# R910 Mobile Hotspot

## User Guide

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# Introduction

The following topics describe the basics of using this guide and your new mobile broadband device.

## Before You Begin

Thank you for purchasing your new R910 Mobile Hotspot!

The following topics explain how best to use this guide to get the most out of your mobile broadband device.

## Before Using Your Device

Read Safety and Notices thoroughly for proper usage.

Accessible services may be limited by subscription contract conditions.

## Guide Usage Notes

Note that most descriptions in this guide are based on your device's default settings at the time of purchase.

## Screenshots and Key Labels

Screenshots and Key labels are provided for reference only. Actual windows, menus, etc. may differ in appearance.

## Other Notations

In the user guide, the mobile broadband device may be referred to either as "mobile broadband device," "hotspot," "device," or "Wi-Fi router."

## Compatible Operating Systems (OS)

The table below outlines the compatible operating systems (OS) for your device. Use outside these environments may affect performance. Additional factors (hardware, connected peripherals, installed applications, etc.) may also affect performance.

- For computer support, OS version upgrade information, etc., see the corresponding manufacturer's product support documentation.
- The information for operating system (compatible OS) listed below is the current information for your device as of Feb.2016.

| Item | Description |
|---|---|
| **Compatible operating systems (OS)** | Windows 7, 8, 10<br>MacOS 10.5 or later<br>Android 2.1 or later |
| **Compatible browsers** | Chrome 36.0 or later<br>Internet Explorer 8.0 or later<br>Firefox 3.1 or later<br>Safari 5.0 or later |

## Package Contents

See below for details on everything you will find in the box for your R910.

- R910 Mobile Hotspot
- Battery Cover
- Rechargeable Battery
- AC Adapter
- Get Started Guide
- Important Information Booklet

## SSID and Security Key

Before connecting Wi-Fi devices to your R910, you will need to confirm the Wi-Fi Name and Wi-Fi Password.

- Once your device is completely powered on, Main Wi-Fi Name and Password are shown on the display. (Note: when the device display is off, press the wake up keys: power button < > on upper right side or navigation buttons < > on front side)

  - ❖ You will see the Wi-Fi Name (R910a-XXXXXX) and Wi-Fi Password.

## Additional Information

The following list describes additional information before you begin using your R910.

- Your mobile broadband device accommodates software updates. Always use the latest software.
- Note that connection speeds may drop or connections may be disabled depending on line traffic or connection environments.

# Get Started

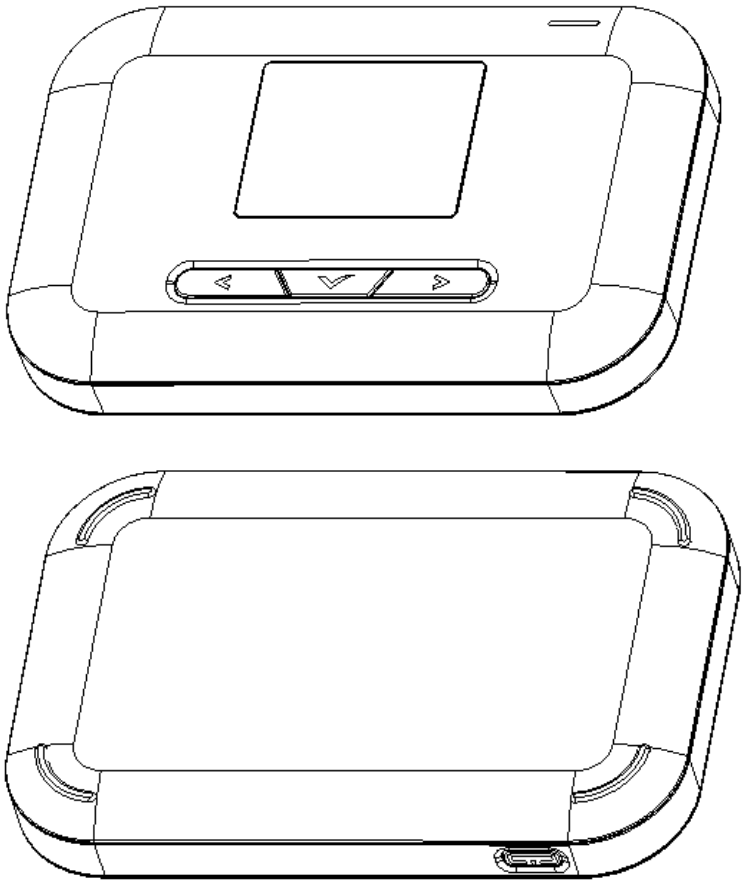
The following topics give you all the information you need to set up your device and wireless service for the first time.

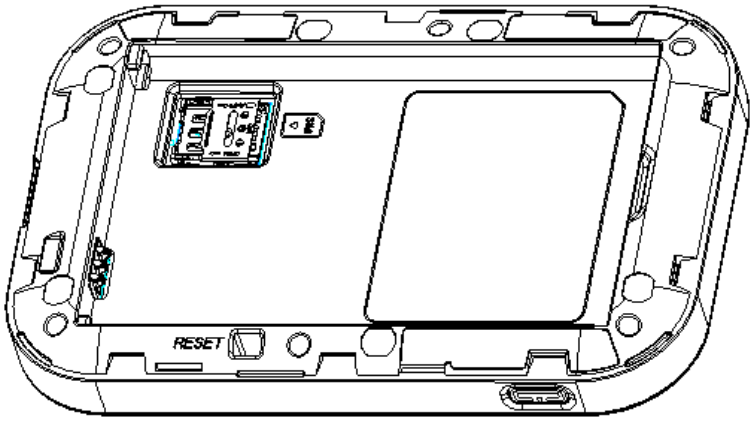
## Parts and Functions

Learn your device's primary parts and functions.

## Device Layout

The following illustration outlines your device's primary external features and buttons.





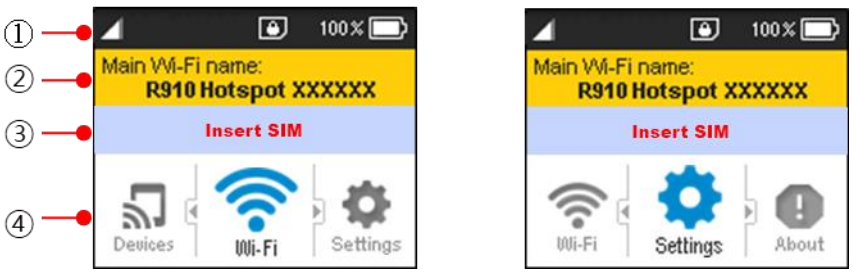

| Part | Description |
|---|---|
| **Display** | View device status and information |
| **SIM card slot** | Install the SIM card. |
| **AC Charging micro USB port** | Connect the micro USB cable for charging. |
| **Battery cover** | Remove the battery cover to remove or insert the battery or SIM card. |
| **Reset button** | Located on back side of device after battery cover is removed. Press to reset your device settings to factory default. (Device must be On when pressing reset button.) |
| **Power button** | Press and hold to power on or off. |

## Home Screen

The following topics describe the details of your device's display layout, icons, and information.

## Home Screen Layout

Explore your device's home screen layout.



| Part | Description |
|---|---|
| ① **Status Bar** | Displays status indicators including Signal strength, SIM Card, Roaming, battery level and more. |
| ② **Wi-Fi Name & Password Info bar** | Displays Main Wi-Fi's SSID name and password<br>Automatically toggles every 6 seconds |
| ③ **Notification Bar** | Displays carrier logo and alert messages such as Insert SIM |
| ④ **Menu Bar** | Displays Menu icons. Access device menu by using navigation buttons (Left: , Select: , Right: ). |

## Status Bar Icons

The Status Bar will display the following icons, depending on current status.

| Icon | Description |
|---|---|
| | Mobile networks connected and data transmission direction |
| | Service signal strength |
| | Out of service area |
| | Appears when roaming |
| | The number of connected WLAN devices |
| | Battery full |
| | Battery low |
| | No battery. Battery icon blinking (charging required) |
| | Battery percentage appears next to battery icon |
| | Appears when No SIM is detected. |
| | Appears when an invalid SIM is detected. |

## Menu Bar Icons

The Menu Bar will display the following icons.

| Icon | Description |
|---|---|
| | Shows the number of connected devices.<br><br>Use this feature to see Main Wi-Fi names, Guest Wi-Fi names and Mac Addresses of the devices currently connected. |
| | Shows the SSID and security keys (Main Wi-Fi and Guest Wi-Fi network<br><br>names and passwords) for your device |
| | Adjust settings for Wi-Fi Options, Display Time out, Network, Software Update.<br><br>Select Wi-Fi options to turn Wi-Fi network on/off and to see Wi-Fi band.<br><br>Select Display Timeout to change display timeout options.<br><br>Select Network Mode to change network mode, roaming mode, and roaming guard.<br><br>Select Software updates to download the latest firmware. |
| | Shows your device's phone number, software version, URL for the WEB UI etc.<br><br>Use this feature to see model name, HW revision, battery level, main Wi-Fi, Guest Wi-Fi name, Mac Address, firmware version, build date, and web app version, etc.<br><br>Select My Account to see phone number, PRL, Model, MEID, ICCID, Activation date, etc. |

## Data Transfer Volume and Transfer Speed

| Wireless Mode | Maximum Downlink Speed | Typical Downlink Speed |
|---|---|---|
| **4G LTE** | 150 Mbps | 50 Mbps |
| **CDMA 1xEVDO Rev. A** | 3.1 Mbps | 1 Mbps |
| **UMTS Cat. 10** | 14 Mbps | 3 - 4 Mbps |

**Note**: Actual speeds depend on several factors, including network conditions.

## SIM Card

The SIM card is an IC card containing your device's phone number and other customer information.

**Note**: Your device's SIM card is preinstalled.

## Handling a SIM Card

Keep the following in mind when handling a SIM card.

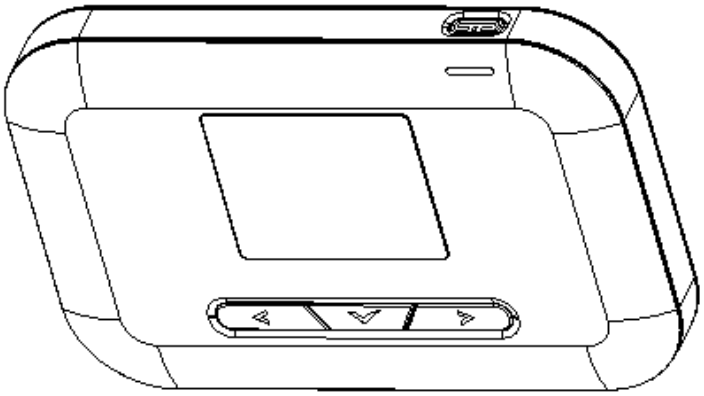
- Customer is responsible for any damage caused by inserting the SIM card in another-brand IC card reader, etc. The company is not responsible in such case.
- Always keep the IC chip clean.
- Wipe clean with a dry, soft cloth.
- Avoid applying labels. May damage the SIM card.
- See instructions included with the SIM card for handling.
- The SIM card is the property of the company.
- The SIM card is replaceable (at cost) in case of loss/damage.
- Return the SIM card to the company when cancelling subscription.
- Returned SIM cards are recycled for environmental purposes.
- Note that SIM card specifications and performance may change without notice.
- It is recommended that you keep a separate copy of information that is stored on the SIM card. The company is not responsible for damages from stored information that is lost.
- Always follow emergency procedures to suspend service if your SIM card or device (SIM card inserted) is lost or stolen. For details, contact Customer Service.
- Always power off the mobile broadband device before inserting or removing the SIM card.

## Insert or Remove a SIM Card

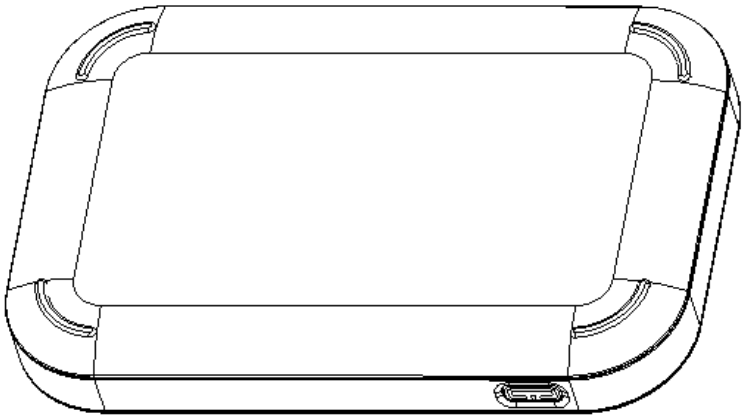
Follow these instructions to insert or remove a SIM card. Remember to power off your device before inserting or removing a SIM card.

**Note**: Your device's SIM card is preinstalled. These instructions are for reference only.

1. Press and hold the **Power** key to turn off the device before inserting or removing the SIM card.

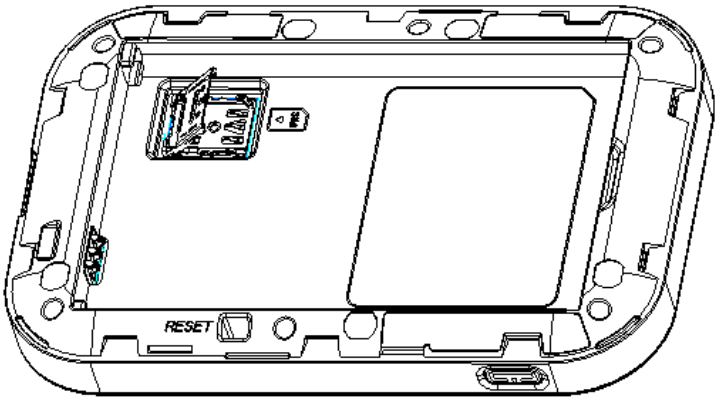


2. Remove the battery cover.

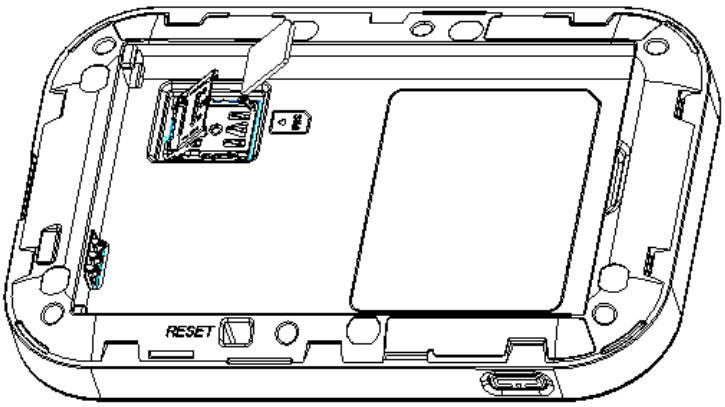


3. Remove the battery

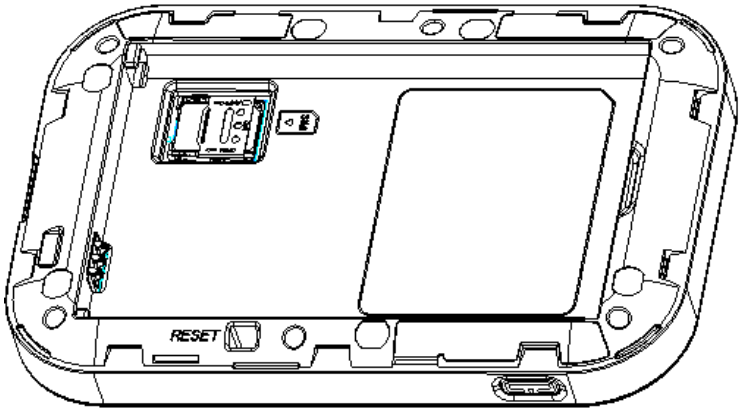
4. Open the SIM card cover by sliding the metal rectangular cover away from the SIM picture engraved on the device (You will feel it unlock.) and lift the cover.



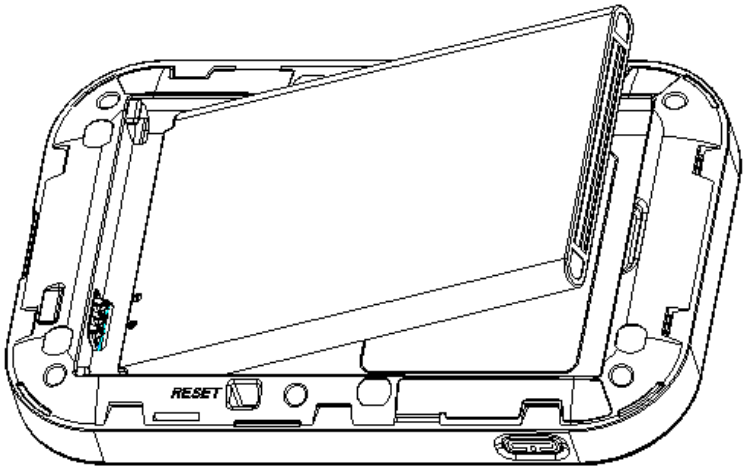

5. Place the SIM card gently with gold IC chip facing downward. Use the SIM picture engraved on device to make sure it is placed properly.



6. Flip the metal rectangular cover back on as shown below and while gently pressing the metal cover, slide towards the SIM picture to secure the SIM. (You will feel it lock.)




7. Insert the Battery.




   - Align the contacts of the battery with the contacts in the device.

8. Put the battery cover on.

## Battery Use

The following topics explain how to insert and remove your device's battery.

### Battery Cautions

**Storage**: Avoid storing or leaving the battery with no charge remaining. Saved information and settings may become lost or changed, or battery may become unusable. Charge once every six months before storing or leaving unused for a long period.

**Bulges**: Depending on use, bulges may appear near end of battery life. This does not affect safety.

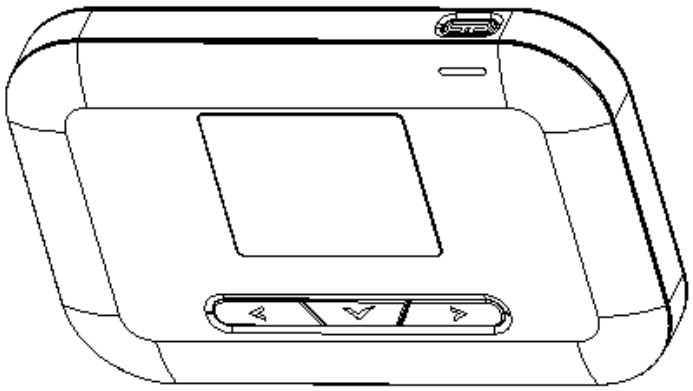
**Replacing the Battery**: The battery's lifespan will depend on frequency of use and other factors. It needs to be replaced if operating time shortens noticeably. Purchase a new battery.

**Cleaning**: Clean soiled terminals between battery and device with a clean, dry cotton swab. Soiled terminals can result in a poor connection and prevent charging, etc.

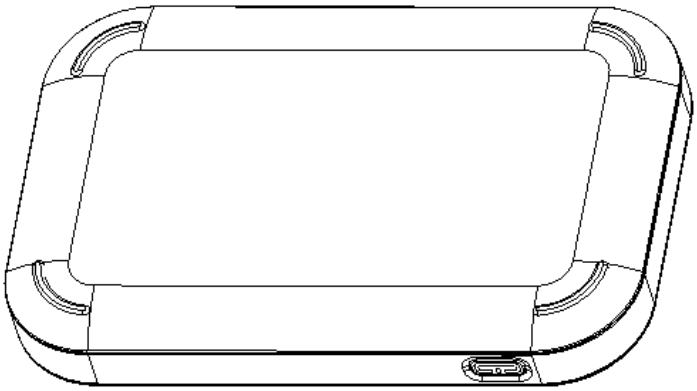
## Inserting / Removing the Battery

Follow these instructions to insert your device's battery safely and properly.

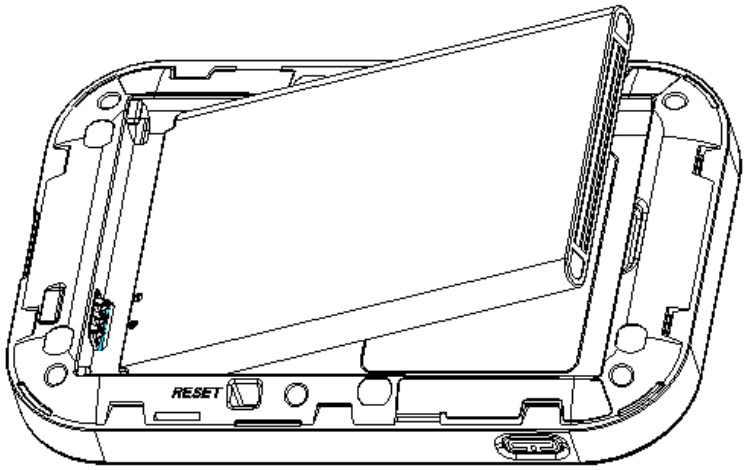
1. Press and hold the **Power** key to turn off the device before inserting or removing the battery.



2. Remove the battery cover.



3. Remove or Insert the battery




4. Put the battery cover on.

## Charge the Battery

Follow these instructions to charge your device's battery using the included AC adapter.

### Battery Charging Cautions

**Charging Conditions**: Under low temperatures charging performance decreases. Charge your device in temperatures between 0°C – 45°C. Do not charge in places where there is high humidity. USB charging may be unavailable depending on Wi-Fi router temperature.

**Use Supplied Accessories**: Always use the supplied AC adapter.

**Precaution for Extended Use**: Your device may become hot when used for a long time or while charging, especially in high temperatures. Prolonged contact with skin may cause low-temperature burn injuries.

**The R910 and AC Adapter Becoming Warm or Hot**: Your device and the AC adapter may become warm while charging. This is not a malfunction. However, stop using them immediately if they become extremely hot; this could indicate a malfunction.

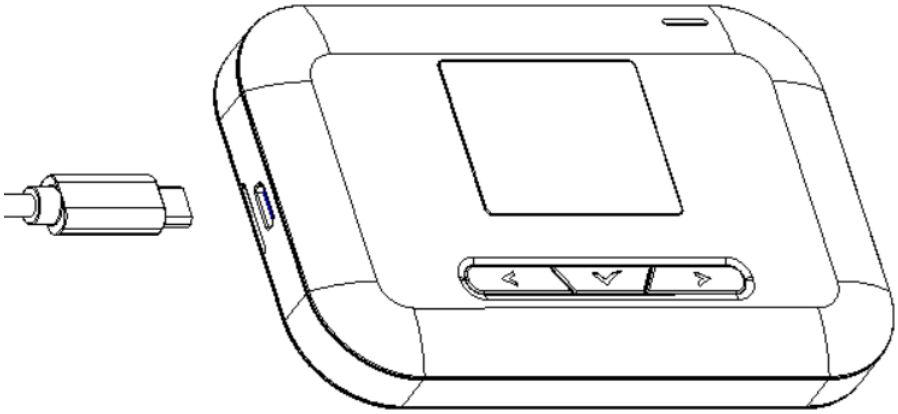
## Charge Using the AC Adapter

Use the supplied AC adapter.

1. Plug the AC adapter into an electrical outlet.

    - The indicator light on the power button illuminates red when charging starts. The light turns green when the battery is fully charged. Fully charging a battery may take up to three hours.

After charging, disconnect the device from the charger.



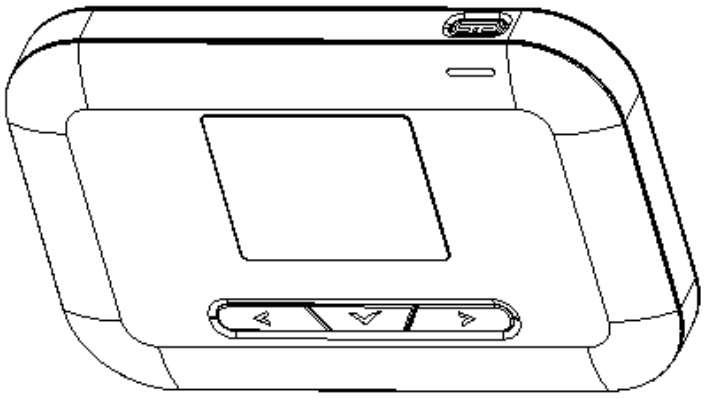
- Unplug the AC adapter from the outlet, and remove the micro USB connector from the device.

## Turn Your Device On and Off

The instructions below explain how to turn your device on and off, or to restart your device if it cannot be powered on and off using the **Power** button .

## Turn Your Device On

- Press and hold the **Power** button until the device displays "Welcome".



## Turn Your Device Off

- Press and hold the **Power** button until the device displays "Goodbye".
- Your device will power off.

## Restart Your Device

If your device will not turn on or off using the Power button, remove and re-insert the battery (see the section "Insert the Battery"), then press and hold the power button again.

**Note**: Restarting your device does not reset the device settings.

# Connect with Wi-Fi (WLAN)

The following topics outline basic features and operations of your device's Wi-Fi (WLAN) connections.

## Wi-Fi (WLAN) Overview

Below are some basics of your device's Wi-Fi (WLAN) function.

## Wi-Fi (WLAN) Information

- **Advanced Settings**: Change your devices Wi-Fi (WLAN) settings as required. See Wi-Fi Advanced Settings
- **Simultaneous Connection**: Use your device to connect up to 10 Wi-Fi devices simultaneously.
- **Automatic Updates for Optimizing Wi-Fi Connection**: When connected by Wi-Fi, connection optimizing settings may be automatically received and updated.
- Your device supports IEEE 802.11 b/g/n standards. Connect Wi-Fi devices (PC, game console, etc.) via Wi-Fi for wireless data transfers.

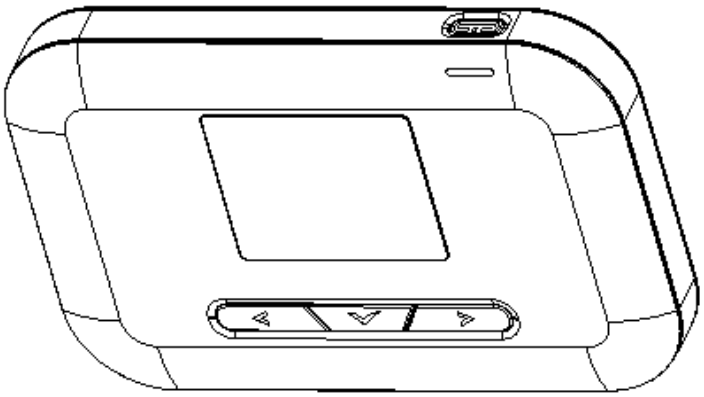
## Wi-Fi (WLAN) Usage Cautions

For added security, it is recommended that you change the default Wi-Fi network name (SSID) and Wi-Fi password after setting up your device.

## Activate Wi-Fi (WLAN) Function

Follow the instructions below to activate your device's Wi-Fi function and connect to the Internet via an available 4G LTE connection. Use the Web UI to select a network.

- Press and hold the **Power** button until the device displays “Welcome”.



Your device's Wi-Fi function automatically turns on once the device is powered up completely.

## Connecting to the Internet

The following information describes how to connect your device with various Wi-Fi capable devices.

1. Press and hold the **Power** button to power on your R910.
    - ❖ Your device's Wi-Fi function activates and automatically connects to the Internet.
2. Turn On Wi-Fi function on your Wi-Fi capable device.
3. Find and Select your R910 device's Wi-Fi Name (SSID) from the list, and click **Connect**.
4. Enter the Wi-Fi password displayed on home screen and then click **Next**.

❖ When connection is made successfully, you should see an icon like so on your hotspot: (the number indicates the number of devices connected to your R910)

# Settings

The following topics provide an overview of items you can change using the device **setting** menu accessed through the Web UI.

## Web UI Overview

Use the device Web UI in a browser to check or change your R910 settings from a device connected via Wi-Fi.

## Web UI Window

Explore the options available through the device's Web UI window.

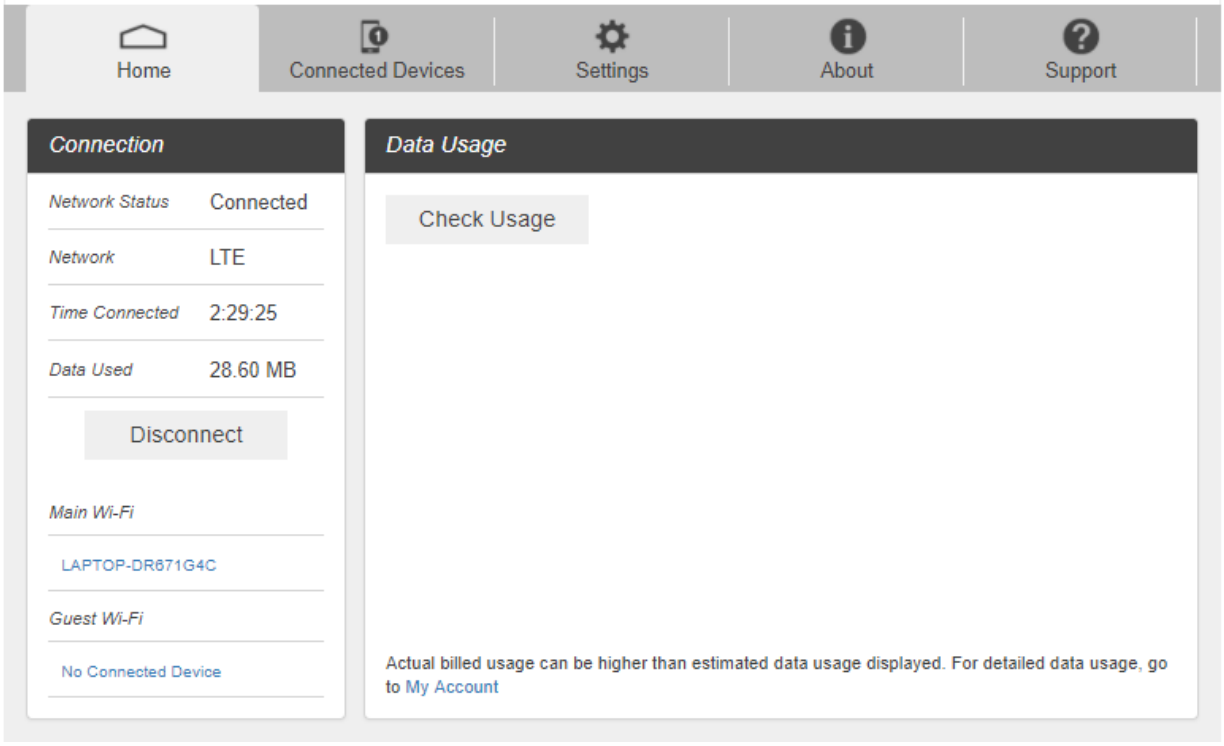
1. Connect your R910 to an external device via Wi-Fi connection.
2. Launch a browser and access the Web UI via http://myhotspot or http://192.168.128.1 .

   ❖ The Web UI launches and displays the main window.

## Home

Check current status of network connection and data usage on the Home page.

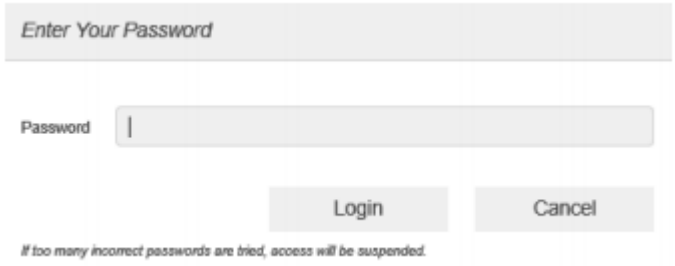
- From the Web UI, click the Home tab. (For connection information, see Web UI Overview.)



### Admin Log in

Accessing other menus will require admin log in.

1. Click "Log in" on the upper right corner of the main screen to log in. (clicking other menus on the main screen will prompt the log in page as well.)




2. Enter the password and click "Login".

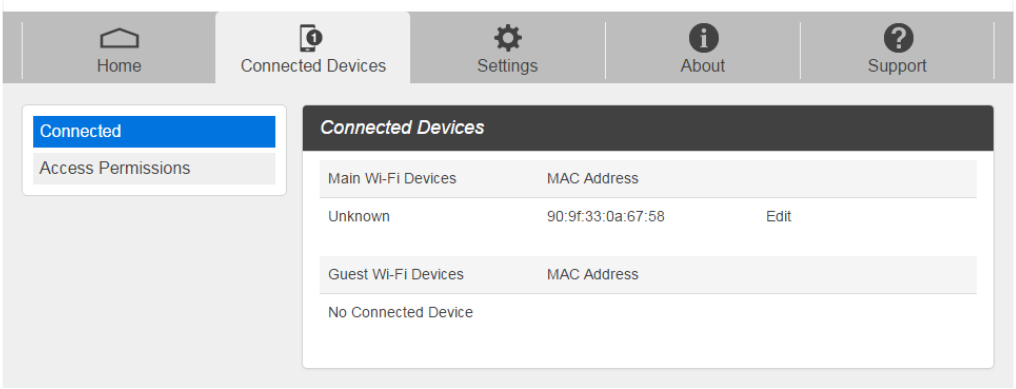
Note: The default password is "password." It's recommended to change the password for your security.

## Connected Devices

The Connected Devices tab lets you confirm the names and MAC addresses of devices currently connected to your device and set access permissions.

## Check the Connected Devices

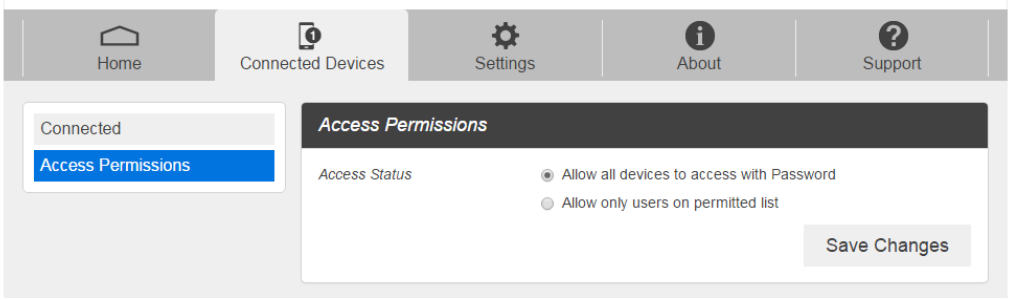
- From the Web UI, click **Connected Devices**>**Connected** to display the list of connected devices.




## Set Access permissions

Allows user to let all devices access with password or limit access to only permitted users. Changing this status will immediately update the status of devices listed to access Wi-Fi from this device, even if they have the password.

1. From the Web UI, click **Connected Devices**>**Access Permissions**.



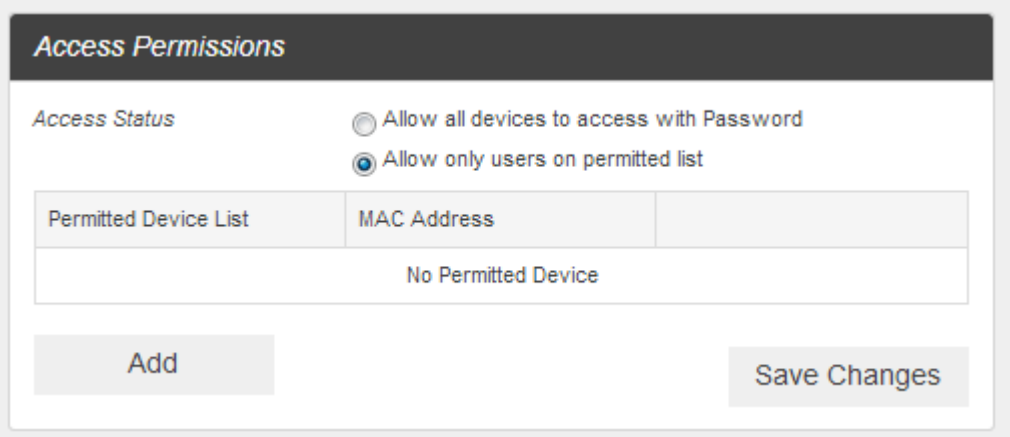

2. Select an access status and then click **Save Changes**.

## Add Permitted Devices

The Access Permissions menu allows you to restrict access only to specific users, instead of anyone who enters the password. To restrict access in this manner, you need to add permitted users from the menu.

1. From the Access Permissions menu, select **Allow only users on Permitted list**.

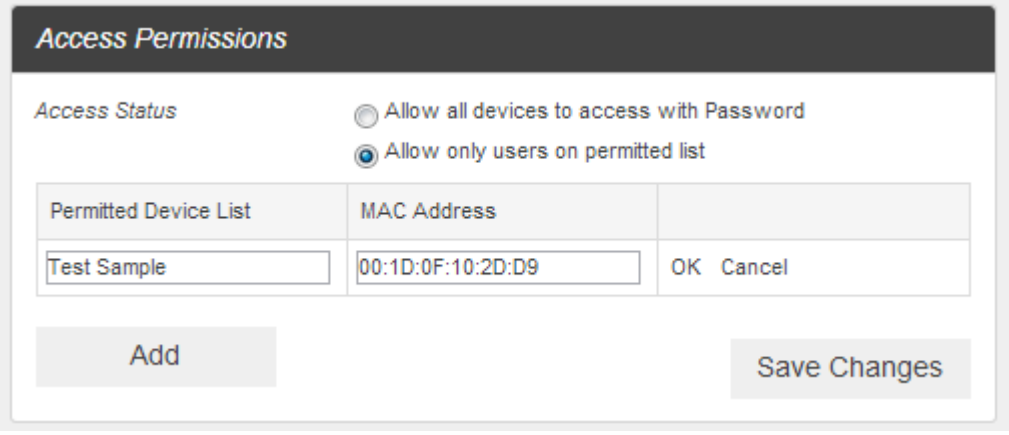
    ❖ The Add Devices option will appear onscreen.




2. Click **Add** to get started.

3. Enter a Friendly Name (optional) and the MAC address of the permitted device: then press OK.

    ▪ A sample MAC address might be 00:1D:0F:10:2D:D9.



4. Click **“Add”** again to add more permitted devices.

5. When you are finished adding permitted devices, click **Save Changes**.

    - ❖ Access to your device will be restricted to the devices in your list.

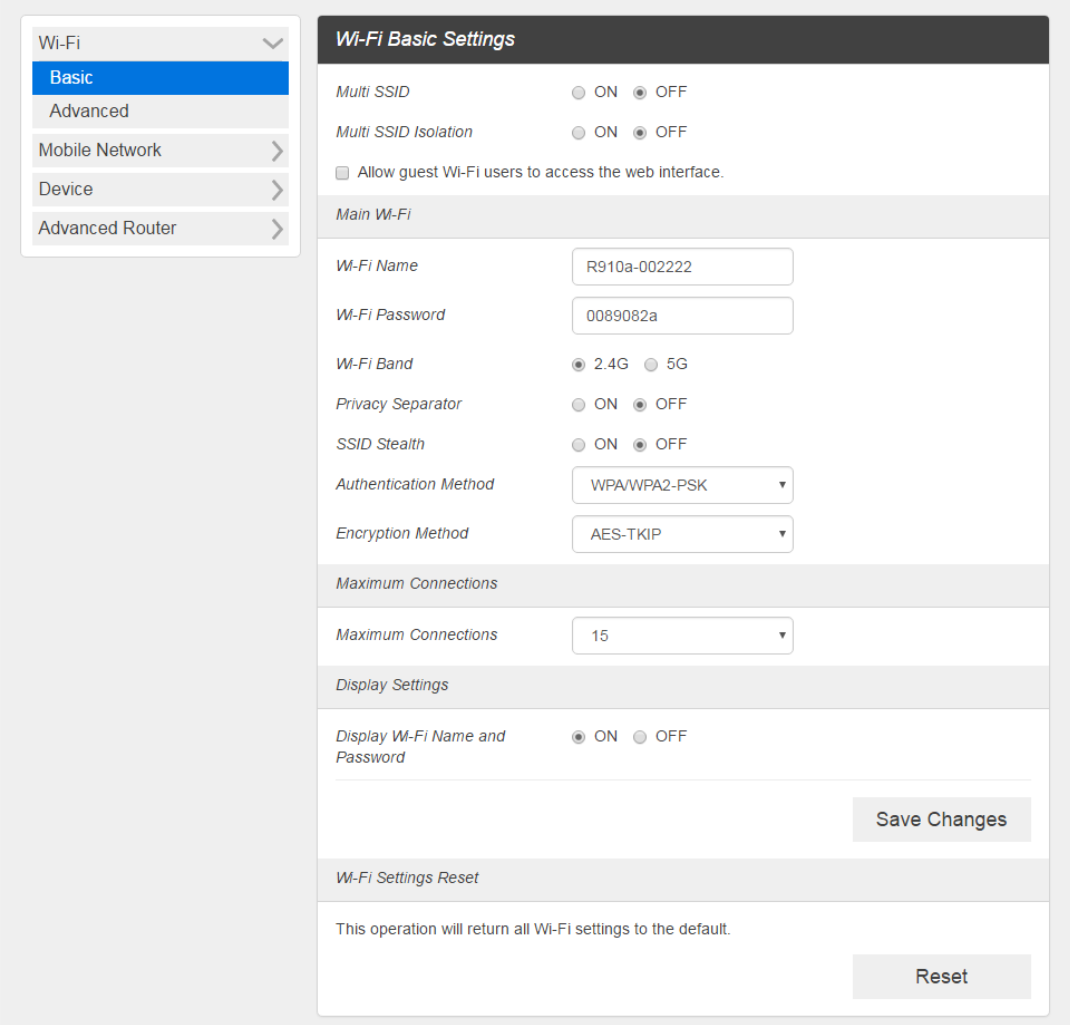
## Settings Tab

Set your device options, including Wi-Fi, Mobile Network, Device and Advanced Router Settings.

## Wi-Fi Basic Settings

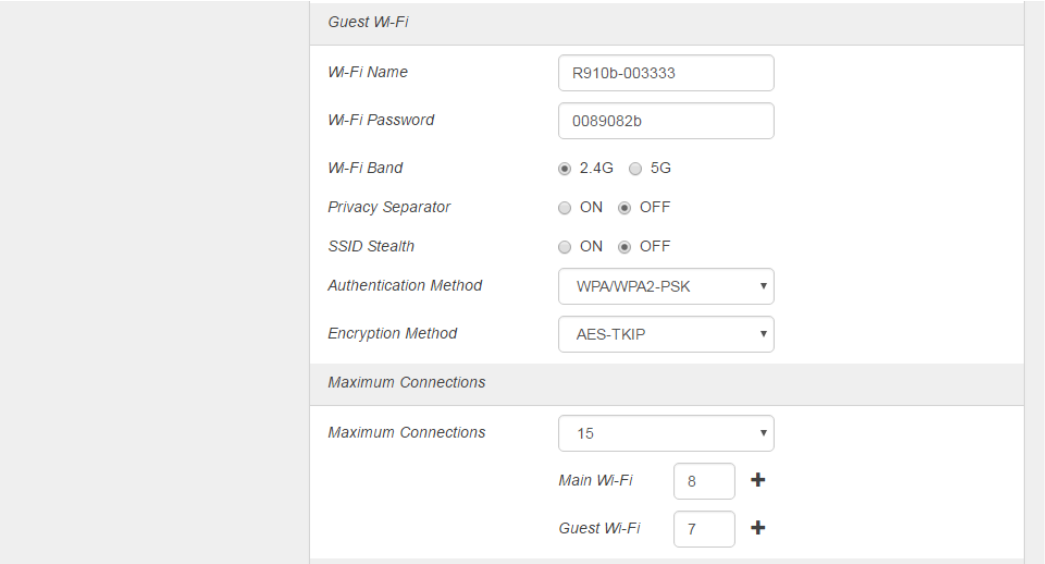
Set the basic Wi-Fi settings for your device.

- From the Web UI, click **Settings**>**Wi-Fi**>**Basic** to configure the basic wireless network parameters.




- **Multi SSID**: Select ON if you like to set up a separate guest Wi-Fi network. Your R910 will broadcast two Wi-Fi Names.

- If ON is selected for Multi SSID, an extra menu called **Guest Wi-Fi** will appear like below. Please note: a maximum connection of 10 will be shared between Main Wi-Fi and Guest Wi-Fi.




- **Multi SSID Isolation**: If On is selected, it will prevent your device from communicating across the Main and Guest Wi-Fi.
- **Allow Guest Wi-Fi users to access the web interface:** If the box is checked, users on the Guest Wi-Fi also can access the Web User Interface.
- **Wi-Fi Name**: Service Set Identifier (SSID). To change it, enter a string less than 32 characters as the name for your wireless local area network (WLAN).
- **Wi-Fi Password**: To change, enter the new Wi-Fi password. The password needs to be at least 8 characters long.
- **Wi-Fi Band**: If 5G is selected, Wi-Fi will use 5G band.
- **Privacy Separator**: If ON is selected, your devices on the same Wi-Fi Name can not make Local Area Network communication. (Note: if you connect WLAN printer to your R910, Privacy Separator should be OFF to send file from your PC to the printer.)
- **SSID Stealth**: If ON is selected, the Wi-Fi name will not appear in the list of available networks. You need to manually enter Wi-Fi name and password to connect.
- **Authentication Method**: Use this setting to select the desired type of Wi-Fi security used to encrypt the wireless network. WPA2 is the latest and most secure method and should be used whenever possible.

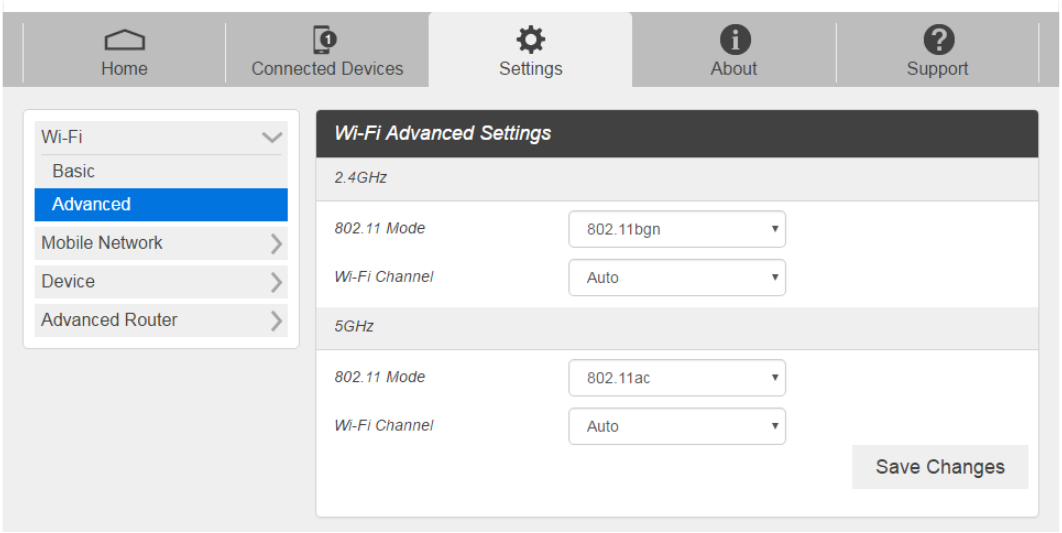
| Mode | Description |
|---|---|
| **Open** | Authentication and encryption won't be performed. There are risks that private info will be intercepted or network will be used by unauthorized individuals |
| **SHARED** | Authentication via Shared Key protocol |
| **WPA2-PSK** | WPA2-PSK is the securer version of WPA with |

| | |
|---|---|
| | implementation of the 802.11i standard. |
| **WPA-PSK/WPA2-PSK** | Apply both the WPA-PSK and WPA2-PSK scheme |

- **Encryption Method**: Use this setting to select the desired type of Encryption Method. Advanced Encryption Standard (AES) is the latest and most secure option for your wireless network and should be used whenever possible.
- **Maximum Connections**: Choose the maximum number of the devices you want connected to your R910 simultaneously. Manage the number of device connections between the Main Wi-Fi and the Guest Wi-Fi.
- **Display Wi-Fi Name and Password**: If ON is selected, the Wi-Fi Name and Password will be displayed on your R910 device home screen.
- **Save Changes**: Make sure to click Save Changes after you set your desired settings.
- **Wi-Fi Settings Reset**: Click the **Reset** button to reset all Wi-Fi settings to default.

## Wi-Fi Advanced Settings

1. From the Web UI, click **Settings**>**Wi-Fi**>**Advanced**.




- **802.11 Mode**: Use this setting to change the Wi-Fi mode. R910 Supports 802.11b, 802.11g, and 802.11n modes in the 2.4GHz band and supports two mixed modes. 5GHz band supports 802.11n mode and 802.11ac mode respectively.
- **Wi-Fi Channel**: Use this setting to change the Wi-Fi channel of 2.4GHz band or 5GHz band.

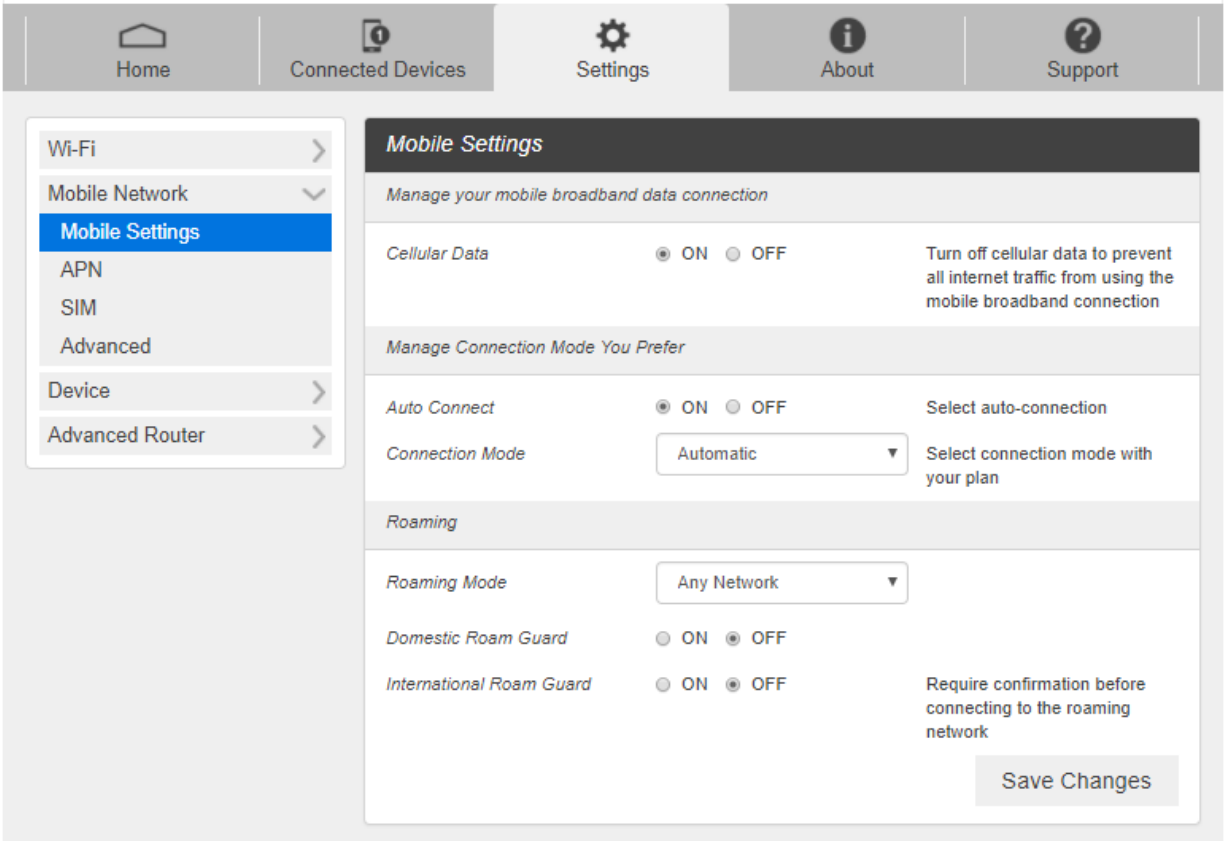
2. Click **Save Changes** to save your settings.

## Mobile Network Settings

*Mobile Network Settings should only be used as directed by Customer Service personnel.*

## Mobile Settings

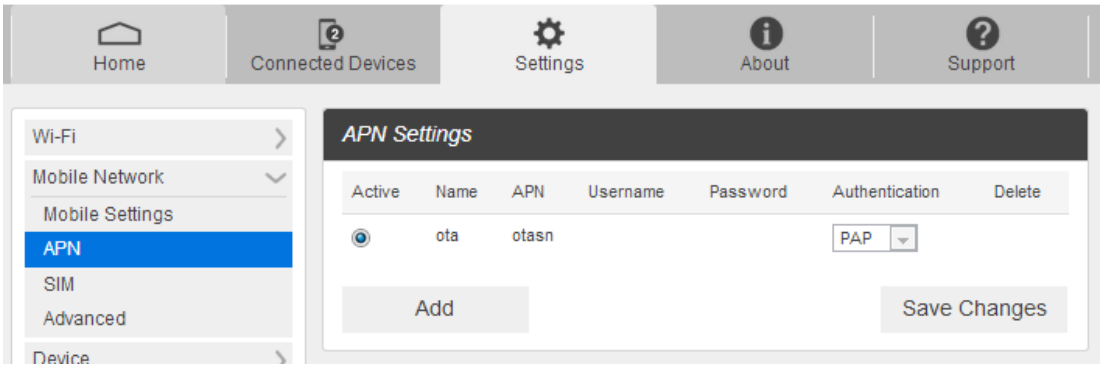
6. From the Web UI, click **Settings**>**Mobile Network**>**Mobile Settings**. The Mobile Settings page is shown in the following figure.




- **Cellular data**: Turn Cellular data on or off. Turn it OFF to prevent all Internet traffic from using the mobile broadband connection.
- **Auto Connect**: Turn the device on or off to automatically connect to the network.
- **Connection Mode**: Change Connection Mode. Supports Automatic, LTE/CDMA, CDMA, UMTS.
- **Roaming Mode:** Select your preferred mode. (***Caution: allowing roaming could result in additional service charges***.)
- **Domestic Roaming Guard**: Turn Domestic Roam Guard on or off. Turn it ON to require confirmation before connecting to the roaming network.
- **International Roaming Guard**: Turn International Roam Guard on or off. Turn it ON to require confirmation before connecting to the roaming network.
- Click **Save Changes** to save your settings.

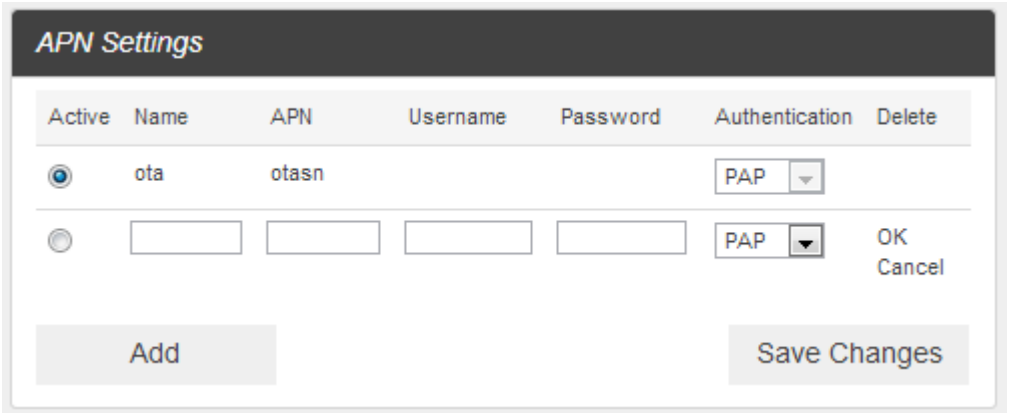
## APN

- From the Web UI, click **Settings**>**Mobile Network**>**APN**. The default APN parameters are shown in the following figure. You can use the default APN to connect to the Internet. You can also add new APNs.




- To add a new APN, follow the steps below:

1. Click **Add** to access the following page.



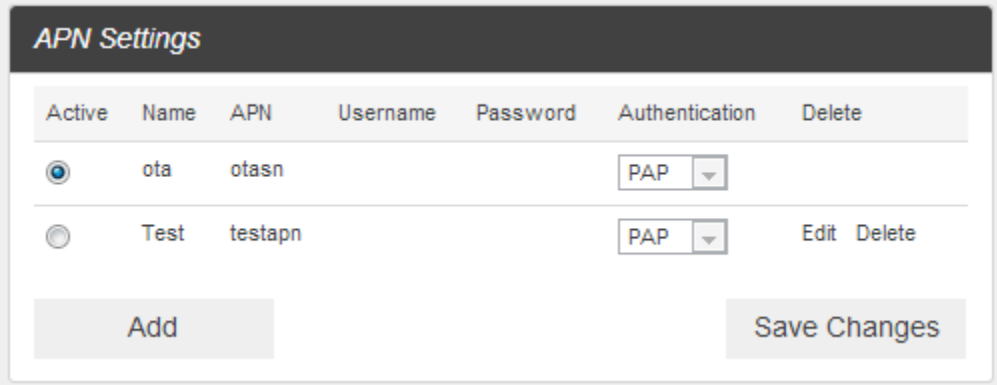

2. Enter the related parameters as described in the following table.

| Parameters | Description |
|---|---|
| **Name** | Type the profile name. |
| **APN** | Type the APN string. |
| **User name** | User name is used to obtain authentication from the ISP when the connection is established. |
| **Password** | Password is used to obtain authentication from the ISP when the connection is established. |

| Parameters | Description |
|---|---|
| **Authentication** | Password Authentication Protocol (PAP) provides a simple method without encryption for the peer to establish its identity using a 2-way handshake. Challenge-Handshake Authentication Protocol (CHAP) is used to periodically verify the identity of the peer using a 3-way handshake. |

3. Click **Save** to add the new APN.

- **Additional APN Options**

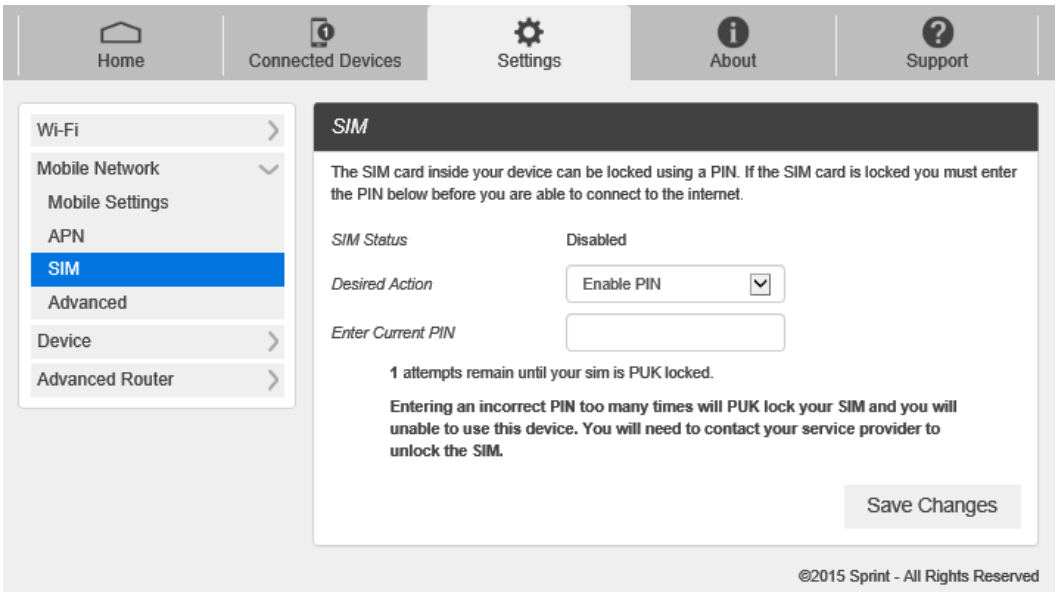



- To activate the new APN, check the circle in front of it and then click **Save Changes**.
- To edit the new APN, click **Edit**, change the settings, and then click **Save**.
- To delete the new APN, click **Delete**.

**Note**: The default APN cannot be edited or deleted.

## SIM

- From the Web UI, click **Settings**>**Mobile Network**>**SIM**. The SIM PIN lock is disabled by default. You can enable it by entering a SIM PIN.



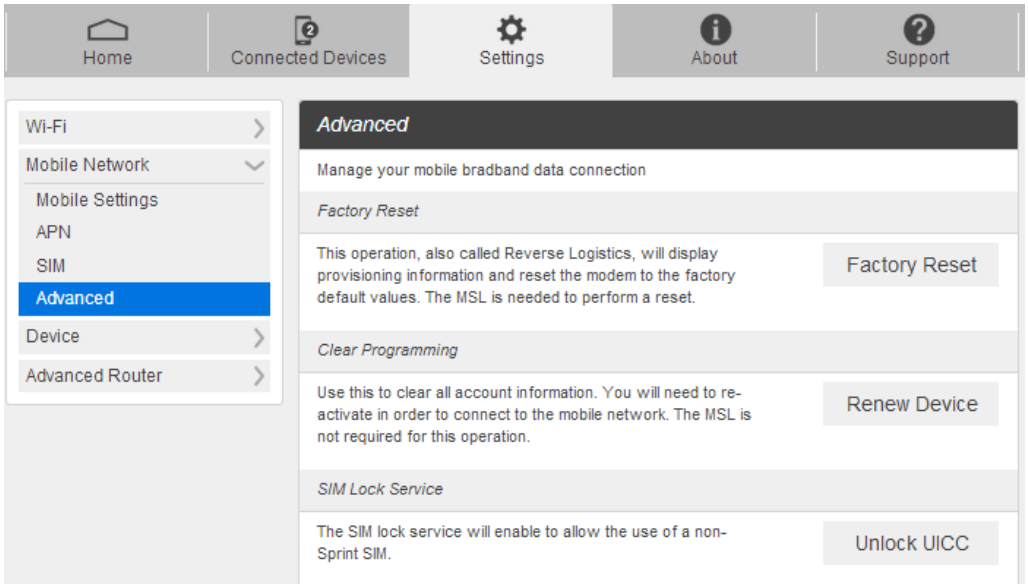

- Enter the SIM PIN and press “Save Changes”. The SIM Status will be changed to Enabled. Once the SIM PIN Lock is enabled, you need to enter the SIM PIN to connect to the mobile broadband network each time you power on your R910.

**Note**: If you enter the wrong SIM PIN three times, your SIM will be disabled permanently until you enter the PUK code from your service provider. ***Please contact your Service Provider.***

## Advanced Mobile Network Settings

*Caution: Advanced Mobile Network Settings should only be used as directed by Customer Service personnel. Certain advanced options will reset your device's connections and programming and will require reactivation.*

- From the Web UI, click **Settings**>**Mobile Network**>**Advanced** to access the mobile network advanced settings.



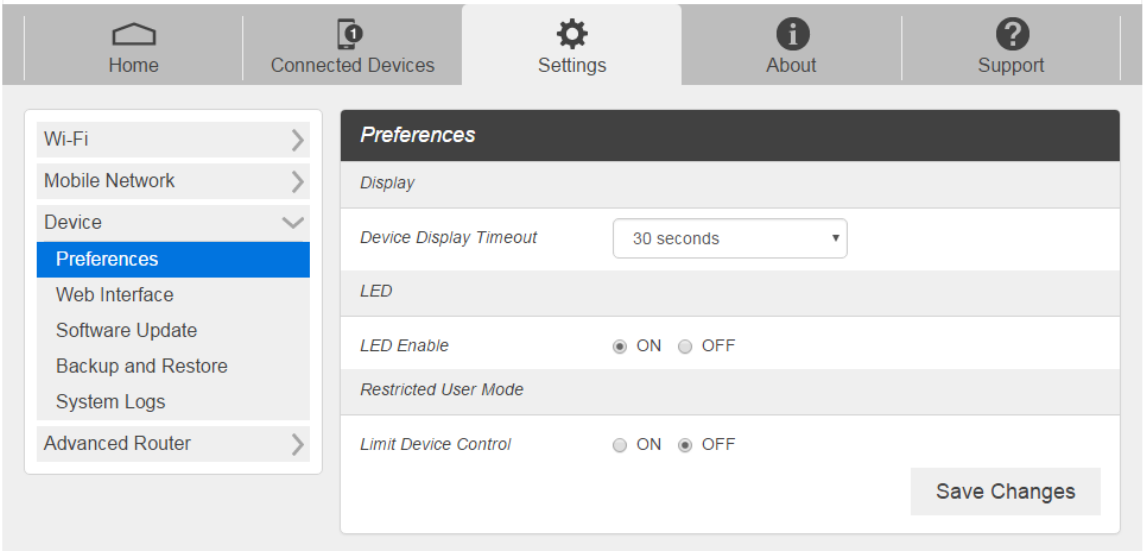

- **Factory Reset**: Click **Factory Reset** to reset the R910 to factory default value.
- **Clear Programming**: Click **Renew Device** to clear all account information.
- **SIM Lock Service**: Click **Unlock UICC** to allow the use of SIM from various service providers.

## Device Settings

The Device settings menu lets you set display brightness, manage account password, update software, back up, restore and check system logs.

## Preferences

1. From the Web UI, click **Settings**>**Device**>**Preferences**. You can set the display timeout on this page.

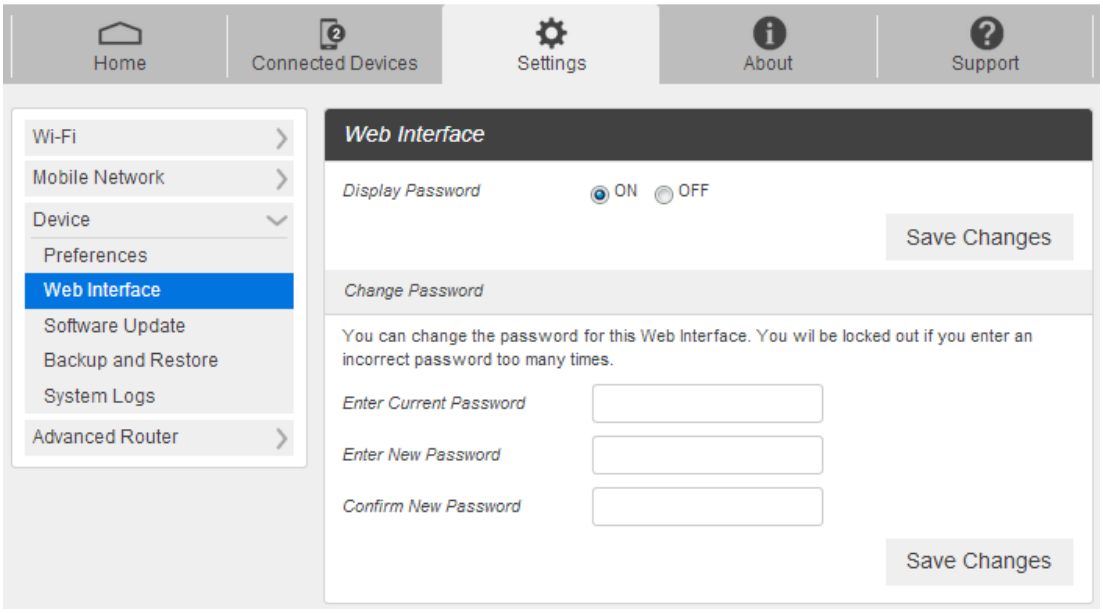



   - **Display Timeout**: Select a timeout time from the drop-down list. Your R910 display turns off after this timeout period if device is idle.
   - **LED Enable**: If ON is selected, the LED indicator next to Your R910 display will blink when the device is on. This LED is a power indicator that shows the device is on when the device display is off.
   - **Limit Device Control:** If ON is selected, Restricts Wi-Fi Setting or Factory Reset in Device UI.

2. Click **Save Changes** to save your settings.

## Web Interface

1. From the Web UI, click **Settings**>**Device**>**Web Interface**. You can manage your Web UI admin password on this page.

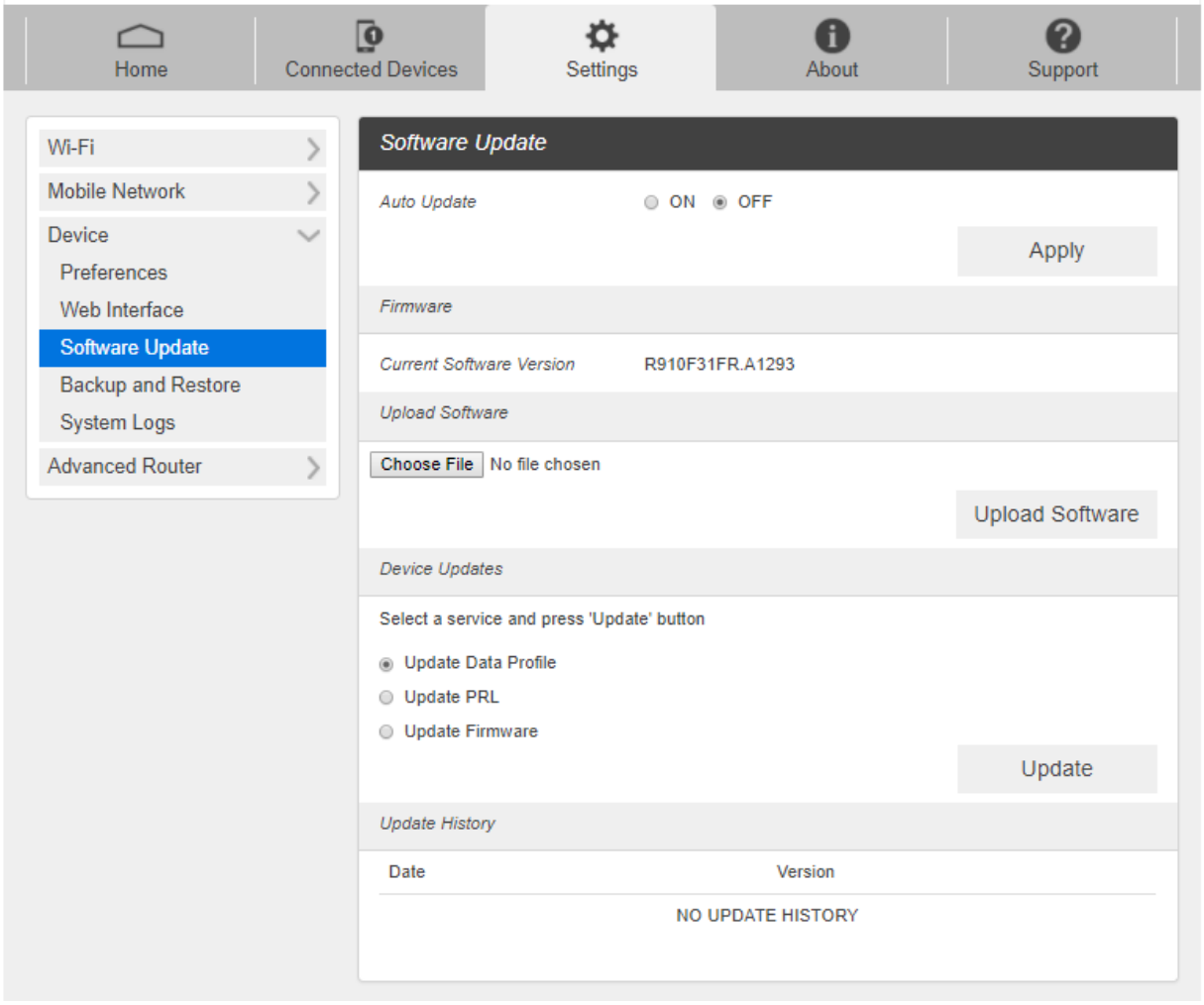



   - **Display Password**: If ON is selected, the Web Interface admin/manager password is displayed in Device Info of the About menu on your R910 device home screen.
   - **Change Password:** Allows changing password of Web UI Log in.

2. Click **Save Changes** to save your settings.

## Software Update

From the Web UI, click **Settings**>**Device**>**Software Update**. You can update the software on this page.




**Auto Update**: If ON is selected, your R910 will check the latest software periodically and update if new software is available.

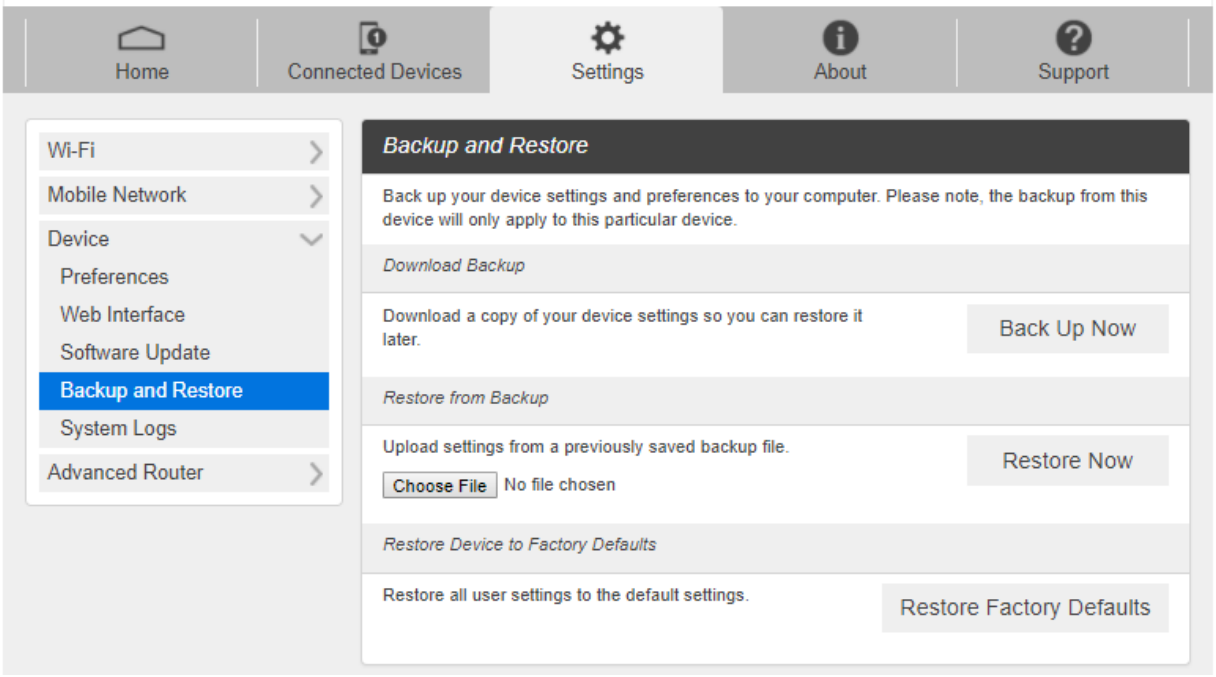
**Update Software**: If you have a new software file provided by your service provider, you can select the file and update your R910 manually by pressing Update Software button.

**Device Updates**: If you would like to check for new data profile, PRL, or Firmware, select desired option and press the Update button. Your R910 will check for the latest version. If available, the device will proceed to update.

**Update History**: Displays the update history list.

## Backup and Restore

- From the Web UI, click **Settings**>**Device**>**Backup and Restore** to back up your device settings to your computer, restore settings from backup file, or restore your device to its factory default settings.




### Backup

To back up your device settings to your computer, follow the steps below:

1. Click **Back Up Now**.
2. Click **Save** on the pop-up window.
3. Choose a location on your computer to save the backup file.
4. Click **Save**.

### Restore

To restore from backup file, follow the steps below:

1. Click **Select File** to select the backup file on your computer.
2. Click **Restore now**.

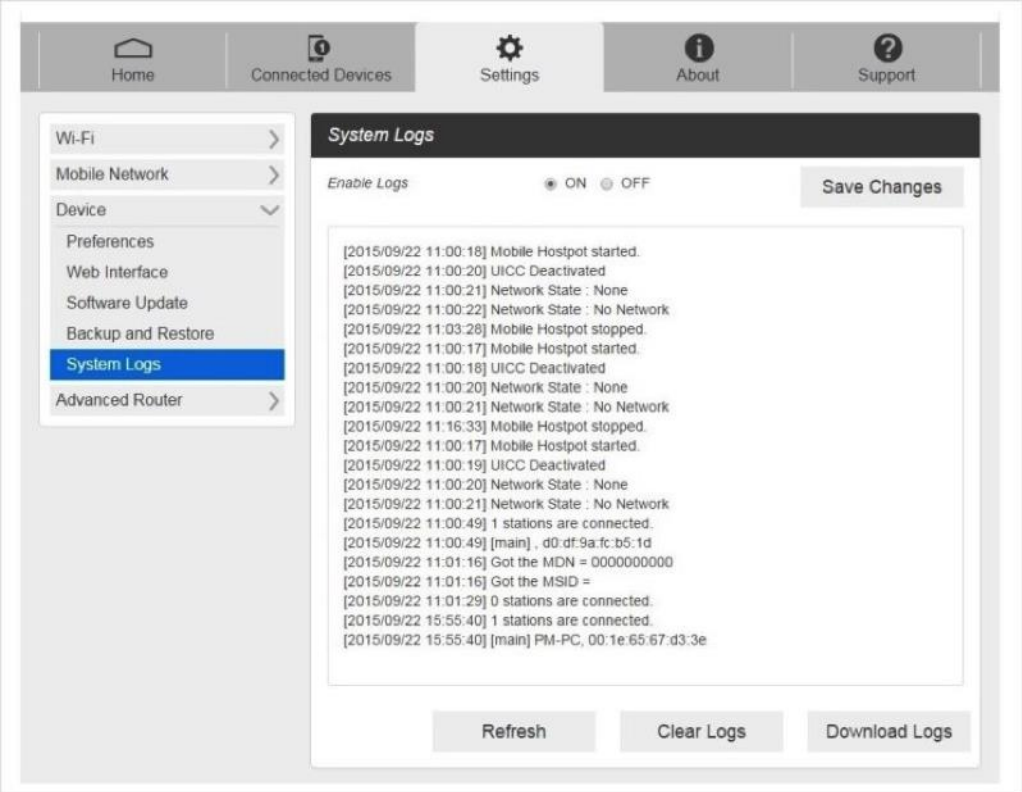
### Restore to Factory Defaults

To restore your device to its factory default settings, follow the steps below:

1. Click **Restore factory default**.
2. Click **Yes** to confirm the command.

## System Logs

- From the Web UI, click **Settings**>**Device**>**System logs**, and then click **Download logs** to download the system logs displayed.



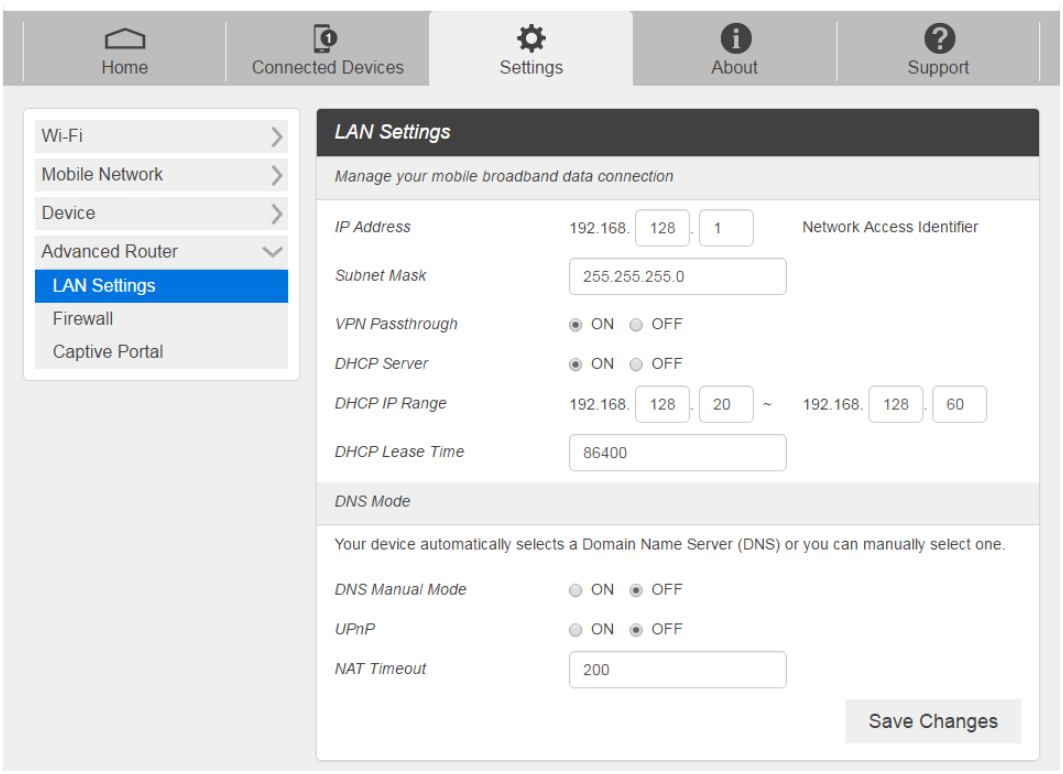

**Note**: System logs are used for engineering purposes by your service provider. Keep it OFF during regular usage of your device.

## Advanced Router Settings

Configure LAN settings, Firewall and Customization.

## LAN Settings

From the Web UI, click **Settings**>**Advanced Router**>**LAN Settings** to display the router information shown in the following figure.




**IP Address**: IP address for Web User Interface.

**Subnet Mask**: Subnet mask for the IP address.

**VPN passthrough**: VPN passthrough must be enabled if you want to allow VPN tunnels to pass through your device's firewall.

**DHCP Server**: Enable or disable DHCP Server function.

**DHCP IP Range**: Allocate begin and end IP address for IP Range.

**DHCP Lease Time**: Define how long the leased IP address will be in use before expiration. The new IP address will be assigned.

**DNS manual mode**: Turn DNS manual mode on or off.

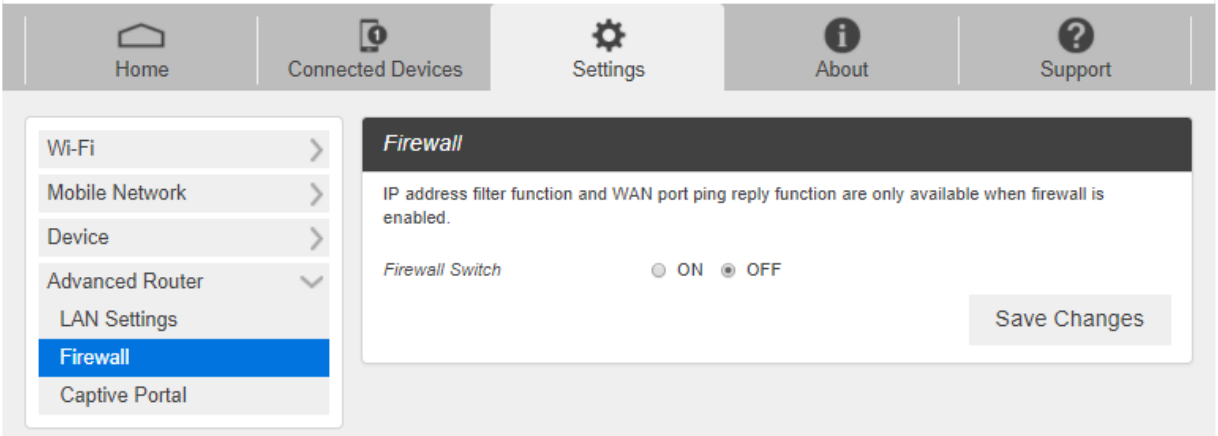
**UPnP**: Turn UPnP (Universal Plug n Play) mode on or off.

**NAT Timeout**: Set TCP NAT time.

Click **Save Changes** to save your settings.

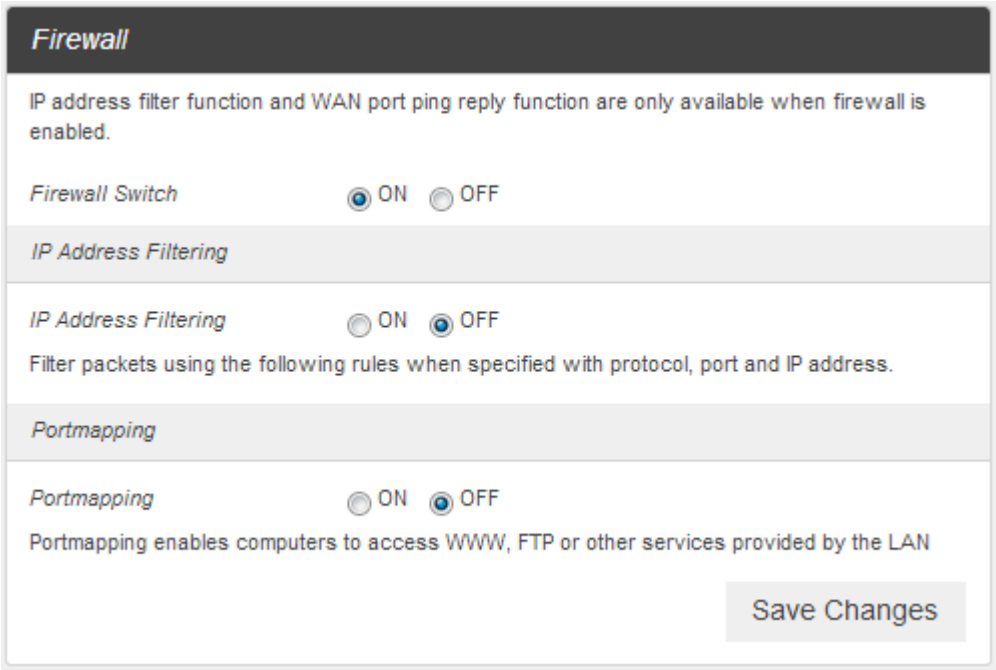
## Firewall

From the Web UI, click **Settings**>**Advanced Router**>**Firewall**. You may set up firewall rules to protect your network from virus and malicious activity on the Internet.




- **IP Address Filtering**

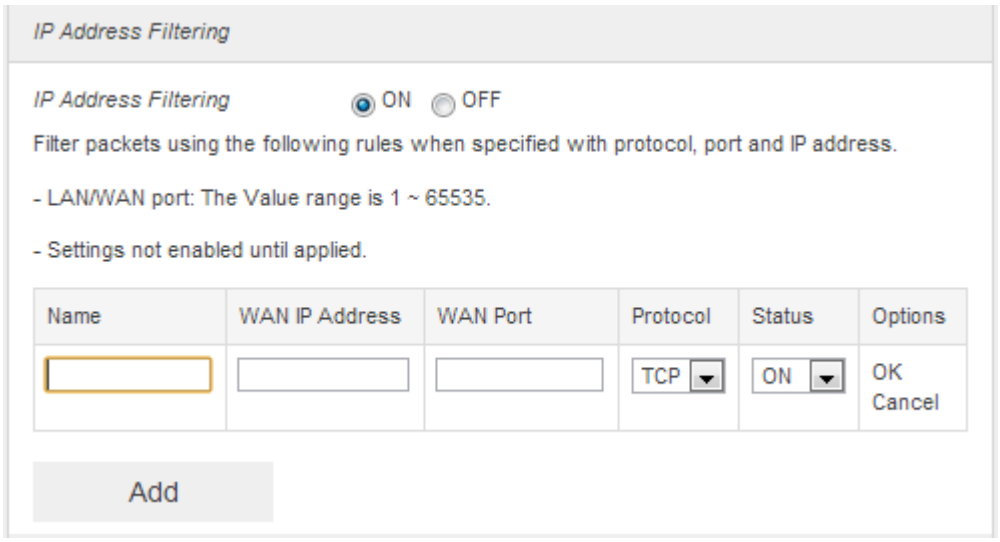
  To set IP Address Filtering rules, follow the steps below:




① Turn on the Firewall Switch.

② Turn on the IP Address Filtering.

③ Click **Add**.




④ Enter the related parameters as described in the following table.

| Parameters | Description |
|---|---|
| **LAN IP address** | Enter the LAN IP address. |
| **LAN port** | Set the LAN port. |
| **WAN IP address** | Enter the WAN IP address. |
| **WAN port** | Set the WAN port. |
| **Protocol** | Set which protocol will be used for filtering. |
| **Status** | Set how to handle the packet if it matches with the rule. |

⑤ Click **Save Changes** to add the new filtering rule.

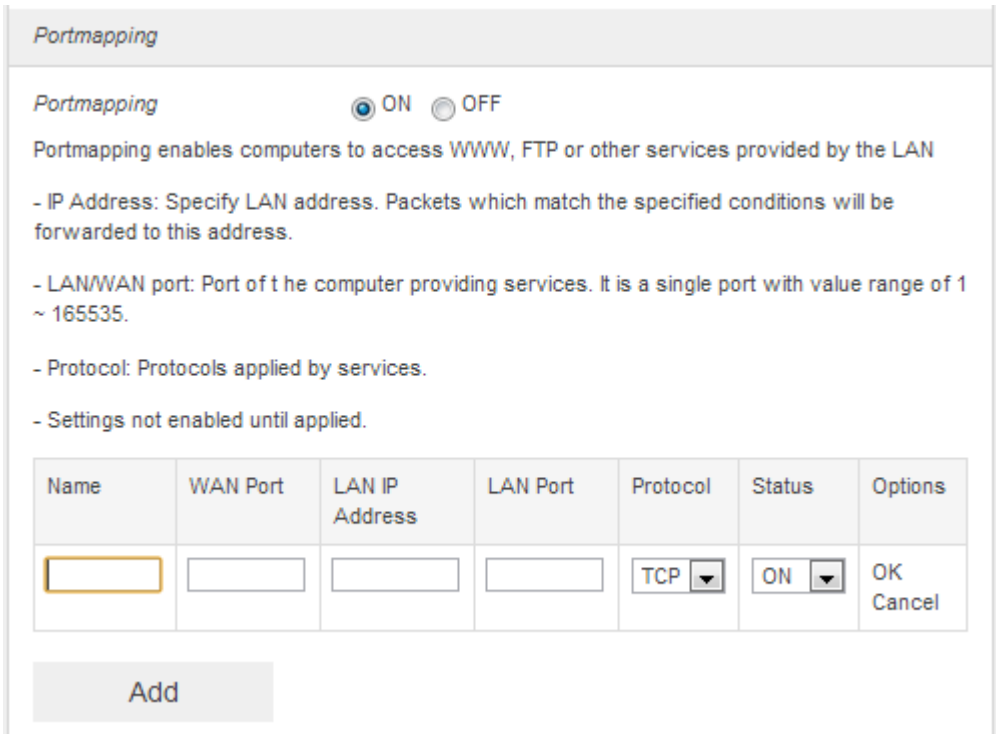
■ **Portmapping**

To set portmapping rules, follow the steps below:

① Turn on the Firewall Switch

② Turn on Portmapping.

③ Click **Add**



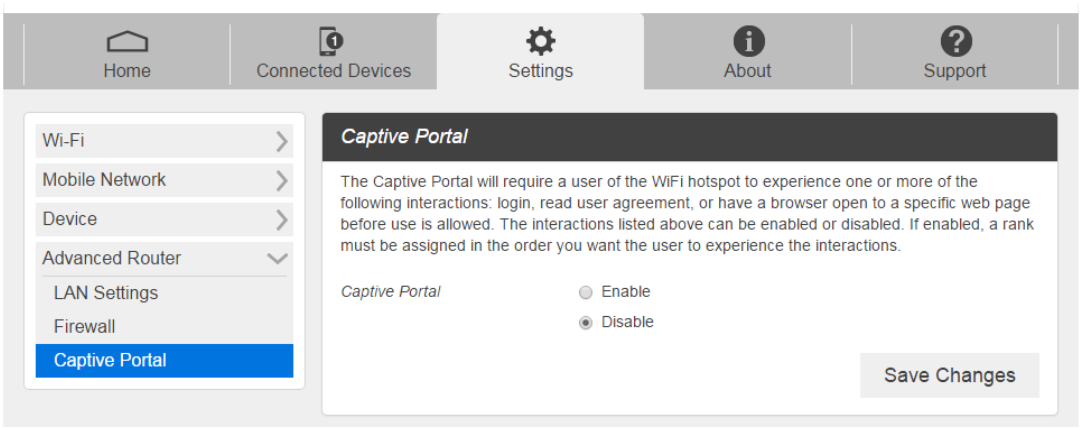

④ Enter the related parameters as described in the following table.

| Parameters | Description |
|---|---|
| **Name** | Enter a name for the rule. |
| **WAN port** | Set the WAN port. |
| **LAN IP address** | Enter the LAN IP address. |
| **LAN port** | Set the LAN port. |
| **Protocol** | Set which protocol will be used for filtering. |
| **Status** | Set how to handle the packet if it matches with the rule. |

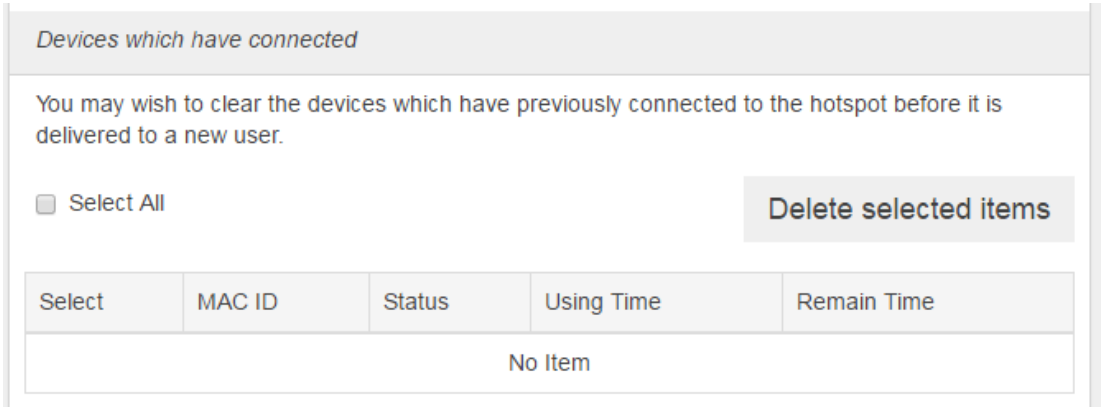
Click **Save Changes** to save your settings.

## Captive Portal

From the Web UI, click **Settings**>**Advanced Router**>**Captive Portal**. You may set up Captive Portal. The Captive Portal will require a user of the Wi-Fi hotspot to experience one or more of the following interactions: login, read user agreement, or have a browser open to a specific web page before use is allowed. The interactions listed above can be enabled or disabled. If enabled, a rank must be assigned in the order you want the user to experience the interactions.



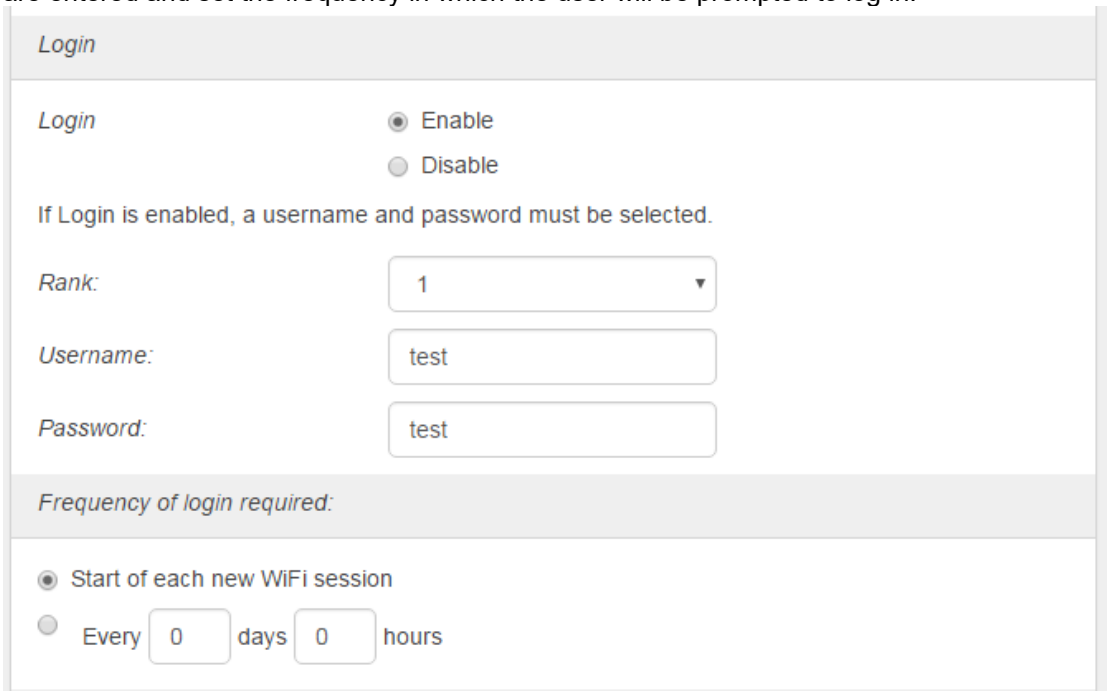

### Previously Connected Devices




Check the information of connected devices through the captive portal function. Selected items can be deleted with the “Delete selected items” button.

## Login

Enable Login feature to restrict a user from accessing the internet unless the proper login credentials are entered and set the frequency in which the user will be prompted to log in.




**Rank**: Set a rank to assign the priority of the login feature.

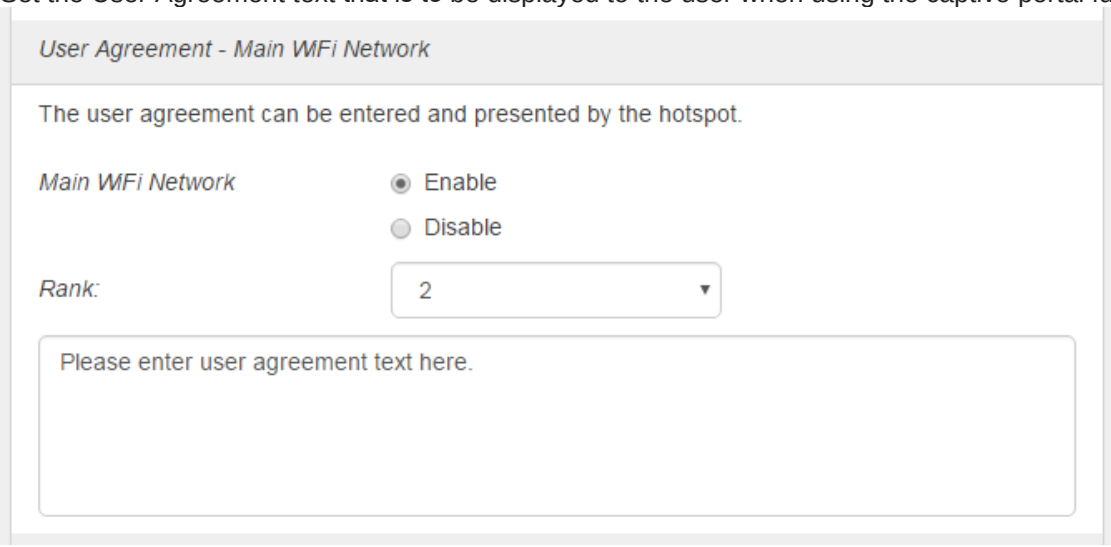
**Username**: When using the captive portal function, set the user name that the user will have to enter to gain Internet access.

**Password**: When using the captive portal function, set the password that the user will have to enter to gain Internet access.

**Frequency of login required**: Set the frequency the user will be prompted to log in.

### User Agreement - Main Wi-Fi Network

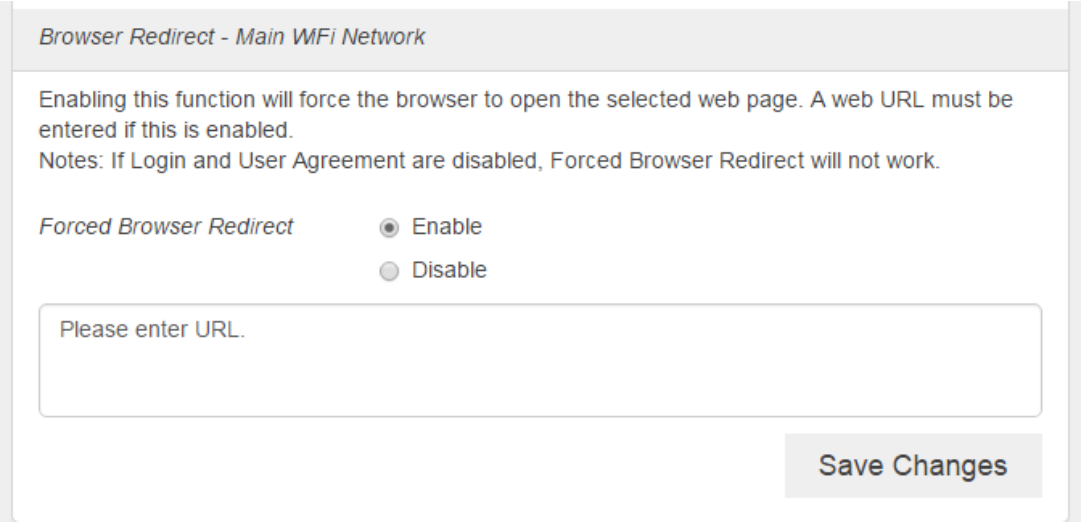
Set the User Agreement text that is to be displayed to the user when using the captive portal function.




**Rank**: Set a rank to assign the priority user is to see user agreement text.
**Text Input Area**: Enter the User Agreement text.

### Browser Redirect - Main Wi-Fi Network

Enable this feature to redirect user to a fixed web page when the captive portal function is used.



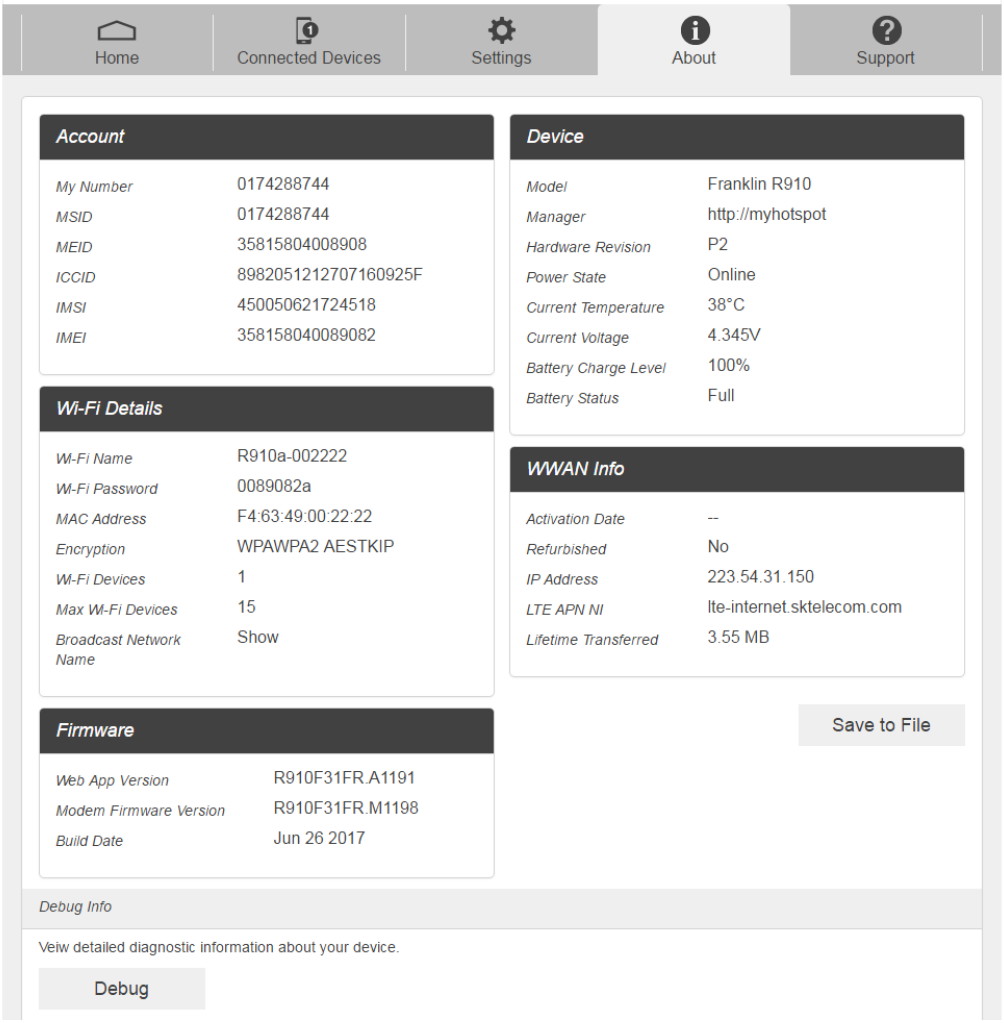

**Text Input Area**: Enter the web address for Forced Browser redirect.

**Save Changes:** Once Captive Portal features have been configured, make sure to save your configured settings.

## About

Displays your device's connection information, firmware information, WWAN information, Wi-Fi details and device information.

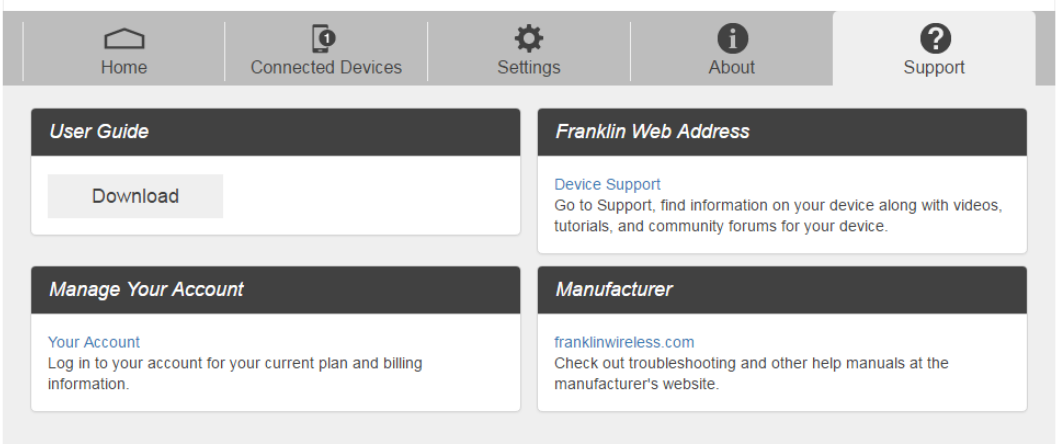
- From the Web UI main screen, Click the **About** tab to view the information above.



## Support Tab

Obtain support information on this interface.

- From the Web UI main screen, click the **Support** tab to view the available options.



# Appendix

The following topics cover items such as troubleshooting, device specifications, applicable warranty and service information, customer service contacts, and applicable trademark and copyright notices.

## Troubleshooting

Check below for troubleshooting solutions for common device issues.

## Check here first

**Issue: Unable to connect via Wi-Fi (WLAN)**

**Solution 1**: Check whether the mobile broadband device is properly connected to the computer or other external device. If not, make sure you have the right Wi-Fi name selected and the Wi-Fi password is entered correctly.

**Solution 2**: If SHARED WEP is the security method being used, check whether the correct WEP key is entered. If the WEP key is unknown, see Wi-Fi Basic Settings to reset the WEP key and reconnect the device.

**Solution 3**: Check whether the correct WPA key is set. If the WPA key is unknown, see Wi-Fi Basic Settings to reset the mobile broadband device or see the WLAN Initialization Sticker to reset the WPA key, and then reconnect the device. WPA/WPA2 security may not be supported depending on the Wi-Fi device. See the Wi-Fi device user guide for more information.

**Issue: Internet connection fails.**

**Solution 1**: Make sure that you are within the service area.

**Solution 2**: If signal reception is poor, move to where signal reception is good and then reconnect.
**Solution 3**: The access point might be busy depending on the time of day. Wait a little and then reconnect.

**Solution 4**: Activate the Web UI and make sure that network settings are correct

**Issue: Transmission fails quickly.**

**Solution 1**: Make sure that the mobile broadband device is properly connected to the PC or other device via Wi-Fi.

**Solution 2**: Signal reception might be poor. Check transmission where signal reception is good.

**Solution 3**: Restart the mobile broadband device.

**Solution 4**: Check the mobile broadband device battery level. If battery level is low, charge with AC charger. See Charge the Battery section for directions on charging your device.

**Issue: Transmissions are slow.**

Solution 1: Signal reception might be poor. Check transmission where signal reception is good.

Solution 2: Connection might be poor. Try again after a while.

**Issue**: **Forgot PIN / Unknown PIN Unblocking Key (PUK) / SIM card is locked.**

**Solution**: Contact Service Provider

**Issue: SIM card is not recognized.**

**Solution 1**: Check whether the SIM card is properly installed. For details, see Insert or Remove a SIM Card (page 8).

**Solution 2**: Check the SIM card for damage.

**Solution 3**: Check the SIM card IC chip for scratches/corrosion.

**Solution 4**: Dirty SIM card (particularly IC chip) may prevent recognition. Clean gently with a soft cloth.

**Solution 5**: Contact Service Provider

**Issue**: **How do I return the mobile broadband device to the default settings (reset)?**

**Solution 1**: Use the reset button located on the back of the device after battery cover removal. (Device must be On when pressing reset button.)

**Solution 2**: Use the Web UI to reset the device. For details, see Web UI Window.

**Issue**: **An old phone number appears on the Web UI.**

**Solution**: The Web UI may display an old phone number depending on subscription terms or cancellation method.

**Issue**: **The mobile broadband device operation is unstable.**

**Solution 1**: Avoid extremely high/low temperatures, high humidity, direct sunlight, dusty areas, etc. Read "Safety Precautions" for use in a proper environment.

**Solution 2**: Avoid invalid software. Operation is not guaranteed for Internet connection, etc., other-party software.

**Issue**: **The connection suddenly fails.**

**Solution 1**: The connection method may have been changed. Check connection mode on the mobile broadband device display.

**Solution 2**: Restart the mobile broadband device.

## Specifications

The following tables list the specifications for the mobile broadband device, the AC charger, and materials.

## Mobile Broadband Device Specifications

| Item | Description |
|---|---|
| **Model name** | R910 Mobile Hotspot |
| **Dimensions**[1] | 12.5mm (H) x 90.1mm (W) x 67mm (D) |
| **Weight** | 125g |
| **Interface** | WebUI |
| **Power consumption** | Normal state: 1.25 Watts<br>Max state : 3.5 Watts |
| **Operating system** | Linux OS |

| Item | Description |
| --- | --- |
| **Frequency** | LTE B2<br>DL: 1930 ~ 1990 MHz UL: 1850 ~ 1910 MHz<br>LTE B4<br>DL: 2110 ~ 2155 MHz UL: 1710 ~ 1755 MHz<br>LTE B5<br>DL: 869 ~ 894 MHz UL: 824 ~ 849 MHz<br>LTE B12<br>DL: 729 ~ 746 MHz UL:699 ~ 716 MHz<br>LTE B25<br>DL: 1930 ~ 1995 MHz UL:1850 ~ 1915 MHz<br>LTE B26<br>DL: 859 ~ 894 MHz UL: 814 ~ 849 MHz<br>LTE B41<br>DL: 2496 ~ 2690 MHz UL: 2496 ~ 2690 MHz<br>WCDMA B1<br>DL: 2110 ~ 2170 MHz UL: 1920 ~ 1980 MHz |

| Item | Description |
|---|---|
| **Frequency** | WCDMA B2<br>DL: 1930 ~ 1990 MHz UL: 1850 ~ 1910 MHz<br>WCDMA B5<br>DL: 869 ~ 894 MHz UL: 824 ~ 849 MHz<br>WCDMA B8<br>DL: 925 ~ 960 MHz UL: 880 ~ 915 MHz<br>CDMA BC0<br>DL: 869 ~ 894 MHz UL: 824 ~ 849 MHz<br>CDMA BC1<br>DL: 1930 ~ 1995 MHz UL:1850 ~ 1915 MHz<br>CDMA BC10<br>DL: 861 ~ 869 MHz UL: 816 ~ 824 MHz<br>Wi-Fi 2.4G(b/g/n)<br>2412MHz ~ 2462MHz<br>Wi-Fi 5G(ac)<br>5180MHz ~ 5825MHz |
| **Compatible networks** | LTE category 4 / CDMA 1xEVDO Rev. A / UMTS / Wi-Fi IEEE802.11 b/g/n/ac |
| **Charging time**[2] | 4.5 hours |
| **Continuous standby time**[3] | 27 hours |
| **Continuous communication time**[3] | 8.5 hours |
| **Communication speed** | LTE category 4 CDMA 1xEVDO Rev. A UMTS<br>DL : 150Mbps DL : 3.1Mbps DL : 14Mbps<br>UP : 50Mbps UP : 1.8Mbps UP : 5.8Mbps |

[1] Approximate values

[2] Varies by ambient temperature, battery usage, etc.

[3] Varies by environment, signal conditions, etc.

## AC Charger Specifications

| Item | Description |
|---|---|
| **Rated input voltage** | 100-240Vac |
| **Operating range** | 90-264Vac |
| **Rated input frequency** | 50/60Hz +/- 3Hz |
| **Nominal dc output voltage** | +5.0V (±5%) |
| **Rating load current** | 2.0A |

## Materials Specifications

| Parts | Materials/Finishing |
|---|---|
| **A cover** | PC(Black),SF coating |
| **B cover** | PC(Black) |
| **Battery cover** | PC(Black),SF coating |
| **A deco** | PC(Black),UV(Gloss 80%) |
| **Power key** | PC(Milky White),Spray(Black),UV(Gloss 80%) |
| **LCD Bracket** | PC(Black) |
| **Rubber feet** | Silicon(Black) |

## Warranty and Service

The following topics outline your device's warranty and service information.

## Warranty

Your device purchase includes Warranty.

- Confirm shop name and purchase date.
- Read contents of Warranty and keep it in a safe place.
- Check warranty period in the Warranty.

## Services

Before submitting your device for repairs, contact your Service Provider’s Customer Services; be prepared to describe the problem in detail.

- During the warranty period, repairs will be made under the terms and conditions described in the Warranty.
- After the warranty period, repairs will be made upon request; if said repairs can be made, you will be charged for them.

## Customer Service

For mobile broadband device service or general information, please contact your Service Provider's Customer Service. For repairs, please also call your Service Provider’s customer assistance.

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# Safety and Notices

The following topics address important safety precautions, general notes, and required RF exposure information for your mobile broadband device.

## Safety Precautions

The following topics outline important safety precautions that must be observed when using your device.

### Important Notice

Due to the nature of wireless communications and transmission, reception of data can never be guaranteed. Data may be delayed, corrupted (i.e., have errors) or totally lost. Although significant delays or losses of data are rare when wireless devices are used in a normal manner with a well-constructed network, your device should not be used in situations where failure to transmit or receive data could result in damage of any kind to the user or any other party, including but not limited to personal injury, death, or loss of property. Franklin Wireless accepts no responsibility for damages of any kind resulting from delays or errors in data transmitted or received using your device, or for failure of your device to transmit or receive such data.

### Safety and Hazards

Do not operate your device under the following conditions.

- In areas where blasting is in progress
- Where explosive atmospheres may be present
- Near medical equipment
- Near life support equipment, or any equipment that may be susceptible to any form of radio interference.

In such areas, your device MUST BE POWERED OFF. Your device can transmit signals that could interfere with equipment nearby.

Do not operate your device in any aircraft, whether the aircraft is on the ground or in flight. In the aircraft, your device MUST BE POWERED OFF. When operating, your device can transmit signals that could interfere with various onboard systems.

Note: Some airlines may permit the use of cellular phones while the aircraft is on the ground. Your device may be used at this time if allowed by airlines.

The driver or operator of any vehicle should not operate the device while in control of a vehicle. Doing so will detract from the driver or operator's control and operation of that vehicle. In some jurisdictions, operating such communications devices while in control of a vehicle is an offense.

### Proper Battery Use and Disposal

Follow these guidelines to ensure safe and responsible battery use.

- Do not open, disassemble, puncture, crush, bend, or shred.
- Do not expose to liquids, fire, explosion, or other hazards.
- Use the original R910 battery supplied with your device.
- If using with a charger, use only the AC charger supplied with your device.
- Do not short circuit the battery.
- When replacing a battery, use the same model of battery that was supplied with your device.
- Follow local regulations when disposing of a used battery.
- Avoid dropping your device or the battery. If dropped and you suspect damage, take it to a service center for inspection.
- Battery usage by children should be supervised.

Note: Improper battery use may result in a fire, explosion, or other hazard.

### FCC Compliance

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

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.

## RF Exposure Information and Specific Absorption Rate (SAR) Information

The following topics detail the specific absorption rate (SAR) information, electromagnetic safety information, and radiofrequency (RF) exposure information for this device.

This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the United States.

During SAR testing, this device is set to transmit at its highest certified power level in all tested frequency bands, and placed in positions that simulate RF exposure in usage against, and near the body with the separation of 10 mm. Although the SAR is determined at the highest certified power level, the actual SAR level of the while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output. Safety and Notices 90

The exposure standard for wireless employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg.

**Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.**

The FCC has granted an Equipment Authorization for this model device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model device is on file with the FCC and can be found under the Display Grant section of http://fcc.gov/oet/ea/fccid after searching on **FCC ID: XHG-R910**

More information on the device's SAR can be found from the following FCC website: http://fcc.gov/oet/ea/fccid.

While there may be differences between the SAR levels of various devices and at various positions, they all meet the government requirement.

SAR compliance for body operation is based on a separation distance of 10 mm between the unit and the human body. Carry this device, at least 10 mm away from your body to ensure RF exposure level compliant or lower to the reported level. To support body operation, choose the belt clips or holsters, which do not contain metallic components, to maintain a separation of 10 mm between this and your body.

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