



# **FCC Statement**

# FC

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 the FCC Rules.

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

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

# **FCC Caution**

- 1. The device complies with Part 15 of the FCC rules. Operation is subject to the following conditions:
- 2. This device may not cause harmful interference, and this device must accept any interference received, including interference that may cause undesired operation.
- 3. FCC RF Radiation Exposure Statement: The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.
- 4. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- 5. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

#### **IMPORTANT NOTE**

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance20cm between the radiator & your body.

#### **CE Mark Warning**

# CEO

This is a class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

#### **National Restrictions**

Frequency range - 2400.0 - 2483.5 MHz

Country	Country	Reason/remark
Bulgaria	none	General authorization required for outdoor use and public service.
France	Outdoor use limited to 10 mW e.i.r.p. within the band 2454-2483.5 MHz	Military Radiolocation use. Refarming of the 2.4 GHz band has been ongoing in recent years to allow current relaxed regulation. Full implementation planned 2012.
Italy	none	If used outside of own premises, general authorization is required.
Luxembourg	none	General authorization required for network and service supply (not for spectrum).
Norway	Implemented	This subsection does not apply for the geographical area within a radius of 20 km from the centre of Ny-Ålesund.
Russian Federation	none	Only for indoor applications.

Note: Please don't use the product outdoors in France

#### **CE Statement of Conformity**

Our product has been tested in typical configuration by Ecom Sertech Corp and was found to comply with the essential requirement of "Council Directive on the Approximation of the Laws of the Member Sates relating to Electromagnetic Compatibility" (89/336/EEC; 92/31/EEC; 93/68/EEC). The Declaration of Conformity can be found at the Sapido regional website. www.sapidotech.de

#### **CE Information of Disposal**

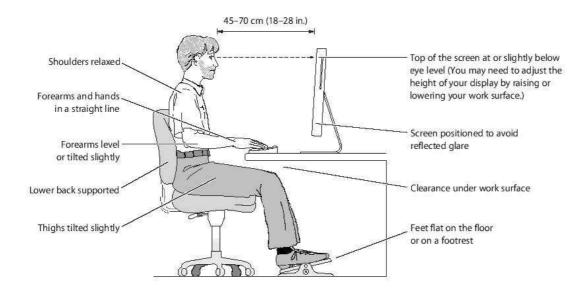


The electric and electronic equipment or unit which is labeled with crossed-out wheeled bin may not be disposed of with household waste. This mark is based on European Directive 2002/96/EC (for Waste Electric and Electronic Equipment=WEEE).

Please take it to the designated collection facilities. We will ensure the proper recycling, reuse and other forms of recovery of WEEE. WEEE has the potential effects on the environment and human health as a result of the presence of hazardous substances. You can contribute to eliminate these effects by your cooperation. Safe Seating Gestures

You should follow the manufacturer's instructions for adjusting the backrest to fit your body properly.

- An adjustable chair that provides firm, comfortable support is best.
- Adjust the height of the chair so your thighs are horizontal and your feet flat on the floor.
  - The back of the chair should support your lower back (lumbar region).



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# **Chapter 1 Introduction**

#### 1.1 Overview

Sapido Mobile Hotspot is equipped with two high capacity and long-lasting Li Batteries. Have the batteries fully charged, you can stay Internet connection for 6 hours, while standby time is up to 20 hours. The inbuilt mini USB port offers flexible power supply and battery charging. It is truly the only router to take with you and enjoy Internet on the road with no worry!

Whatever broadband service you use - xDSL/Cable, WiFi Hotspot, 3G/4G, or even WiMAX, you can share internet connections effortlessly via Sapido Mobile Hotspot. It also carries advanced 2T2R antenna technology, which enhances not only wireless coverage but also provides an ultimate wireless speed performance of 300 Mbps.

In addition, Sapido Mobile Hotspot complies with the latest 802.3az Energy Efficient Ethernet standard and carrying Green AP technology. It adjusts power consumption according to the auto detect of Internet connection and packet transmission, and can save up to 80% electricity.

#### 1.2 Features

- All broadbands can work 3G/4G, WiMAX, xDSL/Cable, WiFi Hotspot
- Advanced Power Saving Technology Save up to 80% Consumption.
- 2T2R Technology Enhance Wireless Speed and Range.
- Complies with wireless 11n standard, which upgrades data transfer rate to 300Mbps.
- 20,000 sessions for efficient P2P downloading, online games and other Internet usages.
- Multi-AP, Network groups setup for flexible management.
- Secure Internet- Support various internet filters and advanced encryption types.
- Unique domain name- Easy to find your server router by typing the unique domain name.
- Virtual Server
- Virtual DMZ

## 1.3 Specifications

Network	
Standards	Mobile (External): 3G/4G USB Modem
	WLAN: IEEE 802.11n, 802.11g, 802.11b
	WAN: xDSL/Cable Modem
Data Rate	3G/4G: Depending on actual service speed
	WiFi: 802.11n (Max 300Mbps), 802.11g (Max 54Mps),
	802.11b (Max 11Mbps)
	LAN: 802.3/802.3u (10/100Mbps)
Frequency Range	2.412~2.484GHz
Modulation Technology	IEEE 802.11b: OFDM
	IEEE 802.11g: CCK, DQPSK, DBPSK
Wireless Security	WEP 64 or 128 bit/WPA/WPA2/WPA2 Mixed,
	WPS (PBC/PIN),
	WDS, Mutiple APs
Firewall	MAC Address Filtering, URL Filtering, IP/Port Based Filtering
	UPnP, DHCP, DDNS, DNS
Operation Modes	Router
Network Features	NAT: One-to-Many NAT, Virtual Server, DMZ
Hardware	
Ethernet	10/100Mbps RJ45, Auto-MDI/MDI-X (WAN/LAN x 1)
LED Indicator	WIRELESS/WPS, LAN/WAN, USB, STATUS, POWER
Power	Li-Ion Battery x2
	DC Adapter: 12V
	Mini-USB Port DC 5V input from PC for operation or DC
Operating Temperature	Operating: 0°C ~40°C (32°F ~104°F)
	Storage: -20°C ~70°C (-4°F ~158°F)
Humidity	Operating: 10% to 85% Non-Condensing
	Storage: 5% to 90% Non-Condensing
Dimension	91mm x 78mm x 33.2mm
Management	Web GUI, Firmware upgrade via web

## 1.4 Product Appearance

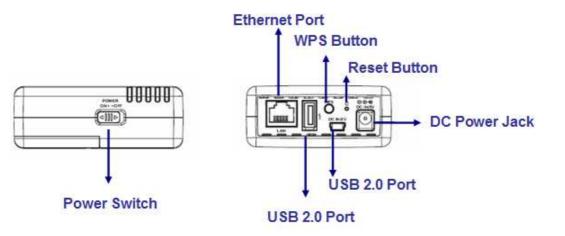
#### The Front



LED Indicator Status Description:

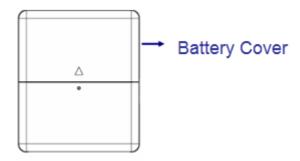
Status LED Indicator	Solid	Flashing
WIRELESS & WPS	Operation OK	Green: Transmitting Data Red: WPS enabled
LAN / WAN	Ethernet connected	Transmitting Data
USB	3G/4G service is available	Connected to a network using 3G/4G
STATUS	Operation OK	Green: Reset / Firmware updates in progress
Power	Green: Battery fully charged Red: Low battery	Green: DC Power input or Battery charging

Side



Power Switch	Power on /off
LAN/WAN	RJ-45 Ethernet 10/100 Ports
USB2.0 Ports	3G/4Gmodem only
WPS Button	WPS function
Reset Button	Back to default setting
Mini USB	Power supply only
DC Power Jack	DC adapter plugged in

#### The Rear



Operation Mode Switch	Router, AP, and WiFi AP operation modes
Ethernet Port (WAN/LAN)	RJ-45 Ethernet 10/100 Ports
Ethernet Port (LAN)	RJ-45 Ethernet 10/100 Ports
Mini USB Port	Power Adapter DC 5V mini-USB B type male connector

# Chapter 2 2

# **Chapter 3 System and Network Setup**

To begin with MB-1132, you must have the following minimum system requirements. If your system can't correspond to the following requirements, you might get some unknown troubles on your system.

- Internet Account for XDSL/Cable Modem, broadband or 3G/4G
- One Ethernet (10 BASE-T or 10/100 BASE-TX) network interface card.
- TCP/IP and at least one web browser software installed (E.g.: Internet Explorer 5.0, Netscape Navigator 7.x, Apple Safari 2.03 or higher version).
- At lease one 802.11g (54Mbps) or one 802.11b (11Mbps) wireless adapter for wireless mobile clients.
- Recommended OS: Win2000 or WinXP / Linux.

#### 3.1 Build Network Connection

Administrator can manage the settings for WAN, LAN, Wireless Network, NAT, password, User Accounts, Firewall, etc.

Please confirm the network environment or the purpose before setting this product.



#### 3.2 Network setup

After the network connection is built, the next step is setup the router with proper network parameters, so it can work properly in your network environment. Before you connect to the wireless router and start configuration procedures, your computer must be able to get an IP address from the wireless router automatically (use dynamic IP address). If it's set to use static IP address, or you're unsure, please follow the below instructions to configure your computer with dynamic IP address:

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

Windows 2000	- please go to section 2.2.1
Windows XP	- please go to section 2.2.2
Windows Vista/Win7	- please go to section 2.2.3

#### 3.2.1 Windows 2000

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".

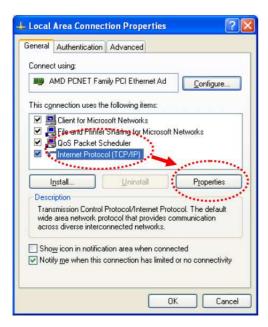
Connect using:		
🖳 Realtek RTL80	29(AS) PCI Ethernet Ac	lapter
		Configure
Components checked	I are used by this conne	
New York, Construction of the second second		
🗹 🔲 Client for Minr	ocoft Moturarka	
🗹 📕 Client for Micr		Maturada
🗹 🚚 File and Prints	r Sharing for Microsoft I	Networks
and a second sec	r Sharing for Microsoft I	Networks
🗹 🚚 File and Prints	r Sharing for Microsoft I	Networks
🗹 🚚 File and Prints	r Sharing for Microsoft I	Networks P <u>r</u> operties
V 🔜 Ele and Printe V V Internet Proto	r Sharing for Microsoft   col (TCP/IP)	
Elle and Printe Internet Proto	ar Sharing for Microsoft I col (TCP/IP) Uninstall	P <u>r</u> operties tocol. The default
Install	ar Sharing for Microsoft I col (TCP/IP) Uninstall ol Protocol/Internet Pro protocol that provides c	P <u>r</u> operties tocol. The default
Install	ar Sharing for Microsoft I col (TCP/IP) Uninstall	P <u>r</u> operties tocol. The default

1. Select "Obtain an IP address automatically" and "Obtain DNS server address automatically", then click "OK".

	d automatically if your network support eed to ask your network administrator f
Obtain an IP address auto	matically
<u></u> lP address:	a 20
Subnet mask:	
Default gateway:	
Obtain DNS server addres	
Preferred DNS server.	Mekaddiesses:
Alternate DNS server.	
	Advanced

#### 3.2.2 Windows XP

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 Status window will appear, and then click "Properties".



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

General	Alternate Configu	uration				
this cap	n get IP settings as ability. Otherwise, ropriate IP settings	you need l				
00	otain an IP addres:	s automatic	ally			1
	e the following IP					
[P ad	idress:					1
Subr	iet mask:			a 2	3	]
Defa	ult gateway:			a 68	1	
<b>O</b> 0	gtain DNS server a	address au	tomatically			1
OU	e the following DN	VS server a	addresses;			
Prefe	arred DNS server.		1		1.	
Alter	nate DNS server:			8 - X	2	
					Adva	nced

#### 3.2.3 Windows Vista / Windows 7

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

	etwork Connection
	Configure
🗹 斗 Internet Protocol Versi 🗹 📲 tánk-Layar Jopology D	issowery Mapper O Driver
Install	iscovery Responder

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

You can get IP settings assigned a this capability. Otherwise, you nee			
for the appropriate IP settings.			
Qbtain an IP address automa	atically		
Oge the following 1P address		•••••	
IP address:	+	* +	1
Sybnet mask:		+	1
Default gateway:			1
C all same su			
Obtain DNS server address a     Ose the following DNS server			
Preferred DNS server:			
Alternate DNS server:	-		
	· · · · · · · · · · · · · · · · · · ·	Ad <u>v</u> a	nced

## 3.3 Router IP Address Lookup

After the IP address setup was completed, please click "start" ⇒ "run" at the bottom-lower corner of your desktop:

	My Documents My Recent Documents My Pictures My Pictures My Computer Control Panel
Windows Messenger	Set Program Access and Defaults Printers and Faxes
Tour Windows XP	Help and Support
Files and Settings Transfer Wizard	D Search
All Programs	e Banin

Input "cmd", and then click "OK".

Run		?
	Type the name of a program, folder, document, Internet resource, and Windows will open it for y	
Open:	cmd	
Л	·	

Input "ipconfig", then press "Enter" key. Please check the IP address followed by "Default Gateway" (In this example, the gateway IP address of router is 192.168.1.1)



NOTE: If the IP address of Gateway is not displayed, or the address followed by 'IP Address' begins with "169.x.x.x", 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.

#### 3.3.1 Log into Web GUI

After obtained an IP address from wireless router, please start your web browser, and input the IP address of the wireless router in address bar.



Mobile	e Hotspot
	A REAL PROPERTY OF THE REAL PR
N MOD	ile Router - 3G/4G
	Router
Username :	
Password :	1
0.0000000000000000000000000000000000000	[
	Login

Enter the User name and Password in to the blank and then Click **Login**. The default values for User Name and Password are **admin** (all in lowercase letters).

🕮 Router 🍯 One Button Setup	Network Config		
IP Config	This page shows the current s	tatus and some basic settings of the device.	
Wireless			
🗖 🧰 Firewall			
🔹 🛅 System Management	System		
Log and Status	Uptime	0day:0h: 10m: 45s	
Logout	Firmware Version	Ver 1.0.1	
	WirelessConfiguration		
	Mode	AP	
	Band	2.4 GHz (B +G +N)	
	SSID	SAPIDO_Mobile_Hotspot	
	Channel Number	6	
	Encryption	Disabled	
	MAC Address	00:d0:41:c3:b5:e5	
	Associated Clients	0	
	LAN Configuration		
	Attain IP Protocol	Fixed IP	
	IP Address	192.168.1.1	
	Subnet Mask	255.255.255.0	
	Default Gateway	192.168.1.1	
	DHCP Server	Enabled	
	MAC Address	00:d0:41:c3:b5:e5	
	WAN Configuration		
	Attain IP Protocol	3.5G Disconnected	
	IP Address	0.0.00	
	Subnet Mask	0.0.00	
	Default Gateway	0.0.0.0	
	MAC Address	00:d0:41:c3:b5:e6	
	3.5G Configuration		
	Connect Speed	Auto Switch	
	Signal Strength		
	NetworkName		
	WiMAX Configuration		
	Signal Strength		
	NetworkName		

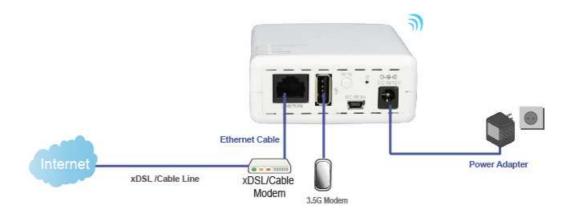
# **Chapter 4 Internet Connection**

This Chapter describes how to setup MB-1132 to the internet. The 3G mini router is delivered with the following factory default parameters.

Default IP address: 192.168.1.1 Default IP subnet mask: 255.255.255.0 Web login user name: admin Web login password: admin

#### 4.1 Plug and Play

The MB-1132 supports three types of Internet connection: 3G/4G modem card, wire or wireless connection via xDSL/Cable modem. Just connect the 3G/4G modem card or Ethernet cable to MB-1132, the router will recognize it automatically.



#### 4.2 Connect to Internet through web GUI

**1.** Open a Web browser, and enter <u>http://192.168.1.1</u> (Default Gateway) into the blank.

2 C.	annot	find s	erver - Mi	crosoft	Intern
File	Edit	View	Favorites	Tools	Help
0	Back	-	) - 💌	2	6
Addre	ess	http://	192.168.1.1	/login.asj	pl

**2.** Enter the User name and Password in to the blank and then Click "Login". The default values for User Name and Password are **admin** (all in lowercase letters).

Mohile	e Hotspot
	CALLER CONTRACTOR
N <sup>+</sup> Mob	ille Router - 3G/4G
	Router
Username :	
Password :	
Passworu :	

## 4.2.1 WAN Interface- 3.5G USB dongle

Select WAN under the IP Config menu, and choose 3.5G usb dongle for the WAN Interface. Its associated setting will show as below.

<ul> <li>Router</li> <li>One Button Setup</li> <li>IP Config</li> <li>Wireless</li> <li>NAT</li> <li>Firewall</li> </ul>		the parameters for Internet network which connects to the WAN port of your change the access method to static IP, DHCP, PPPoE or PPTP by click the
System Management     Log and Status	WAN Interface:	3.5G usb dongle
👘 🚺 Logout	Service:	
	Connect Speed:	⊙ Auto Switch ○ 2.5G/2.75G only ○ 3G/3.5G only
	SIM PIN:	V None
	Retype SIM PIN:	
	APN:	internet
	User Name:	
	Password:	
	PHONE Number:	*99#
	Attain DNS Automatically	
	O Set DNS Manually	
	DNS 1:	
	DNS 2:	
	DNS 3:	
	Clone MAC Address: 000	00000000
	Always     Alw	
	O Dial on demand	
	Idle 3 (0~60 Minutes	, if input 0 or no input,it will set to Always mode)
	Manual Connect	disconnect
	Enable IGMP Proxy	
	Enable Ping Access on WA	AN
	Enable Web Server Access	s on WAN
	Apply Change Rese	t

Item	Description
APN (Access Point Name)	Enter the access point name. If you do not know the setting information for APN, check with your 3.5G service provider.
User Name	Enter the User Name supplied by the provider.
Password	Enter the password supplied by the provider.
Phone Number	Enter the subscribing access point's phone number.
DNS	Select <b>Attain DNS Automatically</b> . Or select <b>Set DNS Manually</b> , if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"
Always / Dial on demand	If your 3G USB adapter is a pay-as-you-go plan base, select "Dial on demand" and disconnect the connection when you don't use the internet.
Apply Change	Click "Finish" to complete the setting

Rebooting this product is started. Please wait for a while.



Change setting successfully!

System is configuring, after 19 seconds....

#### 4.2.2 WAN Interface–WiMAX

If you are using WiMAX as the WAN Type, please select WiMAX USB Dongle.



#### WAN Interface Setup

This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE or PPTP by click the item value of WAN Access type.

WAN Interface:		WIMAX	~	
Operator:		VMAX	~	
UserName:				
Password:				
Attain DNS Automat	ticall <del>y</del>			
O Set DNS Manually				
DNS 1:				
DNS 2:				
DNS 3:				
Clone MAC Address:	000000	000000		
Enable IGMP Proxy	Eaable IGMP Proxy			
Enable Ping Access	s on WAN			
🗌 Enable Web Server Access on WAN				

Apply Change Reset

Item	Description
Operator	Select operator from the drop down list
User Name	Enter the User Name supplied by the provider.
Password	Enter the password supplied by the provider.
DNS	Select "Attain DNS Automatically". Or select "Set DNS Manually" if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"
Always / Dial on demand	If your 3G USB adapter is a pay-as-you-go plan base, select "Dial on demand" and disconnect the connection when you don't use the internet.
Apply Change	Click "Finish" to complete the setting

#### 4.2.3 WAN Interface- Ethernet Port

The WAN access type is depended on the service that you contract with the provider. The MB-1132 provides five selections for the WAN access type, **Static IP, DHCP Client, PPPoE, PPTP, L2TP**. Check with your ISP if you don't know the WAN type.

🚍 Router	WAN Interfac	ce Setup	
One Button Setup			
💷 🧰 IP Config	This page is used to confi	gure the parameters for Internet network which connects to the WAN port of your	
🔸 🧰 Wireless	Access Point. Here you may change the access method to static IP, DHCP, PPPoE or PPTP by click the		
+ 🛅 NAT	item value of WAN Access type.		
🔸 💼 Firewall			
🔸 🕅 System Management			
🕕 🧰 Log and Status	WAN Interface:	Ethernet Port	
🚺 Logout			
	WAN Access Type:	DHCP Client	
		Static IP	
	Host Name:	DHCP Client	
		PPPoE	
	MTU Size:	PPTP 1400-1492 bytes)	
	Attain DNS Automat	L2TP ically	

#### 4.2.3.1 Access Type- Static IP

Select **WAN** under the **IP Config** menu, and choose Ethernet Port for the WAN Interface. Its associated setting will show up.

Router	WAN Interface Setup	
IP Config		figure the parameters for Internet network which connects to the WAN port of your may change the access method to static IP, DHCP, PPPoE or PPTP by click the ss type.
DDNS Wireless NAT Firewall System Management Gand Status Log out	WAN Interface: WAN Access Type:	Ethernet Port 💌
	IP Address: Subnet Mask:	172.1.1.1       255.255.255.0
	Default Gateway: MTU Size:	172.1.1.254 1500 (1400-1500 bytes)
	DNS 1: DNS 2:	
	DNS 3: Clone MAC Address: 🖉 Enable IGMP Proxi	000000000
	<ul> <li>Enable Four Proxy</li> <li>Enable Ping Access</li> <li>Enable Web Server</li> </ul>	on WAN
	Apply Change	Reset

Item	Description	
WAN Access Type	Select "Static IP"	
IP Address	Enter the IP address which is provided by your ISP.	
Subnet Mask	Please enter the Subnet Mask address	
Default Gateway	Input ISP Default Gateway Address, .	
DNS	Input DNS information which is provided by your ISP	
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"	
Apply Change & Reset	Click on "Apply Change" to save the setting date, or you may click on "Reset" to clear all the input data.	

# 4.2.3.2 Access Type- DHCP Client

Router One Button Setup	WAN Interface Setup	
IP Config	This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE or PPTP by click the item value of WAN Access type.	
DDNS  Wireless  NAT	WAN Interface: Ethernet Port	
<ul> <li>Firewall</li> <li>System Management</li> </ul>	WAN Access Type: DHCP Client	
+ 📄 Log and Status	Host Name: Realtek	
	MTU Size: (1400-1492 bytes)	
	Attain DNS Automatically	
	© Set DNS Manually	
	DNS 1:	
	DNS 2:	
	DNS 3:	
	Clone MAC Address: 0000000000	
	Enable IGMP Proxy	
	Enable Ping Access on WAN	
	Enable Web Server Access on WAN	
	Apply Change Reset	

Item	Description	
WAN Access Type	Select "DHCP Client"	
Host Name	You can keep the default as the host name, or input a specific name if required by your ISP.	

DNS	Select <b>Attain DNS Automatically</b> . Or select <b>Set DNS Manually</b> , if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"
Apply Change & Reset	Click on "Apply Change" to save the setting date, or you may click on "Reset" to clear all the input data.

# 4.2.3.3 Access Type- PPPoE

Router One Button Setup	WAN Interfa	ce Setup
IP Config ID Config IVAN	· -	figure the parameters for Internet network which connects to the WAN port of your may change the access method to static IP, DHCP, PPPoE or PPTP by click the as type.
DDNS • The Wireless • The NAT • The Firewall	WAN Interface: WAN Access Type:	Ethernet Port
<ul> <li>System Management</li> <li>Log and Status</li> <li>Logout</li> </ul>	User Name: Password:	
	Service Name: Connection Type:	Continuous Connect Disconnect
	Idle Time: MTU Size:	5 (1-1000 minutes) 1452 (1360-1492 bytes)
	Attain DNS Automa Set DNS Manually	tically
	DNS 1: DNS 2:	
	DNS 3: Clone MAC Address: Enable IGMP Proxy	000000000
	<ul> <li>Enable Fing Access</li> <li>Enable Web Server</li> </ul>	on WAN
	Apply Change	Reset

Item	Description
WAN Access Type	Select "PPPoE"
User Name	Input your user name provided by your ISP. If you don't know, please check with your ISP.
Password	Input the password provided by your ISP.

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Service Name	Input the service name provided by your ISP.	
Connection Type	Three types for select: <b>Continues, Connect on Demand,</b> and <b>Manual.</b>	
DNS	Select <b>Attain DNS Automatically</b> . Or select <b>Set DNS Manually</b> , if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.	
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"	
Apply Change & Reset	Click on "Apply Change" to save the setting date, or you may click on "Reset" to clear all the input data.	

# 4.2.3.4 Access Type- PPTP

Router One Button Setup	WAN Interface Setup		
IP Config WAN LAN	This page is used to configure the parameters for Internet network which connects to the WAN port of you Access Point. Here you may change the access method to static IP, DHCP, PPPoE or PPTP by click the item value of WAN Access type.		
<ul> <li>DDNS</li> <li>Wireless</li> <li>NAT</li> <li>Firewall</li> <li>System Management</li> <li>Log and Status</li> <li>Logout</li> </ul>	WAN Interface: Ethernet Port		
	WAN Access Type:     PPTP       Address Mode:        • Dynamic SQie		
	Server IP Address:		
	Password:		
	MTU Size: (1400-1460 bytes) (1400-1460 bytes)		
	O Set DNS Manually		
	DNS 1:		
	DNS 2: DNS 3:		
	Clone MAC Address: 0000000000		
	Enable IGMP Proxy		
	Enable Ping Access on WAN     Enable Web Server Access on WAN		
	Apply Change Reset		

Item	Description
WAN Access Type	Select "PPTP"

Server IP Address	Input your server IP address provided by your ISP. If you don't know, please check with your ISP.	
User Name	Input PPTP account provided by your ISP.	
Password	Input the password provided by your ISP.	
DNS	Select <b>Attain DNS Automatically</b> . Or select <b>Set DNS Manually</b> , if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.	
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"	
Apply Change & Reset	Click on "Apply Change" to save the setting date, or you may click on "Reset" to clear all the input data.	

## 4.2.3.5 Access Type- L2TP

<ul> <li>Router</li> <li>One Button Setup</li> <li>IP Config</li> <li>WAN</li> <li>LAN</li> </ul>		- igure the parameters for Internet network which connects to the WAN port of your nay change the access method to static IP, DHCP, PPPoE or PPTP by click the
DDNS	WAN Interface:	Ethernet Port
<ul> <li>Firewall</li> <li>System Management</li> </ul>	WAN Access Type:	L2TP
+ 💼 Log and Status	Address Mode:	⊙ Dynamic SQie
Logout	Server IP Address/Host Name:	
	User Name:	
	Password:	
	MTU Size:	1460 (1400-1460 bytes)
	Attain DNS Automa     One of the second sec	tically
	O Set DNS Manually	
	DNS 1:	
	DNS 2:	
	DNS 3:	
	Clone MAC Address:	000 00 0000 000
	🗷 Enable IGMP Proxy	
	Enable Ping Access	on WAN
	Enable Web Server	Access on WAN
	Apply Change	Reset

Item	Description

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WAN Access Type	Select "PPTP"
Server IP Address / Host Name	Input your server IP address or Host Name provided by your ISP. If you don't know, please check with your ISP.
User Name	Input PPTP account provided by your ISP.
Password	Input the password provided by your ISP.
DNS	Select <b>Attain DNS Automatically</b> . Or select <b>Set DNS Manually</b> , if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"
Apply Change & Reset	Click on "Apply Change" to save the setting date, or you may click on "Reset" to clear all the input data.

#### 4.2.4 WAN Interface- Wireless

Select WAN under the IP Config menu, and choose wireless for the WAN Interface. Its associated setting will show as below.

Router	WAN Interface	Setu	р					
E IP Config I WAN	This page is used to configur Access Point Here you may item value of WAN Access by	change the						our
DDN5 Wireless NAT Firewall	WAN Interface:	Wi	reless 🗸	Channel	Туре	Encrypt	Signal	Select
+ System Management	SAPIDO_Mobile_Notspot_b	bfd626	00:00:41:56:46:25	6(B+G+N)	AP	no	52	0
🗉 🗖 Log and Status	- 02-Webcam-Server-3R-WDS	3	00:d0:41:ab&b:ba	7(B+G)	AP	WEP	30	ŏ
Logout	BT_WebCam		00:14:85:d0:be:89	9(B+G)	AP	WEP	28	õ
	SAPIDO_2F_Wlan		00:00:41:55:10:65	1(B+G)	AP	WEP	26	0
	Host Name: Re MTU Size: 14 Attain DNS Automatics Set DNS Manually DNS 1: DNS 2: DNS 3: Clone MAC Address: 00 Enable IGMP Proxy Enable Fing Access on Reable Ping Access on Enable Web Server Access	00000000 • WAN	(1400-1492 bytes	)				

Item	Description					
Refresh	You can see a list of available Wireless networks. Select the preferred one.					
Encryption type	Select the Encryption type form the drop-down list.					
WAN Access Type	Select Static IP, DHCP, PPPoE, PPTP or L2TP.					
DNS	Select <b>Attain DNS Automatically</b> . Or select <b>Set DNS Manually</b> , if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.					
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"					
Apply Change & Reset	Click on "Apply Change" to save the setting date, or you may click on "Reset" to clear all the input data.					

# **Chapter 5 Wireless Setup**

#### 5.1 Wireless Setup

There are two ways to setup wireless LAN with MB-1132. You can use either way to setup Wireless LAN.

#### 5.1.1 Setup Wireless LAN by WPS button

You can setup wireless LAN easily by using the WPS button if both WLAN router and the WLAN adapter (client) are WPS supported. Before starting the setup, please check the things below:

- Get ready for Internet connection with MB-1132
- The WLAN adapter is finished installation and plug in your computer/ laptop.

There are two ways to setup a wireless LAN between MB-1132 and your wireless adapter:

- 1. Setup with WPS button, if your wireless adapter has a physical WPS button.
  - (1) Press the WPS button from MB-1132 and wait for Wireless/WPS LED light changed into red.
  - (2) Press the WPS button from the adapter until the setup window shows up.





(3) Open a web browser to check the internet connection.



2. Setup without WPS button if you wireless adapter has only virtual WPS function.

(1) Open Wireless adapter utility.

- (2) Press the WPS button from MB-1132 and wait for Wireless/WPS LED light changed into red.
- (3) Back to the WLAN adapter utility and click its "PBC" button.





📃 Wireless Utility							
${\sf Refresh}(\underline{R})  \forall {\sf iew}(\underline{V})  {\sf About}(\underline{A})$							
MyComputer States USI	General Profile Available Network Advanced Status Statistics Wi-Fi Protect Setup						
	Wi-Fi Protected Setup (WPS)						
	An easy and secure setup solution for Wi-Fi network						
	Pin Input Config (PIN) After pushing the PIN button.Please enter the PIN code into your AP.						
	PIN Code: 40336930						
	Pin Input Config (PIN)						
	Push Button After pushing the PBC button.Please push the physical button on your AP or visual button on the WPS config page.						
	Push Button Config (PBC)						
K eff							
✓ Show Tray Icon Radio Off	Disable Adapter     Close     Windows Zero Config						
Ready							

The utility will start searching the destination connection.



(4) Confirm the information form the Utility

😑 Wireless Utility	
Refresh( <u>R)</u> View( <u>V</u> ) Abou	t( <u>A)</u>
🖃 🚽 MyComputer	General Profile Available Network Status Statistics Wi-Fi Protect Setup
	The second se
	Status: Associated Throughput:
	Speed: Tx:150 Mbps Rx:300 Mbps
	Type: Infrastructure
	Encryption: None Tx:20.6%, Total:20.6%
	SSID : SAPIDO_Mobile_Hotspot
	Signal Strength: 100%
	Link Quality: 100%
	100%
	Network Address:
	MAC Address: 00:50:18:67:89:12 IP Address: 192.168.1.150
	Subnet Mask; 255,255,255.0
	Gateway: 192.168.1.1
	ReNew IP
🗹 Show Tray Icon	Disable Adapter Close
🔲 Radio Off	
Ready	NUM

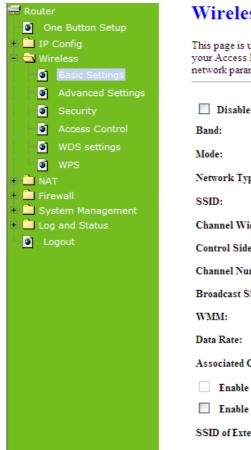
(5) After completes the WPS setup. Please confirm that it can be connected to the Internet.

Note: The setup image might be some differences when using other branded Adapter.

#### 5.1.2 Wireless Basic Setup from Web GUI

The Wireless Basic Settings include Band, Mode, SSID, Channel Number and other wireless settings.





## Wireless Basic Settings

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.

Disable Wireless	LAN Interface
Band:	2.4 GHz (B+G+N) 🗸
Mode:	AP  Multiple AP
Network Type:	Infrastructure 🗸
SSID:	SAPIDO_Mobile_Hotspot
Channel Width:	40MHz 💌
Control Sideband:	Upper 💙
Channel Number:	6 🗸
Broadcast SSID:	Enabled 💙
WMM:	Enabled V
Data Rate:	Auto 💌
Associated Clients:	Show Active Clients
Enable Mac Clone	(Single Ethernet Client)
Enable Universal	Repeater Mode (Acting as AP and client simultaneouly)
SSID of Extended Inter	face: ESSID_SAPIDO_MB-1132
Apply Change	Reset

Item	Description
Disable Wireless LAN Interface	Turn off the wireless service.
Band	Select the frequency. It has 6 options: 2.4 GHz (B/G/N/B+G/G+N/B+G+N).
Mode	Select the mode. It has 4 modes to select: (AP, Client, WDS, AP+WDS). Multiple AP: Please check Section 4.1.2.1.
SSID	Service Set identifier, users can define to any or keep as default.
Channel Width	Please select the channel width, it has 2 options: 20MHZ, and 40MHZ.
Control Sideband	Enable this function will control your router use lower or upper channel.
Channel Number	Please select the channel; it has Auto, 1, 2~12 or 13.
Broadband SSID	User may choose to enable Broadcast SSID or not.
Data Rate	Please select the data transmission rate.
Associate Clients	Check the AP connectors and the Wireless connecting status.
Enable MAC Clone	Clone the MAC address for ISP to identify.

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(Single Ethernet Client)		
Enable Universal Repeater Mode (Acting as AP and Client simultaneously)	Allow to equip with the wireless way conjunction upper level, provide the bottom layer user link in wireless and wired way in th meantime.	
	(The IP that bottom layer obtains is from upper level.) Please also check Section 4.1.2.2 for more details.	
SSID of Extended Interface	While linking the upper level device in wireless way, you can set SSID to give the bottom layer user search.	
Apply Change & Reset	Click on "Apply Change" to save the setting date, or you may click on "Reset" to clear all the input data.	

#### 5.1.2.1 Multiple APs

The MB-1132 can register up to 4 SSIDs (wireless LAN group). It can be used as if there are multiple wireless LAN access points with one product. Each SSID could be set with different data rate, WMM and access type.

This	page sho	ows and updates the wire	less setting for mul	tiple APs.				
No.	Enable	Band	SSID	Data Rate	Broadcast SSID	WMM	Access	Active Client List
AP1	<b>V</b>	2.4 GHz (B+G+N) 💌	Multiple_AP1	Auto 👻	Enabled -	Enabled 👻	LAN+WAN -	Show
AP2	<b>V</b>	2.4 GHz (B+G+N) ▼	Multiple_AP2	Auto 👻	Enabled -	Enabled 👻	LAN+WAN -	Show
AP3	<b>V</b>	2.4 GHz (B+G+N) ▼	Multiple_AP3	Auto 👻	Enabled 👻	Enabled 👻	LAN+WAN -	Show
AP4	7	2.4 GHz (B+G+N) 👻	Multiple_AP4	Auto 👻	Enabled 👻	Enabled -	LAN+WAN -	Show

Item	Description			
Enable	Enable or disable the service.			
Band	Select the frequency.			
SSID	Enter the SSID			
Data Rate	Select the data transmission rate.			
Access	Enable this function can let clients use two access types:			
	a. LAN+WAN: the client can access to the Internet and access in the			
	router's GUI.			
	b. WAN: the client can only access to the Internet.			
Active Client List	Display the properties of the client which is connecting successfully.			

#### 5.1.2.2 Enable Universal Repeater Mode

The router can act as Station and AP at the same time. It can use Station function to connect to a Root AP and use AP function to service all wireless stations within its coverage.



Example: When users enable the Universal Repeater to connect to the upper level device, please fill in the upper level device's channel and SSID. Click on "Apply Changes" to save the settings.

(Please disable the DHCP service first)

Channel Number:	6 🗸		
Broadcast SSID:	Enabled 💙		
WMM:	Enabled V		
Data Rate:	Auto 🗸		
Associated Clients:	Show Active Clients		
Enable Mac Clone (Single Ethernet Client)			
Enable Universal Repeater Mode (Acting as AP and client simultaneouly)			
SSID of Extended Interf	ace: ESSID_SAPIDO_MB-1132		
Apply Change Reset			

Users can use the Network Configuration page to check the information about "Wireless Repeater Interface Configuration".

Network Confi	g		
This page shows the current	t status and some basic settings of the device.		
	-		
Custom			
System Uptime	0day:0h:21m:26s		
Firmware Version	Ver1.0.1		
WirelessConfiguration			
Mode	AP		
Band	2.4 GHz (B+G+N)		
SSID	SAPIDO_Mobile_Hotspot		
Channel Number	6		
Encryption	Disabled		
MAC Address	00:d0:41:c3:b5:e5		
Associated Clients	0		
WirelessRepeater Interface	Configuration		
Mode	Infrastructure Client		
ESSID	ESSID_SAPIDO_MB-1132		
Encryption	Disabled		
MAC Address	00:00:00:00:00		
State	Scanning		
LAN Configuration			
Attain IP Protocol	Fixed IP		
IP Address	192.168.1.1		
Subnet Mask	255.255.255.0		

#### 5.2 Wireless Security Setup

Here users define the security type and level of the wireless network. Selecting different methods provides different levels of security. **Please note that using any encryption may cause a significant degradation of data throughput on the wireless link.** There are five Encryption types supported: "None", "WEP", "WPA (TKIP)", "WPA2(AES)", and "WPA2 Mixed". Enabling WEP can protect your data from eavesdroppers. If you do not need this feature, select "None" to skip the following setting.



- 1. Encryption -- WEP Key
  - (1) Set WEP Key: This section provides 64bit and 128bit WEP encryptions and two different shared key formats (ASCII and Hex) for wireless network.

🚍 Router 🍯 One Button Setup	Wireless Security S	Setup	
+ 🗎 IP Config - 💼 Wireless	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.		
<ul> <li>Basic Settings</li> <li>Advanced Settings</li> <li>Security</li> <li>Access Control</li> </ul>	Select SSID: Root AP - SAPIDO Apply Change Reset	_Mobile_Hotspot	
WDS settings	Encryption:	WEP 💌	
+ 🔲 NAT + 🛄 Firewall	802.1x Authentication:		
<ul> <li>System Management</li> <li>Log and Status</li> </ul>	Authentication:	◯ Open System ◯ Shared Key ④ Auto	
🖸 Logout	Key Length:	64-bit 💌	
	Key Format:	Hex (10 characters) 💌	
	Encryption Key:	*****	

(2) 802.1x Authentication

It is a safety system by using authentication to protect your wireless network.

- 2. Encryption WPA (WPA, WPA2, and WPA2 Mixed), WPA Authentication Mode
  - (1) Enterprise (RADIUS): Please fill in the RADIUS server Port, IP Address, and Password

🚍 Router 🍯 One Button Setup	Wireless Security Setup
<ul> <li>IP Config</li> <li>Wireless</li> </ul>	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.
<ul> <li>Basic Settings</li> <li>Advanced Settings</li> <li>Security</li> <li>Access Control</li> </ul>	Select SSID:       Root AP - SAPIDO_Mobile_Hotspot         Apply Change       Reset
WDS settings	Encryption:
+ 🔲 NAT + 🗎 Firewall + 🗎 System Management	Authentication Mode: <ul> <li>Enterprise (RADIUS)</li> <li>Personal (Pre-Shared Key)</li> </ul> WPA Cipher Suite: <ul> <li>TKIP</li> <li>AES</li> </ul>
<ul> <li>Log and Status</li> <li>Logout</li> </ul>	RADIUS Server IP Address:
	RADIUS Server Port:   1812     RADIUS Server Password:

(2) Personal (Pre-Shared Key): Pre-Shared Key type is ASCII Code; the length is between 8 to 63 characters. If the key type is Hex, the key length is 64 characters.

🚍 Router	Wireless Security Setup
<ul> <li>One Button Setup</li> <li>IP Config</li> <li>Wireless</li> </ul>	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.
<ul> <li>Basic Settings</li> <li>Advanced Settings</li> <li>Security</li> <li>Access Control</li> </ul>	Select SSID:       Root AP - SAPIDO_Mobile_Hotspot         Apply Change       Reset
₩DS settings ₩PS +  NAT	Encryption:
+ 🛅 Firewall + 🗋 System Management	Authentication Mode: <ul> <li>Enterprise (RADIUS)</li> <li>Personal (Pre-Shared Key)</li> </ul> WPA Cipher Suite: <ul> <li>TKIP</li> <li>AES</li> </ul>
+ 🗖 Log and Status 🗿 Logout	Pre-Shared Key:

3. Apply Change & Reset: Click on "Apply Changes" to save setting data. Or click 'Reset' to reset all the input data.

### 5.3 Wireless Access Control

Access Control allows user to block or allow wireless clients to access this router. Users can select the access control mode, then add a new MAC address with a simple comment and click on "Apply Change" to save the new addition. To delete a MAC address, select its corresponding checkbox under the Select column and click on "Delete Selected" button.

Router	Wireless Access Control
<ul> <li>One Button Setup</li> <li>IP Config</li> <li>Wireless</li> <li>Basic Settings</li> </ul>	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.
<ul> <li>Advanced Settings</li> <li>Security</li> <li>Access Control</li> <li>WDS settings</li> <li>WPS</li> <li>NAT</li> <li>Firewall</li> </ul>	Wireless Access Control Mode:     Disable       MAC Address:
<ul> <li>System Management</li> <li>Log and Status</li> <li>Logout</li> </ul>	MAC Address       Comment       Select         Delete Selected       Delete All       Reset

Take the wireless card as the example.

1. Please select Deny Listed in Wireless Access Control Mode first, and then fill in the MAC address what you plan to block in the MAC Address field. Click "Apply Changes" to save the setting.

Wireless Access Control		
access control list will be able to co	y those clients whose wireless MAC addresses are in the onnect to your Access Point. When 'Deny Listed' is the list will not be able to connect the Access Point.	
Wireless Access Control Mode: Deny Listed -		
MAC Address: 0018F8638A54 Comment:		
Apply Change Reset		
Current Access Control List:		
MAC Address	Comment Select	
Delete Selected Dele	ete All Reset	

2. The MAC address what you set will be displayed on the Current Access Control List.

Wireless 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.		
Wireless Access Control Mode:	Deny Listed 👻	
MAC Address:	Comment:	
Apply Change Reset		
Current Access Control List:		
MAC Address	Comment	Select
00:18:f8:63:8a:54		
Delete Selected Delete All Reset		

3. The wireless client will be denied by the wireless router.

(1) 無線網路連線 4		
洞路工作	選擇一個無線網路	
🛃 重新整理網路清單	按下列清單中的一個項目來連線到範圍內的無線網路或取得其他習	紊訊(₩)
《 為住家或小型辦公室設定無線網路	((Q)) SAPIDO_Mobile_Hotspot	已連線 👷 🛆
Manager and	無安全性的無線網路	
相關的工作	((Q)) SAPIDO-1F-Fax_Router	
(j) 了解有關無線網路		
**	((Q)) SAPIDO_2F_Wlan	
☆ 變更喜好網路的順序	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	
🎐 變更進階設定	((Q)) SAPIDO_Mobile_Hotspot_bfd626	
	無安全性的無線網路	
	((Q)) 02-Webcam-Server-3R-WDS	
	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	
	((Q)) 01-Webcam-Server-3R-WDS	
		連線(C)
4		

# **Chapter 6 Security Setup**

This section contains configurations for the MB-1132's advanced functions such as: virtual server, DMZ, and Firewall to provide your network under a security environment.

### 6.1 NAT

### 6.1.1 Visual Server

The Virtual Server feature allows users to create Virtual Servers by re-directing a particular range of service port numbers (from the WAN port) to a particular LAN IP address.

🚍 Router	Port Filtering
One Button Setup	
+ 🚞 IP Config	Entries in this table are used to restrict certain types of data packets from your local network
+ 🧰 Wireless	to Internet through the Gateway. Use of such filters can be helpful in securing or restricting
+ 🛄 NAT	your local network.
= 🔁 Firewall	
Port Filtering	Enable Port Filtering
IP Filtering	Port Range: - Protocol: Both Comment:
MAC Filtering	rote Range:
URL Filtering	
+ 💼 System Management	
<ul> <li>Log and Status</li> </ul>	Apply Change Reset
Logout	
	Current Filter Table:
	Port Range Protocol Comment Select
	Delete Selected Delete All Reset

Item	Description
Enable Port Forwarding	Select to enable Port Forwarding service or not.
IP Address	Specify the IP address which receives the incoming packets.
Protocol	Select the protocol type.
Port Range	Enter the port number, for example 80-80 or 20-22
Comment	Add comments for this port forwarding rule.
Apply Change & Reset	Click on "Apply Changes" to save the setting data. Or you may click
	on "Reset" to clear all the input data.
Current Port Forwarding	It will display all port forwarding regulation you made.
Table	
Delete Selected & Delete All	Click "Delete Selected" will delete the selected item. Click "Delete All" will delete all items in this table.
Reset	Click "Reset" to cancel.

Please find the following figure to know that what the virtual server is. The web server is located on 192.168.1.100, forwarding port is 80, and type is TCP+UDP.



### Configuration:

### 6.1.2 DMZ

The DMZ feature allows one local user to be exposed to the Internet for special-purpose applications like Internet gaming or videoconferencing. When enabled, this feature opens all ports to a single station and hence renders that system exposed to intrusion from outside. The port forwarding feature is more secure because it only opens the ports required by that application.

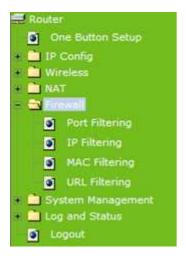
🚍 Router 🍯 One Button Setup	DMZ
<ul> <li>IP Config</li> <li>Wireless</li> <li>NAT</li> <li>Virtual Server</li> </ul>	A Demilitarized Zone is used to provide Internet services without sacrificing unauthorized access to its local private network. Typically, the DMZ host contains devices accessible to Internet traffic, such as Web (HTTP) servers, FTP servers, SMTP (e-mail) servers and DNS servers.
DMZ	Enable DMZ
<ul> <li>Port Filtering</li> <li>IP Filtering</li> </ul>	DMZ Host IP Address:
MAC Filtering	Apply Change Reset
System Management     Log and Status     Logout	

Item	Description
Enable DMZ	It will enable the DMZ service if you select it.
DMZ Host IP Address	Please enter the specific IP address for DMZ host.

http://www.sapido.com.tw/

Apply Changes & Reset	Click on "Apply Changes" to save the setting data. Or you may click
	on "Reset" to clear all the input data.

### 6.2 Firewall



### 6.2.1 Port Filtering

When enabled packets are denied access to Internet/filtered based on their port address.

<ul> <li>Router</li> <li>One Button Setup</li> <li>IP Config</li> <li>Wireless</li> <li>NAT</li> <li>Firewall</li> <li>Port Filtering</li> <li>MAC Filtering</li> <li>URL Filtering</li> <li>URL Filtering</li> <li>Log and Status</li> </ul>	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.         Enable Port Filtering         Port Range:       -       Protocol:       Both 🕑 Comment:         Apply Change       Reset
🦉 Logout	Port Range     Protocol     Comment     Select       Delete Selected     Delete All     Reset
Item	Description

nem	Description	
Enable Port Filtering	Select Enable Port Filtering to filter ports.	
Port Range	Enter the port number that needs to be filtered.	
Protocol	Please select the protocol type of the port.	
Comment	You can add comments for this regulation.	
Apply Changes & Reset	Click on "Apply Changes" to save the setting data. Or you may click on "Reset" to clear all the input data.	

Current Filter Table	It will display all ports that are filtering now.	
Delete Selected & Delete All	Click "Delete Selected" will delete the selected item. Click "Delete All" will delete all items in this table.	
Reset	You can click "Reset" to cancel.	

Port 80 has been blocked as the following illustrate.



### 6.2.2 IP Filtering

When enabled, LAN clients are blocked / filtered from accessing the Internet based on their IP addresses.

🚍 Router 🛐 One Button Setup	IP Filtering
+  IP Config  +  Wireless +  NAT -  Firewall	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.
<ul> <li>Port Filtering</li> <li>IP Filtering</li> <li>MAC Filtering</li> <li>URL Filtering</li> <li>URL Filtering</li> <li>System Management</li> <li>Log and Status</li> <li>Logout</li> </ul>	Enable IP Filtering         Loal IP Address:       Protocol: Both          Apply Change       Reset
	Current Filter Table:     Comment     Select       Loal IP Address     Protocol     Comment     Select       Delete Selected     Delete All     Reset
Item	Description

Item	Description	
Enable IP Filtering	Please select Enable IP Filtering to filter IP addresses.	
Local IP Address	Please enter the IP address that needs to be filtered.	

Protocol	Please select the protocol type of the IP address	
Comment	You can add comments for this regulation.	
Apply Changes & Reset	Click on "Apply Changes" to save the setting data. Or you may click on "Reset" to clear all the input data.	
Current Filter Table	It will display all ports that are filtering now.	
Delete Selected & Delete All	Click "Delete Selected" will delete the selected item. Click "Delete All" will delete all items in this table.	
Reset	You can click "Reset" to cancel.	

### 6.2.3 MAC Filtering

When enabled, filtering will be based on the MAC address of LAN computers. Any computer with its MAC address on this list will be blocked from accessing the Internet.

Router	MAC Filtering		
<ul> <li>One Button Setup</li> <li>IP Config</li> <li>Wireless</li> <li>NAT</li> <li>Firewall</li> <li>Port Filtering</li> </ul>	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	Enable MAC Filtering MAC Address: Comment:		
<ul> <li>URL Filtering</li> <li>System Management</li> <li>Log and Status</li> </ul>	Apply Change Reset		
Logout	MAC Address Comment Select		
	Delete Selected Delete All Reset		

Item	Description	
Enable MAC Filtering	Please select Enable MAC Filtering to filter MAC addresses.	
MAC Address	Please enter the MAC address that needs to be filtered.	
Comment	You can add comments for this regulation.	
Apply Changes & Reset	Click on " <b>Apply Changes</b> " to save the setting data. Or you may click on " <b>Reset</b> " to clear all the input data.	
Current Filter Table	It will display all ports that are filtering now.	
Delete Selected & Delete All	Click " <b>Delete Selected</b> " will delete the selected item. Click " <b>Delete</b> <b>All</b> " will delete all items in this table.	
Reset	You can click " <b>Reset</b> " to cancel.	

### 6.2.4 URL Filtering

URL Filtering is used to restrict users to access specific websites in internet

🚍 Router 🍯 One Button Setup	URL Filtering
<ul> <li>IP Config</li> <li>Wireless</li> <li>NAT</li> </ul>	URL filter is used to deny LAN users from accessing the internet. Block those URLs which contain keywords listed below.
<ul> <li>Firewall</li> <li>Port Filtering</li> <li>IP Filtering</li> <li>MAC Filtering</li> </ul>	Enable URL Filtering URL Address: Apply Change Reset
<ul> <li>URL Filtering</li> <li>System Management</li> <li>Log and Status</li> <li>Logout</li> </ul>	Current Filter Table: URL Address Select
	Delete Selected Delete All Reset

Item	Description	
Enable URL Filtering	Please select Enable MAC Filtering to filter MAC addresses	
URL Address	Please enter the MAC address that needs to be filtered.	
Apply Changes & Reset	Click on "Apply Changes" to save the setting data. Or you may click on "Reset" to clear all the input data.	
Current Filter Table	It will display all ports that are filtering now.	
Delete Selected & Delete All	Click " <b>Delete Selected</b> " will delete the selected item. Click " <b>Delete</b> <b>All</b> " will delete all items in this table.	
Reset	You can click " <b>Reset</b> " to cancel.	

Notes: This function will not be in effect when the Virtual Server is enabled. Please disable Virtual Server before activate the URL Filtering function.

# **Chapter 7 Advanced Setup**

### 7.1 LAN Interface Setup

This page is used to configure the parameters for local area network that connects to the LAN ports of your router. Here you may change the setting for IP address, subnet mask, DHCP, etc.

🖅 Router 🗿 One Button Setup	LAN Interface	e Setup
- TP Config		ure the parameters for local area network which connects to the Point. Here you may change the setting for IP address, subnet
DDNS + DVireless + DVireless	IP Address: Subnet Mask:	192.168.1.1       255.255.255.0
Firewall     System Management     Log and Status     Logout	Default Gateway: DHCP:	0.0.0.0 Server 💌
	DHCP Client Range: Static DHCP: Device Name:	192.168.1.100         –         192.168.1.200         Show Client           Set Static DHCP         SAPIDO_MB-1132
	802.1d Spanning Tree: Clone MAC Address:	Disabled V 00000000000
	Apply Change	Reset

Item	Description	
IP Address	The default IP address is 192.168.1.1	
Subnet Mask	Please enter the Subnet Mask address	
Default Gateway	Please enter the Default Gateway address for LAN interface.	
DHCP	Click to select "Disabled", "Client" or "Server" in different operation mode of LAN access point	
DHCP Client Range	Fill in the start IP address and end IP address to allocate a range of IP addresses; client with DHCP function set will be assigned an IP address from the range	
Static DHCP	Configures how static DHCP address are assigned to client (only available when DHCP server is enabled)	
Device Name	Configures the device name of the router.	
802.1d Spanning Tree	IEEE 802.1d Spanning Tree Protocol (STP) is a link layer network protocol that ensures a loop-free topology for any bridged LAN. Select enable or disable the IEEE 802.1d Spanning Tree function	

	from drop-down list.
Clone MAC Address	If your ISP asks you to enter a specific MAC Address, please input the correct info at the column.
Apply Change & Reset	Click on "Apply Changes" to save the setting data. Or you may click on "Reset" to clear all the input data.

### 7.2 Dynamic DNS Setting

You can assign a fixed host and domain name to a dynamic Internet IP address. Each time the router boots up, it will re-register its domain-name-to-IP-address mapping with the DDNS service provider. This is the way Internet users can access the router through a domain name instead of its IP address.

Note: make sure that you have registered with a DDNS service provider before enabling this feature.

🛱 Router	Dynamic D	NS Setting
<ul> <li>One Button Setup</li> <li>IP Config</li> <li>WAN</li> </ul>		ice, that provides you with a valid, unchanged, internet domain name t (possibly often changing) IP address.
<ul> <li>LAN</li> <li>DDNS</li> <li>Wireless</li> </ul>	Enable DDNS	
+ 💼 NAT + 💼 Firewall + 💼 System Management	Service Provider:	0 dyndns 🗸
	Domain Name:	ho st. dy ndns. org
+ 🛄 Log and Status	User Name/Email:	
	Password/Key:	
		a 30 days free trial <u>here</u> or manage your TZO account in <u>control panel</u> create your DynDNS account <u>here</u> Reset

Please enter Domain Name, User Name/Email, and Password/Key. After entering, click on "Apply Changes" to save the setting, or you may click on Reset to clear all the input data.

Item	Description
Enable/Disable DDNS	Select enable to use DDNS function. Each time your IP address to WAN is changed, and the information will be updated to DDNS service provider automatically.
Service Provider	Choose correct Service Provider from drop-down list, here including DynDNS, TZO, ChangeIP, Eurodns, OVH, NO-IP, ODS, Regfish embedded in MB-1132.
User Name/Email	User name is used as an identity to login Dynamic-DNS service.

Password/Key	Password is applied to login Dynamic-DNS service.
Apply & Cancel	Click on Apply button to continue. Click on Cancel button to clear the setting on this page.

### 7.3 Wireless Advanced Setup



In Advanced Settings page, more 802.11 related parameters are tunable



### Wireless Advanced Settings

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.

Fragment Threshold:	2346 (256-2346)
RTS Threshold:	2347 (0-2347)
Beacon Interval:	100 (20-1024 ms)
Preamble Type:	● Long Preamble ○ Short Preamble
IAPP:	●Enabled ○Disabled
Protection:	○Enabled
Aggregation:	●Enabled ○Disabled
Short GI:	Enabled Obisabled
WLAN Partition:	○Enabled
STBC:	◯Enabled ⊙Disabled
20/40MHz Coexist:	◯Enabled ⊙Disabled
<b>RF Output Power:</b>	● 100% ○ 70% ○ 50% ○ 35% ○ 15%
Apply Change R	leset

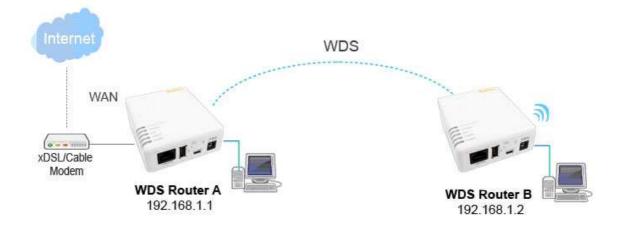
http://www.sapido.com.tw/

Item	Description	
Fragment Threshold	To identify the maxima length of packet, the over length packet will be fragmentized. The allowed range is 256-2346, and default length is 2346.	
RTS Threshold	This value should remain at its default setting of 2347. The range is 0~2347. Should you encounter inconsistent data flow, only minor modifications are recommended. If a network packet is smaller than the present RTS threshold size, the RTS/CTS mechanism will not be enabled. The router sends Request to Send (RTS) frames to a particular receiving station and negotiates the sending of a data frame. After receiving an RTS, the wireless station responds with a Clear to Send (CTS) frame to acknowledge the right to begin transmission. Fill the range from 0 to 2347 into this blank.	
Beacon Interval	Beacons are packets sent by an access point to synchronize a wireless network. Specify a beacon interval value. The allowed setting range is 20-1024 ms	
Preamble Type	PLCP is Physical layer convergence protocol and PPDU is PLCP protocol data unit during transmission, the PSDU shall be appended to a PLCP preamble and header to create the PPDU. It has 2 options: Long Preamble and Short Preamble.	
IAPP	Inter-Access Point Protocol is a recommendation that describes an optional extension to IEEE 802.11 that provides wireless access-point communications among multivendor systems.	
Protection	Please select to enable wireless protection or not.	
Aggregation	Enable this function will combine several packets to one and transmit it. It can reduce the problem when mass packets are transmitting.	
Short GI	Users can get better wireless transmission efficiency when they enable this function.	
RF Output Power	Users can adjust RF output power to get the best wireless network environment. Users can choose from 100%, 70%, 50%, 35%, and 15%.	
Apply Changes & Reset	Click on Apply Changes to save the setting data. Or you may click on Reset to clear all the input data.	

### 7.3.1 WDS Settings

When selected in the Basic Settings page and enabled here, Wireless Distribution System (WDS) enables the router to be used as a wireless bridge. Two Wireless-N Routers in bridge mode can communicate with each other through their wireless interfaces. To accomplish this, all wireless routers should be set to the same channel and the MAC address of other AP / Routers should be entered in the table.

The WDS explanation is as the following picture.



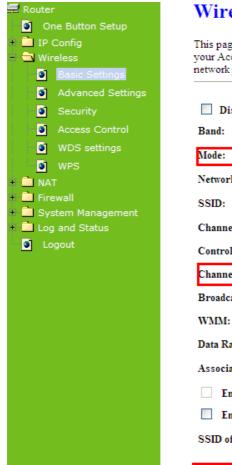
1. Setup Router A



(1) Please check the MAC address and Channel number from WDS Router A.

WirelessConfiguration	
Mode	AP
Band	2.4 GHz (B+G+N)
SSID	SAPIDO_Mobile_Hotspot
Channel Number	6
Encryption	Disabled
MAC Address	00:d0:41:c3:b5:e5
Associated Clients	0
LAN Configuration	
Attain IP Protocol	Fixed IP
IP Address	192.168.1.1
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
DHCP Server	Enabled
MAC Address	00:d0:41:c3:b5:e5

(2) Set the connection mode to "AP+WDS" from "Wireless Basic Setting", and then select the channel number (in this example is "6"). Click Apply Changes to save the setting.



### Wireless Basic Settings

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.

Disable Wireless	LAN Interface
Band:	2.4 GHz (B+G+N) 🔽
Mode:	AP+WDS V Multiple AP
Network Type:	Infrastructure 🗸
SSID:	SAPIDO_Mobile_Hotspot
Channel Width:	40MHz 💌
Control Sideband:	Upper 💙
Channel Number:	6 💙
Broadcast SSID:	Enabled 💌
WMM:	Enabled 💟
Data Rate:	Auto 💌
Associated Clients:	Show Active Clients
Enable Mac Clon	e (Single Ethernet Client)
Enable Universal	Repeater Mode (Acting as AP and client simultaneouly)
SSID of Extended Inter	face: ESSID_SAPIDO_MB-1132
Apply Change	Reset

(3) Enable WDS function from the page – "WDS Setting", and then fill in the MAC address of Router B. Click Apply Changes to save the setting data.

WDS Sett	ings			
Ethemet does. To a	lo this, you must se	et these APs in the sam	nicate with other APs, 1 ne channel and set MA ole and then enable the	C address
Enable WDS				
MAC Address:	000e68ff05c8			
Data Rate: Comment:	Auto 💌			
Apply Change	Reset	Set Security	Show Statistics	
WDS Security Set	up:			
MAC Addre	ess Tx Rat	te (Mbps) Co	mment Select	
Delete Select	ed Delete	All Reset		

(4) The WDS AP List will show the WDS device MAC address after reboot.

Wireless Distribution Syst Ethemet does. To do this, of other APs which you w	you must set these A	Ps in the sa	ime channel a	and set MAC add
Enable WDS				
MAC Address:				
MAC Address: Auto	*			
Data Rate: Auto				
Data Rate: Auto Comment:		Security	Show	Statistics
Data Rate: Auto Comment: Apply Change		Security	Show	Statistics
Data Rate: Auto Comment:			Show	Statistics

2. Move on the setup to WDS Router B

(1) Input Router A's MAC address.

Ethemet does. To	o do this, you must s	et these APs in the sam	icate with other APs, like the e channel and set MAC ad e and then enable the WDS	dres
Enable WDS	š			
MAC Address:	00d041c35e61			
Data Rate: Comment:	Auto 💌			
Apply Chang	ge Reset	Set Security	Show Statistics	
WDS Security S	etup:			
MAC Add		te (Mbps) Con	iment Select	

(2) You will receive an IP address from Router A.

neral Support	
Address Type: IP Address: Subnet Mask: Default Gateway:	Assigned by DHCP 192.168.1.2 255.255.255.0 192.168.1.1
Details Vindows did not detect problems with this connection. If you cannot connect, click Repair.	Repair

If you failed the WDS setting, please check you setting with refer to the list below.

	Router A	Router B
Mode	Router	AP
LAN IP Address	Set the same segment as the	Set the same segment as the
	router B(Note)	router A(Note)
	Example :192.168.1.1	Example :192.168.1.2
Security	Set the same security as	Set the same security as
	Router B	Router A
DHCP	Enable	Disable
MAC Address	Same as Router B	Same as Router A

Note: LAN IP address should be under the same segment but cannot be the same number.

### 7.3.2 WPS

This page allows user to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client atomically synchronize it's setting and connect to the Access Point in a minute without any hassle. MB-1132 could support both Self-PIN or PBC modes, or use the WPS button (at real panel) to easy enable the WPS function.

**PIN model,** in which a PIN has to be taken either from a sticker label or from the web interface of the WPS device. This PIN will then be entered in the AP or client WPS device to

connect.

**PBC model,** in which the user simply has to push a button, either an actual or a virtual one, on both WPS devices to connect.

Please follow instructions below to enable the WPS function.

- 1. Setup Wireless LAN with WPS PIN:
  - (1) Get the WPS PIN number from wireless card and write it down.



(2) Fill in the PIN number from the wireless card in Client PIN Number field, and then click "Start PIN".

🚍 Router 🛐 One Button Setup	Wi-Fi Protec	cted Setu	ıp	
<ul> <li>IP Config</li> <li>Wireless</li> <li>Basic Settings</li> </ul>				'i Protected Setup). Using this feature could g and connect to the Access Point in a minute
<ul> <li>Advanced Settings</li> <li>Security</li> </ul>	Disable WPS			
Access Control	WPS Status:	5	Configured	Un-Configured
WDS settings		1	Reset to	UnConfigured
I WES	Self-PIN Number:	5	1039615	
e 💼 NAT e 💼 Firewall	Push Button Configura	ition:	Start PBC	
<ul> <li>System Management</li> <li>Log and Status</li> </ul>	Apply Change	Reset		
Cogout	Current Key Info:			
	Authentication	Encryption	a Key	
	Open	None	N/A	
	Client PIN Number:	Ę	38698170	Start PIN

(3) Click PIN from Adapter Utility to complete the WPS process with the wireless router.

Wi-Fi Protected Setup (WPS)
An easy and secure setup solution for Wi-Fi network Pin Input Config (PIN) After pushing the PIN button.Please enter the PIN code into your AP. PIN Code : 38698170
Pin Input Config (PIN)
Push Button After pushing the PBC button.Please push the physical button on your

- 2. Start PBC:
  - (1) Press the WPS button from MB-1132 and wait for Wireless/WPS LED light changed into red.
  - (2) Press the WPS button from the adapter until the setup window shows up.





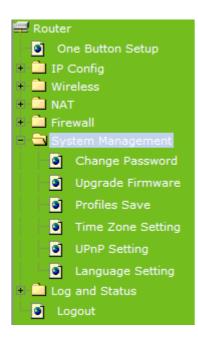
(3) Open a web browser to check the internet connection.



Please also refer to section 4.1.1 WPS setup for more details.

### 7.4 System Management

This section including Change Password, Upgrade Firmware, Profiles Save, Time Zone Setting, UPnP Setting, and Language Setting. It is easy and helpful for users making more detailed settings.



### 7.4.1 Change Password

Users can set or change user name and password used for accessing the web management interface in this section.

Router One Button Setup	Change Password
The button setup     The button setup     The button setup	This page is used to set the account to access the web server of Access Point. Empty user name and password will disable the protection.
<ul> <li>INAT</li> <li>Firewall</li> <li>System Management</li> </ul>	User Name:
Change Password	New Password:
<ul> <li>Upgrade Firmware</li> <li>Profiles Save</li> </ul>	Confirmed Password:
<ul> <li>Time Zone Setting</li> <li>UPnP Setting</li> </ul>	Apply Change Reset
Language Setting	
+ 🚞 Log and Status	
🚺 Logout	

Click on Apply Changes to save the setting data. Or you may click on Reset to clear all the input data.

### 7.4.2 Upgrade Firmware

This function can upgrade the firmware of the router. There is certain risk while doing firmware upgrading. Firmware upgrade is not recommended unless the significant faulty is found and published on official website. If you feel the router has unusual behaviors and is not caused by the ISP and environment. You can check the website

<u>http://www.sapido.com.tw/</u> to see if there is any later version of firmware. Download the firmware to your computer, click Browser and point to the new firmware file. Click Upload to upgrade the firmware. You can't make any move unless the machine reboot completely.

Firmware	• Upgrade			
This page allows you upgrade the Access Point firmware to new version. Please note, do not power off the device during the upload because it may crash the system.				
<u> </u>	· · · · · · · · · · · · · · · · · · ·			
Select File:	Browse			
Upload Res	et			

Note: 1. To prevent that firmware upgrading is interrupted by other wireless signals and causes failure.
We recommend users to use wired connection during upgrading.
2. The firmware upgrade will not remove your previous settings.

### Reset button:

On the front of this router, there is a reset button. If you cannot login the administrator page by forgetting your password; or the router has problem you can't solve. You can push the reset button for 5 seconds with a stick. The router will reboot and all settings will be restored to factory default settings. If the problem still exists, you can visit our web site to see if there is any firmware for download to solve the problem.



### 7.4.3 Profile Save

Users can create a backup file that contains current router settings. This backup file can be used to restore router settings. This is especially useful in the event you need to reset the router to its default settings.

Save/Reload Se	ttings	
	rrent settings to a file or reload the s, you could reset the current con	
Save Settings to File:	Save	
Load Settings from File:		Browse Upload
Reset Settings to Default:	Reset	

Item	Description
Save	Save to computer
Upload	Upload the file from PC to router
Reset	Reset to default

- 1. Save Configuration
- (1) Click Save

Save/Reload Settings			
	rrent settings to a file or reload the s s, you could reset the current config		
Save Settings to File:	Save		
Load Settings from File:		Browse Upload	
Reset Settings to Default:	Reset		

(2) Please click "Save" to save the configuration to your computer.

lo you v	want to save this file, or find a program online to open it?
न	Name: config.dat
	Type: Unknown File Type, 17.2KB
	From: 192.168.1.254
	Find Save Cancel

(3) Select the location which you want to save file, then click Save.

Save As						?
Save jn	🞯 Desktop		~	00	📂 🛄•	
My Recent Documents	My Documen My Compute My Network I	•				
My Documents						
My Computer	File <u>n</u> ame:	config.dat			<b>•</b> (	<u>S</u> ave
My Network	Save as type:	.dat Document			× (	Cancel

- b. Load configuration file
- (1) Click Browser

Save/Reload Settings		
	rrent settings to a file or reload the s s, you could reset the current config	<u> </u>
Save Settings to File: Load Settings from File: Reset Settings to Default:	Save Reset	Browse Upload

(2) Select configuration file then click Open

Look in:	🞯 Desktop		•	000	<b></b> .	
My Recent Documents Desktop Wy Documents My Computer	My Documen My Network P Catalyst Cont Catalyst C	Ylaces rol Center Utility				
My Network						
My Network Places	File name:	config		1	- [	Open

(3) Click Upload to upload configuration file to MB-1132.

Save/Reload Se	ttings
	arrent settings to a file or reload the settings from the file which is, you could reset the current configuration to factory default.
Save Settings to File: Load Settings from File:	Save ministrator\Desktop\config.dat Browse Upload
Reset Settings to Default:	Reset

- (4) After 90 seconds, MB-1132 will reboot automatically.
- (C) Reload factory default setting
- 1. Please click Reset

Save/Reload Settings						
	rrent settings to a file or reload the s s, you could reset the current config	<u> </u>				
Save Settings to File:	Save					
Load Settings from File:		Browse Upload				
Reset Settings to Default:	Reset					

(2) Please click OK to start reload factory default setting to MB-1132.

Message	e from webpage	X
2	Do you really want to reset the current settings to o	default?
	OK Cancel	

(3) After 90 seconds, MB-1132 will reboot automatically.

### 7.4.4 Time Zone Setting

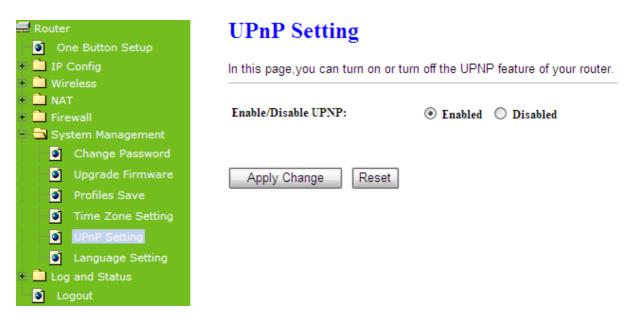
Users can synchronize the local clock on the router to an available NTP server (optional). To complete this setting, enable NTP client update and select the correct Time Zone.

🚍 Router 🍯 One Button Setup	Time Zone Setting	
<ul> <li>IP Config</li> <li>Wireless</li> <li>NAT</li> </ul>	You can maintain the system time by synchronizing with a public time server over the Internet.	
<ul> <li>Firewall</li> <li>System Management</li> <li>Change Password</li> <li>Upgrade Firmware</li> </ul>	Current Time : Yr 2010 Mon 9 Day 15 Hr 16 Mn 28 10 Copy Computer Time	Sec
<ul> <li>Profiles Save</li> <li>Time Zone Setting</li> </ul>	Time Zone Select : (GMT+08:00)Taipei	~
<ul> <li>UPnP Setting</li> <li>Language Setting</li> <li>Log and Status</li> </ul>	<ul> <li>Enable NTP client update</li> <li>Automatically Adjust Daylight Saving</li> </ul>	
Logout	NTP server : <ul> <li>192.5.41.41 - North America</li> <li>(Manual IP Setting)</li> </ul>	

Item	Description
Current Time	Users can input the time manually.
Time Zone Select	Please select the time zone.
Enable NTP client update	Please select to enable NTP client update or not.
Automatically Adjust Daylight Saving	Please select to enable Automatically Adjust Daylight Saving or not.
NTP Server	Please select the NTP server from the pull-down list, or you can enter the NTP server IP address manually.
Apply Changes & Reset & Refresh	Please click on Apply Changes to save the setting data. Or you may click on Reset to clear all the input data. Or you may click on Refresh to update the system time on the screen.

### 7.4.5 UPnP Setting

Universal Plug and Play (UPnP) is a standard of networking protocols promulgated by the UPnP Forum. The goals of UPnP are to allow devices to connect seamlessly and to simplify the implementation of networks in the home (data sharing, communications, and entertainment) and in corporate environments for simplified installation of computer components. MB-1132 supports UPnP function, and can cooperate with other UPnP devices. When you activate UPnP, please click My Network Places. Users will see an Internet Gateway Device icon. By click the icon, users can enter the GUI of the router. If you do not wish to use UPnP, you can disable it.



Enable/Disable UPnP: Select to enable or disable this function.

### 7.4.6 Language Setting

The MB-1132 provides 12 language for Web GUI. You can select the language interface from the dropdown list and by following steps.

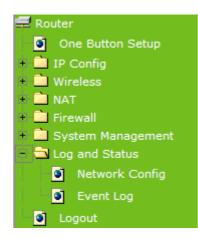


When you see the screen message change to the selected language, the setup is completed.

Sprache einstellen					
Auf dieser Seite können Sie d	die GUI-Setup-Sprache.				
Wählen Sie die Sprache:	Deutsch - Bewerben ändern				

### 7.5 Log & Status

The category provides Network Config and Event Log status for users to know the operation status.



### 7.5.1 Network Config

Users can check the Internet status under this category, including Firmware version, Wireless setting, Connecting Time, WAN, TCP/IP ...information.

<ul> <li>Router</li> <li>One Button Setup</li> <li>IP Config</li> <li>Wireless</li> <li>NAT</li> </ul>	<b>Network Config</b> This page shows the current status and some basic settings of the device.			
Firewall				
🔹 🧰 System Management	System			
1 Second Contract	Uptime	0day:0h: 10m: 45s		
🔮 Logout	Firmware Version	Ver1.0.1		
	WirelessConfiguration			
	Mode	AP		
	Band	2.4 GHz (B +G +N)		
	SSID	SAPIDO_Mobile_Hotspot		
	ChannelNumber	6		
	Encryption	Disabled		
	MAC Address	00:d0:41:c3:b5:e5		
	Associated Clients	0		
	LAN Configuration			
	Attain IP Protocol	Fixed IP		
	IP Address	192.168.1.1		
	Subnet Mask	255.255.255.0		
	Default Gateway	192.168.1.1		
	DHCP Server	Enabled		
	MAC Address	00:d0:41:c3:b5:e5		
	WAN Configuration			
	Attain IP Protocol	3.5G Disconnected		
	IP Address	0.0.0.0		
	Subnet Mask	0.0.0.0		
	Default Gateway	0.0.0.0		
	MAC Address	00:d0:41:c3:b5:e6		
	3.5G Configuration			
	Connect Speed	Auto Switch		
	Signal Strength			
	Network Name			
	WiMAX Configuration			
	Signal Strength			
	NetworkName			

### 7.5.2 Event Log

You may enable the event log feature here.

🚍 Router ) One Button Setup	System Log					
+ IP Config + Wireless	This page can be used to set remote log server and show the system log.					
+ 🛄 NAT + 🛄 Firewall + 🛍 System Management	Enable Log system all	wireless	DoS			
- 🖘 Log and Status	Enable Remote Log	Log Server IP Address:				
<ul> <li>Event Log</li> <li>Logout</li> </ul>	Apply Change					
				^		
				~		
	Refresh Clear					

Item	Description			
Enable Log	You may choose to enable Event Log or not.			
System all, Wireless, & DoS	Please select the event you want to record.			
Enable Remote Log	You may choose to enable the remote event log or not.			
Log Server IP Address	Please input the log server IP Address.			
Apply Changes & Refresh & Clear	Click on Apply Changes to save the setting data. Click on Refresh to renew the system time, or on Clear to clear all the record.			

\* The following figure is an example when users click Apply Changes to record the event log.

Enable Log		
🗹 system all	wireless DoS	
Enable Remote Log	Log Server IP Address:	
Apply Changes		
Conntrack		~
Oday 00:00:17 PPTP net	tfilter connection tracking: registered	-
Oday 00:00:17 PPTP net	tfilter NAT helper: registered	
Oday 00:00:17 ip_table:	es: (C) 2000–2002 Netfilter core team	
Oday 00:00:17 NET4: Un	nix domain sockets 1.0/SMP for Linux NET4.0.	
Oday 00:00:17 NET4: Et1	thernet Bridge 008 for NET4.0	
-	unted root (squashfs filesystem) readonly.	
-	unused kernel memory: 64k freed	
Oday 00:00:17 mount /p		
Oday 00:00:17 mount /v		
-	ethO entered promiscuous mode	
-	vlanO entered promiscuous mode	
-	-	≣
-	reasonable target TSSI 0	
luday uuruurl7 brll: nor	ct 2(wlan0) entering listening state	

#### Logout 7.6

This function logs out the user. Click on Apply Change to logout.

### 🚍 Router One Button Setup 🔹 🧰 IP Config 🗉 🛄 Wireless 🗄 🛄 NAT 🗉 🛄 Firewall 🗉 🧰 System Management 🗉 🚞 Log and Status Logout

# Logout

This page is used to logout.

### Do you want to logout ?

Apply Change

# **Chapter 8 DDNS Service Application**

DDNS is a service changes the dynamic IP to the static IP. The settings of DDNS can solve the problem of being given the different IP by router every time. After setting the Router, your host name would correspond to your dynamic IP. Moreover, via the host name application, it could be easier for you to use FTP, Webcam and Printer remotely.

Dynamic DNS allows you to make an assumed name as a dynamic IP address to a static host name. Please configure the dynamic DNS below. Please select **Dynamic DNS** under the **IP Config** folder, and follow the instructions below to enter the **Dynamic DNS** page to configure the settings you want.

If you don't have a DDNS account, please follow the steps to complete your DDNS with Dynamic IP settings.

**Step 1.** First access the Internet and fill <u>http://www.dyndns.com/</u> into the address field of your web browser, then click <u>Create Account</u>.

		DNS & Domains	Email Services	Performance & Security
IC Network Services Inc.			at are you looki	ng for? Search
Services & Pricing	Support			Have an account? Sign
Want to take you	r Dynamic DNS serv	vice to the next level? Get <u>Dynamic DNS</u>	Pro. Username	
Add New Hostnam	e		Password	
			Log in	
S. S		10 10 10 10 10 10 10 10 10 10 10 10 10 1	The set of	
	Want to take you Add New Hostnam Note: You currently don't h	Services & Pricing Support Want to take your Dynamic DNS ser Add New Hostname Note: You currently don't have any active Dyna	Services Inc.       When         Services & Pricing       Support         Want to take your Dynamic DNS service to the next level? Get Dynamic DNS         Add New Hostname         Note: You currently don't have any active Dynamic DNS Pro in your account. You canned	Services Inc.       What are you looking         Services & Pricing       Support         Want to take your Dynamic DNS service to the next level? Get Dynamic DNS Pro.       Username         Add New Hostname       Password         Note: You currently don't have any active Dynamic DNS Pro in your account. You cannot us Paying for an Dynamic DNS Pro will make this form fully functional and will add several oth       Functional Part of the several oth

Create an accou Username: Password: Confirm password: Email:	sapido_tw				Already Registered? Username Password
Confirm email: Subscribe to:	sapido@sapid DynDNS.co (1 or 2 per )	o.com.tw m newsletter			Log in Eorgot your password?
Security Image:	3 2 m the above ima				CERTIFIED PRIVACY
				te Account	
	IS.com		User	name	Password Log in Log in
	About	Services	Account	Support	News

Step 2. Fill in the form as required, and then click on Create Account button.

# One more step to go...

We've sent an email to joanne@sapido.com.tw, to verify your account. Please check your inbox and click on the confirmation link.

If you do not receive the email in the next few minutes you can try resending it.

Thanks for choosing DynDNS.com!



**Step 3.** When you got this account created message, close it, and check your mailbox. You would get a mail from DynDNS website.

Step 4. Click on the indicated address within your mail to confirm.

Your DynDNS.com Account ' sapido ' has been created. You need to visit the confirmation address below within 48 hours to complete the account creation process:

https://www.dyndns.com/account/confirm/BDJZJY1WzdYnrQBVEP1bcQ

Our basic service offerings are free, but they are supported by our paid services. See <a href="http://www.dyndns.com/services/">http://www.dyndns.com/services/</a> for a full listing of all of our available services.

If you did not sign up for this account, this will be the only communication you will receive. All non-confirmed accounts are automatically deleted after 48 hours, and no addresses are kept on file. We apologize for any inconvenience this correspondence may have caused, and we assure you that it was only sent at the request of someone visiting our site requesting an account.

O DynDNS.com			Userr	name	Password?	rd	Log in		
		About	Services	Accoun	t	Support	News		
My Account	<b>~</b>	Account	t Confirme	ed					
Create Account		Account							

### Step 5. Click on login.

### Step 6. Click Add New Hostname.



**Step 7.** Put in your favorite hostname and service type, and then click **Create Host** after finished.

Hostname:	sapido . dyndns.org 🛩
Wildcard Status:	Disabled [Want Wildcard support?]
Service Type:	<ul> <li>Host with IP address [?]</li> <li>WebHop Redirect [?]</li> <li>Offline Hostname [?]</li> </ul>
IP Address:	Your current location's IP address is 220.133.247.40
<u>IIL</u> :	60 s. Default dynamic DNS value 💌
Mail Routing:	Yes, let me configure Email routing. [?]

What do you want to use this host for? Select services and devices you would like to use with this hostname.					
Work From Home Office or VPN:					
vpn remote file access remote desktop mail server web server					
chat server ftp backup ssh database voip					
Hosting and Design For Web Sites and Blogs blog gallery wiki portfolio ecommerce web page					
Remote Access For Devices:					
dvr   webcam   data storage   cctv   printer   alarm and security					
thermostat weather station game server home automation					
Add To Cart					

### **Step 8.** Your hostname has been created when you see the following page.

Your cart contains  $\ensuremath{\textit{free services only}}$  . You will not be asked for credit card information.

두 Upgrade Options					
<ul> <li>Free accounts allow only five Dynamic DNS hosts.</li> <li>To add more and enjoy <u>additional benefits</u> for only \$15.00 per year, <u>purchase Dynamic DNS Pro</u> .</li> <li>To get Dynamic DNS for <b>your own domain</b>, use <u>Custom DNS</u>.</li> </ul>					
Dynamic DNS Hosts					
sapido.dyndns.org	-	remove	\$0.00		
Please enter coupons	in the box below and click "Add Coupon".	Sub-Total:	\$0.00		
		Order	Total: \$0.00		

Would you like to print an estimate/quote?

Next	>>
11000	

### Step 9. Click "Activate Service"

### **Free Services Checkout**

Once you have confirmed the contents of your cart your services will be instantly activated.

	Service	Period	Price
Dynamic DNS Hosts	ST 10-125 (\$10)		
<u>sapido.dyndns.org</u> +		-	\$0.00
		Sub-Total:	\$0.00
		Activate S	ervices >>

#### Step 10. Finish

Logged In User: Sapido_tv Dynamia Network Services Inc.								
		About	Services	Accou	unt	Support	News	
My Account	Hos	t Service:	5					<u>↑ My Services</u>
My Services Dynamic DNS Pro Internet Guide SLA	sapido.dyndns.org successfully activated.							
	Hostname		<u>Service</u>	<u>Details</u>			Last Updated	
Premier Support	<u>sapido</u>	o.dyndns.org		Host	220,13	3.247.40		Mar. 31, 2010 10:24 PM
Zone Level Services Domain registration and transfer, DNS hosting, MailHop services	<u>» Host</u>	<u>t Update Logs</u>						Add New Host
Host Services Dynamic DNS hosts, WebHop URL Forwarding								

# Chapter 9 Q & A

### 9.1 Installation

#### 1. Q: Where is the xDSL Router installed on the network?

A: In a typical environment, the Router is installed between the xDSL line and the LAN. Plug the xDSL Router into the xDSL line on the wall and Ethernet port on the Hub (switch or computer).

### 2. Q: Why does the throughput seem slow?

A: To achieve maximum throughput, verify that your cable doesn't exceed 100 meter. If you have to do so, we advise you to purchase a bridge to place it in the middle of the route in order to keep the quality of transmitting signal. Out of this condition you would better test something else.

- Verify network traffic does not exceed 37% of bandwidth.
- Check to see that the network does not exceed 10 broadcast messages per second.
- Verify network topology and configuration.

### 9.2 LED

### 1. Why doesn't MB-1132 power up?

A: Check if the output voltage is suitable, or check if the power supply is out of order.

# 2. The Internet browser still cannot find or connect to MB-1132 after verifying the IP address and LAN cable, the changes cannot be made, or password is lost.

A: In case MB-1132 is inaccessible; you can try to restore its factory default settings. Please press the "Reset" button and keep it pressed for over 7 seconds and the light of STATUS will vanish. The LEDs will flash again when reset is successful.

### 3. Why does MB-1132 shut down unexpectedly?

A: Re-plug your power adapter. Then, check the STATUS indicator; if it is off, the internal flash memory is damaged. For more help, please contact with your provider.

### 9.3 IP Address

### 1. Q: What is the default IP address of the router for LAN port?

A: The default IP address is 192.168.1.1 with subnet mask 255.255.255.0

### 2. Q: I don't know my WAN IP.

- A: There are two ways to know.
  - Way 1: Check with your Internet Service Provider.
  - Way 2: Check the setting screen of MB-1132. Click on Status & Log item to select Network Configuration on the Main Menu. WAN IP is shown on the WAN interface.

### 3. How can I check whether I have static WAN IP Address?

A: Consult your ISP to confirm the information, or check Network Configuration in MB-1132's Main Menu.

# 4. Will the Router allow me to use my own public IPs and Domain, or do I have to use the IPs provided by the Router?

A: Yes, the Router mode allows for customization of your public IPs and Domain.

### 9.4 OS Setting

### 1. Why can't my computer work online after connecting to MB-1132?

- A: It's possible that your Internet protocol (TCP/IP) was set to use the following IP address. Please do as the following steps. (Windows 2000 & XP) Start > Settings > Network and Dial-up Connections > double click on Internet Protocol(TCP/IP) > select obtain IP address automatically > Click on OK button. Then, open Internet browser for testing. If you still can't go online, please test something else below.
  - Verify network configuration by ensuring that there are no duplicate IP addresses.
  - Power down the device in question and ping the assigned IP address of the device. Ensure no other device responds to that address.
  - Check that the cables and connectors or use another LAN cable.

### 2. Q: Why can't I connect to the router's configuration utility?

A: Possible Solution 1: Make sure that your Ethernet connect properly and securely. Make sure that you've plugged in the power cord.

Possible Solution 2: Make sure that your PC is using an IP address within the range of 192.168.1.2 to 192.168.1.254. Make sure that the address of the subnet mask is 255.255.255.0. If necessary, the Default Gateway data should be at 192.168.1.1. To verify these settings, perform the following steps:

### Windows 2000, or XP Users:

- 1. Click on Windows **Start** > click on **Run** > input **cmd** > click on **OK** button.
- 2. At the DOS prompt, type ipconfig/all.
- Check the IP Address, Subnet Mask, Default Gateway data. Is this data correct? If the data isn't correct. Please input ipconfig/release > press Enter > input ipconfig/renew > press Enter.

Possible Solution 3: Verify the connection setting of your Web browser and verify that the HTTP Proxy feature of your Web browser is disabled. Make these

verifications so that your Web browser can read configuration pages inside your router. Launch your Web browser. **Internet Explorer Users:** 

- 1. Click on Tools > Internet Options > Connections tab.
- 2. Select **never dial a connection**, click on **Apply** button, and then click on **OK** button.
- 3. Click on **Tools** and then click on **Internet Options**.
- 4. Click on **Connections** and then click on **LAN Settings**.
- 5. Make sure none of the check boxes are selected and click on **OK** button.
- 6. Click on OK button.

### Netscape Navigator Users:

- 1. Click on **Edit** > **Preferences** > double-click **Advanced** in the Category window.
- 2. Click on **Proxies** > select **Direct connection to the Internet** > click on **OK** button.
- 3. Click on **Edit again** and then click on **Preferences**.
- 4. Under category, double-click on **Advanced** and then click on **Proxies**.
- 5. Select Direct connection to the Internet and click on OK button.
- 6. Click on **OK** button.

# 3. Q: Web page hangs, corrupt downloads, or nothing but junk characters is being displayed on the screen. What do I need to do?

A: Force your NIC to 10Mbps or half duplex mode, and turn off the "Auto-negotiate" feature of your NIC as a temporary measure. (Please look at the Network Control Panel, in your Ethernet Adapter's Advanced Properties tab.)

### 4. Q: Why can't I connect to the Web Configuration?

A: you can remove the proxy server settings in your web browser.

### 9.5 MB-1132 Setup

### 1. Q: Why does MB-1132's setup page shut down unexpectedly?

A: If one of the pages appears incompletely in MB-1132's setup pages, please click on Logout item on the Main Menu before shutting it down. Don't keep it working. Then, close Internet browser and open it again for going back to the previous page.

# 2. Q: Why can't my USB devices and LAN ports work properly after setting the DHCP?

- A: There are two rules over here.
  - Rule1: After connecting USB devices, please reboot your Router.
  - Rule2: Before finishing the DHCP setup, please don't connect any computer to LAN ports, because the conflict of having the same IP may occur and cause some computers a lot of trouble.

# *XNotice: Make sure that you always click on the Apply button after configuring each setting. And in order to let other LAN ports work properly, please reboot your PC.*

### 3. Q: I don't know how to configure DHCP.

A: DHCP is commonly used in the large local network. It allows you to manage and distribute IP addresses from 2 to 254 throughout your local network via MB-1132. Without DHCP, you would have to configure each computer separately. It's very troublesome. Please Open Internet browser > Input 192.168.1.1 in the website blank field > Select DHCP Server under the IP Config Menu.

### Q: How do I upgrade the firmware of MB-1132?

A: Periodically, a new Flash Code is available for MB-1132 on your product supplier's website. Ideally, you should update MB-1132's Flash Code using Firmware Upgrade on the System Management menu of MB-1132 Settings.

### 4. Q: My MB-1132 cannot connect to the ISP?

- A: There are three possible solutions.
  - 1. Check the Cable/XDSL modem is power on.
  - 2. Check the Cable/XDSL link light is on to verify a good physical connection.
  - Check the WAN port LED to verify if the Cable/XDSL modem is connected to the router:

If your ISP Login method is following, please make sure the username and password are correct or not.

If your ISP is using dynamic IP addressing (DHCP) then the DHCP protocol does not have the authentication feature. Some Cable service providers often use the following to determine user's identification.

- 5. Q: Why is that I can ping to outside hosts, but cannot access Internet websites?
  - A: Check the DNS server settings on your PC. You should get the DNS servers settings from your ISP. If your PC is running a DHCP client, remove any DNS IP address setting. As the router assign the DNS settings to the DHCP-client-enabled PC.

### 6. Q: MB-1132 couldn't save the setting after click on Apply button?

A: MB-1132 will start to run after the setting finished applying, but the setting isn't written into memory. Here we suggest if you want to make sure the setting would be written into memory, please reboot the device via **Rebo**ot under **System Management** directory.

### 9.6 Wireless LAN

### 1. Q: Why couldn't my wireless notebook work on-line after checking?

A: Generally, Wireless networks can sometimes be very complicated to set up, particularly if you're dealing with encryption and products from different vendors. Any number of variables can keep your workstations from talking to each other. Let's go over some of more common ones.

For starters, verify that your router and your workstation are using the same SSID descriptions. SSID acts as a password when a mobile device tries to connect to the wireless network. The SSID also differentiates one WLAN from another, so all access points and all devices attempting to connect to a specific WLAN must use the same SSID. A workstation will not be permitted to connect to the network unless it can provide this unique identifier. This is similar to the function of your network's Workgroup or Domain name.

When you're experiencing conductivity problems, it is always best to keep things simple. So next you are going to do is that, please disable any WEP encryption you might have configured.

Successful implementation of encryption also includes the use of a shared key. A HEX key is the most common, but other formats are also used. This key identifies the workstation to the router as a trusted member of this network. Different manufacturers can implement this key technology in ways that might prevent them from working correctly with another vendor's products. So pay attention to detail is going to be the key to a successful installation.

Next make sure the router and the NIC are configured to use the same communications channel. There are normally 11 of them, and the default channel can also vary from vendor to vendor. You might also want to confirm that the router has DHCP services enabled and an address pool configured. If not, the NIC won't be able to pick up an IP address. I have run across a few access points that offer DHCP services but do not assign all of the needed IP information to the NIC. As a result, I was able to connect to the network, but could not browse the web. The point is, don't assume anything. Verify for yourself that all of the required settings are being received by the workstation.

Finally, you might want to keep the system you're trying to configure in the same room as the router, at least during the initial configuration, in order to minimize potential interference from concrete walls or steel beams.

### 2. Q: My PC can't locate the Wireless Access Point.

A: Check the following:

- Your PC is set to Infrastructure Mode. (Access Points are always in Infrastructure Mode.)
- The SSID on your PC and the Wireless Access Point are the same. Remember that the SSID is case-sensitive. So, for example "Workgroup" does NOT match "workgroup".
- Both your PC and the Wireless Access Point must have the same setting for WEP. The default setting for the Wireless Router is disabled, so your wireless station should also have WEP disabled.
- If WEP is enabled on the Wireless Router, your PC must have WEP enabled, and the key must match.
- If the Wireless Router's Wireless screen is set to Allow LAN access to selected Wireless Stations only, then each of your Wireless stations must have been selected, or access will be blocked.
- To see if radio interference is causing a problem, see if connection is possible when close to the Wireless Access Point. Remember that the connection range can be as little as 100 feet in poor environments.

### 3. Q: Wireless connection speed is very slow.

- A: The wireless system will connect at highest possible speed, depending on the distance and the environment. To obtain the highest possible connection speed, you can experiment with following:
  - Access Point location: Try adjusting the location and orientation of the Access Point.
  - Wireless Channel: If interference is the problem, changing to another channel may show a marked improvement.
  - Radio Interference: Other devices may be causing interference. You can experiment by switching other devices off, and see if this helps. Any "noisy" devices should be shielded or relocated.
  - RF Shielding: Your environment may tend to block transmission between the wireless stations. This will mean high access speed is only possible when close to the Access Point.

### 4. Q: Some applications do not run properly when using the Wireless Router.

- A: The Wireless Router processes the data passing through it, so it is not transparent. Use the Special Application feature to allow the use of Internet applications which do not function correctly. If this does solve the problem, you can use the DMZ function. This should work with almost every application, but:
  - It is a security risk, since the firewall is disabled.
  - Only one (1) PC can use this feature.

### 5. Q: I can't connect to the Wireless Router to configure it.

A: Check the following:

- The Wireless Router is properly installed, LAN connections are OK, and it is powered ON.
- Make sure that your PC and the Wireless Router are on the same network segment.
- If your PC is set to "Obtain an IP Address automatically" (DHCP client), restart it.
- If your PC uses a Fixed (Static) IP address, make sure that it is using an IP Address within the range 192.168.1.129 to 192.168.1.253 and thus compatible with the Wireless Router's default IP Address of 192.168.1.254. Also, the Network Mask should be set to 255.255.255.0 to match the Wireless Router. In Windows, you can check these settings by using Control Panel ~ Network to check the Properties for the TCP/IP protocol.

# 6. Q: The WinXP wireless interface couldn't communicate the WEP with MB-1132's wireless interface.

A: The default WEP of WinXP is Authentication Open System - WEP, but the WEP of MB-1132 is only for Shared Key - WEP, it caused both sides couldn't communicate. Please select the WEP of WinXP from Authentication Open System to Pre-shared Key - WEP, and then the WEP wireless interface between WinXP and MB-1132 would be communicated.

### 9.7 Support

### 1. Q: Why can't the NTFS hard disk be used with MB-1132?

- A: MB-1132 doesn't support the NTFS hard disk. It only supports EXT3 and FAT32 file systems.
- 2. Q: What is the maximum number of IP addresses that the XDSL Router will support?

A: The Router will support to 253 IP addresses with NAT mode.

### 5. Q: Is the Router cross-platform compatible?

A: Any platform that supports Ethernet and TCP/IP is compatible with the Router.

### 9.8 Others

### 1. Q: Why can't I receive corrupted FTP downloads?

A: If you are experiencing corrupted files when you download a file with your FTP client, try using another FTP program.

### 2. Q: Why does the router dial out for PPPoE mode very often?

A: Normally some of game, music or anti-virus program will send out packets that trigger the router to dial out, you can close these programs. Or you can set the idle time to 0, then control to dial out manually.

### 3. Q: What can I do if there is already a DHCP server in LAN?

A: If there are two DHCP servers existing on the same network, it may cause conflict and generate trouble. In this situation, we suggest to disable DHCP server in router and configure your PC manually.

### Chapter 10 Appendices

### **10.1 Operating Systems**

- 1. Microsoft : Windows 2000, XP, Vista, Win 7 and the following related versions.
- 2. Apple : Mac OS X 10.4.7, Leopard and the following related versions.
- 3. Linux : Redhat 9, Fedora 6 & 7, Ubuntu 7.04 and the following related versions.

### 10.2 Browsers

- 1. Internet Explorer ver. 6 and 7 and the following related versions.
- 2. FireFox ver. 2.0.0.11 and the following related versions.3.
- 3. Safari ver. 3.04 and the following related versions.

### **10.3** Communications Regulation Information

Should any consumers need to learn more information, services and supports, please contact the supplier of your product directly.