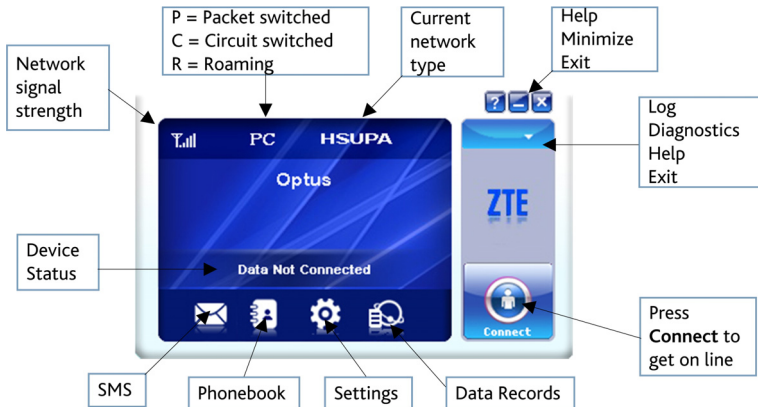


MF652 USB Modem User Guide

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Connection Manager Software Guide

After installation the Connection Manager will launch. The modem takes a few minutes to initialise. You'll be ready to go as soon as the **Connect** button is available.



TIP

Connect becomes available when the modem is fully installed and the SIM card is connected to the network. Please allow sufficient time for installation and network registration.

LED indicator	Modem Status
 Red	Offline. Not registered on the network
 Green solid	Registered on the 2G network
 Green blinking	Active data transfer on the 2G network
 Blue solid	Registered on the 3G network
 Blue blinking	Active data transfer on the 3G network

Installation Notes

- The installation will create a new icon on your desktop and a new program listing under Start-Programs
- If you have problems with the installation please contact your supplier or see zte.com.au/optus for more assistance and FAQ's
- If you can't connect to the internet check your SIM card is inserted correctly and is activated for data services.
- Advanced users should check device manager to see if the drivers are fully installed. See zte.com.au/optus for details.
- See the Troubleshooting section in this User Guide for further assistance.

Using your USB Modem

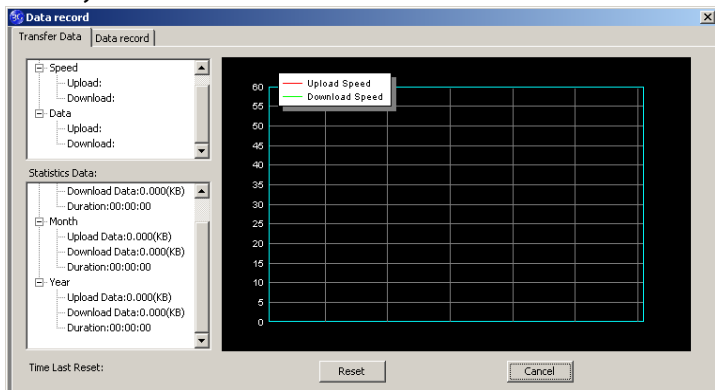
- Press **Connect** to start a data connection using your USB modem
- Launch your intended application, eg web browser, email etc.
- When you have finished your internet or email connection remember to return to the software interface and press **Disconnect** to end your session
- When the software is minimized double click the icon on the task bar to re-open the Connection Manager.

TIP

After the computer wakes from hibernation or standby mode you may need to remove and re-insert the modem.

Internet connection records

To view your connection records click on **Data records**:



- The graph shows the upload and download speeds updated in real time.
- Click on the Data record tab to view upload and download history.
- Data usage is approximate. Please contact your service provider for actual usage.

Task bar information

When you minimise the software the window will minimise to an icon on the system tray. The program is still active in the background but disappears to free your normal Windows space. Double click the task bar icon to restore the Connection Manager.

Right Click the task bar icon to access the following menu:

Log	Displays the system log file (for support purposes)
Diagnostics	Open Diagnostics (serial no., software version etc)
Help	Open the help file
Exit	Close the software and switch off the modem

Safe Removal of Hardware

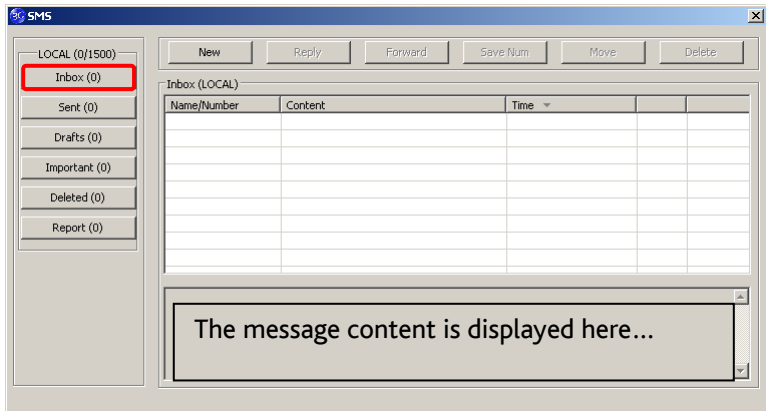
To remove your USB modem from the computer first close the Connection Manager then use the safe removal of hardware process for Windows or Eject for MAC OS. If you remove the USB modem when it is active the Phonebook records may become corrupted.

Safely remove the modem, eg. Windows Systems:

- Left click the icon on the Windows taskbar
- Click on Safely Remove Hardware
- Remove the USB modem

Using the SMS Interface

Click the **SMS** button to use the SMS Interface:



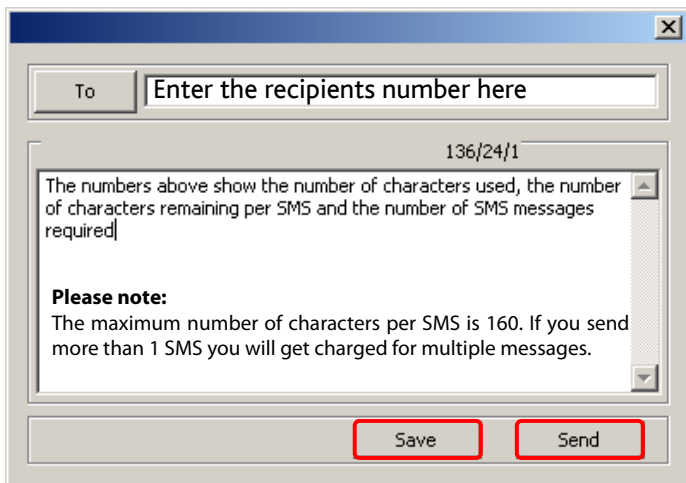
Read Incoming Messages

The inbox is displayed by default. Select a message from the **Inbox**. The message content and details are displayed in the window below the inbox summary list.

Click on the column headers to sort by Name/Number, Content or Time

Create a new message

- Select **New** and enter the recipient's number
- Use ';' to separate multiple recipients if required
- Press **To** for the **Phonebook** interface
- Click into the text field to enter text
- Click **Send** when finished or **Save** to store in **Drafts**

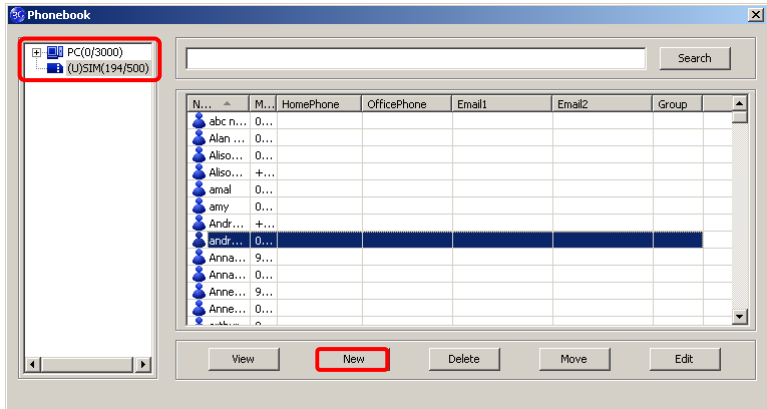


The screenshot shows a mobile messaging application window. At the top, there is a blue header bar with a close button (X) on the right. Below the header is a 'To' field with a button labeled 'To' and a text input field containing the placeholder text 'Enter the recipients number here'. Below the 'To' field is a status bar showing '136/24/1'. The main area is a text input field with the following text: 'The numbers above show the number of characters used, the number of characters remaining per SMS and the number of SMS messages required'. Below the text input field is a 'Please note:' section with the text: 'The maximum number of characters per SMS is 160. If you send more than 1 SMS you will get charged for multiple messages.' At the bottom of the window are two buttons: 'Save' and 'Send', both of which are highlighted with a red border.

- After the message is sent it is saved in the **Outbox**.
- If the message fails to send the icon is marked with a red cross

Using the Phonebook

Click the **Phonebook** button to select the phonebook interface.
Select from PC or USIM:



To create a new contact click **New** → **New Contact**, enter the details and select **OK** to finish.

You can choose the **Save location** as the PC or the USIM card. The default location is on the PC.

Phonebook Notes:

- If your storage location is PC then you can also save to a Group
- Use the Search box to find contacts by name or number

Select the following functions using the buttons at the bottom of the screen:

View	View the selected contact's information
New	Create a new contact
Delete	Delete contacts or groups
Move	Move the contact between the SIM and the PC
Edit	Edit the contact information

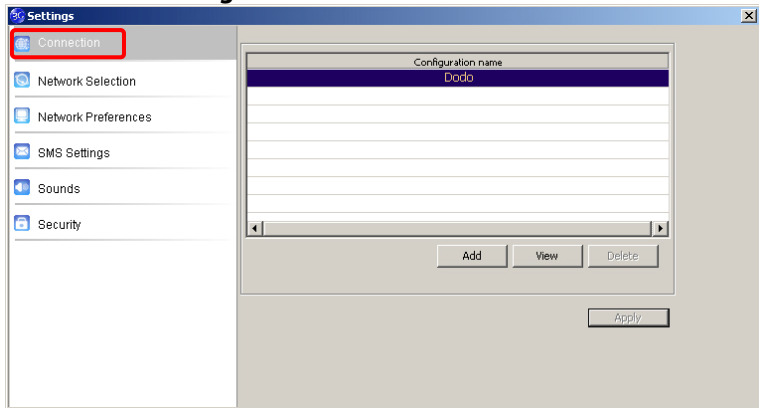
Tip

To avoid corrupting the phonebook file wait for the connection manager to close before removing the modem and always use the Safe removal of hardware process.

Settings

Click the **Settings** button to select the settings interface.

Connection Settings:



The setting Data is pre-configured for your network.

If you have a private VPN you may need to create a new connection configuration. This feature is designed for IT Administrators in a corporate environment and is generally not required to be changed by end users.

Settings > Network Selection (Default = Automatic)

These settings are pre-configured for your network. There is no need to change any of these settings. Manual mode will perform a scan of available networks.

Settings > Network Preferences (Default = Automatic)

These settings are pre-configured for your network. There is no need to change any of these settings. Selecting UMTS/HSPA will lock the modem to 3G services only. Selecting GSM/EDGE will lock the modem to 2G services only.

Settings > SMS Settings

These settings are pre-configured for your network. There is no need to change any of these settings. If you go overseas or use a foreign SIM card you may need to change the local SMS Centre number. Consult your service provider for more details.

Settings > Sounds

The default system sounds can be personalised if required. Browse to your chosen sound to change the alert tones specified.

Settings > Security

You can enable a PIN number that is requested when the Connection Manager is launched. This can protect you against unwanted use. The PIN number is stored on the SIM card.

Using a microSD™ memory card

You can insert a microSD™ memory card up to 32GB to use the modem as a mass storage device.

- Safely remove your modem from your computer
- Open the side port to access the microSD™ slot
- There is a diagram showing the correct orientation of the microSD™ card printed on the port cover
- Check the correct orientation and carefully insert the microSD™ card
- Close the port cover and insert your device into your computer
- The microSD™ card will appear as an external drive on your computer system
- Always handle memory cards with care and avoid static discharge

microSD™ cards supported to 2GB are FAT 16 format.

microSD™ HC cards supported to 32GB are FAT 32 format.

If you want to remove the modem please use the Safe Removal of Hardware to stop the removable disk first. For more details see the Safe Removal of Hardware process.

Troubleshooting Guide

If you have any problems with your modem please check this section. If the problem still exists test on an alternate PC and contact your service provider. Check zte.com.au/optus for more details.

Problem	Possible Causes	Suggested Solution
The user interface doesn't start or stays 'Initialising' after the modem is plugged in.	PC configuration is not correct. (No Autorun)	Start the program manually by going Start > Program Files or use the desktop shortcut. Check the drivers, try Safe Mode.
The modem has no signal.	The antenna is at the wrong angle or position.	Use the extension cable and adjust the angle and position of the USB modem.
	You have no network coverage.	Try moving location until you get good reception. Try the extension cable.
	Check your SIM card active and inserted correctly.	Check your SIM insertion, account and PIN number if applied.

Problem	Possible Causes	Suggested Solution
Message sent failed.	The SMS centre number isn't correct.	Contact your Service Provider. Enter the correct number in the Message settings.
Data connection failed.	You have no network coverage.	Try moving location until you get good reception. Try the extender cable
	The APN configuration is wrong	Check with your service provider and set the APN in the configuration settings.
	The manual network selection is wrong.	Select the correct network for your service provider. Restore Automatic mode.
	You are using the wrong APN.	Consult your service provider.
The modem cannot connect to the internet abroad (Roaming)	You don't have roaming enabled on your plan.	Contact your service provider to enable roaming.

Problem	Possible Causes	Suggested Solution
No warning tone.	The PC soundcard is disabled or on low volume.	Check the audio card and adjust the volume.
The microSD™ card cannot be read or is not found.	Re-insert the microSD™ card. The maximum capacity is 32GB. The card is not formatted correctly.	Try another microSD™ card and make sure the capacity and format is correct. 2GB is FAT16 format 32GB is FAT32 format

Troubleshooting Tips
1. Install and test the modem in another computer
2. Check your SIM is working in another device – eg mobile phone
3. Insert a known working SIM card into your modem
4. Confirm your account is active – contact your service provider
5. Uninstall the modem and re-install using 'Safe Mode'. Consult a PC technician if required. Check the drivers in Device Manager
6. If the software installation does not start or has failed try downloading the current version from zte.com.au/optus

System requirements

1. USB port x 1 (USB 1.0 or 2.0*)
2. System Requirements:
 - a. PC – Windows 7, Vista, XP
 - b. Mac - OSX 10.4.11 and above

CPU	1GHz Pentium or above
Hard Disk	20GB or above
RAM	512M or above
Display	800 x 600 minimum

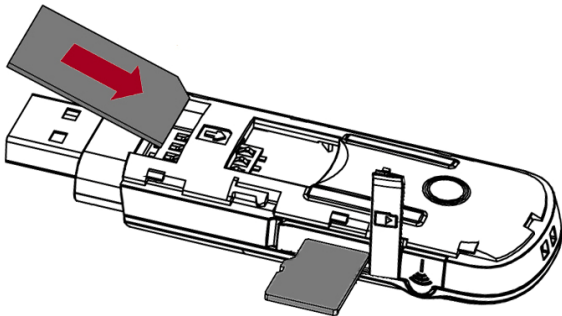
3. You need to have **Administrator** rights to install and run the software
4. We suggest you switch off your anti-virus software before installing the USB modem. In some cases protection software can prevent automatic installation. It is possible to start the installation process manually by clicking the Autorun icon when it appears.

Tips

- *USB 2.0 ports are preferred because they are much faster
- Identify the type of port on your PC and use version 2 ports
- Use the USB extender cable to obtain optimum reception

SIM card and microSD™ insertion

1. Open the modem top cover to access the SIM and microSD™ slot



2. Insert the SIM card as shown with the gold contacts facing down and the bevelled corner on the outside edge of the modem.

3. Push the SIM card in **as far as it will go** and replace the modem cover.

Optional

Insert a microSD™ card as shown to use the modem as an external storage device.

Tip: There is a diagram showing the correct orientation of SIM card embossed on top of the SIM slot.

Installation Guide

The installation and management software is pre-loaded onto your USB modem. Wait for your system to be fully loaded then insert the modem into your computer and follow the instructions on-screen. You'll be up and connected in about 5 minutes.

There are three main steps to the installation process:

1. Device insertion; USB drivers are installed by your system
2. Install shield launches and installs the Connection Manager
3. Connection Manager launches and continues to install the modem drivers and then initializes the modem

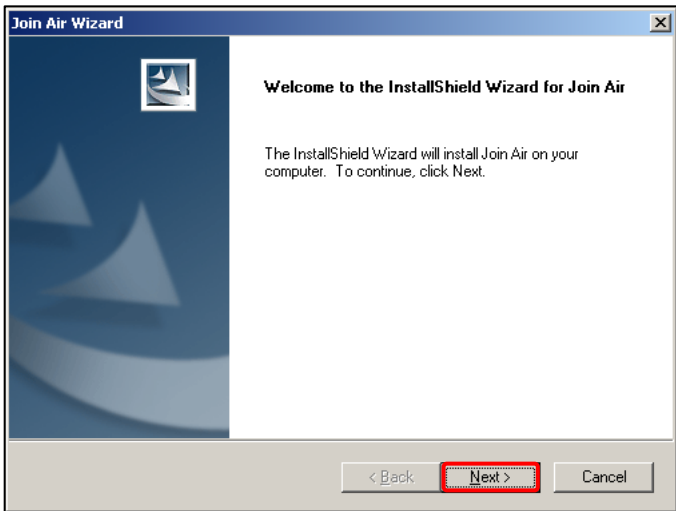
If nothing happens your system configuration may be preventing Autorun.

Manual installation process

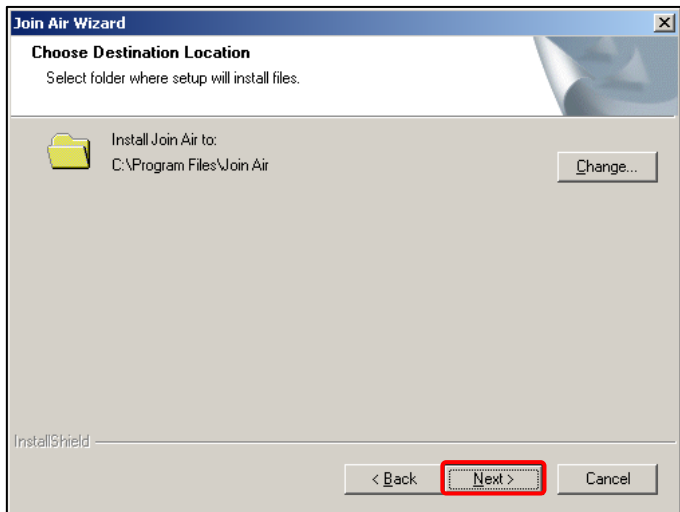
- **Windows users:** Browse to the device and select AutoRun to start the installation. (Start > My Computer > Join Air > AutoRun.exe)
- **MAC users: Go to Computer**, open the CD-ROM named Modem, and double click the Connection Manager icon.
- You can download the install files from zte.com.au/optus

Step by Step Installation

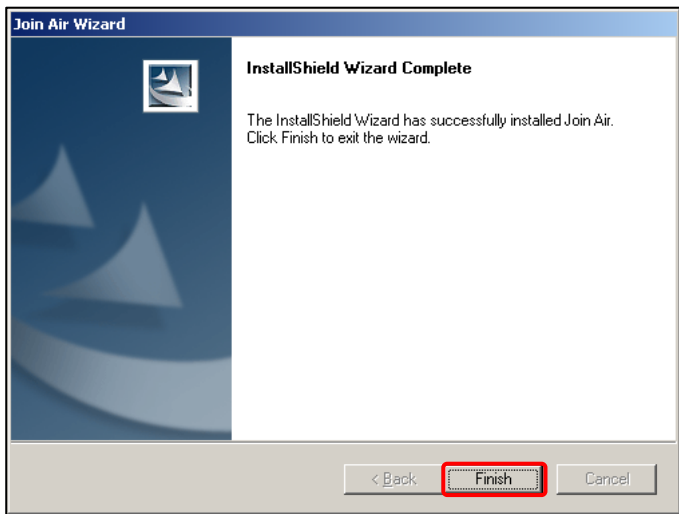
The installation method shown below is for Windows XP. Other operating systems will follow a similar but not necessarily identical installation process:



Press **Next** to accept the default folder location, or press **Change** to define your own path.



Please wait a few seconds for the installation to proceed...



Click **Finish** to complete the installation.

Software Removal

If you wish to uninstall the application please follow the procedure below:

Windows

Start → Programs → Connection Manager → Uninstall

Follow the prompts and press **Yes** to continue.

MAC OS X

Go to **Applications**, select **Uninstall Connection Manager**.

Follow the prompts to remove the software.

Radiation from Electronic Devices – SAR

The USB Wireless modem is a transmitting device with similar output power to a mobile phone. It uses an internal antenna to connect to the mobile network. To get the best performance from your device do not cover or shield the device in any way as this will lead to increased output power. Always leave a clear space around the device to allow the transmit and receive signals to propagate. SAR tests have been completed and comply with the Australia and New Zealand regulatory requirements.

Precautions and Safety Information

- Some electronic devices are susceptible to electromagnetic interference. The modem is a transmitting device and may cause interference to sensitive electronic equipment such as audio systems, vehicle systems and medical equipment. Please consult the manufacturer of the other device before using the modem.
- Operating of laptop or desktop PCs with the modem may interfere with medical devices like hearing aids and pacemakers. Please keep the modem more than 20 centimetres away from such medical devices. Turn the modem off if necessary. Consult a physician or the manufacturer of the medical device before using the modem near such devices.
- Be aware of the regulations when using the modem at places such as oil refineries or chemical factories, where there are explosive gases or explosive products being processed. Turn off your modem as instructed.
- Don't touch the antenna area unnecessarily whilst connected. This can affect your modem performance and reduce the signal quality.
- Store the modem out of the reach of children. The modem may cause injury or get damaged.
- The modem contains sensitive electronic circuitry. Do not expose the modem to any liquids, high temperatures or shock.
- Only use original accessories or accessories that are authorized

by the manufacturer. Using unauthorized accessories may affect your modem's performance, damage your modem and violate related national regulations.

- Avoid using the modem in areas that emit electromagnetic waves or in enclosed metallic structures eg lifts.
- The modem is not waterproof. Please keep it dry and store it in a cool, dry place.
- Don't use the modem immediately after a sudden temperature change eg from an air conditioned environment to high temperature and humidity outside. In such cases there could be condensing moisture inside the modem which can cause internal damage. Unplug the modem and leave it for 30 minutes before use.
- Always handle the modem with care. Be careful not to drop or bend the modem.
- There are no user serviceable parts inside the modem. Unauthorised dismantling or repair will void the warranty.

Declaration of Conformity

We declare under our sole responsibility that the product(s) 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.

Technical Specifications

Network and Band compatibility	UMTS 900, 2100 MHz
	GSM 850, 900, 1800, 1900 MHz
Size and Weight	81.2 x 26.5 x 14.5mm. Approx 28g
Data Rate	HSDPA (download) up to 21 Mbps*
	HSUPA (upload) up to 5.76 Mbps*
Power requirements	5V with current 100mA – 450mA max
Max Emitted Power	In 3G WCDMA Mode: 250mW
	In 2G GSM/GPRS Mode: 2W
Interface	USB 2.0
Operating systems	Windows 7, Vista & XP SP2 & above Mac OS X 10.4.11 and above
Functions	High speed wireless data, internet, microSD™ memory, SMS
Memory card	2GB microSD™ - 32GB microSD™HC
Temperature range	-5°C to +45°C