SURFboard mAX

User Guide, DRAFT Revision x.2

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Get started

SURFboard mAX products combine the latest Wi-Fi technologies (802.11ac and 802.11ax) with a tri-band design to deliver whole-home Wi-Fi coverage with broadband speeds. With a dedicated 4x4 multi-Gigabit band to link mesh units, you get the speeds you pay for!

SURFboard mAX home Wi-Fi devices are available in multiple speed capabilities and packages. Each product has a designation which translates its wireless LAN standard and maximum speed capability. For example, AX7800 means it uses the 802.11ax standard and has a maximum transfer rate of 7.8 Gbps. AC3800 means it uses the 802.11ac standard and has a maximum transfer rate of 3.8 Gbps. Use the table below to determine which category your product fits into. This will help you better undertand the capabilities of your product as you go through this User Guide.

Speed and Packages	Included Devices
AX11000 (W31)	One mAX router.
AX11000 (W133)	Two mAX routers with one functioning as a signal extending satellite.
AX7800 (W130)	Two mAX routers with one functioning as a signal extending satellite.
AX6600 (W21)	One mAX router.
AX6600 (W121)	Two mAX routers with one functioning as a signal extending satellite.
AX6600 (W122)	One mAX router and one signal extending satellite.
AXE6600 (W161)	Two mAX routers with one functioning as a signal extending satellite.
AXE6600 (W61)	One mAX router.
AX6600 (W11)	One signal extending satellite.
AC3800 (WC4T)	Two mAX routers with one functioning as a signal extending satellite.

The ARRIS SURFboard Central mobile app assists you with product setup and functions as your interface into your SURFboard mAX products. It steps you through installing your SURFboard mAX Wi-Fi home network using your iOS or Android mobile device and lets you manage your home network access, Parental Control, Guest Access, and more on all your connected devices (e.g., smartphones, cameras, tablets, computers, smart TVs, gaming consoles, and more) across your mAX Wi-Fi home network.

The SURFboard Central mobile app supports mobile devices running iOS 12.0 and above or Android 5.0 and above, and requires a cable/DSL modem or fiber ONT device connected to your ISP.

In the box

Your box will contain some of the items below depending on the model. Each mAX router unit is paired with a Power adapter and Ethernet cable.

Item		Description
mAX router unit		High-speed mAX unit with WAN and LAN Ethernet ports.* Each can function as a router or satellite.
mAX unit satellite unit		High-speed satellite unit for expanding the coverage area of your Home Wi-Fi network.
Power adapter		Power adapter for an electrical wall outlet connection with each mAX router unit.
Ethernet cable		Standard Category 5e (CAT5e) or higher network cable.

* The number of ports is determined by model.

Hardware diagrams

mAX Router units

This diagram and table explain the ports on the underside of your mAX router unit.
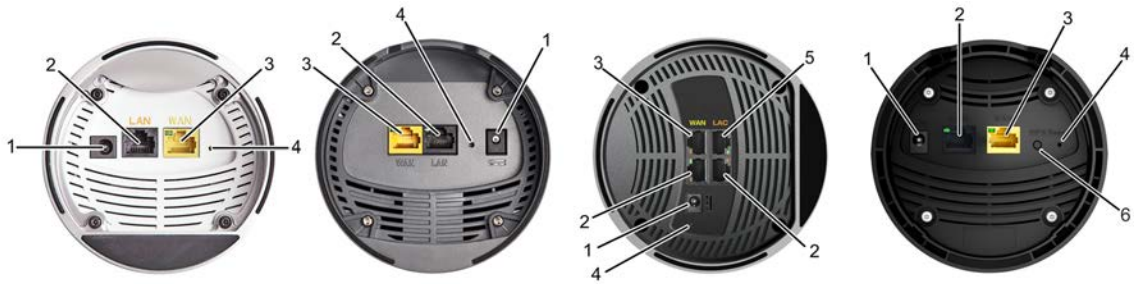
Callout	Name	Description
1	Power	For connection to the power adaptor included in the box.
2	LAN Ethernet port	For Ethernet device connections (i.e., TV, game console, PC, etc).
3	WAN Ethernet port	For connection to your cable/DSL modem or fiber ONT device.
4	Reset button	Resets the mAX to factory defaults.
5	LAC port	For connection to modems that support greater than 1Gbps service.
6	WPS button	To connect client devices and add satellite units.

mAX Express unit

This diagram and table explain the connections on the rear of your mAX Express satellite unit.

Callout	Name	Description
1	Power	For connection to the power outlet.
2	Reset button	Resets the mAX to factory defaults.

LED behavior

This table describes the mAX LED behavior.

LED Behavior	Action
Solid amber	Booting
Solid white	Boot successful
Rapidly alternating green and white (~1 sec increments)	Attempting to pair with mobile app via Wi-Fi during on-boarding
Slowly alternating green and white (3 sec increments)	Paired with mobile app via Wi-Fi during on-boarding
Slowly alternating blue and red (3 sec increments)	Paired with mobile app via Wi-Fi during on-boarding and WAN down
Solid blue	"Normal" state; on-boarding complete; connected to Internet; latest firmware installed.
Rapidly alternating blue and amber (~1 sec increments)	Downloading software in background
Solid blue	mAX good WAN connection state
Solid red	mAX disconnected WAN connection state

Mobile app help

Some of the SURFboard Central mobile app screens offer textual help. Tap the **?** if you require more information or assistance with something on that screen.

Help is also available on the **Side menu**, accessed from the **Collapsed menu icon** ☰ on the mobile app **Home** screen. Here, you can read our **Frequently Asked Questions**, get contact information for ARRIS support, tap to navigate to our self-help site, or get answers quickly with our **Live chat** feature.

If you require more assistance, call ARRIS Technical Support: 1-866-757-3598.

Related information

Help (page 49)
Side menu (page 47)

Set up your SURFboard mAX home network

These are the tasks you will perform to set up your SURFboard mAX home Wi-Fi network.

1. *Get the ARRIS SURFboard Central mobile app* (page 10)
2. *Launch the ARRIS SURFboard Central mobile app* (page 10)
3. *Create your SURFboard account* (page 11)
4. *Set up your SURFboard mAX router* (page 15)
5. *Get your SURFboard mAX router online* (page 17)
6. *Setup your home Wi-Fi network and set a password* (page 20)
7. *Add devices to home network* (page 21)

> **Note:** Some screenshots throughout this chapter may contain images of a model different that your own, these are simply examples and the app on your mobile device should represent the model you are configuring.

Get the ARRIS SURFboard Central mobile app

The mobile app is available online as a free download for your mobile device.

1. Navigate to the Apple App Store (for iOS devices) or Google Play Store (for Android devices).
2. Search for the ARRIS SURFboard Central mobile app.
3. Download by tapping **OPEN** in the Play Store or **GET** in the Apple Store.

Launch the ARRIS SURFboard Central mobile app

- Once you have the SURFboard Central mobile app installed, tap the shortcut on your mobile device to launch it.

Create your SURFboard account

1. On the **SAY HELLO TO YOUR NEW SURFBOARD DEVICE!** screen, tap **GET STARTED** to begin the setup process.

   The app may need to request permissions to improve the app experience during setup. The screen explains the purpose of each of these permission requests.

2. Tap **CONTINUE** after granting the required permissions.
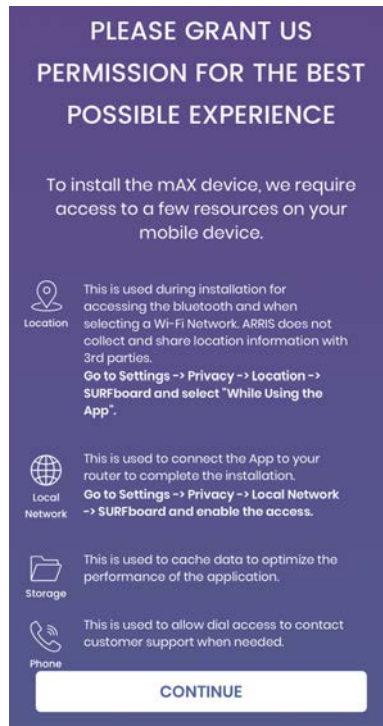
3. On the first **SELECT YOUR DEVICE BELOW** screen, select the `SURFboard Mesh Wi-Fi Triband` device group and tap **NEXT**.
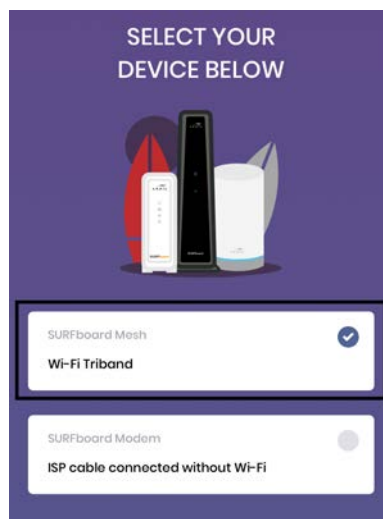
4. On the second **SELECT YOUR DEVICE BELOW** screen, select your SURFboard mAX model which will function as your router.

5. Scroll down, if necessary, and tap **NEXT**.
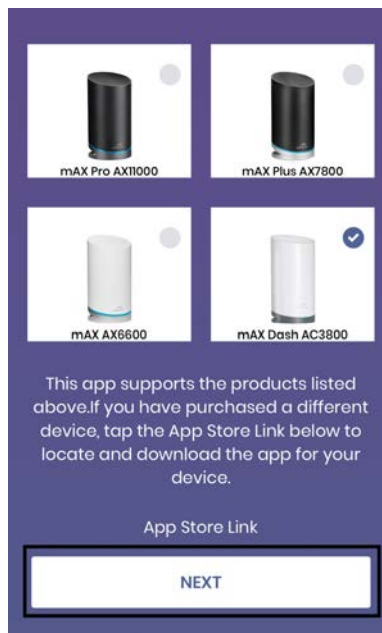
6. Perform one of the following depending on whether you have an existing SURFboard account:

   a. If you do not already have a registered account, tap to **SIGN UP**, fill out the requested information and agree to the Terms and Conditions. Tap **SIGN UP** again to complete registration.

b. If you already have a registered account, enter your Email ID associated with your account and tap **SIGN IN**.

Shortly, you will receive a verification code at the email address you provided. This code is only valid for 24 hours.

7. Enter the code on the **ENTER VERIFICATION CODE** screen.

8. When verification is complete, the **CODE VERIFIED** screen will display. Tap **NEXT**.
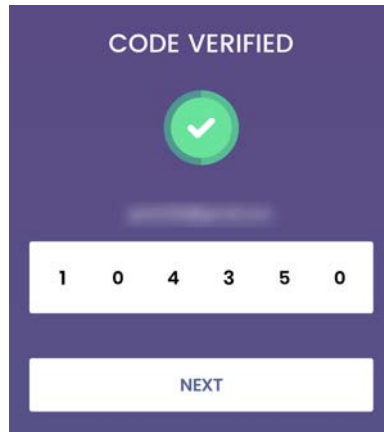
Set up your SURFboard mAX router

1. You can follow the network optimization recommendations based on the information you provided about your network or opt to skip the recommendations and begin router set up. To optimize your network, tap **HELP ME OPTIMIZE MY NETWORK** and continue with step 2 or tap **SKIP OPTIMIZATION** to begin router set up and skip to step 3.

WE'D LIKE TO HELP YOU
OPTIMIZE YOUR NETWORK

The following steps can help
optimize your Home Network.
We will ask you a few questions
to learn about your Network.

HELP ME OPTIMIZE MY NETWORK

SKIP OPTIMIZATION

2. If you chose help with optimizing your network, on the **PLEASE SELECT YOUR HOME NETWORK CONFIGURATION** screen, tap the option that best describes your current network set up. If you do not know your configuration, tap **I Don't Know My Configuration**. The options are as listed below:

Cable Modem Only	Internet access is provided via a single device with a wired connection to networked devices. Typically, a cable is connected to a modem. Wi-Fi is not available.
Gateway: Cable Modem and Inbuilt Router	Internet access is provided via a single device. Cable is connected to the gatway. Wi-Fi is provided throught the built-in functionality of the same gateway device.
Cable Modem and Additional Router	Internet access is provided through a cable modem which is connected to an external Wi-Fi router that provides wireless Internet to the client devices.
DSL-based Modem or Gateway	Internet access is provided through a DSL modem or gateway. For this configuration, we recommend that the DSL modem and router connection is maintained; but that the Wi-Fi component of the router is disabled.

Fiber-based Modem or Gateway	Internet access is proided through a single device. The optical fiber cable connects to the gateway and Wi-Fi is provided through the built-in functionality of the fiber gateway device.
I Don't Know My Configuration	Your configuration is not covered by one of the above selections or you are unsure if it does.

Use the recommendations provided by the app based on your network configuration to choose the best place in your home for your mAX router.

3. Unpack the mAX unit(s) and accessories. Included are:

   ■ SURFboard mAX unit(s)

   ■ An Ethernet cable

   ■ A power cord

   Note: If you have the two mAX units in your box, they are interchangeable as router and satellite at time of setup. They are assigned the roles of router or satellite upon configuration.

4. Tap **NEXT**.

5. Unplug your existing modem from power and tap **NEXT**.

6. Connect a mAX unit to your modem with the Ethernet cable. Be sure to use the WAN port on the underside of the mAX. Tap **NEXT**.

7. Connect your modem to power with your modem's power cable. Tap **NEXT**.

8. Connect your mAX unit to power via the provided power cord. Wait for the LED on the mAX unit to alternate white and blue before you tap **NEXT**.

   Note: If you get a message that Wi-Fi is disabled, follow the directions on the screen to enable Wi-Fi before continuing.

Get your SURFboard mAX router online

This topic describes how your SURFboard Central mobile app pairs with the mAX router, and the router connects to the Internet. Depending on your SURFboard mAX router model, you may initially pair with your router through Bluetooth or Wi-Fi.

If you are setting up an AX11000 (W31) or AX7800 (W30), your mobile device will pair using Bluetooth. Ensure Bluetooth is enabled on your mobile device before proceeding with this procedure. Once the initial pairing is complete, your router is configured, and you've setup your Home Wi-Fi network you will no longer use Bluetooth to communicate with the router.

If you are setting up an AX6600 (W21) or AC3800 (WC4), your mobile device will pair using Wi-Fi. Ensure Wi-Fi is enabled on your mobile device before proceeeding with this procedure. During the procedure, your mobile device will temporarily connect to the router's Wi-Fi connection, `SURFBoard-Onboarding`. Once the initial pairing is complete, your router is configured, and you've setup your Home Wi-Fi network you will no longer use `SURFBoard-Onboarding` to communicate with the router.

1. On the **SETUP INFORMATION** screen, tap **NEXT** to begin getting your router online.

   - If you are setting up an AX11000 (W31) or AX7800 (W30), your mobile device will connect through Bluetooth.

     Note: If you get a message that Bluetooth is disabled, follow the directions on the screen to enable Bluetooth before continuing.

   - If you are setting up an AX6600 (W21) or AC3800 (WC4), you may receive a prompt from your mobile device to confirm connecting to the SSID. Confirm joining to the mAX unit's `SURFBoard-Onboarding` SSID for configuration.

   The SURFboard Central mobile app searches for the mAX router. The LED alternates white and green during this process.

2. When the SURFboard Central mobile app successfully connects to your mAX router, the LED will light solid blue and a **SUCCESSFULLY CONNECTED** screen displays on your mobile app. Tap **NEXT**.

3. The mAX router will now be connected to the Internet. This will take a few minutes. The LED will alternate white and blue during this process. Tap **NEXT**.

4. With a successful connection to the Internet, the LED will continue to alternate white and blue, but the **SUCCESSFULLY CONNECTED TO THE INTERNET** screen displays. Tap **NEXT**.

Now that your mAX router is online, it will take a few minutes to check for new firmware, which improves system performance and my provide new features in future updates. If firmware is found, the LED will alternate blue and amber while downloading.
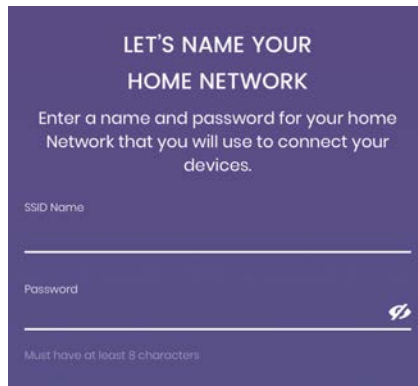
If your firmware is already up-to-date or after the firmware is updated, the router will be registered. Registration ensures that you will always be running the latest and greatest firmware for maximum performance.

After your mAX router updates and registers, your mobile device will reconnect to the mAX router so you can setup your Home Wi-Fi network.

Setup your home Wi-Fi network and set a password

1. Name your home network and choose a password. You will be able to connect and manage all Wi-Fi enabled and wired devices on this new home network. Tap **NEXT**.

Note: A shortcut - If you previously had a home Wi-Fi network, you can use the network name (SSID) and password from your old network as the network name (SSID) and password for your new network. That way, your devices previously connected to the old network should automatically connect to the new SURFboard mAX home Wi-Fi network. This will only work if you remove or disable your old router. It is possible that some devices may need to be reconnected manually even if your SSID and password are the same as your previous network.

Note: If you wish to have your wired devices connect to the new mAX network (recommended), be sure to disconnect the wired devices from your old gateway or router and reconnect them into the Ethernet port on the underside of your mAX router. If you have more than one device, you can plug a multi-port switch (not included) into this port to support multiple devices.

2. The mAX router will create your new SURFboard mAX home Wi-Fi network and register your device under your SURFboard account. You may receive a prompt from your mobile device to confirm connecting to the SSID you created. If you receive this prompt, confirm joining the network.

3. Once complete, the **CONGRATULATIONS** screen is displayed in your mobile app. Tap **CONTINUE**.

Your mAX router setup is complete. This app provides your interface to managing your mAX router. Tap **GET STARTED** to see a quick tutorial on how to navigate the app when managing your mAX router.

Note: If you want to set up your mAX satellite at this time, choose **INSTALL NOW** on the next screen. If you choose the option to **INSTALL LATER**, refer to *Adding a SURFboard mAX satellite* (page 22) when you are ready to install the satellite.

Add devices to home network

Ensure Wi-Fi is enabled for the device you wish to connect to your SURFboard mAX Wi-Fi home network. Repeat these steps for each device.

Note: If you had a previous Wi-Fi network and used the same SSID (network name) and password for your SURFboard mAX home Wi-Fi network, your devices should connect automatically.

1. In your device **Settings**, browse to the available Wi-Fi networks.

2. Select your SURFboard mAX home Wi-Fi network SSID you previously established.

3. Enter the password for your SURFboard mAX home Wi-Fi network.

Your device will connect to the network.

Adding a SURFboard mAX satellite

Adding a mAX satellite to your home network extends your home network Wi-Fi coverage. After you install and configure your router, you will be given the option to add one, even two, satellites to your SURFboard mAX home network.

Note: Some screenshots throughout this chapter may contain images of a model different that your own, these are simply examples and the app on your mobile device should represent the model you are configuring.

You can access the feature from the **Side menu** by tapping the **Collapsed menu icon** Ξ and selecting **Add a New Satellite** from the **Side menu**.
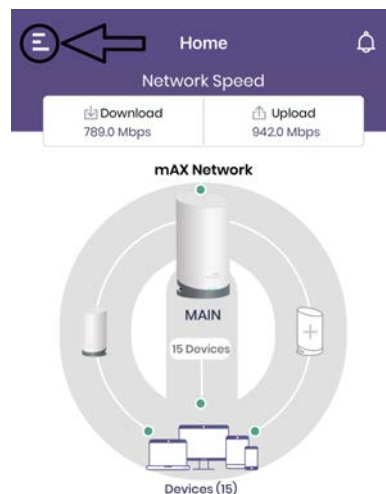
You can also access the feature by tapping one of the empty satellite slots on the **Home** screen.
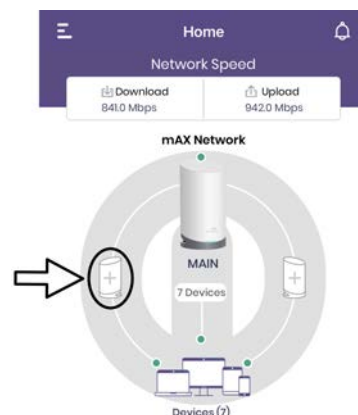
When adding a satellite, you will perform the following tasks.

- *Set up your SURFboard mAX satellite* (page 23)

- *Get your SURFboard mAX satellite online* (page 24)

Set up your SURFboard mAX satellite

1. Tap **INSTALL NOW** to add an additional satellite to your mAX home Wi-Fi network.

INSTALL ADDITIONAL
SATELLITE

If you have an additional satellite
unit to Install, you can install it now
or later.

INSTALL NOW

INSTALL LATER
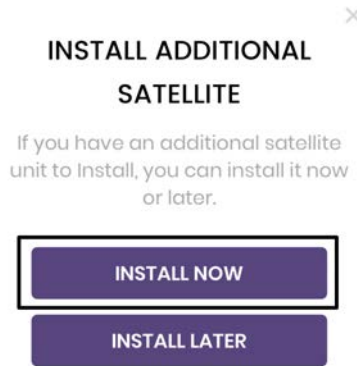
2. Read the explanation of satellites on the **ADD A NEW SATELLITE** screen and tap **NEXT**.

ADD A NEW SATELLITE

Each satellite expands your SURFboard
network's coverage. The most effective
way to place a brand new satellite is
within the range of another SURFboard
network.

NEXT

CANCEL
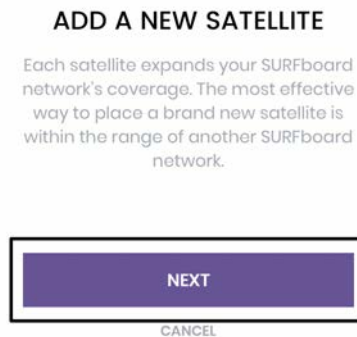
3. From the box your mAX satellite came in, locate the additional mAX unit and power cord and then tap **NEXT**.

4. The next screens present satellite placement information you can use to optimize your network's coverage. Either tap **CONTINUE** to find the best placement for the satellite in your home or tap **SKIP** if you want to skip to installation.

WE'D LIKE TO HELP YOU
PLACE YOUR SATELLITE

The following placement tips will help
give the best coverage for your home.

CONTINUE

SKIP
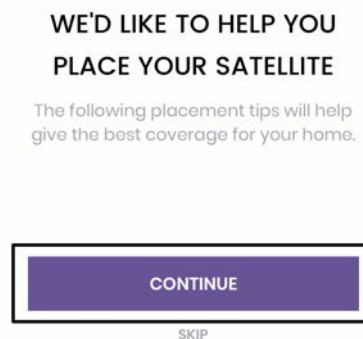
Get your SURFboard mAX satellite online

1. Use the provided power adapter and plug the satellite into an outlet and then tap **NEXT**.

   Note: If you are setting up AXE6600 (W161) devices from the same pack, your mAX unit will already be paired with the satellit unit. The units will connect automatically once you have powered up the satellite device.

2. Your mobile device will attempt to connect to the satellite to begin the configuration. Tap **NEXT** to continue with the process.

   If you are adding an AX11000 (W31) or AX7800 (W30) as a satellite, your mobile device will connect through Bluetooth.

   Note: If you get a message that Bluetooth is disabled, follow the directions on the screen to enable Bluetooth before continuing.

   If you are adding an AX6600 (W21), AX6600 (W11), or AC3800 (WC4), you may receive a prompt from your mobile device to confirm connecting to the SSID. Confirm joining to the mAX unit's `SURFBoard-Onboarding` SSID for configuration.

   Note: You may receive a prompt from your mobile device to confirm connecting to the SSID. Confirm joining to the mAX unit's `SURFBoard-Onboarding` SSID for configuration.

   The LED on your mAX device will flash green throughout the attempt. This may take a moment. If the attempt is unsuccessful resulting in a red LED on the satellite, move the satellite closer to the router and try again.

3. Upon establishing a connection, the **SUCCESSFULLY CONNECTED** screen displays. Tap **NEXT** to continue.

4. The app begins to configure your mAX satellite and connect it to your mAX router. You may receive a prompt from your mobile device to confirm connecting to your mAX home Wi-Fi network SSID. If you receive this prompt, confirm joining the network.

   Once complete, your mAX satellite will be registered with your SURFboard account.

5. Next, the satellite will check for new firmware updates. If updates are required, the LED will flash blue and amber while they are downloaded. Once the satellite has confirmed the firmware is up to date, the **YOUR SATELLITE IS UP TO DATE!** screen displays in your mobile app. Tap **NEXT**.

6. Now, your setup will be finalized. This could take a few minutes. When complete, the **CONGRATULATIONS** screen displays in your mobile app. Tap **CONTINUE**.

The SURFboard Central command center screen appears providing a layout of the user interface of the app. Your mAX home Wi-Fi network will begin to calibrate based off the addition of your new satellite. This can take up to 15 minutes to complete.

Note: While your router is completing calibrating your home Wi-Fi network with the new satellite, you will receive the following message when you attempt to view the satellite details. Your mAX satellite will be available for view once the optimization is complete.
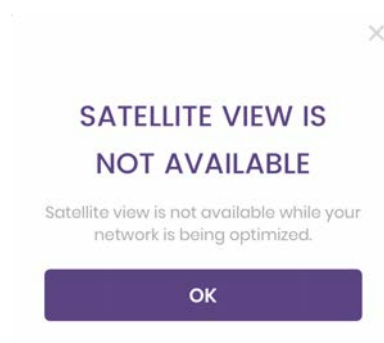
SURFboard Central mobile app features

The main navigational features of the SURFboard Central mobile app are the **Home**, **Network**, and **Parental Control** screens - all accessible by tapping the corresponding icon at the bottom of the SURFboard Central mobile app - and a **Side menu**, accessed by tapping the **Collapsed menu icon** ☰ at the top, left-hand corner of the **Home** screen.

The **Home** screen gives you router and satellite information as well as details about devices both connected and offline.

The **Network** screen gives you access to view, edit, and enable/disable network settings. These settings include IP addresses and various configurations such as Port Forwarding, DNS, and Time Zone. In addition, it provides information about your main network, a button to test your connection speed, and a switch to enable or disable your **Guest network** - a separately secured network apart from your main network.

The **Parental Control** screen is where you create profiles for your household members. You can add devices to individual profiles which allows you to control the days and times those devices are permitted access to your mAX Wi-Fi home network, as well as the ability to instantly pause all Internet access for a particular profile or all the devices on your entire network.

The **Side menu**, accessed by tapping the **Collapsed menu icon** ☰ at the top, left-hand corner of the **Home** screen, has six buttons from which you can perform a **Speed Test**, **Add a New Satellite**, **Get Alexa Skills**, get **Help**, learn more **About** your mAX versions and the licensing, and view your account **Settings**.

Note: Some screenshots throughout this chapter may contain images of a model different that your own, these are simply examples and the app on your mobile device should represent the model you are configuring.

Model specific features

Some of the features described in this document are not available on all SURFboard mAX models. In these situations, the section describing the feature will explain which models the feature is available on. If a feature does not appear in the SURFboard Central mobile app, that simply means the feature is a not available on your model. The device firmware and app are updated periodically which means the feature may be added to your mobile in the future.

Related information

Home

Tap the **Home** icon at the bottom of the SURFboard Central mobile app to return to the **Home** screen from anywhere in the SURFboard Central mobile app.

These are the main features on the **Home** screen.
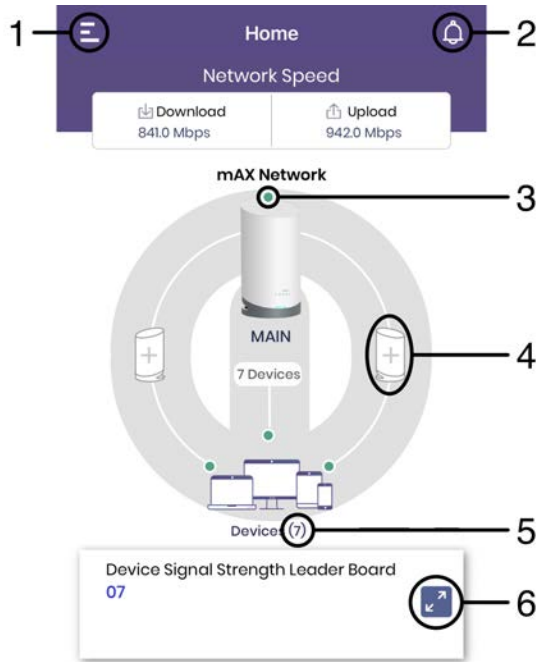
1   **Collapsed menu icon**. Tap to access the **Side menu**.

2   **Notifications**. Tap the **Notification bell** to display firmware updates, incidents of new devices connecting to your network, unsuccessful router responses, and more.

3   **Information**. Indicates an issue. Tap the error banner that displays for more information.

4   **Add satellite**. Tap either the left or the right satellite image to add a new satellite to your home Wi-Fi network. A maximum of 2 satellites can be added.

5   **Devices**. Lists the number of devices online.

6   **Expand card**. Tap to expand the section for more information.

You can tap on the image of your mAX router or satellite to access its details including online and offline devices, device connection details, and LED settings.

The **Home** screen also provides **Statistics** about the top 5 connected devices' signal strength that you can choose to view strongest to weakest or weakest to strongest, a history of speed tests, and a list of blocked devices. Swipe left or right to move through the various **Statistics** screens.

mAX router and satellite details

To access information about your mAX router or satellite(s), tap **Home** at the bottom of the SURFboard Central mobile app and then tap the image of the router or satellite to display details about it.
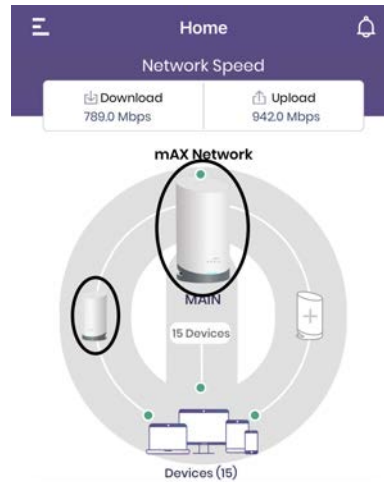
The details window for the router or satellite displays the device's name at the top of the window, a filter for the different connection types, and information about connected devices and connection strength.
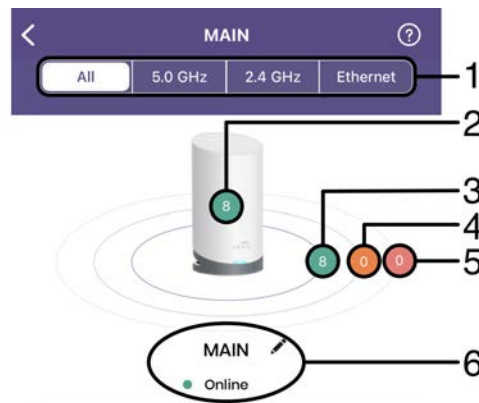
1   Currently selected connection type(s). Select one of the following connection type filter to limit the displayed device counts using:

All

Every device currently connected, both wireless and wired.

6.0 GHz

Only devices connected wirelessly on the 6.0 GHz band.

5.0 GHz

Only devices connected wirelessly on the 5.0 GHz band.

2.4 GHz

Only devices connected wirelessly on the 2.4 GHz band.

Ethernet

Only devices with wired connections.

2 Total number of devices connected to the router or satellite using selected connection type filter.

3 Number of connected devices with excellent connectivity using selected connection type filter.

4 Number of connected devices with medium connectivity using selected connection type filter.

5 Number of connected devices with poor connectivity using selected connection type filter.

6 Name of device and status (online or offline).

Note: To edit a device name or password, refer to *Edit name for mAX and devices* (page 30)

Online and offline device details

After you have added devices to your home Wi-Fi network, you can access information about your online and offline devices. Tap **Home** at the bottom of the SURFboard Central mobile app and then tap **Devices** to display a list of your devices.

You can browse devices by `Online` or `Offline` status by tapping the buttons at the top of the screen. Each list of devices is grouped by the router or satellite it is currently connected through. Tap the **+** by each device to expand for more information on that device.

Tap the router image on the **Home** screen and in the **Connected Devices** section, tap **+** to expand a device. Tap on the expanded information to display a **Device Details** screen to edit

the device name, view UL and DL speeds and the connection (6.0, 5.0, or 2.4 GHz), the last network access time, if it is currently online or offline, and addresses.
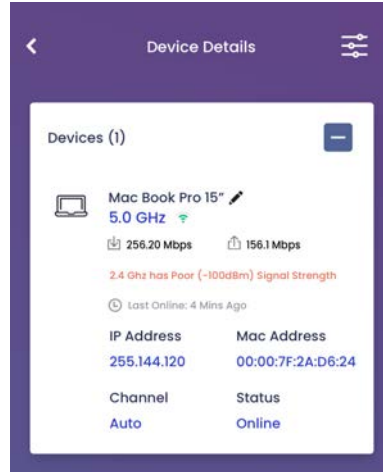
Edit name for mAX and devices

You can change the name of your mAX router, satellite(s), and connected devices as much and as often as you like.

1. Tap the pencil next to a router, satellite, or connected device image/name.

2. Enter a name for the router, satelite, or device.

    Note: Names for your devices must not end in a space.

3. Optional: Assign a device type icon to a device by selecting the pull-down and tapping the desired icon.

4. Tap **SAVE CHANGES**.

Adjust LED brightness level

1. On the router or satellite details screen, tap the **+** to expand the **LED Settings** section.

2. Use the slider to choose the brightness of the unit's LED. Move to the left to dim and to the right to brighten.

Restart mAX

1. On the router or satellite details page, tap **RESTART ROUTER** at the bottom of the screen.

2. On the confirmation screen, tap **RESTART ROUTER** to confirm.

Note: If you decide to cancel the action, tap the **x** in the top-right corner of the confirmation screen.

Network

Tap **Network** at the bottom of the SURFboard Central mobile app to access these settings.
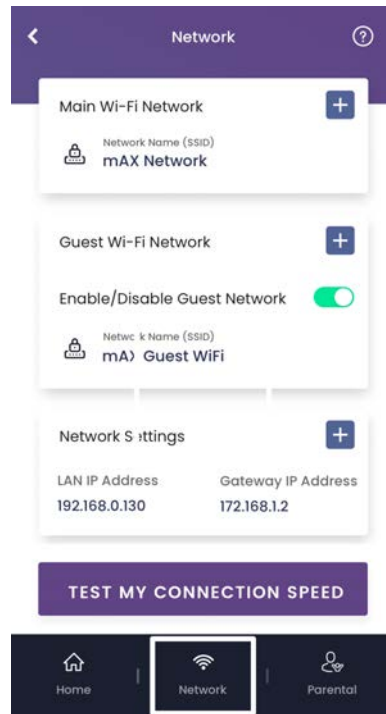
Setup and manage Guest network

A Guest network is a separate, secure network apart from your main network.

▶ *Enabling your Guest network:*

1. Tap **Network** at the bottom of the SURFboard Central mobile app.

2. Move the **Enable/Disable Guest Network** switch to the right to enable the Guest network feature.
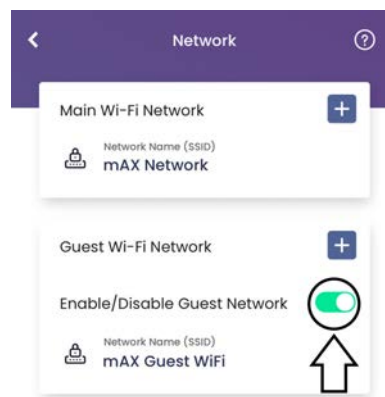
Note: The first time you do this, you will be required to establish a **Network Name (SSID)** and password. The Guest network name cannot be the same as your main network.

‣ *Renaming your Guest network:*

3. Tap the **+** to expand the Guest Wi-Fi Network section.
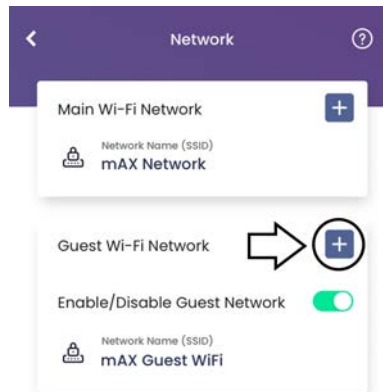
4. Tap the pencil next to **Network Name (SSID)** to enter a new name or password for your Guest network.

5. Tap **SAVE CHANGES**.

‣ *Sharing your Guest network credentials:*

6. To send the login information to a guest, tap **SHARE CREDENTIALS**, and choose from email, text, or any other of the options to send the credentials.

‣ *Disabling your Guest network:*

7. To disable the Guest network, moved the **Enable/Disable Guest Network** switch to the left.

> **Note:** This does not completely delete your Guest network but suspends the network until you enable it again. Your mAX router will remember your SSID and password and reuse it once you re-enable your Guest network.

Network settings

Although the SURFboard mAX Wi-Fi home network works very well with the default settings, there may be instances where you wish to change some of them. You can access all the settings by tapping **NETWORK** at the bottom of the SURFboard Central mobile app, add tapping the **+** to expand **Network Settings**.

This will display your mAX router's `LAN IP Address` - the address is used by your devices to communicate with your mAX router - and `Gateway IP Address` - the address is used by your mAX router to access the Internet through your ISP.

A variety of menus are also available here which provide settings for different areas of your mAX router:

- General Settings
- WAN Settings
- LAN Settings
- Time Zone

General Settings

Enable or disable UPnP

UPnP is an abbreviation for the Universal Plug and Play protocol. The default state of UPnP is enabled. This protocol allows the discovery of devices and auto-configurations of the network. Common UPnP supported devices are game consoles, smart TVs, and network printers. This protocol allows the device to interact with Internet servers and makes it available across your home Wi-Fi network. This is a convenient capability, but to accomplish this, the UPnP protocol allows devices to open connection/ports through the mAX. Some users consider this a security risk. Disabling UPnP will sacrifice convenience for added security.

Note: UPnP is enabled by default.

▶ *Access Path:*

1. Tap **Network** at the bottom of the SURFboard Central mobile app.
2. Expand **Network Settings** with the **+** button.
3. Tap **General Settings**.

▶ *Enable or disable UPnP:*

4. Move the slider for **UPnP** to the left to disable or to the right to enable.

Enable or disable Bridge mode

Bridge mode is a state you can place your mAX device in where it will no longer function as a router but join another router's network. The most common situation where you may want to enable this functionality is if you'd prefer to continue use of an existing router which manages an existing home Wi-Fi network. When using Bridge Mode, your mAX device would allow devices connected to it but function as part of your existing router's network.

CAUTION: When enabling or disabling Bridge mode, your mAX router will reboot and it may take some time for your devices to reconnect.

▸ *Access Path:*

1. Tap **Network** at the bottom of the SURFboard Central mobile app.
2. Expand **Network Settings** with the **+** button.
3. Tap **General Settings**.

▸ *Enable or disable Bridge mode:*

4. Move the slider for **Bridge Mode** to the left to disable or to the right to enable.

Manage Port Forwarding rules

Port forwarding is when particular traffic needs to be sent to particular devices by utilizing an IP address. Network traffic for a particular purpose (most often related to a particular software application) has a certain port or range of ports which it uses to communicate through networks. A Port Forwarding rule ensures that network traffic on those ports reaches the desired device on your mAX home network.

Note: If your mAX Wi-Fi home network is utilizing UPnP, it is possible that some rules here are generated by the router when an UPnP compatible device or application requests it. Refer to *Enable or disable UPnP* (page 34) for more information.

Port forwarding rules are evaluated in the order that they are listed. Traffic is checked against the top rule first, followed by the next rule until a match is found. If multiple rules have similar characteristics, traffic will only be forwarded to the first rule that it matches. For any rule, the number of internal and external ports defined should match.

▸ *Access Path:*

1. Tap **Network** at the bottom of the SURFboard Central mobile app.
2. Expand **Network Settings** with the **+** button.
3. Tap **General Settings** > **Port Forwarding**.

▸ *Manage Port Forwarding rules:*

4. Tap **Port Forwarding Rule name** to add a name for the rule.
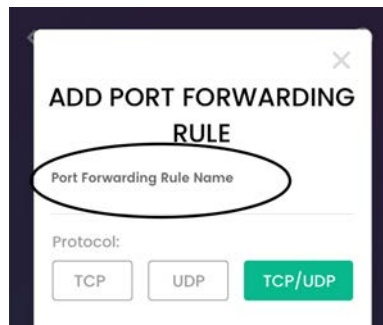
5. Tap to choose the rule **Protocol** - **TCP**, **UDP**, or **TCP/UDP**.
6. Complete fields and tap **SAVE CHANGES**.

Enable or disable IPv6 support

IPv6 is the newest format for IP address. It allows significantly more IP addresses than the more common IPv4 format. However, most home networks operate perfectly well with IPv4, which is still the most common IP address format. Enabling IPv6 will allow your mAX router to assign IPv6 addresses to your devices if they support them. IPv6 functionality is dependent on whether it is offered by your Internet Service Provider.

> **CAUTION:** When enabling or disabling IPv6 support, your mAX router will reboot and it may take some time for your devices to reconnect.

▶ *Access Path:*

1. Tap **Network** at the bottom of the SURFboard Central mobile app.

2. Expand **Network Settings** with the **+** button.

3. Tap **General Settings**.

▶ *Enable or disable IPv6 support:*

4. Move the slider for **IPv6 Enable** to the left to disable or to the right to enable.

WAN Settings

Configure your mAX router's WAN IP

Based on your Internet Service Provider (ISP) configuration, you may need to set a static IP for your mAX router. This is not typical for most users, but may apply to some business accounts. You can view the default DHCP settings on the **WAN IP CONFIGURATION** screen.

> **CAUTION:** Misconfiguration of this setting will cause disruption of Internet access across all your network devices.

▶ *Access Path:*

1. Tap **Network** at the bottom of the SURFboard Central mobile app.

2. Expand **Network Settings** with the **+** button.

3. Tap **WAN Settings** > **WAN IP Configuration**.

▶ *WAN IP through DHCP:*

4. Select **DHCP**. Your mAX router will retrieve your WAN IP information from your ISP.

▶ *WAN IP through Static:*

5. Select **STATIC** to manually configure these settings.

    a. Populate the fields with the values provided by your ISP.

    b. Tap **SAVE CHANGES**.

    The mAX router will re-establish its WAN connection and may briefly show a red LED.

Configure your mAX Wi-Fi home network's DNS

A Domain Name Server (DNS) is, by default, configured by your ISP. The DNS server allows your devices to access services across networks by name instead of by IP address. The default configuration for this value is **Automatic**. Switching this default configuration to **Static** is possible for the advanced user that desires more control over website lookups. This may be for speed, security, or reliability. You must know the address of another DNS server before turning off the default.

▶ *Access Path:*

1. Tap **Network** at the bottom of the SURFboard Central mobile app.

2. Expand **Network Settings** with the **+** button.

3. Tap **WAN Settings** > **DNS Configuration**.

▶ *Automatic DNS configuration:*

4. Select the **Automatic** option. Your mAX router will retrieve DNS information from your ISP.

▶ *Static DNS configuration:*

5. Select the **Static** option. Your mAX router will retrieve DNS information from your ISP.

    a. Add an IP address for your `Primary DNS` server.

    b. Add an IP address for your `Secondary DNS` server.

LAN Settings

Reserve a LAN IP for a device

The mAX router assigns an IP address for every device that joins your mAX Wi-Fi home network. This is called DHCP and allows your devices to join the home network and have connectivity to the Internet. Typically, there is no need to make any changes to this support. However, in some cases you may want to establish fixed (or reserved) IP addresses for particular devices in your network. This is called LAN IP reservation and it ensures a device is always accessible at a specific IP address. Examples of this include setting up a file or media server.

▶ *Access Path:*

1. Tap **Network** at the bottom of the SURFboard Central mobile app.

2. Expand **Network Settings** with the **+** button.

3. Tap **LAN Settings** > **LAN IP reservation**.

▶ *LAN IP reservation:*

4. Tap **ADD CONFIGURATION**.

5. On the **Reserve a LAN IP** screen:

    a. Enter an IP address. This IP address must be within the home network subnet. From this time forward, the specified device will maintain this IP address.

    b. Tap in the **Select Your Device** field and choose the device from the list that you want to assign the static IP address.

    c. Tap **SAVE CHANGES**.

Configure LAN Subnet and DHCP range

A LAN subnet is a prescribed prefix for the first three sets of numbers in your networks IP addresses. The default value is 192.168.7.# which means all the IP address of your devices (including your mAX router) will begin with those numbers. Your mAX router will automatically be assigned the first value, 192.168.7.1. If you change to another subnet, your router will retain the first number for that subnet.

DHCP range is the range of IP addresses inside your selected Subnet. Your mAX router will handle the assignment of all your devices by using the addresses in this range. The exception will be if you have configured IP reservations as described in *Reserve a LAN IP for a device* (page 37). Any devices utilizing LAN IP reservations will not use DHCP.

▶ *Access Path:*

1. Tap **Network** at the bottom of the SURFboard Central mobile app.

2. Expand **Network Settings** with the **+** button.

3. Tap **LAN Settings** > **LAN Subnet and DHCP Range Configuration**.

▶ *Configure LAN Subnet:*

4. Select a `Subnet` to use for your Home network.

   The SURFboard mAX provides three options:

   - 192.168.7.# (default)
   - 10.0.0.#
   - 172.16.0.#

   Example: If you change to 10.0.0.#, your mAX router will be assigned the IP address 10.10.0.1 and all your devices' IP addresses will also begin with 10.0.0

▶ *Configure DHCP range:*

5. Select your DHCP range by entering a `Starting IP` and `Ending IP`.

   Note: The number of concurrently connected devices will be limited by the range you select. For instance, if you select 101 to 120, then only twenty devices can be connected to your mAX router at one time because only twenty IP addresses are available.

Configure LAN DHCP Lease time

A Lease Time is the amount of time that your device waits before asking your mAX router for a new IP address. This ensures that IP addresses are not kept assigned to devices that are no longer on the network. You might need to modify this value if you have a various devices which are only on your mAX home network for a short period of time or you want to increase the amount of time an IP address is assigned to your devices.

▶ *Access Path:*

1. Tap **Network** at the bottom of the SURFboard Central mobile app.

2. Expand **Network Settings** with the **+** button.

3. Tap **LAN Settings** > **LAN DHCP Lease Time**.

▶ *Configure LAN DHCP Lease time:*

4. Select a `Lease Time` for your devices' IP address assigned by DHCP. Default value is 1440.

5. Select a `Time Unit` for your Lease Time.

   This value is the units used in Lease Time. By default, it's measured in `Minutes`. So, if you have the default value of 1440 in Lease Time, then the final lease time used is 1440 Minutes.

   The following Time Units are available:

   - Minutes
   - Hours
   - Days
   - Weekly
   - Forever

   Example: If you want to change the least time to 6 hours, set the `Lease Time` to '6' and the `Time Unit` to "Hours".

6. Tap **SAVE CHANGES**.

Time Zone

Set time zone

Your time zone is generally automatically determined by your mAX router. If this is not the case, you can set this manually. Only North American time zones are supported by the SURFboard mAX.

▶ *Access Path:*

1. Tap **Network** at the bottom of the SURFboard Central mobile app.
2. Expand **Network Settings** with the **+** button.
3. Tap **Time Zone**.

▶ *Set time zone:*

4. Tap the box next to your time zone to select it. Changes made on this screen are updated in the mAX router. When you are finished, tap **Done**.

Start or view speed tests

The **Speed Test** screen provides the ability to measure the speed between the device running your SURFboard Central mobile app and the mAX router or satellite to which it is connected, as well as the speed between your router and the Internet. A speed test between the device running your SURFboard Central mobile app and the router cannot be run remotely.

1. Tap **Network** at the bottom of the SURFboard Central mobile app and then **TEST MY CONNECTION SPEED** or tap **Speed Test** on the **Side menu**.
2. To start a speed test, tap **START TEST** below the speed dial.

When you are home, the test will report download and upload speeds between your device running the SURFboard Central mobile app and the router, and also for the router and the Internet. When you are remote, you will get results between the router and Internet only.

3. While the test is in progress, tap **STOP TEST** if you want to discontinue testing.

4. Tap **VIEW HISTORY** to review and compare previous speed tests. The last 20 speed tests are retained in history.

Parental Control

Your mAX router uses profiles to assign personal devices to members of the household and manage their network access. Parental Control allows you to enable and disable access for time blocks of hours, days, or weeks by profile. When you assign devices to a profile, the time blocks you create control all devices on the profile. You can even instantly pause and unpause Internet access by profile or for all profiles on the entire network.

The steps to setting up Parental Control are ordered. You must first enable Parental Control. Then, you will create user profiles, add devices to the profiles, and finally create time schedules designed to enable and disable access to your home Wi-Fi network.

Enable Parental Control

1. Tap **Parental** at the bottom of the SURFboard Central mobile app.
2. Move the **Enable Parental Control** slider to the right to enable the feature.
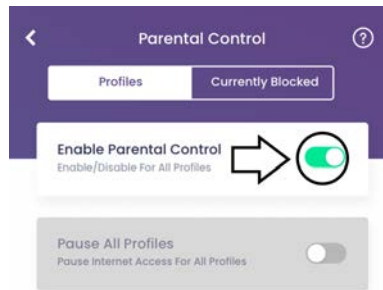
Work with user profiles

This topic covers how to add, edit, and delete user profiles for Parental Control. Creating profiles for individuals with access to your home Wi-Fi network and associating the devices used by the profile allows you to control when Internet access is allowed and when it is not.

Note: Be sure *Parental Control is enabled* (page 41) before beginning.

1. Tap **+ Add Profile**.

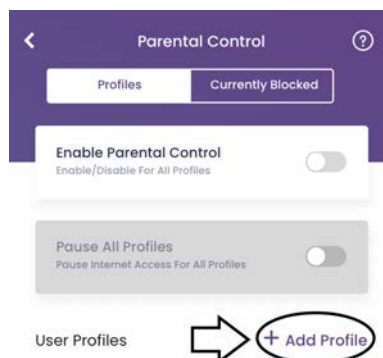2. On the **PROFILE NAME** screen, enter a name for the profile. This could be an individual's name or an event like Dinner Time, for example. The profile will be the vehicle you use to control Internet access for all of its associated devices, whether a person or an event. You will get an error if you choose a profile name that already exists in your network. Profile names must be unique.
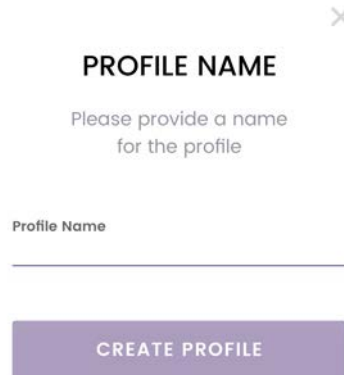
3. Tap **CREATE PROFILE**.
4. If you would like to add a profile picture to a user profile:
   a. Tap on the User Profile you would like to add a picture.
   b. Tap on the empty profile picture at the top of the screen.
   c. Choose a location to select a picture from and select the picture you would like to use with this profile.
5. Repeat these steps to create all user profiles. User profiles are listed on the **Parental Control** screen.
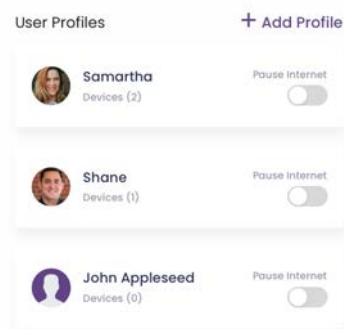
Add devices to user profile

Devices added to a profile have their access to the network controlled by the settings you place on the profile. You must create a profile before adding devices, and add devices to a profile before creating the day and time access restrictions for the profile.

Note: Be sure *Parental Control is enabled* (page 41) and your device Wi-Fi is enabled before beginning.

1. On the **Parental Control** screen, tap a user profile to which you want to add devices.
2. Tap **+ ADD DEVICE**.
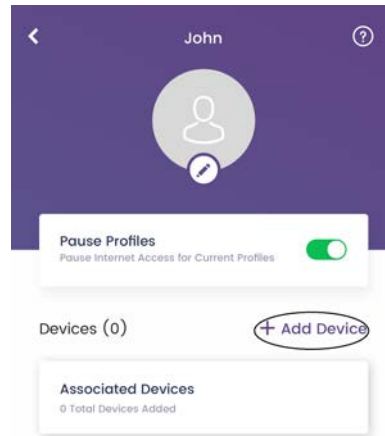
A list of network connected devices, both online and offline, displays. If a device has been added to another profile already, it will not display in this list. Devices can only belong to one profile.

3. Tap the box next to the device or devices that you would like to add to the user profile and tap **ADD DEVICE** when you are finished.
Now, the user profile page will show that devices have been added to the profile, as well as the number of devices added.

4. You can tap the **+** by **Associated Devices** to see which devices are added to the user profile.
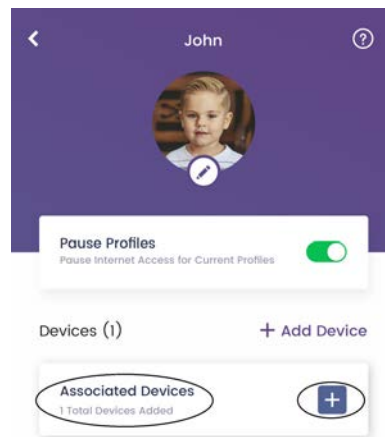
5. To delete a device from a profile, on the user profile, expand **Associated Devices** by tapping **+**, and swipe left on the device name to display the delete option. Tap on the delete option to confirm.

Add time schedule to user profile

The **Schedule Time** feature of Parental Control sets enabled and disabled Internet access times for profiles by days and hours. These days and hours of disabled Internet access are called **Rules**. **Rules** are associated with profiles and all devices associated with the profile are affected. You must create a profile before adding devices, and add devices to a profile before creating the access restrictions for the profile.

> **Note:** You must have a *profile with associated devices created* (page 42), and be sure that *Parental Control is enabled* (page 41) before beginning.

1. On the user profile, tap **+ Add Rule**.
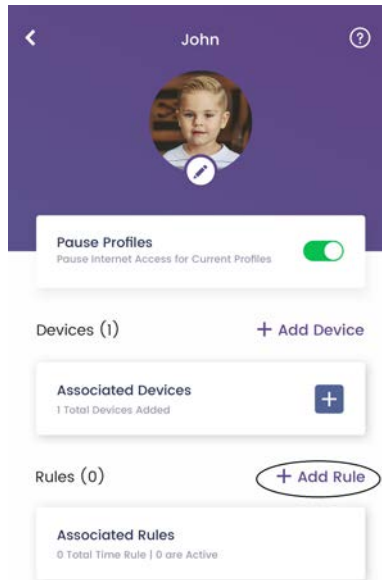
2. Tap **ADD TIME SCHEDULE**.
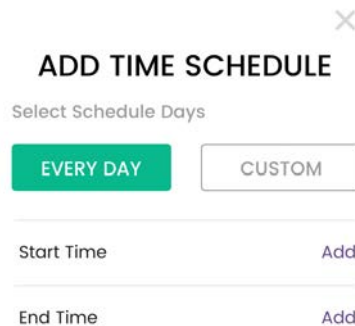
3. On the **ADD TIME SCHEDULE** window, select the days of the week (**EVERY DAY** or **CUSTOM**) to disable Internet access for this profile. If you choose **CUSTOM**, a window will display for you to tap the days of the week to disable Internet access for the profile.

4. Also, on the **ADD TIME SCHEDULE** window, set the **Start Time** and **End Time** to disable Internet access for this profile.

   a. First, tap **ADD** next to **Start Time**.

   b. Swipe up and down on the hours and minutes until the time in the center row reflects the desired **Start Time**. Do not forget to do the same to set **AM** or **PM**.

   c. Tap **OK**.

   d. Repeat to set **End Time**.

5. Tap **SAVE CHANGES** on the **ADD TIME SCHEDULE** window when both **Start Time** and **End Time** are set.

6. To delete a rule from a user profile:

   a. Tap the **+** by **Associated Rules** to expand it.

    b. Tap the rule you wish to delete (the time band for disabling Internet access).

    c. Swipe to the left and tap the red delete message.

Pause Internet access

You can instantly enable or disable Internet access for all profiles or for a single profile with the **Pause Internet** feature. All devices associated with paused profiles are affected.

- To pause Internet access for a single profile, on the user profile screen, move the slider next to **Pause Profiles** to the right. To enable access again, move the slider to the left.
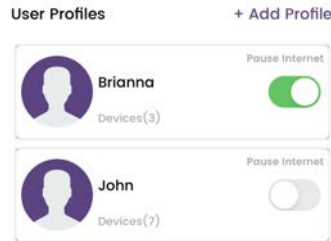
- To pause the Internet for all user profiles, on the **Parental Control** screen, move the slider next to **Pause All Profiles** to the right. To enable access again, move the slider to the left.
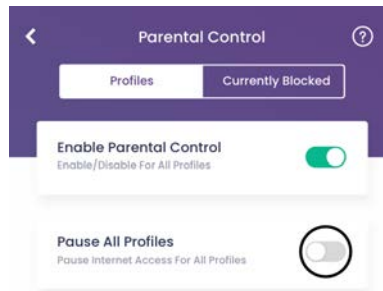
Remove a user profile, rule, or device association

Rules or devices associated with a rule as well as profiles themselves can easily be removed through the **Parental Control** screen. When removing a time schedule rule, the associated profile and devices will no longer be impacted by the removed rule. When removing associated devices from a profile, they will remain on the network but no longer be associated with the profile. When removing an entire profile, all time schedule rules and associated devices will be removed as well by the device will remain on the network.

1. Swipe left on the profile/rule/associated device you would like to remove.

A **Delete** button appears to the right of the profile/rule/associated device.
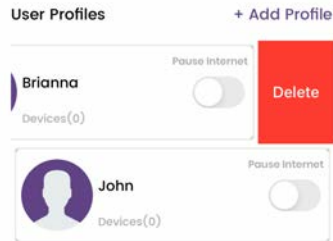
2. Tap the **Delete** button to confirm the removal.

The profile/rule/associated device will be removed on your SURFboard mAX router. This may take a few moments to complete.

Side menu

Access the **Side menu** by tapping the **Collapsed menu icon** ☰ at the top, left-hand corner of the **Home** screen.
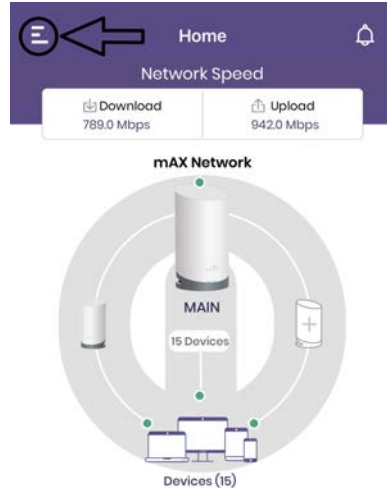
The **Side menu** has eight buttons which you can tap to **Add a Device** or **Remove a Device**; start a **Speed Test** or view previous tests; **Add a New Satellite** to your network; **Get Alexa Skills**; get **Help**; learn **About** licensing and purchase information; and view your **Settings**.
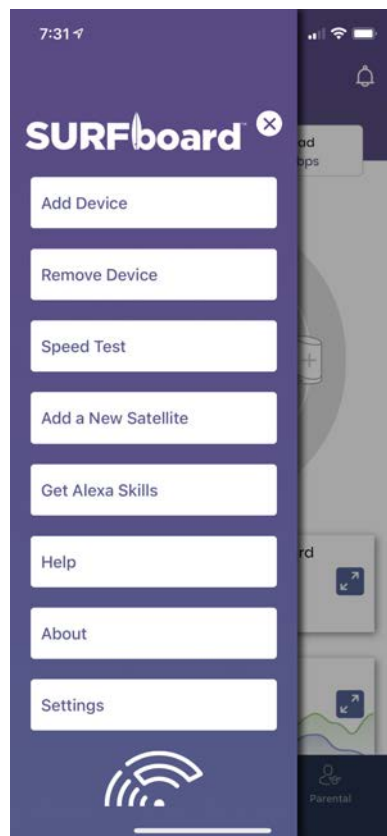
Related information

Add or remove other SURFboard devices

■ If you would like to add or remove a SURFboard Cable Modem, refer to the associated *SURFboard Quick Start Guide* or *SURFboard User Guide* of your device.

Start or view speed tests

The **Speed Test** screen provides the ability to measure the speed between the device running your SURFboard Central mobile app and the mAX router or satellite to which it is connected, as well as the speed between your router and the Internet. A speed test between the device running your SURFboard Central mobile app and the router cannot be run remotely.

1. Tap **Network** at the bottom of the SURFboard Central mobile app and then **TEST MY CONNECTION SPEED** or tap **Speed Test** on the **Side menu**.

2. To start a speed test, tap **START TEST** below the speed dial.

When you are home, the test will report download and upload speeds between your device running the SURFboard Central mobile app and the router, and also for the router and the Internet. When you are remote, you will get results between the router and Internet only.

3. While the test is in progress, tap **STOP TEST** if you want to discontinue testing.

4. Tap **VIEW HISTORY** to review and compare previous speed tests. The last 20 speed tests are retained in history.

Add another mAX

This feature cannot be accessed remotely.

Tap **Add a New Satellite** on the **Side menu** to add 1 or 2 mAX satellites to your home Wi-Fi network. For more information, see *Adding a SURFboard mAX satellite* (page 22).

Get Alexa Skills

An Amazon Alexa device is required. Alexa Skills are like apps. You can add them to your mAX to bring products and services to life. To learn more about Alexa Skills, visit www.amazon.com/alexaskills.

1. Tap **Get Alexa Skills**.
   Directions for getting skills are displayed.

2. Follow the onscreen directions.

Help

We are here to help! Choose your preferred method to contact us for assistance from the options below. You can access this information from the **Side menu** > **Help**.

- **Frequently Asked Questions**: Tap to browse the list of topics that range from the simple to the complex.

- Call us at 1-866-757-3598.

- Browse ARRIS Consumer Support by tapping **www.arris.com/selfhelp**.

- Tap **Live chat** to connect with one of our helpful, live tech support people.

About

The **About** screen displays the following information on your SURFboard mAX router:

Firmware Version	This is the current firmware version your SURFboard mAX router is currently using.
App Version	This is the current version of the SURFboard Central app you are using.
Model Number	This is the model number of your SURFboard mAX router.

In addition, this screen also provides a convenient link to purchase another SURFboard mAX to use as a satellite to further expand the range of your mAX home network. Finally, the **VIEW LICENSES** button provides relevant safety and regulatory information on handling your mAX router and the radio signals it uses provide your mAX home network.

Settings

The **Settings** screen shows you the account information associated with your SURFboard account including your Name and Email address. If this account information is not accurate or you want to switch to another account, simply tap **Sign out** and you will be brought back to the **Welcome** screen where you can either switch accounts or sign up for a new one.

ARRIS Safety, Environment, Regulatory, Software License, Privacy, and Warranty information

- Safety information
- Caring for the environment by recycling your ARRIS equipment
- FCC statements
- Wireless LAN information
- Open Source software information
- Software license
- Privacy notice
- Warranty information

Safety and regulatory information

Read all safety and regulatory information before installing your device and setting up your home network connection.

Important safety instructions

Read this before you begin — When using your equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- Read all the instructions listed here and/or in the user manual before you operate this device. Give attention to all safety precautions. Retain the instructions for future reference.
- This device must be installed and used in strict accordance with manufacturer's instructions, as described in the user documentation that is included with the device.
- Comply with all warning and caution statements in the instructions. Observe all warning and caution symbols that are affixed to this device.
- To prevent fire or shock hazard, do not expose this device to rain or moisture. The device must not be exposed to dripping or splashing. Do not place objects filled with liquids, such as vases, on the device.

- This device was qualified under test conditions that included the use of the supplied cables between system components. To ensure regulatory and safety compliance, use only the provided power and interface cables and install them properly.

- Different types of cord sets may be used for connections to the main POWER supply circuit. Use only a main line cord that complies with all applicable device safety requirements of the country of use.

- Installation of this device must be in accordance with national wiring codes and conform to local regulations.

- Operate this device only from the type of power source indicated on the device's marking label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.

- Do not overload outlets or extension cords, as this can result in a risk of fire or electric shock. Overloaded AC outlets, extension cords, frayed power cords, damaged or cracked wire insulation, and broken plugs are dangerous. They may result in a shock or fire hazard.

- Route power supply cords so that they are not likely to be walked on or pinched by items placed upon or against them. Pay attention to cords where they are attached to plugs and convenience receptacles; and examine the point where they exit from the device.

- Place this device in a location that is close enough to an electrical outlet to accommodate the length of the power cord.

- Place the device to allow for easy access when disconnecting the power cord of the device from the AC wall outlet.

- Do not connect the plug into an extension cord, receptacle, or other outlet unless the plug can be fully inserted with no part of the blades exposed.

- Place this device on a stable surface.

- Avoid damaging the device with static by touching the coaxial cable when it is attached to the earth-grounded coaxial cable-TV wall outlet.

- Always first touch the coaxial cable connector on the device when disconnecting or reconnecting the Ethernet cable from the device or user's PC.

- Installation of an AC surge protector in the AC outlet to which this device is connected is recommended. This is to avoid damaging the device by local lightning strikes and other electrical surges.

- Postpone installation until there is no risk of thunderstorm or lightning activity in the area.

- Avoid using a telephone (other than a cordless type) during an electrical storm. There is a remote risk of electric shock from lightning. For added protection, unplug the device from the wall outlet and disconnect the cables to avoid damage to this device from lightning and power surges.

- Do not use this product near water. For example, near a bathtub, washbowl, kitchen sink, laundry tub, swimming pool, or in a wet basement.

- Do not use the telephone to report a gas leak located near the leak.

- Do not cover the device or block the airflow to the device with any other objects. Keep the device away from excessive heat and humidity and keep the device free from vibration and dust.

- Wipe the device with a clean, dry cloth. Never use cleaning fluid or similar chemicals. Do not spray cleaners directly on the device or use forced air to remove dust.

- For added protection, unplug the device from the wall outlet and disconnect the cables to avoid damage to this device during lightning activity or power surges.

   CAUTION: To reduce the risk of fire, use only No. 26 AWG or larger (e.g., 24 AWG) UL Listed or CSA Certified Telecommunication Line Cord, or national equivalent.

- Upon completion of any service or repairs to this device, ask the service technician to perform safety checks to determine that the device is in safe operating condition.

- Do not open the device. Do not perform any servicing other than that contained in the installation and troubleshooting instructions. Refer all servicing to qualified service personnel.

- This device should not be used in an environment that exceeds 104° F (40° C).

SAVE THESE INSTRUCTIONS

Note: To CATV system installer — This reminder is provided to call the CATV system installer's attention to Section 820.93 of the National electric code, which provides guidelines for proper grounding and, in particular, specifies that the coaxial cable shield must be connected to the grounding system of the building, as close to the point of cable entry as practical.

Caring for the environment by recycling your ARRIS equipment

Please do not dispose of this product with your residential or commercial waste. Contact your local authorities for information about practices established for your region. If collection systems are not available, call ARRIS Technical Support at **1-877-466-8646** for assistance.

FCC statements

FCC Interference statement

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 environment. 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 device 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 device 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.

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.

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

FCC Declaration of Conformity

CommScope, Inc, 3871 Lakefield Drive, Suwanee, GA 30024, declares that the SURFboard device complies with 47 CFR Parts 2 and 15 of the FCC rules as a Class B digital device.

FCC Radiation Exposure statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. To comply with the FCC RF exposure compliance requirements, the separation distance between the antenna and any person's body (including hands, wrists, feet and ankles) must be at least 12 inches (30 centimeters).

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter except those already approved in this filing.

The availability of some specific channels and/or operational frequency bands are country dependent and are firmware programmed at the factory to match the intended destinations. The firmware setting is not accessible by the end user.

Industry Canada (IC) Statement

This device complies with RSS-210 of the Industry Canada Rules. Operation is subject to the following two conditions:

- This device may not cause interference, and
- This device must accept any interference, including interference that may cause undesiredoperation of the device.

CAN ICES-3 (B)/NMB-3 (B)

In Canada, RLAN devices are restricted from using the 5600-5650 MHz frequency band.

CAUTION: To reduce the potential for harmful interference to co-channel mobile satellite systems, use of the 5150-5250 MHz frequency band is restricted to indoor use only.

High power radars are allocated as primary users (meaning they have priority) of 5250-5350 MHz and 5650-5850 MHz frequency bands. These radars could cause interference and/or damage to License Exempt–Local Area Network (LE-LAN) devices.

IC Radiation Exposure Statement

Important: This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 30 centimeters between the radiator and your body.

Avis D'Industrie Canada (IC)

Cet appareil est conforme à la réglementation RSS-210 d'Industrie Canada. Son utilisation est assujettie aux deux conditions suivantes:

- Cet appareil ne doit pas causer d'interférences et
- Cet appareil doit accepter toute interférence reçue, y compris les interférences causant unfonctionnement non désiré.

CAN ICES-3 (B)/NMB-3 (B)

Au Canada, les appareils de réseau local sans fil ne sont pas autorisés à utiliser les bandes de fréquence 5600-5650 MHz.

ATTENTION : A fin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux, les dispositifs fonctionnant dans la bande 5150-5250 MHz sont réservés uniquement pour une utilisation à l'intérieur.

Les radars à haute puissance sont définis en tant qu'utilisateurs principaux (c.-à-d. prioritaires) des bandes de fréquences 5250-5350 MHz et 5650-5850 MHz. Ces radars peuvent causer de l'interférence ou des dommages susceptibles de nuire aux appareils exempts de licence–réseau local (LAN-EL).

Déclaration de IC sur L'Exposition aux Rayonnements

Important : Cet équipement est conforme aux limites d'exposition aux rayonnements établies par IC pour un environnement non contrôlé. Cet équipement doit être installé et utilisé de manière à maintenir une distance d'au moins 30 cm entre la source de rayonnement et votre corps.

Wireless LAN information

Note: This applies to devices that provide Wi-Fi capability.

This device is a wireless network product that uses Direct Sequence Spread Spectrum (DSSS) and Orthogonal Frequency-Division Multiple Access (OFDMA) radio technologies. The device is designed to be interoperable with any other wireless DSSS and OFDMA products that comply with:

- The IEEE 802.11 Standard on Wireless LANs (Revision AC, Revision B, Revision G, and Revision N), as defined and approved by the Institute of electrical electronics engineers.
- The wireless fidelity (Wi-Fi) certification as defined by the Wireless Ethernet Compatibility Alliance (WECA).

Restrictions on the use of wireless devices

In some situations, or environments, the use of wireless devices may be restricted by the proprietor of the building or responsible representatives of the organization. For example, using wireless equipment in any environment where the risk of interference to other devices or services is perceived or identified as harmful.

If you are uncertain of the applicable policy for the use of wireless equipment in a specific organization or environment, you are encouraged to ask for authorization to use the device prior to turning on the equipment.

The manufacturer is not responsible for any radio or television interference caused by unauthorized modification of the devices included with this product, or the substitution or attachment of connecting cables and equipment other than specified by the manufacturer. Correction of the interference caused by such unauthorized modification, substitution, or attachment is the responsibility of the user.

The manufacturer and its authorized resellers or distributors are not liable for any damage or violation of government regulations that may arise from failing to comply with these guidelines.

The operation of this device is prohibited on oil platforms, cars, trains, boats, and aircraft, except that operation of this device is permitted in large aircraft while flying above 10,000 feet. Operation of transmitters in the 5.925-7.125GHz band is prohibited for control of or communications with unmanned aircraft systems.

Note: The use of 5150-5250 and 5925-7125 MHz frequency band is restricted to indoor use only.

Warning: This device allows you to create a wireless network. Wireless network connections may be accessible by unauthorized users. For more information on how to protect your network, refer to the relevant chapters in this document or visit our Consumer Support website at *http://www.arris.com/selfhelp*.

Open Source software information

For instructions on how to obtain a copy of any source code being made publicly available by ARRIS related to software used in this ARRIS product, you may send your request in writing to:

ARRIS

Software Pedigree Operations 2450 Walsh Avenue

Santa Clara, CA 95051 USA

The ARRIS website *opensource.arrisi.com* also contains information regarding use of open source. ARRIS created *opensource.arrisi.com* to serve as a portal for interaction with the software community-at-large. This document contains additional information regarding licenses, acknowledgments and required copyright notices for open source packages used in this ARRIS product.

Software license

ARRIS International, plc. ("ARRIS")

3871 Lakefield Drive Suwanee, GA 30024

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Wireless communications, including those sent and received by the Product, are not secure communications. ARRIS is not responsible for the privacy of activity using the Product or Software. For security purposes, activity on the Product may be monitored, but there is no obligation on ARRIS to do so or to take any action even if it does.

ARRIS is not responsible for any third-party software provided as a bundled application, or otherwise, with the Software.

Privacy notice

ARRIS will collect certain personal and anonymous information from and about you in connection with your use of the Product, including your email address and phone number for the limited purposes of Product registration, security and warranty support services. Your email address and phone number will not be shared with any third parties. In general, our collection, protection, use and disclosure of this information will be subject to the ARRIS Privacy Policy located at *http://www.arris.com/company/privacy/*. Your use of this Product indicates your consent to allow ARRIS' collection and use of such information.

This Product uses Google Analytics, which collects and processes certain data. Google's use such data is described at *www.google.com/policies/privacy/partners/*.

This Product uses Ookla Speedtest software application which tests the Internet speed between the Product and your Internet Service Provider (ISP). Ookla Speedtest collects certain personal data which is subject to Ookla's privacy policy set forth at *http://www.speedtest.net/privacy.*

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The Product and documentation is provided with RESTRICTED RIGHTS. The use, duplication, or disclosure by the Government is subject to restrictions as set forth in subdivision (c)(1)(ii) of The Rights in Technical Data and Computer Software clause at 52.227-7013. The contractor/manufacturer is ARRIS International, plc., 3871 Lakefield Drive, Suwanee, GA 30024.

Warranty Information

CommScope, Inc. ("ARRIS")

Retail Purchasers

If you purchased this Product directly from ARRIS or from an authorized ARRIS retail reseller, ARRIS warrants to you, the original end user customer, that (A) the Product, excluding Software, will be free from defects in materials and workmanship under normal use, and (B) with respect to Software, (i) the media on which the Software is provided will be free from defects in material and workmanship under normal use, and (ii) the Software will perform substantially as described in its documentation. This Limited Warranty to you, the original end user customer, continues (A) for Software and the media upon which it is provided, for a period of ninety (90) days from the date of purchase from ARRIS or an authorized ARRIS reseller, and (B) for the Product (excluding Software), for a period of two (2) years from the date of purchase from ARRIS or from an authorized ARRIS reseller. To take advantage of this Limited Warranty or to obtain technical support, you must call the ARRIS toll-free phone number: **1-877-466-8646**. ARRIS' sole and exclusive obligation under this Limited Warranty for retail sales shall be to repair or replace any Product or Software that does not meet this Limited Warranty. All warranty claims must be made within the applicable Warranty Period.

Cable Operator or Service Provider Arrangements

If you did not purchase this Product directly from ARRIS or from a ARRIS authorized retail reseller, ARRIS does not warrant this Product to you, the end-user. A limited warranty for this Product (including Software) may have been provided to your cable operator or Internet Service Provider ("Service Provider") from whom you obtained the Product. Please contact your Service Provider if you experience problems with this Product.

General Information

The warranties described in this Section shall not apply: (i) to any Product subjected to accident, misuse, neglect, alteration, Acts of God, improper handling, improper transport, improper storage, improper use or application, improper installation, improper testing or unauthorized repair; or (ii) to cosmetic problems or defects which result from normal wear and tear under ordinary use, and do not affect the performance or use of the Product. ARRIS' warranties apply only to a Product that is manufactured by ARRIS and identified by ARRIS owned trademark, trade name or product identification logos affixed to the Product. ARRIS does not warrant to you, the end user, or to anyone else that the Software will perform error free or without bugs.

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What additional provisions should I be aware of? Because it is impossible for ARRIS to know the purposes for which you acquired this Product or the uses to which you will put this Product, you assume full responsibility for the selection of the Product for its installation and use. While every reasonable effort has been made to insure that you will receive a Product that you can use and enjoy, ARRIS does not warrant that the functions of the Product will meet your requirements or that the operation of the Product will be uninterrupted or error-free.

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These matters are governed by the laws of the Commonwealth of Pennsylvania, without regard to conflict of laws principles and excluding the provisions of the United Nations Convention on Contracts for the International Sale of Goods.

Retail Purchasers Only

If you purchased this Product directly from ARRIS or from an ARRIS authorized retail reseller, please call the ARRIS toll-free phone number, **1-877-466-8646**, for warranty service or technical support.

Cable Operator or Service Provider Arrangements

If you did not purchase this Product directly from ARRIS or from an ARRIS authorized retail reseller, please contact your Service Provider for technical support.

Contacts

Technical services

For technical support, you can contact us by phone, email, or on the web.

By telephone

The Technical Support Center may be reached at:

- +1-215-323-2346
- +1-888-944-HELP (4357).

Additional support numbers are located at: *https://www.commscope.com/globalassets/ digizuite/294037-arris-combined-contact-information-phone.pdf*. For faster service, use your IVR support ID.

On the web

Please visit *Ask ARRIS*, which is the Technical Support web portal. You will need to register for this tool using your support contract ID and email address. There you will be able to access:

- Support Contact Information for all products
- Knowledge Base Information (also known as Solutions)
- User Documentation
- Current open support cases
- Ability to create a new support case (for technical support or repair and return)
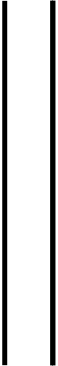- Training Webcasts

By email

The Technical Support Center may also be reached by email:

Provider group	Products	Email address
Home Broadband	Touchstone, SURFboard, NVG without ECO, Extenders, HAv3, Plume, Assia	*homebroadbandsupport@commscope.com*
HomeAssure Support	ECO, Edge, Andromeda	*homeassuresupport@commscope.com*
Home Media Devices	QAM STB – Not supported by LTTS, IP STB	*homemediadevicesupport@commscope.com*
Home Media Software	KreaTV	*homemediasoftwaresupport@commscope.com*

Additional email addresses for ARRIS products are located at: *https://www.commscope.com/globalassets/digizuite/1651-techsupport-contact-information-email.pdf*.

Technical training

For more information about our Global Knowledge Services Department and the programs we offer, email us at: *techtraining@commscope.com*.