User's Guide

# TRENDIET



HD Wireless Day / Night PTZ Cloud Camera

TV-IP862IC

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# **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)

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

# **Features**

## TV-IP862IC (高畫質無線夜視旋轉雲端攝影機)

The TV-IP862IC records at 1280x720 pixels (VGA), 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, and scheduled recording sessions. Some other features of this device is Pan/Tilt auto-patrol, date-and-time overlays, one-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 by a 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

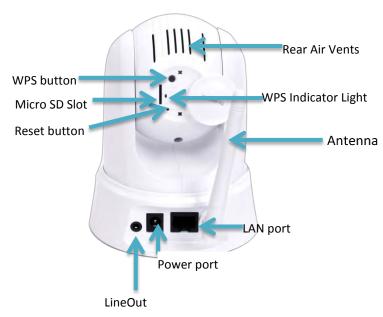
The TV-IP862IC can pan side to side at a remarkable 330 degrees.

## **Recording Quality**

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

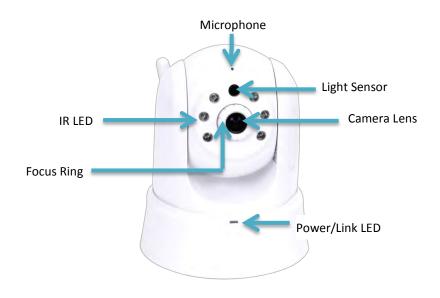
# **Product Hardware Features**

#### **Rear Panel View**



- LAN Port Connect Ethernet cables to your wired network devices.
- Power Port Connect the included power adapter from your camera to an available power outlet.
  - **Note**: Use only the adapter that came with your camera.
- **Reset Button** Use an item such as a paperclip to push and hold this button for 3 seconds and release to reset your camera to its factory defaults.
- WPS (Wi-Fi Protected Setup) Push and hold this button for 3 seconds to activate WPS. The button LED is blinking green when WPS is activated.
- Antenna 2dBi detachable antenna.
- Line Out Insert an external microphone to this connection.
- 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.

#### **Front Panel View**



- IR LED Built-in 6 IR LED 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 turn 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 The camera

# Installation

#### **Wired Connection**

1. Connect the Ethernet Cable

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



## 2. Attach the Power Supply

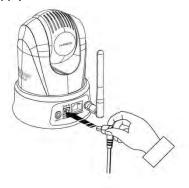
Attach the included power supply to the **DC 12V 1.0A** receptor on the rear panel of the camera and then connect it to a wall outlet or power strip. A blue LED will light up under the lens indicating that the camera has power.



#### **WPS Connection**

An alternative method of connecting your camera to your network is by using WPS. WPS is a quick, simple and secure method of adding devices to a network. If you have a router which supports WPS follow the steps below, otherwise, please use the wired mode of setting up the camera.

1. Attach the Power Supply



 Press the WPS button on your wireless device then press the WPS button on the camera.

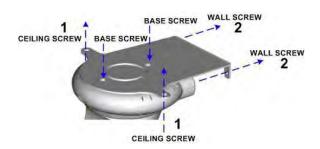




#### Wall mount installation

To attach the metal plates carry out the following:

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



# **Starting the 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 internet
- A DHCP router with WPS enabled or the camera connected to a LAN connection.

Note: The TV-IP862IC must be connected to the network and Internet to work.

Follow these steps to setup the process:

- Look underneath the camera for a similar URL (<a href="http://73859116.cam.trendnetcloud.com">http://73859116.cam.trendnetcloud.com</a>) on the label. Write it down
- 2. Connect the power cable to the camera.



There are two methods to connect to the Internet, wired and wireless. For wireless, follow the instructions from Image A below. For wired, follow the instructions from Image B below.

Image A (connecting using WPS)

TV-IP862IC



# **Image B (wired connection)**



3. Open your browser, type the URL listed on the label of your camera and hit Enter to connect to the camera's live stream. Please note: you can also use this URL to connect to the camera from any location or computer.

No matter which setup procedure you wish to use, once you have entered the URL into your browser, you start to have access to the cloud.



You are prompted to install the plug-in needed for TRENDnet access. Click **Install**.



The log-in screen appears. Enter the default username (admin) and the default password (admin) and click Login. If you don't want to use the information you just typed in, click **Reset** and reenter your data.



The next step is to accept the Terms of Use. Click the checkbox and click Next.



The next step is, changing the username and password. Enter a username and the existing password. Enter the new password and re-type it to confirm it. Click OK to complete.



The next screen verifies your settings are successful. Click Login.



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



The camera now displays the Cloud view via the TRENDnet cloud service.



If you look under the Live View, you will notice Mode 1. The first login method is for MODE 1. If you wish to access the other modes, please go to the Settings panel. Here is a quick rundown of what the three different modes are:

# **Cloud Mode 1:**

Mode 1 indicates the camera is connecting directly to the internet or local network. This mode offers configuration and management options.



# **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. 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.



When you first login to the Cloud Service, you need to read the service agreement. Click the **Accept** checkbox and click **Next**.



Create a **Username**, enter an existing **Password**, and enter a new **Password**. Please note the password must be at least 8 characters long. Re-enter the **Password** to confirm and click **OK**.



The cloud service recognizes your changes and confirms the edit. Click Login.



After you login, this is the main Cloud Service screen.



What's on the interface?



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- 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 (Select the Preset Position you want to view.)
- 7. Edit a Preset Name and Preset Position.
- 8. Audio. Click this button to toggle between Sound and Mute.
- 9. Microphone. Toggle between On/Off.
- 10. Snapshot take a snapshot
- 11. Start recording. Toggle between Start/Stop
- 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

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 can use this option in Mode 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 4Profiles 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.

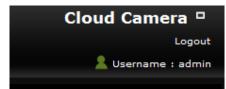


**Logout:** Use this link to logout

**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



# **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.



English



#### **French**



German



Spanish



Russian

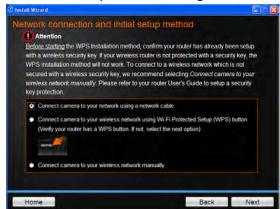
1. This is TRENDnet's Terms of Use. Click Agree to continue.



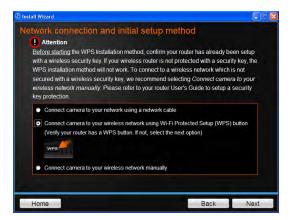
The next step references information on the camera itself. Go to your camera
and check the details at the bottom of the device. Click Next to continue, Back
to go to the previous screen or Home to return to the Main Menu. Also
enclosed, is a sticker with the same details attached.



- 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



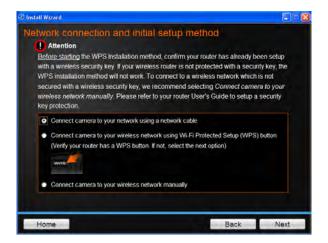
 Connect camera to your wireless network using Wi-Fi Protected Setup (WPS) button (Verify your router has a WPS button. If not, select the next option).



c. Connect camera to your wireless network manually.



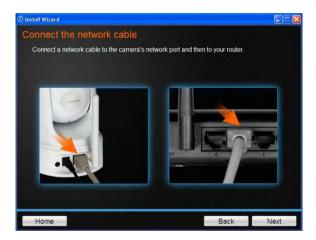
4. The basic connection type is "A" using a network cable. Let's begin the installation process using the network cable connection first. Click this radio button and click Next to continue, Back to go to the previous screen or Home to return to the Main Menu.



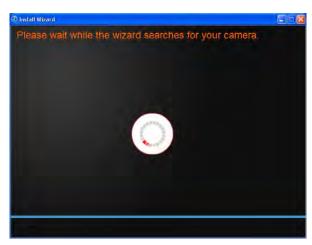
 Follow the instructions in the next screen to Power up the Camera. Connect one end of the power adapter to the camera and watch the LED flicker. Click Next to continue, Back to go to the previous screen or Home to return to the Main Menu.



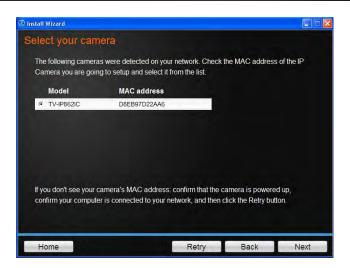
 Connect one end of the network cable to your camera and the other end to your router. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**



7. The wizard searches the network for your camera.



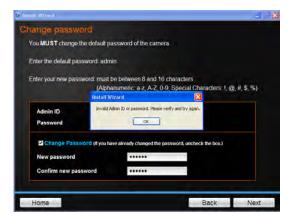
8. If you only have one camera on your network, the wizard will automatically select it (as shown below). Otherwise, if you have more than one camera, it provides several options from the list. The wizard provides the **Model Name** and **MAC Address** of the camera. If you do not see any of your camera(s) 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**.



9. 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.



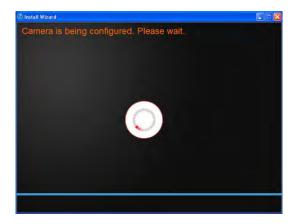
If you have entered the incorrect admin details, you are prompted to change the configuration, as shown below.



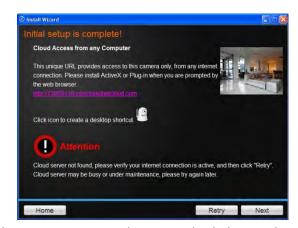
If the password length is less than 8 characters, you are also prompted to alter the configuration, as shown below.



10. The wizard configures your parameters.



11. 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**. When 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**.



Click on the product image to create a shortcut on the desktop. A shortcut is created.

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

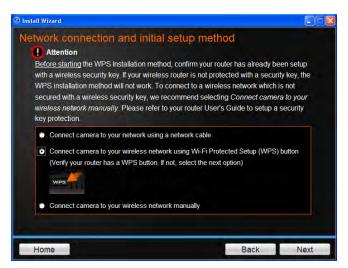
12. The mobile option allows the user to download the **TRENDnet Cloud App** in either Apple iOS or Android<sup>™</sup> format. To use this feature, the user must have a Barcode Scanner App on their mobile device. This is also available from the Apple App Store or Google Play<sup>™</sup><sup>2</sup>.



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

# **Wireless Connection**

**Using WPS** 



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.

 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.

<sup>&</sup>lt;sup>1</sup> Android is a trademark of Google Inc.

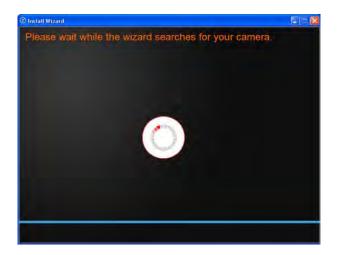
<sup>&</sup>lt;sup>2</sup> Google Play is a trademark of Google Inc.



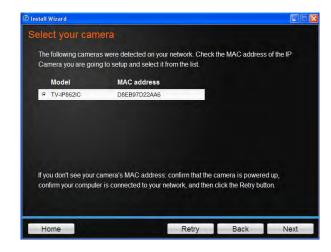
2. Follow the instructions and click **Next** to continue. If you wish to go to the previous screen, click **Back** or **Home** to return to the main menu.



3. The camera now searches for the settings you chose.



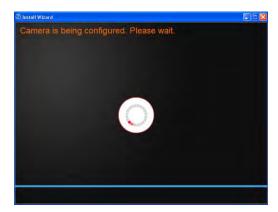
4. If you only have one camera on your network, the wizard will automatically select it (as shown below). Otherwise, if you have more than one camera, it provides several options from the list. The wizard provides the **Model Name** and **MAC Address** of the camera. If you do not see any of your camera(s) 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. 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.



6. The wizard configures your parameters.



7. 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**. When 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**.



8. The mobile option allows the user to download the **TRENDnet Cloud App** in either Apple iOS or Android™ format. To use this feature, the user must have a Barcode Scanner App on their mobile device. This is also available from the Apple App Store or Google Play™. You are now ready to use your camera. Click **Finish** to exit.



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

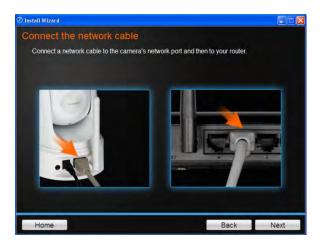
#### **Connecting Wireless Network Manually**



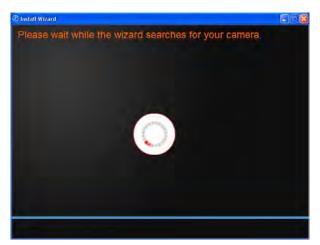
Follow the instructions in the next screen to Power up the Camera. Click Next
to continue, Back to go to the previous screen or Home to return to the Main
Menu.



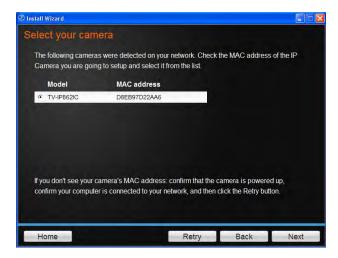
 Connect one end of the network cable to your camera and the other end to your router. Click **Next** to continue, **Back** to go to the previous screen or **Home** to return to the **Main Menu.**



3. The wizard searches the network for your camera.



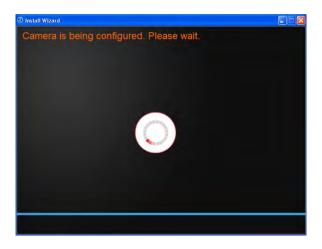
4. If you only have one camera on your network, the wizard will automatically select it (as shown below). Otherwise, if you have more than one camera, it provides several options from the list. The wizard provides the **Model Name** and **MAC Address** of the camera. If you do not see any of your camera(s) 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**.



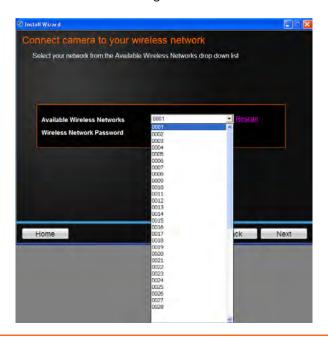
5. Password Settings. Follow the instructions on the screen. The default username and password is admin. Tick the Change Password checkbox to enter the new password details. The password should be between 8 and 16 characters. Click Next to continue, Back to go to the previous screen or Home to return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



6. The wizard configures your parameters.



Once your wireless network is discovered, the wizard provides 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.



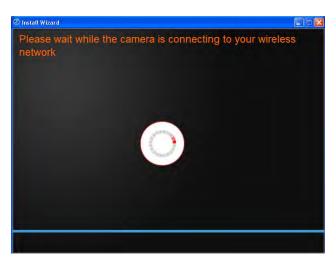
8. The wizard searches for wireless Access Points. Click the Rescan button at any time if you want to find your AP. Once it finds the wireless AP you are looking for, select it and enter the wireless network password of the AP. Click Next to continue.



 Next, you are 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.



10. The camera is connecting to the wireless network.



11. 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 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. When 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.

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12. The mobile option allows the user to download the **TRENDnet Cloud App** in either Apple iOS or Android™ format. To use this feature, the user must have a Barcode Scanner App on their mobile device. This is also available from the Apple App Store or Google Play™. You are now ready to use your camera. Click **Finish** to exit.



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

# **Mobile Apps**

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

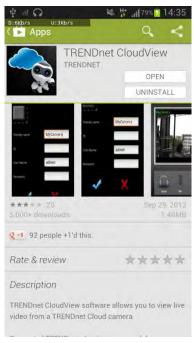


The app copies the QR link and provides a HTML link to the TRENDnet app. Click on the link.



<sup>&</sup>lt;sup>3</sup> Please use the **Quick Installation Guide** to install the mobile applications or learn how to use mobile accessibility.

You will be directed to the **Google Play™ Storefront** to download the app.



Download the app, install it and use the app on your mobile device to view the TRENDnet camera.

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Here is Apple iTunes version



Scan the QR Code using one of IOS's QR Code apps. The app automatically creates an HTML link to the iTunes App Store. Link the link.



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

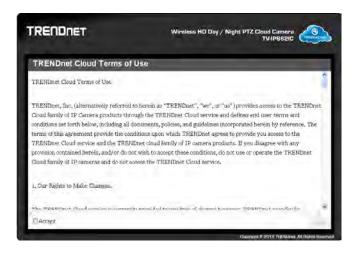
# **Configuration**

After completing the AutoRun Wizard, you are ready to use your camera. The camera's built-in Web configuration utility is designed to allow you to easily access and configure your TV-IP862IC camera. Open a web browser such as Internet Explorer® and enter the IP address of your camera (Default IP Address: http://192.168.10.30). To log in, type the Username admin and the password you created in the Setup Wizard. If you did not create a password, the default password is admin. After entering your password, click **OK**.

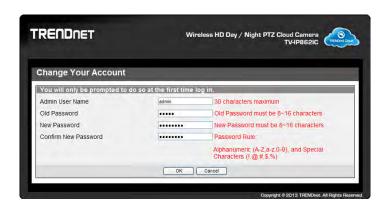
These initial steps are using Internet Explorer.



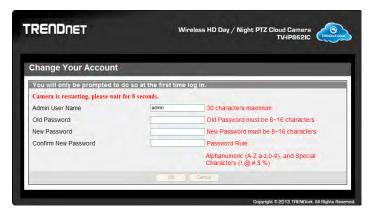
When you log in for the first time, the TRENDnet Cloud Terms of Use appears. Tick the **Accept** check box and click **Next**.



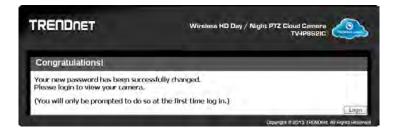
The **Change Your Account** page appears. Under Admin User Name, leave it as "admin" or change it accordingly. Enter the Old Password, enter the New Password, and then reenter the New Password to confirm it. Click OK to continue. Click Cancel if you wish to discontinue.



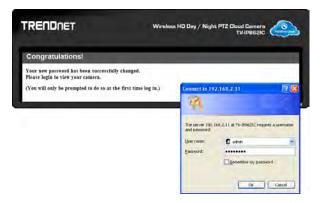
The camera saves the information you have entered and restarts in 10 seconds.



The **Congratulations** page appears. 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 at the first time log in.



The home page for the TV-IP862IC appears. 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 need to install the plug-in required. Click the link below the camera view finder to install the plug-in.



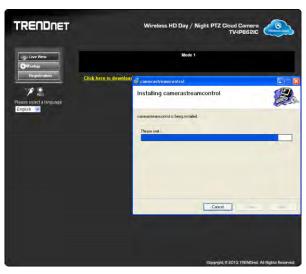
The plug-in is saved to your Downloads Folder. Click it to begin the installation. Click **Run** to start the process.



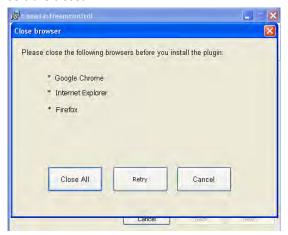
Click Next to continue.



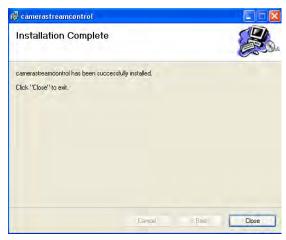
The Camera stream control application is installed.



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.

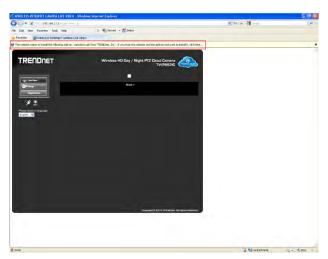


Refresh your browser and the live camera image is displayed.

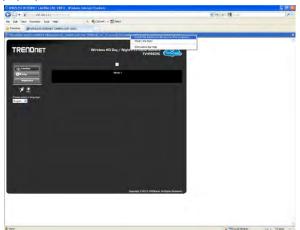
This is the Microsoft Internet Explorer plug-in installation. When you open your Internet Explorer, you cannot view the camera stream. Log-in using the default username and password.



The screen below displays this. At the top of the browser is a pop-up which prompts you to add the TRENDnet add-on.



Click the ActiveX pop-up to install it.



Another pop-up appears to warn you of installing an add-on. Accept the add-on and click the **Install** button.



Once the add-on is installed, Internet Explorer will display the streaming image. The image below is displayed in both Internet Explorer and Chrome.

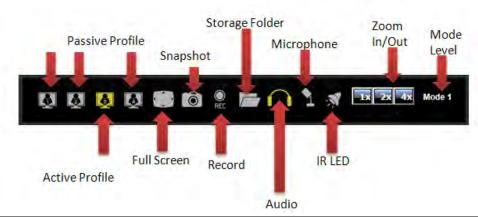


# **Main Web User Interface**



- 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 the viewing area.
- 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.

# <u>Setup</u>

View camera settings:

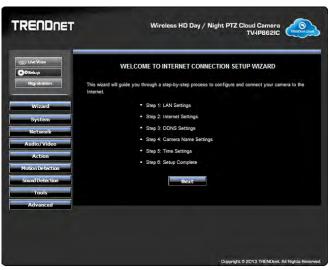
- 1. Login to the camera
- 2. Click **Setup**. The main configurable screen appears.

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



# <u>Wizard</u>

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

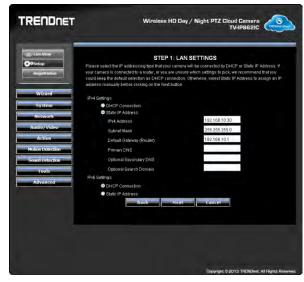


#### **Step 1: LAN Settings**

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.

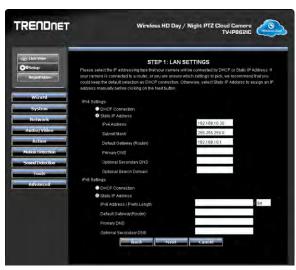


For Static options, click Static IP Address.



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 automatically populates. 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. 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 its saving. After it restarts, you are directed back to the start of the wizard.







# **Configuring Camera Settings**

The TV-IP862IC allows you to make configuration changes from anywhere by connecting to the camera using a standard web browser.

To configure camera settings:

- 1. Login to the camera as described in the section **Using the web-based** configuration interface.
- 2. Click **System**. The system status screen appears.

#### **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.
- 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**.

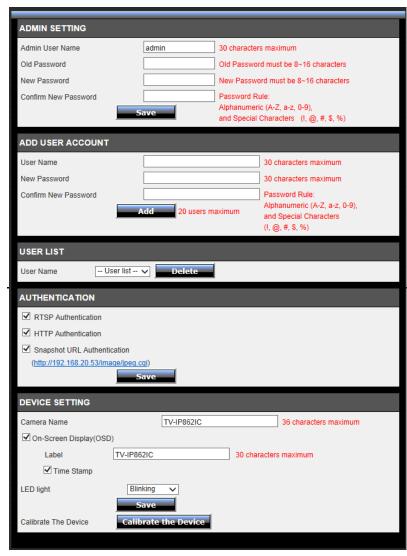
#### Authentication

- 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.
- 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.

TV-IP862IC

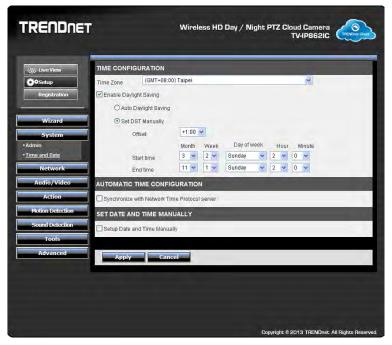


#### System - Time and Date

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.

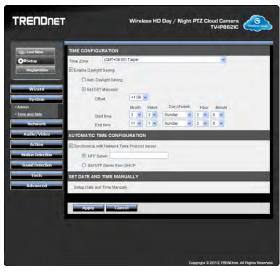
- The two options available are Auto Daylight Saving and Set DST Manually. Click
   Auto Daylight Saving to allow the camera to automatically adjust Daylight savings time.
- Select **Set DST Manually** if you wish to set the Daylight Savings time yourself. A configurable drop-down menu appears allowing 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**

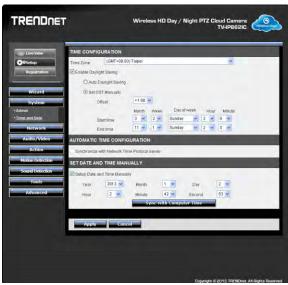
Click the **Synchronize with NTP Server** checkbox to enable this feature. An **NTP Server** field opens to prompt you to enter the server details.

Enter the server details otherwise consult your administrator for server details.



#### **Set Date and Time Manually**

Click the **Setup Date and Time Manually** checkbox to enable this feature. Here you 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.



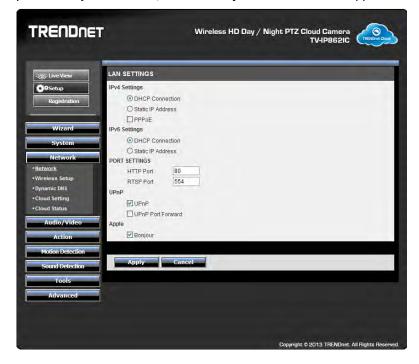
#### Network

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**

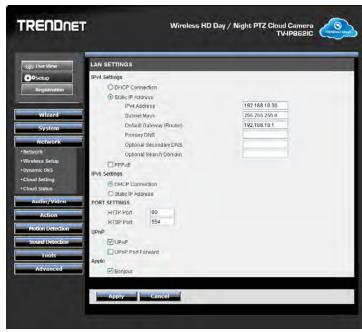
There are wired LAN settings and wireless settings. For LAN settings follow these instructions:

- 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):

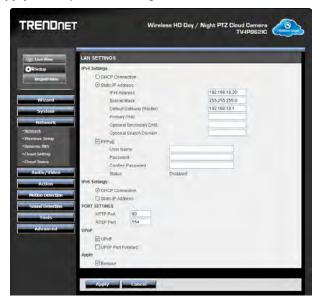
- 1. Select the radio button next to **Static IP Address** under **LAN Settings**
- 2. Enter the **IPv4 IP** address in the field provided.
- Set the Subnet Mask.
- 4. Set the **Default Gateway IP** settings from your router
- 5. Lastly, set the optional **Primary** and **Secondary DNS** fields.
- 6. 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.



# Network - 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 automatically starts 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 between None, WEP, WPA-PSK, and 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.

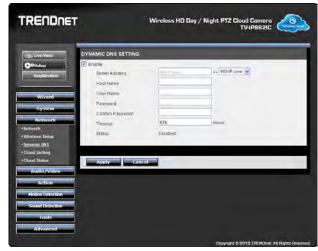


#### Network - Dynamic DNS - Dynamic DNS Settings

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.

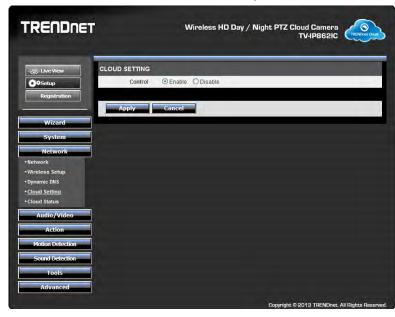


- 1. Click the **DDNS** checkbox to enable **DDNS** settings.
- 2. Select the **DDNS Server** from the drop-down list.
- 3. Enter the **Host Name** you setup on this online server.
- 4. Enter a **User Name** in the field provided.
- 5. Enter a **Password** and confirm the **Password**.
- 6. Enter a **Timeout**, 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.



# Network - Cloud Setting - 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.



# Network - Cloud Status - 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.

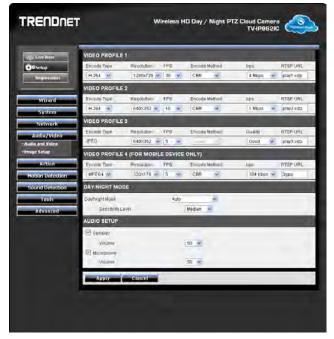


TV-IP862IC TRENDnet User's Guide

#### Audio /Video

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



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 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

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

/64Kbps

**Bps** 

**Quality** – Low/Fair/Standard/Good/Excellent

#### RTSP URL - 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 infradred 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.



# Audio/Video - 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.



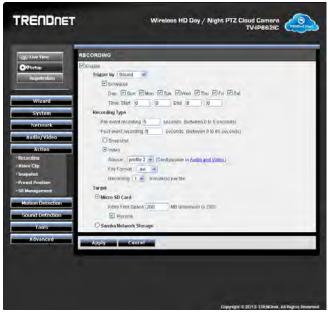
Trigger By - Motion

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 days 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**



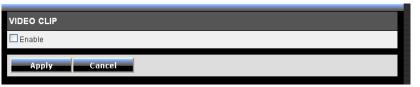
# **Recording features:**

Functi	on	Recordin g	Video Clip	Snapshot	Note
Trigge Type	r Always	Υ	Y	Υ	
	Motion	Υ	Y	Υ	
	Motion with Schedule	Y	Y	Υ	
	Schedule	Y	Υ	Y	
	Sound	Υ	Y	Υ	

	Sound with Schedule	Y	Y	Y	
Video profile Options		3	3	1	* For recording and video, the available video options are profile 1/2/4.  * For snapshot, the default video option is profile 3.
Target	E-Mail	N	Y	Y	
	FTP	N	Υ	Υ	
	SD card	Υ	N	N	
	Samba	Υ	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	Υ	Y	

#### Action - 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. It's 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. It's 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.



# Action - 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 layed 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. It's 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. It's 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.



Action Preset Position
Preset Position

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



#### **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.

#### **Action – 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.

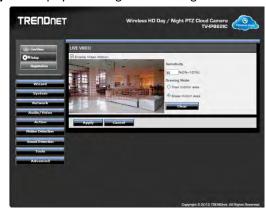
#### Motion Detection - Live Video

# **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.



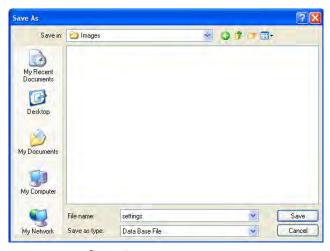
#### **Tools**

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

#### Tools - System

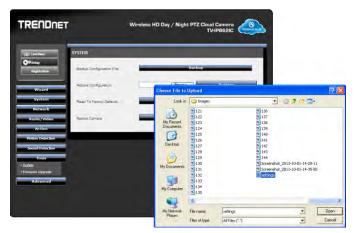
The first configurable option is: Backup Configuration File. Click the **Backup** button to save this file to your local hard drive. Then click Save to save it.





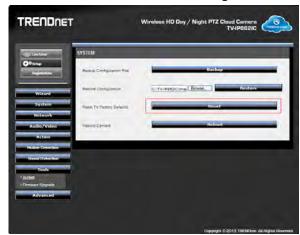
# Tools - System - Restore Configuration

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.



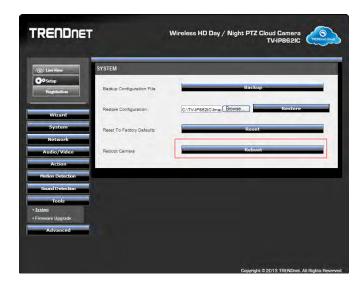
#### **Reset to Factory Defaults**

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



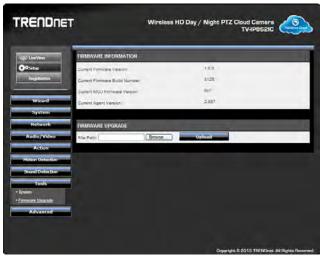
#### **Reboot Camera**

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.



# **Tools – 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 site, 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.

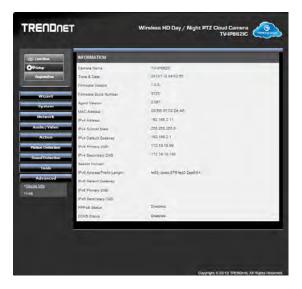
**IPv6Default Gateway** – This is the IPv6 gateway.

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.



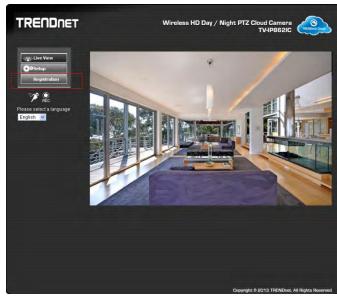
# Advanced - Log

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



# Registration

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



When you click the Registration button, you are redirected to the Trendnet registration website.



# Install TRENDnetVIEW Pro Software<sup>4</sup>

Click Autorun.



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 2.0 camera monitoring software. To install TRENDnetView Pro 2.0 on a system running Windows, launch the TRENDnetView Pro 2.0 installation software on the installation CD-ROM and follow the setup instructions. Once the software is installed, the TRENDnet View Pro 2.0 camera monitoring utility is ready for use. Add up to 32 network cameras to monitor using the software. Additional software, TRENDnet IPView Pro Player

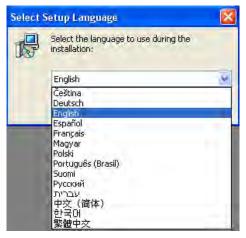
software is also installed. The TRENDnetView Pro 2.0 Player is used for playing recorded video from cameras that have been configured to save recorded files.

#### **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.

<sup>&</sup>lt;sup>4</sup> Please refer to TRENDnetView Pro User Guide for a more detailed installation experience.



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

# How to setup/access the camera remotely

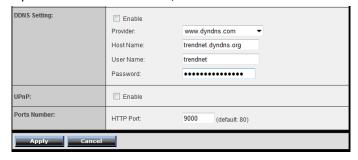
You can either setup the Dynamic DNS connection via camera itself or your home router. An account from any of the listed DDNS providers is required prior to this operation.

# **Configure DDNS on your Camera**

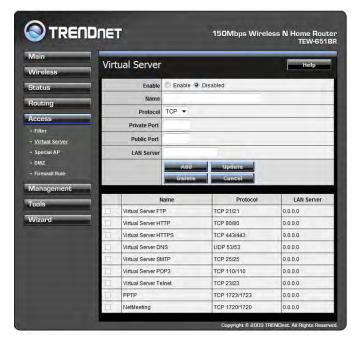
1. Go to Camera's **DDNS Setting** page, click **Enable** to activate the feature. Then select a DDNS provider from the list.



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



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



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

Enable: Click Enable

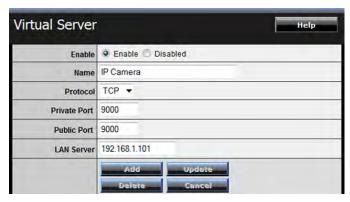
Name: Enter the application name (eg. CameraName)

**Protocol**: Select **TCP** 

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

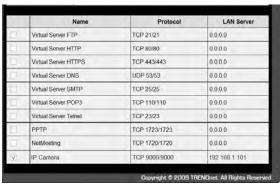
**Public Port:** The port used on remote side to access to your Camera.

LAN Server: The local IP address of your Camera.



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

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



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

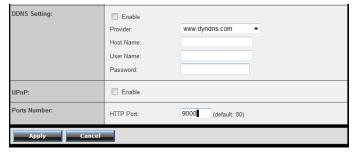
http://yourDomainName:PortNumber



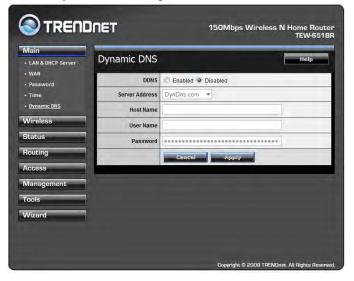
7. Camera's login page will appear.

# **Configure DDNS on your router**

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



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



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



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

Enable: Click Enable

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

Protocol: Select TCP

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

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

**LAN Server:** The local IP address of your Camera.



Click **Add** to add the application.

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

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



7. The camera login page will appear.

# **Technical Specifications**

# TV-IP862IC

System			
General	Network Processor – Faraday SOC		
	System ROM – 16MB Flash		
	System RAM – 128MB DDR II		
	Ethernet Interface - 10/100BaseT Port x1 - Compliant to following standards		
	-IEEE 802.3 compliance		
	-IEEE 802.3u compliance		
	-Support Full-Duplex operations		
	-MDI/MDIX auto-negotiation		
	-802.3x Flow Control support for Full-Duplex mode		
	Power Supply - Input : 100 ~ 240 VAC, 0.5 A, 50 - 60 Hz -Output : DC 12V / 1 A		
	- Power cord length: 1.5 meters		
	Power Consumption - Max.10.5W / 12V @motor on and IR on		
	<b>Environment</b> - Operation: Temp: $0^{\circ}\text{C} \sim 40^{\circ}\text{C}$ Humidity: $20\% \sim 85\%$ noncondensing Storage: Temp: $-25^{\circ}\text{C} \sim 70^{\circ}\text{C}$ Humidity: $5\% \sim 95\%$ noncondensing Certification - FCC / CE class B / LVD / Anatel		
Sensor and Lens			
Image Sensor	1/4" CMOS Sensor		
Image resolution	1280x 800		
F-Stop	F2.0		
Focus Length	4.6mm		
Sensitivity	1 lux@IR_LED Off (minimum)		
	0 lux@IR_LED On		
Focus Depth	20cm~Infinity		
View Angle	Horizontal – 48.8°		
	Vertical – 31.1°		
	Diagonal – 57.8°		

Image Processing	
	LL 2C4/MADEC 4/MADEC triple format communication simultaneously
Compression	H.264/MPEG4/MJPEG triple format compression simultaneously
Multi-profile	Support 4 video profiles simultaneously
Exposure Control	Auto
White Balance	Auto
Frequency	50 Hz
	60 Hz
Image size and	1280*800 mode /H.264 - Max Resolution: 1280x800
frame rate	- Max frame rate: 30 fps
Audio	
Input – Internal	Yes
Microphone	
Input – Sensitivity	42dB +/- 3dB (5 Meters distance min.)
Input – Directivity	Omni-directional
Input – Frequency	50~16000Hz
Response	
S/N	More than 58 dB
Output Audio Output	Line Out
Two-way audio	Full Duplex
Audio Codec	PCM /ADPCM/AAC
Other	
Day/Night	Built-in ICR
IR LED	Built-in IR LED (Max up to 5 M)
I/O Connector	Micro SD slot *1 , Max support 32GB (SDHC class10)
Pan/Tilt	
Pan range	+165° ~ -165°
Tilt range	+90° ~ -25°

LED & Buttons	
Power LED	Color: Blue (Lighting when power on)
Link/act. LED	Color: Green (Lighting when LAN/WLAN is connected, Flashing when LAN/WLAN is transmitting video stream)
WPS LED	<ul> <li>Color: Green</li> <li>Push WPS button over 3 seconds and then release WPS button, and LED blinking 1 time/sec.</li> <li>-WPS success: Lighting and then reboot directly.</li> <li>-WPS Fail: blinking 5 times/ sec for 20 seconds and then reboot directly.</li> </ul>
WPS button	Push button(more than 3 seconds) to enable Wi-Fi Protected Setup (WPS) function
Reset button	Push button for Factory reset
Wireless Interface	
Chipset Model	Ralink RT5370 11b/g/n
Host Interface	USB2.0 Chipset on board
IEEE 802.11b specificat	tion
Standard	IEEE 802.11b
Radio and Modulation Type	DQPSK, DBPSK, DSSS, and CCK
Operating Frequency	2400 ~ 2483.5MHz ISM band
Channel Numbers	11 channels for United States 13 channels for Europe Countries
Data Rate	11, 5.5, 2, and 1Mbps
Media Access Protocol	CSMA/CA with ACK
Transmitter Output Power	Typical RF Output Power at each RF chain, Data Rate and at room Temp. 25degree C 17.5dBm(±2dB) at 1,2,5.5,11Mbps
Receiver Sensitivity	Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =8% —92dBm at 1Mbps

### Page 11 ### Page 12 ### Page 12 ### Page 13 ### Page 13 ### Page 14 ### Page 15 ### Page 16 ### Pa		-91dBm at 2Mbps	
Radio and   BPSK, QPSK, 16QAM, 64QAM with OFDM		·	
Standard   IEEE 802.11g		l ·	
Standard   IEEE 802.11g			
Radio and Modulation Type  Operating Frequency Channel Numbers 11 channels for United States 13 channels for Europe Countries Data Rate 6,9,12,18,24,36,48,54Mbps  Media Access Protocol  Transmitter Output Power  Typical RF Output Power (tolerance +-2dB) at each RF chain, Data Rate and at room Temp. 25degree C 17.5dBm at 6~12 Mbps 17.5dBm at 24 Mbps 16.5dBm at 36 Mbps 15.5dBm at 48 Mbps 15.5dBm at 48 Mbps 16.5dBm at 54 Mbps 17.5dBm at 6Mbps -88dBm at 9Mbps -86dBm at 12Mbps -8dBm at 12Mbps -8dBm at 18Mbps -7dBm at 36Mbps -7dBm at 48Mbps -7dBm at 54Mbps	IEEE 802.11g specificat		
Modulation Type  Operating Frequency Channel Numbers  11 channels for United States 13 channels for Europe Countries  Data Rate 6,9,12,18,24,36,48,54Mbps  Media Access Protocol  Transmitter Output Power  Typical RF Output Power (tolerance +-2dB) at each RF chain, Data Rate and at room Temp. 25 degree C 17.5dBm at 6*12 Mbps 17.5dBm at 18 Mbps 17.5dBm at 24 Mbps 16.5dBm at 36 Mbps 15.5dBm at 48 Mbps 14.5dBm at 54 Mbps  Receiver Sensitivity  Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10% -90dBm at 6Mbps -8dBm at 12Mbps -8dBm at 12Mbps -8dBm at 12Mbps -8dBm at 24Mbps -7dBm at 36Mbps	Standard	IEEE 802.11g	
Channel Numbers	Radio and	BPSK, QPSK, 16QAM, 64QAM with OFDM	
Channel Numbers  11 channels for United States 13 channels for Europe Countries  Data Rate  6,9,12,18,24,36,48,54Mbps  Media Access Protocol  Transmitter Output Power  Typical RF Output Power (tolerance +-2dB) at each RF chain, Data Rate and at room Temp. 25degree C 17.5dBm at 6~12 Mbps 17.5dBm at 18 Mbps 17.5dBm at 24 Mbps 16.5dBm at 36 Mbps 15.5dBm at 48 Mbps 15.5dBm at 54 Mbps 14.5dBm at 54 Mbps  Receiver Sensitivity  Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10% -90dBm at 6Mbps -88dBm at 12Mbps -86dBm at 12Mbps -81dBm at 24Mbps -78dBm at 36Mbps -78dBm at 48Mbps -78dBm at 48Mbps -78dBm at 48Mbps -76dBm at 48Mbps -76dBm at 48Mbps -76dBm at 48Mbps -76dBm at 54Mbps IEEE 802.11n  IEEE 802.11n	Modulation Type		
Data Rate  Data Rate  6,9,12,18,24,36,48,54Mbps  Media Access Protocol  Transmitter Output Power  Typical RF Output Power (tolerance +-2dB) at each RF chain, Data Rate and at room Temp. 25degree C  17.5dBm at 6~12 Mbps 17.5dBm at 18 Mbps 17.5dBm at 24 Mbps 16.5dBm at 36 Mbps 15.5dBm at 48 Mbps 14.5dBm at 54 Mbps  14.5dBm at 54 Mbps  Receiver Sensitivity  Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10%  -90dBm at 6Mbps -8dBm at 12Mbps -8dBm at 12Mbps -8dBm at 12Mbps -8dBm at 24Mbps -7ddBm at 36Mbps -7ddBm at 48Mbps -7ddBm at 48Mbps -7ddBm at 48Mbps -7ddBm at 48Mbps -7ddBm at 54Mbps  TIBEE 802.11n Specification  Standard	Operating Frequency	2400 ~ 2483.5MHz ISM band	
Data Rate  6,9,12,18,24,36,48,54Mbps  CSMA/CA with ACK  Protocol  Transmitter Output Power  Typical RF Output Power (tolerance +-2dB) at each RF chain, Data Rate and at room Temp. 25degree C  17.5dBm at 6~12 Mbps  17.5dBm at 18 Mbps  17.5dBm at 24 Mbps  16.5dBm at 36 Mbps  15.5dBm at 48 Mbps  14.5dBm at 54 Mbps  Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10%  -90dBm at 6Mbps  -8dBm at 12Mbps  -8dBm at 12Mbps  -8dBm at 12Mbps  -8dBm at 24Mbps  -8dBm at 36Mbps  -8dBm at 36Mbps  -8dBm at 36Mbps  -8dBm at 36Mbps  -7dBm at 36Mbps  -7dBm at 36Mbps  -7dBm at 54Mbps  TIEEE 802.11n specification  Standard  IEEE 802.11n	Channel Numbers		
Media Access Protocol  Transmitter Output Power  Typical RF Output Power (tolerance +-2dB) at each RF chain, Data Rate and at room Temp. 25degree C  17.5dBm at 6~12 Mbps 17.5dBm at 18 Mbps 16.5dBm at 36 Mbps 15.5dBm at 48 Mbps 15.5dBm at 48 Mbps 14.5dBm at 54 Mbps Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10% -90dBm at 6Mbps -88dBm at 9Mbps -8dBm at 12Mbps -8dBm at 12Mbps -8dBm at 12Mbps -8dBm at 24Mbps -7dBm at 36Mbps -7dBm at 36Mbps -7dBm at 48Mbps -7dBm at 48Mbps -7dBm at 54Mbps		·	
Protocol  Transmitter Output Power  Typical RF Output Power (tolerance +-2dB) at each RF chain, Data Rate and at room Temp. 25degree C  17.5dBm at 6~12 Mbps 17.5dBm at 18 Mbps 16.5dBm at 24 Mbps 16.5dBm at 36 Mbps 15.5dBm at 48 Mbps 14.5dBm at 54 Mbps Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10% -90dBm at 6Mbps -88dBm at 9Mbps -86dBm at 12Mbps -83dBm at 18Mbps -81dBm at 24Mbps -78dBm at 36Mbps -78dBm at 36Mbps -78dBm at 48Mbps -78dBm at 48Mbps -74dBm at 54Mbps  TEEE 802.11n specification  Standard  IEEE 802.11n	Data Rate	6,9,12,18,24,36,48,54Mbps	
Transmitter Output Power (tolerance +-2dB) at each RF chain, Data Rate and at room Temp. 25degree C  17.5dBm at 6~12 Mbps 17.5dBm at 18 Mbps 17.5dBm at 24 Mbps 16.5dBm at 36 Mbps 15.5dBm at 48 Mbps 14.5dBm at 54 Mbps Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10% -90dBm at 6Mbps -88dBm at 9Mbps -86dBm at 12Mbps -81dBm at 24Mbps -81dBm at 24Mbps -78dBm at 36Mbps -76dBm at 48Mbps -74dBm at 54Mbps IEEE 802.11n specification  Standard  IEEE 802.11n	Media Access	CSMA/CA with ACK	
and at room Temp. 25degree C  17.5dBm at 6~12 Mbps  17.5dBm at 18 Mbps  17.5dBm at 24 Mbps  16.5dBm at 36 Mbps  15.5dBm at 48 Mbps  14.5dBm at 54 Mbps  Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10%  -90dBm at 6Mbps  -8dBm at 9Mbps  -8dBm at 12Mbps  -8dBm at 12Mbps  -8dBm at 12Mbps  -8dBm at 24Mbps  -78dBm at 36Mbps  -78dBm at 36Mbps  -76dBm at 48Mbps  -76dBm at 48Mbps  -74dBm at 54Mbps  1EEE 802.11n specification  Standard	Protocol		
and at room Temp. 25degree C  17.5dBm at 6~12 Mbps  17.5dBm at 18 Mbps  17.5dBm at 24 Mbps  16.5dBm at 36 Mbps  15.5dBm at 48 Mbps  14.5dBm at 54 Mbps  Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10%  -90dBm at 6Mbps  -8dBm at 9Mbps  -8dBm at 12Mbps  -8dBm at 12Mbps  -8dBm at 12Mbps  -8dBm at 24Mbps  -78dBm at 36Mbps  -76dBm at 48Mbps  -76dBm at 48Mbps  -74dBm at 54Mbps  IEEE 802.11n specification  Standard	Transmitter Output	Typical RF Output Power (tolerance +-2dB) at each RF chain, Data Rate	
17.5dBm at 6~12 Mbps 17.5dBm at 18 Mbps 17.5dBm at 24 Mbps 16.5dBm at 36 Mbps 15.5dBm at 48 Mbps 14.5dBm at 54 Mbps 14.5dBm at 54 Mbps Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10% -90dBm at 6Mbps -88dBm at 9Mbps -86dBm at 12Mbps -86dBm at 12Mbps -81dBm at 24Mbps -78dBm at 36Mbps -78dBm at 36Mbps -76dBm at 48Mbps -76dBm at 48Mbps -74dBm at 54Mbps IEEE 802.11n specification Standard IEEE 802.11n	•	and at room Temp. 25degree C	
17.5dBm at 24 Mbps 16.5dBm at 36 Mbps 15.5dBm at 48 Mbps 14.5dBm at 54 Mbps  Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10% -90dBm at 6Mbps -88dBm at 9Mbps -86dBm at 12Mbps -81dBm at 24Mbps -81dBm at 24Mbps -78dBm at 36Mbps -76dBm at 48Mbps -76dBm at 48Mbps -74dBm at 54Mbps IEEE 802.11n specification  Standard  IEEE 802.11n		17.5dBm at 6~12 Mbps	
16.5dBm at 36 Mbps 15.5dBm at 48 Mbps 14.5dBm at 54 Mbps  Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10% -90dBm at 6Mbps -88dBm at 9Mbps -86dBm at 12Mbps -81dBm at 24Mbps -81dBm at 24Mbps -78dBm at 36Mbps -76dBm at 48Mbps -76dBm at 48Mbps -74dBm at 54Mbps  TREEE 802.11n specification  Standard  IEEE 802.11n		17.5dBm at 18 Mbps	
15.5dBm at 48 Mbps 14.5dBm at 54 Mbps  Receiver Sensitivity  Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10% -90dBm at 6Mbps -88dBm at 9Mbps -86dBm at 12Mbps -83dBm at 18Mbps -81dBm at 24Mbps -78dBm at 36Mbps -78dBm at 48Mbps -76dBm at 48Mbps -74dBm at 54Mbps  TEEE 802.11n specification  Standard  IEEE 802.11n		17.5dBm at 24 Mbps	
14.5dBm at 54 Mbps  Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10%  -90dBm at 6Mbps  -88dBm at 9Mbps  -86dBm at 12Mbps  -83dBm at 18Mbps  -81dBm at 24Mbps  -78dBm at 36Mbps  -76dBm at 48Mbps  -76dBm at 48Mbps  -74dBm at 54Mbps  BEEE 802.11n Specification  Standard  IEEE 802.11n		16.5dBm at 36 Mbps	
Receiver Sensitivity  Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10%  -90dBm at 6Mbps  -88dBm at 9Mbps  -86dBm at 12Mbps  -83dBm at 18Mbps  -81dBm at 24Mbps  -78dBm at 36Mbps  -76dBm at 48Mbps  -74dBm at 54Mbps  THEE 802.11n Specification  Standard  IEEE 802.11n		15.5dBm at 48 Mbps	
-90dBm at 6Mbps -88dBm at 9Mbps -86dBm at 12Mbps -83dBm at 18Mbps -81dBm at 24Mbps -78dBm at 36Mbps -78dBm at 48Mbps -76dBm at 48Mbps -74dBm at 54Mbps  IEEE 802.11n specification  Standard  IEEE 802.11n		14.5dBm at 54 Mbps	
-88dBm at 9Mbps -86dBm at 12Mbps -83dBm at 18Mbps -81dBm at 24Mbps -78dBm at 36Mbps -76dBm at 48Mbps -76dBm at 48Mbps -74dBm at 54Mbps  IEEE 802.11n specification  Standard  IEEE 802.11n	Receiver Sensitivity	Typical Sensitivity at Which Frame (1000-byte PDUs) Error Rate =10%	
-86dBm at 12Mbps -83dBm at 18Mbps -81dBm at 24Mbps -78dBm at 36Mbps -76dBm at 48Mbps -74dBm at 54Mbps  -74dBm at 54Mbps  IEEE 802.11n Specification  Standard  IEEE 802.11n		–90dBm at 6Mbps	
-83dBm at 18Mbps -81dBm at 24Mbps -78dBm at 36Mbps -76dBm at 48Mbps -74dBm at 54Mbps  -74dBm at 54Mbps  IEEE 802.11n specification  Standard  IEEE 802.11n		–88dBm at 9Mbps	
-81dBm at 24Mbps -78dBm at 36Mbps -76dBm at 48Mbps -74dBm at 54Mbps  IEEE 802.11n specification  Standard  IEEE 802.11n		–86dBm at 12Mbps	
-78dBm at 36Mbps -76dBm at 48Mbps -74dBm at 54Mbps  IEEE 802.11n specification  Standard  IEEE 802.11n		–83dBm at 18Mbps	
-76dBm at 48Mbps -74dBm at 54Mbps  IEEE 802.11n specification  Standard  IEEE 802.11n		–81dBm at 24Mbps	
-74dBm at 54Mbps  IEEE 802.11n specification  Standard  IEEE 802.11n		–78dBm at 36Mbps	
Standard IEEE 802.11n		–76dBm at 48Mbps	
Standard IEEE 802.11n		–74dBm at 54Mbps	
DDCK ODCK 1COAM CAOAM With OFDM	IEEE 802.11n specificat	ion	
Radio and BPSK, QPSK, 16QAM, 64QAM with OFDM	Standard	IEEE 802.11n	
	Radio and	BPSK, QPSK, 16QAM, 64QAM with OFDM	

Modulation Type			
Operating Frequency	2400 ~ 2483.5MHz ISM band		
Channel Numbers	11 channels for United States 13 channels for Europe Countries		
Data Rate	From MCS0 to MCS7		
	MCS	GI-400ns / 20MHz	
	0	7.2	
	1	14.4	
	2	21.7	
	3	28.9	
	4	43.3	
	5	57.8	
	6	65.0	
	7	72.2	
Media Access	CSMA/CA with ACK		
Protocol			
Transmitter Output	Typical RF Output Power (tole	rance +-2dB) at each RF chain, Data	
Power	Rate and at room Temp. 2		
Power	● HT20		
	■ 14.5dBm at MCS0~MCS7		
Receiver Sensitivity	Typical Sensitivity at Which Frame	(1000-byte PDUs) Error Rate =10%	
	• HT20		
	–88dBm at MCS0		
	–84dBm at MCS1		
	–81dBm at MCS2		
	–78dBm at MCS3		
	–74dBm at MCS4		
	–72dBm at MCS5		
	–70dBm at MCS6		
	-67dBm at MCS7		
Antenna Specification	•		
Antenna	Dipole Antenna		
Gain	• 2 dBi(max.)		
Operating Frequency	• 2.4~2.5Ghz		

•	

# Firmware Specification

os	Linux 2.6		
Live Video (IE)	<ul> <li>Video Profile: Profile1, Profile2 Profile3 and Profile4</li> <li>Manually Snapshot, Manually Recording, Set Storage Folder</li> <li>Listen/Stop Listening, Talk/ Stop Talking</li> <li>Language selection: English, German, Spanish, Russian, and French</li> <li>IR_LED On/Off (When "Day/Night Mode setting" is "Manual IR" mode)</li> <li>Digital Zoom in /Zoom out control</li> <li>Indicator</li> <li>Motion Trigger Indicator</li> <li>Recording Indicator</li> </ul>		
Live Video (Non-IE)	Video Profile: Profile1, Profile2 Profile3 and Profile4  Manually Snapshot, Manually Recording, Set Storage Folder  Listen/Stop Listening, Talk/ Stop Talking  Language selection: English, German, Spanish, Russian, and French  IR_LED On/Off (When "Day/Night Mode setting" is "Manual IR" mode)  Digital Zoom in /Zoom out control  Indicator  Motion Trigger Indicator  Recording Indicator		
Digital Zoom	4x		
Setup wizard	This wizard will guide you through a step-by-step process to configure your new IP Camera and connect the camera to the internet.		
Network setting	<ul> <li>LAN Settings</li> <li>1. Automatic IP Address</li> <li>2. Static IP Address (Default IP:192.168.10.30)</li> <li>3. PPPOE :Enable/Disable  <ul> <li>User Name</li> <li>Password</li> <li>Confirm password</li> </ul> </li> <li>Port Settings <ul> <li>HTTP Port(default is 80)</li> <li>RTSP Port(default is 554)</li> </ul> </li> <li>UPnP <ul> <li>UPnP :Enable/Disable</li> <li>UPnP Port Forward :Enable/Disable</li> </ul> </li> </ul>		

	<ul><li>External HTTP port(default is 80)</li></ul>			
	<ul><li>External RTSP port(default is 554)</li></ul>			
	• Apple			
	Bonjour :Enable/Disable			
Dynamic DNS setting	• Enable/ Disable			
,	1. Server Address			
	2. Host Name			
	3. User name			
	4. Password			
	5. Confirm Password			
	6. Timeout			
	7. Status			
Network Protocols	● IPv4 , IPv6 ,ARP, TCP, UDP, ICMP			
support	DHCP Client			
зарроге	NTP Client			
	DNS Client			
	• DDNS Client			
	• SMTP Client			
	• FTP Client			
	HTTP Server			
	UpnP Port Forwarding			
	• PPPoE			
	• LLTD			
	RTP (Real Time Protocol)			
	RTCP (Real Time Control Protocol)			
	RTSP (Real Time Streaming Protocol)			
	•3GPP			
	• SAMBA Client			
Image setting	• Brightness (0~100)			
8	• Saturation (0 ~100)			
	• Contrast (0 ~100)			
	◆ Hue (0~100)			
	Black/White mode			
	Mirror (Enable/Disable)			
	• Flip(Enable/Disable)			
	• Frequency: 60Hz ,50Hz and Auto			
	White balance: Auto/ Disable			
	• Slow Shutter: Disable, 1/15s, 1/10s, 1/7.5s, 1/3.75s			
	• Reset to Default			
Video Profiles	Video Profile 1 mode			
VIGEO FIOITIES	1. Encode Type: H.264/MPEG4			
<u> </u>	, ,			

setting	2. Resolution Type:1280x720, 640x352, 320x176, 160x80	
	3. Max Frame Rate: H.264@30fps , MPEG4@30fps	
	4. Fixed Bit Rate: 64K, 128K, 256K, 384K, 512K, 768K, 1M, 1.5M,	
	2M, 3M, 4M (H.264/MPEG4 only)	
	5. RTSP Default URL is http://IP_Cam_IP/play1.sdp	
	Video Profile 2 mode	
	1. Encode Type: H.264/MPEG4	
	2. Resolution Type: 640x352, 320x176, 160x80	
	3. Max Frame Rate: 30fps	
	4. Fixed Bit Rate: 64K, 128K, 256K, 384K, 512K, 768K, 1M, 1.5M,	
	2M, 3M, 4M (H.264/MPEG4 only)	
	5. RTSP Default URL is http://IP_Cam_IP/play2.sdp	
	Video Profile 3 mode	
	1. Encode Type: JPEG	
	2. Resolution Type: 1280x720, 640x352, 320x176, 160x80	
	3. Max Frame Rate: 1280x720@5fps,	
	640x352/320x176/160x80@30fps	
	4. JPEG Quality: Low, Fair, Standard, Good, Excellent (JPEG only)	
	5. RTSP Default URL is http://IP_Cam_IP/play3.sdp	
	• Video Profile 4 mode	
	Encode Type: H.264/MPEG4	
	2. Resolution Type: 640x352, 320x176, 160x80	
	3. Max Frame Rate: 30fps	
	4. Fixed Bit Rate: 64K, 128K, 256K, 384K, 512K, 768K, 1M, 1.5M,	
	2M, 3M, 4M (H.264/MPEG4 only)	
	5. RTSP Default URL is http://IP_Cam_IP/3gpp	
Audio setting	• Speaker:	
	-Enable/ Disable	
	-Volume adjustable: 0 ~ 100	
	Microphone:	
	-Enable/ Disable	
	-Volume adjustable: : 0 ~ 100	
3GPP support	Audio codec: AAC	
	Video codec/MPEG4	
	Protocols / RTSP, RTP, RTCP	
System Time setting	Time Configuration	
,	1. Time Zone Setting	
	2. Daylight Saving: Enable/ Disable	
	-Auto Daylight Saving	

TV-IP862IC

# TRENDnet User's Guide

	-Set date and time manually		
	<ul> <li>Automatic Time Configuration</li> <li>Synchronize with NTP Server</li> <li>Set Date and Time manually</li> </ul>		
	manually setting/ Copy your PC's Time settings		
Recording	Enable/ Disable     Trigger Event:     -Always		
	-Motion Detection  Only during  Pre-event recording: Default is 5 seconds(between 0 to 5 seconds)  Post-event recording: Default is 5 seconds(between 0 to 60 seconds)		
	-Sound Detection  Only during Pre-event recording: Default is 5 seconds(between 0 to 5 seconds) Post-event recording: Default is 5 seconds(between 0 to 60 seconds)		
	-Scheduled  2. Recording Type		
	-Source:Profiles1, 2 and 4(Default is Profile2)  3. Record to:		
	-Micro SD card -Samba network device		
Video Clip setting	Enable/ Disable     Trigger Event:		
	-Always		
	-Motion Detection  Scheduled		
	-Sound Detection		
	Scheduled		
	-Scheduled 2. Video Clip Type		

	- Source: Profiles1, 2 and 4(Default is Profile2)	
	-Pre-event recording (Between 0~5 seconds)	
	-Maximum duration (Between 5~10 seconds)	
	3. Target:	
	-FTP Server	
	<ul> <li>FTP Server IP address and port number</li> </ul>	
	<ul><li>User Name</li></ul>	
	<ul><li>Password</li></ul>	
	■ Path	
	Filename Prefix	
	<ul> <li>Interval: Between 60~86400 seconds(for Schedule and Always)</li> </ul>	
	<ul><li>Send next FTP after (for Motion only)</li></ul>	
	<ul> <li>Passive Mode: Enable/Disable</li> </ul>	
	-E-mail Address	
	<ul> <li>Recipient E-mail Address</li> </ul>	
	■ SMTP Mail Server	
	■ Port	
	■ User Name	
	Password	
	<ul> <li>Sender E-mail Address</li> <li>Interval: Range :60 to 86400 seconds(for Schedule</li> </ul>	
	and Always)	
	<ul> <li>Send next E-mail after(for Motion and Sound)</li> </ul>	
	■ Use SSL-TLS	
	- Test	
Snapshot setting	• Enable/ Disable	
	1. Trigger Event:	
	-Always	
	-Motion Detection	
	<ul> <li>Scheduled</li> </ul>	
	-Sound Detection	
	Scheduled	
	-Scheduled	
	2. Snapshot Type	
	-Source:Profiles3	
	-Single snapshot	
	-6 snapshot with 1 or 2 second interval	
	<ul> <li>3 frames before and 3 frames after motion frame</li> </ul>	

# TRENDnet User's Guide

	3. Target:	
	-FTP Server	
	<ul> <li>FTP Server IP address and port number</li> </ul>	
	<ul><li>User Name</li></ul>	
	■ Password	
	■ Path	
	Filename Prefix	
	■ Interval: Between 60~86400 seconds(for Schedule and Always)	
	<ul><li>Send next FTP after (for Motion and Sound)</li></ul>	
	■ Passive Mode: Enable/Disable	
	-E-mail Address	
	<ul> <li>Recipient E-mail Address</li> </ul>	
	<ul> <li>SMTP Mail Server</li> </ul>	
	<ul><li>Port</li></ul>	
	■ User Name	
	Password	
	<ul> <li>Sender E-mail Address</li> <li>Interval: Range :60 to 86400 seconds(for Schedule</li> </ul>	
	and Always)	
	<ul><li>Send next E-mail after(for Motion and Sound)</li></ul>	
	■ Use SSL-TLS	
	Test	
Motion detection	Enable/ Disable: Video Motion	
	1. Sensitivity: Range 0~100	
	Drawing Mode: Draw motion area/ Erase motion area	
Sound Detection	Enable/ Disable	
	Detection Sensitivity: Range 50~100	
Maintenance-	Admin password setting	
Admin setting	Add User account: 20 users maximum	
	User List: Delete	
	Authentication	
	1. RTSP Authentication : Enable/Disable	
	HTTP Authentication : Enable/Disable     Space but URL authorities time : Enable/Disable	
	3. Snapshot URL authentication: Enable/Disable	
	Device setting     Camera Name	
	2. OSD: Enable/ Disable	
	-Label	
	-Time Stamp : Enable/ Disable	
	,	

	3. LED light
	-Power/Link
	-Off
	-Blinking
Backup and restore	Save to local hard drive
Setting	Load from local hard drive
	Restore to factory defaults
	Reboot Device
Firmware upgrade	Firmware information     Current firmware Version
	Firmware upgrade
System log	•512 items (max) stored on the Flash drive
	• Clear system log
	Download from device
System	Web Based Administration
Management	NIPCA support     ONNUE profile C
	ONVIF profile S     Keep the RESET button pressed for at least 6 second to reset all
RESET Function	configurations to factory default values.
	When factory reset processing, Power LED and Link LED have switch
	lighting.
Browser	Internet Explore Version 9 above
biowsei	• Firefox 13.0 or above
	• Safari 4.0 or above
	Google Chrome 24 or above
WLAN setting	Wireless : Enable/Disable (Default is "Enable")
True secting	Network Name(SSID): (Default is "TRENDnet")
	• Site Survey
	Wireless Mode: Infrastructure / Ad-hoc
	• Security Mode: None /WEP /WPA-PSK /WPA2-PSK
	Authentication:
	1. WEP 64/128 bits
	2. WPA-PSK (TKIP/AES) (Infrastructure support only)
	3. WPA2-PSK (TKIP/AES) ( Infrastructure support only )
	• Show Hidden Key
	Channel ( Ad-hoc support only )
	WPS Support
Day/Night Mode	• Auto

setting	Manual IR		
setting			
	Always day mode		
	Always night mode		
	Schedule		
Software Specifications			
os	Windows XP/Vista/7 (32/64bit platform)		
AutoRun	Installation	One is Executable format, another can install to PC from CD-ROM	
	Setting Items	<ul> <li>Search and list IP camera</li> <li>Suggestion IP address function</li> <li>IP mode</li> <li>Wireless setting</li> </ul>	
API (SDK)	Uniform interface		
CGI	Uniform interface		
Mobile App Specificati	Mobile App Specification		
OS Support	<ul> <li>Apple IOS5 or above</li> <li>Android™ 2.3 or above.</li> </ul>		
Trendnet CloudView	Support Cloud Link Camera		
	Support Local Network Camera scan		
	Support Initial Camera		
	<ul> <li>Support video recording (optional f</li> </ul>	or paid version)	
Zoom in/ out	Pinch to control	·	

# **Troubleshooting**

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

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

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

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

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

#### 3. The camera can be accessed locally but not remotely

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

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

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

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

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

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

# 5. The camera images are 'noisy'

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

#### 6. The camera images are of poor quality.

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

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

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

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

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

# 以下警語適用台灣地區

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

ত্রে 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.
Latviski [Latvian]	Ar šo TRENDnet deklarē, ka TV-IP862IC atbilst Direktīvas 1999/5/EK būtiskajām prasībām un citiem ar to saistītajiem

	noteikumiem.
Lietuvių [Lithuanian]	Šiuo TRENDnet deklaruoja, kad šis TV-IP862IC atitinka esminius reikalavimus ir kitas 1999/5/EB Direktyvos nuostatas.
ા 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.
իս Magyar [Hungarian]	Alulírott, TRENDnet nyilatkozom, hogy a TV-IP862IC megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EC irányelv egyéb előírásainak.
Polski [Polish]	Niniejszym TRENDnet oświadcza, że TV-IP862IC jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/EC.
Português [Portuguese]	TRENDnet declara que este TV-IP862IC está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE.
Slovensko [Slovenian]	TRENDnet izjavlja, da je ta TV-IP862IC v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES.
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.
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.

TRENDnet User's Guide Limited Warranty

# **Limited Warranty**

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

#### TV-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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V1.0R / 04.08.2013

# TRENDIET

# **Product Warranty Registration**

Please take a moment to register your product online.

Go to TRENDnet's website at http://www.trendnet.com/register

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