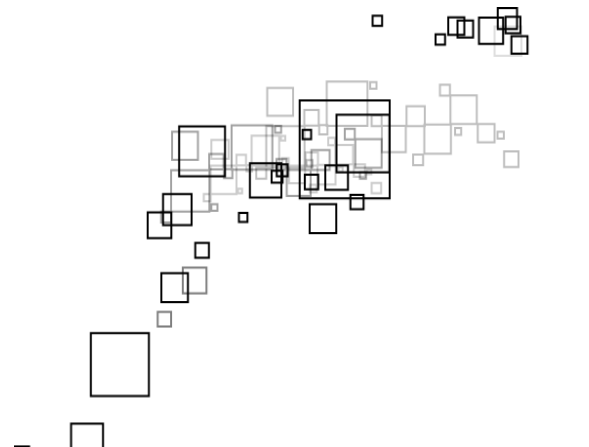


MOFI5500-
5GXeLTE4G/LTE/5G* Advanced
High Performance Router
Updated Manual can be located
at: www.MoFiNetwork.com
1-888-499-0123 (Toll Free)



User Manual

Please note that it is recommended to download our full User Manual on our site since this is current version that is enclosed does not have all the features listed.

Manual revision version is 1.0

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About the Product

- The MOFI5500-5GXeLTE SIM Version is a high performance wireless broadband Router with 4G/LTE/5G* support. Comes with different configuration options (with a CAT7 EM7411, CAT7 EM7411 Dual, CAT20 EM7690 and CAT20 EM9191 4G/LTE/5G option as well as a model that has no module for the Cable/Satellite/DSL customers including Starlink). You will need a compatible cellular plan from your provider and then can put the sim card in the router(with the module version) to get internet access.
- 4-Port Wireless-N/AC Broadband Router to Share Wireless Internet Connection with more users.
MOFI5500-5GXeLTE integrates router functions so that Internet can be accessed through WIFI connection simultaneously. MOFI5500-5GXELTE router function provides an excellent solution for sharing a wireless Internet connection and files such as High Definition (HD) video, music, photos and documents with the wireless speed up to 1000Mbps.
- Advanced Wireless Security
The MOFI5500-5GXeLTE creates a secure Wi-Fi® network by supporting the latest wireless security features to prevent unauthorized access. It supports for 64/128-bit WEP, WPA, WPA2 and WPA3 to ensure that you will be able to secure your Wi-Fi network, regardless of your client devices. In addition, the 4G/LTE/5G* Mobile Router utilizes dual active firewalls (SPI and NAT) to prevent potential attacks from across the Internet.
- Wide Wireless Coverage
The product integrates 4x4 (4 transmit and 4 receive) 5dBi antennas. This MIMO technology overlay the signals of multiple radios, which successfully reduce “dead spots”, increase throughput and increase wireless coverage range.
- Easy to install and Use
By connecting a USB modem into USB port of MOFI5500-5GXeLTE, Internet access can be accessed and shared virtually anywhere within a wire or wireless broadband network. The USB port can also be used to for cell phone tethering to share the internet off your cell phone.

Features

- High performance mission critical solution for your 4G/LTE/5G* solution.
- Support (4G/LTE/5G*) USB modem connection - to offer a network connection with full mobility
- Latest Cellular Embedded Modem that allows the fastest and most stable connection possible
- Units has build in amplifiers that boost the WiFi with a strong yet clean signal that will allow to use the router as far as possible ever using the 5GHz WiFi Bands where other lower performance router cannot reach this range.
- Support WAN Port and 4-Port 10/100/1000M (Full Gigabit Support)
- Support for 64/128-bit WEP, WPA, and WPA2 and the new WPA3 - ensure secure WiFi network, and prevent unauthorized access
- Detachable Antennas - allows flexible gain performance antennas for both the cellular and wifi connection and offers the ability to use outdoor external antennas
- Auto Fail Over (Can have a cellular and Cable/DSL/Satellite connection, if the Cable/DSL/Satellite connection is lost, the cellular connection will take over and as soon as the connection is established again, it will revert back to the Cable/DSL/Satellite connection.
- Many more features are included in the router which you can find at www.mofinetwork.com for help and videos. You can visit our youtube channel for videos <https://www.youtube.com/c/Mofinetwork/videos>
- You can also send us an email anytime to: support@mofinetwork.com

Requirements

- Your computer must meet the following minimum requirements.
- Any internet browser to surf the internet
- Ethernet network adapter or wifi network adaptor
- The MOFI router will work with basically any operating system and devices.

Device Design - Front Panel



LED	Behavior	Description
Power/Boot Status	Blink/Solid	Blink when booting, Solid when competed boot.
Internet	On	Internet using the SIM Card
	Off	No Internet access
	BLINKING	Using the WAN Internet
Wi-Fi	On	Wireless is enabled (will blink to show the wireless traffic)
	Off	Wireless is disabled
	Blinking Very Fast	Normal Use Unit is in recovery mode
WAN	On	Connected to a Cable/DSL/Satellite
	Off	No Modem connection
Ethernet 1-4	On	Connected to an Active Ethernet Device
	Off	No Ethernet Connection
	Blinking	Transmitting/Receiving Data

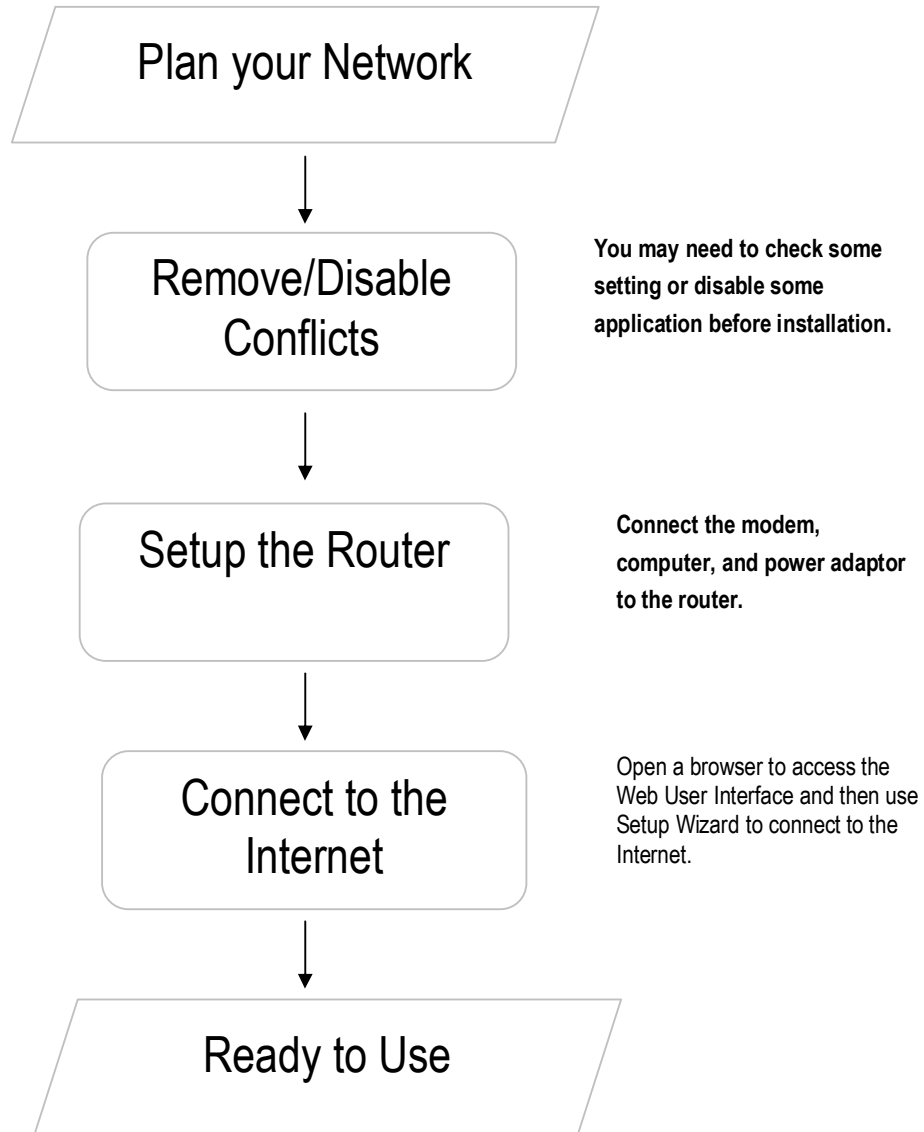
FRONT VIEW



Label	Description
Ethernet Port 1-4	Connecting with computers/devices using an Ethernet cable
WAN	Connect to a modem Cable/DSL/Satellite using an Ethernet cable
Reset	Press for 10 seconds to reset to the Factory Default.
Power Jack	Use 12V 3.5A Power Adapter

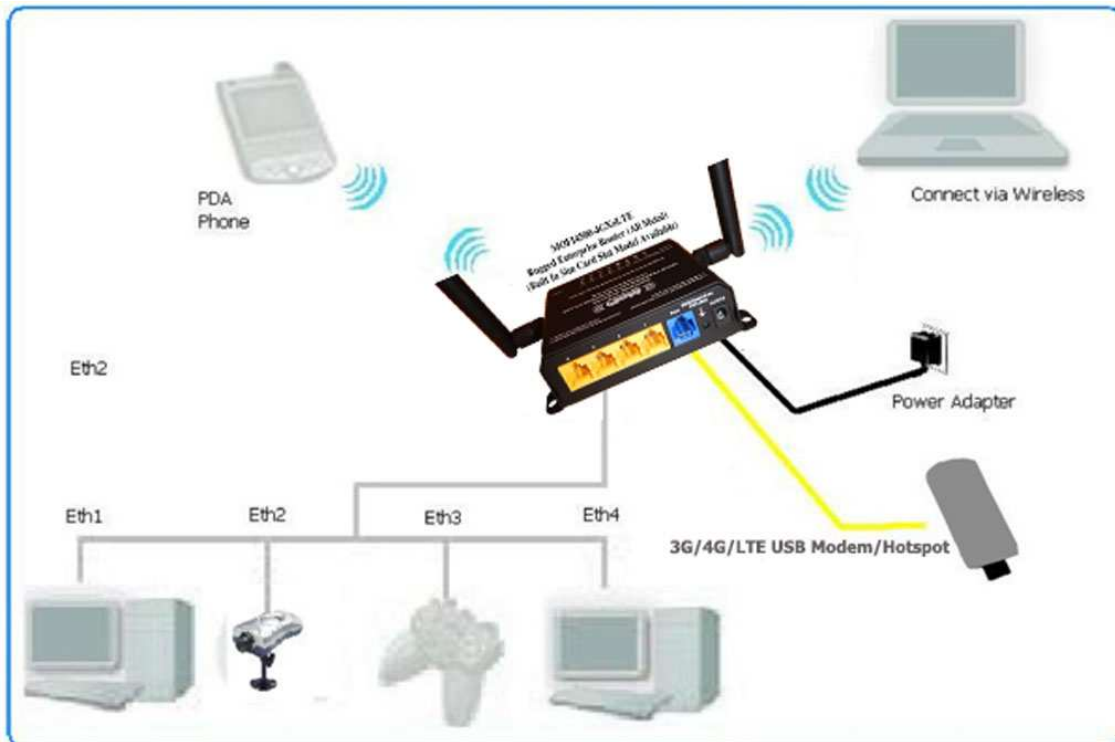
*Note to get 5G cellular, you will need the MOFI5500-5GXeLTE-EM9191 model

Getting Started



Plan Your Network

1. Using a 4G/LTE/5G* USB Modem Stick



2. Using a DSL/Cable modem (If your DSL/Cable modem is both a router and a modem, contact us.



*Note to get 5G cellular, you will need the MOFI5500-5GXeLTE-EM9191 model

Remove or Disable Conflicts

To make sure the router installation moves on smoothly, you need to remove or disable conflicts that may interfere the installation. Probable conflicts may include:

- Internet sharing applications
- Proxy software
- Security software
- TCP/IP settings
- Internet properties
- Temporary Internet files

Internet Sharing, Proxy, and Security Applications

Internet sharing, proxy software, and firewall applications may interfere with the router installation. These should be removed or disabled before start the installation.

If you have any of the following or similar applications installed on your computer, remove or disable them according to the manufacturer's instructions.

Internet Sharing Applications	Proxy Software	Security Software
Microsoft Internet Sharing	WinGate	Symantec
	WinProxy	Zone Alarm

Configuring the TCP/IP Settings

Check if your computer uses default TCP/IP Settings

To check the TCP/IP properties:

1. Click the Start button, and then click Run. This opens the Run dialog box.
2. Type in ncpa.cpl, and then click OK. This opens the Network Connections in your computer.
3. Right-click LAN, and then select Properties. This opens the Local Area Connection Properties dialog box.
4. Select Internet Protocol (TCP/IP), and then click Properties. This opens the Internet Protocol (TCP/IP) dialog box.
5. Select Obtain an IP address automatically.
6. To close the Internet Protocol (TCP/IP) dialog box, click OK.
7. To close the Local Area Connection Properties dialog box, click OK.

Configuring Internet Properties

To set the Internet Properties:

1. Click the Start button, and then click Run. This opens the Run dialog box.
2. Type in inetcpl.cpl, and then click Ok. This opens the Internet Properties.
3. Click the Connections Tab.
4. In Dial-up and Virtual Private Network settings, select Never dial a connection.
5. Click Ok the button to close the Internet Properties.

Removing Temporary Internet Files

Temporary Internet files are files from Web sites that are stored in your computer. Delete these files to clean the cache and remove footprints left by the Web pages you visited.

To remove temporary Internet files:

1. Click the Start button, and then click Run. This opens the Run dialog box.
2. Type control, and then click OK. This opens Control Panel.
3. Double-click Internet Options. This opens Internet Options.
4. In the Temporary Internet Files pane, click Delete Cookies.
5. Click Delete Files.
6. To close Internet Properties, click OK.

Installing your Router

The MOFI5500-5GXELTE SIM Version can be used in many ways including as a 4G/LTE/5G* router or just a regular Cable/DSL/Satellite high speed router including using it with Starlink.

Using a SIM card from your provider direct from provider

1. Insert your SIM card in the SIM card slot on the side of the router and connect all antennas to router.

(Note that when looking down on the router, the sim card should be facing up and the cut on the sim card should go in the router first and you should feel a click when the sim card is in correct. Note also that only a large sim card (2FF) can be used so if you have a micro or a nano sim, you need to use the sim card adaptor to make it to the largest size.)

2. Connect the power cable to the router's power jack and plug it in to the wall socket.

3. Connect your PC to any available Ethernet port using an Ethernet cable or connect via wireless.

(do not use the WAN)

4. At this point, your connection should be connected. If not, you will need to check your settings

- Is the APN correct and is the router reading the sim card fine? To check this, log into the router

Go to Mofi Internal Modem then click on the configuration tab on the left

The carrier ID should show up (that is how you know the router is reading the sim card)

On the bottom of that page, it will show the current access point (APN) that you are using.

You need to confirm the APN is correct that you need to use, if not, then you can select it from the APN list what you need to use or under country, select custom apn and enter the apn that you want to use then save and reboot.

Using a DSL or Cable Modem or Satellite Modem

If you choose to use a DSL, Cable or Satellite modem you are required to have the following:

- DSL or cable modem or Satellite modem
- Active Internet Account

1. Connect your DSL, Cable or Satellite modem to the router's WAN port using an Ethernet cable.
2. Connect the power cable to the router's power jack and plug it in to the wall socket.
3. Connect your PC to any of available Ethernet port using an Ethernet cable or connect via wireless.

Note: Ensure that the router's IP address does not conflict with the DSL/Cable/Satellite modem. Please refer to your modem's User Manual on how to change the LAN IP address. The default IP on the MOFI5500-5GXeLTE is 192.168.10.1

Connecting to the Internet VIA 4G/LTE/5G*

Here is a video to help you setup the MOFI router using the wizard:

<https://youtu.be/jevcVD5t0G8> (this is for the MOFI4500 but the setup process is very similar to the MOFI5500)

If you have a cable, DSL or Satellite modem that does not need to have a username/password, just connect the output from the Cable/DSL/Satellite to the WAN port of the router then repower your Cable/DSL/Satellitebox and you should be online.

To Connect to the Internet via the Web User Interface with a 4G//LTE/5G* connection, you only need to put the sim card in and the router should auto detect and it should work. If you need to manually enter the info, do the following:

1. Open your Internet web browser.
2. Type `http://192.168.10.1` in the address bar and press enter. This opens the login authentication page.
3. Type your Username and Password. Your default Username is root and the password is: admin
Please refrain from saving your username and password if your browser asks you to..
4. Run the wizard on the top right and follow the on screen instruction



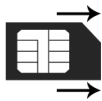
If you have a micro or nano sim, you can use the included sim adaptor to make it into a standard full-size sim.

Turn the router on the bottom and you will see this picture.

Note the gold portion of the sim card is facing upwards and slot side in first.

Just put your sim over this picture and then move it over and push in side of router.

It will click in if it is inserted the correct way. Here is a video https://youtu.be/7uyswCo_JA



*Note to get 5G cellular, you will need the MOFI5500-5GXeLTE-EM9191 model

Wireless

By default, the wireless network name is: MOFINETWORKXXX where the XXXX is the last 4 digits of your router's MAC address.

If you do not require setting up a WIFI name or a wireless password then you can skip this step.

If you want to change the network name (ESSID) or add a wireless password, please do the following:

You can just run the wizard which will allow you to set this up easily or if you want more control, you can do this by going to Network --> Mofi Wifi

NOTE: All the MOFI5500 models are equipped with dual band WIFI which means that your router will broadcast both 2.4GHz and 5.0GHz Wireless connection.

The screenshot shows the MOFI5500 router's web interface. The left sidebar contains a menu with options: Status, Mofi Internal Modem #1, System, Network (highlighted), Router IP/DNS, Interfaces, Mofi Wifi (highlighted in red), Wifi Bridge/Repeater, Wireless, Wifi Blocker, Port Forwarding, Port Filtering, Captive Portal, IPv6 Support, DHCP, and DMZ. The main content area displays the 'Main WiFi 2.4GHz' and 'Main WiFi 5GHz' configuration sections. Each section has a title bar with 'Router ID: E43A6526B24C Firmware: 4.6.2-5500-std' and buttons for 'Wizard', 'Usage', and 'Logout'. Below the title bar is a text box stating 'This section will configure the main 2.4 GHz wifi to connect to.' and 'This section will configure the main 5 GHz wifi to connect to.' respectively. Each section has a table of settings:

Setting	Value
Enabled	ON
SSID	MOFI WIFI 2.4GHz
Hide SSID	<input type="checkbox"/>
Encryption	none

Setting	Value
Enabled	ON
SSID	MOFI WIFI 5GHz
Hide SSID	<input type="checkbox"/>
Encryption	none

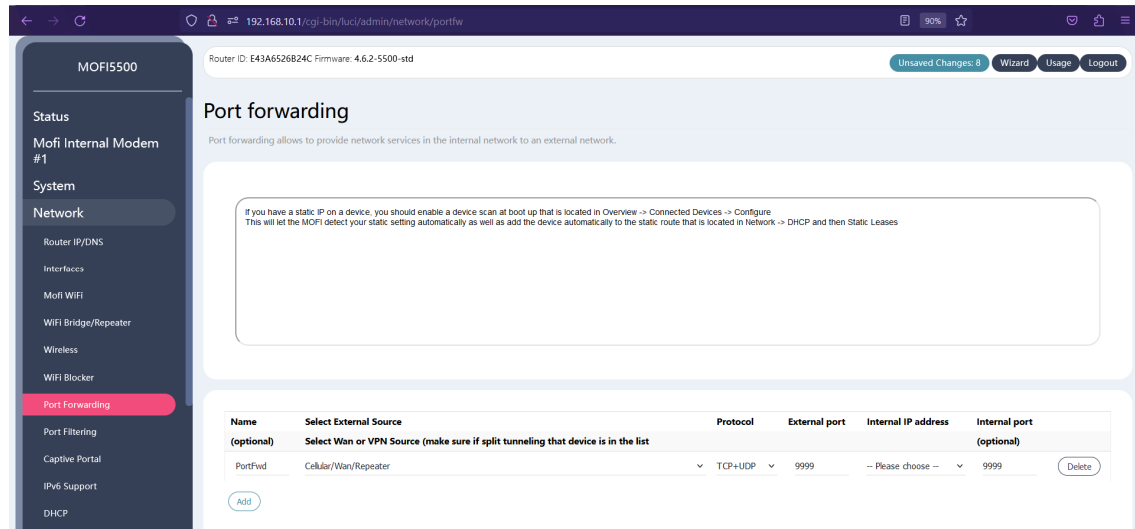
The most popular encryption is WPA2-PSK. It is recommended to select this and enter the password in the Password Field (minimum 8 characters)

Click on Save to save the changes

How to forward ports:

(Note you will need a public IP address in order to do any port forwarding)

MOFI offers a public IP service depending on what you need this for.
By default, most cellular connection does not provide a public IP.
If you need this service then please contact us for a free trial.



Port Forwarding should be just under Network, Click on Add

For Name, enter whatever you want to call it

Select the Protocol you want to use

Enter the external port that you want to forward to

Usually the internal and external ports would be the same

Select the IP address of the device you want to forward to, Click on "Save"

If you are using a mobile internet connection like a cellular connection, you will probably have a private IP from your provider.

If you have a private IP, you will not be able to use any port forwarding features.

If you would like a public IP that will work with port forwarding, we offer a service called Mofi Cloud Link.

Call us if you want to get this set up.

There are 2 ways to get around this:

- 1) You could contact your internet service provider and try to get a public IP address from them.
Some providers do not offer this.
- 2) We offer a public IP option. To get this, contact us and we can instantly set up your account and you will be able to get a public IP address and have access remotely to your network. A lot of customers use this option to use with a video camera system so if this is something you are looking to do, contact us toll free at 1-888-499-0123 or email sales@mofinetwork.com

*Note to get 5G cellular, you will need the MOFI5500-5GXeLTE-EM9191 model

How to open ports in the router:

Note that normally, you would not have to do this. If you feel you need to, first double check as when you do a port forward, it should automatically open the ports for you.

These are the default port that are open by default

WEB 80

SSH 22

HTTPS 443

RDP 3389

UDP 68

If you want to be use or open some of the uncommon ports to connect to your DVR or other devices from the outside, below is the instruction on how to open up ports.

When you do a port forwarding rule, it normally opens the port by default so the below is normally not needed.

Log into the router

Click on Advanced Mode --> Network Tab --> Firewall

Under Rules, click Add

For the Name, put whatever you like to describe it

Source Zone: Leave at WAN/USB

Protocol: Select which one you want or "Any" if you are not sure

Source Address: Leave it default "any"

Destination Address: (this is where you would enter the port you would like to open) example 2100

Action: Leave default at "accept"

Click "Save & Apply" to save the changes

Now the port is open in the router.

To actually use this, you may have to set a port forward rule

The easiest way is to upgrade to version 3.1 or later where has the port forwarding under Network

Click on Network Tab --> Port Forwarding

Click on Add

For Name, enter whatever you want to call it

Select the Protocol you want to use

Enter the external port that you want to forward to

Select the IP address of the device you want to forward to

Click on "Save"

How to Set a Wireless Bridge/Repeater:

The first thing you need to know ahead of time is the wireless SSID (network name) and password of the device that you want to connect to if it has a security enable on it.

Note it is case sensitive so make sure you have everything exactly the way it is.

If you are using a hotspot device such as the MiFi units, the wireless password is printed on the inside cover of the unit.

Connect the router to your pc with the Ethernet cable in one of the 4 ports (not the WAN port)

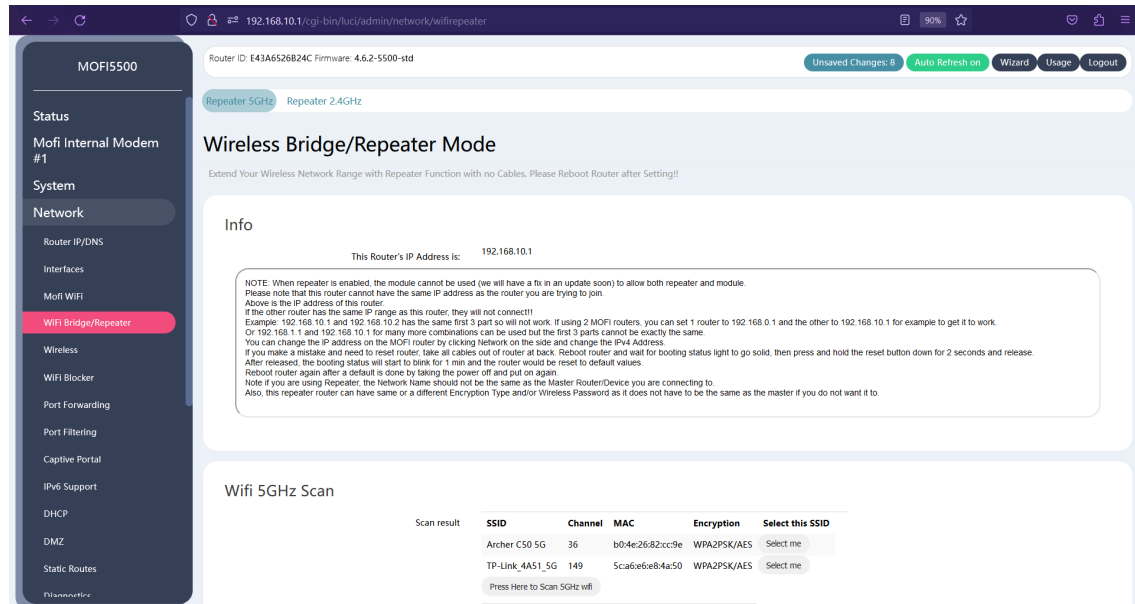
Open up your web browser

Log into the router,

http://192.168.10.1

username: root, password: admin

1. Go to Wifi Bridge/Repeater under Network



NOTE: All the MOFI5500 routers are equipped with dual band WIFI. So you need to ensure which band of WIFI are you trying to form the bridge with (repeater 2.4GHz / repeater 5.0GHz)

2. Under 2.4GHz Scan / 5.0GHz, click on Press Here to Scan 2.4GHz WIFI / 5.0GHz WIFI and this will populate the list with the available wireless network around you.

3. Click on "Select Me" for the network that you would like to form the bridge with.

4. Under Wifi 2.4GHz / 5GHz, make sure it is enabled and verify the network name is correct and then enter the Wi-Fi password of that device.

*Note to get 5G cellular, you will need the MOFI5500-5GXeLTE-EM9191 model

Wifi 5GHz

Enable

☒

Channel

149

SSID or Network Name of Master Router/Device (It is case sensitive)

MOFI Cell

Wifi Security

WPA2-PSK

Encryption/Security Type (WPA2-PSK) is recommended

Cipher

Force AES

Wireless Password/Key (Case Sensitive)

password for the wifi here

Passwords Must be between 8 and 63

Clone Mac Address

Use this if you need to make the router's wifi have the same mac as your device

MAC Address of Current Device:

c4:03:a8:d1:16:4a

5. Under Bridge/Repeater 2.4GHz / 5GHz (this) Router, verify that it is enabled.

This section is for the WiFi name that you want to broadcast from your MOFI5500 router.

Enter the name you want to use (it cannot be the same as any other network around you) and then enter the password you want to use. Then click on Save.

Bridge/Repeater 5GHz (this) Router

Repeater Mode Enabled

☒

SSID or Network Name of this Repeater Router

repeat_5g

Wifi Security

WPA2-PSK

Encryption/Security Type (WPA2-PSK) is recommended

Cipher

Force AES

Wireless Password/Key (Case Sensitive)

password for your new wifi

Passwords Must be between 8 and 63

After 30 seconds or so, the router should connect and you will see the internet LED on the router come on.

It is suggested to power cycle the router at this point.

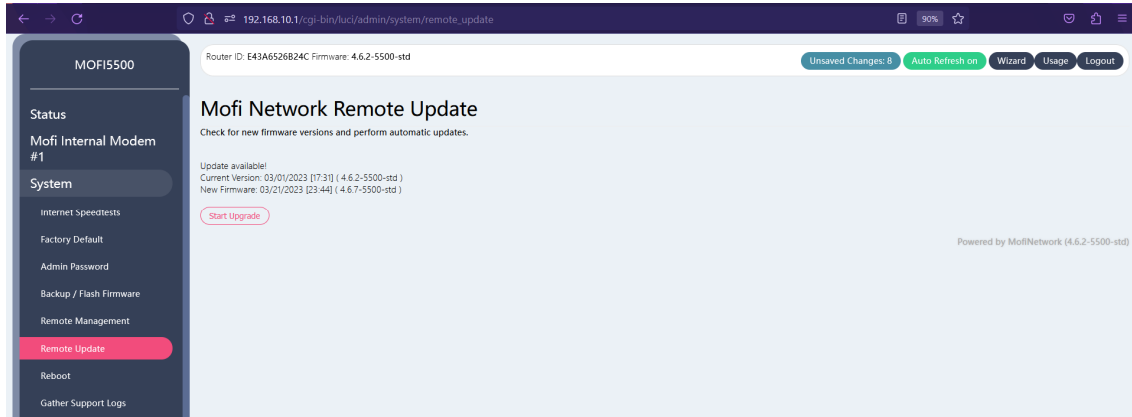
When the router comes back up, you should see the name in step #5 that you made and you should be able to connect and have internet

If for some reason you do not have internet, you will need to double check that you have selected the correct network name and entered the correct wifi password for that network name.

How to do a Firmware Upgrade:

There are two ways to upgrade the firmware on the MOFI5500 router:

If you have a working internet connection, then you can perform a Remote Update.
You can do this by going to System → Remote Update



However, if you do not have internet access on the router, you may have to do a manual firmware update.

To do a manual firmware update, please visit www.mofinetwork.com and then go to Support --> Downloads, then click on select MOFI5500 Download

Download the latest firmware and then follow the instructions there on how to update.

NOTE: After you have installed the latest firmware update, you will need to perform a factory default to reset the router.

If you make a mistake or encounter an error during the firmware upgrade process and the router seems to be non-functional, look at our section on how to do a MOFI Recovery.

*Note to get 5G cellular, you will need the MOFI5500-5GXeLTE-EM9191 model

How to Remote Login into the Router:

Remote Login on the MOFI5500 router is enabled by default and can be accessed on port 80, 81 and 8080

Port 8080 is the official port for remote access on the MOFI5500 router.

If you have a public IP address, you will be able to access your router remotely by going to:

`http://yourpublicIPAddress:8080`

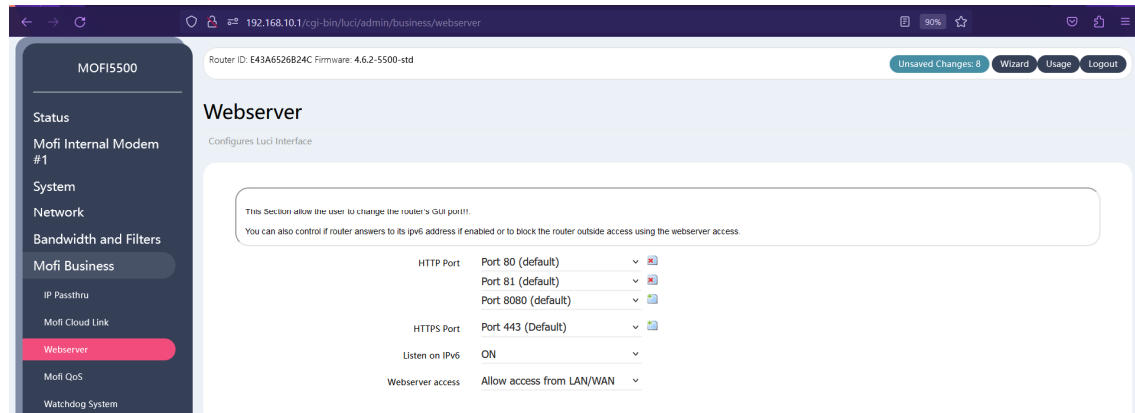
However, if you are using a cellular connection and have not paid or added a public ip option to your account, you cannot get direct access to the router as the NAT will not let you do this,

If you have a security camera system for example and want to log in directly, you will need to contact your internet service provider and get a public IP option or contact us for a public IP option that we offer.

How to modify settings/ports for remote access to the router:

By default, the router is set to receive on port 80, 81 and 8080

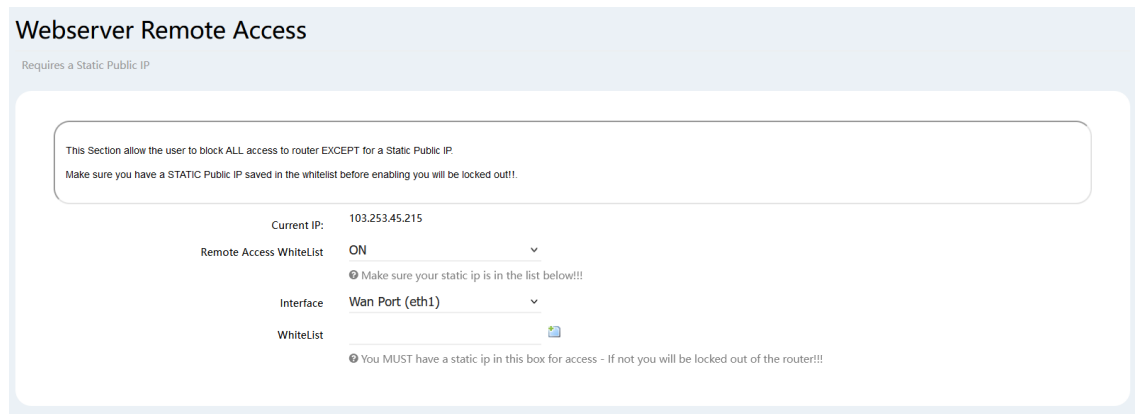
If you want to change this, log into the router and go to Mofi Business → Webserver



To change the port, click on the HTTP Port option and select custom and then change it to what you want. If you want port 90 for example, you would type: 90

If you want to disable access for remote access, just turn remote access off.

If you want to limit remote access to specific IP address, for Remote Access White list, turn it ON
For the Interface, select the current internet connection type you have. By default, WAN port is selected.
Under White list, type the IP address that can have access to the router.
If you want multiple IP, click on the plus icon on the right



***Note to get 5G cellular, you will need the MOFI5500-5GXeLTE-EM9191 model**

There are many more features that are not covered in this manual such as

We are currently making some changes to this section but below is some more options not fully documented

- Parental Control Scheduler (ability automatically to allow or block access to individual devices via the mac address). This feature is great to block kids for use of internet when they should not be using it.
 - Wifi speed limiter. This allows you to set the upload and download speed of your wifi signal. You can add 2 wifi network and each of these can be individually control the speed. This feature would be great for customers of a bus company or store that want to give their customers access to the internet but do not want a customer to kill the bandwidth usage and cause a slow down for everyone else or use up too much data.
 - Bandwidth monitoring. This feature allows to see the usage at any point during the month for each individual device. This is great if you have an infecting device and want to track where the extra data use is coming from. It is suggest you enable the remote management and track the bandwidth uses there as this will give you the most accurate measurements
 - Bandwidth control: This feature allow you to set specific amount of data to an individual device via the mac address. You ,can also use this option in daily or monthly quota so if a user used too much data in the allotted time, they will lose internet access automatically until their time gets reset normally the next day or when the billing month starts over.
- Mofi Extended - An easy way to daisy change multiple MOFI routers to increase your wireless range using multiple MOFI routers. This method is the preferred way but will require connecting each router using a Ethernet (wired) connection.

FAIL OVER

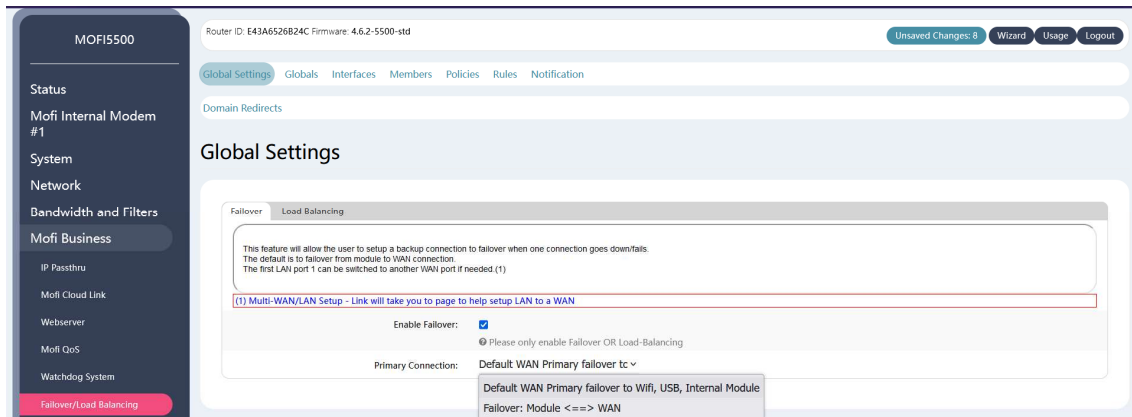
If you require the highest stability, Fail Over can be a life saver.

This feature is used if you have 2 activate internet connection.

You can specify which connection you want as your main connection and once that connection drops (or if it is not available), it will jump to the secondary connection and then jump back to the primary connection when it is available.

To activate fail over, go to Mofi Business → Fail Over / Load Balancing

1. Enable by checking box
2. Normally, 99% of customers wants WAN as primary and cellular as secondary so you can select the default profile. If you want to change, select the option you need.
3. Save & reboot router



*Note to get 5G cellular, you will need the MOFI5500-5GXeLTE-EM9191 model

LOAD BALANCING

If you require the fastest internet possible, the Load Balancing feature will allow you to take two WAN connections and make them work as one.

To active Load Balancing, go to Mofi Business → Fail Over/Load Balancing

1. Select Load Balancing
2. Enable by checking the box that says Enable Load Balancing
3. Save and reboot the router

With this feature, you will need to have 2 internet connections (one is the WAN port and the other in port 1)

This feature also includes fail over simultaneously so if one connection fails, the other will still work. If both connections are working, they will bind together and work as one. This will ensure the faster connection speeds possible than any single connection connected.

Global Settings

Failover

Load Balancing

This feature will allow the user to setup multiple connections to share the load across all of them. The default is to balance the load between the cellular module and the WAN connection.

Enable Load Balancing: ☐ Please only enable Failover OR Load-Balancing

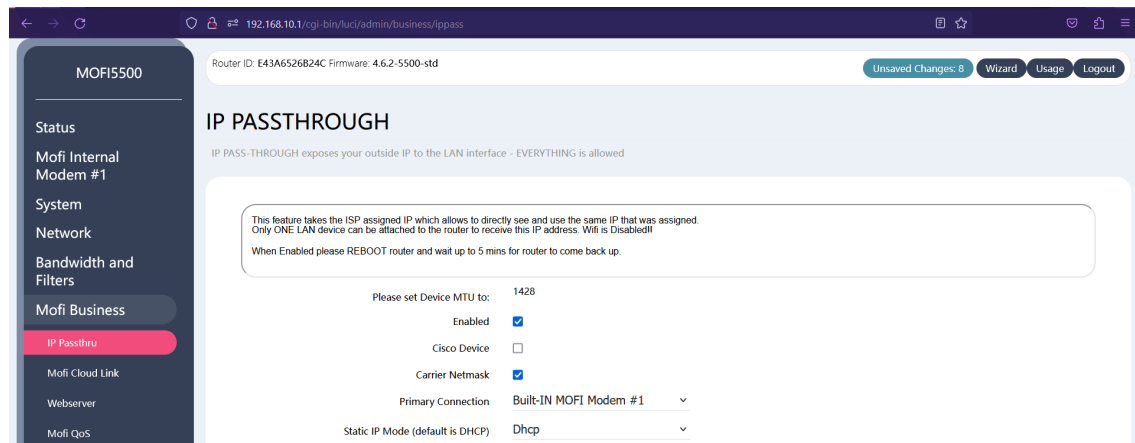
WAN Weight: 50% ▼

Module1 Weight: 50% ▼

Estimated bandwidth percent

WAN percent: 50%
Module1 percent: 50%

IP Pass Through



With IP Pass Through, this feature will make your router to work as a modem. Only 1 device can be connected via Ethernet Port 1.

This feature will prevent 2 routers from conflicting each other.

To enable IP Pass-through, check the box that says Enabled and then save and reboot the router.

Normally you would never need to change any of the default settings here.

When IP Pass Through is on, your WiFi will automatically be disabled.

If you are connected to a device, all ports will be sent to this. This feature will pass everything over to the device connected.

If you connect a different device, you will have to reboot the router for this to be active.

If you need access back to the router after it is in IP Pass-through Mode, go to <http://192.168.10.1:8080> or if you have a public IP Address, <http://yourpublicIP:8080>

Note that by default, most cellular connection provides a private IP address and as such, port forwarding will not work.

If you require a public IP address, contact us about this option.

If you make a mistake and can't back in the router, you can do a reset by holding the reset button at the back for 10 seconds and then release after the router is booted up.

*Note to get 5G cellular, you will need the MOFI5500-5GXeLTE-EM9191 model

MOFI RECOVERY (For MOFI5500)

How to recover router from wrong file update or other problem

This MOFI utility will restore your MOFI MOFI5500-5GXeLTE router back to working mode.

Note you will need a pc with an Ethernet cable if the MOFI WIFI RECOVERY does not load

There are possibly 2 ways to do the recovery on this MOFI5500 router

One is the Recovery where you can do this off wifi and the other is the basic mofi recovery where you will need to do this with an Ethernet cable.

Before doing this, suggest you download and save the latest firmware

https://mofinetwork.com/mofi5500_downloads/

If you need to do the boot recovery, you will also need this recovery firmware

https://mofinetwork.com/firmware/MOFI5500/MOFI5500_RECOVERY.bin

Depending on what you load, you may over write the file to do the MOFI Wifi Recovery

To see if you can get into the mofi wifi recovery:

Take Power off the router

Hold the reset button down

Connect the power back in the router Keep holding the reset button (about 20 seconds) and first, you will see the 1st BLUE LED come on.

Keep holding down and then about 5 more seconds and you should see both BLUE LED come on

Release the reset button, the router will reboot with only the power LED on.

Wait for about 1 min and then check your wifi and you should see the MOFI Recovery wifi show up. Connect to this and you can load the standard mofi firmware on this. If this does not work, you can try the boot recovery which needs an Ethernet cable to get this to work

Step 1: Set router is recovery mode

Connect the router to your pc with an Ethernet cable to port 1 at the back of the router.

Unplug the router and press and hold the reset button on the back of the router.

Wait until you see the first BLUE LED come on and then release the reset button (this will take approx 12-15 seconds) The Internet LED will also flash

Step 2: Set your network connection to static ip address: 192.168.10.7 To set your static ip address, you can do this: Go to control panel --> network connection or network and internet then network and sharing center then click on change adaptor settings or network connections under network connections, right click on local area connections and then select properties click on Internet Protocol TCP IP V4 so it turns blue click on properties and enter the below:

IP: 192.168.10.7 subnet: 255.255.255.0 default gateway: 192.168.10.1

Then go out and save

Step 3: Mofi Recovery Interface

Open your web browser to <http://192.168.10.1/index.html>

Browse to the recovery file and load this You can get the recovery firmware here

https://mofinetwork.com/firmware/MOFI5500/MOFI5500_RECOVERY.bin

Will take approx 4 mins for router to complete.

Step 4: Set back your network cable to automatic To set your network card back to automatic, you can do this:

Go to control panel --> network connection or network and internet then network and sharing center then click on change adaptor settings or network connections under network connections

Right click on local area connections and then select properties click on Internet Protocol TCP IP V4 so it turns blue click on properties and select "Obtain an IP address automatically"

Also, make sure the DNS is set to "Obtain DNS server address automatically"

Step 5: Log into the router Now, you will be able to log back in the router.

To log in router, go to <http://192.168.10.1>

username: root password: admin

Once you are in, you can load the standard firmware back on your router

MOFI RECOVERY (For MOFI5500 WiFi Recovery)

How to recover router from wrong file update or other problem

This MOFI utility will restore your MOFI MOFI5500-5GXLTE router back to working mode.

It will only work on any operating system like Windows, MAC, Linux

Here is a video on how do this:

<https://youtu.be/-OaSkU6VSPk>

On the MOFI5500-5GXLTE model, it has two types of recovery.

The first step will not require recovery file but this recovery does not work if the directory gets deleted

To try, simple follow these steps:

Step 1: Take the power off the router

Step 2. Hold the reset button down at the back of the router

Step 3: Power on the router and keep holding the reset button.

Hold about 20 seconds until you see both blue LED come on, then release.

The router will reboot. Wait about 2 mins and then you can connect via wifi to the MOFI Recovery WiFi and log into the router

<http://192.168.10.1> then you can install the latest firmware.

If this step does not work, then you will need to do the boot recovery where you will need to connect the router with an Ethernet Port.

You will need to download the recovery firmware.

To do a boot recovery, follow these steps:

Step 1: Set router is recovery mode

Connect the router to your pc with an Ethernet cable to port 1 at the back of the router.

Unplug the router and press and hold the reset button on the back of the router.

Plug back in power in router and after 15 seconds until you see only 1 blue LED, then release the reset button.

Step 2: Set your network connection to static ip address: 192.168.10.7

To set your static ip address, you can do this:

Go to control panel --> network connection or network and internet

- ➔ Network and sharing center
- ➔ click on change adaptor settings or network connections
- ➔ right click on local area connections and then select properties
- ➔ click on Internet Protocol TCP IP V4 so it turns blue

click on properties and enter the below:

IP: 192.168.10.7

subnet: 255.255.255.0

default gateway: 192.168.10.1

Then go out and save

Step 3: Mofi Recovery Interface

Open your web browser to

<http://192.168.10.1/index.html>

Browse to the file you want to recover to and open and run

Will take approx 4 mins for router to complete.

You will see the power/booting status light go off and flash and then go back solid

Step 4: Set back your network cable to automatic

To set your network card back to automatic, you can do this:

Go to control panel --> network connection or network and internet

then network and sharing center

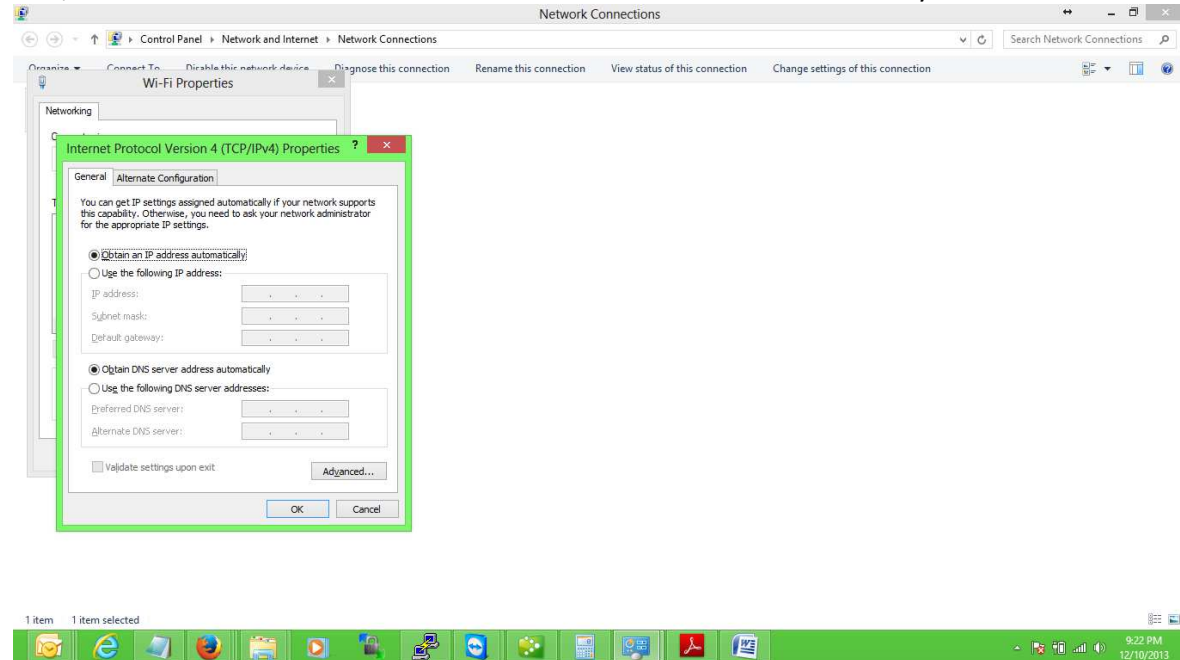
then click on change adaptor settings or network connections

under network connections, right click on local area connections and then select properties

click on Internet Protocol TCP IP V4 so it turns blue

click on properties and select "Obtain an IP address automatically"

Also, make sure the DNS is set to "Obtain DNS server address automatically"



Step 5: Log into the router

Now, you will be able to log back in the router.

To log in router, go to <http://192.168.10.1>

username: root

password: admin

Once you are in, you can now load the latest firmware to bring the router to the latest version.

*Note to get 5G cellular, you will need the MOFI5500-5GXeLTE-EM9191 model

MOFI REMOTE MANAGEMENT

How to Enable Remote Management

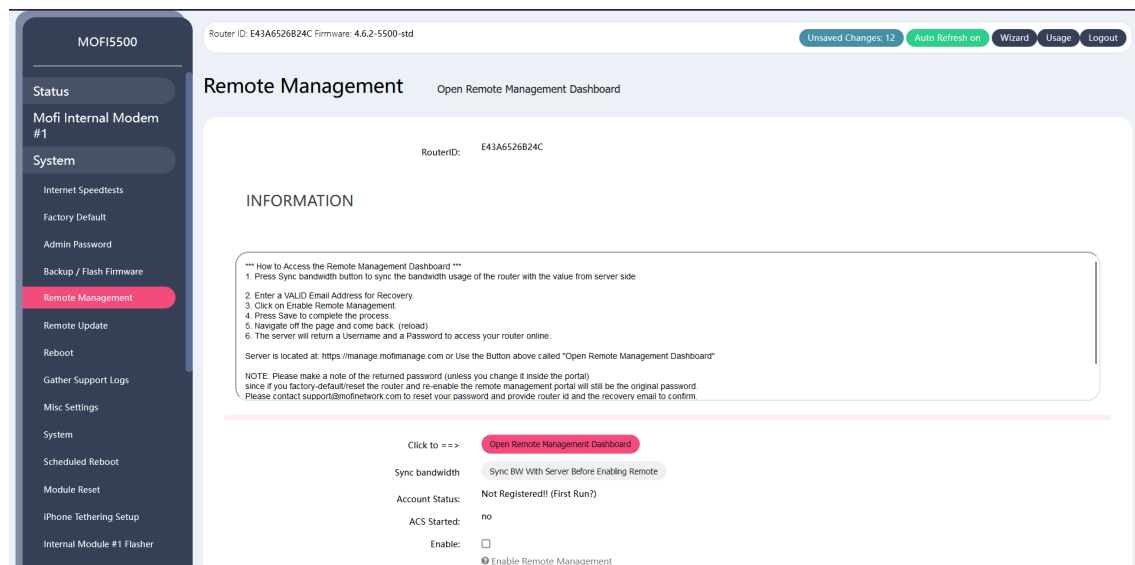
With your MOFI router, you have the ability to access your router status and make various changes if need all from an online interface on our server. To use this feature, you will need to enable this option that is located in:

Basic Mode --> System --> Remote Management

The way this works is the router will contact the server every 4 mins and check to see if there are any changes needed. If there is, it will take and apply them.

This remote management feature will work on both a public and private IP address and no need for any special IP settings for this to work.

For customers that want to have all their routers show up under one account so it can easily be managed, contact us for how you can do this.



1. Press Sync bandwidth button to sync the bandwidth usage of the router with the value from server side

2. Enter a VALID Email Address for Recovery.

3. Click on Enable Remote Management.

4. Press Save to complete the process.

5. Navigate off the page and come back. (reload)

6. The server will return a Username and a Password to access your router online.

Server is located at: <https://manage.mofimanager.com> or Use the Button above called "Open Remote Management Dashboard"

NOTE: Please make a note of the returned password (unless you change it inside the portal) since if you factory-default/reset the router and re-enable the remote management portal will still be the original password.

Please contact support@mofinetwork.com to reset your password and provide router id and the recovery email to confirm.

Please REBOOT/UNPLUG the router after everything has been setup to allow the router to provision.

The router will automatically upload its info to the server on reboot.

Once you visit <https://manage.mofimanager.com> or Use the Button above called "Open Remote Management Dashboard" you can log in using the username (MAC address of your router) and the password that was displayed above.



Once you are logged in, you will see an interface similar to the one below:



ID: This show your ID for your router that is internet to MOFI NETWORK

User: This is your MAC Address on your router

Version: This is the firmware version that is being used on your router

Model: This is the model router you are using

Serial: This is your MAC Address

Connected VIA: This will show how you are connected, WAN or 4G/LTE

IP Address: Your public IP address you are assigned. Note that your internal IP address assigned by the provider might be different since be default, most providers provide a private IP address

Last Seen: This is the last time the server has seen your router

*Note to get 5G cellular, you will need the MOFI5500-5GXeLTE-EM9191 model

Edit: In this section, once you click on that, you will have the option to change your password on the server. Default is admin

Router/Wifi Password: You can change both your Router Admin password and/or your Wifi password in this section

Wifi SSID: Section to change the network name on your router

Wifi Status: Section to turn wifi on and off.

Show Remote Gui: Section to allow or disable the option to turn on/off remote management after it has been enabled. You sometimes might not want to have the ability to disable the remote management by the user and this is how you can do this.

Bandwidth: Ability to turn on and off bandwidth monitoring

Once bandwidth is hit, you will still be able to access the router via this management interface but not will have no internet.

Firmware Operation: Ability to push a firmware update to the router

Factory Default: Ability to do a factory default on the router

Reboot: Ability to reboot router

MOFI CLOUD LINK

STATIC DEDICATED PUBLIC IP SERVICE

Do you need a public IP address or do you know what it is?

You are given what is referred to as a Private IP address by 99% of all providers.

With a private IP address, you cannot do any port forwarding. If you have a device that needs to forward a port like a camera system, you will need to get a public IP address.

There is a misunderstanding regarding whether or not you have a public IP.

Note every internet service needs a public IP to browse the web but that does not mean you have a public IP. There is a way to check which IP address your service provider assigned you.

To see what IP address you are getting you could log into the router and then click on **Check Internet Status**.



If both IP's are the same, then you have a public IP.

The MOFI CLOUD would make a great solution.

The MOFI CLOUD will give you a dedicated static public IP address.

This implies that your IP address will not change and it won't be shared with anyone. Even if the provider has closed some ports, it'll always have all of its ports open.

A wonderful benefit of the MOFI CLOUD is it does not matter what connection or provider you use, you will always have the same IP.

*Note to get 5G cellular, you will need the MOFI5500-5GXeLTE-EM9191 model

If you have a cellular connection and decide to change your provider, it would not matter. Your IP address will not change.

To sign up for the MOFI Cloud Link, contact us and we will set you up with a 7 days free trial

By phone 1-888-499-0123 or email: sales@mofinetwork.com

Instructions on how to set this up

- Log into the router
- Go to Business then Mofi Cloud

The screenshot shows the MOFI5500 router's web interface. The left sidebar contains a menu with options: Status, Mofi Internal Modem #1, System, Services, Network, Bandwidth and Filters, Business (selected), IP Passthru, Mofi Cloud Link (highlighted in pink), Webservice, Mofi QoS, Watchdog System, Failover/Load Balancing, and VPN Services. The main content area is titled 'Global options' and includes a 'NOTE' stating 'This requires a CloudLink Account from Mofi Network.' Below the note are configuration fields: Server (set to VPN Servers), Location (a dropdown menu with the text '----- PLEASE SELECT A DATA'), Enable CloudLink (checked), Username (set to 'username'), Password (masked with dots), IP-Passthrough (set to OFF), DMZ (unchecked), SSH (Remote Access) (set to OFF), ROUTER GUI (Remote Access) (set to ON), Advanced Settings (unchecked), and Tunnel Mode (set to Split Mode - Only MAC Address). At the top right of the interface are buttons for 'Auto Refresh on', 'Wizard', 'Usage', and 'Logout'.

- Check the box to Enable CloudLink
- Select the location that your account is on (you should find this information in the email that we sent you)
- Click Browse and then select the *.conf* file that is attached in your email.
- Then hit save and reboot the router

Once the router is up you should have your public IP address assigned and you will be able to access your router from anywhere.

Preparing your device for port forwarding:

If you would like to add a device like a video camera recorder (DVR) or any other device to get this public IP address and be able to access those devices remotely, then you will have to add those devices under the MOFI Cloudlink section.

Status

Mofi Internal Modem #1

System

Services

Network

Bandwidth and Filters

Business

IP Passthru

Mofi Cloud Link

Webservice

Mofi QoS

Watchdog System

Failover/Load Balancing

List of Devices that will use the VPN in Split Mode

Label	MAC-Address	IPv4-Address
	-- Please choose --	-- Please choose --

Add

VPN Status

VPN Status:
Disconnected/Disabled

- Going back to the MOFI Cloud section, there is an option to add your device that you want to use with the public IP address. You can add as many devices that you require.
- Add the MAC address and the IPv4 Address associated with that device.
- Hit save and the change will take effect immediately

Static Lease:

For some customers, you might want to make a static IP router (this is not needed normally). In order to do that:

- Log into the router
- Go to Network and then DHCP
- Scroll to the bottom and under Static Lease, click on Add
- Enter a name to identify your device and select the MAC address for it and set the IP address that you want it to use
- Hit Save once you are done and then reboot the router

Port Forwarding:

Once you have the MOFI Cloud Link up and running, then follow the steps below to forward the ports that you need:

- Log into the router
- Go to Network and then Port Forwarding

Port forwarding

Port forwarding allows to provide network services in the internal network to an external network.

If you have a static IP on a device, you should enable a device scan at boot up that is located in Overview -> Connected Devices -> Configure. This will let the MOFI detect your static setting automatically as well as add the device automatically to the static route that is located in Network -> DHCP and then Static Leases

Name	Select External Source	Protocol	External port	Internal IP address	Internal port
(optional)	Select Wan or VPN Source (make sure if split tunneling that device is in the list)				(optional)
PortFwd	Cellular/Wan/Repeater	TCP+UDP	9999	... Please choose ...	9999
	Cellular/Wan/repeater				
	Cloudlink/Vpn				

Add Delete

- You will have to use CloudLink/VPN instead of WAN for the External Source
- Select the Internal IP address of the device that you are trying to forward the port to
- Type in your desired ports for the external/internet port.
- Then hit save and then reboot the router.

That should complete the port forwarding process.

BAND LOCK

Manually Setting LTE Band

An LTE band is the frequencies that the provider is using. Here are some potential bands for various providers.

If using the MOFI5500-5GXeLTE

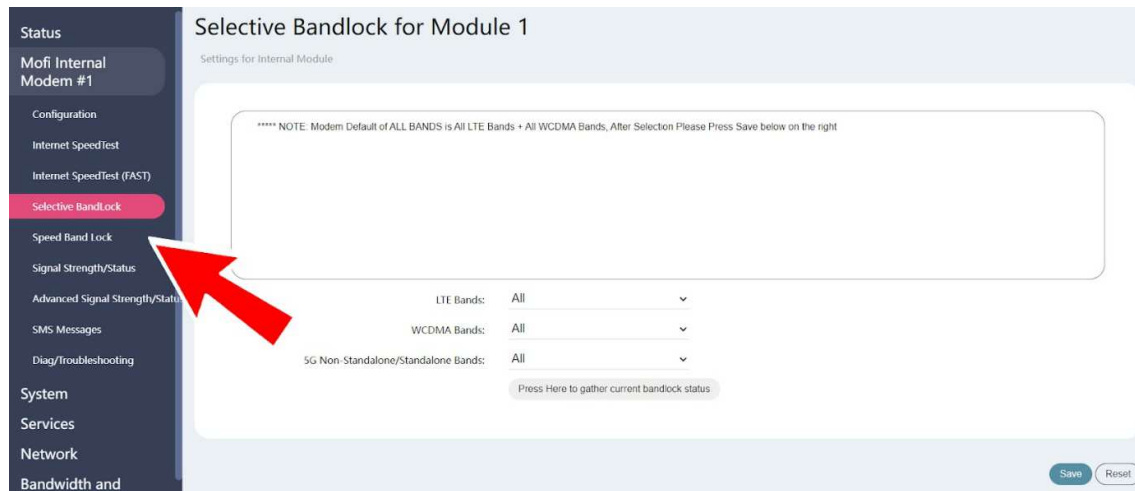
AT&T: B2, B4, B5, B12/B17, B14, B30, B66

T-Mobile: B2, B4, B5, B12/B17, B66, B71

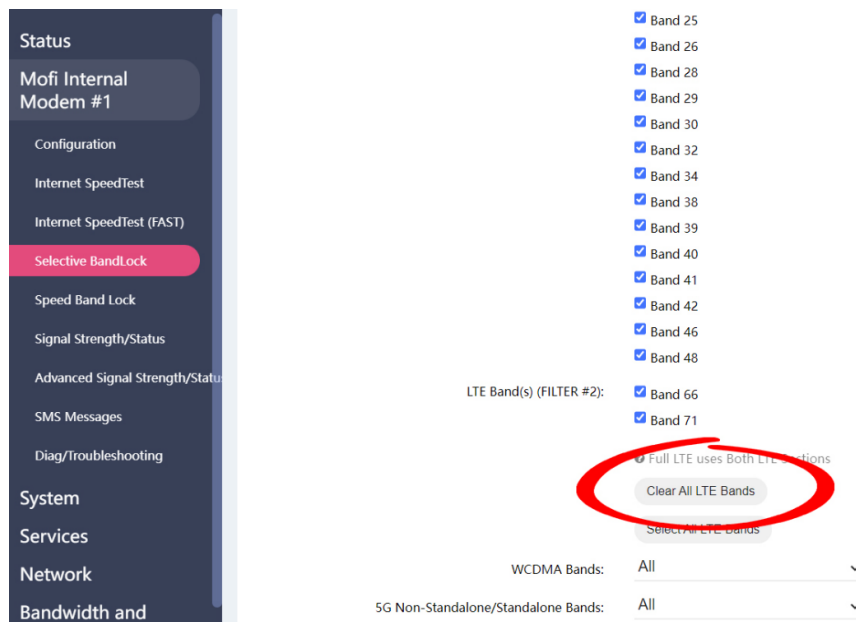
Verizon: B2, B4, B5, B13, B66

To do a selective band lock, follow the steps below:

- First log into the router by visiting 192.168.10.1 on your browser
- From the list on the left click on **Network** and then go to **Selective Band Lock**



- At this point from the drop down menu of the LTE bands, select **Custom**.
- You might have all the LTE bands checked (you might see a blue check mark beside each LTE band name).
- The next thing you should do is click on the button that says **Clear All LTE Bands**



- Now you will need to check only the bands that you want the router to lock on to. For example if you have AT&T and perhaps Band 4 and Band 66 is better in your area. So you would check the boxes for Band 4 and Band 66 and then hit Save on the bottom right hand corner.
- Allow the router a minute or two for the change to take effect. Once it is done, your router should be locked on to the bands that you have specifically selected.

NOTE: *Selective Band Lock is effective in situations where a particular band might be slowing the speed of your connection after the speed band lock. So with selective band lock you will have the ability to add or remove a certain band and then finally lock on to the bands that might perform best in your area.*

Speed Band Lock

- First log into the router by visiting 192.168.10.1 on your browser
- From the list on the left Click on **MOFI Internal Modem** and then **Speed Band Lock**



- Please select your Internet service provider from the list (AT&T/T-Mobile/Verizon etc),
- **Start Scan.** Note: this process will take about 10-15 minutes and the router will go through all the available bands in your area and then finally lock on to the best bands for your carrier.
- Once the process is done, you can view the results of the band lock under Bandwidth Test Status.

EXCEPTIONS:

- If you have a EM9191 or RM502, then you might want to set *Include 5G in Lock* to Yes.
- If you have a EM7411 dual SIM router then you will need to do a speed band lock in the respective module. So to perform speed band locks on SIM slot # 2, you will need to go under MOFI Internal Modem # 2 and then perform Speed band lock and hence during that time for Module, you will need to select Module 2.

NOTE: In some cases, one slow band might be slowing down all the speeds in the router. For example, after speed band lock the router locked on to Band 2, 4 and 12. However, from the bandwidth test status you can see that Band 2 has a download speed of about 50mbps, Band 4 has 70mbps but Band 12 has only about 2mbps download. In that case you might want to uncheck Band 12 or the whole speed of the connection might suffer. In order to do that you will have to do a **Selective Band Lock** (please see our Selective Band Lock page for further instruction)

BANDWIDTH MONITORING

If you want to set a limit of usage per device, this is where you set this.

1. You will need to enable Bandwidth Monitoring

To Enable, this, go to Bandwidth & Filters on the left hand side

Then Check the Enable option and set the day of the month that your billing cycle starts over at.

Then Save and Reboot router

What this will now do is show the individual usage of all devices connect to router. This is a nice way to see if a pc is infected with a virus if for example you are not using it and you noticed an unusual high usage.

Note it can take up to 5 mins for the usage to be updated in this page.

+ Gather Support Logs
+ Network
General
Mofi Internal Modem
Wifi
Wifi Bridge/Repeater
Captive Portal
Wi-Fi Protected Setup
DHCP
Switch
Port Forwarding
Auto Port Forwarding
DMZ
Mofi KeepAlive
Dynamic DNS
UPNP
Network Shares
SNMP
USB Print Server
+ MOFI Business
+ Wizard
+ Bandwidth & Filters
Internet Usage
Mac Filter
Bandwidth Monitoring

Bandwidth Monitoring

INFORMATION

BANDWIDTH
This feature will monitor the usage of all devices connected to the router.
Click on the checkbox to enable and select a Reset Day this feature to be active.
You should find out when your monthly usage gets reset with your provider and set the date to that.
This way, your usage can match your billing from your provider.

Bandwidth Usage Settings

Enabled
This will enable the Bandwidth Monitoring per User
☒

Reset Month :
Enter Month to Reset Database
Every Month

Reset Day :
Enter Your Billing Date to Reset Billing Period
29th

Bandwidth Usage Amounts in Monitored Period

BANDWIDTH
Total Uploaded Amount : 0 KB
Total Downloaded Amount : 0 KB
Total Bandwidth Amount : 0 KB
Previous Period Total : 0 KB
Bandwidth Amount :
Press Here to Reset Usage Database Previous Months Totals will be Erased
Database Previous Months This Button will run a script to remove the database
Totals will be Erased

Individual User Bandwidth

User IP	MAC-Address	Upload	Download	Total
---------	-------------	--------	----------	-------

Bandwidth - USER LIMITS

Make sure the Bandwidth Monitor is enabled as explained above.

If you are looking to set a limit of data use to an individual device, you would enable the User Limits

Enable the User Limits by clicking on the check box

The screenshot displays the MoFi router's configuration interface. On the left, a sidebar lists various settings, with 'Bandwidth Monitoring' highlighted. The main panel shows the 'User Limits' section, which is currently disabled (indicated by a checkbox). Below this, the 'User Bandwidth Block List' is shown as a table with columns: Hostname, MAC-Address, Bandwidth Limit, BandWidth Limit Size, Unblock, Reset?, and Status. A dropdown menu is open for the MAC-Address field, showing the selected address 34:02:86:a9:a0:1a (192.168.10.133) and a custom option. The table also shows a 'Reset' button and a 'Save' button at the bottom right.

Click on Add and add the device you want to set the limit for.

Note you will need to know the MAC address of the device that you want to set the limit. You can also see the IP address that the MAC is associated to.

Set the Limit you want, then save and reboot router.

When the user hits this limit, they will not have any access to use more data. You have the ability to override this by checking the Unblock Option if you need to as well as see if the limit has been ready by looking as the status as the image is shown above.

TROUBLESHOOTING

Here are some basic troubleshooting steps:

Here is a video to look at also

<https://www.youtube.com/watch?v=KPqpnsHaPA0&t=3s>

For most customers, the first step in trouble shooting is to do a module reset then a factory default.

Log into router

http://192.168.10.1

username: root

password: admin

after you log in

go to mofi internal modem

then on the bottom, click the button to reset the module

this will reset the module and reboot the router

once that is done

close your internet browser

make sure you are connect back to the MOFI wifi or via Ethernet cable

then log back in

once you are in

go to system then factory default

then perform reset

this will reset and reboot router

if you can't get into the router, you can reset it manually by power off then on the router

when the power led is solid

then press and hold the reset button down for 10 seconds and then release

after a few seconds, you will see power LED start to flash and then go solid after about 1-2 mins

if you see this, then the router should be reset.

once router is back up

the internet should work, if not, close your internet browser

make sure you are connect back to the MOFI wifi or via Ethernet cable

then log back in

Go to Mofi Internal Modem then click on the Configuration Tab

What does it say for the carrier ID?

By seeing the carrier ID, you know that the SIM card is being read fine.

What does it say for the phone number?

If the sim card is activated, a phone number should show up there

If this is still not working,

You should contact your provider and verify what APN (access point name) that you need use.

Once you know what APN you need to use, log into the router and go to mofi internal modem

Then click on country and select custom apn

Then enter the apn you need to use, Then save

After it is saved, reboot the router

If this is still not working, ensure that you have all 4 antennas on and you are getting a proper signal.

Regulatory Compliance Notices

FCC Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15, 22 and 24 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 or more 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 or television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by MoFiNetwork could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

This device may not cause harmful interference, and

This device must accept any interference received, including interference that may cause undesired operation.

Exposure Information to Radio Frequency Energy

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body.

European Regulations

The product has been designed, tested and manufactured according to the European R&TTE directive 1999/5/EC.

