

User's Guide

TRENDnet[®]



AC120 High Power Wireless Dual Band PCIe Adapter

TEW-807ECH

Contents

Product Overview1

Package Contents	1
Features	1
Product Hardware Features.....	2
System Requirements.....	2
Application Diagram	3

Installing your Wireless Adapter.....4

Using the Wireless Utility10

Wireless Utility Overview	11
Connect to your wireless network	14
Connect to your wireless network using WPS.....	15
Create or modify wireless network profiles.....	18

Technical Specifications 20

Troubleshooting 22

Appendix 23

Product Overview



TEW-807ECH

Package Contents

In addition to your wireless adapter, the package includes:

- CD-ROM (Utility & Drivers)
- Multi-Language Quick Installation Guide
- 2 x High Gain Detachable Dual Band Antennas
- 1 x Magnetic Antenna Base with 1 m (3.3 ft.) extension cable
- Standard & Low Profile Brackets

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

Features

TRENDnet's AC1200 High Power Wireless Dual Band PCIe Adapter, model TEW-807ECH, upgrades a standard or low profile Windows® tower computer to Wireless AC1200. Quickly connect to a high performance Wireless AC network at 867 Mbps or to a Wireless N network at 300 Mbps. A high power 500 mW radio with detachable 5 dBi antennas increase wireless coverage. A convenient 1 m (3.3 ft.) extension cable and a magnetic mounting base provide installation flexibility.

Easy Setup

Get up and running in minutes with the intuitive guided setup

AC1200 Dual Band

Connect to an extreme performance 867 Mbps Wireless AC or 300 Mbps Wireless N network*

Wireless Coverage

Extended wireless coverage with high power 500 mW radio and detachable 5 dBi antennas

PCIe Slot

PCI Express slot (1x)

Heat Sink

Heat sink minimizes heat loading and optimizes processing performance

Tower Brackets

Includes standard and low profile tower brackets

Extension Cable

Convenient 1 m (3.3 ft.) extension cable provides installation flexibility

Magnetic Base

Adjustable magnetic mounting base attaches to the side of a tower computer or other metal surface

LED Indicator

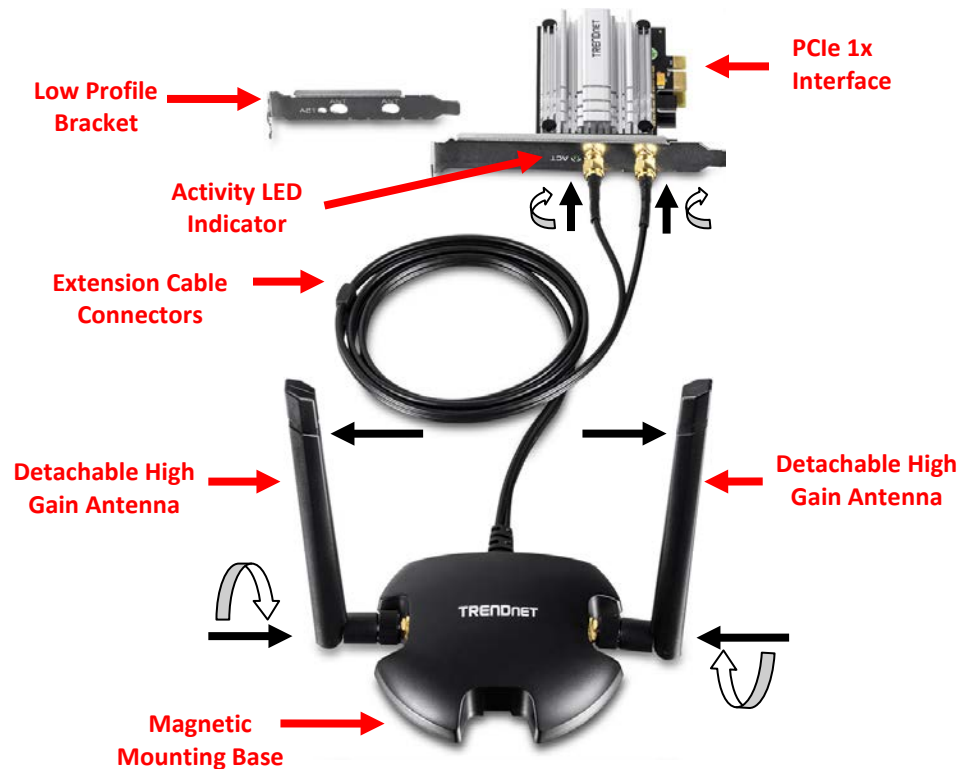
LED indicator conveys device status

Operating Systems

Compatible with Windows operating systems

* Maximum wireless signal rates are referenced from IEEE 802.11 theoretical specifications. Actual data throughput and coverage will vary depending on interference, network traffic, building materials and other conditions. For maximum performance of up to 867Mbps, connect to an 867 Mbps 802.11ac wireless router or access point.

Product Hardware Features



- **PCle 1x Interface** – The PCIe interface connects your adapter to PCIe slots on your computer.
- **Activity LED Indicator** – The LED will blink rapidly to indicate WPS has been activated. The LED will blink every 5 sec. when disconnected. When connected, the LED will blink rapidly during wireless data transmission.
- **Detachable High Gain Antennas** – The high gain antennas can be connected to the external mounting base for flexible and optimized antenna placement or connected directly to the antenna connectors on the adapter.
- **Mounting Base** – It is recommended to attach the antennas to the external mounting base to achieve the best possible placement and wireless coverage. The mounting base is also magnetic and can attach to metallic surfaces. When using the mounting base, the extension cable connectors will be connected to the antenna connectors located on the adapter.
- **Low Profile Bracket** – The low profile bracket can be used to install the adapter on low profile computer towers.

System Requirements

- Windows® 8.1 (32/64), 8 (32/64), 7 (32/64), Vista (32-bit), or XP (32/64)
- Available PCIe slot on your computer.
- CD-ROM Drive (Utility and Driver Installation with included CD)

Application Diagram



The AC1200 High Power Wireless Dual Band PCIe Adapter can provide wireless AC or wireless N connectivity through the use of an available PCIe slot on your computer to a wireless AC/N network (router/access point). The external mounting base allows for flexible and optimal antenna placement to achieve the best possible wireless coverage and connectivity.

Installing your Wireless Adapter

This section describes how to install the software driver and utility for the wireless adapter.

1. Insert the included CD-ROM into your computer's CD-ROM drive.

Note: If you do not have the included CD-ROM, you can download the utility and drivers from <http://www.trendnet.com/downloads/>.



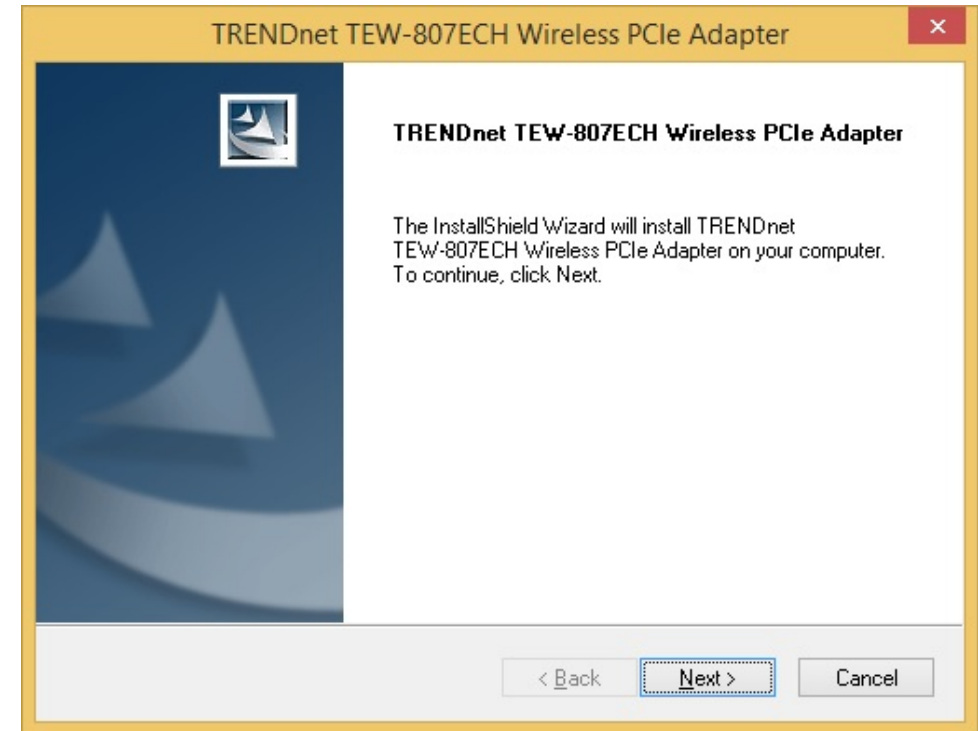
2. At the CD Autorun Prompt window, click **Run Autorun.exe**.

Note: If the Autorun prompt does not appear automatically, open the CD contents and double-click **Autorun.exe**.

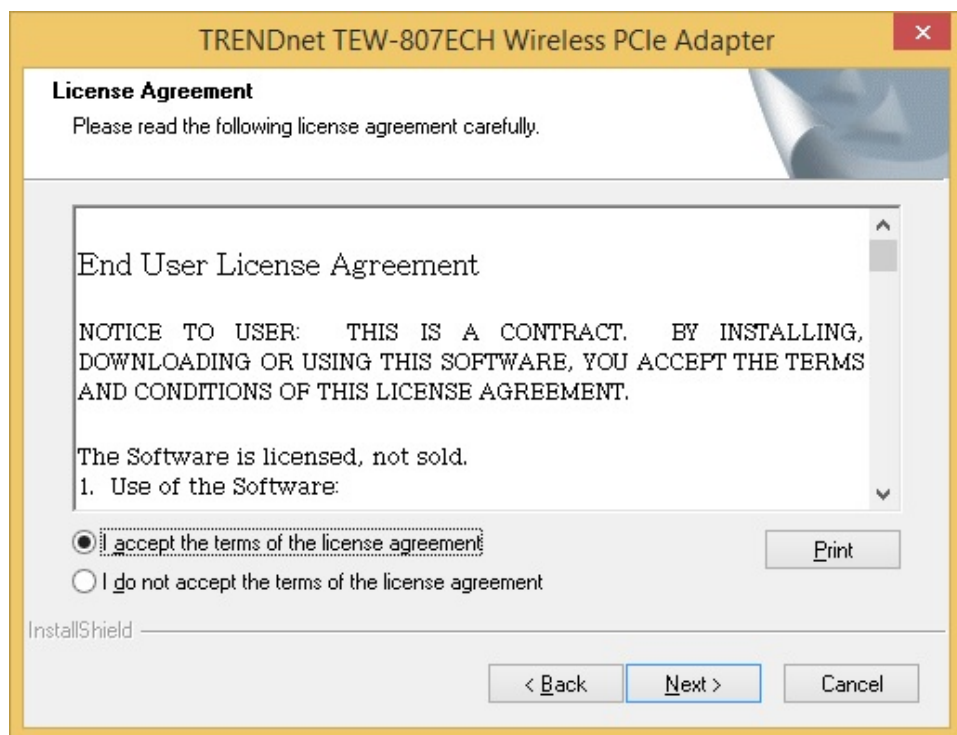
At the CD-ROM main menu, click **Install Drivers & Utility**.



3. At the installation window, click **Next**.

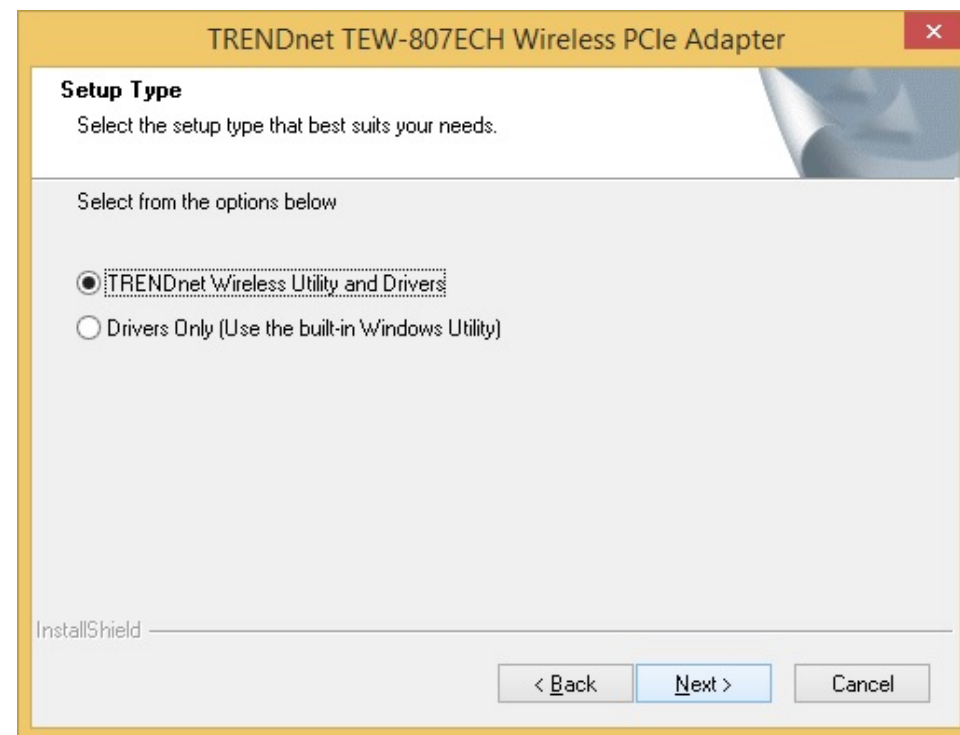


4. You will be prompted to accept the end user license agreement. Select **I accept the terms of the license agreement** and click **Next**.



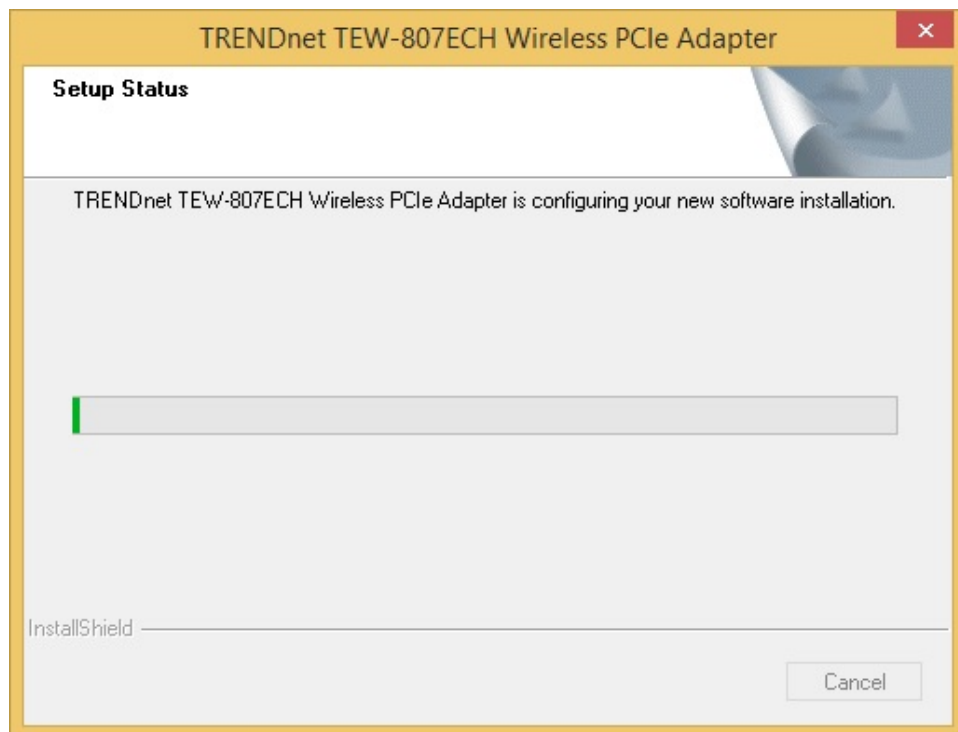
5. Select your preferred installation option and click **Next**.

- **Driver and TRENDnet WLAN Utility (Recommended)** – Installs both the driver and TRENDnet software utility to manage your wireless connections.
- **Driver Only (Use the built-in Windows Utility)** – Installs the driver only and use the built-in Windows wireless utility to manage your wireless connections.

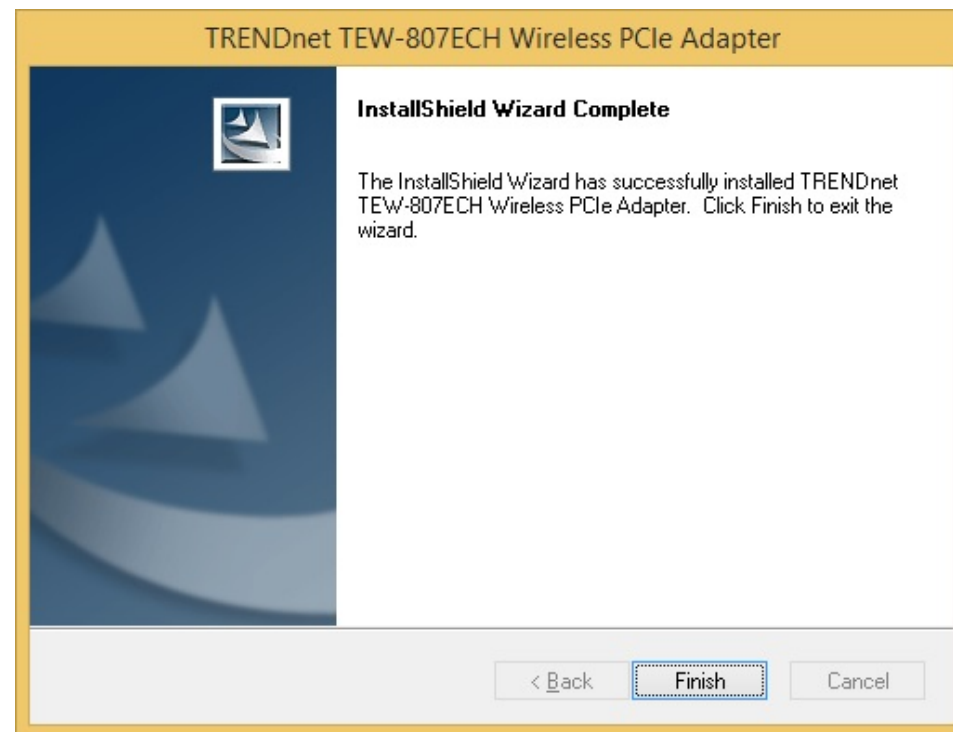


6. Wait for the utility and drivers installation to complete. This may take a few minutes.

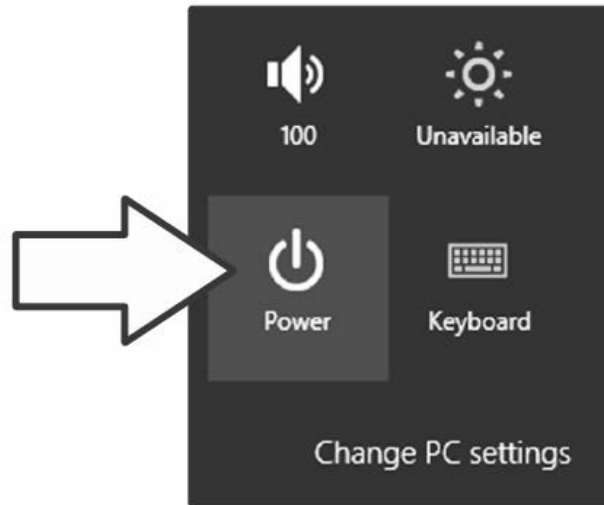
Note: If you do not receive a security prompt, continue to the next step. If prompted, click **Install this driver software anyway**.



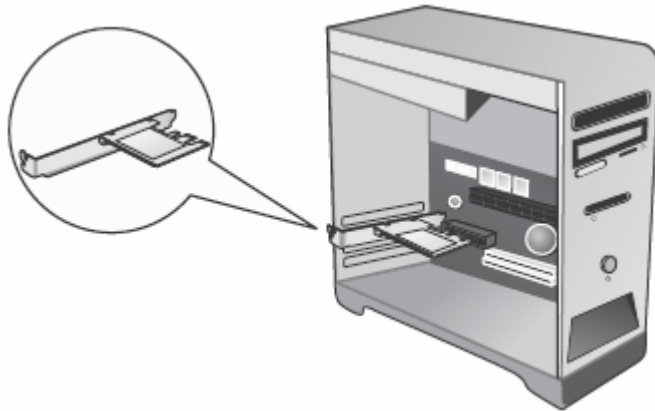
7. After the process is completed, click **Finish**.



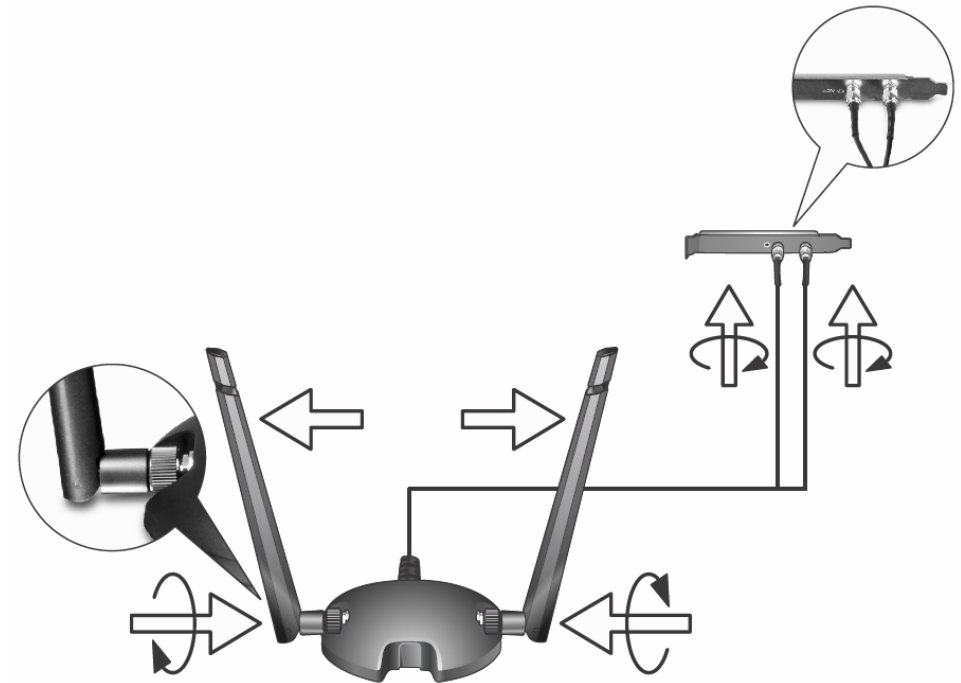
8. Please shut down your computer.



9. Locate an available PCIe slot inside of your computer. Insert the adapter into the available PCIe slot.



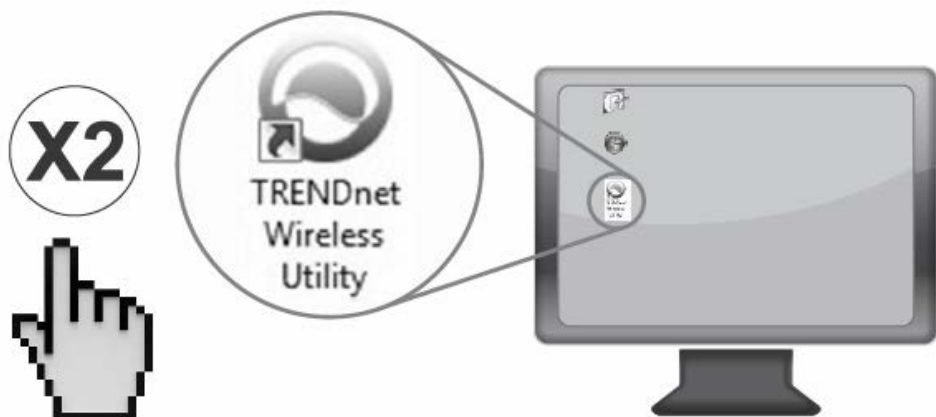
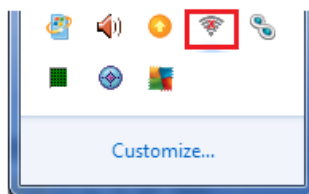
10. Attach the high gain detachable antennas to the antenna connectors on the mounting base and attach the extension cable connectors from the mounting base to the antenna connectors on the adapter. It is recommended to place the mounting base at the highest point possible (ex. table top or on top of the computer tower) and position the antennas at opposite angles as shown for optimal coverage. The mounting base is magnetic and attaches to the metallic surfaces for flexible placement. The antennas may also be directly connected to the antenna connectors on the adapter.



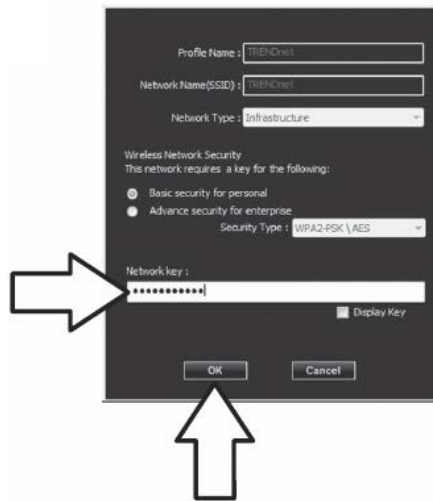
11. Power on your computer.



12. After the driver is successfully installed, double-click the icon in the system tray (or Desktop Icon) and click the Site Survey tab scan for available wireless networks.



13. If your wireless network requires a Wi-Fi security key, you will be prompted to enter it. Enter the Wi-Fi security key required to connect to your wireless network and click **OK**. **Note:** If your wireless network does not require a security key, skip to the next step.



14. Check the status information at the bottom of the utility to verify that you were successfully connected to your wireless network.

Note: If no status information appears, please verify that your security key is correct.



Using the Wireless Utility

Upon completing the software installation, a desktop shortcut is automatically created.

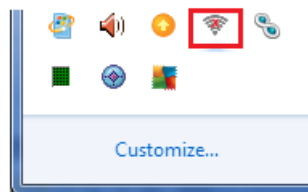
After installation, the wireless software utility will start and open up automatically. If the utility does not start and open up automatically, double-click the desktop icon to start the utility.

You can also start the wireless utility from the Start Menu folder.

Note: If you decide to uninstall the utility and drivers later on, click on the Uninstall item under the Start Menu.



When the utility is started, you will see the following icon in your system tray in the bottom right corner of the screen.

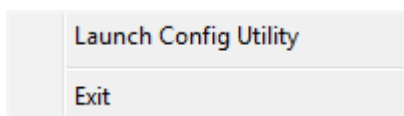


Wireless Adapter is Disconnected



Wireless Adapter is Connected. When connected, icon displays green bars according to signal strength.

You can right-click the system tray icon for additional options.



- **Launch Config Utility** – This option opens up the wireless utility.
- **Exit** – This option will close the utility and terminate the application. The application will no longer be running and accessible from your system tray. You will have to restart the application manually by double-clicking the Desktop icon.

Wireless Utility Overview

Available Networks Window

This window allows you to discover and connect to available wireless networks.

Available Networks List

This window displays a list of the available wireless networks found by your wireless adapter. In addition to displaying the wireless network name (SSID), the list will display additional information about the network such as MAC address (BSSID), signal strength percentage, security type, and channel

Note: Since this adapter has dual-band capability, available wireless network found on both the 2.4GHz band and 5GHz band will be displayed in the list.

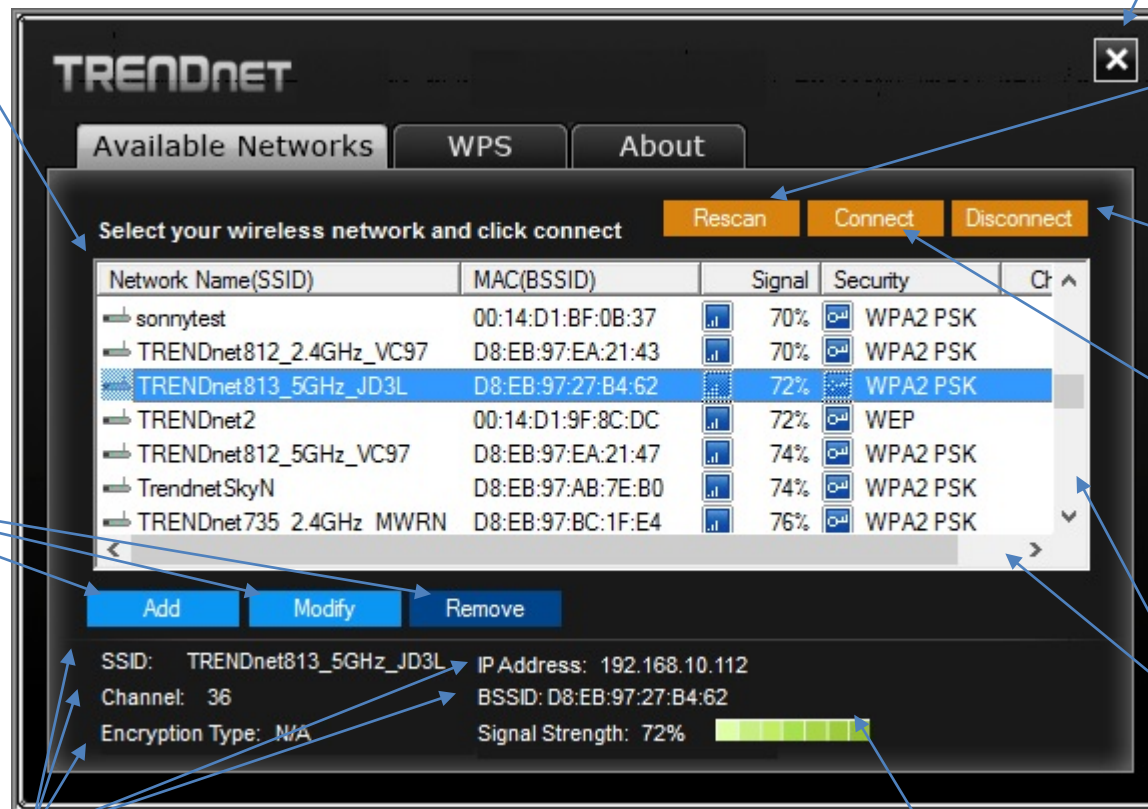
Add, Modify, Remove

These controls allow you to manage your wireless profiles. The utility uses the built-in operating system wireless profile manager for your wireless profiles.

Add – Click Add to manually add a new wireless network profile.

Modify – Select a network in the list to modify, and click Modify. The network should already be in your network profile list in order to modify.

Remove – Select a network in the list to remove from the profiles list. The network should already be in your profile list in order to remove.



SSID, Channel, IP Address, Encryption Type, BSSID, Signal Strength

This will display the wireless network name (SSID), channel, and security/encryption type, MAC address (BSSID), and Signal Strength of the wireless network you are currently connected. This will also display the IP address obtained from the wireless network you are currently connected.

Signal Strength/Link Quality

The bars provide a graphical representation of the general signal strength and link connectivity to the wireless network you are currently connected.

Close

To close the utility, click Close. This does not terminate the wireless utility application and can still be accessed through the system tray, desktop icon, or start menu.

Rescan

If you do not find your wireless network in the available networks list, click Rescan to scan for available wireless networks.

Disconnect

Select the wireless network to disconnect from, and click Disconnect. This does not delete the wireless profile from Windows®.

Connect

After selecting the wireless network in the available networks list, you can click Connect to connect to the network or simply double-click the network in the list. If the wireless network has security enabled, you may be prompted to enter a network key.

Vertical/Horizontal Scroll

You can click the arrows or click and drag the slider, to display more available networks or information.

Wireless Utility Overview**WPS (Wi-Fi Protected Setup) Window**

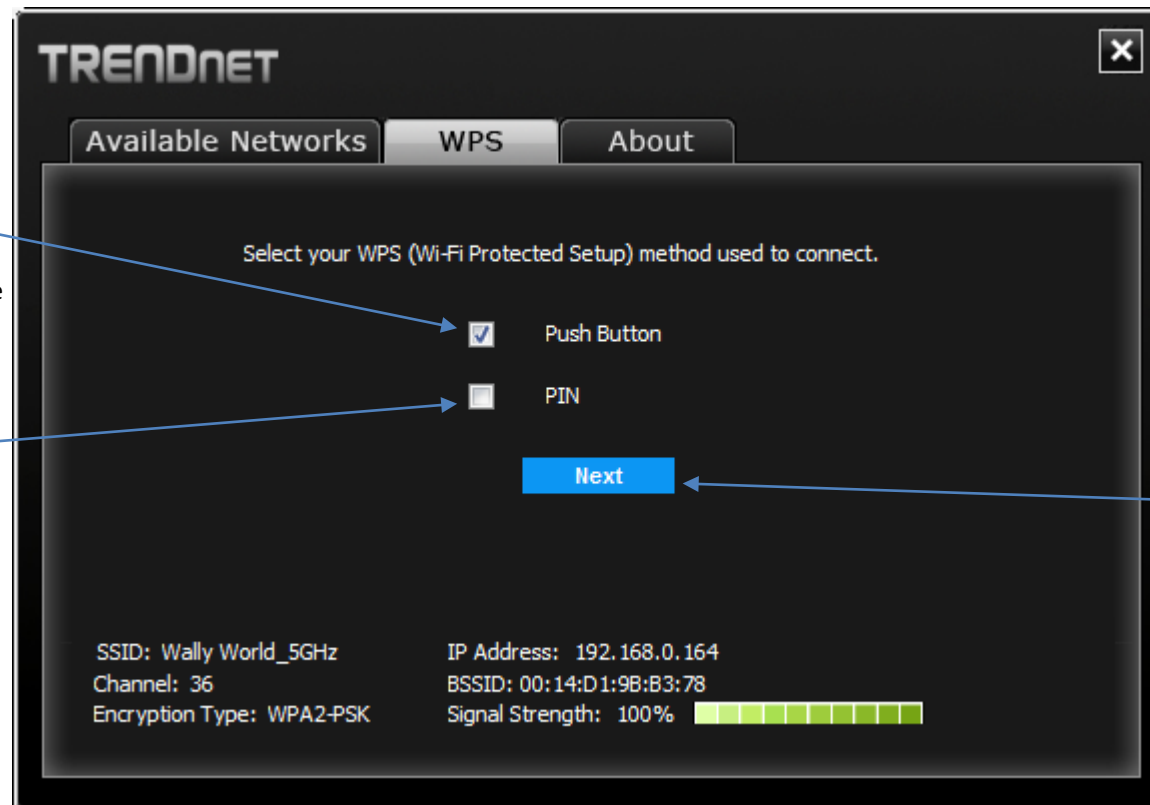
This window allows you to establish wireless connectivity using WPS to WPS supported device such as a wireless router/access point.
For information on how to connect using WPS, please refer to the section "Connect to your wireless network using WPS" on page 12.

WPS Push Button Method (Default)

Allows you to establish wireless connectivity to a WPS supported device such as a wireless router/access point using the WPS Push Button method.

WPS PIN Method

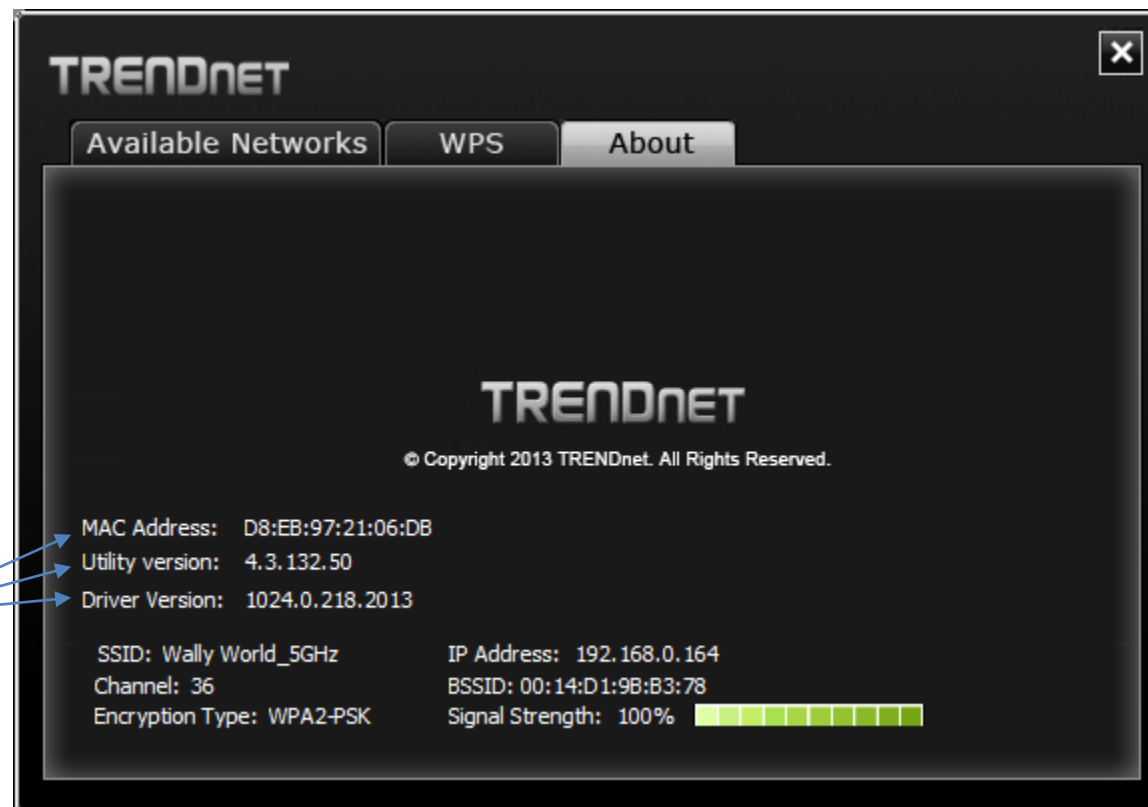
Allows you to establish wireless connectivity to a WPS supported device such as a wireless router/access point using the WPS PIN method.

**Next**

After selecting the WPS method to use, click Next to continue to remaining steps of the WPS connection process.

Wireless Utility Overview**About Window**

This window displays the wireless adapter MAC address, driver, and utility version reference information.

**MAC Address, Utility & Driver Version**

Displays the wireless adapter MAC address, utility, and driver version reference information.

Connect to your wireless network

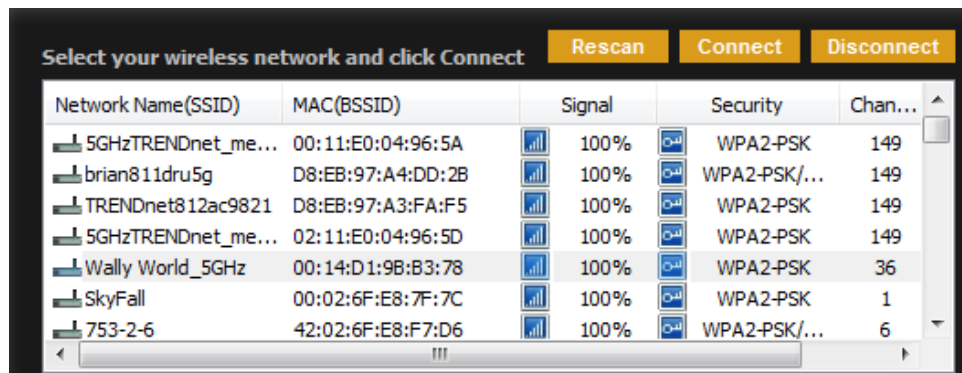
1. Open up the wireless utility.



2. Click on the **Available Networks** tab.



3. In the list, double click on your wireless network or select your wireless network and click the **Connect** button.



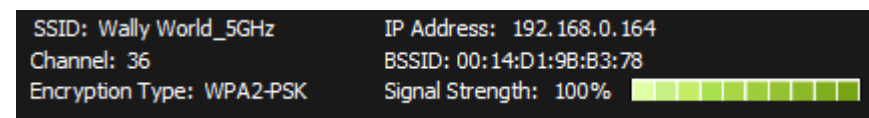
4. If your network has security enabled, you will be prompted to enter the **Network Key** and the encryption type will be detected automatically. Enter the **Network Key** and click **OK**.

Note: After entering the network key, you can click **Display Key** to show the characters you typed in for the network key to verify it is correct.

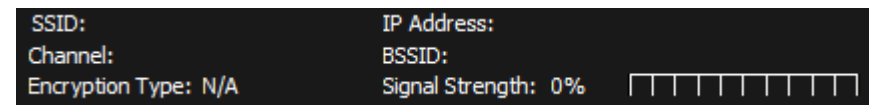


5. The wireless network information will appear at the bottom of the utility of the wireless network you are connected and the **Signal Strength/Link Quality** bars will turn green to indicate a successful connection.

Connection Successful



Connection Unsuccessful



Note: If there is no information displayed and the bars do not turn green, you were not connected to the wireless network successfully. Please select your network in the list again, and click **Modify** and re-enter your Wi-Fi/Network Security Key to verify if your key may have been entered incorrectly, then click **OK**. If you are still experiencing issues connecting to your wireless network, you may need to verify the security settings of your wireless network to make sure they correct key is entered.



Connect to your wireless network using WPS

WPS (Wi-Fi Protected Setup) is a feature that makes it easy to connect devices to your wireless network. If your wireless router/access point supports WPS, you can use this feature to easily connect wireless devices to your network.

Note: You can typically find out if you if your wireless router/access point supports WPS just by looking at the physical device. There should be a WPS push button located on the exterior casing of the device, if not, your device may not support WPS or you may need to reference your device documentation as to how WPS can be initiated on the device. If your device does not have an identifiable WPS push button on the exterior location, we would recommend using the standard connection method on the previous page.

There are two methods the WPS feature can easily connect your wireless devices to your network.

- Push Button Configuration (PBC) method (**Recommended**)
- PIN (Personal Identification Number) Method

Virtual Push Button (PBC) Method

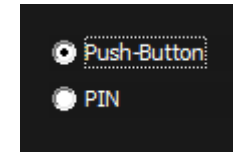
1. Open up the wireless utility.



2. Click on the **WPS** tab.



3. In the WPS window, the Push Button Configuration (PBC) option will be selected by default. If not, check the Push Button option.



4. Click **Next**.

5. On your wireless router/access point, push the WPS button.

Note: Typically, the WPS button hold time is 3-5 sec., then release. For TRENDnet routers/access points, the WPS hardware push button hold time is 3 seconds. If you are using another brand device, you may need to refer to your device documentation for WPS operation.



6. On the wireless utility, click **Start**.

7. Messages will appear utility indicating that the WPS process has been activated and the status. Wait for the process to complete.

8. If successful, you will see the following message at the top and the connection information at the bottom of the utility will appear. Click **Finish**.

The Network Key is set successfully. After press "Finish" button, you can check the connection status.

Finish

SSID: Wally World_5GHz IP Address: 192.168.0.164
Channel: 36 BSSID: 00:14:D1:9B:B3:78
Encryption Type: WPA2-PSK Signal Strength: 100% 

Note: If the WPS process fails, you will see the message below and connection information at the bottom of the utility will not be displayed. You may need to click **Cancel** and attempt the WPS process again. You may need to refer to your wireless router/access point documentation regarding the operation of WPS.

WPS configuration was unsuccessful. Please click the Cancel button below to retry.

Cancel

PIN (Personal Identification Number) Method

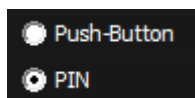
1. Open up the wireless utility.



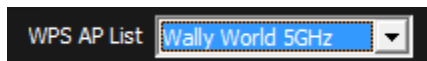
2. Click on the **WPS** tab.



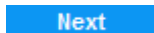
3. Check the **PIN Code** option.



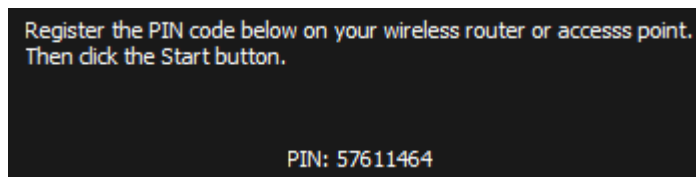
4. Click the **WPS AP List** drop-down list and select your wireless network.



5. Click **Next**.

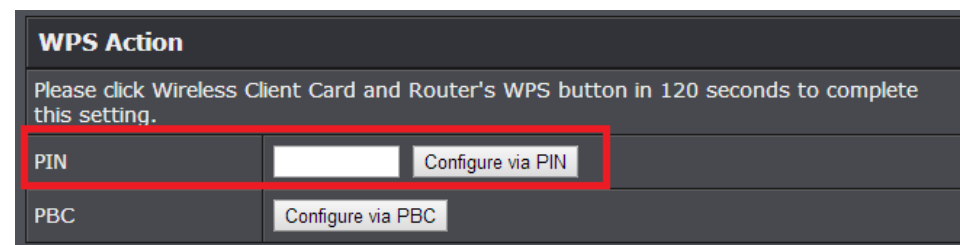


6. The client **PIN Code** will be generated automatically.



7. On your wireless router/access point, enter the client **PIN Code** into your wireless router/access point configuration page and start the WPS process.

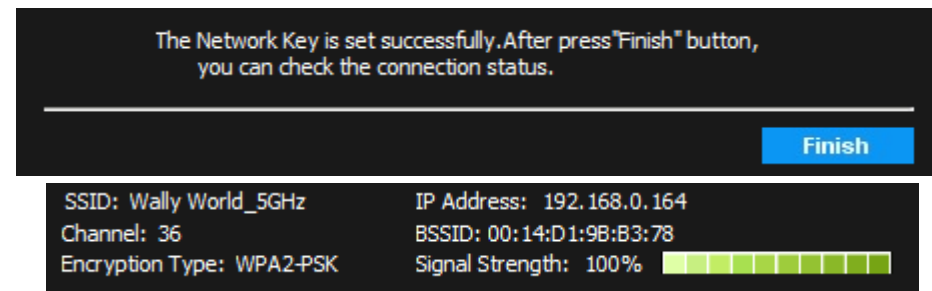
Note: You will need to access the device configuration page (typically through a web browser) to access the WPS section to enter the client PIN code and use the WPS PIN method. You may need to refer to your device documentation on how to access your device's configuration page and locate the WPS section. The example below (from our TRENDnet TEW-810DR router) shows where the WPS client PIN information is entered.



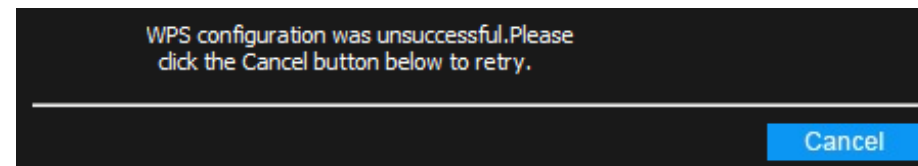
8. On the wireless utility, click **Start**.



9. If successful, you will see the following message at the top and the connection information at the bottom of the utility will appear.



Note: If the WPS process fails, you will see the message below and connection information at the bottom of the utility will not be displayed. You may need to click **Back** and attempt the WPS process again. You may need to refer to your wireless router/access point documentation regarding the operation of WPS.



Create or modify wireless network profiles

Wireless network profiles are profiles that define the parameters of an existing network such as the wireless network name (SSID) and security settings in order to allow for easier management especially if you connect to multiple wireless networks. When you connect to a wireless network using the Available Networks window, a profile for that network is automatically saved to your profile list so that the next time you are in range of that network, your computer will automatically connect to that predefined wireless network without having to manually scan and reconnect to the network.

Note: The wireless utility uses built-in Windows® profile management for wireless networks.

When a parameter (wireless network name or security key) changes in a wireless network that you had connected to before and saved to the profile list, you may need to modify the profile of that network and change to the correct parameters in order to reconnect.

If you are connecting to a wireless network where the wireless network name (SSID) is not discoverable for security purposes, you may need to manually add a new profile to the list for this network in order to connect.

Please note that these parameters are set based on the configuration parameters required by the wireless router/access point.

For additional information on security parameters, you can refer to the Appendix.

1. Open up the wireless utility.

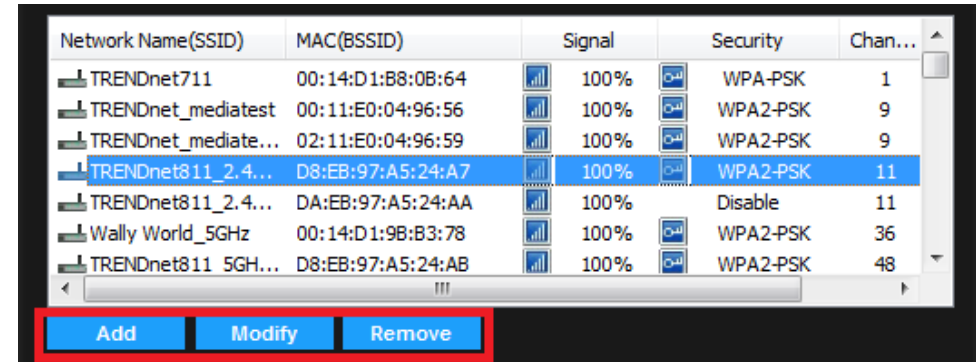


2. Click on the **Available Networks** tab.



3. Review the options.

When connecting to a wireless network, it is automatically saved to your Windows® profile list.



- **Add** – Allows you to manually add a wireless network profile (ex. If the wireless network is set to hide its wireless network name (SSID)). This will add the profile to Windows® profile list.
- **Modify** – Allows you to modify an existing wireless network profile in the Windows® profile list. Select the wireless network to modify in the Available Networks list, and click this option to modify it. You will only be able to modify the settings of a wireless network that had been saved in the Windows® profile list.
- **Remove** – Allows you to remove an existing wireless network profile in the Windows® profile list. Select the wireless network to remove in the Available Networks list, and click this option to remove it. You will only be able to remove a profile that had been saved in the Windows® profile list.

Enter or modify the parameters for the wireless network profile.

- **Profile Name** – Enter a name you easily identify in your profile list, for example “Home” or “Office”. Please note that this is not the same as your wireless network name and does not need to be the same as your wireless network name.
- **Network Name (SSID)** – Enter the wireless network name of the network you are connecting.
- **Network Type** – The most typical configuration type is **Infrastructure** which is used when connecting to a wireless router/access point. **Ad-Hoc** is only used when establishing a wireless one-to-one only connection with another wireless device or computer operating in ad-hoc mode.

There are 2 security categories to choose.

Basic security for personal – Includes the most common security options under the Security Type drop-down menu.

- **Open \ Disable** – Wireless network has no security configured. No key is required.
- **Open or Shared \ WEP** – Enter the WEP key for your wireless network. Wireless network has WEP security enabled, open or shared. Please note that the Key Index 1-4 must also match the same index configured on the wireless router/access point.

WEP Key Format

WEP Key Format	HEX	ASCII
Character set	0-9 & A-F, a-f only	Alphanumeric (a,b,C,?,*,/,1,2, etc.)
64-bit key length	10 characters	5 characters
128-bit key length	26 characters	13 characters

- **WPA-PSK \ TKIP or AES** – Wireless network has WPA-PSK security enabled, TKIP or AES.
Note: 8-63 alphanumeric characters (a,b,C,?,,/,1,2, etc.)*
- **WPA2-PSK \ TKIP or AES** – Wireless network has WPA2-PSK security enabled, TKIP or AES.
Note: 8-63 alphanumeric characters (a,b,C,?,,/,1,2, etc.)*

Advance security for enterprise – Includes all security options including advanced options under the Security Type drop-down that require additional authentication parameters to connect to the wireless network typically used offices and businesses that require a higher level of security.

Additional security options:

- **WPA EAP-TLS or WPA2 EAP-TLS \ TKIP or AES** – Wireless network has WPA-EAP security enabled, TKIP or AES. Select the EAP (Extensible Authentication Protocol) Type.
 - **Select a Certificate** – EAP-TLS requires additional certificate to be installed on computer for authentication purposes. Click the drop-down and select the certificate type used to authenticate and required by the authentication (RADIUS) server.

Technical Specifications

Standards

- PCI Express 1.0a
- IEEE 802.11a
- IEEE 802.11b
- IEEE 802.11g
- IEEE 802.11n (up to 300 Mbps)
- IEEE 802.11ac (draft 2.0, up to 867 Mbps)

Hardware Interface

- PCI Express x1 (Version 1.0a)
- LED indicator
- 2 x RP-SMA antenna connectors
- Magnetic Antenna Base with 1 m (3.3 ft) extension cable
- 2 High Gain Detachable Dual Band Antennas

Operation Modes

- Client (Infrastructure)
- Soft AP
- Ad-Hoc

Encryption

- Wireless encryption: WEP, WPA/WPA2-PSK, WPA/WPA2-RADIUS

Compatibility

- Windows® 8.1, 8, 7, Vista, XP

Special Features

- 2 high gain dual band detachable antennas and integrated high powered amplifiers for long range connectivity
- Magnetic Antenna Base for easy mounting and antenna positioning for optimal signal reception
- High-speed 802.11ac connectivity
- Soft AP for wireless client connectivity

Quality of Service

- WMM
- WMM-SA

Frequency

- 2.4 GHz: 2.400 - 2.484 GHz
- 5 GHz: 5.745 GHz-5.825 GHz

Modulation

- 802.11b: CCK, DQPSK, DBPSK
- 802.11a/g: OFDM with BPSK, QPSK and 16/64-QAM
- 802.11n: BPSK, QPSK, 16-QAM, 64-QAM with OFDM
- 802.11ac: OFDM with BPSK, QPSK and 16/64/256-QAM

Antenna Gain

- 2.4 GHz/5 GHz: 2 x 5 dBi (max.) dual band external/detachable

Wireless Output Power

- 802.11a: 28 dBm (max.) @ 54 Mbps
- 802.11b: 28 dBm (max.) @ 11 Mbps
- 802.11g: 28 dBm (max.) @ 54 Mbps
- 802.11n (2.4GHz): 29 dBm (max.) @ 300 Mbps
- 802.11n (5GHz): 31 dBm (max.) @ 300 Mbps
- 802.11ac: 30 dBm (max.) @ 867 Mbps

Receiving Sensitivity

- 802.11a: -90 dBm (typical) @ 54 Mbps
- 802.11b: -91 dBm (typical) @ 11 Mbps
- 802.11g: -87 dBm (typical) @ 54 Mbps
- 802.11n (2.4GHz): -85 dBm (typical) @ 300 Mbps
- 802.11n (5GHz): -90 dBm (typical) @ 300 Mbps
- 802.11ac: -58 dBm (typical) @ 867 Mbps

Wireless Channels

- 2.4 GHz: FCC: 1-11, ETSI: 1-13

- 5 GHz: FCC: 149, 151, 155, 157, 159 and 165, ETSI: 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140

Power

- Consumption: Max. 6 W

Operating Temperature

- -10 - 70 °C (14 – 158 °F)

Operating Humidity

- Max. 90% non-condensing

Certifications

- CE
- FCC

Dimensions

- 84 x 64 x 17 mm (3.3 x 2.5 x 0.7 in.)

Weight

- 80 g (2.8 oz.)
- Antenna Base: 114 g (4 oz.)

* Maximum wireless signal rates are referenced from IEEE 802.11 theoretical specifications. Actual data throughput and coverage will vary depending on interference, network traffic, building materials and other conditions. For maximum performance of up to 867Mbps, connect to an 867 Mbps 802.11ac wireless router or access point.

Troubleshooting

Q: I inserted the Utility & Driver CD-ROM into my computer's CD-ROM Drive and the installation menu does not appear automatically. What should I do?

Answer:

1. For Windows® 8.1/8/7, if the installation menu does not appear automatically, click on the Windows Icon on the bottom left hand corner of the screen,, click the "Search programs and files" box, and type D:\Autorun.exe, where "D" in "D:\Autorun.exe" is the letter assigned to your CD-ROM Drive, and then press the ENTER key on your keyboard
2. For Windows® Vista, if the installation menu does not appear automatically, click **Start**, click the **Start Search** box, and type **D:\Autorun.exe** where "D" in "D:\autorun.exe" is the letter assigned to your CD-ROM Drive, and then press the ENTER key on your keyboard.
3. For Windows® XP, if the installation menu does not appear automatically, click **Start**, click **Run**, and type **D:\Autorun** where "D" in "D:\Autorun.exe" is the letter assigned to your CD-ROM Drive, and then press the ENTER key on your keyboard.

Q: I completed all the steps in the quick installation guide, but my Wireless USB Adapter is not connecting to my access point. What should I do?

Answer:

1. Verify that the SSID (Network Name) matches your wireless router or access point's SSID
2. Please check with your network administrator for security key in order to access a secured wireless access point or router. Please refer to the User's Guide for more information regarding wireless network security.
3. Check your TCP/IP properties to ensure that Obtain an IP address automatically is selected.
4. Double-click the Wireless Configuration Utility icon, click Available Networks and then click Refresh to check and see if there are any available wireless networks listed.

Q: Windows is unable to recognize my hardware. What should I do?

Answer:

1. Make sure your computer meets the minimum requirements as specified in Section 1 of this quick installation guide.
2. You must complete the installation of the Wireless Configuration Utility (as described in Section 2) before connecting the Wireless USB Adapter to your computer.
3. Connect the Wireless USB Adapter to a different USB port on your computer.

Q: I cannot open the Wireless Configuration Utility. What should I do?

Answer:

Access your device manager to make sure the adapter is installed properly.

1. To access the device manager on Windows® 8.1/8/7, click on the Windows icon on the bottom left-hand corner, click **Computer**, click **System Properties** and then click **Device Manager**.
2. To access the device manager on Windows® Vista, right-click **Computer**, click **Properties** and then click **Device Manager**.
3. To access the device manager on Windows® XP, right-click **My Computer**, click **Properties**, click the **Hardware** tab, and then click **Device Manager**.

If you see a networking device with a yellow question mark or exclamation point:

1. Uninstall the device from device manager
2. Remove the adapter from the computer
3. Click the Windows / Start icon, click All Programs, click TRENDnet Wireless Utility and then click Uninstall.

Appendix

How to choose the type of security for your wireless network

Setting up wireless security is very important. Leaving your wireless network open and unsecure could expose your entire network and personal files to outsiders. TRENDnet recommends reading through this entire section and setting up wireless security on your new router.

There are a few different wireless security types supported in wireless networking each having its own characteristics which may be more suitable for your wireless network taking into consideration compatibility, performance, as well as the security strength along with using older wireless networking hardware (also called legacy hardware).

It is strongly recommended to enable wireless security to prevent unwanted users from accessing your network and network resources (personal documents, media, etc.).

In general, it is recommended that you choose the security type with the highest strength and performance supported by the wireless computers and devices in your network. Please review the security types to determine which one you should use for your network.

Wireless Encryption Types

- **WEP:** Legacy encryption method supported by older 802.11a/b/g hardware. This is the oldest and least secure type of wireless encryption. It is generally not recommended to use this encryption standard, however if you have old 802.11 b, 802.11g or 802.11a wireless adapters or computers with old embedded wireless cards(wireless clients), you may have to set your router to WEP to allow the old adapters to connect to the router. **Note:** *This encryption standard will limit connection speeds to 54Mbps.*

- **WPA:** This encryption is significantly more robust than the WEP technology. Much of the older 802.11a or 802.11g hardware has been upgraded (with firmware/driver upgrades) to support this encryption standard. Total wireless speeds under this encryption type however are limited to 54Mbps.
- **WPA-Auto:** This setting provides the router with the ability to detect wireless devices using either WPA or WPA2 encryption. Your wireless network will automatically change the encryption setting based on the first wireless device connected. For example, if the first wireless client that connects to your wireless network uses WPA encryption your wireless network will use WPA encryption. Only when all wireless clients disconnect to the network and a wireless client with WPA2 encryption connects your wireless network will then change to WPA2 encryption. **NOTE:** WPA2 encryption supports 802.11n speeds and WPA encryption will limit your connection speeds to 54Mbps
- **WPA2:** This is the most secure wireless encryption available today, similar to WPA encryption but more robust. This encryption standard also supports the highest connection speeds. TRENDnet recommends setting your router to this encryption standard. If you find that one of your wireless network devices does not support WPA2 encryption, then set your router to either WPA or WPA-Auto encryption.

Note: *Check the specifications of your wireless network adapters and wireless appliances to verify the highest level of encryption supported.*

Below is brief comparison chart of the wireless security types and the recommended configuration depending on which type you choose for your wireless network.

Security Standard	WEP	WPA	WPA2
Compatible Wireless Standards	IEEE 802.11a/b/g (802.11n devices will operate at 802.11g to connect using this standard)	IEEE 802.11a/b/g (802.11n/ac devices will operate at 802.11g to connect using this standard)	IEEE 802.11a/b/g/n/ac
Highest Performance Under This Setting	Up to 54Mbps	Up to 54Mbps	Up to 867Mbps 11ac** Up to 300Mbps 11n*
Encryption Strength	Low	Medium	High
Additional Options	Open System or Shared Key, HEX or ASCII, Different key sizes	TKIP or AES, Preshared Key or RADIUS	TKIP or AES, Preshared Key or RADIUS
Recommended Configuration	Open System ASCII 13 characters	TKIP Preshared Key 8-63 characters	AES Preshared Key 8-63 characters

*Dependent on the maximum 802.11n data rate supported by the device (300Mbps)

**Dependent on the maximum 802.11ac data rate supported by the device (867Mbps)

How to find your IP address?

Note: Please note that although the following procedures provided to follow for your operating system on configuring your network settings can be used as general guidelines, however, it is strongly recommended that you consult your computer or operating system manufacturer directly for assistance on the proper procedure for configuring network settings.

Command Prompt Method

Windows® XP/Vista/7/8/8.1

1. On your keyboard, press **Windows Logo+R** keys simultaneously to bring up the Run dialog box.
2. In the dialog box, type **cmd** to bring up the command prompt.
3. In the command prompt, type **ipconfig /all** to display your IP address settings.

Note: If you are experiencing difficulties, please contact your computer or operating system manufacturer for assistance.

How to configure your network settings to obtain an IP address automatically or use DHCP?

Note: Please note that although the following procedures provided to follow for your operating system on configuring your network settings can be used as general guidelines, however, it is strongly recommended that you consult your computer or operating system manufacturer directly for assistance on the proper procedure for configuring network settings.

Windows® 8/7

- a. Go into the **Control Panel**, click **Network and Sharing Center**.
- b. Click **Change Adapter Settings**, right-click the **Local Area Connection** icon.
- c. Then click **Properties** and click **Internet Protocol Version 4 (TCP/IPv4)**.
- d. Then click **Obtain an IP address automatically** and click **OK**.

Windows® Vista

- a. Go into the **Control Panel**, click **Network and Internet**.
- b. Click **Manage Network Connections**, right-click the **Local Area Connection** icon and click **Properties**.
- c. Click **Internet Protocol Version (TCP/IPv4)** and then click **Properties**.

- d. Then click **Obtain an IP address automatically** and click **OK**.

Windows® XP

- a. Go into the **Control Panel**, double-click the **Network Connections** icon
- b. Right-click the **Local Area Connection** icon and click **Properties**.
- c. Click **Internet Protocol (TCP/IP)** and click **Properties**.
- d. Then click **Obtain an IP address automatically** and click **OK**.

Note: If you are experiencing difficulties, please contact your computer or operating system manufacturer for assistance.

How to connect to a wireless network using the built-in Windows utility?

Note: Please note that although the following procedures provided to follow for your operating system on configuring your network settings can be used as general guidelines, however, it is strongly recommended that you consult your computer or operating system manufacturer directly for assistance on the proper procedure for connecting to a wireless network using the built-in utility.

Windows® 8.1/8/7

1. Open Connect to a Network by clicking the network icon ( or ) in the notification area.
2. In the list of available wireless networks, click the wireless network you would like to connect to, then click **Connect**.
4. You may be prompted to enter a security key in order to connect to the network.
5. Enter in the security key corresponding to the wireless network, and click **OK**.

Windows® Vista

1. Open Connect to a Network by clicking the **Start Button**.  and then click **Connect To**.
2. In the **Show** list, click **Wireless**.
3. In the list of available wireless networks, click the wireless network you would like to connect to, then click **Connect**.
4. You may be prompted to enter a security key in order to connect to the network.
5. Enter in the security key corresponding to the wireless network, and click **OK**.

Windows XP

1. Right-click the network icon in the notification area, then click **View Available Wireless Networks**.
2. In **Connect to a Network**, under **Available Networks**, click the wireless network you would like to connect to.
3. You may be prompted to enter a security key in order to connect to the network.
4. Enter in the security key corresponding to the wireless network, and click **Connect**.

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.

FCC Caution: To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).



FCC Radiation Exposure Statement

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

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

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

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.

RoHS

This product is RoHS compliant.



Europe – EU Declaration of Conformity

TRENDnet hereby declare that the product is in compliance with the essential requirements and other relevant provisions under our sole responsibility.



Safety

EN60950-1 : 2006 + A11 : 2009 + A1: 2010 + A12: 2011

EMC

EN 301 489-1 V1.9.2: 09-2011

EN 301 489-17 V2.2.1: 09-2012

EN 55022 2010 + AC: 2011 (Class B)

Radio Spectrum & Health

EN 300 328 V1.8.1 : 06-2012

EN 62311 2008

This product is herewith confirmed to comply with the Directives.

Directives

Low Voltage Directive 2006/95/EC and 2014/35/EU

EMC Directive 2004/108/EC

R&TTE Directive 1999/5/EC

EMF Directive 1999/519/EC

RoHS Directive 2011/65/EU

REACH Regulation (EC) No. 1907/2006

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.

 Česky [Czech]	TRENDnet tímto prohlašuje, že tento TEW-807ECH je ve shodě se základními požadavky a dalšími příslušnými ustanoveními směrnice 1999/5/ES a 2006/95/ES.
 Dansk [Danish]	Undertegnede TRENDnet erklærer herved, at følgende udstyr TEW-807ECH overholder de væsentlige krav og øvrige relevante krav i direktiv 1999/5/EF og 2006/95/EF.
 Deutsch [German]	Hiermit erklärt TRENDnet, dass sich das Gerät TEW-807ECH in Übereinstimmung mit den grundlegenden Anforderungen und den übrigen einschlägigen Bestimmungen der Richtlinie 1999/5/EG und 2006/95/EG befindet.
 Eesti [Estonian]	Käesolevaga kinnitab TRENDnet seadme TEW-807ECH vastavust direktiivi 1999/5/EÜ ja 2006/95/EÜ põhinõuetele ja nimetatud direktiivist tulenevatele teistele asjakohastele sätetele.
 English	Hereby, TRENDnet, declares that this TEW-807ECH is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC and 2006/95/EC.
 Español [Spanish]	Por medio de la presente TRENDnet declara que el TEW-807ECH cumple con los requisitos esenciales y cualesquiera otras disposiciones aplicables o exigibles de la Directiva 1999/5/CE, y 2006/95/CE.
 Ελληνική [Greek]	ΜΕ ΤΗΝ ΠΑΡΟΥΣΑΤRENDnet ΔΗΛΩΝΕΙ ΟΤΙΤΕW-807ΕCHΣΥΜΜΟΡΦΩΝΕΤΑΙ ΠΡΟΣ ΤΙΣ ΟΥΣΙΩΔΕΙΣ ΑΠΑΙΤΗΣΕΙΣ ΚΑΙ ΤΙΣ ΛΟΙΠΕΣ ΣΧΕΤΙΚΕΣ ΔΙΑΤΑΞΕΙΣ ΤΗΣ ΟΔΗΓΙΑΣ 1999/5/ΕΚ, 2006/95/ΕΚ ΚΑΙ.
 Français [French]	Par la présente TRENDnet déclare que l'appareil TEW-807ECH est conforme aux exigences essentielles et aux autres dispositions pertinentes de la directive 1999/5/CE, 2006/95/CE et.
 Italiano [Italian]	Con la presente TRENDnet dichiara che questo TEW-807ECH è conforme ai requisiti essenziali ed alle altre disposizioni pertinenti stabilite dalla direttiva 1999/5/CE e 2006/95/CE.
 Latvīski [Latvian]	Ar šo TRENDnet deklarē, ka TEW-807ECH atbilst Direktīvas 1999/5/EK, un 2006/95/EK būtiskajām prasībām un citiemar to saistītajiem noteikumiem.
 Lietuvių [Lithuanian]	Šiuo TRENDnet deklaruoją, kad šis TEW-807ECH atitinka esminius reikalavimus ir kitas 1999/5/EB ir 2006/95/EB Direktyvos nuostatas.

 Nederlands [Dutch]	Hierbij verklaart TRENDnet dat het toestel TEW-807ECH in overeenstemming is met de essentiële eisen en de andere relevante bepalingen van richtlijn 1999/5/EG, en 2006/95/EG.
 Malti [Maltese]	Hawnhekk, TRENDnet, jiddikjara li dan TEW-807ECH jikkonforma mal-ħtiġijiet essenzjali u ma provvedimenti oħrajn rilevanti li hemm fid-Direttiva 1999/5/KE u 2006/95/KE.
 Magyar [Hungarian]	Alulírott, TRENDnet nyilatkozom, hogy a TEW-807ECH megfelel a vonatkozó alapvető követelményeknek és az 1999/5/EK irányelv, a 2006/95/EK irányelv egyéb előírásainak.
 Polski [Polish]	Niniejszym TRENDnet oświadcza, że TEW-807ECH jest zgodny z zasadniczymi wymogami oraz pozostałymi stosownymi postanowieniami Dyrektywy 1999/5/WE i 2006/95/WE.
 Português [Portuguese]	TRENDnet declara que este TEW-807ECH está conforme com os requisitos essenciais e outras disposições da Directiva 1999/5/CE e 2006/95/CE.
 Slovensko [Slovenian]	TRENDnet izjavlja, da je ta TEW-807ECH v skladu z bistvenimi zahtevami in ostalimi relevantnimi določili direktive 1999/5/ES in 2006/95/ES.
 Slovensky [Slovak]	TRENDnet týmto vyhlasuje, že TEW-807ECH spĺňa základné požiadavky a všetky príslušné ustanovenia Smernice 1999/5/ES a 2006/95/ES.
 Suomi [Finnish]	TRENDnet vakuuttaa täten että TEW-807ECH tyyppinen laite on direktiivin 1999/5/EY ja 2006/95/EY oleellisten vaatimusten ja sitä koskevien direktiivin muiden ehtojen mukainen.
 Svenska [Swedish]	Härmed intygar TRENDnet att denna TEW-807ECH står i överensstämmelse med de väsentliga egenskapskrav och övriga relevanta bestämmelser som framgår av direktiv 1999/5/EG och 2006/95/EG.

Limited Warranty

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

TEW-807ECH – 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.

WARRANTIES EXCLUSIVE: IF THE TRENDNET PRODUCT DOES NOT OPERATE AS WARRANTED ABOVE, THE CUSTOMER'S SOLE REMEDY SHALL BE, AT TRENDNET'S OPTION, REPAIR OR REPLACE. THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING

WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. TRENDNET NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, INSTALLATION MAINTENANCE OR USE OF TRENDNET'S PRODUCTS.

TRENDNET SHALL NOT BE LIABLE UNDER THIS WARRANTY IF ITS TESTING AND EXAMINATION DISCLOSE THAT THE ALLEGED DEFECT IN THE PRODUCT DOES NOT EXIST OR WAS CAUSED BY CUSTOMER'S OR ANY THIRD PERSON'S MISUSE, NEGLIGENCE, IMPROPER INSTALLATION OR TESTING, UNAUTHORIZED ATTEMPTS TO REPAIR OR MODIFY, OR ANY OTHER CAUSE BEYOND THE RANGE OF THE INTENDED USE, OR BY ACCIDENT, FIRE, LIGHTNING, OR OTHER HAZARD.

LIMITATION OF LIABILITY: TO THE FULL EXTENT ALLOWED BY LAW TRENDNET ALSO EXCLUDES FOR ITSELF AND ITS SUPPLIERS ANY LIABILITY, WHETHER BASED IN CONTRACT OR TORT (INCLUDING NEGLIGENCE), FOR INCIDENTAL, CONSEQUENTIAL, INDIRECT, SPECIAL, OR PUNITIVE DAMAGES OF ANY KIND, OR FOR LOSS OF REVENUE OR PROFITS, LOSS OF BUSINESS, LOSS OF INFORMATION OR DATA, OR OTHER FINANCIAL LOSS ARISING OUT OF OR IN CONNECTION WITH THE SALE, INSTALLATION, MAINTENANCE, USE, PERFORMANCE, FAILURE, OR INTERRUPTION OF THE POSSIBILITY OF SUCH DAMAGES, AND LIMITS ITS LIABILITY TO REPAIR, REPLACEMENT, OR REFUND OF THE PURCHASE PRICE PAID, AT TRENDNET'S OPTION. THIS DISCLAIMER OF LIABILITY FOR DAMAGES WILL NOT BE AFFECTED IF ANY REMEDY PROVIDED HEREIN SHALL FAIL OF ITS ESSENTIAL PURPOSE.

Governing Law: This Limited Warranty shall be governed by the laws of the state of California.

Some TRENDnet products include software code written by third party developers. These codes are subject to the GNU General Public License ("GPL") or GNU Lesser General Public License ("LGPL").

Go to <http://www.trendnet.com/gpl> or <http://www.trendnet.com> Download section and look for the desired TRENDnet product to access to the GPL Code or LGPL Code. These codes are distributed WITHOUT WARRANTY and are subject to the copyrights of the developers. TRENDnet does not provide technical support for these codes. Please go to <http://www.gnu.org/licenses/gpl.txt> or <http://www.gnu.org/licenses/lgpl.txt> for specific terms of each license.

PWP05202009v2

2014/11/10



Product Warranty Registration

Please take a moment to register your product online.
Go to TRENDnet's website at <http://www.trendnet.com/register>

TRENDnet
20675 Manhattan Place
Torrance, CA 90501. USA