ROBERTS

Sound for Generations

DAB
Digital Audio Broadcasting

Revival

DAB/FM RDS digital radio
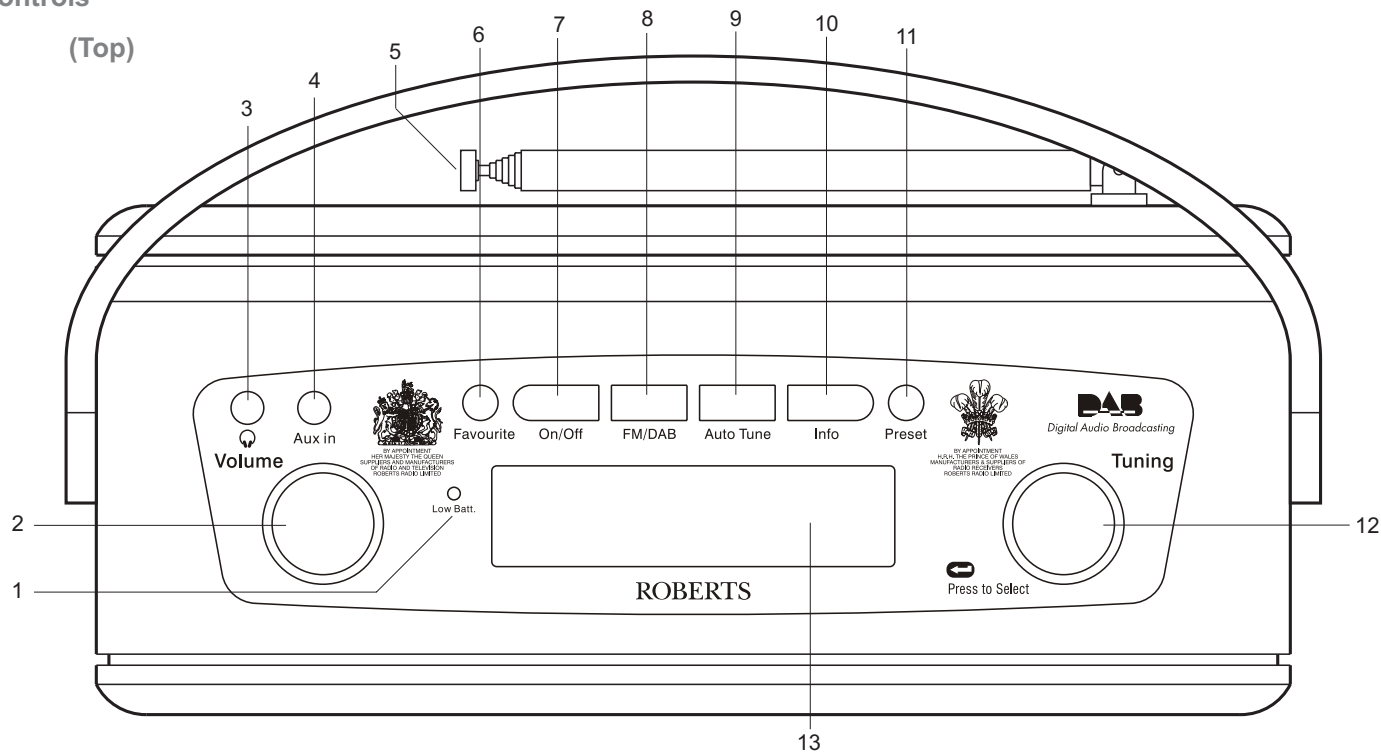**model RD-60**

Please read this manual before use

Contents

Controls

(Top)

1. Low battery indicator
2. Volume control
3. Headphone socket
4. Auxiliary Input socket
5. Telescopic aerial

6. Favourite button
7. On/Off button
8. FM/DAB button
9. Auto Tune button
10. Info button

11. Preset button
12. Tuning control
13. LCD display

If you need any further advice, please call our Technical Helpline on :-
020 8758 0338 (Mon-Fri)

Controls

RF In
75 Ω

15 ———————— Line
Out
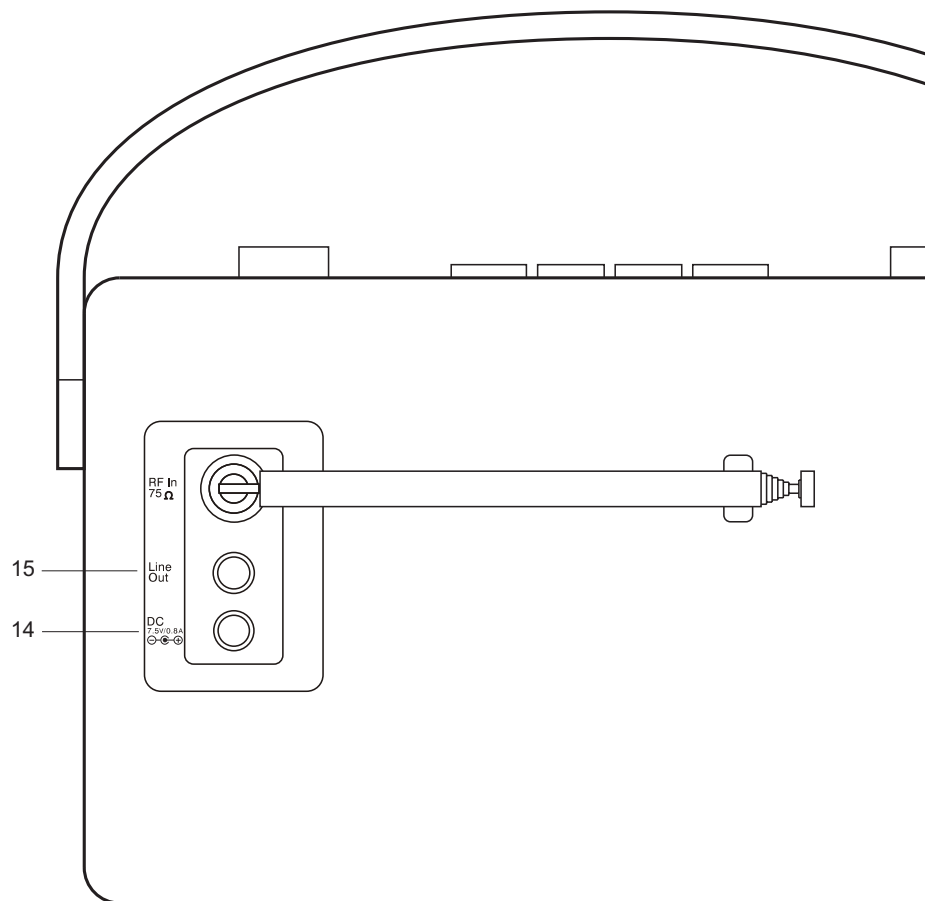
14 ———————— DC
7.5V/0.8A

14. DC in socket

15. Line output socket

Battery operation

1. Release the catch securing the rear door of your radio.

2. Insert four LR20 (D size) batteries into the spaces in the compartment. Take care to ensure all batteries are inserted with the correct polarity as shown inside the battery compartment. Close the rear door and secure the catch.

3. The Low Battery indicator lighting, distortion, or the radio switching itself off are all signs that the batteries may need replacing.
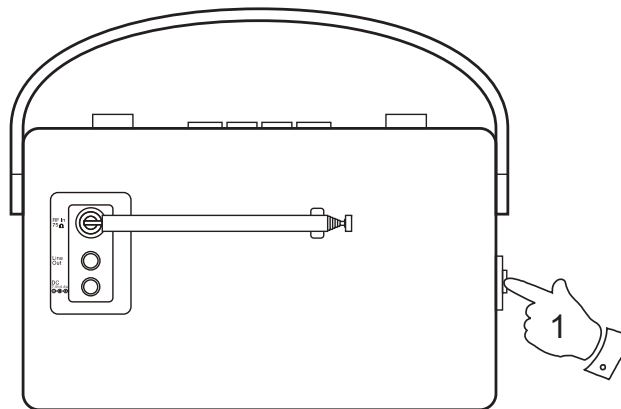
4. If the radio is not to be used for any extended period of time it is recommended that the batteries are removed from the radio.

   We would recommend for economy that the RD-60 is used via the AC adaptor whenever possible with battery operation for occasional or stand-by use only.

Using the AC adaptor

1. Insert the adaptor plug into the DC in socket on the rear of your radio.
2. Plug the adaptor into a standard 13A mains socket outlet. Whenever the adaptor is used the batteries are automatically disconnected.

   The AC adaptor should be disconnected from the mains supply and the radio when not in use.

• **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 socket outlet completely.
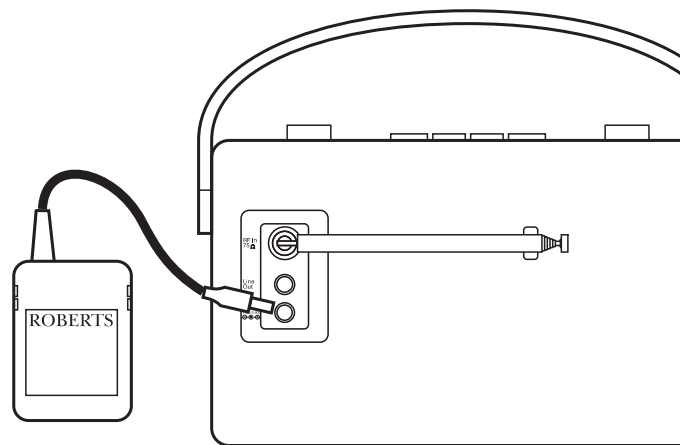
If you need any further advice, please call our Technical Helpline on :-

020 8758 0338 (Mon-Fri)

Operating your radio - DAB

1. Carefully extend the telescopic aerial.

2. Press the *On/Off button* to switch on your radio. The display will show "Welcome to DAB".

3. If this is the first time the radio is used a quick scan of the UK Band III DAB channels will be carried out. If the radio has been used before the last used station will be selected.

4. During the scanning process, the lower line of the display shows a bar-graph indicating progress of the scan.

5. When the scanning is completed the first station (in numeric-alpha order 0...9...A....Z) will be selected.

6. If the station list is still empty after the scan your radio will display "No stations available".

7. If no signals are found it may be necessary to relocate your radio to a position giving better reception. Then, either switch your radio off and on again, or press the *Auto Tune button* to repeat the scan.

On/Off 2
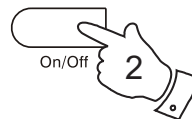
```
 Welcome to DAB
■■■■■■■■■
```

```
BBC R7      DAB
Now tuning...
```

```
BBC R7      DAB
Im sorry I have
```

```
No stations
available
```

Selecting a station - DAB

1. The top line of the display shows the name of the station currently selected.

2. Rotate the *Tuning control* to scroll through the list of available stations on the lower line of the display. Stop rotating the Tuning control when you find the station that you wish to hear.

3. Press and release the *Tuning control* to select the station. The display may show "Now tuning..." while your radio finds the new station.

4. Adjust the *Volume control* to the required setting.

Note: If after selecting a station the display shows "Not Available" it may be necessary to relocate your radio to a position giving better reception.

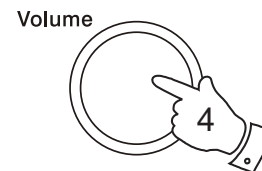The use of radio station presets for selecting your preferred radio stations is described on page 16.

```
Classic     DAB
Classical Music
```

Tuning

Press to Select

2
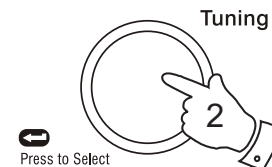
```
Classic     DAB
✦BBC 7          ✦
```
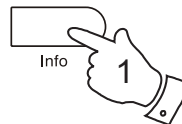
```
BBC R7      DAB
Now tuning...
```

Volume

4

Display modes - DAB

Your radio has seven display modes:-

1. Press the **Info button** to cycle through the various modes.

a. Scrolling text — Displays scrolling text messages such as artist/track name, phone in number etc.

```
BBC R7      DAB
Im sorry I have
```

b. Program Type — Displays the type of station being listened to e.g. Pop, Classic, News etc.

```
BBC R7      DAB
Varied Speech
```

c. Multiplex Name — Displays the name of DAB multiplex to which the current station belongs.

```
BBC R7      DAB
BBC National DAB
```

d. Time and date — Displays the current the time and date.

```
BBC R7      DAB
19:17 08-06-2008
```

e. Frequency — Displays the frequency of the DAB multiplex for the station listened to.

```
BBC R7      DAB
12B  225.64MHz
```

f. Bit rate & audio type — Displays the digital bit rate & audio type for the station being listened to.

```
BBC R7      DAB
160kbps Stereo
```

g. Signal Strength — Displays a graph showing the signal strength for the station being received.

```
BBC 7       DAB
■■■■□■■■■
```

Finding new radio stations - DAB

As time passes new stations may become available. To find new stations proceed as follows:-

1. Press and release the **Auto Tune button.** The display will show "Scanning..." and your radio will perform a scan of the UK DAB frequencies. As new radio stations are found the station counter on the right-hand side of the display will increase and the radio stations will be added to the list stored in the radio.

Auto Tune
1

```
Scanning...      24
████████
```

2. To carry out a full scan of the entire DAB Band III frequencies press and hold down the **Auto Tune button** for more than 2 seconds and then release. The display will show "Full Scanning...". As new radio stations are found the station counter on the right-hand side of the display will increase and the radio stations will be added to the list stored in the radio.

Auto Tune
2

```
Full Scanning..24
████████
```
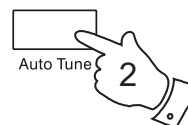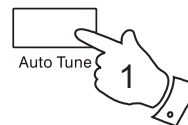
Secondary services - DAB

1. Certain radio stations have one or more secondary services associated with them. If a radio station has a secondary service associated with it the display will show ">>" next to the station name on the station list. The secondary service will then appear immediately after the primary service as you rotate the tuning control clockwise.

Tuning
1,2
Press to Select

```
BBC R5L      DAB
  ◀  BBC R5SX      
```

```
BBC R5SX     DAB
     BBC R5L  ≫  
```

2. Press and release the **Tuning control** to select the station.

3. When the secondary service shuts down, your radio will automatically switch back to the main radio station (or primary service) if it is available.
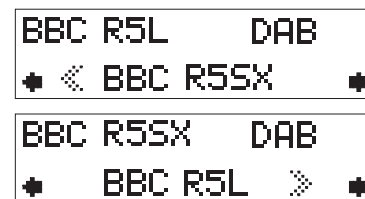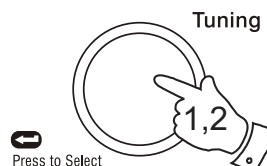
If you need any further advice, please call our Technical Helpline on :-

020 8758 0338 (Mon-Fri)

Manual Tuning - DAB

Manual tuning allows you to tune directly to the various DAB Band III channels. UK DAB stations located in the range 11B to 12D.

1. Press and hold in the **Info button** until the display shows "Manual tune". Press and release the **Tuning control** to select this function.

2. Rotate the **Tuning control** to select the required DAB channel.

3. Press and release the **Tuning control** to select the desired channel. The graph will indicate the signal strength, and the lower line will show the name of the DAB Multiplex (group of radio stations). Any stations found will be added to the stored list in the radio.

4. Press and release the **Tuning control** to return to the normal tuning mode.
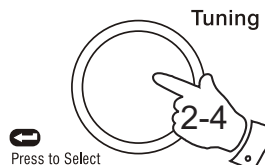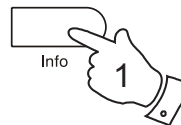
Signal strength display - DAB

1. Repeatedly press and release the **Info button** until the lower line of the display shows signal strength.

2. Position your radio and try moving the aerial so as to give maximum number of black rectangles on signal strength display. Normally, the best reception will be found with the aerial vertical and fully extended.

3. The clear unfilled rectangle indicates minimum signal level required for satisfactory reception.
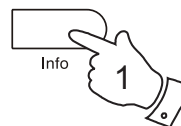
Dynamic Range Control settings - DAB

Dynamic Range Control (also known as DRC) can make quieter sounds easier to hear when your radio is used in a noisy environment.
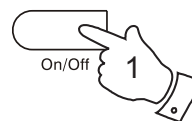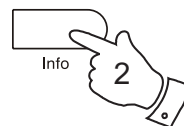
1. Press the **On/Off button** to switch on your radio.

2. Press and hold in the *Info button*. The display will show "Manual tune."

3. Rotate the *Tuning control* until the display shows "DRC value".

4. Press and release the **Tuning control** to enter the adjustment mode.

5. Rotate the *Tuning control* to select the required DRC setting (the default is 0).

    DRC 0 - DRC is switched off, Broadcast DRC will be ignored.

    DRC 1/2 - DRC level is set to 1/2 that sent by broadcaster.

    DRC 1 - DRC level is used as sent by broadcaster.

6. Press and release the *Tuning control* to confirm the setting. The display will return to normal tuning mode.

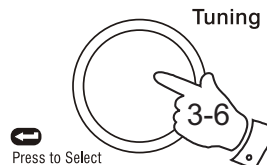Note: Not all DAB broadcasts are able to use the DRC function. If the broadcast does not support DRC, then the DRC setting in the radio will have no effect.

On/Off **1**

```
♦ ♦ or SELECT
♦Manual tune      ♦
```

Info **2**

```
♦ ♦ or SELECT
♦DRC value        ♦
```

Tuning

```
DRC0
♦DRC0             ♦
```
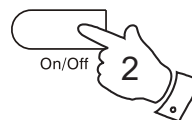
3-6

Press to Select
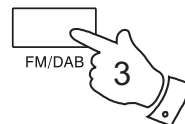
```
DRC0
♦DRC 1/2          ♦
```

```
DRC0
♦DRC 1            ♦
```
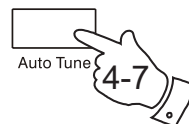
Operating your radio - Search tuning - FM

1. Carefully extend the telescopic aerial fully.

2. Press the *On/Off button* to switch on your radio.

3. Press the *Band button* to select the FM band.

4. Press and immediately release the *Auto tune button*, your radio will scan in an upwards direction (low frequency to high frequency) and stop automatically when it finds a station of sufficient strength.

5. After a few seconds the display will update. The display will show the frequency of the signal found. If the signal is strong enough and there is RDS data present then the radio will display the station name.

6. To find other stations, press and release the *Auto tune button* as before.

7. To scan the FM band in a downwards direction (high frequency to low frequency) press and hold down the *Auto tune button* for 0.5 seconds and then release.

8. When the waveband end is reached your radio will recommence tuning from the opposite waveband end.

9. Adjust the *Volume* **control** to the required setting.
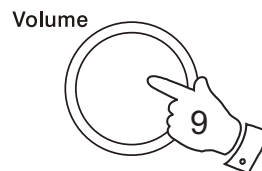
The use of radio station presets for selecting your preferred radio stations is described on page 16.

On/Off **2**

FM/DAB **3**

Auto Tune **4-7**

Volume **9**

`89.30MHz  FM`

`Searching... ▷`

`Searching... ◁`

Manual tuning - FM

1. Press the *On/Off button* to switch on your radio.

2. Press the *Band button* to select the FM band. Carefully extend the telescopic aerial fully for FM reception.

3. Rotate the *Tuning control* to tune to a station. With each click of the control the frequency will change up or down by 50 kHz.

4. When the waveband end is reached the radio will recommence tuning from the opposite waveband end.

5. Set the *Volume control* to the desired settings.

6. To switch off your radio press the *On/Off button*.
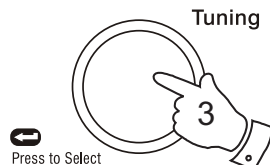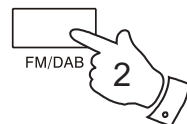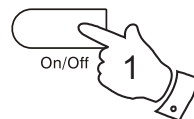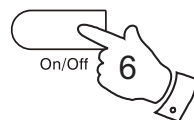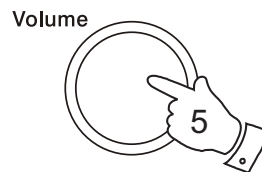
On/Off   1

FM/DAB   2

Tuning

Press to Select   3

`89.30MHz  FM`

Volume   5

On/Off   6

Display modes - FM

In FM mode the bottom line of the display can be set to any of the following display options:-

1. Press the **Info button** to cycle through each of the options.
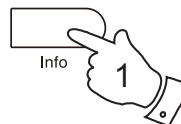
a. Scrolling text   Displays scrolling text messages such as artist/track name, phone in number etc.

b. Program type   Displays type of station being listened to e.g. Pop, Classic, News, etc.

c. Time and date   Displays the current time and date.

d. Frequency   Displays frequency of the station being listened to.

e. Audio mode   Display shows Auto (stereo) or Mono.

Note: Your radio will display "NO RT" on the lower line of the display if there is no scrolling text available and "NO PTY" if there is no programme type information.

Info   1

a
```
BBC R2      FM
The latest news
```

b
```
BBC R2      FM
Pop Music
```

c
```
BBC R2      FM
12:02 16-06-2008
```

d
```
BBC R2      FM
  89.30MHz
```

e
```
  89.30MHz  FM
Auto (Stereo)
```

Favourite button

Your radio is fitted with a button which when pressed will automatically select the required waveband and tune to your Favourite radio station. With this button you can store one favourite station from either the DAB or FM wavebands.

To set up your favourite station, follow these steps:

1. Carefully extend the telescopic aerial and switch on your radio.

2. Select the desired waveband (DAB or FM) and tune into the required radio station as described on the preceding pages.

3. Press and hold down the **Favourite button** (for 5 seconds) until the display shows "My Fav. saved".

```
BBC R7       DAB
My Fav. saved
```

Recalling your favourite station

1. Carefully extend the telescopic aerial and switch on your radio.

   If your radio is in Auxiliary Input mode, press and release the **DAB/FM button** to select normal radio operation.

2. Momentarily press the **Favourite button**, your radio will automatically select the DAB or FM waveband as needed and then tune to the radio station stored in the favourite memory.

```
BBC R7       DAB
I'm sorry I have
```

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020 8758 0338 (Mon-Fri)

Preset stations - DAB and FM

To make it easier for you to tune your radio to the stations that you prefer, you may store selected radio stations as presets. Your radio holds presets separately for DAB and FM radio modes.

You may set as many or as few presets as you like in each mode.

You can easily switch between displaying all DAB stations (or all FM frequencies) and displaying only those that you have set as presets.

Any station or frequency which has been marked as a preset can easily have the mark cancelled should your preferences or needs change.

Presets are retained when your radio is switched off.

1. To setup your preset stations, tune into the required station.

2. Press and hold down the **Preset button** until the displays shows a tick symbol next to the radio station name or frequency. This indicates that the radio station is marked as a preset. To cancel the preset mark, press and hold the **Preset button** again.

3. Repeat steps 1 and 2 as needed for any other stations that you want as presets.

4. To view only the preset stations for the currently select waveband when tuning, press and release the **Preset button** so that the heart symbol shows in the display.

5. To listen to one of the preset radio stations, rotate the **Tuning control** until the required radio station is displayed. Press and release the **Tuning control** to select and tune to that station.

6. To cancel the preset stations view, press and release the **Preset button** so that the heart symbol disappears from the display. Your radio will then be able to access the full station list using the **Tuning control**.

Preset
2,4

```
Classic  ✓ DAB
Classical Music
```

Tuning

Press to Select

5

```
Classic  ✓ DAB ♥
Classical Music
```

Preset
6
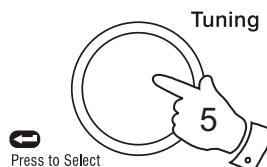
FM Stereo/Mono

1. If a station being received is weak some hiss may be audible (especially when listening using headphones). To reduce this, press and release the *Tuning control* so that the display shows "Switching to Mono". Your radio will switch to mono mode.

2. To return to stereo mode press and release the *Tuning control* so that the display shows "Switching to Auto". Your radio will switch to stereo mode.

Note: Stereo listening is only available when listening via headphones or when using the Line Out socket connected to an external amplifier.

Tuning

Press to Select

1
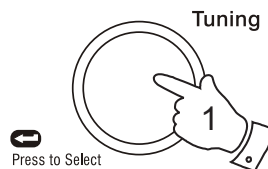
```
89.30MHz  FM
Mono
```

```
89.30MHz  FM
Auto (Stereo)
```

Scan sensitivity setting - FM

Your radio will normally scan for FM broadcasts which are strong enough to give good reception. However, you may wish the Auto-scan function to also be able to find weaker signals, possibly from more distant radio transmitters. Your radio includes a local / distant option for the Auto-scan function.

1. Press the *On/Off button* to switch on your radio.

2. If needed, press the *Band button* to select the FM band.

3. Press and hold the *Info button* until the display shows "FM Scan Zone" then press the *Tuning control* to enter the scan zone selection menu.

4. Rotate the *Tuning control* to switch between Local and Distant options on the lower line of the display. The Distant option will allow the radio to find weaker signals when scanning.

5. Press and release the *Tuning control* to confirm your selection. The radio will then revert to the normal information display. The Local or Distant setting is stored in the radio and remains in force until changed or until a System Reset.

Note: The initial setting (out of the box, or after a System Reset) causes the radio to ignore weaker (or more distant) signals.

On/Off **1**

FM/DAB **2**

Info **3**

Tuning

Press to Select **3-5**
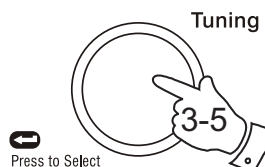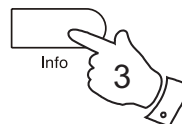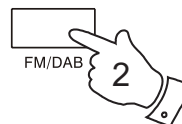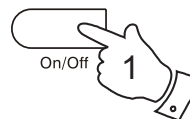
```
◆  ◆  or SELECT
◆FM Scan Zone    ◆
```

```
FM Scan Zone
◆Local            ◆
```

```
FM Scan Zone
◆Distant          ◆
```

Software version

The software display cannot be altered and is just for your reference.

1. To view the software version on the display, ensure your radio is in DAB mode and press and hold the **Info button** for 2 seconds.

2. Rotate the **Tuning control** until "SW Version" together with the version number appears on the display.

3. After a few seconds the display will revert to the normal display mode.
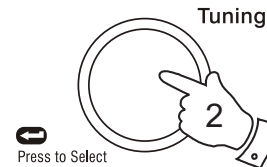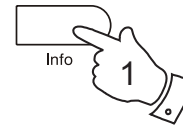
System reset

If your radio fails to operate correctly, or some digits on the display are missing or incomplete, it may be possible to restore normal operation by carrying our a System Reset operation on your radio. This will restore the radio's settings to their factory defaults. No presets will be stored, and the list of DAB radio stations will be empty.

If you have moved to a different part of the country and you wish to erase local DAB radio stations that are no longer available from the stored list, then you may carry out this procedure. Your radio will automatically re-scan for the DAB stations available at your current location when it restarts.

1. Press and hold down the *Info button* for 2 seconds

2. Rotate the *Tuning control* until the display shows "Factory reset", then press and release the *Tuning control*.

3. If you wish to perform the reset operation, press and release the *Tuning control one more time*. A full reset of your radio will be performed. All presets and station lists will be erased.

4. After a system reset a scan of the DAB band will be performed.

In case of malfunction due to electrostatic discharge, reset the product (temporary disconnection of the power adaptor or removal or batteries may be required) to resume normal operation.

If a problem persists our technical staff would be pleased to offer any assistance on operating the radio. Our technical helpline number is 020 8758 0338.

Info

1

◆ ◆ or SELECT
◆Factory reset ◆

Tuning

2,3
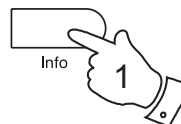
Press to Select
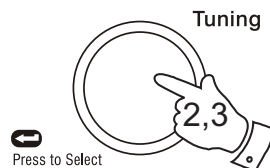
Press SELECT to
confirm reset...

Welcome to DAB
■■■■■■■■

Headphone socket

A 3.5mm **Headphone Socket** located on the top left hand corner of your radio is provided for use with either headphones or an earpiece. Inserting a plug automatically mutes the internal loudspeaker.

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

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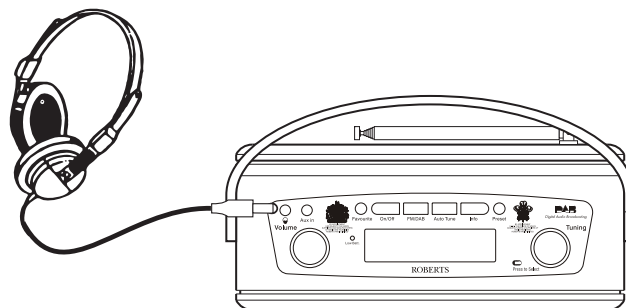
Auxiliary input socket

1. Connect a stereo or mono audio source (i.e. CD player, MP3 player, etc.) to the **Auxiliary input socket**.

2. Press the **On/Off button** to switch on the radio. Press and release the **DAB/FM button** until the display shows "AUX IN".

    Note that the Auxiliary Input mode can only be selected when a plug is inserted in the socket.

3. Adjust the **Volume control** on your player and on the radio for comfortable listening.

4. Remove the cable from the **Auxiliary input socket** or press and release the **DAB/FM button** to cancel Auxiliary Input mode.
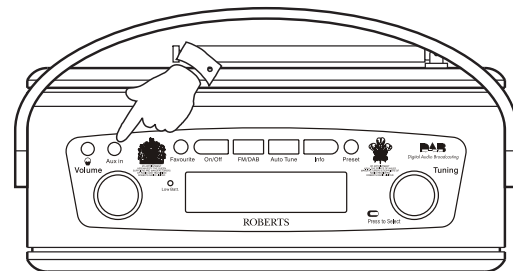
If you need any further advice, please call our Technical Helpline on :-

020 8758 0338 (Mon-Fri)

Line out socket

A 3.5mm stereo *Line out socket* located on the rear of your radio is provided for connecting the audio signal to an external amplifier. Inserting a line out audio cable will not mute the internal loudspeaker. Set the volume control on the radio to minimum if desired.
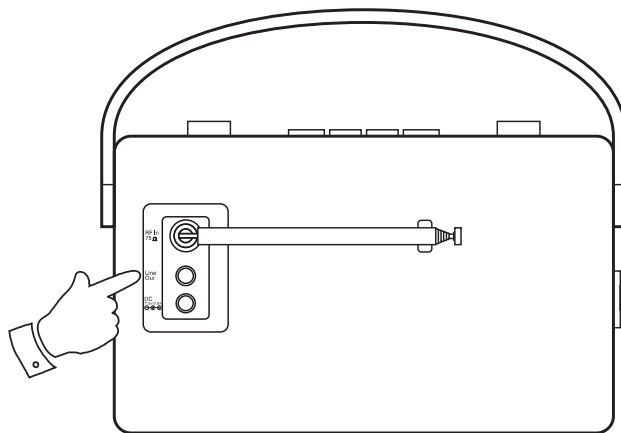
Display backlight

1. When using the radio powered from batteries, the display backlight will be switched on for approximately 12 seconds when any button is pressed.

2. When your radio is powered by the AC mains using the supplied mains adaptor the display backlight will always be on whenever the radio is switched on.
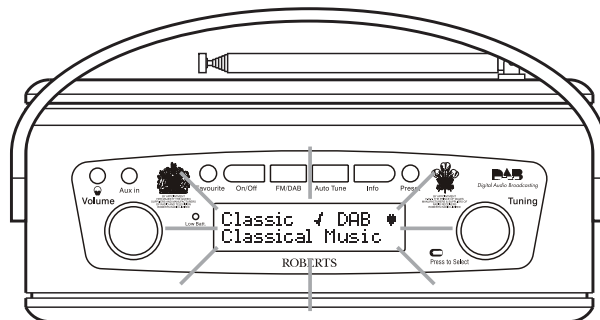
General

Do not allow this radio to be exposed to water, steam or sand. Do not leave your radio where excessive heat could cause damage such as in a parked car where the heat from the sun can build up even though the outside temperature may not seem too high. It is recommended that the DAB band be used wherever possible as better results in terms of quality and freedom from interference will usually be obtained than on the FM band.

The name plate is located on the inside of the rear door on your radio.
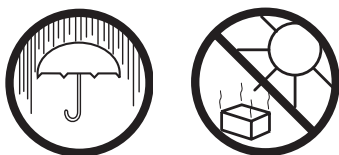
- Your radio should not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the radio.
- It is recommended to operate the product such that there is a minimum distance (10cm recommended) to adjacent objects in order to ensure good ventilation.
- The ventilation of the product should not be restricted by covering it or its ventilation openings 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 window sills, in direct sunlight etc.

Specifications

Power Requirements

Mains	AC 100 - 240 volts, 50 - 60 Hz ∿ only (adaptor)
Batteries	4 x LR20 (D size)

Battery Life

Approx. 120 hours of listening for 4 hours a day at normal volume using alkaline cells.

Frequency Coverage

FM	87.5-108MHz
DAB	174.928 - 239.200MHz

Circuit Features

Loudspeaker	75mm full range
Output Power	1.0 Watt
Headphone socket	3.5mm dia.
Auxiliary Input socket	3.5mm dia.
Line out socket	3.5mm dia.

Aerial System		
	FM	Telescopic aerial
	DAB	Telescopic aerial

If you need any further advice, please call our Technical Helpline on :-

020 8758 0338 (Mon-Fri)

Guarantee

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

The guarantee does not cover:

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

N.B. Damaged or broken telescopic aerials will not be replaced under guarantee.

Procedure:

Any claim under this guarantee should be made through the dealer from whom the instrument was purchased. It is likely that your Roberts' dealer will be able to attend to any defect quickly and efficiently, but should it be necessary the dealer will return the instrument to the company's service department for attention. In the event that it is not possible to return the instrument to the Roberts' dealer from whom it was purchased, please contact Roberts Radio Technical Services at the address shown on the rear of this manual.

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

ROBERTS RADIO TECHNICAL SERVICES

97-99 Worton Road

Isleworth Middlesex

TW7 6EG

Technical Helpline :- 020 8758 0338 *(Mon-Fri during office hours)*

http://www.robertsradio.co.uk

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