TP-LINK®

User Guide

TD-8610

External ADSL Modem

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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.

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.

EC DECLARATION OF CONFORMITY (EUROPE)

In compliance with the EMC Directive 89/336/EEC, Low Voltage Directive 73/23/EEC, this product meets the requirements of the following standards:

- EN55022
- EN55024
- EN60950

SAFETY NOTICES

Caution: Do not use this product near water, for example, in a wet basement or near a swimming pool.

Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

Package contents

The following contents should be found in your box:

- One TD-8610 External ADSL MODEM
- One AC power Adapter for TD-8610 External ADSL MODEM
- One Resource CD for TD-8610 External ADSL MODEM, including:
  - This Guide
  - Other Helpful Information
- One RJ45 cable
- Two RJ11 cable
- One ADSL splitter

Note: If any of the listed cable are damaged or missing, please contact the retailer from whom you purchased the TD-8610 External ADSL MODEM for assistance.

Chapter 1: Product Overview

TP-LINK® TD-8610 External ADSL MODEM is the latest product designed and manufactured by TP-LINK Technologies Co., Ltd. With TP-LINK's excellent design of circuit and high quality production, we guarantee ADSL MODEM a high performance, very good stability and easy to use.

TD-8610 uses integrated ADSL2+ transceiver and a 256-MHz MIPS32 CPU.The AFE supports full-rate ADSL connectivity conforming to the ITU and ANSI specifications; MIPS32 CPU with MMU and 16-KB I-cache/8-KB D-cache is integrated into the device.

In addition to the basic DMT physical layer functions, the ADSL PHY supports dual latency ADSL Framing (fast and interleaved) and the I.432 ATM Physical Layer.

TD-8610 is a complete plug-and-play solution. With standard Ethernet interface, it can be directly connected to any 10M/100M Ethernet devices,support Auto-MDIX.

TD-8610 not only use html (web mode through Ethernet port) to configure the MODEM but also use external utility software，too. You can download it from our website (http://www.tp-link.com).

1.1 Product main specification

- High speed and asymmetry data transmit mode, adapt to wide-band internet access
- Point to point connection, provide safe and exclusive bandwidth
- Support All ADSL industrial standards
- Advanced DMT modulation and demodulation
- Firmware upgradeable
- Compatible with all mainstream DSLAM (CO)
- Real-time Configuration and device monitoring
- Quick response semi-conductive surge protect circuit, provides reliable ESD and surge-protect function

1.2 Supporting protocol

- G.992.1 (G.dmt) - Annex A/B/C
- G.992.2 (G.lite) - Annex A/B/C
- ANSI T1.413
- G.992.3 (ADSL2) - Annex A/B/C/M and Annex L (RE-DSL) compliant
- G.992.5 (ADSL2+) Annex A/B/C and Annex L (RE-DSL) compliant
- ADSL dual latency (fast path and interleaved path)
- I.432 ATM physical layer compliant

-Supports RFC2516 (PPPoE) *
- Supports RFC1483 (EoA)(Bridged)

NOTE. "*"Need third-party software.

1.3 Transmit data-rate

- Max download data-rate: 24Mbps
- Max upload data-rate: 1Mbps
- Max line length: 6Km

1.4 ATM property

- AAL0, AAL5, OAM, RM, and raw cell types supported
- Direct hardware support for 4 Receive VCs, with additional RX VCs and TX VCs supported in software
- Full 24-bit Virtual Path Identifier (VPI) and Virtual Circuit Identifier (VCI)

1.5 System support

- Support PVC
- Support IEEE 802.3、IEEE 802.3u
- Support 10Base-T/100BASE-TX full-duplex or half duplex Ethernet
- Support Auto-MDIX

1.6 Working environment

- Operating temperature: 0℃~40 ℃
- Storage temperature: -40℃~70 ℃
- Humidity: 10%～90%

1.7 Electric parameter

- Adaptor power Output: 9VAC/0.8mA，50Hz or 60 Hz
- Power consumption: 4W Maximum

Chapter 2: Hardware Installation Guide

2.1 System requirement

Confirm your computer has been installed with networking interface card (NIC) before connecting ADSL MODEM to your computer, with operating system supporting the TCP/IP protocol.

2.2 LED explanation

The panel of ADSL MODEM includes one power button, one power indicator (RED) and four function indicators (GREEN), and these five indicators are explained as chart 1-1:

Indicator	Description	Status	Function Details
PWR	Power	On Off	Power OK Power fail
ADSL	ADSL status	Slow flash Quick flash On	Self-detecting when power up Connecting to the telecom network Connection to telecom network OK
ALARM	Mistake	On Off	There is mistake when ADSL transmitting data or receiving data ADSL normal
ACT	Data	On Off	There is data transmitting or receiving on WAN port No data transmitting or receiving on WAN port
LAN	Ethernet	On Off Flash	LAN port normal Connection on LAN port abnormal Data transmitting or receiving on LAN port

Chart 1-1

2.3 Rear-panel

- **ON/OFF:** Turn on/off the ADSL MODEM's power.
- **Power (9VAC/0.8A input)**: please do not use any unknown power adaptor, otherwise that may damage your ADSL MODEM.
- **RESET(reset default)**: First press push the reset button of MODEM, then turn on the MODEM's power about three minuters. It will utilize the default manufacturer's setting.
- **LAN:** Connect with your computer's NIC.
- **LINE(WAN)**: Connect to the MODEM of Splitter or Connecting the telephone line.

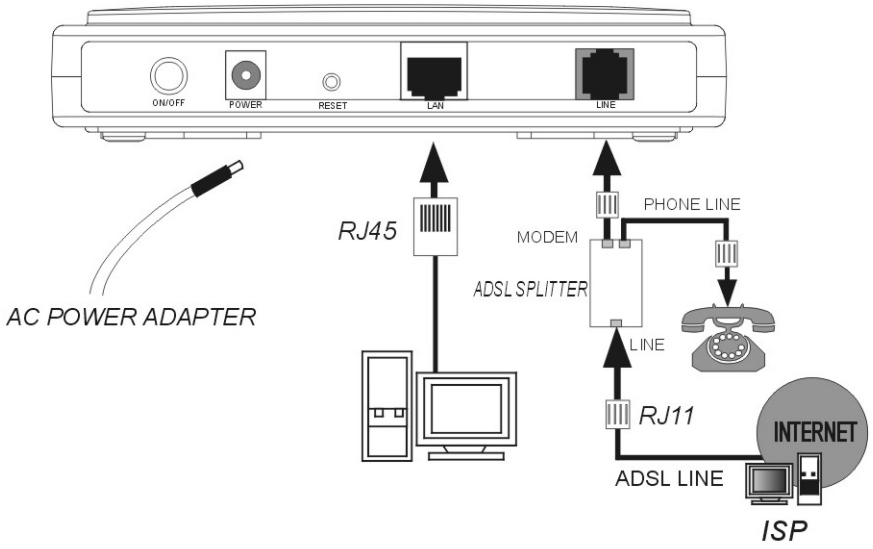
2.4 Hardware installation procedures（figure2-1）

First Step: Connecting the MODEM of Splitter with the LINE port of the TD-8610 ADSL MODEM by telephone line. While you need to use a telephone, please attach telephone line into the phone of Splitter.

Second Step: Connect category 5 cable with RJ45 jacks to ADSL MODEM's LAN port and your computer's NIC.

Third Step: Link power adapter into the power jack of ADSL MODEM. Please note the range of voltage of power adapter SHOULD be within AC 220～230V, 50Hz, which will make the MODEM under normal operation.

Last Step: Check the line connection to see if everything is ready. Then power up.



（figure2-1）

Chapter 3: How to use

3.1 Computer Configuration

1. Connect the cable according to Chapter 2, turn on the power.
2. Change the IP address of your PC（Figure 3-1）: Open TCP/IP Properties of the LAN card in your PC, enter the IP address as 192.168.1.* (* is any value between 2 to 254, Netmask is 255.255.255.0, Gateway is 192.168.1.1, DNS address is the value provided by ISP).

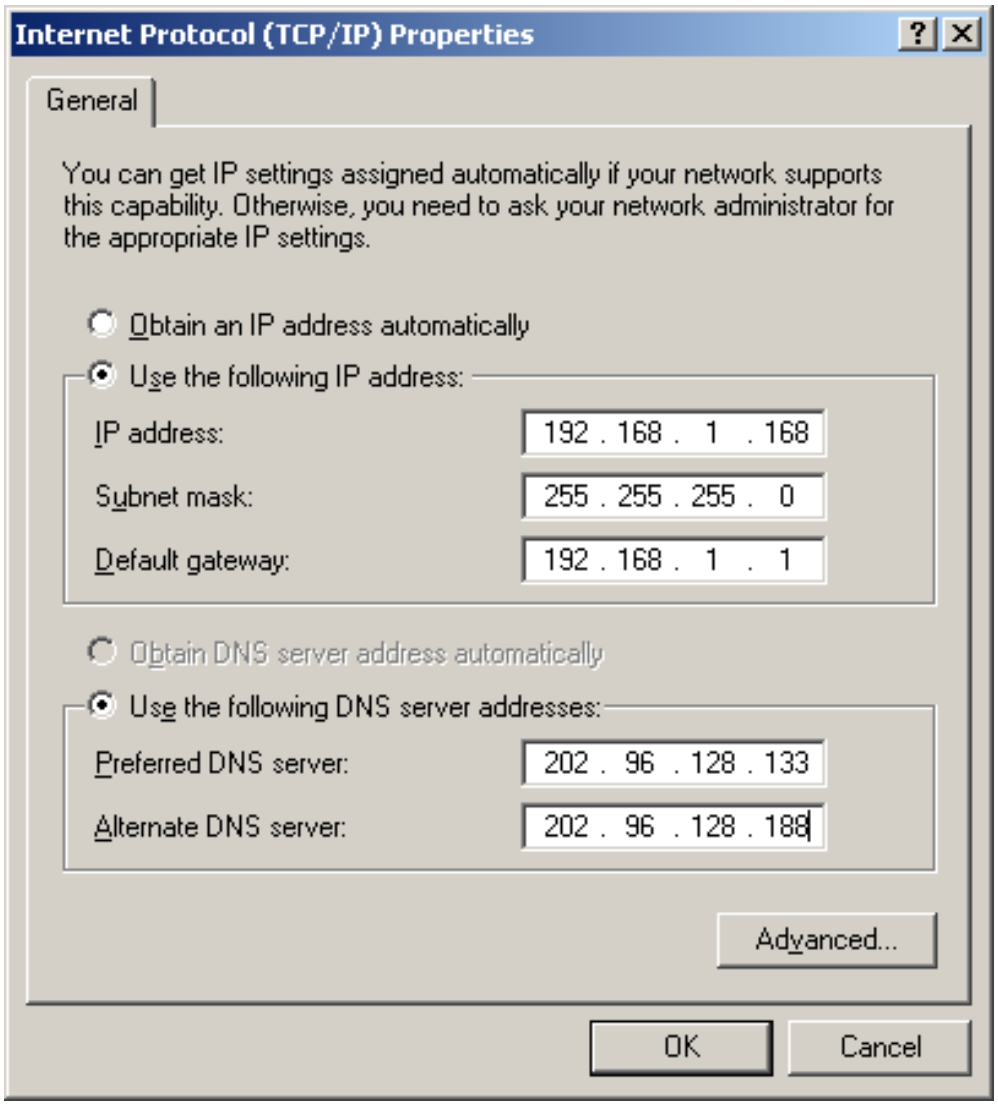


Figure 3-1

Please note:

the users of Windows 98 can open **TCP/IP Properties** according to the following: Right-press (Mouse) **Network Neighbor** -> Choose **Properties** -> Double-press **TCP/IP.. PCI Fast Ethernet Adapter**.

The users of Windows 2000/NT/XP can do the following: Right-press **Network Neighbor** -> Choose **Properties** -> Right-press **Local Connection** -> Choose **Properties** -> Double-press **Internet Protocol (TCP/IP).**

NOTE: The words in fact maybe are different with this guide.

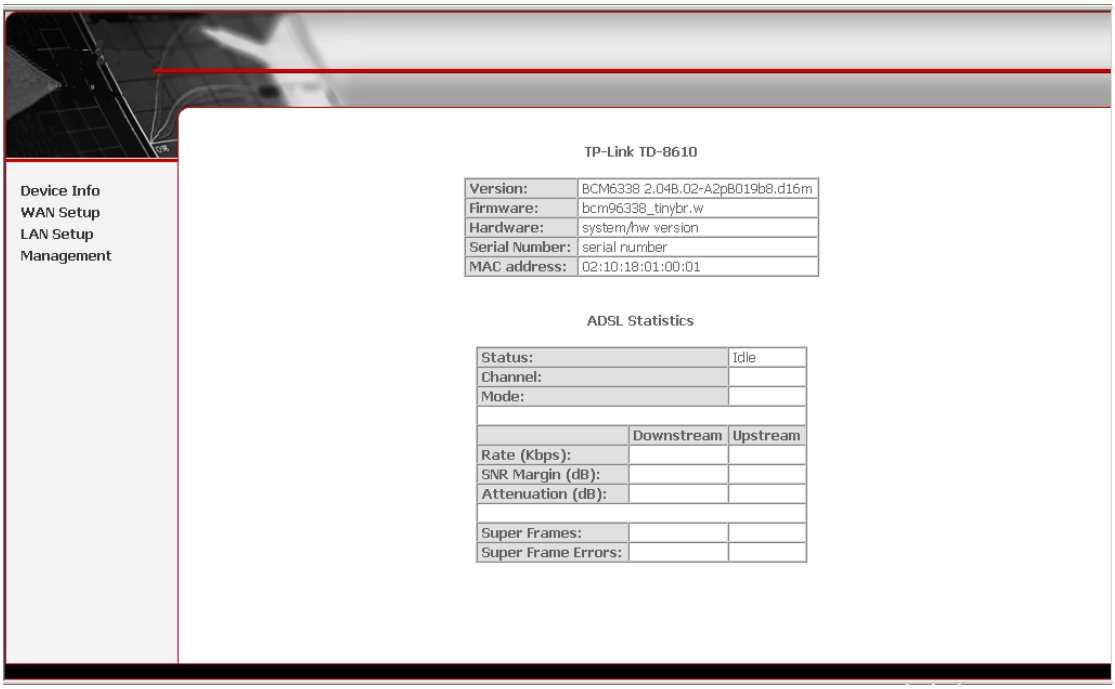
Remarks: you can check whether your configuration is successful through **PING** command. Enter **Ping 192.168.1.1**

If the screen likes the following, you succeed.
Pinging 192.168.1.1 with 32 bytes of data:
Reply from 192.168.1.1: bytes=32 time<10ms TTL-128
…

If the screen likes the following, you fail. Please try again.
Pinging 192.168.1.1 with 32 bytes of data:
Request timed out.

3.2 Login

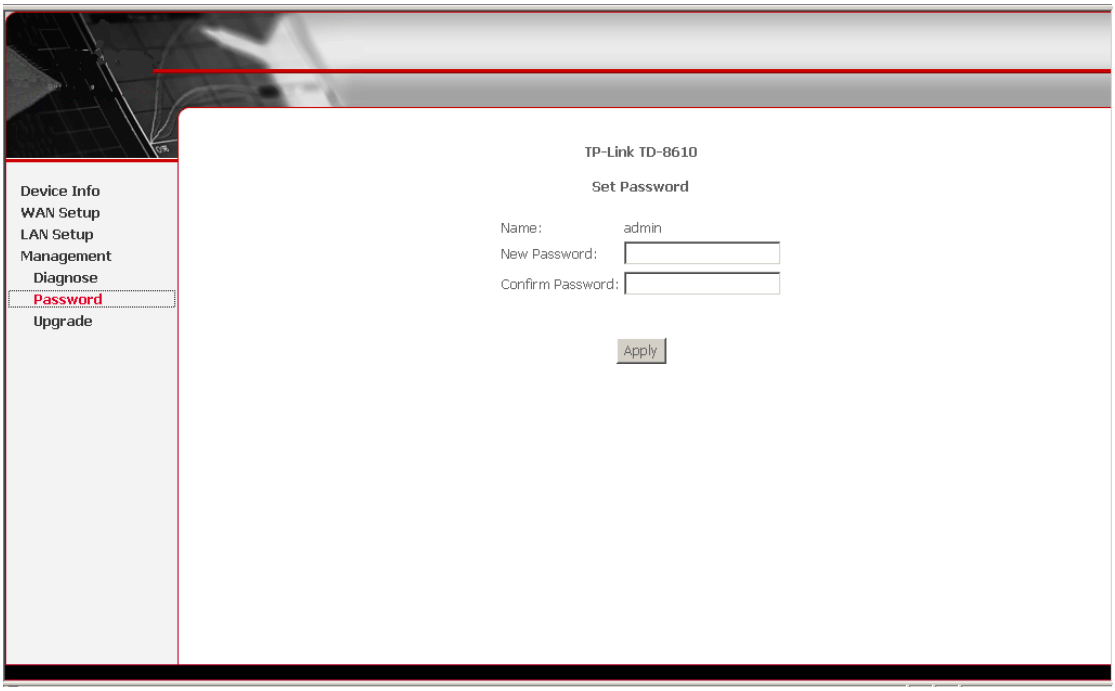
Startup Internet Explorer, and enter 192.168.1.1; then enter user name(admin)、password(admin); you will see the page (Figure 3-2). When ADSL connecting is OK, you will see some information such as link rate and soon.



(Figure 3-2)

Default value of user name and password is admin; if you want to change them, please

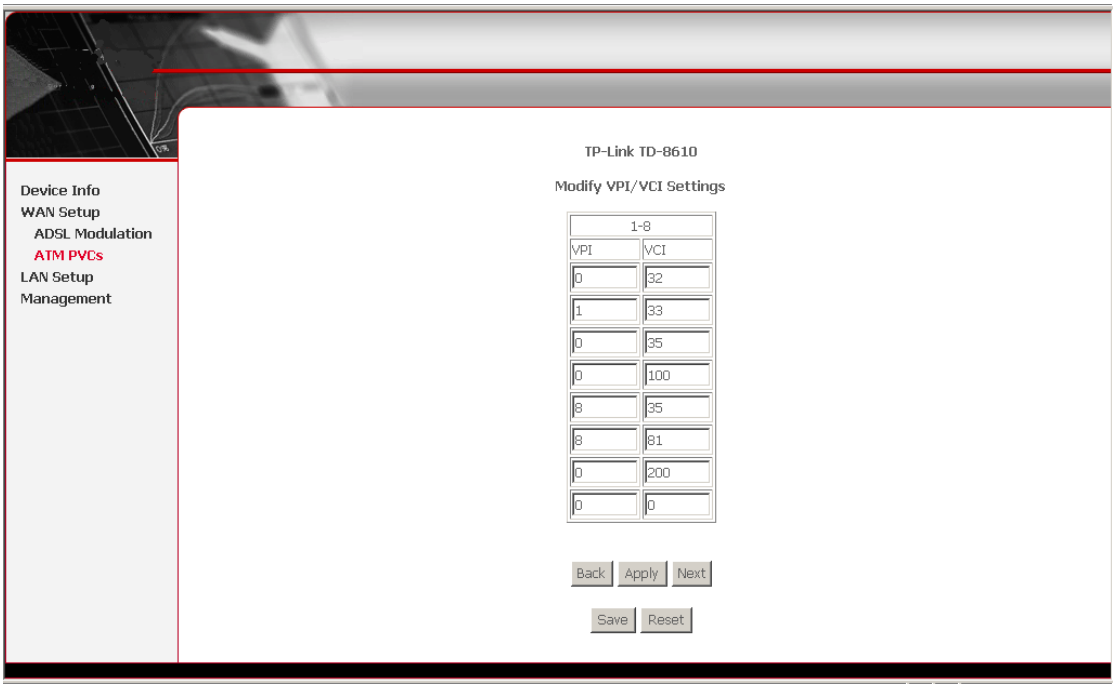
go to"Management","Password"changing them. (Figure 3-3)



(Figure 3-3)

3.3 Setup

1) Choose ATM PVCs Config (See Figure 3-4)
2) Enter **VPI/VCI** value which is provided by your ADSL service provider, press **Save** to finish the configuration.You can press **Next** to add **VPI/VCI** value.



(Figure 3-4)

3.4 Software Dial

TD-8610 work in bridged(RFC 1483 Bridged) mode connecting Internet.you need to install dial software on your PC.There are some software working on WINDOWS in market,example for EnterNet3000、RASPPPoE、WinPeET.How to use the software?Please refer to everyone's operation instructions.

Appendix A: Default Config

USER NAME	admin
PASSWORD	admin
IP ADDRESS	192.168.1.1
VPI/VCI	0/32,1/33,0/35,0/100,0/200,8/35,8/81

Appendix B: Contact Information

For help with the installation or operation of the TP-LINK TD-8610 External ADSL MODEM, please contact us.

E-mail: support@tp-link.com
Website: http://www.tp-link.com