



U s e r M a n u a l  
W I R E L E S S R O U T E R



MODE COM  
WIRELESS ROUTER  
**MC-418A**

MODE COM

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MODE COM WIRELESS ROUTER

# MC-418A

## User Manual



Great thanks for your purchasing MC-418A Wireless Router ,MC-418A Supports IEEE802.11G Standard ,transferring data with speed of 54Mbps , also conforms to IEEE802.11B Standard. MC-418A satisfy enterprise with small scale, SOHO user to lay out WAN and LAN. MC-418A provide multi-protection for the security for the networks, such as support or prohibit SSID broadcast, not allow AP to broadcast SSID network name for SSID prevention. MC-418A support WEP for the security of WLANs with powerful firewall. MC-418A allow many PCs to share one PC's WAN Cable and one Internet account by ISP. MC-418A allow varies ways to internet, such as ADSL, Cable Modem, dial up automatically, easy to configure. MC-418A combines 4 port Ethernet Switch to connect with Ethernet adapters. VLAN server allow Internet user to visit website, FTP and other service in LAN. MC-418A control the outside visit, configure different authorized access. MC-418A support Web management, DMZ, network game and videoconference. This manual is the user's guide for MC-418A. This manual consists of hardware specification, installation guide, configuration guide and definition on how to use MC-418A. Pls use this manual for your reference.

First, please read the installation guide in chapter 4, note some points when install. Second, Pls read chapter 6, in order to allow MC-418A to run in corresponding Internet environment.

For You we create products unique in every aspect...

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### 1. Warning

1. Please used adaptor provided by manufacturer, otherwise will break MC-418A.
2. Do not drop Router down or any damage to the Router and its electronic component.
3. Do not disassemble Router, otherwise warranty for repair will not be guaranteed
4. Do not exposure Router under Sunshine, to avoid heat.
5. Please keep Router dry and away from fire.
6. Please keep Router under shield and run under 0-40 to the perfect state.

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# MODE COM

## 2. PACKAGE CONTENTS

Package contents of Wireless Router as follows:

1. Wireless Router MC-418A
2. Switch DC Power Adapter (7.5V,1.5A)
3. Ethernet Cable
4. User's Guide

## 3.SPECIFICATION

This Wireless Router is a highly integrated Wireless Router with many functions such as Gateway, Switch, DHCP server, Firewall etc:

**11G 54Mbps** Support 802.11g high-speed data rate up to 54Mbps for 802.11g(draft) and 11Mbps for 802.11b with wide range coverage.

**Network Address Transform (NAT)** With providing Internet application this Router can allow more than one user to connect with Internet at the same time by sharing one public IP address; It supports many connection waysxDSL Cable Modem LAN/ Leased Line and so on.

**4 Ports 10/100M Switch** It has 4 Network 10/100M switch ports port support MDI/MDIX automatic identification function, Switch port can connect to other switches, so that can support over hundred computers to go to Internet at the same time.

**PPPoE(ADSL) Automatic Disconnection/Connection** Users can optionally choose automatic disconnection in idle time and connection in access time to save Internet access cost.

**DHCP Server Supported** All of the networked computers can retrieve TCP/IP settings automatically from this product.

**Static IP address Binding:** Authorize user to manage and configure PC in LAN in most by binding MAC address and IP address together.

System Memorandum: MC-418A record routing history and forwarder to administrator mailbox.

**UPnP:** Defaulted UPnP enable user to configure networking hardware and software.

Management Based on Web Page Both network configuration and system configuration are based on inside Web Server. The user interface is clear and usage is easy. By this interface users can also update software to enhance the system stability and expansibility.

**Internet Access Control** Different administration can be setup for different users.

Data Package Filtration: Port Filtration, IP Address Filtration, MAC Address filtration, Key word Filtration enable user to configure IP router to analyze data package can be forwarded or refused.

**Virtual Server** Allow other users from Internet access WWW, FTP server or other servers in LAN.

**QoS:** Control the IP Router bandwidth forwarding and transferring by configuration IP Address QoS , application QoS and port QoS.

**Firewall** Users can randomly refuse or allow data from Internet

**Scheduler:** Manage and control Local Network accessing Internet by configuration time.

**DMZ Server** Allow one computer to be totally open to Internet to make sure special application.

**Remote Management** Users can totally manage office or home network wherever they are.

**DDNS** By this function users can set up their own web station.

**Remote Wake-up:** Enable user to remote wake up PCs in LAN.

**Support VPN Pass-through** Supports VPN Pass-through PPTP dialogue and also supports users to configure VPN Server and Client in LAN.☒

**VPN server:** Allow you to setup VPN server, allow 5 VPN client logging at same time Detailed Specification

ITEM		WIRELESS ROUTER MC-418A	
SPECIFICATION	Standard	IEEE 802.11G IEEE 802.11B IEEE 802.3 IEEE 802.3u IEEE 802.3x	
	Protocol	TCP/IP, NAT, DHCP, UDP, FTP, PPPoE, PPTP, L2TP,HTTP,DNS, IPSec/VPN Pass-through...	
	External Port	WAN	One 10/100Mbps RJ-45 port, automatic sense cross cable
		LAN	Four 10/100Mbps speed Ethernet switch port, auto sense cross cable
	Wireless Parameter	Frequency Range	2.412~2.472 GHz
		Forward Speed	1, 2, 5.5, 11Mbps(802.11b) 6, 9, 12, 18, 24, 36, 48, 54 Mbps (802.11g)
		Opt. Channel	14
		Data Modulation	CCK, DQPSK, DBPSK, OFDM
		RF Power	16-18dBm
	Antenna Type	1*2.4Ghz Dipole Antenna 1*2.4Ghz Embedded Antenna	
	Cable	UTP100Base-TX UTP/STP 5 or above standard	
Control interface	Based on Web application		
Inside function	10/100Mbps switch; LAN/WAN port auto sense cross cable; WAN port static/dynamic IP flexible setting up; Support 64/128 bit WEP and MAC; Support AP client Bridge-Point-to Point mode; Support client mode; PPPoE dial-up and connection time setting up; PPPoE dial-up and automatic/manual connection; Double IP Configuration; Support VPN Pass-through; DHCP Service; DNS relaying; DMZ Server; Static IP Address Binding; System Memorandum forwarding; IP Router configuration back-up; UPNP; Connection setting up and stat.; Time control on access to internet; Firewall; NAT ON/OFF; Port/IP/MAC/Key word Filtration; Remote control; Remote Wake-up; DDNS; Gateway; Virtual Server; Qos & VPN Server		
Product Specification	CPU	KENDIN KS8695PX (ARM9)	
	FLASH	2MB Flash	
	Memory	16MB SDRAM	
	LAN connection	Static or dynamic IP address	
	WAN connection	xDSL Cable Modem Special cable LAN	
	Power supply	DC 7.5V/1.5A switch power adapter	
	Size	179mm×*119mm×*39mm	
	Temperature	0 ~ 60	
	Humidity	10 ~ 85%	

### **Compatible OS**

**Windows 95/98/ME/NT/2000/XP**

**Mac OS Linux or other UNIX system**



#### **Notes:**

***If the specification and functions of Router have been changed, it will not be informed. The users please take care of it by themselves.***

## **4.INSTALLATION**

### **4.1 BEFORE INSTALLATION**

- 4.1.1. Firstly please confirm your computer OS (Windows 95,98,NT, ME, 2000, XP, Linux, Mac) and Web browser (Internet Explorer 4.0 with JavaScript function Netscape Navigator 4.0 or above version)
- 4.1.2. Make sure there is LAN Card which has been correctly installed in your computer.
- 4.1.3. If you are xDSL user, please remember your user ID and password.
- 4.1.4. If you connect Internet by LAN or WAN, please get the following information from your network administrator: IP address is static or dynamic, DNS, default gateway, account and so on.

If your computer has installed ADSL PPPoE dial-up software before the installation of Router, please backup your installation software and uninstall your ADSL PPPoE dial-up software by Start->control panel->Add or Remove Programs.

### **4.2 INSTALLATION**

- 4.2.1. Setup WAN connection: connect broadband cable (xDSL, Cable Modem or LAN/ Leased cable) with WAN port of Router.
- 4.2.2. Setup LAN connection: connect your computer LAN card's port or your switch UPLINK port with one LAN port of Router by a common network cable.  
Note: All LAN ports of Router can automatically sense cross cable, so you can either use through cable or cross cable to connect LAN card or switch.
- 4.2.3. Turn on the power: connect and the power supply, turn on it. Then Router comes to self-detect state. During the self-detect: PWR LED will be long light, RUN LED will slow flash after correct startup, other four LAN LED and WAN LED will flash only twice rapidly, then the system will come to normal work state.
- 4.2.4. Start computer

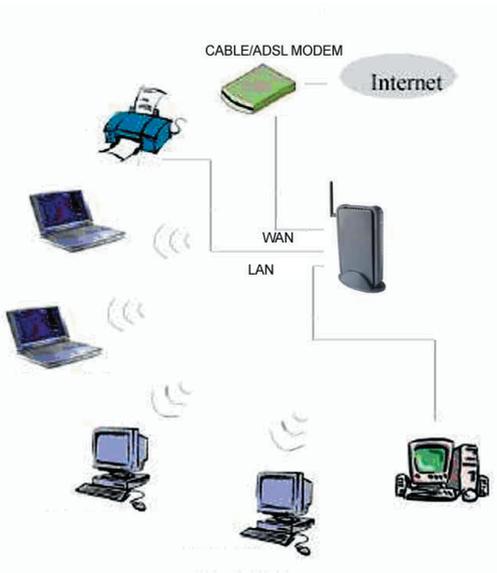
LED	Description	Explanation
PWR	Power LED	Long light
RUN	System status LED	LED flash when device work normally. LED doesn't on or flash refer some problem with device
WLAN	WLAN port connection LED	Flashing refers to data transformation
WAN	WAN port connection LED	Flashing refers to data transformation
LAN	LAN port connection LED	Flashing refers to data transformation

Port explanation	
Antenna	Antenna provide wireless LAN functionality and ensure optimal signal strength
Power jack	Connect power adapter (7.5V/1.5A)
Reset	Press Reset button. Switch the power off/on. After switching the power on, about 5 seconds later RUN LED will flash rapidly, then release the button. After Router startup, all configurations will restore to default configuration.
WAN	Connect xDSL/Cable Modem or Special cable
LAN 1~4	Connect personal computer or hub, switch and so on



NOTE: After switch or hub expand, Wireless Router can connect at most 253 client computers in LAN or WLAN.

### 4.3 NETWORK SKETCH MAP



**Note: During the usage, the sequence of turn on is firstly turn on Modem's power supply 1 minute after Modem startup turn on Router power supply , then turn on the computer .**

## 5. LOCAL COMPUTER SETUP

Users should configure local network to access Internet by Router. Users should know the default configuration of Router before installation. Users must connect with Router again after configure computer's local network. Please make sure your computer setting is as follows, Otherwise Router can not be correctly connected (Linux and Mac users please setup as follows by relative conference).

The default configuration of Router is:

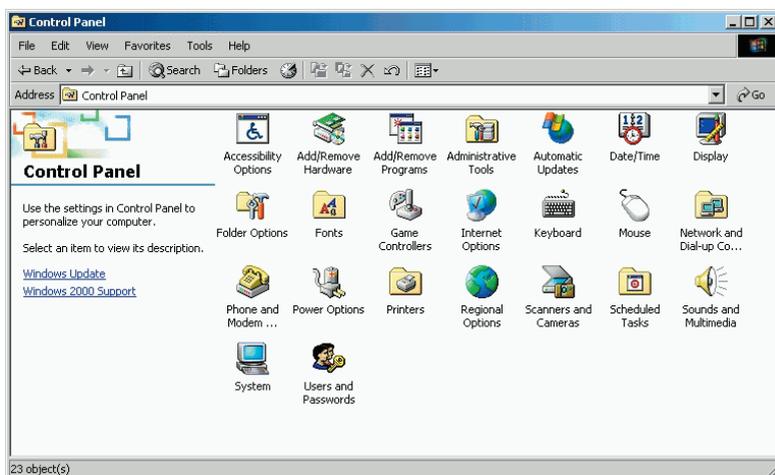
— IP address **192.168.0.1**

— Subnet Masks **255.255.255.0**

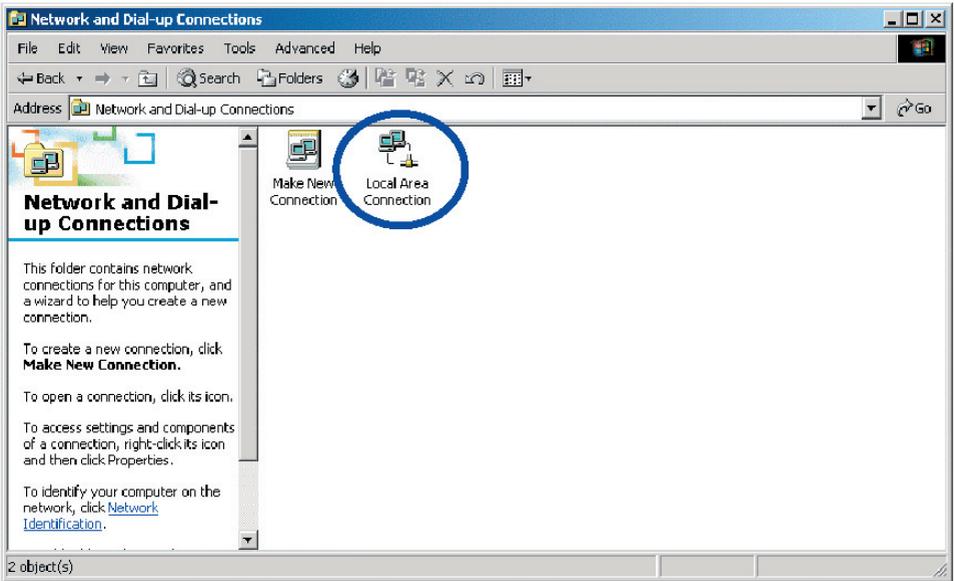
Users can setup static or dynamic IP configuration.

### 5.1 Windows 2000 SETUP

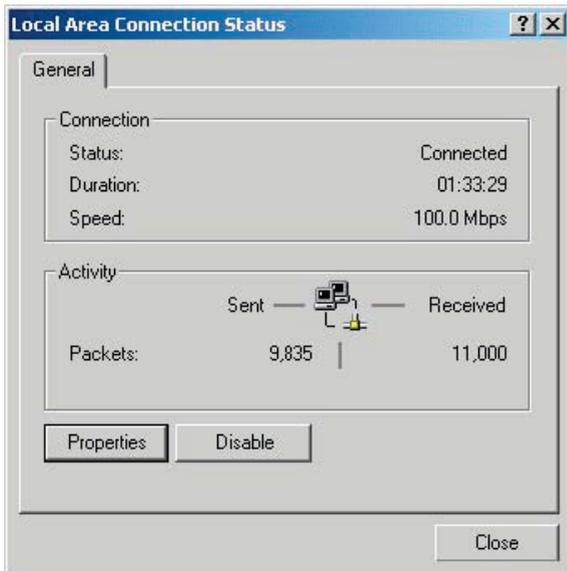
- (1) Install Router.
- (2) Start Windows 2000 and check LAN LED is on or off. If off, please confirm the connection of your computer with Router.
- (3) Click "start"->"Setting"->"Panel Control".



(4) Double click the **“Network and Dial-up Connection”** in **“control panel”**.

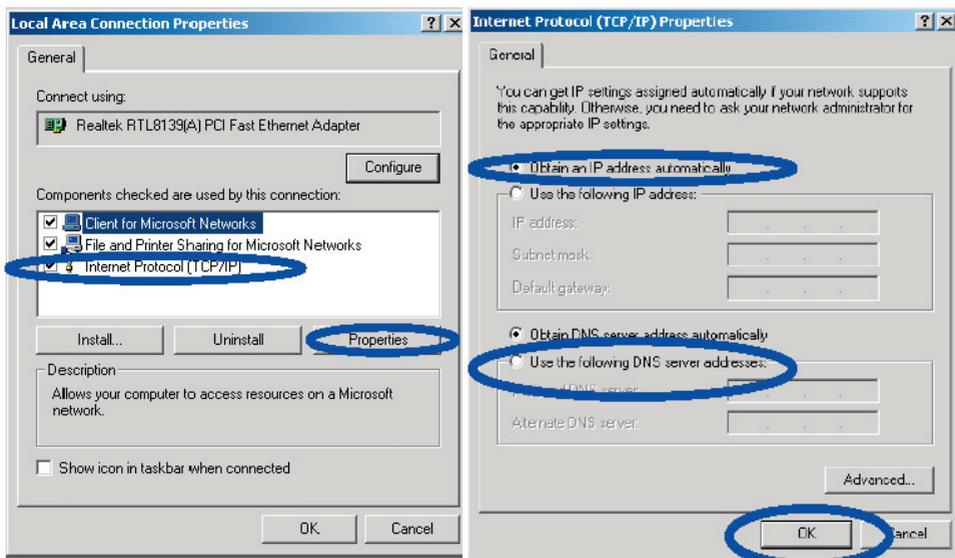


(5) Click **“Local area connection”**->**“Properties”**->**“Internet protocol (TCP/IP)”** and **“Properties”**.



(6) Click **"General"** bar, Select **"Obtain an IP address automatically"** and **"Obtain DNS server address automatically"**

(7) Click **"OK"**.



(8) Click **"Start"** -> **"Run"**.

(9) Input **"cmd"**, then click **"OK"**.

(10) Input **"ipconfig"** in Pop-up Command window.

(11) Please make sure your IP is the same with below. If same then your configuration is successful, or please redo the above steps and restart your computer.

The IP address is between **192.168.0.2** and **192.168.0.254**

The subnet mask is **255.255.255.0**

The default gateway is **192.168.0.1**

```
C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) 版权所有 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : local
    IP Address. . . . . : 192.168.0.2
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.0.1

C:\Documents and Settings\Administrator>
```

(10) Input “ping 192.168.0.1”, then “Enter”.

(11) If you can see “Reply from 192.168.0.1: bytes=32 time=2ms TTL=64” then the connection between your computer and Router is completed.

```
C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) 版权所有 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>ping 192.168.0.1

Pinging 192.168.0.1 with 32 bytes of data:

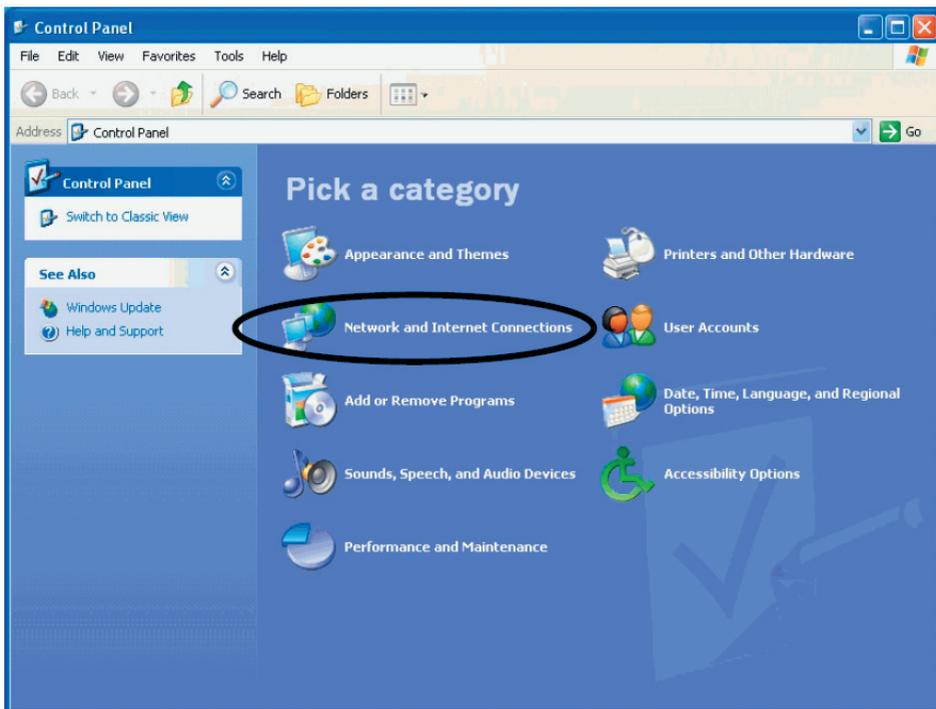
Reply from 192.168.0.1: bytes=32 time<1ms TTL=64

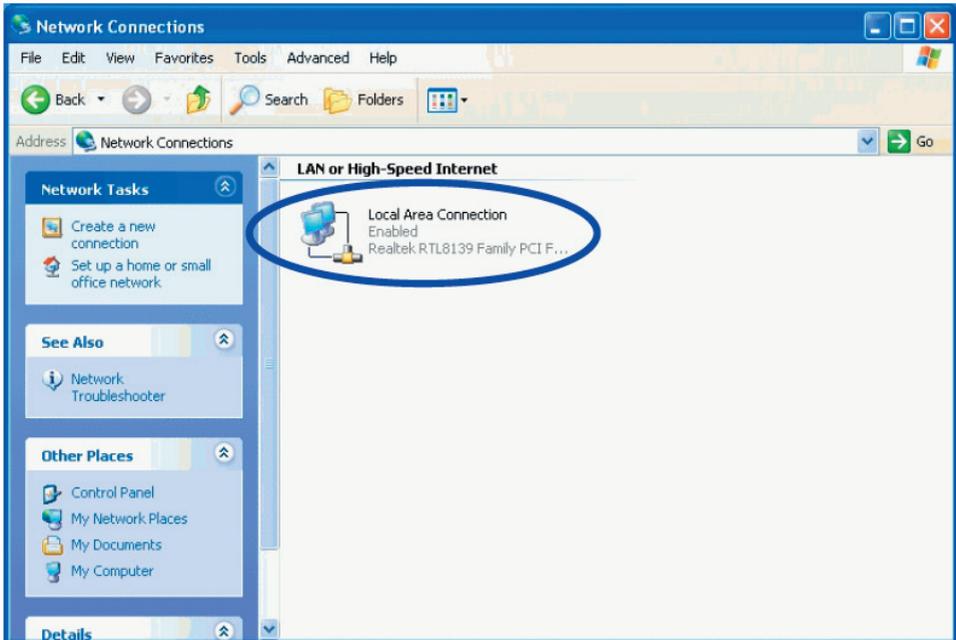
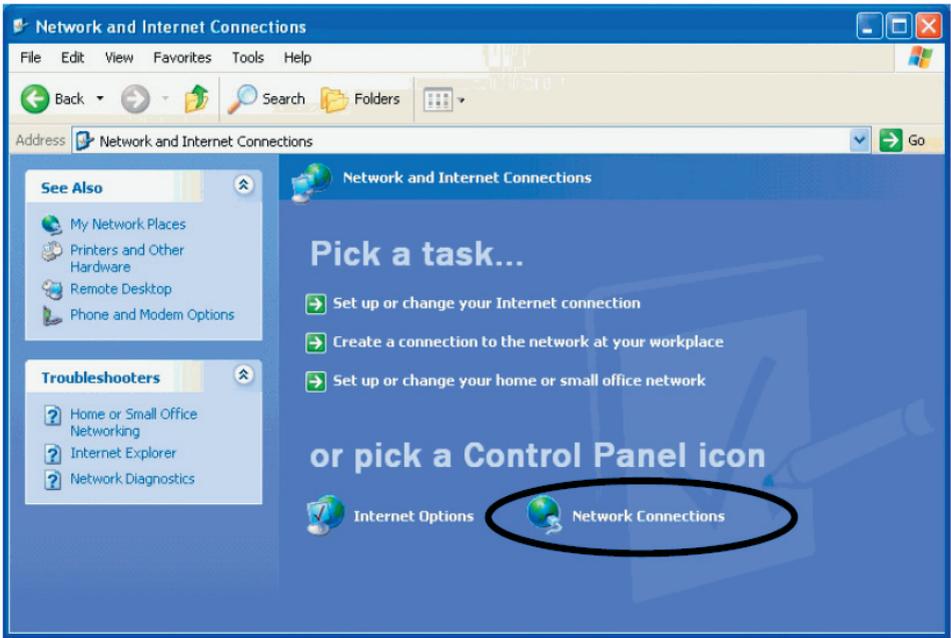
Ping statistics for 192.168.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

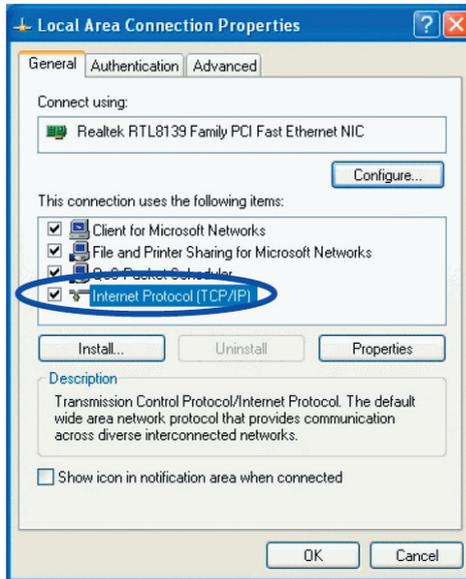
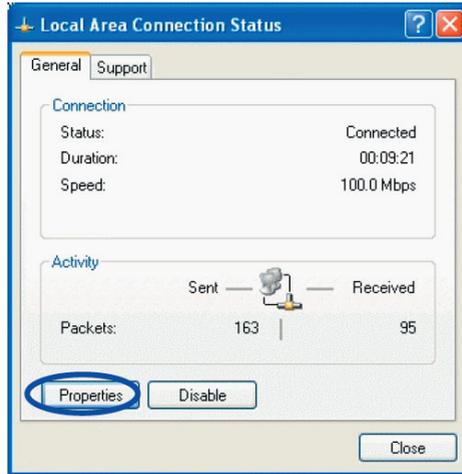
C:\Documents and Settings\Administrator>
```

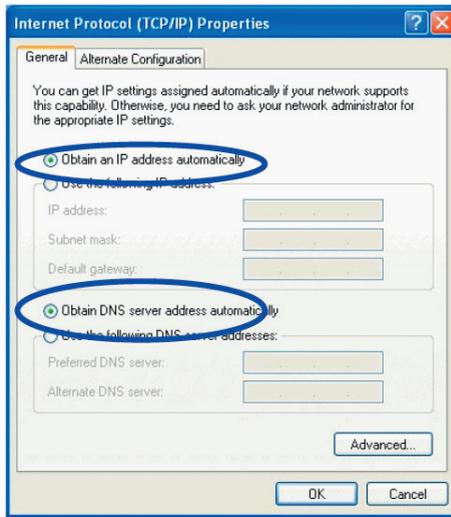
## 5.2 Windows XP SETUP

- (1) Install Router.
- (2) Start Windows XP and check LAN LED is on or off. If off, please confirm the connection of your computer with Router.
- (3) Click **“Start”->“Setting”->“Panel Control”**
- (4) Double click the **“Network and Internet Connections”** in **“control panel”**.
- (5) Click **“Network connection”->“local area connection”->“properties”->“Internet protocol TCP/IP”** and **“Properties”**.
- (6) Click **“General”**, Select **“Obtain an IP address automatically”** and **“Obtain DNS server address automatically”**
- (7) Click **“OK”**









(8) Click "Start"->"Run"

(9) Input "cmd", Click "OK"

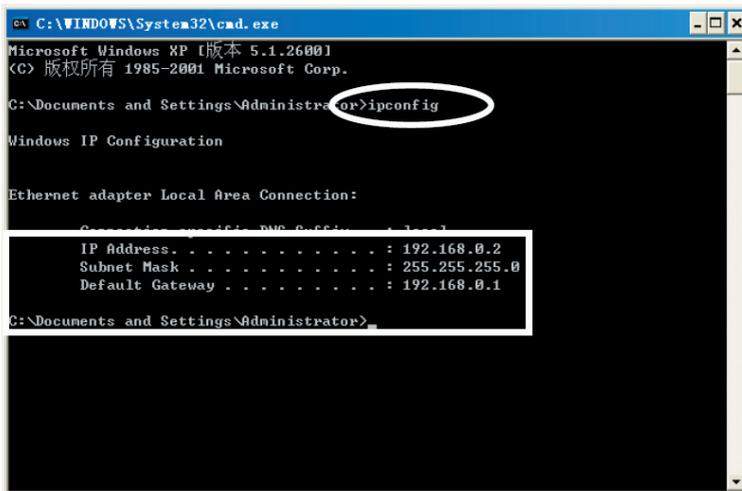
(10) Input "ipconfig" in the pop-up command window.

(11) Please make sure your IP is the same with below. If same then your configuration is successful, or please redo the above steps and restart your computer.

The IP address is between **192.168.0.2** and **192.168.0.254**

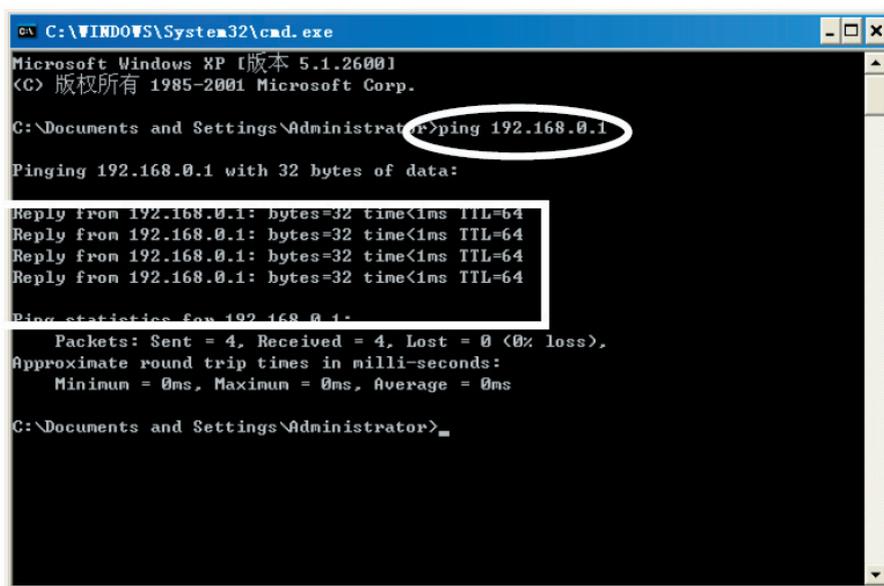
The subnet mask is **255.255.255.0**

The default gateway is **192.168.0.1**



(12) Input “ping 192.168.0.1”, then “Enter”.

(13) If you can see “Reply from 192.168.0.1: bytes=32 time=2ms TTL=64” then the connection between your computer and IP router is completed.



```
C:\WINDOWS\System32\cmd.exe
Microsoft Windows XP [版本 5.1.2600]
(C) 版权所有 1985-2001 Microsoft Corp.

C:\Documents and Settings\Administrator>ping 192.168.0.1

Pinging 192.168.0.1 with 32 bytes of data:

Reply from 192.168.0.1: bytes=32 time<1ms TTL=64

Ping statistics for 192.168.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\Documents and Settings\Administrator>
```

## 6. MC-418A ROUTER SETUP

### 6.1 START INTERNET EXPLORER TO LOGIN

Run Internet Explorer  and click the “Stop”  button in Internet Explorer’s toolbar.

Input **http://192.168.0.1** in Internet Explorer’s address bar.



**192.168.0.1 is Default IP address of Router.**

You may see the following login web page. Click “Login” button and make relative configuration. Check “WAN

Setup” to Setup Wizard. The setup wizard enables you to configure the router quickly and conveniently. Check “WLAN Setup” to WLAN setup wizard. The wireless setup wizard enables you to configure the wireless setting. You can login directly without account & password confirmation because there is no account information required by factory default configuration.

**Conn. Type:** ROUTER current connection type, Dynamic IP is default value.

**Conn. Status:** Router current connection Status

**WAN IP:** ROUTER WAN current IP address

**Connected PC:** IP address of the computer which connects to ROUTER.

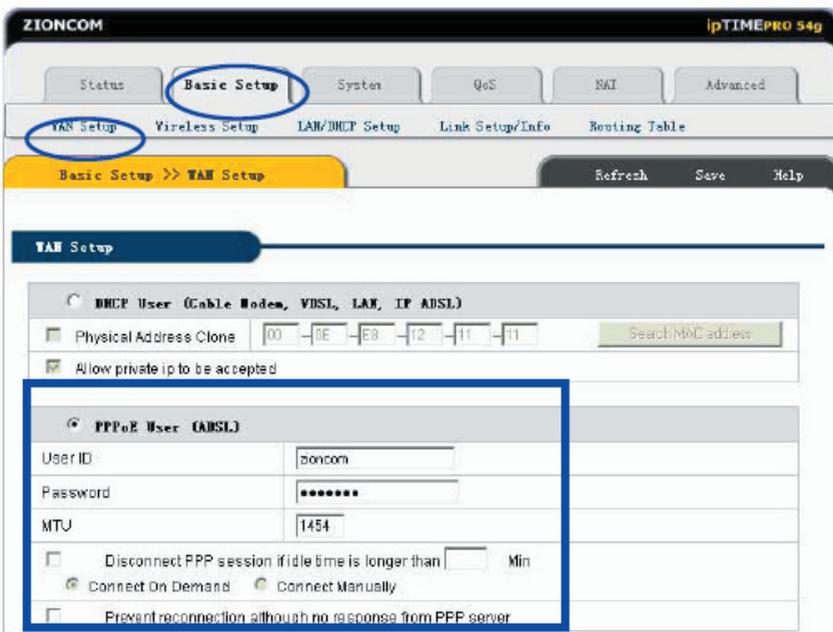
## 6.2 PPPoE(ADSL) USER SETUP

This connection way is suitable for virtual dial-up Internet connection.

Open external ADSL Modem and check the WAN LED of ROUTER.

If WAN LED is off, check the network cable between external modem and WAN port.

Click “Basic setup”->“WAN setup”, as follows:

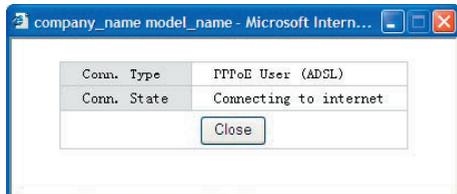


Select “PPPoE User (ADSL)” radio button.

Key in the “User ID” and “Password” provided by your Internet service provider.

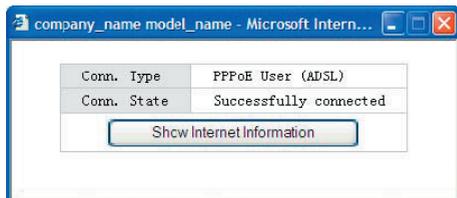
Click the **“Apply”** button.

You may see the popup window.



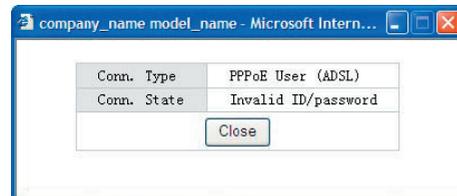
In case **“Conn. Status”** is **“Successfully connected”**, the configuration is correct.

Click **“Show Internet connection status”** and see the 6.5.1.

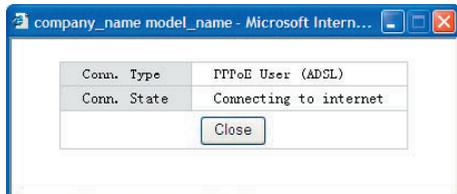


If In case **“Conn. Status”** is **“Invalid ID/password”**, the configuration is incorrect.

Click the **“close”** button and check your ID& password.



If **“Conn. Status”** keeps unchanged, check whether your service type is correct.



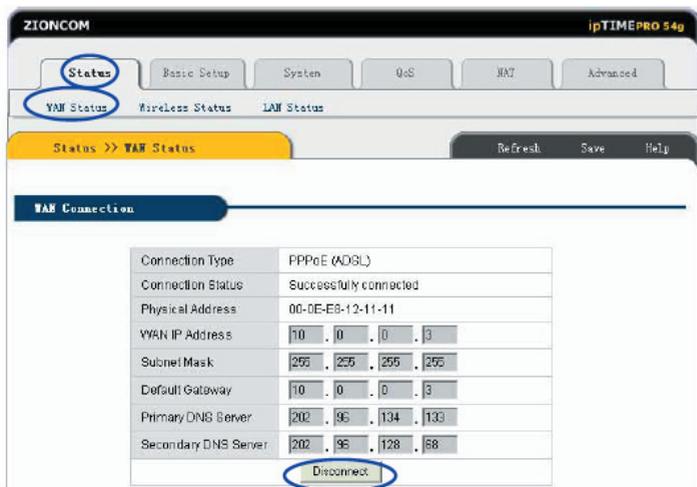
**Confirm the WAN connection status:** If WAN connection is successfully established, then by clicking “**Show Internet Information**” you can enter WAN status web page; or click “**Status**”-> “**WAN status**”, as the following.

**Connection Type** should be **PPPoE (ADSL)**

**Connection Status** should be “**successfully connected**”

**Physical Address** is shows Router WAN port MAC Address.

**WAN IP Address, Subnet mask, Default Gateway, Primary DNS server** and **Secondary DNS server** can be different from the following values. (These addresses are provided by your ISP)



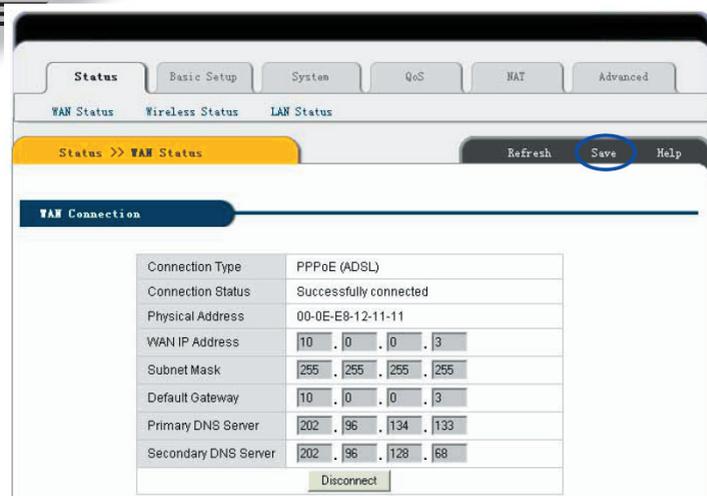
“**Disconnect**” is manual disconnection button. If you click then the system will disconnect with Internet



“**Connect**” is manual connection button. By clicking it the system can be connected to Internet again.

Click “**Save**” to save current configuration.

Restart all PCs connect with IP Router.



**Notes:** Please save Router Configuration after completion, otherwise configuration will lose when power off or restart.

#### Other Configurations:

**MTU:** Input MTU value of data package, default value is 1454. Normally please do not change it.

**Disconnect PPP session if idle time is longer than Min:** If you choose this option and setup the time T, then the router automatically disconnects from Internet after T idle time.

**Connect On Demand:** Router can automatically connect with Internet if there is Internet access after disconnection. Note: during usage if there is disconnection due to external causes, then the Router will try to connect with Internet at once until successful connection. This function is the Router inner function and does nothing with **Connect On Demand** function. **Connect On Demand** is only effective to **Disconnect PPP session if idle time is longer than Min**.

**Connect Manually:** By this option users have to connect with Internet manually after disconnection. This option is only effective to **Disconnect PPP session if idle time is longer than Min**.

**Prevent reconnection although no response from PPP server:** This option is to shut off Router inner automatic connection function. By choosing this option if external network disconnects, Router will not try to connect at once.

### 6.3 DYNAMIC IP USER (Cable/Modem...) SETUP

By this connection way Router can get IP address automatically from ISP (such as: CHINA TELCOM). It is suitable for connection ways such as Cable Modem, LAN and so on.

Turn on the external Cable Modem and check the WAN LED of Router.

If WAN LED is off, please re-confirm the network cable between external Modem and WAN port.

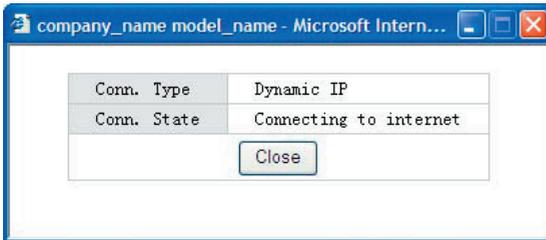
Click "**Basic Setup**"->"**WAN Setup**" as diagram:

Choose **Dynamic IP user (Cable Modem...)**

Click **Apply** to complete.

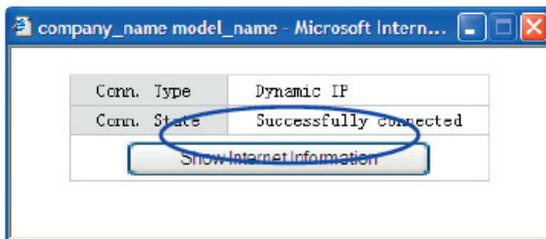


You will see the following pop-up window



If **Conn. status** is "**Successful connected**", the configuration is correct.

Click "**Show Internet Information**" and see the **6.5.1**



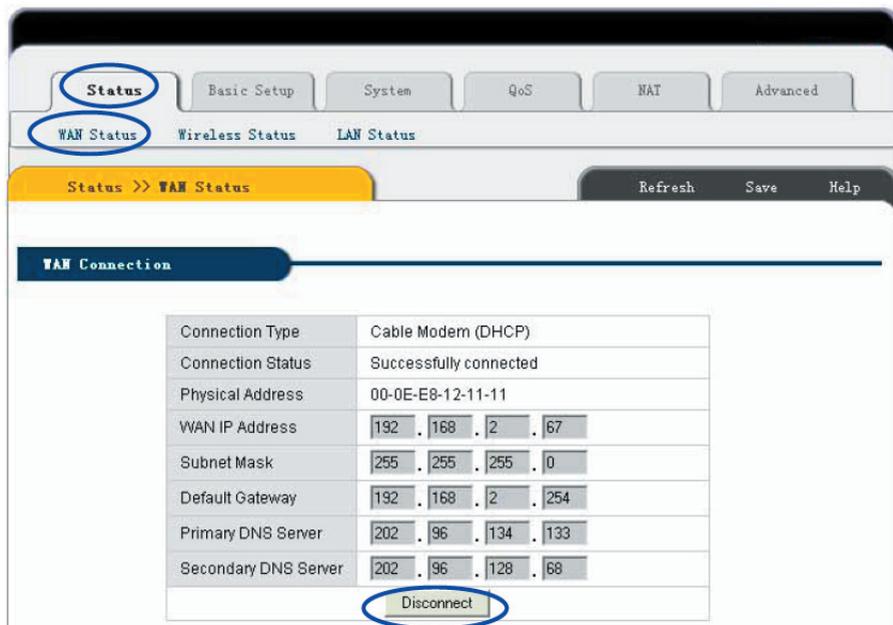
If connection status keeps to be **“Connecting to Internet”**, please do the following steps:

Close the pop-up window.

Turn off Cable Modem power supply then on, and confirm the WAN LED status.

Re-click **“Apply”** button.

**Check the WAN Connection Status:** If the status is **“Successfully connection”**, click **“Show Internet Information”** to enter WAN status page; or click **Status->WAN status**, as following diagram:



If WAN connection is successfully established, you can see the following.

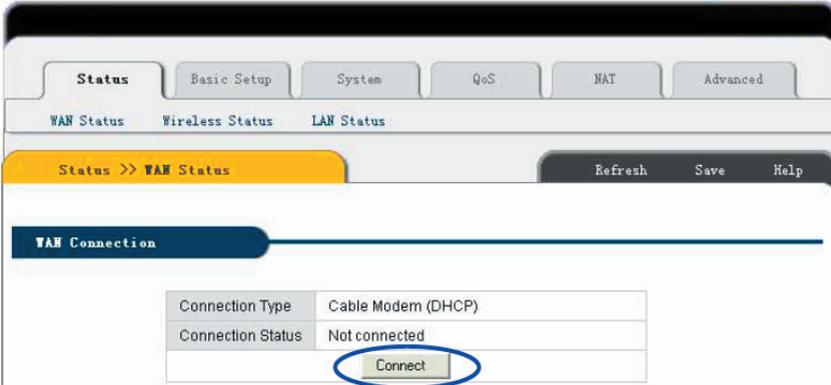
**Connection Type** should be **“Cable Modem (DHCP)”**

**Connection Status** should be **“Successful connected”**

**Physical Address** is shows Router WAN port MAC Address.

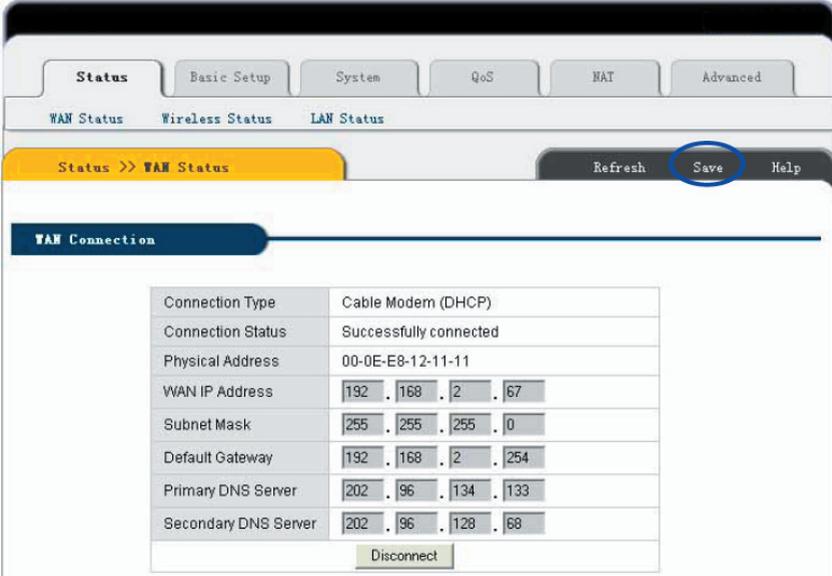
**WAN IP Address, Subnet mask, Default Gateway, Primary DNS server** and **Secondary DNS server** in your computer may be different from the following value (These addresses are provided by your ISP).

**Disconnect** button as follows is manual WAN port IP address release function button. If click it IP Router will release WAN port IP address and disconnect with Internet.



**Connect** button is manual WAN port IP address refresh function button. If click it WAN port will re-get dynamic IP address and connect with Internet.

Click **Save** button to save current configuration, then restart all PCs connected with Router





**Note:**

**After completed setup, please save Router configuration, otherwise the configuration will be lost when Router is power off or restarts.**

**Other configuration:**

**Physical address Clone** If you want to change WAN port MAC address you can choose this option; If this option is un-chosen the WAN MAC address is default value; By this option the displayed MAC address is your current MAC address; You can also manually add the WAN port MAC address; without the option WAN port MAC address will restore to default value.

**Allow private IP to be accepted:** Allow WAN port assigned private IP address.

**6.4 STATIC IP USER SETUP**

If you have static IP address provided by ISP, you can choose this option.

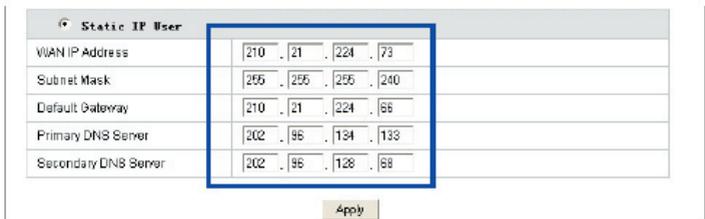
Turn on the external modem and check the WAN LED of IP Router

If the WAN LED is off, please check the network cable between external modem and the WAN port.

Click **Basic Setup->WAN Setup** as following diagram

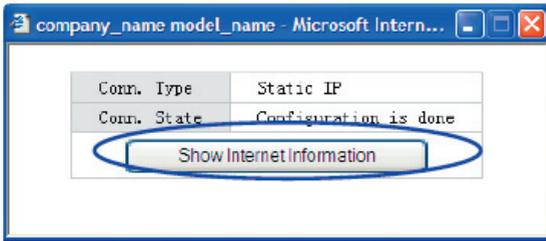


Input **WAN IP address, Subnet mask, Default Gateway, Primary DNS Server** and **Secondary DNS Server** provided by ISP.

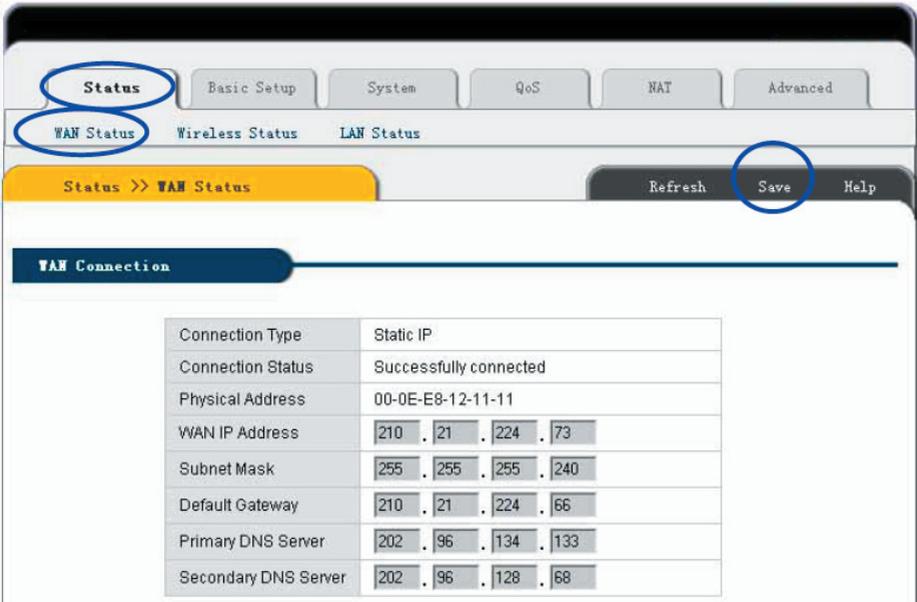


Click **Apply** to complete.

You will see the following pop-up window:



**Check WAN connection status:** If it is “Configuration is done”, click “Show Internet Information” to enter WAN status page; or click **Status->WAN status**, as following diagram:



If WAN connection is successfully established, you can see the following.

**Connection Type** should be “Static IP”

**Connection Status** should be “successful connection”

**Physical Address** is shows Router WAN port MAC Address.

Confirm **WAN IP Address**, **Subnet mask**, **Default Gateway**, **Primary DNS server** and **Backup DNS server** is same with the values provided by ISP or not.

Click the “Save” button to keep current configuration, then restart computers in LAN to re-get IP relative information.

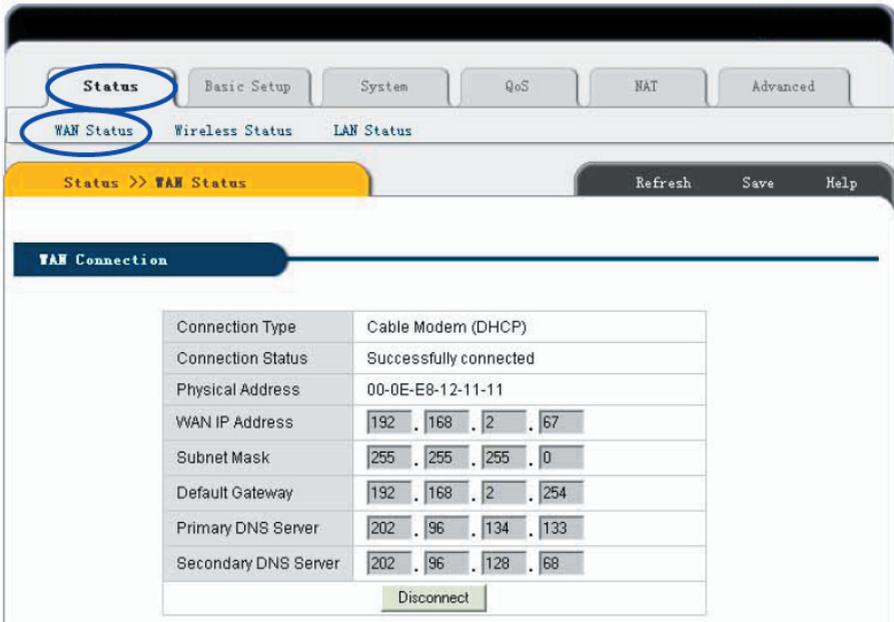
**Note:**

**After completion please save the configuration, otherwise configuration will be lost when IP Router is power off or restarts.**

## 6.5 STATUS

### 6.5.1 WAN Status

Click “Status”->“WAN Status” as following:



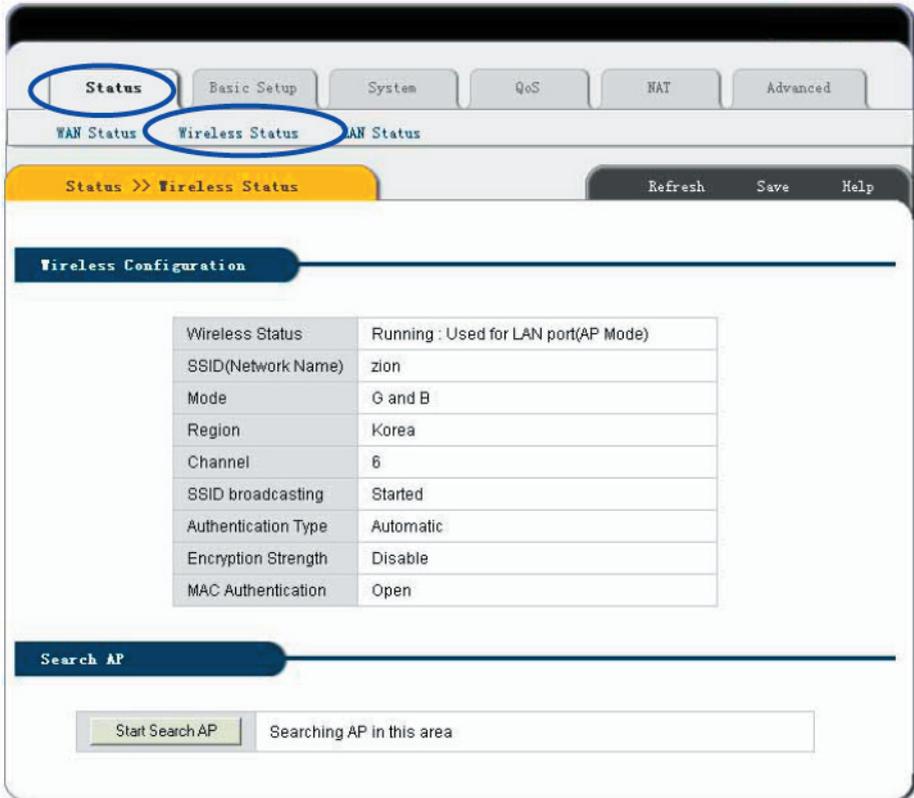
This page shows current Internet connection status (WAN port), including **Connection Type**, **Connection Status**, **WAN IP address**, **Subnet mask**, **Default Gateway** and **DNS server**. If it is dynamic IP way, “Disconnect” button or “Connect” button will be shown above. Click “Disconnect” button to release current WAN Port IP Address, then click “Connect” button to refresh WAN IP address; if it is PPPoE way, then “Connect” or “Disconnect” button will be shown above. Click “Connect” button to connect with Internet, click “Disconnect” button to disconnect with Internet.

**Refresh** Refresh current web page. All of the following web pages will have this button with the same function.

**Save** Save IP Router current configuration. All of the following web pages will have this button with the same function.

## 6.5.2 Wireless Status

Click "Status"->"Wireless Status" as following:



This web show current wireless part configuration, including:

**Wireless Status:** Show current wireless connector status.

**SSID (networking name):** Show current wireless networking name.

**Mode:** Current used wireless connector forwarding mode

**Region:** Show current channel region information

**Channel:** show current used channel

**SSID Broadcast:** Show SSID is on or off

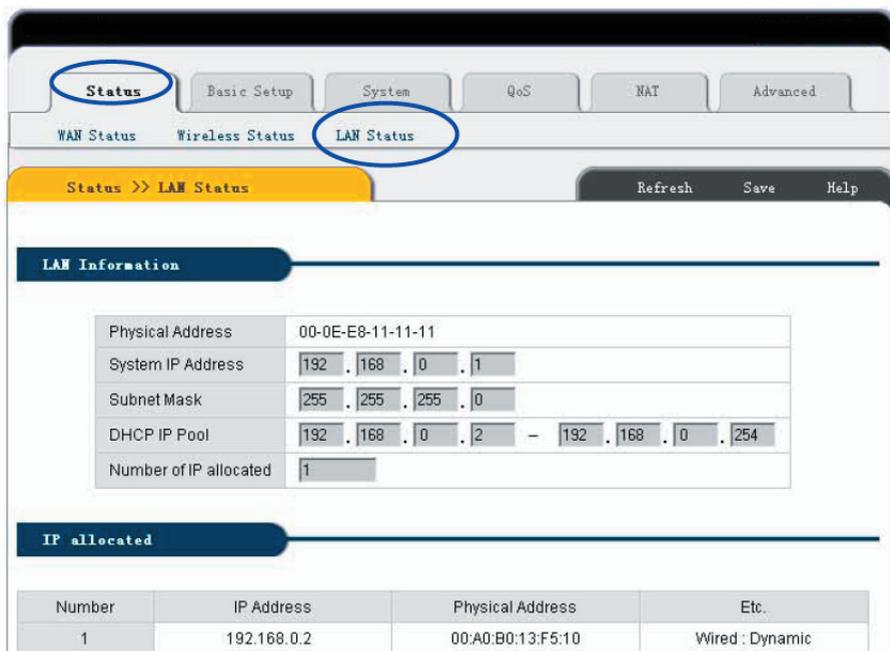
**Authentication Type:** Show current used certification way

**Encryption Strength:** Show WEP encryption length (64/128 bits)

**MAC Authentication:** Show how to identify wireless customer by MAC address.

### 6.5.3 LAN Status

Click “Status” –>“LAN Status” as follows:



The screenshot shows the router's configuration interface. At the top, there are tabs for 'Status', 'Basic Setup', 'System', 'QoS', 'NAT', and 'Advanced'. Below these are sub-tabs for 'WAN Status', 'Wireless Status', and 'LAN Status'. The 'LAN Status' sub-tab is selected and circled in blue. Below the sub-tabs, there is a yellow bar with 'Status >> LAN Status' and buttons for 'Refresh', 'Save', and 'Help'. The main content area is titled 'LAN Information' and contains a table with the following data:

Physical Address	00-0E-E8-11-11-11								
System IP Address	192	. 168	. 0	. 1					
Subnet Mask	255	. 255	. 255	. 0					
DHCP IP Pool	192	. 168	. 0	. 2	-	192	. 168	. 0	. 254
Number of IP allocated	1								

Below the 'LAN Information' section is the 'IP allocated' section, which contains a table with the following data:

Number	IP Address	Physical Address	Etc.
1	192.168.0.2	00:A0:B0:13:F5:10	Wired : Dynamic

LAN Information : Show user current LAN connecting status (LAN port and wireless connection ) and DHCP server status, include MAC address of the LAN port ,and IP rent regions and quantities of IP address shared by Router among IP address ,subnet mask, DHCP server in LAN .

Shared IP information: Show IP address information rent by DHCP server

Serial Number: The position in the subject

Physical Address: MAC address of the client PC

Types: Wireless /Wired, dynamic / static

## 6.6 BASIC SETUP

### 6.6.1 WAN Setup

Click "Basic Setup"->"WAN SETUP" as following:



The way for Dynamic IP User, PPPoE(ADSL) user and static IP user to set up are illustrated in Chapter 6.2 ,6.3,and 6.4 respectively . Please refer to those chapters.

MC-418A not only connect Internet by cable also with other AP by wireless, named wireless client mode. In this mode, wireless client PC cannot connect with this Wireless router in wireless way but by cable.

If choose this mode, configure wireless connection as Internet connection, click "Applied" and "restart". This mode enable user to obtain IP in WAN setup.

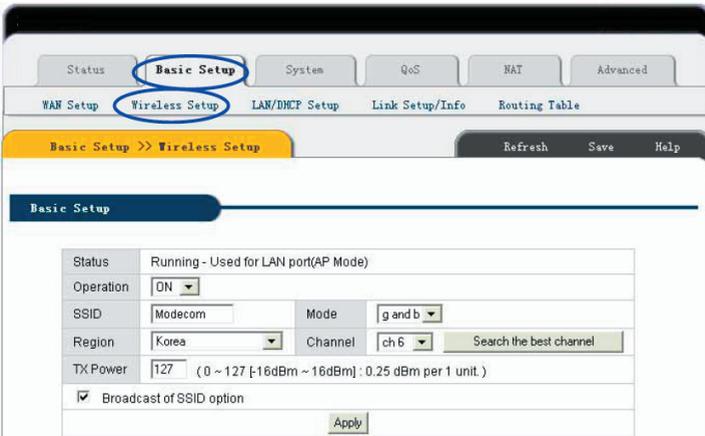
#### Note:

1. In client mode, click " Basic Setup "->"Wireless Setup" configure corresponding SSID and encryption way.
2. in client mode , wireless router WAN port will be disable.

### 6.6.2 Wireless Setup

Click "Basic Setup"->"Wireless SETUP" as following:

This web show the basic wireless parameter and wireless certification way configuration



**Basic Setup:** Show current wireless status and basic parameter for configuration

**Status:** Show wireless connector status (on/off, AP/Client mode)

**Operation:** Wireless connector can be configured as on or off.

**SSID:** Record wireless SSID

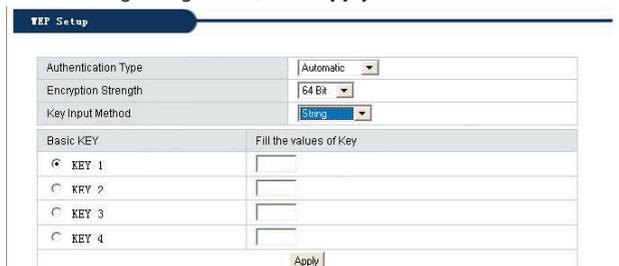
**Mode:** If wireless connector conforms to 11G and 11B standard, pls choose “G and B”; If wireless connector only run under 11G standard, choose “g only mode”.

**Region:** Configure region for wireless channel, no need to setup.

**Channel:** Choose the wireless networks channel in AP mode; In client mode, option for channel is disable.

**Broadcast of SSID Option:** if SSID configured, AP broadcast SSID to wireless client.

After finishing configuration, click “Apply”.



The screenshot shows the 'WEP Setup' window. It contains the following fields and options:

- Authentication Type: Automatic (dropdown)
- Encryption Strength: 64 Bit (dropdown)
- Key Input Method: String (dropdown)
- Basic KEY section with a table:
 

Basic KEY	Fill the values of Key
<input checked="" type="radio"/> KEY 1	<input type="text"/>
<input type="radio"/> KEY 2	<input type="text"/>
<input type="radio"/> KEY 3	<input type="text"/>
<input type="radio"/> KEY 4	<input type="text"/>
- An 'Apply' button at the bottom right.

**WEP Setup:** Configure Certification way and WEP key.

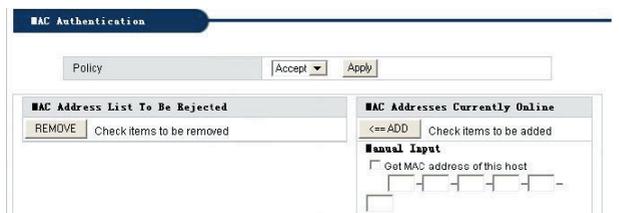
**Authentication Type:** Choose authentication type (automatic/open system/share Key)

**Encryption Strength:** Choose Key length (64/128bits)

**Key Input Method:** Choose string, HEX or Pass phrase

**Basic Key:** Fill in Key value

After finishing configuration, click “ Apply ” .



The screenshot shows the 'MAC Authentication' window. It contains the following fields and options:

- Policy: Accept (dropdown) with an 'Apply' button.
- MAC Address List To Be Rejected: REMOVE (button) Check items to be removed.
- MAC Addresses Currently Online: <= ADD (button) Check items to be added.
- Manual Input:
  - Get MAC address of this host
  - MAC address input field: -----

**MAC Authentication:** Configure MAC authentication, choose type (Open/Accept/Reject) and click "Apply"  
 In open type: All the wireless clients can connect.  
 In Accept type: Specified clients can connect  
 In Reject type: Specified client was reject to connect.

**! Notes:**

**After setup, pls click "Save". Save Router configuration, otherwise, configuration will be lost when power off or router restarted.**

**6.6.3 LAN Status**

Click "Basic Setup"->"LAN/DHCP SETUP" as following:

The screenshot shows the router's configuration page for LAN/DHCP Setup. The navigation tabs at the top include Status, Basic Setup, System, QoS, NAT, and Advanced. Below these are WAN Setup, Wireless Setup, LAN/DHCP Setup, Link Setup/Info, and Routing Table. The 'LAN/DHCP Setup' tab is selected and highlighted in yellow. The page has 'Refresh', 'Save', and 'Help' buttons in the top right.

**System IP Setup**

System IP Address	192	.	168	.	0	.	1
Subnet Mask	255	.	255	.	255	.	0

Apply

**DHCP Setup**

DHCP Server Status	Running
DHCP Server Operation	Start
DHCP IP Pool	192 . 168 . 0 . 2 - 192 . 168 . 0 . 254
<input type="checkbox"/> Manual DNS configuration	202 . 96 . 134 . 133 , 202 . 96 . 128 . 68

Apply

**Static Lease Management**

Add hardware address & IP pair on the real network  
 Add hardware address & IP pair manually

IP Address	Physical Address	Del
------------	------------------	-----

**Twin IP Setup**

Twin IP

Search MAC address:

IP Update Duration:  Seconds

Apply

LAN port basic parameter and DHCP server parameter can be setup in this web page.

**System IP Setup** If you want to change Router LAN port address, you can setup as follows:

**System IP address** IP address in LAN. This IP address is factory default value **192.168.0.1**, and you can change it.

**Subnet Mask** Subnet mask in LAN. This value cannot be changed.

TCP/IP protocol configuration includes IP address, subnet mask, Gateway and DNS server and so on. It is not easy to configure TCP/IP protocol correctly in all computers in LAN, but it is lucky that –DHCP Server has provided this function. If you choose the DHCP function, you can let DHCP Server configure TCP/IP protocol in all computers in LAN automatically.

**DHCP Setup:** If you want to able or disable DHCP Server, change DHCP address range, you can choose the following options:

**DHCP Server Status** Display DHCP Server current status.

**DHCP Server Operation** Able and disable DHCP Server. The default value is able DHCP Server.

**DHCP IP Pool** IP address range automatically allocated by DHCP Server is address pool.

**Manual DNS configuration:** Let DHCP Server automatically allocated the DNS Server to Client PC.

**Static Lease Management** This function makes sure the convenient control of the IP address in LAN computers. Static lease IP can obligate static IP address for computer with appointed MAC address. Afterwards when the computer asks DHCP Server for IP address, DHCP Server will give it the obligated IP address.

**Add hardware address & IP pair on the real network:** Choose this function, IP Router list PC IP address and MAC address, specify IP address and MAC address to be binded, click "Add" to implement binding.

**Static Lease Management**

Add hardware address & IP pair on the real network

Add hardware address & IP pair manually

	IP Address	Physical Address
<input checked="" type="checkbox"/>	192.168.0.2	00-A0-B0-13-F5-10
	Add	

**Add hardware address & IP pair manually:** Choose this option, user just input the MAC address and IP address of PC to be binded

**Notes:**

1. In order to use DHCP function of the Router, TCP/IP protocol of computers in LAN must be configured as “automatically get IP address”.
2. After completion please click “Apply” to make the configuration valid. Please save the configuration, otherwise configuration will be lost when Router is power off or restarts.

### 6.6.4 Link Setup/Info

Click “Basic setup”->“Link Setup/Info” as follows:



**Link Setup**

Port	Mode	Speed	Apply
WAN	Auto	10Mbps	Apply
1	Auto	10Mbps	Apply
2	Auto	10Mbps	Apply
3	Auto	10Mbps	Apply
4	Auto mode only		

**Link Information**

Port	WAN	1	2	3	4
Link	On	Off	Off	On	Off
Speed	100 Mbps	-	-	100 Mbps	-
Deuplex	Full	-	-	Full	-

**Link Statistics**

Port	WAN	1	2	3	4
Rx-Packets	419	0	0	2325	0
Rx-Bytes	109782	0	0	343104	0
Rx-Broadcast	171	0	0	130	0
Rx-Multicast	0	0	0	10	0
Rx-Error	0	0	0	0	0
Tx-Packets	224	0	0	2256	0
Tx-Bytes	54262	0	0	521680	0
Tx-Collision	0	0	0	0	0

Clear

All IP Router ports' speed, Link information and port statistics data and so on can be setup by this web page:

**Link Setup** Setup every port's connection speed.

**Port** Router WAN Port and LAN Port.

**Mode** Automatic mode and manual mode turn on/off.

**Speed** Setup port speed.

**Apply** Apply current setup.

**Link Information** Display all current ports connection status.

**Port** Router WAN port and LAN port.

**Link** Connection port is being used or not.

**Speed** Current port speed.

**Duplex** If **FULL**, then it is full Duplex; If **HALF** then it is half- Duplex

**Link Statistics** Display received and sent-out data flow from every current port.

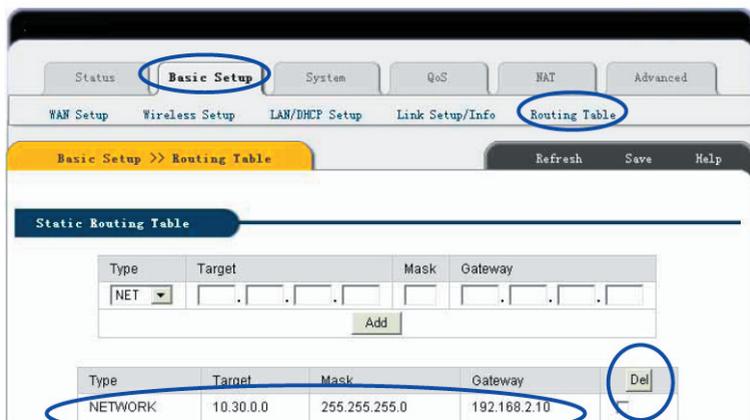


**Note:**

Click "Save" to save this Router configuration, otherwise configuration will be lost when power is off or PC restarted.

## 6.6.5 Routing Table

Static routes can be added if you require specific routes, Click "Basic setup"->"Routing Table" as follows:



**Type** Routing Type. Have two options: NET/Host.

**Target:** Enter in the IP of the specified network or host that you want to access using the static route

**Mask:** Enter in the subnet mask to be used for the specified network, For example:255.255.255.0=>24.

**Gateway:** Enter in the gateway IP address to the specified network.

For Complete Setup, Please click "Add" button to add a Routing rule.



**Note:**

**Click "Save" to save this Router configuration, otherwise configuration will be lost when power is off or PC restarted.**

## 6.7 SYSTEM

### 6.7.1 PASSWORD

Click "**System**" -> "**Password**" as follows

System administrator ID and password can be changed by this web page.

The screenshot shows the router's web interface. At the top, there are tabs for 'Status', 'Basic Setup', 'System', 'QoS', 'NAT', and 'Advanced'. The 'System' tab is selected and circled in blue. Below the tabs, there are sub-tabs for 'Admin Setup', 'Firmware Upgrade', 'System Log', and 'Misc.'. The 'Admin Setup' sub-tab is selected and circled in blue. The main content area is divided into two sections: 'Login Account Setup' and 'Admin E-mail Setup'. The 'Login Account Setup' section contains a table with the following fields: 'Current Login ID' (with the value 'root'), 'Current Password', 'New Login ID', 'New Password', and 'Re-type New Password'. An 'Apply' button is located below the table. The 'Admin E-mail Setup' section contains a table with the following fields: 'Admin E-mail', 'Mail Server(SMTP)', 'E-mail of sender', a checkbox for 'Use Authentication', 'SMTP Account', and 'SMTP Password'. An 'Apply' button is located below the table.

Login Account Setup	
Current Login ID	root
Current Password	
New Login ID	
New Password	
Re-type New Password	
Apply	

Admin E-mail Setup	
Admin E-mail	
Mail Server(SMTP)	
E-mail of sender	
<input type="checkbox"/> Use Authentication	
SMTP Account	
SMTP Password	
Apply	

Firstly please input your old ID and password, and then input your expected new ones. If your old ID and password which have been input are correct then click **“Apply”** to successfully change.

**Admin E-Mail Setup:** If user wants to receive IP Routing log, configure Email address and SMTP server to receive.



**Note:**

**1. According to the safety, we strongly recommend you to change the initial administrator username and password. If you forget your system password please change them to factory default values by Reset button.**

**2. If want to restore the default value, Please press Reset button and pull out the power adapter DC plug then insert the DC plug, about 5 seconds later RUN LED will flash rapidly, then release the button. After Router startup, all configuration will restore to default configuration.**

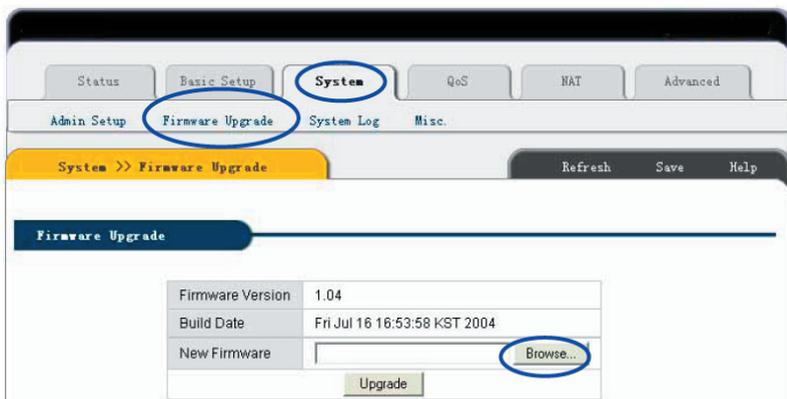
### 6.7.2 Firmware Upgrade

Click **“System”** -> **“Firmware Upgrade”** as follows

Router will be obtained new function by upgradation .

How to upgrade firmware:

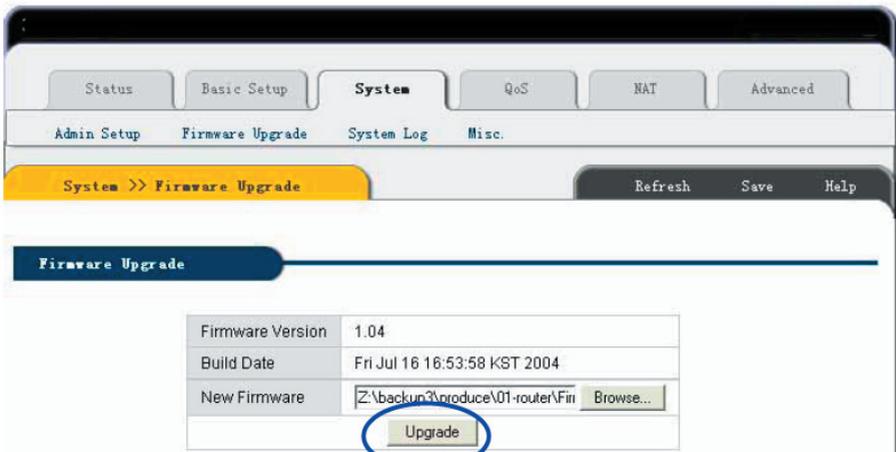
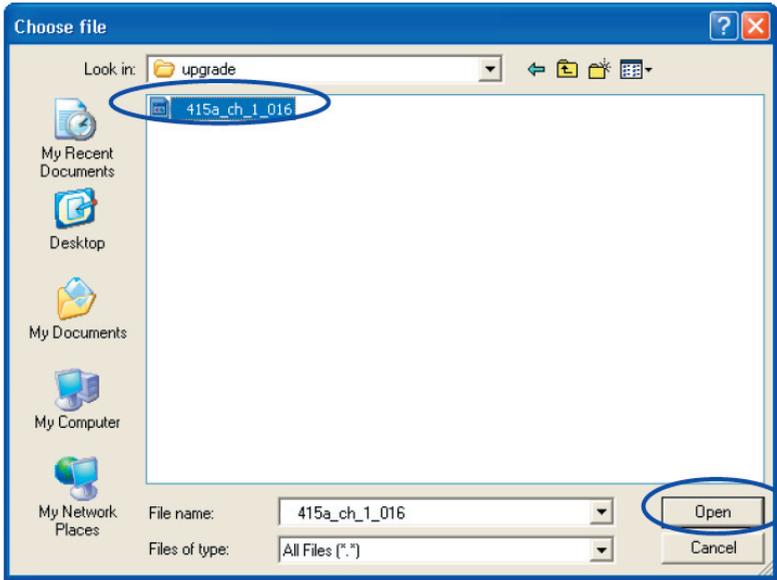
Login our website [www.modecom.eu](http://www.modecom.eu), download advanced software to local hard disk; please pay attention to model number.



By updating the Router software, you can get new functions or performance.

Software update steps:

- 1) Login our company homepage [www.modecom.eu](http://www.modecom.eu), **download new version software to your local hard disk. Please notice production and software type.**
- 2) Click "Browse" button to choose you downloaded file.



- 3) Click **“Upgrade”** button to upgrade system software.

### Firmware Upgrade

Upgrade process is completed.

When the system is restarted configuration page will be opened automatically.

Please, wait a minute .....

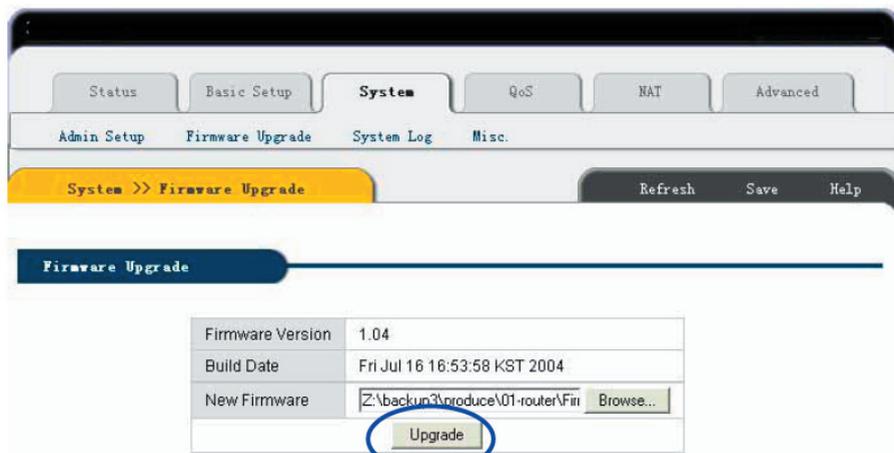
- 4) After update, Router will restart automatically.
- 5) Please check you firmware version.



**Update phase is about 60 seconds. During the update progress please do not turn the power off otherwise the Router will be damaged.**

### 6.7.3 System log

Click **“System”** -> **“System log”** as follows



Firmware Version	1.04
Build Date	Fri Jul 16 16:53:58 KST 2004
New Firmware	Z:\backup3\produce\01-router\Fir <input type="button" value="Browse..."/>
<input type="button" value="Upgrade"/>	

This web record router system log and can switch system log status for checking system history happens on the Router.

## 6.7.4 Misc.

Click "System" -> "Misc." as follows

The screenshot shows the top navigation bar of the MODE COM interface. The 'System' menu item is highlighted with a blue oval. Below it, the 'Misc.' sub-menu item is also highlighted with a blue oval. The breadcrumb trail shows 'System >> Misc.'. The 'Refresh', 'Save', and 'Help' buttons are visible on the right side of the breadcrumb area.

### Hostname Setup

Hostname

### Config / Restart

<input type="button" value="Config Backup"/>	Download configuration file into your PC
<input type="text"/> <input type="button" value="Browse..."/>	After browsing a configuration file, click "Config Restore" button
<input type="button" value="Config Restore"/>	
<input type="button" value="Restore Default"/>	To restore the factory default configuration, click this button.
<input type="button" value="Restart System"/>	To restart the system, click this button. But, some configuration would be erased if you didn't save a configuration.

### System Time Setup

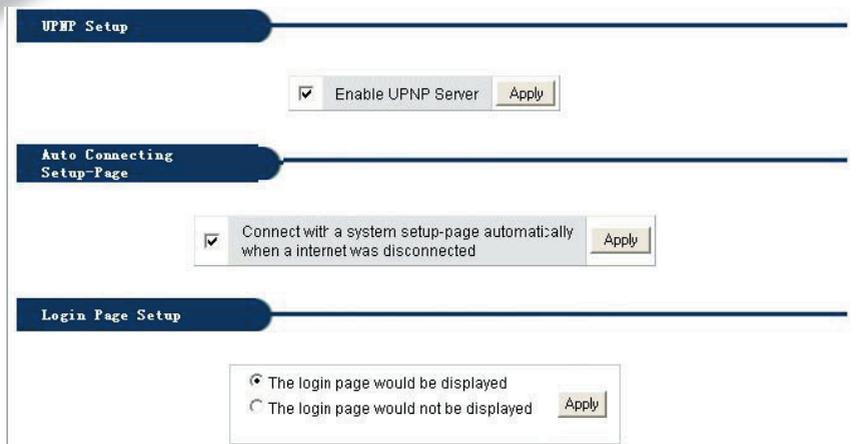
Current System Time	Thu Jan 1 01:31:27 1970
Time Server	time.nist.gov
Standard Time Zone	(GMT+08:00) Beijing, Hongkong, Ulan-Bator, Kuala Lumpur, Singapore

### Config / Restart

<input type="button" value="Config Backup"/>	Download configuration file into your PC
<input type="text"/> <input type="button" value="Browse..."/>	After browsing a configuration file, click "Config Restore" button
<input type="button" value="Config Restore"/>	
<input type="button" value="Restore Default"/>	To restore the factory default configuration, click this button.
<input type="button" value="Restart System"/>	To restart the system click this button. But, some configuration would be erased if you didn't save a configuration.

### System Time Setup

Current System Time	Thu Jan 1 01:31:27 1970
Time Server	time.nist.gov
Standard Time Zone	(GMT+08:00) Beijing, Hongkong, Ulan-Bator, Kuala Lumpur, Singapore



The screenshot displays a web-based configuration interface for a router. It features three main sections, each with a dark blue header and a light gray content area. The first section, 'UPNP Setup', contains a checked checkbox for 'Enable UPNP Server' and an 'Apply' button. The second section, 'Auto Connecting Setup Page', contains a checked checkbox for 'Connect with a system setup-page automatically when a internet was disconnected' and an 'Apply' button. The third section, 'Login Page Setup', contains two radio buttons: 'The login page would be displayed' (which is selected) and 'The login page would not be displayed', with an 'Apply' button to the right.

**Setup Hostname:** Configure Router name in the networking presented on the report forwarded to administrator mailbox.

**Config Mgmt /Restart:**

**Config Backup:** Enable user to backup all the configurations.

**Config Restore:** Restore previous configuration on router.

**Restore Default:** Restore defaulted configuration provided by manufacturer, including:

Defaulted user name: **Blank**

Defaulted IP address: **192.168.0.1**

Defaulted Subnet Mask: **255.255.255.0**

Restore defaulted configuration provided by manufacturer, router will reboot automatically.

**Restart System:** Click "**Restart System**", router will reboot automatically.

**System Time Setup:** For sake of Scheduler. pls configure accurate time system. Refresh router current time in accurate time zone : Or choose other system server until time to be refreshed.

**UPNP Setup:** UPNP is configured as defaulted. General plug and play UPNP refer to system architecture for the networking between PC and other universal intelligent equipments, especially for the SOHO user. UPnP works with wired or wireless networks and can be supported on any operating system. UPnP boasts device-driver independence and zero-configuration networking, enable networking equipments connect automatically and working harmoniously.

## 6.8 QoS

### 6.8.1 Basic Setup

Click "QoS" -> "Basic Setup" as follows

The screenshot shows a web interface for QoS configuration. At the top, there are navigation tabs: Status, Basic Setup, System, QoS (circled in blue), NAT, and Advanced. Below these, there are sub-tabs: Basic Setup (circled in blue), IP QoS, Application QoS, and Port QoS. The main content area is titled 'QoS >> Basic Setup' and includes a 'Refresh', 'Save', and 'Help' button. Under the 'QoS Basic Setup' section, there are two buttons: 'QoS Status' (set to 'Started') and 'QoS Operation' (set to 'Stop'). Below this is the 'WAN Speed Setup' section, which contains a form with the following fields: 'Internet Type' (dropdown menu set to 'VDSL Pro'), 'Download Rate' (input field '13' and dropdown 'Mbps'), and 'Upload Rate' (input field '13' and dropdown 'Mbps'). An 'Apply' button is located below these fields. A red warning message at the bottom of the form reads: 'Not allow to use a radix point. ex) 2.5Mbps -> 2500Kbps'.

**Function:** Above web is for user to configure QoS basic functions status, access to the Internet and bandwidth speed.

**Setup Method:**

Start up QoS, configure the access to the internet and bandwidth speed under subject of internet throughput, QoS specify the throughput level of the internet application, and then click "Apply".

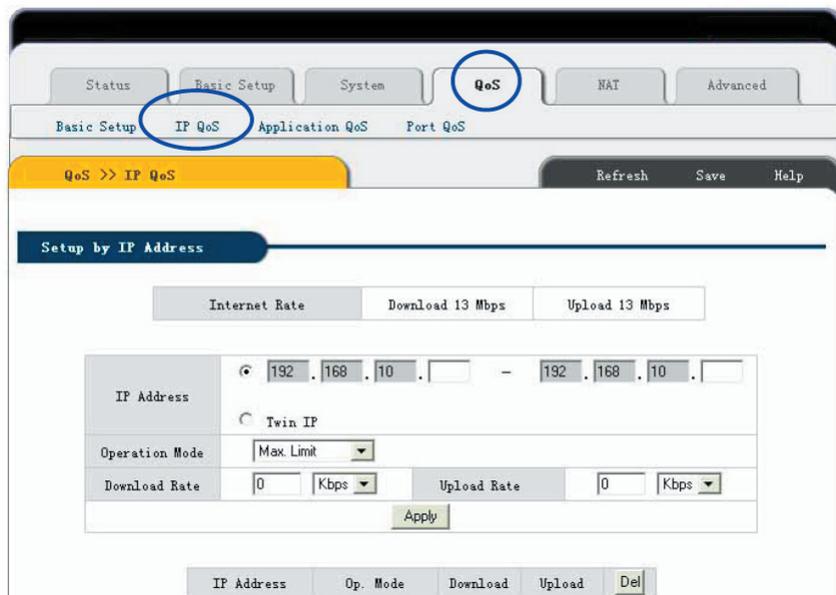


**Notes:**

1. If Internet throughput configuration changed, current QoS configuration will be missing.
2. Save current configuration before router power is off or reboot.
3. For the management, prefer to static lease IP or using static IP address on client's PC.

## 6.8.2 IP QoS

Click “QoS” -> “IP QoS” as follows



QoS >> IP QoS

Refresh Save Help

Setup by IP Address

Internet Rate Download 13 Mbps Upload 13 Mbps

IP Address	<input type="radio"/> 192 . 168 . 10 . <input type="text"/>	-	<input type="radio"/> 192 . 168 . 10 . <input type="text"/>
	<input type="radio"/> Twin IP		
Operation Mode	Max. Limit		
Download Rate	<input type="text"/> 0 <input type="text"/> Kbps	Upload Rate	<input type="text"/> 0 <input type="text"/> Kbps
<input type="button" value="Apply"/>			

IP Address	Op. Mode	Download	Upload	Del
------------	----------	----------	--------	-----

### Function:

IP QoS enable user to control forwarding and downloading speed between the maximum and minimum on PC with specified IP address.

### Setup Method:

Fill in specified IP address in the column, choose operating mode (maximum Limit /Minimum Guarantee), and then fill value in forwarding and downloading Bandwidth throughput, click “Apply”.

If delete current configuration, choose the value, click “del”

### ! Notes:

1. If Internet throughput configuration changed, current QoS configuration will be missing.
2. Save current configuration before router power is off or reboot.
3. For the management, prefer to static lease IP or using static IP address on client’s PC.

## 6.8.3 Application QoS

Click “QoS” -> “Application QoS” as follows

Internet Rate    Download 13 Mbps    Upload 13 Mbps

Apps	Operation Mode	Download		Upload	
<input type="checkbox"/> WWW (HTTP)	Max. Limit	0	Kbps	0	Kbps
<input type="checkbox"/> Soribada	Max. Limit	0	Kbps	0	Kbps
<input type="checkbox"/> GuruGuru	Max. Limit	0	Kbps	0	Kbps
<input type="checkbox"/> WinMX	Max. Limit	0	Kbps	0	Kbps
<input type="checkbox"/> eDonkey	Max. Limit	0	Kbps	0	Kbps
<input type="checkbox"/> MS Streaming	Max. Limit	0	Kbps	0	Kbps

Apply

### Function :

QoS on application programme bandwidth throughput will be specified between maximum or minimum value.

### Setup Method:

Choose application programme to be specified, choose operation mode (maximum Limit /Minimum Guarantee), specify the bandwidth throughput value, and click “Apply”.

If want to delete current configuration, choose the column to be deleted, and click “Apply”.

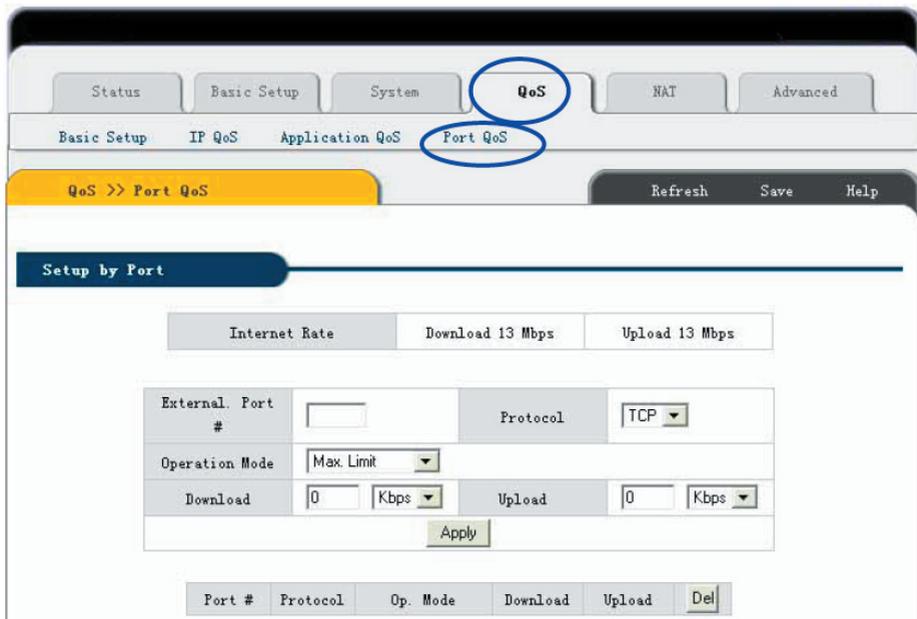


### Notes:

1. If Internet throughput configuration changed, current QoS configuration will be missing.
2. Save current configuration before router power is off or reboot .
3. For the management, prefer to static lease IP or using static IP address on client's PC.

## 6.8.4 Port QoS

Click “QoS” -> “Port QoS” as follows



The screenshot shows the router's configuration interface. At the top, there are tabs for 'Status', 'Basic Setup', 'System', 'QoS', 'NAT', and 'Advanced'. The 'QoS' tab is selected and circled in blue. Below it, there are sub-tabs for 'Basic Setup', 'IP QoS', 'Application QoS', and 'Port QoS'. The 'Port QoS' sub-tab is also selected and circled in blue. The main content area is titled 'QoS >> Port QoS' and includes a 'Refresh', 'Save', and 'Help' button. Below this is a 'Setup by Port' section with the following configuration options:

- Internet Rate: Download 13 Mbps, Upload 13 Mbps
- External Port #:
- Protocol: TCP
- Operation Mode: Max. Limit
- Download: 0 Kbps
- Upload: 0 Kbps

An 'Apply' button is located below the configuration fields. At the bottom, there is a table for managing configurations:

Port #	Protocol	Op. Mode	Download	Upload	Del

### Function:

QoS on port bandwidth throughput will be specified between maximum or minimum value.

### Setup Method:

Choose port to be specified, choose operation mode (maximum Limit /Minimum Guarantee), specify the bandwidth throughput value, and click “Apply”.

If want to delete current configuration, choose the column to be deleted, and click “Apply”.

### Notes:

1. If Internet throughput configuration changed, current QoS configuration will be missing.
2. Save current configuration before router power is off or reboot.
3. For the management, prefer to static lease IP or using static IP address on client's PC.

## 6.9 NAT

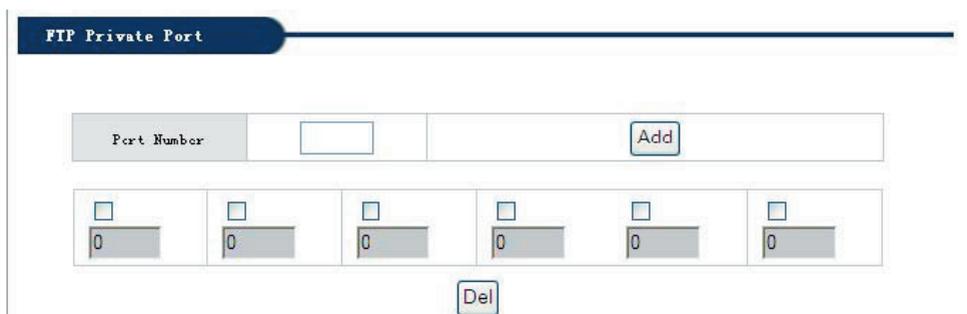
### 6.9.1 Applications

Click “NAT”->“Applications”, as follows:

The screenshot shows a web interface for NAT configuration. The top navigation bar includes tabs for Status, Basic Setup, System, QoS, NAT, and Advanced. The 'NAT' tab is selected and circled. Below it, the 'Applications' sub-tab is also selected and circled. The main content area is titled 'Application Setup' and contains a table with the following data:

Application	Internal IP Address
<input type="checkbox"/> BuddyBuddy	192 . 168 . 0 . <input type="text"/>
<input type="checkbox"/> WinAmp Broadcasting	192 . 168 . 0 . <input type="text"/>
<input type="checkbox"/> GuruGuru	192 . 168 . 0 . <input type="text"/>
<input type="checkbox"/> NetMeeting	192 . 168 . 0 . <input type="text"/>
<input type="checkbox"/> WinMx	192 . 168 . 0 . <input type="text"/>
<input type="checkbox"/> Windows XP/2000 Remote Desktop	192 . 168 . 0 . <input type="text"/>
<input type="checkbox"/> Network Drive	192 . 168 . 0 . <input type="text"/>
<input type="checkbox"/> H.323 Internet Phone	192 . 168 . 0 . <input type="text"/> 1719
<input type="checkbox"/> Soribada2	192 . 168 . 0 . <input type="text"/>
<input type="checkbox"/> Soribada2 Multi Forward Option	UDP port 22321 & 7674 is forwarded by using non-standard NAT algorithm

At the bottom of the page, a status bar indicates: 'The connected PC's IP address is 192.168.0.2'. An 'Apply' button is located at the bottom right of the configuration area.

A screenshot of a web interface titled "FTP Private Port". It features a header bar with the title. Below the header, there is a form with a "Port Number" label, an input field containing the number "0", and an "Add" button. Underneath this, there is a table with six columns, each containing a checkbox and an input field with the number "0". Below the table is a "Del" button.

Some programs such as Internet network game, Video meeting, network phone and so on need more than one connection. Because of Firewall some of the programs can not work with simple NAT IP Router. But **"Applications"** can make those programs work well with NAT IP Router.

#### Function

This page is only for the special application programs that cannot work well with Firewall or Proxy Server. If use these functions I, make the special application programs work well with IP Router.

#### Setup Method

Choose needed application program. Then fill the program's IP address in **"Internal IP address"**. Click **"Apply"** to make it effective.



#### Note

1. If you want to save all values after Router power off or restart, please click **"Save"** button which is in right-above to save current values.
2. If you want to choose option **"Applications"**, we recommend you to use **"Reserving IP"** function or use static IP address in client computer in order to manage it easily.
3. The following is the list of all application port:

## 6.9.2 Internal Server

Click "NAT"-> "Internal Server" as follows:

The screenshot shows the NAT configuration page. The 'NAT' tab is selected, and the 'Internal Server' sub-tab is active. The 'Internal Server Setup' section contains a table of protocols and their corresponding IP addresses and ports. Below the table, the connected PC's IP address is shown as 192.168.0.2. The 'DMZ Host Setup' section is also visible, showing the DMZ checkbox checked and the IP address 192.168.0.3.

Protocol	Internal Server IP Address	External Port #
<input type="checkbox"/> DNS	192 . 168 . 0 . [ ]	53
<input type="checkbox"/> SMTP	192 . 168 . 0 . [ ]	25
<input type="checkbox"/> POP3	192 . 168 . 0 . [ ]	110
<input type="checkbox"/> HTTP	192 . 168 . 0 . [ ]	80
<input type="checkbox"/> News	192 . 168 . 0 . [ ]	119
<input type="checkbox"/> FTP	192 . 168 . 0 . [ ]	21
<input type="checkbox"/> Telnet	192 . 168 . 0 . [ ]	23
<input type="checkbox"/> PPIP	192 . 168 . 0 . [ ]	1723

The connected PC's IP address is 192.168.0.2

Apply

**DMZ Host Setup**

DMZ    192 . 168 . 0 . [ ]    ALL

The connected PC's IP address is 192.168.0.3

Apply

**DMZ Host Setup**

DMZ    192 . 168 . 0 . [ ]    ALL

The connected PC's IP address is 192.168.0.3

Apply

Because there is Firewall function in the Router, if computers in WAN try to access servers in LAN through the Router, under default configuration the firewall protection will not allow the access, then conflict occurs – at the same time Router has to protect computers in LAN from WAN, at the other time it has to allow access of valid users in WAN.

Here the Router provides you “**Internal Server**” function to solve the conflict. Virtual Server provides one service port. All service requests to this port will be relocated to the servers whose IP address has been appointed in LAN.

### Function

After been setup the IP Router can allow some services, such as DNS,SMTP,POP3,HTTP,NEWS,FTP,Telnet,PPTP in LAN, to be open to Internet. Then users from Internet can access servers in your LAN; Or by setting up DMZ Server you can allow all application services and ports of one Server in your LAN to be open to Internet.

## Setup Method

1. Please confirm the LAN services which you want to be open to Internet according to the following list:

Protocol	Server
DNS	DNS (Domain Name Server)
SMTP	SMTP (Simple Message Transfer Protocol)
POP3	POP3(Post Office Protocol)
HTTP	Web Server
News	News Server
FTP	FTP File Transfer Server
Telnet	Telnet Server
PPTP	VPN (Virtual Private Network)

2. Choose the Server which you want to be open to Internet, then input Server IP address. Click “**Apply**” button to make current setup valid. Note: All open protocol port should be standard port, otherwise Router can not transfer the data package from the invalid port which you have configured; You can change external port number. But other users who want to access the services which you have setup have to setup the port number before successful access.

3. If you want to setup “**DMZ Host**” please choose “**DMZ**” option, then input the internal Server’s IP address which you want to be open to Internet. Router will transfer all received data packages except those which have been setup in “**Internal Server**” to DMZ Server, and will allow the unlimited dual communication between DMZ Server and outside Internet. If you are using a new network application but Router can not transfer data package without knowing the Port of this application, then you can setup all DMZ ports to be open. After DMZ service being effective, firewall protection of this computer will be invalid, please notice the safety.

## NOTE

1. If you want to save all values after Router power off or restart, please click “Save” button which is in right-above to save current values.
2. If you use “Internal Server”, we recommend you to use “Reserving IP” function or use static IP address in client computer in order to manage it easily.

Application	Port
BuddyBuddy	TCP 812, TCP 987
WinAmp Broadcasting	TCP 8000
GuruGuru	TCP 9292 TCP 9999
NetMeeting	TCP 1720
WinMX	TCP 6699 UDP 6257
Windows XP/2000 Remote Desktop	TCP 3389 UDP 3389
Soribada2	UDP22321

### 6.9.3 Port Forwarding

Click “NAT”->“Port Forwarding” as follows:

#### Function

By the Port Range which user has setup, “Port Forwarding” will be defined as Service Port. All requests to this port will be transferred to the computer which appointed with “Internal PC IP address”.

#### Setup Method

Input port transfer details which you want to setup in “Rule Name”. Choose “Protocol” and “External Port Range” which you want to setup. Then setup “Internal PC IP Address” and Port Transfer Range. Click “Add” to apply current configuration. If you want to delete rule, then choose the rule which you want to delete, click “Delete”.

**Rule Name:** Port transfer details need to be added.

**Protocol:** Port transfer protocol. There are 2 choices: **TCP** and **UDP**.

**External Port Range** Port Range which is open to outside.

**Internal PC IP Address** IP address of the computer to which IP Router will transfer data.

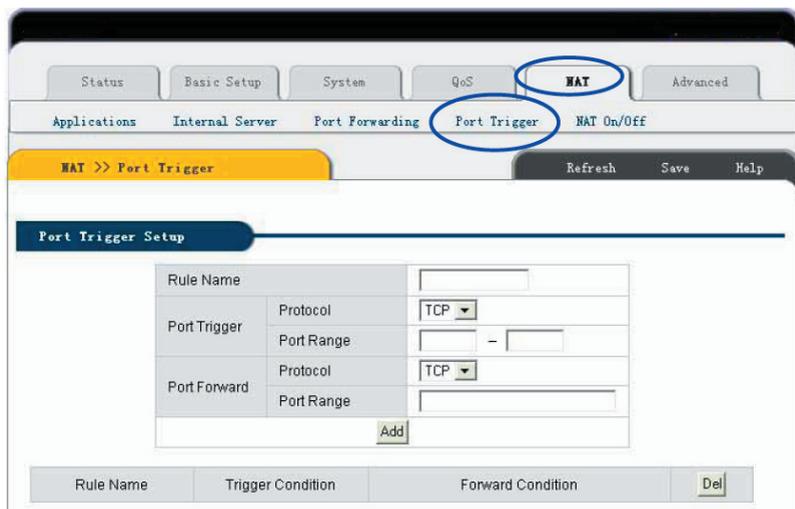
**Internal Port Range** Internal PC Port Range.

## Note

1. If you want to save all values after Router power off or restart, please click “Save” button which is in right-above to save current values.
2. If you use “Port Forwarding”, we recommend you to use “Reserving IP” function or use static IP address in client computer in order to manage it easily.

## 6.9.4 Port Trigger

Click "NAT"->"Port Trigger" as follows:



The screenshot shows a web-based configuration interface. At the top, there are tabs for 'Status', 'Basic Setup', 'System', 'QoS', 'NAT', and 'Advanced'. The 'NAT' tab is selected and circled in blue. Below it, there are sub-tabs: 'Applications', 'Internal Server', 'Port Forwarding', 'Port Trigger', and 'NAT On/Off'. The 'Port Trigger' sub-tab is also circled in blue. The main content area is titled 'NAT >> Port Trigger' and contains a 'Port Trigger Setup' form. The form has the following fields:

Rule Name	<input type="text"/>	
Port Trigger	Protocol	TCP
	Port Range	<input type="text"/> - <input type="text"/>
Port Forward	Protocol	TCP
	Port Range	<input type="text"/>
<input type="button" value="Add"/>		

At the bottom of the form, there is a table with columns: Rule Name, Trigger Condition, Forward Condition, and a 'Del' button.

### Function

If application program is connected form forward ports. All in trigger ports will be opened to prepare for connection.

### Setup Method:

Key in the description which you setup the function on the trigger port, Setup the protocol and range of the trigger port, then setup the protocol and range of the forward port, Click "Add" Button and add the rule, If want to delete the current rule, Please select the rule which you want to delete and click "Del" button.

**Rule Name:** The description of adding the trigger port.

**Port Trigger:** Setup the trigger port.

**Protocol:** Select the trigger port's protocol (TCP / UDP)

**Port Range** Trigger port's range.

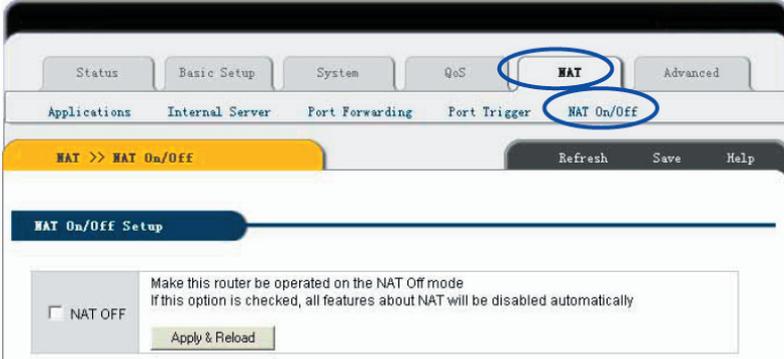
**Port Forward:** Setup the forward port

**Protocol:** Select the forward port's protocol (TCP / UDP)

**Port Range** Forward port's range.

## 6.9.5 NAT ON/OFF

Click "NAT"->"NAT ON/OFF" as follows:

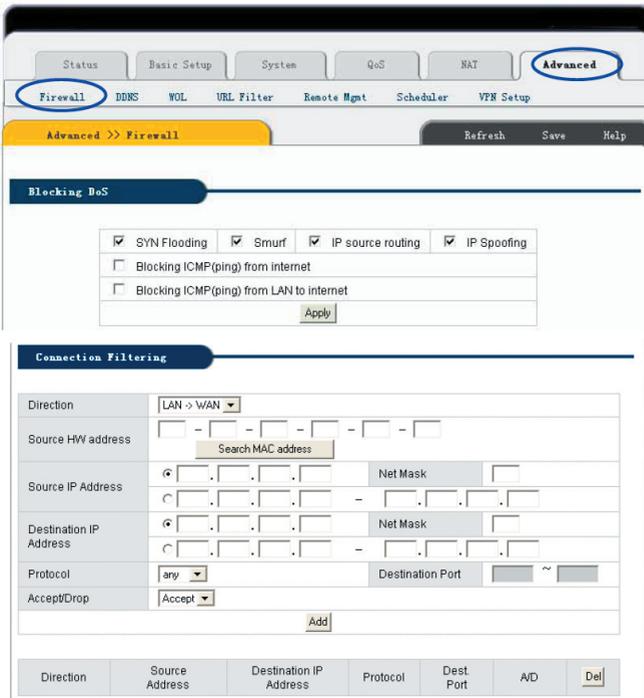


Make this router be operated on the NAT Off mode. If this option is checked, all features about NAT will be disabled automatically.

## 6.10 Advanced Setup

### 6.10.1 Firewall

Click "Advanced"->"Firewall" as follows:



## Function

**Blocking Dos** Blocking list from all attack, all default value of the options mentioned above is **ON**.

**Blocking ICMP (ping) from Internet:** In order to setup Ping package from Internet to which Router has no response. It is for the protection from shock wave attack and other hacker detects.

**Blocking ICMP (ping) from LAN to Internet:** In order to setup Ping package from LAN to which Router has no response. It is for the protection from shock wave attack.

**Connection Filtering:** By setting up IP address Filter, data package from source IP address to destination address can be accepted or dropped.

## Setup Method

1. Choose Dos attack from which needed protected, then click **"Apply"** button to effect current configuration. (Note: Current all options' default value is **ON**)

2. Setup relative parameter of connection filter. Click **Add** to effect current configuration. If you want to delete current rule, then choose the rule and click **"Delete"** button.

**Direction** Setup the orientation of connection filter. There are two options: **"WAN"->"LAN"** and **"LAN"->"WAN"**.

**Source IP Address** IP Router address of the computer which sends the data.

**Net Mask** Subnet Mask of the computer which sends the data. Such as 255.255.255.0 will be 24.

**Destination IP Address** IP Router address of the computer which receives the data.

**Net Mask** Subnet Mask of the computer which receives the data. Such as 255.255.255.0 will be 24.

**Protocol** Protocol support. There are four options: **Any****TCP****UDP** and **ICMP Any** refers to all protocols.

**Destination Port** Protocol port of destination computer. If **any**, then it cannot be setup.

**Accept/Drop** Setup **"Connection Filtering"** to accept or drop data package.

## Note

1. If you want to save all values after Router power off or restart, please click **"Save"** button which is in right-above to save current values.

2. If you use **"Connection Filter"**, we recommend you to use **"Reserving IP"** function or use static IP address in client computer in order to manage it easily.

## 6.10.2 DDNS

Click “Advanced”->“DDNS” as follows:

ZIONCOM ipTIMEPRO 54g

Status Basic Setup System QoS NAT **Advanced**

Firewall DDNS WOL URL Filter Remote Mgmt Scheduler VPN Setup

Advanced >> DDNS Refresh Save Help

**DDNS Status**

DynDNS Client Operation Stopped  
\* Sign up [www.dyndns.org](http://www.dyndns.org) first.(Free)

**DDNS Setup**

DynDNS Operation Start  
User ID  
Password  
Apply

**Hostname Registration**

Host Name Add

Host Name	Connection State	Del
-----------	------------------	-----

With Internet connections ways such as ADSL or Cable Modem, normally ISP will allocate a dynamic IP address.

**Dynamic domain name service** is a method of keeping a domain name linked to dynamic IP address gets from ISP. But dynamic domain name service depends on dynamic domain name service system. This function can allow you to use registered dynamic domain name service no matter how IP address changes.

Before use DDNS, an account provided by DDNS provider is needed.

Choose Dynamic DNS to be **Stat**, input valid “**User ID**” and “**Password**” that got from DDNS provider. Fill your registered domain name in “**Host Name**”. Click “**Apply**” button to effect current configuration.

**DDNS Status** Display current DDNS status. “**Started**” or “**Stopped**”.

**DynDNS Operation** DDNS “**Start/Stop**”☒

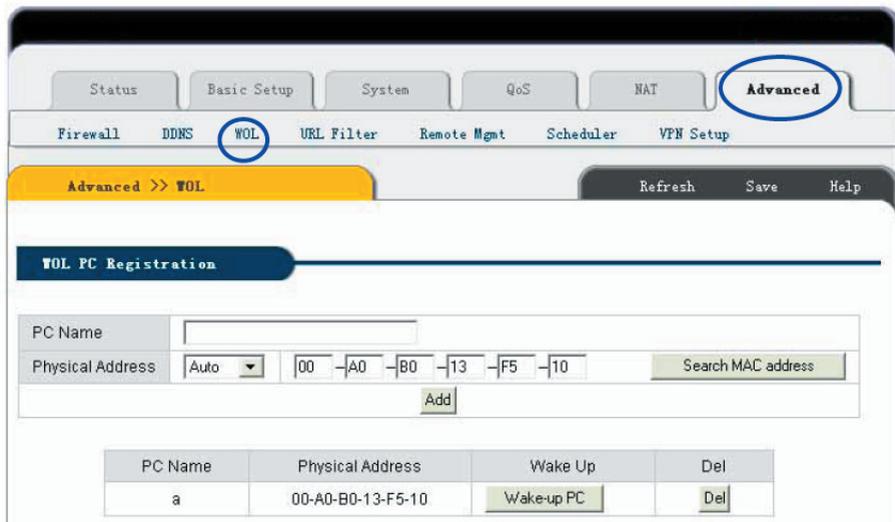
**User ID** The valid ID which you get from DDNS provider.

**Password** The valid password which you get from DDNS provider.

**Host Name** The valid domain name which you get from DDNS provider.☒

### 6.10.3 WOL

Click “Advanced”->“WOL”:



#### Function

This function allows the wake-up signal from LAN or remote equipment to connect to Router’s Internal network, and supports network wake-up computers.

#### Setup Method

1. If you want to send network wake-up signal to special client computer, please input the computer’s name and LAN Card’s MAC address. Then click “Add” button to add new rule.
2. After setup, click “Wake-up PC” button to send network waken-up signal to the computer which you want to wake up.
3. If you want to delete current rule, please choose rule then click “Delete” button.

## 6.10.4 URL Filter

Click “Advanced ”->“URL Filter” as follows:

Advanced >> URL Filter

Refresh Save Help

### URL Filtering Setup

Status: Stopped  
Operation: Start

### Filtering Rule

IP Address: 192.168.0.0 - 192.168.0.0  ALL IP

Physical: 00-00-00-00-00-00  Search MAC address

Input string:

Add

Filtering Address	Filtering Keyword	Del
all IP addresses	sex xxx	Del

### Function

In order to control the web stations which can be accessed by the computers in LAN, you can use “URL Filter” function by PC’s IP or MAC address to appoint the web stations which can be allowed to access or not.

### Setup Method

1. Click “start” button to start URL Filter function.
2. Input the IP address or MAC address which you want o filter in “IP Address”. Input the web station address which you want to filter in “Input String”. For example, if you want to forbid users to access “www.xxx.com”, you may input “www.xxx.com” in “Input String”.
3. Click “Add” button to effect current configuration.
4. If you want to delete current rule, please click “Delete” button follow with the rule.

**Status** URL filter current status. “Started ” or “Stoped”.

**Operation** URL setup “Start” and “Stop” switch. Click “Start” button to start “URL Filter”, click “Stop” button to forbid “URL Filter”.

**IP Address** Setup all computers which you want to limit. Include IP address and MAC address limit. Choose “All IP” to limit all computers in LAN; when choose MAC address, the default MAC address is the MAC address of the IP Router which you are accessing.

**Input String** The web station URL or keyword which you want to limit the access.

By inputting **www.xxx.com** to limit users to access **www.xxx.com**

By inputting web sites’ keywords, such as **sex xxx** (between is Blank) to forbid users to access **www.sex.com** and **www.xxx.com**.

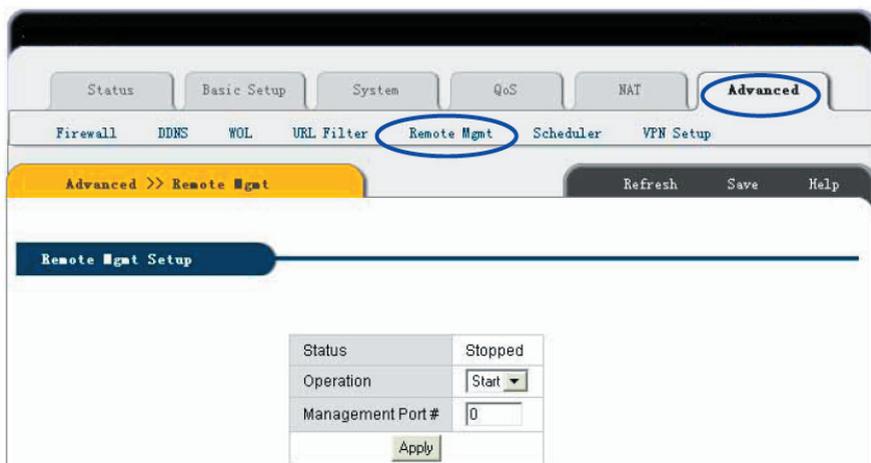


#### Note

1. If you want to save all values after IP Router power off or restart, please click “save” button which is in right-above to save current values.
2. If you use “URL Filter”, we recommend you to use “Reserving IP” function or use static IP address in client computer in order to manage it easily.

## 6.10.5 Remote Management

Click “Advanced”->“Remote Mgmt” as follows:



This page is to setup Router's remote management and WEB management ports. After start Remote Management, users can remote manage the Router by "http://WAN port IP address: Your setup Port (between is colon)"; If you want to start remote management, please setup "Management port" then click "Apply".

**Status** Display the status and management Port number of remote management setup.

**Operation** Router remote management **Start/Stop** switch.

**Management Port** Remote WEB management port number.

## 6.10.6 Scheduler

Click "Advanced"->"Scheduler" as follows:

The screenshot shows the 'Scheduler' configuration page. At the top, there are tabs for 'Status', 'Basic Setup', 'System', 'QoS', 'NAT', and 'Advanced' (which is circled in red). Below these are sub-tabs for 'Firewall', 'DDNS', 'WOL', 'URL Filter', 'Remote Mgmt', 'Scheduler' (circled in blue), and 'VPN Setup'. The main content area is titled 'Advanced >> Scheduler' and includes 'Refresh', 'Save', and 'Help' buttons. The 'Schedule Setup' section contains a table for configuring blocking rules.

Days To Block	Time To Block	Address To Block	
<input type="checkbox"/> Sun <input type="checkbox"/> Mon <input type="checkbox"/> Tue <input type="checkbox"/> Wed <input type="checkbox"/> Thu <input type="checkbox"/> Fri <input type="checkbox"/> Sat	00:00 ~ 00:00 (24 Hour)	192.168.0.0 - 192.168.0.0	<input type="checkbox"/> Everyday
		<input type="checkbox"/> ALL IP	<input type="checkbox"/> ALL Day
		<input type="checkbox"/> ALL IP	

Below the table, there is an 'Add' button and a summary table:

Days To Block	Time Of Day To Block	Address To Block	Del
<input type="checkbox"/> Sun <input type="checkbox"/> Mon <input type="checkbox"/> Tue <input type="checkbox"/> Wed <input type="checkbox"/> Thu <input type="checkbox"/> Fri <input type="checkbox"/> Sat	00:00 ~ 24:00	ALL IP	<input type="checkbox"/>

### Function

This function can limit Internet access time of client computers in LAN. Then client computers in LAN can not access Internet in special time, but in other time the access can be allowed.

### Setup Method

1. Setup the days which you want to limit or "Everyday".
2. Choose limited time period or "All Day".
3. Input the IP or MAC address of the computer which you want to limit or "All IP".

4. Click **"Add"** button to effect current configuration.

5. If you want to delete current rule, please click **"Delete"** button follows with the rules.

**Days To Block** The days you want to limit. From **"Monday"** to **"Sunday"** or **"Everyday"**.

**Time Of Day To Block** The time you want to limit. **"24 Hours"** or **"All Day"**.

**Address To Block** The computers you want to limit. **"IP /Mask"** or **"Physical"**, or **"All IP"**.

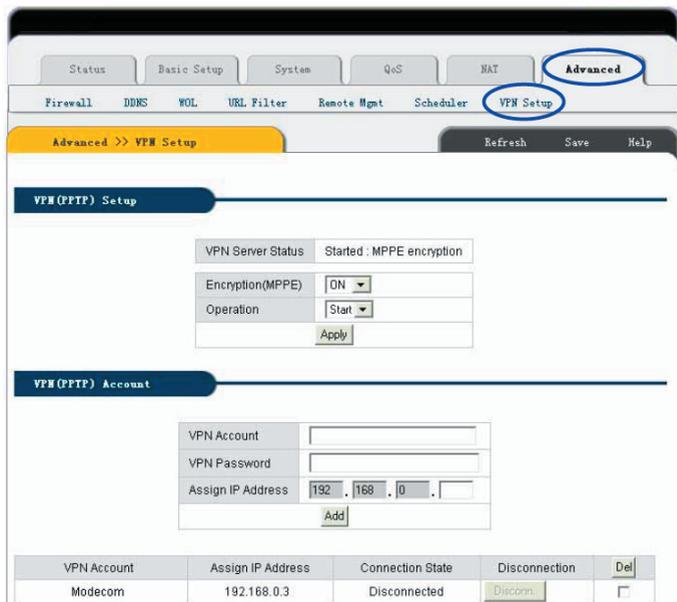
### Note

1. If you want to save all values after Router power off or restart, please click **"save"** button which is in right-above to save current values.

2. If you use **"Scheduler"**, we recommend you to use **"Reserving IP"** function or use static IP address in client computer in order to manage it easily.

## 6.10.7 VPN Setup

Click **"Advanced"**->**"VPN Setup"** as follows:



The screenshot shows a web interface for configuring a VPN. At the top, there are navigation tabs: Status, Basic Setup, System, QoS, NAT, and **Advanced** (circled in blue). Below these are sub-tabs: Firewall, DDNS, WOL, URL Filter, Remote Mgmt, Scheduler, and **VPN Setup** (circled in blue). The main content area is titled 'Advanced >> VPN Setup' and includes 'Refresh', 'Save', and 'Help' buttons. There are two main sections: 'VPN (PPTP) Setup' and 'VPN (PPTP) Account'.

**VPN (PPTP) Setup** section includes:

- VPN Server Status: Started : MPPE encryption
- Encryption(MPPE): ON (dropdown)
- Operation: Start (dropdown)
- Apply button

**VPN (PPTP) Account** section includes:

- VPN Account: [input field]
- VPN Password: [input field]
- Assign IP Address: 192 . 168 . 0 . [input field]
- Add button

At the bottom, there is a table with the following data:

VPN Account	Assign IP Address	Connection State	Disconnection	Del
Modecom	192.168.0.3	Disconnected	<input type="button" value="Discorn"/>	<input type="checkbox"/>

## Function

This wireless router VPN server allow 5 user to get in at same time.

## Setup Method

**VPN (PPTP) setup** Check Apply button to open VPN server

**VPN (PPTP) account** Type in VPN client Account and Password also enter account IP address then check add button

If want to delete current account, check the account and check delete button to delete it.

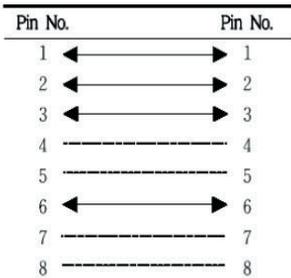
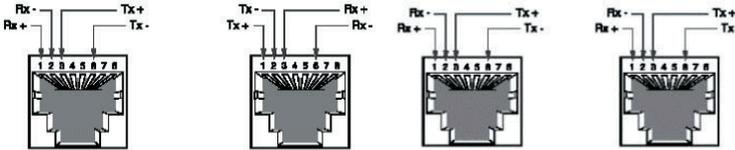
## Note

If you want to save all values after Router power off or restart, please click "save" button which is in right-above to save current values.

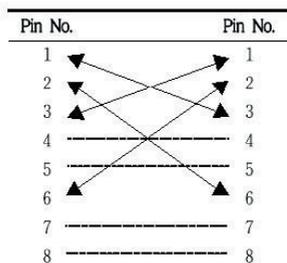
## 1 Appendix A UTP Cable specification

Twisted pair Category-5 straight-through cable

Twisted pair Category-5 Cross over cable



Straight-through Cable



Cross over Cable



Be inspired... Be satisfied... be modern...

Mode Com Ltd.  
03-301 Warsaw, Poland  
82 Jagiellońska St.  
[www.modecom.eu](http://www.modecom.eu)

**MODE COM**