REVERY R4 **WFS-58**



Revision 2





The UNDOK App enables remote control of the Revery R4 (WFS-58) running on your iPhone, iPod touch, iPad or Android smartphone. The UNDOK™ App is available for Android and iOS. You can easily control every SmartLink device from your Smartphone or tablet with our full function UNDOK™ App to stream your favorite music or station. Download and install free UNDOK™ App simply from the Apple iTunes App store or Android Google Play store to control your music now.



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Sangean Revery R4 (WFS-58) powered by Qualcomm® aptX™ audio.

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Cautions

- Do not allow your radio to be exposed to water, steam or sand.
- Do not leave your radio where excessive heat could cause damage.





- The radio shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the radio.
- 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.
- No naked flame sources such as lighted candles should be placed on the product.
- It is recommended to avoid using or storing the product at extremes of temperature. Avoid leaving the unit in cars, on windows sills, in direct sunlight etc.
- The radio must be used in a moderate climate.
- The apparatus shall not be exposed to dripping of splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- The batteries shall not be exposed to excessive heat such as sunshine, fire or the like.
- The MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- To prevent possible hearing damage, do not listen at high volume levels for long periods.
- Attention should be drawn to the environmental aspects of battery disposal.

- Disposal of a battery into fire or a hot oven, or mechanically crushing or cutting of a battery, that can result in an explosion.
- Leaving a battery in an extremely high temperature surrounding environment that can result in an explosion or the leakage of flammable liquid or gas.
- A battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas.

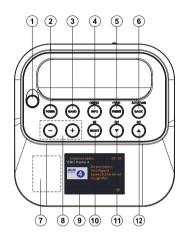
Before you can use this product

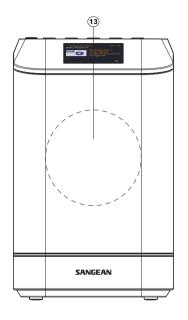
Before you can use your internet radio, you must have the following:

- A broadband internet connection (not required for DAB, FM, Bluetooth, Aux in).
- A wireless access point (WiFi) connection connected to your broadband Internet Service Provider, preferably via a router. In many cases the broadband modem, router and wireless access point will be a single combined unit supplied by your Internet Service Provider or bought from a computer store.
- If your wireless network is configured to use Wired Equivalent Privacy (WEP) or WiFi Protected Access (WPA/WPA2) data encryption then you either need to know the WEP, WPA or WPA2 key used for encryption so you can get the internet radio to communicate with the network, or your router needs to offer WiFi Protected Setup (WPS).
- If connecting using WiFi, the internet radio will typically work within a 10-20 metre radio from your wireless access point. The actual range achieved will depend upon the building type, other nearby wireless network, and possible interference sources. DAB and FM radio functions can operate wherever the internet radio is able to receive a suitable broadcast signal.

IMPORTANT:

Before you continue, make sure that your wireless access point or router is powered up and working with your broadband Internet service (use your computer to verify this). To get this part of the system working you must read the instructions supplied with the wireless access point or router.

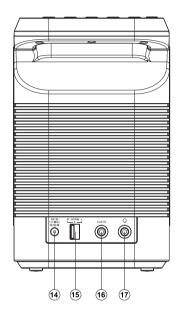




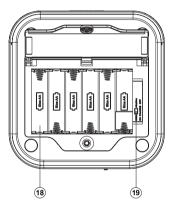
- 1. Telescopic aerial
- 2. On/Standby button
- 3. Band button
- 4. Info/Menu button
- 5. Preset/Bluetooth pairing button
- 6. Back/Auto tune button

- 7. NFC detection area
- 8. Volume Up/dowm button
- 9. LCD display
- 10. Select/Play/Pause button
- 11. Menu Down/Left/Previous button
- 12. Menu Up/Right/Next button
- 13. Speaker

Controls and connections - cont.



- 14. DC input socket
- 15. Stereo mode switch
- 16. Auxiliary input socket
- 17. Headphone socket



- 18. Battery compartment
- 19. NiMH/Alkaline batteries switch

Powering the radio

1. Battery operation

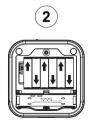
 Installing the batteries, first use coin (for example) to turn the screw anticlockwise to loosen and open the battery cover.

Note:

Before you insert the batteries, if you use non-rechargeable batteries, make sure the NiMH/Alkaline switch which located inside the battery compartment is switched to Alkaline position. If you use rechargeable batteries, make sure to switch NiMH/Alkaline switch to NiMH position.

When playing on (rechargeable) batteries the output power is less compared to the output power when playing on mains adaptor. Because of this the sound can be somewhat distorted at the highest volume settings.







2. Mains adaptor operation

The mains adaptor required for this unit should be 12 volts DC at 2A center pin positive. Insert the adaptor plug into the DC socket located on the rear of the radio. Plug the other end of the adaptor into a standard mains outlet. Whenever the adaptor is used, the batteries are automatically disconnected. The mains adaptor should be disconnected from the mains outlet when not in use.

Note: If no controls are used and no sound output (except for mute) from the radio for 15 minutes, the radio will be put into standby mode when using the mains adaptor. When the radio is operated on battery power, the radio will be switched off completely in order to minimize battery usage.

IMPORTANT INFORMATION ON CHARGING AND USING RECHARGEABLE BATTERIES

- 1. Recharge the batteries in any case at least every 2 months.
- Make sure the Battery Select switch inside the battery compartment is set to the "NiMH" position.
- 3. Put the batteries in the compartment while paying attention to the correct polarity of the batteries (+ and -).
- 4. First use: Charge new batteries in one continuous, uninterrupted, charge until they are full. This first charge may take longer than normal. For longer battery life it is advised to always recharge in one continuous, uninterrupted charge until batteries are full and to not recharge again while the batteries are still full.
- New batteries will only reach their full capacity after some time of use (several charge and discharge cycles).
- Leave the complete group of batteries in place inside the radio and do not use these batteries or a few of them for other purposes. This will result in a mix of (fully) charged and (partly) empty batteries. This can seriously damage the batteries and radio when recharged.
- It is advised to only charge batteries at room temperatures between 5 degrees C – 35 degrees C. In lower or higher temperatures full charge cannot be achieved
- 8. Depending on the capacity of the batteries, charging from "empty" to "full" can take several hours, even up to 7 hours or more.
- Do not charge batteries when the radio is hot or exposed to heat or heat sources
- 10. It is advised to clean the metal contacts of the batteries and of the charger inside the radio e.g. with a contact-spray from time to time.
- 11. Do not use a mix of old and new rechargeable batteries.
- 12. Do not use a mix of rechargeable and non-rechargeable batteries.
- 13. Do not use a mix of full and empty rechargeable batteries.

- 14. Do not use batteries that have a different mAh capacity.
- 15. Do not use damaged, deformed or leaking batteries.
- Battery level indication is an approximate indication only and can vary with battery type that is used.
- 17. Batteries can become hot during charging.
- 18. In cold conditions the capacity of batteries will be much lower than when used at normal room temperature
- Batteries (even when supplied with the radio), as being consumables, do not fall under the warranty conditions of the radio.
- Batteries should not be disposed of by incineration and with household waste.
- Disposable batteries should be taken to a suitable recycling center if possible.
- 22. CAUTION: "Risk of explosion if the battery is replaced by an incorrect type."

Battery charging indicator

Please note that the battery charging status detection can only be activated when the radio is in charging mode (i.e. the radio is switched off, the battery switch slides to the NiHM position and it is connected to the mains outlet).

Batteries will be fully charged in around 5-7 hours.

Note:

Duration for charging your batteries fully can vary according to the mAh capacity of the batteries. Higher mAh batteries require longer charging time.		
When charging is in progress, the following display is shown (6 battery icons animate).	09 / 03 / 2017 14:59	
	Battery: 1 2 3 4 5 6 Charging 🚨 🚨 🚨 💂 🙃	
When the charging process is completed, the following display is shown (6 battery icons are full and stop animation).	09 / 03 / 2017	
	15:14	
	Battery: 1 2 3 4 5 6 Charging	
When there is no battery/missing batteries in the compartment or some of batteries are inserted with the incorrect polarity, no attery charging status is shown on the display (see picture on the right).	10 / 03 / 2017	
	11:54	
	•	
During the charging process, if a battery is detected as faulty/damaged, the battery indicator will be shown with a cross under	05 / 04 / 2017	
the corresponding battery number (see picture on the right).	11:04	
	Battery: 1 2 3 4 5 6 Charging	

Navigation controls

This page describes the basic means of controlling your WFS-58. Instructions for each operating mode are given in the later sections of this book.

- Pressing the On/Standby button brings your radio out of Standby mode.
 Pressing On/Standby while the radio is in use will cause it to return to the Standby mode with the clock display.
- 2. Press and release the Band button on the radio and then use the Menu Up or Down and Select buttons to select the desired operating mode.
- Pressing and holding the Info/Menu button will access the menu system.The Info button also allows the display of information relating to the radio station or music file being played.
- 4. Many operations require the user to make a selection from the menu. Highlight the menu item using the Menu Up or Down buttons. Press and release the Select button to select that item. If there are more than five items in a menu, then the display will automatically scroll up or down so that the additional items become visible. If there are many items in a menu, then the radio allows the menu to 'wrap around' in either direction. This can make it easier to reach items at the end of a long menu, such as a list of countries or Internet radio stations.
- 5. If an error is made when navigating the menus, it is generally possible to go back to a higher level menu by pressing the Back button.

The WFS-58 is a smart audio system which provides the following feature:

 Voice control of primary functions using Alexa with Amazon Echo products.

The WFS-58 works with Alexa so you can use voice commands to easily control the system via your Echo devices -pause, skip to the next track, mute, play a genre, turn the volume up or down, or even ask Alexa what's playing on the WFS-58. You can control and enjoy your music simply by giving voice commands to your Echo device, such as "Alexa, play the playlist Dear Mama on the WFS-58."

You can use the UNDOK smartphone app to give the WFS-58 a friendly name to indicate its location, making it easier for your Echo device to play music from the smart audio system.

Please scan the QR code to download the full 3PDA (Alexa) Setup Guide.

Connecting your radio to your computer network

- 1. Place your radio on a flat surface.
- 2. Insert the adaptor plug into the DC socket located on the rear of the radio ensuring that the plug is pushed fully into the socket.
- 3. Plug the other end of the adaptor into a standard mains outlet.

IMPORTANT:

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

- 4. When you apply power, the display on the radio will light up and say: 'SANGEAN'. If this is the first time that you use your radio (or after a Factory Reset) the display will show "Setup wizard" and "YES" will be highlighted on the screen. Press the Select button to start the setup wizard and proceed to step 5.
 - If press the Menu Left or Right buttons to highlight 'No' and press the select button. The screen will ask if you wish to run the setup wizard again at the next start up. This will lead to the main menu.





- Press the Menu Left or Right buttons to highlight the desired clock format (either 12 or 24 hour) then press the Select button to enter your selection.
- Next, the way in which the radio updates its clock is set. A menu allowing you to specify the autoupdate option for the clock will be shown. The 'Update from Network' option will be best for most users.
- 7. Press the Menu Up or Down buttons to choose an auto-update option for the clock. This can be updated from DAB or FM radio, from the Network, or not updated. The default is to auto-update from the network. If you choose another option go to 'Connecting to your computer network'. Otherwise you will first need to select the correct time zone and daylight savings setting, see the next steps. If you choose 'No update' you will need to set the clock manually later. Press the Select button to confirm your choice.
- Press the Menu Up or Down buttons to highlight the time zone for your current location. Press the Select button to enter the setting.
- 9. You will then need to set the Daylight Savings option according to your location (Daylight Savings is also known as Summer/Winter time or BST/GMT adjustment). Press the Menu Left or Right buttons to highlight 'ON' or 'OFF' as required. The asterisk shows the current setting. Press the Select button to enter the selection. In the UK, 'ON' is equivalent to British Summer Time and 'OFF' is equivalent to Greenwich Mean Time.
 - You will then need to set 'Keep network connected'. If you need to be able to remotely control the radio even when it has been put into standby, press the Menu Left or Right buttons to highlight 'YES' to activate this function or 'NO' to deactivate this function. You can also choose to keep the network connected by using the 'Keep network connected' option in the network setting menu. In the standby mode display either the WiFi signal indicator is shown with or without a cross through it according to the chosen network settings.
- 10. The display will show a list of regional options for the WiFi configuration. Press the Menu Up or Down buttons to highlight the required region and then press the Select button to make the selection. Your radio will then scan for available WiFi networks.
- 11. The radio will enter the Network Settings Wizard and will display 'Scanning...'. The radio will automatically scan both the 2.4GHz and 5GHz WiFi bands. After a short while the display will show a list of the available WiFi networks.



☐ Auto update
Update from DAB
Update from FM
Update from Network
No update

■ Set timezone

UTC + 00:00: Dublin, Lond *

UTC + 01:00: Madrid, Am

UTC + 01:30:

UTC + 01:30: Athens,



Network settings

Keep network connected?

YES* NO

Europe
Australia

Network settings

Network wizard
Scanning... /

- 12. You will first need to identify your network in the list of network names presented by the Network Wizard. If no networks are found then you may have to get your wireless router working (please see the instructions supplied with it) or you may be too far from the router. When the radio finds your wireless network, it displays the Network Name (SSID) for the wireless access point on the screen. This is a name that is allocated to the access point in your router by the person who set up the network for example: 'Jones family' or 'Paul's network'. Routers supplied by Internet Service Providers often have the default name of the WiFi network provided on a label or card for easy reference (e.g. BTHub 1234, virginmedia 1234567). If the router supports WiFi Protected Setup, then '[WPS]' will be shown in front of the SSID. It is possible, and in some locations highly likely, that your radio will find more than one wireless network, in which case you should choose which one you need to connect to.
- 13. Press the Menu Up or Down buttons to see the SSID for each wireless network that has been found. If your network is shown proceed to step 15 on the next page. If it is not shown then proceed to step 14. If you make a mistake at any point, use the Back button to go back to the previous screen.
- 14. If your network is not found, it may be because the router is configured not to broadcast the SSID. You should then use the Menu Up or Down and Select buttons to highlight and select the '[Manual config]' option in order to enter the network details manually. This is described in 'Manual Network Configuration'. If your network name is being broadcast, and it was not found, then try re-scanning (press the Back button), and if necessary try moving your radio to a location closer to your access point/router.
- 15. When the SSID for the wireless network you wish to connect to is highlighted on the screen, press the Select button. If WiFi Protected Setup (WPS) was indicated, you will see an additional menu at this point, otherwise proceed to step 16. Choose one of the WPS menu options as required for your router (WPS may be via push button, or using an identification number).

'Push Button' - the display prompts you to press the WPS button on your router and then the Select button on the radio. The two devices should then connect with the encryption key sent automatically to the radio.

'PIN' - the display shows an identification number which you must enter into your router using a web browser (refer to your router's user documentation). You should then press the Select button on the radio. The two devices should then connect with the encryption key sent automatically to the radio.

'Skip WPS' - if you wish to enter the encryption key yourself (or if it was previously entered). If you chose Push Button or PIN the screen will then show 'Connecting...' and then 'Setup wizard completed'. Press the Select button to exit the setup wizard.

16. If your network is configured without an encryption key, the screen should say 'Connecting...', and then 'Setup wizard completed'. Press the Select button to exit the setup wizard and show the Main menu. If this is the case then you have successfully connected your radio to your network.

Jones family
[WPS] Paul's network
Smith
[Rescan]
[Manual config]

SSID
Jones family
[WPS] Paul's network
Smith
[Rescan]
[Manual config]

Jones family
[WPS] Paul's network
Smith
[Rescan]
[Manual config]

PIN > Skip WPS >

Please wait
Connecting... /

- 17. If the screen displays 'Key:', it is because the network is using one of the encryption systems: Wired Equivalent Privacy (WEP) or WiFi Protected Access (WPA). You will need to enter the correct WEP or WPA key into the radio to allow it to communicate with your wireless network. If you do not have the WEP or WPA key, then you should obtain it from the person who set up your network. Some wireless routers may come with an encryption key already set up by the supplier, in which case you should refer to the documentation provided with it. WPA is used here to also include WPA2. WEP keys are 10 or 26 characters long (using 0 9, and A F). Some wireless routers can also use pass-phrases for WEP but these are not supported by the radio. WPA keys are usually set up using a pass-phrase of between 8 and 63 characters. Your radio accepts pass-phrases for WPA keys.
- 18. To enter the WEP or WPA key, characters are selected and entered using the Menu Up or Down, Left or Right and Select buttons. The highlight scrolls through the available characters as well as the three controls on the right. The character currently highlighted will be entered when you press the Select button. Do this as needed until the complete key has been entered. Remember, WEP keys only use the numbers 0-9 and letters A-F. WPA keys are sensitive to upper and lower case characters. You must enter the key exactly or the radio will not connect to the network.

The three controls on the right-hand side of the screen have special functions. You can quickly access these by pressing the Info button and then using the Menu Up or Down and Select buttons as needed:

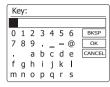
select 'BRSP' to erase a character just entered (long press to clear); Info again to continue select 'ORI' when the complete key has been entered

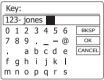
select ' CANCEL ' to cancel and re-run the Network Wizard

If a WEP or WPA key has previously been entered for the selected SSID then the display will show 'Key: [Set]'. If you have previously entered a different key, you must clear this by selecting the ' [BRSP]' symbol. This will remove the '[Set]' indication.

After the final character of the WEP or WPA key has been entered, highlight the 'ord' symbol and press the Select button. The screen will show 'Connecting...' and then 'Setup wizard completed'. Press the Select button to the exit setup wizard. The radio should now be able to connect to the network.

19. Once you have connected your radio to the network (and therefore also to the Internet) it will display the Main menu. Press the On/Standby button to put the radio into Standby mode. It should then display the time as obtained from the Internet. If the time display is not correct for any reason, it can easily be adjusted later, see 'Manually setting the clock'. If you have followed the steps on the preceding pages successfully, your radio will have connected to your router, and then made a connection to the Internet and set its clock. If this is the case, then you can try listening to radio stations via the Internet.











06 / 02 / 2017 **15:37**

Changing the network connection

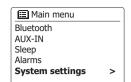
In the sections above, you chose how your radio would be connected to your network, using a WiFi connection. From time to time, you may find that you need to connect to different computer networks. The Network Settings menu allows you to change your radio's network settings, scan for an alternative wireless network, or to manually configure the network parameters.

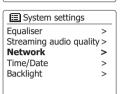
The steps outlined below describe how you can do this - see also the section 'Network profiles'.

Configuring the radio to use an alternative WiFi connection

From the Network Settings menu select 'Network wizard'. This will present you with details of any WiFi networks that are found. Scroll down the list using the Menu Up or Down buttons to the desired network name. Press the Select button to select this network.

The radio will then use its WiFi system to communicate with the network. Depending on the settings for the new network you may need to enter an encryption key. By default the radio will then acquire an IP address and other network settings from the network's router using DHCP (Dynamic Host Configuration Protocol).









Using the UNDOK app

1. Download the UNDOK app

Download and install the UNDOK app to your Android or iOS device from the Android Google Play store or Apple iTunes App store.

- Make sure the UNDOK app installed on your device has the latest version.
- The app may update a new version on the internet from time to time, so this app may have been changed slightly since these instructions were written.

Note: The images used below extract from Android device. If your device uses iOS Apple or different UNDOK version, the display may be slightly different.

- Open the UNDOK app and turn on the radio, making sure your radio and smartphone are connected to the same WiFi network.
- 3. The device will be listed on the screen of the smart phone. Select your radio, for example "Sangean WFS-58 xxxxxxxxxxxx" (the 12 digit alphanumeric code is the MAC address of your radio) to establish a connection between UNDOK and your radio.
- 4. If using the radio for the first time or after performing a factory reset, turn on the radio and open the UNDOK app, you can also select the 'SET UP AUDIO SYSTEM' or 'AUDIO SYSTEMS TO BE SET UP' on your smartphone. The UNDOK app has a setup wizard to help configure suitable audio device to connect to your WiFi network.
- 5. Go to WiFi settings of the smart phone to choose for example 'UNDOK WFS-58 xx:xx:xx:xx:xx:xx:xx: Go back to UNDOK app, the app will show a list of suggested audio systems to setup. Your radio will normally appear in this list as "UNDOK WFS-58 xx:xx:xx:xx:xx:xx:xx.". Select the radio to be setup.











- 6. Use the app to complete radio the setup, including giving the radio a name if needed.
- 7. Select the preferred method to connect your radio to the network (e.g WiFi).
- 8. For a WiFi connection the app will ask you to choose a WiFi network and enter the appropriate password. Your radio will connect to your network.

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









UNDOK display options

- 1. Source: Select the desired source mode.
- Now Playing& Browse: Select 'Now Playing' or 'Browse' as needed to access content for the selected source.

UNDOK Settings

Equaliser function

The sound on your radio can be adjusted to suit your personal taste for the material that you are listening to. The WFS-58 has a range of equaliser modes. Alternatively you may set the bass, midrange and treble levels to your own preferences.

- 3. Select the 'Settings' screen and then select 'Equaliser' in UNDOK.
- Choose the desired equaliser setting or select the 'My EQ' option to adjust the bass, mid-range and treble setting.

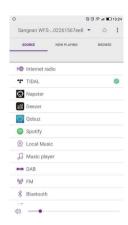
Sleep timer

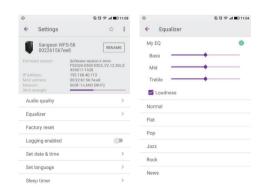
Your radio can be set to turn off after a preset time has elapsed. The sleep setting can be adjusted as follows.

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

Friendly name

Your radio is identified within the UNDOK app using its Friendly Name. By default, your radio's name will be shown as "Sangean WFS-58" followed by a 12 digit alphanumeric code which is the network MAC address that is unique to your radio. Tap 'RENAME' on the screen to change its friendly name.





Network remote control options

Network PIN setup (PIN number)

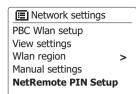
Your radio has the option of being controlled by an application installed on an Apple iPhone, iPod touch, iPad or equivalent Android device. The PIN number facility allows you to ensure that your radio can only be controlled by your own device rather than someone else's.

The remote control application is called UNDOK, by Frontier Silicon Limited, and is available from the Apple App Store and Google Play for your device.

UNDOK will try to use the default PIN of '1234' to control your radio.

You may change the PIN if desired using the 'NetRemote PIN Setup' option in the Network settings menu. The updated PIN should then be used in the UNDOK app to allow the app to reconnect to the radio. The app will prompt you for the PIN as needed.





Keep network connected

To ensure you can use UNDOK app when your radio is in all modes especially in non-internet modes, you need to select "Yes" in 'Keep Network Connected' menu. This also allows you to wake the radio from standby using your UNDOK app.

Note: If unattended to use radio for long periods of time, e.g. overnight, while on holiday or while out of the house, select "NO" to save power is recommended.

Manual settings
NetRemote PINSetup
Network profile >
Clear network settings >
Keep network connected

Internet Radio

Internet Radio - the basics

Before you can use your radio to listen to broadcasts via the Internet, it is necessary to have connected it to your computer network using the wireless (WiFi) connection.

There are literally many thousands of radio broadcasts available via the Internet as well as 'Podcasts'. Your radio 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 within the radio, or add them to a list of your favourite stations which your radio can access. The number of presets is limited (there are ten presets on the radio) but you can store as many favourites as you like

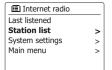
You may search for an Internet radio station by Location. If you know the name of the station and the country from which a station is broadcast this may be the easiest method to find a station. It is also a great way to experience radio from other parts of the world.

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 radio 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.

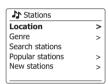
The WFS-58 connects to a radio station database which serves many users in many countries. This means that there is a very wide range of programme content available. You can also search for stations which have been recently added to those available (new stations) or you can search for the most popular.

Selecting a radio station by location

- 1. Press the On/Standby button to switch the radio on. Press and release the Band button and then use the Menu Up or Down and Select buttons to select the Internet Radio mode.
- 2. Press and hold the Menu button to enter the main Internet Radio menu. Press and release the Menu Up or Down buttons until 'Station list' is highlighted on the display and then press and release the Select button to select the option.
- 3. Press the Menu Up or Down buttons until 'Stations' is highlighted on the display and then press and release the Select button. Note that the menu may offer one or more local selections based upon the country in which the unit is being used, according to your internet IP address ('United Kingdom' and 'BBC' sta- tions, for example).
- 4. Press the Menu Up or Down buttons until 'Location' is highlighted on the display and then press and release the Select button.
- 5. Press the Menu Up or Down buttons to scroll through the list of continents. When the desired continent is highlighted press and release the Select button to enter your selection.
- 6. The display will show a list of countries within the chosen continent. If there are many countries shown you can scroll through the list continually in either direction. For example, if the chosen continent was Europe, then to find the United Kingdom scroll up from the top of the list to the bottom by pressing and releasing the Menu Up button. Press and release the Select button to choose the desired country.
- 7. You will typically find that you then have the option to select either 'All Stations' or one of a number of categories. The lists are always sorted alphabetically, and long lists will wrap around from top to bottom or bottom to top.













Selecting a radio station by location - cont.

- 8. Press and release the Menu Up or Down buttons to highlight your chosen radio station and then press and release the Select button to enter your selection. The display will show 'Connecting...' while the radio connects to the new station. The station should then start playing. Adjust the volume as needed.
- 9. If the station has on-demand content, that is, it gives the option of listening to programmes which have already been broadcast or to Podcasts, there will be an additional screen showing the radio station name as well as a 'Podcasts' option. These are selected using additional menus, determined by the radio station and the content. There may simply be a list of programmes, or there may also be options to choose from broadcasts on particular dates or days of the week. The examples shown here are typical. Podcasts can also be accessed separately from the main Internet Radio menu.

If your radio cannot connect to a radio station

Note: If your radio is unable to connect to an Internet radio station it will generally either display 'Network Error' or 'Stopped'. 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 radio 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.

Asian sound radio
Asian sound radio
Aston FM
Atlantic FM
Audio Book Radio
BBC Radio 1







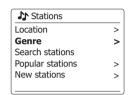




Selecting a radio station by genre

- Press and hold the Menu button to enter the main Internet Radio menu. Press the Menu Up or Down buttons until 'Station list' is highlighted on the display and then press and release the Select button.
- Press the Menu Up or Down buttons until 'Stations' is highlighted on the display and then press and release the Select button.
- Press the Menu Up or Down buttons until 'Genre' is highlighted on the display and then press and release the Select button.
- 4. Press the Menu Up or Down buttons to scroll through the list of content types. This menu is normally cyclic you can scroll the list continually in either direction. When the chosen genre is highlighted, press and release the Select button.
- 5. You then have the choice of 'All Stations' of the chosen genre, or a list of countries. Note if a country is not shown then the station may still appear in the 'All Stations' list. Press the Menu Up or Down buttons and press and release the Select button to choose as needed.
- A list of radio stations is then shown. Press the Menu Up or Down buttons until the desired station name is highlighted on the display.
- 7. Press and release the Select button to select the station. The display will show 'Connecting...' while it finds the new station. If the radio is unable to connect this may be for one of the reasons explained on the preceding page.
- 8. Adjust the Volume as needed to set the listening level.











Searching for a radio station by name

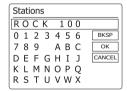
There may be occasions when you know the name of a radio station but you do not know the location or genre. This facility allows you to search for the station using a part (or parts) of the radio station name.

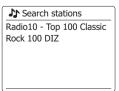
- Press and hold the Menu button to enter the main Internet Radio menu. Press the Menu Up or Down buttons until 'Station list' is highlighted on the display and then press and release the Select button.
- Press the Menu Up or Down buttons until 'Stations' is highlighted on the display and then press and release the Select button.
- Press the Menu Up or Down buttons until 'Search stations' is highlighted on the display and then press and release the Select button.
- 4. To enter the search word(s) press the Menu Up or Down, Left or Right to highlight each character for the search in turn, and press and release the Select button to enter. If you make an error press and release the Menu Up or Down buttons or use the Info button to access the delete character 'BRSP' on the screen and then press and release the Select button. Press and release the Menu Up or Down buttons or press Info again to go back to the character selection. After the final character of the search has been entered, use the Info button and then the Menu Up or Down buttons to highlight the 'DR' symbol on the screen and then press and release the Select button to finish.
- 5. The radio will search for radio stations that match your search data. If you include a space between two search items the radio will look for station names which include both items. Thus a search for 'ROCK 100' could find a station called '100 Classic Rock Hits' as well as a station called '100.FM Rocks'.
- 6. Press the Menu Up or Down buttons to highlight the station that you wish to listen to and press and release the Select button to confirm your choice. The display will show 'Connecting...' while it finds a new station.









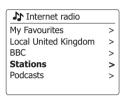


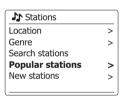
Selecting a new or popular station

As described in the section 'Internet Radio - the basics', your radio connects via the Internet to a database of radio stations. This option is provided to highlight stations which are newly added to the list of those available, or stations which are particularly popular with listeners around the world. Your radio allows you to easily choose stations from these two categories, using menus very similar to those used when finding stations by location and genre.

- Press and hold the Menu button to enter the main Internet Radio menu. Press the Menu Up or Down buttons until 'Station list' is highlighted on the display and then press and release the Select button.
- 2. Press the Menu Up or Down buttons until 'Stations' is highlighted on the display and then press and release the Select button.
- Press the Menu Up or Down buttons until 'Popular stations' or 'New stations' is highlighted on the display. Press and release the Select button to enter your choice.
- 4. Press the Menu Up or Down buttons to highlight the station that you wish to listen to and then press and release the Select button to enter your choice. The display will show 'Connecting...' while the new station is found.







Selecting a podcast

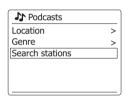
Radio broadcasters and individuals may make programmes which are intended normally to be downloaded into a computer or copied onto a portable media player. These are commonly known as Podcasts.

Podcasts are also accessible using the Podcasts option on the Stations menu.

- Press and hold the Menu button to enter the main Internet Radio menu. Press the Menu Up or Down buttons until 'Station list' is highlighted on the display and then press and release the Select button.
- Press the Menu Up or Down buttons until 'Podcasts' is highlighted on the display and then press and release the Select button.
- 3. You may then search by location, genre, or using part of the name of the podcast. The searches operate in exactly the same way as when searching for a conventional radio station.
 - Searching by location is done first by continent, then by country. You may then list 'All shows' or search within a country by genre.
 - Searching by genre is more direct, since once the genre is chosen the next menu display shows a list of available podcasts.
 - Searching by name operates in the same way as when searching for a named radio station, selecting the 'OR' symbol when you have entered the text. You may enter one or more pieces of text which will be used for the search.
- 4. Press the Menu Up or Down buttons and then press and release the Select button to confirm your chosen podcast. The display will show 'Connecting...' while it finds the new programme.









Presetting stations

With so many Internet radio stations available, it is desirable to have a means of rapidly selecting the stations that you listen to most frequently. Your radio has ten memory presets for Internet radio which can easily be set to store the details of any Internet radio station or podcast. The radio station presets are retained even when the radio is switched off.

Please see also the sections 'Last Listened' and 'Configuring My Favourite Stations'.

Storing a preset using the unit

- Press the On/Standby button to switch on your radio. Tune to the required station using one of the methods described on the preceding pages.
- 2. Press and hold the Preset button. The display will show a 'Save to Preset' menu.
- 3. Press the Menu Up or Down buttons to scroll through the preset list until you reach an unused preset or a preset that you wish to change. Press and release the Select button to store the preset. 'Preset stored' will be shown on the display. Repeat this procedure as needed for the remaining presets.
- Stations which are already stored in the presets may be over-written by following the procedure above.

Recalling a preset using the unit

- 1. Select the Internet radio mode.
- 2. Press and release the Preset button to display the 'Recall from Preset' menu.
- Press the Menu Up or Down buttons to select the desired preset station. Press and release the Select button.

Your radio will then connect to the station stored in the preset memory. The preset used will be shown at the bottom of the display screen.



- 1. [Not set]
- 2. BBC Radio 4
- 3. Atlantic FM
- 4. [Not set]
- 5. [Not set]



E Recall from Preset

- 1. Classic FM
- 2. BBC Radio 4 3. Atlantic FM
- 4. RTL
- 5. BBC Radio 2



Display modes

Your radio has a range of display options when in Internet Radio mode. Note that not all information may be available for all Internet radio stations.

1. Press and release the Info button to cycle through the different options.

Description Displays information about the radio station or scrolling text messages such

as artist/track name, phone number etc.

Genre Displays programme type information e.g. Pop, Classic, News, etc. and the

location of the current radio station.

Reliability Displays the reliability of the data stream from the station currently being

received.

Format Displays the bit rate and format of the station being received.

Playback buffer Displays status when connecting to and playing a radio station. This indicates

the reliability of the data stream to your radio. If there are no bars shown to the right of the dividing line then the data stream reliability may be poor and $\frac{1}{2}$

you may find that there are many breaks in the audio.

Date Displays the current date.

Additional or alternative information may be displayed when listening to Podcasts. Categories displayable can include...

Episode name Show description Show genre Show language

Episode URL Bit rate

Codec Sampling rate

Whenever the soundbar is displaying an information screen (as opposed to a menu screen), the time is displayed in the top-right corner of the display, and a WiFi strength or Ethernet connection indicator is shown in the bottom-right corner.















Customising your radio

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

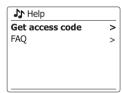
Your soundbar uses a database which is accessed via the Internet in order to find out which radio stations are available and how it should connect to them. You are able to add your personal selections to this database. These will only be accessible by you using your PC or your sound- bar. You can choose 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 on your radio via the 'My Added Stations' menu item.

Registering an account

- 1. Open the web site http://www.wifiradio-frontier.com using the Internet browser on your computer. 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 Internet radio from the many others that it also provides data for. To obtain the access code, please follow these steps.
- 2. With your radio switched on and in Internet Radio mode, press and hold the Menu button, then select 'Station list' using the Menu Up or Down and the Select buttons.
- 3. Scroll down the Station List menu to the item called 'Help'. Press and release the Select button to enter the Help menu.
- 4. In the Help menu, select the menu item 'Get access code'. Provided that the radio 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.
- You should then use the code displayed by the radio 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 radios which use the same database, you may also add them to your account. You will need to get an access code from each radio in order to add it to the account. They may then share your favourite and added radio station details.









Customising your radio - cont.

Configuring My Favourite Stations

- 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 computer. Clicking on the 'Add to favourites' icon will cause the radio station to be added to the list accessible via your radio.
- 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 on your radio. 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 radio. These stations will be available on your radio from the Internet Radio menu item 'My Favourites'.
- 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 on your radio. 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 radio. These stations will be available on your radio from the Internet Radio menu item 'My Added Stations'.
- 4. It is possible to add the web addresses for audio streams which may not be playable by your radio. If you attempt to play such a stream, your radio will normally display an error message of some kind. The Sangean WFS-58 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.

Last Listened

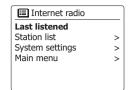
It is often helpful to be able to go back to a station that you have recently listened to. Your radio has a 'Last Listened' feature which provides you with quick access to the ten most recently listened to radio stations or podcasts. As each new radio station is listened to the oldest item is deleted from the list. The Last Listened list is stored when the radio is disconnected from the mains.

- 1. With the radio switched on and in Internet Radio mode, press and hold the Menu button. The first item on the menu is 'Last listened'. With this item highlighted press the Select button.
- 2. The display will then show a list of the last ten Internet radio stations or podcasts. Press the Menu Up or Down buttons to highlight whichever you wish to listen to and then press the Select button to cause your radio to reconnect to that radio station or podcast.

Storing favourite stations with your radio

It is also possible to store your favourite radio stations whilst playing a station on your radio.

- 1. Press the On/Standby button to switch on your radio.
- 2. Tune to the required station using one of the methods described on the preceding pages.
- 3. Press and hold the Select button. The display will show 'Favourite added'.
- 4. These stations will be available on your radio from the Internet Radio menu item 'My Favourites', see 'Selecting your favourite stations' overleaf. Repeat this procedure as needed to store other favourite stations.









Selecting your Favourite stations or My Added stations

- 1. Press and hold the Menu button to enter the main Internet Radio menu.
- 2. Press the Menu Up or Down buttons until 'Station list' is highlighted on the display. Press and release the Select button to enter the menu.
- 3. Press the Menu Up or Down buttons until 'My Favourites' or 'My Added Stations' is highlighted on the display. Press and release the Select button and your favourite stations list or your added stations list will appear on the display.
- 4. Press the Menu Up or Down buttons to highlight the required station and then press and release the Select button to confirm your selection. The display will show 'Connecting...' while it finds the new station.

If the station has on-demand content such as Podcasts, please see 'Selecting a Podcast'.

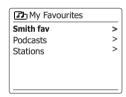
Should you be unable to connect to a particular station, please note that some radio stations do not broadcast 24 hours per day, and some stations are not always on-line.

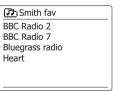
In addition, as mentioned in the previous section, it is possible to specify audio streams for 'My added stations' which are not compatible with your radio. In this event the station will not be playable. The Sangean WFS-58 can only play MP3, WMA and AAC internet radio streams.

Note that the audio coding formats listed are generic terms. There are many variations of each format, as well a variety of streaming protocols in use by different radio broadcasters. Your radio has been designed to play the vast majority of coding and streaming formats in current use by broadcasters.



Internet radio	
My Favourites	>
Local United Kingdom	>
Stations	>
Podcasts	>
My Added Stations	>

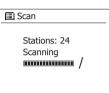


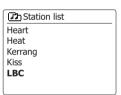


Using DAB mode for the first time

- 1. Carefully extend the telescopic aerial.
- Press the On/Standby button to switch on the radio. If the radio has been used before the last used mode will be selected.
- Press and release the Band button as needed and then use the Menu Up or Down and Select buttons to select the DAB Radio mode.
- 4. If this is the first time that DAB mode is used a scan of the Band III DAB channels will be carried out. The display will show 'Scanning'. (If the radio has been used before the last used station will be selected instead.) During the scanning process, as new stations are detected the station counter will increase and the stations will be added to the list which is stored in the radio. The bar graph indicates the progress of the scan.
- 5. When scanning is completed the radio will list the stations found (in numeric- alpha order 0....9...A...Z), unless it has previously been tuned to a DAB station. Press the Menu Up or Down buttons to scroll through the list of available DAB radio stations. Press and release the Select button to select the highlighted station. The display may show 'Connecting...' while the radio re-tunes. Use the Volume buttons to set the sound level as needed.
- 6. If the station list is still empty after the scan the display will show 'No stations found'.









Selecting a DAB radio station

- 1. When playing a DAB radio station, the display normally shows the name of the current station with other related information.
- Press the Menu Up or Down buttons to access the radio station list and to scroll through the available stations.
- Press and release the Select button to select the highlighted station. The display may show 'Connecting...' while the radio re-tunes.
- 4. Use the Volume buttons to set the sound level as needed.

A question-mark in front of the station name merely indicates that the station has not recently been detected by the radio. It may still be available.

Secondary service

Some DAB radio stations can have one or more secondary stations associated with them. Typically these are not broadcast continually. If a station has a secondary station available then the secondary will appear in the list of station names beneath the main (or primary) station. Examples are the programmes 'Daily Service' and 'Parliament' on BBC Radio 4.

1. To listen to a secondary service, use the Menu Up or Down buttons to scroll to the chosen station, and press and release the Select button to tune to the station. If the secondary service is not available (off-air) then the primary service will be selected.









Display modes

Your radio has a range of display options when in DAB mode:

1. Press and release the Info button to cycle through the different options.

Text Displays text messages such as the artist or track name, phone in

number, traffic alerts, etc.

Program Type Displays the type of station being listened to such as Pop, Classic, News

etc.

Multiplex/Frequency Displays the name of the DAB multiplex to which the current station

belongs as well as its broadcast frequency.

Signal error/strength Displays the signal error and strength for the station being listened

to. A lower error number indicates a better quality of radio signal. The signal strength graph can be used when positioning the radio. For good

reception the graph should occupy three or more blocks.

Bit rate and audio type Displays the digital bit rate and audio coding information for the station

being listened to.

Date Displays the current date.

DL Plus text Some stations may provide other programme related information for the

display in addition to the regular text.

If none is available, a message 'no info' is displayed.

A signal strength indicator is always shown in the lower area of the display on the right hand side. If the broadcast being received is in stereo, then the stereo speaker symbol will be shown.

If the currently tuned station has been stored as a preset, then the preset number will also be shown.

Note: On DAB some radio stations broadcast promotional images and other information which can be displayed on radio with color screens. Once slide appears small in the screen, you can press the Select button to make slide full screen. To return to small screen, press the Select button again.

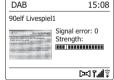














Finding new DAB radio stations

Should you wish to use your radio for DAB reception in a new location, or if no stations were detected during the initial scan, you can follow this procedure to allow your radio to find out which DAB radio stations are available.

- Ensure that the telescopic antenna is extended and press the On/Standby button to switch on the radio.
- Press and release the Band button as needed and then use the Menu Up or Down and Select buttons to select the DAB Radio mode.
- 3. Once in DAB mode press and hold the Menu button.
- 4. Press the Menu Up or Down buttons until 'Scan' is highlighted on the display.
- 5. Press and release the Select button to initiate the scan. The display will show 'Scanning' and your radio will perform a scan of the Band III DAB frequencies. As new stations are found the station counter will increase and stations will be added to the list. The bar graph indicates the progress of the scan.
- 6. Alternatively press the Auto Tune button on the radio to initiate a scan of the DAB Band III frequencies. The Auto Tune button may not operate in all display modes. In this case use the menu option above.

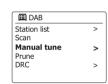
Manual Tuning

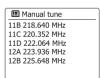
Manual tuning allows you to tune directly to the various Band III DAB channels (5A to 13F).

- 1. When in DAB mode press and hold the Menu button so that the display shows the DAB menu.
- 2. Press the Menu Up or Down buttons until 'Manual tune' is highlighted.
- 3. Press and release the Select button to enter manual tune mode.
- 4. Press the Menu Up or Down buttons to choose the required DAB channel.
- 5. Press and release the Select button to cause the radio to tune to the chosen channel. When the radio has tuned, the display shows the channel number and frequency, and the name of the DAB multiplex found (if any). A bar graph shows the signal strength and is useful if you need to reposition the radio. The minimum signal marker 'l' which separates the left and right parts of the signal graph shows the minimum signal level required for satisfactory reception. Any new radio stations found on the tuned DAB multiplex will be added to the list stored in the radio.
- 6. Press the Back button to choose a different frequency.
- Press the Back button a second time to access the main DAB menu then select 'Station list' to return to normal tuning.











Dynamic Range Control settings

Dynamic Range Control (also known as DRC) can make quieter sounds easier to hear when your radio is used in a noisy environment by reducing the dynamic range of the audio signal.

- 1. Press the On/Standby button to switch on your radio.
- 2. Press and release the Band button as needed and then use the Menu Up or Down and Select buttons to select the DAB Radio mode.
- 3. Press and hold the Menu button to enter the DAB menu.
- 4. Press the Menu Up or Down buttons until 'DRC' is highlighted on the display.
- Press and release the Select button to enter the DRC adjustment mode. The current DRC setting will be indicated with an asterisk.
- Press the Menu Up or Down buttons to highlight the required DRC setting (the default is Off).'DRC Off' DRC is switched off. Broadcast DRC will be ignored.
 - 'DRC high' DRC is set as sent by broadcaster.
 - 'DRC low' DRC level is set to 1/2 that sent by broadcaster.
- 7. Press and release the Select button to confirm the setting.

Note: Not all DAB broadcasts use the DRC function. If the broadcast does not provide DRC information, then the DRC setting in the radio will have no effect.

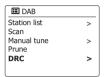
Station order setup

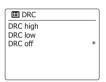
Your radio has 3 station order settings from which you can choose. The station order settings are, alphanumeric, ensemble and valid.

Note: The default station order on your radio is alphanumeric.

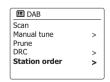
- 1. Press the On/Standby button to switch on your radio.
- Press and release the Band button as needed and then use the Menu Up or Down and Select buttons to select the DAB Radio mode.
- 3. Press and hold the Menu button to enter the DAB menu list.
- Press the Menu Up or Down buttons until 'Station order' is highlighted. Press the Select button to enter the station order adjustment mode.
- 5. Press the Menu Up or Down buttons to choose between 'Alphanumeric', 'Ensemble' and 'Valid'. 'Alphanumeric' - sorts the station list alpha-numerically 0...9 A...Z. 'Ensemble' - organizes the station list by DAB multiplex.
 - 'Valid' shows only those stations for which a signal can be found. The current setting is indicated by an asterisk.
- 6. Press and release the Select button to select the required station order.
- 7. Press the Back button as needed to return to the DAB menu or to the stations list.













Prune stations

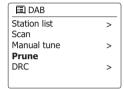
If you move to a different part of the country, some of the stations which were listed may no longer be available. Also, from time to time, some DAB services may stop broadcasting, or may change location or frequency. Stations which cannot be found, or which have not been received for a very long time are shown in the station list with a question mark.

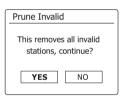
The Prune stations function will delete the marked DAB stations from your station list.

- 1. Press the On/Standby button to switch on your radio.
- Press and release the Band button as needed and then use the Menu Up or Down and Select buttons to select the DAB Radio mode.
- 3. Press and hold the Menu button to enter the DAB menu.
- Press the Menu Up or Down buttons until 'Prune' is highlighted. Press and release the Select button.
- 5. To cause the stations list to be pruned, eliminating unavailable stations press the Menu Left or Right buttons until 'YES' is highlighted on the display.
- 6. Press and release the Select button to cause the invalid station names to be removed from the station list. If you do not wish to prune stations, highlight 'NO' and then press and release the Select button. The display will revert to the previous menu.

Note: If you have moved your radio to a different part of the country you should also carry out a search for new stations (please see the section 'Finding new stations').







FM Radio

Operating your radio in FM mode

- 1. Carefully extend the telescopic aerial and press the On/Standby button to switch on your radio.
- Press and release the Band button as needed and then use the Menu Up or Down and Select buttons to select the FM Radio mode.
- 3. Press and hold the Menu Left or Right buttons to scan the FM band.
- 4. The display will show the frequency of the signal which has been found. If RDS information is available, after a few seconds the display will show the radio station name.
- 5. To find more FM stations repeat the scan operation. Your radio will scan the FM band from the currently displayed frequency and will stop scanning when it finds a signal of sufficient strength.
- 6. Alternatively the Auto Tune button on the radio can also be used. If you only hear hiss or interference, simply press the Auto Tune button to scan further. Your radio may have found a spurious interference signal.
- 7. When the end of the waveband is reached your radio will recommence tuning from the opposite end of the waveband. Use the Volume buttons to adjust the sound level as needed.

Manual tuning

- 1. Carefully extend the telescopic aerial.
- 2. Press the On/Standby button to switch on your radio.
- 3. Press and release the Band button as needed and then use the Menu Up or Down and Select buttons to select the FM Radio mode.
- 4. Press and release the Menu Left or Right buttons to control the frequency that the radio will tune to. The frequency will change in steps of 50kHz. When the end of the waveband is reached the radio will recommence tuning from the opposite end of the waveband.
- 5. Use the Volume buttons to adjust the sound level as needed.











Display modes

Your radio has a range of display options when in FM mode:

- 1. Press and release the Info button to cycle through the different options.
 - Displays text messages such as the artist or track name, phone in number, a. Text
 - traffic alerts, etc.
 - Displays the type of station being listened to such as Pop. Classic. News etc. b. Program Type
 - c. Frequency Displays the frequency of the FM signal.
 - d Date Displays the current date.

Note: If no RDS information is available, then the radio will only be able to display the Pop Music frequency. There will be no text or programme type information available under these conditions. The radio only provides displays when there is information available. So if there is no text, for example, that display is not available.

The RDS indicator at the bottom of the display shows that there is some RDS data present in the broadcast being received.

The stereo speaker display shows that the radio is receiving a stereo broadcast (please see also 'Stereo/Mono switching').

Scan setting

When using the FM mode your radio can be set to either scan local stations or to scan all stations including distant radio stations.

- 1. Press and release the Band button as needed and then use the Menu Up or Down and Select buttons to select the FM Radio mode.
- 2. Press and hold the Menu button to enter the FM menu.
- 3. Press the Menu Up or Down buttons until 'Scan setting' is highlighted and then press and release the Select button to enter the scan adjustment mode. The current scan setting is indicated with an asterisk
- 4. To set your radio so that only the stations with the strongest signals are found during scanning press the Menu Left or Right buttons until 'YES' is highlighted. Press and release the Select button to confirm the setting. (Normally this will restrict scanning to local transmissions.) Alternatively, to set your radio so that all available stations are found during scanning (local and distant transmissions) press the Menu Left or Right buttons until 'NO' is highlighted. Press and release the Select button to confirm the setting.
- 5. Press the Back button to return to the normal FM mode display.



FM Radio

Audio settina

Main menu

System settings

12:34

12:34

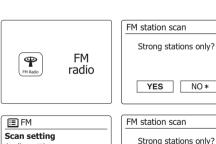
16/06/2017

SODULT 제공

NO *

NO

FM Radio



>

YES*

co D디모네용

Stereo/Mono switching

If the FM radio station being listened to has a weak signal, some hiss may be audible. It is possible to reduce this hiss by forcing the radio to play the station in mono rather than stereo.

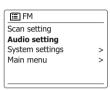
- 1. Press and release the Band button as needed and then use the Menu Up or Down and Select buttons to select the FM Radio mode. Tune to the required FM station as previously described.
- 2. Press and hold the Menu button to enter the FM menu.
- Press the Menu Up or Down buttons until 'Audio setting' is highlighted on the display. Press and release the Select button to enter the audio setting mode. The current setting is indicated with an asterisk.
- 4. To switch to mono in order to reduce the hiss from a weak FM signal press the Menu Left or Right buttons until 'YES' is highlighted. Press and release the Select button to confirm the setting. Alternatively, to return to the normal automatic 'stereo or mono' mode press the Menu Left or Right buttons until 'NO' is highlighted. Press and release the Select button to confirm the setting.
- 5. Press the Back button to return to the normal FM mode display.

Presetting stations

Your radio has ten memory presets each for DAB and FM radio. They are used in the same way for each operating mode.

The radio station presets are retained even when the radio is switched off.







Storing a preset using the unit

- Press the On/Standby button to switch on your radio. Tune to the required station using one of the methods described on the preceding pages.
- 2. Press and hold the Preset button. The display will show a 'Save to Preset' menu.
- 3. Press the Menu Up or Down buttons to scroll through the preset list until you reach an unused preset or a preset that you wish to change. Press and release the Select button to store the preset. 'Preset stored' will be shown on the display. Repeat this procedure as needed for the remaining presets.
- Stations which are already stored in the presets may be over-written by following the procedure above.

Recalling a preset using the unit

- 1. Select the DAB or FM radio mode.
- 2. Press and release the Preset button to display the 'Recall from Preset' menu.
- Press the Menu Up or Down buttons to select the desired preset station. Press and release the Select button.

Your radio will then connect to the station stored in the preset memory. The preset used will be shown at the bottom of the display screen.

■ Save to Preset

- 1. [Not set]
- 2. BBC Radio 4
- 3. Heart
- 4. [Not set]
- 5. [Not set]



■ Recall from Preset

- 1. [Not set]
- 2. BBC Radio 4
- 3. Heart
- 4. [Not set]
- 5. [Not set]



Use with Windows, Apple Mac, Linux

The Music Player allows you to play audio files which are stored on a 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 radio 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 your radio 's controls. WMP can serve MP3, WMA, AAC and WAV files to your radio (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 NAS or network router, you should consult your manufacturer's documentation on how this should be configured.

The Music Player on the radio 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 radio.

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 radio.

Some third party server applications allow customization 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 radio as part of a group of multi-room products, audio files in ALAC and FLAC formats will only play on the group master.

Accessing your audio files via a UPnP server

If your computer is running Windows 7, 8, or 10, then Windows Media Player includes a UPnP server which will make your files available to your radio. 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).

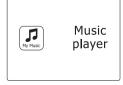
It is beyond the scope of this instruction book to cover all possible options for UPnP. We explain the use of Microsoft's Windows Media Player here since that will be the first choice for the majority of users.

Set up UPnP access with Windows Media Player

- 1. At the time of writing, Windows 7, 8, 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 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 radio.
- 3. Press and release the On/Standby button to switch the radio on. Press and release the Band button as needed and then use the Menu Up or Down and Select buttons to select the Music Player mode. The main 'Music Player' menu will then be displayed.

Enabling Media Streaming in Windows Media Player 12

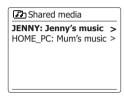




Set up UPnP access on a Windows PC - cont.

- 4. Press the Menu Up or Down buttons until 'Shared media' is highlighted and press the Select button to select. The radio will scan for all available UPnP servers. It may take a few seconds for the radio to complete its scan. The radio will display '<Empty>' if no UPnP servers are found.
- 5. After scanning, select your UPnP server using the Menu Up or Down and Select buttons. If you allowed automatic connection previously, your radio should now connect and you may skip to the next page. If you did not permit automatic connections, your radio will then normally display 'Unauthorised' at this stage.
- 6. Your PC may prompt you that there has been a connection to your UPnP server. Whether prompted or not, in order that the radio 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 radio 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.
- 8. On the radio, select the named server again using the Menu Up or Down and Select buttons. If WMP 12 is now able to communicate with your radio 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 radio, you may select the files that you wish to play as follows:

- Press the On/Standby button to switch on the unit. Press and release the Band button as needed and then use the Menu Up or Down and Select buttons to select the Music Player mode. The main Music Player menu will then be displayed.
- 2. Press the Menu Up or Down buttons until 'Shared media' is highlighted on the display and then press the Select button to cause the radio to scan for UPnP servers. Note that it may take a few seconds for the radio to complete its scan. The display will return to the Music Player menu if no UPnP servers are found.
- 3. After a successful scan, press the Menu Up or Down buttons to highlight your UPnP server and then press the Select button. If the display shows multiple media types, select 'Music'. (Some UPnP servers can serve pictures and video content to suitable devices.)
- 4. The radio will now list the media categories which are made available by the UPnP server for example, 'Album', 'Artist' and 'Genre'. Press the Menu Up or Down buttons to highlight which category you wish to browse, then press the Select button to confirm your choice. If you wish to use the search function, press the Menu Up or Down buttons until 'Search' is selected on the display. 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. For a library of many files this can take some time.



Music player

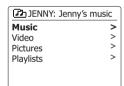
Music player

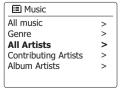
Shared media

My playlist

Repeat play: Off
Shuffle play: Off
Clear My playlist







Media selection

When searching via UPnP you will have a selection of search criteria as determined by the UPnP server software on your computer. 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 customized.

The searches described here are just examples of the possibilities.

Listening to a complete album

- 1. Press the Menu Up or Down buttons to choose content by Artist, Album, Genre, etc. according to your needs then press the Select button to enter your choice.
- 2. When you reach the album or folder the menu will then switch to showing the tracks in that album or folder. When searching by UPnP they will normally be listed in track number order (but as with the search criteria, this can vary according to the server application used).
- With the first track in the album indicated, press the Select button. The album will then begin playing.

While the radio is playing from your media library, you may use the menus as described above to choose a different selection. When you select the track from which to play, the radio will then immediately begin playing the new selection.

JENNY: Jenny's music	
Music	>
Video	>
Pictures	>
Playlists	>

Music	
All music	>
Genre	>
All Artists	>
Contributing Artists	>
Album Artists	>







Listening to a particular track

- 1. If you wish to play only a particular track from an album or folder, first choose the album or folder as described on the preceding pages.
- 2. Press the Menu Up or Down buttons until the required track is highlighted.
- 3. Press and release the Select button. The track will begin playing. The radio will then play subsequent tracks from the same album or folder.

Controlling playback

- 1. Press the Play/Pause button to pause playback of the current track.
- 2. If you press the Play/Pause button, playback will resume from the point where it was paused.
- 3. Press the Previous button to start playback of the previous track in the list.
- 4. Press the Next button to start playback of the next track in the list.
- 5. Press and hold the Next or Previous button to move through the current track. The longer the button is pressed, the greater the speed at which the player will move through the track. Release the button when the desired point is reached. (Note that this feature is not supported when playing files encoded using the FLAC and ALAC format.)

In the music player you may choose to repeat the current album (or playlist), or to play the files in random order, or both options together.

Repeat tracks

- 1. Use the Menu button to enter the main music player menu.
- Press the Menu Up or Down buttons until 'Repeat play' is highlighted. To activate the repeat option press and release the Select button so that 'On' appears on the display. Your selected tracks will now be played repeatedly.
- 3. To turn off the repeat option highlight 'Repeat play' and press and release the Select button so that 'Off' appears on the display.











Play tracks in random order

- 1. Press and hold the Menu button to enter the main music player menu.
- 2. Press the Menu Up or Down buttons until 'Shuffle play' is highlighted.
- To activate the shuffle option press and release the Select button so that 'On' appears on the display. Your selected tracks will be played in random order.
- 4. To turn off the shuffle option highlight 'Shuffle play' and press and release the Select button so that 'Off appears on the display.

If both Repeat and Shuffle playback options are set to 'On' then both Repeat and Shuffle icons will be shown in the display.

Display modes

e Buffer

Your radio has a range of display options when in Music Player mode. Note that the availability of information depends on the specific media files, their format and upon the server capability. (Not all UPnP servers make information from the media files available in the same way.)

- 1. Press and release the Info button to cycle through the different options.
 - a. Progress bar
 b. Artist
 c. Album
 d. Format
 Displays the playback progress for the track currently playing.
 Displays the artist information for the track currently playing.
 Displays the album information for the track currently playing.
 Displays the bit rate and format of the track currently playing.
 - f . Date Displays the current date.

Whenever the Music Player is displaying an information screen (as opposed to a menu screen), the time is displayed in the top-right corner of the display, and a WiFi strength or Ethernet connection indicator is shown in the bottom-right corner together with an indicator showing the method by which the radio is obtaining the media - from a UPnP server.

Displays the radio internal buffer status during media playback.

The WFS-58 is able to display the album art for the track being played. The ability of the radio to display art depends on the presence of the art in the file being played, the art being not too large (or being resized by the server), and the ability of the UPnP server to send the art to the radio. Art sent to the radio needs to be in a JPEG format and no larger than 640 x 480 pixels. If the radio does not receive any art then a default icon is displayed. Some UPnP server applications will also send a default icon if no art is found within the file being played. Some UPnP server applications will be able to re-size the art, if needed, before sending it to the radio. If the radio expects to receive art but none is provided then no art or icon will be displayed. Due to the wide variations in album art formats and UPnP/DLNA standards, the failure of the radio to display album art is not considered to be a fault.

















Playlists

Sometimes you may wish to set up a list of music tracks or albums which can then be played without further action - as background music for a party, for example.

Your radio can be configured to hold a queue of up to 500 tracks in a playlist menu. The tracks or albums for the playlist can be selected from your UPnP server. The playlist is held in the memory in your radio until the external power is removed, or until the playlist is cleared from the menu.

Adding a single track to your playlist

- When selecting a track using a UPnP server press and hold the Select button and the display will show 'Added to My playlist'.
- 2. The track will be added to the playlist for playback later.

Adding an entire album or folder

- 3. When using a UPnP server highlight the chosen album, artist or folder and press and hold the Select button. The display will show 'Added to My playlist'.
- 4. Each of the tracks within the album, artist or folder selection will be added to the playlist individually. This allows any unwanted tracks to be removed from the playlist if needed.

Viewing your playlist

- 1. Press the On/Standby button to switch on the unit. Press and release the Band button as needed and then use the Menu Up or Down and Select buttons to select the Music Player mode. The Music Player menu will then be shown on the display.
- 2. Press the Menu Up or Down buttons until 'My Playlist' is highlighted on the display. Press and release the Select button to enter the playlist.
- Press the Menu Up or Down buttons to scroll through the playlist. Tracks which are served via UPnP will show their track name.

Love Me Do >
From Me to You >
She Loves You >
I Want to Hold Your Hand >
Can't Buy Me Love >











Erasing a track from the playlist

- 1. Press and hold the Menu button to enter the main Music Player menu.
- Press the Menu Up or Down buttons until 'My Playlist' is highlighted on the display. Press and release the Select button to enter the playlist.
- Press the Menu Up or Down buttons until the track you wish to erase is highlighted. Press and hold the Select button.
- 4. You will be asked to confirm the deletion. To delete the track press the Menu Left or Right buttons until 'YES' is highlighted on the display then press and release the Select button to confirm the deletion.
- 5. If you do not wish to delete the track from the list, press the Menu Left or Right buttons to highlight 'NO' and press and release the Select button to cancel the operation.

Clearing the playlist

- 1. Press and hold the Menu button to enter the main Music Player menu.
- 2. To clear the whole playlist press the Menu Up or Down buttons until 'Clear My playlist' is highlighted on the display. Press and release the Select button.
- To clear the whole playlist press the Menu Left or Right buttons until 'YES' is highlighted on the display. Press and release the Select button to clear the playlist.
- 4. If you do not wish to clear the playlist press the Menu Left or Right buttons to highlight 'NO' and press and release the Select button to confirm.

Playing your playlists

- 1. Press and hold the Menu button to enter the main Music Player menu.
- Press the Menu Up or Down buttons until 'My playlist' is highlighted on the display. Press and release the Select button.
- 3. To play the playlist from a particular track, press the Menu Up or Down buttons until the desired track is highlighted then press and release the Select button to start play.
- 4. While playing from the playlist, you can use this function to jump to a particular track within the playlist.
- 5. While playing from the playlist, you may add additional tracks or albums or remove specific tracks(please see the preceding sections).

Love Me Do
From Me to You
She Loves You
I Want to Hold Your Hand
Can't Buy Me Love









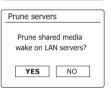


Prune servers

Your radio stores details of UPnP servers that it has seen via its network connection in its internal memory. If you use the radio at different locations you may find that there are servers listed by the radio that you are no longer interested in. The prune servers functions allows the list to be updated so that only active UPnP servers on the currently connected network are shown when selecting 'Shared Media' from the Music Player menu.

- 1. Press and hold the Menu button to enter the main Music Player menu.
- Press the Menu Up or Down buttons until 'Prune servers' is highlighted on the display. Press and release the Select button.
- 3. To remove servers that are no longer required press the Menu Left or Right buttons until 'YES' is highlighted on the display. Press and release the Select button to cause the servers to be removed.
- 4. If you do not wish to prune servers press the Menu Left or Right buttons to highlight 'NO' and press and release the Select button to confirm.





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 radio 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 radio operates as a Digital Media Renderer (known as DMR mode).

- 1. Ensure your radio 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 radio.
- 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 radio, to which you may choose to send the music. Highlight the radio 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 radio. Your radio will enter the Digital Media Renderer mode (DMR) and after a few seconds the radio will start playing. The display on the radio will show that is it in DMR mode.
- 6. While the radio 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 radio. You may also use the controls on your radio to adjust volume, display track information (press the Info button) or to change operating mode. It is not possible to skip tracks or pause playback using the radio's controls while it is in DMR mode.
- 7. While playing, you may select additional content within Windows and again use the 'Play to'/'Cast to Device' function (see steps 2 4). 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 radio 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 and 10 has been tested successfully with the WFS-58 when using Microsoft's own security software without problems.



Listening to Spotify

Playing music using Spotify Connect

Introduce your radio to a whole new world of music. With Spotify, you can enjoy instant access to millions of songs. A Spotify Premium subscription is required.

For details, see the Spotify homepage. http://www.spotify.com

The Spotify software is subject to third party licenses found here: www.spotify.com/connect/third-party-licenses

- 1. Prepare for playback
- Download Spotify app (Spotify) to your smartphone or tablet and log in to the app.
- Check the network environment and then turn on this radio's power (please refer to 'Configuration' in the previous section.)

Note:

It is necessary that your radio and your smartphone or tablet connect to the same wifi network, so that you can find the radio on your smartphone or tablet later.

Open Spotify on your smartphone (for example), then enter the Playback screen as shown in the right side.

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 if needed.

- 3. Press and release the Band button and then use the Menu Up or Down and Select buttons to select the Spotify Connect mode. The message 'Waiting for Users' is displayed.
- 4. Play tracks via your radio.

Press the Connect icon () at the bottom of the screen on your smartphone and you should find your radio on the list. Press the item and your smartphone is linked with your radio (e.g. Sangean WFS-58). You can see the green Connect icon indicating the connect is on radio. Now you can listen to audio streamed wirelessly from your linked smartphone.

Note:

If you cannot see the icon, it indicates no connect device available. Check your device's user manual or the manufacture's support site as a firmware upgrade may be required.

- 5. Control playback.
 - Use the controls on your Connect-enabled device (e.g. Smartphone) or controls on the radio (or the remote control) to play or pause audio, navigate tracks and control volume.
- 6. Disconnect Spotify from your radio.

Press the icon () and you will see your smartphone (for example) on the list, press the item and Spotify will play via your smartphone. In addition, you can switch off your radio or select a different operating mode.









Display mode- Spotify Connect

Your radio has a range of display options when playing Spotify Connect.

1. Press and release the Info button to cycle through the different options.

a. Progress barb. ArtistDisplays the playback progress for the track currently playing.Displays the name of the artist for the track currently playing.

c. Album

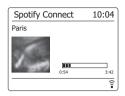
Displays the name of the album from which the current track is taken.

Displays the bit rate and sampling rate of the track currently playing.

e. Playback buffer Displays the soundbars internal buffer level.

Note:

If the Audio streaming from Spotify Connect is interrupted or stopped (e.g. control passed to another device), the message "Waiting for Users" is displayed.











Listening to Napster/Deezer/Qobuz/TIDAL

Before you can use your radio to listen to Napster/Deezer/Qobuz/TIDAL, it is necessary that your radio connects to the wifi network and you need to register a valid user account to access these streaming music services. Please note that a Premium subscription is required for each streaming music service.

 With your radio switched on, press and release the Band button and then use the Menu Up or Down and Select buttons to select the required mode.









Napster

Deezer

Qobuz

TIDAL

2. Use the Menu Up or Down and Select buttons to enter the username. Press the Info button and then use the Menu Up or Down buttons to highlight 'OR' symbol on the screen. Press the Select button and then follow the same steps to enter the password to finish the login.





3. Highlight the streaming service menu item using the Menu Up or Down buttons. Press the Select button to confirm the option.









- 4. Control the playback using Play/Pause (▶┃), Next track (▶▶┃), Previous track (▶▶┃) buttons on the radio. Press and hold the Next or Previous button to move through the current track. Release the button when the desired point is reached.
- 5. If the streaming music service is able to provide information from the track being played, you may press and release the Info button to view the information on the display.
- 6. If you wish to log out of the current user account, when in streaming service menu, press the Menu Up or Down button until 'Logout' is highlighted on the display and press Select button.









Listening to music via Bluetooth streaming

You need to pair your Bluetooth device with WFS-58 before you can auto-link to play/stream Bluetooth music through your radio. Pairing creates a 'bond' so two devices can recognize each other.

Pairing and playing your Bluetooth device for the first time

- Press and release the On/Standby button to switch on the radio. Press and release the Band button
 and then use the Menu Up or Down and Select buttons to select the Bluetooth mode. Your radio will
 show that it is discoverable by flashing the Bluetooth indicator on the display.
- 2. Activate Bluetooth on your device according to the device's user manual to link to the radio. Locate the Bluetooth device list and select the device named 'WFS-58'. With some mobiles (which are equipped with earlier versions than BT2.1 Bluetooth device), you may need to input the pass code "0000".
- 3. Once connected, the name of your connected Bluetooth device will show on the display. You can simply select and play any music from your source device. Volume control can be adjusted from your source device, or directly from the radio.
- Use the controls on your Bluetooth-enabled device or on the radio to play/pause and navigate tracks

Note:

- If 2 Bluetooth devices, pairing for the first time, both search for your radio, it will show its availability
 on both devices. However, if one device links with this unit first, then the other Bluetooth device
 won't find it on the list.
- 2). If you take your source device out of range, the connection will be temporarily disconnected to your radio. Your radio will automatically reconnect if the source device is brought back in range. Be aware that during the period of disconnection, no other Bluetooth device can pair or link with your radio.
- 3). If 'WFS-58' shows in your Bluetooth device list but your device cannot connect with it, please delete the item from your list and pair the device with the radio again following the steps described previously.
- 4). The effective operation range between the system and the paired device is approximately 10 meters (30 feet). Any obstacle between the system and the device can reduce the operational range.
- 5). Bluetooth/NFC connectivity performance may vary depending on the connected Bluetooth devices. Please refer to the Bluetooth capabilities of your device before connecting to your radio. All features may not be supported on some paired Bluetooth devices.



Bluetooth Audio

Playing audio files in Bluetooth mode

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

- Once playing has started adjust the volume to the required setting using the Volume buttons on your radio or on your enabled Bluetooth device.
- 2. Use the controls on your device to play/pause and navigate tracks. Alternatively, control the playback using Play/Pause (▶■), Next track (▶▶■), Previous track (◄◄) buttons on the radio.
- Press and hold the Next or Previous button to move through the current track. Release the button when the desired point is reached.

Note:

- 1). That not all player applications or devices may respond to all of these controls.
- When you make or receive calls, you radio will pause the music automatically to allow you to answer the phone. Such behaviour is a function of the connected device and does not indicate a fault with your radio.

Display modes - Bluetooth

Your radio has a range of display options when in Bluetooth mode. Note that the availability of information depends on the specific media format.

- 1. Press and release the Info button to cycle through the different options.
 - a. Title Displays the track information for the track currently playing.
- b. Artist Displays the artist information for the track currently playing.
- c. Album Displays the album information for the track currently playing.







Speaker memory and reconnecting a device

Your radio can memorize up to 8 sets of paired device, when the memory exceed this amount, the oldest pairing history will be over written.

If your Bluetooth device already paired with the radio previously, the unit will memorize your Bluetooth device and it attempts to reconnect with a device in memory which is last connected. If the last connected device is not available, your radio will try to connect to the second last device, and so forth. Alternatively, you can select to connect to your previously-paired device.

- Press and release the Band button and then use the Menu Up or Down and Select buttons to select the Bluetooth mode.
- 2. Press and hold the Menu button to enter the Bluetooth menu.
- 3. Press the Menu Up or Down buttons until 'View details' is highlighted and then press the Select button to enter the menu.
- 4. Press the Menu Up or Down buttons until 'Paired Device List' is highlighted and then press the Select button to enter a list of previously connected devices.
- 5. Press the Menu Up or Down buttons to highlight a previously-paired device you would like to connect and press the Select button to confirm the selection.

Bluetooth or connected Bluetooth device information display

- 1. Press and release the Band button and then use the Menu Up or Down and Select buttons to select the Bluetooth mode.
- 2. Press and hold the Menu button to enter the Bluetooth menu.
- 3. Press the Menu Up or Down buttons until 'Bluetooth Info' is highlighted and then press the Select button to display the Bluetooth information (e.g. Bluetooth Status/Firmware/Friendly name).
- 4. To View connected Bluetooth device information, when in Bluetooth menu, press the Menu Up or Down buttons until 'Connected Device' is highlighted and then press the Select button.

Disconnecting your Bluetooth device

- 1. Press and hold the Bluetooth pairing button for 2-3 seconds to disconnect with your Bluetooth device. The Bluetooth indicator will flash on the display. Now your radio is discoverable again for pairing.
- You can also turn off Bluetooth on your Bluetooth source device to disconnect with your Bluetooth device or select any mode other than Bluetooth mode to disable the connection.







Pairing and playing your device via NFC

Your radio is equipped with wireless NFC (Near Field Communication) feature, allowing NFC enabled devices to pair and play the music with your radio. For non-NFC devices, please refer to the above sections for standard Bluetooth pairing.

- Turn on your NFC feature on your device. (Important: Please make sure the screen of your playing device is on and unlocked to allow NFC to work.)
- 2. Touch the NFC area of your playing device against the NFC area of the radio. The unit will enter automatic pairing mode. If you pair with the unit for the first time, some NFC enabled device will be asked the permission to link with the radio. Once paired with a device, 'Connecting WFS-58...' or a similar message is shown on your NFC-enabled device.
- 3. Use the controls on your device or on your radio to play/pause and navigate tracks.

Note:

- 1. NFC connectivity performance may vary depending on the connected Bluetooth devices. Please refer to the Bluetooth capabilities of your device before connecting to your radio. All features may not be supported on some Bluetooth/NFC enabled devices.
- 2. The location of the NFC detection area is not the same on all devices. When connecting with other Bluetooth device via NFC, refer to the User guide of the other device for more information.
- Some of metallic case or cover for mobile phones may reduce the sensitivity of NFC. Make sure you remove it, before activating the NFC.

Disconnecting your NFC-enabled device

To disconnect your device, simply touch it again on the NFC area of the radio. (Important: Please make sure the screen of your playing device is on and unlocked to allow NFC to work.)

Automatically updating the clock

Your radio will normally update the clock automatically when connected to the internet. If you enter a time setting manually, the radio will calculate a local time offset which is then stored in memory. Whenever it synchronises the clock using the internet, including after a power failure, your radio will then set the clock automatically using this information.

You may wish to use the radio away from the internet, in which case you may specify that the unit sets its clock from DAB or FM radio broadcasts. After a power failure the radio will then set its clock the next time that you turn on the radio in DAB or FM mode.

Alternatively you may specify that the time is not automatically updated. In this case the clock must always be set manually after a power interruption.

- With your radio switched on, press and hold the Menu button to access the menu for the current mode.
- 2. Press the Menu Up or Down buttons until 'System settings' is highlighted on the display. Press and release the Select button to enter the System Settings menu.
- 3. Press the Menu Up or Down buttons until 'Time/Date' is highlighted on the display. Press and release the Select button to enter the time setup.
- 4. Press the Menu Up or Down buttons until 'Auto update' is highlighted on the display. Press and release the Select button to enter the Auto Update menu.
- 5. Press the Menu Up or Down buttons to choose an update option from 'Update from DAB', 'Update from FM', 'Update from Network' or 'No update' as required. Press and release the Select button to confirm your choice. The radio will then exit to the previous menu display.

Bluetooth
AUX-IN
Sleep
Alarms
System settings





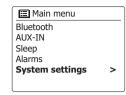


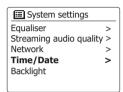
Setting the clock format

The clock display used in Standby mode and on the playing mode screens can be set to 12 or 24 hour format. The selected format is then also used when setting the alarms.

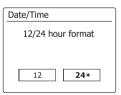
- 1. With your radio switched on, press and hold the Menu button to access the menu for the current mode
- 2. Press the Menu Up or Down buttons until 'System settings' is highlighted on the display. Press and release the Select button to enter the System Settings menu.
- 3. Press the Menu Up or Down buttons until 'Time/Date' is highlighted on the display. Press and release the Select button to enter the time setup.
- 4. Press the Menu Up or Down buttons until 'Set format' is highlighted on the display. Press and release the Select button to enter the Clock Format menu. The current clock display format is marked with an asterisk
- 5. Press the Menu Left or Right buttons to select either 12 or 24 hour format. Press and release the Select button to confirm your choice of clock format. The display will then revert to the previous menu.

If the 12 hour clock format is chosen, the radio will then use the 12 hour clock for the setting of alarms, and will display a 12 hour clock with an AM or PM indicator when in standby mode.









Manually setting the clock

After a connection to the Internet has been established, your radio will normally set its clock automatically to the local time zone that was specified during setup.

Should you need to set the time manually, change the time zone, or manually switch from winter to summer time (from GMT to BST in the UK, also commonly known outside the UK as daylight savings time), then please follow this procedure.

- With your radio switched on, press and hold the Menu button to access the menu for the current mode.
- 2. Press the Menu Up or Down buttons until 'System settings' is highlighted on the display. Press and release the Select button to enter the System Settings menu.
- 3. To change the time zone setting go to step 10. To change from winter to summer time go to step 12. To change the current time or date setting press the Menu Up or Down buttons until 'Time/ Date' is highlighted on the display, then press and release the Select button to enter the time and date setting screen.
- Press the Menu Up or Down buttons until 'Set Time/Date' is highlighted on the display. Press and release the Select button to enter the clock setup. The day digits will flash.
- 5. Press the Menu Up or Down buttons until the correct day is shown on the display. Press and release the Select button to enter the selection. The month digits will then flash.
- 6. Press the Menu Up or Down buttons to select the correct month. Press and release the Select button to enter the selection. The year digits will then flash.

Main menu
Bluetooth
AUX-IN
Sleep
Alarms
System settings >

Equaliser > Streaming audio quality > Network > Time/Date > Backlight

E Time/Date

Set Time/Date

Auto update >
Set format
Set timezone
Daylight savings >

06 - 04 - 2017 13:53

Set Time/Date

06 - **04** - 2017

13:53

- 7. Press the Menu Up or Down buttons to select the correct year. Press and release the Select button to enter the selection. The hour digits will then flash.
- 8. Press the Menu Up or Down buttons to select the correct hour. Press and release the Select button to enter the selection. The minute digits will then flash.
- Press the Menu Up or Down buttons to select the correct minutes. Press and release the Select button to enter the selection. The display will then return to the previous menu.
- Press the Menu Up or Down buttons until 'Set timezone' is highlighted on the display then press and release the Select button.
- 11. Press the Menu Up or Down buttons to highlight the time zone which is applicable to your location, press and release the Select button to confirm the setting. Press the Back button to exit or go to step 12 to set the summer/winter time option.
- 12. Press the Menu Up or Down buttons until 'Daylight savings' is highlighted on the display then press and release the Select button. The asterisk shows the current setting. In the UK, ON is equivalent to British Summer Time, OFF is equivalent to Greenwich Mean Time.
- 13. Press the Menu Left or Right buttons to highlight 'ON' or 'OFF' as required then press and release the Select button to confirm the setting. Press the Back button to exit.

Set Time/Date

06 - 04 - **2017** 13:53

Set Time/Date

06 - 04 - 2017 **13**:53

Set Time/Date

06 - 04 - 2017 13:**53**

Ime/Date
Set Time/Date
Auto update
Set format
Set timezone
Daylight savings

ETime/Date
Set Time/Date
Auto update
Set format
Set timezone
Daylight savings

UTC + 00:00: Dublin, Lond ★
UTC + 00:30:
UTC + 01:00: Madrid, Am
UTC + 01:30:
UTC + 01:30:
UTC + 02:00: Athens, Cair
UTC + 02:30:

Daylight savings

Daylight savings

ON OFF*

Setting the alarm clock

Your radio has two separate alarms which can be set to wake you to either the radio or a buzzer alarm. In the event of a power interruption your radio has built in memory that will retain your alarm settings. Ensure that the time is set correctly before setting the alarms.

If your radio is being used as part of a multi-room system, please also see 'Alarm and Multi-room'.

- 1. While the radio is switched on, press and hold the Menu button to access the menu for the current mode. Press the Menu Up or Down buttons until 'Main menu' is highlighted on the display. Press and release the Select button to enter the Main menu.
- Press the Menu Up or Down buttons until 'Alarms' is highlighted on the display. Press and release the Select button to see the current alarm settings. If no change is required, press the Back button to exit.
- 3. Press the Menu Up or Down buttons until the desired alarm (1 or 2) is highlighted on the display. Press and release the Select button to enter alarm setup.
- 4. Press the Menu Up or Down buttons until 'Time' is highlighted on the display. Press and release the Select button to adjust the alarm time.
- 5. Press the Menu Up or Down buttons to choose the alarm hour. Press and release the Select button to confirm the setting.

06/04/2017 **15:37 2** 07:30 **2** 08:30 **?**

Main menu
FM
Bluetooth
AUX-IN
Sleep
Alarms

Alarms
Alarm 1: Off [00:00]
Alarm 2: Off [00:00]

E Alarm 1
Enable: Off
Time: 00:00
Mode: Buzzer
Volume: 20
Save

07:00

- 6. Press the Menu Up or Down buttons to choose the alarm minute. Press and release the Select button to confirm the setting. The display will then return to the alarm setting menu. If the radio has been set to use a 12 hour clock format, there will also be an option here for setting AM or PM for the alarm time
- 7. Press the Menu Up or Down buttons to highlight 'Enable' and press and release the Select button. The display will show the Frequency options for the alarm. The alarm frequency options are as follows:

'Off' - the alarm will be disabled

'Daily'- the alarm will sound everyday

'Once'- the alarm will sound once

'Weekends' - the alarm will sound only at weekends 'Weekdays' - the alarm will sound on weekdays only Press the Menu Up or Down buttons to choose the required alarm frequency option. Choosing Off will disable the alarm. Press and release the Select button to confirm the selection.

If you choose to set the alarm to Once you will also need to set the date using the Menu Up or Down and Select buttons

8. The alarm can be set to buzzer. Internet radio. DAB or FM radio. For whichever radio mode is selected, the radio alarm may be set to any of the stations which have been stored as presets or to the station most recently listened to. Press the Menu Up or Down buttons to highlight the current 'Mode' option for the alarm, then press and release the Select button if you wish to change it. Press the Menu Up or Down buttons to highlight either 'Buzzer' or the required mode. Press and release the Select button to confirm the selection

Alarm 1 time

07:30

I III Alarm 1 **Enable: Off**

Time: 07:30 Mode: Buzzer Volume: 20 Save

■ Alarm 1 frequency

Off Daily Once Weekends

Weekdays

Alarm 1 date/time

06 - 04 - 2017 13:53

■ Alarm 1

Enable: Once Time: 07:30 Date: 06/04/2017 Mode: Buzzer

Volume: 20

■ Alarm 1 mode

Buzzer Internet radio DAR

FM

9. If setting the alarm to a radio option, press the Menu Up or Down buttons to highlight the 'Preset:' option then press and release the Select button if you wish to change it. Choose from either the radio station 'Last listened' to, or from the presets 1 - 10. Scroll to the chosen option and press the Select button to confirm the selection.

Note: The alarm may only use a preset which has already been stored.

- 10. Press the Menu Up or Down buttons until the 'Volume:' option is highlighted on the display and press and release the Select button if you wish to change it. The radio uses the saved volume setting for each alarm when it sounds. Press the Menu Up or Down buttons to set the required volume and then press and release the Select button to confirm the setting.
- 11. In order to store the alarm settings press the Menu Up or Down buttons until 'Save' is highlighted. Press and release the Select button to store the alarm settings. Your radio will show 'Alarm saved' and will then go back to the list of alarms with the new alarm setting shown in the display. If you decide not to save the settings, press the Back button. The display will show 'Save changes' with a 'YES' or 'NO' option. Press and release the Menu Left or Right buttons to choose 'NO' and then press and release the Select button. 'Alarm not saved' will show on the display. Active alarms are shown using small alarm indicators at the bottom of the playing displays and on the clock display when in Standby.

Note: If you make a mistake at any point while setting the alarms, use the Back button to go back to the previous screen.

☐ Alarm 1

Enable: Once
Time: 07:30

Date: 06/04/2017

Mode: DAB

Preset: Last listened

■ Alarm 1 preset

Last listened

- 1. BBC Radio 2
- Rock Antenne
 Absolute Radio
- 4. [Not set]

I Alarm 1

Time: 07:30 Date: 06/04/2017 Mode: DAB

Preset: Last listened
Volume: 20

Alarm 1 volume



15



67

When the alarm sounds

The buzzer or radio alarm will sound at the selected times for up to 60 minutes unless cancelled. The volume used for the alarm will be as specified during the alarm setting procedure. If the radio cannot connect to the specified radio station, the buzzer alarm will be used instead.

During an alarm, the alarm icon will flash at the bottom of the playing mode displays. The radio will automatically revert to standby mode after 60 minutes.

To cancel an alarm, press the On/Standby button to return to Standby mode.

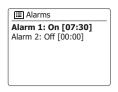
Note: If the radio is switched on because of an alarm you can control basic functions such as volume.

Snooze timer

- 1. The buzzer or radio alarm can be silenced for 5 minutes by pressing any button other than the On/ Standby or Volume button. Should you wish for a longer snooze duration this can be extended. Pressing any button again other than the On/Standby or Volume button while the radio is snoozed will set the available snooze time to 5, 10, 15 or 30 minutes.
- While the snooze timer is active the remaining snooze time is shown next to the flashing alarm icon on the clock display.
- 3. In order to cancel the Snooze timer while the alarm is suspended, press the On/Standby button. The display will briefly show an 'Alarm Off' message.

Disabling alarms

- 1. To disable an alarm while the radio is playing enter the Alarms menu and press the Menu Up or Down buttons until the desired alarm is highlighted on the display. Press the Select button.
- Press the Menu Up or Down buttons until the 'Enable:' option is highlighted on the display. Press and release the Select button.
- 3. Press the Menu Up or Down buttons to highlight 'Off' and press and release the Select button.
- 4. Press the Menu Up or Down buttons until the 'Save' option is highlighted on the display then press and release the Select button to save the new setting. The chosen alarm will now be disabled.



06/04/2017 **15:37**№ 07:30

№ 08:30

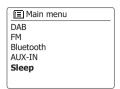
06/04/2017 15:37 18 07:30 10 08:30 7

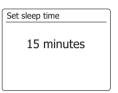
Enable: Off
Time: 07:30
Mode: Buzzer
Volume: 20
Save

Sleep timer

Your radio can be set to turn off after a preset time has elapsed. The sleep timer setting can be adjusted between 15 and 120 minutes.

- 1. With your radio switched on, access the menu for the current mode by pressing and holding the Menu button. Press the Menu Up or Down buttons until 'Main menu' is highlighted on the display. Press and release the Select button to enter the Main menu.
- Press the Menu Up or Down buttons until 'Sleep' is highlighted on the display then press and release the Select button.
- 3. Press the Menu Up or Down buttons until the required sleep time setting is selected. Press and release the Select button to confirm the setting.
- 4. The sleep timer will be set to the chosen duration. An active sleep timer is shown using a small timer indicator at the bottom of the playing displays. This indicator also shows the sleep time remaining before the radio switches itself into Standby mode.
- 5. To cancel the sleep time before the preset time has elapsed and to turn off the radio, press the On/ Standby button to turn the unit off manually. To cancel the sleep timer and leave the radio playing, go back into the sleep timer settings (steps 1 to 3 above) and select the Off option in step 3.









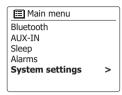
Display and Audio

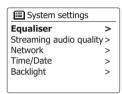
Equaliser function

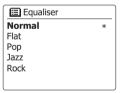
The sound on your radio can be adjusted to suit your personal taste for the material that you are listening to. The WFS-58 has a range of equaliser options. Alternatively you may set the bass, midrange and treble levels to your own preferences which can be accessed from the My EQ menu item.

- 1. Press the On/Standby button to switch on your radio.
- 2. Press and hold the Menu button to access the menu for the current mode.
- 3. Press the Menu Up or Down buttons until 'System settings' is highlighted on the display. Press and release the Select button to enter the System Settings menu.
- 4. Press the Menu Up or Down buttons until 'Equaliser' is highlighted on the display. Press and release the Select button.
- 5. Press the Menu Up or Down buttons to cycle through and highlight the various modes. Press and release the Select button to confirm your selection.

The currently selected mode is marked with an asterisk.





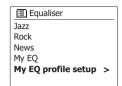


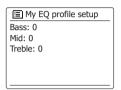
Setting up your My EQ profile

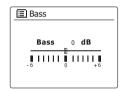
If you find the preset equaliser functions not to your liking, you may set up a custom bass, mid-range and treble setting as follows:

- 1. Follow steps 1-4 on the preceding page in order to enter the Equaliser menu.
- 2. Press the Menu Up or Down buttons until 'My EQ profile setup' is highlighted on the display. Press and release the Select button to enter the adjustment mode.
- 3. To adjust the bass level press the Menu Up or Down buttons until 'Bass' is highlighted on the display. Press and release the Select button to enter the adjustment mode and press the Menu Up or Down buttons until the desired level (between -6 and +6) is displayed. The sound will change as you adjust the levels. Press and release the Select button when you are happy with the bass setting.
- 4. To adjust the mid-range or treble level press the Menu Up or Down buttons until 'Mid' or Treble' is highlighted on the display. Press and release the Select button to enter adjustment mode and press the Menu Up or Down buttons until the desired level (between -6 and +6) is displayed. The sound will change as you adjust the level. Press and release the Select button when you are happy with the mid-range or treble setting.
- 5. Press the Back button and the display will prompt you to save the changes. If you wish to save the changes press the Left or Right buttons to highlight 'YES'. If you do not wish to save the changes highlight 'NO'. Press and release the Select button to enter the selection.
- 6. To use the 'My EQ' profile press the Menu Up or Down buttons until 'My EQ' is highlighted, and then press and release the Select button to make the selection.

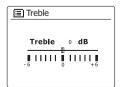
To quickly cancel the effect of the 'My EQ' profile press the Menu Up or Down buttons until 'Normal' is highlighted on the display and press and release the Select button. The bass, mid-range and treble settings will be remembered for the next time that you wish to use the 'My EQ' setting.











Streaming audio quality setting

The Streaming audio quality can be set to Low/Normal/High quality.

- 1. Press the On/Standby button to switch on your radio.
- 2. Press and hold the Menu button to access the menu for the current mode.
- 3. Press the Menu Up or Down buttons until 'System settings' is highlighted on the display. Press and release the Select button to enter the System Settings menu.
- 4. Press the Menu Up or Down buttons until 'Streaming audio quality' is highlighted on the display. Press and release the Select button to enter the setting.
- 5. Press the Menu Up or Down buttons to select your option and press the Select button to confirm your setting.

Low quality- the lowest provided bit rate

Normal quality - the median of the provided bit rate

High quality – the highest provided bit rate

Brightness control

The brightness of the display can be adjusted for when the radio is in standby and for when it is in use. If you use the unit in the bedroom, you may prefer a lower standby brightness level than the standard setting. There are a range of Standby brightness levels and a range for when the radio is in use. To change the current brightness setting, please follow these steps.

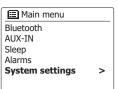
- Press the On/Standby button to switch on your radio. Access the menu for the current mode, press and hold the Menu button.
- 2. Press the Menu Up or Down buttons until 'System settings' is highlighted on the display. Press and release the Select button to enter the System Settings menu. Press the Menu Up or Down buttons until 'Backlight' is highlighted on the display. Press and release the Select button.
- 3. In Backlight menu, there are 3 settings:

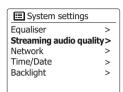
Time out: to adjust the length of time before the backlight turns off.

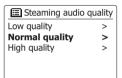
On level: to adjust the brightness when the radio is in use.

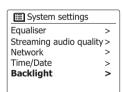
Dim level: to adjust the brightness when the radio is in standby.

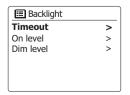
Press the Menu Up or Down buttons to select your option and press the Select button to confirm your setting.











Loudness

- With your radio switched on, press and hold the Menu button to access the menu for the current mode.
- Press the Menu Up or Down buttons until 'System settings' is highlighted on the display. Press and release the Select button to enter the System Settings menu.
- 3. Press the Menu Up or Down buttons until 'Loudness' is highlighted on the display. Press and release the Select button.
- 4. Press the Menu Up or Down buttons to select 'On' or 'Off'. Select 'On' to get compensation on lower and higher frequency. The effect will be more audible when the radio is in lower volume level. Press the Select button to confirm the setting. To turn off the loudness function, select 'Off' and press the Select button to confirm the setting.

Streaming audio quality > Network > Time/Date > Backlight > Loudness >

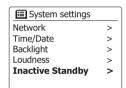


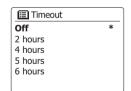
Inactive Standby timer

The Inactive Standby timer allows your radio to save power by automatically going to Standby if no controls are used for a period of time.

- 1. With your radio switched on, access the menu for the current mode, press and hold the Menu button.
- Press the Menu Up or Down buttons until 'System settings' is highlighted and press and release the Select button.
- Press the Menu Up or Down buttons until 'Inactive Standby' is highlighted and press and release the Select button.
- 4. Choose from 2, 4, 5, 6 hours or Off. Your radio will go into Standby after the selected time has expired. Setting Inactive Standby to Off will disable this feature.

Note that if the sleep timer is used then the sleep timer will override this setting.





Language selection

By default your radio will display all menus and messages in English. You can choose your preferred language.

- Access the menu for the current mode by pressing and holding the Menu button. Press the Menu
 Up or Down buttons until 'System settings' is highlighted on the display. Press the Select button to
 enter the settings menu.
- 2. Press the Menu Up or Down buttons until 'Language' is highlighted on the display. Press the Select button to enter the menu.
- 3. Press the Menu Up or Down buttons until your preferred language is highlighted and press the Select button to confirm the setting.

System settings Time/Date > Backlight > Loudness > Inactive Standby > Language >

Headphone socket

A 3.5mm Headphone Socket located on the rear of your radio is provided for use with headphones. Inserting a plug automatically mutes the internal loudspeaker.

Please be aware that the sensitivity of headphones can vary widely. We therefore recommend setting volume to a low level before connecting headphones to the radio. It is also recommended to reduce the volume before unplugging your headphones.

Important:

Excessive sound pressure from earphones and headphones can cause hearing loss.

To prevent possible hearing damage, do not listen at high volume levels for long periods.



Auxiliary input socket

A 3.5mm Auxiliary Input socket located on the rear of your radio 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 radio. Typically this lead will have a 3.5mm stereo plug at both ends.
- 2. Switch on your radio.
- 3. Press and release the Band button and then use the Menu Up or Down and Select buttons to select the 'AUX-IN' mode.
- 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 radio 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 in order to listen to your radio conventionally.



Information

Factory reset

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

- To access the menu for the current mode, press and hold the Menu button. Press the Menu Up or Down buttons to highlight the 'Main menu' option, then press and release the Select button to select.
- 2. Press the Menu Up or Down buttons until 'System settings' is highlighted and then press and release the Select button to select.
- 3. Press the Menu Up or Down buttons until 'Factory reset' is highlighted and then press and release the Select button. Press the Menu Left or Right buttons and highlight 'YES' to proceed. If you do not wish to carry out a system reset, highlight 'NO' and then press and release the Select button. The display will revert to the previous menu.
- 4. With 'YES' highlighted, press and release the Select button. A full reset will be performed and the radio will restart as if first plugged in. The DAB stations list together with any preset stations will be erased and your wireless network connection details will be lost. All configuration settings will be restored to their defaults, the clock and alarms will be reset.

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.









Software update

From time to time, new software features for your radio may be developed. Your radio has therefore been designed to allow its internal software to be updated using your Internet connection.

You should not attempt to update your radio unless it is recommended to you by Sangean Customer Services. Updating the software may remove all network settings, radio station presets and alarm settings from your radio.

It is important that you do not attempt this procedure unless you have a good Internet connection and a reliable mains power supply. If the radio connects to your router using a WiFi connection, make sure that this is also reliable before proceeding.

- 1. The 'Software update' option is accessed via the System Settings menu. When you select 'Software update' the menu will display 'Auto check setting' and 'Check now'. If you want your radio to check periodically for new software versions press the Menu Up or Down buttons to highlight 'Auto check settings'. Then press and release the Select button and select 'YES'. If you do not want your radio to check for updates select the 'NO' option.
- 2. To check if there are any software updates available currently, press the Menu Up or Down buttons to highlight 'Check now' and then press and release the Select button. The radio will check to see if an update is available. The display will show 'Checking for new versions'. If there are no updates then the display will show 'Software up to date'. If a software update is available your radio will then offer the choice of updating the software or not, displaying 'New version available. Update software?'. Select the 'YES' option if you wish to go through the update process.
- 3. If you choose to update your radio it will first download the new software and will then reprogram its internal memory. This may take anything from a few seconds to a few minutes depending on the speed of your internet connection.
- 4. Once the software update is completed, the radio will prompt you to press Select to restart. Press and release the Select button and your radio will then restart. You may find that you will need to reconfigure your network connection following an update. You may also need to re-enter all radio station presets, alarm settings, and configuration options.

VERY IMPORTANT: Do not switch off the power to the radio until the update operation is complete and the radio has restarted, otherwise the unit may become permanently damaged.

| Biluetooth AUX-IN Sleep Alarms System settings >









Network profiles

Each time that you connect your radio to a WiFi network, the radio will store the details of that connection (SSID, security key, DHCP/IP address settings) as a profile. Up to four such profiles are stored in the radio so that if the unit is used in multiple locations there is no need to enter the network settings when returning to a location previously visited.

The radio stores the four most recent profiles in memory identified by their SSID. Normally the radio will attempt to connect to one of the stored profiles and only if it is unable to do so will you need to use the Network Wizard.

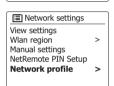
In the event that you visit a location only once you may wish to delete the profile for the network in that location to avoid losing other profiles.

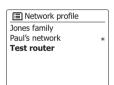
- 1. To access the menu for the current mode, press and hold the Menu button.
- Press the Menu Up or Down buttons until 'System settings' is highlighted on the display. Press and release the Select button to enter the System Settings menu.
- 3. Press the Menu Up or Down buttons until 'Network' is highlighted on the display. Press and release the Select button to enter the Network Settings menu.
- 4. Press the Menu Up or Down buttons until 'Network profile' is highlighted on the display. Press and release the Select button to see the stored profiles. The profile which is currently in use (if any) is marked with an asterisk.
- 5. To remove a profile from memory, press the Menu Up or Down buttons to highlight the profile to be deleted and then press and release the Select button.
- 6. The radio will offer a 'YES' or 'NO' selection. Press the Menu Left or Right buttons to select 'YES' and then press and release the Select button. The selected profile will be deleted.

Note: It is not possible to delete a profile which is currently in use.







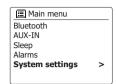


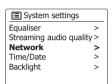


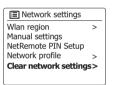
Clear network settings

In the event that you pass your radio on to someone else you may wish to remove all the network settings stored. This function will clear all stored network settings from your radio.

- 1. To access the menu for the current mode, press and hold the Menu button.
- 2. Press the Menu Up or Down buttons until 'System settings' is highlighted on the display. Press and release the Select button to enter the settings menu.
- 3. Press the Menu Up or Down buttons until 'Network' is highlighted on the display. Press and release the Select button to enter the Network settings menu.
- Press the Menu Up or Down buttons until 'Clear network settings' is highlighted on the display.
 Press and release the Select button.
- 5. The radio will offer a 'YES' or 'NO' selection. Press the Menu Left or Right buttons to select 'YES' and then press and release the Select button. The network settings will be deleted.
- 6. If you do not wish to clear the network settings, highlight 'NO' and then press and release the Select button. The display will revert to the previous menu.









Manual network configuration

If you do not wish to use DHCP for automatic network configuration, or if your network is configured with a hidden SSID, then you will need to enter some network settings manually. The typical user will not need to use manual network configuration. The facility is provided to allow the product is to be used with networks where the configuration of devices is not managed by the router, or where customized settings may be required. In such cases it is assumed that the user already has sufficient knowledge to understand the terms and settings used for this purpose. IPv4 address schemes are used.

- 1. From the radio's Network Settings menu, select 'Manual settings'. You must then choose to connect using 'Wireless' connections. Entering this option, there are as many as nine settings screens, shown by the '1 of 9' progress marker in the top right corner of the display.
- 2. The subsequent menus allow configuration of the following parameters:

DHCP - On or Off

IP address - e.g. 129.168.1.25

Subnet mask - e.g. 255.255.255.0

Gateway address - e.g. 129.168.1.1

DNS address (primary and secondary addresses)

SSID - needed for WiFi connections if the SSID is not broadcast

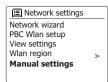
WEP/WPA/WPA2 key and settings

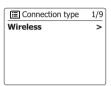
When entering numbers, the SSID or the WiFi pass key, the three controls on the right-hand side of the screen have special functions. You can quickly access these by pressing the Info button and then use the Menu Up or Down and the Select buttons as needed:

select 'exsp' to erase a character just entered (long press to clear); Info again to continue select 'ex' when the complete encryption key has been entered

select ' $\[\]$ ' to cancel and go back to the TKIP/AES options screen

3. Upon completion of the settings the radio should connect to the network. If the connection is made successfully, the radio will return to the Network Settings menu. If the unit cannot connect, then it will display a 'Failed to connect' message. You will then need to identify which setting may need to be changed, or whether some other network issue is responsible. Once connected, the network settings are saved. They are retained in memory while the radio is disconnected from the mains.





IP settings	3/9	
IP address 192 . 168 .	1	25
Subnet mask 255 . 255 .	255	0

SSID:						6/9
net	wc	rk				
1	2	3	4	5	6	BKSP
8	9		_	-	@	OK
	а	b	С	d	е	CANCEL
g	h	İ	j	k	1	
n	0	р	q	r	s	
	net 1 8	netwo 1 2 8 9 a g h	network 1 2 3 8 9 . a b g h i	1 2 3 4 8 9 a b c g h i j	1 2 3 4 5 8 9 a b c d g h i j k	network 1 2 3 4 5 6





Software version display

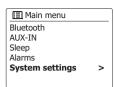
The software version display is provided for reference and customer support purposes.

- 1. To access the menu for the current mode, press and hold the Menu button.
- 2. Press the Menu Up or Down buttons until 'System settings' is highlighted on the display. Press and release the Select button to enter the System Settings menu.
- 3. Press the Menu Up or Down buttons until 'Info' is highlighted on the display. Press and release the Select button to display the software version and radio ID. Press the Menu Up or Down buttons to display further information.
- 4 Press the Back button to exit

Audio FAQ

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

- 1. With your radio switched on and in the Internet Radio mode, press and hold the Menu button.
- Press the Menu Up or Down buttons until 'Station list' is highlighted on the display. Press and release the Select button
- 3. Press the Menu Up or Down buttons until 'Help' is highlighted on the display. Press and release the Select button to enter the Help menu.
- 4. Press the Menu Up or Down buttons until 'FAQ' is highlighted. Press and release the Select button to display some frequently asked questions.
- 5. Press the Menu Up or Down buttons to choose a question that suits your requirements and press and release the Select button to listen to the answer. Adjust the volume as needed.





Audio codecs

Your radio 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 or other DLNA compatible sources.

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 radio. The radio stations database to which your radio 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 radio 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 radio. Higher rates may be playable in some cases but performance of the product may be affected.

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

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

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

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

- (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 radio as part of a group of multi-room products, audio files in ALAC and FLAC formats will only play on the group master.

Product markings

	Class II equipment
	For indoor use only
♦-©- ♦	Polarity of d.c. power connector
(V)	The symbol indicates energy efficiency marking
~	The symbol indicates AC voltage
	DC Voltage
Z -	Recycling This product bears the selective sorting symbol for Waste Electrical and Electronic Equipment (WEEE). This means that this product must be handled pursuant to European directive 2012/19/EU in order to be recycled or dismantled to minimize its impact on the environment. The user has the choice to give the product to a competent

electrical or electronic equipment.

recycling organization or to the retailer when buying a new

Power Requirements	
Mains Power Supply	AC IN 100-240 V / 50/60 Hz / 0.68A, DC OUT 12V / 2A (switching adaptor)
Batteries	6 x UM-3 (AA size, LR6) Alkaline or Ni-MH battery
Connectivity	
WiFi	802.11 b, g, n, a supported with WEP and WPA/WPA2 encryption. Compatible with 2.4GHz and 5GHz WiFi bands. WiFi: 2412~2472MHz, EIRP=15.44dBm 5180MHz~5240MHz, EIRP=16.78dBm Operations in the 5.15-5.35GHz band are restricted to indoor usage only.
Bluetooth	
Bluetooth standards	A2DP, AVRCP
Bluetooth codecs supported	aptX, SBC and AAC
The frequency and maximum transmitted power	2402MHz~2480MHz: 3.42dBm (bluetooth EDR)
Frequency Coverage	
FM S	87.5-108 MHz
DAB	174.928-239.200 MHz
Circuit features	
Headphone socket	3.5mm diameter, stereo
Auxiliary Input	3.5mm diameter, stereo
Aerial System	WiFi Built-in antenna
	DAB / FM Telescopic aerial
Operating temperature range	0°C to +35°C
Operating temperature range	0 C t0 ±33 C

* The barcode label on the product is defined as below: aH 18 12 00001 Serial number Production month aH181200001 Production year Product code



Specifications

The company reserves the right to amend the specifications without notice.

If at any time in the future you should need to dispose of this product please note that: Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice. (Waste Electrical and Electronic Equipment Directive) 83