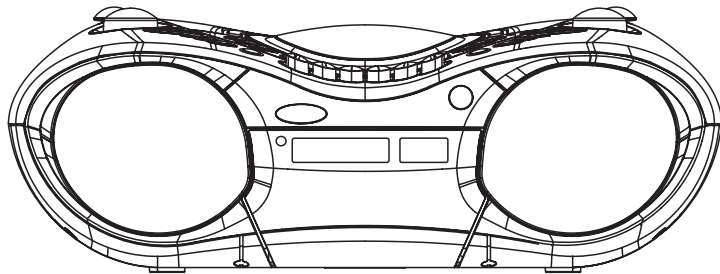


# Goodmans

## COMPACT DISC PLAYER & CASSETTE RECORDER WITH DAB, FM/MW RADIO

**GPS285DAB**

### Instruction Manual



Please Read these Instructions prior to first use and retain for future reference.

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### What's in the Box

On unpacking the unit the following should be located within the packing.

- 1 x GPS285DAB Main Unit
- 1 x Remote control
- 1 x Detachable mains power cord with 3 pin plug.
- 1 x Digital radio questionnaires
- 1 x Digital one station leaflet
- 1 x Instruction Manual
- 1 x External wire aerial

Please retain all packaging materials as in the event of the product needing transportation or return for service these will be needed.

## Important Notes

Your hearing is very important to you and to us so please take care when operating this equipment. It is strongly recommended that you follow the listed guidelines in order to prevent possible damage or loss of hearing:

### ESTABLISH A SAFE SOUND LEVEL

- Over time your hearing will adapt to continuous loud sounds and will give the impression that the volume has in fact been reduced. What seems normal to you may in fact be harmful. To guard against this **BEFORE YOUR HEARING ADAPTS** set the volume at a low level.
- Slowly increase the level until you can hear comfortably and clearly and without distortion.
- Damage to your hearing is accumulative and is irreversible.
- Any ringing or discomfort in the ears indicates that the volume is too loud.

**Once you have established a comfortable listening level, DO NOT INCREASE THE SOUND LEVEL FURTHER.**

The following list of typical sound levels may assist you in recognising just how loud you have set the volume level.

### DECIBEL

Level dB	Example
30dB	Quiet library, soft whisper.
40	Living room, fridge freezer bedroom away from traffic.
50	Normal conversation, quiet office, light traffic.
60	Electric sewing machine,
70	Vacuum cleaner, hair dryer, noisy restaurant

### THE FOLLOWING NOISE CAN BE HARMFUL UNDER CONSTANT EXPOSURE

80dB	Average city traffic, alarm clock buzzer at 2 feet, food mixer.
90dB	Motorcycle, heavy goods vehicle, petrol lawn mower.
100	Pneumatic drill, chain saw, garbage truck, discotec / night-club.
120	Rock band concert, thunderclap.

### PERMANENT LOSS OF HEARING

140	<b>THRESHOLD OF PAIN</b> Gunshot 2 feet away.
180	Rocket Launching pad.

## Important Safeguards

### PRE FITTED MAINS PLUGS

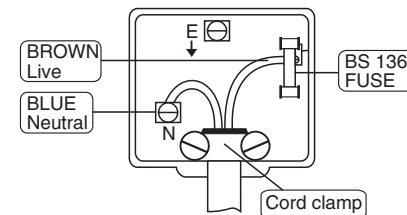
For your convenience a mains plug has been fitted to this appliance. For your safety please observe the following information.

1. Should the fuse in the plug remove the plug from the wall socket and replace the fuse with a 3 Amp ASTA approved to BS 1362 fuse.
2. Never use the plug without the fuse cover fitted. Replacement fuse covers are available from your dealer or most electrical retail outlets.
3. If the cable of the mains plug is cut off the cable, rewire the replacement plug in accordance with instruction given in this manual.
4. **CAUTION:** Under no circumstances should the discarded plug be inserted mains socket. To prevent a shock hazard carefully dispose of the discarded plug. Do not leave the plug lying around where children might see it.

**WARNING:** To prevent fire or shock hazard do not expose this unit to rain or moisture.

**CAUTION:** DANGEROUS VOLTAGES EXIST INSIDE THIS UNIT, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. DISCONNECT FROM MAINS SUPPLY WHEN NOT IN USE.

### PLUG WIRING DETAILS



The wires in this mains lead are coloured in accordance with the following wiring codes:  
 Blue..... Neutral  
 Brown..... Live  
 The wires in this mains lead must be connected to the terminals in the plugs as follows:  
 Blue Wire..... N or Black  
 Brown Wire..... L or Red  
 Only a 3 Amp fuse should be fitted in the plug or a 5 Amp fuse at the distribution board.

**WARNING:** UNDER NO CIRCUMSTANCES MUST THE LIVE OR NEUTRAL WIRES BE CONNECTED TO THE EARTH TERMINAL IN A 3-PIN MAINS PLUG.



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

## Important Safeguards (Continued)

### CAUTION

#### CLASS 1 LASER PRODUCT

Use of Controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

#### LASER SAFETY

This unit employs a laser, only qualified service personnel should attempt repair.



**DANGER:** INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK FAILED OR DEFEATED. AVOID DIRECT EXPOSURE TO BEAM.

**CAUTION:** HAZARDOUS LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED.

### CAUTION

**CLEANING:** Always disconnect unit from mains supply before attempting to clean it. Use soft cloth moistened with soapy water, wipe gently. Do not use solvents or abrasive materials.

#### SOME DO'S AND DONT'S ON THE SAFE USE OF EQUIPMENT

This equipment has been designed and manufactured to meet European safety standards but like any electrical equipment, care must be taken if you are to obtain the best results and safety is to be assured.

Do read the operating instructions before you attempt to use the equipment.

Do ensure that all electrical connections (Including the mains plug, extension leads and interconnections between pieces of equipment) are properly made in accordance with the manufacturer's instructions. Switch off and withdraw the mains plug when making or changing connections.

Do consult your dealer if you are ever in doubt of the installation, operating, or safety of your equipment.

Don't continue to operate the equipment if you are in any doubt about it working normally, or if it is damaged in any way- switch off, withdraw the mains plug and consult your dealer.

Don't remove any fixed covers as this may expose dangerous voltages.

Don't leave equipment switched on when it is unattended unless it is specifically stated that it is designed for unattended operation or has a standby mode. Switch off using the switch on the equipment and make sure that your family knows how to do this. Special arrangements may need to be made for infirm or handicapped people.

Don't listen to headphones at high volume, as such use can permanently damage your hearing.

Don't obstruct the ventilation of the equipment, for example with curtains or soft furnishings. Overheating will cause damage and shorten the life of the equipment.

Don't allow electrical equipment to be exposed to rain or moisture.

#### Above all

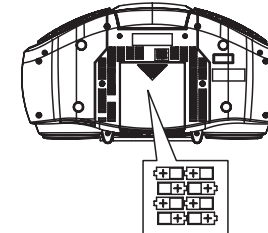
- Never let anyone, especially children, push anything into holes, slots or any other opening as this could result in a fatal electric shock.
- Never guess or take chances with electrical equipment of any kind.
- It is better to be safe than sorry!

**WARNING:** TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE, DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE, DO NOT OPEN THE CABINET, REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

## Power Supply

### BATTERY OPERATION

- 1 Remove the battery compartment cover by gently pushing the clips downward and outwards.
- 2 Install 8 x "C" size batteries (UM-2 or equivalent) and ensure the correct polarities are observed.



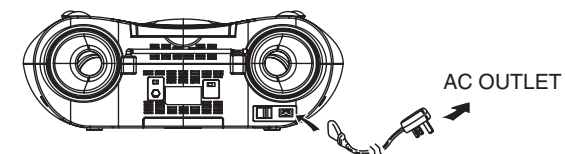
- 3 Replace the battery compartment cover.

#### NOTE:

- The batteries will only operate when the mains power lead is removed.
- To avoid damage which may be result from leaking batteries, remove the batteries when they become weak or when the unit is not to be used for a long period of time.

### AC OPERATION

Connect the AC Cord to the AC socket at the back of the unit and insert the AC plug into a standard household outlet.

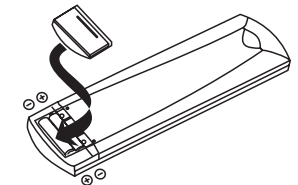


**NOTE:** When the AC line cord is connected to the AC socket of the unit, the batteries will not operate. To operate the set on batteries, check that the AC plug is detached from the AC socket of the unit.

**NOTE:** If the AC plug of this unit does not fit in your AC outlet, a plug adaptor should be used. Consult your local dealer on the right type of plug adaptor that is required.

### REMOTE CONTROL

The remote control uses two "AAA" or "UM-4" batteries.



## Player Maintenance

### CLEANING THE CABINET

Wipe with a soft cloth. If the cabinet is very dirty, dampen the cloth with a weak solution of neutral detergent and water, and then wipe clean.

### CLEANING THE UNIT

To clean the unit, simply wipe off with a soft clean cloth moistened with plain lukewarm water.

Warning: Remove mains plug from mains outlet socket before clean.

### CLEANING THE LENS

A dirty lens will cause sound skipping and, if the lens is very dirty, the CD may not work. Open the disc cover and clean the lens as follows:

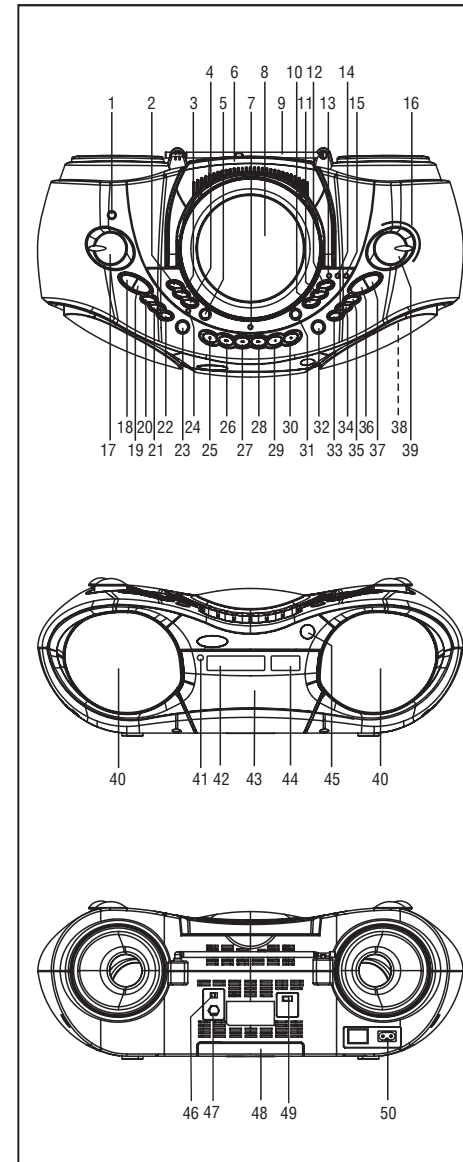
### DUST OR DRY PARTICLES

Using a camera lens brush/blower to blow on the lens couple times, then wipe it lightly with the brush to remove dust and blow on the lens once more.

### FINGER PRINTS

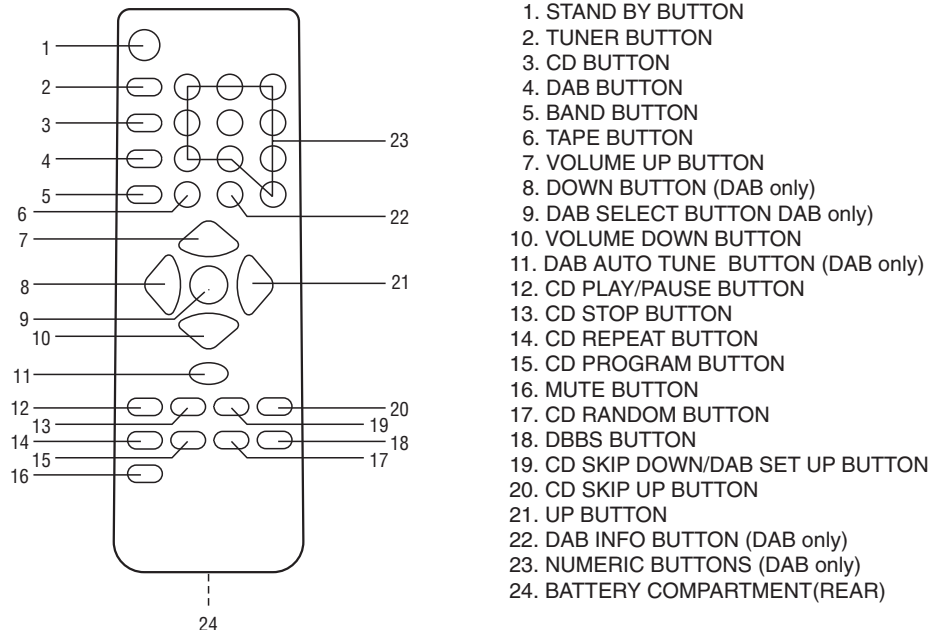
If the lens cannot be cleaned by using a brush/blower, use a dry cotton swab.

## Location of Controls



1. EARPHONE SOCKET
2. SETUP BUTTON
3. INFO BUTTON
4. AUTO-TUNE BUTTON
5. BASS BOOST BUTTON
6. FOLDING HANDLE
7. TAPE INDICATOR
8. CD DOOR
9. FM TELESCOPIC ROD AERIAL
10. CD REPEAT BUTTON
11. CD PROGRAM BUTTON
12. CD STOP BUTTON
13. MW INDICATOR
14. FM INDICATOR
15. FM STEREO INDICATOR
16. DIAL SCALE
17. VOLUME CONTROL
18. DAB UP BUTTON
19. DAB DOWN BUTTON
20. SELECT BUTTON
21. BAND BUTTON
22. RADIO BUTTON
23. DAB BUTTON
24. BASS BOOST INDICATOR
25. CASSETTE PAUSE KEY
26. CASSETTE STOP/EJECT KEY
27. CASSETTE FAST FORWARD KEY
28. CASSETTE REWIND KEY
29. CASSETTE PLAY KEY
30. CASSETTE RECORD KEY
31. CD DOOR OPEN BUTTON
32. POWER BUTTON
33. TAPE BUTTON
34. CD BUTTON
35. CD PLAY/PAUSE BUTTON
36. CD BACKWARD SKIP/SEARCH BUTTON
37. CD FORWARD SKIP/SEARCH BUTTON
38. BUILT-IN CONDENSER MICROPHONE
39. TUNING CONTROL
40. SPEAKERS
41. STAND BY INDICATOR
42. LCD FOR DAB INFORMATION
43. CASSETTE DOOR
44. LCD DISPLAY (FOR CD PLAYBACK)
45. REMOTE SENSOR
46. DAB ANT. INT/EXT SWITCH
47. DAB EXT ANT. SOCKET
48. BATTERY COMPARTMENT
49. FM ST./MONO SELECTOR
50. AC SOCKET

## Location of Controls (Remote control)



1. STAND BY BUTTON
2. TUNER BUTTON
3. CD BUTTON
4. DAB BUTTON
5. BAND BUTTON
6. TAPE BUTTON
7. VOLUME UP BUTTON
8. DOWN BUTTON (DAB only)
9. DAB SELECT BUTTON DAB only)
10. VOLUME DOWN BUTTON
11. DAB AUTO TUNE BUTTON (DAB only)
12. CD PLAY/PAUSE BUTTON
13. CD STOP BUTTON
14. CD REPEAT BUTTON
15. CD PROGRAM BUTTON
16. MUTE BUTTON
17. CD RANDOM BUTTON
18. DBBS BUTTON
19. CD SKIP DOWN/DAB SET UP BUTTON
20. CD SKIP UP BUTTON
21. UP BUTTON
22. DAB INFO BUTTON (DAB only)
23. NUMERIC BUTTONS (DAB only)
24. BATTERY COMPARTMENT(REAR)

### REMOTE CONTROL OPERATION

The numeric buttons can only be used in the DAB mode. Please note pressing any of the numeric buttons or the INFO button during CD playback will result in unit malfunction.

#### Using the Remote control Correctly

- Point the remote control at the REMOTE SENSOR located on the unit on the unit.
- When there is a strong ambient light source, the performance of the REMOTE SENSOR may be degraded, causing unreliable operation.
- The recommended effective distance for remote operation is about 6 Metres.
- Replace the two "AAA" or "UM-4" batteries when there is either no operation or operation becomes erratic.

## Listening to the Radio

- ① Press Power button to turn the unit on after the power has been connected and then press the Radio button or the TUNER key on the remote controller.
- ② Select the desired band with the BAND button.
- ③ Tune to the desired station by rotating the TUNING control after locating a station slowly turn the Tuning control to fine tune to the station to receive the best reception.
- ④ The built-in MW antenna and external FM TELESCOPIC ANTENNA are directional.
  - When listening to an FM broadcast, fully extend the TELESCOPIC ANTENNA and rotate it for the best reception.
  - For MW broadcast, rotate the whole set until the best reception is heard.
- ⑤ Adjust the volume level to a comfortable listening level.
- ⑥ To turn off the radio, press the POWER button to turn the unit to STAND BY mode.

#### NOTES:

- If a particular FM (STEREO) station is weak, or you hear too much background noise, slide the FM ST./FM selector to the FM (MONO) position. This will often result in a much clearer reception.
- When the FM ST./FM selector is in the FM STEREO position and a station is broadcasting, the FM STEREO indicator will be lit.

#### STEREO HEADPHONE SOCKET

A stereo headphone socket has been provided on the top of the unit so that headphones can be used to listen without disturbing others. To use this socket, plug in the headphones/earphones (not supplied) and adjust the VOLUME control to a comfortable listening level.

**NOTE:** When external headphones/earphones are connected, the sound of the unit's speakers will be automatically muted.

## Listening to a Compact Disc

### COMPACT DISC OPERATION

#### HANDLING A DISC

- Although built to withstand the effects of dust, dirt and scratches, discs should be treated with care and according to rules applicable to conventional analog discs.
- Always protect a disc against scratches, dirt and dust etc. It is recommended that during non-use periods the discs should be retained in the original case. If a disc is treated with reasonable care, the only maintenance needed to retain the excellent sound reproduction is to wipe it with a cloth as indicated below.



To handle a disc use only one of the two methods illustrated (Do not touch the rainbow - coloured side).



To wipe a disc, use only a soft cloth. Do not use alcohol based liquids or thinner which will damage the disc. The disc should always be wiped in a straight line from the centre to the edge. It should never be wiped in a circular motion.



Never place the disc on other equipment or near any heat source. Avoid positions where the disc would be subjected to direct sunlight for long periods.

#### PLAYING A CD COMPACT DISC

- ❶ Press CD button to select the CD function, the LCD will show an icon " -- ".
- ❷ Press the CD DOOR OPEN BUTTON to open the CD Door..
- ❸ Insert a CD with the **LABEL** side **UP**. If the disc is upside down, the Display will show " -- ").
- ❹ Close the CD Door by gently pushing the Door down with your finger.
- ❺ The Display will show the total number of tracks (songs) on the CD.
- ❻ To start the music, press the CD Play/Pause Button (wait a few seconds for music to start). The first track number "01" will appear in the Display, playback begins afterwards.
- ❼ To pause playback, press the Play/Pause Button, the icon " ► " in the display will flash to indicate you are in the Pause mode .
- ❽ To resume, press the Play/Pause Button again, and the icon " ► " will be shown (not flashing).
- ❾ To stop playback, press the CD Stop Button.
- ❿ To turn the unit off, press the power button, the standby indicator will illuminate.

**NOTE:** Always stop the CD player by using the CD Stop Button before taking a disc out of the compartment.

**NOTE:** If you hit or move the CD during play, the music will stop for a second or two and then start again. This is a normal phenomenon for all portable CD players and is not a fault.

#### SKIPPING TRACKS (SKIP)

- ❶ This function enables you to find the beginning of any track during playback. If the CD Forward Search/Skip ( ►► ) Button is pressed once, the **NEXT TRACK** on the disc will be selected for each press of the button. The display will show the track or song number.

## Listening to a Compact Disc (Continued)

- ❷ If the CD Backward Search/Skip ( ◀◀ ) Button is pressed twice or more in rapid succession, play will go **BACK** one track per press.
- ❸ Whilst in the pause mode, it is also possible to select the beginning of a track by using the CD Forward Search/Skip ( ►► ) Button and CD Backward Search/Skip ( ◀◀ ) Button to reach the desired track. After selection, press Play.
- ❹ Press and **HOLD** the CD Forward Search/Skip ( ►► ) Button to search forward at a high speed for a particular section of a track. Press and **HOLD** the CD Backward Search/Skip ( ◀◀ ) Button to search backward. Release the button to resume normal play when the required section is found.

#### TO PROGRAM TRACKS

- ❶ Press the CD Stop Button during playback. The total number of tracks will be shown in the display.
- ❷ Press the CD Program Button, "00" and " PROGRAM" will flash in the display.
- ❸ Select the desired track by pressing Backward or Forward Skip/Search Button ( ◀◀ or ►► ).
- ❹ Press CD Program Button again to store the selected track in memory.
- ❺ Repeat steps ❸ and ❹ (up to 20 tracks may be programmed).
- ❻ After all tracks have been programmed in order, press the CD Play/Pause Button to start the programmed playback from the first programmed track, and "PROGRAM" will flash to indicate you are in the Programmed playback mode.

#### TO CLEAR PROGRAM

- ❶ Press the CD Stop Button twice during the programmed play to clear the program.
- ❷ Open the CD compartment, the disc will stop rotating, and the program will be erased.
- ❸ Turn off the power.

**NOTE:** Programming can only be done when the disc is stopped. Pressing the Stop button once cancels program playback, it can be restarted by pressing program button.

#### REPEAT PLAY SINGLE SONG

To repeat the **SAME** song over and over again:

- ❶ Press the Search/Skip Button during playback to select the song you want to repeat.
- ❷ Press the Repeat Button.
- ❸ "REPEAT" will show in the display.
- ❹ The song selected will play over and over, until the Stop button is pressed. To cancel the repeat function, press Repeat Button twice.

#### REPEAT PLAY ALL SONGS

To repeat play **ALL SONGS** on a disc and play them again and again, do the following.

- ❶ Press Repeat Button twice during playback.
- ❷ "ALL REPEAT" Indicator will show in the display.
- ❸ All the songs on the CD will play in its original order and then start all over again. To cancel the repeat function, press Repeat Button once.

#### RANDOM PLAY

Press Random button on the remote controller when the disc is stopped, the unit will select the tracks in a random order for playing immediately.

To cancel random playback press the CD Stop button.



## Cassette Operation

### RECORD

Press the record button to make a recording from either a CD, radio stations, internal microphone or DAB stations.

**NOTE:** When the RECORD button is pressed, the PLAY button will be depressed at the same time. The record key will not go down if the cassette is protected; see 'Protecting recordings from being erased.'

### PLAY BUTTON

Press the PLAY button to start playing a cassette.

### REWIND BUTTON

Press the REWIND button to quickly rewind a tape. Press STOP/EJECT to release the button at the end of the tape.

### FAST F. BUTTON

Press the FAST FORWARD button to quickly advance the tape. Press STOP/EJECT to release the button at the end of the tape.

### STOP/EJECT BUTTON

Press the STOP/EJECT button to cancel a selection, i.e. press this button during cassette play to stop the tape.

When the tape is stopped, press the button to eject the cassette.

### PAUSE

The cassette PAUSE button can be used to temporarily interrupt a recording or playback and is useful for editing the content of the recorded tracks. Press the button once to pause the recording or playback, press this button again to continue recording or playback.

**NOTE:** In pause mode, the cassette motor is still on, therefore do not keep the unit in pause mode for too long a time as it can cause damage to the cassette mechanism.

### AUTOMATIC STOP

The cassette mechanism has a built-in automatic stop. During playing/recording, the unit will automatically stop when the end of the tape is detected.

### TO PLAY A CASSETTE TAPE

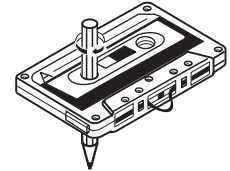
- ❶ Open the cassette door by pressing the cassette STOP/EJECT button.
- ❷ Insert a cassette with the exposed tape facing upwards and the full reel on the right (unit plays from right to left) into the guides on the inside of the cassette door.
- ❸ Close the cassette door.
- ❹ Press the TAPE button to select TAPE operation
- ❺ Press the cassette PLAY button to start the tape playing.
- ❻ Adjust the VOLUME control to a comfortable listening level.

## Cassette Operation (Continued)

- ❷ To stop the tape playing, press the STOP/EJECT button. Press the button again to open the cassette door and eject the tape.

### CARE OF CASSETTE TAPES TO HELP AVOID TANGLES

Loose tape may jam or get tangled in the cassette recorder. With a hexagonal pencil or a similar tool, gently turn the pencil to tighten the tape, as shown opposite.

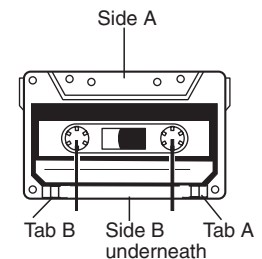


If the spool feels tight when taking up slack tape as described above, this may be due to ridges on the spool of tape. Tight spools can lead to uneven playback speed or tape tangling. In most cases the ridges can be removed by fast winding the cassette from one end to the other and back again.

Avoid the use of C120 tapes with this unit.

### PROTECTING RECORDINGS FROM BEING ERASED.

To prevent recordings from being erased accidentally, break out the tab(s) with a screwdriver. When the edge with the exposed tape is facing away from you, the tab that protects the side that is uppermost is on your right, as shown opposite.



## Cassette Operation (Continued)

To record on a protected cassette, seal the open slots with adhesive tape.



### AUTOMATIC LEVEL CONTROL (ALC)

This set has the latest Automatic Level Control circuitry, therefore, it is not necessary to adjust the VOLUME control when recording. This circuit automatically records at the correct level and prevents over loading.

**NOTE:** While recording you may adjust the VOLUME control as required without affecting the recording operation.

### TO RECORD FROM THE BUILT-IN RADIO

- ❶ Press the RADIO button to select the radio operation and tune to the desired station.
- ❷ Load a cassette into the cassette compartment, with the full reel on the right.
- ❸ Press the cassette RECORD button until it locks in the down position (PLAY button is depressed at the same time) and recording will start.
- ❹ To end the recording press the cassette STOP/EJECT button. If this button is not pressed the recording will stop automatically when the end of the tape is reached.
- ❺ To listen to your recording, press the TAPE button, press the cassette REWIND button until the start point of the recording is reached, then press the STOP button and the PLAY button. Use the VOLUME control to adjust the playback level.

**NOTE:** On each end of the tape there is a tape leader and no recording will take place over this portion of the tape. If you wish recording to take place as soon as the RECORD button is pressed, please ensure that the leader is wound past the record head.

### TO RECORD FROM COMPACT DISC

- ❶ Press the CD button to select CD operation.
- ❷ Load a cassette into the cassette compartment with the full reel on the right.
- ❸ Insert the compact disc from which you wish to record and close the CD door.
- ❹ Press the cassette PAUSE button on the tape deck.
- ❺ Press the cassette RECORD and PLAY buttons so they lock in the down position (The unit is now in recording standby mode).
- ❻ Start the CD playing by pressing the CD PLAY/PAUSE (▶||) button.
- ❼ Press the cassette PAUSE button again and then recording begins.
- ❽ To end the recording, press the cassette STOP/EJECT button.

## Cassette Operation (Continued)

- ❾ Press the CD STOP (■) button and then press the Tape button.
- ❿ To listen to your recording, press the REWIND button to return to the point where the recording started and then press the PLAY button.

### TO RECORD FROM THE BUILT-IN MICROPHONE

- ❶ Press the Tape button.
- ❷ Load the cassette which you wish to record on into the guides on the cassette door (Full reel on the right hand side).
- ❸ Press the cassette RECORD button and speak into the built-in microphone on the top right of the unit.
- ❹ Press the STOP/EJECT button to end the recording.
- ❺ Rewind the tape and then press the PLAY button to listen to your recording.

### MAINTENANCE

If the sound becomes muffled or in any case after every 15 hours of operation, clean the pinch roller, capstan, erase head and record / play head by using a tape cleaning cassette available from all good audio stores.

### CAUTION

Never touch any of the parts described above with a metal object. Do not insert a cassette until the cleaned parts are completely dry.



## DAB Operation

### GENERAL INTRODUCTION TO DAB OPERATION

Press the DAB button.

### CONNECTING TO AN AERIAL

The prefitted telescopic aerial on the unit is used to receive digital radio signals. If the telescopic aerial does not result in good reception, use the external wire DAB aerial .

1. Screw the aerial plug onto the Aerial connector on the rear of the unit.
2. For the best reception, use the built-in aerial supplied, extend the aerial fully. You may have to experiment with different angles to find the best reception for particular services. Just like FM reception, you may find that moving the radio around to find the best location for reception near a window may provide better reception when inside.

### TUNING FOR THE FIRST TIME

When you switch on your unit for the first time an auto-tuning process will be performed automatically. A progress indicator on the display shows that auto-tuning is underway.

If stations are found during the auto-tuning

The stations will be stored in alphanumeric order and the first station on the list will be selected and it will be heard.

If no stations are found during the auto-tuning

Stations no available will be shown on the display for a few seconds and then you see a menu of options.

Use the Up and Down buttons to scroll through the following options and push it to select that option.

### ADJUSTING THE VOLUME

Once you have tuned your set as explained above you can adjust the volume using the VOLUME control.

## DAB Operation (Continued)

### Channel

Displays the channel identifier and frequency for the station to which you are tuning in.

### Mode

Displays the mode of the current service, Stereo or Mono and the data rate at which the audio signal is being transmitted. This rate is set by the broadcaster to suit the type and quality of material being transmitted.

### Signal error rate

Displays the signal error rate for the signal to which you are tuned. As a guide values from 0 to 15 indicate good reception, 16 to 30 borderline reception and 31 or more poor reception. This error rate can be improved by adjusting the aerial position using the Tuning aid option .

### GUIDE TO DIGITAL RADIO

This unit enables you to receive and listen to DAB radio programmes. Digital Audio Broadcast (DAB) uses digital signals rather than traditional analogue signals, the result of which enables near CD-quality audio and virtually interference-free reception. DAB also enables broadcasters to transmit additional data along with the audio including other audio channels, text and in the future , perhaps computer data and images.

Digital radio is broadcast as groups of data called ensembles or multiplexes. Each multiplex can contain a number of stations (services) and each station contains a primary services and can contain secondary services as illustrated in the following diagram.

Each multiplex is transmitted in a set frequency range and received by your unit for decoding. Your unit enables you to receive multiplexes broadcast in frequency band III (174-240 MHz) and store the services in each multiplex for you to access. The number of multiplexes you receive will vary depending on your location. Band III is divided into 41 channels identified as 5A to 13F. Each channel can contain one multiplex . Channels allocated to the UK Are in the range 11B to12D.

Multiplexes and stations have labels (names) which are used to identify them. Instead of needing to know a particular frequency to listen to your favourite broadcast you simply select the station name. Secondary services and additional data such as text containing programme or multiplex information are also easily accessed using this unit.

## DAB Operation (Continued)

### DAB OPERATION

1. Press the DAB button to select DAB operation.
2. Search DAB signals available by pressing the Auto Tune button.
3. If the reception is sufficient, the number of available stations will be shown on the LCD display.

### User Interface

This section details all the menus and structured sub menus the user can access via the interface.

Each illustration shows the symbols, text and format of each menu displayed, reflecting what will be displayed on the LCD. The LCD defines the character set shown and therefore this is only an example of the text displayed.

### General Behaviour

When navigating through menus, any list will cycle to the beginning once all the menus have been scrolled through.

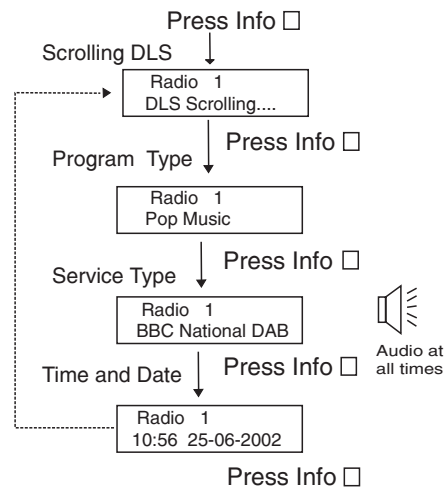
If a button has no specific function in a menu or mode then pressing it will exit the menu or mode you are currently in.

### KEY FUNCTION

#### INFO button

Pressing the INFO button changes the information displayed on the bottom line of the LCD screen.

Continue to press the Info button to scroll through the options available.



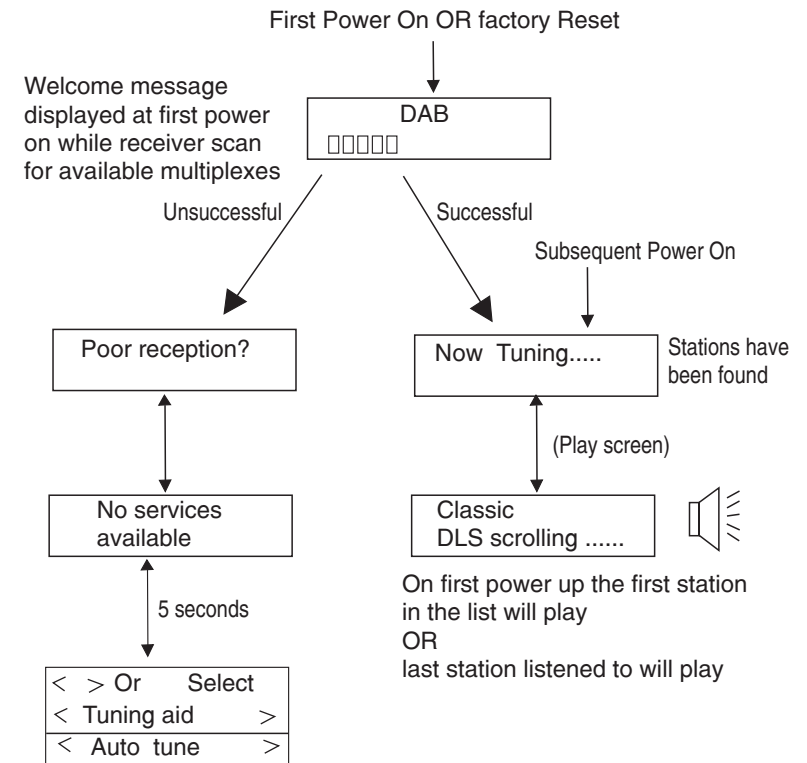
## DAB Operation (Continued)

### Power On and Tuning

On first power up or if a factory reset has been initiated, the display will show "DAB" while it is scanning to find all the stations available. When the DAB services have been acquired the screen will display "Now Tuning" and tune to the first station found in the alphanumeric list.

If no stations can found, then Poor reception? Followed by no services available will be displayed and the radio will present a menu that you scroll select through to help you find services. For an explanation of the Tuning aid see the Setup section.

On subsequent power ups, the radio will show Now Tuning on the screen(see below) and will acquire/tune to the last listened to station.



## DAB Operation (Continued)

### Station Selection and Navigation

#### Selecting a station

Once you have tuned your unit you may select the digital radio station you want to listen by using the Up and Down button. If you have assigned stations to presets you can also select them directly by pressing the relevant numbered button(1-10).

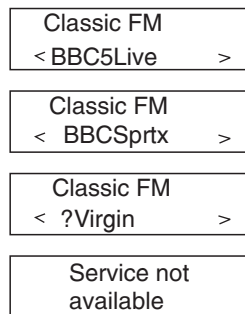
1. The top line of the display shows the name of the currently selected station. Press the Up and Down buttons to see the names of other stored stations on the bottom line of the display. Stop when you find the station to which you want to listen.

2. Press the Select button to listen to the station you have selected. The display may show 'Now tuning..' Briefly as it finds the new station.

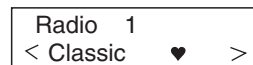
If a station has one or more secondary services available the display will show '>>' next to the station name on the station list and they will appear after the primary service as you press the Up and Down buttons.

A secondary service will display '<<' before the station name on the station list indicating that it belongs to the primary service before it in the list.

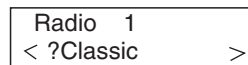
If the station has '?' Before its name the service is currently inactive or invalid. If you select a station which has this symbol the unit tries to tune to that station. If still unavailable 'Service not avail' or 'Service off-air' will be displayed and the unit will attempt to tune to an alternative station. A flashing cursor will indicate that this is in progress. If you want to try to manually tune to this station you have five seconds during which to press the Up and Down buttons and the manual tuning bar will be displayed so that you can adjust your aerial.



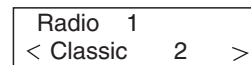
When scrolling through stations the following indicators may be seen. They can be seen individually or as any combination together.



Heart icon denotes favourite station



? Denotes station saved in list, but not currently available



Number 2 denotes station stored in Preset 2

## DAB Operation (Continued)

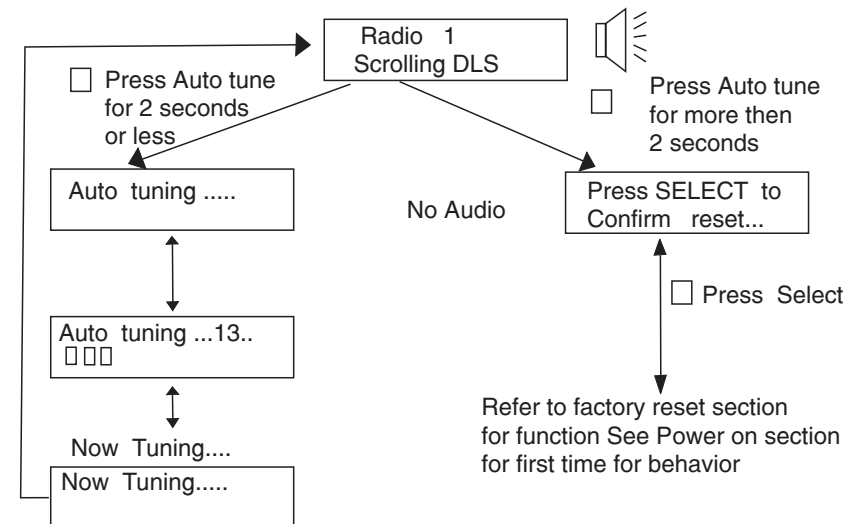
### AUTO TUNE

The AUTO button has two function.

1. If the button is pressed quickly (2 seconds or less ) the radio will rescan only UK Band III for available stations.

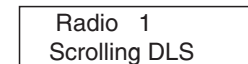
A scanning screen appears and a progress bar is displayed. Audio is suspended. On completion the radio will tune and return to play the station being listened to.

2. If the button is held for more than 2 seconds or more there is a factory reset. Press select to initiate this function. If select is not pressed it will time out and return to playing the station you were previously listening to.



### Tuning and Playing

Once the station list is available and playing, the station name will appear on the top line. On the line below a scrolling line of text will be seen called DLS.



Pressing the Info button changes the information displayed on the bottom line. See the INFO function for the options available.

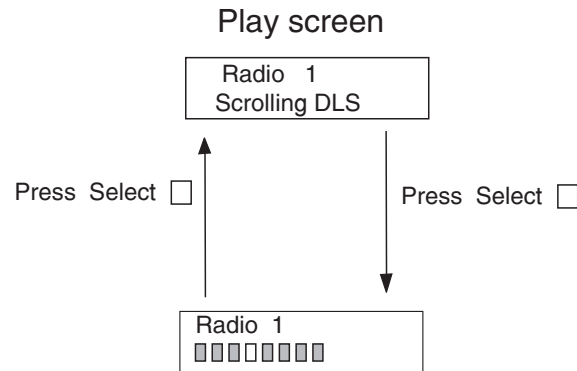
## DAB Operation (Continued)

### SELECT button

The Select key has 2 functions.

In normal navigation it confirms the highlighted selection.

When pressed in normal mode it will display the signal strength. The grey bars are the current signal level and the central highlighted bar is the minimum signal required. Press Select to cancel the signal level display.



### SET UP

Pressing the Set up key will bring a menu that allows access using the UP and DOWN buttons to a number of system settings. The menu structure showing the options accessible for this can be seen on page 24. Press UP and DOWN buttons to locate a required option and press select to access it. Use the UP and DOWN buttons and SELECT to navigate within the sub menus.

The sub menus available are Station Order, Tuning aid, Dynamic range control, Software version, Channel & Frequency and Signal Error Rate.

### Station order

In use the radio creates a full list of the stations it can receive in all the locations it has been used. Using the station order function the way this list is displayed can be changed.

- Alphanumeric;
- Favourites. Identifies the 10 most listened to stations and places them at the top of the list. A favourite station is identified with a heart symbol when the stations are browsed in search and select screen.
- Tidy. Cut the list of stations to show only those in your location any station with a ? in front of the name will be removed.

## DAB Operation (Continued)

### Tuning aid

Use Up/Down buttons to select a DAB channel. When a channel is selected the radio tunes to this frequency. Once tuned, the signal strength will be displayed using the signal strength meter. This function can be used to check for the best position for the antenna. As the antenna is moved the indicator will fluctuate according to the change in signal strength. To exit this menu press Select.

1. Press the UP and Down key to scroll through different channels and push the Up and Down key to select one.

**Note:** the list includes all channels, UK Stations are in the range 11B to 12D. You see a signal quality display. The empty block indicates the minimum required level for reception and the solid blocks indicate the current level.

2. Move the aerial or radio whilst watching the display and to try to raise the current level to the empty block or beyond. The display will change to show the multiplex name on the bottom line of the display once a good signal is received and the multiplex will be added to the service list.
3. Push the **Setup** button to exit Tuning aid or press the Up and Down key to select another channel.

### DRC VALUE

DRC ( Dynamic Range Control ) enables adjustment of the dynamic range of the received audio ( dependent on broadcast material). The DRC level of a broadcast is set by a broadcaster and transmitted with the service. Changing this DRC value enables you to apply a scaling factor to this level.

When you select this option you see the current DRC value on the top line of the display and a scroll list on the bottom.

Press the Up and Down keys to scroll through the following options and push the Up and Down keys to select one:

DRC 0 : DRC scaling is switched off.

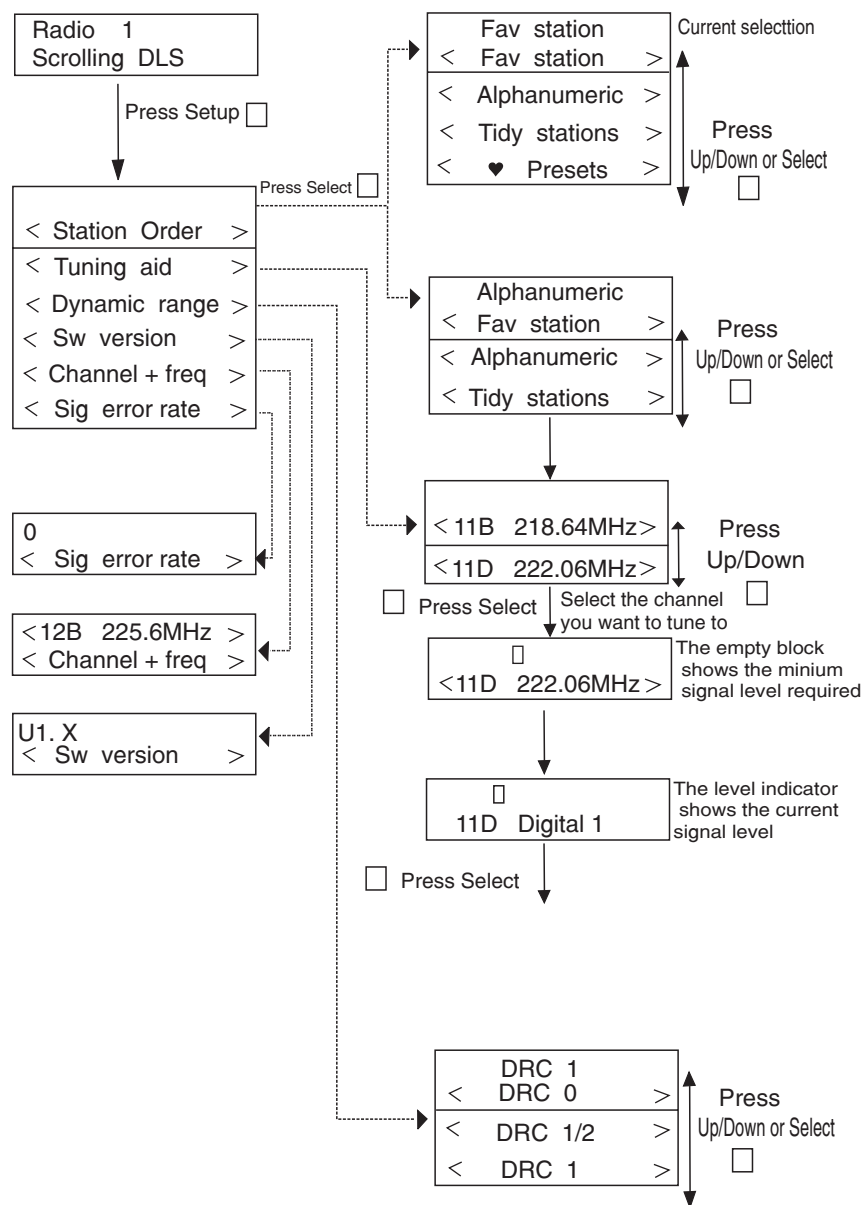
DRC1/2: DRC scaling is set to 1/2 that sent with the transmitted service.

DRC 1 : Applies the DRC scaling as sent with the transmitted service. This is the default setting.

### SW VERSION

This option displays the version number of the software installed in this unit. This option can only be viewed, no adjustment is possible.

## DAB Operation (Continued)



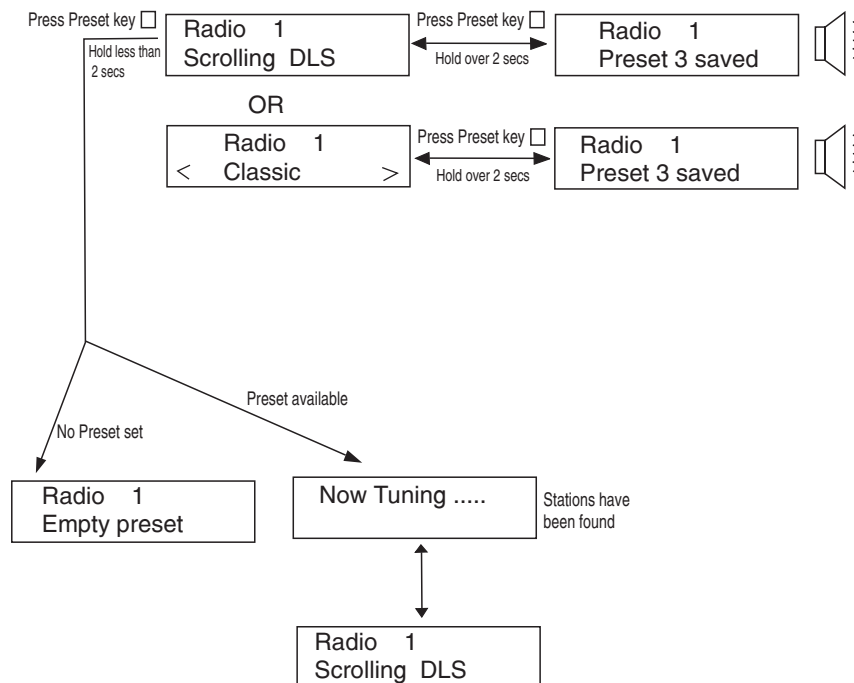
## DAB Operation (Continued)

## PRESETS

There are 10 DAB presets available( on the remote control ).

Presets are assigned in the following way.

- Listen to the station you would like to assign. Press and hold a Preset button (1-10) for two seconds.
- Alternatively the station you wish to assign can be displayed in the second line of the display when you are browsing stations. Again press and hold the Preset button (1-10) for two seconds. In both cases a confirmation message will show that the preset has been saved.
- Once assigned to a station, the preset button can be pressed and the radio will tune to the required station.
- If you are browsing stations a preset will be shown by the number of the preset displayed at the end of the line.
- If a Preset button is pressed with no station assigned then it will be shown as empty. See the diagram below for full details.



## DAB Operation (Continued)

### FACTORY RESET

There is no dedicated factory reset button for the unit. Pressing and holding the Auto tune button for more than 2 seconds will initiate a factory reset. A prompt screen will appear asking to press select for reset. Pressing select will confirm this and starts the radio as if it were first powered up.

Factory reset clears any settings and reboots the radio. Following a factory reset the radio will power up with only the factory default settings available and will behave as if it has been powered up for the first time.

### Factory Default Settings

- No services in stations list
- NO presets allocated
- Service order is alphanumeric order
- DRC value is 1
- Display mode is scrolling DLS

### Important notes:

The contents broadcast from the DAB stations can be recorded with a tape in the same way as the ordinary radio stations and CDs.

## Product Specifications

### PICK-UP

System	Compact disc digital audio system
Laser diode	material: GaAlAs
Properties	Wavelength: $\lambda = 780\text{nm}$ Emission Duration: continuous Laser output: $<44.6\mu\text{W}$
Error correction	Cross-interleave Reed-solomon code

### AUDIO

D/A conversion	1-bit DAC 8 times oversampling
Frequency response	20-20,000Hz (+1/-3 dB)
Wow and flutter	Below measurable limits
No. of channels	2 channels (stereo)
Output level	Earphone: 20mW x 2 ( $32\Omega$ )      Main Unit 2 x 3W Rms
Speakers	5W 4Ohm*2

### RADIO

Receiving bands	MW/FM
Frequency range	MW 522-1620 KHz FM 87.5 -108.0 MHz

### GENERAL

Power requirements	AC 230V/50Hz
Power consumption	22W
Dimension	Approx. 504(L)X302(W)X221(H)mm
Weight	Approx. 3.380kg