MBR Series 500/550
Quick Start Guide

WAVE WiFi®
CONNECTIVITY SOLUTIONS

Accessories

Power Adapter

Ethernet Patch Cable

x2 AP antennas

x2 Cell Antennas
(**550 ONLY**)

Ethernet Ports

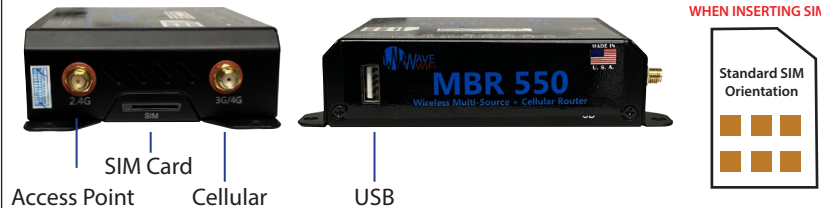PORT5 PORT4 PORT3 PORT2 PORT1
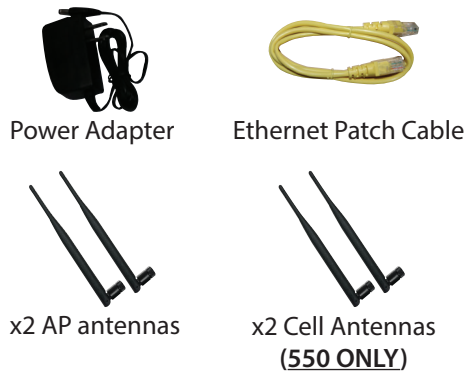
MBR 500/550 ethernet ports count from right to left beginning with the blue port.

Guest

VSAT

Cellular

Wave WiFi

Main LAN

THIS SIDE UP
WHEN INSERTING SIM

MBR 550
Wireless Multi-Source + Cellular Router

Standard SIM Orientation

SIM Card

Access Point

Cellular

USB

Quick Tips

1. Allow for the MBR system to be turned on for at least 30 secs before plugging any sources into it.

2. Initial setup should be done with a Laptop.

3. Hover over or click on the ❓ for brief explanations.

4. Only use the 12V⎓1A power supply provided

5. **550 ONLY** - Cell antennas MUST be connected to the unit in order for the system to authenticate the SIM.

6. When using mobile devices make sure that 'autocorrect' does not change sensitive information that you are typing in. Ex. "APN".

HOW TO CONNECT:

1. Connect to your MBR system **(Blue Port)** with the ethernet cable provided for initial connection and troubleshooting purposes.
2. Open a supported browser such as Mozilla Firefox or Google Chrome.
3. In the URL at the top of the browser type in the IP address "192.168.101.1"
4. This should open the "Router Status" page from here you can see the different ports and their connections.

USER ACCESS MANAGEMENT (BE SURE TO READ ALL NOTES ON THIS PAGE):

Connected Users - Choose your settings based on security needs and parameters.
 • **Allow open Internet access (no login required)** - No restricting data usage to any devices on the network.
 • **Allow Internet access with agreement to disclaimer** - All devices that connect to the system must agree to terms before usage.
 • **Allow Internet access using login codes and MAC authentication** - Restricting data usage based on login codes and MAC authentications previously set up.
 • **Allow Internet access using MAC authentication only** - Restricting access to allowed MAC IDs only
 Note: If you choose either options "B or C," it is recommended that you instruct all users to navigate to
 http://signon.internet to access the disclaimer or login page in order to successfully log in to access the internet.
 You can also **BLOCK** 🚫 or **WHITELIST** ✔ devices. Whitelisting a device means that no matter how you set the users it will always be allowed onto the network and will not have to go through the disclaimer process. Blocking on this page is only temporary. To fully block an address do so on the **MAC MANAGEMENT** page.

Login Codes - Codes given to users in order for their devices to connect and gain internet access.
 • **Login Code** - Does not have to be a numerical value
 • **Description** - Our suggestion is to put the name of the user and the device or the name of the crew / group who will be using the code.
 • **Download/Upload Rate** - The highest restriction allowable is 75Mbps or MAX

MAC Management - List of allowed and blocked MAC Addresses
- **Allowed/Blocked Address List** - Use if you want to block or allow a device by all ports or single port.

Manage Domains - Manage which domains/sub-domains devices on the network can or cannot access

Disclaimer - Create a disclaimer message that users will see before agreeing to terms of usage.
- **Title of Disclaimer Page** - Create a title for the Disclaimer Page to fit whatever needs necessary.
- **Disclaimer Text** - Can be changed entirely to fit your own agreement to your customers

Usage Report - Reports data usage based on date, device, IP address, and MAC code (if there is one).

SETTINGS:
Admin Options - Change the Admin Login parameters of the Router
- **Switchover Mode**
   - Automatic - Allows for internet sources to change based on level of priority set by Admin.
   - Manual - Admin must manually change which internet source to use. It will not switch over under any condition.
- **Admin Password**
   - Create an Adminisrative level password to prevent other users from accessing and configuring the network.
   - **This is completely optional and not recommended for the basic user**
- **Access Code Login** - If internet access is limited to **Login Codes** on **USER ACCESS MANAGEMENT** page
   - Use default login page - Default login page presented to user once connected to network
   - Use a custom login page - Custom login page presented to user once connected to network

Port Forwarding - Used for Advanced Networking. Wave WiFi suggests speaking to your technical advisor before editing anything on this page.

Network Settings - Allows the selecting and configuring of WAN/LAN internet ports.
- **Port Mode** - Change the functionality of the port to either LAN or WAN. LAN ports connect the router to the network so that the data can be shared to other devices. WAN ports provide the MBR system with internet access to distribute to any connected devices over the LAN ports.
- **Port Name** - Change the name of the port using **Alphanumeric ONLY** (A - Z and/or 0 - 9. Do Not use symbols or punctuation ex. "@, !, %, (.), ('), ").
- **Guest LAN** - This port allows internet access to users while blocking access to the User Interface.
- **Use DHCP** - If the port mode is set to LAN then this should remain unchecked unless you intend on setting up a DHCP server that would give an IP address to the MBR system. If the port mode is set to WAN then 'Use DHCP' should be checked unless the source plugged into the port requires a static setup.

Miscellaneous
- **Serial Number** - Located on the top-right of the **Miscellaneous** tab. This is useful information in the event of needed tech support from Wave WiFi.
- **Reboot Router** - A warm reboot that reloads the operating system when in an operational or live mode. **(Shut off power for 10 secs to cold reboot)**
- **Upgrade Firmware** - When/if internet is available, a notification will display on the top banner whenever there is an upgrade available.
- **System Audit Logs** - View activity logs of changes made to settings by date.
- **Import/Export Settings** - Backup your settings for ease of any reinstallation.
- **Advanced Settings (MBR 550 Only)** - View and update carrier drivers along with configuring band groups and active drivers.

WAVE®
WiFi
CONNECTIVITY SOLUTIONS

LOCAL APs:

Local Access Point Management - You can configure the Internal and External Access Points from this page.

- **SSID** - The name of the router's wireless signal. This is where you rename the internal and external access points to the name of the boat
  By default the SSID will be Wave WiFi AP XXXXXX.
- **Key** - Password used to secure the Access Point.
  Originally the **Key** will be the serial number of the router (ex. RSN-0000).
  Serial Number can be found on bottom of router, front of product box, or top-right of the **Miscellaneous** tab in the **SETTINGS** page
  Securing your network is optional but highly recommended by Wave WiFi and must be 8 or more characters long.
- **Type** - States whether the Access Point is internal or external
  Internal - The Access point housed inside of the router.
  External - Access points that are connected to the network through LAN ports
- **Enabled** - Toggles the Internal Access Point on and off. Only applies to the Internal Access Point.
- **Port** - Indicates which LAN port the access point is connected to. Only applies to the Internal Access Point.
- **Output** - Configure output power to change router broadcast distance.
- **Channel** - Configure which channel the router will broadcast on. Switch to channels that are net heavily used when in a busy area. Set to automatic by default

NOTICE: IF THIS IS PAIRED TO A "GUEST NETWORK" YOU CANNOT CONTROL THE ROUTER SYSTEM FROM THIS PORT.

CELLULAR SETTINGS (MBR 550 ONLY):

1. Plug the SIM card into the slot of the MBR system.
2. Go to the **Settings** page then click on the **Network Settings** tab.
3. Click on the "Mobile Data 1" port and the options will open for that virtual port.
4. In order to activate the SIM you will need to type in the APN of the carrier you are using. Your carrier should have this information.
5. After you complete the setup click "Change Settings".
6. Go back to the " Router Status " page and wait about 3 - 5 minutes. The Mobile Data 1 port should then show the carrier name once establishing a connection.

FCC Warning:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one 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/TV technician for help.
- Please contact a professional person to install and operate.