BUSH

Instruction Manual
CDAB4312R

Table of contents

Product Code
CDAB4312R

BUSH

⚠ Safety information

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE ANY COVER. NO USER-SERVICEABLE PARTS INSIDE, REFER ANY SERVICING TO QUALIFIED SERVICE PERSONNEL.

- Please take the time to follow the instructions in this owner's guide carefully. It will help you set up and operate your system properly and enjoy all of its advanced features.
- Please save this owner's guide for future reference.
- The product label is located on the back of the product.
- Heed all warnings - on the product and in the owner's guide.
- Do not use this apparatus near water or moisture.
- Do not use this product near a bathtub, washbowl, kitchen sink, and laundry tub, in a wet basement, near a swimming pool, or anywhere else that water or moisture is present.
- Only use attachments/accessories specified by the manufacturer.
- Unplug this apparatus during lightning storms or when unused for long periods of time - to prevent damage to this product.
- Refer all servicing to qualified service personnel
- Servicing is required when the apparatus has been damaged in any way: such as liquid has been spilled or objects have fallen into the apparatus; the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped -
- Do not attempt to service this product yourself.
- Opening or removing covers may expose you to dangerous voltages or other hazards.
- To prevent risk of fire or electric shock, avoid overloading wall outlets, extension cords, or integral convenience receptacles.
- Use suitable power sources - Plug the product into a suitable power source, as described in the operating instructions or as marked on the product.
- The mains plug is used as the disconnect device, the disconnect device shall remain readily accessible.
- The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.
- Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.
- Batteries shall not be exposed to excessive heat such as sunshine, fire or the like.

CAUTION

RISK OF ELECTRIC SHOCK! DO NOT OPEN!

This symbol means that this mains charger is double insulated. An earth connection is not required.

- Any electrical work that is required to install this appliance MUST be carried out by a qualified electrician.
- Before making any electrical connections, ensure the following:
- Do not bend, stretch or pull the supply cable in order to avoid electric shock.
- The supply voltage should be the same as that indicated in the technical specifications and the appliance rating plate.
- When installed, the power socket must be within easy reach.
- If the socket outlets in your home are not suitable for the plug supplied with this unit check with a qualified electrician for replacement.
- The use of multiple connectors or extension cables are not recommended.
- The appliance must be connected to a 100-240 volt 50/60Hz AC supply by means of a three pin socket.
- The main plug is used as the disconnect device, the disconnect device shall remain readily operable.
- In order to disconnect the apparatus from the mains completely, switch off the outlet and remove the mains plug completely.

CE This product complies with European low voltage (2006/95/EC) and electromagnetic compatibility (2004/108/EC) directives.

Functions & controls

Please familiarize yourself with the parts and accessories listed below

Accessories included

- 1 x CDAB4312R
- 1 x Mains charger
- 1 x Earphones
- 1 x Instruction manual

Overview of controls
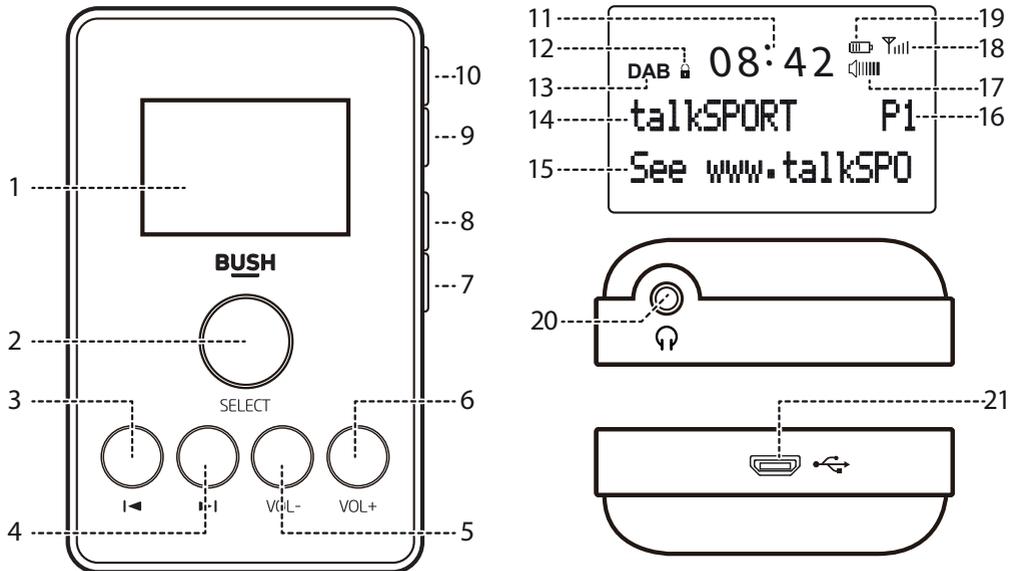
1: LCD Display
2: SELECT button
3: TUNE DOWN button
4: TUNE UP button
5: VOLUME - button
6: VOLUME + button
7: PRESET button

8: MENU button
9: MODE button
10: POWER ON/OFF button
11: Time
12:. KEY LOCK icon
13: DAB/FM MODE icon
14: STATION info

15: DLS message
16: PRESET location (FM)
17: VOLUME level icon
18: SIGNAL strength
19: BATTERY level
20: EARPHONE output socket
21: MICRO USB charge port

Charging the CDAB4312R before use

Before use the unit should be fully charged to prolong the life time of the internal lithium battery.

1: To charge using the supplied mains adaptor, connect the micro **USB** connector cable to the bottom of the unit **(21) (as shown across)**.
2: Connect the mains adaptor plug to a **UK** mains wall socket and switch **ON.**

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Installation

3: The **CDAB4312**R will automatically begin charging when connected to the power source **(with power ON)**.
4: When fully charged the battery level indicator **(19)** will display all three solid bars **(while powered ON)**. If you charge with the unit switched **OFF 'Charge Full'** will appear on the display.
5: The **USB** cable can now be disconnected and stored. The device is fully charged and ready for use.

IMPORTANT! Connecting the earphones before powering on

Getting started

In order to receive radio stations the earphones need to be connected as they act as an antenna.

1: Connect the earphone **3.5**mm jack to the earphone output **(20)** of the unit.

Switch the unit ON.

1: Press the **POWER** button **(10)** to switch the unit **ON.**
2: To switch the unit **OFF**, press the **POWER** button once more.

NOTE: When you next power up ON, the radio plays in the same mode (DAB or FM) as last used.

Listening to the radio for the first time

When you first switch the unit on the default mode is DAB.

1: After switching the unit **ON**, you will see **'Welcome to Digital Radio'** on the display and then a **FULL SCAN** will be performed.

```
DAB    08:42🔋 ▼ⁿ
Scanning... 34
■■■■■■■■□□□□□□□
```
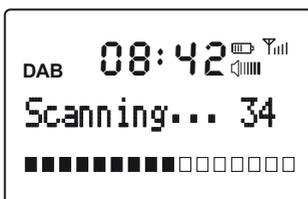
Listening to the radio for the first time (cont)

During the full scan mode, the LCD will display a slide bar that indicates the progress of the scan, and the amount of radio stations that have been found so far.

Once the scan has finished, the radio will select the first alphanumeric station.

NOTE: The station name will be shown in the middle of the display. Information about the DAB radio station will be displayed on the bottom of the display.

General operation

Volume

1: Press the **UP** + button **(6)** to increase the volume level.
2: Press the **DOWN** - button **(5)** to decrease the volume level.

Keylock

The unit is equipped with a key lock function to prevent buttons being pressed by mistake.

1: Press and hold the **SELECT** button **(2)** to activate the key lock function.
2: Press and hold the **SELECT** button **(2)** again to release the key lock function.

DAB operation

Press the MODE button (9) (if in FM mode) to switch to DAB mode. The display will show 'DAB'.

```
DAB    08:42🔋 ▼ⁿ
Scanning... 34
■■■■■■■■□□□□□□□
```

1: To listen to the located **DAB** stations use either **TUNE UP (4)** or **TUNE DOWN (3)** buttons to cycle through the stations. When you reach the desired station press the **SELECT** button **(2)** to begin playback of that station.

User instructions

DAB operation (cont)

NOTE: If when the unit was switched on, no stations where found, or no DAB stations can be received currently [No DAB station] will be displayed. In this case you may need to perform another station scan.

NOTE: Ensure the earphones are connected for maximum reception.

DAB radio station full scan

Full scan: searches all **DAB** channels.

1: Press and hold the **MENU** button **(8)**.
2: When the **‹Station List›** option appears press either **TUNE UP (4)** or **DOWN (3)** button to locate the **‹Full Scan›** option. Press the **SELECT** button to begin the scan.
3: Once the scan has finished, the radio will select the first alphanumeric station and begin playback.

DAB radio station manual tune

As well as an auto tune function, you can manually tune the receiver. This can help when aligning your aerial or when adding stations that were missed while auto tuning.

1: Press and hold the **MENU** button **(8)**.
2: When the **‹Station List›** option appears press either **TUNE UP (4)** or **DOWN (3)** button to locate the **‹Manual Tune›** option. Press the **SELECT** button to select.
3: Use either **TUNE UP (4)** or **DOWN (3)** button to cycle through the **DAB** Multiplexes, which are numbered from **5**A to **13**F.
4: Now press the **SELECT** button to enter the current ensemble/multiplex, the top line will now display the frequency followed by the ensemble/multiplex information. The unit will scan and store any available stations on the selected ensemble/multiplex.
5: Press the **SELECT** button once more to return to the Multiplex selection screen. Then press **MENU** to return to the default screen.
6: To listen to the located **DAB** stations press either **TUNE UP (4)** or **DOWN (3)** button to cycle through the stations.

Storing DAB station presets

It is possible to store up to 10 of your favourite DAB stations. This will enable you to access your favourite stations quickly & easily.

1: To store a preset, you must first be listening to the station that you would like to save, press and hold the **PRESET** button **(7)** for **2** seconds. The **LCD** will then show the following.

2: Use the **TUNE UP (4)** or **DOWN (3)** buttons to choose the preset number from **1**–**10** you wish to use. Then press the **SELECT** button to store.
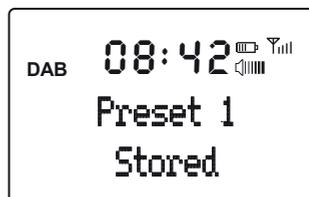
Recalling DAB station presets

1: You can recall preset stations by pressing the **PRESET** button. Then use the **TUNE UP (4)** or **DOWN (3)** buttons to select the desired preset. Once selected press the **SELECT** button to activate.

NOTE: If you choose a preset that hasn't been allocated a station, then "Preset Empty" will be displayed.

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User instructions

Pruning

When the radio has performed a Scan in several locations you may find there are stored stations that you can no longer receive. This function automatically removes them from the stored station list.

1: Press and hold the **MENU** button **(8)**.
2: When the **<Station List>** option appears press either **TUNE UP (4)** or **DOWN (3)** button to locate the **<Prune>** option. Press the **SELECT** button to select.
3: Use the **TUNE UP (4)** or **DOWN (3)** buttons to select **YES** or **NO** and press **SELECT** to activate.

Display modes

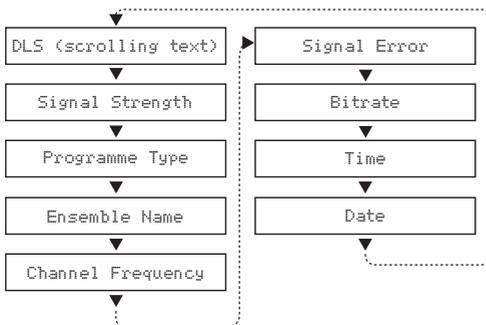Press the **MENU** button (8), and the bottom section of the display will show a sub text menu with various information about the current station.
Every press of the **MENU** button changes the information displayed.

This can be better explained in a diagram showing the order of sequence.

NOTE: once you reach the last info setting the next press will return you to the first setting.

```
┌──────────────────────┐      ┌──────────────────────┐
│ DLS (scrolling text) │ ──►  │    Signal Error      │
└──────────────────────┘      └──────────────────────┘
           ▼                             ▼
┌──────────────────────┐      ┌──────────────────────┐
│   Signal Strength    │      │      Bitrate         │
└──────────────────────┘      └──────────────────────┘
           ▼                             ▼
┌──────────────────────┐      ┌──────────────────────┐
│   Programme Type     │      │       Time           │
└──────────────────────┘      └──────────────────────┘
           ▼                             ▼
┌──────────────────────┐      ┌──────────────────────┐
│    Ensemble Name     │      │       Date           │
└──────────────────────┘      └──────────────────────┘
           ▼                             ▼
┌──────────────────────┐
│   Channel Frequency  │
└──────────────────────┘
```

DLS (Dynamic Label Segment)
Dynamic label segment is a scrolling message that the broadcaster may include with their transmissions. This message usually includes information, such as program detail etc.

Signal Strength
Displays how strong the current signal being received is.

Display modes (cont)

Program type
This describes the "Style" or "genre" of music that is being broadcast e.g. "Rock "or "Classical".

Ensemble/Multiplex (Group name)
A multiplex/ensemble is a collection of radio stations that are bundled and transmitted on one frequency. There are national and local multiplexes. Local ones contain stations that are specific to that area e.g. MXR West.

NOTE: DAB – unlike normal radio, groups together several radio stations and transmits them on one frequency.

Channel Frequency
Displays the frequency information for the current station.

Signal Error
Displays information regarding the error rate in the signal.

Bitrate
Displays the current stations bitrate details.

Time & Date
The time & date is set automatically from the DAB broadcast.

Station ordering

This function allows you to re-arrange the order in which the stations are listed.

1: Press and hold the **MENU** button **(8)**.
2: When the **<Station List>** option appears press either **TUNE UP (4)** or **DOWN (3)** button to locate the **<Station order>** option. Press the **SELECT** button to select.
3: Use the **TUNE UP (4)** or **DOWN (3)** buttons to select **<Alphanumeric> (arranges by the station name in alphabetical order)** or **<Ensemble> (arranges by Ensemble order)** and press **SELECT** to select.

User instructions

DRC (Dynamic Range Control)

This causes the radio to reduce the dynamic range of the audio signal. The purpose of this is to adapt the dynamic range of the audio signal to listening in a noisy environment.

NOTE: this is not available on many DAB stations.

1: Press and hold the **MENU** button **(8)**.
2: When the **<Station List>** option appears press either **TUNE UP (4)** or **DOWN (3)** button to locate the **<DRC>** option. Press the **SELECT** button to select.
3: Choose between **DRC** off, **DRC** Low and **DRC** High using the **TUNE UP (4)** or **DOWN (3)** buttons.
4: Press **SELECT** to save the setting.

FM operation

Press the MODE button (9) (if in DAB mode) to switch to FM mode. The display will show 'FM'.

```
┌─────┐
│ FM  │  08:42▭ ▼ⅈₗ
└─────┘       ⊲ⅈⅈⅈ

      87.50MHz
    All the best t
```

Tuning an FM station

1: Press and hold either **TUNE UP (4)** or **DOWN (3)** button to scan up or down the frequency range. When a station is found the scan will stop and play the found station.
3: You can fine tune the frequency by pressing either **TUNE UP (4)** or **DOWN (3)** button to advance **0.05MHz** with each press.

Scan mode

This function allows you to tailor which stations will be detected when performing a scan.

1: Press and hold the **MENU** button **(8)**.
2: When the **<Scan setting>** option appears the **SELECT** button to select.

Scan mode (cont)

3: Use the **TUNE UP (4)** or **DOWN (3)** buttons to select from **<Strong stations only>** or **<All stations>**.Strong stations only, will only stop at stations with a strong signal. All stations will stop at any station found with a strong or weak signal.
4: Make your choice by pressing the **SELECT** button to activate the setting.

Audio mode (STEREO/MONO)

Denotes if the broadcast is in Stereo or Mono.
To specify that a station can be only played in mono or that stereo is allowed.

1: Press and hold the **MENU** button **(8)**.
2: When the **<Scan setting>**option appears press either **TUNE UP (4)** or **DOWN (3)** button to locate the **<Audio setting>** option. Press the **SELECT** button to select.
3: Use the **TUNE UP (4)** or **DOWN (3)** buttons to cycle through the two options **<Forced Mono>** or **<Stereo Allowed>**. Press **SELECT** to select.
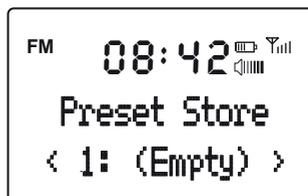
Stereo allowed: Means any station broadcast in stereo with a strong enough signal will be played in stereo.

Mono only: Plays ALL stations in mono regardless of the availability of a stereo signal.

Storing FM station presets

It is possible to store up to 10 of your favourite DAB stations. This will enable you to access your favourite stations quickly & easily.

1: To store a preset, you must first be listening to the station that you would like to save, press and hold the **PRESET** button **(7)** for **2** seconds. The **LCD** will then show the following.

```
  FM     08:42▭ ▼ⅈₗ
             ⊲ⅈⅈⅈ
      Preset Store
     < 1: (Empty) >
```

2: Use the **TUNE UP (4)** or **DOWN (3)** buttons to choose the preset number from **1**-**10** you wish to use. Then press the **SELECT** button to store.

BUSH

User instructions

```
         08:42 🔋 ▼ⁱ|
FM            🔊|||||
      Preset 1
      Stored
```

Recalling FM station presets

1: You can recall preset stations by pressing the **PRESET** button. Then use the **TUNE UP (4)** or **DOWN (3)** buttons to select the desired preset. Once selected press the **SELECT** button to activate.
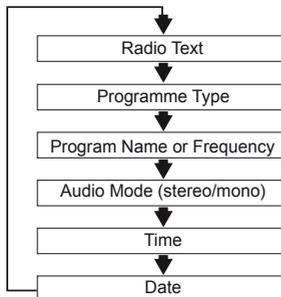
NOTE: If you choose a preset that hasn't been allocated a station, then "Preset Empty" will be displayed.

Display modes

Press the **MENU** button (8), and the bottom section of the display will show a sub text menu with various information about the current station.
Every press of the **MENU** button changes the information displayed.

This can be better explained in a diagram showing the order of sequence.

NOTE: once you reach the last info setting the next press will return you to the first setting.

```
┌──────────────────────────────┐
│  ┌─────────────────────────┐  │
│  │      Radio Text         │  │
│  └─────────────────────────┘  │
│  ┌─────────────────────────┐  │
│  │    Programme Type       │  │
│  └─────────────────────────┘  │
│  ┌─────────────────────────┐  │
│  │ Program Name or Frequency│ │
│  └─────────────────────────┘  │
│  ┌─────────────────────────┐  │
│  │  Audio Mode (stereo/mono)│ │
│  └─────────────────────────┘  │
│  ┌─────────────────────────┐  │
│  │         Time            │  │
│  └─────────────────────────┘  │
│  ┌─────────────────────────┐  │
└──│         Date            │  │
   └─────────────────────────┘
```

Display modes (cont)

Radio Text
Displays scrolling text broadcast by the station (only if broadcast).

Program type
This describes the "Style" or "genre" of music that is being broadcast e.g. "Rock "or "Classical".

Programme Name
Station name (if broadcast). Frequency of the station if no name is broadcast.

Audio Mode
Displays stereo or mono depending on the broadcast being received.

Time
Displays the current time.

Date
Displays the current date.

Factory reset

To reset the radio to the factory settings follow the next steps.

1: Press and hold the **MENU** button **(8)**.
2: When the **‹Station List› (DAB)** or **‹Scan setting› (FM)** appears use the **TUNE UP (4)** or **DOWN (3)** buttons and find **‹System›**, press the **SELECT** button.
3: Use the **TUNE UP (4)** or **DOWN (3)** buttons to find the **‹Factory Reset›** option and press **SELECT.**
4: Use the **TUNE UP (4)** or **DOWN (3)** buttons once more to select **‹Yes›** and press **SELECT.**
5: The unit will re-start with default settings.

NOTE: performing a factory reset will remove any presets stored in both DAB and FM.

Backlight timer

To set the backlight time out duration.

1: Press and hold the **MENU** button **(8)**.
2: When the **‹Station List› (DAB)** or **‹Scan setting› (FM)** appears use the **TUNE UP (4)** or **DOWN (3)** buttons and find **‹System›**, press the **SELECT** button.

User instructions

Backlight timer (cont)

3: Use the **TUNE UP (4)** or **DOWN (3)** buttons to find the **‹Backlight›** option and press **SELECT.**

4: Select one of the available time periods: **‹ON›**, **‹10 sec›**, **‹20 sec›**, **‹30 sec›**, **‹45 sec›**, **‹60 sec ›** , **‹90 sec›**, **‹120 sec›** and **‹180 sec›** using the **TUNE UP (4)** or **DOWN (3)** buttons.

5: Press the **SELECT** button to select and activate the timer duration.

Technical specifications

Mains Input Power:. . . . . 100-240V~50/60Hz
Adaptor Output Power:. . . . . 5V ▬▬ 0.5A (USB)
Power consumption: 2.5W
Battery: . . . . Lithium
DAB:. . . . . .BAND III 174.928-239.200
FM:. . . . . 87.5-108 MHz
Headphone Output: . . . . 3.5mm stereo jack

Care & maintenance

Care and cleaning

• All care and cleaning operations should be carried out with the unit unplugged from the mains power.
• Occasionally wipe the cabinet with a lint free duster. Never clean the unit with liquids or solvents.

Battery removal & disposal instructions

The internal battery is removable in order to dispose of in the correct manner. Follow the below steps to remove the battery from the unit.

1: Remove the battery compartment cover by pressing downwards slightly on the engraved arrow at the top of the cover, and sliding downwards **(see arrow direction)**.
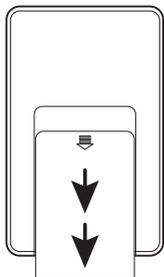
Instructions for earphone usage.

**1:** Connect the **3.5**mm jack into the **EARPHONE** socket **(20)** on the unit.

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

If you hear no sound during playback, do not turn the volume up as the music may suddenly begin at a high volume.

Excessive sound pressure from earphones and headphones can cause hearing loss.
To avoid damaging your ears, adjust the volume to the lowest safe level before playing, and turn up to the desired level when playback has started.

2: Remove the battery from the compartment.
3: Un-plug the battery from the socket on the bottom right of the compartment.
4: Dispose of in the correct manner according to the **UK** regulations **(pg 10)**.

BATTERY

PLUG

BUSH
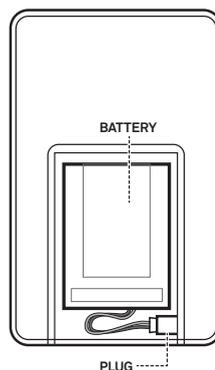
User instructions

Troubleshooting

In the unlikely event of difficulties with your appliance please follow the trouble shooting guide below.
If the problem persists, contact the retailer if the machine is still under guarantee.
Customer **helpline: 0870 600 3030**

Problem	Reason(s)	Solution(s)
No Power	• Internal battery is flat • Power set to OFF	• Re-charge the battery see pages 3-4 • Press the POWER button
Desired station not found	• Weak signal • Station not available in your area	• Use the manual tune function • See DAB availability website below
Weak or no DAB signal	• DAB not available in your area • Earphones not connected when scanning for stations	• See DAB availability website below • Connect the earphones. They act as an antenna when connected.
The display is blank	• This may occur if the broadcaster changes the label of a service or removes a label while tuned.	• The unit will try to re-tune. If not perform a new scan
I can hear a burbling noise on some stations	• Battery power is low • Weak signal	• Re-charge the battery see pages 3-4 • Try re-positioning the aerial (earphones)
No sound	• Volume set to minimum	• Increase the volume level

Disposal information

WEEE marking "Information for the consumer"
Disposal of your old product Your product is designed and manufactured with high quality materials and components, which can be recycled and reused. When this crossed out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC. Please make yourself aware of the local collection system for electrical and electronic products. Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

DAB availability

Check how many stations you can get in your area by texting DAB and your postcode to 88600# or find out which stations on the website at:

http://www.getdigitalradio.com/

Guarantee

BUSH

PRODUCT GUARANTEE

This product is guaranteed against manufacturing defects for a period of

Year

This product is guaranteed for twelve months from the date of original purchase.

Any defect that arises due to faulty materials or workmanship will either be replaced, refunded or repaired free of charge where possible during this period by the dealer from whom you purchased the unit.

The guarantee is subject to the following provisions:
- The guarantee does not cover accidental damage, misuse, cabinet parts, knobs or consumable items.
- The product must be correctly installed and operated in accordance with the instructions contained in this manual.
- It must be used solely for domestic purpose.
- The guarantee will be rendered invalided if the product is re-sold or has been damaged by inexpert repair.
- Specifications are subject to change without notice.
- The manufacturer disclaims any liability for the incidental or consequential damages.
- The guarantee is in addition to, and does not diminish your statutory or legal rights.

Guarantor: Argos Limited
489 - 499 Avebury Boulevard
Central Milton Keynes
MK9 2NW

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