



## End-User Guide

*This document explains how an end-user may use a Frontier Smart Technologies AURIA-based reference platform running CA1.x software. It is intended as source material for radio manufacturers to produce their own end-user radio guides.*

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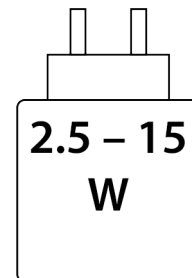
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**WARNINGS:** Use Restriction: Operation at 5150 to 5350 MHz is restricted to indoor use only.



AT	BE	BG	CH	CY	CZ	DE
DK	EE	EL	ES	FI	FR	HR
HU	IE	IS	IT	LT	LI	LU
LV	MT	NL	NO	PL	PT	RO
SE	SK	TR	SI	UK (NI)		



This device has been evaluated for and shown to be compliant with European Guidelines when installed and operated with a minimum distance of 20cm between the unit and your body

Do not attempt to use a damaged unit as this may result in electric shock and death.

Ensure the rear panel is fitted correctly before use.

Do not use unit if wet or in damp conditions as this may result in electric shock and death. Do not expose the unit to dripping or splashing.

Do not place containers of liquids on unit.

If you do not intend to use the set for a long time, disconnect the unit from the power supply. To completely disconnect the unit from the power supply, remove the AC/DC adapter from the mains socket.

Ensure clear access without obstruction to the unit's AC/DC adapter during operation.

Long-term exposure to loud music may cause hearing damage. It is best to avoid extreme volume when listening via earphones or headphones, especially for extended periods.

Do not expose the contained Li-Ion battery to excessive temperatures from any source, for example sunshine, heating equipment or fire.

Batteries must be disposed of in accordance with applicable laws and regulations on the transport, shipping and disposal of Li-Ion batteries.

The unit's operating temperature range is 0°C to 40°C.

Adequate ventilation with a minimum gap of 15cm between the ventilation holes and surrounding surfaces is necessary to prevent heat build-up.

Ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.

No naked flame sources such as lighted candles should be placed on the unit.

In moderate climates, avoid operating the unit in conditions of excessive humidity and or temperature.

Do not ingest the battery, Chemical Burn Hazard

If the product is subject to abnormal use, the safety of the product may be impaired

**CAUTION:**     **Danger of explosion if battery is incorrectly replaced.**  
**Replace only with the same or equivalent type.**

## Compliance statement

Hereby, Frontier Smart Technologies Ltd., declares that AURIA Wireless Speaker Reference Platform is compliant with the essential requirements and other relevant provisions of Directive 2014/53/EU

To view the official DoC, please click on the following URL:  
<https://www.frontiersmart.com/product-auria-eug/>

## Frequency and RF powers of all transmitters

### 2.4GHz Wi-Fi

• ISM (2.400... 2.4835GHz)	Channel: 1,2,3,4,5,6,7,8,9,10,11 (FCC / IC / World Wide region)	
	Channel: 1,2,3,4,5,6,7,8,9,10,11,12,13 (EU region)	
Maximum transmit power, 20dBm EIRP		

### 5GHz WiFi

• UNII-1 (5.150...5.250GHz)	20MHz channels: 36, 40, 44, 48	Maximum transmit power 23dBm EIRP
• UNII-2a (5.250...5.350GHz)	20MHz channels: 52, 56, 60, 64	Maximum transmit power 20dBm EIRP
20MHz channels:		
(World wide)		
100, 104, 108, 112, 116, 132, 136, 140		
(EU)		
100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140		
(FCC)		
100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140, 144		
(IC)		
100, 104, 108, 112, 116, 132, 136, 140, 144		
• UNII-2c(5.470...5.725GHz)		Maximum transmit power 19dBm EIRP
• UNII-3 (5.725...5.850GHz)	20MHz channels: 149, 153, 157, 161, 165	Maximum transmit power 14dBm EIRP
• UNII-4 (5.850...5.925GHz)	20MHz channels: 169, 173	Not currently supported

### Bluetooth

• BDR, EDR	Channels 0-79	Maximum transmit power	10dBm EIRP
• BLE	Channels 0-39	Maximum transmit power	10dBm EIRP

## Replacement parts

This device contains no user serviceable components. The power supply unit and internal battery may be replaced as necessary, but, only using the following replacement parts detailed below:

### Battery Details:

- Made by = Great Power
- Voltage = 3.7V
- Capacity = 4000mAh
- Model # = GSP864376

**Power Supply:**

- Made by = Becky Industrial Co Limited
- Voltage = 5VDC
- Output Max = 3A
- Model # - GME18A-050300FXR

**Wireless Charger:**

- Operating Frequency Range: 110 to 148.5kHz
- Transmit Power  $\leq 50$  dB $\mu$ A/m at 3m distance
- Power Output: 5VDC, 1.5A, 7.5W
- Compliant with EN 303 417

**Battery replacement**

Turn the device off and remove the external power supply unit from the device. Locate and remove the battery connector situated on the base PCB taking care not to damage the connector or surrounding cables and components.

Carefully remove the battery and its adhesive pad from the device. Dispose of the battery in accordance with applicable laws and regulations on the transport, shipping and disposal of Li-Ion batteries.

Secure the new battery in the unit (in the position vacated by the old battery) using a fresh adhesive pad, then reconnect the battery to the battery connector.




**Cleaning**






To clean the product, ensure the unit is turned off with the external power supply and internal battery disconnected. Only wipe the exterior surfaces of the unit with a clean dry or damp cloth. Do not use any strong detergents or other cleaning fluids.

**Explanation of Symbols**

This symbol indicates that this product and/or battery should not be disposed of with household waste. Dispose of this product and/or its battery, in accordance with local environmental laws and guidelines.

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## Revision history

Revision number	Date	Document maturity	Description
1	November 2024	Preliminary	Created for CA1.x software.
2	February 2025	Complete	CA1.X Software FCC compliance
3	April 2025	Revised	Setup update
4	September 2025	Revised	IR Remote control
5	October	Revised	Feature updates

## Document maturity key

Initial	Initial data, all subject to change.
Preliminary	Preliminary data; minor details may be missing or subject to change.
Complete	All sections complete.
Revised	Additions/corrections incorporated.
Obsolete	Document refers to a discontinued or soon-to-be-discontinued product. Withdrawn from external distribution.

## Feedback

To contribute feedback on this document, please e-mail

<https://www.frontiersmart.com/product-auria-eug/>.

Include the following information:

Document title, number and date:

- AURIA CA1.x EUG End-User Guide, TECHPUBS-1816952510-3856 Rev 5 Revised, 10/10/2025
- Section number and heading if referring to a specific part of the document.

# 1 Introduction

## 1.1 ... for audio manufacturers' manual authors

This document explains how an end-user may use a Frontier Smart Technologies AURIA-based Internet radio running CA1.x master software, using AURIA platform as an example.

Everything from the following section onwards may be reproduced almost verbatim in an end-user guide. Alternatively, a manufacturer may choose to write their own guide from scratch, using this document merely as source information, or any in-between method.

**Note:** All manuals for Internet radios based on AURIA and CA1.x MUST include all the third-party copyright notices that follow the sentence "Below is a list of notices associated with third party software." under "Legal and precautionary notices" on page 2.

To produce an end-user radio Guide based on this document, the following changes are required:

- Delete this section, 1.1 and the heading '1.2 ... for end-users'
- Import this document into your template, in whatever package
- Change the English usage and spelling to another locale as necessary. This document is produced in UK English
- Delete information about unused sources (sources are mentioned in other places than their specific source section, so do search on the source's name)
- Insert specific information about your physical radio product, especially the controls and safety information
- Insert information about your company including local distributor addresses, service and support
- Change *Frontier Smart Technologies* and *AURIA* to the brand and model name of your radio
- Edit, applying your style guide as necessary
- Translate as required. The CA1.X UI currently includes the following languages: English. If you are planning to translate this Guide into another language, please contact [technical-publications@frontiersmart.com](mailto:technical-publications@frontiersmart.com).

**Note:** The Screen images used in this guide are temporary and will change as the functionality is updated during development.

## 1.2 ... for end-users

This guide describes how to use the Frontier Smart Technologies AURIA smart audio speaker, an advanced but easy-to-use Wi-Fi connected audio system with the following sources:

- **Spotify** acting as wireless speakers controlled by the Spotify App available for iOS/Android smart devices and a desktop client for PCs
- **Apple Airplay** – streaming and control from an Apple Airplay capable device.
- **Bluetooth** - streaming and control from a Bluetooth Smart device
- **Internet Radio** streaming of internet radio stations
- **DAB** – Receiving digital DAB and DAB+ broadcast radio.
- **FM** - Receiving FM radio broadcasts.
- **Bluetooth Low Energy Audio** – BLE technology enabling low power audio streaming and **Auracast** broadcast to many devices
- **Aux-In** for external music sources such as MP3 players.

AURIA also provides the following features:

- Clear status indication using LEDs
- **Remote control** from an Android or iOS Smart Device, using Spotify or OKTIV the Frontier Smart Technologies Remote Control App.

## 1.3 Box contents

The AURIA box includes the following items:

- 2 x AURIA speaker platforms with AURIA modules mounted
- 100-240 V to 5 V power supply.

Check that all items are present and contact Frontier Smart Technologies if there are any missing or damaged items.

## 1.4 External resources

To operate AURIA, the following external resources are needed:

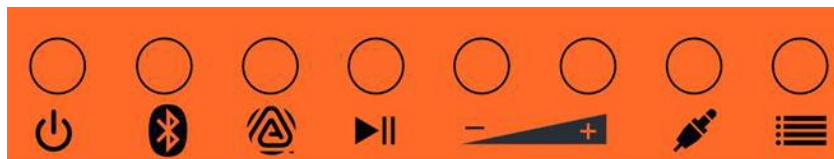
- A power source (100-240 V mains supply)
- A wireless (Wi-Fi) network (provided through a router) with appropriate permissions and passphrase if necessary.

Dependent on the operating mode the following resources may also be required:

- Broadband Internet access (for Spotify and AirPlay sources and Internet Software Update)
- An iOS or Android device (for using Bluetooth/BLE audio and control apps)
- An external audio source (for Aux-In source).

## 2 Controls, connectors and display

### 2.1 Main controls



Key	Action	Definition
Power	Short press	Toggle Standby
	Double tap	Toggle Outdoor mode (disable Wi-Fi) on/off.
Bluetooth	Short press	Enter into BT Classic mode. Reconnect to last connected device. If cannot reconnect, enters discoverable mode. If pairing list is empty, enters discoverable mode.
	Long press 2s	Disconnect current BT Classic connection and enter BT Classic pairing mode.
	Double tap	Toggle Airplane mode On / Off
Auracast	Short press	Toggle BMR on, cycle and connect to available BMS.
	Long press 2s	Toggle BMS on/off.
	Triple tap	Toggle audio output between 48kHz and 24 kHz (hearing aid support)
▶	Short press	Toggle play / pause
	Double tap	Skip track
	Triple tap	Previous track
Vol -	Short press	Decrease volume by one step increments.
	Long press	Decrease volume
Vol +	Short press	Increase volume by one step increments.
	Long press	Increase volume
Mode	Short press	Cycle through available modes: Auracast, Aux-in, Bluetooth, DAB, FM, Internet Radio, Spotify
	Hold while applying power	Enter recovery mode
Preset	Short press	Recall preset 1
	Long press 2s	Save preset 1

A further 3 keys are available on the rear panel of the Unit (see below).

Key	Action	Definition
DNLD (rear panel)	N/A	For development use only
RST (rear panel)	Short press	Hardware reset, power cycle the speaker
Factory reset (rear panel)	Long press 5s	Clear network settings
	Long press 10s	Factory reset

## 2.2 Remote Control



Remote control button	Auria / CA1.x function	Remote control button	Auria / CA1.x function
Power	Standby		
clock icon	N/A	ALARM	N/A
Mode	Mode		
DAB	N/A	Shift+DAB	N/A
FM	N/A	Shift+FM <sup>a</sup>	N/A
BT	BT	Shift+BT	Aux
Menu	Menu		
OK	N/A		
Scroll Up	N/A	Scroll Left	N/A
Scroll Down	N/A	Scroll Right	N/A
Vol +	Volume Up	Vol -	Volume Down
Mute	Mute		
EQ	N/A		
Play/Pause	Play/Pause		
Rewind	N/A	Fast Forward	N/A
Last	Previous	Next	Next

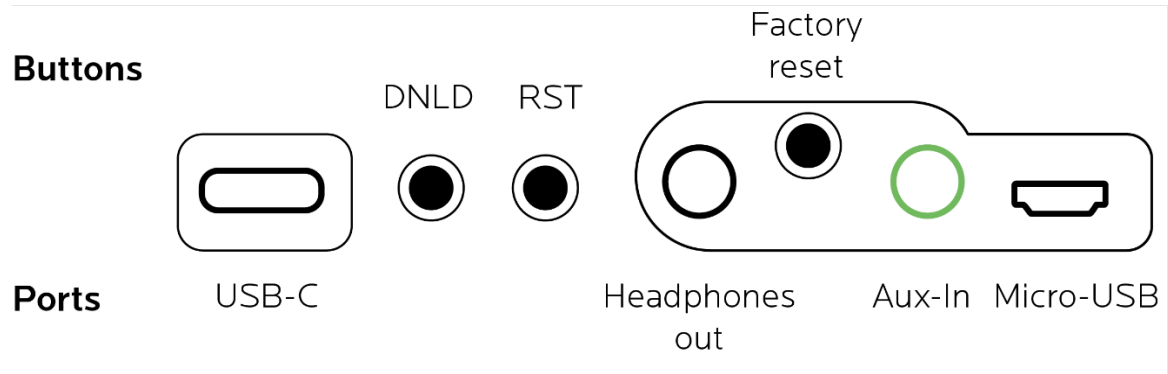
Remote control button	Auria / CA1.x function	Remote control button	Auria / CA1.x function
Shuffle	Shuffle	RPT	Repeat
Red	N/A	Shift+Red	N/A
Green	N/A	Shift+Green	N/A
Yellow	N/A	Shift+Yellow	N/A
Blue	N/A	Shift+Blue	N/A
APP1	Long press - Toggle Outdoor mode (WiFi on/off)	Shift + APP1	Clear network settings
APP2	BT classic pairing (short press)	Shift + APP2	N/A
Rewind	N/A		
Fast Forward	N/A		
Eject	N/A		
P	N/A		
S	N/A		
Presets 1-9	Short press for recall	Long press for save	
0	N/A	5	5
1	1	6	6
2	2	7	7
3	3	8	8
4	4	9	9
Thumbs up	N/A	Thumbs Down	N/A
Info	N/A		
BL	N/A		

## 2.3 Battery switch

On the side of the AURIA unit is a switch to turn battery operation on and off.

## 2.4 Connectors

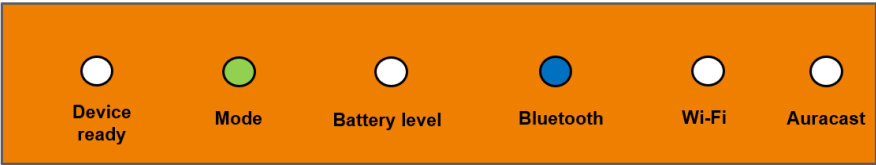
As shown below, AURIA has connectors on the rear panel of the unit (from left to right) for the following:

























- USB-C connector – for power
- Headphones out
- Aux-In
- Micro-USB connector – for development use only

2.5 LED and Display

The status of AURIA is indicated by the multicolour LEDs.



LED	Colour	Effect	Definition
Device ready	○ White	Steady	Device powered up and ready
	● Orange	Steady	Booting up
Source	○ White	Steady	Internet Radio
	● Green	Steady	Spotify
	● Blue	Steady	Auracast / BT Classic
	● Orange	Steady	AirPlay
	● Yellow	Steady	Dab
	● Pink	Steady	FM
	● Purple	Steady	Aux-In
	● Red	Steady	Standby
	Off	Off	No source
Battery level <sup>1</sup>	Off	Off	No battery
	○ White	Breathing	Charging

LED	Colour	Effect	Definition
	 Green	Steady 100% bright	Battery level = 75-100%
	 Green	Steady 75% bright	Battery level = 50-74%
	 Green	Steady 50% bright	Battery level = 25-49%
	 Red	Steady 25% bright	Battery level = 6-24%
	 Red	Slow blink (1s on/off)	Battery level = 0-5%
Bluetooth	 Blue	Fast blink (0.5s on/off)	BT Classic pairing mode
	 Blue	Steady	BT Classic connected
	Off	Off	BT not connected
Wi-Fi	 White	Steady	Wi-Fi connected
	 White	Breathing	Wi-Fi connecting / reconnecting
	 White	Fast blink (0.5s on/off)	Waiting for network setup / Network error
	Off	Off	Wi-Fi disabled
Auracast	 Green	Single blink (2s on/off)	Preset stored
	 White	Fast blink (0.5s on/off)	BMR connecting to BMS
	 White	Steady	BMR connected to BMS
	 Amber	Slow blink (1s on/off)	On BMR - no BMS available
	 White	Slow blink (1s on/off)	BMS broadcasting
	Off	Off	Not under Auracast mode
All LED	 White	Double Blink (0.1s on/off X2)	Factory reset initiated
	 White	Blink 1 time (0.1s on/off X1)	Network settings cleared
	 White	Steady	Recovery mode
	 White	Slow blink (1s on/off)	Firmware update in progress
	 Yellow	Fading from 0-100%	Volume level, shown shortly after adjusting volume
	 Red	Running	Mute
	 Red	Double blink (0.5 on/off X2)	Operation not permitted

1 AC/DC supply connected

Battery LED is always lit as per the table in all modes.



Under battery power

Battery LED lights for 30 seconds only on power on and after any button press while power is on in battery mode.

## 3 Getting started/setup

AURIA is a sophisticated multi-source wireless speaker.

The various listening sources have different requirements:

- Spotify Connect requires connection to a wireless network connected to the internet
- Internet Radio requires connection to a wireless network connected to the internet
- DAB – (optional) requires broadcast antenna and Auria option with DAB processing capability.
- FM - (optional) requires broadcast antenna and Auria option with FM demodulating capability.
- Apple Airplay requires an Airplay capable device and Wi-Fi network
- Bluetooth requires a Bluetooth capable smart device
- Aux-In requires an input connection via the Aux-In socket.

To start AURIA, connect the unit to a suitable power source using the power supply provided. The unit starts up (there may be a few seconds delay before the display is initialised).

After the initial start-up sequence AURIA will normally enter the last used listening source. The first time AURIA is started (or after being reset to factory settings) AURIA boots up in Device Setup mode.

### 3.1 Setup

**Note** The test version of OKTIV is required for the latest setup process, available from your FS support team.

To setup your AURIA units, for Spotify, Apple Airplay and other network functions, they need to be connected to your Wi-Fi network using the OKTIV app.

The Wi-Fi LED flashing white indicates the unit is not currently connected to a Wi-Fi network and waiting for network setup.

Bluetooth LE allows OKTIV to discover and setup new devices so they are connected to the Wi-Fi network.

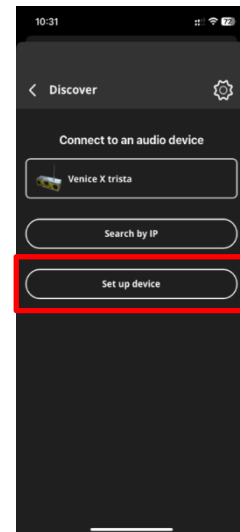
#### 3.1.1 On AURIA

1. Ensure AURIA is in Device Setup mode indicated by the device ready light showing white and the Wi-Fi light flashing white, on and off:
  - If AURIA has not already been configured, it enters Device Setup mode automatically on start-up
  - If AURIA has previously been configured and already connected to a network  
*Either:*  
Clear any current network settings by pressing the Reset button (on the rear panel) for 5 seconds.  
or  
Perform a Factory reset pressing and holding the Reset button (on the rear panel) for 10 seconds.

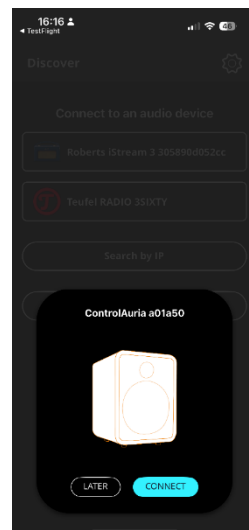
### 3.1.2 Setup using OKTIV

**Note:** To set up AURIA, OKTIV needs to access Location data on your smart device. Please ensure the settings for OKTIV allow Location access while using the app.

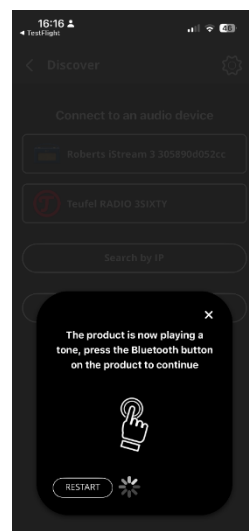
1. OKTIV will automatically search for any AURIA devices on the network, tap on 'Set up device'.



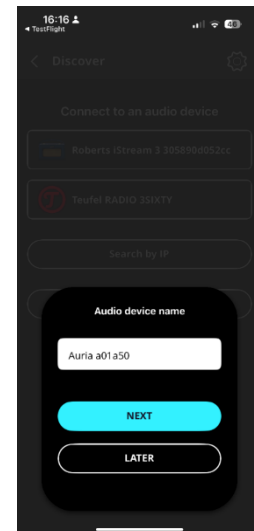
2. Devices to be configured will be shown. Tap Connect for the device you wish to connect.



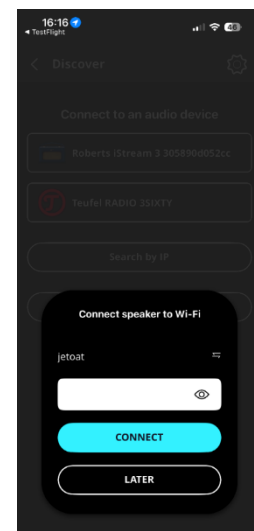
3. The AURIA device that you are setting up will play a tone, press the Bluetooth button on that device.



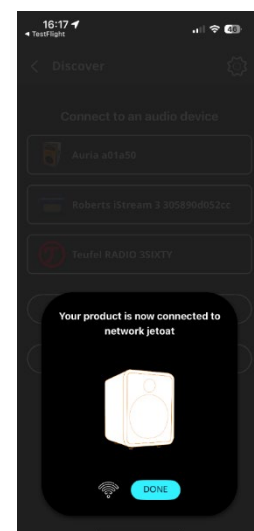
4. Change or accept the default name then tap on 'Next'.



5. Enter the Wi-Fi password for the network that your phone is connected to – if you have previously setup a device then the password will be remembered. Other networks can be selected if necessary, Tap Connect.



6. A tone will play to inform you that your device is connected to your network. Setup is complete.



The Wi-Fi LED indicates successful connection to your Wi-Fi network by changing from flashing white to a steady white.

### 3.1.3 Web Based Configuration

Using PCs, Mac OS and Android smart devices.

1. Ensure the Wi-Fi interface of your computer or device is switched on.
2. Select the AURIA network: AURIA\_APxxxxxx from your computer's list of available Wi-Fi networks.
3. In a Web browser on the computer or device, navigate to the AURIA Web configuration page using the following address:  
IP address 172.16.0.1
4. The AURIA Web Configuration page opens.
5. Click the Network tab.
6. Select Wi-Fi as the Network Type.
7. Click Scan.

The screenshot shows the AURIA Web Configuration interface. At the top, there's a header with the 'FRONTIER SMART TECHNOLOGIES' logo and a language dropdown set to 'English'. Below the header is a navigation bar with tabs: 'Status', 'Network' (selected), 'Update', 'Presets', and 'Report'. The main content area is titled 'Network Connection'. It has two radio buttons for 'Network Type': 'Ethernet' and 'WiFi' (selected). A 'Scan' button is next to the 'WiFi' option. Below this is a list of available Wi-Fi networks, including WPS and BT networks. The 'SSID' field is populated with 'BT-77AFZT'. There are input fields for 'WiFi Passphrase' and a checkbox for 'Visible'. Below that is the 'WiFi Protected Setup' section with a checkbox for 'PBC' (selected). The 'Network Setting' section has two rows of radio buttons: 'DHCP' (selected 'Enable') and 'Keep network connected' (selected 'Enable'). At the bottom right are 'Cancel' and 'Apply' buttons.

8. The Wi-Fi Networks list updates to show available Wi-Fi networks.
9. Select your preferred network from the Wi-Fi Networks list. (Usually your normal home network).
10. Type the passphrase (if required) for the network in the Wi-Fi Passphrase box.
11. In the DHCP field, Enabled is selected by default to generate network settings automatically. Only select 'Disabled' if you wish to set the following parameters manually:  
IP Address  
Subnet Mask Address  
Gateway Address  
DNS Address.
12. Keep network Connected - to allow activation/control from network app, such as OKTIV, this must be set to enable. If disabled the network connection of your AURIA is shut down when not in a network mode.
13. Click Apply.
14. Click OK to confirm you wish to apply the selected settings. AURIA restarts and connects to the preferred network.
15. Setup Complete.










The AURIA unit's wireless network (AURIA\_APxxxxxx !!! *This SSID is manufacturer configurable !!!*) will no longer be available. Reconnect your computer to the same preferred home network as you have just specified for the AURIA unit (this may happen automatically, dependent on the computer set up).

## 4 Operation

After the initial setup, AURIA is ready for operating with all Audio Sources.

### 4.1 Audio Sources

Audio can be directed to your AURIA devices in a number of ways:

-  Spotify – Audio is streamed directly to your AURIA devices, controlled from a smart device running the Spotify Connect app.
-  AirPlay – Audio is streamed to your AURIA devices from an AirPlay capable smart device.
-  Bluetooth – Audio streamed to an AURIA device from a Bluetooth capable audio source.
-  BLE – Bluetooth Low Energy technology allows multiple AURIA devices to stream audio in as broadcast speakers
-  Auracast - an unlimited number of devices acting as BMR receivers for a BMS broadcast source
-  Aux-In – Audio delivered to an AURIA device via the Aux-In port.
-  Internet Radio – Auria can play thousands of radio stations from around the world through a broadband Internet connection
-  DAB/DAB+ - DAB radio mode receives broadcast DAB/DAB+ digital radio.
-  FM – FM radio mode receives broadcast FM analogue radio.

### 4.2 Audio Source selection

An AURIA device can be selected as the output device from a range of audio sources, directly or remotely.

#### 4.2.1 From AURIA interface

- Bluetooth (classic) – Pair your Bluetooth capable device to your AURIA speaker and stream audio.
- Auracast (BLE) – Set one AURIA device as a BLE-BMS Auracast broadcast source and an unlimited number of BLE BMR broadcast receivers (these can be AURIA devices or other third party BLE capable devices). See section 7 BLE Audio for further details.
- Aux-In – play audio from a source connected to the Aux-In port of the AURIA device.
- Mode – Mode button to select an audio source, repeated presses cycle through the available audio sources.

#### 4.2.2 From OKTIV

- Internet Radio – Select Internet Radio on a Wi-Fi connected AURIS device and browse for an IR station by location, genre, popularity, etc.
- DAB – Select a DAB broadcast station
- FM – Select an FM broadcast by frequency or strong signal search
- Spotify – Select a Wi-Fi connected AURIA device as a Spotify output device before handing over to the Spotify Connect app (an active Spotify Connect account will be required)
- Bluetooth – Select an attached AURIA speaker as the Bluetooth output device for your smart device.
- Aux-In – play audio from a source connected to the Aux-In port of the AURIA device.
- Auracast Receiver – Select the AURIA speaker as a BLE BMR (receiver) and browse for an Auracast Broadcast Sender (BMS). See section 7 BLE Audio for further details.

### 4.2.3 From Webpages

Audio sources set as Presets can be selected from the Preset Tab on the embedded webpages.

Note The preset tab is only present if the current audio source mode supports Presets.

### 4.2.4 From other Apps/Smart sources

- Spotify - Select a Wi-Fi connected AURIA speaker from your device running the Spotify connect app (an active Spotify Connect account will be required).
- AirPlay - Select a Wi-Fi connected AURIA speaker from your AirPlay capable device.
- Bluetooth (classic) – Select a Bluetooth paired AURIA for your audio output.

## 4.3 Audio playback

The Common local controls for audio playback are available in all Audio sources:

The Volume controls + (increase) and – (decrease) are on the top of the AURIA device and used to increase or decrease the sound volume.

The general track controls are:

Play/Pause  to:

- start and stop tracks (single tap),
- skip to the next track (double tap),
- return to the beginning/previous track (triple tap).

## 4.4 Presets

AURIA supports the saving and selection of audio sources/tracks as preset options. The list of preset sources is shared across modes.

### 4.4.1 From Auria interface

Preset 1 (the preset saved in store 1) can be save/recall using the preset button on the Auria device.


#### 4.4.1.1 To store preset1

Long press the Preset button to store the currently playing playlist as preset1. The playlist is stored in preset1 store.

#### 4.4.1.2 To recall preset1

Short press the Preset button to recall preset1.

### 4.4.2 From OKTIV

IN OKTIV Presets can be saved and recalled. Preset sources are accessed from the Now Playing screen via the preset button indicated by a list icon (  ). This presents a list of preset stores showing which have presets stored, which are empty and their pinned status

In addition, if a preset has been pinned to the home page, that preset is available on the home page.

### 4.4.3 From Webpages

Presets are available for playback on the Preset tab on the webpage.

## 5 Spotify Connect ●

This source enables Spotify streaming to the AURIA unit controlled by a suitable Spotify enabled smart device.

**Note:** An active Spotify Connect account is required.

Use your phone, tablet or computer as a remote control for Spotify.

Go to [spotify.com/connect](https://spotify.com/connect) to learn how

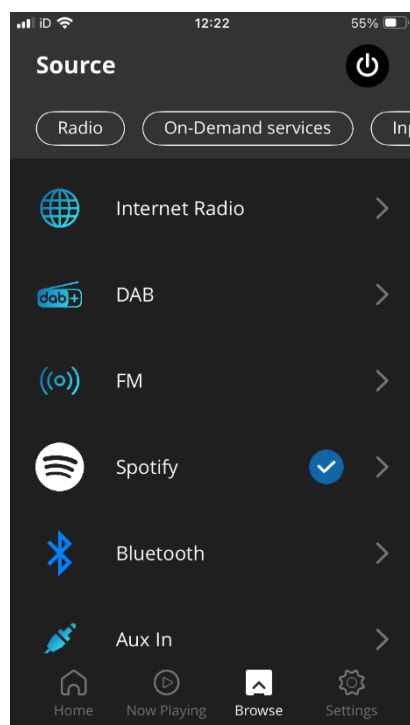
Start Spotify streaming by using Spotify App, from the Spotify App Now Playing screen, tap the device button and select AURIA from the list to start streaming, once this is done the audio will start to play from the AURIA speaker.

Spotify source is indicated with the source LED showing green, this source is active when audio media is directed to AURIA by a smart device running the Spotify App.

The Smart device running the Spotify Connect app acts as the principal control interface (eg. Skip previous / next, volume control) and directs audio content to AURIA.

### 5.1 Connect using OKTIV

To enter Spotify source, select Spotify from the OKTIV Browse screen.



### 5.2 Control from AURIA

While in Spotify source you can: pause, play, Skip tracks, return to the beginning of a track or previous track and adjust the volume, using the buttons available on the AURIA audio system.

### 5.3 Presets

In all audio sources different stations/playlists can be stored and recalled as preset options in a single preset list (up to 10 preset stores), accessed from OKTIV and the embedded web pages Preset tab. See section 4.4 Presets for further details.

On the Auria device the preset button can be used to save and recall preset1 only.



## 6 Bluetooth ●

Bluetooth mode allows Bluetooth devices to stream music, one-to-one, to the AURIA Audio device.

### 6.1 To pair with AURIA

To pair with the AURIA device, long press the Bluetooth button to enter Bluetooth discoverable mode and pair from your Bluetooth smart device.

### 6.2 To connect

From your Bluetooth capable smart device select a previously paired AURIA device to connect via Bluetooth technology and stream audio.

#### 6.2.1 Enter Bluetooth mode

An AURIA device can be put into Bluetooth mode via the OKTIV app or manually short press the Bluetooth button on the AURIA device.

### 6.3 Control from AURIA

While in Bluetooth mode you can: pause, play, Skip tracks, return to the beginning of a track or previous track and adjust the volume, using the buttons available on the AURIA audio system.

## 7 BLE Audio ●

Bluetooth 5 BLE (Bluetooth Low Energy) technology Built into AURIA devices enables them to act as Senders (BLE BMS) or as Receivers (BLE BMR) of BLE signals. This allows the speakers to be used as part of a multi-device broadcast (Auracast).

The sections below show how to set up your AURIA devices as part of an Auracast broadcast.

**Note:** When you setup an AURIA device on a Wi-Fi network, ensure the device is **not** acting as a BMR or BMS . In these modes network setup is not available.

### 7.1 Auracast

Bluetooth Low Energy Audio introduces Auracast, which allows for one device to broadcast audio to many other devices via Bluetooth LE Audio technology.

To connect devices to the broadcast and share the audio listening, you need to enable Broadcast Media Receiver (BMR) source on those devices. These could be third party devices or other AURIAs.



#### 7.1.1 Control from AURIA

When part of an Auracast broadcast, each individual AURIA device controls its own audio volume using the AURIA device buttons.

Playback control such as, pause, play, Skip tracks, return to the beginning of a track or previous track, is only available using the buttons of the on the AURIA device acting as the BLE BMS.

#### 7.1.2 BMS behaviour

The Auracast LED will blink white to indicate it is acting as a BMS. The OLED display will continue to indicate the Audio source the AURIA device is currently in.

The AURIA device is now broadcasting any currently playing audio from the audio source over BLE. The audio source can be via Spotify, AirPlay, DAB, FM, Internet Radio, Aux-In or Bluetooth.

**Note:** Volume control is set on BMS and BMR devices individually.

You can connect as many BMR devices to the BMS as you like – this could be multiple AURIA devices or other devices that support Bluetooth LE Audio Auracast.

### 7.1.3 To define a Bluetooth Low-Energy BMS (Broadcast Media Sender)

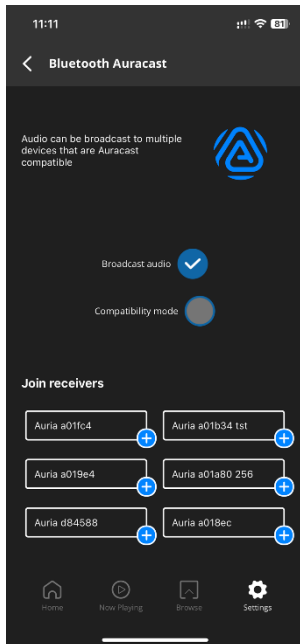
To define an AURIA device as a BLE BMS, while the Auria is in any source mode, other than BMR, long press the Auracast button. The Auracast LED will start blinking white.

**Note:** A short press of the Auracast button will put the ARIA device into BMR mode (The Auracast LED blinking Orange). To exit BMR mode, select any other different source mode.

#### 7.1.3.1 Via OKTIV

Alternatively, BMS can be enabled on OKTIV at: Settings > System > Bluetooth Auracast >

Then check the Broadcast audio button.



All available BMR devices are listed at the bottom of the screen. Select all required receivers by selecting the + (plus) icon for each device. Multiple receivers can be selected at the same time.

### 7.1.4 To exit BMS

To stop your AURIA device broadcasting as a BMS, long press the Auracast button for approximately 2 secs. The Auracast LED will stop blinking and turn off.

The current audio source for the AURIA device will be unchanged, so the device may continue to play the source audio but will no longer be broadcasting it for any available BMR.

#### 7.1.4.1 Via OKTIV

Alternatively, BMS can be turned off via OKTIV at: Settings > System > Bluetooth Auracast >

Then uncheck the Broadcast audio button.

### 7.1.5 To define a Bluetooth Low-Energy BMR (Broadcast Media Receiver)

To put an AURIA device into BMR mode, short press the Auracast button on the device. This puts the AURIA device into BMR mode and is indicated by the source LED turning blue, the Auracast LED blinking orange and a message on the OLED display.

To find a BMS broadcast signal short press the Auracast button a second time, this will allow AURIA to search for any available BMS broadcasts. If only one broadcast signal is found the AURIA device will connect automatically.

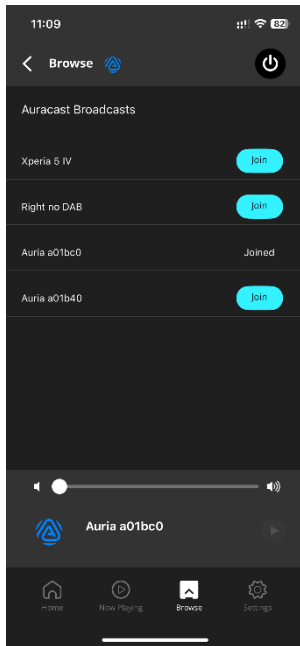
If there are several broadcast signals you can select the appropriate source device to connect to by short presses of the Auracast button to cycle through available broadcast devices.

The AURIA, acting as a BLE BMR, will receive and playback audio content from the selected BMS.

If an AURIA in BMR source is turned off whilst connected to a BMS broadcast, when turned back on, if the BMS is still available, the BMR will reconnect automatically.

#### 7.1.5.1 Via OKTIV

From the Browse source screen select Auracast. Any available Auracast broadcasts (BMS) are listed. Click on the join button for the required BMS broadcast. Only one broadcast at a time can be selected.



**Note:** Auracast broadcast sources (BMS) are available even if the speaker has not been through the network setup process.

#### 7.1.6 To exit BLE BMR source

To exit BLE BMR source on your AURIA device, select any other audio source.

## 8 Aux-In source ●

Auxiliary input source is indicated with the source LED showing purple. In Auxiliary input (Aux-In) source, AURIA can play analogue audio content from an external source plugged into the Aux-In port on the back of the device.

The Aux-In source is selected by short press the Aux-In- button.

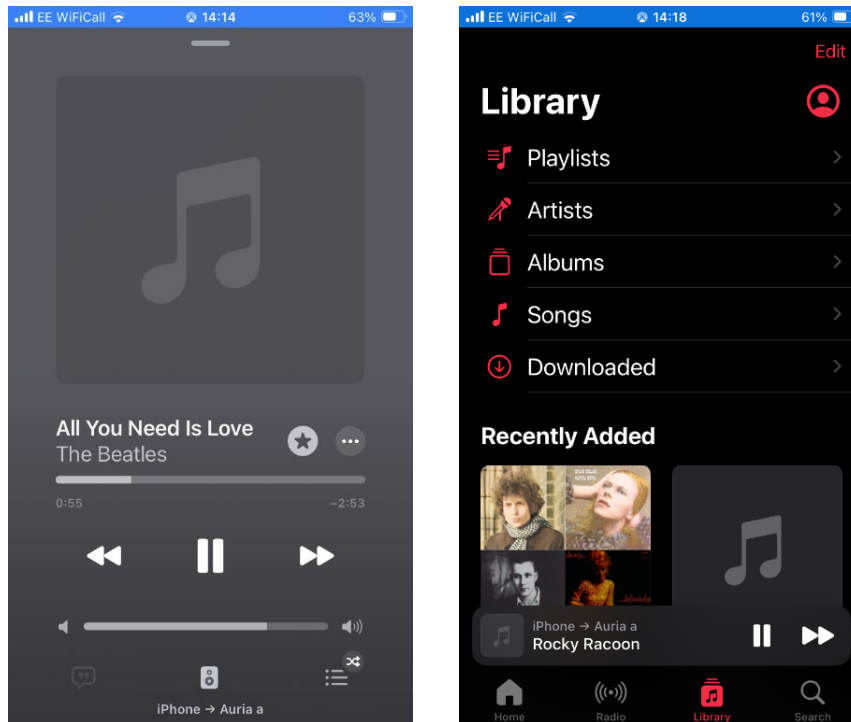
Aux-In source plays audio from an external source.

### **To play audio with Aux-In source,**

1. To avoid sudden loud volume, turn the volume low on both AURIA and, if adjustable, the audio source device.
2. Connect the external audio source to the Aux-In 3.5 mm stereo socket.
3. To enter Aux-In source, either press the Aux-In button on the AURIA speaker or select Aux-In via the OKTIV app.
4. Adjust the volume of AURIA (and, if necessary, the audio source device) as required.

## 9 AirPlay

Your AURIA speaker automatically enters AirPlay source when selected as the output device from an AirPlay capable device.



Start Airplay streaming from iOS devices, select your AURIA device from the available device list on the Airplay compatible app to start streaming, once this is done the audio will start to play from the AURIA speaker.

AirPlay source is indicated with the source LED showing orange, this source is active when audio media is streamed to AURIA from an iOS device.

The device that sends audio content to AURIA acts as the principal control interface and controls Airplay multiroom and other control functions.

### 9.1 Control from AURIA

While in AirPlay source you can pause, play, Skip tracks, return to the beginning of a track or previous track and adjust the volume, using the buttons available on the AURIA audio system.

### 9.2 Presets

In all audio sources different stations/playlists can be stored and recalled as preset options in a single preset list (up to 10 preset stores), accessed from OKTIV and the embedded web pages Preset tab. See section 4.4 Presets for further details.

On the Auria device the preset button can be used to save and recall preset1 only.

## 10 Internet radio mode ○

Auria can play thousands of radio stations from around the world through a broadband Internet connection.

When you select Internet radio mode, A list of internet radio stations, organised into different categories like Country, and Popular are available. Station selection is organised through the OKTIV app. Once you select a station, Auria connects directly to that station.

### 10.1 Control from Auria

To enter Internet Radio mode, either press Mode to cycle through the listening modes until *Internet Radio* is displayed, then press select,

#### 10.1.1 Via OKTIV

Use the Browse options in OKTIV to select Internet Radio.

All control for playback selection is carried out via the OKTIV app.

**Note:** If the Internet Radio service is unavailable, Auria defaults to the last listened Playable URL for Internet Radio station, or the URL stored in a preset if playing from a preset

The Common local controls for sound volume, Mute, Play/Stop and Presets are available.

### 10.2 Presets

In all audio sources different stations/playlists can be stored and recalled as preset options in a single preset list (up to 10 preset stores), accessed from OKTIV and the embedded web pages Preset tab. See section 4.4 Presets for further details.

On the Auria device the preset button can be used to save and recall preset1 only.

## 11 DAB radio mode

DAB radio mode receives DAB/DAB+ digital radio and displays information about the station, stream and track playing.

### 11.1 Station List

The first time you select DAB radio mode, or if the station list is empty, Auria automatically performs a full scan to see what stations are available.

### 11.2 Control from Auria

To enter DAB mode, either press Mode to cycle through the listening modes until *DAB Radio* is displayed,

#### 11.2.1 Via OKTIV

Use the Browse options in OKTIV to select DAB.

All control for playback selection is carried out via the OKTIV app.

### 11.3 Presets

In all audio sources different stations/playlists can be stored and recalled as preset options in a single preset list (up to 10 preset stores), accessed from OKTIV and the embedded web pages Preset tab. See section 4.4 Presets for further details.

On the Auria device the preset button can be used to save and recall preset1 only.



## 12 FM radio mode

FM radio mode receives analogue radio from the FM band and displays RDS (Radio Data System) information about the station and show (where broadcast).

### 12.1 Control from Auria

To enter FM Radio mode, either press Mode to cycle through the listening modes until *FM Radio* is displayed,

#### 12.1.1 Via OKTIV

Use the Browse options in OKTIV to select FM

All control for playback selection is carried out via the OKTIV app.

### 12.2 Presets

In all audio sources different stations/playlists can be stored and recalled as preset options in a single preset list (up to 10 preset stores), accessed from OKTIV and the embedded web pages Preset tab. See section 4.4 Presets for further details.

On the Auria device the preset button can be used to save and recall preset1 only.

## 13 Embedded Webpage

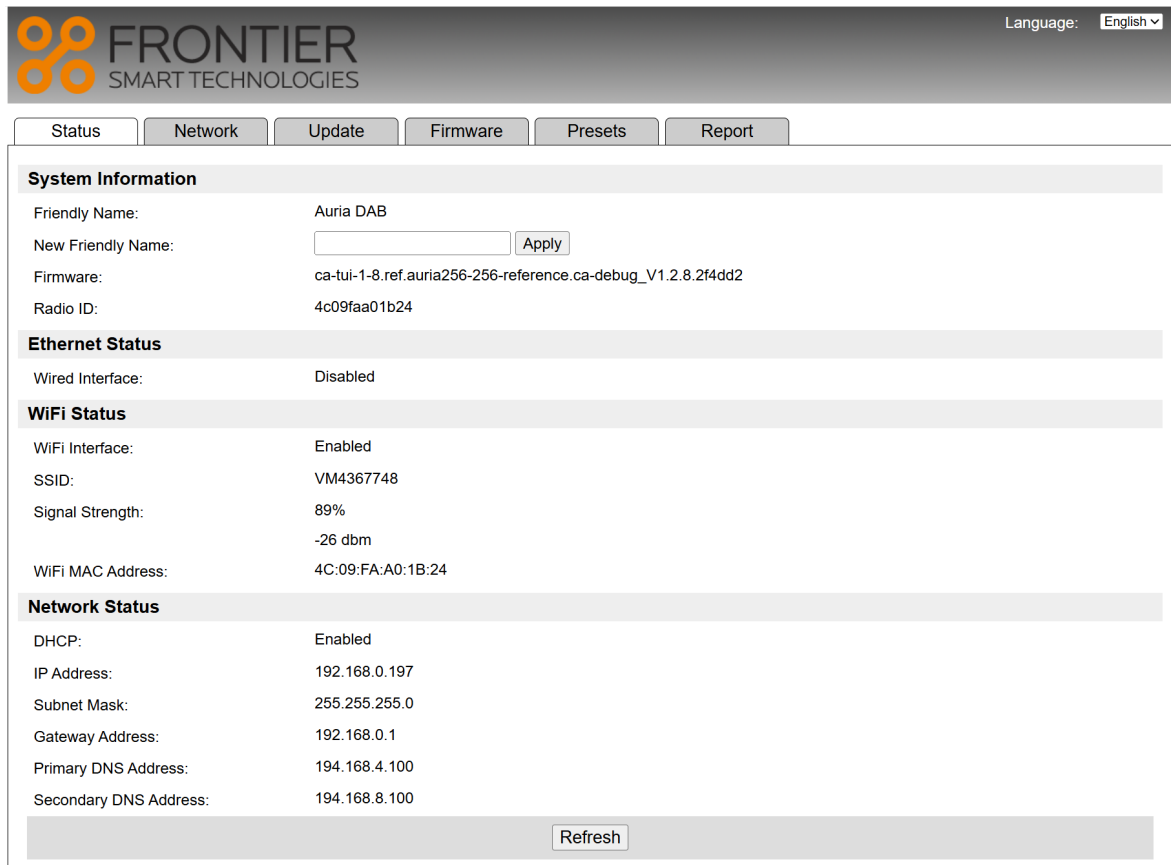
Once AURIA is connected to your network a webpage is available to view status information, change network settings and perform software update.

To connect to the webpage enter the AURIA unit's IP address, this can be identified using OKTIV.

### 13.1 Status Tab

From the Status Tab, basic information about the AURIA unit is provided.

Device friendly name can be changed by entering a desired name and press Apply, the friendly name changes immediately.



The screenshot displays the 'Status' tab of the AURIA Embedded Webpage. The header features the 'FRONTIER SMART TECHNOLOGIES' logo on the left and a 'Language: English' dropdown on the right. Below the header is a navigation bar with tabs for 'Status', 'Network', 'Update', 'Firmware', 'Presets', and 'Report'. The main content area is divided into three sections: 'System Information', 'Ethernet Status', and 'WiFi Status'. The 'System Information' section shows 'Friendly Name: Auria DAB', 'New Friendly Name' with an input field and an 'Apply' button, 'Firmware: ca-tui-1-8.ref.auria256-256-reference.ca-debug\_V1.2.8.2f4dd2', and 'Radio ID: 4c09faa01b24'. The 'Ethernet Status' section shows 'Wired Interface: Disabled'. The 'WiFi Status' section shows 'WiFi Interface: Enabled', 'SSID: VM4367748', 'Signal Strength: 89%', '-26 dbm', and 'WiFi MAC Address: 4C:09:FA:A0:1B:24'. Below these sections is the 'Network Status' section, which shows 'DHCP: Enabled', 'IP Address: 192.168.0.197', 'Subnet Mask: 255.255.255.0', 'Gateway Address: 192.168.0.1', 'Primary DNS Address: 194.168.4.100', and 'Secondary DNS Address: 194.168.8.100'. A 'Refresh' button is located at the bottom right of the 'Network Status' section.

System Information	
Friendly Name:	Auria DAB
New Friendly Name:	<input type="text"/> <button>Apply</button>
Firmware:	ca-tui-1-8.ref.auria256-256-reference.ca-debug_V1.2.8.2f4dd2
Radio ID:	4c09faa01b24

Ethernet Status	
Wired Interface:	Disabled

WiFi Status	
WiFi Interface:	Enabled
SSID:	VM4367748
Signal Strength:	89%
	-26 dbm
WiFi MAC Address:	4C:09:FA:A0:1B:24

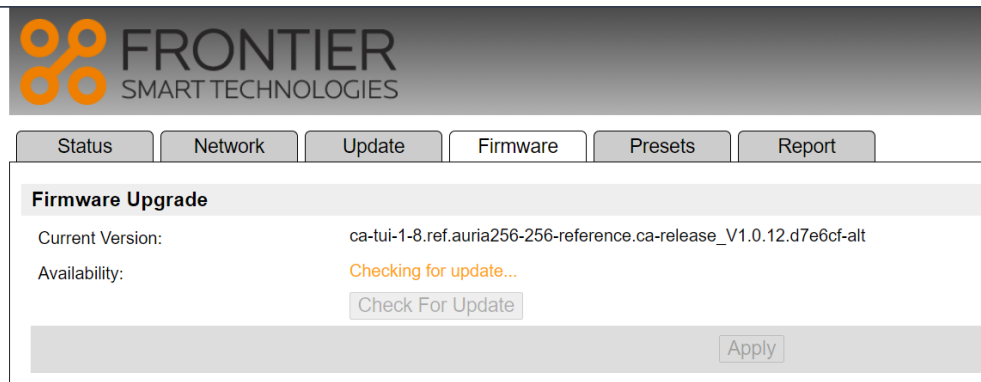
Network Status	
DHCP:	Enabled
IP Address:	192.168.0.197
Subnet Mask:	255.255.255.0
Gateway Address:	192.168.0.1
Primary DNS Address:	194.168.4.100
Secondary DNS Address:	194.168.8.100

Refresh

## 13.2 Firmware tab

This shows the current firmware version and allows users to check for possible updates to the firmware that may be available via the internet.

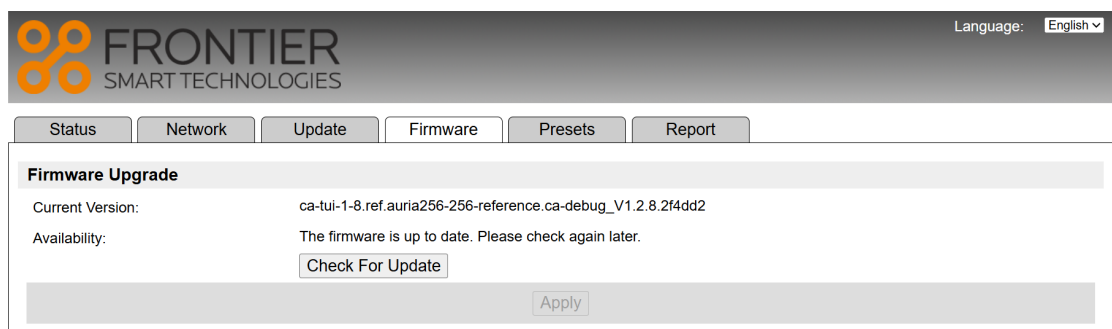
1. Navigate to Firmware tab
2. AURIA will check if update is available



3. If update is available, the new firmware version will be displayed. Press Apply to accept and start the update.



4. If the current firmware is up to date, below message will appear on the webpage.



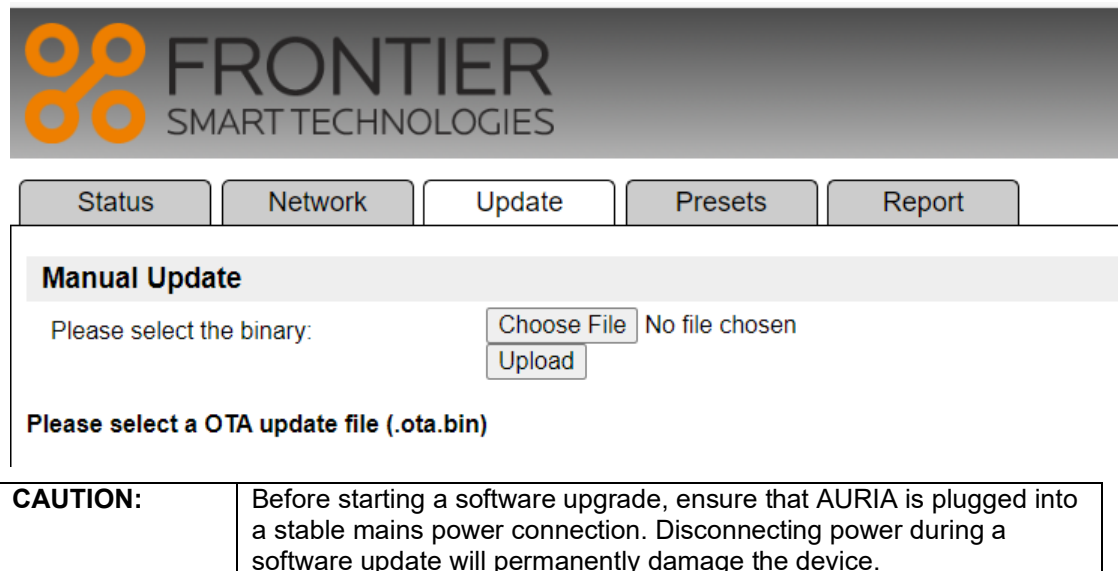
<b>CAUTION:</b>	Before starting a software upgrade, ensure that AURIA is plugged into a stable mains power connection. Disconnecting power during a software update will permanently damage the device.
-----------------	---

## 13.3 Update tab

This allows a user to manually upload update firmware from the connected computer being used to

view the webpage.

1. Navigate to Update Tab
2. Press Choose File, select an update file with file extension \*.ota.bin
3. Press Upload to start downloading the new software. All the LEDs will flash white while the update is in progress.
4. When the software update complete, AURIA will reboot to restart
5. New Firmware version can be checked under the Status tab



**FRONTIER SMART TECHNOLOGIES**

Status Network **Update** Presets Report

**Manual Update**

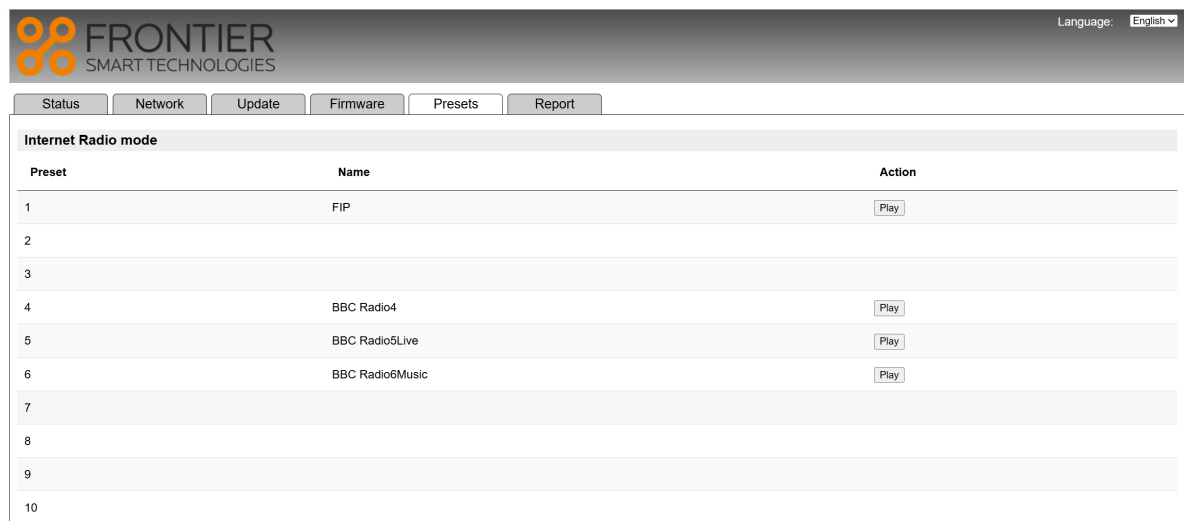
Please select the binary:  No file chosen

**Please select a OTA update file (.ota.bin)**

**CAUTION:** Before starting a software upgrade, ensure that AURIA is plugged into a stable mains power connection. Disconnecting power during a software update will permanently damage the device.

## 13.4 Preset tab

This tab presents a list of the presets currently saved for the Auria device. Click on the relevant Play button to switch the Auria to that preset audio source.



**FRONTIER SMART TECHNOLOGIES** Language: English

Status Network Update Firmware **Presets** Report

**Internet Radio mode**

Preset	Name	Action
1	FIP	<input type="button" value="Play"/>
2		
3		
4	BBC Radio4	<input type="button" value="Play"/>
5	BBC Radio5Live	<input type="button" value="Play"/>
6	BBC Radio6Music	<input type="button" value="Play"/>
7		
8		
9		
10		

## Glossary

BLE	Bluetooth Low Energy
BMR	Broadcast Media Receiver
BMS	Broadcast Media Sender
IP	Internet protocol
UI	User Interface
WLAN	Wireless Local Area Network

