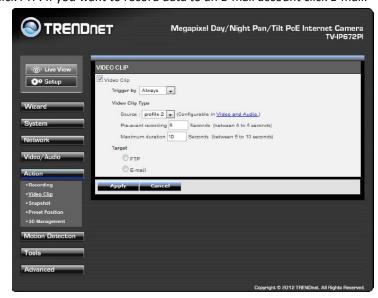
Click the Video Clip checkbox to activate video recording events.

There are three main sections:

Trigger By: Always, Motion, Schedule,

Video Clip Type: Configure the recording options

Target: The targets available are FTP and E-mail. If you want to record data to an FTP server, click FTP. If you want to record data to an E-mail account click E-mail.



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The **Trigger by** and **Video Clip** settings are similar to the options under Recording. Please see the above description for details.

Target

Target offers two variables, **FTP** or **Email**. You cannot select both. If you select FTP enter the details as laid out in the FTP field.

FTP Server – this is your default FTP server address

Port – this is the default FTP Port (21) address

Username – the username your FTP administrator provided

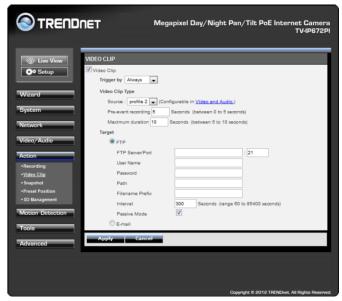
Password – the password your FTP administrator assigned you

Path - the directory

Filename Prefix – the filename you are using to access the data or save the data to

Interval – The default interval range is 60-86400. the time the server interacts with your camera

Passive Mode – Server/client initiation access to bypass proxies.



For Email

Recipient E-mail Address – the email address you want to send information to

SMTP Mail Server – the mail server domain details

Port - the default Port number (25)

Username – the username settings provided by your email administrator

Password - the password settings provided by your email administrator

Sender Email Address – the email address of the sender

Send next email after – the alert email interval times

Use SSL-TLS – this is a secure method (please consult your administrator before using this setting). There are two options, SSL-TLS or STARTTLS.

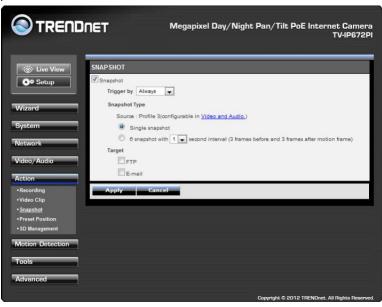
Click the Test button to proceed with a test. This will authenticate the email details with your email server.

If the authentication is positive the test will be complete. If the test is a failure, the result will not be successful.



Snapshot

These settings control **SNAPSHOT** settings for your camera. The **Trigger by** settings is similar to settings above, so please view the settings above. The **Snapshot Type** provides for a **Single snapshot** or 6 snapshots at 1-2 second intervals. The **Target FTP** and **Email** settings are similar to settings explained above. Please read the configuration in the above explanation.



Preset Position

Preset Position

This screen shows the software Pan/Tilt functions. You can set preset positions for fast authentication. Most of the screen is taken up by the camera image. On the right of the main screen is the Pan & Tilt dial



- 1. **Under Preset Position** Enter a name in the field provided to give a name a position.
- 2. Click Add.
- 3. To set a new **Preset Position** Use the Pan & Tilt dial to select your Pan & Tilt speeds, and select the position.
- 4. Use the **Set As Home** button to choose it as your home screen.
- 5. Click the **Default Home** button if you wish to use this configuration as your default home viewing area.
- 6. **Preset Position** From the Preset Position drop-down menu, you can select the preset you created and delete it.

The Pre-programmed Preset Positions is a list of presets you have setup under Preset Position. This list is populated with different camera views and angles.

Patrol Selection

This area is where you setup the movement of the Pan/Tilt during a particular time frame. This Patrol Position can be setup with different Pan/Patrol Speeds and Dwelling time(s) in seconds. The Dwelling Time is the duration the camera takes to span a particular area.

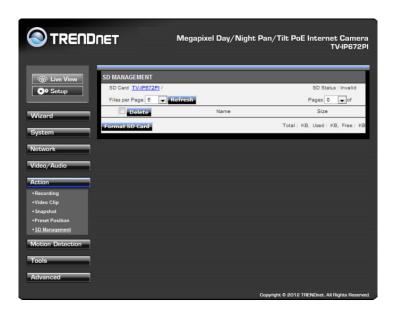
- 1. **Setup the Preset Position** Once you have setup the Preset in the previous configuration list, select it from the Pre-programmed Preset Positions.
- 2. Click the **Select** button to transfer this preset to the **Patrol Position**.
- 3. Set the position of your **Preset**. This depends on the priority of Patrol Position which item you want to make your priority.
- 4. For each Patrol Position you can adjust the Pan/Patrol Speed (1-3 with 1 being the slowest), and Dwelling Time (in seconds). This indicates the time needed to span an area covered by the camera.
- 5. Click **Apply** to continue and finish the process.



SD Management

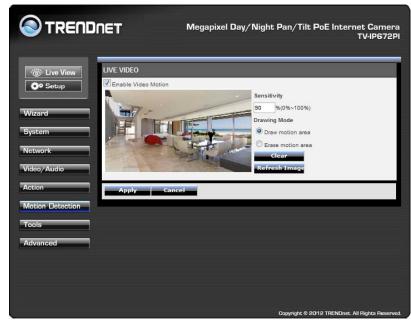
These settings control the management of data on the SD card installed on the camera. Set the files per page – 5-100 files. To delete a file, select the file and click the Delete checkbox to delete the file. If you wish to format your SC card at any time, click the Format SD Card button.

Set Micro-SD card format toFAT32, it is recommended formatting the SD card to make sure the SD card is compatible with the camera. (Please backup all data on the SD card to other locations prior to this procedure)



Motion Detection

These settings control the motion detection settings on the camera. Motion detection allows you to designate an area in the cameras viewing angle to capture motion within that area. All other areas will not be recorded. This is useful if you want to limit your recording to a particular size.



Click the **Enable Video Motion** checkbox to activate motion detection. There are two main fields: **Sensitivity** and **Drawing Mode**. **Sensitivity** is based on the strength of the motion in the designated area. **0%** means the strength is low and the system moves up incrementally to **100%** full sensitive strength.

Drawing Mode provides two options. Once you select Draw motion area, take your mouse and draw a rectangular area where you want the camera to detect the motion. If you want to remove the motion detection area select Erase motion area and the red blocked area will disappear. If you click the Clear button too it will also remove the motion detection area. If you click the Refresh Image button it will do as said. This is useful when the camera is out of focus and comes back into focus at a later stage. Once you have set all setting options click Apply.

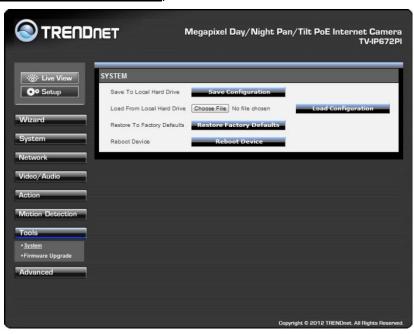
Tools

System

These settings allow you to save the recorded data to your local hard drive or retrieve it from the drive. When you click the **Save Configuration**

Save Configuration button it saves a database file to your local system. When you want to access recorded data from your hard drive, click the **Browse** button, locate the file on your hard drive and to display the data click **Load Configuration**

Load Configuration



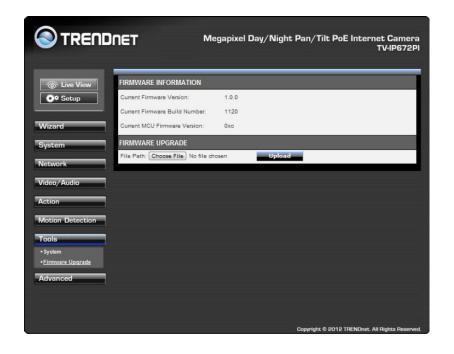
When you want to reset the camera to system default, click the **Restore Factory**

Defaults button to reset the system. If the system is not working properly for any reason, you can reboot the system by clicking the Reboot Device button.

Firmware Upgrade

These settings display the **Current Firmware Version** and the **Current Firmware Build Number**.

To do the **Firmware Upgrade**, locate the path of your upgrade file by clicking the browse button and click the **Upload** button to upgrade the firmware.

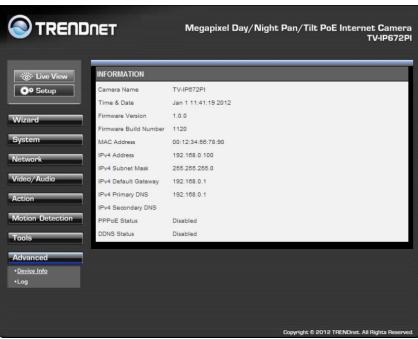


Clear

Advanced

Device Info

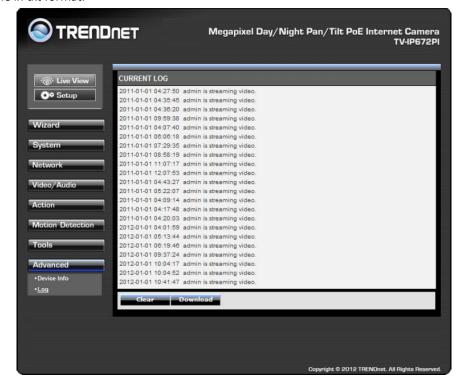
These settings display the Device information to you. It comprises of all the important details regarding the phones network settings. The description is laid out in the picture below.



Log

These settings display the Current Log of the device. Click the Clear Download

button to reset the log or click the Download button to download a file in txt format.



For more monitoring features, please refer to SecurView Pro software user's guide for details.

How to setup/access the camera remotely

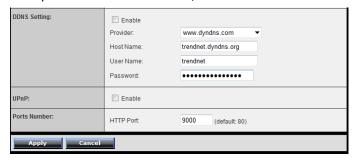
You can either setup the Dynamic DNS connection via camera itself or your home router. An account from any of the listed DDNS providers is required prior to this operation.

Configure DDNS on your Camera

1. Go to Camera's **DDNS Setting** page; click **Enable** to activate the feature. Then select a DDNS provider from the list.



2. Enter your DDNS's the Host Name, User Name and Password.



- 3. In the **Port Number** section, assign an HTTP port of the camera. The default HTTP Port on the camera is 80. The example shows above is using port number 9000.
- 4. Open another web browser and go to your Router's Web Configuration page. (In the example, TRENDnet's TEW-651BR Wireless N router is used)



5. Go to **Virtual Server*** section and create a new entry.

Enable: Click Enable

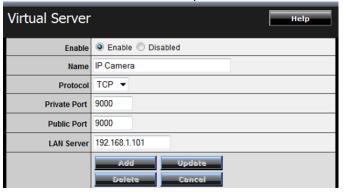
Name: Enter the application name (eg. CameraName)

Protocol: Select TCP

Private Port: The HTTP port that you assign on your Camera.

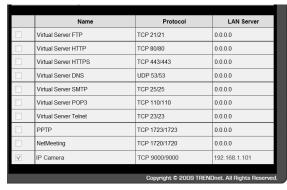
Public Port: The port used on remote side to access to your Camera.

LAN Server: The local IP address of your Camera.



Then click **Add** to add the application.

* Please refer to your router's user's manual for detail **Virtual Server** setting. Some router might use **Port Forwarding** or **Special applications** for this function. The setup steps should be very similar.



6. Open another web browser and enter your DDNS domain and camera's port number.

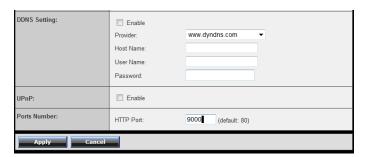
http://yourDomainName:PortNumber



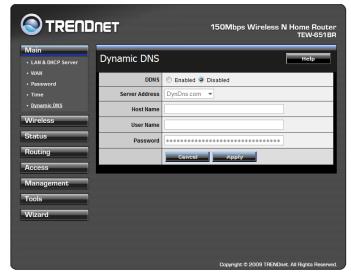
7. Camera's login page will appear.

Configure DDNS on your router

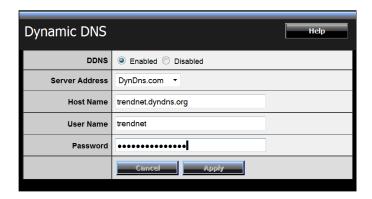
 Go to Camera's DDNS → Ports Number section, assign a HTTP port for your camera and click Apply.



2. Login to your router's web configuration page. Find the **Dynamic DNS** configuration section.



3. Enable DDNS, fill out the following information and then click Apply.



4. Go to **Virtual Server*** section and create a new entry.

Enable: Click Enable

Name: Enter the application name (eg. Camera Name)

Protocol: Select TCP

Private Port: The HTTP port that you assign on your Camera.

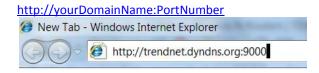
Public Port: The port used on remote side to access to your Camera.

LAN Server: The local IP address of your Camera.



Click Add to add the application.

- * Please refer to your router's user's manual for detail **Virtual Server** setting. Some router might use **Port Forwarding** or **Special applications** for this function. The setup steps should be very similar.
- 5. Open another web browser and enter your DDNS domain and camera's port number.



6. The camera login page will appear.

Technical Specifications

TV-IP672P

Camera	
General	Sensor: 1/4" CMOS Sensor
	Board Lens
	Focal Length: 4mm
	F/No: 1.5
	Minimum illumination: 1 lux
	Focus Depth: 20 cm ~ infinity
	View:
	Horizontal: 51.8 degrees
	Vertical: 33.8 degrees
	Diagonal: 59.6 degrees
	Digital Zoom: 4x
Audio	Built-in omni-directional microphone
	Sensitivity: -40dB +/- 3dB (5 meters max.)
	Frequency: 100~20000Hz
	S/N: >60dB
	Format: PCM/ADPCM
	External speaker output (speaker sold separately)
	Two-way audio with echo canceling
Pan & Tilt	Pan: -170° ~ +170°
	Tilt: up 90°and down 25°
	Auto-Patrol preset positions: 10
Hardware	
Network	IEEE 802.3u 10/100Mbps Auto-MDIX Fast Ethernet
	IEEE 802.3af Power over Ethernet (PoE)
LED	Power, Link/Act
Reset Button	Reset to factory default
Privacy Button	Privacy mode on/off

	T
Power Consumption	Max. 9 watts
Power	Input: 100~240V, 50/60Hz 0.5A
	Output: 12V, 1.25A external power adapter
Dimension	113 x 113 x 130 mm (4.5 x 4.5 x 5.1 in.)
Weight	495 g (1.1 lb.)
Temperature	Operating: 0°C ~ 40°C (32°F ~ 104°F)
	Storage: -25°C ~ 70°C (-13°F ~ 158°F)
Humidity	Max. 90% (non-condensing)
Certifications	CE, FCC
Requirement	
Management	Internet Explorer 7.0 or above
Interface	Firefox, Safari, and Chrome
To Run software	Windows 7 (32/64-bit), Vista (32/64-bit), XP (32/64-bit)
	Windows Server 2003, 2008
SecurView Pro	Channel: supports up to 32 cameras
Software	Record/Playback/Motion Detection/Audio
Network Protocols	IPv4, ARP, TCP, UDP, ICMP
	DHCP Client, NTP Client, DNS Client, DDNS Client, SMTP Client, FTP Client
	НТТР
	Samba Client
	PPPoE
	UPnP
	LLTD
	RTP (Real Time Protocol)
	RTCP (Real Time Control Protocol) RTSP (Real Time Streaming Protocol)
	3GPP (video only)
Management	Sol. (Naco only)
	Web based administration
System	
Access	Up to 20 user accounts

1	
Backup / Restore	Save/retrieve configuration files
Log	System log up to 500 entries
Micro SD	View, download, delete files
	Format and remove Micro SD card
Settings	
Image	Brightness, contrast, saturation, sharpness, white balance, flip, mirror (horizontal/vertical), black & white, indoor, outdoor, schedule mode
	Shutter: 1/3.25s, 1/7.5s, 1/10s, and 1/15s
Video Setting	Profile 1: H.264/ MPEG-4
	 Resolution: 1280 x 800, 640 x 400, 320 x 192, 160 x 96 Max frame rate: 30fps
l	Profile 2: H.264/ MPEG-4
	Resolution: 640 x 400, 320 x 192, 160 x 96Max frame rate: 30fps
	Profile 3: MJPEG
	 Resolution: 1280 x 800, 640 x 400, 320 x 192, 160 x 96 Max frame rate: 1280 x 800 @ 5fps, 640 x 400/320 x 192@30fps JPEG quality: Low, Fair, Standard, Good, Excellent
	Profile 4: H.264/MPEG-4
	- Resolution: 640 x 400, 320 x 192, 160 x 96
	Max frame rate: 30fpsRTSP: http://ipcamera_ip/3gpp
3GPP	Audio format/AMR
	Video format/MPEG4
	Protocols/RTSP, RTP, RTCP
Recording	Resolution: Define individual resolution for up to 4 profiles
l	Required storage: 32MB (minimum per profile)
	Recording type: event based (motion detection and digital input trigger), continuous, and scheduled
Event Action	Trigger event: motion detection or digital input signal
	Action: send real-time snapshot or video recording to FTP or email
Port Settings	HTTP port: 80 (default)
	RTSP port: 554 (default)

Time	Synchronize with NTP server or set time / date manually
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TV-IP672PI

Camera	
General	Sensor: 1/4" CMOS Sensor
	Board Lens
	Focal Length: 4mm
	F/No: 1.5
	Minimum illumination: 0 lux
	Focus Depth: 20 cm ~ infinity
	View:
	Horizontal: 51.8 degrees
	Vertical: 33.8 degrees
	Diagonal: 59.6 degrees
	Digital Zoom: 4x
Audio	Built-in omni-directional microphone
	Sensitivity: -40dB +/- 3dB (5 meters max.)
	Frequency: 100~20000Hz
	S/N: >60dB
	Format: PCM/ADPCM
	External speaker output (speaker sold separately)
	Two-way audio with echo canceling
Pan & Tilt	Pan: -170° ~ +170°
	Tilt: up 90°and down 25°
	Auto-Patrol preset positions: 10
Day/Night	Built-in ICR
	Nigh vision (IR) supports up to 7.5 meters
Hardware	
Network	IEEE 802.3u 10/100Mbps Auto-MDIX Fast Ethernet
	IEEE 802.3af Power over Ethernet (PoE)

LED	Power, Link/Act	
Reset Button	Reset to factory default	
Privacy Button	Privacy mode on/off	
Power Consumption	Max. 9 watts	
Power	Input: 100~240V, 50/60Hz 0.5A	
	Output: 12V, 1.25A external power adapter	
Dimension	113 x 113 x 130 mm (4.5 x 4.5 x 5.1 in.)	
Weight	500 g (1.1 lb.)	
Temperature	Operating: 0°C ~ 40°C (32°F ~ 104°F)	
	Storage: -25°C ~ 70°C (-13°F ~ 158°F)	
Humidity	Max. 90% (non-condensing)	
Certifications	CE, FCC	
Requirement	Requirement	
Management	Internet Explorer 7.0 or above	
Interface	Firefox, Safari, and Chrome	
To Run software	Windows 7 (32/64-bit), Vista (32/64-bit), XP (32/64-bit)	
	Windows Server 2003, 2008	
SecurView Pro	Channel: supports up to 32 cameras	
Software	Record/Playback/Motion Detection/Audio	
Network Protocols	IPv4, ARP, TCP, UDP, ICMP	
	DHCP Client, NTP Client, DNS Client, DDNS Client, SMTP Client, FTP Client	
	НТТР	
	Samba Client	
	PPPoE	
	UPnP	
	LLTD DTD (Pool Time Protect)	
	RTP (Real Time Protocol)	
	RTCP (Real Time Control Protocol) RTSP (Real Time Streaming Protocol)	
	3GPP (video only)	
	3011 (video offiy)	

Management	
System	Web based administration
Access	Up to 20 user accounts
Backup / Restore	Save/retrieve configuration files
Log	System log up to 500 entries
Micro SD	View, download, delete files
	Format and remove Micro SD card
Settings	
Image	Brightness, contrast, saturation, sharpness, white balance, flip, mirror (horizontal/vertical), black & white, indoor, outdoor, schedule mode Shutter: 1/3.25s, 1/7.5s, 1/10s, and 1/15s
Video Setting	Profile 1: H.264/ MPEG-4 - Resolution: 1280 x 800, 640 x 400, 320 x 192, 160 x 96 - Max frame rate: 30fps Profile 2: H.264/ MPEG-4 - Resolution: 640 x 400, 320 x 192, 160 x 96 - Max frame rate: 30fps Profile 3: MJPEG - Resolution: 1280 x 800, 640 x 400, 320 x 192, 160 x 96 - Max frame rate: 1280 x 800 @ 5fps, 640 x 400/320 x 192@30fps - JPEG quality: Low, Fair, Standard, Good, Excellent Profile 4: H.264/MPEG-4 - Resolution: 640 x 400, 320 x 192, 160 x 96 - Max frame rate: 30fps - MTSP: http://ipcamera_ip/3gpp
3GPP	Audio format/AMR Video format/MPEG4 Protocols/RTSP, RTCP
Recording	Resolution: Define individual resolution for up to 4 profiles Required storage: 32MB (minimum per profile) Recording type: event based (motion detection and digital input trigger), continuous, and scheduled

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Event Action	Trigger event: motion detection or digital input signal
	Action: send real-time snapshot or video recording to FTP or email
Port Settings	HTTP port: 80 (default) RTSP port: 554 (default)
Time	Synchronize with NTP server or set time / date manually

Troubleshooting

1. The Power LED and Ethernet Activity LED do not light up.

The power supply or camera might be faulty. Check that the connection to both the power source and the terminal on the back of the camera are secure and that you are using the provided power supply. If the camera is otherwise functioning correctly, the LEDs might have been disabled in the configuration. See the section of this guide on Configuration of System settings.

2. The camera can't be accessed or access is slow

There might be a problem with the network cable. To confirm that the cables are working, ping the address of a known device on the network. If the cabling is OK and your network is reachable, you should receive a reply similar to the following (...bytes = 32 time = 2 ms).

Another possible problem may be that the network device such as a hub or switch utilized by the Network Camera is not functioning properly. Please confirm the power for the devices are well connected and functioning properly.

3. The camera can be accessed locally but not remotely

This might be caused by a firewall. Check the Internet firewall with your system administrator. The firewall may need to have some settings changed in order for the Network Camera to be accessible outside your local LAN. For more information, please refer to the section about installing your camera behind a router.

Make sure that the Network Camera isn't conflicting with any Web server you may have running on your network.

The default router setting might be a possible reason. Check that the configuration of the router settings allow the Network Camera to be accessed outside your local LAN.

4. White vertical lines appear on the image from the camera

It could be that the CMOS sensor (a square panel situated behind the lens that measures the light signals and changes it into a digital format so your computer can present it into an image that you are familiar with) has become overloaded when it has been exposed to bright lights such as direct exposure

to sunlight or halogen lights. Reposition the Network Camera into a more shaded area immediately as prolonged exposure to bright lights will damage the CMOS sensor.

5. The camera images are 'noisy'

Often if the camera is in a low-light environment, the images can contain a lot of noise. Try enabling Night mode and see if that improves the image quality. Otherwise, try to use the camera in a location where there is a bit more light.

6. The camera images are of poor quality.

Make sure that your computer's display properties are set to at least 16-bit color. Using 16 or 256 colors on your computer will produce dithering artifacts in the image, making the image look as if it is of poor quality.

Try also adjusting the brightness, contrast, saturation, light frequency and antiflicker controls on the Video Settings under the Configuration menu. You may also consider adjusting the resolution of the camera and the compression rate to improve the image.

7. Video can't be viewed through the web browser interface.

ActiveX might be disabled. If you are viewing the images from Internet Explorer make sure ActiveX has been enabled in the Internet Options menu. You may also need to change the security settings on your browser to allow the ActiveX plugin to be installed.

If you are using Internet Explorer with a version number lower than 6, then you will need to upgrade your Web browser software in order to view the streaming video transmitted by the Network Camera. Try also viewing the video using Java. Ensure that you have the latest version of Java installed before you do. Go to www.java.com for more information.

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Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Europe – EU Declaration of Conformity

This device complies with the essential requirements of the R&TTE Directive 1999/5/EC. The following test methods have been applied in order to prove presumption of conformity with the essential requirements of the R&TTE Directive 1999/5/EC:

EN 60950-1: 2006 +A11:2009

Safety of Information Technology Equipment

EN 301 489-1 V1.8.1: (2008-04)

Electromagnetic compatibility and Radio Spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements

EN 301 489-17 V2.1.1 (2009-05)

Electromagnetic compatibility and Radio spectrum Matters (ERM); ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17: Specific conditions for 2,4 GHz wideband transmission systems

This device is a 2.4 GHz wideband transmission system (transceiver), intended for use in all EU member states and EFTA countries, except in France and Italy where restrictive use applies.

In Italy the end-user should apply for a license at the national spectrum authorities in order to obtain authorization to use the device for setting up outdoor radio links and/or for supplying public access to telecommunications and/or network services.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 – 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.



್ತ Česky [Czech]	TRENDnet tímto prohlašuje, že tento TV-IP672P / TV-IP672PI je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES.
da Dansk [Danish]	Undertegnede TRENDnet erklærer herved, at følgende udstyr TV-TV-IP672P / TV-IP672PI overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
de Deutsch [German]	Hiermit erklärt TRENDnet, dass sich das Gerät TV-IP672P / TV-IP672PI in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG befindet.
et Eesti [Estonian]	Käesolevaga kinnitab TRENDnet seadme TV-IP672P / TV-IP672PI vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
en English	Hereby, TRENDnet, declares that this TV-IP672P / TV-IP672PI is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Español [Spanish]	Por medio de la presente TRENDnet declara que el TV-IP672P / TV-IP672PI cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE.
el Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑ TRENDnet ΔΗΛΩΝΕΙ ΟΤΙ TV-ΙΡ672Ρ / TV- ΙΡ672ΡΙ ΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ.
fr Français [French]	Par la présente TRENDnet déclare que l'appareil TV-IP672P / TV-IP672PI est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE.
it Italiano [Italian]	Con la presente TRENDnet dichiara che questo TV-IP672P / TV-IP672PI è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
Latviski [Latvian]	Ar šo TRENDnet deklarē, ka TV-IP672P / TV-IP672PI atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to

	saistītajiem noteikumiem.
Lietuvių [Lithuanian]	Šiuo TRENDnet deklaruoja, kad šis TV-IP672P / TV-IP672PI atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
nl Nederlands [Dutch]	Hierbij verklaart TRENDnet dat het toestel TV-IP672P / TV-IP672PI in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG.
mt Malti [Maltese]	Hawnhekk, TRENDnet, jiddikjara li dan TV-IP672P / TV-IP672PI jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
ि Magyar [Hungarian]	Alulírott, TRENDnet nyilatkozom, hogy a TV-IP672P / TV-IP672PI megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
면 Polski [Polish]	Niniejszym TRENDnet oświadcza, że TV-IP672P / TV-IP672PI jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
pt Português [Portuguese]	TRENDnet declara que este TV-IP672P / TV-IP672PI está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
sl Slovensko [Slovenian]	TRENDnet izjavlja, da je ta TV-IP672P / TV-IP672PI v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
Slovensky [Slovak]	TRENDnet týmto vyhlasuje, že TV-IP672P / TV-IP672PI spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
fi Suomi [Finnish]	TRENDnet vakuuttaa täten että TV-IP672P / TV-IP672PI tyyppinen laite on direktiivin 1999/5/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
SV Svenska [Swedish]	Härmed intygar TRENDnet att denna TV-IP672P / TV-IP672PI står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

TRENDnet User's Guide Limited Warranty

Limited Warranty

TRENDnet warrants its products against defects in material and workmanship, under normal use and service, for the following lengths of time from the date of purchase.

TV-IP672P / TV-IP672PI – 3 Years Warranty

AC/DC Power Adapter, Cooling Fan, and Power Supply carry 1 year warranty.

If a product does not operate as warranted during the applicable warranty period, TRENDnet shall reserve the right, at its expense, to repair or replace the defective product or part and deliver an equivalent product or part to the customer. The repair/replacement unit's warranty continues from the original date of purchase. All products that are replaced become the property of TRENDnet. Replacement products may be new or reconditioned. TRENDnet does not issue refunds or credit. Please contact the point-of-purchase for their return policies.

TRENDnet shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to TRENDnet pursuant to any warranty.

There are no user serviceable parts inside the product. Do not remove or attempt to service the product by any unauthorized service center. This warranty is voided if (i) the product has been modified or repaired by any unauthorized service center, (ii) the product was subject to accident, abuse, or improper use (iii) the product was subject to conditions more severe than those specified in the manual.

Warranty service may be obtained by contacting TRENDnet within the applicable warranty period and providing a copy of the dated proof of the purchase. Upon proper submission of required documentation a Return Material Authorization (RMA) number will be issued. An RMA number is required in order to initiate warranty service support for all TRENDnet products. Products that are sent to TRENDnet for RMA service must have the RMA number marked on the outside of return packages and sent to TRENDnet prepaid, insured and packaged appropriately for safe shipment. Customers shipping from outside of the USA and Canada are responsible for return shipping fees. Customers shipping from outside of the USA are responsible for custom charges, including but not limited to, duty, tax, and other fees.

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