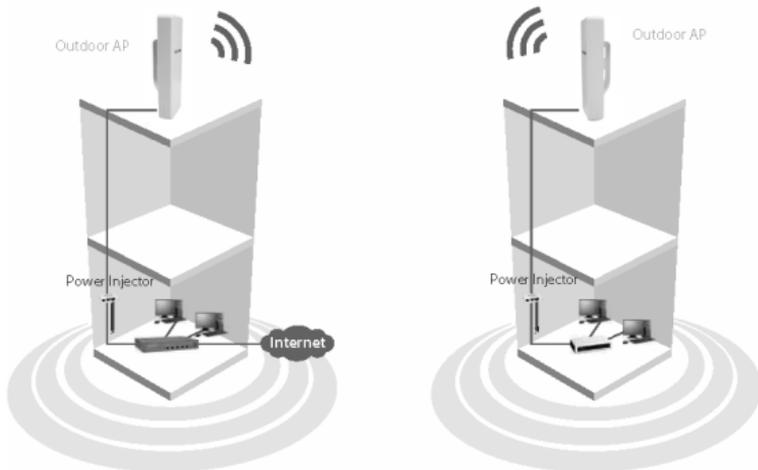


Installation

1 Typical Network

TL-WA7510N is used for remote point-to-point connection. It makes remote Internet share possible.



Note The typical connection for TL-WA7510N is shown as above. Please make sure that the two CPEs are placed face to face; otherwise the wireless signal strength might be weak. Here shows several incorrect examples.



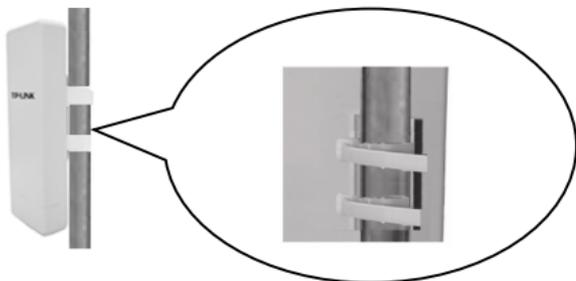
Note If you are using an external antenna to connect, please refer to **Appendix 1**.

2

Connecting the Device

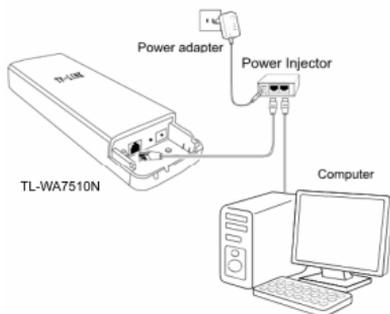
Note Please use only wired network connections to configure the AP.

- 1 Locate a suitable mounting site for your CPE. For choosing the best location, select an elevated location where trees, buildings and large steel structures will not obstruct the antenna signals and which offers maximum line-of-sight propagation with the users.
- 2 Adjust the direction of your CPE for the best signal. Place the straps through the slots on the back of the CPE and then around the pole. Tighten the straps.



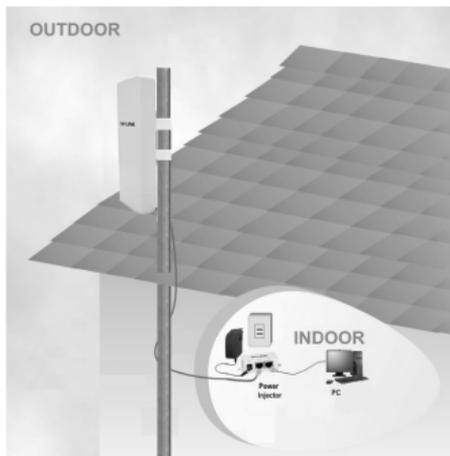
- 3 Connect one end of an Ethernet cable to the POE port of the provided Power Injector and the other end of the Ethernet cable to the LAN port of the CPE.

Then, connect the LAN port of the Power Injector to a PC using another Ethernet cable. Finally, plug the provided power adapter into the DC jack on the Power Injector, and the other end to a standard electrical wall socket.

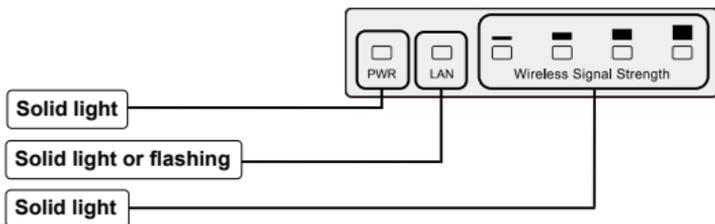


- 4 The connection will be similar to the figure below after the above steps are finished.

If you use two CPEs to build the network, please make sure that the two CPEs are placed face to face.



- 5 Turn on all your network devices and then check to see if the LEDs on the AP display normally as the diagram below describes.



Note If the LEDs display abnormally, please check to see if all the cable connectors (power adapter and Ethernet cable) are well connected to your devices.

3

Configuring the Device

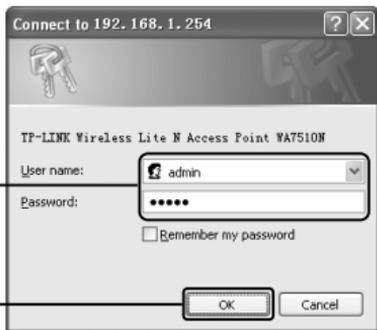
Note You will need to assign your computer a **Static IP address** within the same range as the AP's IP address. See the **Appendix 2: Troubleshooting - T3** if you need any assistance.

1 Login

Open your web browser and type in **http://192.168.1.254** in the address bar and then press **Enter**



A dialog box will prompt you for the **User name** and **Password**. Enter the default values and click **OK**.



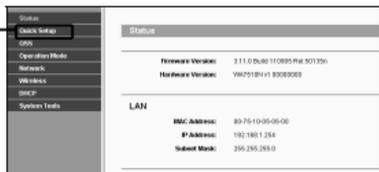
User name: **admin**
Password: **admin**

Click **OK**

Note If the dialog box does not pop up, please refer to **T3** in the **Appendix 2: Troubleshooting**. Also, **T2** will give you some help if you forget the password.

The web management page will display after your successful login.

Click **Quick Setup**



2 Operation Mode Setting

This page will then display.

Click **Next**



Choose the **Operation Mode Type** appropriate to your needs



Click **Next**

Note The AP supports three operation modes: **Standard AP**, **AP Router** and **AP Client Router**.

- If you want to connect to your WISP, please choose **AP Client Router** mode and proceed to **A**;
- If you want to configure a point-to-point connection, please skip to **B**;
- If you want to configure a repeater, please skip to **C**.

A. Configuration for WISP Client (CPE)

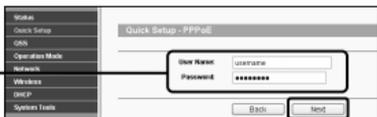
This page will then display.

Choose your **WAN Connection Type** provided by your ISP. Here we choose **PPPoE** for example



Click **Next**

Enter the **Username** and **Password** provided by your ISP



Click **Next**

Note The **Username** and **Password** are provided by your ISP.

Click **Search**

Quick Setup - Wireless

Please configure parameters of AP's Mode:

SSID: WISP Example: 00-1D-0F-11-22-33

BSSID: 00-1D-0F-11-22-33

Region: United States

Warning: First of all, you should understand location, time & power, and related to you related search AP's. Choose you select a correct country to configure local law. Informed settings may cause interference.

Search

New type: None

WEP basic: Yes

Auth type: Open

Password: []

Back Next

This page will then display.

You will see the **BSSID** as well as **SSID** provided by your ISP display on the **AP List**. Here takes **00-1D-0F-11-22-33** and **WISP** for example.

AP List

AP Count: 1

ID	BSSID	SSID	Signal	Channel	Security	Choose
00-1D-0F-11-22-33	WISP		25db	44	ON	Connect

Back Refresh

Click **Connect**

Then it will automatically paste the SSID and BSSID value into the corresponding field

Quick Setup - Wireless

Please configure parameters of AP's Mode:

SSID: WISP Example: 00-1D-0F-11-22-33

BSSID: 00-1D-0F-11-22-33

Region: United States

Warning: First of all, you should understand location, time & power, and related to you related search AP's. Choose you select a correct country to configure local law. Informed settings may cause interference.

Search

New type: None

WEP basic: Yes

Auth type: Open

Password: []

Back Next

Click **Next**

Click **Finish** to exit the **Quick Setup** wizard and wait until the AP completes rebooting. After that the changes will take effect.

Quick Setup - Finish

Congratulations! The Router is now connecting you to the Internet. For detail settings, please click other menus if necessary.

Back Finish

Click **Finish**

B. Configuration for Point-to-Point Connection

Note Two TL-WA7510N Access Points are needed for this application.

1) The AP Setting

Select **Standard AP**

Quick Setup - Choose Operation Mode

Please Choose Operation Mode Type:

Standard AP - Wireless Access Point

AP Router - Wireless Standard Router

AP Client Router - WISP Client Router

Back Next

Click **Next**

Enter a unique and easy-to-remember name for your wireless network. Here we enter **TP-LINK_050500** as the SSID for example

Select your region from the drop-down list

Click **Next**



Click **Finish** to exit the **Quick Setup** wizard and wait until the AP completes rebooting. After that the changes will take effect.

Click **Finish**



2) The Client Setting

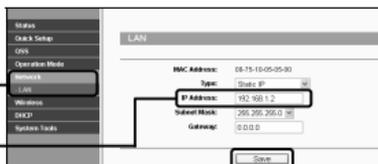
After your successful login, please configure the other TL-WA7510N by following the steps below.

Note You should change the default LAN IP address of the Client from 192.168.1.254 to 192.168.1.X (X can be any number from 2 to 253) to avoid an IP conflict with the former AP. Here we choose 192.168.1.2 as an example.

Click **Network > LAN**

Enter **192.168.1.2** in the **IP Address** field

Click **Save**

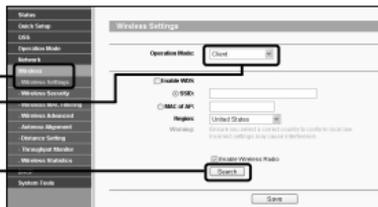


Note The AP will begin rebooting automatically after clicking **Save**.

Click **Wireless > Wireless Settings**

Select **Client**

Click **Search**



This page will then display.

Find the **SSID** you have configured on the first AP

Click **Connect**

ID	BSSID	SSID	Signal	Channel	Security	Connect
1	80-0A-05-00-13-34	TP-LINK_00000	21.89	38	OFF	Connect
2	80-10-0F-01-88-18	TP-LINK_010018	21.89	43	ON	Connect
3	80-AF-AF-AF-AF-AF	TP-LINK_AFAF AF	9.40	44	OFF	Connect
4	80-25-89-07-32-FC	Network-8025890732N	19.89	36	OFF	Connect
5	80-1D-0F-01-88-18	TP-LINK_010018	13.89	44	OFF	Connect

Then it will automatically paste the SSID value into the **SSID** field, and BSSID value into the **MAC of AP** field

Click **Save**

Wireless Settings

Operation Mode: Client

Private WPS: Disabled

SSID: TP-LINK_00000

MAC of AP: 80-0A-05-00-13-34

Region: United States

WPS sleep: Disabled (You cannot connect clients to wireless local area network (WLAN) if WPS is disabled.)

Enable Wireless Probe

Search

Save

Note The BSSID is the same as the MAC address.

C. Configuration for Repeater

Click **Wireless > Wireless Settings**

Select **Repeater**

Click **Search**

Wireless Settings

Operation Mode: Repeater

MAC of AP:

Region: United States

WPS sleep: Disabled (You cannot connect clients to wireless local area network (WLAN) if WPS is disabled.)

Wireless Probe: Disabled

Search

Save

This page will then display.

Find the **BSSID** of the remote AP whose signal you want to repeat

Click **Connect**

ID	BSSID	SSID	Signal	Channel	Security	Connect
1	80-0A-05-00-13-34	TP-LINK_00000	21.89	38	OFF	Connect
2	80-10-0F-01-88-18	TP-LINK_010018	21.89	43	ON	Connect
3	80-AF-AF-AF-AF-AF	TP-LINK_AFAF AF	9.40	44	OFF	Connect
4	80-25-89-07-32-FC	Network-8025890732N	19.89	36	OFF	Connect
5	80-1D-0F-01-88-18	TP-LINK_010018	13.89	44	OFF	Connect

Then it will automatically paste the BSSID you've connected into the **MAC of AP** field

Click **Save**

Wireless Settings

Operation Mode:

BSSID of AP:

Max Tx Power:

Note The BSSID is the same as the MAC address.

3 Antenna Alignment

After basic configuration of operation mode, you can adjust your CPE's direction to get a better signal strength according to the parameters shown on the **Antenna Alignment** page.

Click **Wireless**

Click **Antenna Alignment**

Antenna Alignment

Power BSS: 41 dBd

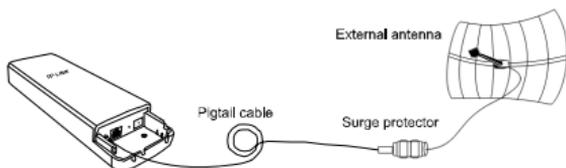
Signal Percent:

RSSI RANGE:

Appendix 1: External Antenna Installation

1 External Antenna Connection

1. If you have an external antenna with the RP-SMA port, you could connect it to the RP-SMA port of your CPE directly.
2. If you have an external antenna with N type port, you could connect it to the TL-WA7510N with a pigtail cable. To protect your product, you could also add a surge protector. The complete connection would be simply illustrated as below.



Note The pigtail cable is used to change the N type port to RP-SMA type port.

2 Configure the External Antenna

Note You will need to assign your computer a **Static IP address** within the same range as the AP's IP address. See the **Appendix 2: Troubleshooting - T3** if you need assistance.

1 Login

Open your web browser, type **http://192.168.1.254** in the address field and press **Enter**



A dialog box will prompt you for the **User name** and **Password**. Enter the default values and click **OK**.

User name: **admin**
Password: **admin**

Click **OK**

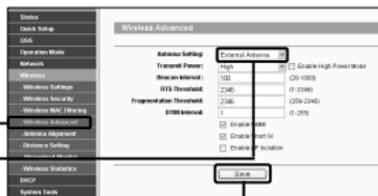


2 Configure the External Antenna

Click **Wireless > Wireless Advanced**

Select **External Antenna**

Click **Save**

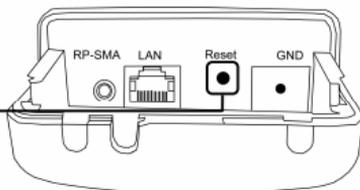


Appendix 2: Troubleshooting

T1. How do I restore my AP's configuration to its factory default settings?

With the AP powered on, press and hold the **Reset** button for about 8 seconds before releasing it.

Hold it in for about 8 seconds



Note Once the AP is reset, the current configuration settings will be lost and you will need to reconfigure the AP.

T2. What can I do if I forget my password?

- 1) Restore the AP's configuration to its factory default settings. If you don't know how to do that, please refer to previous section **T1**;
- 2) Use the default user name and password: **admin, admin**;
- 3) Try to reconfigure your AP by following the instructions of this QIG.

T3. What can I do if I cannot access the web-based configuration page?

You should first configure your computer's IP Address.

Please follow the steps below to finish your PC configuration.

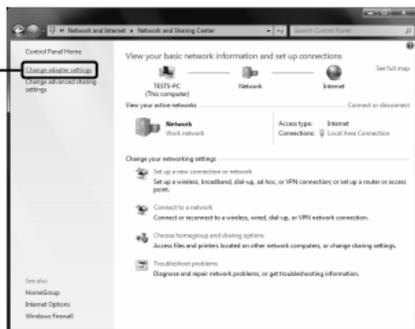
➤ **For Windows 7 OS**

Go to **Start > Settings > Control Panel**, and then you will see the following page.

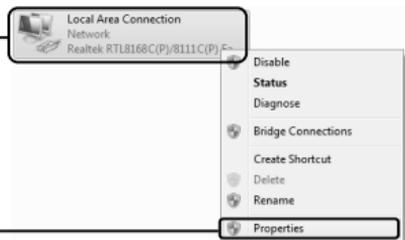
Click **View network status and tasks**



Click **Change adapter settings**

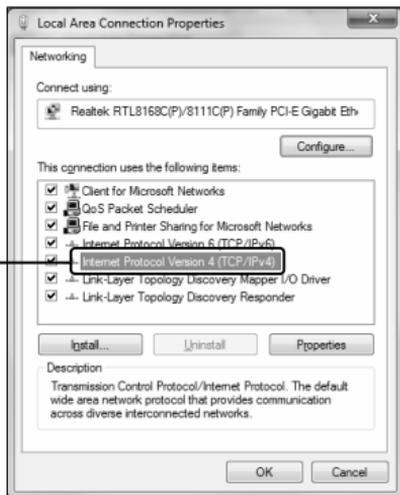


Right-click **Local Area Connection**



Click **Properties**

Double-click **Internet Protocol Version 4 (TCP/IPv4)**



Select **Use the following IP address**

Enter **192.168.1.100** into the **IP address** field, **255.255.255.0** into the **Subnet mask** field

Select **Use the following DNS server addresses**

Enter the **DNS server address** provided by your ISP or network administrator

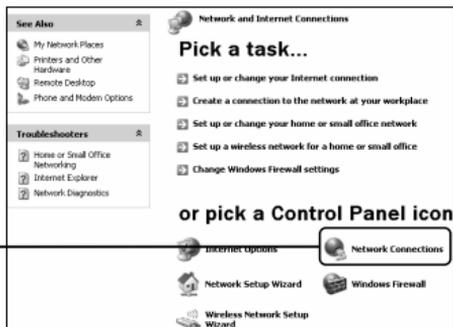
Click **OK**

➤ **For Windows XP OS**

Go to **Start > Control Panel**, you will then see the following page.

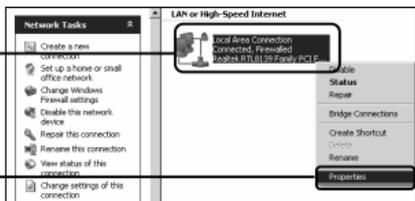
Click **Network and Internet Connections**

Click **Network Connections**

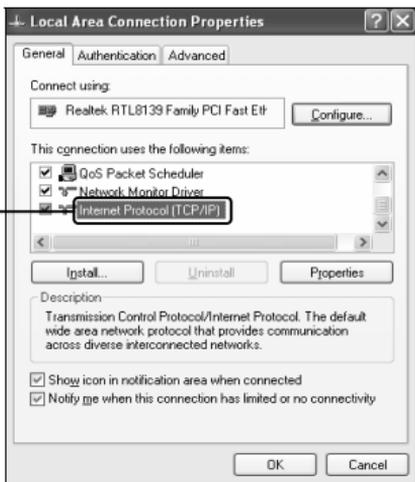


Right-click **Local Area Connection**

Click **Properties**



Double-click **Internet Protocol (TCP/IP)**



The image shows a screenshot of the "Internet Protocol (TCP/IP) Properties" dialog box. The "General" tab is selected. The dialog contains the following elements:

- Text: "You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings."
- Radio button: "Obtain an IP address automatically" (unselected).
- Radio button: "Use the following IP address:" (selected).
- Text fields: "IP address:" (192 . 168 . 1 . 100) and "Subnet mask:" (255 . 255 . 255 . 0).
- Text field: "Default gateway:" (. . .).
- Radio button: "Obtain DNS server address automatically" (unselected).
- Radio button: "Use the following DNS server addresses:" (selected).
- Text fields: "Preferred DNS server:" (. . .) and "Alternate DNS server:" (. . .).
- Button: "Advanced..."
- Buttons: "OK" and "Cancel".

Five callout boxes with arrows point to specific parts of the dialog:

- Box 1: "Select **Use the following IP address**" points to the selected radio button.
- Box 2: "Enter **192.168.1.100** into the **IP address** field, **255.255.255.0** into the **Subnet mask** field" points to the IP address and Subnet mask fields.
- Box 3: "Select **Use the following DNS server addresses**" points to the selected radio button.
- Box 4: "Enter the **DNS server address** provided by your ISP or network administrator" points to the Preferred DNS server field.
- Box 5: "Click **OK**" points to the OK button.

Technical Support

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

Global

Tel: +86 755 26504400
E-mail: support@tp-link.com
Service time: 24hrs, 7 days a week

Singapore

Tel: +65 62840493
E-mail: support.sg@tp-link.com
Service time: 24hrs, 7 days a week

UK

Tel: +44 (0) 845 147 0017
E-mail: support.uk@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
Service time: 24hrs, 7 days a week

Malaysia

Tel: 1300 88 875465 (1300 88TPLINK)
Email: support.my@tp-link.com
Service time: 24hrs, 7 days a week

Russian Federation

Tel: 8 (495) 223-55-60
8 (800) 250-55-60 (toll-free call from any RF region)
E-mail: support.ru@tp-link.com
Service time: From 10:00 to 18:00 (Moscow time)
*Except weekends and holidays in Russian Federation

Germany / Austria

Tel: +49 1805 875465 (German Service)
+49 1805 TPLINK
E-mail: support.de@tp-link.com
Fee: 0.14 EUR/min from the German fixed phone network and up to 0.42 EUR/min from mobile phone
Service time: Monday to Friday 9:00 AM to 6:00 PM. GMT+ 1 or GMT+ 2 (Daylight Saving Time in Germany)
*Except bank holidays in Hesse

Australia & New Zealand

Tel: AU 1300 87 5465
NZ 0800 87 5465
E-mail: support@tp-link.com.au
Service time: 24hrs, 7 days a week

Turkey

Tel: 444 19 25 (Turkish Service)
E-mail: support.tr@tp-link.com
Service time: 9:00 AM to 6:00 PM
7 days a week

Italy

Tel: +39 02 66987799
E-mail: support.it@tp-link.com
Service time: Monday to Friday
9:00 AM to 6:00 PM

Ukrainian

Tel: +380 (44) 590-51-14
E-mail: support.ua@tp-link.com
Service time: Monday to Friday
14:00 PM to 22:00 PM

Brazilian/Portuguese Service

Toll Free: 0800-770-4337
E-mail: suporte.br@tp-link.com
Service time: Monday to Saturday
08:00 AM to 08:00 PM

Indonesia

Tel: (+62) 021 6259 135
E-mail: support.id@tp-link.com
Service time: Monday to Friday
9:00 -12:00; 13:00 -18:00
*Except public holidays

Switzerland

Tel: +41 (0)848 800998 (German Service)
E-mail: support.ch@tp-link.com
Fee: 4-8 Rp/min, depending on rate of different time
Service time: Monday to Friday 9:00 AM to 6:00 PM. GMT+ 1 or GMT+ 2 (Daylight Saving Time)