

# Wireless Broadband Router



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# Chapter I: Product Information

### 1-1 Introduction and safety information

Thank you for purchasing this wireless broadband router! This high cost-efficiency router is the best choice for *Small office / Home office* users, all computers and network devices can share a single xDSL / cable modem internet connection at high speed. Easy install procedures allows any computer users to setup a network environment in very short time - within minutes, even inexperienced. When the number of your computers and network-enabled devices grow, you can also expand the number of network slot by simple attach a hub or switch, to extend the scope of your network!

With built-in IEEE 802.11b/g wireless network capability, all computers and wireless-enabled network devices *(including PDA, cellular phone, game console, and more!)* can connect to this broadband router without additional cabling. The wireless interface can work in both AP (access point) and client mode. In AP mode, this router serves other wireless client's connection needs; in client mode, this router can connect to other wireless access point which provides Internet connection, and share the connection with LAN clients.

### Other features of this router including:

- High Internet Access throughput
- Allow multiple users to share a single Internet connection
- Supports up to 253 LAN users sharing a single Cable or xDSL internet connection
- Four wired LAN ports (10/100M) and one WAN port (10/100M)
- Provides IEEE 802.11b/g wireless LAN capability.
- Wireless interface work in both AP (Access Point) and wireless client mode.
- Hardware wireless switch. You don't need a computer to switch wireless function on / off!
- Support DHCP (Server/Client) for easy client IP-address setup
- Advanced network and security features like: Special Applications, DMZ, Virtual Servers, Access Control, Firewall.
- Allow you to monitor the router's status like: DHCP Client Log, System Log, Security Log and Device/Connection Status

- Easy to use Web-based GUI for network configuration and management purposes
- Remote management function allows configuration and upgrades from a remote computer (over the Internet)
- Auto MDI / MDI-X function for all wired Ethernet ports.

### 1-2 Safety Information

In order to keep the safety of users and your properties, please follow the following safety instructions:

1. This router is designed for indoor use only; DO NOT place this router outdoor.

2. DO NOT put this router at or near hot or humid places, like kitchen or bathroom. Also, do not left this router in the car in summer.

3. DO NOT pull any connected cable with force; disconnect it from the router first.

4. If you want to place this router at high places or hang on the wall, please make sure the router is firmly secured. Falling from high places would damage the router and its accessories, and warranty will be void.

5. Accessories of this router, like antenna and power supply, are danger to small children under 3 years old. They may put the small parts in their nose or month and it could cause serious damage to them. KEEP THIS ROUTER OUT THE REACH OF CHILDREN!

6. The router will become hot when being used for long time (*This is normal and is not a malfunction*), DO NOT put this router on paper, cloth, or other flammable materials.

7. There's no user-serviceable part inside the router. If you found that the router is not working properly, please contact your dealer of purchase and ask for help. DO NOT disassemble the router, warranty will be void.

8. If the router falls into water when it's powered, DO NOT use your hand to pick it up. Switch the electrical power off before you do anything, or contact an experienced technician for help.

9. If you smell something strange, or even see some smoke coming out from the router or power supply, remove the power supply or switch the electrical power off immediately, and call dealer of purchase for help.

### 1-3 System Requirements

- Internet connection, provided by xDSL or cable modem with a RJ-45 Ethernet port.
- Computer or network devices with wired or wireless network interface card.
- Web browser (*Microsoft Internet Explorer 4.0 or above, Netscape Navigator 4.7 or above, Opera web browser, or Safari web browser*).
- An available power socket

1-4 Package Contents

Before you starting to use this router, please check if there's anything missing in the package, and contact your dealer of purchase to claim for missing items:

□ Broadband router with Antenna(1 pcs)	. 1
□ Quick installation guide (1 pcs)	2
$\Box$ CDROM with multi-languages setup wizard, multi-languages Qu	lick
installation guide and User manual (1 pcs)	3
$\Box$ 12V 1A power adapter (1 pcs)	. 4
Ethernet Cable (1 pcs)	5

### Front Panel



LED Name	Light Status	Description
(Power)	ON	Router is switched on and correctly powered
	On	Wireless network is switched on
1	Off	Wireless network is switched off
(Wireless)	Flashing	Wireless LAN activity (transferring data)
	On	WAN port (Internet) is running at 100Mbps
WAN	Off	WAN port (Internet) is running at 10Mbps
	Flashing	WAN activity (transferring data)
LAN	On	LAN port is connected
1-4	Off	LAN port is not connected
LINK/ACT	Flashing	LAN activity (transferring data)

Back Panel



Item Name	Description
Antenna	Wireless antenna. Please keep antenna perpendicular to
	the ground at all the time.
ON/OFF	Wireless switch, Set to 'ON' to switch wireless function
	on; set to 'OFF' to switch wireless function off.
12V	Power connector, connects to power adapter
Reset	Reset the router to factory default settings (clear all
	settings). Press this button and hold for 20 seconds to
	clear all settings.
1 - 4	Local Area Network (LAN) ports 1 to 4
WAN	Wide Area Network (WAN / Internet) port

# Chapter II: System and Network Setup

### 2-1 Establish network connection

Please follow the following instruction to build the network connection between your new Broadband router and your computers, network devices:

1. Connect your xDSL / cable modem to the WAN port of router by Ethernet cable.



 Connect all your computers, network devices (network-enabled consumer devices other than computers, like game console, or switch / hub) to the LAN (1-4) port of the router.



3. Connect the power adapter to the wall socket, and then connect it to the '12V' socket of the router. 4. Please check all LEDs on the front panel. 'PWR' LED should be steadily on, WAN and LAN LEDs should be on if the computer / network device connected to the respective port of the router is powered on and correctly connected. If PWD LED is not on, or any LED you expected is not on, please recheck the cabling, or jump to '4-2 Troubleshooting' for possible reasons and solution. 2-2 Setup client computers to obtain IP address automatically

After the network connection is established, the next step you should do is setup the router with proper network parameters, so it can work properly in your network environment.

Before you can connect to the router and start configuration procedures, your computer must be able to get an IP address automatically (use dynamic IP address). If it's set to use static IP address, or you're unsure, please follow the following instructions to configure your computer to use dynamic IP address:

If the operating system of your computer is....

Windows 95/98/Me	- please go to section 2-2-1
Windows 2000	- please go to section 2-2-2
Windows XP	- please go to section 2-2-3
Windows NT	- please go to section 2-2-4

### 2-2-1 Windows 95/98/Me IP address setup:

 Click 'Start' button (it should be located at lower-left corner of your computer), then click control panel. Double-click *Network* icon, and *Network* window will appear. Select 'TCP/IP', then click 'Properties'.

Network ? X
Configuration Identification Access Control
The following network components are installed:  Client for Microsoft Networks  Client for NetWare Networks  SMC EtherPower Adapter (SMC8432)  FIX/SPX-compatible Protocol  TCP/IP
Add <u>R</u> emove <u>Properties</u>
Primary Network Logon:
Client for Microsoft Networks
Eile and Print Sharing
Description TCP/IP is the protocol you use to connect to the Internet and wide-area networks.
OK Cancel

2. Select 'Obtain an IP address from a DHCP server', then click 'OK'.

TCF	P/IP Propertie	\$			?	×
	Bindings Gateway	Advar WINS I	iced		onfiguration IP Address	
	An IP address of by a DHCP serv server, ask your type it in the spa	er. If your ne network ad	etwork does	not have	a DHCP	
	○ <u>O</u> btain an -			<sup>o</sup> server	)	
	<u>I</u> P Addres	:5:				
	S <u>u</u> bnet M	lask:		ŀ		
	<u></u>					
				Ļ		
				*******	•	
				OK	Cancel	
			****	*********		

### 2-2-2 Windows 2000 IP address setup:

1. Click 'Start' button (it should be located at lower-left corner of your computer), then click control panel. Double-click *Network and Dial-up Connections* icon, double click *Local Area Connection,* and *Local Area Connection* 

*Properties* window will appear. Select 'Internet Protocol (TCP/IP)', then click 'Properties'

Local Area Connection	Properties	? ×
General		
Connect using:		
💷 Realtek RTL80	129(AS) PCI Ethernet Adap	pter
,		Configure
	l are used by this connect	ion:
<ul> <li>Client for Mich</li> <li>Eile and Prints</li> </ul>	osoft Networks er Sharing for Microsoft Ne	atworks
Internet Proto		AWYOINS
************	······································	·····
Install	<u>U</u> ninstall	Properties
Description		**************************************
wide area network	ol Protocol/Internet Proto protocol that provides cor connected networks.	
Sho <u>w</u> icon in task	bar when connected	
	0K	Cancel

2. Select 'Obtain an IP address automatically' and 'Obtain DNS server address automatically', then click 'OK'.

	utomatically if your network supports I to ask your network administrator for
the appropriate IP settings.	
Obtain an IP address automa	tically
. Use the following IP address:	
[P address:	
S <u>u</u> bnet mask:	
Default gateway:	
G Obvie DNC	- to a star line line
<ul> <li>Obtain DNS server address a</li> <li>Use the following DNS serve</li> </ul>	
Preferred DNS server:	
Alternate DNS server:	
	,
	Advanced

#### 2-2-3 Windows XP IP address setup:

1. Click 'Start' button (it should be located at lower-left corner of your computer), then click control panel. Double-click *Network and Internet Connections* icon, click *Network Connections,* then double-click *Local Area Connection, Local Area Connection Statuss* window will appear, and then click 'Properties'

🕹 Local Area Connection Properties 🛛 🔹 💽
General Authentication Advanced
Connect using:
AMD PCNET Family PCI Ethernet Ad
This connection uses the following items:
Client for Microsoft Networks
🗹 🗐 File and Printer Sharing for Microsoft Networks
🗹 👵 QoS Packet Scheduler 🔹
☑ 3  Internet Protocol (TCP/IP)
······································
Install
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
<ul> <li>Show icon in notification area when connected</li> <li>Notify me when this connection has limited or no connectivity</li> </ul>
OK Cancel

2. Select 'Obtain an IP address automatically' and 'Obtain DNS server address automatically', then click 'OK'.

eneral Alternate Configuration	
	d automatically if your network supports eed to ask your network administrator fo
Obtain an IP address auto	matically
Use the following IP addre	
IP address:	
S <u>u</u> bnet mask:	
<u>D</u> efault gateway:	
⊙ O <u>b</u> tain DNS server addres	s automaticallu
Use the following DNS ser	
Preferred DNS server:	
<u>A</u> lternate DNS server:	
	Ad <u>v</u> anced.
	Ad <u>r</u> ancea:

2-2-4 Windows Vista IP address setup:

1. Click 'Start' button (it should be located at lower-left corner of your computer), then click control panel. Click *View Network Status and Tasks*, then click *Manage Network Connections..*Right-click *Local Area Netwrok, then select 'Properties'. Local Area Connection Properties* window will appear, select 'Internet Protocol Version 4 (TCP / IPv4), and then click 'Properties'

📱 Local Area Connection Properties 🛛 🗙		
Networking		
Connect using:		
Intel(R) PRO/1000 MT Network Connection		
Configure		
This connection uses the following items:		
<ul> <li>Client for Microsoft Networks</li> <li>QoS Packet Scheduler</li> <li>File and Printer Sharing for Microsoft Networks</li> <li>Internet Protocol Version &amp; (TCP/IPv6)</li> <li>Internet Protocol Version 4 (TCP/IPv4)</li> <li>Internet Topology Discovery Marper I/O Driver</li> <li>Link-Layer Topology Discovery Responder</li> </ul>		
Install Uninstall Properties Description Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication		
OK Cancel		

2. Select 'Obtain an IP address automatically' and 'Obtain DNS server address automatically', then click 'OK'.

	automatically if your network supp	
this capability. Otherwise, you n for the appropriate IP settings.	eed to ask your network administra	ator
Obtain an IP address autor	natically	
Uge the following IP addres		
IP address:		
Sybnet mask:	· · · ·	
Default gateway;		
Obtain DNS server address	automatically	
□ <sup>(*)</sup> Use the following DNS serv		
Preferred DNS server:		
<u>A</u> lternate DNS server:		
	Advance	ed

### 2-3 Connect to broadband router by web browser

Default IP address of this broadband router is '192.168.2.1', and you can connect to broadband router's web-based configuration interface by any connected computer with web browser (Internet Explorer 5.x or above, Firefox, or Netscape).

Please input '192.168.2.1' in web browser's address bar and press 'Enter' key to establish connection:

🗿 abo	ut:b	lank -	Microsoft	t Intern	et Ex	plorer
<u>F</u> ile	<u>E</u> dit	⊻iew	F <u>a</u> vorites	<u>T</u> ools	<u>H</u> elp	
G	ack	- Θ	- 💌	2 (		Search 🌔
Address	5	192.16	8.2.1			
	******	•••••				

You should see the following authentication window:



Please input 'admin' in 'User name' field, and '1234' in 'Password' field, and click 'OK' button to enter web configuration interface.



TIPS: If you can't establish connection with broadband router with web browser (got 'The page cannot be displayed' or similar error message), the IP address you inputted may be wrong. If you've changed the IP address of this broadband router previously, please input correct IP address instead of the default IP address '192.168.2.1'.

If the DHCP server function of this broadband router is enabled, please follow the following instructions to find out the IP address of this broadband router: Please click 'start' -> 'run' at the bottom-lower corner of your desktop:



Input 'cmd', then click 'OK'



Input 'ipconfig', then press 'Enter' key. Please check the IP address followed by 'Default Gateway' (In this example, the IP address of router is 192.168.2.1, *please note that this value may be different.*)



NOTE: If the IP address of Gateway is not displayed, or the address followed by 'IP Address' begins with '169', please recheck network connection between your computer and router, and / or go to the beginning of this chapter, to recheck every step of network setup procedure.

If you tried the instructions listed above and still can not find the IP address of this broadband router / you forget the password, please jump to chapter xx-xx to reset the broadband router.

### 2-4 Using 'Quick Setup'

This broadband router provides a 'Quick Setup' menu, and you can setup basic parameters of this broadband router. Please follow the following instructions to use 'Quick Setup' menu:

1. Click 'Quick Setup' after logged in.



2. This page introduces the steps you'll go through during Quick Setup, click 'Next' to start setup procedure.



3. Check 'Enable NTP client update' box so this router will setup its internal clock automatically by synchronizing with time server. Please select the time zone of your residence from 'Time Zone Select' dropdown list, and then select a nearest time server from 'NTP server' dropdown menu. When you finish, click 'Next' to continue.

🗿 EDIMAX Technology - Microsoft Int	ernet Explorer	
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> el		2
🚱 Back 🔹 🐑 🔺 🛃 🏠	🔎 Search 🤺 Favorites 🚱 🔗 - 🌺 🚍 🦓	
Address 🗃 http://192.168.2.1/home.asp		🖌 🄁 Go 🛛 Links 🂙
1:31:31 IP:192.168.2.1 V1.01 Ru	Inning Time Oday:01:31:32	
Quick Setup General Setup	Status Tools Languages Home	
Home / Quick Setup		
1. Time Zone S	etting	
You can maintain the	system time by synchronizing with a public time server over the Internet.	
Enable N	TP client update	
Time Zone Select :	(GMT-08:00)Pacific Time (US & Canada); Tijuana 💌	
NTP server :	192.5.41.41 - North America 💌	
	Cancel Previous Next	
E Done		🔮 Internet 🛒

4. Please input the IP address and Subnet Mask of the LAN interface here. You can use default setting and just click 'Next' to continue.

EDIMAX Techn	ology - Microsoft Inte	rnet Explorer		
	Favorites <u>T</u> ools <u>H</u> elp			
G Back 🔹 🕤	- 🖹 🖻 🏠 🍃	🔎 Search 🤺 Favorites 🥝 👔	3- 😓 🔜 🕉	
Address 🙆 http://1	92.168.2.1/home.asp			🔽 🄁 Go 🛛 Links 🎽
1:45:23 IP:192.		ning Time Oday:01:45:24	A REAL PROPERTY AND A REAL	NETWORKING PEOPLE TOGETHER
Quick Setup	General Setup	Status Tools Languag	jes Home	
Home / Quick So	etup			
2	2. LAN Interface	Setup		
			a network which connects to the LAN p 9 addresss, subnet mask, DHCP, etc	
1	P Address:	192.168.2.1		
s	Subnet Mask:	255.255.255.0		
			Cancel Previous Next	
ê				🥶 Internet

5. Please select the WAN connection type here from 'WAN Access Type' dropdown menu. Every connection type requires different settings. Detailed instructions will be given below.

🗿 EDIMAX Techno	ology - Microsoft Internet Explorer	
<u>File E</u> dit <u>V</u> iew F	Favorites Iools Help	
G Back 🔹 🕥	🕞 🔀 🏠 🔎 Search 📌 Favorites 🤣 🎅 - 🌺 🧫 🦓	
Address 💰 http://19	92.168.2.1/home.asp 🕑 🔂 🚱	Links »
	<b>Spin</b>	
1:55:07 IP:192.1	168.2.1 V1.01 Running Time Oday:01:55:08	OGETHER
Quick Setup	General Setup Status Tools Languages Home	
Home / Quick Se	etup	
3.	3. WAN Interface Setup	
ус	his page is used to configure the parameters for Internet network which connects to the WAN port of our router. Here you may change the access method to static IP, DHCP, PPPoE or PPTP by licking the corresponding item .	
	WAN Access Type: DHCP Client	
	Hostname:	
	Cancel Previous Next	
<b>e</b>	🌍 Internet	

### How to select the type of Internet Connection?

Static IP - You should select this connection type when our Internet Service Provider assigns you with a specific IP address. You must know this IP address before you can access Internet.

DHCP Client - Your Internet Service Provider requires you to use DHCP client to obtain an IP address from them. Many Internet Service Provider which uses cable / ADSL modem to provide Internet access will use this kind of connection.

PPPoE - Your Internet Service Provider requires you to use PPPoE client to obtain an IP address from them. Many Internet Service Provider which uses ADSL modem to provide Internet access will use this kind of connection.

PPTP / L2TP - Your Internet Service Provider requires you to use PPTP / L2TP client to obtain an IP address from them. Or you want to establish a connection with a remote PPTP / L2TP connection server.

### If you select 'Static IP' as connection type:

WAN Access Type:	Static IP 💌
IP Address:	172.1.1.1
Subnet Mask:	255.255.255.0
Default Gateway:	172.1.1.254
DNS :	

Item Name	Description
IP Address	Input the IP address assigned by your Internet
	Service Provider. You can only use the IP address
	assigned by your Internet Service Provider, or
	you'll not be able to access Internet.
Subnet Mask	Input the subnet mask assigned by your Internet
	Service Provider.

Default Gateway	Input the IP address of the default gateway
	assigned by your Internet Service Provider.
DNS	Input the DNS (Domain Name System) server's IP
	address assigned by your Internet Service
	Provider. DO NOT INPUT HOSTNAME HERE
	(i.e. you should input something like
	140.123.45.67, but not dns.somewhere.com).

If you select 'DHCP Client' as connection type:

WAN Access Type:	DHCP Client
· · · · · · · · · · · · · · · · · · ·	
Hostname:	
nosulaine.	

Item Name	Description
Hostname	Input the hostname. This field is optional and only
	required when your Internet Service Provider
	requests you to input a specific (or any) hostname.

If you select 'PPPoE' as connection type:

WAN Access Type:	PPPoE 🖌
User Name:	
Password:	

Item Name	Description		
User Name	Input the PPPoE user name assigned by your		
	Internet Service Provider.		
Password	Input the PPPoE password assigned by your		
	Internet Service Provider.		

### If you select 'PPTP' as connection type:

WAN Access Type:	РРТР
IP Address:	0.0.0.0
Subnet Mask:	0.0.0.0
Server IP Address:	0.0.0.0
User Name:	
Password:	

Item Name	Description	
IP Address	Input the IP address assigned by your Internet	
	Service Provider.	
Subnet Mask	Input the subnet mask assigned by your Internet	
	Service Provider.	
Server IP Address	Input the IP address of PPTP connection server.	
User Name	Input the user name of PPTP connection server.	
Password	Input the password of PPTP connection server.	

If you select 'L2TP' as connection type:

WAN Access Type:	L2TP 🔽
💿 Attain IP Automati	cally
🔘 Set IP Manually	
IP Address:	0.0.0.0
Subnet Mask:	0.0.0.0
Server IP Address:	
User Name:	
Password:	

Item Name	Description	
Attain IP Automatically	Select this option if your Internet Service Provider	
	will assign an IP address to you automatically by	
	DHCP.	
Set IP Manually	Select this option if your Internet Service Provider	
	assigns an IP address to you and requires you to	

	use this IP address.	
IP Address	Input the IP address assigned by your Internet	
	Service Provider.	
Subnet Mask	Input the Subnet Mask assigned by your Internet	
	Service Provider.	
Server IP Address	Input the IP address of L2TP connection server.	
User Name	Input the user name of L2TP connection server.	
Password	Input the password of L2TP connection server.	

When you finish, click 'Next' to continue.

6. Please select the wireless band and mode here:

EDIMAX Tech	nology - Microsoft Inte	rnet Explor	er				
<u>Eile E</u> dit <u>V</u> iew	F <u>a</u> vorites <u>T</u> ools <u>H</u> elp						<b>N</b>
🌀 Back 🔹 🕘	) - 🖹 🖻 🏠	Search	쑷 Favorit	es 🚱 🔗 -	🎍 🚍 🦓		
Address 🍯 http://	192.168.2.1/home.asp					🖌 🄁 💽 Lini	ം »
2:39:53 IP:192				:54			ER
Quick Setup	General Setup	Status	Tools	Languages	Home		
Home / Quick S	Setup		1				^
					clients which may connect gs as well as wireless netw		
	Band:	2.4 GH:	z (B+G) 🔽	]			≡
	Mode:	Client	~				
	Network Type:	etwork Type: Infrastructure 💌					
	SSID:	def					
	Channel Number:	11 🗸					
	Enable Mac Clor	ne (Single E	thernet C	lient)	Cancel Previous (	Next	
<b>e</b> 1						Internet	<b>•</b>

Item Name	Description		
Band	Select the wireless band:		
	2.4GHz (B): only wireless clients with 802.11b capability can connect to this router. Maximum connection speed is 11Mbps.		
	2.4GHz (G): only wireless clients with 802.11g capability can connect to this router. Maximum connection speed is 54Mbps.		

	2.4GHz (B+G): Both 802.11b and 802.11g
	wireless clients can connect to this router.
Mode	Select the working mode of wireless interface:
	AP: This router will act as access point (serves
	other wireless client's connection needs).
	Client: This router will act as wireless client
	(connect to other access point as client).
	WDS: This router will act as WDS (Wireless
	Distribution System) station. With this capability,
	this router can connect to other WDS-enabled
	access point and the LAN clients on every
	WDS-enabled access points can communicate
	with each other.
	AP+WDS: This router will act as access point with
	WDS capability.
Network Type	Select the wireless network type (Infrastructure or
	Ad Hoc). This option is only required when this
	router is working in 'Client' mode.
SSID	Input the SSID (Service Set IDentifier) of this
	access point (or the SSID of the access point you
	wish to connect when in 'Client' mode).
	You can input up to 32 alphanumerical characters
	as SSID. SSID is used to identify this wireless
	router so wireless clients can identity this router
	from others.
Channel Number	Select the channel number of wireless radio. All
	wireless devices who wish to communicate with
	each other must use the same channel number.
	It's highly recommended to select a channel
	number which is not taken by other access points,
	or the wireless network performance will become
	poor. To know which channels are taken by other
	access points, you can use 'Site Survey' function
	(See chapter 2-7-5) to discover which channel
	numbers were taken already.

Enable Mac Clone	(When in Client mode) If the access point you wish
	to connect only permits the connection from
	certain MAC address, check this box and the
	wireless interface will use the same MAC address
	which wired LAN client uses.

When you finish, click 'Next' to continue.

7. Select the encryption mode of wireless connection:

EDIMAX Techno	logy - Microsoft Internet Explorer	
<u>F</u> ile <u>E</u> dit ⊻iew F	=avorites Iools Help	
🌀 Back 🔹 🕥	🔹 🖹 🏠 🔎 Search 🤺 Favorites 🛛 🔗 😓 😹 🔜 🔏	
Address 💰 http://19	2.168.2.1/home.asp	🔽 🔁 Go 🛛 Links 🎽
		TDIMAY
3:12:43 IP:192.1	68.2.1 V1.01 Running Time Oday:03:12:44	NETWORKING PEOPLE TOGETHER
Quick Setup	General Setup Status Tools Languages Home	
Home / Quick Set	tup	
Th	. Wireless Security is page allows you setup the wireless security. Turn on WEP or WPA by using Encryption juld prevent any unauthorized access to your wireless network.	Keys
Er	ncryption: None 🗸	ж
Error on page.		💙 Internet 🔤

Please select wireless encryption type from 'Encryption' dropdown menu. If you select 'None' as encryption type, no encryption will be used and other people will be able to read all information you transmitted by wireless network, therefore no encryption is not recommended.

Please note that when you use encryption, all wireless clients should use the same encryption mode and setting.
# If you select 'WEP' as encryption type:

Encryption: WEP	
Key Length:	64-bit 💌
Key Format:	ASCII (5 characters) 💌
Default Tx Key:	Key 1 🔽
Encryption Key 1:	*****
Encryption Key 2:	*****
Encryption Key 3:	*****
Encryption Key 4:	****

Item Name	Description
Key Length	There are two types of WEP key length: 64-bit and
	128-bit. Using '128-bit' is safer than '64-bit', but
	will reduce some data transfer performance.
Key Format	There are two types of key format: ASCII and Hex.
	When you select a key format, the number of
	characters of key will be displayed. For example, if
	you select '64-bit' as key length, and 'Hex' as key
	format, you'll see the message at the right of 'Key
	Format' is 'Hex (10 characters), which means the
	length of WEP key is 10 characters.
Default Tx Key	You can set up to four sets of WEP key, and you
	can decide which key is being used by default
	here. If you don't know which one you should
	use, select 'Key 1'.
Encryption Key 1 to 4	Input WEP key characters here, the number of
	characters must be the same as the number
	displayed at 'Key Format' field. You can use any
	alphanumerical characters (0-9, a-z, and A-Z) if
	you select 'ASCII' key format, and if you select
	'Hex' as key format, you can use characters 0-9,
	a-f, and A-F. You must enter at least one
	encryption key here, and if you entered multiple
	WEP keys, they should not be same with each
	other.

## If you select 'WPA (TKIP)' as encryption type:

Encryption:	WPA (TKIP)	*			
Pre-Shared	Key Format:		Dacenhraca	*	
	Key:				

Item Name	Description
Pre-shared Key Format	Select the type of pre-shared key, you
	can select Passphrase (8 or more
	alphanumerical characters, up to 63), or Hex
	(64 characters of 0-9, and a-f).
Pre-shared Key	Please input the WPA passphrase here.
	It's not recommended to use a word that can
	be found in a dictionary due to security
	reason.

## If you select 'WPA2 (AES)' as encryption type:

Encryption:	WPA2(AES)			
Pre-Shared	Key Format:	Passphrase	V	
Pre-Shared	-			

Item Name	Description
Pre-shared Key Format	Select the type of pre-shared key, you
	can select Passphrase (8 or more
	alphanumerical characters, up to 63), or Hex
	(64 characters of 0-9, and a-f).
Pre-shared Key	Please input the WPA passphrase here.
	It's not recommended to use a word that can
	be found in a dictionary due to security
	reason.

### If you select 'WPA2 Mixed' as encryption type:

Encryption:	WPA2 Mixed 💙			
Pre-Shared	Key Format:	Passphrase	~	
Pre-Shared				

Item Name	Description
Pre-shared Key Format	Select the type of pre-shared key, you
	can select Passphrase (8 or more
	alphanumerical characters, up to 63), or Hex
	(64 characters of 0-9, and a-f).
Pre-shared Key	Please input the WPA passphrase here.
	It's not recommended to use a word that can
	be found in a dictionary due to security
	reason.

When you finish, click 'OK' to end Quick Setup procedure. It takes few seconds for this router to save settings, when you see this message, the router is ready with new setting:

)	Chan	ge	setti	ng	succ	essful	ly!
	ОК	1					

Click 'OK' to start to use this router.

### 2-5 Using 'General Setup'

The 'General Setup' menu provides detailed setup procedures of all functions and settings of this router. If you want to maximize the functionality of this router, you can use this setup menu to configure detailed settings of this router.

To enter 'General Setup' menu, click 'General Setup' icon in main menu, and select the setup item you wish to set.



### 2-5-1 System

You can configure system related settings in 'System' menu. Select the setup item you wish to set, then click 'Next' to continue.



2-5-1-1 Time Zone

You can setup router's internal clock here, and you can also let router's clock to synchronize with time server automatically.



The descriptions of every setup item are listed below:

Item Name	Description
Current Time	Input current date and time manually. Please note
	that this router uses 24-hour time format. (Please
	input '23' instead of '11PM'.
Time Zone Select	Please select the time zone of your residence from
	this dropdown menu.
Enable NTP client	Check this box and this router will synchronize its
update	internal clock with time server automatically.
NTP Server	Select the IP address of time server from
	dropdown list, or input the IP address by yourself
	here. Every IP address in dropdown list comes
	with the location of time server; please select the
	time server which is nearest to you. If you found
	the time is not correct when you select certain time
	server, please select another one.
Next	Click this button to save changes you made in this
	page.
Cancel	Discard all changes you made in this page.
Refresh	Reload this page, and the current date and time
	setting of this router will be displayed on this page.

### 2-5-1-2 Password Settings

You can change the user name and password used to protect the web configuration interface against unauthorized access. You can also disable the protection so everyone who knows the IP address of this router can change its setting. However, it's not recommended to disable protection.

EDIMAX Technology	nology - Microsoft Internet Explorer	
	Favorites Iools Help	
🌀 Back 🔹 🕥	) - 💌 😰 🏠 🔎 Search 👷 Favorites 🤣 😥 🌭 🔜 🖏	
Address 🕘 http://19	192.168.2.1/home.asp	🖌 🔁 Go 🛛 Links 🎽
6:29:56 IP:192.5	.168.2.1 V1.01 Running Time Oday:06:29:57	RKING PEOPLE TOGETHER
Quick Setup	General Setup Status Tools Languages Home	
- L N	and password will disable the protection. User Name: New Password: Confirm password: Next Cancel	
ど Done	😵 Int	ernet

The descriptions of every setup item are listed below:

Item Name	Description	
User Name	Input the user name used to enter web	
	configuration interface.	
New Password	Input the password used to enter web	
	configuration interface with user name.	
Confirm password	Input the password again, to make sure the	
	password you entered is correct.	
Next	Save settings you made in this page. If you	
	changed user name and / or password, you'll be	
	prompted to input them again.	
Cancel	Discard all settings you made in this page.	

If you want to disable password protection, just leave all fields blank, and click 'Next'. You'll be prompted to confirm this:



Click 'OK' to disable protection, or click 'Cancel' and this router will still ask for user name and password before one can enter web configuration interface.

### 2-5-2 WAN

In WAN menu, you can configure WAN (Wide Area Network, or 'Internet') settings. The settings here are similar to those in Quick Setup menu, but you can do more detailed configuration here.

To setup WAN settings, please select the type of WAN connection from 'WAN Access Type' dropdown menu first, and then refer to corresponding chapter below.

EDIMAX Technology - Microsoft Internet Explo	prer	
Eile <u>E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp		2
🌀 Back 🝷 🐑 💌 😰 🏠 🔎 Search	📌 Favorites 🔗 🔗 😓 😹	
Address 🗃 http://192.168.2.1/home.asp		🖌 🄁 Go 🛛 Links 🂙
6:45:26 IP:192.168.2.1 V1.01 Running Time	0day:06:45:27	NETWORKING PEOPLE TOGETHER
Quick Setup General Setup Status	Tools Languages Home	
Home / General Setup / WAN		<u>_</u>
to the WAN port of your	rigure the parameters for Internet network which connects router. Here you may change the access method to static PTP by clicking the corresponding item . Static IP 172.1.1.1 255.255.255.0	
Default Gateway: DNS 1:	172.1.1.254	
DNS 2: DNS 3: Clone MAC Address:	0000000000	
Enable uPNP		<b>v</b>
🖉 Done		🔮 Internet 💦

2-5-2-1 WAN Access Type: Static IP

NOTE: Please use the IP address assigned by your Internet Service Provider.

IP Address:	172.1.1.1
Subnet Mask:	255.255.255.0
Default Gateway:	172.1.1.254
DNS 1:	
DNS 2:	
DNS 3:	
Clone MAC Address:	00000000000
Enable uPNP	
Enable Web Server	r Access on WAN

Item Name	Description	
IP Address	Input the IP address assigned by Internet Service	
	Provider.	
Subnet Mask	Input the subnet mask assigned by your Internet	
	Service Provider.	
Default Gateway	Input the IP address of the default gateway	
	assigned by your Internet Service Provider.	
DNS 1 - 3	Input the DNS (Domain Name System) server's IP	
	address assigned by your Internet Service	
	Provider. You can input up to 3 IP addresses of	
	DNS server, and do not input hostname here. At	
	lease one DNS server is required.	
Clone MAC Address	If your Internet Service Provider only permits	
	connection from specific MAC address, type the	
	MAC address here.	
Enable uPNP	Check this box if you wish to enable uPNP	
	(Universal Plug-and-Play) function on WAN port.	
Enable Web Server	If you wish to connect to the web configuration	
Access on WAN	interface from Internet, please check this box.	
	Please note that if you didn't set a strong	
	password to protect this router, the settings of	
	this router may be modified by unauthorized	
	person who comes from Internet. Only check	
	this box when it's required.	
Next	Save changes you made in this page.	
Cancel	Discard changes you made in this page.	

## 2-5-2-2 WAN Access Type: DHCP Client

WAN Access Type:	DHCP Client
Hostname:	
Obtain DNS Auton	natically
⊙ Set DNS Manually	ı
DNS 1:	
DNS 2:	
DNS 3:	
Clone MAC Address:	00000000000
<ul> <li>Enable uPNP</li> <li>Enable Web Serve</li> </ul>	er Access on WAN

Item Name	Description	
Hostname	Input the hostname of router. This is optional	
	(should not be required in most cases, unless	
	required by your Internet Service Provider).	
Obtain DNS	Most of service provider will provide DNS IP	
Automatically	address via DHCP. Select this option and this	
	router will obtain DNS server's IP address from	
	your service provider automatically.	
Set DNS Manually /	Select this and input the DNS (Domain Name	
DNS 1 - 3	System) server's IP address assigned by your	
	Internet Service Provider. You can input up to 3 IP	
	addresses of DNS server, and do not input	
	hostname here. At least one DNS server is	
	required.	
Clone MAC Address	If your Internet Service Provider only permits	
	connection from specific MAC address, type the	
	MAC address here.	
Enable uPNP	Check this box if you wish to enable uPNP	
	(Universal Plug-and-Play) function on WAN port.	
Enable Web Server	If you wish to connect to the web configuration	
Access on WAN	interface from Internet, please check this box.	

	Please note that if you didn't set a strong password to protect this router, the settings o this router may be modified by unauthorized person who comes from Internet. Only check this box when it's required.	
Next	Save changes you made in this page.	
Cancel	Discard changes you made in this page.	

## 2-5-2-3 WAN Access Type: PPPoE

WAN Access Type:	PPPoE	✓
User Name:		
Password:		
Service Name:		
Connection Type:	Continuous	Connect Disconnect
ldle Time:	5	(1-1000 minutes)
MTU Size:	1412	(1400-1492 bytes)
<ul> <li>Obtain DNS Auton</li> <li>Set DNS Manually</li> <li>DNS 1:</li> </ul>		
DNS 2:		
DNS 3:		
Clone MAC Address:	0000000000	0
<ul> <li>Enable uPNP</li> <li>Enable Web Serve</li> </ul>	r Access on W	'AN

Item Name	Description
User Name	Input PPPoE user name assigned by your Internet
	Service Provider.
Password	Please input the password assigned by your
	Internet Service Provider.
Service Name	Please give a name to this Internet service, this is
	optional.

Connection Type	Please select the connection type of Internet
	connection you wish to use. There are 3 options:
	'Continuous' - koon internet connection alive, de
	'Continuous' - keep internet connection alive, do not disconnect.
	not disconnect.
	'Connect on Demand' - only connects to Internet
	when there's a connect attempt,
	Manual - only connects to Internet when 'Connect'
	button on this page is pressed, and disconnects
	when 'Disconnect button is pressed.
Idle Time	Please specify the time to shutdown Internet
	connect after no internet activity is detected in
	minute(s) from 1 to 1000. This option is only
	available when connection type is 'Connect on
	Demand'.
MTU Size	Please input the MTU value of your network
	connection here (from 1400 to 1492). If you don't
	know which value you should use, you can use
	default value.
Obtain DNS	Most of service provider will provide DNS IP
Automatically	address via DHCP. Select this option and this
	router will obtain DNS server's IP address from
	your service provider automatically.
Set DNS Manually /	Select this and input the DNS (Domain Name
DNS 1 - 3	System) server's IP address assigned by your
	Internet Service Provider. You can input up to 3 IP
	addresses of DNS server, and do not input
	hostname here. At least one DNS server is
	required.
Clone MAC Address	If your Internet Service Provider only permits
	connection from specific MAC address, type the
	MAC address here.
Enable uPNP	Check this box if you wish to enable uPNP
Enable Web Server	(Universal Plug-and-Play) function on WAN port. If you wish to connect to the web configuration
Access on WAN	interface from Internet, please check this box.
	intendee nom internet, please eneek tills box.
	Please note that if you didn't set a strong
	r lease note that if you thun t set a shoriy

	password to protect this router, the settings of this router may be modified by unauthorized person who comes from Internet. Only check this box when it's required.
Next	Save changes you made in this page.
Cancel	Discard changes you made in this page.

#### How to choose a proper MTU size?

Default MTU value (1412) works in most cases, however, it may not be the best choice in your network environment. If your Internet connection is stable, you can try a larger MTU value, and this will increase the performance of network. However, if your Internet connection is unstable, you can try a smaller MTU value, there will be some impact on network performance, but this will improve network stability.

### 2-5-2-4 WAN Access Type: PPTP

WAN Access Type:	PPTP	<b>~</b>		
IP Address:	0.0.0.0			
Subnet Mask:	0.0.0.0			
Server IP Address:	0.0.0.0			
User Name:				
Password:				
MTU Size:	1412	(1400	)-1492 bytes)	

🔘 Obtain DNS Autom	atically			
⊙ Set DNS Manually				
DNS 1:				
DNS 2:				
DNS 3:				
Clone MAC Address:	00000000000			
Enable uPNP				
Enable Web Server Access on WAN				

Item Name	Description
IP Address	Input the IP address assigned by your Internet
	Service Provider.
Subnet Mask	Input the subnet mask assigned by your Internet
	Service Provider.
Server IP Address	Input the IP address of PPTP connection server.
User Name	Input the user name of PPTP connection server.
Password	Input the password of PPTP connection server.
MTU Size	Please input the MTU value of your network
	connection here (from 1400 to 1492). If you don't
	know which value you should use, you can use
	default value.
Obtain DNS	Most of service provider will provide DNS IP
Automatically	address via DHCP. Select this option and this
	router will obtain DNS server's IP address from
	your service provider automatically.
Set DNS Manually /	Select this and input the DNS (Domain Name
DNS 1 - 3	System) server's IP address assigned by your
	Internet Service Provider. You can input up to 3 IP
	addresses of DNS server, and do not input
	hostname here. At least one DNS server is
	required.
Clone MAC Address	If your Internet Service Provider only permits
	connection from specific MAC address, type the
	MAC address here.
Enable uPNP	Check this box if you wish to enable uPNP
	(Universal Plug-and-Play) function on WAN port.
Enable Web Server	If you wish to connect to the web configuration
Access on WAN	interface from Internet, please check this box.
	Please note that if you didn't set a strong
	password to protect this router, the settings of
	this router may be modified by unauthorized
	person who comes from Internet. Only check
	this box when it's required.
Next	Save changes you made in this page.
Cancel	Discard changes you made in this page.

### 2-5-2-5 WAN Access Type: L2TP

)			
(1400-149	2 bytes)		
minutes /	of no activity	ŗ	
1	(1.100 1.101		2 (1400-1492 bytes)

Enable Web Server Access on WAN

Item Name	Description
Attain IP Automatically	Select this option if your Internet Service Provider
	will assign an IP address to you automatically by
	DHCP.
Set IP Manually	Select this option if your Internet Service Provider
	assigns an IP address to you and requires you to
	use this IP address.
IP Address	Input the IP address assigned by your Internet
	Service Provider.
Subnet Mask	Input the Subnet Mask assigned by your Internet
	Service Provider.

Server Address	Input the IP address of L2TP connection server.
User Name	Input the user name of L2TP connection server.
Password	Input the password of L2TP connection server.
MTU Size	Please input the MTU value of your network
	connection here (from 1400 to 1492). If you don't
	know which value you should use, you can use
	default value.
Disconnect after	Check this box and this router will disconnect
	current L2TP connection after there's no network
	activity for the time specified here. Uncheck this
	box to keep L2TP connection alive forever.
Obtain DNS	Most of service provider will provide DNS IP
Automatically	address via DHCP. Select this option and this
	router will obtain DNS server's IP address from
	your service provider automatically.
Set DNS Manually /	Select this and input the DNS (Domain Name
DNS 1 - 3	System) server's IP address assigned by your
	Internet Service Provider. You can input up to 3 IP
	addresses of DNS server, and do not input
	hostname here. At least one DNS server is
	required.
Clone MAC Address	If your Internet Service Provider only permits
	connection from specific MAC address, type the
	MAC address here.
Enable uPNP	Check this box if you wish to enable uPNP
	(Universal Plug-and-Play) function on WAN port.
Enable Web Server	If you wish to connect to the web configuration
Access on WAN	interface from Internet, please check this box.
	Please note that if you didn't set a strong
	password to protect this router, the settings of
	this router may be modified by unauthorized
	person who comes from Internet. Only check
	this box when it's required.
Next	Save changes you made in this page.
Cancel	Discard changes you made in this page.
L	

### 2-6 LAN

You can change LAN (Local Area Network) settings here.

IP Address:	192.168.2.1
Subnet Mask:	255.255.255.0
Default Gateway:	0.0.0.0
DHCP:	Server 💌
DHCP Client Range:	192.168.2.2 - 192.168.2.254 Show Client
802.1d Spanning Tree:	Disabled 💙
Clone MAC Address:	0000000000

Item Name	Description
IP Address	Input the IP address of the LAN port of this router
	here.
Subnet Mask	Input the subnet mask of the LAN port of this
	router here.
Default Gateway	In most cases, this router will be the default
	gateway of other network clients, and you don't
	have to input the gateway IP address here (use
	default value 0.0.0.0). However, if you want your
	network clients to use other IP address as default
	gateway address, you can input its IP address
	here, and network clients will use the IP address
	listed here as default gateway.
DHCP	There are 3 options:
	Disabled: Disable DHCP server / client function.
	Client: This router will become a DHCP client and
	obtain IP address information from DHCP server.
	Server: This router will become DHCP server and
	give IP address information (DHCP leases) to
	DHCP clients.
DHCP Client Range	Input the start and end IP address of DHCP

	leases. For example, you want to give 100 DHCP
	leases out, you can input '192.168.2.101' in left
	field and '192.168.2.200' in right field.
Show Client	Show all active DHCP leases and their associated
	MAC address. You can also know every lease's
	expired lease time.
	Please note: By clicking 'Show Client' button,
	a new browser window will appear. If your
	browser prevents pop-up window from
	appearing, please disable this function or you
	will not be able to use 'Show Client' function.
802.11d Spanning Tree	If there's 802.11d spanning tree compatible switch
	attende alter anvel ANI mant of this mouther an eleven
	attached to any LAN port of this router, and you
	wish to use 802.11d spanning tree function, select
	wish to use 802.11d spanning tree function, select
Close MAC Address	wish to use 802.11d spanning tree function, select 'Enable' here, or select 'Disable' to disable this
Close MAC Address	wish to use 802.11d spanning tree function, select 'Enable' here, or select 'Disable' to disable this function.
Close MAC Address	<ul><li>wish to use 802.11d spanning tree function, select</li><li>'Enable' here, or select 'Disable' to disable this function.</li><li>If you wish to use customized MAC address for</li></ul>
Close MAC Address	<ul> <li>wish to use 802.11d spanning tree function, select</li> <li>'Enable' here, or select 'Disable' to disable this function.</li> <li>If you wish to use customized MAC address for the LAN port of this router, you can input the MAC</li> </ul>
	<ul> <li>wish to use 802.11d spanning tree function, select</li> <li>'Enable' here, or select 'Disable' to disable this function.</li> <li>If you wish to use customized MAC address for the LAN port of this router, you can input the MAC address here.</li> </ul>

#### 2-7 Wireless

In wireless menu, you can setup wireless functions like SSID and wireless security. When you want to use this router as wireless client and connect to other access point, you can also scan for access points by wireless setup menu.

•	Basic	This page is used to configure the parameters for wireless LAN clients which may connect to your Access Point. Here you may change wireless encryption settings as well as wireless network parameters.
•	Advanced	These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Access Point.
•	Security	This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.
•	Access Control	If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect the Access Point.
•	Site Survey	This page provides tool to scan the wireless network. If any Access Point or IBSS is found, you could choose to connect it manually when client mode is enabled.
•	WDS Setting	This page allows you setup the wireless security for WDS. When enabled, you must make sure each WDS device has adopted the same encryption algorithm and Key.

Please select the setup item you wish to set, then click 'Apply' to continue.

### 2-7-1 'Basic' Settings

In this menu, you can setup basic wireless parameters.

Band:	2.4 GHz (B) 💌	
Mode:	Client 💌	
Network Type:	Infrastructure 💌	
SSID:	def	
Channel Number:	11 🔽	
Associated Clients:	Show Active Clients	
Enable Mac Clone (Single Ethernet Client)		
Enable Universal Repeater Mode (Acting as AP and client simultaneouly)		
SSID of Extended Interface	s 5555	

Item Name	Description
Band	Select the wireless band:
	2.4GHz (B): only wireless clients with 802.11b capability can connect to this router. Maximum connection speed is 11Mbps.
	2.4GHz (G): only wireless clients with 802.11g capability can connect to this router. Maximum connection speed is 54Mbps.
	2.4GHz (B+G): Both 802.11b and 802.11g
	wireless clients can connect to this router.
Mode	Select the working mode of wireless interface:
	AP: This router will act as access point (serves other wireless client's connection needs).
	Client: This router will act as wireless client
	(connect to other access point as client).

Dist this acc WD	PS: This router will act as WDS (Wireless tribution System) station. With this capability, router can connect to other WDS-enabled ess point and the LAN clients on every PS-enabled access points can communicate h each other.
	+WDS. This router will act as access point with
WD rout wire rout WD	S capability. When in WDS-only mode, this ter will not be able to accept the connection of eless clients; when in AP+WDS mode, this ter will be able to connect with other S-enabled access points, and accept the inection of wireless clients.
Ad	ect the wireless network type (Infrastructure or Hoc). This option is only required when this ter is working in 'Client' mode.
acc wish You as s rout	ut the SSID (Service Set IDentifier) of this ess point (or the SSID of the access point you h to connect when in 'Client' mode). I can input up to 32 alphanumerical characters SSID. SSID is used to identify this wireless ter so wireless clients can identity this router n others.
wire eac It's nun or th poo acc (Se	ect the channel number of wireless radio. All eless devices who wish to communicate with th other must use the same channel number. highly recommended to select a channel nber which is not taken by other access points, he wireless network performance will become or. To know which channels are taken by other ress points, you can use 'Site Survey' function be chapter 2-7-5) to discover which channel nbers were taken already.
mod	en this router is working in 'AP' or 'AP+WDS' de, you can click 'Show Active Clients' button to w all connected wireless clients.

	Please note: By clicking 'Show Active Clients' button, a new browser window will appear. If your browser prevents pop-up window from appearing, please disable this function or you will not be able to use 'Show Client' function.
Enable Mac Clone	(When in Client mode) If the access point you wish
	to connect only permits the connection from
	certain MAC address, check this box and the
	wireless interface will use the same MAC address
	which wired LAN client uses.
Enable Universal	If you want this router to act as wireless client
Repeater Mode	(connect to other access point) and access point
	(serve wireless client's communication needs),
	check this box, and this router will act as access
	point and wireless client at the same time.
SSID of Extended	When you enable "Enable Universal Repeater
Interface	Mode", please input the Access Point's SSID
	which BR-6204WLg would like connect.
Next	Save changes you made in this page.
Cancel	Discard changes you made in this page.

### 2-7-2 'Advanced' Setting

In this menu, you can configure advanced settings of wireless interface.

Please note that the settings in this page are designed for experienced users, and this wireless router is able to work without any problem when all settings in this menu are unchanged. Only modify the settings in this page when you understand the setup item's purpose.

Authentication Type:	🔿 Open Sy	stem 🔿 Shared Key 💿 Auto
Fragment Threshold:	2346	(256-2346)
RTS Threshold:	2347	(0-2347)
Beacon Interval:	100	(20-1024 ms)
Data Rate:	Auto 💌	
Preamble Type:	💿 Long Pre	amble O Short Preamble
Broadcast SSID:	📀 Enabled	◯ Disabled
IAPP:	💿 Enabled	O Disabled
802.11g Protection:	💿 Enabled	O Disabled
WMM:	O Enabled	⊙ Disabled
RF Output Power:	⊙ 100% (	○50% ○25% ○10% ○5%
Turbo Mode:	💿 Auto 📿	Always 🔘 Off
	Note: "Alway Realtek prod	/s" may have compatibility issue. "Auto" will only work with luct.

Item Name	Description
Authentication Type	Select the wireless authentication type: Open
	system, Shared Key, or Auto. The wireless client
	must use the same authentication type or they
	won't be able to connect to this router. If you don't
	know which one you should use, select 'Auto'.
Fragment Threshold	Fragment threshold is used to control the size of
	the maximum size of every network packet. When
	radio reception is good and there's no or very few
	radio interference, it's suggested to use a larger
	value to improve the network performance; if
	there's a lot of radio interference or the radio
	reception is bad, you can use a smaller value to
	reduce the time wasted on packet re-transmission.
	You can use default value (2346). If you found
	there're some communication problems, you
	can try a smaller value and see if this will
	improve network performance and stability.

DTS Thrashald	DTS throughold in used to deside the time interval
RTS Threshold	RTS threshold is used to decide the time interval between every RTS (Request to Send) packets. Using a smaller value will cause the wireless router to send RTS packets more often, and all wireless stations will be able to recover from collision (two stations send the packet at the same time, which will destroy transmitted data packet)
	more quickly.
	However, sending RTS packets too often will
	reduce the performance of wireless network, and
	you should only use a smaller value when there're
	a lot of wireless stations connected to this wireless
	router. It's safe to use default value (2347) when
	there are less then 10 wireless clients.
	When you wish to decrease the RTS threshold
	value to improve network performance and
	stability, please decrease 'Fragment
	Threshold' value also.
Beacon Interval	Beacon Interval is used to control the time interval
	between every beacon packet. If you use a
	smaller value, this wireless router will send the
	beacon packet more often, and wireless clients
	can found this wireless router quickly; If you use a
	larger value, wireless clients will have to scan for more times before it can find this wireless router.
	By using a larger value, there will be lesser
	beacon packets sent by this wireless router, and
	the network performance will be better.
Data Rate	Please select the wireless data rate from
	dropdown list. You can select a fixed data rate and
	all wireless clients must use this data rate to
	communicate with wireless router.
	It's recommended to select 'Auto' and let
	wireless client / router to decide the
	communication speed by actual radio
1	reception.

Preamble Type	Select the preamble type (long or short) for the network packet. When you're using this router in a heavily-loaded network environment, select 'Short preamble' will help to improve network performance. However, not every network client works with short preamble (especially certain 802.11b only wireless clients). If you found that some wireless clients can't connect to this router when you select 'Short Preamble', please select 'Long Preamble'.
Broadcast SSID	By selecting 'Enabled' here, this router will broadcast its SSID to all wireless clients so they can connect to this router. However, there will be some security risk to let everyone know this router's SSID. By selecting 'Disabled' here, this router will not broadcast its SSID, so only client who know this router's SSID is able to connect to this router, and therefore security level is improved.
IAPP	IAPP stands for <i>Inter-Access Point Protocol</i> , If your wireless clients will roam between access points, you can select 'Enabled' here.
802.11g Protection	When this wireless router is working in 802.11B + 802.11G mode, it's high recommended to enable 802.11g protection to prevent data collision, and this will improve network stability and performance.
WMM	Select 'Enabled' to enable support for WMM (Wireless MultiMedia). This will improve the performance of video / audio data transmission.

RF Output Power	Select the radio output power. If all wireless clients
	are not far away from wireless router, you can
	select a lower output power to save energy and
	prevent other people to scan your wireless router
	from distant.
Turbo Mode	Turbo Mode will increase the performance of
	wireless data transmission . You can set this
	option to 'Always' and this router will switch turbo
	mode on infinitely, but some wireless clients which
	are not compatible with Turbo Mode may not be
	able to connect to this router. It's recommended to
	select 'Auto' to let this wireless router to switch
	turbo mode on when wireless client supports it.
	Currently, this function only works with Realtek
	wireless network cards.
Next	Save changes you made in this page.
Cancel	Discard changes you made in this page.

### 2-7-3 'Security' Setting

You can set wireless security (data encryption) settings in this menu. When data is encrypted, other people will not be able to read the contents of the data you transmitted by wireless interface, so you can keep privacy. Also, when encryption is enabled, only wireless client with correct encryption key will be able to connect to this router, so unauthorized clients who do know correct encryption key will not be able to connect to this router.

Encryption: WEP 💌	Set WEP Key	
Use 802.1x Authentication	WEP 64bits      WEP 128bits	
WPA Authentication Mode:	◯ Enterprise (RADIUS) 💿 PSK (Pre-Shared Key)	
WPA Cipher Suite:	● TKIP ○ AES	
WPA2 Cipher Suite:	OTKIP OAES	
Pre-Shared Key Format:	Passphrase	
Pre-Shared Key:		
Enable Pre-Authentication		
Authentication RADIUS Server:	Port 1812 IP Address Password	
Note: When encryption WEP is selected, you must set WEP key value.		

Item Name	Description
Encryption	Please select the encryption type from dropdown
	list. For the requirements of the key of every kinds
	of encryption, please refer to the descriptions at
	the last of this chapter.
Set WEP Key	Set WEP key:
	Key Length: There are two types of WEP key
	length: 64-bit and 128-bit. Using '128-bit' is safer
	than '64-bit', but will reduce some data transfer
	performance.
	Key Format: There are two types of key format:
	ASCII and Hex. When you select a key format, the
	number of characters of key will be displayed. For
	example, if you select '64-bit' as key length, and

	гт
	'Hex' as key format, you'll see the message at the
	right of 'Key Format' is 'Hex (10 characters), which
	means the length of WEP key is 10 characters.
	Default Tx Key: You can set up to four sets of WEP key, and you can decide which key is being used by default here. If you don't know which one you should use, select 'Key 1'.
	you should use, select ney 1.
	Encryption Key 1 to 4: Input WEP key characters here, the number of characters must be the same as the number displayed at 'Key Format' field. You can use any alphanumerical characters (0-9, a-z, and A-Z) if you select 'ASCII' key format, and if you select 'Hex' as key format, you can use characters 0-9, a-f, and A-F. You must enter at least one encryption key here, and if you entered multiple WEP keys, they should not be same with each other.
	When you finish, click 'Apply' button to save
	changes; click 'Close' to close WEP key setup
	window, or click 'Reset' to clear the content of
	every field in this page.
Use 802.1x	Check this box to use 802.1x authentication
Authentication	instead of local WEP key. You also have to select
	the length of WEP key (64bits or 128bits), and
	setup the IP address and login information of
	RADIUS authentication server below.
	This option works with WEP encryption only.
WPA Authentication	Select the type of WPA authentication (Enterprise /
Mode	Using RADIUS sever) or PSK (Pre-shared key). If
	you don't have RADIUS authentication server,
	please select PSK.
	This option works with WPA encryption only.

WPA Cipher Suite	Select the cipher suite of WPA encryption (TKIP or AES)
	This option works with WPA encryption only.
WPA2 Cipher Suite	Select the cipher suite of WPA2encryption (TKIP
	or AES)
	This option works with WPA2 encryption only.
Pre-shared Key Format	Select the format of WPA/WPA2 pre-shared key
	(Passphrase or Hex). If you select 'Passphrase',
	you have to input 8 to 63 alphanumerical
	characters; If you select 'Hex', you have to input
	64 characters of 0-9 and a-f.
Pre-shared Key	Input WPA/WPA2 pre-shared key here.
Enable	Enable Pre-Authentication function.
Pre-Authentication	
Authentication RADIUS	Input the port number, IP address, and password
Server	of RADIUS authentication server here.
Next	Save changes you made in this page.
Cancel	Discard changes you made in this page.

### 2-7-4 'Access Control' Setting

You can use this menu to restrict the client to connect to this wireless router by checking its MAC address.

There are two kinds of access control: Allow listed MAC address only, and deny listed MAC address only.

Wireless Access Control Mode:	Allow Listed 🔽	
MAC Address:	Comment:	
Next Cancel		

Item Name	Description
-----------	-------------

Wireless Access Control	Select the access control mode from dropdown
Mode	list. Available options are:
	Disable: Disable access control.
	Allow Listed: Only MAC addresses listed here will
	be able to connect to this router.
	Deny Listed: Only MAC addresses listed here will
	not be able to connect to this router.
MAC Address	Input the MAC address to add to the list.
Comment	Input descriptive text for this MAC address, so you
	can remember who owns this MAC address. This
	is optional and you can leave it blank. You can
	input up to 20 alphanumerical characters in this
	field.
Next	Add the MAC address and associated comment to
	the list.
Cancel	Discard all settings you made in this page.
Cancel	Discard all settings you made in this page.

All MAC addresses in the list will be listed in 'Current Access Control List' table:

	Comment	Select	
00:11:22:33:44:55	Allen's Computer		

If you want to delete one or more address(es) listed here, check 'Select' box of the address(es) you wish to delete, then click 'Delete Selected' button; Click 'Delete All' to delete all addresses. If you want to unselect all selected boxes, click 'Reset' button.

2-7-5 Site Survey

When this router enables wireless client mode, you can use this function to scan for all reachable access points, and connect to selected access point.

When you enter 'Site Survey' menu, please see if the access point you wish to

connect is listed. If not, please click 'Refresh' button. You may have to click 'Refresh button for several times before the access point you wish to connect appears.

SSID	BSSID	Channel	Туре	Encrypt	Signal	Select
CE_AP1	00:13:f7:8e:71:87	3 (B+G)	AP	WPA- PSK/WPA2- PSK	1	۲
Refresh Connec	t					

When the access point you wish to connect appears, click 'Select' of that access point, then click 'Connect' button. This router will use current encryption setting to connect to selected access point.

### 2-7-6 WDS Setting

This wireless router supports WDS (Wireless Distribution System). You can connect this router with other WDS-enabled wireless access point, and all clients (wireless & wired) of every WDS-enabled wireless access point can communicate with each other. Therefore, you can use WDS to extend the range and scope of your network.

To use WDS, you must select 'WDS' or 'AP+WDS' as working mode (as described in chapter 2-7-1). WDS function will not work in other working modes.

Enable WDS		
Add WDS AP: MAC Address	Commen	
Apply Changes Reset	Set Security	Show Statistics

Item Name	Description			
Enable WDS	Check this box to enable WDS function. This			
	option is only available when the working mode of			
	this router is 'WDS' or 'AP+WDS'.			

MAC Address	Input the MAC address of other WDS-enabled
	access point.
Comment	Input any descriptive text about this MAC address,
	so you can remember the purpose of this MAC
	address. You can input up to 20 alphanumerical
	characters in this field.
Apply Changes	Click this button to add above MAC address and
	comment to WDS access point list.
Reset	Clear the contents of 'MAC Address' and
	Comment' field.
Set Security	Click this button to set WDS security (encryption).
	All WDS access points must use the same
	security setting so they can communicate with
	each other.
	Please refer to chapter 2-7-3 for detailed
	instructions about how to input proper encryption
	parameters.
Show Statistics	Click this button and a new window with all
	statistics (Tx / Rx packet counts, error counts etc.)
	will appear. Click 'Close' to close the window.
	Please note: If your browser prevents pop-up
	window from appearing, please disable this
	function or you will not be able to use 'Show
	Statistics' function.

All WDS AP addresses in the list will be listed in 'Current WDS List' table:

MAC	Address	Comment	Select
00:11:1	1:11:11:11	Room AP	
Delete Selected	Delete All	Reset	

If you want to delete one or more AP(s) listed here, check 'Select' box of the AP(s) you wish to delete, then click 'Delete Selected' button; Click 'Delete All' to delete all AP. If you want to unselect all selected boxes, click 'Reset' button.

### 2-8 Advanced Settings

This router provides several advanced network functionalities like port forwarding and IP filtering. You can use these functions to control your network in detail.

•	Port Filtering	Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.
•	IP Filtering	Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.
•	MAC Filtering	Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.
•	Port Forwarding	behind the NAT firewall. These settings are only necessary if you wish to host some sort of server like a web server or mail server on the private local network behind your Gateway's NAT firewall.
•	DMZ	The DMZ (exposed host) function allows unrestricted internet access of the computer with the specified IP address.
•	DDNS	Dynamic DNS is a service, that provides you with a valid, unchanging, internet domain name (an URL) to go with that (possibly everchanging) IP-address.

Please select the setup item you wish to set, then click 'Apply' to continue.

### 2-8-1 Port Filtering

By using this function, you can restrict certain types of outbound (from LAN to Internet) traffic by blocking specific ports. For example, if you don't want your LAN devices and computers to access FTP servers on Internet, you can add port number '20' and '21' to the port filtering list.

For port numbers of common services, please refer to chapter 4-3 'Well-Known Services'.

			Comment:	
Next Can	cel			

Item Name	Description
Enable Port Filtering	Check this box to enable port filtering.
Port Range	Input the port range to be included in this port
	filtering rule. Please input the starting port number
	in the left field, and input the ending port number in
	the right field. For example, if you want to block
	port 20 to 40, input '20' in the left field and input
	'40' in the right field. If you only want to block a
	single port number for this rule, input the port
	number in the left field.
	Valid port number is from 1 to 65535.
Protocol	Please select the protocol type you want to block
	for this rule. You can select 'TCP', 'UDP' or both.
Comment	Input any descriptive text about this rule, so you
	can remember the purpose of this rule. You can
	input up to 20 alphanumerical characters in this
	field.
Next	Add the MAC address and associated comment to
	the list.
Cancel	Discard all settings you made in this page.

All existing port filtering rules will be listed in 'Current Filter Table':

Current Filter Table:						
Port Range		Pr	otocol		Comment	Select
20-21		TCP+UDP			FTP	
Delete Selected		elete All	Reset			

If you want to delete one or more rule(s) listed here, check 'Select' box of the rule(s) you wish to delete, then click 'Delete Selected' button; Click 'Delete All' to delete all rules. If you want to unselect all selected boxes, click 'Reset' button.

2-8-2 IP Filtering

Not only ports, you can also block certain local IP address(es) from accessing Internet. These IP address(es) will not be able to access Internet, however, they can still communicate with other LAN devices / computers.

🗹 Enable IP Fi	ltering					
Local IP Address:	172.1.1.2	Protocol:	Both	×	Comment: Jenie's computer	
	1					

Item Name Description Enable IP Filtering Check this box to enable IP filtering. Local IP Address Input the IP address you wish to add to IP filtering list. The IP address you inputted here must belong to the same subnet of current LAN IP address. If not, you'll receive an error message when you attempt to add this IP address to the list. Protocol Select the protocol type you wish to block from dropdown list: 'TCP', 'UDP', or 'Both'. Comment Input any descriptive text about this rule, so you can remember the purpose of this rule. You can input up to 20 alphanumerical characters in this
	field.
Next	Add the IP address and associated comment to
	the list.
Cancel	Discard all settings you made in this page.

All existing IP filtering rules will be listed in 'Current Filter Table':

Port Range	F	rot	ocol		Comment	Selec
20-21	Т	CP+	UDP		FTP	
Delete Selected			Reset			

If you want to delete one or more rule(s) listed here, check 'Select' box of the rule(s) you wish to delete, then click 'Delete Selected' button; Click 'Delete All' to delete all rules. If you want to unselect all selected boxes, click 'Reset' button.

## 2-8-3 MAC Filtering

Similar to IP filtering, you can block devices / computers with certain MAC address from accessing Internet.

🗹 Enable MAC	iltering	
MAC Address:	Comment:	

Item Name	Description
Enable MAC Filtering	Check this box to enable MAC filtering.
MAC Address	Input the MAC address you wish to add to MAC
	filtering list.
Comment	Input any descriptive text about this rule, so you
	can remember the purpose of this rule. You can
	input up to 20 alphanumerical characters in this

	field.
Next	Add the IP address and associated comment to the list.
Cancel	Discard all settings you made in this page.

All existing MAC filtering rules will be listed in 'Current Filter Table':

Current Filter Table:			
MAC	Address	Comment	Select
11:22:3	33:44:55:11	Intruder's Computer	
Delete Selected	Delete All Reset	]	

If you want to delete one or more rule(s) listed here, check 'Select' box of the rule(s) you wish to delete, then click 'Delete Selected' button; Click 'Delete All' to delete all rules. If you want to unselect all selected boxes, click 'Reset' button.

## 2-8-4 Port Forwarding

This router uses 'NAT' (Network Address Translation) to let all devices and computers on LAN to access Internet. Normally, this is a one-way translation - Computers on LAN can access Internet, but computer comes from Internet will not be able to access computers on LAN.

Sometimes you'll need to let computers from Internet to access certain ports on LAN, so you can provide services to general public. In this case, you can use 'Port Forwarding' function and computer from Internet can access certain services on LAN.

For port numbers of common services, please refer to chapter 4-3 'Well-Known Services'.

	ding				
IP Address:	Protocol:		Port Range:	- Comment:	
Next Cancel					

The descriptions of every setup item are listed below:

Item Name	Description
Enable Port Forwarding	Check this box to enable Port forwarding.
IP Address	Input the IP address on LAN you wish to provide
	services to computers from Internet.
Protocol	Select the protocol type you wish to block from
	dropdown list: 'TCP', 'UDP', or 'Both'.
Port Range	Input the port range to be included in this port
Full Kange	
	forwarding rule, the port number you inputted here
	will be mapped to the WAN IP address used by
	this router. Please input the starting port number in
	the left field, and input the ending port number in
	the right field. For example, if you want to block
	port 20 to 40, input '20' in the left field and input
	'40' in the right field. If you only want to block a
	single port number for this rule, input the port
	number in the left field.
	Valid port number is from 1 to 65535.
Comment	Input any descriptive text about this rule, so you
	can remember the purpose of this rule. You can
	input up to 20 alphanumerical characters in this
	field.
Next	Add the IP address and associated comment to
	the list.
Cancel	Discard all settings you made in this page.

All existing Port forwarding rules will be listed in 'Current Port Forwarding Table':

Local IP Address	Protocol	Port Range	Comment	Select
	TCP+UDP			

If you want to delete one or more rule(s) listed here, check 'Select' box of the rule(s) you wish to delete, then click 'Delete Selected' button; Click 'Delete All' to delete all rules. If you want to unselect all selected boxes, click 'Reset'

button.

## 2-8-5 DMZ

DMZ (Demilitarized Zone) is a special IP address on LAN. Computer from Internet can access all services on this IP address, just like this IP address is the same as the IP address used by the WAN interface of this router. You can use this function to setup a server on LAN, and it will be able to be accessed by any computer from Internet.

This router only capable to use one IP address for WAN port, therefore only one DMZ host is allowed.

Please note that computer using DMZ IP address is no longer protected by the built-in firewall of this router, it must be able to protect itself from attacks.

🗹 En	able DMZ		
DMZ Ho	ost IP Addr	ess:	
Next	Cancer	)	

The descriptions of every setup item are listed below:

Item Name	Description
Enable DMZ	Check this box to enable DMZ function.
DMZ Host IP Address	Input the IP address on LAN you wish to set as
	DMZ host.
Next	Save DMZ settings.
Cancel	Discard all settings you made in this page.

## 2-8-6 DDNS

DDNS (Dynamic DNS) is a kind of service which provides hostname-to-IP service to 'dynamic' IP address users. 'Dynamic IP' means Internet service subscriber will obtain different IP address when he or she connects to Internet. Due to this nature, it will be difficult for dynamic IP users to provide services to

general public, because the IP address is always changing.

DDNS service maps ever-changing IP address to a fixed hostname, so people who wants to access the service provides by dynamic IP users just need to remember the fixed hostname, and don't have to worry about the fact of IP address will be changed next time.

This router supports two kinds of DDNS service provider, please go to their service webpage and follow their instructions to register a new DDNS account to use their service:

TZO: <u>http://www.tzo.com</u> DynDNS: <u>http://www.dyndns.org</u>

You can also click the text in DDNS menu to access TZO and DynDNS website (pointed by arrow)

🗌 Enable DDNS				
Service Provider :	DynDNS 🗸			
Domain Name :				
User Name/Email:				
Password/Key:				
Note: For TZO, you can ha For DynDNS, you ca			e your TZO a	ccount in con

After you obtained a valid hostname, user name, and account from one of DDNS services, you can use 'DDNS' menu to use DDNS service.

Item Name	Description
Enable DDNS	Check this box to enable DDNS function.
Domain Name	Input the domain name (host name) obtained from
	DDNS service provider.
User Name / Email	Input the user name / Email you used to register
	DDNS service.
Password / Key	Input the password / key you used to register

	DDNS service.
Next	Save DDNS settings.
Cancel	Discard all settings you made in this page.

## Chapter III Advanced Operation Techniques

## 3-1 Status

This broadband router provides a 'status' menu, and you can check all system-wide status and statistics of this broadband router. Please follow the following instructions to use 'Status' menu:

1. Click 'Status' after logged in.



2. Select one status item you wish to check, and then click 'Apply' button.

•	Status Information	This page shows the current status and some basic settings of the device.
•	System Log	This page can be used to set remote log server and show the system log.
•	Statistics	This page shows the packet counters for transmission and reception regarding to wireless and Ethernet networks.
		Previous Apply

## 3-1-1 Status Information

You can check current system-wide status of this router here.

System	
Uptime	Oday:4h:10m:42s
Firmware Version	1.01
Wireless Configuration	
Mode	WDS
Band	2.4 GHz (B+G)
SSID	
Channel Number	11
Encryption	Disabled
BSSID	00:1f:1f:1f:6a:3a
TCP/IP Configuration	
Attain IP protocol	Fixed IP
IP Address	192.168.2.1
Subnet Mask	255.255.255.0
Default Gateway	192.168.2.1
DHCP Server	Enabled
MAC Address	00:1f:1f:1f:6a:3a
WAN Configuration	
Attain IP protocol	Fixed IP
IP Address	172.1.1.1
Subnet Mask	255.255.255.0
Default Gateway	172.1.1.254
MAC Address	00:1f:1f:1f:6a:3b

## 3-1-2 System Log

This router logs all important system events here, and you can even decide which kind of event this router will log. Optionally, you can save the log to a remote syslog server to keep and maintain the log.

	Enable Log Owireless only Osystem all
	Enable Remote Log Log Server IP Address:
	Apply Changes
^	ay 04:13:25 brO: port 1(ethO) entering listening state
	ay 04:13:25 br0: port 2(wlan0) entering learning state
	ay 04:13:25 br0: port 2(wlan0) entering forwarding state
	ay 04:13:25 brO: topology change detected, propagating
	ay 04:13:25 brO: port 1(ethO) entering learning state
	ay 04:13:25 brO: port 1(ethO) entering forwarding state
	ay 04:13:25 brO: topology change detected, propagating
6=	ay 04:13:33 eth1:phy is 8305
~	
	Refrech Clear
	ay 04:13:33 eth1:phy is 8305 Refresh Clear

Item Name	Description
Enable Log	Check this box to enable log function.
Wireless only	Select this to log wireless-related events only.
System all	Select this to log all system-wide events.
Enable Remote Log	Check this box to send the log to a remote syslog
	server.
Log Server IP Address	Input the IP address of the syslog server you wish
	to send log to.
Apply Changes	Save changes you made in this page.
Refresh	Reload logs.
Clear	Clear existing logs.

## 3-1-3 Statistics

In this menu you can see the statistics of all network interfaces.

Wireless LAN	Sent Packets	110
	Received Packets	0
	Sent Packets	1878
Ethernet LAN	Received Packets	13100
F41	Sent Packets	2769
Ethernet WAN	Received Packets	0
		Defeat
		Refresh

Item Name	Description
Refresh	Reload statistics.

## 3-2 Tools

This router provides two tools: save/reload current router settings, and upgrade firmware.

Please follow the following instructions to use 'Tools' menu:

1. Click 'Tools' after logged in.



2. Select one tools item you wish to use, and then click 'Apply' button.

## 3-2-1 Save/Reload Settings

You can save current system settings to a file, or load a previously-saved system setting from a file.

You can also reset all settings of this router and restore to factory default settings. If you want to give this router to other people, you can use this function to clear all settings, to prevent other people to know your security settings. When this router is not working properly, reset all settings may solve the problem if the source of problem is improper setting.

Save Settings to File:	Save		
Load Settings from File:		Browse Uploa	
Reset Settings to Default:	Reset		

Item Name	Description
Save Settings to File	Click 'Save' button to save current router settings to a file. You'll be prompted to save the file as 'config.dat', click 'Save' button to select destination folder to save the file when you're prompted. You have chance to change the filename when you're choosing the destination folder.
	File Download Image: Config.dat   Do you want to save this file? Name: config.dat   Type: Unknown File Type   From: 192.168.2.1   Save Cancel   While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not save this file. What's the risk?
Load Settings from File	Click 'Browse' button to select a previously-saved router setting file, then click 'Upload' to upload the setting file to the router.
Reset Settings to	Click 'Reset' button to clear all settings of this

Default	router. You'll be prompted to confirm reset, click 'OK' to clear all settings or 'Cancel' to keep current settings untouched.
	Microsoft Internet Explorer Image: Constant of the current settings to default?   OK Cancel

### 3-2-2 Firmware Upgrade

To upgrade firmware, please make sure you have firmware file ready in your computer's hard drive. When you're ready, enter 'Upgrade Firmware' menu to upload new firmware file to the router.

Select File:		0	Browse	
		Upload		_

Click 'Browse...' button to select a firmware file to upload. You'll be prompted to select the firmware file from computer's hard disk:

Choose file		? 🗙
Look in:	🔁 Temp 💽 🕜 🎓 🖽 -	
My Recent Documents	Constant Sector 2010 Constant Sector 2010	
My Documents		
My Computer		
<b></b>		
My Network Places	File name:	Open
1 10053	Files of type: All Files ( <sup>×</sup> . <sup>×</sup> )	Cancel

After you selected the file, click 'Open'. You'll return to previous menu, click 'Upload' now to start uploading firmware file:

EDIMAX Tecl	hnology - Microso	ft Internet Explorer	
File Edit Viev	v Favorites Tools	Help	
G Back 🔹 🤇	) 🛯 🗶 🗧	🏠 🔎 Search 🤺 Favorites 🤣 🔗 🍃 🦓	
Address 🙆 http:	://192.168.2.1/home.a	asp	🔽 🄁 Go 🛛 Links 🂙
			TDIMAY
		1 Running Time Oday:13:50:30	NETWORKING PEOPLE TOGETHER
Quick Setup	General Se	etup Status Tools Languages Home	
		you to upgrade the Router firmware to a new version. Please note, do not the upload because it may crash the system. C:\Temp\edimax-6204Wlg_Browse Upload Reset	power off
		Please wait	

The upload procedure will take few minutes, please be patient. After the file is fully uploaded, you'll see the following message, indicating the firmware file is successfully uploaded. Please wait for 1 minute and click 'OK' button; your router will be ready with new firmware.

EDIMAX Technology - Microsoft Internet Explorer				
<u>E</u> ile <u>E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp	Ar			
🕞 Back 🔻 🛞 🖌 📓 🏠 🔎 Search 🤺 Favorites 🤣 🍰 🍓 🔜 🖓				
Address 🕘 http://192.168.2.1/home.asp	Go Links 🌺			
13:52:45 IP:192.168.2.1 V1.01 Running Time Oday:13:52:46				
Quick Setup General Setup Status Tools Languages Home				
Update successfully (size = 1557958 bytes)! Please wait a while for rebooting OK				
Done	🧐 Internet			

# Chapter IV Appendix

4-1 Specifications

## 4-2 Troubleshooting

Do not panic when this router is not working properly! Please refer to the troubleshooting checklist in this chapter, and find the problem you're encountering and its solution. Maybe you can solve the problem by yourself and save the time sending this router back to dealer of purchase to ask for help.

Scenario	Solution
The router is not	a. Please check the connection of power cord
responding to me	and network cable of this access point. All
when I want to access	cords and cables should be correctly and
it by web browser	firmly inserted to the access point.
	b. If all LEDs on the router are out, please
	check the status of A/C power adapter, and
	make sure it's correctly powered.
	c. You must use the same IP address section
	which router uses.
	d. Are you using MAC or IP address filter?
	Try to connect the access point by another
	computer and see if it works; if not, please
	perform a hard reset (pressing 'reset'
	button).
	e. Set your computer to obtain an IP address
	automatically (DHCP), and see if your
	computer can get an IP address.
	f. If you did a firmware upgrade and this
	happens, contact your dealer of purchase for
	help.
	g. If all above solutions don't work, contact
	the dealer of purchase for help.
Can't get connected to	a. If encryption is enabled, please re-check
router wirelessly	WEP or WPA passphrase settings on your
	wireless client.
	b. Check wireless On/Off switch located at the
	back of this router. Switch it to 'On'.
	c. Try to move closer to wireless access point.
	d. Unplug the power plug of access point, and
	plug it back again after 10 seconds.

	· · · · · · · · · · · · · · · · · · ·
	e. If all LEDs on the router are out, please check the status of A/C power adapter, and
	make sure it's correctly powered.
I can't locate my	a. 'Broadcast SSID' set to off?
router by my wireless	b. Are you too far from your access point? Try
client	to get closer.
	c. Please remember that you have to input
	SSID on your wireless client manually, if SSID
	broadcast is disabled.
	d. If antenna is not installed, install them now
	and never remove them.
File download is very	a. Try to reset the router and see if it's better
slow or breaks	after that.
frequently	b. Try to know what computers do on your
	local network. If someone's transferring big
	files, other people will think Internet is
	really slow.
	c. Change channel number and see if this
	works.
I can't log onto web	a. Make sure you're connecting to the correct
management interface:	IP address of the access point!
password is wrong	b. Password is case-sensitive. Make sure the
	'Caps Lock' light is not illuminated.
	c. If you really forget the password, do a hard
	reset.
Router become hot	a. This is not a malfunction, if you can keep
	your hand on the router's case.
	b. If you smell something wrong or see the
	smoke coming out from access point or A/C
	power adapter, please disconnect the access
	point and A/C power adapter from utility
	power (make sure it's safe before you're
	doing this!), and call your dealer of
	purchase for help.

### 4-3 Well-Known Services

This table lists all well-known Internet services. Please note that some services may use other ports instead of 'standard' port number. Refer to the technical document of the service program you're using, to make sure the port number it uses.

Port Number	Description
7	Echo
11	systat
13	Daytime
19	chargen
20	ftp-data
21	ftp
22	Ssh
23	Telnet
25	SMTP
37	Time
53	DNS
63	Whois
69	TFTP
80	HTTP
110	POP3
119	NNTP
123	NTP
137	Netbios-NS
138	Netbios-DGM
139	Netbios-SSN
143	IMAP
161	SNMP

### **Federal Communication Commission Interference Statement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.

- 2. Increase the separation between the equipment and receiver.
- 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4. Consult the dealer or an experienced radio technician for help.

### **FCC Caution**

This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.

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.

Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.

### Federal Communications Commission (FCC) Radiation Exposure Statement

This equipment complies with FCC radiation exposure set forth for an uncontrolled environment. In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 2.5cm (1 inch) during normal operation.

Federal Communications Commission (FCC) RF Exposure Requirements

SAR compliance has been established in the laptop computer(s) configurations with PCMCIA slot on the side near the center, as tested in the application for Certification, and can be used in laptop computer(s) with substantially similar physical dimensions, construction, and electrical and RF characteristics. Use in other devices such a PDAs or lappads is not authorized.

This transmitter is restricted for use with the specific antenna tested in the application for Certification. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

### **R&TTE Compliance Statement**

This equipment complies with all the requirements of DIRECTIVE 1999/5/EC OF THE EUROPEAN PARLIAMENT AND THE COUNCIL of March 9, 1999 on radio equipment and telecommunication terminal Equipment and the mutual recognition of their conformity (R&TTE)

The R&TTE Directive repeals and replaces in the directive 98/13/EEC (Telecommunications Terminal Equipment and Satellite Earth Station Equipment) As of April 8, 2000.

### Safety

This equipment is designed with the utmost care for the safety of those who install and use it. However, special attention must be paid to the dangers of electric shock and static electricity when working with electrical equipment. All guidelines of this and of the computer manufacture must therefore be allowed at all times to ensure the safe use of the equipment.

#### **EU Countries Intended for Use**

The ETSI version of this device is intended for home and office use in Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, Slovenia, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom.

The ETSI version of this device is also authorized for use in EFTA member states: Iceland, Liechtenstein, Norway, and Switzerland.

### EU Countries not intended for use

None

A declaration of conformity is available on www.edimax.com





