

# TP-LINK®

## User Guide

### TX-6610

### 1-Port Gigabit GPON Terminal



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## FCC 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 or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

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

## CE Mark Warning



This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.



Продукт сертифіковано згідно с правилами системи УкрСЕПРО на відповідність вимогам нормативних документів та вимогам, що передбачені чинними законодавчими актами України.



## Safety Information

- When product has power button, the power button is one of the way to shut off the product; when there is no power button, the only way to completely shut off power is to disconnect the product or the power adapter from the power source.
- Don't disassemble the product, or make repairs yourself. You run the risk of electric shock and voiding the limited warranty. If you need service, please contact us.
- Avoid water and wet locations.

This product can be used in the following countries:

AT	BG	BY	CA	CZ	DE	DK	EE
ES	FI	FR	GB	GR	HU	IE	IT
LT	LV	MT	NL	NO	PL	PT	RO
RU	SE	SK	TR	UA			

## DECLARATION OF CONFORMITY

For the following equipment:

Product Description: 1-Port Gigabit GPON Terminal

Model No.: **TX-6610**

Trademark: **TP-LINK**

We declare under our own responsibility that the above products satisfy all the technical regulations applicable to the product within the scope of Council Directives:

Directives 2004 / 108 / EC, Directives 2006 / 95 / EC, Directives 2011/65/EU

The above product is in conformity with the following standards or other normative documents:

**EN 55022:2010**

**EN 55024:2010**

**EN 61000-3-2:2006+A1:2009+A2:2009**

**EN 61000-3-3:2008**

**EN 60950-1:2006+A11: 2009+A1:2010+A12:2011**

*The product carries the CE Mark:*



Person responsible for making this declaration:

A handwritten signature in black ink, appearing to read 'Yang Hongliang', is written over a light gray rectangular background.

Yang Hongliang

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Date of issue: 2013

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# Package Contents

The following contents should be found in your package:

- One TX-6610 1-Port Gigabit GPON Terminal
- One Power Adapter for TX-6610 1-Port Gigabit GPON Terminal
- Quick Installation Guide
- One RJ45 cable
- One Resource CD for TX-6610 1-Port Gigabit GPON Terminal, including this User Guide

 **Note:**

Make sure that the package contains the above items. If any of the listed items are damaged or missing, please contact your distributor.

# Chapter 1. Product Overview

Thank you for choosing the **TX-6610 1-Port Gigabit GPON Terminal**.

## 1.1 Product Overview

TP-LINK's TX-6610 is a next-generation Gigabit Passive Optical Network (GPON) terminal, ideal for Fiber to The Home solution. It's an incredibly robust device allowing users to access high-speed internet connections via its GPON port and share it with a Gigabit Ethernet port. With the transmission rates of up to 2.488Gbps, one GPON port and one Gigabit Ethernet port, the TX-6610 provides high-performance forwarding capabilities to ensure smooth VoIP, HD video streaming experiences.

## 1.2 Main Features

- Complies with ITU G.984.1, ITU G.984.2, ITU G.984.3 and ITU G.984.4 provides users comprehensive GPON network compatibility
- Downstream rates of up to 2.488Gbps and upstream rates up to 1.244Gbps
- Gigabit port ensures rapid transfer speeds
- Quality of Service control for traffic prioritization and bandwidth management
- Quick and hassle-free installation
- Intelligent power-saving method

## 1.3 Panel Layout

### 1.3.1 The Front Panel

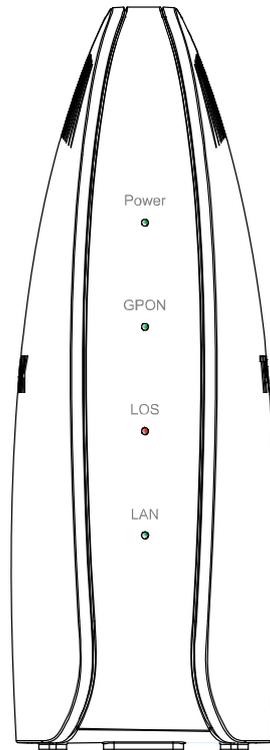


Figure 1-1

The GPON Terminal's LEDs are located on the front panel. They indicate the device's working status. For details, please refer to LED Explanation.

#### LED Explanation:

Name	Status	Indication
Power	On	The ONT is powered on.
	Off	The ONT is off.
GPON	On	The ONT has connected to the OLT.
	Flash	The ONT is trying to set up a connection to the OLT.
	Off	The ONT has not connected to the OLT.
LOS	On	The Rx optical power of the ONT is abnormal.
	Flash	The Rx optical power of the ONT is lower than the optical receiver sensitivity.
	Off	The Rx optical power of the ONT is normal.

LAN	On	There is a device connected to this LAN port.
	Flash	The device is sending or receiving data over this LAN port.
	Off	There is no device connected to this LAN port.

### 1.3.2 The Back Panel

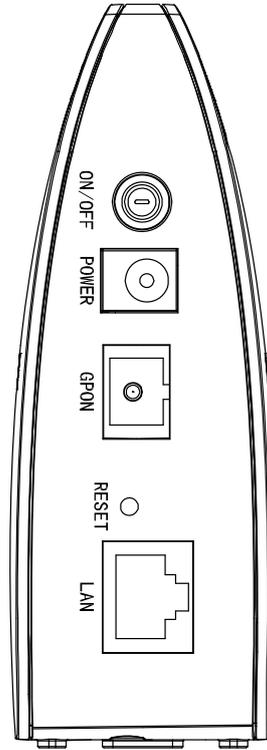


Figure 1-2

- **ON/OFF:** The switch for the power.
- **POWER:** The Power plug is where you will connect the power adapter.
- **GPON:** The GPON is where you will connect the fiber.
- **RESET:** There are two ways to reset the ONT's factory defaults.
  - Method one:** With the ONT powered on, use a pin to press and hold the Reset button for at least 5 seconds. And the ONT will reboot to its factory default settings.
  - Method two:** Restore the default setting from "Management → Factory Defaults" of the ONT's Web-based utility.
- **LAN:** Through the port, you can connect the ONT to your PC or the other Ethernet network devices.

# Chapter 2. Connecting the ONT

## 2.1 System Requirements

- Broadband Internet Access Service (GPON).
- PCs with a working Ethernet Adapter and an Ethernet cable with RJ45 connectors.
- TCP/IP protocol on each PC.
- Web browser, such as Microsoft Internet Explorer, Mozilla Firefox or Apple Safari.

## 2.2 Installation Environment Requirements

- The Product should not be located where it will be exposed to moisture or excessive heat.
- Place the ONT in a location where it can be connected to the various devices as well as to a power source.
- Make sure the cables and power cord are safely placed out of the way so they do not create a tripping hazard.
- The ONT can be placed on a shelf or desktop.
- Keep away from the strong electromagnetic radiation and the device of electromagnetic sensitive.

## 2.3 Connecting the ONT

Before installing the device, please make sure your broadband service provided by your ISP is available. If there is any problem, please contact your ISP. Before cable connection, cut off the power supply and keep your hands dry. You can follow the steps below to install it.

**Step 1:** Connect the fiber. Plug one end of the fiber into the GPON port on the rear panel of TX-6610, and insert the other end into the wall socket.

**Step 2:** Connect the Ethernet cable. Attach one end of a network cable to your computer's Ethernet port or a regular hub/switch port, and the other end to the LAN port on the TX-6610.

**Step 3:** Power on the computers and LAN devices.

**Step 4:** Attach the power adapter. Connect the power adapter to the power connector on the rear of the device and plug in the adapter to an electrical outlet or power extension. The electrical outlet shall be installed near the device and shall be easily accessible.

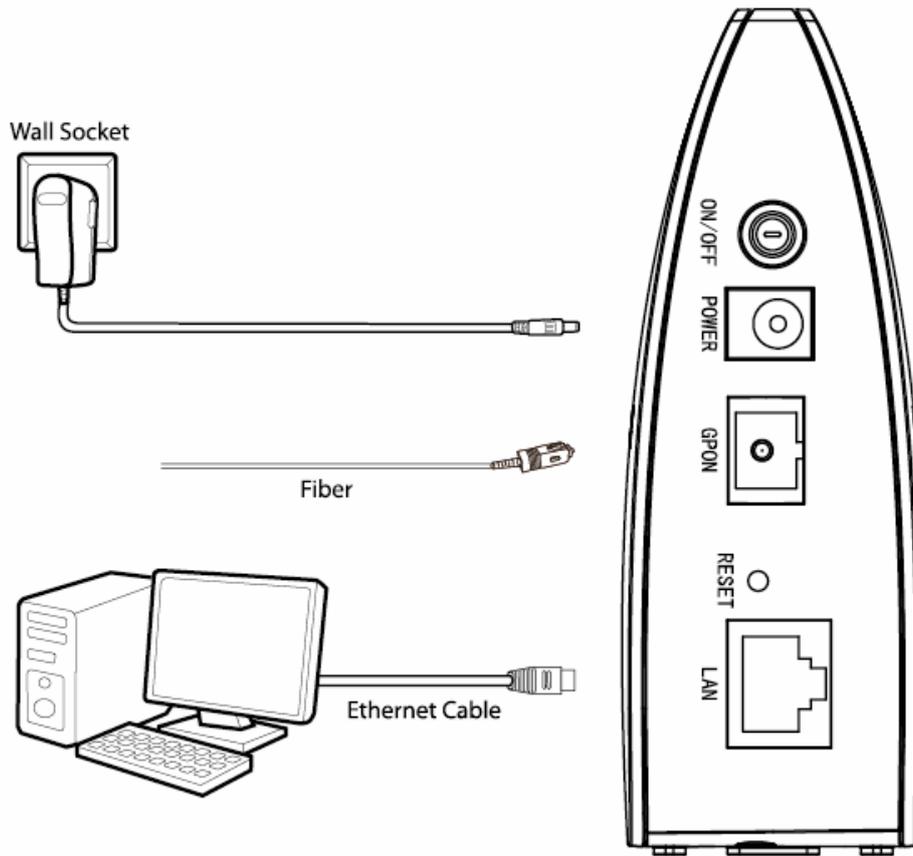


Figure 2-1

## Chapter 3. Quick Installation Guide

### 3.1 TCP/IP Configuration

The default IP address of the TX-6610 1-Port Gigabit GPON Terminal is 192.168.1.1. And the default Subnet Mask is 255.255.255.0. These values can be changed as you desire. In this guide, we use all the default values for description.

Connect the local PC to the LAN/WAN port of the Router. And then you can configure the IP address for your PC in the following way.

- Obtain an IP address automatically
  - 1) Set up the TCP/IP Protocol in "**Obtain an IP address automatically**" mode on your PC. If you need instructions as to how to do this, please refer to [Appendix B: Configuring the PC](#).
  - 2) Then the built-in DHCP server will assign IP address for the PC.

Now, you can run the Ping command in the command prompt to verify the network connection. Please click the **Start** menu on your desktop, select **run** tab, type **cmd or command** in the field and press **Enter**. Type **ping 192.168.1.1** on the next screen, and then press **Enter**.

If the result displayed is similar to the screen below, the connection between your PC and the router has been established.

```
Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Figure 3-1

If the result displayed is similar to the screen shown below, it means that your PC has not connected to the router.

```
Pinging 192.168.1.1 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Figure 3-2

You can check it following the steps below:

### 1) Is the connection between your PC and the router correct?

The LEDs of LAN port which you link to the device and the LEDs on your PC's adapter should be lit.

### 2) Is the TCP/IP configuration for your PC correct?

If the router's IP address is 192.168.1.1, your PC's IP address must be within the range of 192.168.1.2 ~ 192.168.1.254.

## 3.2 Quick Installation Guide

With a Web-based utility, it is easy to configure and manage the TX-6610 1-Port Gigabit GPON Terminal. The Web-based utility can be used on any Windows, Macintosh or UNIX OS with a Web browser, such as Microsoft Internet Explorer, Mozilla Firefox or Apple Safari.

1. To access the configuration utility, open a web-browser and type the default address `http://192.168.1.1` in the address field of the browser.



Figure 3-3

After a moment, a login window will appear, similar to the Figure 3-4. Enter admin for the User name and Password, both in lower case letters. Then click the **OK** button or press the **Enter** key.



Figure 3-4

#### Note:

- 1) Do not mix up the user name and password with your ONT account user name and password which are needed for PPP connections.
- 2) If the above screen does not pop up, it means that your Web-browser has been set to a proxy. Go to **Tools** menu→**Internet Options**→**Connections**→**LAN Settings**, in the screen that appears, cancel the Using Proxy checkbox, and click **OK** to finish it.
2. After your successful login, you will see the Login screen as shown in Figure 3-5. Click **“Network Setting”**→**“PON Certification”** to complete the PON setting. You are required to enter **GPON Password** or **GPON SN** or both provided by your ISP to pass the OLT

authentication. For details, please consult your ISP. Click **Save** to make your settings take effect.

### PON Certification

---

#### GPON Password

GPON Password(Notice: Maximum 10 ASCII characters)

**Old Password:**  (0)characters

**New Password:**

---

#### GPON SN

GPON SN(Notice: Must be 16 Hexadecimal Numbers )

**Old SN:**

**New SN:**

Figure 3-5

3. Run the dialing software to connect to the Internet. For details, please refer to [T1](#) in **Troubleshooting**.

## Chapter 4. Configuring the ONT

This chapter will show each Web page's key function and the configuration way.

### 4.1 Login

After your successful login, you will see the five main menus on the left of the Web-based utility. On the right, there are the corresponding explanations and instructions.

Status
Network Setting
Management

The detailed explanations for each Web page's key function are listed below.

### 4.2 Status

Choose "**Status**", you can see the corresponding information about **System Status**, **LAN**, **PON** and **Statistics**.

System Status				
<b>System Status</b>				
	<b>ONU Type:</b>	1GE SFU GPON		
	<b>System UP Time:</b>	0:5:42:49(dd:hh:mm:ss)		
	<b>Firmware Version:</b>	3.1.1.1 build 130912 Rel.38824n		
	<b>Hardware Version:</b>	TX-6610 v2 3.1.1.1		
<b>LAN</b>				
	<b>IP Address:</b>	192.168.1.1		
	<b>Subnet Mask:</b>	255.255.255.0		
	<b>MAC Address:</b>	00:11:22:33:44:55		
	<b>LAN Status:</b>	Connected		
	<b>LAN Model:</b>	100Mbps full duplex		
	<b>Flow Control:</b>	Off		
<b>PON</b>				
	<b>Access Mode:</b>	GPON		
	<b>ONU ID:</b>	255		
	<b>Authentication:</b>	Fiber disconnected		
	<b>Upstream FEC:</b>	Off		
	<b>Downstream FEC:</b>	Off		
	<b>Temperature:</b>	54.31 °C		
	<b>Voltage:</b>	3240 mV		
	<b>Bias Current:</b>	0.00 mA		
	<b>TX Power:</b>	-- dBm		
	<b>RX Power:</b>	-- dBm		
<b>Statistics</b>				
	<b>Type</b>	<b>PON</b>	<b>OMCI</b>	<b>LAN</b>
	<b>RX Packets</b>	0	0	13675
	<b>TX Packets</b>	0	0	2186
	<b>Drop Packets</b>	N/A	N/A	10
	<b>Error Packets</b>	N/A	N/A	0
<a href="#">Refresh</a>				

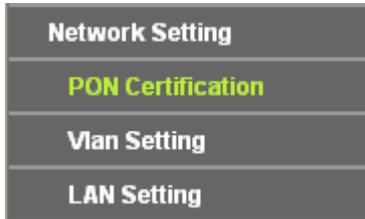
Figure 4-1

- **System Status:** Here shows the system information of the ONT.
- **LAN:** The current port status of the ONT.
- **PON:** Here shows the ONT's current GPON module information.
- **Statistics:** Here you can view the statistics of the ONT.

Click **Refresh** to update this page.

## 4.3 Network Setting

Choose “**Network Setting**”, there are three submenus under the main menu. Click any one of them, and you will be able to configure the corresponding function.



### 4.3.1 PON Certification

Choose “**Network Setting**”→“**PON Certification**”, the GPON Configuration screen will appear on the page as shown in Figure 4-2. You are required to enter the **GPON Password** or **GPON SN** or **both** to pass the OLT authentication before you connect to the Internet. For details, please consult your ISP.

PON Certification

---

**GPON Password**

GPON Password(Notice: Maximum 10 ASCII characters)

**Old Password:**  (0)characters

**New Password:**

---

**GPON SN**

GPON SN(Notice: Must be 16 Hexadecimal Numbers )

**Old SN:**

**New SN:**

Figure 4-2

#### GPON Password

- **Old Password:** Displays the factory default password.
- **New Password:** Enter the password provided by your ISP.

Click **Save** to make the settings take effect.

#### GPON SN

- **Old SN:** Displays the factory default SN.
- **New SN:** Enter the SN provided by your ISP.

Click **Save** to make the settings take effect.

### 4.3.2 VLAN Setting

Choose “**Network Setting**”→“**VLAN Setting**”, the VLAN Setting screen will appear on the page as shown in Figure 4-3.

VLAN Setting

---

**VLAN Mode**

This function is used to set the available VLAN mode and VLAN vid. And you can use [VLAN Scan](#) function to get vlan mode and vlan vid

VLAN Mode:

---

**VLAN Scan**

This function is used to detect the available VLAN mode and VLAN vid.

Dial Type	VLAN Mode	VLAN vid
PPPoE	VLAN TAG Mode	100

Figure 4-3

➤ **VLAN Mode:** Select your desired VLAN Mode from the dropdown list.

Click the **Start VLAN Scan** button to search for available VLAN Mode and VLAN vid.

### 4.3.3 LAN Setting

Choose “**Network Setting**”→“**LAN Setting**” menu and you will see the LAN screen as shown in Figure 4-4. You can change the LAN IP address on this page.

LAN Setting

---

LAN IP Address and Mask

IP Address:

Mask:

---

Figure 4-4

- **IP Address:** Enter the ONT's local IP Address, then you can access to the Web-based Utility via the IP Address, the default value is 192.168.1.1.
- **Subnet Mask:** Enter the ONT's Subnet Mask, the default value is 255.255.255.0.

Click **Save And Reboot** to make the settings take effect.

 **Note:**

If you change the IP Address of LAN, you must use the new IP Address to log in the ONT.

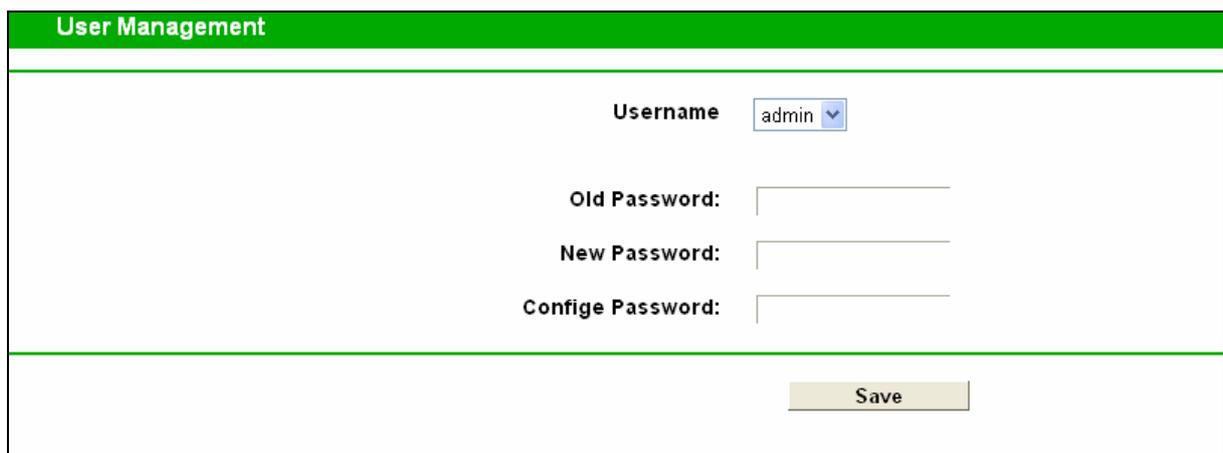
## 4.4 Management

Choose menu “**Management**”, and you will see the submenus under the main menu: **User management**, **Firmware Upgrade**, **Factory Defaults** and **Reboot**. Click any one of them, and you will be able to configure the corresponding function. The detailed explanations for each submenu are provided below.



### 4.4.1 User Management

Choose menu “**Management**” → “**User Management**”, and then you can change the factory default user name and password of the ONT in the next screen as shown in Figure 4-5. TX-6610 provides two users: admin/admin and user/user. Both can be used to log in the management page.



**User Management**

**Username**

**Old Password:**

**New Password:**

**Configure Password:**

Figure 4-5

It is strongly recommended that you should change the factory default user name and password of the ONT, because all users who try to access the ONT's Web-based utility will be prompted for the ONT's default user name and password.

 **Note:**

- 1) The new user name and password cannot exceed 14 characters in length and not include any spaces. Enter the new Password twice to confirm it.
- 2) If you use the “user” to log in the ONT’s management page, only the Status and Statistics page will you see, as shown in Figure 4-6.

Status	System Status			
Network Setting	System Status			
Management	<p><b>ONU Type:</b> 1GE SFU GPON</p> <p><b>System UP Time:</b> 0:5:42:49(dd:hh:mm:ss)</p> <p><b>Firmware Version:</b> 3.1.1.1 build 130912 Rel.38824n</p> <p><b>Hardware Version:</b> TX-6610 v2 3.1.1.1</p>			
	LAN			
	<p><b>IP Address:</b> 192.168.1.1</p> <p><b>Subnet Mask:</b> 255.255.255.0</p> <p><b>MAC Address:</b> 00:11:22:33:44:55</p> <p><b>LAN Status:</b> Connected</p> <p><b>LAN Model:</b> 100Mbps full duplex</p> <p><b>Flow Control:</b> Off</p>			
	PON			
	<p><b>Access Mode:</b> GPON</p> <p><b>ONU ID:</b> 255</p> <p><b>Authentication:</b> Fiber disconnected</p> <p><b>Upstream FEC:</b> Off</p> <p><b>Downstream FEC:</b> Off</p> <p><b>Temperature:</b> 54.31 °C</p> <p><b>Voltage:</b> 3240 mV</p> <p><b>Bias Current:</b> 0.00 mA</p> <p><b>TX Power:</b> -- dBm</p> <p><b>RX Power:</b> -- dBm</p>			
	Statistics			
	Type	PON	OMCI	LAN
	RX Packets	0	0	13675
	TX Packets	0	0	2186
	Drop Packets	N/A	N/A	10
	Error Packets	N/A	N/A	0
	Refresh			

Figure 4-6

#### 4.4.2 Firmware Upgrade

Choose menu “**Management**” → “**Firmware Upgrade**”, and then you can update the latest version of firmware for the ONT on the following screen.

Figure 4-7

**To upgrade the ONT's firmware, follow the instructions below:**

- 1) Download a most recent firmware upgrade file from our website ([www.tp-link.com](http://www.tp-link.com)).
- 2) Type the path and file name of the update file into the “File Path” field. Or click the **Browse** button to locate the update file.
- 3) Click the **Upgrade** button.
- 4) The ONT will reboot while the upgrading has been completed.

 **Note:**

- 1) New firmware versions are posted at <http://www.tp-link.com> and can be downloaded for free. There is no need to upgrade the firmware unless the new firmware has a new feature you want to use. However, when experiencing problems caused by the ONT rather than the configuration, you can try to upgrade the firmware.
- 2) When you upgrade the ONT's firmware, you may lose its current configurations, so before upgrading the firmware please write down some of your customized settings to avoid losing important settings.
- 3) Do not turn off the ONT or press the Reset button while the firmware is being upgraded. Loss of power during the upgrade could damage the ONT.
- 4) The firmware version must correspond to the hardware.
- 5) The upgrade process takes a few moments and the ONT restarts automatically when the upgrade is completed.

#### 4.4.3 Factory Defaults

Choose menu “**Management**” → “**Factory Defaults**” and then and you can restore the configurations of the ONT to its factory defaults on the following screen.

Figure 4-8

- **Also erase current PON settings:** Check this box, the current PON settings will be deleted when you restore the configurations of the ONT to its factory defaults.

Click the **Restore** button to reset all configuration settings to their default values.

- The default **User Name**: admin
- The default **Password**: admin

 **Note:**

All changed settings will be lost when defaults are restored.

#### 4.4.4 Reboot

Choose menu “**Management**” → “**Reboot**” and then you can click the **Reboot** button to reboot the ONT via the next screen.

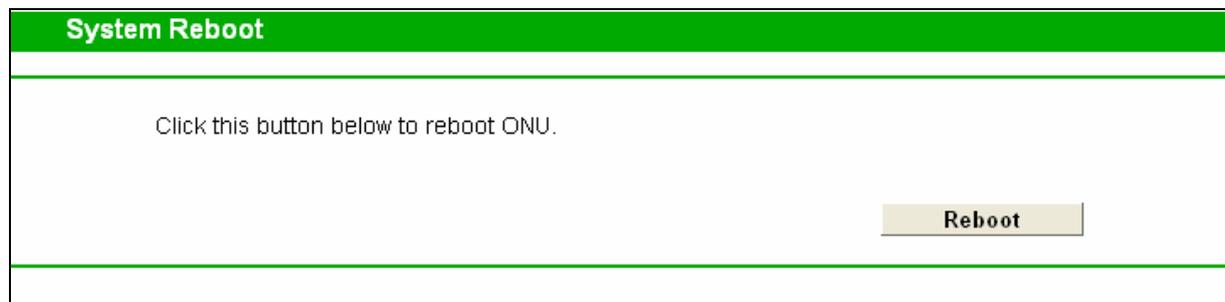


Figure 4-9

## Appendix A: Specifications

General				
Standards and Protocols	802.3, 802.3u, 802.3ab, 802.1p, 802.1q, ITU-T G.984.1, G.984.2, G.984.3, G.984.4			
Safety & Emission	FCC, CE			
Ports	One 10/100/1000M Auto-Negotiation RJ45 port (Auto MDI/MDIX) One SC/UPC (GPON) port			
LEDs	Power, GPON, LOS, LAN			
Network Medium	10Base-T	UTP category 3, 4, 5 cable (maximum 100m)		
		EIA/TIA-568 100Ω STP (maximum 100m)		
	100Base-TX	UTP category 5, 5e cable (maximum 100m)		
		EIA/TIA-568 100Ω STP (maximum 100m)		
	1000Base-TX	UTP category 5e, 6 cable (maximum 100m)		
		EIA/TIA-568 100Ω STP (maximum 100m)		
GPON Class B+	G.652 single mode fiber (maximum 20km)			
GPON Parameter	Interface	SC/UPC		
	Distance	20km		
	Date Rate	Downstream	2.488Gbps/s	
		Upstream	1.244Gbps/s	
	Wavelength	Tx	1310nm	
		Rx	1490nm	
	Transmitter	DFB Laser		
	Receiver	APD-TIA		
	Tx Power	0.5dBm~5dBm		
Rx Sensitivity	≤-27dBm			
System Requirement	Internet Explorer 5.0 or later, Netscape Navigator 6.0 or later			

	Win 9x/ ME/ 2000/ XP/ Vista/ 7/8
<b>Physical and Environment</b>	
Working Temperature	0°C ~ 40°C
Working Humidity	10% ~ 90% RH (non-condensing)
Storage Temperature	-40°C ~ 70°C
Storage Humidity	5% ~ 90% RH (non-condensing)

## Appendix B: Configuring the PC

In this section, we'll introduce how to install and configure the TCP/IP correctly in Windows XP. First make sure your Ethernet Adapter is working, refer to the adapter's manual if necessary.

### 1. Configure TCP/IP component

- 1) On the Windows taskbar, click the **Start** button, and then click **Control Panel**.
- 2) Click the **Network and Internet Connections** icon, and then click on the **Network Connections** tab in the appearing window.
- 3) Right click the icon that showed below, select Properties on the prompt page.



Figure B-1

- 4) In the prompt page that showed below, double click on the **Internet Protocol (TCP/IP)**.

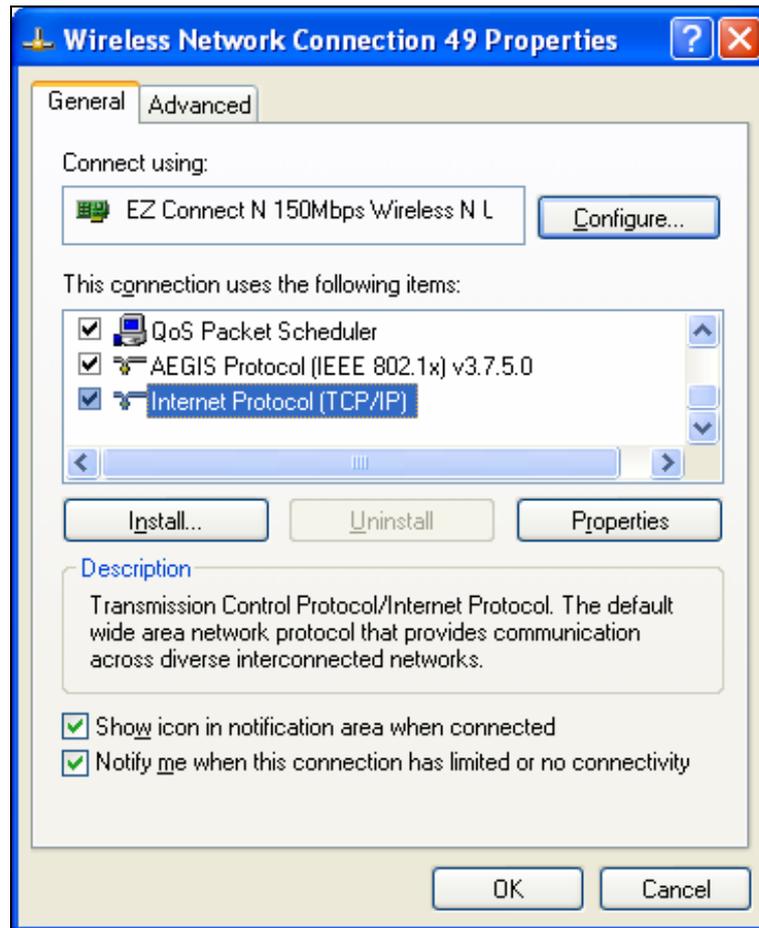


Figure B-2

- 5) The following **TCP/IP Properties** window will display and the **IP Address** tab is open on this window by default.

Now you have two ways to configure the **TCP/IP** protocol below:

➤ **Setting IP address automatically**

Select **Obtain an IP address automatically**, Choose **Obtain DNS server automatically**, as shown in the Figure below:

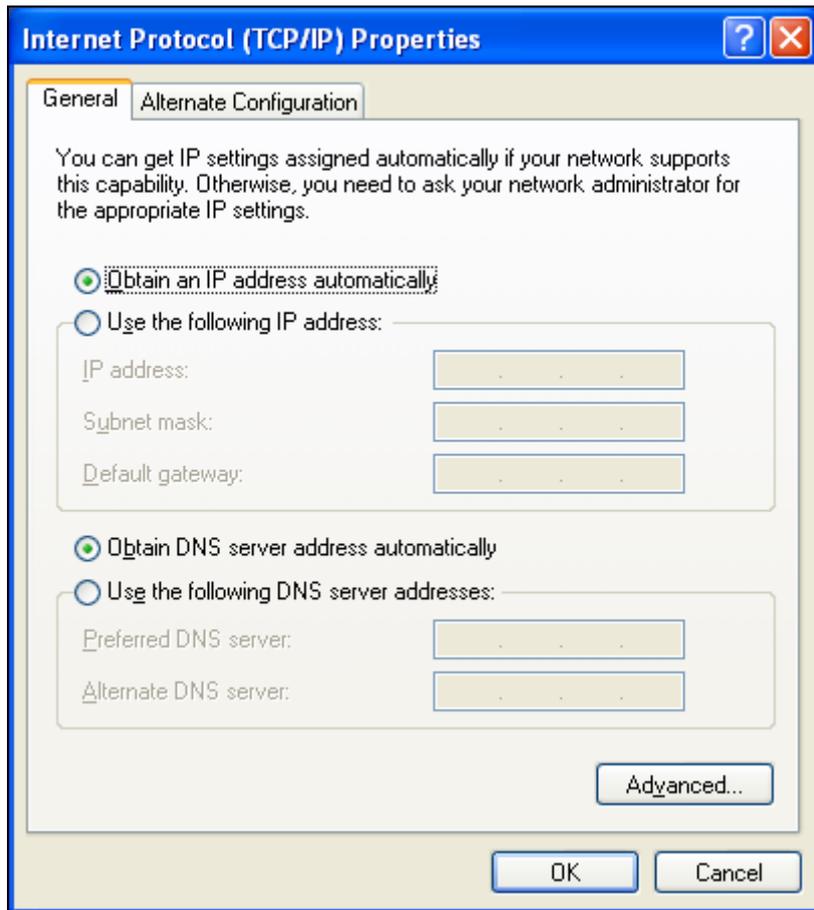


Figure B-3

 **Note:**

For Windows 98 OS or before, the PC and Router may need to be restarted.

➤ **Setting IP address manually**

- 1 Select **Use the following IP address** radio button. And the following items available
- 2 If the modem router's LAN IP address is 192.168.1.1, specify the **IP address** as 192.168.1.x (x is from 2 to 254), and the **Subnet mask** as 255.255.255.0.
- 3 Type the modem router's LAN IP address (the default IP is 192.168.1.1) into the **Default gateway** field.
- 4 Select **Use the following DNS server addresses**. In the **Preferred DNS Server** field you can enter the same value as the **Default gateway** or type the local DNS server IP address.

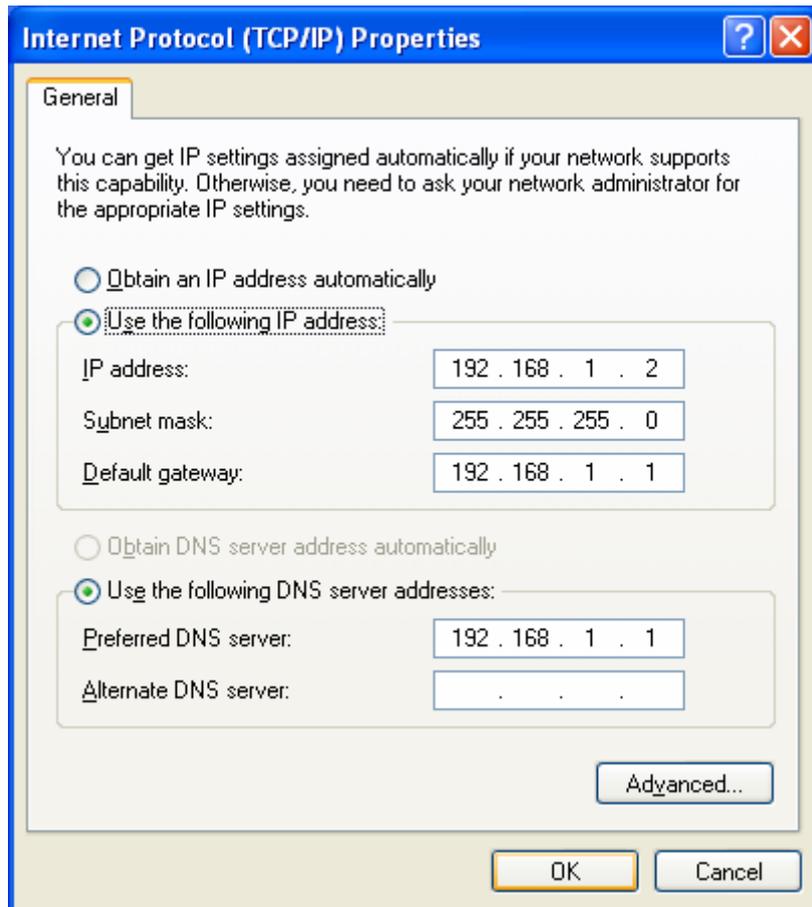


Figure B-4

**Now:**

Click **OK** to keep your settings.

# Appendix C: Troubleshooting

## T1. How to connect to the Internet?

To connect to the Internet, please run the dialing software such as WinPoet or EnterNet to do the virtual dialing as the following described.

### For Mac OS X

- 1) Click the **Apple** icon on the upper left corner of the screen.
- 2) Go to “**System Preferences -> Internet & Wireless -> Network**” and then select **Ethernet**.
- 3) In the **Con-figure IPv4** box, select **Create PPPoE Service**.
- 4) Type a **Service Name** to identify your connection.
- 5) Enter the **User name** and **Password** given by your ISP and then click **Apply** and **Connect**.

### For Windows 7

- 1) Click **Start -> Control Panel**.
- 2) Click **Network and Sharing Center**.
- 3) Click **Set up a new connection or network**.
- 4) Click **Connect to the Internet** and then click **Next**.
- 5) Click **Broadband (PPPoE)**.
- 6) Enter the **User name** and **Password** given by your ISP, and type a **Connection name** to identify your connection, and then click **Connect**.

### For Windows XP

- 1) Click “**Start → All Programs → Accessories → Communications → New connection wizard**” to launch the wizard. Then click **Next**.
- 2) Select **Connect to the Internet** and then click **Next**.
- 3) Select **Set up my connection manually** and then click **Next**.
- 4) Select **Connect using a broadband connection that requires user name and password** and then click **Next**.
- 5) Type an **ISP Name** to identify your connection and then click **Next**.
- 6) Enter the **User name** and **Password** given by your ISP and then click **Next**.
- 7) Select **Add a shortcut to this connection to my desktop** for convenience and then click **Finish**.
- 8) The shortcut icon  of this connection will appear on your desktop. Double-click the icon  to run the dialing software and then click **Connect**.

### For Windows 8

- 1) Move your mouse to the lower right corner and you will see the **Search** icon in the Popups.
- 2) Go to **Apps**, type **Control Panel** in the search box and press **Enter**.
- 3) Go to “**Control Panel -> Network and Internet -> Connect to the Internet**”.
- 4) Click **Broadband (PPPoE)**.

- 5) Enter the **User name** and **Password** given by your ISP, and type a **Connection name** to identify your connection, and then click **Connect**.

## T2. How can I restore my ONT's configuration to its factory default settings?

Once the ONT is reset, the current settings will be lost and you will need to reconfigure it. We strongly suggest you back up the current settings before resetting the ONT.

With the ONT powered on, use a pin to press and hold the RESET button on the rear panel for 5 seconds before releasing it.

## T3. What can I do if I forget my ONT's password?

Reset the ONT first and then use the default user name and password: **admin/admin**.

## T4. How can I assign an IP address to my computer?

### For Mac OS X

- 1) Click the **Apple** icon on the upper left corner of the screen.
- 2) Go to "**System Preferences -> Network**".
- 3) Select **Airport** on the left menu bar, and then click **Advanced** or wireless configuration; or select **Ethernet** for wired configuration.
- 4) In the **Con-figure IPv4** box under **TCP/IP**, select **Manually** and then enter 192.168.1.x into the IP Address field, 255.255.255.0 into the Subnet mask field. Click **Apply** to save the settings.

### For Windows 7

- 1) Click "**Start -> Control Panel -> Network and Internet -> View network status -> Change adapter settings**".
- 2) Right-click **Wireless Network Connection** (or **Local Area Connection**), and then click **Properties**.
- 3) Select **Internet Protocol Version 4 (TCP/IPv4)**, and then click **Properties**.
- 4) Select **Use the following IP address** and then enter 192.168.1.x into the IP address field, 255.255.255.0 into the Subnet mask field. Then click **OK**.

### For Windows XP

- 1) Click "**Start -> Control Panel -> Network and Internet Connections -> Network Connections**".
- 2) Right-click **Wireless Network Connection** (or **Local Area Connection**), and then click **Properties**.
- 3) Select **Internet Protocol (TCP/IP)**, and then click **Properties**.
- 4) Select **Use the following IP address** and then enter 192.168.1.x into the IP address field, 255.255.255.0 into the Subnet mask field. Then click **OK**.

### For Windows 8

- 1) Move your mouse to the lower right corner and you will see the **Search** icon in the Popups.
- 2) Go to **Apps**, type **Control Panel** in the search box and press **Enter**.
- 3) Go to "**Control Panel -> View network status and tasks -> Change adapter settings**".

- 4) Right-click **Ethernet**, select **Properties**. Then double-click **Internet Protocol Version 4 (TCP/IPv4)**.
- 5) Select **Use the following IP address** and then enter 192.168.1.x into the IP address field, 255.255.255.0 into the Subnet mask field. Then click **OK**.

#### **T5. What can I do if I cannot access the Internet?**

- 1) Check to see if all the connectors are connected well, including the Fiber line, Ethernet cables and power adapter, based on the LEDs described previously.
- 2) Check to see if the ONT is registered correctly based on the GPON LED described previously and **Authentication** status in **System Status** page. If not, please enter the GPON SN or GPON Password described in step 2 again and wait for approximately 2 minutes or try to unplug the fiber and then connect it again. If the problem still exists, please consult your ISP to make sure if you have entered the correct GPON SN or GPON Password.
- 3) Check to see if the dialing software used in step 3 is installed correctly and make sure the account username and password are correct.
- 4) If you still cannot access the Internet, please restore your ONT to its factory default settings and reconfigure it by following the instructions in this QIG.
- 5) Please feel free to contact our Technical Support if the problem still exists.

#### **Note:**

For more details about Troubleshooting and Technical Support contact information, please log on to our Technical Support website:

<http://www.tp-link.com/en/support>

# Appendix D: Technical Support

## Technical Support

- For more troubleshooting help, go to:  
**<http://www.tp-link.com/en/support/faq>**
- To download the latest Firmware, Driver, Utility and User Guide, go to:  
**<http://www.tp-link.com/en/support/download>**
- For all other technical support, please contact us by using the following details:

### Global

Tel: +86 755 2650 4400  
 Fee: Depending on rate of different carriers, IDD.  
 E-mail: [support@tp-link.com](mailto:support@tp-link.com)  
 Service time: 24hrs, 7 days a week

### USA/Canada

Toll Free: +1 866 225 8139  
 E-mail: [support.usa@tp-link.com](mailto:support.usa@tp-link.com) (USA)  
           [support.ca@tp-link.com](mailto:support.ca@tp-link.com) (Canada)  
 Service time: 24hrs, 7 days a week

### Turkey

Tel: 0850 7244 488 (Turkish Service)  
 Fee: Depending on rate of different carriers.  
 E-mail: [support.tr@tp-link.com](mailto:support.tr@tp-link.com)  
 Service time: 09:00 to 21:00, 7 days a week

### Ukraine

Tel: 0800 505 508  
 Fee: Free for Landline; Mobile: Depending on rate of different carriers  
 E-mail: [support.ua@tp-link.com](mailto:support.ua@tp-link.com)  
 Service time: Monday to Friday, 10:00 to 22:00

### Brazil

Toll Free: 0800 608 9799 (Portuguese Service)  
 E-mail: [suporte.br@tp-link.com](mailto:suporte.br@tp-link.com)  
 Service time: Monday to Friday, 09:00 to 20:00;  
 Saturday, 09:00 to 15:00

### Indonesia

Tel: (+62) 021 6386 1936  
 Fee: Depending on rate of different carriers.  
 E-mail: [support.id@tp-link.com](mailto:support.id@tp-link.com)  
 Service time: Monday to Friday, 09:00 to 12:00,  
 13:00 to 18:00 \*Except public holidays

### Australia/New Zealand

Tel: NZ 0800 87 5465 (Toll Free)  
       AU 1300 87 5465 (Depending on 1300 policy.)  
 E-mail: [support.au@tp-link.com](mailto:support.au@tp-link.com) (Australia)  
           [support.nz@tp-link.com](mailto:support.nz@tp-link.com) (New Zealand)  
 Service time: 24hrs, 7 days a week

### Germany/Austria

Tel: +49 1805 875 465 (German Service)  
       +49 1805 TPLINK  
       +43 820 820 360  
 Fee: Landline from Germany: 0.14EUR/min.  
 Landline from Austria: 0.20EUR/min.  
 E-mail: [support.de@tp-link.com](mailto:support.de@tp-link.com)  
 Service time: Monday to Friday, 09:00 to 12:30 and  
 13:30 to 18:00. GMT+1 or GMT+2 (DST in  
 Germany) \*Except bank holidays in Hesse

### Singapore

Tel: +65 6284 0493  
 Fee: Depending on rate of different carriers.  
 E-mail: [support.sg@tp-link.com](mailto:support.sg@tp-link.com)  
 Service time: 24hrs, 7 days a week

### UK

Tel: +44 (0) 845 147 0017  
 Fee: Landline: 1p-10.5p/min, depending on the  
 time of day. Mobile: 15p-40p/min, depending on  
 your mobile network.  
 E-mail: [support.uk@tp-link.com](mailto:support.uk@tp-link.com)  
 Service time: 24hrs, 7 days a week

### Italy

Tel: +39 023 051 9020  
 Fee: Depending on rate of different carriers.  
 E-mail: [support.it@tp-link.com](mailto:support.it@tp-link.com)  
 Service time: Monday to Friday, 09:00 to 13:00;  
 14:00 to 18:00

### Malaysia

Toll Free: 1300 88 875 465  
 Email: [support.my@tp-link.com](mailto:support.my@tp-link.com)  
 Service time: 24hrs, 7 days a week

### Poland

Tel: +48 (0) 801 080 618  
 +48 223 606 363 (if calls from mobile phone)  
 Fee: Depending on rate of different carriers.  
 E-mail: [support.pl@tp-link.com](mailto:support.pl@tp-link.com)  
 Service time: Monday to Friday, 09:00 to 17:00.  
 GMT+1 or GMT+2 (DST)

### France

Tel: 0820 800 860 (French service)  
 Fee: 0.118 EUR/min from France  
 Email: [support.fr@tp-link.com](mailto:support.fr@tp-link.com)  
 Service time: Monday to Friday, 09:00 to 18:00  
 \*Except French Bank holidays

### Switzerland

Tel: +41 (0) 848 800 998 (German Service)  
 Fee: 4-8 Rp/min, depending on rate of different  
 time.  
 E-mail: [support.ch@tp-link.com](mailto:support.ch@tp-link.com)  
 Service time: Monday to Friday, 09:00 to 12:30  
 and 13:30 to 18:00. GMT+1 or GMT+2 (DST)

### Russian Federation

Tel: 8 (499) 754 5560 (Moscow NO.)  
 8 (800) 250 5560 (Toll-free within RF)  
 E-mail: [support.ru@tp-link.com](mailto:support.ru@tp-link.com)  
 Service time: From 09:00 to 21:00 (Moscow time)  
 \*Except weekends and holidays in RF