

# USER MANUAL



## DAB<sup>+</sup>/FM Portable radio

Technical Support: 1800 189 941

**DG-DAB23C**

## NEED HELP?

If you are experiencing difficulty operating this product or require set up assistance please contact the DGTEC Service Centre. The call is free from anywhere in Australia. Our operators will assist you in plain English without the technical jargon:



**Call**

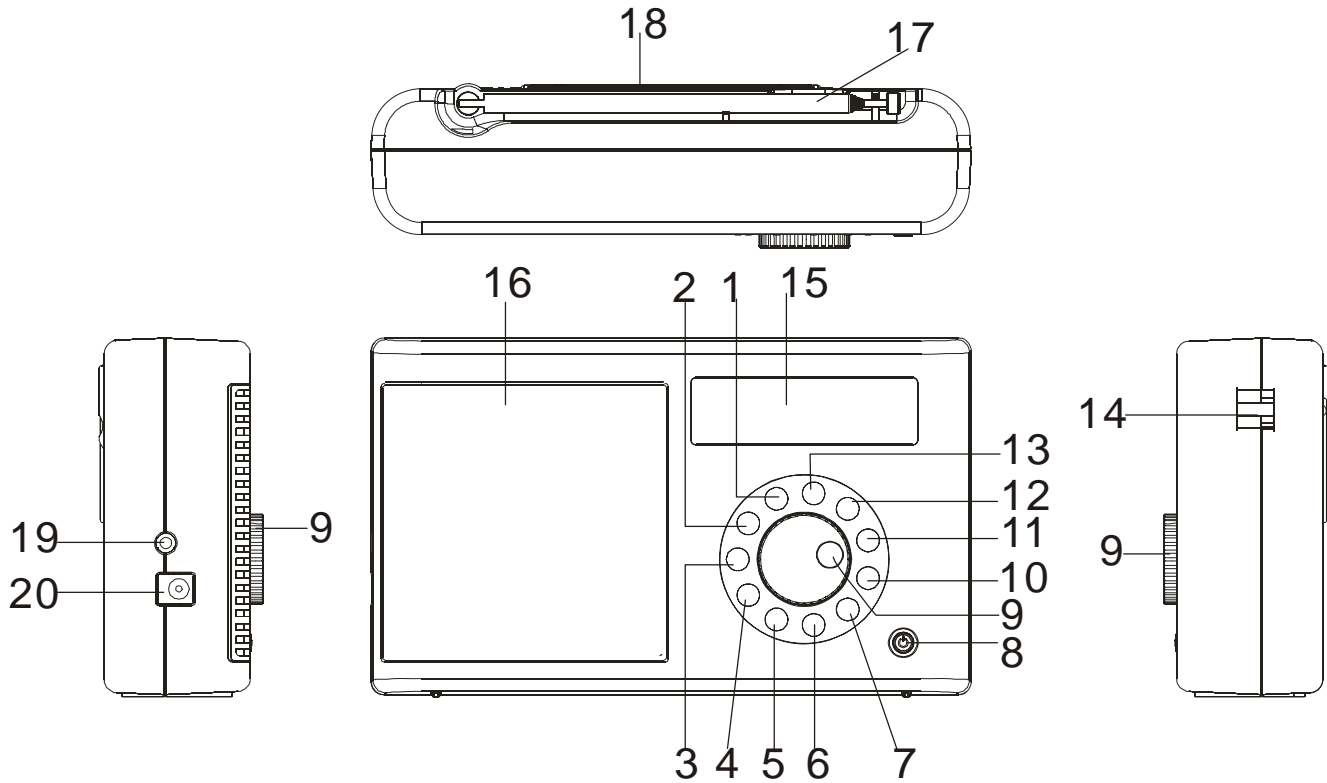
**1800 189 941**



(Australia)

8:00am-:00pm Australian EST

\* Subject to change without notice.

## Location of controls



- |   |   |
|---|---|
| 1. 1/5 button   | 12. SCAN button   |
| 2. 2/6 button   | 13.  MENU/SELECT button |
| 3. 3/7 button   | 14. Handle strap  |
| 4. 4/8 button   | 15. LCD   |
| 5. SHIFT button   | 16. Speaker   |
| 6. FM/DAB & DAB <sup>+</sup> button   | 17. Antenna   |
| 7.  DISPLAY button | 18. Stand bracket   |
| 8. POWER button   | 19. STEREO OUT socket   |
| 9. VOLUME knob  | 20. DC socket   |
| 10. TUNE - button   |   |
| 11. TUNE + button   |   |

### **Backlight function (powered by batteries)**

Press any of the buttons on the front panel to activate the backlight, the display will illuminate for 5 seconds and then go off.

### **Backlight function (powered by mains)**

When powered by the mains the backlight will remain on at all times.

### **Battery operation**

This unit operates with 6 AA/LR06 1.5V batteries (not supplied). On the rear of the unit, slide the battery compartment cover in the direction of arrow to remove it.

Insert the batteries into the battery compartment observing the polarity (+/-). Replace the battery compartment cover.

### **Battery precautions**

Be sure to follow the correct polarity when installing the batteries as indicated in the battery compartment. Reversed batteries may cause damage to the device.

Do not mix different types of batteries together (e.g. Alkaline and Carbon-Zinc) or old batteries with fresh ones.

If the device is not to be used for a long period of time, remove the batteries to prevent damage or injury from possible battery leakage.

Do not try to recharge batteries not intended to be recharged, then can overheat and rupture. (Follow battery manufacturers directions.)

When replacing batteries replace all the batteries at the same time with the same type.

Dispose of used batteries safely at your local recycling plant.

Use only the size and type of batteries specified.

**Caution:** Please note, when the carrying strap, only use when the unit is powered by batteries. Never attempt to carry the unit when it is connected to the mains supply.

### **Stand**

This unit is supplied with its own stand, this is located at the rear of the unit. To use the stand, just flip it open and then rest the unit stable surface.

### **Headphones socket**

A stereo headphone socket is provided for private listening. Connect a pair of low impedance (8-16ohm) headphones or earphones (not supplied) with a 3.5mm stereo jack plug to the headphone socket on the left hand side of the unit. When the headphones are connected the main speaker is automatically disconnected.

Please note: listening to music at high volume for a long period of time may cause damage to hearing. Before using headphones, make sure the volume is set low and gradually increase to a comfortable listening volume.

## Using your DAB&DAB<sup>+</sup> radio

DAB&DAB<sup>+</sup> or Digital Audio Broadcasting represents a new age in broadcasting technology and as with all new technologies it is significantly different to traditional Analogue FM broadcast methods. The new system no longer relies on tuning to a given frequency but instead allows the DAB receiver to provide an active Station List of all available radio programmes/stations at the touch of one button. Station Lists are described in more detail in the DAB Operation section of this manual.

Before selecting the DAB function make sure that the antenna is fully extended.

1. Connect the plug of the adaptor to a suitable 13 amp mains socket.
2. Insert the other end to the “DC IN” socket and press the power button.
3. Press the “FM/DAB&DAB<sup>+</sup>” button, the unit will automatically start a scan of the DAB services and after 15 to 20 seconds the first station will begin to playback.

**NOTE:** At this stage it is possible that the display may show ‘**Service not available**’, this indicates the unit has been unable to locate any available DAB stations during the search process. This may be due to the radio needs relocating to a better location in order to get adequate reception. The signal strength indication (See Display button operation) can be used to assist this process.

4. Use the Volume control to increase or decrease the sound output level as required.
5. To search for new stations, press the ‘**SCAN**’ button at the front of the radio. The radio will commence the station search process.

**Note:** Press and release the ‘**SCAN**’ button once, the radio commence local scan (11B-12D); press and hold ‘**SCAN**’ button for about 2 seconds, the radio commence full scan (5A-13F.)

During the search process the display indicates the progress and stations found, for example:

Scanning . . .	17
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The symbols on the second line of the display are a bar graph that indicates the progress of the scan. The number on the first line indicates the number of stations found and will increase as the scan progresses.

Once the search has completed the DAB radio will tune to the first station in the list. Stations are listed in numerical then alphabetical order.

The station list is retained in memory so the next time you switch the tuner on, the station search does not take place.

If there are no stations found check that adequate DAB coverage exists in your area.

### Changing DAB&DAB<sup>+</sup> stations

Press either the **TUNE-/+** buttons to scroll through the available stations. The stations will appear on the display.

When the station you require is displayed press the ‘**MENU**’ button. The radio will now tune to that station.

### Scanning for DAB &DAB<sup>+</sup> Stations

Due to the nature of DAB radio, additional stations and services regularly become available. If you wish to see if there is any new DAB stations introduced in your area, you can initiate a search by pressing the ‘**SCAN**’ button.

## Setting DAB Presets

You can preset up to 8 DAB stations as follows.

Tune to the station you wish to preset.

Press and hold the '**PRESET (1-5)**' button for about 3 seconds on the front of the radio. 'Preset 1 saved' will be displayed on the second line of the display. Repeat this with button '2/6', '3/7' and '4/8' when you want to save into preset 5, press and hold the '**SHIFT**' button and then press the '**PRESET (1-5)**' button for about 3 seconds on the front of the clock radio. 'Preset 5 saved' will be displayed on the second line of the display. Continue until all 8 presets are saved.

## Selecting a Preset DAB Station

Press the '**Power**' button on the front of the unit.

Press a preset button or hold '**Shift**' button and press a preset button to select the station you want to listen to.

## Resetting the DAB Preset Station

DAB presets cannot be deleted individually but they can be overwritten. For example if you wish to change a preset from one station to another:

Tune into the station you want to listen to, press and hold the preset number (1-8) button until the 'Preset # saved' message is displayed. If you want to select preset 5-8, first hold 'Shift' button, then press and hold the required preset button for a about 3 seconds.

## Changing the DAB Station Information

It is possible to change the information that is displayed on the second line of the display when listening to a DAB station. There are 9 types of information available as listed below. To change the information displayed press the **DISPLAY** button.

Dynamic Label Segment (DLS): This is scrolling text information supplied by the DAB station. It may comprise information on music titles or details of the programme and is provided by the broadcaster.

- Signal Quality Indication: To indicate the strength of receiving signal
- Program Type (PTY): This is a description of the type of programme provided by the DAB station and is provided by the broadcaster.
- Multiplex Name: This will show the multiplex that is broadcasting the programme you are listening to.
- Frequency: This displays the transmission frequency.
- Signal Error Rate: If the transmission signal contains errors, the system can apply a correction. This signal error rate is a number which indicates the quality of the signal. 0-15 indicates good reception, 16-30 indicates borderline reception, try to adjust the position of the antenna if over 30
- Signal Information: This shows the digital bit rate and the signal mode
- Time: This displays the time and is provided by the broadcaster so will be accurate.
- Date: This displays the date and is provided by the broadcaster so will be accurate.

Press **DISPLAY**

BBC Radio 5 Live
DLS Scrolling

Press **DISPLAY**

BBC Radio 5 Live
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Press **DISPLAY**

BBC Radio 5 Live
News

Press **DISPLAY**

BBC Radio 5 Live
BBC National DAB+

Press **DISPLAY**

BBC Radio 5 Live
Freq: 225.640MHz

Press **DISPLAY**

BBC Radio 5 Live
Signal error 8

Press **DISPLAY**

BBC Radio 5 Live
192kbs / ACC

Press **DISPLAY**

BBC Radio 5 Live
12:18:00

Press **DISPLAY**

BBC Radio 5 Live
26/08/2008

## Station Order

This function enables you to define how the stations are arranged when scrolling the stations list. To select an option press and hold the **MENU/SELECT** button for about 5 seconds, until '**DAB Station list**' displayed on the LCD.

**Note:** Press the **MENU/SELECT** button again to confirm the current operation.

Press the **TUNE +/-** buttons to display the option you want. There are 3 options as described below.

- **Alphanumeric**

This is the default setting. The stations are arranged in numerical then alphabetical order.

- **Ensemble**

This option sorts the list by the ensembles are in.

- **Valid**

This option sorts the list by whether the station is currently marked as being valid.

## Manual Tune

It is possible to manually tune to a specific channel/frequency and add this to the station list.

This function can be used to assist the positioning the antenna to obtain the optimum reception for a specific channel/frequency.

Press and hold the **SELECT/MENU** button for about 3 seconds, then press the **UP or DOWN** button to display '**Manual tune**', press the **SELECT/MENU** then press **UP or DOWN** to select desired frequency, Press the **SELECT/MENU** button. A rectangle will be displayed on first line of the display. The position of this rectangle indicates the signal strength, i.e the further towards the right the greater the signal strength.

5 A	1 7 4 . 9 2 8 M H Z
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Adjust the position of the antenna to obtain the optimum signal strength.

Press and hold **SELECT/MENU** button for about 3 seconds, the LCD appear STATION LIST, then press **SELECT/MENU** to enter normal DAB listening mode.

## Dynamic Range Control (DRC)

DRC adds or removes a degree of compression to compensate for the differences in the dynamic range between radio stations. For example, when a station is broadcasting popular music, may has a high level of compression applied since the emphasis is on a constant high listening level, whereas a station is broadcasting classical music, will has a little or no compression as the listener requires all of the highs and lows in the music to define the detail.

There are three levels of compression:

- DRC off            No compression applied.
- DRC high        High compression applied (this is the default).
- DRC low         Low compression applied.

Press and hold the **SELECT/MENU** button. 'Station list' will be displayed.

Press the **UP/DOWN** buttons until '**DRC**' is displayed.

Press the **SELECT/MENU** button.

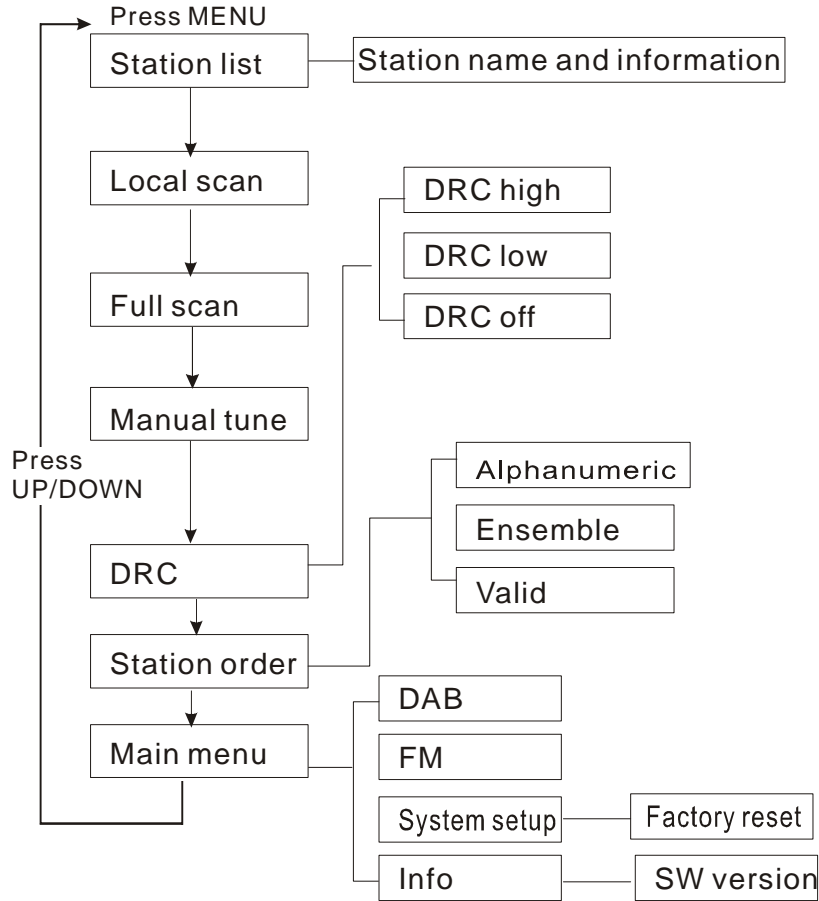
A symbol "\*" will be shown on Line 1 and the current DRC level will be displayed on Line 2.

Press the **UP/DOWN** buttons to select between the three values on Line 2 of the display.

When the required value is displayed, press the **SELECT/MENU** button.

## Menu

Press SELECT/MENU button, until the “Menu” displays on the LCD.



## Factory reset

You can delete all of the preset stations and return the DAB/FM Radio to its factory settings as follows : -

Press and hold the SELECT/MENU button under DAB mode or FM mode

Select MAIN MENU -> SYSTEM SETUP -> FACTORY RESET according the menu tree.

The display will show “ Press ‘ Display ’ to confirm reset “

Press the DISPLAY button to confirm

The display will show ‘RESTARTING...’ before performing a new scan for stations.

## Language

There is only one option presented –**English**.

## FM OPERATION

### Selecting the FM function

Press **FM/DAB&DAB<sup>+</sup>** mode button, the display will show “FM”.

When in FM mode, the frequency of the station is being listened will appear on the display.

“**St**” will be showed if stereo is activated

In FM mode, you can use Auto Scan and Manual Tuning two methods.

For Auto Scan method, briefly press **SELECT/MENU**, the radio will immediately scan all available stations which are currently broadcasting. The frequency of that station will be on the top line of the display.

For Manual Tuning, briefly press the “**UP**” or “**DOWN**” buttons.

The frequency display will be changed in 50kHz steps up or down the FM band. Press and hold the “**UP**” or “**DOWN**” button will advance or decrease the selected frequency rapidly in 50 kHz steps until available station is reached.

## Scan setting

Press and hold the SELECT/MENU button, then press UP or DOWN button until the display shows “SCAN SETTING”, then press SELECT/MENU button again, now you can press UP or DOWN button to choose **Strong stations only** or **All stations**, then press SELECT/MENU button to confirm

## Audio setting

Press and hold the SELECT/MENU button, then press UP or DOWN button until the display shows “Audio setting”, then press SELECT/MENU button again, now you can press UP or DOWN button to choose “**Stereo or mono**” or “**Mono only**”, then press to SELECT/MENU button to confirm.

## Storing and Recalling Preset Frequencies in FM

Up to 8 FM frequencies can be stored into preset memories.

To preset memories are in the form of a list of preset locations numbered 1 to 8.

### Storing a Frequency as a preset

#### To store a frequency into a preset location

1. Tune on the radio to the required frequency.
2. Press and hold the preset locations number (**1-4**) for about 3 seconds, until “**Preset Stored**” appears on the display.
3. Hold **SHIFT** button and then hold preset number (**5-8**) for about 3 seconds, until “**Preset Stored**” appears on the display.

### Recalling a Preset Frequency

#### To recall a preset frequency

1. Briefly press the preset locations number buttons (**1-4**), and the current frequency stored in the Preset location will be displayed.
2. Hold **SHIFT** button and then briefly press preset number (**5-8**) to select the desired preset number, and the current frequency stored in the preset location will be displayed.
3. If nothing is currently stored in the location, “**Preset Empty**” will appear on the display.

## Specifications

POWER SUPPLY:

Adaptor: 7.5V 600mA (  —  )

Battery: 6x1.5V (AA/LR6)

Receiver Bands: DAB/DAB+ Band III: 174.928 MHz (5A) – 239.200MHz (13F)  
Tuning Range - 11B to 12D local scan, 5A to 13F full scan  
FM Range 87.5-108 MHz

DAB sensitivity: -98dBm or better

DAB Adjacent Channel Rejection: -30dB or better

DAB audio decode: 64kbps - 384kbps

Power Output (at 10% THD): 1W RMS

Headphones Socket: 3.5mm diameter.

Speakers: 50mm

Dimensions (W x H x D): 18.5 x 11 x 4.5 cm

Power consumption : 4.5W

Specifications are subject to change and improvement at any time without notice.

## Important notice:

In case of malfunction due to electrostatic discharge, reset the apparatus by disconnecting from the mains supply.

Disconnect from the mains, remove the batteries and leave to stand for a few minutes.

Replace the batteries or re-connect to the mains supply.

## Electrostatic discharge

In case of malfunction due to electrostatic discharge just reset the micro system (reconnection of power may be required) to resume normal operation.

## Electrical Information



### Warning

**Read these electrical safety instructions carefully before connecting the AC adaptor to the mains.**


- This unit is supplied with an AC mains adaptor.
- This AC mains adaptor is designed to operate on AC 230V ~50Hz supply only. Connecting it to any other power sources may damage the unit.
- The AC mains adaptor is designed for indoor use only.
- The AC mains adaptor is a sealed unit. There are no user serviceable parts inside and it does not require any electrical adjustments.
- Do not attempt to open the AC mains adaptor.
- If the AC mains adaptor is not suitable for your socket, or becomes damaged, it must be replaced and disposed of in a safe and environmentally protective way. Always refer to qualified personnel.
- Periodically inspect the AC mains adaptor for damage. Do not use if faults or damages are found. Refer to qualified personal.



This symbol indicates that the adaptor is a Class II appliance and does not require an earth connection.



This symbol indicates that the adaptor is for indoor use only.

 This symbol indicates that the adaptor conforms to CE regulations.

## Safe use and care of your equipment

We have designed and made this product to meet European safety standards, but as with any electrical equipment you must take care to get the longest working life from it and stay safe. Here are a few tips to help you do this.

**Read** these instructions carefully before you try to use the equipment.

**Protect the power lead.** You must ensure the power lead cannot be walked on, crushed, chafed or cut.

**Avoid harsh conditions** such as wet or damp places, high humidity, strong vibration, extremely high or low temperatures, strong sunlight and places which are very dusty.

**Never** push objects into holes and ventilation slots.

**To save power**, switch off mains power or pull out the mains power plug when you are not using the equipment, unless the function of the equipment requires a continuous power supply.

**Don't** continue to use this equipment if you have spilt liquids in it, if it is damaged in any way or if it does not work normally. Immediately unplug the equipment and get expert advice.

**Pull** the mains adaptor out of the wall socket during thunderstorms.

**This product is designed for domestic use only. Any other use may invalidate the guarantee and might be dangerous.**

### Ventilation

Place the equipment on a hard flat surface away from direct sunlight and heat sources. If it is in a cabinet, allow at least a 10cm gap all around. Don't obstruct the ventilation slots, including those underneath, with soft furnishings.

Overheating will shorten the life of the equipment and increase the risk of fire.

### Cleaning

Disconnect the mains supply and use only a lightly dampened soft cloth. Do not use chemical solvents or strong detergents as these may damage the cosmetic finish.

### Batteries

Remove batteries when the equipment is not to be used for a long time. Batteries left in equipment may cause damage through deterioration and corrosive leakage, invalidating the guarantee.

To protect the environment please use local recycling facilities for battery disposal.

### Disposal



Waste 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.

### Important Safety warnings

- To prevent electric shock, do not remove any cover.
- If anything goes wrong, don't try and fix it yourself, get a qualified service agent to look at the product.
- Do not expose this equipment to dripping or splashing or place any objects filled with liquids, such as vases, on the equipment.
- Never put a naked flame source on or near this equipment.
- Small parts. Do not let young children play with the equipment