



User Manual  
**ADSL2+ Modem Router**  
Model No. SP3361

Web: [www.micronet.com.tw](http://www.micronet.com.tw) ; [www/micronet.info](http://www.micronet.info)

### FCC Certifications

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

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

### 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.



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## Chapter 1. Introduction

This device is a full-featured ADSL2+ modem router that provides Ethernet direct connections to individual PCs or local area network with 10/100 Base-T Ethernet. This product uses advanced ADSL chipset solution with complete set of industry standard features and high-speed ADSL, ADSL2 and ADSL2+ Internet access solution for SOHO and residential users. User can enjoy higher quality multi-media and real-time applications such as Video-on-Demand, online gaming and other bandwidth consuming services. Also the feature-rich routing functions are integrated to ADSL/ADSL2+ service for existing corporate or home users seamlessly.

### 1.1 System Requirements

- Pentium III 266 MHz processor or higher
- 128 MB RAM minimum
- 20 MB of free disk space minimum
- Ethernet Network Interface Controller (NIC) RJ45 Port
- USB Port
- CD drive

### 1.2 Package Contents

- ADSL2+ Modem Router
- RJ-45 Ethernet cable
- RJ-11 Phone cable

- USB Cable (for dual mode router only)
- Power Adapter
- Driver and Manual CD
- Quick Installation Guide

If any of above items is missing or damaged, please contact your local dealer immediately.

## Chapter 2. Features

### 2.1 ADSL Compliant

- ANSI T1.413 issue 2
- ITU-T G.992.1 (G.dmt)
- ITU-T G.992.2 (G.lite)
- G.994.1 (G.hs, Multimode)
- ITU-T G.992.3 (ADSL2 G.dmt.bis)
- ITU-T G.992.4 (ADSL2 G.lite.bis)
- ITU-T G.992.5 (ADSL2+, Annex A, B, I, J, L & M)

### 2.2 ATM Protocols and Encapsulations

- Support up to 8PVCs
- ATM Forum UNI 3.1/4.0 PVC
- Traffic Shaping UBR, CBR, VBR-nrt
- Multi Protocol over AAL5 (RFC1483 / 2684)
- Classical IP over ATM (RFC 1577)
- OAM F4 and F5 segment end-to-end loopback, AIS, and RDI OAM cells
- VC and LLC Multiplexing
- VPI is 0~255 and VCI is 32~65535

## 2.3 PPP Support

- PPP over Ethernet (RFC 2516)
- PPP over ATM (RFC 2364)
- PPP over PAP (Password Authentication Protocol; RFC1334)
- PPP over CHAP (Challenge Authentication Protocol; RFC1994)

## 2.4 Bridging / Routing Support

- Ethernet to ADSL self-learning Transparent Bridging (IEEE 802.1D)
- IP routing-RIPv2 (backward compatible with RIPv1)
- Static IP routing
- IGMP Proxy
- IP Multicast IGMP v1/v2
- ICMP support
- MIB II support (RFC 1213)

## 2.5 IP Management

- NAT (Network Address Translation)
- PAT (Port Address Translation)
- DHCP Server / Relay / Client
- Virtual Server and DMZ
- DNS Proxy / Relay
- DDNS
- UPnP

## 2.6 Security

- PAP (Password Authentication Protocol; RFC1334)
- CHAP (Challenge Authentication Protocol; RFC1994)
- Password Protected System Management
- VPN (IPSec, PPTP, L2TP) Pass-Through
- Built in NAT Natural Firewall
- Web page Content Filtering

## 2.7 Device Management

- Web-based GUI Configuration / Management
- Command-line Interpreter (CLI)
- Telnet Remote Management
- Firmware upgrade via FTP / TFTP
- SNMP Support
- Built-in Diagnostic tool

## 2.8 Interface

- One USB port compliant with USB v1.1, full speed (12Mbps)
- One RJ45 port compatible with IEEE 802.3/802.3u, 10/100Mbps auto selection
- One RJ11 port for ADSL connection
- One power switch button for turn ON/OFF
- One reset button for restoration of factory default setting

## Chapter 3. Hardware

### 3.1 Front Panel

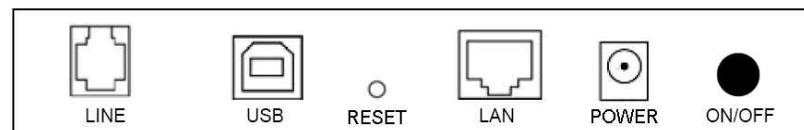
Front panel has LED indicators to display the operating status.



#### Descriptions of LED status

ADSL	When connection with Internet (ADSL Connected) is established, this LED will light up. When this LED is flashing: NO ADSL physical connection
DATA	When router is transferring data between Internet and router, this LED will be flashing.
LAN	When connection 10/100MB with end user is established, this LED will light up. When router is transferring data between router and end user, this LED will be flashing.
USB	When an active USB cable is connected with router, this LED will light up.
PWR	When an active power adapter is connected with router, this LED will light up.

### 3.2 Back Panel



#### Descriptions of All Connectors

LINE	Connect with telephone line.
USB	Connect with USB cable.
RESET	Reset button.
LAN	Connect with Ethernet Cable to Switch Hub or PC
POWER	Connect with power adapter
ON/OFF	Power switch button

### 3.3 Connect Related Devices

- 1) Connect Router to **LINE**  
Plug the provided **RJ-11 phone cable** into **LINE port** on the back panel of the router and insert the other end into splitter or wall phone jack.
- 2) Connect Router to **LAN**  
Plug **RJ-45 Ethernet Cable** into **LAN port** on the back panel of the router and insert the other end of the Ethernet cable on your PC's Ethernet port or switch / hub.
- 3) Connect Router to Power Adapter  
Plug **Power Adapter** to **POWER** port on the back panel of

the router and the other end to a power outlet.

- 4) Press **ON/OFF** button to start the router
- 5) If connect the router via USB cable, plug the provided **USB cable** into **USB port** on the back panel of the router and insert the other end of the USB cable on your PC.

**Warning! Only use the power adapter provided in the package, otherwise it may cause hardware damage.**

## Chapter 4. Connection

This ADSL modem router can be connected with PC through either Ethernet cable or USB cable. After connection is established, configure the host PC to be a DHCP client. Repeat the same steps for every host PC on the network which uses DHCP function on this router. It also accepts host PC using fixed virtual IP which is resided in the same sub network of this router.

### 4.1 Setup ADSL router via Ethernet Cable

If there is an available LAN card present on PC, simply connect ADSL router and PC through the Ethernet cable. Once Internet connection is established, you could browse the Web through the Ethernet cable.

### 4.2 Setup ADSL router via USB Cable

PC can be connected ADSL router via USB cable while no LAN card present on it. USB cable acts as another LAN connection in this scenario. Once Internet connection is established, you could browse the Web through the USB cable.

## USB Device Driver Installation

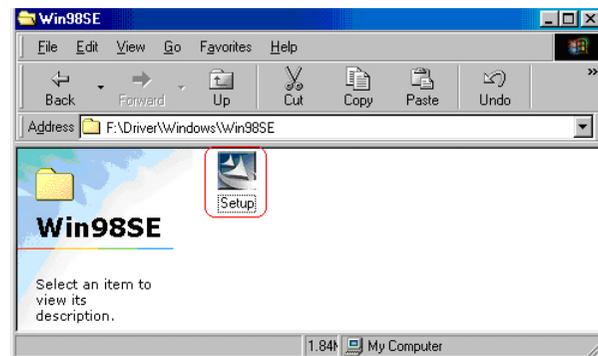
### For windows 98SE and ME:

Step 1: Connect ADSL Router and PC with USB cable.

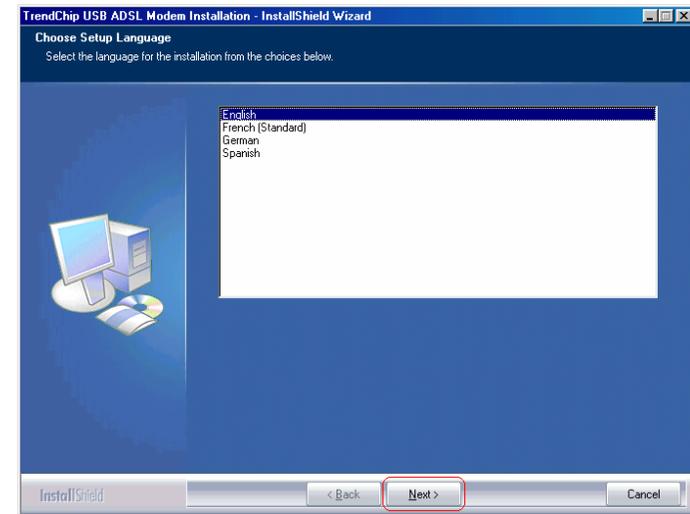
Step 2: Once “Add New Hardware Wizard” window pops out, click “Cancel”.



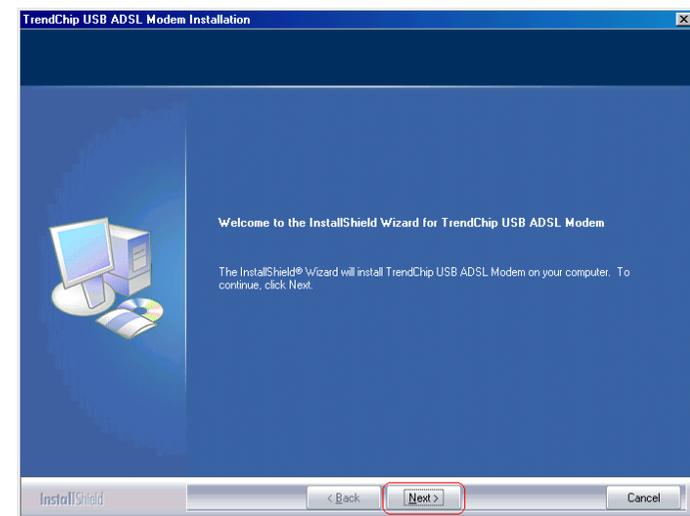
Step 3: Browse your installation CD and direct the device drive path which depends on your operating system. Then, double-click “Setup.exe” to execute the installation process.



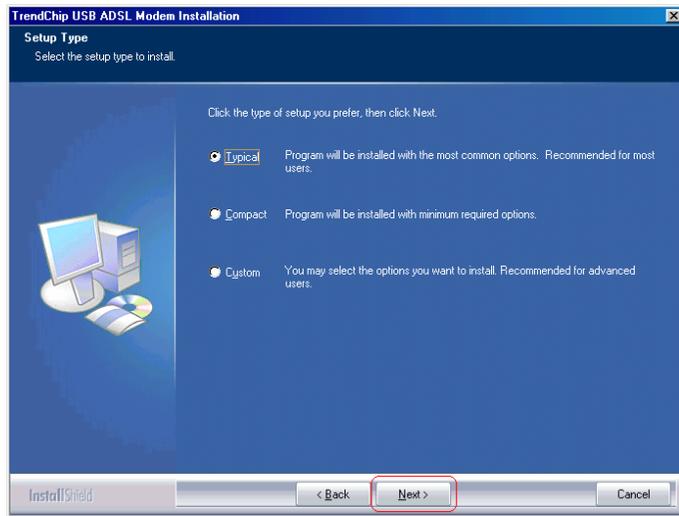
Step 4: Choose Setup Language and click “Next” to continue.



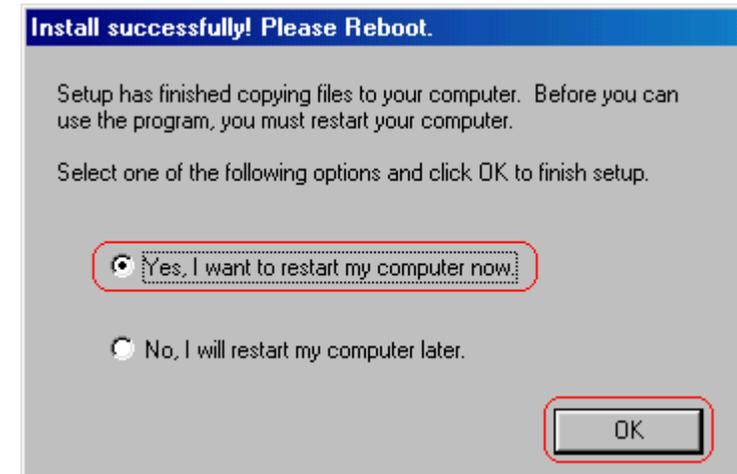
Step 5: Click “Next” to continue.



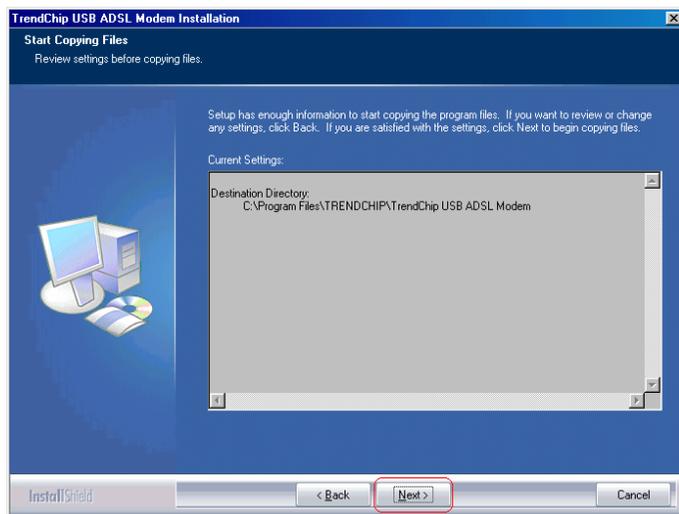
Step 6: Select the setup type to install and click “Next” to continue.



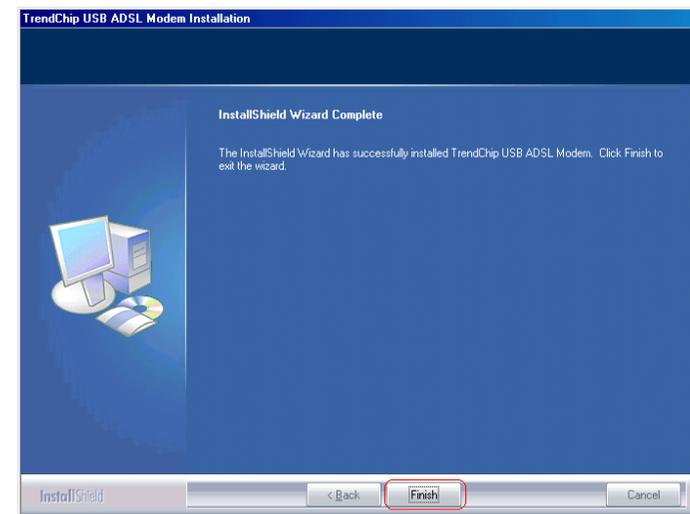
Step 8: Select “Yes, I want to restart my computer now” to restart your computer and click “OK”.



Step 7: Click “Next” to continue.



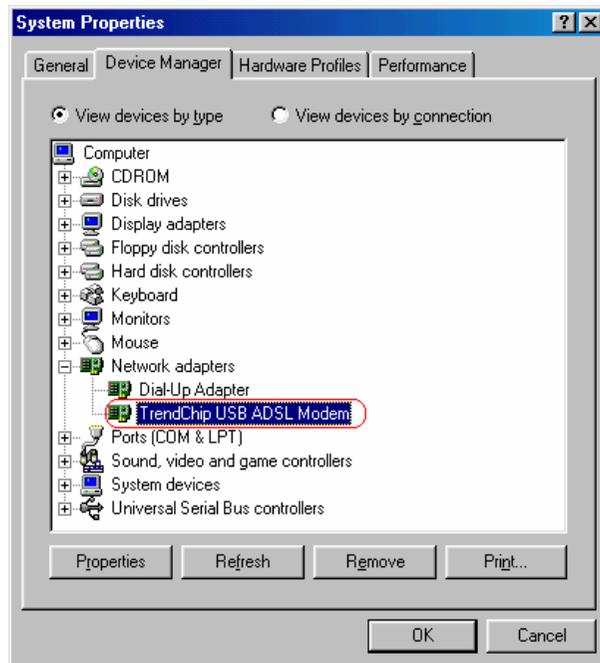
Step 9: Click “Finish” to exit the wizard.



Step 10: After complete the installation process, the system will ask to restart your computer. Please click “Yes” to reboot it.



After OS boots up, go through “Start → Settings → Control Panel → System → Device Manger” to check if USB device is installed properly,



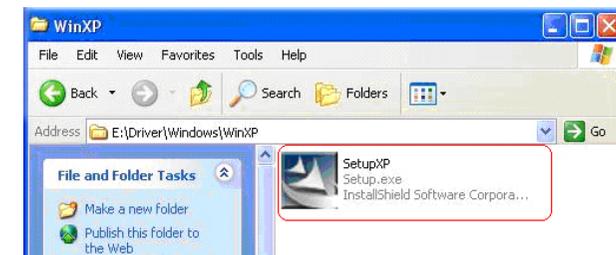
**For Windows 2000 and XP:**

Step 1: Connect ADSL Router and PC with USB cable.

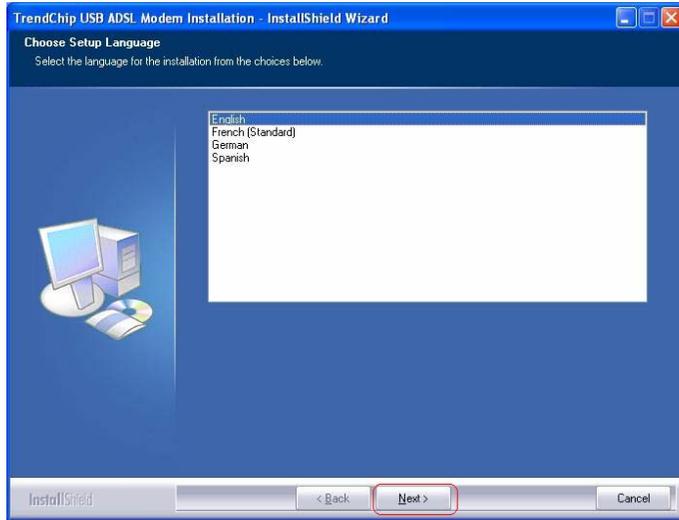
Step 2: Once “Found New Hardware Wizard” window pops out, chooses “Install from a list or specific location (advanced)” and click “Cancel”:



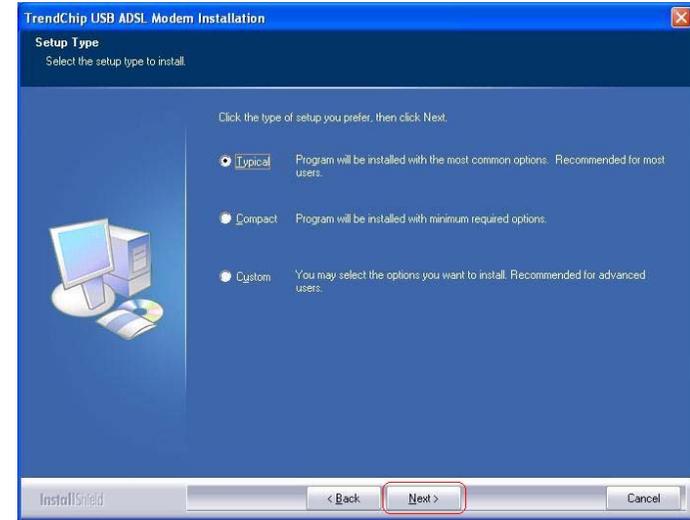
Step 3: Browse your installation CD and direct the CD drive path. Then, double-click “Setup.exe” to execute the installation process.



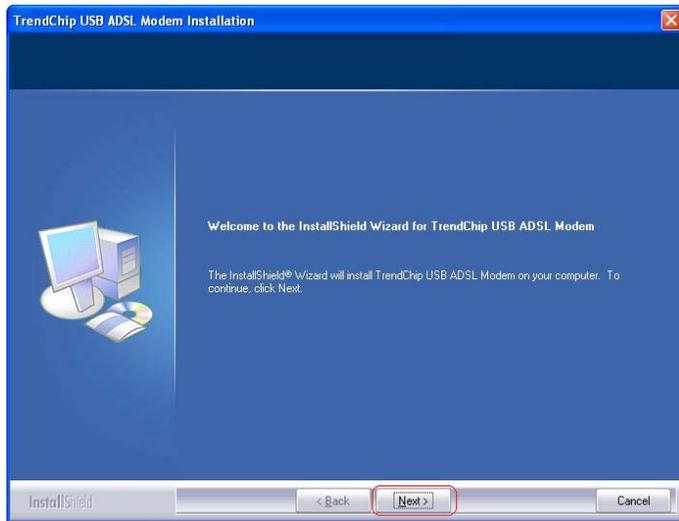
Step 4: Choose Setup Language and click “Next” to continue.



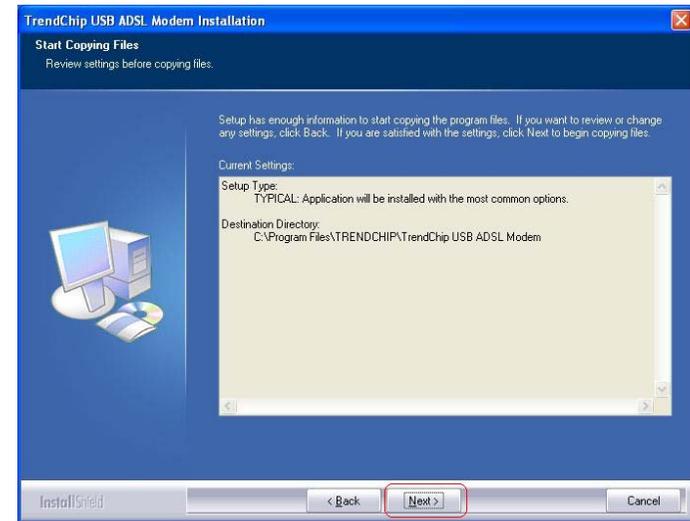
Step 6: Select the setup type to install and click “Next” to continue.



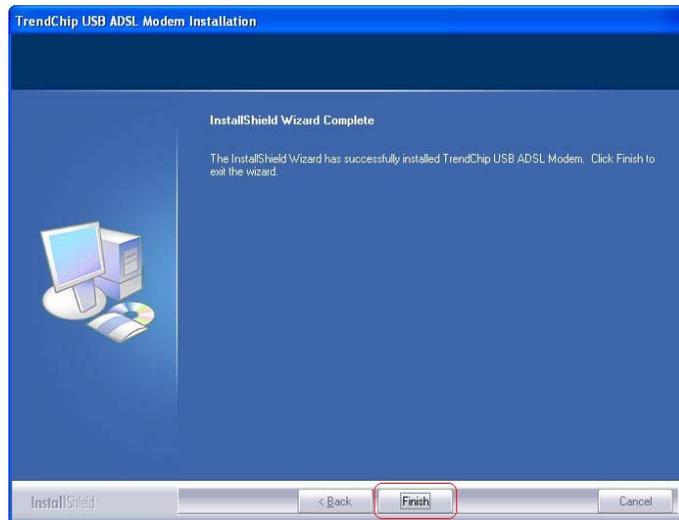
Step 5: Click “Next” to continue.



Step 7: Click “Next” to continue.



Step 8: Click **“Finish”** to exit the wizard.

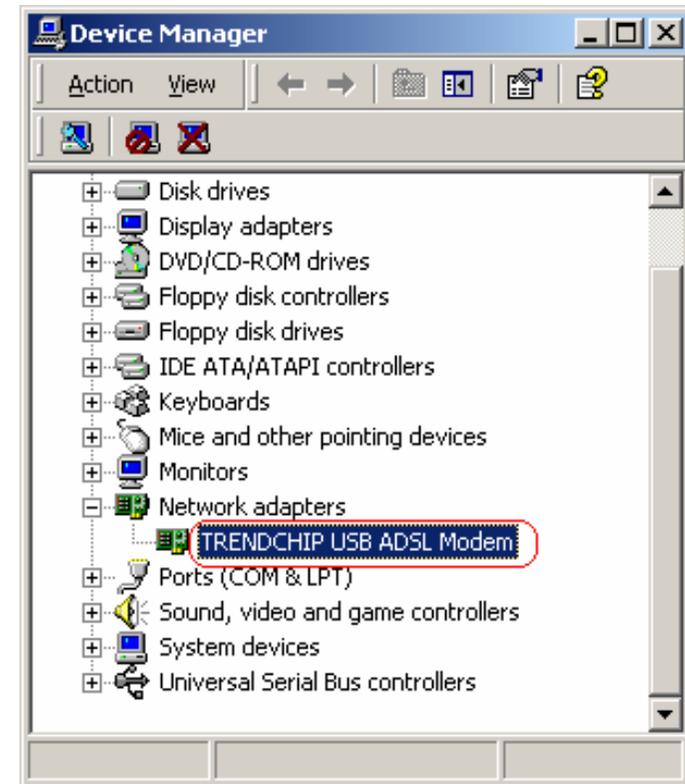


#### **For Windows XP:**

Go through **“Start → Control Panel → System → Hardware → Device Manager”** to check if USB device is installed properly.

#### **FOR Windows 2000:**

Go through **“Start → Settings → Control Panel → System → Hardware → Device Manager”** to check if USB device is installed properly.



### **4.3 Configure TCP/IP**

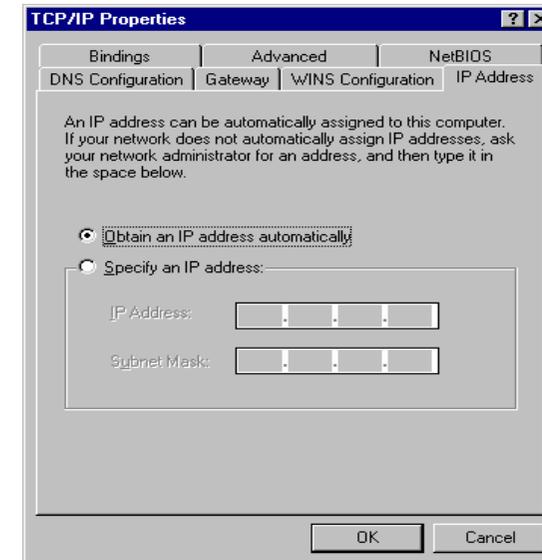
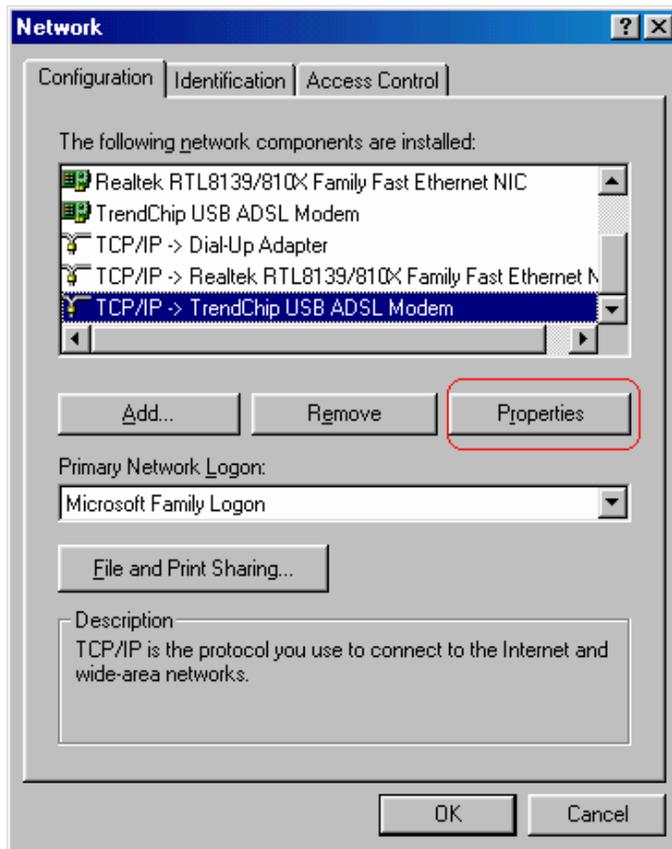
#### **For Windows 98SE and ME**

Step 1: Click **Start** then **Settings** and choose **Control Panel**

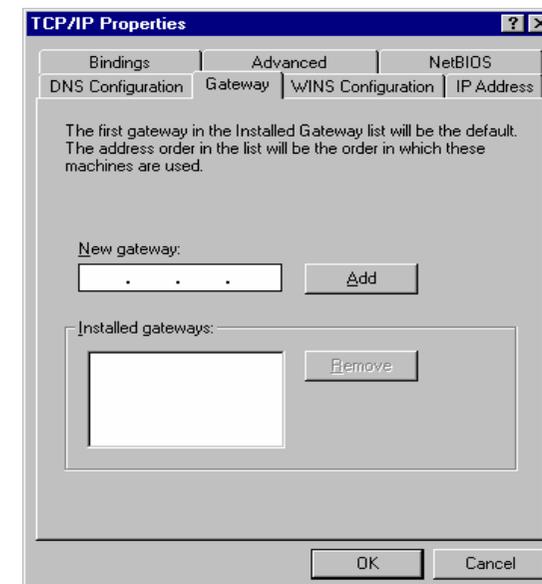
Step 2: Double click **Network** icon.

Step 3: Select **Configuration** tab, then choose **TCP/IP** from the list of installed network components and click **Properties** button.

Step 4: You can setup the following configurations in **two** methods:



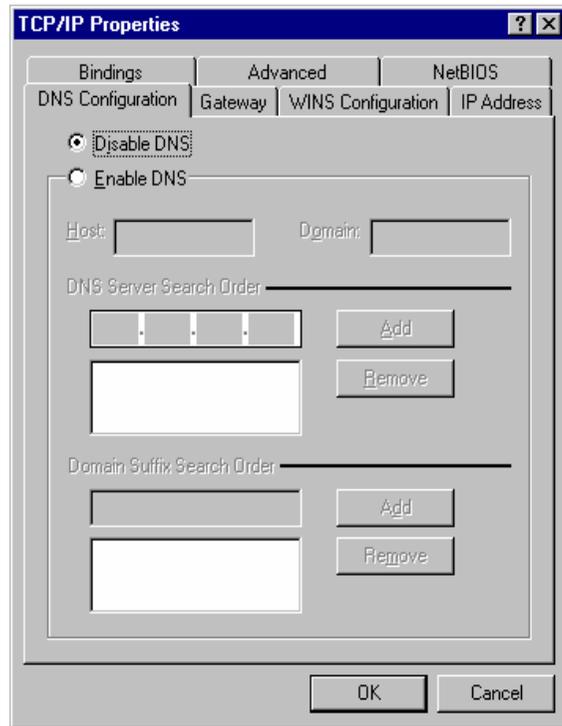
1) Select **Gateway** tab and click **OK**.



**Option1:** Get an IP from router automatically.

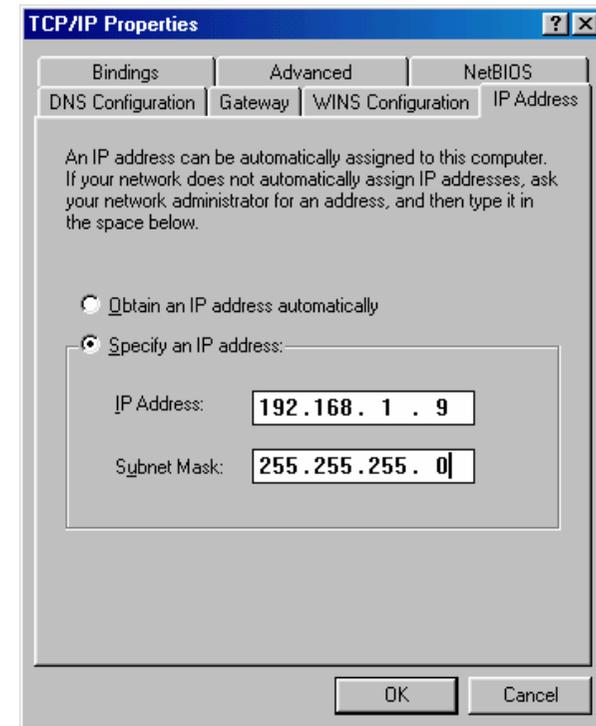
Choose **Obtain an IP address automatically** option in the next window.

2) Select DNS Configuration tab and select Disable DNS then click OK.

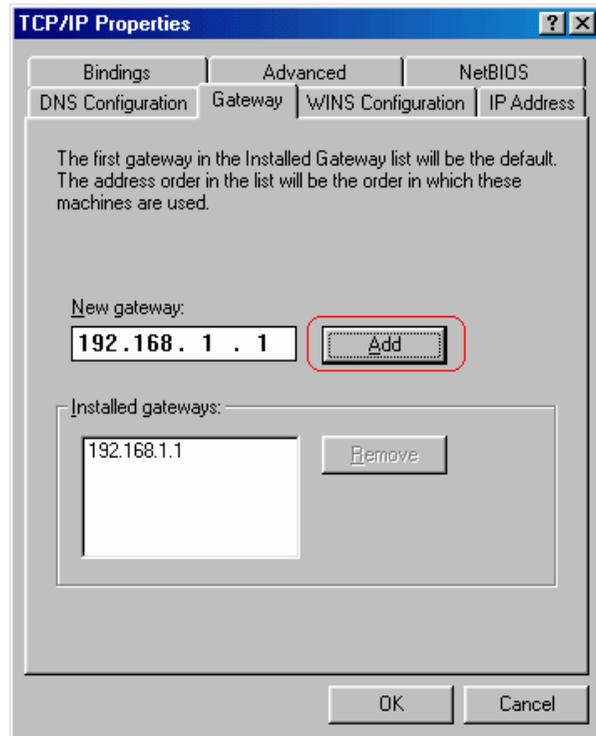


**Option2:** Configure IP manually.

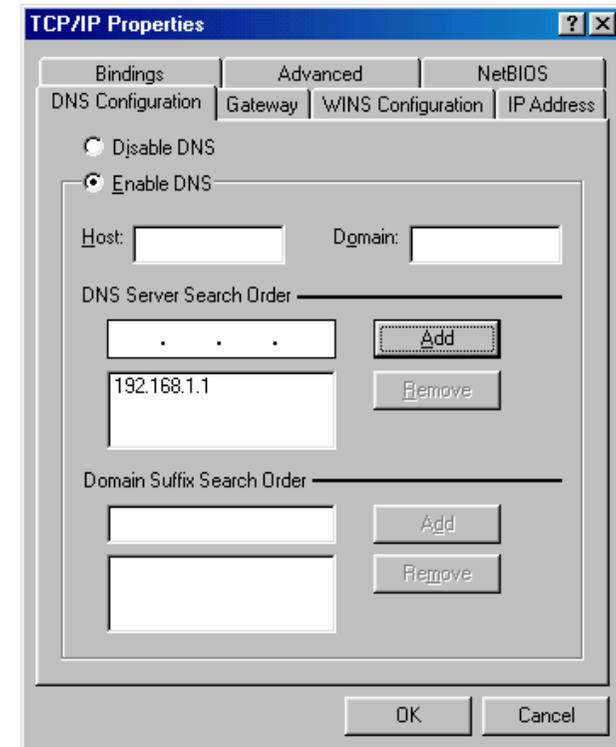
1) Select **Specify an IP address**, set default IP address for the router is **192.168.1.1**, so use **192.168.1.x** (x is a number between 2 to 254) for **IP Address** field and **255.255.255.0** for **Subnet Mask** field.



- 2) Select Gateway tab and add default router IP address (192.168.1.1) in the New gateway field and click Add.



- 3) Under DNS Configuration tab, select Enable DNS and add DNS values which provides by your local ISP in DNS Server Search Order field then click Add.

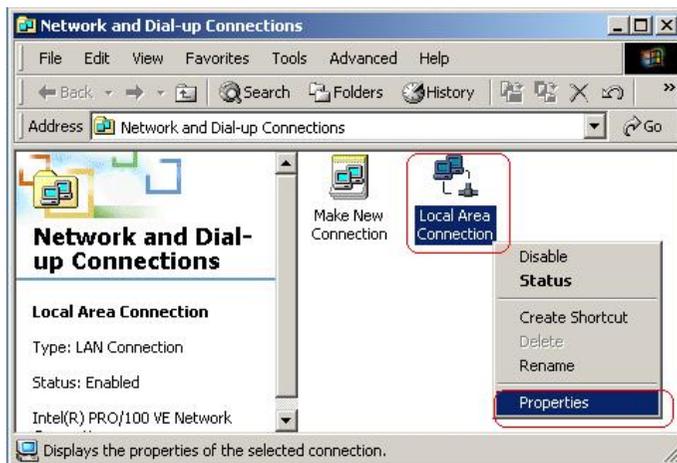


## For Windows 2000

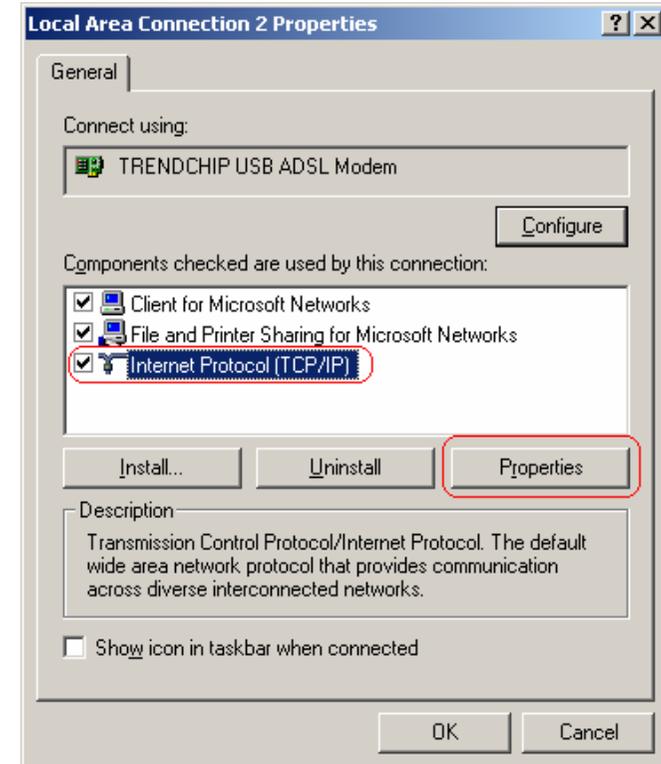
Step 1: Right click **My Network Places** and select **Properties** in the main window screen.



Step 2: Right click Local Area Connection (the local network hooked up with ADSL router) and select Properties:



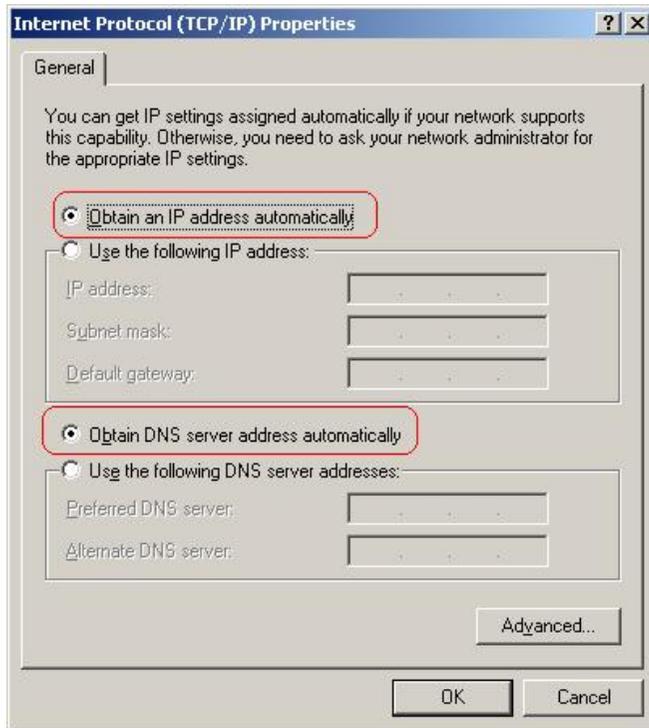
Step 3: Select **Internet Protocol (TCP/IP)** then click **Properties**.



Setup the following configurations in **two** methods:

### Option1: Configure IP automatically

Select **Obtain an IP address automatically** and **Obtain DNS server address automatically** then click **OK** to complete IP configuring process.



### Option2: Configure IP Manually

Select **Use the following IP address** and **Use the following DNS server addresses**.

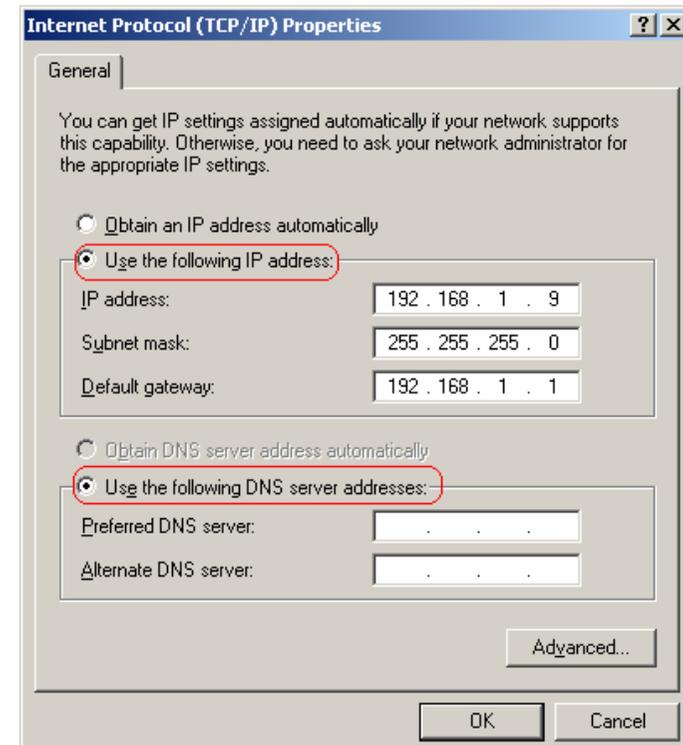
**IP address:** Fill in IP address 192.168.1.x (x is a number between 2 to 254).

**Subnet mask:** Default value is 255.255.255.0.

**Default gateway:** Default value is 192.168.1.1.

**Preferred DNS server:** Fill in preferred DNS server IP address.

**Alternate DNS server:** Fill in alternate DNS server IP address.



## For Windows XP

Step 1: Click **Start** then select **Control Panel** in the main window screen.



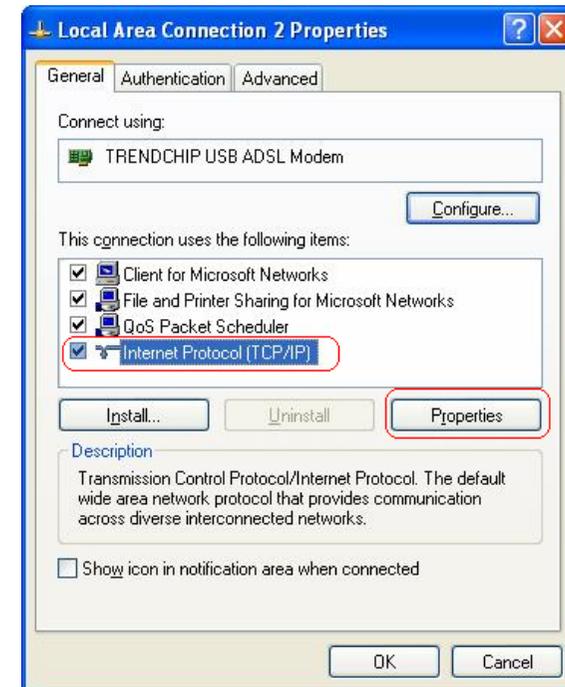
Step 2: Double click **Network Connections** icon.



Step 3: Right click **Local Area Connection** (local network your ADSL hooked up with) then select **Properties**:

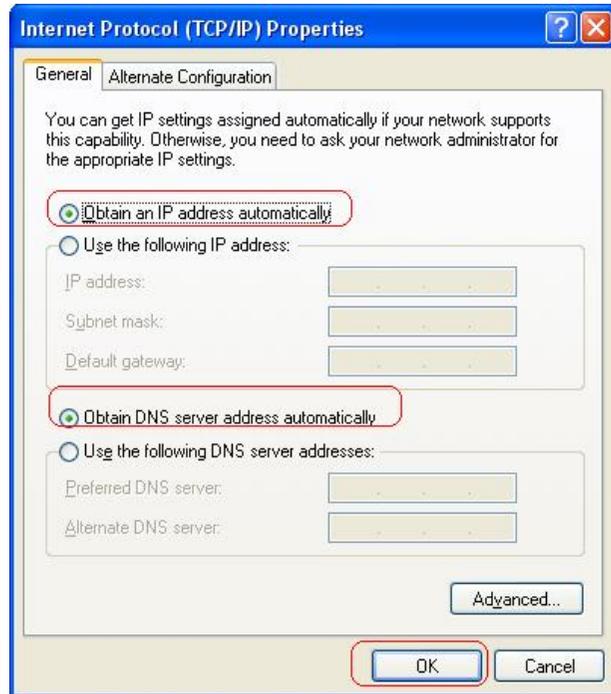


Step 4: Select **Internet Protocol (TCP/IP)** then click **Properties** to configure IP with either option below.



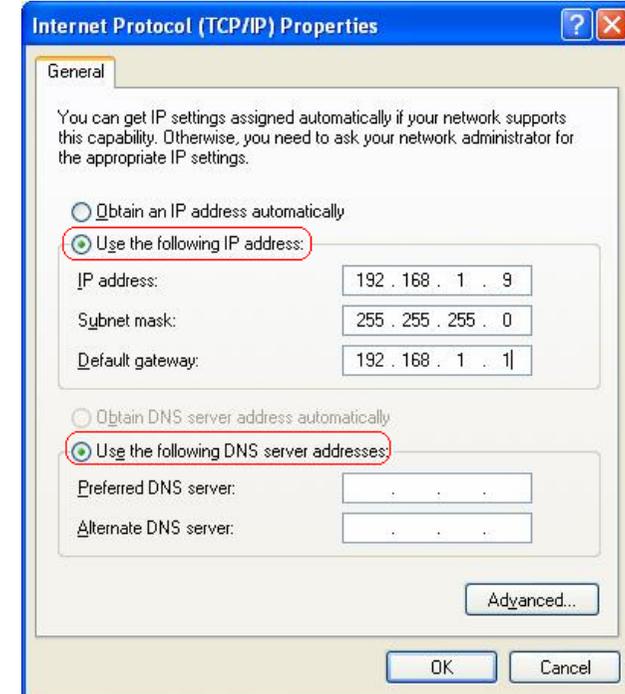
### Option1: Configure IP address automatically

Select **Obtain an IP address automatically** and **Obtain DNS server address automatically**:



### Option2: Configure IP address manually

Step 1: Select **Use the following IP address** and **Use the following DNS server addresses**.



**IP address:** Fill in IP address 192.168.1.x (x is a number between 2 to 254).

**Subnet mask:** Default value is 255.255.255.0.

**Default gateway:** Default value is 192.168.1.1.

**Preferred DNS server:** Fill in preferred DNS server IP address.

**Alternate DNS server:** Fill in alternate DNS server IP address.

You can use ping command under DOS prompt to check if you have setup TCP/IP protocol correctly and if your computer has successfully connected to this router.

Type **ping 192.168.1.1** under DOS prompt and the following messages will appear:

```
Pinging 192.168.1.1 with 32 bytes of data:  
Reply from 192.168.1.1: bytes=32 times<2ms TTL=64  
Reply from 192.168.1.1: bytes=32 times<1ms TTL=64  
Reply from 192.168.1.1: bytes=32 times<10ms TTL=64
```

If the communication link between your computer and router is not setup correctly, after you type **ping 192.168.1.1** under DOS prompt following messages will appear:

```
Pinging 192.168.1.1 with 32 bytes of data:  
Reques          t timed out.  
Reques          t timed out.  
Reques          t timed out.
```

This failure might be caused by cable issue or something wrong in configuration procedure.

## 4.4 USB Device Driver Installation on MAC OS

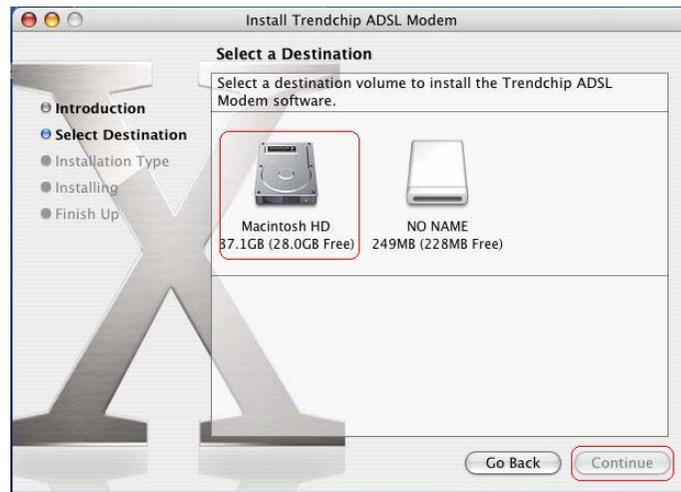
Step 1: Once you insert the device driver CD disk, direct the path of your MAC OS. Double-click the compressed “.zip” file to unzip the file. Then, you will get a “.pkg” file.



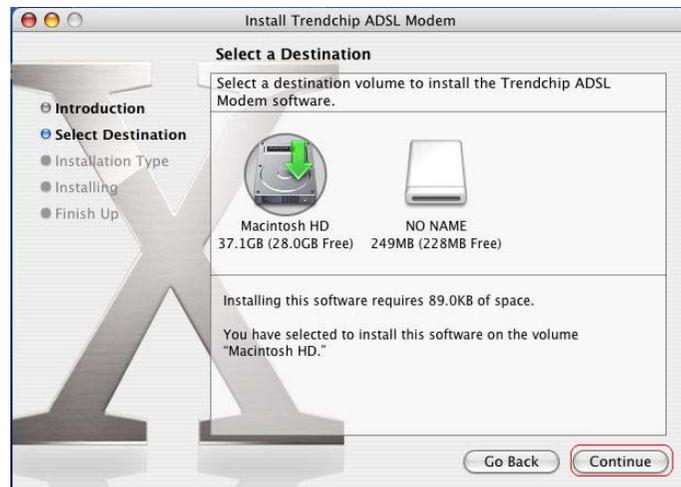
Step 2: Double-click the “.pkg” file, the Trendchip ADSL modem installer windows will appear. Click “Continue” to go next process.



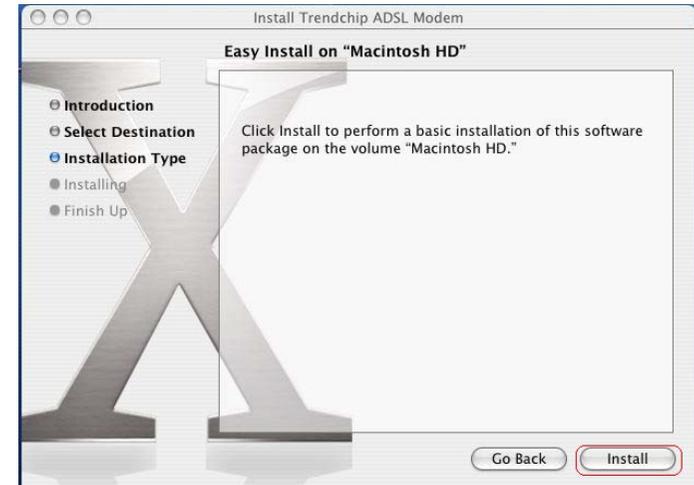
Step3: Select a Destination to install the Trendchip ADSL Modem software and click **“Continue”**.



Step 4. Click **“Continue”** to go next process.



Step 5: Click **“Install”** to begin the installation process.



Step 6: Enter your Name and Password for the system. Then, click **“OK”** to continue.



Step7: Click **“Continue Installation”** to start installation.



Step 8: Click **“Restart”** to finish installing the software.



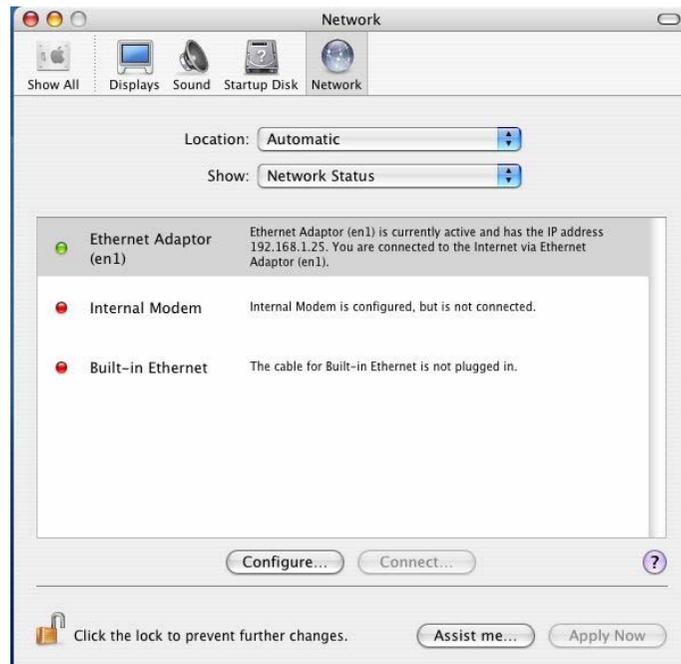
Step 9: After restart the PC, click **“System Preferences”** on the bottom of the desktop.



Step 10: Click **“Network”** icon on the System Preferences windows.

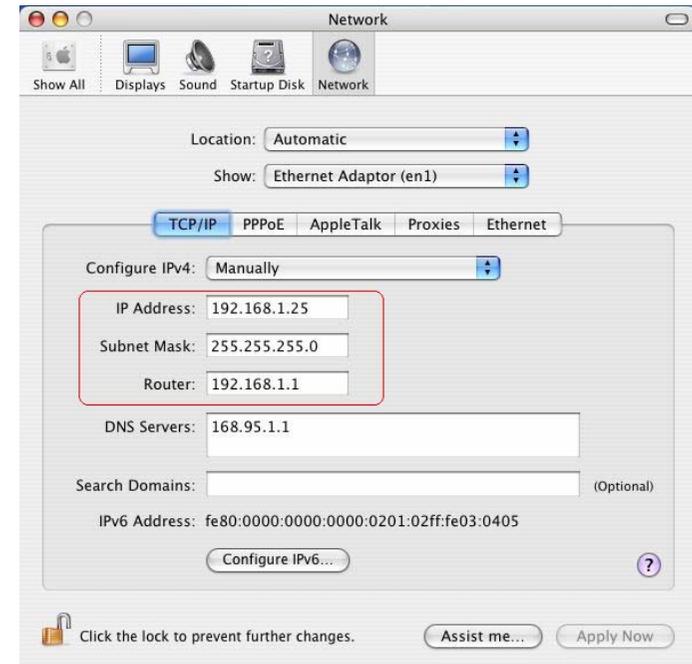


Step 11: Once your Ethernet Adaptor's button is "Green", it means your ADSL Router is successful installed.



Step 12: Fill in TCP/IP IP address.

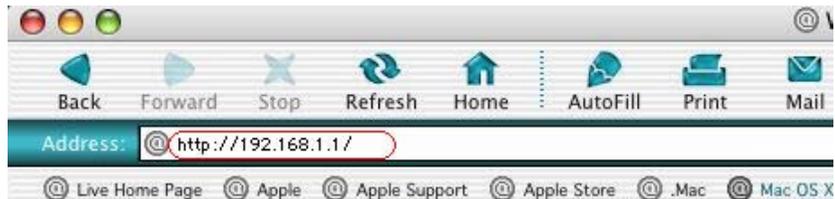
**IP address:** Fill in IP address 192.168.1.x  
(x is a number between 2 to 254).  
**Subnet mask:** Default value is 255.255.255.0.  
**Router:** Default value is 192.168.1.1



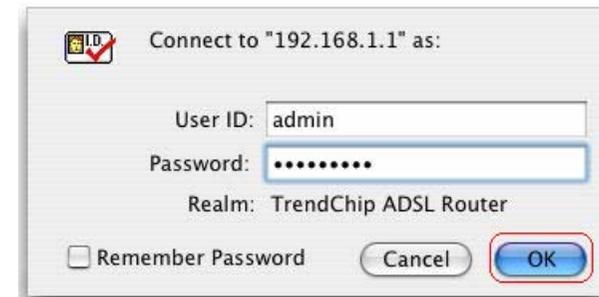
Step 13: Go to “Applications” → double-click “Internet Explorer” icon.



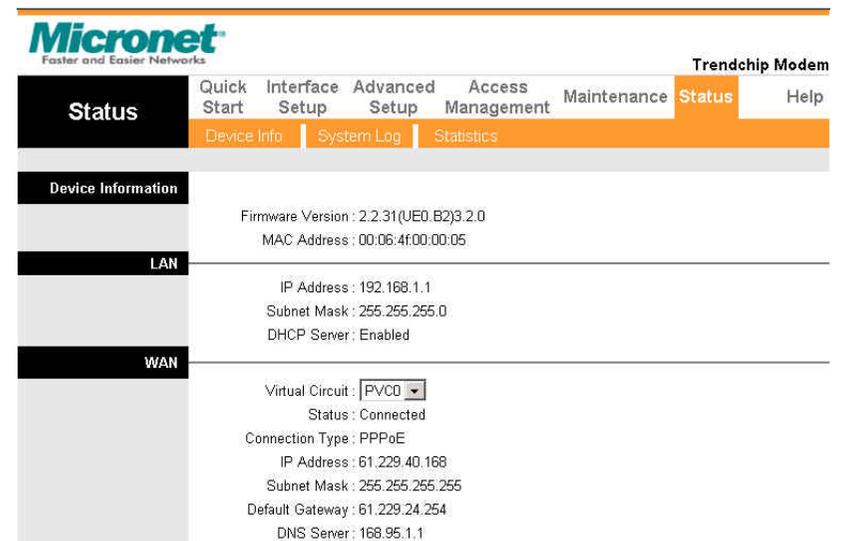
Step14: Enter the default IP address <http://192.168.1.1>



Step15: Entry of the username and password will be displayed. Enter the default **User ID** and **Password**. The default login **User ID** of the administrator is **admin**, and the **default admin login password** is **trendchip**. Then, click “OK” to enter.



After you enter User ID and Password, the main webpage will show as below.



# Chapter 5. Configuration

ADSL Router supports a web-based (HTML) GUI to allow users to configure router setting via Web browser.

## 5.1 Login

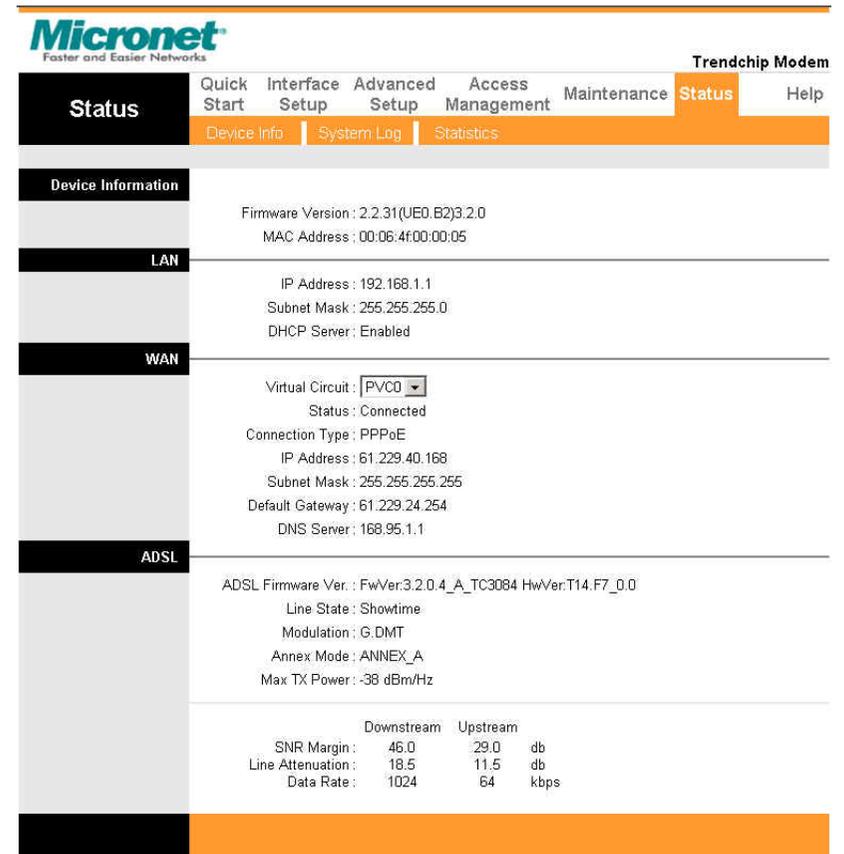
- 1) Launch the Web browser.
- 2) Enter the default IP address <http://192.168.1.1>
- 3) Entry of the username and password will be displayed. Enter the default **login**

### User Name and Password:

The default login **User Name** of the administrator is **admin**, and the default **login password** is **trendchip**.



The main webpage will be displayed as below:



**Micronet**  
Faster and Easier Networks

TrendChip Modem

Quick Start | Interface Setup | Advanced Setup | Access Management | Maintenance | **Status** | Help

Device Info | System Log | Statistics

---

**Device Information**

Firmware Version : 2.2.31(UE0\_B2)3.2.0  
MAC Address : 00:06:4f:00:00:05

---

**LAN**

IP Address : 192.168.1.1  
Subnet Mask : 255.255.255.0  
DHCP Server : Enabled

---

**WAN**

Virtual Circuit : PVCD  
Status : Connected  
Connection Type : PPPoE  
IP Address : 61.229.40.168  
Subnet Mask : 255.255.255.255  
Default Gateway : 61.229.24.254  
DNS Server : 168.95.1.1

---

**ADSL**

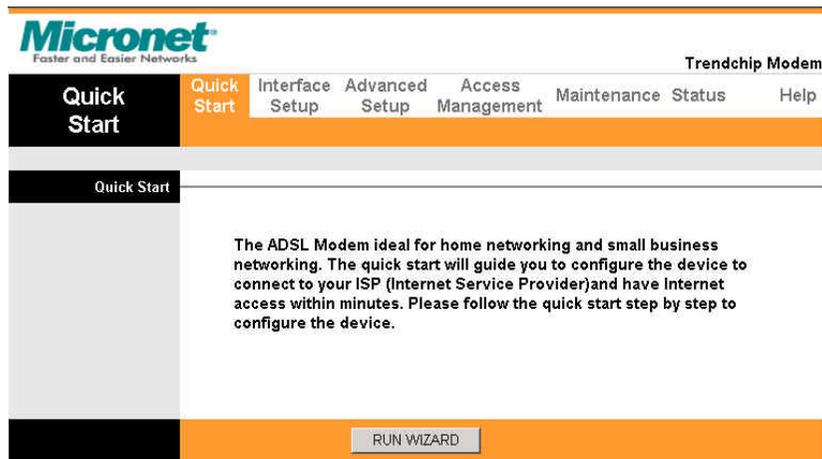
ADSL Firmware Ver. : FwVer:3.2.0.4\_A\_TC3084 HwVer:T14.F7\_0.0  
Line State : Showtime  
Modulation : G.DMT  
Annex Mode : ANNEX\_A  
Max TX Power : -38 dBm/Hz

	Downstream	Upstream
SNR Margin :	46.0	29.0 db
Line Attenuation :	18.5	11.5 db
Data Rate :	1024	64 kbps

## 5.2 Quick Start

Click **Quick Start** to guide you to configure the device to connect your ISP and have Internet access within minutes. This Quick Start helps you connect to the Internet as easily as possible.

*NOTE: It is a strong recommendation that using Quick Start to set your ADSL settings.*



The **Quick Start** setup wizard includes four quick steps:

- 1) **Set your new password.**
- 2) **Choose your time zone.**
- 3) **Set your Internet connection.**
- 4) **Re-start your ADSL router.**

Please follow the quick start step by step to configure the device. If ISP provides DNS, after complete Quick Start configuration, please go to **Interface Setup** → **Internet** to configure the DNS settings.

## 5.3 Interface Setup

Click **Interface Setup** to set ATM VC values, setup Encapsulation, configure PPPoE/PPPoA connection settings and LAN configuration.

### 5.3.1 Internet

**Virtual Circuit: VPI** (Virtual Path Identifier) and **VCI** (Virtual Channel Identifier).

**VPI** – The valid range for the VPI is 0 to 255.

**VCI** – The valid range for the VCI is 32 to 65635.

**Encapsulation:** Select the method of encapsulation used by your ISP from the list. Choices vary depending on the mode selected in the **Mode** field.

**PPPoE/PPPoA:** Enter your username, password and Encapsulation. Then check the proper **Connection Setting** and **IP Address** which are used to define how the router to control the Internet status.

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---

**ATM VC**

Virtual Circuit: PVC0 | PVCs Summary

Status:  Activated  Deactivated

VPI: 0 (range: 0~255)

VCI: 33 (range: 1~65535)

---

**QoS**

ATM QoS: CBR

PCR: 0 cells/second

SCR: 0 cells/second

MBS: 0 cells

---

**Encapsulation**

ISP:  Dynamic IP Address  
 Static IP Address  
 PPPoA/PPPoE  
 Bridge Mode

---

**PPPoE/PPPoA**

Username: 85238998@hinet.net

Password: \*\*\*\*\*

Encapsulation: PPPoE LLC

---

**Connection Setting**

Connection:  Always On (Recommended)  
 Connect On-Demand (Close if idle for 0 minutes)

---

**IP Address**

Get IP Address:  Static  Dynamic

Static IP Address: 0.0.0.0

IP Subnet Mask: 0.0.0.0

Gateway: 0.0.0.0

NAT: Enabled

Default Route:  Yes  No

Dynamic Route: RIP1 | Direction: Both

Multicast: Disabled

APPLY

**Note: Every time you change one setting, you must click APPLY button once, then go to next setting's change.**

### 5.3.2 LAN

**Micronet**  
Faster and Easier Networks

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Quick Start | **Interface Setup** | Advanced Setup | Access Management | Maintenance | Status | Help

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---

**Router Local IP**

IP Address: 192.168.1.1

IP Subnet Mask: 255.255.255.0

Dynamic Route: RIP2-B | Direction: None

Multicast: Disabled

---

**DHCP**

DHCP:  Disabled  Enabled  Relay

---

**DHCP Server**

Starting IP Address: 192.168.1.33

IP Pool Count: 32

Lease Time: 259200 seconds (0 sets to default value of 259200)

---

**DNS**

DNS Relay: User\_DNS

Primary DNS Server: 168.95.1.1

Secondary DNS Server: 168.95.192.1

APPLY | Cancel

#### [Router Local IP]

**IP Address:** Enter the IP address of your router in dotted decimal notation, for example, 192.168.1.1 (default setting).

**IP Subnet Mask:** Your ADSL router will automatically calculate the subnet mask based on the IP address that you assign. Unless subnet mask is assigned, use the subnet mask computed by the router.

**Dynamic Route:** Select the Dynamic Route from **RIP-1**, **RIP-2B** and **RIP-2M**.

**Direction:** Select the RIP direction from **None**, **Both**, **In Only** and **Out Only**.

**Multicast:** IGMP (Internet Group Multicast Protocol) is a

session-layer protocol used to establish membership in a multicast group. The router supports both **IGMP-v1** and **IGMP-v2**. Select **None** to disable it.

### [DHCP]

**DHCP:** The LAN port DHCP role – **Disabled**, **Enabled** or **Relay**.

**IP Pool Count:** This field specifies the size or count of the IP address pool.

**Size of Client IP Pool:** This field specifies the size or count of the IP address pool.

**Primary DNS Server:** Enter the IP addresses of the DNS servers. The DNS servers are passed DHCP clients along with the IP address and the subnet mask.

**Note:** Every time you change one setting, you must click **APPLY** button once, then go to next setting's change.

## 5.4 Advanced Setup

### 5.4.1 Routing

This table displays the IP address of Internet destinations commonly accessed by your network. When a computer requests to send data to a listed destination, the device uses the Gateway IP to identify the first Internet router it should contact to route the data most efficiently.

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Advanced Quick Start Interface Setup Advanced Setup Access Management Maintenance Status Help

Routing NAT

Routing Table List

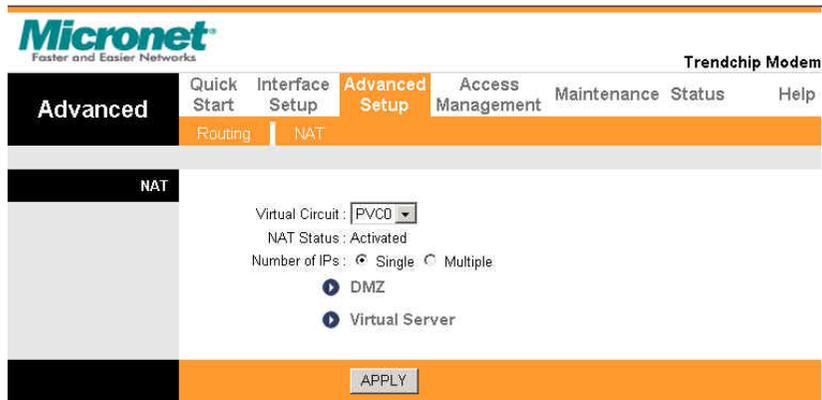
#	Dest IP	Mask	Gateway IP	Metric	Device	Use	Edit	Drop
1	61.229.24.254	32	61.229.24.254	1	poe0	0		
2	192.168.1.0	24	192.168.1.1	1	enet0	397		
3	default	0	isp	2	poe0	868		

ADD ROUTE

### 5.4.2 NAT

**Network Address Translation (NAT)** is a method for disguising the private IP addresses used on the LAN as the public IP address used on the Internet. It rules that specify exactly how and when to translate between public and private IP addresses.

**Virtual Circuit (VC):** The virtual circuit (VC) properties of the ATM VC interface identify a unique path that the ADSL modem router uses to communicate via the ATM-based network with the telephone company central office equipment.



**DMZ:** DeMilitarized Zone (DMZ) is cited from military phraseology. Used in network technology, saying a computer or small sub-network that sits between a trusted internal network, such as a corporate private LAN, and an untrusted external network, such as the public Internet. When there is a suspected packet coming from WAN, the router will forward this packet to the DMZ host.

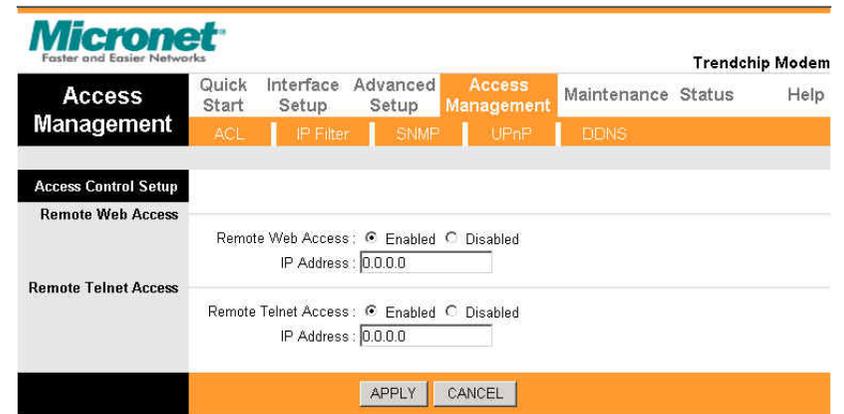
**Virtual Server:** This feature allows Internet users to access standard Servers on your LAN, via the router. Normally, Internet users would not be able to access a server on your LAN because your Server does not have a valid external IP Address.

Attempts to connect to devices on your LAN are blocked by firewall in this device. The "Virtual Server" feature solves these problems and allows Internet users to access to your servers.

**Note:** Every time you change one setting, you must click **APPLY** button once, then go to next setting's change.

## 5.5 Access Management

### 5.5.1 ACL



**Access Control Setup:** This page allows you to manage the router remotely through Web UI and Telnet Access.

**IP Address:** The default 0.0.0.0 allows any client to use this service to remotely manage the router. Type an IP address to restrict access to the client with a matching IP address.

**Note:** Every time you change one setting, you must click **APPLY** button once, then go to next setting's change.

### 5.5.2 IP Filter

The **IP Filter** feature enables you to control the forwarding of incoming and outgoing data between your LAN and the Internet and within your LAN.

The screenshot shows the Micronet Trendchip Modem web interface. The top navigation bar includes 'Quick Start', 'Interface Setup', 'Advanced Setup', 'Access Management', 'Maintenance', 'Status', and 'Help'. The 'Access Management' section is active, with sub-menus for 'ACL', 'IP Filter', 'SNMP', 'UPnP', and 'DDNS'. The 'IP Filter' sub-menu is selected, displaying a list of services with checkboxes: Telnet, FTP, TFTP, Web, and SNMP. Below the list are 'APPLY' and 'CANCEL' buttons.

**Telnet/FTP/TFTP/Web/SNMP:** Select **Telnet**, **FTP**, **TFTP**, **Web** and **SNMP** to block incoming WAN requests for the corresponding service.

**Apply:** Click this button to save these settings back to the router.

**Note:** Every time you change one setting, you must click **APPLY** button once, then go to next setting's change.

### 5.5.3 SNMP

The **Simple Network Management Protocol (SNMP)** enables a host computer to access configuration, performance and other system data that resides in a database on the modem. The host computer is called a *management station* and the modem is called an *SNMP agent*. The data that can be accessed via SNMP is stored in a *Management Information Database (MIB)* on the modem.

The screenshot shows the Micronet Trendchip Modem web interface. The top navigation bar is the same as in the previous screenshot. The 'Access Management' section is active, and the 'SNMP' sub-menu is selected. It displays two input fields: 'Get Community' and 'Set Community', both containing the value 'public'. An 'APPLY' button is located at the bottom of the configuration area.

**Note:** Every time you change one setting, you must click **APPLY** button once, then go to next setting's change.

## 5.5.4 UPnP

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Trendchip Modem

Access Management | Quick Start | Interface Setup | Advanced Setup | Access Management | Maintenance Status | Help

ACL | IP Filter | SNMP | UPnP | DDNS

Universal Plug & Play

UPnP:  Activated  Deactivated  
Auto-configured:  Activated  Deactivated (by UPnP-enabled Application)

APPLY

**Universal Plug and Play (UPnP):** You can choose “**Activated**” or “**Deactivated**” option from this session.

**Auto-Configured (by UPnP Application):** Choose “**Activated**” option to allow UPnP-enabled applications to automatically configure the router so that they can communicate through the router, for example by using NAT traversal, UPnP applications automatically reserve a NAT forwarding port in order to communicate with another UPnP enabled device; this eliminates the need to manually configure port forwarding for the UPnP enabled application. If you don’t want to make configuration changes through UPnP, just choose “**Deactivated**”.

**Apply:** Click **Apply** to save the setting to the router.

**Note:** *Every time you change one setting, you must click **APPLY** button once, then go to next setting’s change.*

## 5.5.5 DDNS

The Dynamic Domain Name System lets you use a static host name with a dynamic IP address.

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ACL | IP Filter | SNMP | UPnP | DDNS

Dynamic DNS

Dynamic DNS:  Activated  Deactivated  
Service Provider: www.dyndns.org  
My Host Name:   
E-mail Address:   
Username:   
Password:   
Wildcard support:  Yes  No

APPLY

**Dynamic DNS:** Choose the option for **Activated** or **Deactivated** DDNS.

**Service Provider:** The default Dynamic DNS service provider is [www.dyndns.org](http://www.dyndns.org).

**My Host Name:** Type the domain name assigned to the router by your Dynamic DNS provider.

**E-mail Address:** Type your e-mail address.

**Username:** Type your user name.

**Password:** Type your password of the DDNS account.

**Wildcard support:** Select **Yes** or **No** to turn on DYNDNS Wildcard.

**Apply:** Click **Apply** to save your changes.

**Note: Every time you change one setting, you must click APPLY button once, then go to next setting's change.**

## 5.6 Maintenance

### 5.6.1 Administration

This field allows user to change new password.

**Note: Every time you change one setting, you must click APPLY button once, then go to next setting's change.**

### 5.6.2 Time Zone

[Time Zone]

**Current Date/Time:** This field displays an updated Date and Time when you reenter this menu.

[Time Synchronization]

**Synchronization with:** You can choose “NTP Server automatically”,

“PC’s Clock”, or “Manually” to coordinate the time.

**Time Zone:** Choose the Time Zone of your location. This will set the time difference between your time zone and Greenwich Mean Time (GMT).

**Daylight Saving:** Choose “Enabled” or “Disabled” to use daylight savings time.

**NTP Server Address:** Type the IP address or domain name of your time server. Check with your ISP/network administrator if you are unsure of this information.

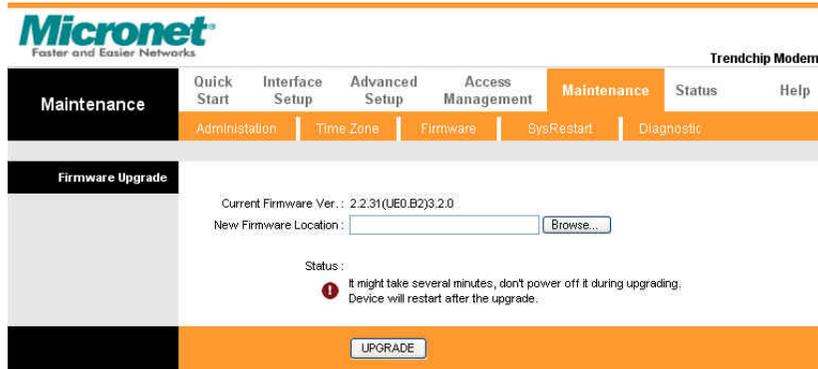
**Note: Every time you change one setting, you must click APPLY button once, then go to next setting's change.**

### 5.6.3 Firmware

Download the firmware, save it and then extract it. The upload process uses TFTP (Trivial File Transfer Protocol).

It takes a few minutes, don't power off it during upgrading. Device will restart after the upgrade!

After a success upload, the system automatically restarts. Please wait for the device to finish restarting (the SYS LED is on steady). This should take about 2 minutes. You need to log in again if you want to access the device.



**Current Firmware Ver.:** This field displays the current firmware version.

**New Firmware Location:** Type in the location of the file you want to upload in this field or click **Browse...** to find it.

**Upload:** Click **Upload** to begin the upload process. This process may take up to 2 minutes.

**Note: Every time you change one setting, you must click APPLY button once, then go to next setting's change.**

#### 5.6.4 System Restart

Click **RESTART** at the bottom of the web page if you want to make the default setting.



**Note: Every time you change one setting, you must click APPLY button once, then go to next setting's change.**

#### 5.6.5 Diagnostic

The **Diagnostic** page allows you to run a series of diagnostic tests of your system software and hardware connections. From the **Virtual Circuit** drop-down list, select the name of the Virtual Circuit on which the diagnostics are to be shown.

- Note:** 1) User ONLY can view PVC0's Diagnostic Test connection.  
 2) "Testing ADSL Synchronization" might take 30 sec to pass the Diagnostic Test.

## 5.7 Status

### 5.7.1 Device Info

The **Device Info** screen is a tool that you use to monitor your modem. Note that these fields are read-only and are not meant for diagnostic purposes. Except the Virtual Circuit, click the drop-down list and select the name of the Virtual Circuit on which the system status is to be shown.

	Downstream	Upstream	
SNR Margin :	46.5	29.0	db
Line Attenuation :	19.0	11.5	db
Data Rate :	1024	64	kbps

### [Device Information]

**Firmware Version:** This field displays current firmware version.  
**MAC Address:** The MAC (Media Access Control) or Ethernet address unique to your modem.

## [LAN]

**IP Address:** The LAN port IP address

**Subnet Mask:** The LAN port IP subnet mask.

**DHCP Server:** The status of **DHCP** Server (Enabled or Disabled)

## [WAN]

**Virtual Circuit:** Click the drop-down list and select the name of the Virtual Circuit on which the system status is to be shown.

**Status:** Connected or Not Connected

**Connection Type:** The WAN Connection Type.

**IP Address:** The WAN port IP address

**Subnet Address:** The WAN port IP subnet mask.

**Default Gateway:** The IP address of the default gateway, if applicable.

**DNS Server:** The IP address of the DNS Server

## [ADSL]

**ADSL Firmware Version:** This field displays current ADSL firmware version.

**Line States:** This is the status of four WAN Line.

**Modulation:** The type of the modulation.

**Annex Mode:** The type of Annex mode.

### 5.7.2 System Log

The **System Log** displays data generated or acquired by routine system communication with other devices, such as the results of negotiations with the ISP's computers for DNS and gateway IP addresses. This information does not necessarily represent

unexpected or improper functioning and is not captured by the system traps that create alarm.

You can click **Save Log** to display a Windows File Download dialog box that enables opening or saving the contents of the log to your PC.

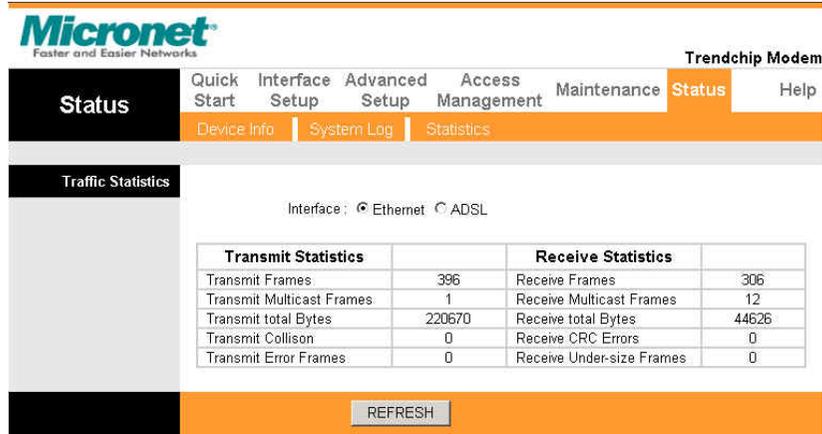
To remove all entries from the list, click **Clear Log**. New entries will begin accumulating.

The screenshot shows the Micronet Trendchip Modem web interface. The top navigation bar includes 'Quick Start', 'Interface Setup', 'Advanced Setup', 'Access Management', 'Maintenance', 'Status', and 'Help'. The 'Status' page is active, with sub-tabs for 'Device Info', 'System Log', and 'Statistics'. The 'System Log' tab is selected, displaying a list of system events in a scrollable text area. The events include MPOA Link Down, LAN promiscuous mode, SNMP TRAP 1 (warm start), main: init completed, SNMP TRAP 3 (link up), adjtime task pause 1 day, MPOA Link Up, mpoaChannDown, ppp\_ready, and SNMP TRAP 3 (link up) followed by two 'Accept() fail' messages. At the bottom of the log area, there are 'Clear Log' and 'Save Log' buttons.

```
1/1/2000 0:0:1> MPOA Link Down
1/1/2000 0:0:1> LAN promiscuous mode <1>
1/1/2000 0:0:1> Last errorlog repeat 1 Times
1/1/2000 0:0:1> SNMP TRAP 1: warm start
1/1/2000 0:0:1> main: init completed
1/1/2000 0:0:3> SNMP TRAP 3: link up
1/1/2000 0:0:3> adjtime task pause 1 day
1/1/2000 0:0:55> MPOA Link Up
1/1/2000 0:2:35> mpoaChannDown: ch<0> null iface
1/1/2000 0:2:59> ppp_ready: ch:80460ef4, iface:80367880
1/1/2000 0:3:1> SNMP TRAP 3: link up
1/1/2000 0:3:1> Accept() fail
1/1/2000 0:3:1> Accept() fail
```

### 5.7.3 Statistics

You can view performance statistics for Ethernet/ADSL router's number of packets transmit/receive.



The screenshot shows the Micronet router's web interface. The top navigation bar includes 'Quick Start', 'Interface Setup', 'Advanced Setup', 'Access Management', 'Maintenance', 'Status', and 'Help'. The 'Status' page is active, with sub-tabs for 'Device Info', 'System Log', and 'Statistics'. The 'Traffic Statistics' section is selected, showing 'Interface: Ethernet' selected and 'ADSL' unselected. A table displays 'Transmit Statistics' and 'Receive Statistics' for the Ethernet interface. Below the table is a 'REFRESH' button.

Transmit Statistics		Receive Statistics	
Transmit Frames	396	Receive Frames	306
Transmit Multicast Frames	1	Receive Multicast Frames	12
Transmit total Bytes	220670	Receive total Bytes	44626
Transmit Collision	0	Receive CRC Errors	0
Transmit Error Frames	0	Receive Under-size Frames	0

If you have any trouble to configure or setup this router, please contact us.

Before contacting us, make sure collect following information.

Submit complete detailed information of your problem will help us to provide you accurate answer.

Model Name:  
Serial Number:  
PC Settings:  
Other: