User's Guide





1-Port Wireless N Multi-Function USB Print Server

TEW-MFP1

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Product Overview



TEW-MFP1

Package Contents

In addition to the print server, the package includes:

- Muti-Language Quick Installation Guide
- CD-ROM (User's Guide & Utility)
- Network cable (1.5m / 5ft)
- Power adapter (5V DC, 2A)

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

Features

TRENDnet's 1-Port Wireless N Multi-Function USB Print Server, model TEW-MFP1, transforms most stand-alone multi-function and standard USB printers into a shared network resource. Install your multifunction printer in the most ergonomic location and then connect the compact TEW-MFP1 to a high speed Wireless N network.

An intuitive utility supports Windows and Mac operating systems and provides a seamless user experience. Scan, fax, and print functionality from any networked workstation. Integrated Wireless N provides greater installation flexibility. An Ethernet port facilitates optional wired networking. Wi-Fi Protected Setup (WPS) streamlines the process of connecting to a wireless network. This compact device fits into the smallest spaces.

- 1 x 10/100Mbps Auto-MDIX Fast Ethernet port (for optional wired installation)
- 1 x USB 2.0 high speed port
- Wi-Fi Protected Setup (WPS) connects to wireless networks at the push of a button
- Based on IEEE 802.11n technology and compliant with IEEE 802.11b/g standards
- High-speed data rates of up to 150Mbps with IEEE 802.11n*
- Backwards Compatible with USB 1.1 Devices
- Control Center utility supports Windows 7 (32/64-bit) / Vista (32/64-bit) / Windows XP(32/64-bit) and Mac OS X 10.4/10.5/10.6/10.7 operating systems
- Supports most All-In-One multi-function printers and regular USB printers
- Share multi-function printers and regular USB printers over the network
- Supports LPR/LPD printing protocols
- Control Center utility includes built in scan feature**
- Supports NetUSB technology**
- Share USB peripheral devices over the network including; digital cameras, web cams, speakers, iPods™, flash drives, external hard drives, printers, and memory card readers**
- Universal Plug & Play (UPnP) installation
- Diagnostic LEDs

Product Hardware Features

Front View



- **Power** This LED indicator is solid green when your router is powered on. Otherwise if this LED indicator is off, there is no power to your router.
- WLAN This LED indicator is blinking green when the wireless is "On" and functioning properly with your. This LED indicator will be blinking green rapidly while data is transmitted or received by your wireless clients or wireless network devices connected to your router.
- LAN This LED indicators will be blinking green while data is transmitted or received through your router LAN port.
- USB This LED indicator will be blinking green while data is transmitted or received through the USB port.

Side View (Right)



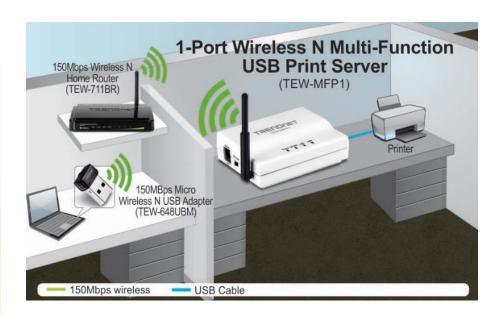
- **USB Port** The USB 2.0 port allows you to connect USB printers and storage devices to your network and share access to these devices to computers on your network through the use of the included USB software utility.
- LAN Port Connect Ethernet cables (also called network cables) to your router or network LAN ports.

Side View (Left)



- Power Port Connect the included power adapter from your router power port and to an available power outlet.
 Note: Use only the adapter that came with your router.
- **On/Off Power Switch** Move the On/Off switch to power "On" (Left position) or "Off" (Outer position) the device.
- WPS/Reset Button Push and hold this button for 5 seconds to activate Wi-Fi Protected Setup (WPS) Push Button Configuration (PBC) setup. Push and hold for 15 seconds to reset the device to its factory default setting.
- Antenna Fixed 2dBi antenna.

Application Diagram



The print server allows you to share your regular printer or multi-function printer through a network. It is typically placed in the same location of your printer or multi-function printer. Unlike many print servers the TEW-MFP1 has the ability to communicate to your wireless network at data rates at Wireless N speeds eliminating any wires throughout your household or office. In addition to its print server functionality the TEW-MFP1 can also allows you to share USB storage devices over the network.

Utility Installation

Windows Installation

1. For each computer that requires access to the print server, insert the **Utility CD-ROM** into your computer's CD-ROM Drive.

2. Click Install Utility



3. Follow the InstallShield Wizard instructions. Then click Finish.



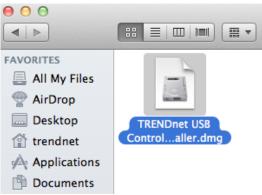
4. Double click on the TRENDnet USB Control Center Utility icon.



5. The utility will automatically find the TEW-MFP1 and your printer. When the TEW-MFP1 is connected to your network.

MAC OS X Installation

- 1. Insert the included CD-ROM into your computer's CD-ROM drive.
- 2. Open the CD contents and locate the "TRENDnet USB Control Center Utility Installer" (.dmg) file. Double-click the file.



3. Double-click the file in the window.



4. You will be prompted to install the utility. Click **Install** to start the installation.



5. You will be prompted for your password to allow the installation. Enter your password and click **OK**.



6. Once the installation is completed. Click **Restart** to restart your computer.



7. Run the TRENDnet USB Control Center Utility. The utility will automatically find the TEW-MFP1 when it is connected to your network

Network Installation

There are 2 ways to install the TEW-MFP1. The easiest way is to use Wi-Fi Protected Setup (WPS) Push Button Configuration (PBC) setup. This feature allows you to setup your TEW-MFP1 with your wireless network with just a push of a button. Please refer to the Manual Setup section if your wireless network does not support Wi-Fi Protected Setup (WPS) Push Button Configuration (PBC).

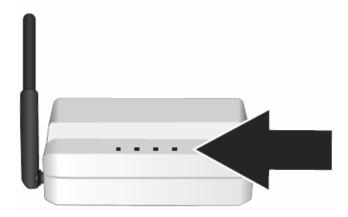
Wi-Fi Protected Setup (WPS) Push Button Configuration (PBC) Setup

Note:

- Make sure your wireless router or access point supports WPS (Wi-FI Protected Setup) PBC (Push button configuration). If not, please refer to the User's Guide on the provided CD-ROM for alternative installation instructions.
- The TEW-736RE must be placed in a location where it can still establish a wireless connection to your wireless network. The most ideal locations are areas where wireless adapters can maintain a 2-3 bars or 30-20% connection rating.
- Verify that any software that is required to operate your printer or multi-function printer is installed before installing the TEW-MFP1.
- The utility must be installed on each computer in order to use your multi-function printer.
- 1. Place the print server in the desired location. The TEW-MFP1 must be placed in a location where it can establish a wireless connection to your wireless network. The most ideal locations are areas where wireless adapters can maintain a 2-3 bars or 30-20% connection rating.
- 2. Plug in the power adapter and connect the print server. Move the power switch to the "On" position.
- 3. Connect your printer to the USB port on the print server.



- 4. Power on the printer.
- 5. Verify that the status LED indicators on the front of the print server to confirm that the device is fully functional (**Power** is solid green, **WLAN** is solid green and **USB** port is solid green).

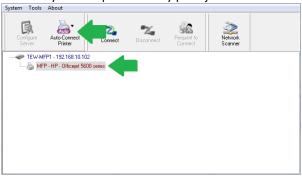


- Press and hold for 5 seconds the WPS button of your wireless router or access
 point. Verify that the WPS feature is enabled and functioning. Please refer to your
 wireless router or access point's manual or contact their technical support for
 instructions.
- Press and hold for 5 seconds the WPS button on the TEW-MFP1.
 Wait 30 seconds while the print server synchronizes with your wireless router or access point.
- 8. Verify that the status LED indicators on the front of the print server to confirm that the device is fully functional (**Power** is solid green, **WLAN** is solid green and **USB** port is solid green).
- 9. Double click on the TRENDnet USB Control Center Utility icon.



The utility will automatically find the TEW-MFP1 and the USB device you have connected to it. **Note:** If the utility cannot find your TEW-MFP1,try to close and reopen the utility. If the utility still cannot locate your TEW-MFP1, it is likely the TEW-MFP1 cannot establish a connection to your wireless network. Place the TEW-MFP1 to a location where it can establish a wireless connection to your wireless network.

11. Select your printer and click **Auto-Connect Printer**. This will set your selected printer to connect to your computer for any print jobs.



Manual Setup

- 1. Plug the TEW-MFP1 with the provided network cable to one of the LAN ports of your router or your network switch.
- 2. Plug in the power adapter and move the power switch to the "On" position on the TEW-MFP1.
- 3. Verify the status LED indicators on the front of the TEW-MFP1 are fully functional (**Power** is solid green and **LAN** port is solid green).
- 4. Double click on the TRENDnet USB Control Center Utility icon.



5. The utility will automatically find the TEW-MFP1.

5. Select the TEW-MFP1 and press Configure Server.



7. When the management page of the TEW-MFP1 opens click on **Config**.



8. Enter the **User Name** and **Password** and then click Login. By default:

Administrator (User Name): admin

Password: admin

Note: User name and Password are case sensitive

9. Click the Wireless tab.



 Under the Site Survey Setting section, click Apply. The TEW-MFP1 will scan your environment for available wireless networks.



11. Select your wireless router or access point and click **Set** button.



12. If your wireless network has wireless security/encryption enabled, select and enter the correct settings and click **Submit**.



13. The device will restart.



- 14. Move the power switch of the TEW-MFP1 to the "Off" position and disconnect the power adapter and network cable.
- 15. Place the TEW-MFP1 in the desired location with the near your printer.

Note: The TEW-MFP1 must be placed in a location where it can establish a wireless connection to your wireless network. The most ideal locations are areas where wireless adapters can maintain a 2-3 bars or 30-20% connection rating.

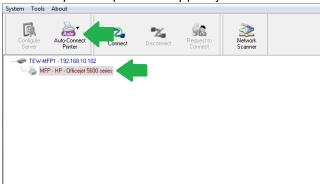
- 16. Plug in the power adapter and move the power switch to the "On" position of the TEW-MFP1
- 17. Connect your printer to the USB port on the TEW-MFP1.
- 18. Power on the printer.
- 19. Verify that the status LED indicators on the front of the TEW-MFP1 are fully functional (**Power** is solid green, WLAN is solid green and **USB** port is solid green).
- Return to the computer you have installed the TRENDnet USB Control Center Utility.
- 21. Double click on the TRENDnet USB Control Center Utility icon.



22. The utility will open and will automatically find the TEW-MFP1 and your printer.

Note: If the utility cannot find your TEW-MFP1,try to close and reopen the utility. If the utility still cannot locate your TEW-MFP1, it is likely the TEW-MFP1 cannot establish a connection to your wireless network. Place the TEW-MFP1 to a location where it can establish a wireless connection to your wireless network.

23. Select your printer and click **Auto-Connect Printer**. This will set your selected printer to connect to your computer for any print jobs.



Using the Utility

The TRENDnet USB Control Center utility is used to communicate with the TE100-MFP1 and any USB device that is connected to the unit. Below describes in detail how to operate the utility for both Windows and Macintosh operating systems.

Launching the Utility

Windows OS

Upon completing the software installation, a desktop shortcut is automatically created. You double click the icon to start the utility or open the utility if it is already running.



If the utility is already running and you attempt to close the window, it will continue to run in the background and you will find the icon in your notification area if the utility is still running. To close and exit the utility and exit the application, you can right-click the notification icon and select **Exit** or click **System > Exit** in the utility main window, however, it is recommended to keep this utility running in the background.



MAC OS X

Upon completing the software installation, a desktop shortcut is automatically created. Double-click the icon to start the utility. Closing the utility will exit the application.



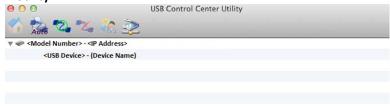
Utility Main Window

In the utility window, you will see the model name and IP address of your print server listed. When USB devices are connected, they will be listed under the model name and IP address of the print server.

Windows OS

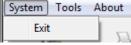


MAC OS X Utility

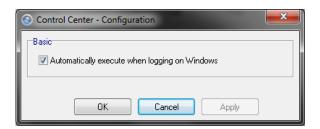


Menu Items (Windows Only)

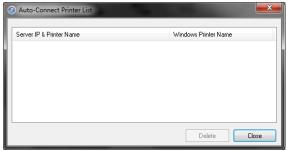
• **System** - Clicking **Exit** will close the utility and exit the application.



- Tools
 - Configuration Checking the option Automatically execute when logging on Windows will automatically start the utility when you log on. Unchecking the option will disable the utility from automatically starting when logging on.



 Auto-Connect Printer List – Provides a list of printers installed on your computer. Select the printer you would like to assign to the Auto-Connect printer list. If you would like to delete printers from this listing, select the printer in the list and click **Delete**. Click **Close** to close the window.



- About
 - About Displays the software/driver version and support contact information.

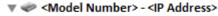
Configure Server

Select the print server you would like to configure in the utility window.

Windows OS



MAC OS X



 Clicking the Configure Server button will open the print server's management page in your web browser. Please refer to see_Log into your router management page see "Access your router management page" on page 14 for additional information on advance settings. **TRENDnet User's Guide**





Windows OS

MAC OS X

Connect

To connect your computer to a USB device, select the USB device in the list, then click the **Connect** button to connect your computer to the USB device.

Note: The utility will only allow one computer to connect to one USB device at any given time, therefore, a computer must disconnect from the USB device first before another computer can connect to it.





Windows OS

MAC OS X

To verify if you are connected to the USB device, a message will appear next to the USB device displaying a message that the USB device is "Manually connected by <your computer name>".

Windows OS

MAC OS X

<USB Device> - (Device Name) (Manually Connected by <your computer name>)

Disconnect

To disconnect your computer from a USB device, select the USB device in the list, then click the **Disconnect** button to disconnect your computer to the USB storage device or printer.

Note: The utility will only allow one computer to connect to one USB device at any given time, therefore, a computer must disconnect from the USB device first before another computer can connect to it.





Windows OS

MAC OS X

To verify if you disconnected from the USB device, the status message next to the message will not show any status message.

Windows OS

······· (Name of device)

MAC OS X

▼ ◆ <Model Number> - <IP Address>

If another computer is currently connected to the USB device you are trying to connect your computer to, you will not be able to connect to it. To verify if another computer is connected to the device, a message will appear next to the USB device displaying a message that the USB device is "Manually connected by <another computer name>".

Windows OS

MAC OS X

<USB Device> - (Device Name) (Manually Connected by <another computer name>) If a USB device is currently being used by another computer, click the Request to **Connect** button to send a request to the computer that is currently connected to the USB device. The computer that is currently connected to USB device will be prompted to "Accept" or "Reject" the your connection request.





Windows OS

MAC OS X

Sending a Request to Connect

You can send a request to connect to the computer that is currently connected to the USB device you would like to establish connection too.

Windows OS

To send t a request to connect to a USB device, click the **Request to Connect** button.



The remote computer will receive the request message below.



- **Accept** Clicking this option will disconnect your computer from the device and allow the requesting computer to connect to the USB device.
- Reject Clicking this option will disregard the request and your computer will
 not be able to connect to the USB

MAC OS X

To send t a request to connect to a USB device, click the **Request to Connect** button.



The local computer sending the request will show the status message below.



The remote computer will receive the request message below.



• **Accept** – Clicking this option will disconnect your computer from the device and allow the requesting computer to connect to the device.

If the remote computer accepts the request, the local computer will display the message below. Click **Close** to close the message.



Reject – Clicking this option will disregard the request.

If the remote computer rejects the request, the local computer will display the message below. Click OK to close the message.



Connect to a Printer

Note: This function applies to stand-alone USB printers or USB multi-function printers. It is required that the printer drivers are installed before your computer is able to print. Please ensure the printer drivers are installed. If the printer drivers are not installed, please refer to your printer manufacturer website or documentation on where to download and how to install the printer drivers. Before installing the printer drivers, connect your computer to the printer using the USB utility first. Some printers may require that the printer is directly connected to the computer in order to complete the driver installation.

Once the printer drivers are installed properly on your computer,

- 1. Select the printer listed in the utility.
- 2. Click **Connect** to connect your computer to the printer.



- 3. Once your computer is connected, you can send print jobs to the printer.
- 4. After you have finished printing, click Disconnect, to make the printer available to other computers on your network that use the printer, or, you can use the Auto-Connect Printer Feature.



Auto-Connect Printer

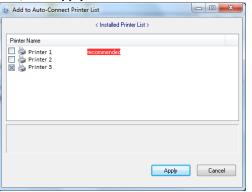
When a USB printer is connected and selected in the main window, clicking this option allows you to enable/disable the auto connect feature to a selected printer in the Auto-Connect printer list. When your computer attempts to print, the Auto-Connect feature will automatically connect your computer to the set Auto-Connect printer assigned in the utility. Once the print job from your computer is completed, it will automatically disconnect to make the printer available to other computers on your network.

Note: It is recommended to enable this feature on all computers that will need to connect to the USB printer. Enabling the Auto-Connect Printer feature will avoid the complexity of having to manually connect and disconnect from the printer for each computer when multiple computers are sending print jobs to the USB printer.

1. Click Auto-Connect Printer.



- 2. Select the assigned printer to use as the auto connect printer by checking the box.
- 3. When you are finished, click **Apply**.



Connect to a Scanner

Note: This function applies to stand-alone USB scanners or USB scanners included with multi-function printers. It is required that the scanner drivers are installed before your computer is able to scan. Please ensure the scanner drivers are installed. If the scanner drivers are not installed, please refer to your printer manufacturer website or documentation on where to download and how to install the scanner drivers. Before installing the scanner drivers, connect your computer to the printer using the USB utility first. Some scanners may require that the scanner is directly connected to the computer in order to complete the driver installation.

- 1. Select the scanner or multi-function printer with scanning capability listed in the utility.
- 2. Click **Connect** to connect your computer to the scanner.



3. Once your computer is connected, you can receive scanned files from the scanner.



4. After you have finished printing, click **Disconnect**, to make the scanner available to other computers on your network that use the scanner.



Advanced Configuration

Note:

- The management page is accessed through the use of your Internet web browser (e.g. Internet Explorer, Firefox, Chrome, Safari, Opera) and will be referenced frequently in this User's Guide.
- When the TEW-MFP1 is set to DHCP the easiest way to access the management page is through the USB Control Center Utility. Follow the below steps to proceed.

Access the management page

1. Double click on the USB Control Center Utility icon.



- 2. The utility will automatically find the TEW-MFP1.
- 3. Select the TEW-MFP1 and press Configure Server.



4. The user interface of the TEW-MFP1 will open. Click on **Config**.

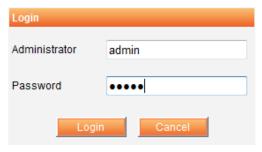


5. Enter the **User Name** and **Password** and then click Login. By default:

Administrator (User Name): admin

Password: admin

Note: User name and Password are case sensitive



Change Wireless settings

Wireless

You can change the wireless settings of the device and connect to another wireless network. Any changes applied to these settings must match your wireless network. Incorrect settings may cause issues.

- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on the Wireless tab and scroll down to the Basic section.



- 3. Select the Network Type you would like set on the device.
 - Ad-Hoc: Peer to Peer connection type

- Infrastructure: Wireless networking connection type
- 4. Enter the SSID or wireless name of your wireless network. Characters entered must match exactly to your wireless network.
- 5. Click **Submit** to apply setting.



Wireless Site Survey

Wireless

The site survey feature allows the device to scan the surrounding area for any available wireless network. This feature can be used instead of manually entering the SSID or wireless name of your wireless network.

- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on the Wireless tab and scroll down to the Site Survey Setting section.
- 3. Press the Apply button to start scanning for available wireless networks.



4. Select your wireless network and click **Set** button



- 5. The selected wireless network will automatically be entered in the SSID field.
- 6. If you cannot see your wireless network click on **Scan AP** to refresh the list.

Wireless Security settings

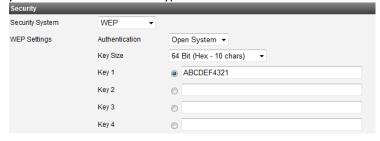
Wireless

Similar to the previous section, you can change the wireless security settings of the device when changes were made on your wireless network. The TEW-MFP1 supports WEP, WPA-PSK and WPA2-PSK security types. WEP is the only security type that can be used when the device is set to Ad-Hoc Network Type. Any changes applied to these settings must match your wireless network. Incorrect settings may cause issues.

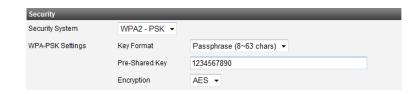
- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on the **Wireless** tab and scroll down to the **Security** section.
- 3. Select the wireless security/encryption type applied on your wireless network under Security System.



4. Enter your wireless network's encryption information.



- WEP
 - Authentication: Select the authentication type
 - Key Size: Authentication Key Size
 - o Key: Selected and enter key set on your wireless network



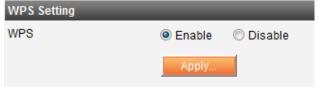
- WPA-PSK or WPA2-PSK
 - Key Format: Select the format type
 - o Pre-Shared Key: Enter the key or password
 - o Encryption: Selected encryption type set on your wireless network
- 5. Click **Apply**.

WPS Setting

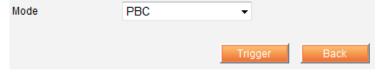
General

Wi-Fi Protected Setup or WPS is a feature that allows the device to authenticate to your wireless network, the TEW-MFP1 supports WPS Push Button and PIN Configuration. When using WPS make sure your wireless router or access point supports these features. The WPS Push Button Configuration or PBC can be initialized from a virtual button following the steps below or from a physical button located on the side of the unit. Please refer to Product Hardware Features section for more information.

- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on Wireless tab and scroll down to the WPS Setting section.
- 3. Select Enable and click on Apply



4. Select the type of WPS Mode you would like to use.



- PBC
 - o **Mode:** Select PBC
 - o Click **Trigger** to initialize WPS
 - o Initiate WPS Push Button on your wireless router or access point



- PIN
- Mode: Select PIN
- o **SSID:** Enter the SSID of your WPS wireless router or access point
- PIN: Select if you want the PIN to Random Generate or Manually Generate the PIN key
- Set PIN: Press to apply the entered PIN key
- o **Default PIN:** Press to return PIN key back to default settings
- Click Trigger to initialize WPS
- o Enter the device's PIN key on your wireless router or access point

Change device IP address

General

Bydefault the device is set to Automatic/DHCP. This setting allows the device to automatically obtain an IP address from your network. However you can statically assign an IP address to the device.

Note: The IP address must be in the same subnet as your network. Incorrect settings may cause issues.

- 1. Log into your router management page (see "Access your router management page" on page 13).
- Click on General tab and scroll down to the TCP/IP section.



- Select Static IP
- 4. Enter the IP address and Subnet Mask settings.
- Click Apply to save settings.

Change Device Information

General

In most cases, you do not need to change the device information and the default settings are just fine. However you can customize these settings to match your network. These settings help you determine or find the device from features like Windows Network Map or a router's client list.

- Server Name: The device name described on your network
- Workgroup: The work group assigned to the device
- Description: The product descript of the device
- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on **General** tab and scroll down to the **Device Information** section.



- 3. Enter the updated device information
- Click Apply.

UPnP

General

Universal Plug and Play (UPnP) is a networking protocol that makes your networking devices discoverable in the network. By default the UPnP setting is set to enable. The device can be discovered under your computer's network map

- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on General tab and scroll down to the UPnP section



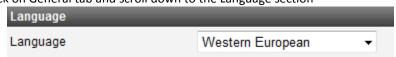
- 3. Select Enable or Disable option
- 4. Click Apply to save settings.

Change Language

General

The device supports multiple languages of the management page. Currently the languages offered are; Western European (English), Central European, Traditional Chinese, Simplified Chinese, Japanese, Korean, Cyrillic, Greek, Arabic, and Thai. You can change the displayed language with the below steps.

- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on General tab and scroll down to the Language section



- 3. Select your desired language on the pull down menu.
- 4. Click **Apply** to save settings.

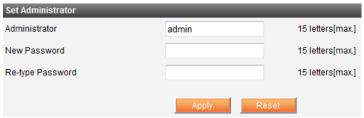
Change Admin Account Setting

Administrator

By default username and login password of the device is *admin* for both username and password. It is recommended to change the default password for added security. You can change both login username and password of the device management page by following the steps below.

Note: Changes to these settings are case sensitive and should be written down somewhere and stored.

- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on Administrator tab and scroll down to the **Set Administrator** section



- 3. Under Administrator section enter your new username information.
- **4.** Under New Password and Re-Type Password section, enter your new password information.
- 5. Click **Apply** to save settings.

Change User Account Setting

Administrator

A user account does not have the ability to make changes to the device settings. You can assign a user account's password information by following the steps below. By default username and login password of the device is *admin* for both username and password. It is recommended to change the default password for added security. You can change both login username and password of the device management page by following the steps below.

Note: Changes to these settings are case sensitive and should be written down somewhere and stored.

TRENDnet User's Guide

- 1. Log into your router management page (see "Access your router management page" on page 13).
- Click on Administrator tab and scroll down to the Set Administrator Set Administrator section



- 3. Under User Name section enter the new login username you would you would like to assign to the user account.
- 4. Under the password section enter the new login password you would like to assign to the user account.
- 5. Under Permission section select the type of access you would like to permit user accounts with; Read **Only** or **Read-Write**.
- 6. Click Add to create the new user account information.
- 7. To delete a user account, select the user account you would like to delete.



8. Click the **Delete** button to permanently remove selected user account.

Maintenance

Restart device

Maintenance

A device restart is similar to power cycling the unit using but using the management screen. A device restart can be a useful tool when troubleshooting your network. The steps below shows you how to perform a device restart.

- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on Maintenance tab



- 3. Click the Restart button
- 4. Click Yes to confirm the device restart



5. The home page will automatically appear once the device has completed restarting.

Reset device

Maintenance

A device reset will set the device back to factory default settings. This can be a useful tool when troubleshooting your network. There are two ways on how to reset the device. You can simply press and hold for 10 second the reset button located on the side of the unit. The other way is to follow the steps below.

- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on Maintenance tab.

Reset to Factory Default

3. Click the Reset to Factory Default button



4. Click Yes to confirm the reset

Upgrade Firmware

Maintenance

Firmware upgrades are available to A device reset will set the device back to factory default settings. This can be a useful tool when troubleshooting your network. There are two ways on how to reset the device. You can simply press and hold for 10 seconds the reset button located on the side of the unit. The other way is to follow the steps below.

- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on Maintenance tab
- 3. Click the Download New Firmware button, this will automatically open a web browser to TRENDnet.com

Download New Firmware

- 4. Go to the product webpage and in the download section of the product webpage you will find available update firmware.
- 5. Download and save .zip firmware file to our computer
- 6. Unzip the downloaded file into your computer
- 7. Return back to the device management screen and click the Upgrade Firmware button



8. Click Browse and select the firmware file from the unzipped folder



9. Click the Upload button to upgrade the device firmware

Device Status

System Status

Status

The system status page provides device information of your unit. This information can be used when troubleshooting your network.

- Firmware Version: Device firmware version
- Model: Device model name
- MAC Address: MAC address of the device
- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on Status



3. Select System Status tab

Network Status

Status

The network status page provides network information of your unit. This information can be used when troubleshooting your network.

- Name: Device name
- Access Mode: Device mode set
- IP Address: Current IP address assigned to the device
- Subnet Mask: Current subnet mask assigned to the device
- DHCP Server: DHCP Server address of the device
- Lease Time: IP address lease time
- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on Status



Select Network Status tab

Wireless Status

Status

The wireless status page provides wireless network information of your unit. This information can be used when troubleshooting your network.

- Name: Device name
- SSID: SSID of your wireless network the device currently connected to
- BSSID: BSSID information your wireless network
- Channel No: Channel your wireless network is using
- Network Type: Type of network is being used on the device
- Link Quality: Quality of the wireless connection
- Signal Strength: Wireless signal strength of the wireless connection
- **Security**: Wireless security or encryption applied on the device
- 1. Log into your router management page (see "Access your router management page" on page 13).
- 2. Click on Status tab



3. Select Wireless Status tab

Management Page Structure

General

- Device Information
 - o Server Name
 - o Workgroup
 - o Description
- Access Mode
 - Server Mode
 - o NetUSB mode
- TCP/IP
 - Automatic/DHCP
 - o Static IP
- UPnP
- Language

Wireless

- Basic
 - Network Tyoe
 - o SSID
- Security
- Site Survey Setting
- WPS Setting

Administrator

- Set Administrator
 - Administrator user name
 - Administrator Password
- User Account List
 - User account username
 - User account password
 - o User account Permission

Maintenance

- Restart
- Reset to Factory Default
- Download new Firmware
- Upgrade Firmware

Status

- System Status
 - o Firmware Version
 - o Model Name
 - MAC Address
- Network Status
 - o Name
 - Access Mode
 - o IP Address
 - Subnet Mask
 - DHCP Server
 - o Lease Time
- Wireless Status
 - o Name
 - o SSID
 - o BSSID
 - o Channel No
 - Network Type
 - Link Quality
 - Signal Strength
 - Security

Troubleshooting

Q Q: I typed http://192.168.10.100 in my Internet Browser Address Bar, but an error message says "The page cannot be displayed." How can I access the printer server's management page?

Answer:

- 1. Check your hardware settings again. See "Network Installation" on page 4.
- 2. Make sure the Power and LAN lights are lit.
- 3. Make sure your network adapter TCP/IP settings are set to <u>Obtain an IP address</u> automatically or DHCP (see the steps below).
- 4. Press on the factory reset button for 15 seconds, the release.

Windows 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/2000

- a. Go into the **Control Panel**, double-click the **Network Connections** icon
- b. Right-click the **Local Area Connection** icon and the 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.

Q: How can I verify if my wireless router or access point supports Wi-Fi Protected Setup (WPS) Push Button Configuration (PBC)?

Answer:

- 1. Check the product specifications of your wireless router or access point.
- 2. Contact your wireless router or access point technical support.

Q: Can I use Wi-Fi Protected Setup PIN Configuration and not Push Button Configuration (PBC).

Answer:

1. No, the TEW-MFP1 only supports Wi-Fi Protected Setup (WPS) Push Button Configuration (PBC).

Q: The utility cannot find my print server. What should I do? Answer:

- 1. Make sure your router and your wireless network is properly working.
- 2. Verify that your computer is properly connected to your network.
- 2. Make sure that the print server is turned on and is connected to your network
- 3. Close the utility and re-open it

Q: I cannot print to my printer. What should I do? Answer:

- 1. Make sure that all drivers and software that is provided with your printer are installed on your computer. Please note these drivers and software are required to be installed on computers that will be using the printer behind the print server.
- 2. Verify that the printer is working.
- 3. Power cycle the printer and print server. Close and re-open the utility.

Q: I cannot find my USB device connected to the print server. What should I do? Answer:

- 1. Make sure that all drivers and software that is provided with your USB device installed on your computer. Please note these drivers and software are required to be installed on computers that will be using the printer behind the print server.
- 2. Verify that the USB device is properly working and connect it directly to your computer.
- 3. Power cycle the printer and print server. Close and re-open the utility.

Q: Can I connect a USB Hub to the print server to add additional USB devices? Answer:

TRENDnet User's Guide TEW-MFP1

1. Yes you can, however please consider that most USB devices are powered by the USB port and some devices requires an optimal power source. Connecting a USB hub will degrade the power source and your device may not work properly.

Q: I have completed the utility installation but the utility does not open. What should I do?

Answer:

- 1. Make sure that your computer meets utility's the minimum requirements.
- 2. Uninstall the utility and reinstall the utility.
- 3. Restart your computer

Appendix

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 2000/XP/Vista/7

- 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.

MAC OS X

- 1. Navigate to your **Applications** folder and open **Utilities**.
- 2. Double-click on **Terminal** to launch the command prompt.
- 3. In the command prompt, type *ipconfig getifaddr <en0 or en1>* to display the wired or wireless IP address settings.

Note: en0 is typically the wired Ethernet and en1 is typically the wireless Airport interface.

Graphical Method

MAC OS 10.6/10.5

- 1. From the Apple menu, select **System Preferences**.
- 2. In System Preferences, from the ${\bf View}$ menu, select ${\bf Network}.$
- 3. In the Network preference window, click a network port (e.g., Ethernet, AirPort, modem). If you are connected, you'll see your IP address settings under "Status:"

MAC OS 10.4

- 1. From the Apple menu, select **Location**, and then **Network Preferences**.
- 2. In the Network Preference window, next to "Show:", select **Network Status**. You'll see your network status and your IP address settings displayed.

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 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/2000

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

MAC OS 10.4/10.5/10.6

- a. From the Apple, drop-down list, select System Preferences.
- b. Click the **Network** icon.
- c. From the **Location** drop-down list, select **Automatic**.
- d. Select and view your Ethernet connection.

In MAC OS 10.4, from the **Show** drop-down list, select **Built-in Ethernet** and select the **TCP/IP** tab.

In MAC OS 10.5/10.6, in the left column, select **Ethernet**.

e. Configure TCP/IP to use DHCP.

In MAC 10.4, from the **Configure IPv4**, drop-down list, select **Using DHCP** and click the **Apply Now** button.

In MAC 10.5, from the **Configure** drop-down list, select **Using DHCP** and click the **Apply** button.

In MAC 10.6, from the **Configure** drop-down list, select **Using DHCP** and click the **Apply** button.

f. Restart your computer.

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

Steps to improve wireless connectivity

There are a number of factors that can impact the range of wireless devices. Follow these tips to help improve your wireless connectivity:

- Adjust your wireless devices so that the signal is traveling in a straight path, rather than at an angle. The more material the signal has to pass through the more signal you will lose.
- 2. Keep the number of obstructions to a minimum. Each obstruction can reduce the range of a wireless device. Position the wireless devices in a manner that will minimize the amount of obstructions between them.
- 3. Building materials can have a large impact on your wireless signal. In an indoor environment, try to position the wireless devices so that the signal passes through less dense material such as dry wall. Dense materials like metal, solid wood, glass or even furniture may block or degrade the signal.
- 4. Antenna orientation can also have a large impact on your wireless signal. Use the wireless adapter's site survey tool to determine the best antenna orientation for your wireless devices.
- 5. Interference from devices that produce RF (radio frequency) noise can also impact your signal. Position your wireless devices away from anything that generates RF noise, such as microwaves, radios and baby monitors.
- 6. Any device operating on the 2.4GHz frequency will cause interference. Devices such as 2.4GHz cordless phones or other wireless remotes operating on the 2.4GHz frequency can potentially drop the wireless signal.

- 7. Although the phone may not be in use, the base can still transmit wireless signal. Move the phone's base station as far away as possible from your wireless devices.
- 8. Make sure that your router is in a good location.
 - a. For the widest coverage area, install your router near the center of your home, and near the ceiling, if possible.
 - b. Avoid placing the router on or near metal objects (such as file cabinets and metal furniture), reflective surfaces (such as glass or mirrors), and masonry walls.
 - c. Any obstruction can weaken the wireless signal (even non-metallic objects), so the fewer obstructions between the router and the wireless device, the better.
 - d. Place the router in a location away from other electronics, motors, and fluorescent lighting.
 - e. Many environmental variables can affect the router's performance, so if your wireless signal is weak, place the router in several locations and test the signal strength to determine the ideal position.

If possible, upgrade wireless network interfaces (such as wireless cards in computers) from older wireless standards to 802.11n. If a wirelessly networked device uses an older standard, the performance of the entire wireless network may be slower. If you are still experiencing low or no signal consider repositioning the wireless devices or installing additional access point.

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 thatto which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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. 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.

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.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destination. The firmware setting is not accessible by the end user.

Certifications

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.

Technical Specifications

Hardware	
Standards	IEEE 802.11b, IEEE 802.11g, IEEE 802.11n, IEEE 802.3 (10Base-T), IEEE 802.3u (100Base-TX), USB 1.1/2.0
LAN Port	1 x 10/100Mbps Auto-MDIX Ethernet port
USB Ports	1 x USB 2.0 Type-A
LED Indicators	Power, WLAN, LAN, USB
TCP/IP Protocol Supported	DHCP
Control Center Utility Supported OS	Windows: 7(32/64-bit) / Vista (32/64-bit) / XP(32/64-bit)
USB Devices Supported	Mac OS X: 10.4/10.5/10.6/10.7
O3B Devices Supported	127 Max.
Button	Init button: restores factory default settings (press over 10 seconds), Activates WPS Function (press for 2~9 seconds)
Power	Input: 120 ~ 240V AC, 50~60Hz Output: 12V DC, 1.5A
Power Consumption	2.04 Watts (max.)
Dimensions (LxWxH)	75 x 58 x 24 mm (3 x 2.3 x 1 in.)
Weight	62 g (2.2 oz.)
Temperature	Storage: -10 ~ 60°C (13.9~139 °F) Operating: 5 ~ 40°C (41~104 °F)
Humidity	Max. 90% (non-condensing)

Wireless	
Frequency	2.412 ~ 2.462 GHz (FCC) 2.412 ~ 2.472 GHz (ETSI)
Antenna	2dBi external fixed dipole antenna
Media Access Protocol	CSMA/CA with ACK
Modulation	CCK, DQPSK, BDSPK, OFDM with BPSK, QPSK and 16/64-QAM sub-carrier modulations
Data Rate	802.11b:11Mbps 802.11g: 54Mbps 802.11n: 150Mbps
Security	64/128-bit WEP, WPA/WP2-PSK
Output Power	802.11b: 16dBm (typical) 802.11g: 13dBm (typical) 802.11n: 13dBm (typical)
Receiving Sensitivity	802.11b: -85dBm (typical) @ 11Mpbs 802.11g: -68dBm (typical) @ 54Mpbs 802.11n: -68dBm (typical) @ 150Mpbs
Channels	1~ 11 (FCC), 1~13 (ETSI)
Certifications	CE, FCC

^{*}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.

^{**} Control Center utility installation required for each computer in order to access the print server

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.

TEW-MFP1 – 3 Years Warranty

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

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

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

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

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

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Product Warranty Registration

Please take a moment to register your product online.

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

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