

WELCOME

Thank you for choosing the Virgin Mini WiFi Modem. To get the most from your device and to keep it in the best condition please read this manual thoroughly.

The following parts are supplied in the box:

Parts	Quantity
Wireless Router	1
AC Charger	1
USB charging cable	1
Quick Start User Guide	1

Quick Reference Section

Browser home page	http://virginmf62.com or http://192.168.0.1 (via wireless connection only)
Administrator Password	admin
Default SSID	Virgin Wifi xxxxxx. Details printed under your battery.
Default Security Key	10 characters which are case sensitive . Details printed under your battery.
Restore defaults	From the powered up state: Press & hold the power key and the WPS key simultaneously. All passwords and settings will be restored to defaults and the router will reboot. From the browser interface: Settings > Advanced > Restore

IMPORTANT: Security Settings - SSID and Wi-Fi Security Key (WPA Key)

- The default security settings are unique for your device and are printed on the sticker underneath the battery.
- The Security Key is case sensitive and should be entered exactly as shown.
- You need this information to connect to your Wi-Fi modem.
- You can change the SSID and Security Key to your own preferences. If you have changed your password and forgotten it then **Restore defaults**.

Contents

1 General Information	3
2 Getting started	5
2.1 Insert your USIM	6
2.2 Charge your Wireless Router	7
2.3 Insert a microSD(HC) [™] memory card (Optional Accessory)	7
2.4 Low Power Mode (Standby Mode).....	8
2.5 Network Lock.....	8
2.6 Connecting an External Antenna.....	8
3 Using the Wireless Router	9
3.1 Preparation	9
3.2 Login to the Web based User Interface	9
3.3 Quick Setup	10
3.4 WAN Connection.....	11
3.5 Phone Book	11
3.6 Settings Settings can only be changed with the device disconnected.	11
3.7 Warranty and Support Service	14
4 Troubleshooting	15
5 Technical Specifications	16
6 Safety Precautions	17

1 General Information

Computer Requirements

The router will operate with any PC, MAC or other device that supports Wi-Fi. ZTE cannot guarantee that third party hardware or software is compatible with this product.

Warnings and Safety Notices

Please read all the safety notices before using this device. Do not use the device near fuel or chemicals or in any prescribed area such as service stations, refineries, hospitals and aircraft. Obey all warning signs where posted.

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No part of this publication may be excerpted, reproduced, translated or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without the prior written permission of ZTE Corporation.

The pictures, symbols and contents in this manual are for reference only. They might not be completely identical with your product.

ZTE Corporation operates a policy of continuous development. ZTE Corporation reserves the right to make changes and improvements to the products described in this document without prior notice.

Limitation of Liability

ZTE shall not be liable for any loss of profits or indirect, special, incidental or consequential damages resulting from or arising out of or in connection with using this product, whether or not ZTE had been advised, knew or should have known the possibility of such damages. The user should refer to the enclosed warranty card for full warranty and service information.

RF Safety Information

The router has an internal antenna. For optimum performance with minimum power consumption do not shield the device or cover with any object. Covering the antenna affects signal quality, may cause the router to operate at a higher power level than needed, and may shorten battery life.

Radio Frequency Energy

Your wireless router is a low-power radio transmitter and receiver. When switched on it intermittently transmits radio frequency (RF) energy (radio waves). The transmit power level is optimized for best performance and automatically reduces when there is good quality reception. Maximum power is only used at the edge of network coverage so under most circumstances the power output is very low. Under poor network conditions the router transmits at a higher power, may get hot and have a significantly shorter battery life.

Declaration of Conformity – Specific Absorption Rate (SAR)

We declare that the product detailed in this manual, and in combination with our accessories, conform with the essential requirements of The Radio Communications Standard (Electro-magnetic Radiation Human Exposure) 2003 and the Australian Communications and Media Authority Section 376 of the Telecommunications Act 1997.



RoHS Declaration (Restriction of Hazardous Substances)

ZTE declares that the Wireless Router is free from hazardous materials and complies with EU directive 2002/95/EC (commonly known as the RoHS Directive) and the amendments.

Wi-Fi Alliance Interoperability Certification



The Wireless Router has successfully completed the Wi-Fi Alliance interoperability testing and is compatible with any wireless device bearing the logo as shown.

The model number is MF62.

Additional information is available at http://www.wi-fi.org/certification_programs.php

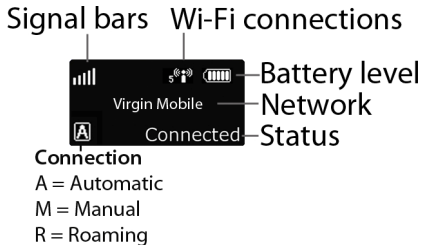
 is a registered trademark of SD Card Association.

2 Getting started

Virgin Mini WiFi Modem



1. Power Key - Press and hold the for three seconds to switch on or off.
2. microSD™ slot for expandable memory up to 32GB
3. WPS – Press to enable Wi-Fi Protected Setup authentication process.
4. USB charging port - Connect to your PC or AC charger for battery charging.
5. TS9 Antenna port – Connect an external antenna to boost your signal.
6. Display Panel:

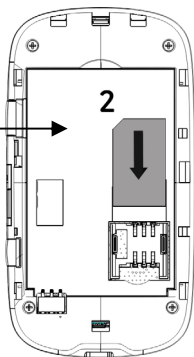


2.1 Insert your USIM

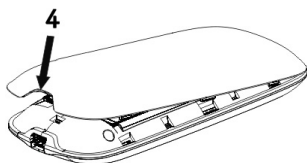
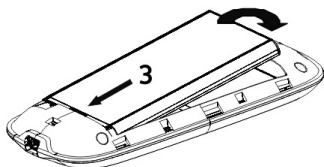
1. Slide the back cover down to open.
2. Insert the (U)SIM card with the gold contacts facing down and the bevelled edge on the left hand side as shown:

TIP

The SSID and password settings are printed in the battery compartment.



3. Insert the battery with the contacts located against the gold springs:



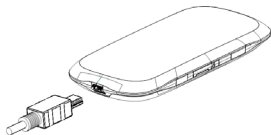
4. Line up the back cover and slide back into place.
5. Press and hold the power key for 3 seconds to switch the router on.

2.2 Charge your Wireless Router

1. Insert the charger lead carefully into the socket at the base of the router.
2. The plug only fits one way. Do not use excessive force to insert the plug.
3. Check the plug is the right way round and insert it gently.
4. Insert the other end of the charger lead (Standard USB) into the AC charger or a USB socket on your computer.

TIP

Be careful to avoid tripping or pulling on the lead whilst plugged in.

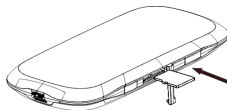
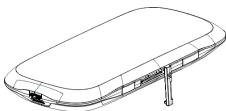


Please note: Under conditions of extended use, low coverage, high temperature or maximum data throughput, the battery may not fully charge, even though the router is connected to the AC charger. For these situations it is recommended that, in addition to the charger being connected, the battery is fully charged before extended data transfers commence.

2.3 Insert a microSD(HC)[™] memory card (Optional Accessory)

Use the device as portable USB storage drive with up to 32GB microSD(HC)[™]:

- Open the memory card slot cover on the right hand side of the router.
- Insert the microSD(HC)[™] card and press gently to click into place:



- Close the memory card slot cover
- Connect the wireless router to your computer using the USB cable supplied - the memory card will display as an external drive.

2.4 Low Power Mode (Standby Mode)

With no Wi-Fi device connected the wireless router will go into low power mode after 10 minutes.

- The display will extinguish, the Wi-Fi SSID broadcast will switch off.
- Press the Power or WPS key to exit from Low Power Mode.
- To operate as 'always on' make sure there is a Wi-Fi device connected that does not itself go into sleep mode.

Note: If the device is powered off and charging (power lead connected) then the charging animation will stop when fully charged.

2.5 Network Lock

- Your wireless router is locked to the Virgin network.
- When you insert a non-Virgin SIM card you are presented with unlock instructions in the web interface (<http://virginmf62.com>)
- Contact Virgin to obtain your 16 digit unlock code.
- An unlocking fee may apply.
- 5 incorrect attempts will block the unlock process and the device will then only work with a Virgin SIM card.
- Contact Virgin for more information.

2.6 Connecting an External Antenna

An external antenna may be recommended in areas of lower coverage to improve your modem performance. TS9 termination antennas are available from various retailers. Insert the connector carefully to avoid damage.

3 Using the Wireless Router



3.1 Preparation

Before using the wireless router, make sure that:

- The (U)SIM card is inserted.
- The device is On and the display is visible.
- Search for available Wireless Networks on your computer and connect.

Example for Windows XP: Start > Control Panel > Network and Sharing Center

> Select the Virgin Mobile Hotspot Wireless Network and click **Connect**.


- Enter the default security key **exactly** as shown on the sticker under the battery. Your security key is case sensitive, be sure to use the correct text.

3.2 Login to the Web based User Interface

The router will work out of the box using the default settings. If you wish to customise any settings please log onto the router using a standard browser:

- Use your computer to Search and Connect to the Virgin Mobile Hotspot.
- Open a web browser and enter <http://virginmf62.com> in the address bar.
- Enter 'admin' into the administrator password box then press **Login**

Language : English



Administrator : Login

UMTS Virgin Mobile Disconnected

WAN Information

- Network Provider YES OPTUS
- Network Type UMTS
- Connection Status Disconnected
- IP Address
- Primary DNS
- Secondary DNS

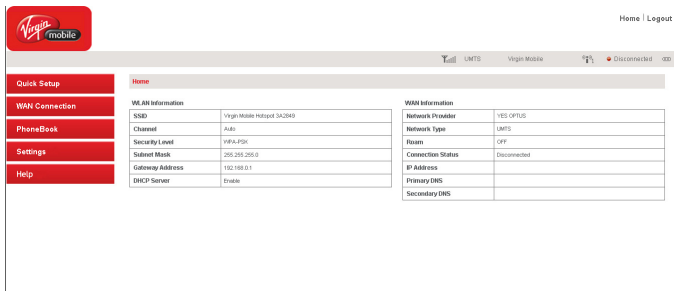
WLAN Information

- SSID Virgin Mobile Hotspot 3A2849
- Channel Auto
- Security Level WPA-PSK
- Gateway Address 192.168.0.1
- Subnet Mask 255.255.255.0
- DHCP Server Enable

Device Information

- Software Version T02
- Firmware Version T02
- PIN Status Disable

When you login, the Home Page is displayed:



Home | Logout

UMTS Virgin Mobile Disconnected

Quick Setup

WAN Connection

PrimeBack

Settings

Help

Home

WAN Information

SSID	Virgin Mobile Hotspot 3A2849
Channel	Auto
Security Level	WPA-PSK
Gateway Address	192.168.0.1
Subnet Mask	255.255.255.0
DHCP Server	Enable

WAN Information

Network Provider	YES OPTUS
Network Type	UMTS
Roaming	OFF
Connection Status	Disconnected
IP Address	
Primary DNS	
Secondary DNS	

3.3 Quick Setup

Step through the Quick Setup wizard if you wish to change the defaults:

APN Auto or Manual	Only change if advised by your service provider
SSID Name	Name of your Wi-Fi network
SSID Enabled	Select whether to broadcast your Wi-Fi network name
Encryption mode	Select your required mode. No need to change
WPA Key	Define your own access key if required

3.4 WAN Connection

Always On	The modem will connect to the <u>cellular</u> network automatically. Always on does not refer to the Wi-Fi connection status. To operate as 'always on' for Wi-Fi make sure there is a Wi-Fi device connected that does not itself go into sleep mode.
Manual	Select Manual mode to manually control when the unit connects to the cellular data service. Select Connect or Disconnect and press Apply to make the selected action.

3.5 Phone Book

Device	View Contacts saved to your Device
SIM Card	View Contacts saved on the SIM card
Add New	Add a new contact, select the Save location to be the Device or the SIM card.
Edit	Edit a Contact to save it to the SIM card or Device

3.6 Settings

Settings can only be changed with the device **disconnected**.

3G Settings

Wireless info	View network status
Network Select	Select your preferred network mode. Only change if instructed by your service provider.
APN Setting	Select or change your APN settings. Only change if instructed by your service provider.

Wi-Fi Settings

Station List	View number of connected Wi-Fi devices
Basic	Configure Wi-Fi mode, SSID and SSID Broadcast settings
Security	Select or change your Wi-Fi security mode and password.
WPS	WPS uses a PIN number to share with compatible devices.

Wi-Fi Security Settings

- **OPEN:** Anyone can connect to your network without authentication.
- **SHARED:** WLAN clients who have the same WEP key as the wireless router can access the wireless network.
- **WPA-PSK:** WPA Pre-Shared Key, plain text with at least 8 characters.
- **WPA2-PSK:** A more secure version of WPA using the 802.11i standard.
- **WPA-PSK/WPA2-PSK:** Apply both the WPA-PSK and WPA2-PSK scheme.
- **WEP Keys:** Up to four keys can be set. The primary key is the only key in use at a given time. Whatever keys you enter for an access point, you must also enter the same keys for the clients in the same order. In other words, WEP key 1 on the AP must match WEP key 1 on the client.
- If the Authentication type is OPEN or SHARED, the bottom part of the configuration page displays further parameters.
- If the Authentication type is WPA-PSK , WPA2-PSK or WPA-PSK/WPA2-PSK , the bottom part of the configuration page displays the WPA parameters.
- **WPA Algorithm:** TKIP, AES or AUTO.
- **Pass phrase:** You can input a pass phrase encryption key format
- Click **Apply** to save your configuration.

Firewall Settings

Firewall settings are intended for advanced users and network administrators. There is usually no need to apply any settings in a home environment.

Note: You can set up to a maximum of 10 filter items for **MAC/IP/Port Filtering** and **Port Forwarding**.

MAC / IP / Port filtering

- **Default Policy:** Set how to handle the packet if none of the rules match.
- **MAC address:** Set the MAC address to be filtered.
- **Destination IP Address:** Set the destination IP address to be filtered.
- **Source IP Address:** Set the source IP address to be filtered.
- **Protocol:** Set which protocol to be used for filtering.
- **Destination Port Range:** Set the destination port numbers to be filtered
- **Source Port Range:** Set the source port numbers to be filtered.
- **Action:** Set how to handle the detected packet.

Note: Filtering rules are matched one by one, if a provision is met it will not continue to match against the other rules set.

Port Forwarding Settings

You can set up virtual servers to provide internet services. Select **Firewall >**

Port Forwarding > Enable to configure the Virtual Server Settings.

- **IP Address:** Set the IP address for the virtual server.
- **Port Range:** Set the port numbers for the virtual server.
- **Protocol:** Set the protocol for the virtual server.

Advanced Settings

Status	View your device firmware and IMEI information
Management	Set the Administrator password, default is 'admin'
Restore	Press to restore device to factory defaults
PIN Management	Set or change your SIM PIN status
Router	Set the IP address range and DHCP settings for your router

3.7 Warranty and Support Service

- All calls and support for PIN numbers, SIM card registration, account and billing information, network services and other general enquiries should be directed to your Service Provider.
- See your warranty card for warranty and service information.
- View Frequently Asked Questions on line: <http://www.zte.com.au/>

4 Troubleshooting

Symptoms	Possible Problems/ Solutions
I cannot access the internet at all.	<p>Check the LCD display which shows the number of active connections. If this is 0 or x then Wi-Fi is not connected. Verify your password is correct.</p> <p>Make sure your SIM card is inserted correctly.</p> <p>Check you have network coverage in your area.</p> <p>Check that your SIM card is active and enabled with data services.</p> <p>Please wait 1 - 2 minutes for the router to initialize.</p>
The download or upload speeds are very slow.	The speed is dependent on signal strength. Check your signal strength and network type.
The signal strength is always low.	<p>This indicates poor reception. Try moving the router to another location nearer the window.</p> <p>You can purchase an external antenna with connector type TS9 to improve your signal strength.</p>
I secured my router and have lost my password(s).	<p>Reset your router to factory defaults to erase all stored passwords and encryption settings.</p> <p>From the powered up state:</p> <p>Press the power key and the WPS key simultaneously.</p>
My battery has not charged while in use and connected to the charger.	In low coverage or high data transfer modes the internal temperature of the device can rise above 45°C. In these conditions the battery cannot be charged due to safety limits with Li-ion battery technology.
My Wi-Fi device goes to sleep and disconnects.	<p>This is dependant on the other devices, ie your Wi-Fi clients. If the Wi-Fi client (PC or other device) has a Wi-Fi sleep policy then Wi-Fi signals are switched off after a period. With no active Wi-Fi connections your wireless router will go into low power mode.</p> <p>To maintain an 'always on' service make sure you have a Wi-Fi device connected to your router.</p>

5 Technical Specifications

- **Network & Frequency Band:** WCDMA: 900, 2100MHz
GSM: 850, 900, 1800, 1900MHz
- **Data Services:** HSDPA Downlink: up to 21.6Mb/s*
HSUPA Uplink: up to 5.76Mb/s*
- **Wi-Fi working range:** approx 25m radius in free space
- **Wi-Fi Connections:** supports up to 8 users
- **Dimensions (W×H×D):** 99.6 x 54 x 14.6mm
- **Weight:** 86g
- **microSD™ card:** microSD™ or microSDHC™ up to 32GB
- **External Antenna Port** TS9
- **Battery:** 1500mAh Li-ion
- **Standby time (low power mode):** up to 80 hours
- **Working time:** up to 4hours, depending on usage and network conditions.
- **Working Temperature Range :** 0 to +40°C
- **Operating Systems:** Microsoft Windows 7, Vista & XP
MAC OS 10.4.11 and above.

* HSDPA / HSUPA: 21.6Mbps downlink & 5.8 Mbps uplink rated device. Actual customer peak download/upload speeds will be less due to network sharing, signal strength and other factors.

6 Safety Precautions

Some electronic devices may be susceptible to electromagnetic interference.

The router may interfere with medical devices like hearing aids and pacemakers.

1. Do not use your router in dangerous environments such as oil terminals, fuel depots, chemical factories or service stations. Obey all warning notices and switch off your router in such environments.
2. Please use original accessories or accessories that are authorized by ZTE. Unauthorized accessories may affect the router performance, damage the router or invalidate your warranty.
3. Do not dismantle the router. There are no user serviceable parts.
4. Do not allow the router or accessories to come into contact with liquid or moisture at any time. The router contains a liquid detection sticker that changes colour when exposed to liquids. Liquid damage will invalidate your warranty.
5. Do not place objects on top of the router or restrict air flow around the device. This may lead to overheating of the device or affect signal quality.
6. Do not expose the router to direct sunlight or store it in hot areas. High temperature can shorten the life of electronic devices.
7. Do not allow children to play with the router or charger.
8. The router and charger are for indoor use only.
9. Use an antistatic cloth to clean the router. Do not use harsh chemicals, solvents or abrasive cleaners as these could damage the case.