



**YOUR MUSIC.  
REDISCOVERED.  
RELIVED. RELOVED.**

# ROBERTS

## S1 / S2

**Multi-room Stereo Speaker with Internet Radio, Music Player and Spotify Connect**  
and remote control from iPhone and Android using UNDOK



Please read this manual before use

# Contents

<b>Introduction</b> .....	<b>1-7</b>	<b>Audio connections</b> .....	<b>29</b>
Before you can use this product .....	1	Auxiliary input socket .....	29
About this instruction manual.....	2	<b>Multi-room mode</b> .....	<b>30-34</b>
Controls and connections .....	3-7	Multi-room the basics .....	30
<b>Setup</b> .....	<b>8-11</b>	Creating and editing a multi-room group with UNDOK.....	31
Step 1 - Download the UNDOK app .....	8	Playing audio to a group.....	32
Step 2 - Plug in your speaker and switch on for first use .....	9	Volume control using UNDOK .....	32
Step 3 - Setup new audio system - Apple iOS device .....	10	Mode indicator and controls in a multi-room configuration .....	33
Step 3 - Setup new audio system - Android device .....	11	Stereo mode switch .....	34
<b>Internet Radio mode</b> .....	<b>12-15</b>	<b>UNDOK settings</b> .....	<b>35</b>
Internet Radio - the basics.....	12	UNDOK settings / Equaliser / Sleep timer / Friendly name .....	35
Selecting internet radio / Presetting internet radio stations .....	13	<b>Information</b> .....	<b>36-48</b>
Customising your speaker .....	14	Factory reset .....	36
Configuring my favourite stations .....	15	Standby mode / Eco Standby mode .....	37
Configuring my added stations.....	15	Network indicator status .....	37
<b>Music Player mode</b> .....	<b>16-21</b>	S1 wall mounting instructions .....	38
Use with Windows, Apple Mac, Linux.....	16	Bluetooth pairing your device by NFC .....	38
Accessing your audio files via UPnP using Windows 7, 8, & 10... ..	17-18	Software version display.....	39
Locating and playing media files using UPnP .....	19-20	Audio FAQ / Software update .....	39
Windows 'Play To' / 'Cast to Device' function (UPnP renderer) .....	21	Using an Ethernet connection .....	40
<b>Spotify Connect</b> .....	<b>22-24</b>	Troubleshooting .....	41-42
Spotify Connect - the basics.....	22	Audio codecs .....	43
Set up a Spotify Connect account .....	22	Cautions .....	44
Playing music using Spotify Connect .....	23	Specifications / Circuit features .....	45
Controlling Spotify on your speaker.....	24	Software License Information .....	46
<b>Bluetooth mode</b> .....	<b>25-28</b>	Guarantee.....	48
Bluetooth mode .....	25		
Connecting Bluetooth devices .....	25		
Playing audio files in Bluetooth mode.....	26		
Connecting and reconnecting a Bluetooth device .....	27		
Bluetooth information.....	28		

## S1 / S2 Speaker features

The Roberts S1/S2 provides the following features in an attractive compact unit:-

- Listen to local, regional, national and international broadcasts using Internet radio.
- Listen to over 1000 radio stations from around the country, and over 10,000 from around the world without using your PC.
- Listen to podcasts from a wide range of broadcasters.
- 20 internet radio station presets.
- Use the Music Player to play your music collection from devices on your network. Connection to Apple and Linux based computers is also possible.
- MP3, WMA, AAC, FLAC, ALAC (Apple Lossless) and WAV formats are supported.
- The S1 and S2 connects to your home computer network, either using WiFi or via a wired Ethernet connection.
- Dual band WiFi allows compatibility with a wide range of networks.
- Works with Windows 'Play to' / 'Cast to Device' function (as a Digital Media Renderer).
- Compatible with Spotify Connect, allowing your Spotify selections to be played through the speaker, remotely controlled from your iPhone, iPad, Android device or any Desktop.
- Supports remote control from Apple iPhone, iPad and Android using the UNDOK app.
- Your speaker may be connected as part of a wireless Multi-room system to allow whatever source is selected to be heard through other connected products.
- Bluetooth streaming to play your music or video soundtracks from your smartphone, tablet or similar device.
- All radio station presets, network configuration details and user settings are retained in the event of a power failure.
- Adjustable sleep timer, can be set to turn the speaker off after a delay of up to 60 minutes.
- Eco standby mode.
- Auxiliary input for playing audio from MP3 players, iPods or other audio equipment.
- Mains powered operation using supplied mains adaptor.

## Before you can use this product

Before you can use your smart speaker, you must have the following:

- A broadband Internet connection (not required for Music Player functions).
- A router (or equivalent wireless access point) providing a WiFi signal or Ethernet connection, connected to your broadband Internet Service Provider. The broadband modem, router and wireless access point will often be a single combined unit supplied by your Internet Service Provider or bought from a computer store.
- A Smart phone or tablet which uses either the Android operating system (version 4.0.3 or later) or Apple iOS (version 8 or later).
- If your wireless network requires a security password to allow connection, then you need to know the WEP, WPA or WPA2 key used for encryption so that you can get the speaker to communicate with the network.
- If you choose to connect the speaker to your network using a wired Ethernet connection, then an Ethernet cable of appropriate length will be needed.

The speaker's WiFi system is compatible with 802.11b, g, n or a networks and can use 2.4 GHz or 5 GHz WiFi frequency bands.

If connecting using WiFi, the speaker will typically work within a 10-20 metre radius from your wireless router or access point. The actual range achieved will depend upon the building type, other nearby wireless networks, and possible interference sources.

**IMPORTANT:** Before you continue, make sure that your router (or access point) is powered up and working with your broadband Internet service (use your computer, smart-phone or tablet to verify this). To get this part of the system working you must refer to the instructions supplied with those items.

## About this instruction manual

This instruction manual is split into sections for each of the operating modes of your Roberts S1/S2 speaker. Each section is clearly identified by the shaded heading in the top right hand corner of each pair of pages.

Before using the Internet Radio and Music Player functions, you will need to connect your speaker to your computer network using either the WiFi or Ethernet connection. This is covered in the section titled **Setup**.

The **Internet Radio** section describes how to find radio stations to listen to. These can be radio stations that you already know and listen to conventionally, or new stations you may search for. You may set up stations that you like as Favourites so that they are more readily accessible.

The section for the **Music Player** describes how you may play music files that you may have stored on a computer or other devices connected to your network. The use of Shared Media (using UPnP) is explained.

The **Spotify Connect** section explains the use of the speaker in conjunction with the Spotify internet based music streaming service.

The **Bluetooth** section describes how to use your S1/S2 to play audio files or video soundtracks directly from your smartphone, tablet or similar devices.

The **Audio Connection** section shows how to connect your speaker to other audio equipment.

The **Multi-room** section explains how your speaker may be connected as part of a wireless music system.

The **UNDOK Settings** section explains how to adjust settings for your speaker including equaliser and sleep timer.

The **Information** section includes troubleshooting, specifications and warranty information.

## Introduction

### Setup

(page 8)

### Internet Radio

(page 12)

### Music Player

(page 16)

### Spotify Connect

(page 22)

### Bluetooth

(page 25)

### Audio Connections

(page 29)

### Multi-room

(page 30)

### UNDOK Settings

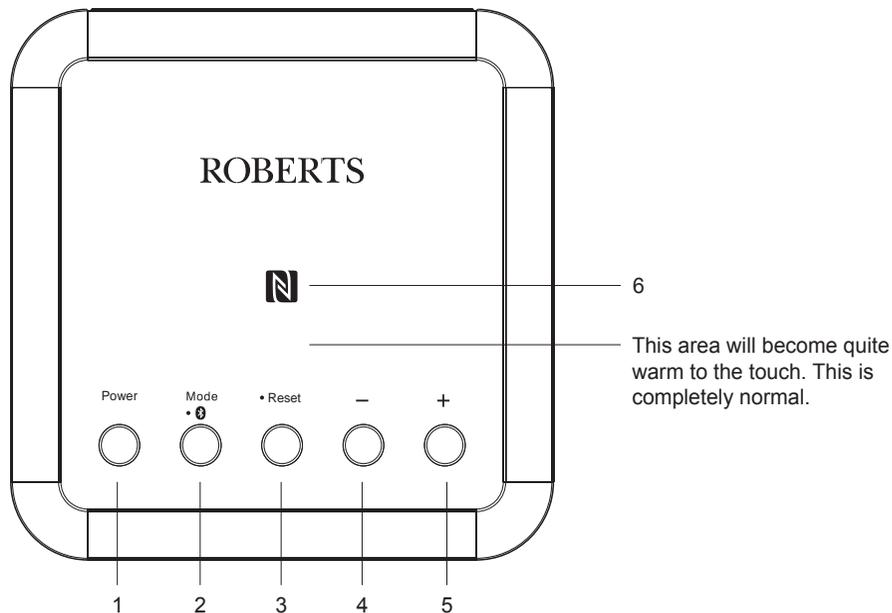
(page 35)

### Information

(page 36)

## Controls and connections

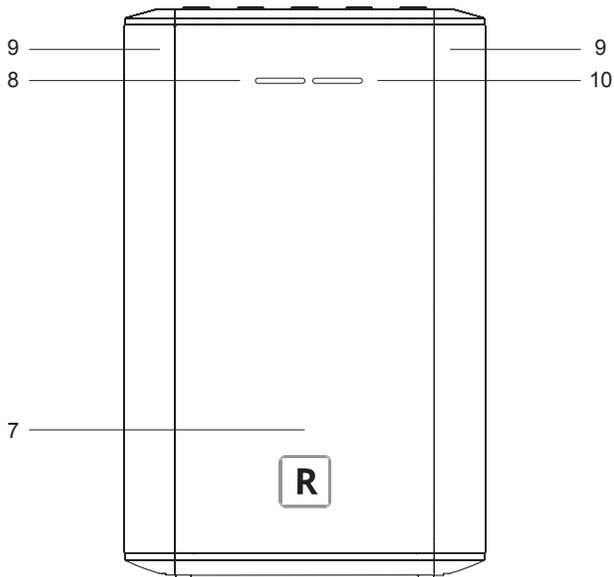
### S1 & S2 Top view



1. Power / On/Standby button
2. Mode / Bluetooth Pair button
3. Reset button

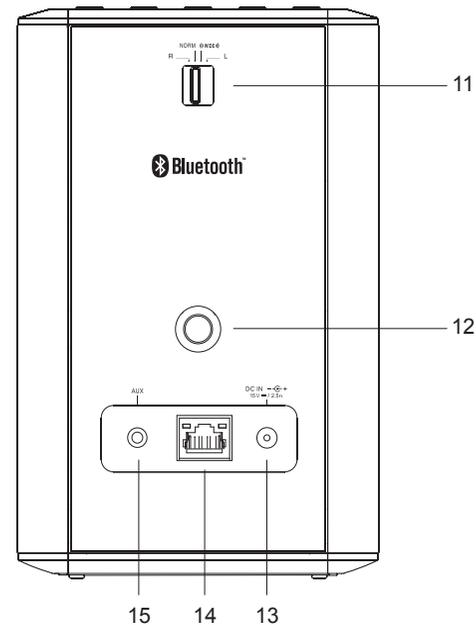
4. Volume Down button
5. Volume Up button
6. NFC detection area

S1 Front



- 7. Bass speaker
- 8. Power / Standby indicator
- 9. Tweeter / mid range speakers x 2
- 10. Mode / Bluetooth Pair indicator

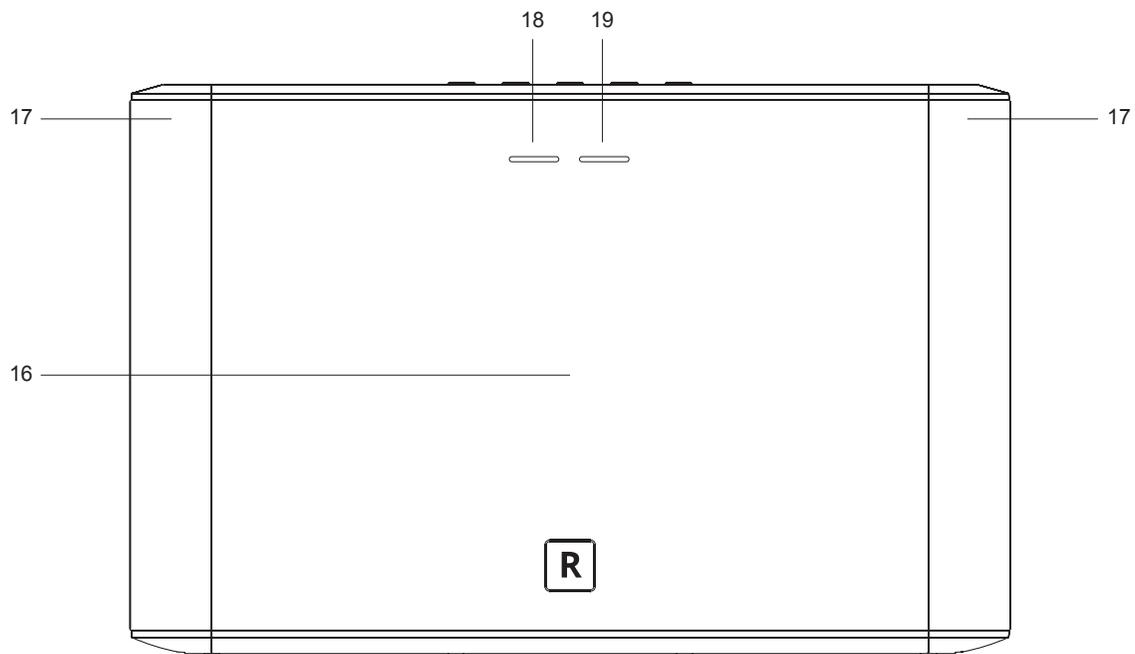
S1 Rear



- 11. Stereo mode switch
- 12. Threaded wall mounting hole (see page 38)
- 13. DC input socket
- 14. RJ45 Ethernet socket
- 15. Auxiliary input socket

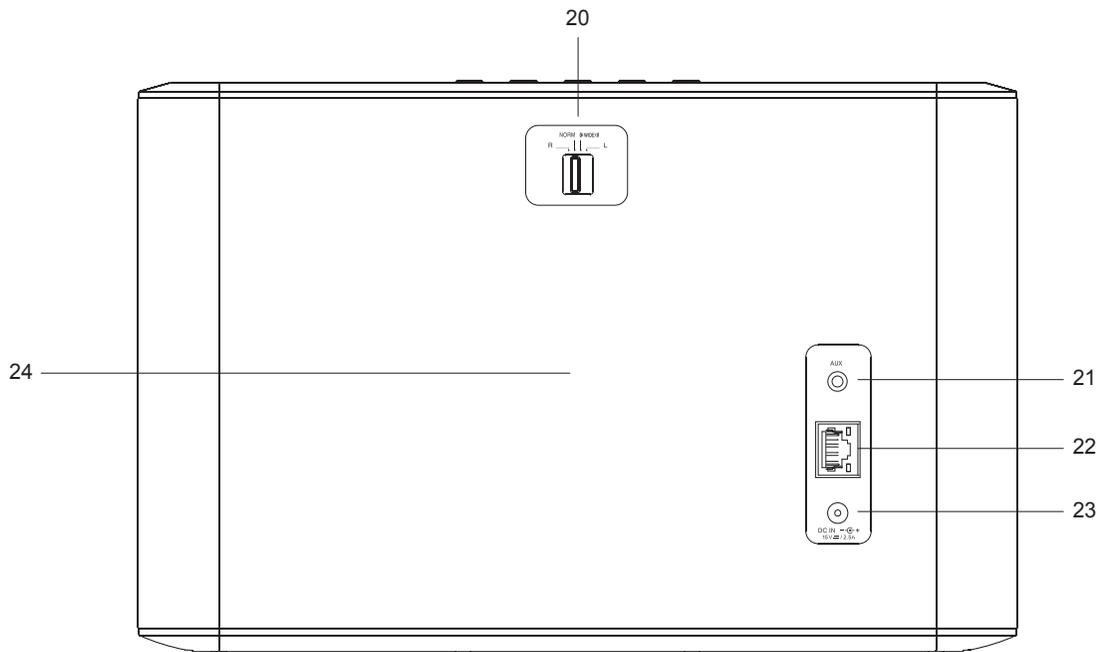
## Controls and connections

### S2 Front



- 16. Bass speaker
- 17. Tweeter / mid-range speakers x 2
- 18. Power / Standby indicator
- 19. Mode / Bluetooth Pair indicator

S2 Rear



- 20. Stereo mode switch
- 21. Auxiliary input socket
- 22. RJ45 Ethernet socket
- 23. DC input socket
- 24. Passive bass radiator

## Controls and connections cont.

The best way to control your speaker is by using the UNDOK app. However you could also use the buttons on your S1/S2 for the following functions.

1. Pressing the **Power/Standby** button brings your speaker out of Standby mode.

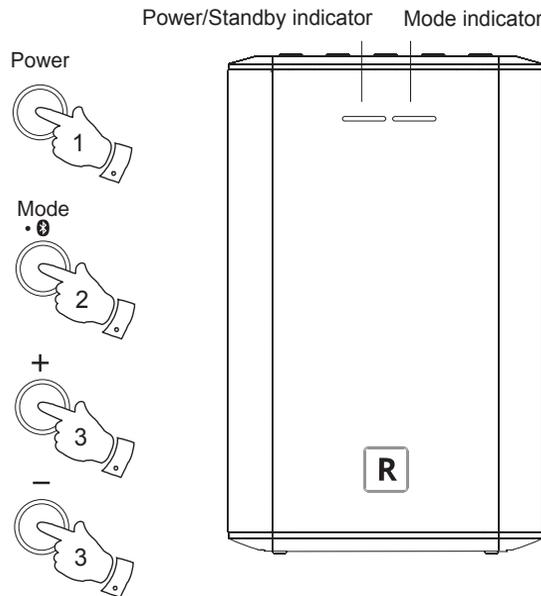
Pressing the **Power/Standby** button while the speaker is in use will cause it to return to the Standby mode. The **Power/Standby** indicator will light white.

2. Press and release the **Mode** button to select the desired operating mode, Internet Radio, Spotify, Music Player, Bluetooth or Auxiliary Input. The **Mode** indicator will change colour according to the source selected (see page 33).

Instructions for each operating mode are given in the later sections of this book.

3. You can control the volume using the **Up** and **Down Volume** buttons on your speaker.

**Note:** You will need to use the UNDOK app to select your choice of content for most operating modes.



## Step 1 - Download the UNDOK app

Download and install the UNDOK app on to your Android or iOS device.



- iOS - Download from Apple App Store
- Android™ - Download from Google Play Store



- If you already have the UNDOK app installed on your device ensure that you have the latest version.
- It is possible that this app may have been changed slightly since these instructions were written.
- Please refer to the Roberts Radio website for guidance on how to use the latest version.

**Note:** At the time of writing Android version 4.0.3 and later or iOS version 8 or later are required to use UNDOK.

## Step 2 - Plug in your speaker and switch on for first use

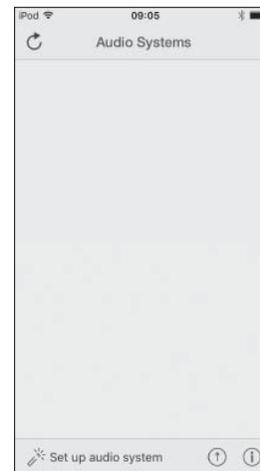
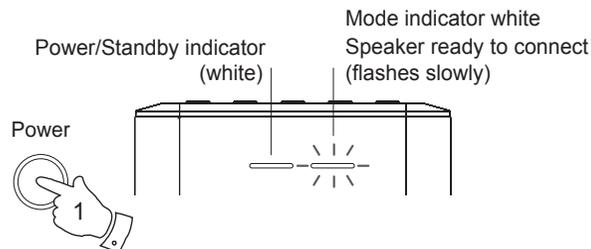
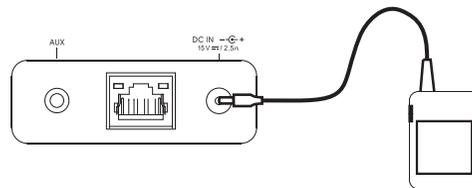
1. Place your speaker on a flat surface and plug the cable from the mains adaptor into the **DC input socket** located on the rear of the speaker (marked 'DC In') ensuring that the plug is pushed fully into the socket.
2. If you wish to use a wired network connection, plug the Ethernet cable into the RJ-45 socket at the back of the speaker.
3. Ensure that the **Stereo mode** switch is in the 'Normal' or 'Wide' position.
4. Plug the mains adaptor into a wall socket and switch on the socket.

**IMPORTANT:** The mains adaptor is used as the means of connecting the speaker to the mains supply. The mains socket used for the speaker must remain accessible during normal use. In order to disconnect the speaker from the mains, the mains adaptor should be removed from the mains socket outlet completely.

5. Press and release the **Power** button. The **Power** indicator will glow white.
  6. After approximately 10 seconds the **Mode** indicator will flash slowly (white).
  7. Your speaker is now ready to be connected to your home network.
- After each use the speaker will remember the mode used and then switch on in that mode the next time it is used.

**Note:** If your speaker has not previously been connected to a network, the Mode indicator will flash white. If this is not the case please reset the speaker see page 36.

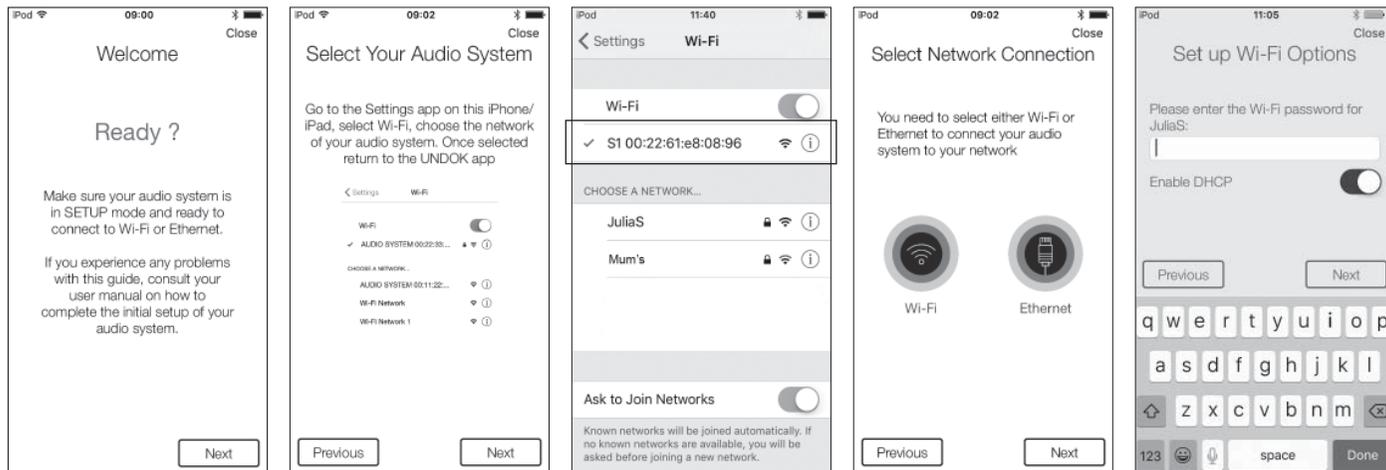
8. Use the UNDOK app to connect your speaker to your network. If adding more than one product this must be done for the first time each product is used.



## Step 3 - Setup new audio system - Apple iOS device

If your device uses Android, please see page 11.

The **UNDOK app** has a setup wizard to help configure suitable audio devices to connect to your home WiFi network.

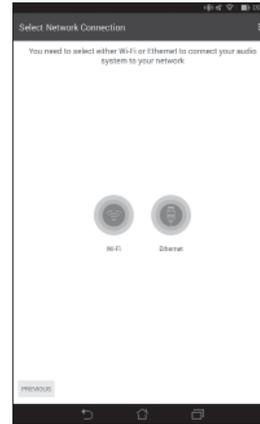


1. Open the **UNDOK app**.
2. Setup a **New Audio system**.
3. The app will prompt you to use your **device's WiFi** settings to connect to your speaker.
4. Select your **S1** or **S2** speaker. Once your device has connected to the speaker the **Mode indicator** will flash white in short bursts. You must then **return** to the UNDOK app.
5. Use the app to complete the setup, including giving the speaker a name (living room, etc), whether it is connected via WiFi or Ethernet. If you wish to connect using an Ethernet cable please (see page 40).
6. For a WiFi connection the app will ask you to choose a WiFi network and enter the appropriate password.
7. The **Mode indicator** on your speaker will stop flashing and remain lit when it has successfully connected to your network.

## Step 3 - Setup new audio system - Android device

If your device is an iPhone or iPad (i.e. uses iOS) please see page 10.

The **UNDOK** app has a setup wizard to help configure suitable audio devices to connect to your home WiFi network.



1. Open the **UNDOK** app.
2. Setup a **New Audio system**.
3. The app will show a list of suggested audio systems to setup.
4. Your speaker will normally appear in this list as **S1** or **S2**. It may appear in the list below called Other. Select the speaker to be setup.
5. Once your device is connected to the speaker the **Mode indicator** will flash white in short bursts. Use the app to complete the speaker setup, including giving the speaker a name (living room, etc).
6. Choose whether it is connected via WiFi or Ethernet. If you wish to connect using an Ethernet cable please (see page 40).
7. For a WiFi connection the app will ask you to choose a WiFi network and enter the appropriate password.
8. The **Mode indicator** on your speaker will stop flashing and remain lit when it has successfully connected to your network.

**Note:** If when setting up your speaker your Android device complains that it cannot connect to the internet this is because it is temporarily connected directly to your speaker. You should ignore this warning message.

## Internet Radio

### Internet Radio - the basics

Before you can use your speaker to listen to broadcasts via the Internet, it is necessary to have connected it to your computer network using either the wireless (WiFi) connection or the wired Ethernet connection (RJ-45 socket) located on the back of the unit. Please see pages 8-11 for details.

There are literally many thousands of radio broadcasts available via the Internet as well as 'Podcasts'. Your speaker provides several ways of searching for broadcasts in order to make finding and choosing them easier. Once you have found the radio stations that you like, you may either store them as presets or add them to a list of your favourite stations which your speaker can access. The speaker allows you to store up to 20 presets and as many favourites as you like.

You may search for an Internet radio station by Location. If you know the name of the station and the country from which a station is broadcast this may be the easiest method to find a station. It is also a great way to experience radio from other parts of the world.

You may also search for an Internet radio station by Genre. If you prefer a particular type of music, Blues for example, you may search for a radio station that broadcasts that type of music, and you can choose from a list of Blues radio stations regardless of location, or taking location into account.

If you know part of the name of an Internet radio station, you can enter it into the UNDOK app and it will search for stations that match that name. This can be helpful if you are unsure of the location or genre of a particular station.

The S1 and S2 speakers connects to a radio station database which serves many users in many countries. This means that there is a very wide range of programme content available. You can also search for stations which have been recently added to those available (new stations) or you can search for the most popular.



Internet radio

## Selecting internet radio

1. Ensure your speaker is switched on.
2. Select **Internet Radio** as the music source.
3. Select 'Browse' to choose radio stations.

## Presetting internet radio stations

Your speaker has twenty memory presets for internet radio which can easily be set to store the details of any radio station or podcast.

1. To store the currently playing radio station select the **Preset** option on the playing screen and choose the desired preset number. Press the '+' symbol to store your preset station.
2. To recall a preset select the **Preset** option on the playing screen and select the desired preset station.

## If your speaker cannot connect to a radio station

Note: If your speaker is unable to connect to an Internet radio station this can be for many reasons, but typically will be due to one of the following:

The radio station may not be broadcasting at the present time.

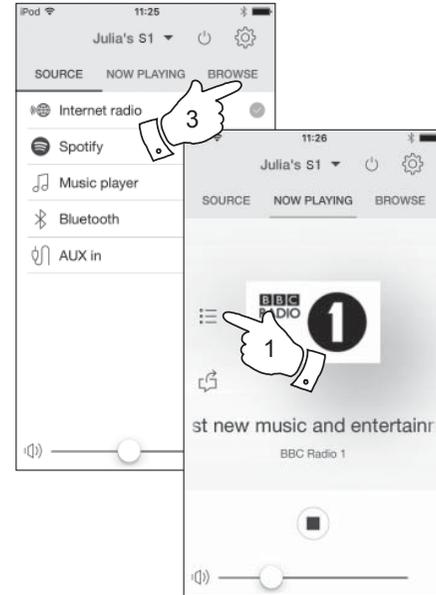
The radio station may not be able to accommodate any more connections from internet listeners.

The broadcaster may limit listening to specific countries or regions

There may be network congestion (either locally or at a distance) which is affecting the reliability of the connection.

If your speaker can connect, but the audio is not continuous and the radio keeps having to reconnect, this may be due to the radio station only having limited connection capacity.

Please also refer to the 'Troubleshooting' section on page 42.



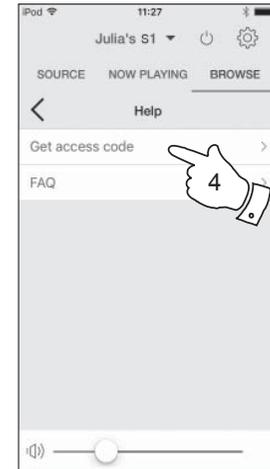
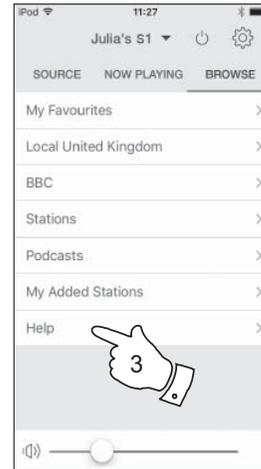
## Customising your speaker

In addition to storing your favourite radio stations in the presets, your speaker allows you to create customised lists of stations which can appear in two special menus called *'My Favourites'* and *'My Added Stations'*.

Your speaker uses a database which is accessed via the Internet in order to find out which radio stations are available and how it should connect to them. You are able to add your personal selections to this database. These are configured using a web browser on your device or on a PC. You can choose the stations which will appear in the *'My Favourites'* menu from the large selection already listed. Additionally, if you find a radio station that is not listed then you may also add the Internet address (URL) of the station's audio stream to your selection. It will then appear in *UNDOK* via the *'My Added Stations'* menu item.

## Registering an account

1. Open the web site <http://www.wifiradio-frontier.com> using a web browser. Click on the *'Register here'* link and follow the on-screen instructions to register an account. During the registration process the web site asks for an access code. This allows it to uniquely identify your speaker from the many others that it also provides data for. To obtain the access code, please follow these steps.
2. Using the *UNDOK* app select **Internet radio** as the music source for your S1 or S2 speaker.
3. Select the *'Browse'* screen and then select the item called *'Help'*.



4. In the *Help* menu, select the menu item *'Get access code'*. Provided that the speaker is connected to the Internet, a code will be displayed of typically seven characters (upper case letters and numbers). Make a note of this code for the next step. If you need to re-register later you must repeat this process to get a fresh access code.
5. You should then use the code displayed to fill in the *Access Code* field on the web page when you set up your account.

Once you have your account set up, if you have other speakers which use the same database, you may also add them to your account. You will need to get an access code for each product in order to add it to the account. They may then share your favourite and added radio station details.

## Customising your speaker - cont.

### Configuring My Favourite Stations

1. Using the web site at <http://www.wifiradio-frontier.com> it is possible to search among the many radio stations that are available by location, genre, or language. You may also choose from new or popular stations.
2. When the radio stations that you have found are shown on your computer screen, they are shown with a 'Play' icon and an 'Add to favourites' icon (the plus symbol and heart). Clicking on the 'Play' icon will allow you to hear the radio station via your device or a PC. Clicking on the 'Add to favourites' icon will cause the radio station to be added to the list accessible via your speaker.
3. To help you organise your favourites, and since you may have a great many after a while, the web site will allow you to specify the name for a category or group under which the radio station will be listed. Suitable names might be 'Rock', 'Smooth', 'Mum's stations', and so on. When ever you add another radio station to your favourites you can either add it to an existing category or create a new one.
4. Once you have Internet radio stations available in your My Favourite Stations list, you may play these stations from your speaker. These stations will be available from the Internet Radio menu item '*My Favourites*' in the UNDOK app.
5. To look at, modify or delete your favourite stations lists on the web site, use the link '*My favourites*' in the '*My account*' area. To delete a favourite radio station, click on the icon with a heart and minus symbol.

### Configuring My Added Stations

1. If you wish to listen to a radio station which is not currently held in the database at <http://www.wifiradio-frontier.com> it is possible to add the details yourself. You will need to obtain the internet address (URL) for the audio stream for the station that you wish to add. This may be information provided by the radio station itself, via its web site, or perhaps passed to you from another listener.  
**Note:** The URL for the audio stream will generally **not** be the URL for the web page from which you listen to the station on your PC.
2. Use the '*My added stations*' link in the '*My account*' area on the web site. This allows you to add details of new stations or to modify those already added. You can provide a name for the radio station which will be shown in UNDOK. You must also provide the web address, location and format details.
3. Once you have Internet radio stations available in your My Added Stations list, you may play these stations from your speaker. These stations will be available from the Internet Radio menu item '*My Added Stations*' in the UNDOK app.
4. It is possible to add the web addresses for audio streams which may not be playable by your speaker. The Roberts S1 and S2 can only play MP3, WMA and AAC Internet radio streams.
5. To look at, modify or delete your added stations list on the web site, use the link '*My added stations*' in the '*My account*' area. To delete an added radio station, click on the icon with a heart and minus symbol.

## Music Player

### Use with Windows, Apple Mac, Linux

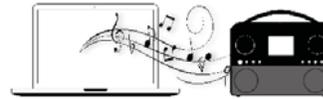
The Music Player allows you to play audio files which are stored on another device connected to your network.

Networked devices that could hold audio files can include computers, smart phones, tablets, Network Attached Storage (NAS) units, and network routers which have UPnP / DLNA file sharing capability. In order to play files from a device on your network, your speaker must connect to a file server program on that device which uses the Universal Plug and Play (UPnP) protocol (often known as DLNA).

If the device is a computer or tablet using Windows, then it probably already has a UPnP server program available in the form of Windows Media Player (WMP). This allows you to share your files to devices on your network, and you may then select files by Album, Artist, and so on using UNDOK. WMP can serve MP3, WMA, AAC and WAV files to your speaker (and FLAC files from Windows 10).

If you are an Apple MacOS, Linux, iOS or Android user, or if you have your audio files stored in other formats, such as ALAC, there are many other UPnP server programs available. Note that Apple computers do not support UPnP streaming natively and third party software is required for this task. If you wish to use a DLNA server built into your network router, you should consult your router's documentation on how this should be configured.

The Music Player on the speaker can play audio files in MP3, WMA, AAC, ALAC, FLAC and WAV formats. WMA Lossless files can also be played when using Windows Media Player as the UPnP server. Note that the playback of files encoded using WMA Voice, WMA 10 Professional, and of files which have DRM protection is not supported by the speaker.



Please note that when using a UPnP / DLNA server, the search and selection criteria that are available to the user are determined by the server software, and not by the device playing the content. Typical searches include Artist, Album and Genre. Many server applications also allow you to access your files according to the folders within which they are stored as well as other criteria. Windows Media Player is less flexible than some other UPnP servers in this regard, but is generally easier to set up.

Many UPnP server applications are also capable of sharing pictures and video files to other network connected devices. If this is the case (as it is with Windows Media Player) you may see the option of choosing between 'Music', 'Video' and 'Pictures' on the Music Player's menu. Clearly you should only select the 'Music' option. Content offered via the alternative options will not be playable on your speaker.

Some third party server applications allow customisation of the search criteria and indexing methods. This can be useful if you have a very large collection of stored music files.

It is not possible in this book to describe server applications for all available environments, and neither is it practical to describe how to get the best out of each. Windows Media Player is used as an example in this case, although many of the principles are applicable to other servers as well. The access to the media, the choice of media for playing, and the use of the media playback controls from the product or from its controlling app are similar regardless of the UPnP / DLNA server being used.

When using your speaker as part of a group of multi-room products, audio files in ALAC and FLAC formats will only play on the group master (see page 43).

## Accessing your audio files via a UPnP server

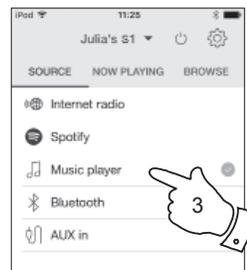
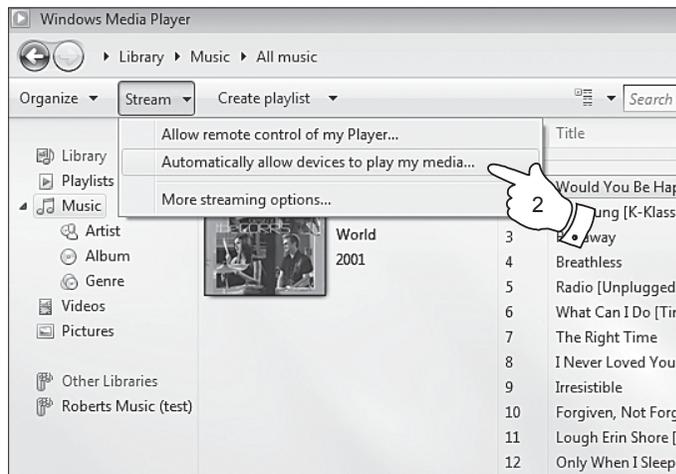
If your device or PC is running Windows 7, 8, 8.1 or 10, then Windows Media Player includes a UPnP server which will make your files available to your speaker. There are other UPnP server solutions available for non-Windows users and for Windows users who may wish to use an alternative (see the preceding page).

It is beyond the scope of this instruction book to cover all possible options for UPnP. We explain the use of Microsoft's Windows Media Player here since that will be the first choice for the majority of users.

## Set up UPnP access with Windows Media Player

1. At the time of writing, Windows 7, 8, 8.1 and 10 all use Windows Media Player version 12 (referred to here as WMP 12), and the configuration is similar in each case. WMP 12 can create a library from all the media files available to it on your device or PC. To add new media files to the library, select '*Library*', then '*Music*', then '*All music*' or '*Artist*', '*Album*' etc. This will show you the current library contents. You may then simply drag and drop files from other locations into the library. Alternatively, with media files or folders on the screen, you may right-click on the file or folder and select '*Include in library*' and then select '*Music*'. In this way you can quickly add additional content to your music library.
2. In WMP 12, click on '*Stream*' (see picture at right) and then select '*Automatically allow devices to play my media*'. Then accept the '*Automatically allow all computer and media devices*' option. There are other options (see overleaf) but this is the simplest if you just wish to quickly enable media streaming to your speaker.
3. Ensure your speaker is switched on and select **Music Player** as the music source.

## Enabling Media Streaming in Windows Media Player 12



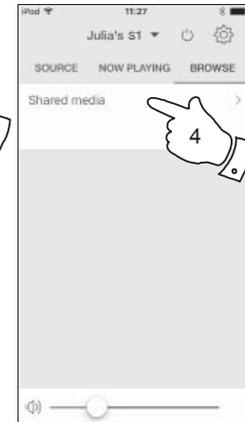
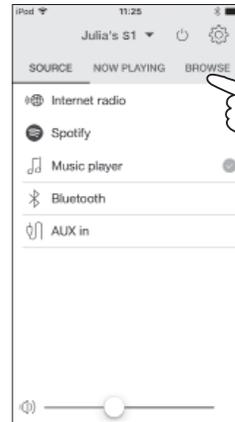
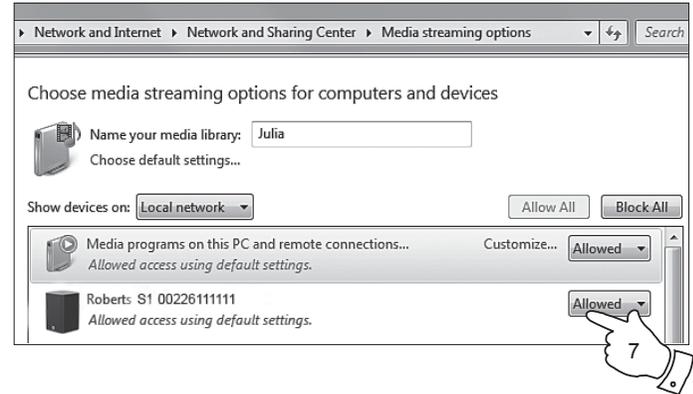
## Set up UPnP access on a Windows PC - cont.

4. Select *'Browse'* in the UNDOK app and select *'Shared media'*. The speaker will scan for all available UPnP servers. It may take a few seconds for the speaker to complete its scan.
5. After scanning, select your UPnP server. If you allowed automatic connection previously, your speaker should now connect and you may skip to the next page.
6. Your PC may prompt you that there has been a connection to your UPnP server. Whether prompted or not, in order that the speaker may access the music files, you will need to click the *'Library'* tab in WMP 12 and select the *'Stream...'* item to open the *'Media Streaming'* window. Select *'Automatically allow devices to play my media'* then select *'Automatically allow all computer and media devices'*.  
Alternatively select *'More Streaming options'* to enable sharing on a 'per device' basis.
7. In the *'More streaming options'* window, the speaker may be listed as a blocked device. Click on the button shown to select *'Allowed'*.

Note: If you are using Microsoft's Windows' firewall software, this should be correctly configured by WMP 12. If you are using third party firewall software you may need to manually configure it to allow your unit and WMP 12 to communicate (see the 'Troubleshooting' section on page 42).

8. Select the named server again. If WMP 12 is now able to communicate with your speaker you will be presented with some media selection options on the display.

Allowing a device to connect to Windows Media Player 12



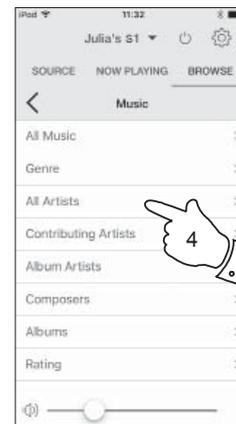
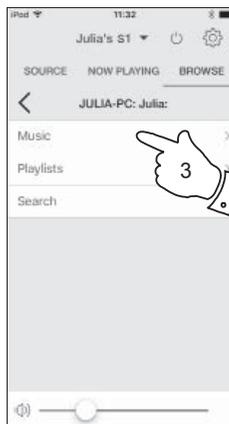
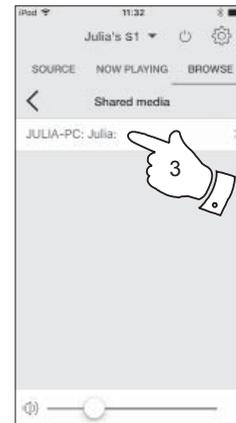
## Locating and playing media files using UPnP

Once the UPnP server has been configured to share media files with your speaker, you may select the files that you wish to play as follows:-

1. Ensure your speaker is switched on. Select **Music Player** as the music source. Select 'Browse' and the main Music Player menu will then be displayed.
2. Select 'Shared media' to cause the speaker to scan for UPnP servers. Note that it may take a few seconds for the speaker to complete its scan.
3. After a successful scan select your UPnP server. If the display shows multiple media types, select 'Music'. (Some UPnP servers can serve pictures and video content to suitable devices.)
4. UNDOK will now list the media categories which are made available by the UPnP server - for example, 'Album', 'Artist' and 'Genre'. Select which category you wish to browse.

If you wish to use the search function select 'Search'. You may select characters to build a keyword for searching for content to play.

When you first set up sharing with a UPnP server, not all of your files will be available immediately. The UPnP server must look inside each file to identify the artist and album information from 'tags' embedded in them. The server may also need time to access the Internet to obtain additional information such as 'album art' which it can display when you examine your music library on your PC or device. For a library of many files this can take some time.



## Media selection

When searching via UPnP you will have a selection of search criteria as determined by the UPnP server software. This allows you to search by a given information type (Album, Artist, Genre, etc.) and then to narrow the search to an album or to a particular track within an album.

Some UPnP server applications allow the search options to be customised.

## Controlling playback

You can control media playback using UNDOK.

1. Press the **Play / Pause** icon to pause playback of the current track.
2. If you press the **Play / Pause** icon, playback will resume from the point where it was paused.
3. Press the **Previous** icon to start playback of the previous track in the list.
4. Press the **Next** icon to start playback of the next track in the list.
5. Press and hold the **Next** or **Previous** icons to move through the current track. The longer the icon is pressed, the greater the speed at which the player will move through the track. Release the icon when the desired point is reached. (Note that this feature is not supported when playing files encoded using the FLAC and ALAC formats).
6. You may choose to repeat the current album or to play the files in random order, or both options together. Use the UNDOK app for repeat and shuffle options.



## Windows 'Play to' / 'Cast to Device' function

If you use Windows 7, 8, 8.1 or 10 it is possible to choose a music album, track or playlist at the computer and then tell Windows that this should be played on the speaker using the 'Play to' function (called 'Cast to Device' in Windows 10).

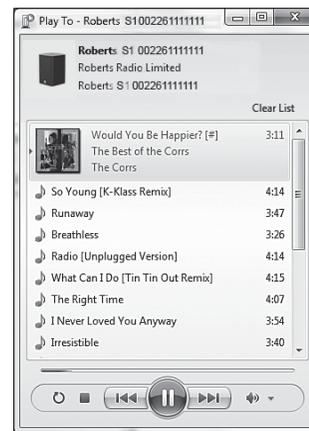
Similar functionality is available for other computer types and for handheld devices using Apple's iOS or Android operating systems. In this mode the speaker operates as a Digital Media Renderer (known as DMR mode).

1. Ensure your speaker is plugged in and connected to your network.
2. At your Windows PC, locate the file, album or playlist that you wish to play on the speaker.
3. Use the right-hand mouse button to pop-up a menu of options for the chosen item and select the 'Play to' / 'Cast to Device' option.
4. Windows should show you one or more devices, including your speaker, to which you may choose to send the music. Highlight the speaker item and click with the left mouse button.
5. Windows will then open a 'Play to' / 'Cast to Device' window showing the track or tracks to be played. Your computer will then take control of your speaker. Your speaker will enter the Digital Media Renderer mode (DMR) and after a few seconds the speaker will start playing.
6. While the speaker is playing in DMR mode you can use the controls in the 'Play to' / 'Cast to Device' window on your computer to skip tracks, fast-forward or rewind, to pause or restart, and to change the volume on the speaker.

You may also use the controls on your speaker to adjust volume or to change operating mode.

7. While playing, you may select additional content within Windows and again use the 'Play to' / 'Cast to Device' function. The additional tracks will be added to the playlist in the current 'Play to' / 'Cast to Device' window. You may also delete or change the order of tracks within the 'Play to' / 'Cast to Device' window.
8. When you wish to exit DMR mode, simply either switch off your speaker or select a different operating mode.

**Note:** Some Windows security software can prevent correct operation of the 'Play to' / 'Cast to Device' function. Such software may have updates or configuration options which will permit 'Play to' / 'Cast to Device' to operate correctly - please consult your anti-virus software supplier. The 'Play to' / 'Cast to Device' function in Windows 7, 8, 8.1 and 10 has been tested successfully with the S1 and S2 speakers when using Microsoft's own security software without problems.



## Spotify Connect

### Spotify Connect - the basics

Spotify is all the music you'll ever need. Millions of songs available instantly. Just search for the music you love, or let Spotify play you something great. Spotify works on your phone, tablet, computer and home speakers. So you'll always have the perfect soundtrack for whatever you're doing.

Spotify Connect allows your Spotify selections to be played through the speaker, remotely controlled from your iPhone, iPad, Android device or any Desktop.

Spotify Connect also allows you to transfer the playing of the sound to other Spotify Connect enabled devices under the control of your smart-phone, tablet or any Desktop

Once your Spotify account has been connected to your speaker, you may start Spotify Connect playing from the speaker without needing to use the Spotify app.

Spotify Connect compatibility is shown with the following identifier:



### Setting up Spotify Connect

For more details about setting up Spotify Connect, please go to [\*\*spotify.com/connect\*\*](https://www.spotify.com/connect)

To use Spotify Connect with your S1 or S2 speaker you will need to download the Spotify app and you will need a **Spotify Premium** account.

The Spotify software is subject to third party licenses found here:

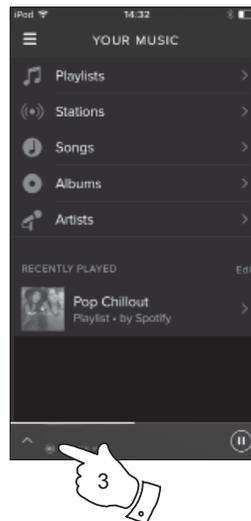
[\*\*www.spotify.com/connect/third-party-licenses\*\*](https://www.spotify.com/connect/third-party-licenses)

## Playing music using Spotify Connect

Spotify Connect lets you push a button to control the music between your Spotify Connect enabled devices. While playing a song, you can switch playback from your smart-phone, tablet, Desktop or even to a Connect enabled speaker.

1. Ensure your speaker is switched on.
2. Make sure that both your speaker and Apple iOS / Android device are connected to the same network and that you have downloaded the latest Spotify app to your device.
3. Simply open Spotify on your Apple iOS / Android device and tap the **Spotify Connect icon** (🔊) on the play screen. When the Spotify app has identified other devices that are compatible with Connect, the Connect icon will be shown with a circle. When another device is playing, the Spotify Connect icon will become green. Tapping the Connect icon will show a list of Connect enabled devices and allow remote control of the volume.
4. To select your speaker choose **S1** or **S2** on the Spotify Connect devices screen. You are now ready to play music through your speaker using Spotify Connect.

The next time you open Spotify, it will continue playing from the previously selected device.



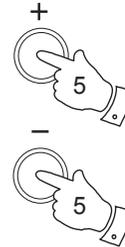
Note: On some devices the layout of controls within the Spotify app may be different from that shown and may also change with different versions of the app. Refer to [spotify.com/connect](https://spotify.com/connect) if needed.

## Controlling Spotify on your speaker

The music can be controlled using either the UNDOK app or any Spotify Connect enabled device.

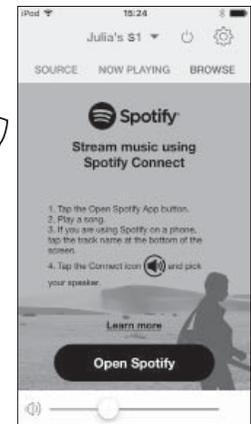
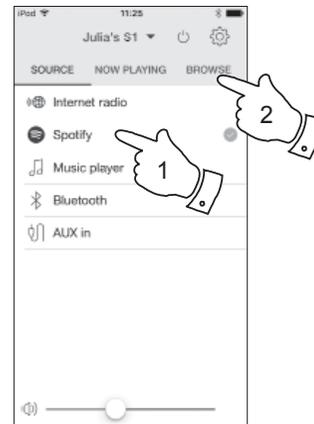
The volume may also be controlled using the buttons on your speaker.

1. Press and release the **Play / Pause** icon to pause playback of the current track.
2. Press and release the **Play / Pause** icon, playback will resume from the point where it was paused.
3. Press the **Next** icon to start playback of the next track in the current Spotify playlist.
4. Press the **Previous** icon to start playback of the previous track in the current Spotify playlist.
5. Press the **Volume Up** or **Down** buttons on the speaker to set the required volume level. The volume may also be controlled either from UNDOK or from within the current Spotify app.



## Using the UNDOK app to select Spotify

1. Ensure your speaker is switched on and select **Spotify** as the music source.
2. UNDOK is not able to access your Spotify account directly. Selecting 'Browse' will provide a link page which you can then use to access Spotify.



## Bluetooth mode

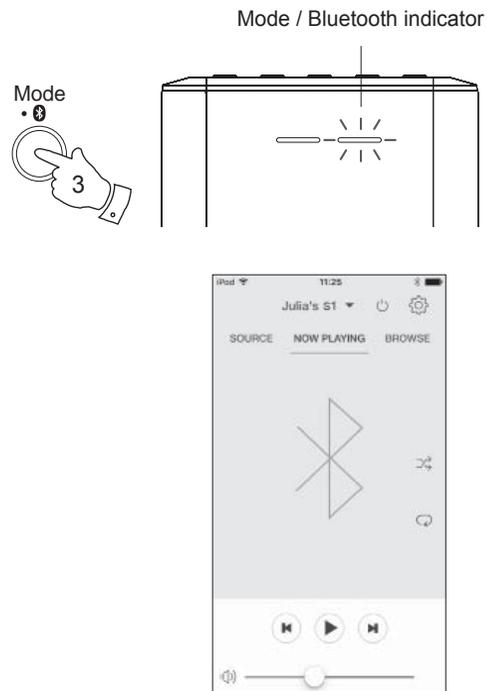
The Bluetooth mode on your speaker allows you to play audio, play sound from video files and stream music from Bluetooth capable devices such as your mobile phone, computer, tablet etc. through your speaker's loudspeakers.

- When a Bluetooth enabled device such as your S1 or S2 speaker is in a 'discoverable' state other Bluetooth devices can detect, pair with or connect to it.
- 'Bluetooth pairing' occurs when two Bluetooth enabled devices agree to establish a connection and communicate with each other.

## Connecting Bluetooth devices

1. Ensure that the Bluetooth capability on your phone, tablet or PC is enabled. You may need to refer to the user documentation for your device, since the method will vary with each device.
2. Ensure your speaker is switched on.
3. Press and release the **Mode / Bluetooth Pair** button on your speaker until the Bluetooth mode is selected or alternatively open the UNDOK app and select '*Bluetooth*' as the music source. Your speaker will show that it is 'discoverable' and the **Mode / Bluetooth indicator** will flash blue. If the indicator is blue and not flashing, then the speaker is already connected to another device. To cause the speaker to become discoverable, press and hold the **Mode / Bluetooth Pair** button.
4. Using the Bluetooth settings of your phone, tablet or PC direct it to search for 'discoverable' devices. After a few seconds, you should see a device named '*S1 or S2*'. Just occasionally it may take longer for the speaker to be found by your device.
5. Select '*S1 or S2*' to cause your phone, tablet or PC to pair with your speaker and to establish a connection.
6. Once the connection is established the Bluetooth indicator will remain steady.  
You can now begin playing music from your smart-phone, tablet, etc.

Some Bluetooth devices may require a 'Passkey' (an authentication key) in order to establish a link between devices. A passkey is similar to a password, although you only need to use the passkey once to establish a link. If your device asks for a passkey to be able to pair with your speaker then enter a code of 0000 (four zeroes).



## Playing audio files in Bluetooth mode

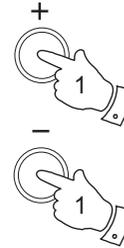
When you have successfully connected your speaker with your chosen Bluetooth device you can start to play your music using the controls on the device.

1. Once playing has started adjust the volume to the required setting using the **Volume** buttons on your speaker or the connected Bluetooth device.
2. The volume of your speaker in Bluetooth mode is affected by the volume settings on the speaker and also on the connected Bluetooth device.

If you adjust the volume control on the speaker but you find that the volume from the speaker is not sufficient, it may be that the volume setting of the connected device needs to be increased.

3. The audio player in your phone, tablet or PC may be able to respond to the **Play/Pause**, **Next** track and **Previous** track options.

**Note:** Not all player applications or devices may respond to all of these options.



## Connecting and reconnecting a Bluetooth device

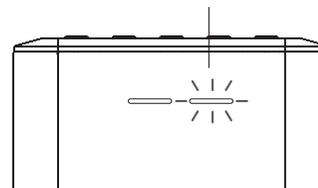
You can only have one Bluetooth device connected to the speaker at any one time although it may be paired with several devices.

Once you have a Bluetooth enabled device connected to your speaker it cannot be interrupted by another Bluetooth device unless you choose to break the connection.

1. To connect to a different device, press and hold the **Mode / Bluetooth Pair** button on the speaker until the **Mode / Bluetooth indicator** flashes blue.
2. Your S1 or S2 speaker will become '*discoverable*' by other devices.
3. You can now pair the speaker with a new device using its Bluetooth settings the speaker will be listed as '*S1 or S2*'. When the new Bluetooth connection has been established the **Mode / Bluetooth indicator** will remain lit. You may then play music from the new device through the speaker.
4. If you no longer want your Bluetooth device to be paired with your speaker you will need to delete the '*S1 or S2*' pairing on the device. Please refer to the device's Bluetooth documentation.



Mode / Bluetooth indicator



## Bluetooth information

Bluetooth connectivity performance may vary depending on the connected Bluetooth devices. Please refer to the Bluetooth capabilities of your device before connecting to your speaker. All features may not be supported on some paired Bluetooth devices.

A Bluetooth connection can provide a link for audio up to a distance of approximately ten metres. When pairing two Bluetooth enabled devices, for convenience, we recommend they should be no more than 2 to 3 metres apart. The presence of other functioning Bluetooth devices during connection may lead to operational difficulties.

Bluetooth is a short-range radio communication system and generally Bluetooth devices can communicate with each other clearly within a regular sized room or office. The reliability of a Bluetooth connection between different rooms will greatly depend upon the construction of the building.

Bluetooth communication range may be substantially reduced if the signal passes through a solid object. Human bodies, brick and concrete walls, heavy furniture or bookcases will all reduce the operational range of your Bluetooth devices to a greater or lesser extent. Glass, dry-wall or wood paneled walls and office partitions may have a less severe but noticeable effect. Metal pipes, foil-lined plasterboard, metal window frames and domestic wiring can also have an effect. You should position your Bluetooth devices closer to each other if you observe communication difficulties.

WiFi networks and cordless phones generally use similar radio frequencies to Bluetooth and may interfere with one another. If any interference is noticed, then try relocating the speaker or one of the other devices.

The Bluetooth capabilities of your speaker enable it to receive audio from many Bluetooth capable devices including mobile phones, personal computers and tablets. Only one Bluetooth device can be connected to your speaker at a time. It supports the following Bluetooth profiles and functionality.

- Your speaker supports A2DP (Advanced Audio Distribution Profile) which is a stereo audio connection that streams stereo music from PCs, mobile phones etc. SBC and AAC audio codecs are supported.
- Your speaker supports AVRCP (Audio Video Remote Control Profile) which allows your speaker to control music playback from the connected device.

**Note:** Some mobile phones may temporarily disconnect from your speaker when you make or receive calls. Some devices may temporarily mute their Bluetooth audio streaming when they receive text messages, emails or for other reasons unrelated to audio streaming. Such behaviour is a function of the connected device and does not indicate a fault with your speaker.

# Audio Connections

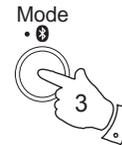
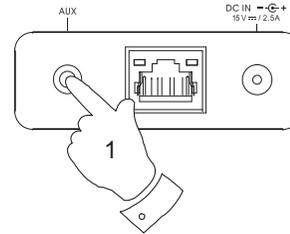
## Auxiliary input socket

A 3.5mm **Auxiliary Input** socket located on the rear of your speaker is provided for connecting the audio signal from an external audio source such as an MP3 or CD player.

1. Connect a stereo lead from the headphone output of your MP3 or CD player to the Aux In socket located at the rear of the speaker. Typically this lead will have a 3.5mm stereo plug at both ends.
2. Switch on your speaker.
3. Press and release the **Mode** button until the Aux In mode is selected (green indicator) or select 'AUX in' in the UNDOK app.
4. Press the 'play' on the connected audio device. If you are using its headphone output for the connection, set its volume control to a level of somewhere between two-thirds and maximum (the objective is to get a strong audio signal but without too much distortion). Then adjust the volume on the speaker as required.

Note, if using an iPod as the sound source, you may need to set its output to maximum to get an adequate audio signal level.

5. After use, disconnect your player by removing the cable from the Auxiliary input socket in order to listen to your speaker conventionally.



## Multi-room - the basics

Your S1 or S2 speaker may be used with other products as part of a multi-room system.

Products may be combined into a synchronised group allowing several units to play the same content around your home.

Multiple groups may be configured for different areas of the home or for different users.

Different products may use the same or different operating modes, but audio will not be synchronised between groups, only between products in the same group.

You may control a single product, a group of products, or even multiple groups using the UNDOK app.

Each group that you configure may contain up to five compatible products. Typically as many as 16 products may operate together on a single network. The maximum number of products that will work together reliably is dependent upon the reliability and capability of the network.

Compatible products from Roberts also allow content from other sources to be shared with all the products in a group. These include CD, DAB and FM radio.

The UNDOK app allows you to:

- Create a group
- Rename a group
- Edit a group - add or remove one or more products
- Delete a group
- Control a group - choose operating mode and browse for content
- Adjust volume for an entire group or for individual products within a group
- Control products which have not been assigned to any group



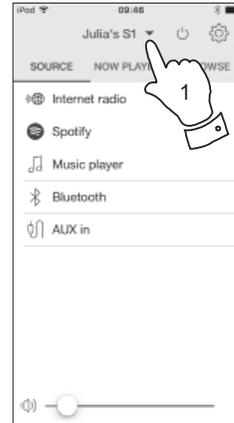
Control via the UNDOK app

## Creating and editing a multi-room group with UNDOK

You can use the UNDOK app to combine your S1 or S2 Smart speaker into a group with the other multi-room products.

**Note:** You may add up to five connected audio products into any one group.

1. Access your list of connected audio products within UNDOK.
2. A list of audio products connected to your network will be shown.
3. Select the edit group icon.
4. UNDOK will show the group setup screen and a list of the products available for grouping.
5. Select the audio products that you wish to add into your group (a maximum of four additional products). You may add or remove products as needed.
6. You may rename your group, for example *'Family Room'* or *'Down Stairs'* etc.
7. Confirm your selection.
8. You may choose to delete a group. The products that were previously in the group will then be listed as individual products.



## Playing audio to a group

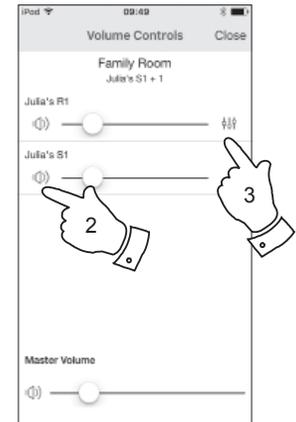
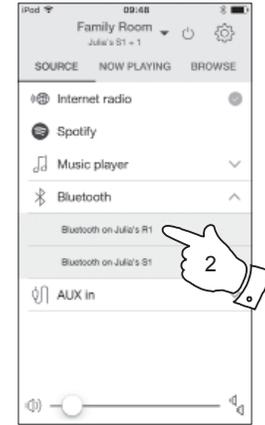
The process of choosing the audio source and content for a group of products is almost the same as for a single product.

1. Select the desired group (or individual product if not in a group).
2. Select the desired source. If more than one product offers the same source type, e.g. Bluetooth then each will be shown in the source menu.
3. Select 'Now Playing' or 'Browse' as needed to access content for the selected source.

## Volume control using UNDOK

UNDOK allows you to control the volume of a group of speakers and the volume of individual speakers within the group.

1. Use the multiple speakers icon to access the individual volume controls.
2. You may also mute either the group, or products within the group using the speaker icon.
3. The equaliser for products in a group can also be accessed from the group's volume control.



## Mode indicator and controls in a multi-room configuration

1. When your speaker is used in a multi-room group and it is acting as the source, providing content to other products in the group, it is said to be acting as the group Master.

In this situation, the speaker's mode indicator will show different colours to indicate the current operating mode of the product, just as if the speaker was operating alone and not as part of a multi-room group.

2. The buttons on the speaker will operate in all modes exactly as they do when the speaker is used on its own. The On / Standby button will control the On / Standby state of all products within the same group.
3. When your speaker is used in a multi-room group and it is receiving content from one of the other products in the group, it is said to be acting as a Client within the group.

In this situation, the speaker's mode indicator will show White.

4. While playing as a group client, the volume control buttons on the speaker will operate normally but will not affect others in the group.

The On / Standby button may be used to put all of the devices in the group into Standby, or to switch them back on, as needed.

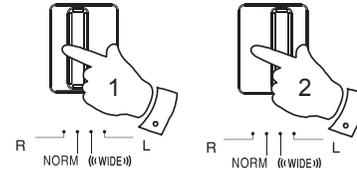
Mode		
	Internet radio	Purple
	Spotify	Yellow
	Music Player / Play-to	Cyan
	Bluetooth	Blue
	Auxiliary Input	Green
	Multi-room client member	White

## Stereo mode switch

You can configure your S1 or S2 as a stand alone stereo speaker or as a left or right speaker in a stereo setup when you have two speaker's within the same multi-room group.

### Create a stereo sound with your S1 or S2

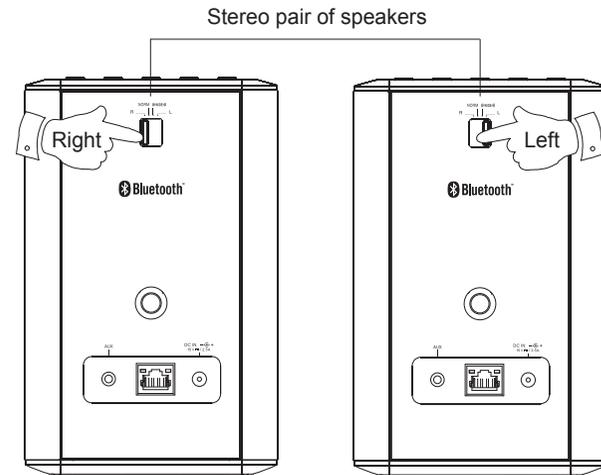
1. Switch the **Stereo mode** switch to the 'NORM' position to listen in normal sound
2. Switch the **Stereo mode** switch to the 'WIDE' position to listen to a wider stereo image.



### Create a stereo pair of speakers within a multi-room group

If you have two such products in the same room and they are both connected to the network and within the same multi-room group you may combine the two speakers into a stereo pair.

1. Set the **Stereo mode** switch on one of the speakers to the left and the other one to the right.
2. The speakers will then operate as a stereo pair.

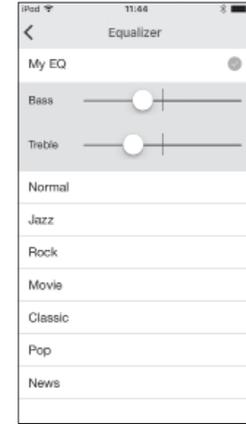
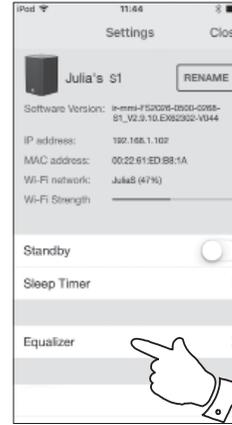


# UNDOK Settings

## Equaliser function

The sound on your speaker can be adjusted to suit your personal taste for the material that you are listening to. The S1 and S2 has a range of equaliser modes. Alternatively you may set the treble and bass levels to your own preferences.

1. Select the 'Settings' screen and then select 'Equaliser' in UNDOK.
2. Choose the desired equaliser setting or select the 'My EQ' option to adjust the treble and bass setting.



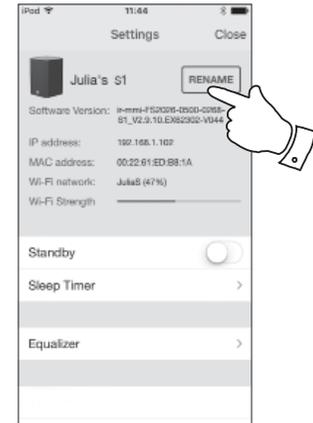
## Sleep timer

Your speaker can be set to turn off after a preset time has elapsed. The sleep setting can be adjusted as follows.

1. Set the sleep timer using the UNDOK app.
2. Your speaker will switch off after the preset sleep timer has elapsed.

## Friendly name

Your speaker is identified within the UNDOK app using its Friendly Name. By default, your speaker's name will be shown as "Roberts S1 or S2" followed by a 12 digit alphanumeric code which is the network MAC address that is unique to your speaker. Use the speakers settings in UNDOK to change its friendly name.



## Factory reset

If you wish to completely reset your speaker to its initial state this may be performed by following this procedure. By performing a factory reset, all user entered settings will be erased.

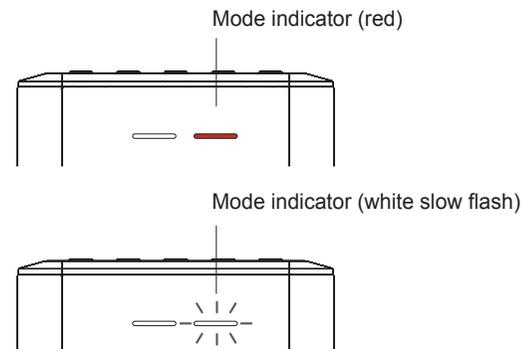
1. Ensure your speaker is switched on.
2. To reset your speaker **press and hold** the **Reset** button for approximately 10 seconds until the **Mode indicator** shows red.
3. The speaker should then clear its stored settings and restart. After a further 10 seconds the **Mode indicator** will flash slowly (white).
4. You may then reconnect your speaker to your network using the UNDOK app (see page 8 to 11).
5. Alternatively you can reset your speaker from the 'Settings' menu in the UNDOK app.

In case of malfunction for any reason, reset the product as described above to resume normal operation. It may be necessary in some cases to disconnect the mains power, then reconnect power after 10 seconds.

In case of malfunction due to electrical fast transient (burst), reset the product as above (reconnection of the power source may be required) to resume normal operation.

When connecting the speaker to a router with an Ethernet cable, shielded cable is highly recommended. The communication could be interrupted temporarily or noise may occur if using un-shielded cable and under strong local interference. Normal communication will resume automatically when the interference signal is removed.

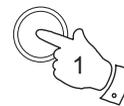
- Reset



## Standby mode

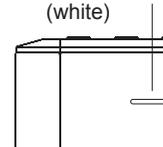
1. Set your speaker to standby mode using the UNDOK app or press and release the **Power/Standby** button on your speaker.
2. The **Mode indicator** will switch off and then the white **Power/Standby indicator** will light.

Power



Power/Standby indicator

(white)



## Eco Standby mode

1. To put your speaker into standby mode and switch off its network connection **press and hold** the **Power/Standby** button on your speaker.
2. The **Mode indicator** will switch off and the white **Power/Standby indicator** will show at a low level.

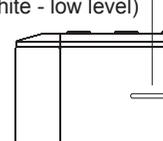
This will result in a further power saving because the speaker is then disconnected from the network. It will not respond to the app until it has been switched back on again using the **Power** button.

Power



Power/Standby indicator

(white - low level)



## Network indicator status

The S1 and S2 speaker has a Mode indicator which also shows the current network status.

Mode



Slow blinking - Ready to be configured to a WiFi or Wired network



Fast blinking - Network connection in progress



Solid colour - Network configuration successful and completed (see Mode indicator page 33)



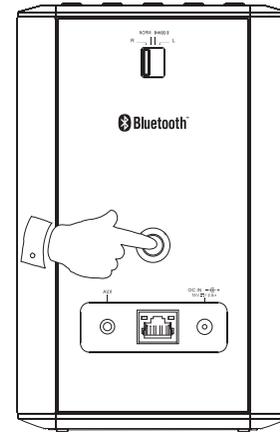
Red blinking - Network connection error

## S1 Wall mounting instructions

The S1 speaker allows for the optional use of a wall mounting bracket. The threaded mounting hole is compatible with a variety of speaker mounts available from third party suppliers.

The mounting hole is compatible with 0.25 " BSW and 0.25 " UNC threads.

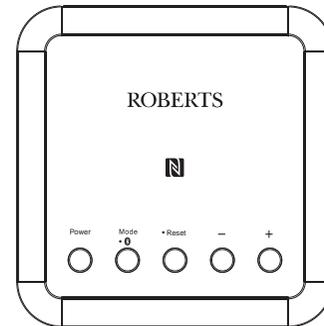
Roberts Radio does not supply wall mounting hardware.



## Bluetooth pairing your device by NFC

Your speaker is equipped with a wireless NFC (Near Field Communication) feature allowing other NFC enabled devices to pair and play music with your speaker.

1. Press and release the **Mode / Bluetooth Pair** button on your speaker until the Bluetooth mode is selected or alternatively open the UNDOK app and select '*Bluetooth*' as the music source.
2. Ensure that Bluetooth and NFC are enabled on your device. You may need to refer to the user documentation for your device, since this method will vary with each device.



## Software version display

The software version display is provided for reference and customer support purposes.

1. To view your software version select the '*Settings*' screen in the UNDOK app.

## Audio FAQ

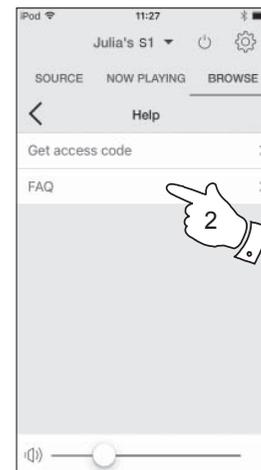
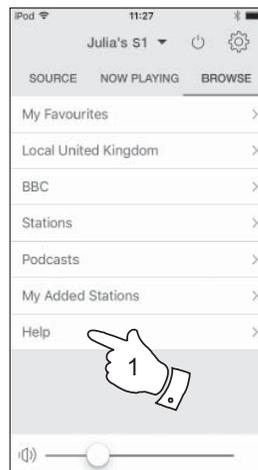
Your speaker can access some audio help for Internet Radio use.

1. With your speaker switched on and in the **Internet Radio** mode, select '*Browse*' and then the '*Help*' option from the app.
2. Select the '*FAQ*' option to display some frequently asked questions.
3. Choose the question that suits your requirements and select to listen to the answer.  
Adjust the volume as needed.

## Software update

From time to time, new software features may be made available for your speaker. This will be indicated via the '*Settings*' screen in the UNDOK app which may then be used to update the product.

If you download a software upgrade to your product, additional license terms may apply and these are available <http://www.frontier-silicon.com/audio/eula.htm>



## Using an Ethernet connection

If you choose to connect your speaker to the network using a wired Ethernet connection, then an Ethernet cable of the appropriate length will be needed (cable not supplied).

The app will offer you an option to connect using Ethernet during the setup procedure.

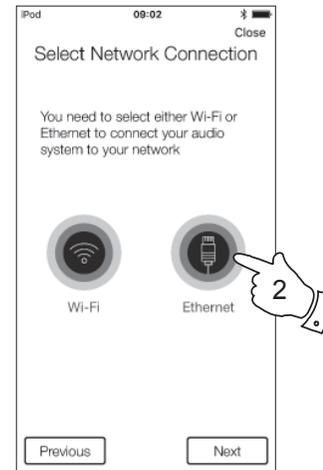
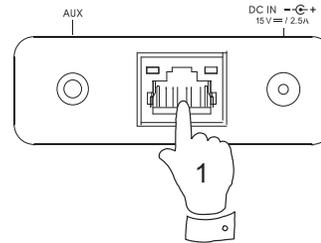
1. Connect the **Ethernet cable** to the RJ45 Ethernet socket on the back of your speaker.
2. Select the Ethernet option on the UNDOK app and follow the onscreen guide.

In situations where there are many WiFi networks in use, it is possible that multi-room performance of the product may be improved by using the ethernet connection.

## RJ45 connection indicators

There are two indicator lights incorporated into the RJ-45 connector. If you have problems with your wired connection, they may help you to identify the possible cause of the problem.

Green On = Link established OFF = no connection  
 Yellow flashing = Data transfer



## Troubleshooting

If you experience any trouble with your speaker, then you may find it useful to visit the help section on our web site.

As a first step, the following points should be checked.

### Is there power to the speaker?

- Make sure your product is plugged in and connected to the mains - see page 9.
- Ensure your product is switched on.

### Is your speaker not receiving audio?

- Check the volume level of your product.
- Check your product is in range and that you have connected your product to your network.
- Ensure the product and the device used for control is connected to the **same** network.
- Ensure that WiFi is enabled on your device. Refer to your device's documentation for details.
- If your product is not visible within UNDOK, first try restarting the UNDOK app on your device. Try reinstalling the UNDOK app and check that you have the latest version installed.
- If the WiFi connection to the product appears unreliable, try an Ethernet connection to verify the functioning of the product.
- Try to eliminate possible interference from other sources e.g. cordless phone, microwave oven etc.

If you have difficulty connecting the speaker to your computer network, some of these steps may help to resolve the problem:

1. Confirm that a WiFi connected PC can access the Internet (i.e. can browse the web) using the same network.
2. Check that your network's firewall is not blocking any outgoing ports. As a minimum, the speaker needs access to UDP and TCP ports 80 and 123. Port 53 may be required for DNS. Some Internet radio services may require additional ports to be open. Windows Media Player 11 or 12 will allocate a port number for UPnP media sharing and will configure Microsoft's Windows built-in firewall appropriately. Other firewall software may require configuration for UPnP or to allow particular IP addresses to have trusted access.
3. Check that your access point does not restrict connections to particular MAC addresses (sometimes called MAC address filtering).  
You can view the radio's MAC address using the '*Settings*' screen in the UNDOK app.  
The MAC address will typically be of the form  
**00 : 22 : 61 : xx : xx : xx**
4. If you have an encrypted network, check that you have entered the correct encryption key into the UNDOK app. Remember that text-format WPA keys are case sensitive. If you have problems connecting your speaker to your network, then please ensure that you enter the correct key for the network. If the problem persists, then you may need to re-check your network configuration.

## Troubleshooting - cont.

If your speaker can connect to the network, but is unable to play a particular Internet radio station, it may be due to one these causes:

1. The station is not broadcasting at this time of the day.
2. The station has reached its maximum allowed number of simultaneous connections.
3. The Internet connection between your speaker and the server (often located in a different country) is slow. This could be due to internet congestion, either locally or at a distance.
4. The station may choose to block internet connections to your geographic region (sometimes known as geo-locking).
5. The station is no longer broadcasting. The database of radio stations that your speaker connects to is frequently updated and checked but may not always be completely accurate.
6. The radio station is broadcasting using an audio format which is not playable by your speaker (although the S1 and S2 does play the most popular formats used by regular broadcasters).

Try using a PC to listen via the broadcaster's web site or via the radio station database web site at <http://www.wifiradio-frontier.com>. If you can play the station with a PC, it may be that the internet feed or local network connection is poor. However, some broadcasters (such as the BBC) provide different data streams for PC users and Internet radio listeners, so this test is not always conclusive.

If you cannot play the station via your PC this may indicate that the problem is not necessarily due to your speaker, but it could be your network, your internet connection, the broadcaster, or internet congestion.

## Music Player / UPnP problems

The use of the Music Player function with UPnP should be straightforward. However, the cleverness of UPnP means that it is often disabled by default by security applications and in routers.

If you are using Windows Media Player 12 as your UPnP server, and if it fails to operate with your speaker, please keep this fact in mind: *A fresh installation of Windows and Windows Media Player when using Microsoft's built-in firewall software will normally work.*

If it does not work, possible reasons may include:

UPnP functions blocked in firewall software

UPnP functions turned off by security software

UPnP functions 'hi-jacked' by other software

UPnP functions blocked in the router

Multi-cast packets blocked in the router

IP address of system blocked in firewall software

Some third-party UPnP servers are much less dependent upon other parts of Windows than WMP 12. If the greater flexibility that these offer is attractive, it may also be found in some cases that they are easier to get working.

## Audio codecs

Your speaker supports a range of audio codecs which provide compatibility with a wide range of Internet Radio stations. These also allow users to stream music from their computers.

Note that for any given audio codec, there are many streaming protocols available, and thus even if an Internet Radio station uses a supported format, this does not guarantee that every such station will work with your speaker. The radio stations database to which your speaker connects is checked for compatibility so that most stations should be playable without problems. Similarly when streaming media from a computer, while a codec may be supported, there can be many subtle variations in formats, tagging schemes and protocols (even within UPnP). In general your speaker will play the supported formats with most common UPnP servers.

The following table summarises the maximum supported bit-rates for the various audio formats that are playable on your speaker. Higher rates may be playable in some cases but performance of the product may be affected.

<b>Codec</b>	<b>Maximum supported data rate</b>
AAC (LC, HE, HE V2)	320 kbits/sec
ALAC <sup>(1)</sup> <sup>(5)</sup>	1.5 Mbits/sec
FLAC <sup>(2)</sup> <sup>(5)</sup>	1.5 Mbits/sec
LPCM <sup>(3)</sup>	1.536 Mbits/sec
MP3	320 kbits/sec
WAV <sup>(3)</sup>	1.536 Mbits/sec
WMA <sup>(4)</sup>	320 kbits/sec

All codecs support 2-channel (stereo) coded files only.

All codecs support sample rates up to 48 k samples/sec (includes 32 and 44.1 samples/sec).

Files which have Digital Rights Management (DRM) protection applied will not be playable on your speaker.

(1) 16 bit samples are supported in ALAC files.

(2) 16 and 24 bit samples are supported in FLAC files.

(3) The maximum supported bit-rate is for 48 kHz sampling, 2 channels and 16-bits per sample.

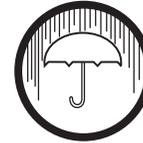
(4) WMA Lossless, WMA Voice, WMA 10 Professional, and files which have DRM protection are not supported.

(5) When using your speaker as part of a group of multi-room products, audio files in ALAC and FLAC formats will only play on the group master (see page 16).

## Cautions

### Safety instructions

- There are no user serviceable parts inside this product.
- Do not attempt to open or disassemble any part of the product.
- Do not dispose of the product in a fire or incinerator.
- Do not expose the product to water, moisture, steam or sand.
- Use only the mains power adaptor supplied with the product or a genuine replacement provided by Roberts Radio.
- To maintain the compliance with the WiFi RF exposure requirement, place the product at least 20 cm (8 inches) from nearby persons except when operating the controls.
- The AC/DC adaptor and speaker shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the AC/DC adaptor or the speaker.



Do not leave your speaker where excessive heat could cause damage.

- Avoid using or storing the product at extremes of temperature. Avoid leaving the unit in cars, on window sills, in direct sunlight etc.
- The speaker must be used in a moderate climate.
- No naked flame sources such as lighted candles should be placed on the product.
- It is recommended to operate the product such that there is a minimum distance (10cm recommended) to adjacent objects in order to ensure good ventilation.
- The ventilation of the product should not be restricted by covering it with items such as newspapers, tablecloths, curtains etc.
- The top panel will become quite warm to the touch. This is completely normal.



## Specifications

### Power Requirements

Mains 100 - 240 volts AC, 50 - 60Hz ~ only (use only the supplied adaptor)

### Connectivity

Wired Ethernet 10/100M bits/sec via RJ-45 connector

WiFi 802.11 b, g, n or a supported with WEP and WPA / WPA2 encryption

Compatible with 2.4 GHz and 5 GHz WiFi bands.

Bluetooth standards A2DP, AVRCP

Bluetooth codecs supported SBC and AAC

The name plate or rating label is located on the rear/underside of the speaker.

## Circuit features S1 and S2

Aux In socket 3.5mm diameter, stereo

Aerial System Built-in WiFi antenna

The Company reserves the right to amend the specification without notice.

Use of the software in this speaker is subject to software licence terms contained in this user manual - by using the speaker, you are agreeing to comply with these licence terms:

**Thompson Licensing: MP3 audio decoder**

MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson

**Fraunhofer: MPEG-4 HE AAC Audio decoder**

MPEG-4 HE-AAC audio coding technology licensed by Fraunhofer IIS:

<http://www.iis.fraunhofer.de/amm/>

**Microsoft: Windows Media Audio decoder (WMA)**

This product is protected by certain intellectual property rights of Microsoft. Use or distribution of such technology outside of this product is prohibited without a license from Microsoft.

**Microsoft: Real Time Streaming Protocol (RTSP)**

This product is protected by certain intellectual property rights of Microsoft. Use or distribution of such technology outside of this product is prohibited without a license from Microsoft.

**Spotify: Spotify Connect**

The Spotify software is subject to third party licenses found here:

<http://www.spotify.com/connect/third-party-licenses>

**Updates**

If you download a software upgrade to your radio, additional licence terms may apply and these are available at:

<http://www.frontier-silicon.com/audio/eula.htm>

## Notes

A series of 20 horizontal dotted lines for writing notes.

This product is guaranteed for twelve months from the date of purchase by the original owner against failure due to faulty workmanship or component breakdown, subject to the procedure stated below. Should any component or part fail during this guarantee period it will be repaired or replaced free of charge.

The guarantee does not cover:

1. Damage resulting from incorrect use.
2. Consequential damage.
3. Product with removed or defaced serial numbers.

Procedure:

Any claim under this guarantee should be made through the dealer from whom the product was purchased. It is likely that your Roberts' dealer will be able to attend to any defect quickly and efficiently, but should it be necessary the dealer will return the product to the company's service department for attention. In the event that it is not possible to return the product to the Roberts dealer from whom it was purchased, please contact Roberts Radio using the contact details on the [www.robertsradio.com](http://www.robertsradio.com) website.

For product repairs falling outside the guarantee period, please refer to the "Customer care" tab on the [www.robertsradio.com](http://www.robertsradio.com) website.

*These statements do not affect the statutory rights of a consumer.*

**ROBERTS RADIO LIMITED**

PO Box 130  
Mexborough  
South Yorkshire  
S64 8YT

Website: <http://www.robertsradio.com>

