



Instruction Manual | Model: BR40DAB DAB+ DIGITAL RADIO

Introduction

Thank you for buying this **BUSH** product, which is designed to give you many years of trouble-free service.

You may already be familiar with using a similar unit, but please take time to read these instructions. They are designed to familiarise you with the unit's many features and to ensure you get the very best from your purchase.

Safety is important

Your safety and the safety of others is important.

Please therefore, ensure you read the "Safety Instructions" **before** you operate this unit.

Warranty

In the unlikely event that your product fails to work normally, please call the below free phone number to discuss the problem with one of our qualified service engineers.

Australia

Bush Warranty: 1800 509 394

New Zealand

Bush Warranty: 0800 450 259

Safety Instructions

Ensure that you read all of the safety instructions before using this unit.

Safety Considerations

- Position the power cable and other connected cables so that they are not likely to be walked on, pinched or where items can be placed on or against them.
- Do not use the unit in humid or damp conditions.
- Do not allow the unit to get wet.
- Never allow children to insert foreign objects into holes or slots on the unit.
- The ventilation should not be impeded by covering the openings with items such as newspapers, tablecloths, curtains, etc. This may cause overheating.
- No naked flame sources, such as lit candles, should be placed on the unit.
- Do not expose the unit to dripping or splashing, and no objects filled with liquids, such as vases, should be placed on the apparatus.
- Do not place the unit in closed bookcases or racks without proper ventilation.

Cleaning

- Disconnect the unit from the mains supply before cleaning.
- Do not use any liquids or aerosol cleaners, as this may damage the unit. Use a soft, dust free cloth.

Servicing

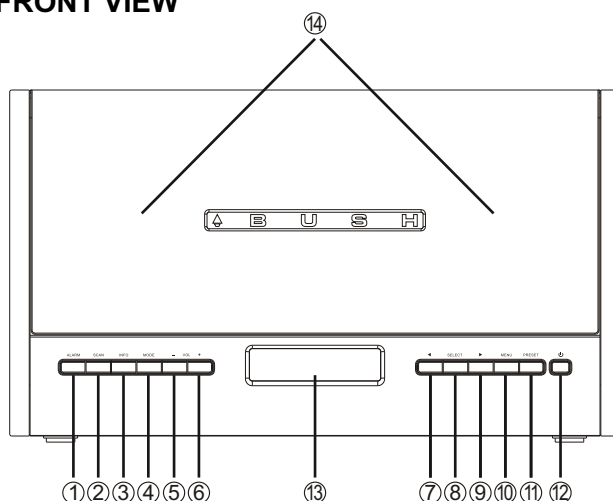
- There are no user serviceable parts in the unit. When servicing, refer to qualified service personnel.
- Consult your dealer if you are ever in doubt about the installation / operation / safety of the product.

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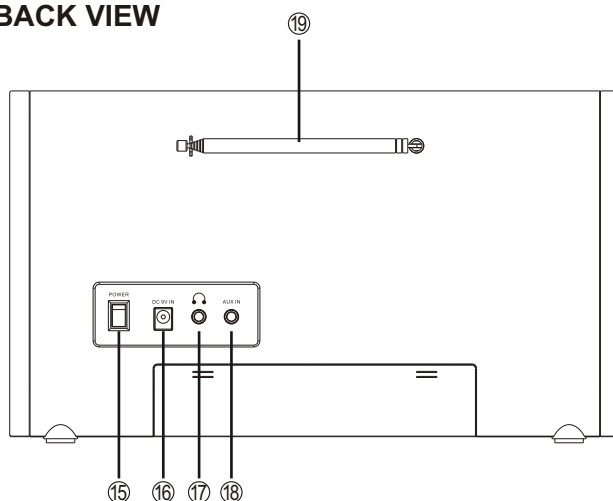
Your DAB+ Radio

FRONT VIEW



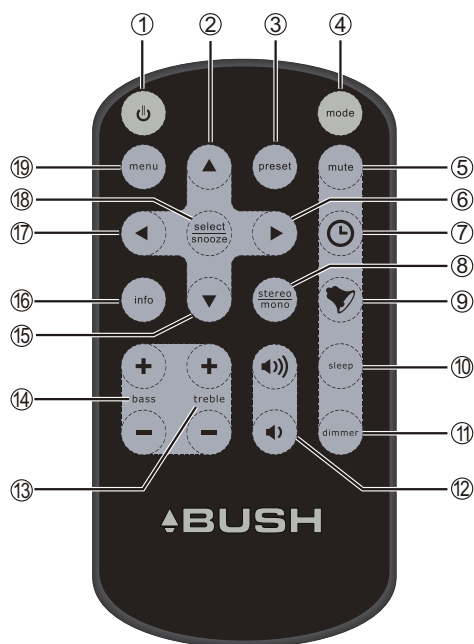
1. ALARM
2. SCAN
3. INFO
4. MODE
5. VOL-
6. VOL+
7. ◀BUTTON
8. SELECT
9. ▶BUTTON
10. MENU
11. PRESET
12. ON/OFF
13. DISPLAY
14. SPEAKER

BACK VIEW



15. POWER ON/OFF
16. DC POWER INPUT
17. HEADPHONE OUT
18. AUX IN
19. ANTENNA

Remote Control



1. POWER ON/OFF
2. ▲BUTTON
3. PRESET
4. MODE SELECT
5. MUTE
6. ►BUTTON
7. CLOCK
8. STEREO/MONO
9. ALARM
10. SLEEP
11. DIMMER
12. VOLUME +/-
13. TREBLE +/-
14. BASS +/-
15. ▼BUTTON
16. INFO
17. ◀BUTTON
18. SELECT/SNOOZE
19. MENU

Remote Control Batteries

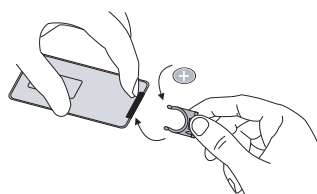
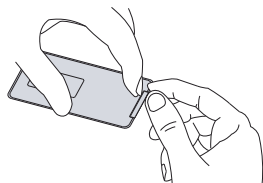
Before first Use

To prepare the remote control for first use, pull out the safety strip to activate the battery.

Replacing the battery

When replacing the battery in the remote control, refer to the diagram below.

1. Press the catch across.
2. While holding the catch, open the battery door.
3. Fit the battery observing polarity as shown. When replacing the battery, use only the same CR2025 type specified.



What is DAB+

DAB+ was developed in **Europe** by a consortium of broadcasters and manufacturers. **DAB+** uses digital compression techniques to transform the source material, i.e. music and speech, into better quality audio.

Interference free reception

Analogue systems suffer from an effect called "multipath distortion". This is caused because waves do not behave in an orderly fashion, but bounce and reflect off buildings etc. **DAB+** sees this as an advantage and uses the direct and reflected signals to actually reinforce the end result, allowing for better service more of the time.

No need to re-tune

A single DAB+ frequency can be used to cover the whole of the **Australia**, so solving.

Scrolling Text

Broadcasters can transmit text to your radio. This way you can read the name of the DJ, artist, song title or any other information they choose.

DAB+ Coverage

Check your local coverage at www.digitalradioplus.com.au

Getting Started

Connecting Power

Before connecting the power, check that the mains voltage on the rating plate of the AC adaptor is the same as the voltage in your area.

- Plug the DC cord from the AC adaptor into the DC-In jack on the unit.
- Plug the AC adaptor into the wall socket and switch the mains power on.

The unit is now ready for use.

NOTE: The AC adaptor may become warm during operation this is normal.

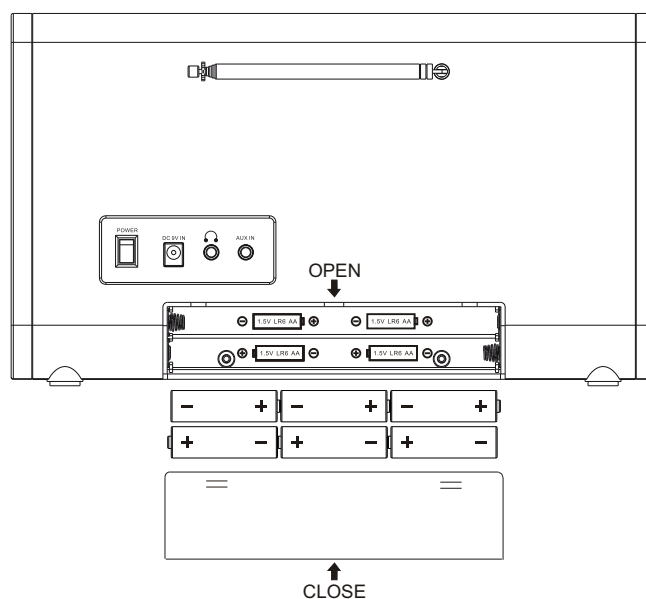
Setting the Clock

The clock on your radio is automatically set when first used from the time signal broadcast with DAB+ radio stations.

If a DAB+ station is not available, the clock may be set manually via the Setting menu.

Fitting Batteries

Referring to the diagram, slide off the battery company compartment lid.
Fit 6 x AA batteries into the battery compartment, observing polarity as shown.
Alkaline batteries are recommended for best performance.



Battery Disposal

Dispose of used batteries with regard to the recycling regulations in your area.

DO NOT short circuit batteries or throw them into water, general rubbish or in a fire.

Weak batteries can leak and damage the radio. Replace them in good time!

Power Control

Power Control

To turn the radio on:

- Slide the **ON/OFF** button at the back of **BR40DAB**.

The radio will switch on.

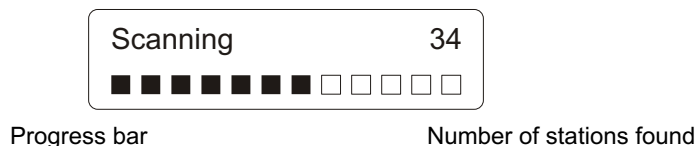
To set the radio to Standby:

- Press the **Standby** button on the unit or Remote control.

The radio will set to standby. The clock will continue to run in Standby mode.

Initial scan

When your radio is switched on for the first time the scanning display will be shown while the scanning process takes place:



The radio scans all usable stations(full scan)and stores them alpha numerically-1 Radio, 2 Radio, AA Radio, AB Radio...

The initial scan will take a few minutes. After the scan, the clock will be set and the radio will play the first station in the sequence. To browse for another station, refer to the next section.

Browsing For a Station

To browse for another DAB+ station:

- Press the ► or ◀ button repeatedly on the unit or Remote control.

The stations in the station list will be displayed in sequence.

Press the button until you find the station you want.

- Press the **SELECT** button to select the displayed station.

After a short delay, the radio will tune to the station.

Adjusting The Volume

To increase the volume:

- Press **VOL+ / ►** to increase the volume.

The volume level will increase.

To decrease the volume:

- Press **VOL- / ◀** to decrease the volume.

The volume is adjusted the display will change to show the current volume setting on a bargraph.

Selecting Input Mode

Press the **MODE** button repeatedly switch **DAB+**, **FM** or **AUX**.

Listening To FM Radio

Your radio can receive FM band radio stations

To change to FM band:

- Press the **MODE** button to switch to **FM** mode.

T0 auto-tune to FM stations:

- Press **SCAN** button or **Press** and **Hold** the ► or ◀ button to search up or down for the next station in the band.

The radio will search and the tuning frequency will be displayed whilst searching.

When a usable station is detected the radio will stop tuning and play the station, If RDS data is present, the station name and scrolling radio text will be displayed. If RDS data is not present, the tuned frequency will be displayed.

To manually tune to FM stations:

Press the ► or ◀ button to tune the band in 50KHz Steps.

Stereo/Mono Reception

You can set your radio to switch automatically between stereo and mono

FM reception (Stereo allowed) or to receive in mono only (Forced mono).

Setting to Forced mono mode may improve sound quality in areas where a weak aerial signal results in a high level of background noise.

- Press the **MENU** button
- Press ► or ◀ button until "Audio Setting" displayed, then press the **SELECT** button to go into the audio setting.
- Press ► or ◀ button to switch between the options of Stereo or Mono reception.
- Press the **SELECT** button to confirm the selection
- Press the **MENU** button again to exit the menu.

DAB+ & FM Station Presets

DAB+ and FM presets

Your radio can store up to 10 of your favourite stations as presets on both the DAB+ and FM bands for quick recall.

To store a preset 1-10

- Tune to the station you want to store as a preset.
- Press and **hold** the **PRESET** button.
'Preset Store' will be displayed.
- Press the **or** button repeatedly to find the preset number you want to store.
For each preset number the preset station currently stored will be display or '(Empty)' if none is stored.
- Press the **SELECT** button to confirm if you want the station in the display preset number.

To recall any preset 1-10

- Press the **PRESET** button **briefly**.
 - Press the **►** or **◄** button repeatedly to find the preset number you want to play.
 - Press the **SELECT** button **briefly** to play the preset.
- The radio will re-tune and the preset number will be displayed.

DAB+ Scanning

When first used, your radio scanned the DAB+ band for available stations. The station services found were then stored in your radio's memory.

You can re-scan the band at any time if you move to a different area or just to refresh the stored list of available stations.

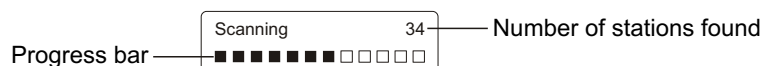
NOTE: On some occasions, when moving to a different area, re-scanning may not fully update the station list. In this case it may be necessary to reset your radio.

To scan for DAB+ stations manually:

- Select the **DAB+** mode.
- Press the **SCAN** button.

The scanning process will take a few minuter. The number of services found during the scan will be shown at the right side of the display.

After the scan ,the radio will re-tune to the last station playing if it is available. Alternatively, you can continue to browse for an other station as described on the previous page.



DAB+ Display Modes

Display Mode Options MODE OPTIONS

The bottom line of the display can be switched to show different items of information that may be transmitted with a DAB+ station.

Choosing the information display:

Press the **INFO** button repeatedly to change the information displayed while playing a DAB+ radio station. The full range of display options are shown below. Some stations may not broadcast all of these options.

DLS (Dynamic Label Segment): This is a scrolling message giving real-time information - song titles, news headlines, etc.

Signal Strength: This setting will display a signal strength bargraph. The longer the bar graph, the stronger the signal. Setting the display to show signal strength is useful when setting up the aerial for the strongest signal.

Programme Type: This describes the style of the programme being broadcast.

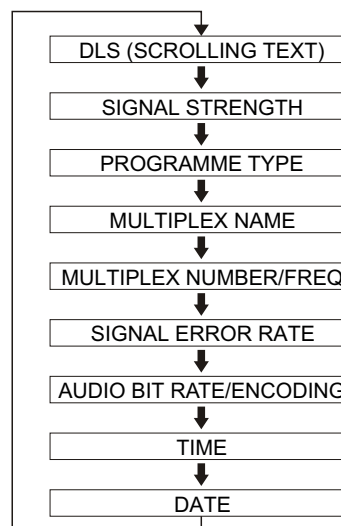
Multiplex Name: DAB+ Digital radio stations are broadcast in multiplexes. Each multiplex is a bundle of radio station transmitted in a single frequency. There are national and local multiplexes; local ones contain stations specific to your area. This option displays the name of the multiplex name that contains the station you are listening to.

Multiplex Number/Freq: This option will display the multiplex number and frequency that contains the station you are listening to.

Signal Error Rate: This option will display the level of signal errors in the current broadcast. The lower the number, the better the quality of the signal.

Bit Rate: DAB+ allows broadcasters to vary the BIT RATE (or the amount by which an audio signal can be compressed) depending on the type of broadcast. This enables the amount of stations on a multiplex to be maximised. Speech and News are often broadcast at a lower Bit Rate; music needs a higher Bit Rate for good fidelity.

Time And Date: Time and date are updated by broadcasted information.



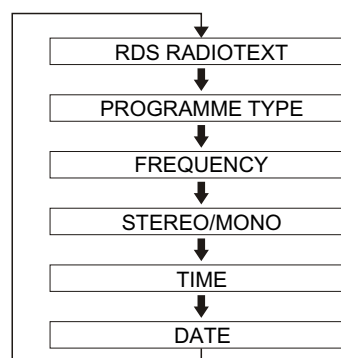
FM Display Modes

The bottom line of the display can be switched to show different items of information that may be transmitted with a FM station.

To change the display mode:

Press the INFO button repeatedly to change the information displayed while playing an FM radio station.

The full range of display options are shown below. Some stations may not broadcast all of these options.



Advanced Operation - DAB+ Settings Menu

DAB+ SETTINGS MENU

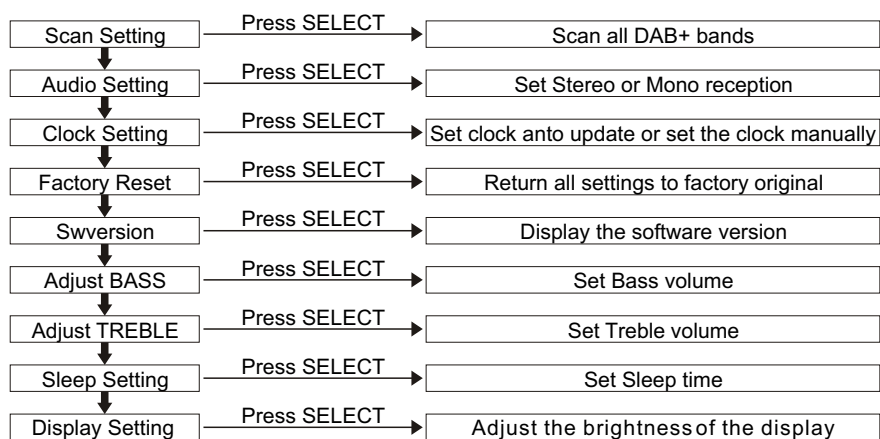
Your radio has some additional features and options that may be reached through the Settings Menu.

A complete map of the menu is shown here.

To enter the DAB+ Settings Menu:

- Set to **DAB+** mode.
- Long press the INFO button Press the ► or ◀ button to scroll through the available options. To choose an option from the menu, press the **SELECT** button. To move back through the menu, press the **INFO** button.

Choose the 'System' menu option to open the sub-menu of system options shown on the menu map.



DAB+ Settings Menu

More Detail Of The DAB+ Settings Menu Options:

Autoscan: Select Autoscan to re-scan the entire DAB+ band and refresh the station list.

Manual Tuning: Manual tuning enables you to search the band manually by pressing the **or** button to step through the multiplex numbers and check if any have usable signal strength on a bargraph display. Manual tuning is not necessary in normal operation where scanning will have automatically established a station list of all usable stations.

More Detail Of The System SUB-MENU Options:

Sleep: Select this option to set a sleep time in the range 15-90 minutes. When a sleep time is set, the radio will set To Standby after the sleep delay time. Choose 'Sleep Off' to cancel sleep mode.

Alarm: Select this option to set alarm times and activate one or both of the dual alarms. There are more details of alarm setting on the following page.

Time: Select the time option to set the clock manually. This may be useful if you are in an area where it is not possible to receive DAB+ radio broadcasts. Within the time menu options it is also possible to change the clock display format between 12 and 24 hour, to choose whether the clock should set from the DAB+ time signal (Auto update) and to change the format of the time and date display.

Display Setting: Select "Display set" then the "ActiveBacklight" sub-option to change the backlight brightness. Press < or > to adjust the brightness level. Press Select to enter the Standby Backlight sub-option. Press < or > to adjust the brightness level during Standby Mode.

Factory Reset: Select the 'Yes' sub-option to reset all the settings of your radio to factory original settings. The station list will also be cleared and any stored preset memories will be erased. After a factory reset the radio will re-scan the band and renew the station list.

SW VERSION: This option will display the version number of the control software currently installed in your radio. This will be helpful to a technician who is servicing the radio.

FM Settings Menu

FM Settings Menu

There are also some menu setting that are specific to FM radio operation. These settings may be changed through the Settings Menu.

To enter the FM Settings Menu:

- Set to **FM** mode.
- Press the **MENU** button.

A map of the menu is shown below. The menu is navigated in the same way as the **DAB+** settings menu.

More Detail Of The FM Settings Menu Options:

Scan Setting: With this menu option you can set the scanning sensitivity of the FM radio to two different levels-'Strong stations only' or 'All stations'. Setting to 'Strong stations only' will exclude weaker stations resulting in a quicker scan. If you set to 'All stations' the scan will stop at every station detected, even if the signal is weak.

Audio Settings: This option enables you to set the radio to receive FM in Auto mode (Mono/Stereo) or in Mono only. This may be useful if the signal is weak and the broadcast is noisy.

System Settings: Allows you to set Tone Settings, Sleep Settings, Display Settings, Time Settings, perform a Factory Reset and view the Software Version.

Tone Settings: Set the Bass volume & Trebel volume.

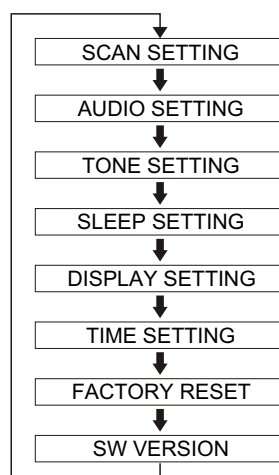
Sleep Settings: Select this option to set a sleep time in the range 15-90 minutes. When a sleep time is set, the radio will set To Standby after the sleep delay time. Choose 'Sleep Off' to cancel sleep mode.

Display Setting: Select "Display set" then the "Active Backlight" sub-option to change the backlight brightness. Press < or > to adjust the brightness level. Press Select to enter the Standby Backlight sub-option. Press < or > to adjust the brightness level during Standby Mode.

Time Setting: Select the time option to set the clock manually.

Factory Reset Setting: Select the 'Yes' sub-option to reset all the settings of your radio to factory original settings. The station list will also be cleared and any stored preset memories will be erased. After a factory reset the radio will re-scan the band and renew the station list.

SW Version: This option will display the version number of the control software currently installed in your radio. This will be helpful to a technician who is servicing the radio.



Setting The Alarms

Setting The Alarms

You can set two completely separate alarm times (ALARM 1 and ALARM 2) and activate either or both of them to wake you with a buzzer or radio.

The alarms are set from within the 'Alarm' option of the Settings Menu.

NOTE: - You must complete all settings before leaving the menu or your changes won't be saved.

Setting the Alarm:

■ Switch on the radio (Alarm settings cannot be changed when set to Standby).

■ Press the **ALARM** button on front panel.

'Alarm Status Set' will appear on the display.

■ Press the **SELECT** button instead of '**SELECT** control' to begin setting Alarm 1 or press the button before selecting to choose Alarm 2 setup.

Alarm 1 Wizard is now displayed.

The alarm is now set in the sequence shown on this page.

NOTE: Press the **MENU** button at any time to exit alarm setting, leaving the settings unchanged.

To make a change to a setting:

1. Press the ► or ◀ button to scroll through the options available for a setting (or times when clock setting).
2. When you have finished changing a setting, press the **SELECT** button to confirm the setting and to the next setting in the sequence.
3. Repeat the previous two steps to change each setting as required.

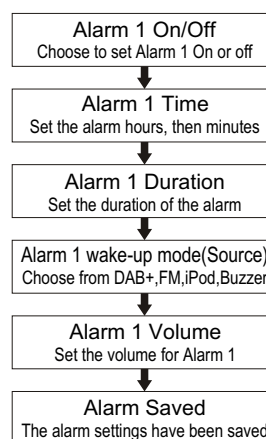
***NOTE:** - When changing the Alarm radio preset setting, wake to the last station you played before setting the radio to Standby.

Saving alarm settings:

Your alarm settings are automatically saved when you complete the last setting and press the **SELECT** control.

Waking to the alarm:

Once you have set the alarm with your required time and wake-up mode, set the radio to Standby. If the alarm is active, the alarm symbol will show on the display.

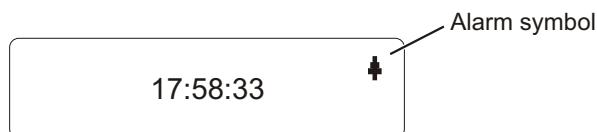


Waking To The Alarms

Setting the Alarm to Wake You

To set the alarm to wake you:

- Check that the Alarm symbol is displayed. If not, set the Alarm(s) On as described in the 'Setting the Alarms' section on the previous page.



- Set the radio to Standby (or set the SLEEP function).
The radio will switch off and the time will be displayed.
with the Alarm Symbol.

WHEN THE ALARM WAKES YOU

To switch off the alarm:

- Press the **POWER** button or **ALARM** button.
- Press ► or ◀ to switch between Alarm 1 or 2
- Press **SELECT**
- Press ► or ◀ to select **OFF**.

AUX IN

There is a **AUX IN** jack to listen to an external audio player, Connect a 3.5mm audio cable(not included) to the AUX in socket of **BR40DAB** and headphone socket or an external audio player.

Press **MODE** button to switch the input to AUX.

HEADPHONE

There is a 🎧 jack on the back panel of the radio. If 🎧 (such as a set of headphones) are connected to this socket for private listening, the speakers will cut out automatically.

Warning / Troubleshooting / Technical Specification

All electrical and electronic products must not be disposed of with household waste. Please refer to the retailer from whom you purchased this item for disposal instructions.
Batteries and packaging materials can be recycled using your local collection facilities.



Troubleshooting

If a fault occurs, first check the points listed below before taking the set for repair.

If you are unable to remedy a problem by following these hints, consult your retailer or service center.

WARNING: Under no circumstances should you try to repair the set yourself, as this would void your guarantee.

PROBLEM	POSSIBLE	REMEDY
No sound	Volume may not be adjusted,  (Headphone out) are connected. Power is not correctly connected.	Increase the Volume level. Disconnect your  (Headphone out). Check and connect the power properly.
The radio does not operate when you press any buttons	Electrostatic discharge	Turn off the unit, disconnect the main power, reconnect after a 60 seconds
Radio poor reception	Weak radio aerial signal Interference caused by the other electrical equipment (i.e. TVs, VCR, Computer, fluorescent lamps (TL) etc)	Extend and aim the aerial for the best reception possible. Keep the unit away from other electrical equipment where possible

Technical Specification

Power Consumption.....	1.5W x 2
Supply Voltage/Battery.....	9 V (AA/UM3 x 6)
DAB+.....	BAND III 174 -240 MHz
FM.....	87.5-108 MHz
Sensitivity.....	-95dBm Typical
 (Headphone out)	3.5mm Stereo Jack

Warranty

Please keep your receipt as proof of purchase. This product is warranted for any defect in materials or workmanship for one year after the original date of purchase. This product is for normal domestic and office use only. This warranty does not cover damage from misuse or neglect, accidental damage, vermin infestation, excessive voltages such as lightning or power surges or any alternation that affects the performance or reliability of the product.

In the unlikely event that your product fails to work normally, please contact the

**Bush Warranty on 1800 509 394 (Australia)
or 0800 450 259 (New Zealand)**

and have your receipt of purchase on hand.

This warranty is subject to the following provisions:

- It is only valid within boundaries of the country of purchase
- The product must be correctly assembled and operated in accordance with the instructions contained in the manual
- This product must be used solely for domestic purposes
- The warranty does not cover accidental damage
- The warranty will be rendered invalid if the product is resold or has been damaged by inexpert repair
- The manufacturer disclaims any liability for incidental or consequential damaged

This warranty is in addition to, and does not diminish, your statutory or legal rights.

**PO BOX 6287
Silverwater NSW 1811**

**Bush Warranty: 1800 509 394 Australia
Bush Warranty: 0800 450 259 New Zealand**

www.bushaustralia.com.au

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