

WARNING : SHOCK HAZARD - DO NOT OPEN
AVIS : RISQUE DE CHOC ÉLECTRIQUE - NE PAS OUVRIR

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

DO NOT EXPOSE TO RAIN OR MOISTURE
NE PAS EXPOSER À LA PLUIE NI À L'HUMIDITÉ

Warnung! Nicht öffnen, elektroschockgefahr.
Nicht dem regen oder feuchtigkeit aussetzen.

3A81UC1000000



SANGEAN

Digital Radio **DAB+** **RDS**

Operating instruction **GB**

DAB+BOX

FM RDS/DAB Digital Radio

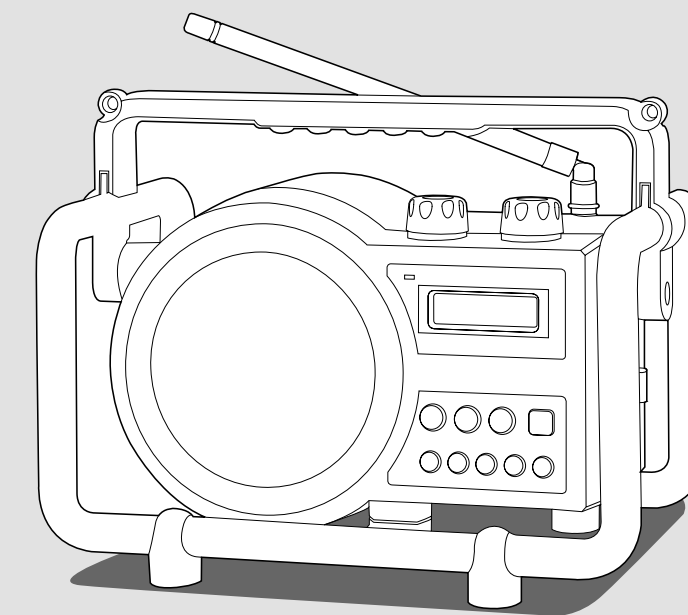




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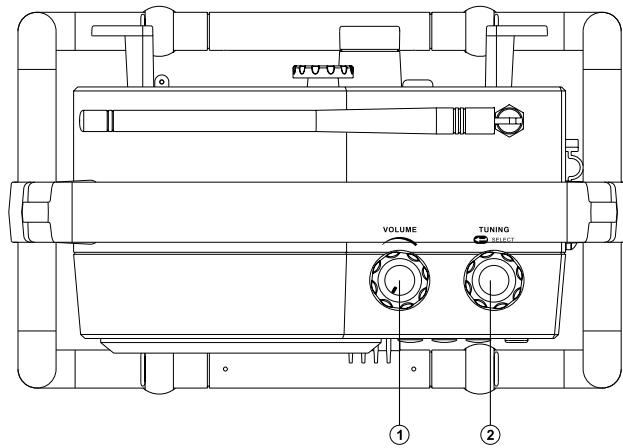
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Important Safety Instructions

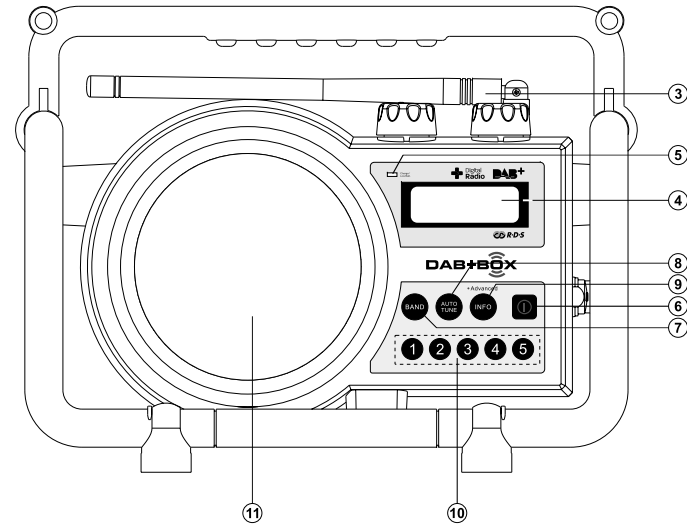
1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings
4. Follow all instructions
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the instructions.
8. Do not install near any heat such as radiators, heat registers, stoves or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet - USA version only.
10. Protect the power cord from being walked on or pinched particularly at plug, convenience receptacle, and the point where they exit from the apparatus.
11. Only use the attachments specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacture, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in anyway, such as power-supply cord or plug is damaged, 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.
15. To reduce the risk of fire electric shock, do not expose this appliance to rain or moisture.
16. The shock hazard marking and associated graphical symbol is provided on the bottom panel of unit.
17. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, shall be placed on the apparatus.
18. For outdoors use, to avoid electric shock, use battery only during a raining day or the weather is wet.

GB

Controls

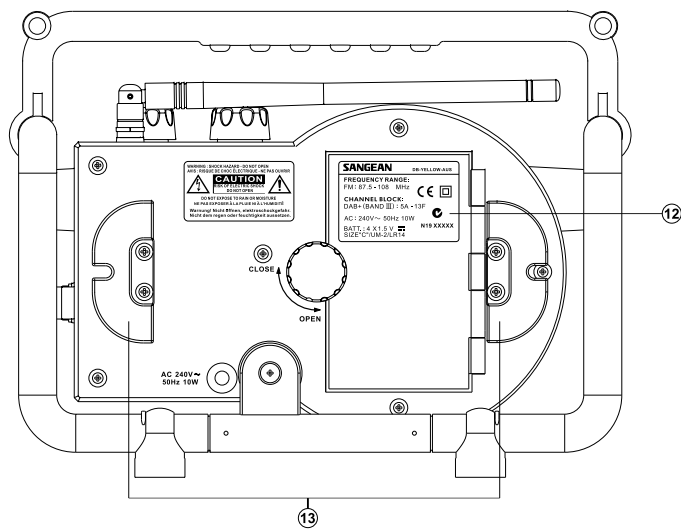


1. Volume control knob
2. Tuning control / Select knob
3. FM/DAB+ antenna
4. LCD display
5. Charge LED indicator
6. Power On/Off button

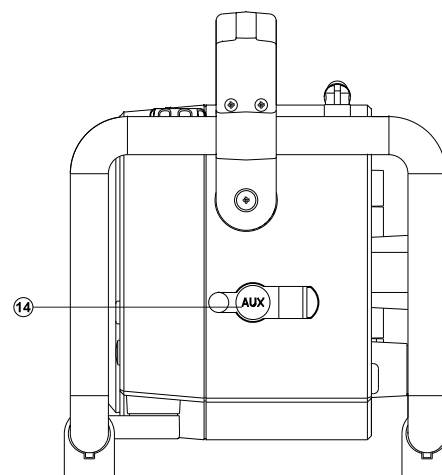


7. Band button
8. Auto Tune button
9. Info button
10. Preset stations
11. Speaker

Controls



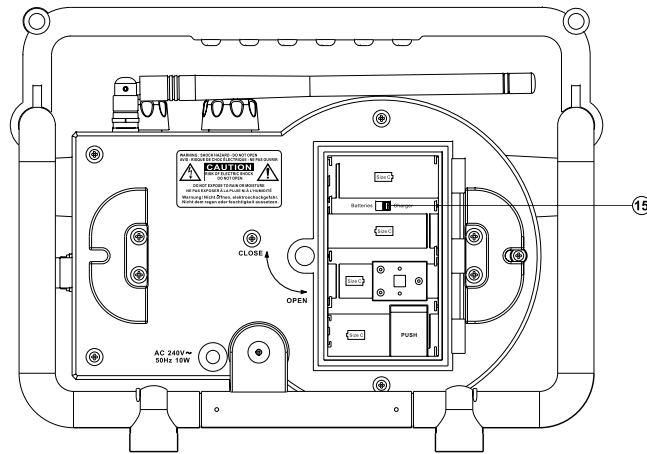
- 12. Battery compartment
- 13. Power cord storage



- 14. Aux In socket

GB

Controls



15. Alkaline/NiMH/NiCad rechargeable battery switch

Power the radio

1. Installing the batteries, first turn battery cover fixture anti-clockwise to loosen and pull down the battery cover.

Note:

Before you insert the batteries, if you use non-rechargeable batteries, make sure NiMH/Alkaline switch to Alkaline position.

2. Insert 4 x C size (UM-2) batteries into the compartment. Ensure the battery is inserted in accordance with the diagram shown.

Close the battery cover and fasten the fixture by turning clockwise. If the radio is not to be used for any extended period of time, it is recommended that the battery is removed from the radio.

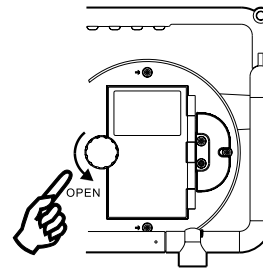
Reduced power, distortion and a "stuttering sound" or low battery LED indicator in red color is on are all signs that the batteries need replacing or recharged (see below charge the batteries).

3. AC Operation

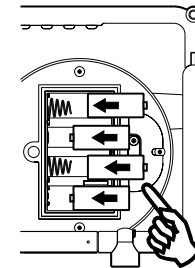
Before plug the AC power cord into the AC socket, be sure the voltage is correct. If you have batteries in the radio and connect AC power cord into the AC socket, the batteries will automatically be disconnected.

AC power cord storage is designed to store the cord when the radio is not in use.

1.

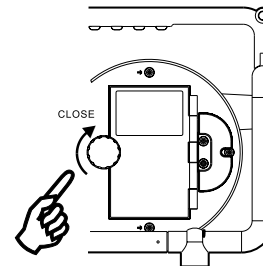


2.



GB

3.



Charge the batteries

Reduced power, distortion and a “stuttering sound” or low battery red LED is on are all signs that the batteries need recharged if you use rechargeable batteries to power the radio.

Note:

The radio can be charged only when the radio is off.

Connect the AC power cord into the AC socket to charge the batteries, be sure the battery type switch is set to Ni/MH position.

When the radio is charged, the green Charge LED will be flashing, and stop flashing (the green LED is on) when the radio is fully charged. Charging time takes approx. 4-6 hours depending on capacity of the rechargeable batteries in use.

Using the radio for the first time

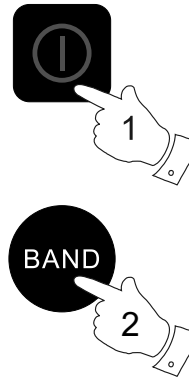
1. Place your radio on a flat surface.
2. Fully extend the antenna on the top of your radio. Adjust the antenna so it is as vertical as possible extending above the radio.
3. Insert the adaptor plug into the AC socket located on the rear of your radio. Plug the adaptor into a standard mains outlet. The display will show “Welcome to DAB” for a few seconds and then the display will show “Clock not set...”. During this time the radio is to find a DAB clock radio station. After a short time the current time will appear on the display.
4. If no stations are found, “Clock not set...” will be displayed. Please press the Power button to switch on your radio. It may be necessary to relocate your radio to a position giving better reception. You should then carry out a scan to find stations as described on the subject as “Display modes – DAB”. Then please press the Power button again to switch off your radio. After a short time the current time will appear on the display to replace “Clock not set...”.

IMPORTANT:

The mains adaptor is used as the means of connecting the radio to the mains supply. The mains socket used for the radio must remain accessible during normal use. In order to disconnect the radio from the mains completely, the mains adaptor should be removed from the mains outlet completely.

Operating your radio – DAB

1. Straighten the rubber antenna properly which is for both DAB and FM reception. Press the Power On/Off button to switch on your radio.
2. Press the Band button to select DAB band.
3. If this is the first time the radio is used, a quick scan of Band III DAB channels will be carried out. The display will show "Clock not set...". If the radio has been used before, the last used station will be selected.
4. During Autotune, as new stations are detected, the station counter on the right hand side of the display will increase and station will be added to the list. The top line of the display shows a bar graph indicating progress of autotune.
5. When the Autotune is completed, the first station (in numeric-alpha order 0...9...A...Z) will be selected.
6. If the station list is still empty after the Autotune, your radio will display "No DAB Station".
7. If no signals are found, it may be necessary to relocate your radio to a position giving better reception.



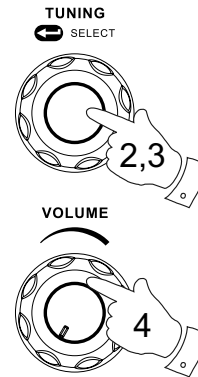
Clock not set...

GB

Welcome to DAB
[Bar graph]

Selecting a station – DAB

1. The top line of the display shows the name of the station currently selected.
2. Rotate the Tuning control to scroll through the list of available stations.
3. Press and release the Tuning control knob to select the station. The display may show “Connecting...” while your radio finds the new station.
4. Adjust the Volume control to the required setting.



Note:

If after selecting a station, the display shows “not available” it may be necessary to relocate your radio to a position giving better reception.

Secondary service – DAB

1. Certain radio stations have one or more secondary services associated with them. If a station has a secondary service associated with it, the display will show “>>” next to the station name on the station list. The secondary service will then appear immediately after the primary service as you rotate the Tuning control knob.
2. Press and release the Tuning control knob to select the station.

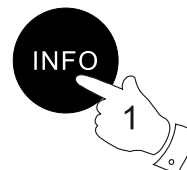
Display mode – DAB

Your radio has six display modes:

1. Press and release the Info button to cycle through the various modes.

- | | |
|--------------------------|---|
| a. Scrolling text (DLS) | displays scrolling text messages such as artist/track name, phone in number, etc. |
| b. Signal strength | displays the signal strength of radio reception. The clear unfilled rectangle indicates minimum signal level required for satisfactory reception. |
| c. Program type | displays type of station being listened to e.g. Pop, Classic, News etc. |
| d. Multiplex name | displays name of multiplex to which current station belongs. |
| e. Channel & frequency | displays current channel and frequency. |
| f. Signal error | displays the bit error rate for the current station being listened to. |
| g. Bit rate / audio type | displays the digital bit rate and the audio type for the currently tuned DAB station. |
| h. Time & date | displays the current time and date. |

• Advanced



Super_Indonesia
Welcome to Super

Super_Indonesia
■■■■■■■■■■

Super_Indonesia
NO PTY

Super_Indonesia
SuperFM DAB

Super_Indonesia
Signal error: 6

Super_Indonesia
64kbps / MP2

Super_Indonesia
15:48 29-06-2010

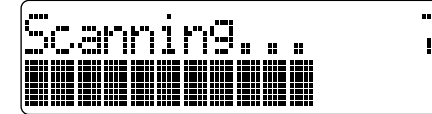
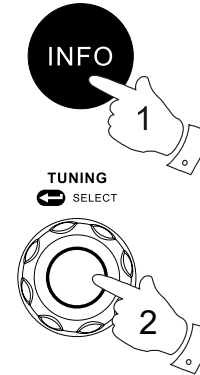
GB

Finding new stations – DAB

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

1. To carry out a full scan of the entire DAB Band III frequencies press and hold the Info button. The display will show "Full scan".
2. Press and release the Tuning control to confirm setting. As new stations are found, the station counter on the right hand side of the display will increase and stations will be added to the list.

• Advanced

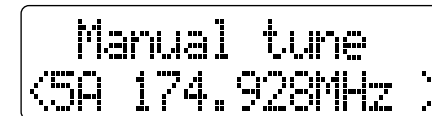
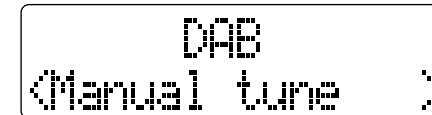
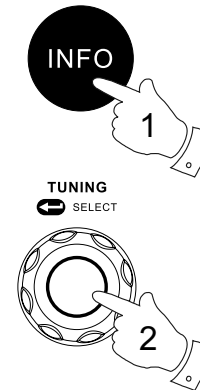


Manual Tuning – DAB

Manual tuning allows you to tune directly to the various DAB band III channels.

1. Press and hold the Info button for 2 seconds, display will show "Full scan".
2. Rotate the Tuning control knob to find "Manual tune". Press and release the Tuning control to enter DAB channels in the list. Rotate the Tuning control to select required DAB channel. When required DAB channel is found, press and release the Tuning control to select the required DAB channel.

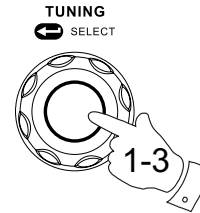
• Advanced



Autoselect – DAB

As an alternative to pressing the Select knob to select a station your radio can be set so as to automatically select a station.

1. When you tune to a station that you wish to have Autoselect, press and hold the Tuning control / Select knob until the display shows "Auto selection ON".
2. Rotate the Tuning control until the station you required is visible on the display. After a few seconds your radio will automatically select the station shown on the display.
3. To switch off autoselect press and hold the Tuning control / Select knob until the display shows "Auto selection OFF".



Auto selection
ON

GB

Station list
<RTI >

RTI
Playing

Auto selection
OFF

Dynamic Range Control (DRC) setting – DAB

DRC can make quieter sound easier to hear when your radio is used in a noisy environment.

1. In DAB band, press and hold the Info button for 2 seconds, display will show “Full scan”.
2. Rotate the Tuning control knob to find “DRC value”. Press and release the Tuning control knob to enter adjustment mode.
3. Rotate the Tuning control knob to select required DRC setting (default is off)
DRC off DRC is switched off, Broadcast DRC will be ignored.
DRC low DRC level is set to 1/2 that sent by broadcaster.
DRC high DRC is set as sent by broadcaster.
4. Press and release the Tuning control to confirm the setting.
The display will return to normal tuning mode.

• Advanced



DAB
<Full scan >

DRC *
<DRC off >

DRC
<DRC low >

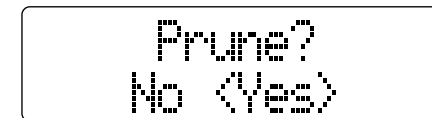
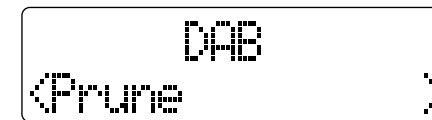
DRC
<DRC high >

Prune stations

If you move to a different part of the country, some of the stations which were listed may no longer be available. Also from time to time, some DAB services may stop broadcasting, or may change location or frequency. Stations which cannot be found, or which have not been received for a very long time are shown in the station list with a question mark. The prune stations function will delete the marked DAB stations from your station list.

1. Press and hold the Info button and the display will show "Full scan".
2. Rotate the Tuning control knob to find "Prune", then rotate the Tuning control to select Yes or No. To activate the Prune function select "Yes", and press and release the Tuning control to confirm the setting.

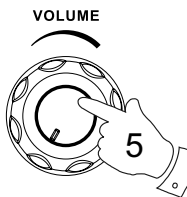
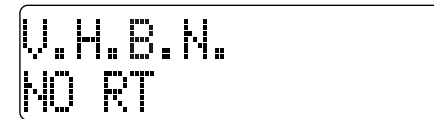
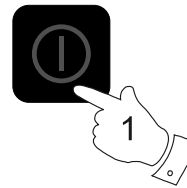
• Advanced



GB

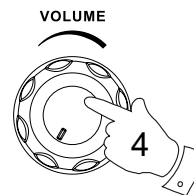
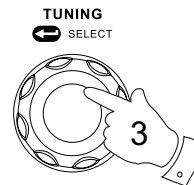
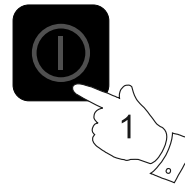
Operating your radio – FM

1. Straighten the antenna properly above the radio. Press the Power On/Off button to switch on your radio.
2. Press the Band button to select FM waveband.
3. Press and release the Auto Tune button, your radio will search upwards and stop automatically when it finds a station of sufficient strength.
4. When the waveband end is reached, your radio will recommence tuning from the opposite waveband end.
5. Adjust the Volume control to the required setting.
6. To switch off your radio, press the Power On/Off button.



Manual tuning – FM

1. Press the Power On/Off button to switch on your radio.
2. press the Band button to select FM waveband.
3. Rotate the Tuning control rightward or leftward to tune to a station.
The frequency will change in steps of 50 kHz. When the waveband end is reached, the radio will recommence tuning from the opposite waveband end.
4. Set the Volume Control to the required setting. To switch off your radio, press the Power On/Off button.



GB

Display Modes – FM

On FM the bottom line of the display can be set to any of the following modes:

1. Press and release the Info button repeatedly to cycle through the various modes.
 - a. Radio text displays scrolling text messages such as artist/track name, phone in number etc.
 - b. Program type displays type of station being listened to e.g. Pop, Classic, News, etc.
 - c. Frequency displays the frequency of the station being listened to.
 - d. Audio type displays the audio type of the station being listened to.
 - e. Time & date displays the current time and date

• Advanced



V.H.B.N.
NO RT

V.H.B.N.
News

V.H.B.N.
106.50MHz

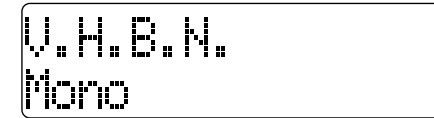
V.H.B.N.
Stereo

V.H.B.N.
15:53 01-07-2010

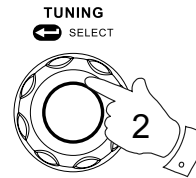
Stereo / Mono (FM)

1. If a station being received is weak some hiss may be audible.
To reduce the hiss repeatedly, repeatedly press the Info button until the audio type of FM radio station shows on the display.
2. Rotate the Tuning control to switch between "Stereo" or "Mono", and press and release the Tuning control to confirm the setting.

• Advanced



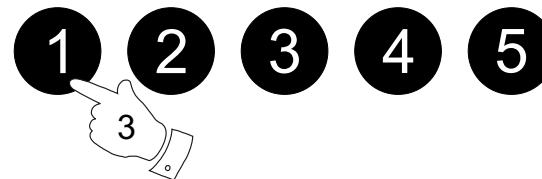
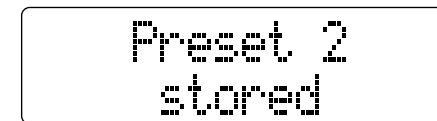
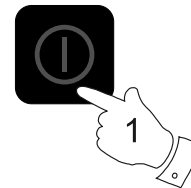
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Preset stations in DAB and FM modes

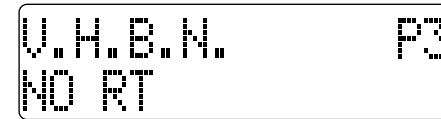
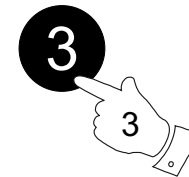
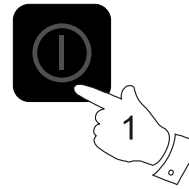
There are 5 memory presets for each DAB/FM wavebands.

1. Press the Power On/Off button to switch on your radio.
2. Tune to the required station as previously described.
3. Press and hold the required Preset button until the display show e.g. Preset 2 stored. The station will be stored under the chosen preset button. Repeat this procedure for the remaining presets.
4. Station stored in the memories may be over written by following the above procedure.



Recall a preset in DAB and FM modes

1. Press the Power On/Off button to turn on the radio.
2. Select the required waveband.
3. Momentarily press the required Preset button, the preset number and station will appear in the display.



Factory reset

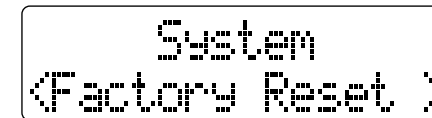
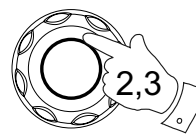
If your radio fails to operate or some digits on the display are missing or incomplete, carry out the following procedure.

1. Press and hold the Info button for 2 seconds.
2. Rotate the Tuning control to select System, then press and release the Tuning control. The display will show Factory Reset. Press and release the Tuning control to enter the setting, then press and release the Tuning control to confirm the reset.
3. A full reset will be performed. All presets and station lists will be erased. After a system reset, the radio will be restarted and a scan of the DAB band III will be performed.

• Advanced



TUNING
SELECT



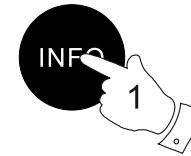
GB

Software version

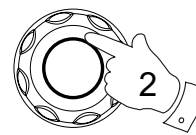
The software display cannot be altered and is just for your reference.

1. To view software version, press and hold the Info button. Rotate the Tuning control to select System.
2. Press and release the Tuning control to enter the setting. Rotate the Tuning control to find SW version, then press and release the Tuning control to view the software version of your radio.

• Advanced



TUNING
SELECT



System
<SW version >

SW version
dab-mni-F52027-0

Clock Time

Display will show clock time only when the radio is synchronized with CT function of DAB radio or FM RDS.

Information

Display backlight

Using batteries to power the radio, when the radio is switched on, press any button except Power button will illuminate the LCD display for approx. 10 seconds.

Using AC power to power the radio, when radio is switched on, LCD display will be always illuminated.

Aux In socket

The Aux In socket is to connect audio source like MP3 player or CD walkman and listen the audio program via radio speaker.

Remove the rubber cover, connect the audio source with a 3.5mm audio connector wire, press the Band button to AUX band and rotate the Volume Control to play the audio program.

Specification

Frequency Coverage:
FM 87.50 – 108 MHz
DAB 174.928 – 239.200 MHz

Power Requirements

Mains:
AC 230V/50 Hz/10W (Europe)
AC 120V/60 Hz/10W (USA)

Batteries: 4 X C size (UM-2)

Output Power:

2 Watt 10% T.H.D. @ 100 Hz @ DC battery 6V
5 Watt 10% T.H.D. @ 100 Hz @ AC 230V or 120V

GB



If at any time in the future you should need to dispose of this product please note that: Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice. (Waste Electrical and Electronic Equipment Directive)