NETGEAR® User Manual

Nighthawk M5 5G WiFi 6 Mobile Router Models MR5100 and MR5200

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I Get Started

This product regularly checks for new firmware and downloads any that is appropriate, or you can check for and download new firmware manually. If the features or behavior of your product does not match what is described in this manual, you might need to update your firmware.

This chapter provides an overview of mobile router features, and instructions for how to set up your mobile router and connect to the Internet. The chapter covers the following topics:

- Meet Your Mobile Router
- <u>Set Up Your Mobile Router</u>
- <u>Recharge the Battery</u>
- <u>Connect to the Internet</u>
- <u>Replace a SIM Card</u>
- Home Screen
- <u>Powering Off/Resetting the Device</u>
- <u>Security Credentials</u>
- <u>Connect to the Mobile Router With Tethering</u>
- <u>Customize the Mobile Router Settings</u>
- Log in to Your Mobile Router Web Page

Meet Your Mobile Router

Before you connect your mobile router, familiarize yourself with its LCD screen, icons, buttons, and connectors.

Figure 1. Mobile router LCD and buttons

The mobile router comes with a USB-C charging cable.

The connectors include a USB 3.2 Type-C connector, an RJ45 ethernet port, and two TS-9 external antenna connectors.

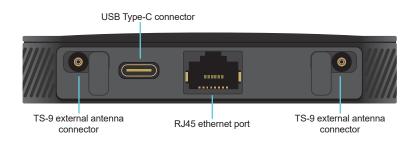


Figure 2. Mobile router connectors

Set Up Your Mobile Router

To set up your mobile router:

1. Insert the battery.

- 2. Install the back cover.
- 3. Firmly close the back cover.
- 4. Tap **Power** to power on the mobile router.

Recharge the Battery

Your battery comes partially charged.

To recharge your battery:

1. Connect the USB-C charging cable to your mobile router.



2. Connect the other end of the cable to the USB port on your computer or to the USB charger.

Connect to the Internet

When you turn on your mobile router, it automatically connects to the network in your area. Connect your device to the mobile router WiFi network to access the Internet.

To connect to the Internet:

1. Tap **Power** to turn on the mobile router.

The device powers up and the Power Off/Restart menu appears.

Operator 5GI	11:15 AM	母父 100% 🔲
WiFi Name WiFi Password	NTGR_A49B x4dRny6W	>
6.8* GB used 11 days left		
*Estimated d	ata.	
WiFi	Messages	ر Settings

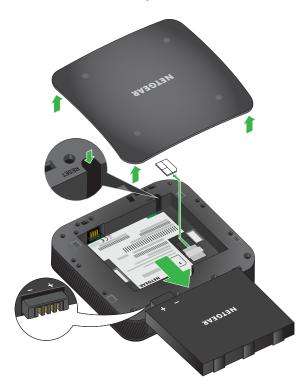
- 2. On your laptop or WiFi device, open your WiFi network connection manager.
- 3. Connect your device to the router with the WiFi name and password.

Replace a SIM Card

In some circumstances you might need to replace the SIM card.

To replace a SIM card:

- 1. Remove the back cover by lifting the corners.
- 2. Remove the battery.



- 3. Slide out the SIM card.
- 4. Insert the replacement SIM card.

5. Insert the battery.



6. Install the back cover.

Home Screen

You can use the home screen to view the mobile router's status, configure WiFi settings, view data usage details, and view system alerts.

Figure 3. LCD screen display

Note: Deletion of message must be done on the mobile router Web UI.

Nighthawk M5 5G WiFi 6 Mobile Router

Table 1. Icons

Icons Description

This indicates the strength of the mobile broadband network signal.

lı.

Your 5G wireless device displays the following network indicator to let you know you are connected to the 5G network.

This indicates the amount of charge in the battery.

Powering Off/Resetting the Device

To power off or reset the device:

- Hold down the **Power** button for 5 seconds. The Power Off/Reset menu appears and you are prompted to power off or reset the device.
- 2. Tap **Power Off** to power off the device, or choose **reset** to reset the device.

Security Credentials

Three passwords are associated with the mobile router:

• **WiFi password**. Use this to connect your computer or WiFi device to your mobile router network. This character string is unique to your device. It displays on the main mobile router touch screen. If the screen is blank (a power-saving feature), press and quickly release the Power button. The default WiFi password is also printed on a label under the battery.

For information about changing WiFi passwords, see <u>Change WiFi Encryption Settings</u> on page 36.

• Web admin login password. Use this to log in to the mobile router web page as an administrator. You must log in as an administrator to use certain features and to make changes to your mobile router settings. The default login password is printed on a label under the battery. The password should be changed after installation by the user, and can be 5-31 characters in length.

Connect to the Mobile Router With Tethering

You can connect a computer to the mobile router using the USB-C cable instead of connecting with WiFi. This kind of cable connection is called tethering.

Note: The computer's operating system detects the Nighthawk M5 5G WiFi 6 Mobile Router the first time you use the USB-C cable to connect the computer to the mobile router.

To install drivers on computers running Windows:

- 1. Ensure that the mobile router is powered off.
- 2. Connect the mobile router to your computer using the USB cable.



The mobile router automatically powers on.

Note: Make sure that your computer has access to Internet when you first use the tethering feature because your computer might need to access the Internet in order to download the required software driver.

After the driver is installed, you can visit the mobile router web page to customize your mobile router's advanced settings. This is an optional step.

Customize the Mobile Router Settings

You can personalize the mobile router and change its settings on the web page.

To log in to your mobile router web page:

- 1. From a computer or WiFi device that is connected to the mobile router, launch a web browser.
- 2. Enter http://192.168.1.1.

The mobile router web page displays.

Enter the administrator login password.
 The default password is printed on the product label. The password is case-sensitive.

Log in to Your Mobile Router Web Page

Your mobile router comes configured and ready to use as is. You can use the mobile router web page to manage advanced settings.

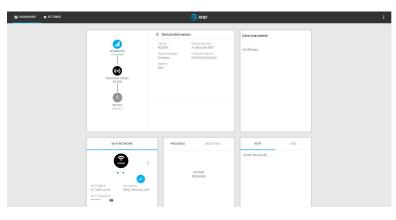
To log in to your mobile router web page:

- 1. From the computer or WiFi device that is connected to the mobile router, launch a web browser.
- 2. Enter http://192.168.1.1.

The mobile router web page displays.

3. Enter the administrator login password.

The default password is printed on the product label. The password is case-sensitive.



2

Use Your Mobile Router

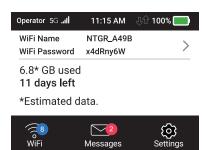
This chapter explains how to use your mobile router. The chapter covers the following topics:

- <u>View Estimated Data Usage on the Mobile Router</u>
- <u>View Data Usage on the Mobile Router Web Page</u>
- <u>View Messages From the Mobile Router</u>
- <u>Send SMS Messages From the Mobile Router</u>
- <u>View Messages From the Mobile Router Web Page</u>
- <u>Send SMS Messages From the Mobile Router Web Page</u>
- Delete a Message From the Mobile Router
- Delete a Message From the Mobile Router Web Page
- <u>View Alerts From the Mobile Router</u>
- <u>View Alerts From the Mobile Router Web Page</u>
- Turn On Dual-Band WiFi From the Mobile Router Web Page
- Turn On Dual-Band WiFi From the Mobile Router
- Manage Your Broadband Network Connection
- <u>Connect to WiFi</u>
- Manage WiFi
- Manage WiFi Security

View Estimated Data Usage on the Mobile Router

To view estimated data usage on the mobile router:

To wake the device, press the **Power** button.



The LCD screen shows the estimated data usage for the current billing cycle. Tapping in the data usage area provides more detailed information and options for configuring usage limit warnings.

View Data Usage on the Mobile Router Web Page

To view data usage information on the mobile router web page:

- 1. From a computer or WiFi device that is connected to the mobile router, launch a web browser.
- 2. Enter http://192.168.1.1.

The mobile router web page displays.

3. Enter the administrator login password.

The default password is printed on the product label. The password is case-sensitive.

The mobile router web page displays the data usage for the current billing cycle and for the current broadband session.

View Messages From the Mobile Router

You can tell from your mobile router display if you have unviewed messages, and you can view them directly from there.

This router display indicates you have an unread message.

Note: Although you can view messages directly on the mobile router, use the mobile router's web page to delete them.

Operator 5GI	11:15 AM	员介 100% 🛑
WiFi Name WiFi Password	NTGR_A49B x4dRny6W	>
6.8* GB used 11 days left		
*Estimated d	ata.	



To view messages from the mobile router display:

- 1. Tap **Power** to wake the mobile router.
- 2. Tap Messages.

The **Messages** screen displays.

3. Tap the message to read the full text.

Note: If you are logged in as an administrator, the **Messages** option on the side menu indicates unread network messages. You can view SMS messages from your network service provider on the mobile router web page.

Send SMS Messages From the Mobile Router

You can send SMS messages from the mobile router.

To send SMS messages from the mobile router:

- 1. Tap **Power** to wake the mobile router.
- 2. Tap Messages.

The **Messages** screen displays and indicates if there are any SMS messages.

3. Tap **Compose**.

A numeric keypad for for entering the phone number displays.

4. Use the keypad to type the phone number to which the message will be sent. As you enter digits, the phone number appears in the **To:** field.

5. Tap **Next**.

A keypad for entering the message appears.



6. Type a message and tap **Send**.

The Message Sent message appears and indicates that the message was sent.

View Messages From the Mobile Router Web Page

To view messages from the mobile router web page:

- 1. From a computer or WiFi device that is connected to the mobile router, launch a web browser.
- Enter http://192.168.1.1.
 The mobile router web page displays.
- Enter the administrator login password. The default password is printed on the product label. The password is case-sensitive. The home page displays.
- 4. Select Messages.

A list of messages displays, showing the first portion of the text.

5. Click a message to read the full text.

Send SMS Messages From the Mobile Router Web Page

You can can send SMS messages from the mobile Web page.

To send an SMS message from the mobile router Web page:

- 1. From a computer or WiFi device that is connected to the mobile router, launch a web browser.
- Enter http://192.168.1.1.
 The mobile router web page displays.
- Enter the administrator login password. The default password is printed on the product label. The password is case-sensitive. The home page displays.
- Tap the Pencil icon.
 The Messages page appears. Any new messages are shown.
- 5. In the **Recipient Number** field, type the phone number to which to send the message.
- 6. In the message box, type the message you want to send.
- Click the **Send** button.
 The SMS message is sent.

Delete a Message From the Mobile Router

You can delete messages from your mobile router display.

To delete messages from the mobile router display:

1. Press **Power** to wake the mobile router.

Operator 5GIl	11:15 AM	尽全 100% 🛑
WiFi Name WiFi Password	NTGR_A49B x4dRny6W	>
6.8* GB used 11 days left		
*Estimated d	ata.	
<u> </u>	2	ŝ

- َ الْمَعْنَ WiFi Messages Settings
- 2. Tap **Messages**. The **Messages** screen displays.
- 3. Select the message to delete.
- 4. Tap **Delete**.

The message is deleted.

Delete a Message From the Mobile Router Web Page

To delete a message from the mobile router web page:

- 1. From a computer or WiFi device that is connected to the mobile router, launch a web browser.
- Enter http://192.168.1.1.
 The mobile router web page displays.
- Enter the administrator login password. The default password is printed on the product label. The password is case-sensitive. The home page displays.
- 4. Select Messages.

A list of messages displays, showing the first portion of the text.

5. Select the message and click the **Delete** button. The message is deleted.

View Alerts From the Mobile Router

When you unlock the device screen, the device displays any current alerts.

1. Unlock the device.

Any current alerts are shown on the display. For example, if no SIM card is installed, the following alert appears:

perly	

2. Use the arrow keys to cycle through the alerts and view each alert. After you have viewed the alerts, the dashboard appears.

View Alerts From the Mobile Router Web Page

Your mobile router displays alerts to advise you of device status changes. When there are outstanding alerts, the alerts displays on the screen. Alerts remain as long as the issues that cause them are active. When the issues are resolved, the alerts are removed automatically.

To view alerts from the mobile router web page:

- 1. From a computer or WiFi device that is connected to the mobile router, launch a web browser.
- 2. Enter http://192.168.1.1.

The mobile router web page displays.

3. Enter the administrator login password.

The default password is printed on the product label. The password is case-sensitive.

Any current alerts are shown on the display. For example, if no SIM card is installed, the following alert appears:



Follow the instructions in each alert to address the conditions that caused it to display.

Turn On Dual-Band WiFi From the Mobile Router Web Page

The mobile router can broadcast WiFi signals in the 2.4 GHz and 5 GHz WiFi bands. Note that the overall throughput speed could decrease when WiFi dual-band is enabled.

To turn on dual-band WiFi from the mobile router web page:

- 1. From a computer or WiFi device that is connected to the mobile router, launch a web browser.
- 2. Enter http://192.168.1.1.

The mobile router web page displays.

 Enter the administrator login password. The default password is printed on the product label. The password is case-sensitive. The home page displays.

4. Select **WiFi > Options**.

5. Select **Dual-Band WiFi**.

The Save and Cancel buttons display at the bottom of the page.

6. Click the **Save** button.

A message displays telling you that to save this change, your device must restart WiFi connections.

Turn On Dual-Band WiFi From the Mobile Router

The mobile router can broadcast WiFi signals in the 2.4 GHz and 5 GHz WiFi bands. Note that the overall throughput speed could decrease when WiFi dual-band is enabled.

To turn on dual-band WiFi from the mobile router web page:

- 1. Tap **Power** to wake the device.
- 2. Tap **WiFi**.

The WiFi screen displays.

3. Tap **Band**.

The Band screen displays.

Band



- 4. Tap Dual-Band WiFi.
- 5. Tap **OK**.

Your settings are saved.

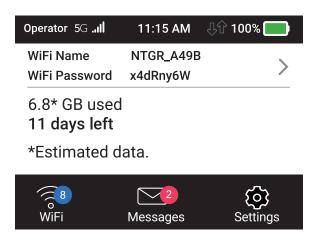
Manage Your Broadband Network Connection

You can view the mobile broadband network status, turn domestic data on and off, and turn international roaming on and off.

View Mobile Broadband Network Status From the Mobile Router

To view network status from the mobile router:

1. To wake the device, tap **Power**.



2. Tap Settings.

3. Tap Broadband.

The Broadband screen displays the network status.

4. To view details about the network status, tap **Status**. The Network Status screen displays.

Use Your Mobile Router

View Mobile Broadband Network Status From the Mobile Router Web Page

To view network status from the mobile router web page:

- 1. From a computer or WiFi device that is connected to the mobile router, launch a web browser.
- Enter http://192.168.1.1.
 The mobile router web page displays.
- Enter the administrator login password. The default password is printed on the product label. The password is case-sensitive. The home page displays.
- Select Settings > Network. The Status page displays.
- 5. View the Network Status section.

Turn Domestic Data Off From the Mobile Router Web Page

Note: You can turn domestic data off, but not on from the web page.

To turn domestic data off from the mobile router:

- 1. From a computer or WiFi device that is connected to the mobile router, launch a web browser.
- 2. Enter http://192.168.1.1.

The mobile router web page displays.

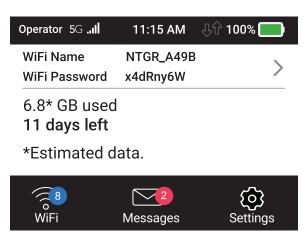
- Enter the administrator login password. The default password is printed on the product label. The password is case-sensitive. The home page displays.
- Select Settings > Advanced Settings > Cellular. The preferences page displays.
- Uncheck the **Data** check box.
 The Save and Cancel buttons display at the bottom of the page.
- 6. Click the **Save** button. Your settings are saved.

Use Your Mobile Router

Turn International Roaming On and Off From the Mobile Router

To view network status from the mobile router:

1. To wake the device, tap **Power**.



2. Tap Settings.

3. Tap Broadband.

The Broadband screen displays the network status.

4. Tap Int'l Roaming.

The International Roaming screen displays.

5. Tap **Int'l Roaming On/Off**. Your settings are saved.

Turn International Roaming On and Off From the Mobile Router Web Page

Before you turn on international roaming, make sure that you are aware of any extra charges for data that you might incur.

To turn international roaming on and off:

- 1. From a computer or WiFi device that is connected to the mobile router, launch a web browser.
- 2. Enter http://192.168.1.1.

The mobile router web page displays.

- Enter the administrator login password. The default password is printed on the product label. The password is case-sensitive. The home page displays.
- Select Settings > Advanced Settings > Cellular. The preferences page displays.
- Uncheck the Roaming Data check box.
 The Save and Cancel buttons display at the bottom of the page.
- 6. Select the **Save** button. Your settings are saved.

Connect to WiFi

You can connect up to 32 devices (such as smartphones, laptops, tablets, digital cameras, printers, gaming consoles, and digital picture frames) to your mobile router network. For information about setting connections for WiFi networks, see <u>View Mobile Broadband</u> <u>Network Status From the Mobile Router</u> on page 27.

To connect using the WiFi password:

- 1. On the WiFi device, view the list of available WiFi networks.
- 2. Connect to the network that corresponds to your mobile router network as displayed on the LCD screen.
- 3. When prompted, enter the WiFi password for your mobile router network.

The WiFi password displays on the mobile router LCD screen. If the screen is turned off, press and quickly release the **Power** button to wake the mobile router.

Manage WiFi

Advanced users can set up the WiFi radio of the mobile router to meet their WiFi needs by customizing settings on the mobile router web page.

On the mobile router web page, the following WiFi profiles are available:

- **Default**, **Dual-Band**. Supports two separate WiFi networks simultaneously using both a 2.4- and 5-GHz frequency band.
- **2.4 GHz only**. Share your main WiFi with 2.4 GHz devices that you trust.
- **5 GHz WiFi**. Share your main WiFi with 5 GHz devices that you trust.
- Turn Off WiFi. Turn off WiFi.

By default, Dual-Band is enabled. If your place of business does not allow WiFi or for any other reason you want to disable WiFi and use the mobile router only in tethered mode, the mobile router gives you that option.

Note: Whenever you change WiFi settings, any devices connected to the mobile router are disconnected and might need to be reconnected.

Turn On 5 GHz WiFi From the Mobile Router

When all of your devices support 5 GHz WiFi, use 5 GHz WiFi for faster downloads.

To turn 5 GHz WiFi on and off from the mobile router:

1. Tap **Power** to wake the device.



3. Tap **Band**.

Use Your Mobile Router

The WiFi Band screen displays.

4. Tap **5 GHz**.

A message displays to tell you that changing the WiFi info temporarily causes connectivity loss.

5. Tap **OK**.

Your settings are saved.

Turn On 5 GHz WiFi From the Mobile Router Web Page

When all of your devices support 5 GHz WiFi, use 5 GHz WiFi for faster downloads.

To turn on 5 GHz WiFi from the mobile router web page:

- 1. From a computer or WiFi device that is connected to the mobile router, launch a web browser.
- Enter http://192.168.1.1.
 The mobile router web page displays.
- Enter the administrator login password. The default password is printed on the product label. The password is case-sensitive. The home page displays.
- 4. Select **Settings > Setup >WiFi Profiles** . The WiFi Options page displays.
- 5. Select **5GHz Only**.

The Save and Cancel buttons display at the bottom of the page.

6. Click the **Apply** button.

A message displays telling you that to save this change, your device must restart WiFi connections.

7. Click the **Continue** button.

Your settings are saved.

Specify WiFi Settings From the Mobile Router

To specify the WiFi settings from the mobile router:

1. Tap **Power** to wake the device.



- 2. To turn the WiFi signal on or off:
 - a. Tap **WiFi**.

The WiFi screen displays.

- b. Tap **Options**.The WiFi Options screen displays.
- c. Tap