

The logo features a white Wi-Fi symbol with three curved lines. A small white icon of an RV is positioned at the base of the symbol. Below the symbol, the text "RV WI-FI" is written in a white, sans-serif font. Underneath that, the large number "5G" is displayed in a white, bold, sans-serif font. The entire logo is set against a background of blue concentric circular patterns.

RV WI-FI
5G

Installation Guide
and User Manual

2022V1



What makes up your RV Wi-Fi 5G

Congratulations on your purchase of an RV Wi-Fi Router.

This purchase will give you greater freedom to enjoy your travelling without sacrificing the lifestyle that the internet provides.

RV WIFI 5G Router



4G/5G Stick Antenna's



Mounting Bracket



Wi-Fi Stick Antenna's



Telstra Starter SIM

SIM adapter

12 volt Power Cable

External 4 in 1 Antenna



External 4 in 1 Antenna Bracket



How to Activate the Telstra Pre Paid SIM

The Telstra satchel contains your Sim Card. You need to activate this and add credit to it to finish the set up stage of your RV Wi-Fi unit.

We strongly advise to do this instore to make sure the activation has been confirmed.

You **MUST** use a Full Sized SIM card in the router OR in conjunction with the SIM adapter provided.

Activate your Telstra Sim Card	
1	Have your driver's licence handy
2	Use the Service Number located on the rear bottom space of the Telstra Satchel.
3	Open your browser and go to www.telstra.com/activate
4	Follow the Telstra prompts for activation.
5	Once complete, turn off your router and then turn it on again to reboot the system.

For providers other than Telstra please look on their packaging for instructions to activate.

Below are links to Optus, Vodafone and Virgin.

Optus can be activated by going to www.optus.com.au/customercentre/activateprepaid

Vodafone can be activated by going to www.vodafone.com.au/activate

Virgin can be activated by going to www.virginmobile.com.au/activate

For other providers, please see your Sim card documentation.

Warranty Registration

Please complete your Warranty Registration by going to:

www.rvwifi.com.au/warranty-registration.

Your serial number for your RV Wi-Fi unit is located on the outside of the box, and on the rear of your RV Wi-Fi unit.

Inserting your SIM card into the RV WIFI 5G

1

In your pack you will have received a SIM card. You can use this one or your own.

It must be a full sized SIM card - or use the adapter provided (see below).

2

Using a SIM pin, depress the SIM open button in the control panel.

3

Remove the SIM tray and place a full sized SIM in the tray, aligning the cut outs together.

4

Press the SIM in till firm and flat.

5

Insert the SIM tray into the SIM card slot with the SIM facing towards the rear of the router.

6

Turn on the power and wait 3 mintues for the router to boot up.



Scan to watch:
How to insert a SIM
card into the
RVWiFi 5G

Using the SIM adapter if you do not have a full sized SIM card.

1

In your pack you will have received a SIM card adapter.

Use if required to make your SIM full sized.

2

There are three in the pack. Choose the one required to make your sim a FULL SIZED SIM CARD

3

Insert the activated and data credited SIM into the required adapter.

4

Insert the SIM/Adapter into the SIM card tray with the router turned : OFF

5

Turn the router on and wait 5 minutes for it to boot up

6

You are now ready to connect your RV WiFi to your devices.



Scan to watch:
How to use the SIM
card adapter if you
do not have a full
sized SIM card

Installing your RV Wi-Fi 5G

In most cases, your manufacturer will install your RV Wi-Fi for you. But if you are looking at installing yourself, please follow the steps below.

There are two methods available:

- With an external antenna fitted to the outside of the RV.
- No external antenna.

Installing your RV Wi-Fi 5G using the external antenna

Set up for use with external antenna	
1	Choose a position for RV WiFi Router adjacent to a single 12v power point, with the control panel facing towards you.;
2	Mount external antenna onto roof using bracket provided, keep away from overhanging items and waterproof as required.;
3	Screw into place on router: 2 x 4G/5G antenna cable into '4G/5G External' ports on the top of the router.;
4	Screw into place on router: 2 x Wi-Fi antenna cables into 'Wi-Fi/External' ports in the side control panel.;
5	Attach 2 x WiFi stick antenna's to WiFi 5.8 on the side control panel.;
6	Attach 2 x 4G/5G stick antenna's into the 4G/5G ports on the base of the router.;
7	Using a SIM pin, push the SIM open slot in the control panel to open up the SIM card slot. Place your full sized, activated SIM in the recess and insert it in the router.
8	Plug the power adaper into the power jack of the RV Wi-Fi Router.;
9	Place the power cord into the single 12v power point and turn on. SIM must be inserted prior to turning on or a reboot will be required.;
10	Ensure the 'Power' light is on.



4G/5G external antenna

4G/5G external antenna

Wi-Fi external antenna



Wi-Fi Internal antenna

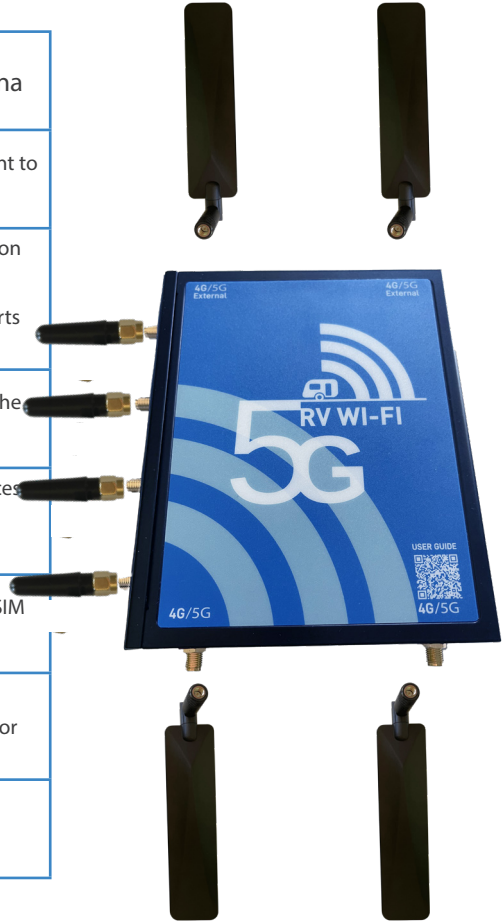


4G/5G internal antenna

Installing your RV Wi-Fi 5G without the external antenna

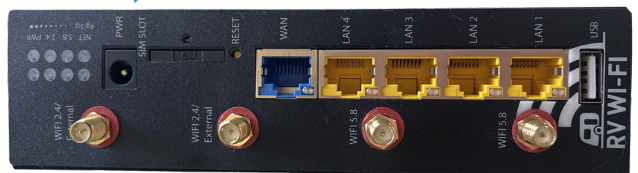
Set up for use with NO external antenna

- 1 Choose a position for RV Wi-Fi 5G router adjacent to a single 12v power point;
- 2 Screw the 4 Wi-Fi antenna's into the Wi-Fi ports on the control Panel.
- 3 Screw the 4 4G/5G antenna's into the 4G/5G ports (top and bottom)
- 4 Plug the power adapter into the power jack of the RV Wi-Fi 5G Router;
- 5 Using a SIM card tool, depress the 'open SIM' recess in the control panel to pop open the SIM card holder.
- 6 Place the full sized/activated SIM card into the SIM card holder and insert into the SIM card slot.
- 7 Place the power cord into the single 12v power point and turn on. The SIM must be inserted prior to power turning on.
- 7 Ensure the Power Lights are on



Turning on your RV Wi-Fi 5G Router

- 1 Place the end of the power adapter into the 'Power' slot.



Connecting your device via Wi-Fi to your RV Wi-Fi 5G

1

Turn on the device/s (phone/laptop etc.), that you wish to connect to the internet.

2

Click on: 'Settings' or equivalent page on your device

3

Click on: 'Wi-Fi' and choose the RV Wi-Fi network: On some devices you will notice that RV Wi-Fi comes up twice with the same series of letters and numbers, but 5.8 included. This is because newer devices recognise the faster 5.8 Wi-Fi as well as the standard 2.4.

4

You will be asked for the Wi-Fi password or Security Key.

5

Type in: rvwifi1234 (all lower case, no gaps)

6

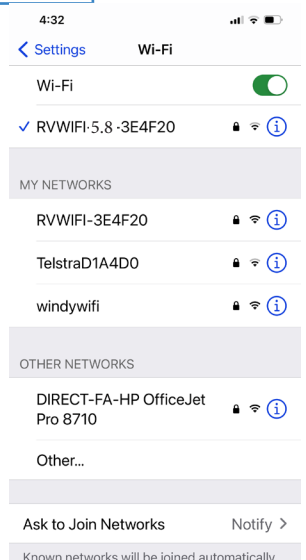
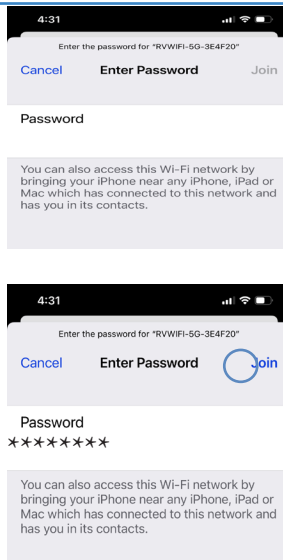
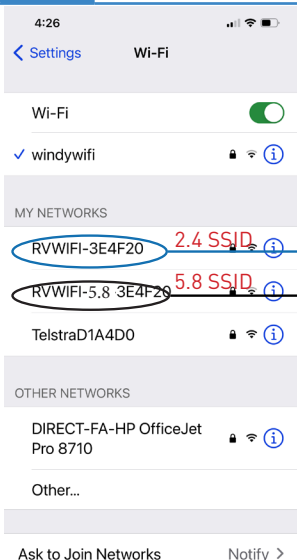
Click the: 'Connect Automatically' Box

7

Click: 'Connect',



Scan to watch:
How to connect your smart device to RV Wi-Fi





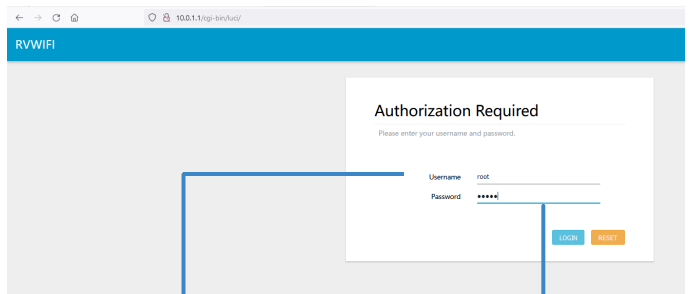
One of the great features of RV Wi-Fi is the security it provides whilst using the internet. This next section provides step by step instructions on setting your Wi-Fi password.

1. Open the web/internet browser on your device and enter the address `http://10.0.1.1` into the 'search' bar.



`http://10.0.1.1`

2. The RV Wi-Fi home page will appear.



Username is prepopulated with 'root'

Type 'admin' for password

3. You are about to enter the username and password.

You **MUST** enter the username 'root' and the password 'admin'. Failure to do so will result in the router requiring resetting. The 'root' password **CANNOT** be changed and is prepopulated.

4. Select/click on the following tab:
1. Network.

The screenshot shows the RVWiFi web interface. The top navigation bar is blue with the RVWiFi logo and name. The left sidebar contains a menu with the following items: Status (expanded), Overview, Routes, Logging, Realtime Graphs, Load Balancing, System, Services, Network (circled in red), and Logout. The main content area is titled 'Status' and contains a 'System' section with the following data:

Hostname	RVWiFi
Model	ZBT-WG209
Architecture	MediaTek MT7621 ver1 eco:3
Authorization	Authorized
Firmware Version	LEDE Reboot SNAPSHOT 17.01 22.07.14_114130
Kernel Version	4.4.61
Local Time	Fri Nov 4 08:07:37 2022

5. Select/click on the dropdown box:
1. Wireless

The screenshot shows the RVWiFi web interface with the 'Wireless' tab selected in the left sidebar (circled in red). The main content area is titled 'Status' and contains a 'System' section with the following data:

Hostname	RVWiFi
Model	ZBT-WG209
Architecture	MediaTek MT7621 ver1 eco:3
Authorization	Authorized
Firmware Version	LEDE Reboot SNAPSHOT 17.01 22.07.14_114130
Kernel Version	4.4.61
Local Time	Fri Nov 4 08:08:29 2022
Uptime	1d 2h 24m 27s
Load Average	0.70, 0.44, 0.34

Below the System section is a '4/5G' section with the following data:

Model	Quectel RM520N-GL
-------	-------------------

6. You will see two options here and will need to complete both. Choose the 5.8 option first as shown below.
Select/Click on the 'Edit' box

The screenshot shows the RVWiFi web interface with the 'Wireless Overview' page. The left sidebar has 'Wireless' selected (circled in red). The main content area shows two wireless controller entries:

- Entry 1: Generic 802.11 Wireless Controller, Channel: 11 | Encryption: psk-mixed+comp, SSID: RVWiFi-5G-5E4F20 | Mode: Master. Buttons: Edit, Add.
- Entry 2: Generic 802.11 Wireless Controller, Channel: 11 | Encryption: psk-mixed+comp, SSID: RVWiFi-5G-5E4F20 | Mode: Master. Buttons: Edit, Add. The 'Edit' button is circled in red.

At the bottom of the page, the footer shows 'Firefox' and 'Version 100.0.3'.

7. Go to the 'Interface Configuration' Section.

- Click on the 'Wireless Security' tab.

The screenshot shows the Mikrotik WinBox interface for configuring a wireless network. The top navigation bar is blue with the Mikrotik logo and 'RWWIFI' text. A sidebar on the left contains a menu with options like Status, System, Services, Network, and Wireless. The main content area is titled 'Wireless Network: Master "RWWIFI-5.8-3E4F20" (mt7612e.network1)'. Below this title, there are two tabs: 'General Setup' and 'Advanced Settings'. The 'Advanced Settings' tab is active, showing fields for Status, Mode, and Channel. Below this, there is another section titled 'Interface Configuration' with two sub-tabs: 'General Setup' and 'Wireless Security'. The 'Wireless Security' sub-tab is active and circled in red. It contains fields for ESSID, Mode, Network, and Hide ESSID. The 'Network' field has a dropdown menu with an asterisk next to it, which is also circled in red. At the bottom right of the configuration area, there are three buttons: 'SAVE & APPLY', 'SAVE', and 'RESET'. The bottom status bar shows 'Firefox' and 'Version 108.0.3'.

8. Next to the 'Key' drop down box, click on the astrisk. This shows what the current Wi-Fi password is set to.

This screenshot shows the 'Wireless Security' section of the Mikrotik WinBox interface. The top navigation bar and sidebar are the same as in the previous screenshot. The main content area is titled 'Wireless Network: Master "RWWIFI-5.8-3E4F20" (mt7612e.network1)'. Below the title, there are two tabs: 'General Setup' and 'Wireless Security'. The 'Wireless Security' tab is active and circled in red. It contains fields for Encryption, Cipher, and Key. The 'Key' field has a dropdown menu with an asterisk next to it, which is also circled in red. At the bottom right of the configuration area, there are three buttons: 'SAVE & APPLY', 'SAVE', and 'RESET'. The bottom status bar shows 'Firefox' and 'Version 108.0.3'.

8. Delete the password, by backspacing or use the delete button.

- In the Key box , type your new Wifi password - your choice!

(Your password must be a minimum of 8 characters, and it is case sensitive).

The screenshot shows the RVWiFi configuration page. The title is "Wireless Network: Master 'RVWiFi5,8-3E4F20' (mt7612e.network1)". The page is divided into two main sections: "Device Configuration" and "Interface Configuration".

Device Configuration:

- Status: SSID: RVWiFi5,8-3E4F20
- Mode: 802.11a/b/g/n
- Channel: Auto

Interface Configuration:

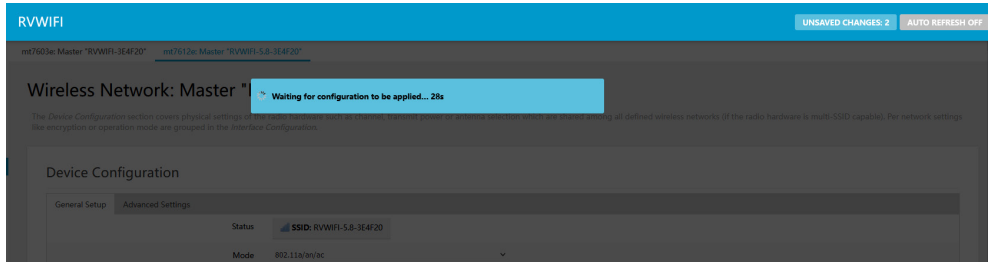
- Encryption: WPA-PSK/WPA2-PSK Mixed Mode
- Cipher: FIPS CCM (AES)
- Key: rnvll234 (highlighted with a red circle)

Buttons at the bottom right: "SAVE & APPLY", "SAVE", "RESET".

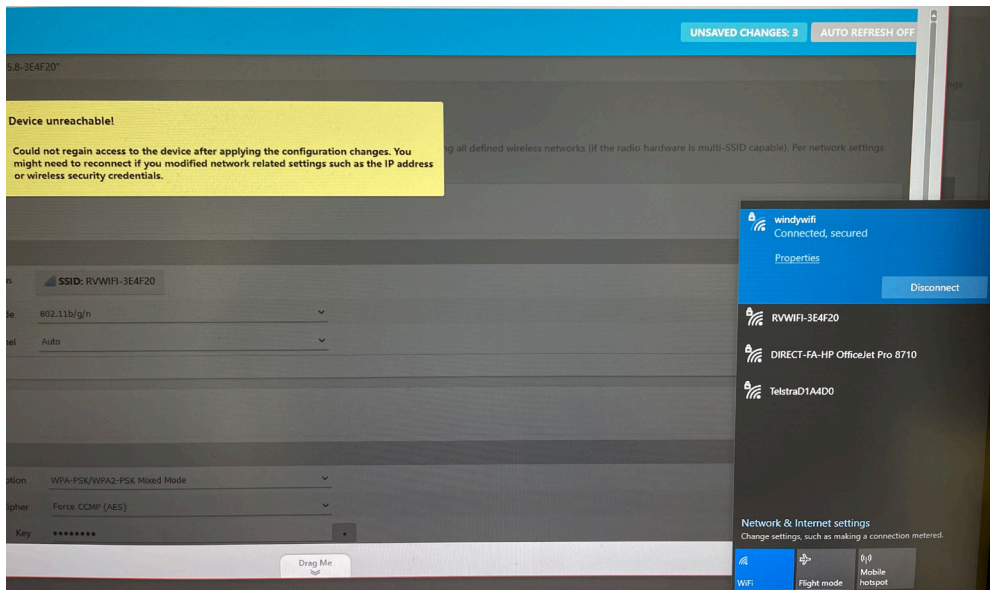
9. Click on the 'Save and Apply' button. The screen will indicate that it is 'waiting for configuration to apply'.

This screenshot is identical to the previous one, showing the RVWiFi configuration page. The "Key" field in the "Wireless Security" section is still highlighted with a red circle. In this screenshot, the "SAVE & APPLY" button at the bottom right is also highlighted with a red circle.

- Wait for this to apply. Do not turn off your device during this time. You will see a countdown clock appear from 30 seconds.

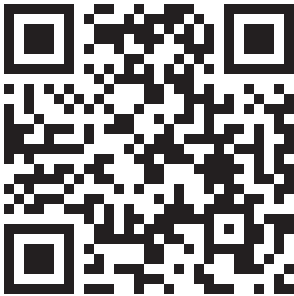


10. The next screen will say 'Device Unreachable'. This is due to the password being changed and the two devices no longer recognising each other.



12. On your device (laptop/ipad/phone).

1. Go to: Settings,
2. Click on: Wifi,
3. Wait for RV Wi-Fi to come up on the list. Click on this,
4. Your device will now tell you that your Wi-Fi password is incorrect (that is because you have just changed it),
5. Type in the 'new' Wi-Fi/Security Key' password that you have just set,
6. Remember that it is case sensitive and some devices will automatically capitalise the first letter.
7. Wait for your device to let you know that you are connected,
8. You are now ready to access the internet through your RV Wi-Fi 5G.



Scan to watch:
How to change your Wi-Fi password
from factory to your own personal
password.

Frequently asked questions

SIM CARDS

What size SIM card should I use?

A full sized SIM card is required. If you do not have one, please use the adapter provided to make your SIM card a full sized one.

What if I insert the wrong sized SIM card?

If the wrong size is placed in the SIM tray, it will move freely in it and you will not get a connection. Remove the SIM tray as instructed and replace the SIM with a full sized SIM.

Do I need a SIM card to operate the Wi-Fi?

For all internet connected requirements, an activated SIM is required. If you are sending information to a Wi-Fi device, like a printer, then you do not need to have a SIM card inserted.

Always turn your router off and on again after doing any adjustments to the SIM card. The router needs to re-read the SIM card once it has been inserted, so turning it off and on again will enable it to do this.

WHAT IS AN SSID?

The SSID is the NAME of your router.

WHY ARE THERE TWO SSID'S?

You will see that there are two SSID's with the RV Wi-Fi 5G

1- RV WIFI 5.8 abc123

2- RV WIFI 2.4 abc123

These are different Wi-Fi frequencies, the newer being 5.8. The 5.8 is a faster Wi-Fi frequency but does not produce as much range. The 2.4 frequency is one that has been around for awhile is a bit slower, but has a better range.

We suggest if 5.8 is available to use, then connect to it as your first option.

DO I HAVE TO SET UP WIFI PASSWORDS ON BOTH SSID'S.

Yes, you will need to set both up as you will most likely use both from time to time.

Set up one first, following the instructions, then repeat for the second, so you devices are ready to accept either.

RESETTING

If you are having issues with your router, please turn off and on.

Reset your device by turning it off and on again. Resetting re-establishes the connection and can help correct issues. Once you have done the reset, leave the router for 4 to 5 minutes to reboot.

OPERATIONAL ISSUES

Why can't I get onto the internet?

There are a couple of reasons this could occur.

1) The wrong size SIM card has been inserted. Please always use a full sized SIM card.

Insert into the router, turn it off and on again.

2) The SIM card has not been activated. Best way to check if the SIM card has been activated by the provider is to try it in another device. Remove the SIM and place it in another device, for example a phone. Go to: Settings, then: Wi-Fi. Turn Wi-Fi to OFF. This way it will be making sure you are using the SIM card inserted and not another Wi-Fi network. If it does not work, see your data provider.

4) The SIM card has run out of data. To check data credit, contact the service provider.

5) The SIM card has expired. To check expiry, contact the service provider.

6) There is a fault with the modem.

To establish if it is a SIM card issue or a router issue, follow these steps

1) Turn on your RV WIFI router

2) On the device (phone/laptop/tablet), go to: settings

3) Go to: Wi-Fi

4) Wait for RV Wi-Fi123abc (each router will have its own unique series of numbers and letters following RV Wi-Fi), to come up on the list of possible Wi-Fi options.

5) Click on: RV Wi-Fi123abc

6) If the device has already been connected to the RV Wi-Fi router, it will recognise it and connect automatically. However, if this is the first time it is connecting to it, it will ask for the Wi-Fi password.

7) Type in the factory set Wi-Fi password: rvwifi1234 (all lower case)

8) Wait for the device to indicate that it is connected.

If at this point if you cannot connect, then perform a reset and then start the process again.

9) Open up a new web page on the device that is now connected via Wi-Fi

10) Type in: <http://10.0.1.1> (where you would normally type in www.google.com.au)

11) This is a website on the actual router NOT on the web.

12) The Username: Root will already be populated. Type in: admin for the password

13) Click on: Login

14) Click on: Overview

15) Scroll down to Network and take a screen shot of the IPV4 Upstream. Send this information to info@rvwifi.com.au explaining your issue.

What do I do if I can't connect to the Wi-Fi?

There are a couple of causes that may have made this happen.

1) The Wi-Fi may have been accidentally deleted during the set-up phase. You will need to return the router to us to reactivate the Wi-Fi.

2) You have entered your own password into 'setting the Wi-Fi password' point 2, instead of entering 'admin' into the password section. You will need to return the router to us to reactivate the Wi-Fi.

Can I change the ROOT username?

This setting cannot be changed.

If you are concerned with security be assured that as the website: <http://10.0.1.1> is located on the router, it can only be accessed by knowing the WIFI password which is set by you.

We recommend that you set your WIFI password upon receiving your router and keep the password information secure.

The latest version of software for the RV Wi-Fi router has improved Wi-Fi encryption capability.

My Wi-Fi password is not being accepted

1) You will need to do a factory reset.

2) Your Wi-Fi password is case sensitive and must be a minimum of 8 characters.

3) When setting your Wi-Fi password, some devices will automatically capitalize your first letter. Check that this is what you want.

Can I change my SSID/Name of your router?

Yes. The SSID is the routers 'name'. This can be changed by:

1) going to the home page of <http://10.0.1.1>.

2/ type in: admin

- 3) click on: login
- 4) Click on: Wireless
- 5) Click on Edit (for the SSID you want to change)
- 6) Scroll down to Interface Configuration and the heading ESSID. Click on and delete RV WiFiabc123
- 7) Type in the new SSID/name of your router and click on: save and apply.
- 8) Follow steps for changing your Wi-Fi password to complete.

ANTENNA

What is the maximum gain from the external antenna when in a fringe reception area?

The maximum gain is 6db.
There are four antennas inside the external antenna. 2 x 3G/4G/5G and 2 x WIFI.

What is an 'omni-directional' antenna?

Our external antenna delivers coverage in a circular horizontal direction.

The Wi-Fi antenna will give you a range of up to 40 metres from the RV.

External antenna dimensions

See under Specifications

How long are the external antenna leads?

See under Specifications

Can these lengths be adjusted?

They can be adjusted by seeking assistance from an auto electrician.

Can I attach a different external antenna to the RV Wi-Fi router?

Yes, you need to make sure the SMA connectors match.

GENERAL INFORMATION

I seem to be using more data than expected. What might be the cause?

Data usage is very hard to comment on because everyone uses their data differently. The possibilities for unexpected high usage are;

1. Someone has gained access to your WIFI password. Change your Wi-Fi password.
2. Software updates (windows or apple or android), turn off automatic updates, and select when you want to do them (i.e. when you're on a public Wi-Fi hotspot and not paying for data)
3. When not using, turn it off, devices might still be using data even when you have put them down, such as a VPN connection on a laptop has a thing called a heartbeat that slowly uses data to maintain the connection, this might slowly use data for many hours.
4. Video conferencing calls can be like steaming video, 1GB per hour as a rule of thumb, even more for High Definition.
5. Consider changing your plan or data provider. There are always new and improved deals being announced.

What coverage can I expect to get?

As we access our data from a range of Data Providers - the coverage is where they are available.

Search on the internet for coverage maps. These are normally located on your providers web site.

Will you be making updates to the software? If so, how can I update my router?

Yes, we are continually looking for new and exciting features and improvements. We will make these available for download on our website.

Follow our Facebook page for notifications and how to apply these updates www.facebook.com/rvwifi

Is there any device in my RV that I should not place the router or antenna near?

1. The external antenna is best placed clear of high objects that will restrict its capacity to receive and send.
2. The router and antenna need to be placed away at least 2 metres from the solar inverter.

How many concurrent Wi-Fi device connections can your product support?

The limit is up to 50 devices at once.

What size external hard drive can be connected?

RV Wi-Fi has been tested up to 1TB.

How is RV Wi-Fi different to hot spotting my phone, or a 'pocket device'?

The RV Wi-Fi solution has been created with the specific needs of the RV community. The differences are as follows:

- Wired in to the 12V supply of the van, so no chargers to look after or lose.
- Superior Wi-Fi coverage – typically 40 metres from the Caravan/ Motorhome.
- The RV Wi-Fi router software has been developed with the travelling holiday in mind. No bill shock – no impact to your phone data plan.

SPECIFICATIONS

RV WIFI 5G router

Supports: 4G/5G (MIMO)

Frequencies: 5G bands (700MHz / 850MHz / 2300MHz / 3500MHz (n1/ 2/3/5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 29/ 30/ 38/ 40/ 41/ 48/ 66/70/ 71/ 75/ 76/ 77/ 78/ 79)

3G/4G bands (700MHz / 850MHz / 900MHz / 1800MHz /2100MHz / 2300MHz / 2600MHz (B1 / B3 / B5 / B7 / B8 / B28 /B40)

WIFI Standards:80.11ac / 802.11a / 802.11n / 802.11g / 802.11b

2.4GHz and 5.8GHz

Works in conjunction with Starlink

Dimensions: Height: 45mm, Width: 130mm, Length: 165mm, Weight: 875 gms

Electrical: 12volt 300mA (typical)

Operating Temp: 0 °C to + 40 °C

Runs on all Australian Mobile Data SIMS

Antenna connection: WIFI - SMA Male

4G/5G - SMA Female

Internal 4G/5G Antenna

QTY: 4

Supports: 4G/5G

Frequencies: 5G bands (700MHz / 850MHz / 2300MHz / 3500MHz (n1/ 2/3/5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 29/ 30/ 38/ 40/ 41/ 48/ 66/70/ 71/ 75/ 76/ 77/ 78/ 79)

3G/4G bands (700MHz / 850MHz / 900MHz / 1800MHz /2100MHz / 2300MHz / 2600MHz (B1 / B3 / B5 / B7 / B8 / B28 /B40)

Dimensions:Length: 190mm

SMA: Male

Gain: 4dBi

Internal WIFI Antenna

QTY: 4

Supports: 2.4GHz and 5.8GHz

Frequencies: 80.11ac / 802.11a / 802.11n / 802.11g / 802.11b

SMA: Female

Gain: 3dBi

External 4G/5G/WIFI Antenna

QTY: 1

Supports: 4G/5G

Frequencies: 5G bands (700MHz / 850MHz / 2300MHz / 3500MHz (n1/ 2/3/5/ 7/ 8/ 12/ 13/ 14/ 18/ 20/ 25/ 26/ 28/ 29/ 30/ 38/ 40/ 41/ 48/66/70/ 71/ 75/ 76/ 77/ 78/ 79)

3G/4G bands (700MHz / 850MHz / 900MHz / 1800MHz /2100MHz / 2300MHz / 2600MHz (B1 / B3 / B5 / B7 / B8 / B28 /B40)

Dimensions: Diameter: 130mm, Height: 50mm Weight: 550gms (inc bracket)

Bracket: Aluminium

SMA: Female (WIFI), Male (4G/5G)

Gain: 6dBi

Cable Length: 2 metres (x4)

Type of cables: 2 x 4G/5G, 2 x WIFI

Need Help

For help with your RV Wi-Fi unit please go to:

info@rvwifi.com.au and a service agent will be in touch.

