

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.

Industry Canada Statement

CAN ICES-3 (B)/NMB-3(B)

BSMI Notice

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- 注意防潮，請勿將水或其他液體潑灑到本產品上。


- 插槽與開口供通風使用，以確保本產品的操作可靠並防止過熱，請勿堵塞或覆蓋開口。
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EAC

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.
- Adapter shall be installed near the equipment and shall be easily accessible.
- The plug considered as disconnect device of adapter.
-  Use only power supplies which are provided by manufacturer and in the original packing of this product.

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	SG	SK	TR	UA	US	

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 + AC: 2011

EN 55024: 2010

EN 60950-1: 2006 + A11: 2009 + A1: 2010 + A12: 2011 +A2: 2013

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

Product Manager of International Business

Date of issue: 2015-09-25

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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.

In this guide, Terminal stands for the device TX-6610.

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
- Built-in DHCP server

1.3 Panel Layout

1.3.1 The Front Panel

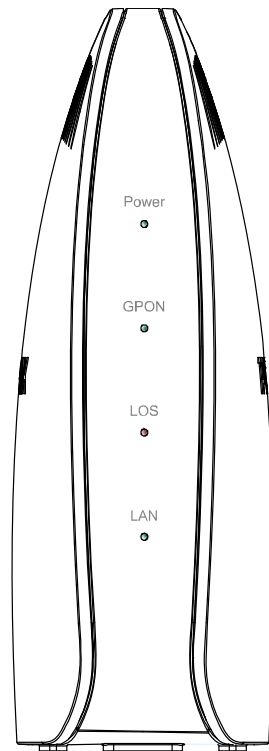


Figure 1-1

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	Power is on.
	Off	Power is off.
GPON	On	The Terminal is registered with the ISP.
	Flashing	The Terminal is trying to register with the ISP.
	Off	The Terminal is not yet registered with the ISP.
LOS	On	The Terminal is unable to transmit optical signal.
	Flashing	No optical signal is received or the received signal is too weak.
	Off	The Terminal is receiving optical signal properly.

LAN	On	A device is connected to the LAN port.
	Flashing	The LAN port is transmitting or receiving data.
	Off	No device is connected to the LAN port.

1.3.2 The Back Panel

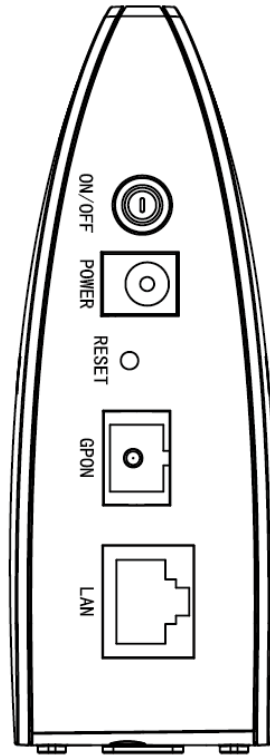


Figure 1-2

- **ON/OFF:** The switch for the power.
- **POWER:** The Power plug is where you will connect the power adapter.
- **RESET:** There are two ways to reset the Terminal's factory defaults.

Method one: With the Terminal powered on, use a pin to press and hold the Reset button for at least 5 seconds. And the Terminal will reboot to its factory default settings.

Method two: Restore the default setting from **Management** → **Factory Defaults** of the Terminal's Web-based utility.

- **GPON:** The GPON is where you will connect the fiber.
- **LAN:** Through the port, you can connect the Terminal to your PC or the other Ethernet network devices.

Chapter 2. Connecting the Terminal

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 Terminal 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 Terminal 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 Terminal

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.

Step 5: Press the **ON/OFF** button of your Terminal.

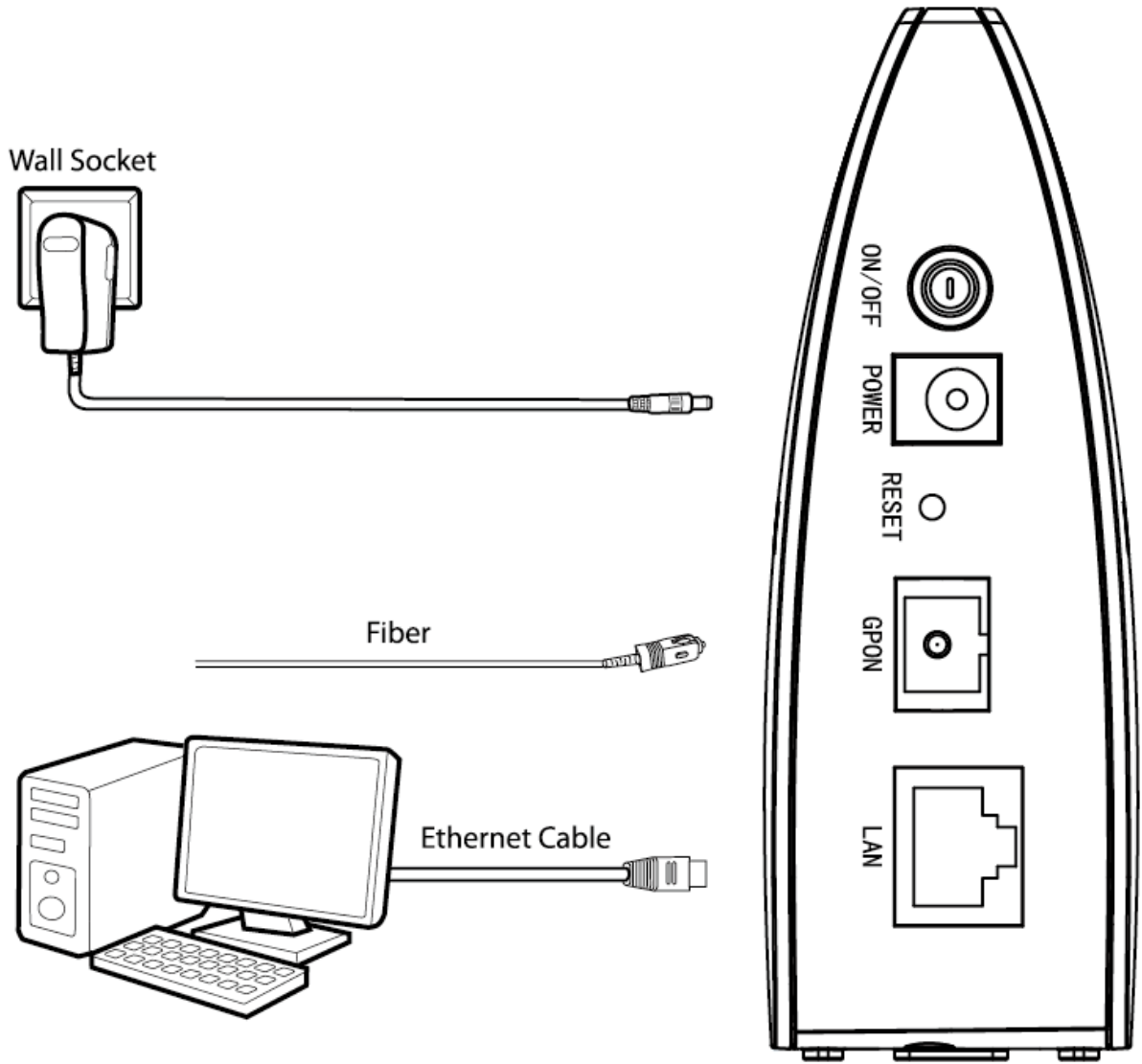



Figure 2-1

Chapter 3. Quick Installation Guide

3.1 TCP/IP Configuration

After you directly connect your PC to the Terminal TX-6610 or connect your adapter to a Hub/Switch which has connected to the Terminal, you need to configure your PC's IP address. We use the procedures in Windows 7 as an example, for other systems refer to [T4](#) for instructions.

Step 1: Right-click **Network icon**(e.g. ) on the system tray, and select “**Open Network and Sharing Center > Change adapter settings**”.

Step 2: Right click the icon that showed below, select **Properties** on the prompt page.

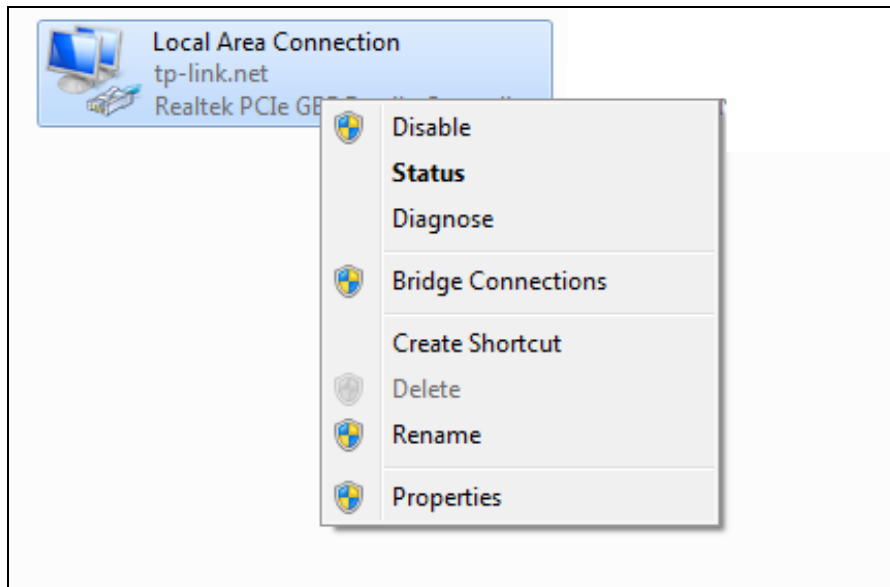


Figure 3-1

Step 3: In the prompt page that showed below, double click on the **Internet Protocol Version 4 (TCP/IPv4)**.

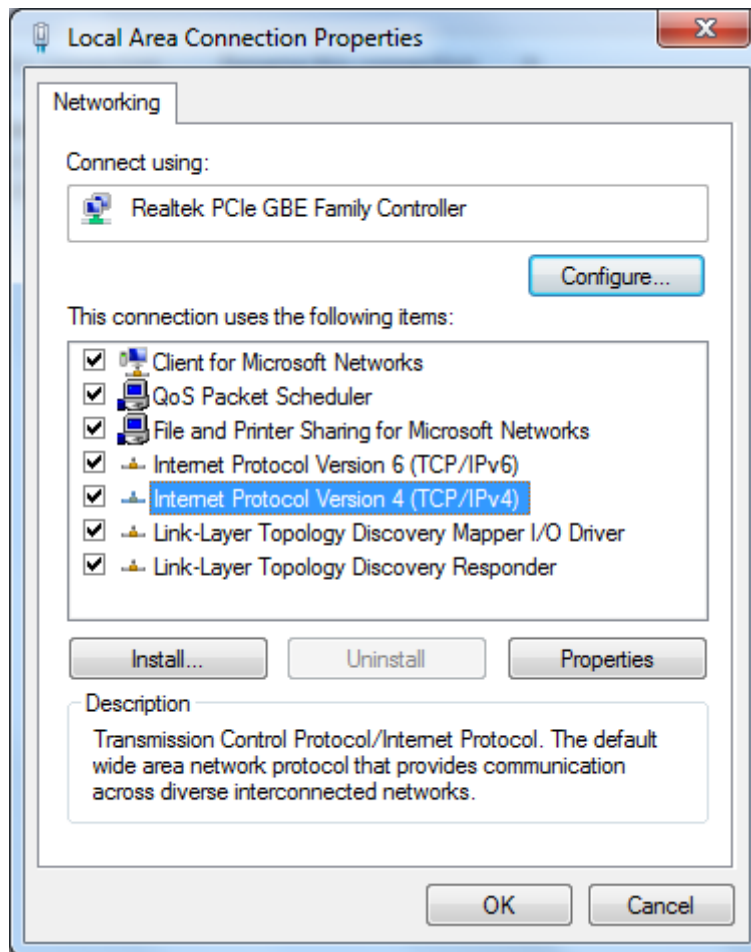


Figure 3-2

Step 4: Select both **Obtain an IP address automatically** and **Obtain DNS server address automatically**. Then click **OK**.

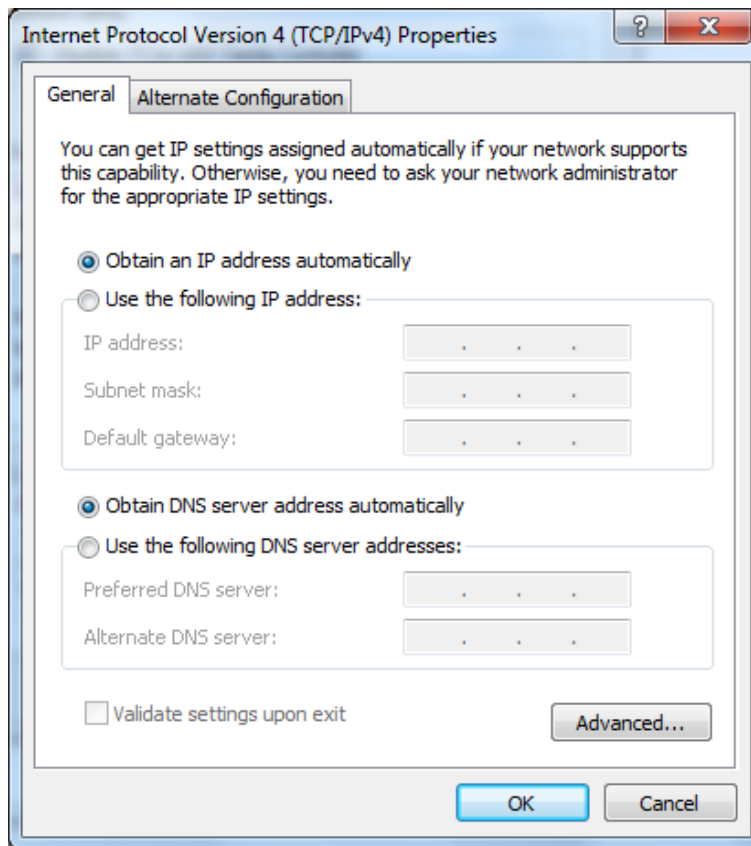


Figure 3-3

Step 5: Back to previous interface, click **OK** to save the settings.

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 Terminal 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
Reply from 192.168.1.1: bytes=32 time<1ms TTL=64
Reply from 192.168.1.1: bytes=32 time<1ms TTL=64
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 3-4

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

```

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 3-5

You can check it following the steps below:

1) Is the connection between your PC and the Terminal 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 Terminal'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.

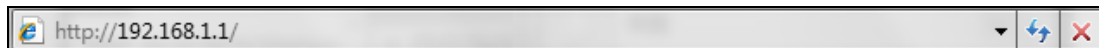


Figure 3-6

After a moment, a login window will appear, similar to the Figure 3-7. Enter admin for the Username and Password, both in lower case letters. Then click the **Login** button or press the **Enter** key.

Figure 3-7

Note:

- 1) Do not mix up the username and password with your Terminal account username 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 3-8. 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 ISP 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:

Save

GPON SN

GPON SN(Notice: Must be 16 Hexadecimal Numbers)

Old SN:

New SN:

Save

Figure 3-8

3. Establish your Internet connection according to the ISP's specific instructions, such as a dial-up connection. For details, please refer to [T1](#) in **Troubleshooting**.

Note:

If you need assistance, contact your ISP.

Chapter 4. Configuring the Terminal

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 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

System Status

ONU Type: 1-Port Gigabit GPON Terminal

System UP Time: 0:0:39:44(dd:hh:mm:ss)

Firmware Version: 3.0.2 build 150814 Rel.60120n

Hardware Version: TX-6610 4.0

LAN

IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0

MAC Address: 00:0a:eb:13:09:69

LAN Status: Connected

LAN Model: 1000Mbps full duplex

Flow Control: Off

PON

Access Mode: GPON

ONU ID: 255

Authentication: Fiber disconnected

Upstream FEC: Off

Downstream FEC: Off

Temperature: 0.00 °C

Voltage: 0 mV

Bias Current: 0.00 mA

TX Power: -- dBm

RX Power: -- dBm

Statistics

Type	PON	OMCI	LAN
RX Packets	6992	0	22550
TX Packets	22550	0	6964
Drop Packets	N/A	N/A	0
Error Packets	N/A	N/A	0

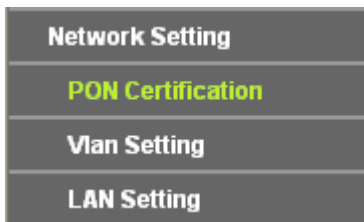
Figure 4-1

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

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 ISP 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 Vid: [1~4094] VLAN Priority: ▼

VLAN Scan

This function is used to detect the available VLAN mode and VLAN vid. Before scanning, please make sure that you have input the valid auth info and ONU is registered.

Figure 4-3

- **VLAN Mode:** Select your desired VLAN Mode from the dropdown list.
 - **Control By OLT:** OLT (Optical Line Terminal). In this mode, your ISP can remotely control the Terminal.
 - **VLAN TAG Mode:** In this mode, a VLAN tag will be added to an upstream data without it, and removed from a downstream data.
 - **Transparent Mode:** In this mode, all the upstream and downstream data are forwarded directly.
 - **Remove DownStream VLAN vid:** In this mode, all the upstream data can be remotely controlled by your ISP, and the VLAN tag of all the downstream data will be removed.
 - **DownStream Transparent Mode:** In this mode, all the downstream data are forwarded directly, and all the upstream data can be remotely controlled by your ISP.

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

- **VLAN Scan:** 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:	<input type="text" value="192.168.1.1"/>
Mask:	<input type="text" value="255.255.255.0"/>
DHCP Server	
Enable	<input checked="" type="checkbox"/>
Start IP Address:	<input type="text" value="192.168.1.100"/>
End IP Address:	<input type="text" value="192.168.1.199"/>
Lease Time:	<input type="text" value="120"/> minutes (1~2880 minutes, the default value is 1440)
<input type="button" value="Save And Reboot"/>	

Figure 4-4

➤ LAN IP Address and Mask:

- **IP Address:** Enter the Terminal’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.
- **Mask:** Enter the Terminal’s Subnet Mask, the default value is 255.255.255.0.

➤ DHCP Server:

These settings allow you to configure the Terminal’s Dynamic Host Configuration Protocol (DHCP) server function. The DHCP server is enabled by default for the Terminal’s Ethernet LAN interface. DHCP service will supply IP settings to computers which are configured to automatically obtain IP settings that are connected to the Terminal though the Ethernet port. Keep in mind that if you change the IP address of the Terminal, you must change the range of IP addresses in the pool used for DHCP on the LAN.

- **Start IP Address:** Enter a value for the DHCP server to start with when issuing IP addresses. Because the default IP address for the Terminal is 192.168.1.1, the default Start IP Address is 192.168.1.2, and the Start IP Address must be 192.168.1.2 or greater, but smaller than 192.168.1.254.
- **End IP Address:** Enter a value for the DHCP server to end with when issuing IP addresses. The End IP Address must be smaller than 192.168.1.254.
- **Lease Time:** The Lease Time is the amount of time in which a network user will be allowed connection to the Terminal with their current dynamic IP address. Enter the amount of time, then the user will be “lease” this dynamic IP address. After the dynamic IP address has expired, the user will be automatically assigned a new dynamic IP address.

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 Terminal.

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 username and password of the Terminal 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.

 A web form titled 'User Management' with a green header. The form contains four input fields: a dropdown menu for 'Username' with 'admin' selected, and three text boxes for 'Old Password', 'New Password', and 'Confirm Password'. A 'Save' button is located at the bottom center of the form.

Figure 4-5

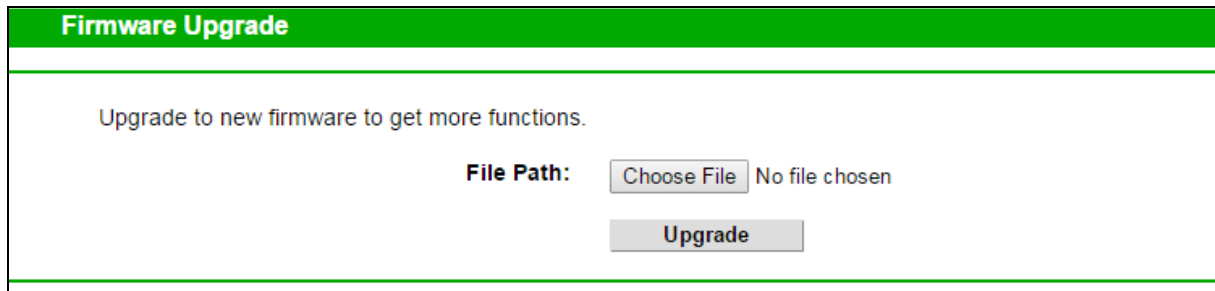
It is strongly recommended that you should change the factory default username and password of the Terminal, because all users who try to access the Terminal's Web-based utility will be prompted for the Terminal's default username and password.

 **Note:**

- 1) The new username 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 Terminal’s management page, only the Status page will you see.

4.4.2 Firmware Upgrade

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



Firmware Upgrade

Upgrade to new firmware to get more functions.

File Path: No file chosen

Figure 4-6

To upgrade the Terminal's firmware, follow the instructions below:

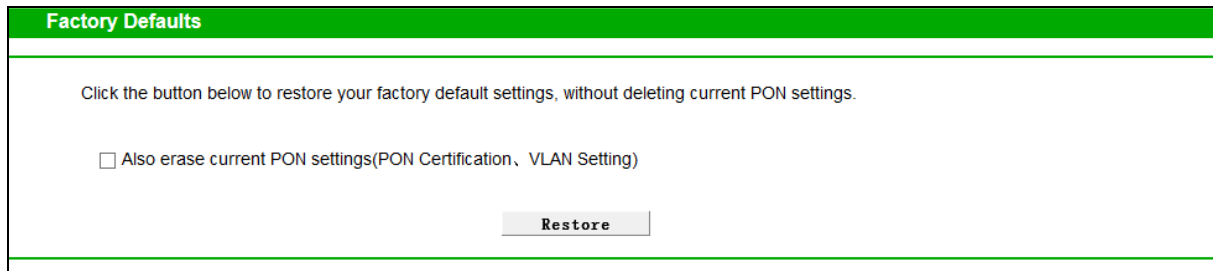
- 1) Download a most recent firmware upgrade file from our website (www.tp-link.com).
- 2) Type the path and file name of the update file into the “File Path” field. Or click the **Choose File** button to locate the update file.
- 3) Click the **Upgrade** button.
- 4) The Terminal will reboot while the 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 Terminal rather than the configuration, you can try to upgrade the firmware.
- 2) When you upgrade the Terminal'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 Terminal or press the Reset button while the firmware is being upgraded. Loss of power during the upgrade could damage the Terminal.
- 4) The firmware version must correspond to the hardware.
- 5) The upgrade process takes a few moments and the Terminal restarts automatically when the upgrade is completed.

4.4.3 Factory Defaults

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



Factory Defaults

Click the button below to restore your factory default settings, without deleting current PON settings.

Also erase current PON settings(PON Certification, VLAN Setting)

Restore

Figure 4-7

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

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

- The default **Username**: 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 Terminal via the next screen.



System Reboot

Click this button below to reboot ONU.

Reboot

Figure 4-8

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/APC (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 C+	G.652 single mode fiber (maximum 20km)			
GPON Parameter	Interface	SC/APC		
	Distance	20km		
	Data 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	≤-30dBm			
System Requirement	Internet Explorer 5.0 or later, Netscape Navigator 6.0 or later Win 9x/ ME/ 2000/ XP/ Vista/ 7/8			
Physical and Environment				
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: Troubleshooting

T1. How to establish a dial-up connection to connect to the Internet?

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 **Configure IPv4** box, select **Create PPPoE Service**.
- 4) Type a **Service Name** to identify your connection.
- 5) Enter the **Username** 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 **Username** 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 do I restore my Terminal to its factory default settings?

Once the Terminal 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 Terminal.

With the Terminal powered on, press and hold the RESET button on the rear panel of the Terminal until all LEDs turn back on momentarily, then release the button.

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


Reset the Terminal first and then use the default username and password: **admin/admin**.

T4. How do I change my computer's setting to obtain an IP address automatically?


For Mac OS X

- 1) Click the **Apple icon** on the upper-left corner of the taskbar.
- 2) Go to **System Preferences > Network**.
- 3) Select **Ethernet** in the left panel.
- 4) Under **Configure IPv4**, select **Using DHCP**.
- 5) Click **Apply**.

For Windows 7/8/8.1

- 1) Right-click the **Network icon** (e.g. ) on the system tray and select **Open Network and Sharing Center > Change adapter settings**.
- 2) Right-click the wired network connection (**Local Area Connection** or **Ethernet** by default) and select **Properties**.
- 3) Double-click **Internet Protocol Version 4 (TCP/IPv4)**.
- 4) Select both **Obtain an IP address automatically** and **Obtain DNS server address automatically**, then click **OK**.
- 5) Click **OK** again to save your configuration.

For Windows XP

- 1) Right-click the **Network icon** (e.g. ) on the system tray and select **Open Network Connections**.
- 2) Right-click the wired network connection (**Local Area Connection** by default) and select **Properties**.
- 3) Double-click **Internet Protocol (TCP/IP)**.
- 4) Select both **Obtain an IP address automatically** and **Obtain DNS server address automatically**, then click **OK**.
- 5) Click **OK** again to save your configuration.

T5. What can I do if I cannot access the web management page?

- 1) Make sure that the computer is properly connected to the Terminal via the Ethernet cable.
- 2) Make sure that the computer connected to the Terminal is set to **obtain an IP address automatically**. Refer to [T4](#) for instructions.
- 3) Make sure that **http://192.168.1.1** is correctly entered, or use another web browser and try again.
- 4) Disable then enable the network adapter being used.
- 5) Restore the Terminal to its factory default settings and reconfigure your Terminal by following the instructions in this Quick Installation Guide.

T6. What can I do if I cannot access the Internet?

- 1) Make sure that all cables are connected properly and securely to the Terminal.
- 2) Check the GPON LED and make sure that it is lit and stable, indicating that the Terminal is registered with the ISP. If not, make sure that the provided **GPON Password** and/or **GPON SN** are entered correctly in the **Network Setting > PON Certification page**.
- 3) Unplug and reconnect the fiber cable to the Terminal. Wait for 2 minutes and try again.
- 4) Make sure that you follow your ISP's specific instructions to connect to the Internet.
- 5) Make sure that the computer connected to the Terminal is set to **obtain an IP address automatically**. Refer to [T4](#) for instructions.
- 6) Contact your ISP 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>