User's Guide

TRENDNET®

HD Wireless Day / Night PTZ Cloud Camera

TV-IP862IC

Contents

Product Overview

TV-IP862IC

Package Contents

In addition to your camera, the package includes:

- Multi-Language Quick Installation Guide
- CD-ROM (Utility & User's Guide)
- Network cable (1.8m / 6ft)
- Power adapter (12V DC, 1A) (1.5m / 5ft)

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

Features

TV-IP862IC

The TV-IP862IC records at 1280x720 pixels (720P HD), 30 FPS (frames per second). You can manage up to 32 TRENDnet cameras with the included complimentary camera management software. The TV-IP862IC also includes adjustable motion detection recording areas, email alerts, scheduled recording sessions, Pan/Tilt auto-patrol, date-and-time overlays, two-way audio, 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.

Easy Installation

The TV-IP862IC includes a CD-ROM with a setup wizard that guides you through the installation process.

Wide Platform Support

The TV-IP862IC supports TCP/IP networking, HTTP, and other Internet related protocols. The TV-IP862IC can be integrated easily into other Internet/Intranet applications because of its standards-based features.

10/100 Ethernet Support

The TV-IP862IC supports 10/100 Ethernet.

Web Configuration

Once setup is complete, administrators can use a standard web browser to access images and video, configure the camera over an intranet or over the Internet. Administration via web browser over the Internet means the IP camera can be accessed and administered from anywhere in the world.

Broad Range of Applications

With today's high-speed Internet connections, many scenarios for the application of your network camera exist, including industrial and public monitoring of properties such as homes, offices, banks, hospitals, child-care centers and amusement parks.

Pan & Tilt

The TV-IP862IC can pan side to side at a remarkable 330 degrees and tilt 115 degrees.

Recording Quality

The TV-IP862IC can record 1280x720 (720p HD) video resolution.

Product Hardware Features

Rear Panel View

Rear Air Vents

WPS Button

WPS Indicator Light

Micro SD Slot

Reset Button

Antenna

Ethernet Port

Power Port

Line Out
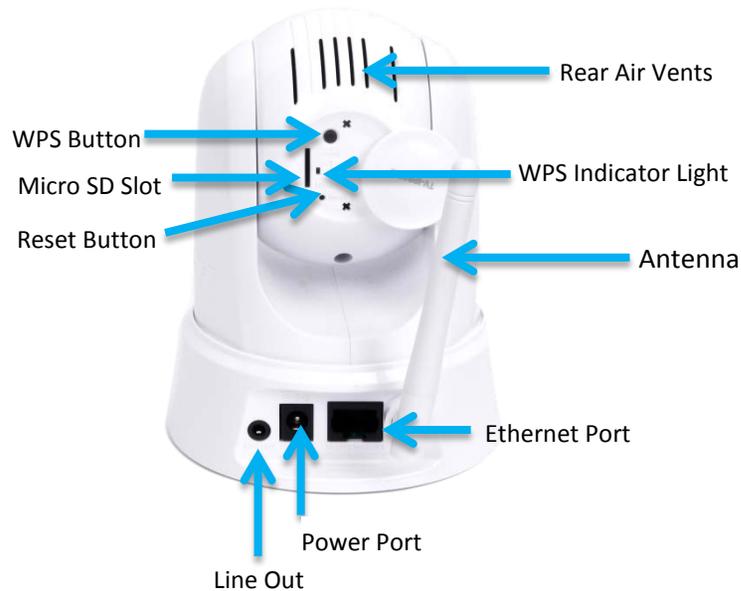
- **Ethernet Port** – Connect Ethernet cables to your wired network devices.
- **Power Port** – Connect the included power adapter from your camera to an available power outlet.
  Note: Use only the adapter that came with your camera.
- **Reset Button** – Use an item such as a paperclip to push and hold this button for 5 seconds and release to reset your camera to its factory defaults.
- **WPS (Wi-Fi Protected Setup)** – Push and hold this button for 5 seconds to activate WPS. The button LED is blinking green when WPS is activated.
- **Antenna** – 2dBi detachable antenna.
- **Line Out** – Connects an external active speaker
- **Micro SD Slot** – Insert a micro SD card into this slot to store video/image data.
- **Rear Air Vent** – This is to cool theTV-IP862IC and dissipate heat.

Front Panel View

Microphone

Light Sensor

IR LED

Camera Lens

Focus Ring

Power/Link LED
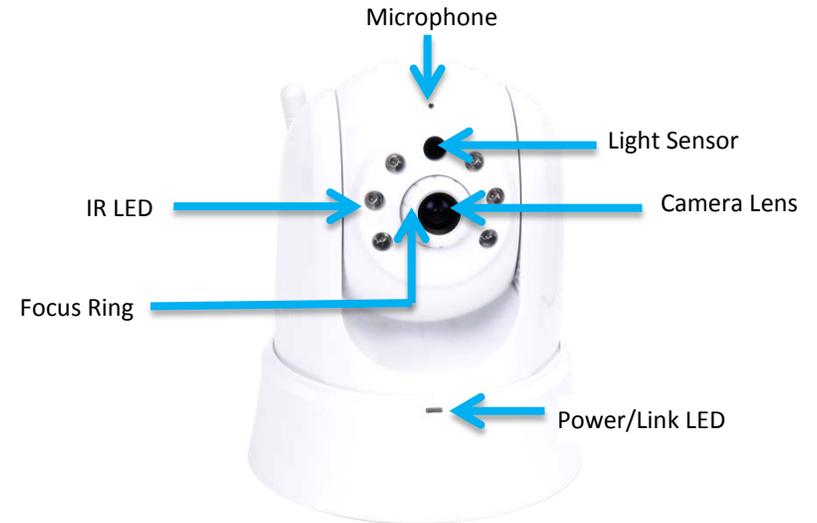
- **IR LED** – Built-in 6 IR LED, 850nm, for night vision uses. (for TV-IP862IC)
- **Light Sensor** – Detects the light source to turn IR on or off.
- **Focus Ring** – Turn to adjust the focus of the camera.
- **Microphone** – Built-in microphone for audio can be turned on or off.
- **Power –** This 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 green when there is connection/data to your camera.
- Camera Lens – Focal Length: 4.6 mm, F2.0; Focal Depth: 20 cm – infinity

Wall Mount Installation

Please do not mount the camera until after you complete the installation steps from the CD-ROM. Temporarily place the camera next to your computer.

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.
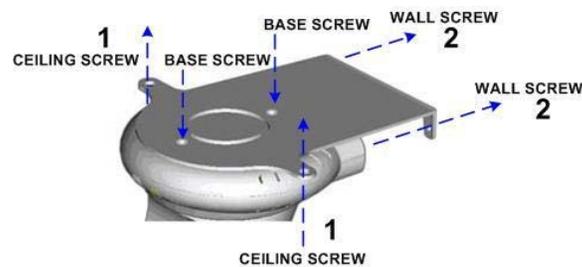
Installation, Using the AutoRun Wizard

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 a language from the drop-down list. There is a choice of five languages – **English, French, German, Spanish, and Russian**.

Next, click **Install Camera** and follow the on-screen steps to continue the installation.
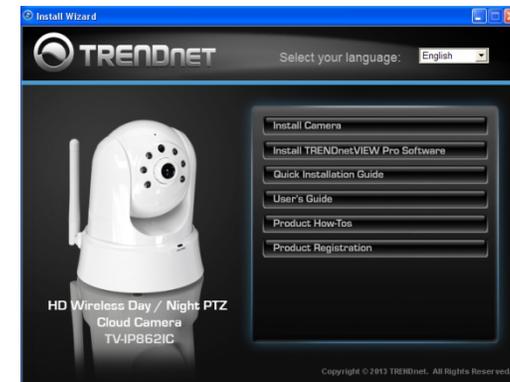
1. This is TRENDnet's Terms of Use. Click **Agree** to continue.

2. The next step references information on the camera itself. Go to your camera and check the details at the bottom of the device. Click **Next** to continue, **Back** to go to the previous screen or Home to return to the **Main Menu**. Also enclosed, is a sticker with the same details attached.


3. The most important part of the setup process is the network connection type. There are three options:
   a. Connect camera to your network using a network cable
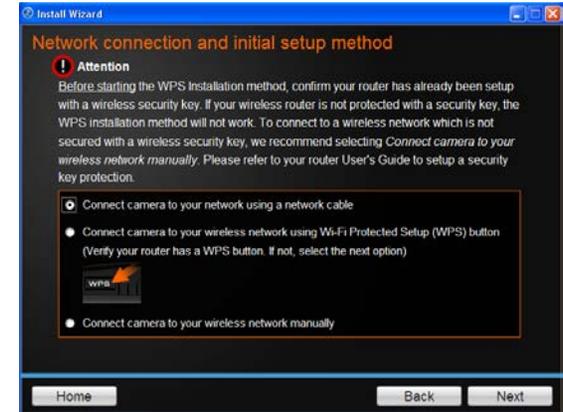
   b. Connect camera to your wireless network using Wi-Fi Protected Setup (WPS) button (Verify your router has a WPS button. If not, select the next option).

c.   Connect camera to your wireless network manually.
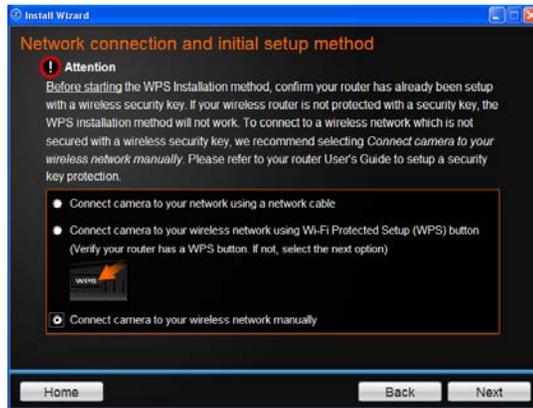
## Option A, Connect camera to your network using a network cable

1. The basic connection type is "**A**" using a network cable. Let's begin the installation process using the network cable connection first. Click this **radio button** and click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu**.
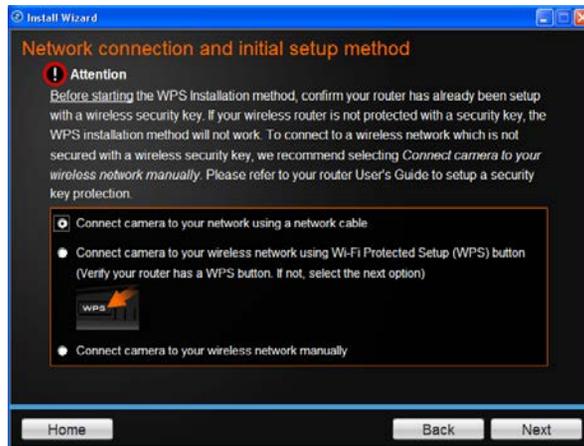
2. Follow the instructions in the next screen to **Power up the Camera**. Connect one end of the power adapter to the camera and watch the LED flicker. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**


3. Connect one end of the network cable to your camera and the other end to your router. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**
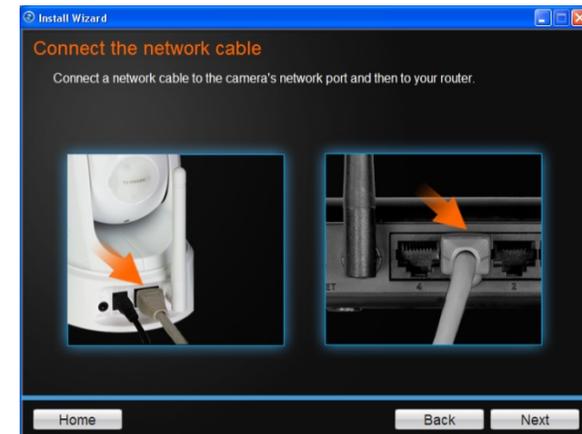
4. The wizard searches the network for your camera.
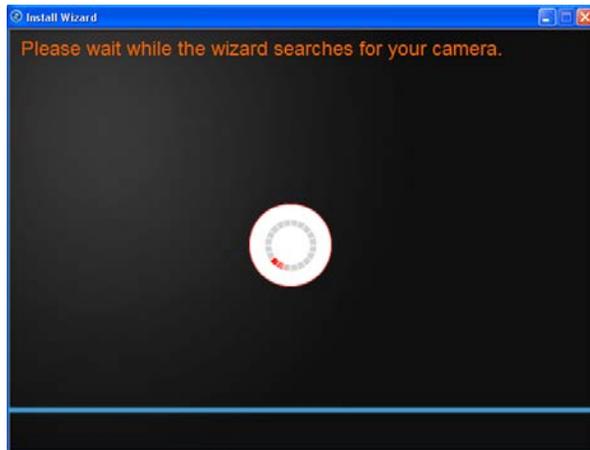
5. If you only have one camera on your network, the wizard will automatically select it (as shown below). Otherwise, if you have more than one camera, it provides several options from the list. The wizard provides the **Model Name** and **MAC Address** of the camera. If you do not see any of your camera(s) in the wizard, click **Retry** to scan for the camera again. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**

6. **Password Settings**. Follow the instructions on the screen. The default username and password is **admin**. Tick the **Change Password** checkbox to enter the new password details. The password should be between 8 and 16 characters. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu**.

If you have entered the incorrect admin details, you are prompted to change the configuration, as shown below.

If the password length is less than 8 characters, you are also prompted to alter the configuration, as shown below.

7. The wizard configures your parameters.
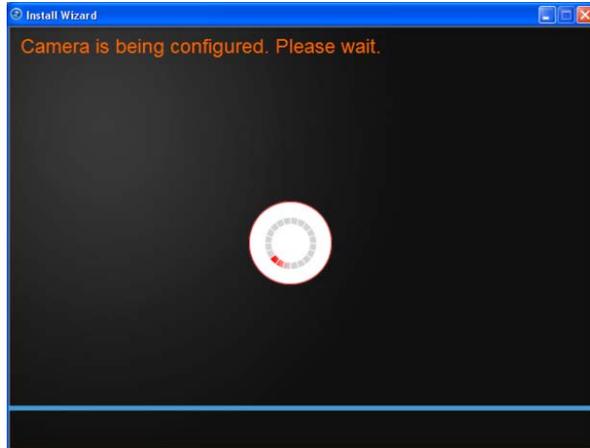
8. The initial setup is complete. The main feature is the Cloud Access accessibility feature. Click the link(s) or icon below to create a shortcut on your desktop. Also, below the icon is a warning. This warning is only shown when the Internet connection is inactive or the Cloud server cannot be found. Make sure the Internet connection is active, click **Retry**. If the Cloud server isn't found, the server may be busy or under maintenance. Under these circumstances, click **Retry** later again. If there is no warning, click **Next**.

Please refer to **Starting the TRENDnet Cloud Services** section for additional Cloud service information.
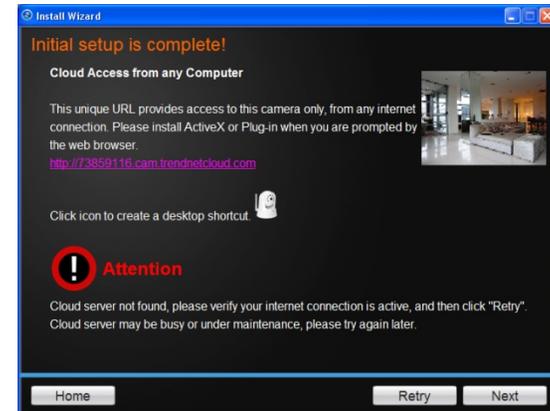
Click on the product image to create a shortcut on the desktop. A shortcut will be created.

Click the link provided to browse the settings in the browser.

9. Scan the barcode to download the **TRENDnet CloudView App** for Apple iOS or Android™[1] . The app can also be found by searching TRENDnet from the Apple App Store or Google Play™[2].

Please refer to **Mobile Apps** section for additional app features information.

You are now ready to use your camera. Click **Finish** to exit.

Option B, Connect Camera to your wireless network using WPS (Wi-Fi Protected Setup) button

Tick the WPS option
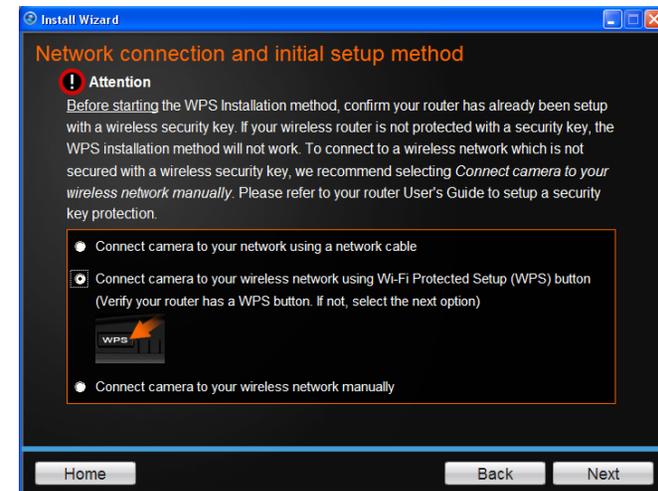
Please consider these points before using WPS.

- Find the access point (AP) or wireless router you wish to connect to from the **Available AP** drop down menu.
- In most cases you should leave the **Channel** set to **Auto** as the AP will determine the channel of operation.
- Select the type of **authentication** and **encryption** required by the access point and enter the **Key** required to connect.

Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**

Please read the next steps carefully as it pertains to the WPS feature on your router and camera.

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[1] Android is a trademark of Google Inc.
[2] Google Play is a trademark of Google Inc. [3] Please refer to the **TRENDnet CloudVIEW Quick Installation Guide** for features supported in the CloudView application.

1. Follow the instructions on the screen to **Power up the Camera**. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**

Follow the instructions and click **Next** to continue. If you wish to go to the previous screen, click **Back** or **Home** to return to the main menu.

2. The wizard will now search for your camera.
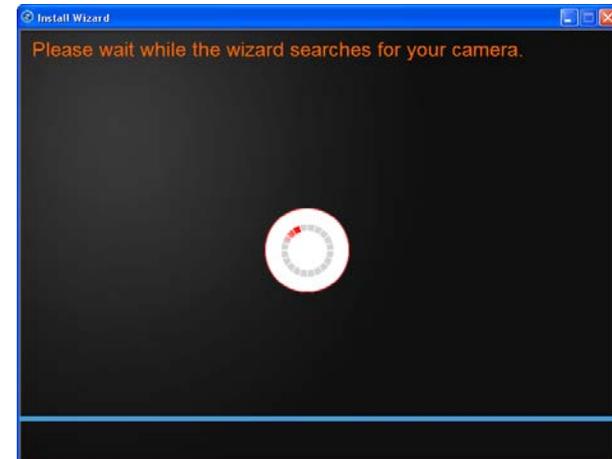
3. If you only have one camera on your network, the wizard will automatically select it (as shown below). Otherwise, if you have more than one camera, it provides several options from the list. The wizard provides the **Model Name** and **MAC Address** of the camera. If you do not see any of your camera(s) in the wizard, click **Retry** to scan for the camera again. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**

4. **Password Settings.** Follow the instructions on the screen. The default username and password is **admin**. Click the **Change Password** checkbox to enter the new password details. The password should be between 8 and 16 characters. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu**.

5. The wizard will now configure your parameters.
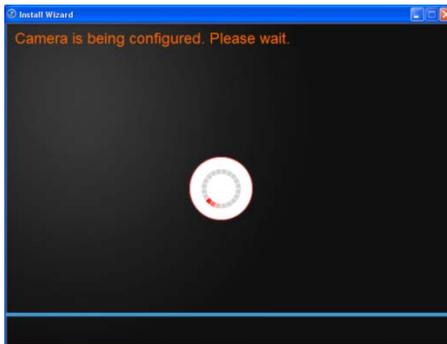
6. The initial setup has been completed. The main feature is the Cloud Access accessibility feature. Click the link(s) or icon below to create a shortcut on your desktop. Also, below the icon is a warning. This warning is only shown when the Internet connection is inactive or the Cloud server cannot be found. Make sure the Internet connection is active, click **Retry**. If the Cloud server isn't

found, the server may be busy or under maintenance. Under these circumstances, click **Retry** later again. If there is no warning, click **Next**.

Please refer to **Starting the TRENDnet Cloud Services** section for additional Cloud service information.
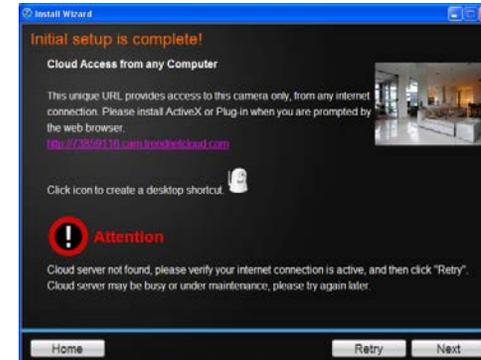
7. Scan the barcode to download the **TRENDnet CloudView App** for Apple iOS or Android™ . The app can also be found by searching TRENDnet from the Apple App Store or Google Play™.

Please refer to **Mobile Apps** section for additional app features information.
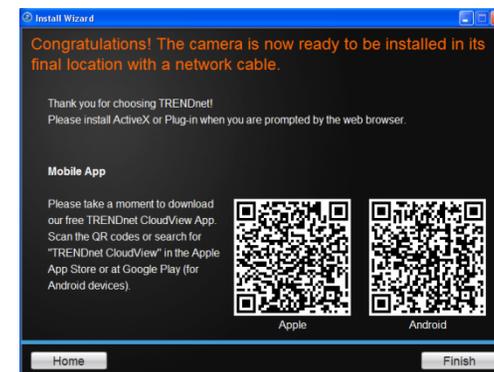
You are now ready to use your camera. Click **Finish** to exit.

Option C, Connect Camera to your Wireless Network Manually
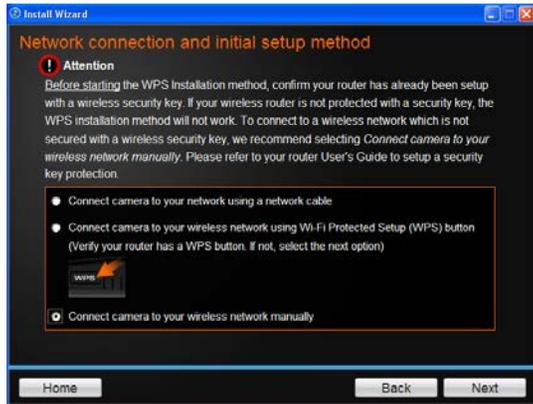

1. Follow the instructions in the next screen to **Power up the Camera**. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**


2. Connect one end of the network cable to your camera and the other end to your router. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**
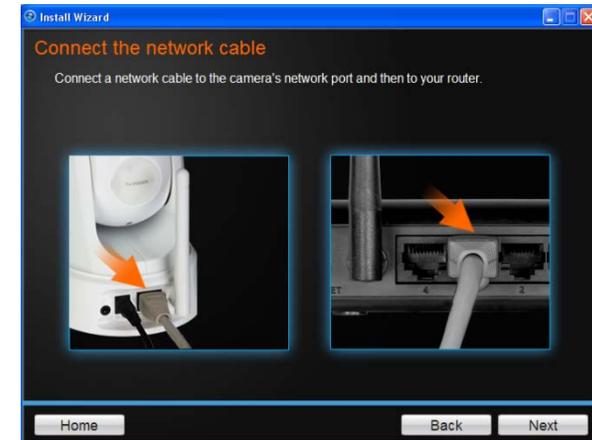
3. The wizard will now search the network for your camera.
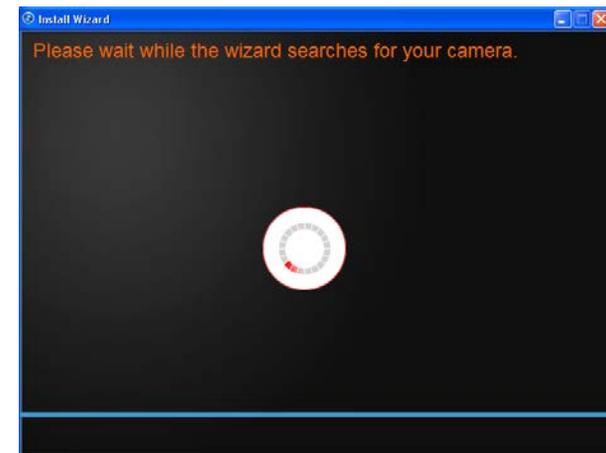
4. If you only have one camera on your network, the wizard will automatically select it (as shown below). Otherwise, if you have more than one camera, it provides several options from the list. The wizard provides the **Model Name** and **MAC Address** of the camera. If you do not see any of your camera(s) in the wizard, click **Retry** to scan for the camera again. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**

5. **Password Settings**. Follow the instructions on the screen. The default username and password is **admin**. Click the **Change Password** checkbox to enter the new password details. The password should be between 8 and 16 characters. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu**.

6. The wizard will now configure your parameters.
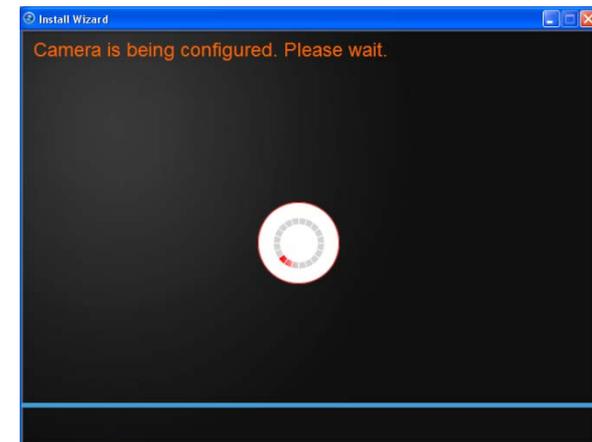
7. Once your wireless network has been discovered, the wizard will provide you with an option to select the **Available Wireless Network** and also to provide a **Wireless Network Password**. If you do not see your wireless network details, click the **Rescan** link to scan the network again.
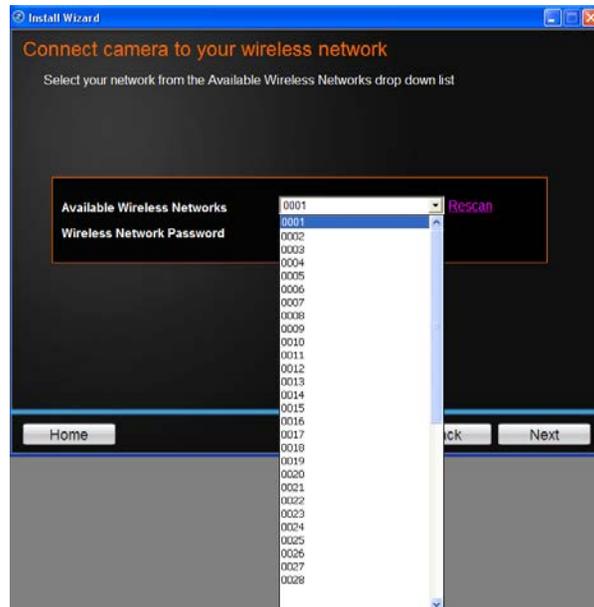
The wizard will search for wireless Access Points. Click the Rescan button if you do not find your AP.

Once the wizard finds the wireless AP you are looking for, select it and enter the wireless network password of the AP. Click **Nex**t to continue.

8. Next, you will be prompted to disconnect your network cable from the camera/router. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**
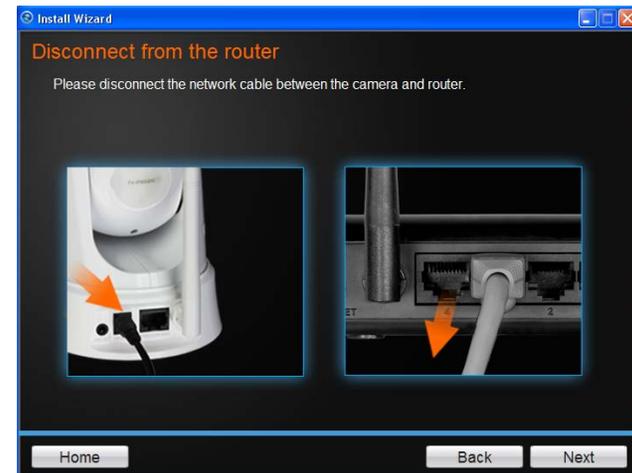
9. The camera will connect to the wireless network.
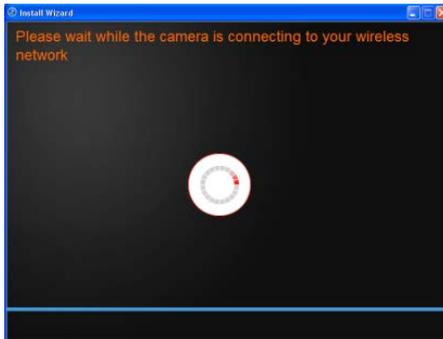
10. The initial setup has been completed. The main feature is the Cloud Access accessibility feature. Click the link(s) or icon below to create a shortcut on your desktop. Also, below the icon is a warning message. This warning message is only shown when the internet connection is inactive or the cloud server cannot be found. Make sure the internet connection is active, click **Retry**. If the Cloud server isn't found, the server may be busy or under maintenance. Under these circumstances, click Retry again. If there is no warning, click **Next**.
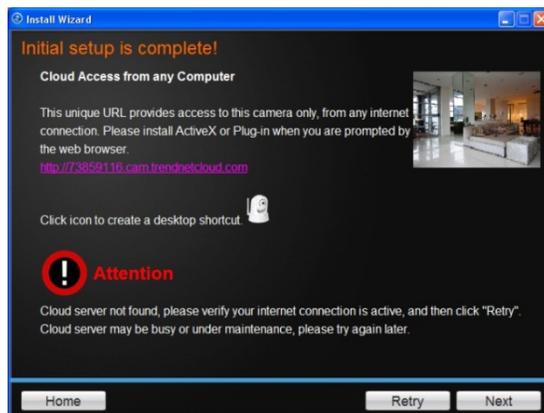
Please refer to **Starting the TRENDnet Cloud Services** section for additional Cloud service information.

11. Scan the barcode to download the **TRENDnet CloudView App** for Apple iOS or Android™ . The app can also be found by searching TRENDnet from the Apple App Store or Google Play™.

Please refer to **Mobile Apps** section for additional Cloud service information.

You are now ready to use your camera. Click **Finish** to exit.

Starting the TRENDnet Cloud Service

When you first purchase the TV-IP862IC, it's already configured to run on the internet out of the box. To do this, you will need the following:

- The TV-IP862IC must be connected to the network with internet
- A DHCP router, with WPS enabled (optional), or the camera connected to a LAN connection by a network cable.

Before starting the TRENDnet Cloud Service, please properly install the camera through the installation steps on the Quick Installation Guide.

To access the cloud service, follow the steps below

1. Open a web browser and type in the **URL** (eg: http://73859116.cam.trendnetcloud.com) listed on the label located at bottom of the camera. Write it down

2. You will reach the cloud service site
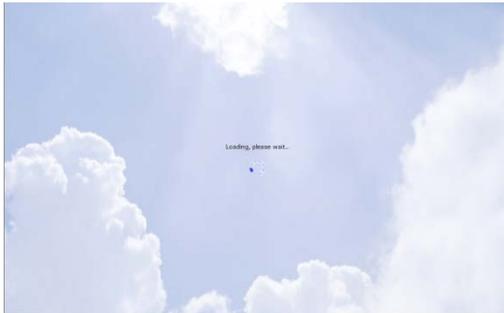
3. You will be prompted to install the plug-in needed for TRENDnet access. Click **Install**.

4. The log-in screen will appear. Enter the default username (admin) and the default password, admin, at the first time login without running installation steps on CD-ROM ahead or soon after the camera reset. If you have done installation via CD-ROM previously, please enter the password you have setup, and click Login. If you don't want to use the information that you just entered, click **Reset** and reenter your data.

Note: For first time login, the site will prompt the Terms of Use and password change windows as below. If you've configured the cameras previously, skip to Step 5.

The next is to change the username and password. Enter a username and the existing password. Enter a new password and re-type it to confirm it. Click **OK** to complete.
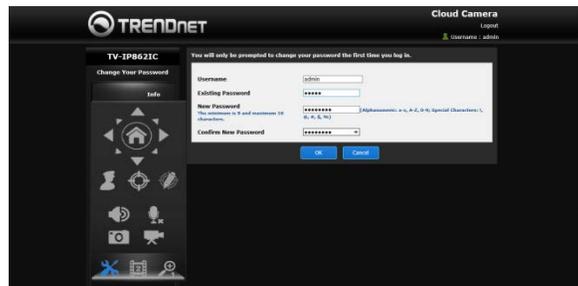
The next screen will verify that your settings have been successfully changed. Click **Login**.

5.   Now, login with the new username and password and click **Login**.

The camera will now display the Cloud view via the TRENDnet cloud service.

Depending on the network environment, you will be connecting to the cloud services in one of the three modes. If you look under the Live View icon, you will notice Mode 1, 2, or 3. This indicates the connection mode currently in use.

Cloud Mode 1:

Mode 1 indicates the camera is connecting directly to the Internet or local network. This mode offers configuration and management options, together with an Advance Configuration mode.

Cloud Mode 2:

Mode 2 indicates the camera is connecting to media in a peer-to-peer fashion to the Internet or local network. This mode offers configuration and management options but not an Advanced Configuration mode.
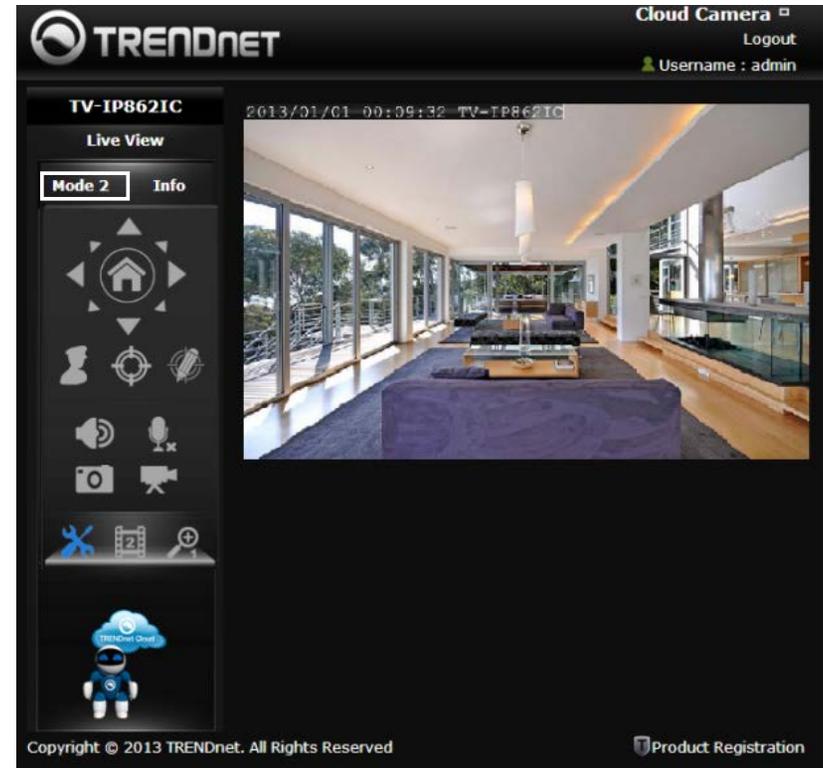
Cloud Mode 3:

Mode 3 indicates the camera is connecting to the Internet or local network through a firewall, or limited by your current network environment. This mode offers configuration and management options but without Advanced configuration – just live streaming for 5 minutes (the last 60 seconds is in countdown format). The firewall settings limits live streaming for each user. The "red" notification at the bottom of the viewing area warns users of the limited time. Refresh this screen continuously if you wish to view your camera's live stream.

Cloud Service Interface and configuration

After you login, you will see the main Cloud Service screen. Please properly install the camera prior to cloud service login. The cloud service provides mostly use but not full configuration settings. For full configuration settings, please refer to the Configuration section.
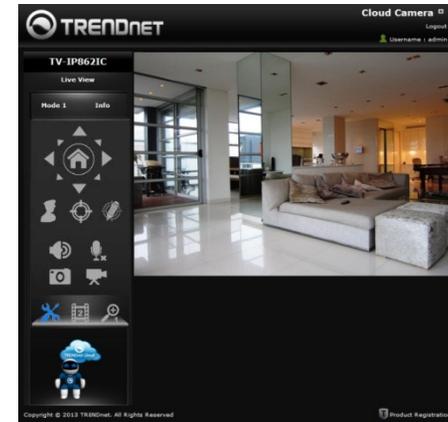
What's on the interface?

1. The camera model name.
2. Live View mode.
3. Mode type
4. Notifications (Info on camera)
5. Pan/Tilt Control (Camera directional remote control)
6. Preset List (the list of your Preset Positions.)
7. Edit a Preset Name and Preset Position.
8. Speaker on your PC. Click this button to toggle between Sound and Mute.
9. Microphone on your PC. Toggle between On/Off.
10. Snapshot – take a snapshot
11. Start recording. Toggle between Start/Stop live view recording into your TV-IP862IC folder, under the "My Document" folder, on your PC.
12. Configure settings in the cloud service.
13. Profiles (Select the camera profile).
14. Aspect Ratio (Zoom in and zoom out.)
15. Click to logout
16. Username
17. Camera Image
18. Fit to screen
19. Product Registration
20. Patrol once continuously at selected pre-set positions (Please refer to the "Patrol Position", under the "Configuration", for details.)

Under Configure settings in the cloud service, there are various options you can reference to configure. Go through the different options to toggle cloud settings.

For Video Configuration

1. Profile: Select a Profile from the drop-down list.
2. Encoding Type: Select your video encoding type from the drop-down list.
3. Resolution: Select the video resolution size from the drop-down menu.
4. Frame Rate: Select the frame rate speed from the drop-down menu.
5. Encoding Method: Select an encoding method from the drop-down menu.
6. Bit Rate: Select the camera bitrate from the drop-down menu.

Click **OK** to put the changes into effect.
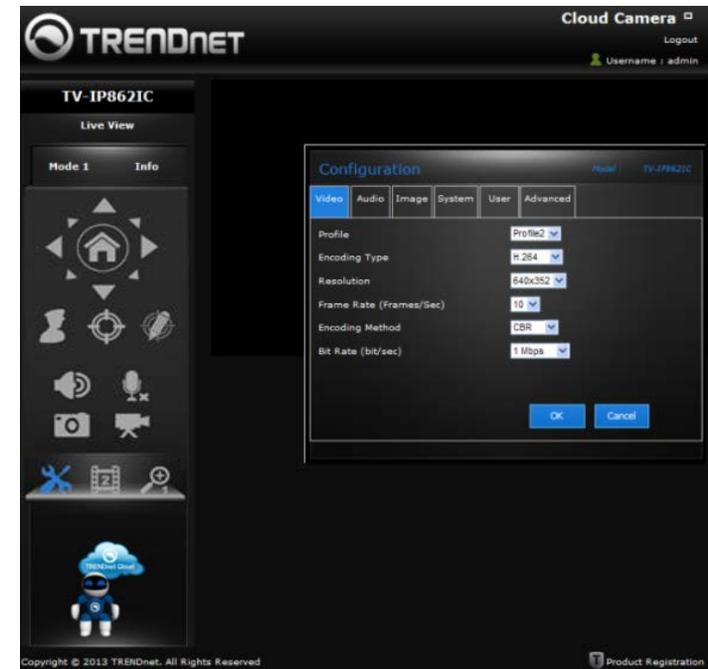
For Audio Configuration

1. Click to enable the speaker.
2. Adjust the volume.
3. Click to enable the microphone.
4. Adjust the microphone volume.

Click **OK** to complete these settings.

For Image Configuration

1. Brightness: Use the slider to adjust the brightness.
2. Contrast: Use the slider to adjust the contrast.
3. Saturation: Use the slider to adjust the saturation.
4. Hue: Use the slider to adjust the hue.
5. Mirror: Click the checkbox to mirror the image.
6. Flip: Click the checkbox to flip the image.
7. Black and White: Click the checkbox to change the image to black and white.

Click **OK** to complete these settings.
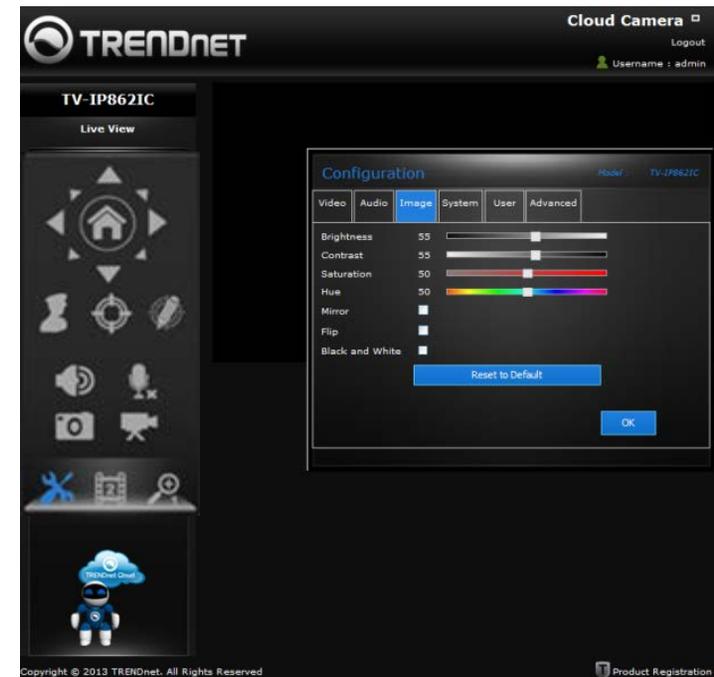
For System Configuration

1. Username: Only change the Admin username here.
2. Existing Password: Enter the existing Admin Password.
3. New Password: Enter the new password.
4. Confirm the Password: Enter the new password again.

Click **OK** to complete the settings.
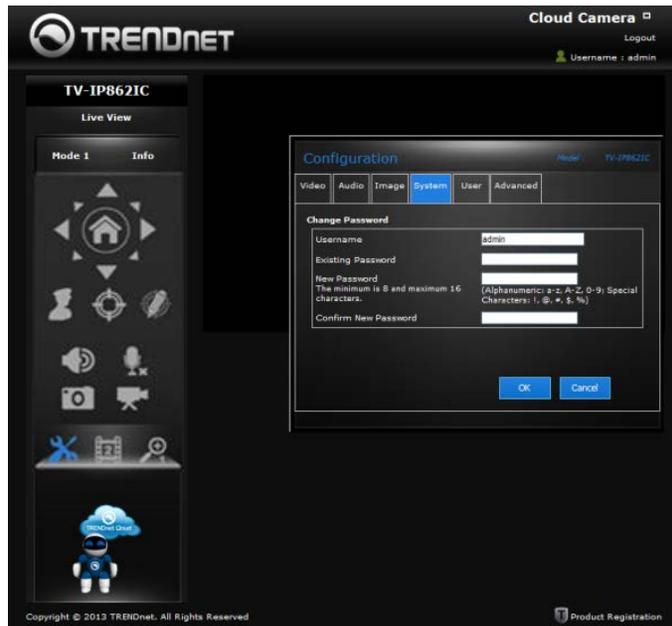
For User Configuration

1. Manual Recording and Snapshot/Set Folder Storage – Click the button to **Select** the directory you want to save your recordings and images. Once you have highlighted the folder you wish to use, click **OK**.

Locate the folder/directory where you want to store your data, select it and click **OK**.
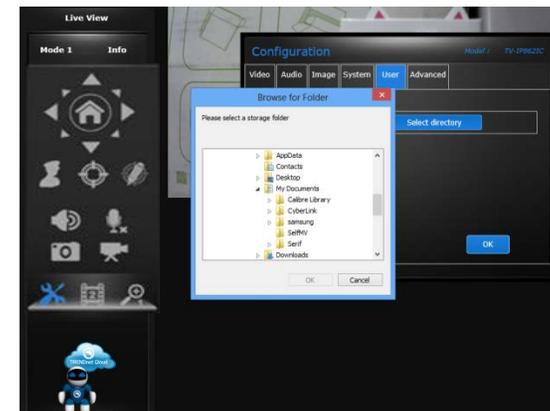
For Advanced Configuration (Please Note: Only Admin user can operate this option in Mode 1)

1. Advanced Camera Settings: Click the Settings button to be redirected your IP camera. This configuration method is similar to the one you already have locally if you use your local IP address.
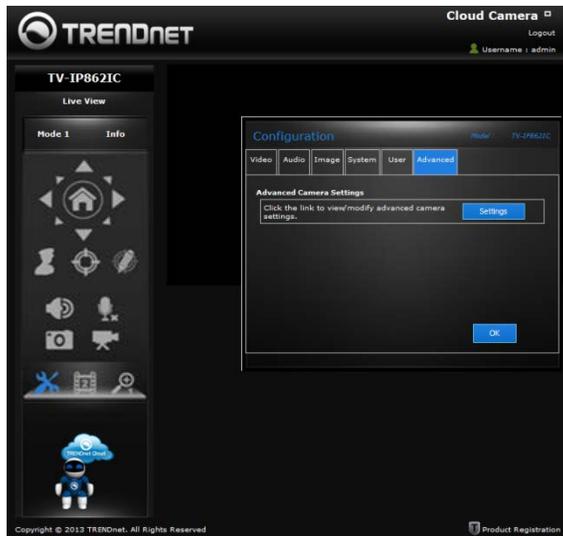
During this process you are redirected to your external IP address which is the camera's webpage.
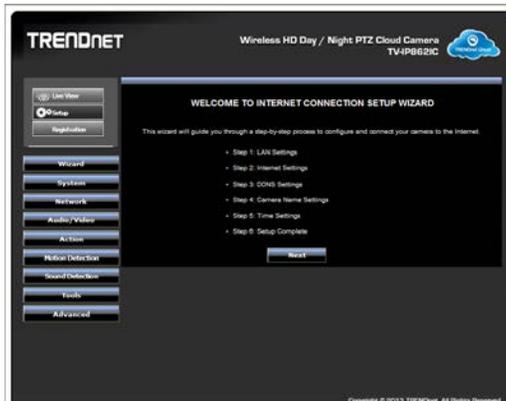
Profiles: - Camera View: The current cloud-based system allows you to set 4 Profiles for each camera you setup. Select which video settings you want to view and create a profile.
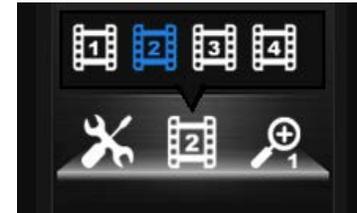
Zoom in and zoom out: Click this icon to zoom in and zoom out. Each camera selection appears as you select a viewing option or view the aspect ratio using this icon.


Logout: Use this link to logout

Username: View the current user connected to the cloud.

 : **This is a Fit-to-Screen icon.**
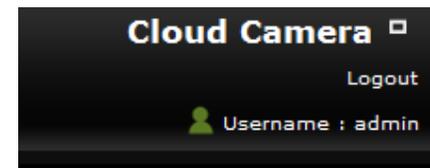
        This is a Fit-to-Normal icon
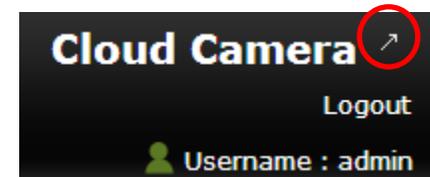
Click this area to resize the screen back to normal view.

Camera: This is the camera view

Mobile Apps

Using your mobile[3] device, in this example it is an **Android** phone, touch the **Bar Code** scanning app on your mobile device. Hold your mobile device up to the **QR Code** on the wizard that reads "**Android**" and scan the image. The **Bar Code** app will read the QR Code and record it.


The app will copy the QR link and provide a HTML link to the TRENDnet app. Click on the link.
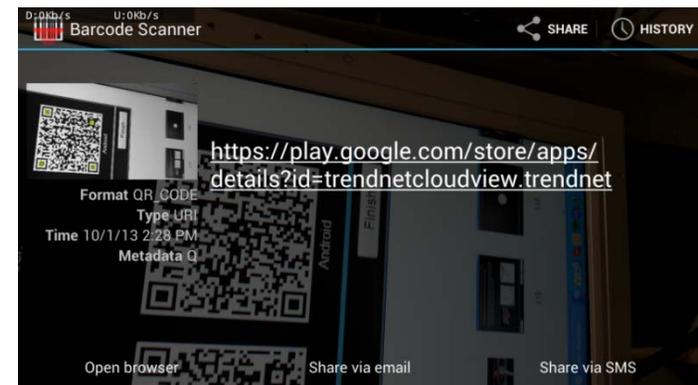
---

[3] Please refer to the **TRENDnet CloudVIEW Quick Installation Guide** for features supported in the CloudView application.

You will be directed to the **Google Play™** to download the app.
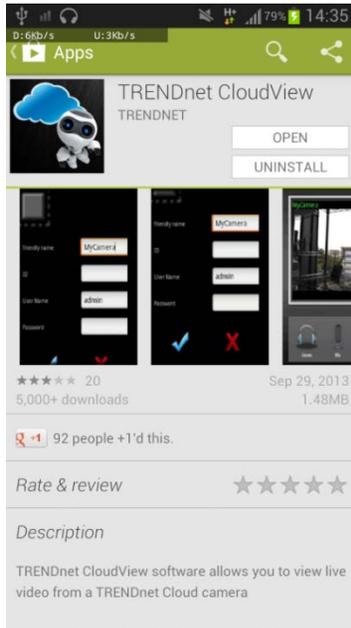
Download the app, install it and use the app on your mobile device to view the TRENDnet camera.
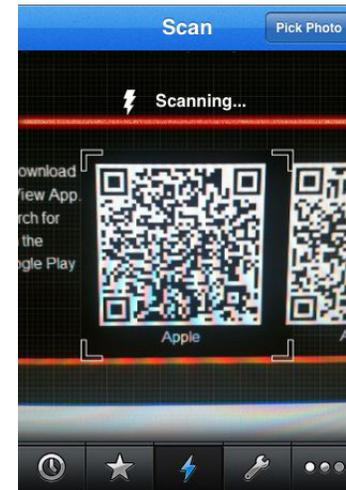
Scan the QR Code using one of IOS's QR Code apps. The app will automatically create an HTML link to the iTunes App Store. Click the link.

You will be immediately directed to the iTunes App Store. Click the link to download.

Find the IP address of your camera(s)

Please install the Setup Wizard utility software (for Windows only) from the setup wizard folder on the CD by double clicking the setup file, to locate the IP address of your camera(s) on the same network with your PC.

Web Browser Management

After completing the Autorun Wizard from the CD, 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-IP862IC camera. Open a web browser such as Internet Explorer® and enter the IP address of your camera (through the setup wizard utility software on the CD). To log in, type the Username **admin** and the password you created in the Autorun Wizard. If you did not create a password or you just press the reset button for reset, the default password is **admin**. After entering your password, click **OK**.

These initial steps are shown using Internet Explorer.

When you log in for the first time or camera reset, the TRENDnet Cloud Terms of Use will appear. Click the **Accept** check box and click **Next**.
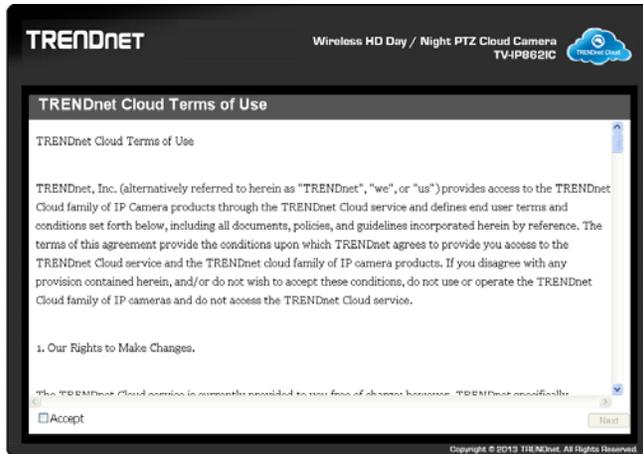
The **Change Your Account** page will appear. Under Admin User Name, leave it as "admin" or change it accordingly. Enter the Old Password, enter the New Password, and then re-enter the New Password to confirm it. Click OK to continue. Click Cancel if you wish to discontinue.
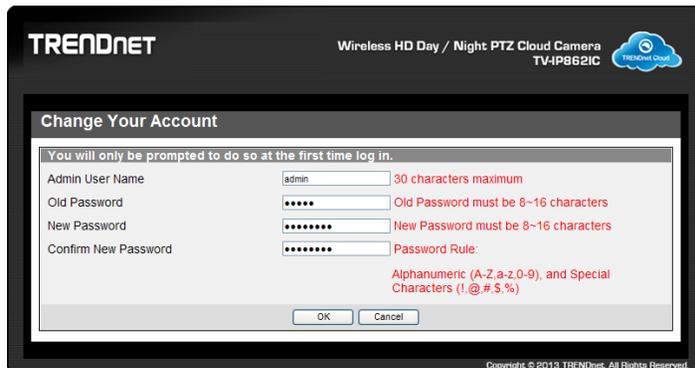
The camera will save the information you have entered and restart in 10 seconds.
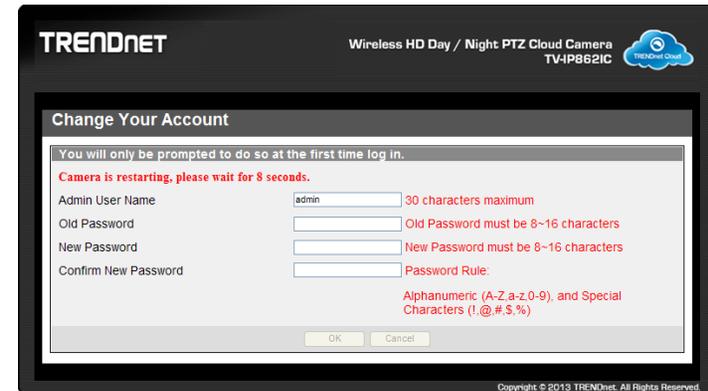
The **Congratulations** page will appear. Click **Login** to go to the Login page again. To log in, enter the Username **admin** and the newly created password. This page only appears the first time log in.
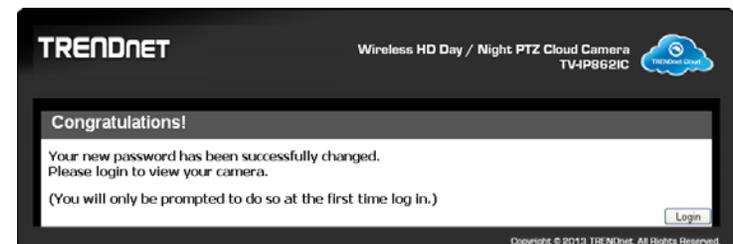
The home page for the TV-IP862IC will appear. Now enter the new username and password you just created and click Log In.
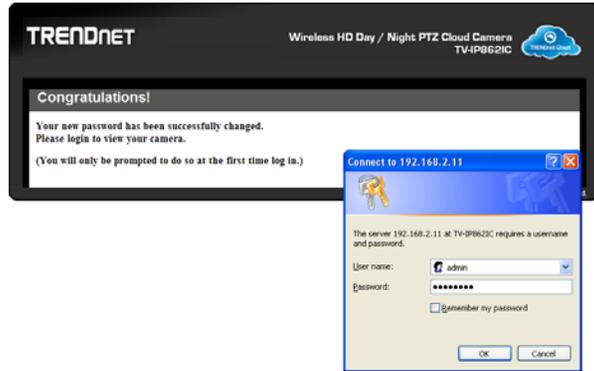
PLEASE NOTE: Depending on the browser you are using, download the plugin needed to view and access the camera feed.

After you have logged in, you will need to install the plug-in required. Click the link below the camera view finder to install the plug-in.
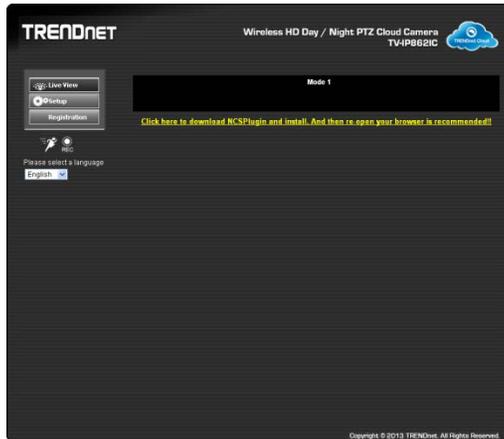
The plug-in will be saved to your Downloads Folder. Click it to begin the installation. Click **Run** to start the process.
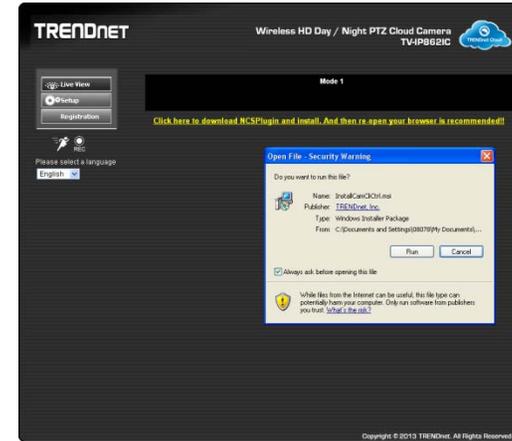
Click **Next** to continue.
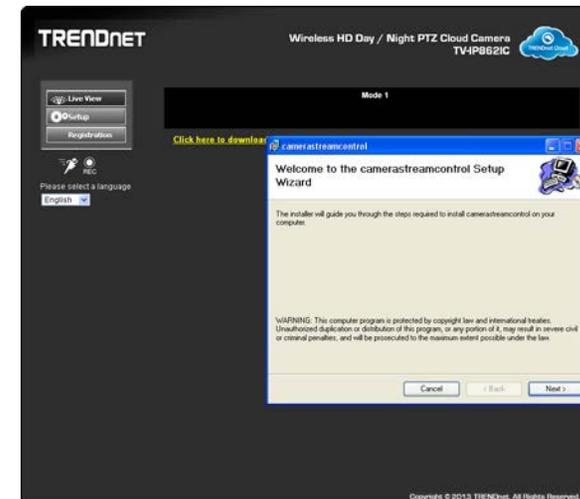
The Camera stream control application will be installed.
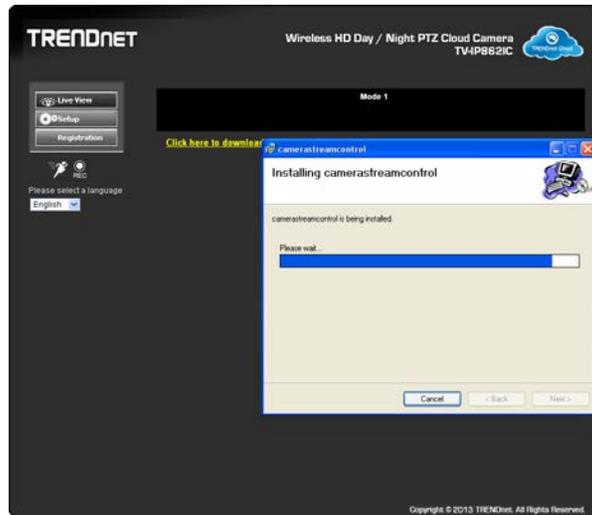
Make sure all browsers are closed.
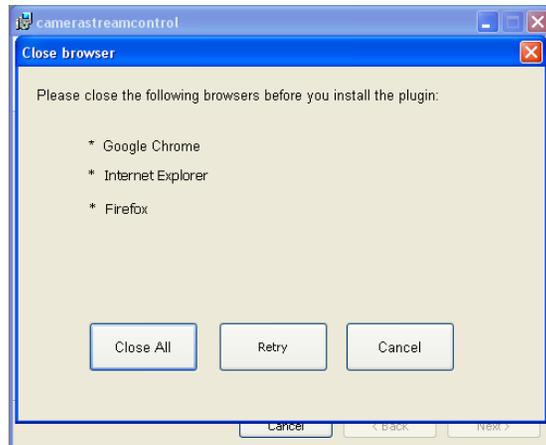
Click the "**Close All**" button to close all browser windows. Click the "**Retry**" button to attempt it again or click the **Cancel** button to exit the plug-in installer.
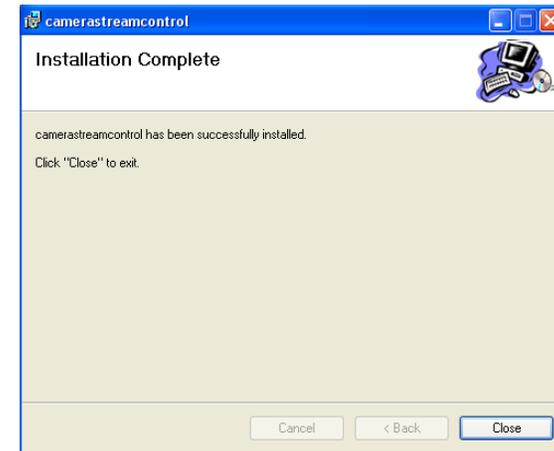
Refresh your browser. The live camera image will be displayed.

This is the Microsoft Internet Explorer plug-in installation. Login to the camera again after refresh the browser.

At the top of the browser there will be a pop-up which will prompt you to add the TRENDnet add-on.
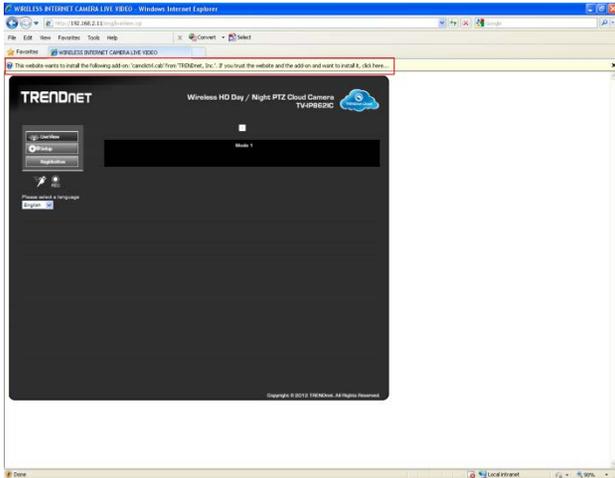
Click the ActiveX pop-up to install it.
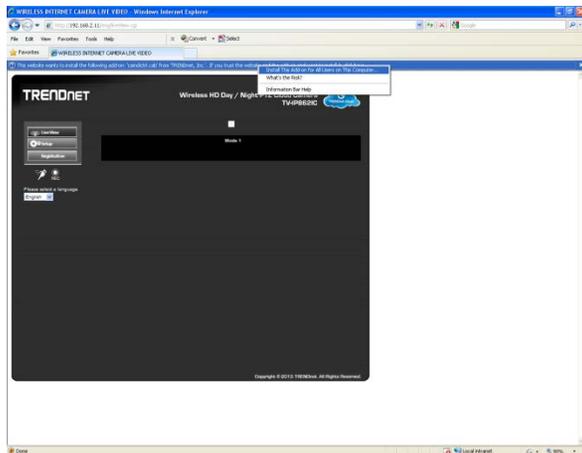
Another pop-up will appear to warn you that you're installing an add-on. Accept the add-on and click the **Install** button.
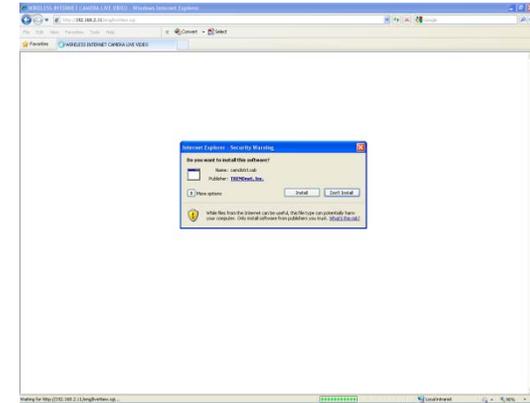
Once the add-on is installed, Internet Explorer will now display the streaming image.

The image below is displayed in both Internet Explorer and Chrome.

Main Web User Interface

1. Live View – view the live image.
2. Setup – Configure the camera settings.
3. Registration – Register your device with TRENDnet.
4. Record button – Click this button to enable recording.
5. Sound/Motion Trigger – Click this button to activate sound and motion.
6. Directional Controller – Control the direction of the camera.
7. Pan Button – Click this button to pan the camera.
8. Patrol Button – Click this button for the camera to patrol once continuously at the selected pre-set positions.
9. Stop – Click this button to stop al Pan/ Tilt/Patrol.
10. Go To – Select a preset position from the drop-down menu.
11. Pan Speed – Select a Pan speed from the drop-down menu.
12. Tilt Speed – Select a Tilt speed from the drop-down menu.
13. Language – Select a language from the drop-down menu.
14. Displays the timestamp.
15. Displays the live image.
16. Product name and Model number.

Camera Toolbar
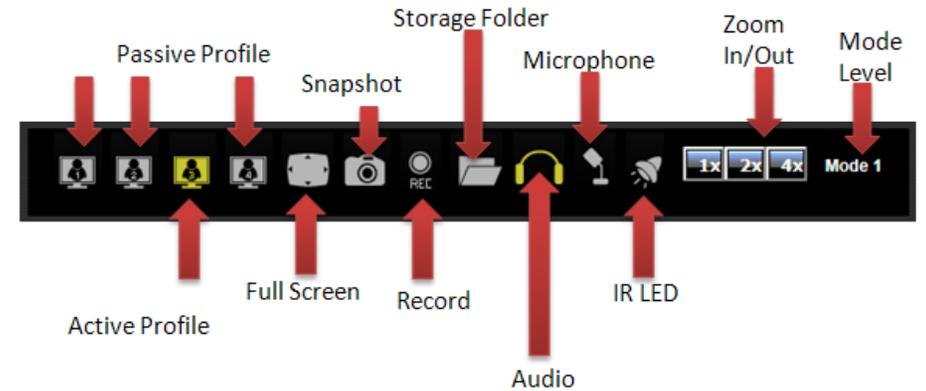
COMPONENT	DESCRIPTION
Passive Profile	This profile, in grey, means the camera is deselected.
Active Profile	This profile, in yellow, means the camera is selected.
Full Screen Mode	The viewable screen is expanded to full screen mode.
Snapshot	Click this button to take a snapshot of image in the viewfinder.
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 incoming audio.
IR LED	Click this button to toggle the on/off IR LED Day/Night mode.
Zoom In/Zoom Out	There are different zoom options under

	Zoom In/Zoom Out. The viewing angle can be zoomed in from 1 times, 2 times, and 4 times.
Mode Level	There are four modes available: Mode 1, 2, 3, 4.

Setup

View camera settings:

1. Login to the camera
2. Click **Setup**. The main configurable screen appears.

From the menu on the left side of the screen, select an option.

Wizard

The first screen in the Setup panel displays a Welcome to Internet Connection Setup Wizard. Click Next to continue.
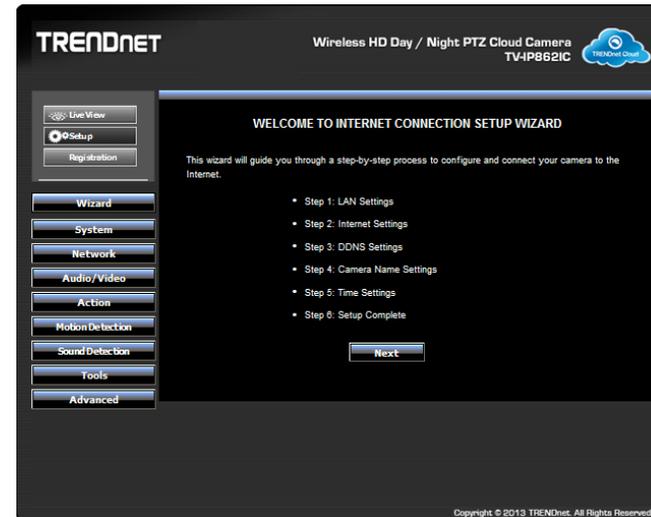

Step 1: LAN Settings

Under LAN Settings you are provided with two choices, IPv4 Settings and IPv6 Settings. Select DHCP for the router to choose your IP address. Click Next.
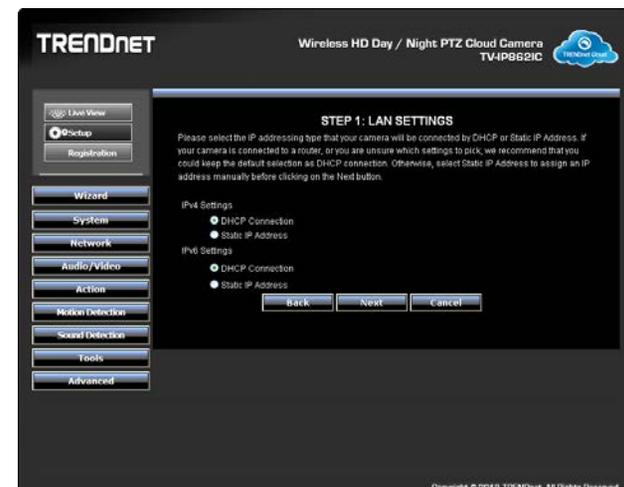
For Static options, click Static IP Address.
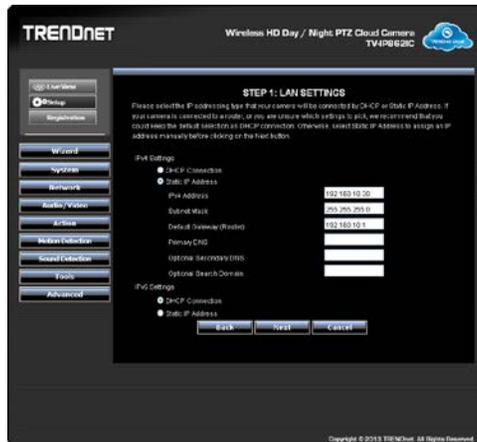
In the Static IP address field, type in the IPv4 IP Address, the Subnet Mask, Default Gateway, Primary DNS and/or Secondary DNS servers. There is also an option to include a Search Domain if you have one.

When you configure static IP settings, click the radio button next to IPv6 Static IP Address. The field now extends to further options. Type in the IPv6 IP Address in the field provided. Then enter the Default Gateway details, a Primary DNS, and a secondary DNS.
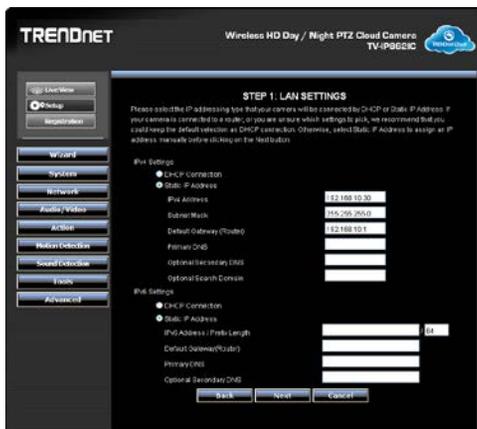
Click the Next button to continue.

Step 2: Internet Settings
If your ISP requires a username and password, now is the time to complete the empty fields. Click the **Enable** checkbox. Enter a **Username** and **Password**, and click the **Next** button.
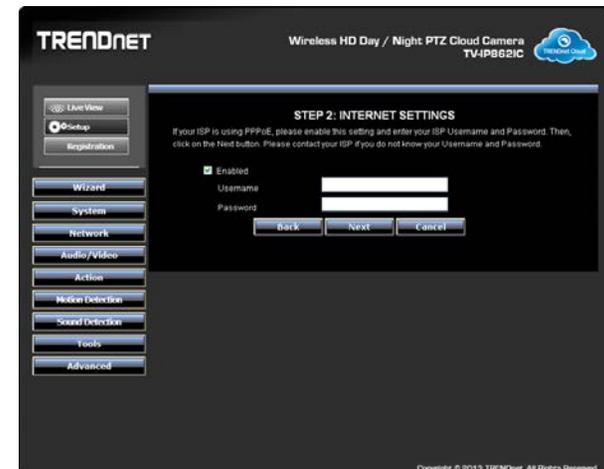
Step 3: DDNS Settings

Under DDNS Settings, click the checkbox to enable this feature. In Server Address, select one of the domains from the drop-down menu. The field to the left of the drop-down menu will automatically populate. Under Host Name enter the name the DDNS service provided. Enter a Username and Password, repeat the password and finally enter the Timeout. Timeout states the time DDNS is updated. Click Next to continue.
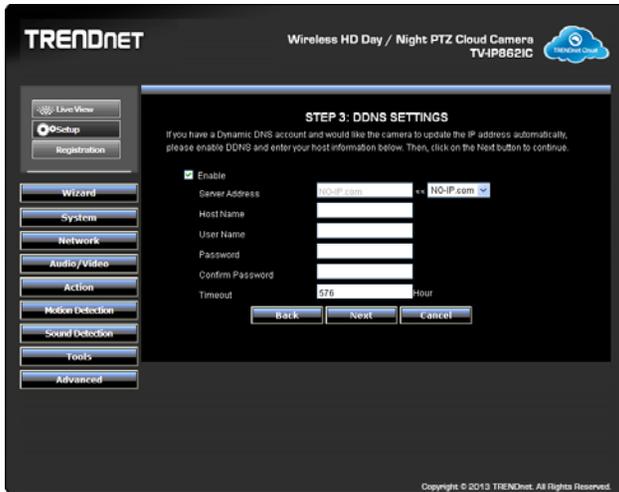
Step 4: Camera Name Settings

Enter a name for the camera. This feature is helpful when you have more than one camera setup. When complete, click **Next**.
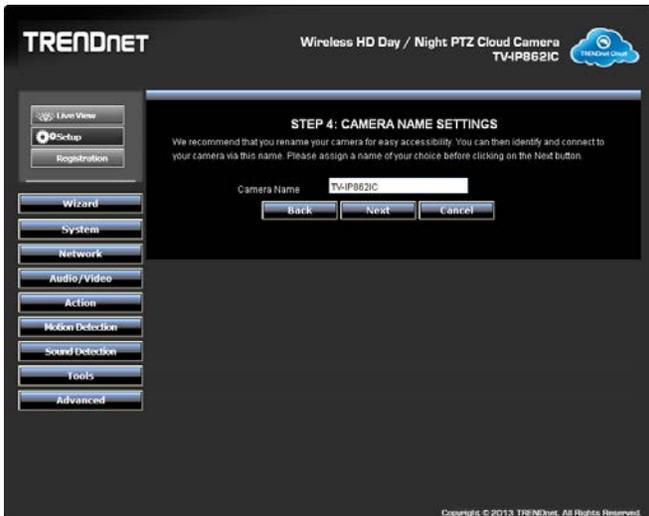
Step 5: Time Settings

From the drop-down menu, select a **Time Zone**. Click the checkbox to enable daylight saving. To edit further options, either select **Auto Daylight Saving** or Set DST manually. Auto Daylight will set the Daylight Savings time for you automatically. If you select DST manually, you can offset the time within 1-2 hours. Then select a start time and an end time from the drop-down menus provided. You can also click the "Keep current date and time" which maintains the current time and date of the camera. Other options include, "Synchronize with Network Time Protocol server". Ask your administrator if you have a server like this. The last option, "Setup a Date and Time manually", allows you to manually configure the date and time from the drop-down menus provided. Alternatively, you can also click "Sync with Computer Time". This uses the current time settings on the computer you are using to sync with the camera's time. Click **Next** to continue.
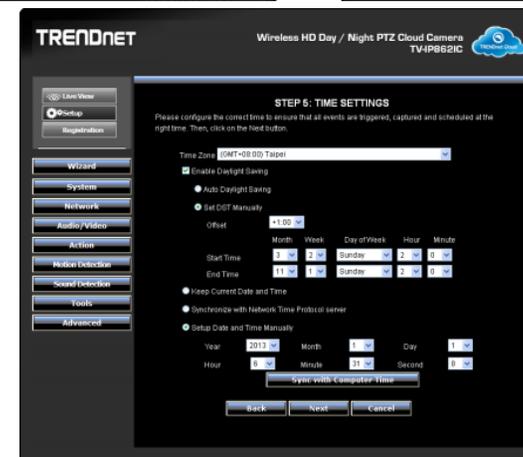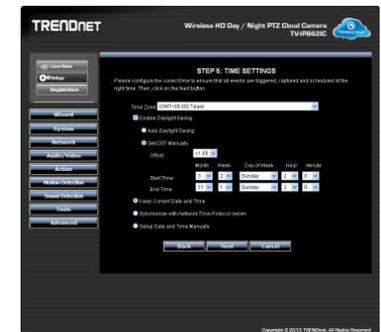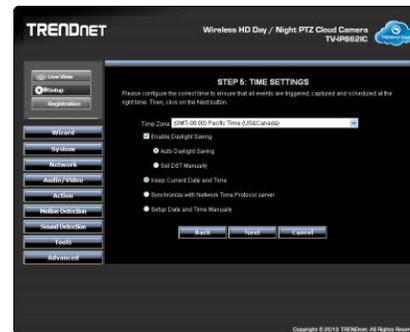
Step 6: Setup Complete

This is the final screen of the wizard. It shows the configuration options you selected. Click Apply to make the changes. After you click through, a notice will appear to mention that the camera will restart in 60 seconds and that it's saving the settings. After the camera restarts, you will be directed back to the start of the wizard.
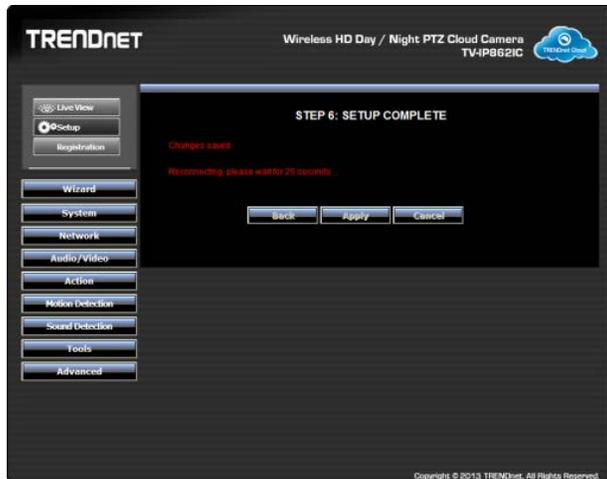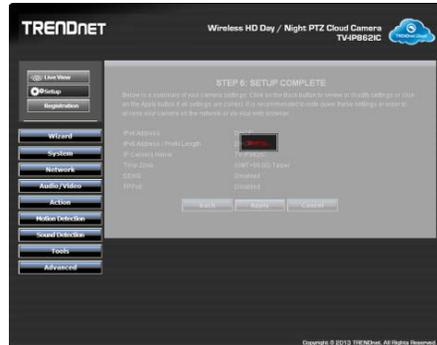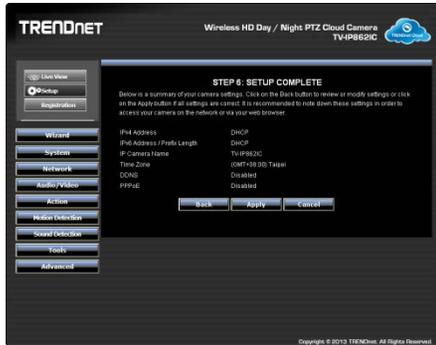
System
Admin

Password Settings

In this section there are two configuration parts – **Admin and Time and Date**. These settings can be configured using the **Setup Wizard** but if you have already done the wizard and want to return to these settings, this is the place to do it.

1. Enter the **Old Password** (30 characters is the maximum length)
2. Enter the **New Password** (30 characters is the maximum length)
3. **Confirm New Password** – Repeat the password you have just entered.
4. Click **Save.**

Please Note the password can only contain: Alphanumeric: A-Z, a-z, 0-9, and Special Characters: !, @, #, $, %

Add User Account

1. **User Name** – enter a new username in this field.
2. **New Password** – enter a password for the user in this field.
3. **Confirm New Password** – Repeat the password you have just entered.
4. Click **Add** to continue.

User List

The **User List** is now populated with the name(s) of the user(s) you have added to the above configuration. If you wish to delete a user, select the user from the drop-down list and click **Delete**.

Authentication

1. **RTSP Authentication** – click the checkbox if you wish to enable the authentication of Real-time Transport Streaming Protocol
2. **HTTP Authentication** – click the checkbox if you wish to enable HTTP authentication.
3. **Snapshot URL Authentication** – click the checkbox if you wish to enable snapshot authentication of the current video stream using the hyperlink next to it.
4. Click **Save** to continue.

Device Settings

1. **Camera Nam**e – In this field enter a name for the camera.
2. **OSD** – Click the OSD checkbox if you wish to have an On-screen display.
3. **Label** – If you have clicked the OSD previously, enter a name under the Label field to make the name visible. Also, click the Time Stamp checkbox if you wish to add a timestamp to the image. Click Save to continue.
4. **LED Light** – From the drop-down list, you have the option to select Power/Link, Off, or Blinking. These options allow you to adjust the LED settings according to your requirements.
5. **Calibrate the Device** – Click the Calibrate the Device button to do exactly what it says. The camera will now pan and tilt to get the system into calibration mode.

ADMIN SETTING

Admin User Name	admin	30 characters maximum
Old Password		Old Password must be 8~16 characters
New Password		New Password must be 8~16 characters
Confirm New Password		Password Rule:
Save		Alphanumeric (A-Z, a-z, 0-9), and Special Characters (!, @, #, $, %)

ADD USER ACCOUNT

User Name		30 characters maximum
New Password		30 characters maximum
Confirm New Password		Password Rule:
Add	20 users maximum	Alphanumeric (A-Z, a-z, 0-9), and Special Characters (!, @, #, $, %)

USER LIST

| User Name | -- User list -- ∨ | **Delete** |

AUTHENTICATION

☑ RTSP Authentication
☑ HTTP Authentication
☑ Snapshot URL Authentication
(http://192.168.20.53/image/jpeg.cgi)
Save

DEVICE SETTING

Camera Name	TV-IP862IC	36 characters maximum
☑ On-Screen Display(OSD)		
Label	TV-IP862IC	30 characters maximum
☑ Time Stamp		
LED light	Blinking ∨	
Save		
Calibrate The Device	**Calibrate the Device**	

Time and Date

Under **Time Zone**, select your region from the drop-down list

- If you need to setup **Daylight Saving** time, click the **Enable Daylight Saving** checkbox.
    - The two options available are Auto Daylight Saving and Set DST Manually. Click **Auto Daylight Saving** to allow the camera to automatically adjust Daylight savings time.
    - Select **Set DST Manually** if you wish to set the Daylight Savings time yourself. A configurable drop-down menu appears allowing you to set the Daylight time according to your requirements. Select an **Offset** time and from the drop-down list (**Month, Week, Day, Hour, and Minute**) select a **Start Time** and an **End Time.**
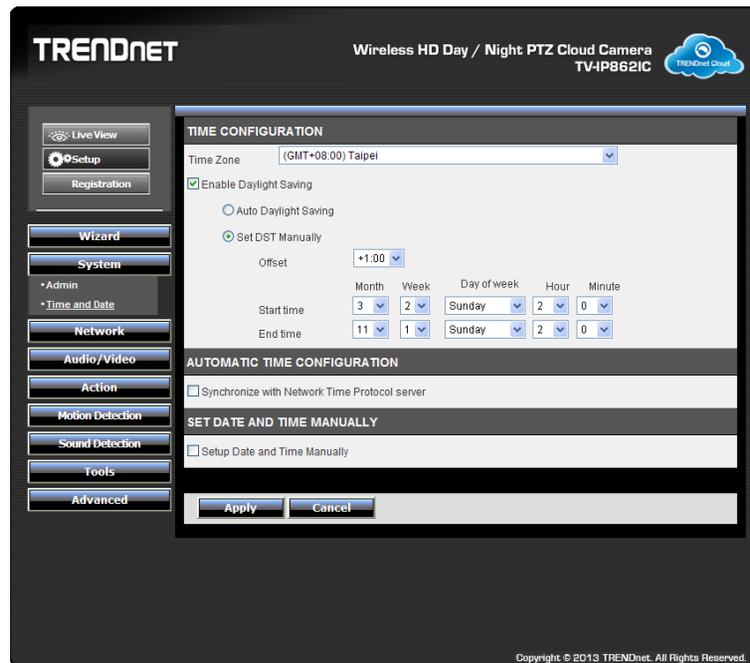
Automatic Time Configuration

Click the **Synchronize with NTP Server** checkbox to enable this feature. An **NTP Server** field will open to prompt you to enter the server details.

Enter the server details, otherwise, consult your administrator for server details.
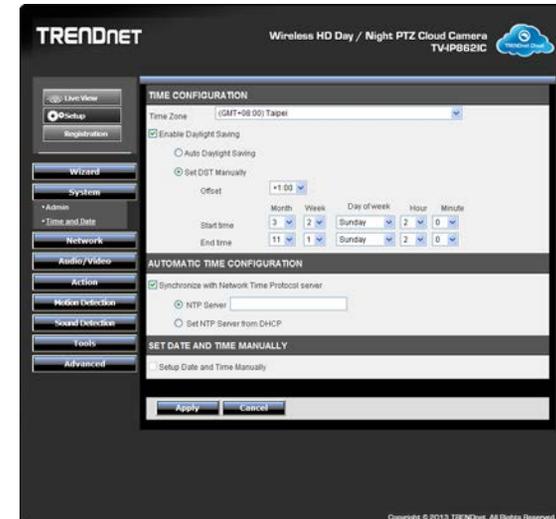
Set Date and Time Manually

Click the **Setup Dat**e **and Time Manually** checkbox to enable this feature. Here you will have the option to select a **Year, Month, Day, Hour, Minute, and Second** or just click **Copy Your Computer's Time** button. Click **Apply** to continue.
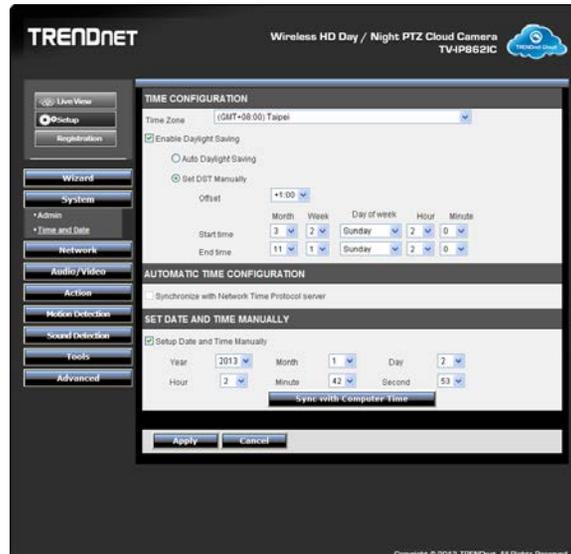
Network

In this section there are five configuration parts – Network, Wireless Setup, Dynamic DNS, Cloud Setting, and Cloud Status. These settings can be configured using the Setup Wizard but if you have already done the wizard and want to return to these settings, this is the place to do it.

LAN Settings

There are wired LAN settings and wireless settings. For LAN settings follow these instructions:

1.   Select the radio button next to **DHCP Connection** under **LAN Settings**
2.   Set the **HTTP Port** or leave the default at 80.
3.   Set the **RTSP Port** or leave the default at 554.
4.   Under **UPnP**, check the **UPnP** checkbox if you wish to use UPnP and the same goes for UPnP Port Forward.
5.   If you use Bonjour for Mac's, click the **Bonjour** checkbox under Apple.
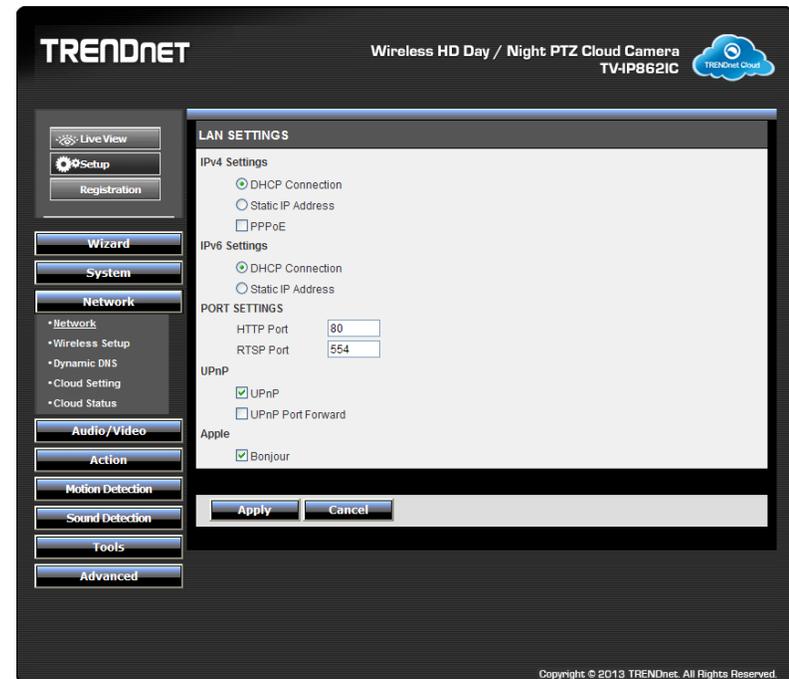
For **Static IP Address** issues follow these steps (Best suited for experienced users):

1. Select the radio button next to **Static IP Address** under **LAN Settings**
2. Enter the **IPv4 IP** address in the field provided.
3. Set the **Subnet Mask**.
4. Set the **Default Gateway IP** settings from your router
5. Lastly, set the optional **Primary** and **Secondary DNS** fields.
6. Click **Apply** to complete the configuration.
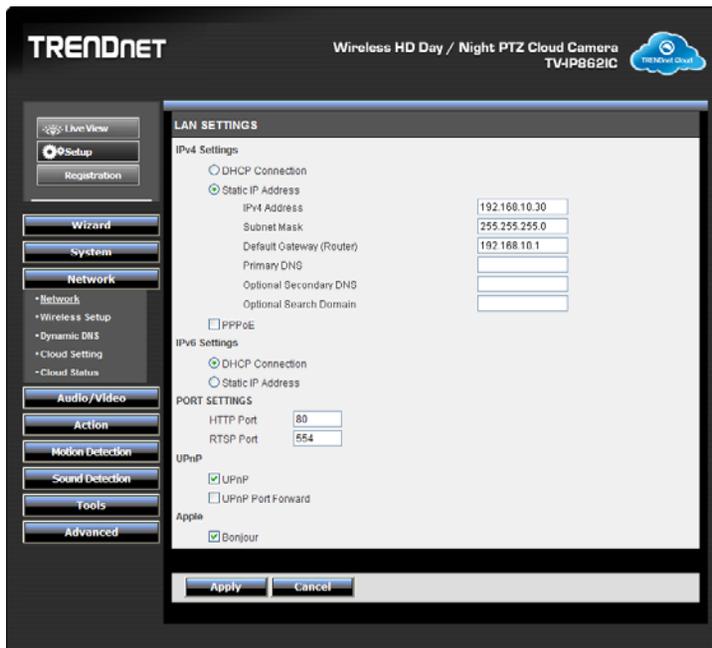
If you are connecting the camera directly to a **PPPoE** network, the camera also has configuration options for that.

1. Click the **PPPoE** checkbox. The viewable window will scroll down to reveal more options.
2. Enter the **User Name** and **Password/Confirm Password** details. The Status should indicate a **Success** or **Failure** (if you have a failure please consult your network administrator or your internet provider)
3. Set the **Port Settings**, **HTTP Port** and **RTSP Port**.
4. Set the **UPnP settings**, **UPnP** and **UPnP Port Forward**.
5. Lastly, set the **Apple**, **Bonjour** settings.
6. Click **Apply** to complete the configuration.
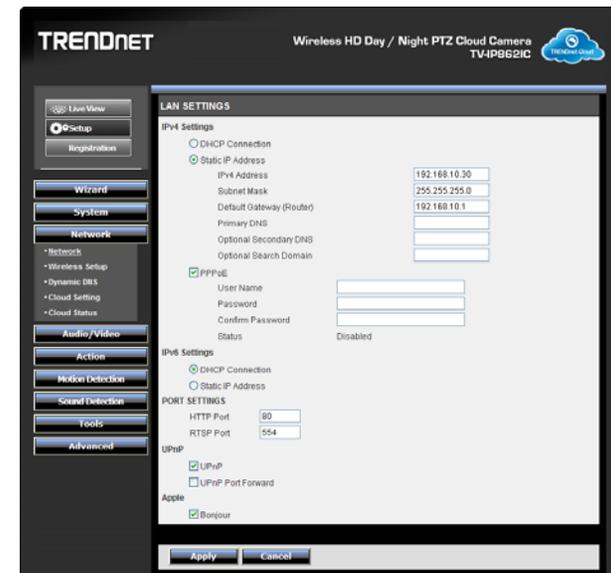
Wireless Setup

Click the **Enable Wireless** button to start using this wireless function. This function takes a while to restart the camera.

After the camera has restarted, the wireless configuration options become available.

1.   Check the **Wireless** checkbox. The camera will automatically begin scanning your wireless area.
2.   Enter a name in the **Network Name** field manually, or select a wireless network router from the drop-down list under **Site Survey**.
3.   Under **Wireless Mode** select between Infrastructure and **Ad-hoc** mode.

Infrastructure Mode - An 802.11 networking framework in which devices communicate with each other by first going through an Access Point (AP). In infrastructure mode, wireless devices can communicate with each other or can communicate with a wired network.

Ad-Hoc - An 802.11 networking framework in which devices or stations communicate directly with each other, without the use of an access point (AP).

Under **Security Mode,** select among **None, WEP, WPA-PSK, or WPA2-PSK**.

None – means no security

WEP - a security protocol for wireless local area networks (WLANs) defined in the 802.11b standard. WEP is designed to provide the same level of security as that of a wired LAN. LANs are inherently more secure than WLANs because LANs are somewhat protected by the physicalities of their structure, having some or all part of the network inside a building that can be protected from unauthorized access. WLANs, which are over radio waves, do not have the same physical structure and therefore are more vulnerable to tampering. WEP aims to provide security by encrypting data over radio waves so that it is protected as it is transmitted from one end point to another.

WPA-PSK - uses a pass-phrase, which is between 8 and 63 characters long. This pass-phrase is created and entered by the user into any client station's configuration utility, as well as into the AP. (A recommendation: do not pick a password already in use within the network, and do not use a variation of your office address.) Generally, when creating or setting up a wireless LAN, the first thing to be configured is the AP, which is then followed by the configuration of client stations. Configuring an AP depends largely upon the manufacturer's instructions; client station configuration is where the real choices about security come into play.

WPA2-PSK - it is a method of securing your network using WPA2 with the use of the optional Pre-Shared Key (PSK) authentication, which was designed for home users without an enterprise authentication server. To encrypt a network with WPA2-PSK you provide your router not with an encryption key, but rather with a plain-English passphrase between 8 and 63 characters long.

Depending on what **Security Mode** you are using, enter the **Key** in the key field next to Key. Click the **Show Hidden Key** if you wish to see what you are typing.

Click **Apply** to continue.
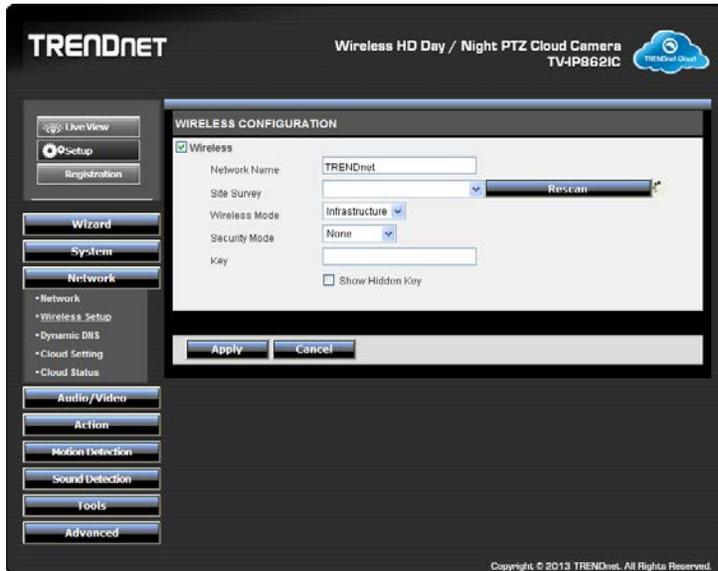
Dynamic DNS

Dynamic DNS is a method of keeping a domain name linked to a changing IP address as not all computers use static IP addresses. Typically, when a user connects to the Internet, the user's ISP assigns an unused IP address from a pool of IP addresses, and this address is used only for the duration of that specific connection. This method of dynamically assigning addresses extends the usable pool of available IP addresses. A dynamic DNS service provider uses a special program that runs on the user's computer, contacting the DNS service each time the IP address provided by the ISP changes and subsequently updating the DNS database to reflect the change in IP address.
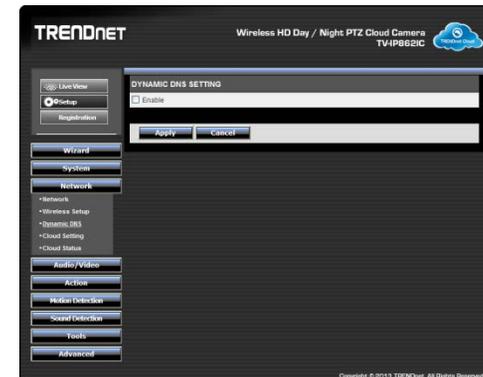
1. Click the **DDNS** checkbox to enable **DDNS** settings.
2. Select the **DDNS Server** from the drop-down list.
3. Enter the **Host Name** you setup on this online server.
4. Enter a **User Name** in the field provided.
5. Enter a **Password** and confirm the **Password**.
6. Enter a **Timeout**, in hours, for the length you want the connection to stay active.
7. Click **Apply**. The Status should change if you have configured the online DNS settings correctly.
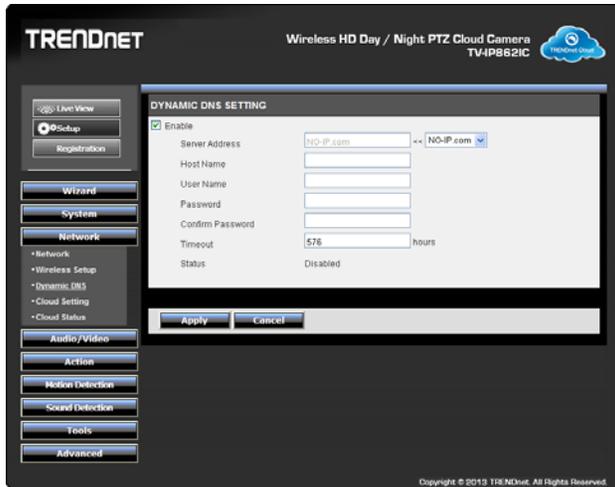
Cloud Setting

This section covers connecting to the cloud. What is a cloud? Cloud computing is being able to connect to your TV-IP862IC from any location. You can access and control the device via the internet. To do this, click the radio button next to the **Enable** button. Click **Apply**. Your selection is saved but there will not be any notification.
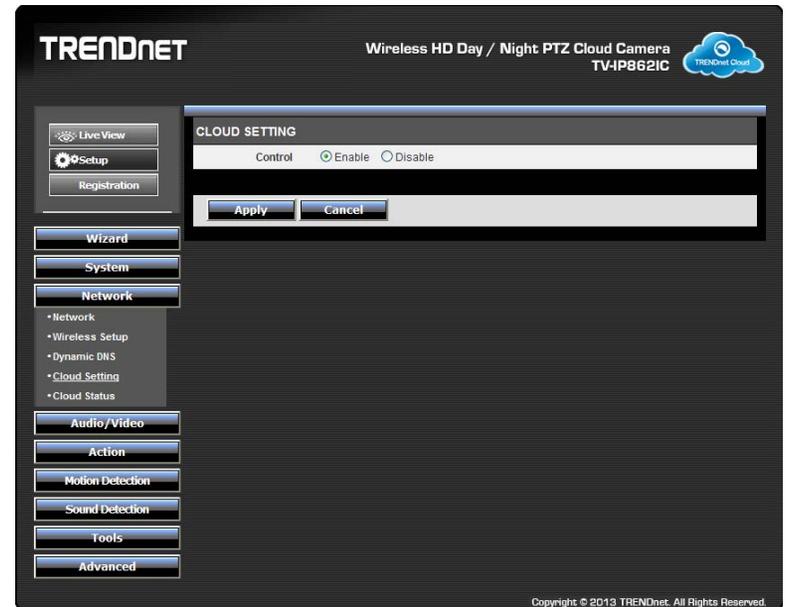
Cloud Status

This section shows you the hyperlink to your cloud connection. Once you click the link, your browser opens to the cloud interface. Click Refresh to update the image.

Audio/Video Setting

In this section there are two configuration parts – Audio and Video and Image Setup. These settings can be configured using the Setup Wizard but if you have already done the wizard and want to return to these settings, this is the place to do it.

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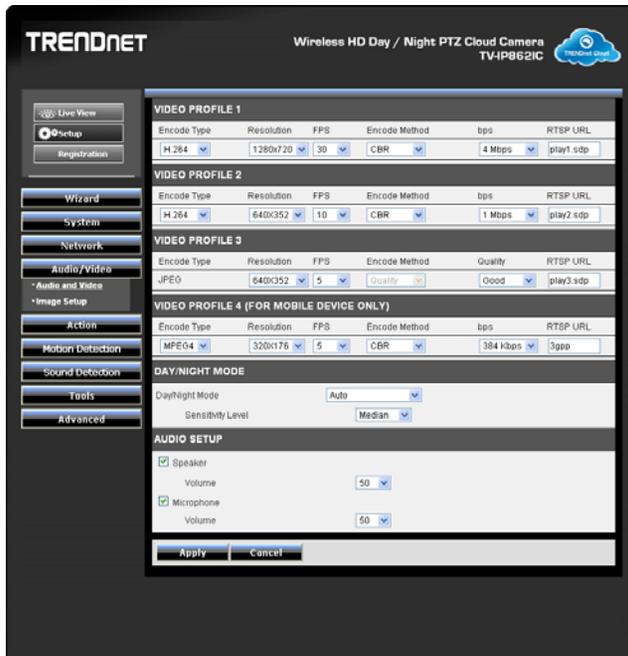
Under each profile settings there are six main functions, Encoder Type, Resolution, Frames per Second, Encode Method, bps, and RTSP URL settings.

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.

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.

Audio and Video - Video Profile 1:

Encode Type – H.264 & MPEG4

Resolution – 1280x720/640X352/320X176/160X80

FPS – 30/15/10/6/5/3/2/1

Encode Method – Two options available: CBR/Quality. CBR and Quality can be defined as such. When users choose the CBR encode method, the camera selects the bitrate as the first priority. The TV-IP862IC will adjust the image quality to fit the bitrate. When the user chooses the Quality encode method, the camera select the bitrate to fit the quality

bps:

4Mbps/3Mbps/2Mbps/1.5Mbps/1Mbps/768Kbps/512Kbps/384Kbps/256Kbps/128Kbps/64Kbps

Quality – Low/Fair/Standard/Good/Excellent

RTSP URL – play1.sdp
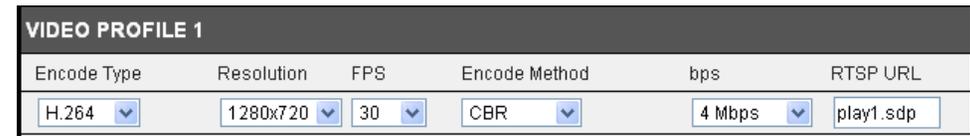
Audio and Video – Video Profile 2

Encode Type – H.264 & MPEG4

Resolution –640X352/320X176/160X80

FPS – 30/15/10/6/5/3/2/1

Encode Method – CBR/Quality

bps –
4Mbps/3Mbps/2Mbps/1.5Mbps/1Mbps/768Kbps/512Kbps/384Kbps/256Kbps/128Kbps
/64Kbp**s**

Quality – Low/Fair/Standard/Good/Excellent

RTSP URL – play2.sdp

VIDEO PROFILE 2					
Encode Type	Resolution	FPS	Encode Method	bps	RTSP URL
H.264	640X352	10	CBR	1 Mbps	play2.sdp

Audio and Video – Video Profile 3

Encode Type – JPEG

Resolution –1280x720/640X352/320X176/160X80

FPS – 30/15/10/6/5/3/2/1

Encode Method –Quality

Quality – Low/Fair/Standard/Good/Excellent

RTSP URL – play3.sdp

VIDEO PROFILE 3					
Encode Type	Resolution	FPS	Encode Method	Quality	RTSP URL
JPEG	640X352	5	Quality	Good	play3.sdp

Video Profile Four for Mobile Devices Only - Options:

Encode Type – H.264 & MPEG4

Resolution – 1280x720/640X352/320X176/160X80

FPS – 30/15/10/6/5/3/2/1

Encode Method – CBR/Quality

Bps –
4Mbps/3Mbps/2Mbps/1.5Mbps/1Mbps/768Kbps/512Kbps/384Kbps/256Kbps/128Kbps
/64Kbps

Quality – Low/Fair/Standard/Good/Excellent

RTSP URL – 3gpp

VIDEO PROFILE 4 (FOR MOBILE DEVICE ONLY)					
Encode Type	Resolution	FPS	Encode Method	bps	RTSP URL
MPEG4	320X176	5	CBR	384 Kbps	3gpp

Day/Night Mode

The TV-IP862IC allows users to record data in day and night mode. The TV-IP862IC has 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.

Toggle this switch On/Off

Day/Night Settings
When you select "Day" mode, the viewing image is in normal "color" mode. However, when you use "Night" mode, the viewing image turns black and white. The reason for this is to create a clearer and smoother image. When you select "Auto" mode, the Day/Night function is concealed.

Please Note: This allows you to set the camera to switch automatically from day to night mode (default) or to permanently set the color and Black/White operations. Also note,

even when the camera is set to color mode, it will switch to Black/White night vision if there is no longer enough ambient light to support the color saturation.

Auto Mode - The camera automatically removes the filter by gauging the amount of ambient light entering the lens.

Day Mode - In Day Mode, the camera switches on the IR cut filter to block infrared light from reaching the sensor so colors aren't distorted.

Night Mode - In Night Mode, the camera switches off the IR cut filter so the sensor can accept infrared light, helping to improve low light sensitivity.

Audio Setup

The TV-IP862IC 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 TV-IP862IC, you can change the Brightness, Contrast, color scheme to Black/White, Flip the image, 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 button.

Action

Recording

In this section there are five configuration parts – Recording, Video Clip, Snapshot, Preset Position, and SD Management.

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 Micro SD Card settings are setup to accommodate the huge storage space required for Always connections. Click **Apply** to complete the configuration.
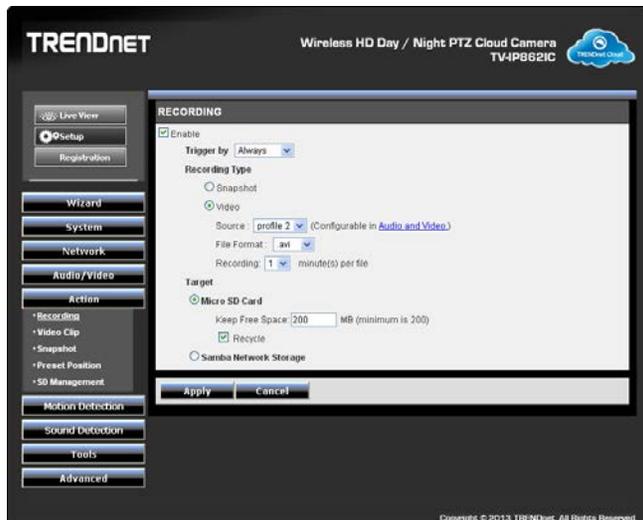
Trigger By – Schedule

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.
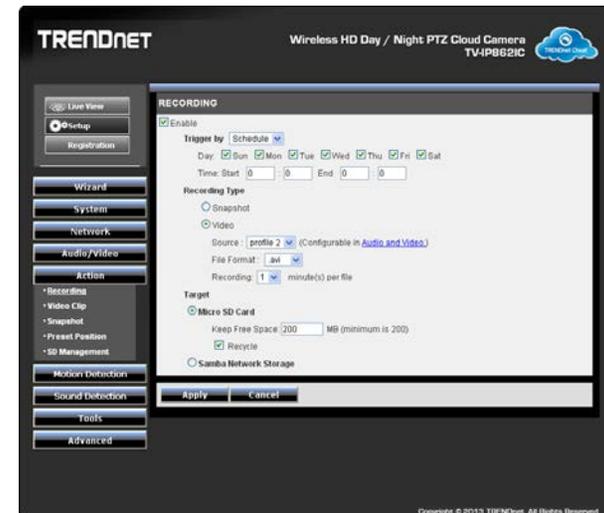
Trigger By – Motion

This option allows you to record according to the motion parameters you setup. If you select **Motion**, click the **Schedule** during checkbox. Then a calendar of the days of the week will appear. 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-event or pre-event settings. This means the camera will start recording before the motion event is observed and after the motion event is inactive. These times can only be set in seconds. Click **Apply** to complete the configuration.
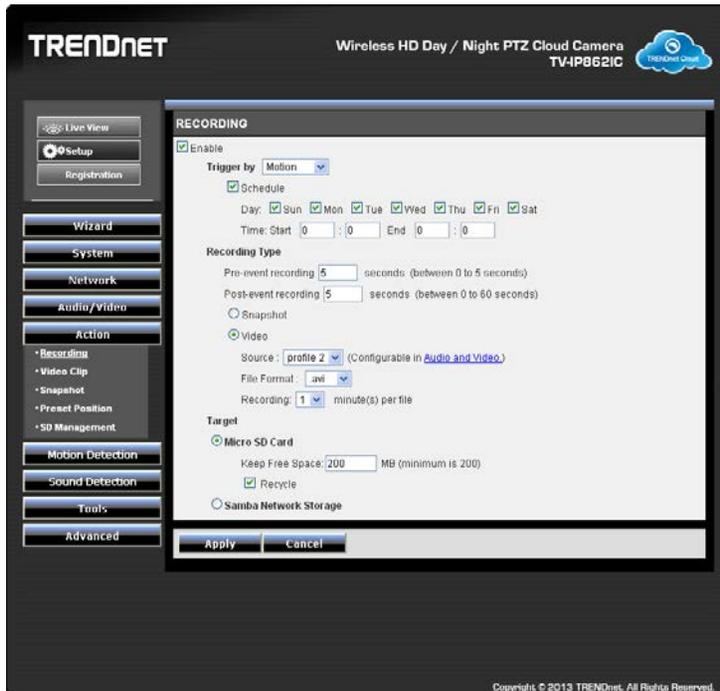
Trigger By: Sound

This option allows you to record according to the audio parameters you setup. If you select Sound, click the Schedule checkbox. You can now configure this by clicking the checkbox of the days of the week. You can edit the Start and End times. Under Recording Type, edit the Pre-event recording and Post-event recording times. Decide whether you want to take a Snapshot or Video. Select the source, File Format, and Recording Time duration (in minutes).
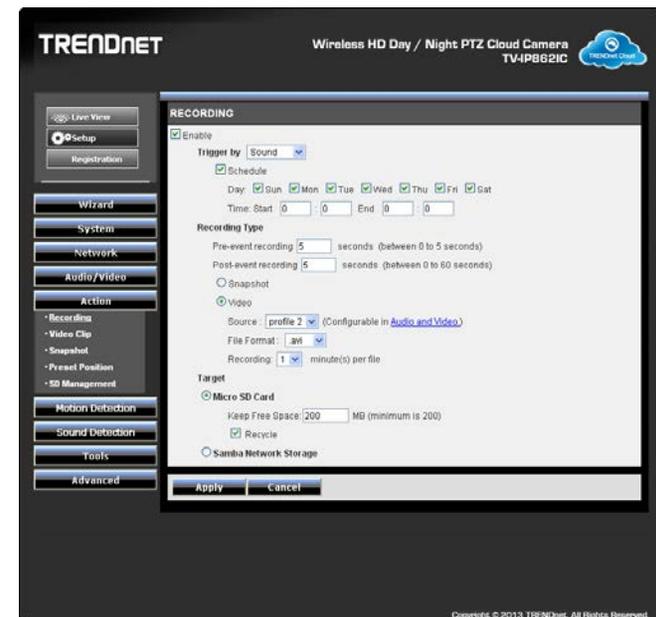
Recording Type
The two main sections here are Snapshot and Video. Snapshot takes a picture from your recorded data and only works with Profile 3. Video captures source data from Profiles 1, 2, and 4 which is configurable in Video/Audio settings. Recording data can be recorded in increments of 1-6 minutes.

Target – Micro SD Card

Keep Free Space is used to set the capacity of your Micro SD card, preventing the system from becoming unstable.

Recycle Click here to recycle the material on your Micro SD card. When the Micro SD card is full all previous data is removed or recorded over thereby freeing up space.

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. Lastly, click the Recycle checkbox if you want to recycle data in the Share Folder. This is useful when you don't need to keep all the recorded material.

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. Then enter the **Share Folder**, **Sub Folder** (if needed) and enter the **Keep Disk Space** needed. Lastly, click the Recycle checkbox if you want to recycle data in the Share Folder. This is useful when you don't need to keep all the recorded material. Remember to click the **Apply** button whenever you want to save your changes.

Anonymous View
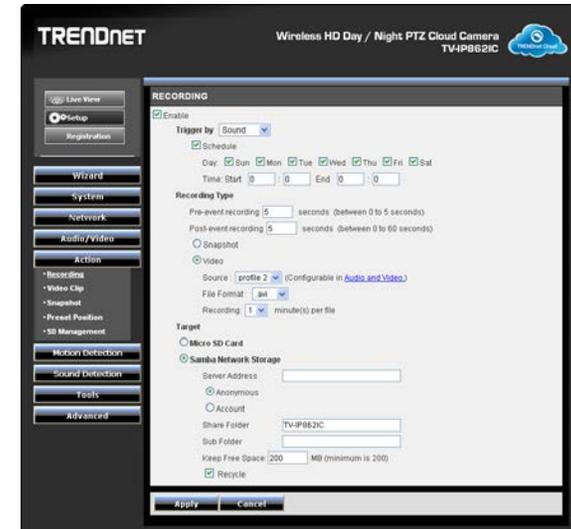
Account View
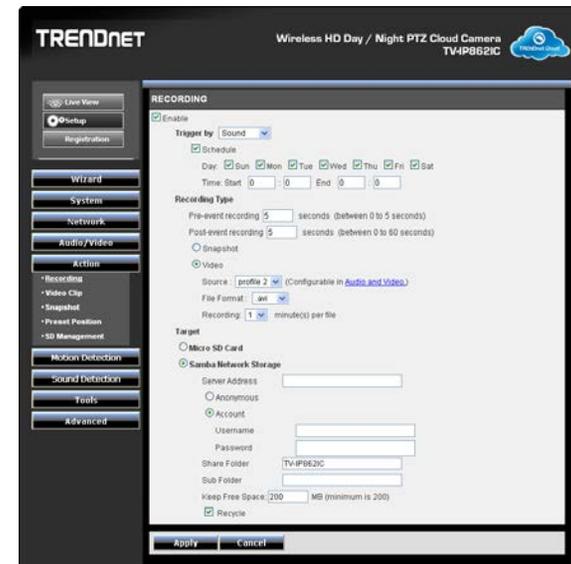
Recording features:

Function		Recording	Video Clip	Snapshot	Note
Trigger Type	Always	Y	Y	Y	
	Motion	Y	Y	Y	
	Motion with Schedule	Y	Y	Y	
	Schedule	Y	Y	Y	
	Sound	Y	Y	Y	
	Sound with Schedule	Y	Y	Y	
Video profile Options		Profile 1/2/4 supported	Profile 1/2/4 supported	Profile 3 supported	* For recording and video clip, the available video profile options are 1/2/4. * For snapshot, the default video profile option is profile 3.
Target	E-Mail	N	Y	Y	
	FTP	N	Y	Y	
	SD	Y	N	N	

	card				
	Samba	Y	N	N	
Recording Type	Pre-Event	Y	Y	Y	* It's only supported when trigger by Motion/Sound is activated. * Snapshot, it's activated using 6 snapshots only.
	Post - Event	Y	N	Y	* It's only supported when trigger by Motion/Sound is activated. * Snapshot, it's activated using 6 snapshots only.
	Real Time	Y	Y	Y	

Video Clip

Click the **Video Clip** checkbox to activate video recording events. There are three main sections:
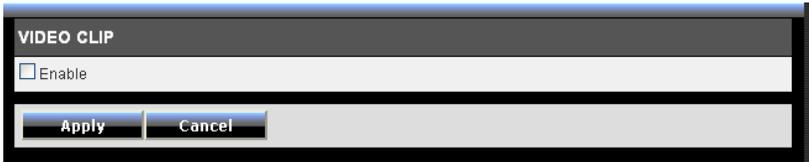
Trigger By: Always, Motion, Schedule, and Sound

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.

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

Video Clip - 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 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 interval range is set between 60 and 86400. The default interval is 300 seconds. The interval determines the time between two video clips, and is only used when you trigger, Always and Schedule.

Send next FTP after – The range is 0 to 86400. The default setting is 10 seconds. This determines the interval to send the next video clip once the previous video clip has finished uploading from the FTP server. This is only available when trigger by Motion and Sound is applied.

Passive Mode – It's used as Server/client initiation access to bypass any proxies.

Click the **Test** button if you wish to verify your FTP server information. Click **Apply** to confirm the configuration settings.

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 (465)

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

Interval – The interval range is 60 to 86400. The default interval is 600 seconds. This determines the time between two video clips, and is only used when you trigger by Always and Schedule.

Send next email after – This determines the interval to send the next video clip after the previous video clip is completed via E-mail. This is only available when you trigger by Motion and Sound.

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 three options available: None, 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. Click **Apply** to confirm the configuration settings.

Snapshot

These settings control SNAPSHOT settings for your camera. The Trigger by settings are 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. Click **Apply** to confirm the configuration settings.

Snapshot - 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. Click **Apply** to confirm the configuration settings.

FTP Server – this is your 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 interval range is set between 60 and 86400. The default interval is 300 seconds. The interval determines the time between two video clips, and is only used when you trigger, Always and Schedule.

Send next FTP after – The range is 0 to 86400. The default setting is 10 seconds. This determines the interval to send the next video clip once the previous video clip has finished uploading from the FTP server. This is only available when trigger by Motion and Sound is applied.

Passive Mode – It's used as Server/client initiation access to bypass any proxies.

Click the **Test** button if you wish to verify your FTP server information. Click **Apply** to confirm the configuration settings.

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 (465)

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.

Interval – The interval range is 60 to 86400. The default interval is 600 seconds. This determines the time between two video clips, and is only used when you trigger by Always and Schedule.

Send next email after – This determines the interval to send the next video clip after the previous video clip is completed via E-mail. This is only available when you trigger by Motion and Sound.

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 three options available, None, 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. Click **Apply** to confirm the configuration settings.

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.
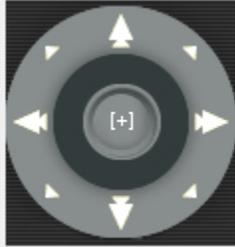
Preset Position

1. **Preset Name** – Enter a name in the field provided to give the position a name.
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 Locations** –Is a list of presets you can setup under Preset Position. This list is populated with different camera views and angles.

Preset Locations

The **Preset Locations** is a list of presets you have setup under Preset Position. This list is populated with different camera views and angles.

Patrol Position

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 Preset Locations.
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 Dwelling Time (in seconds). This indicates the time needed to span each Preset while Patrolling.
5. Click **Save** to continue and finish the process.

SD Management
SD Card
The TV-IP862IC has a tiny Micro SD card slots at the back of the camera. Micro SD cards are smaller than normal SD cards and require an adapter to work properly in a Micro SD slot. Here you can format the SD card, select how many files you want to display on a page, delete a page and also delete a file. When inserting a Micro SD card for the first time, make sure you don't have any important data stored on the card because once you format the drive that data is lost.

1. Format the SD Card
2. Select how many files you want to display per page.
3. Setup recording by going to Action, Recording.
4. Designate space for the recording and click Apply.
5. To delete a file. Select the file from the list, click the Delete checkbox and click **Apply**.
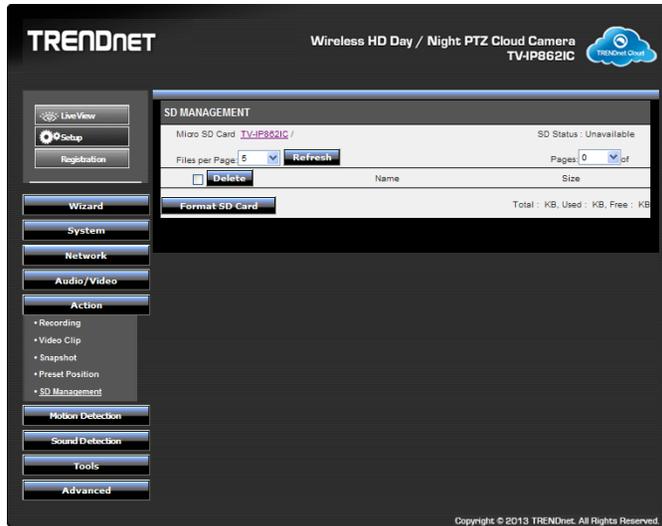
Motion Detection

In this section there are five configuration parts – Video Motion, Sensitivity, and Drawing Mode. Each of these components derives its feature set from a live video stream.

Motion Detection – Live Video

Video Motion Settings

1. Draw a red rectangle around the area on the viewable screen you wish to monitor.
2. Click the **Enable Video Motion** checkbox
3. Under **Sensitivity**, enter a percentage of how sensitive you want the motion detection to be. 1% is low and 100% is the most sensitive.
4. Click **Apply** to enforce your configuration.

Editing Video Motion Settings

1. Under **Drawing Mode**, click **Erase motion area** to erase the red rectangle from the screen and motion field. Or, click the **Clear** button to remove the video motion field.
2. Click **Apply** to accept your configuration changes.
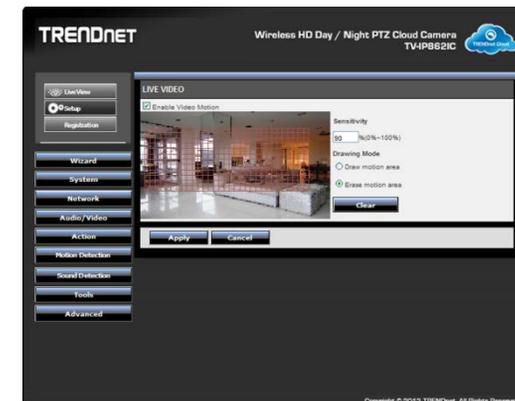
Sound Detection

Sound detection allows the camera to pick up audio from the TV-IP862IC. When you enable sound detection, the camera listens for sounds based on the sensitivity level you created. The lower the sensitivity level the easier it is for the camera to detect sounds, thereby activating the camera to start recording.

Click the checkbox to enable it. Then, in the drop-down list, next to Detection Sensitivity Level, choose the level you want to use. It ranges from 50-90. Click **Apply** when you are finished.
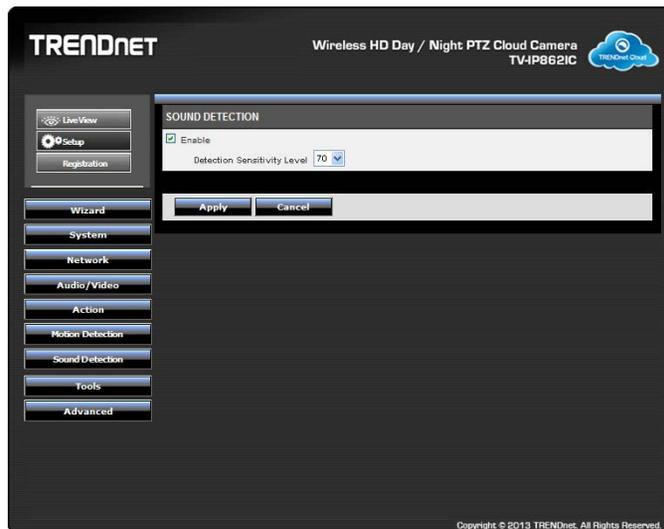
Tools

In this section there are two configuration parts – System, and Firmware Upgrade.

Tools – System

The first configurable option is: Backup Configuration File. Click the **Backup** button to save this file to your local hard drive. Then click Save to save it.
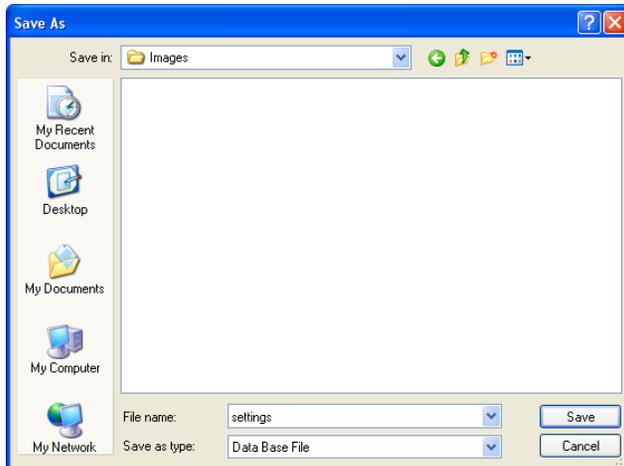
Tools

System

Restore Configuration

This feature allows you to restore the file you just saved above, and restore the system to the configuration it was previously at. Click the Browse button to locate the file. Once you have found the file, click Restore. This puts the file back in the system and you are able to click the Restore button to activate it.
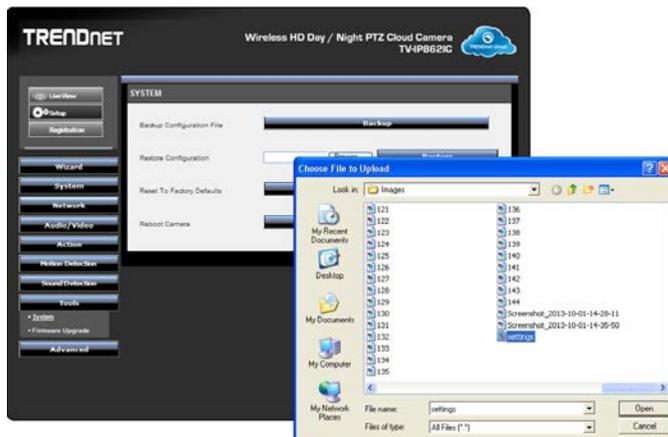
Reset to Factory Defaults

Click the **Reset** button to restore the TV-IP862IC to its original state.
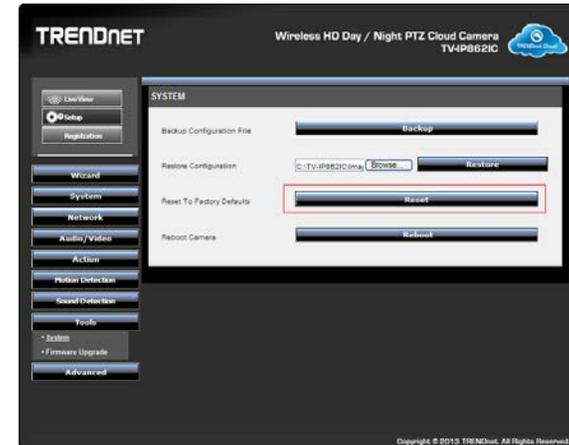
Reboot Camera

Click the Reboot button to reboot the TV-IP862IC. If the camera should freeze for some reason or if you need to reload software, or restart it when using the Micro SD card click the Reboot button.
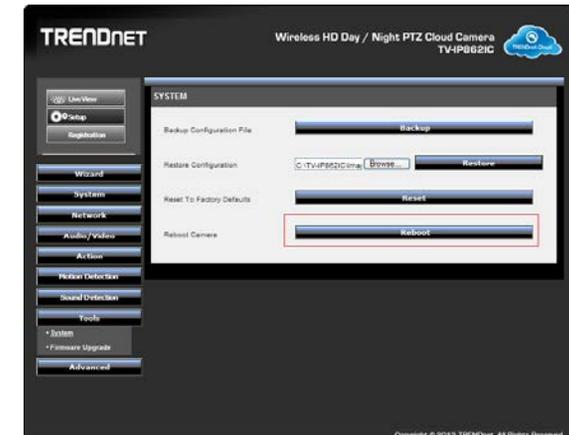
Firmware Upgrade
This window shows all the details of your current firmware. It shows your Current Firmware Version number and your Current Firmware Build Number. When you want to upgrade to the latest firmware, go to the TRENDnet website, download the latest firmware, save it to a folder on your computer.
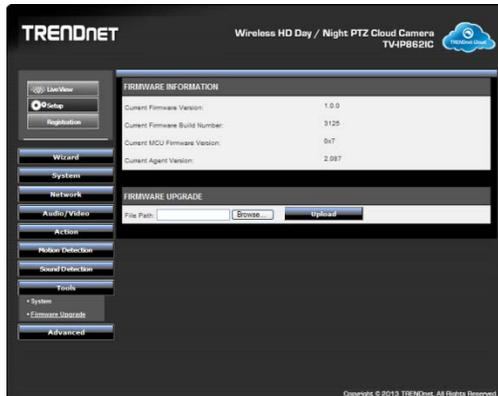
1. Click the **Browse** button to locate the firmware on your computer.
2. Select the file, click **Open**.
3. Click **OK** to continue.
4. A warning message appears at the top of the screen asking you not to turn anything off.
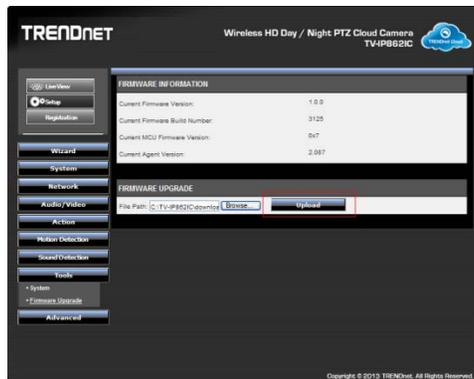
Advanced

Advanced – Device Info
In this section there are two configuration parts – **Device Info and Log**.
Advanced – Device Info – Information

The Device Information highlights everything about the TV-IP862IC camera. All information refer to the primary software functions on the TV-IP862IC. The list includes the following:

Camera Name – the name of the camera – TV-IP862IC.
Time and Date – the current time and date on the camera.
Firmware Version – the latest firmware running on the camera.
Firmware Build Number – the software factory build number.
Agent Version – This is the agent number.
MAC Address – This is the MAC address assigned to the device.
IPv4 Address – the current IP address.
IPv4 Subnet Mask – the current Subnet Mask.
IPv4 Default Gateway – the gateway of your router.
IPv4 Primary DNS – the primary DNS assigned by your router.
IPv4 Secondary DNS – the secondary DNS assigned by your router.
Search Domain – This refers to the domain you use in public.
IPv6 Address/Prefix Length – This is the current IPv6 address and prefix length.
IPv6Default Gateway – This is the IPv6 gateway.
IPv6 Primary DNS – This is the IPv6 Primary DNS.
IPv6 Secondary DNS – This is the IPv6 secondary DNS.
PPPoE Status – if you are using PPPoE will show success otherwise if you are not using it, it will show a failure
DDNS Status – this will be disabled if you are not using DDNS.

Registration

Click the **Registration** tab to redirect you to the TRENDnet website.

Advanced – Log

These settings display the **Current Log** of the device. Click the **Clear** button to reset the log or click the **Download** button to download a file in txt format
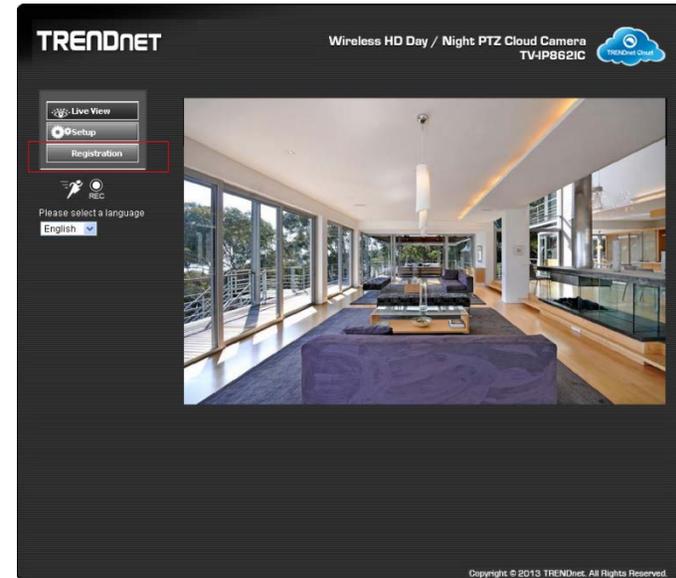
When you click the Registration button, you are redirected to the TRENDnet registration website.
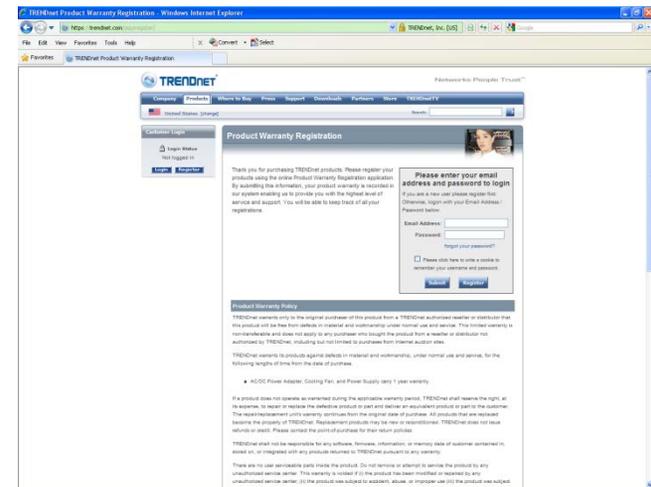
TRENDnetVIEW Pro Software

Click Autorun.

Autorun
IP Camera Software

Click on the link, Install **TRENDnetVIEW Pro Software**, to install it.
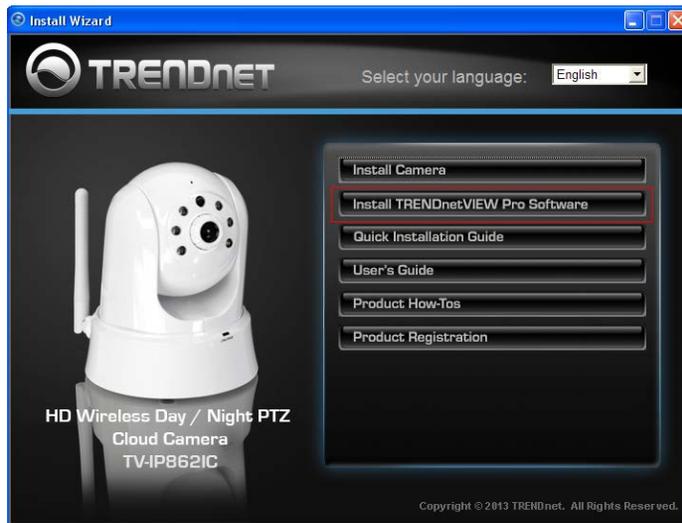
Using the proprietary-based configuration interface

This section describes the how to setup a camera using the TRENDnetView Pro camera monitoring software. To install TRENDnetView Pro on a system running Windows, launch the TRENDnetView Pro installation software on the installation CD-ROM and follow the setup instructions. Once the software is installed, the TRENDnet View Pro camera monitoring utility is ready for use. Add up to 32 network cameras to monitor using the software. Additional software, TRENDnet IPView Pro Player software is also installed. The TRENDnetView Pro Player is used for playing recorded video from cameras that have been configured to save recorded files.

Running the Software

When the wizard starts, you have the option to select a language. The default is English.

Alternatively, there are 13 other languages to choose from. Select the one that best suits your needs.

The next screen displays the Welcome screen. Click **Next** to continue.

Please view the **TRENDnetVIEW Pro User Guide** for more details on the software.

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 anti-flicker 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 plug-in 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.

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.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

IEEE 802.11b or 802.11g operation of this product in the U.S.A. is firmware-limited to channels 1 through 11.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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+A1:2010+A12:2011

Safety of Information Technology Equipment

EN 62311: 2008

Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz-300 GHz)

(IEC 62311:2007 (Modified))

EN 300 328 V1.7.1: (2006-10)

Electromagnetic compatibility and Radio spectrum Matters (ERM); Wideband Transmission systems; Data transmission equipment operating in the 2,4 GHz ISM band and using spread spectrum modulation techniques; Harmonized EN covering essential requirements under article 3.2 of the R&TTE Directive

EN 301 489-1 V1.9.2: 2011

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.

This device is designed to provide uninterrupted monitoring and/or recording. This device does not off power management functionality such as Off mode or Standby mode.

IMPORTANT NOTE:

NCC AND FCC Warning Statement

FOR COUNTRY CODE SELECTION USAGE (WLAN DEVICES)

Note: This country code selection is for non-US models only and is not available to all US models. Per FCC regulation, all WiFi products marketed in the US must be fixed to US operation channels only.

<div align="center">以下警語適用台灣地區</div>

經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得

擅自變更頻率、加大功率或變更原設計之特性及功能。

低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾

cs Česky [Czech]	TRENDnet tímto prohlašuje, že tento TV-IP862IC 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-IP862IC overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF.
de Deutsch [German]	Hiermit erklärt TRENDnet, dass sich das Gerät TV-IP862IC 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-IP862IC vastavust direktiivi 1999/5/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
en English	Hereby, TRENDnet, declares that this TV-IP862IC is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
es Español [Spanish]	Por medio de la presente TRENDnet declara que el TV-IP862IC 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-IP862IC 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-IP862IC 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-IP862IC è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE.
lv Latviski [Latvian]	Ar šo TRENDnet deklarē, ka TV-IP862IC atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem

	noteikumiem.
lt Lietuvių [Lithuanian]	Šiuo TRENDnet deklaruoja, kad šis TV-IP862IC atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
nl Nederlands [Dutch]	Hierbij verklaart TRENDnet dat het toestel TV-IP862IC 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-IP862IC jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn relevanti li hemm fid-Dirrettiva 1999/5/EC.
hu Magyar [Hungarian]	Alulírott, TRENDnet nyilatkozom, hogy a TV-IP862IC megfelel a vonatkozó alapvetõ követelményeknek és az 1999/5/EC irányelv egyéb elõírásainak.
pl Polski [Polish]	Niniejszym TRENDnet oświadcza, że TV-IP862IC jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
pt Português [Portuguese]	TRENDnet declara que este TV-IP862IC está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
sl Slovensko [Slovenian]	TRENDnet izjavlja, da je ta TV-IP862IC v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
sk Slovensky [Slovak]	TRENDnet týmto vyhlasuje, že TV-IP862IC spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES.
fi Suomi [Finnish]	TRENDnet vakuuttaa täten että TV-IP862IC 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-IP862IC står I överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG.

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-IP862IC – 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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Product Warranty Registration

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