# TEAC

# R-3

## DAB L-BAND/DAB BAND-Ⅲ/FM Radio

### OWNER'S MANUAL



TEAC DAB/FM RECEIVER R-3

INFO/MODE    AUTO SCAN

AUX IN

DAB
Digital Audio Broadcasting

L-BAND/BAND Ⅲ/FM
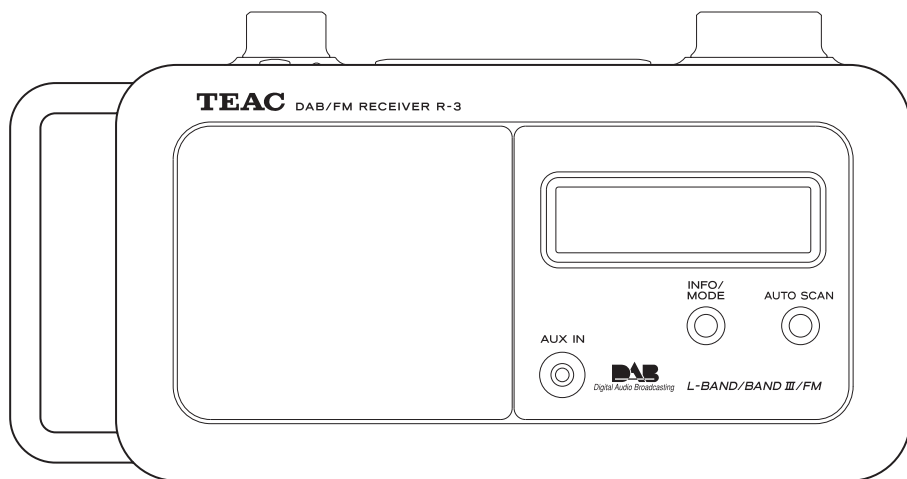
# Contents

**Thank you for choosing TEAC. Read this manual carefully to get the best performance from this unit.**

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**Disposal of your old appliance**

1. 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.

2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.

3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.

4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

# Before Using the Unit

- As the unit may become warm during operation, always leave sufficient space around the unit for ventilation.

- The voltage supplied to the unit should match the voltage as printed on the rear panel. If you are in any doubt regarding this matter, consult an electrician.

- Choose the installation location of your unit carefully. Avoid placing it in direct sunlight or close to a source of heat. Also avoid locations subject to vibrations and excessive dust, heat, cold or moisture.

- Do not place the unit on an amplifier/receiver.

- Do not open the cabinet as this might result in damage to the circuitry or electrical shock. If a foreign object should get into the unit, contact your dealer or service company.

- When removing the power plug from the wall outlet, always pull directly on the plug, never yank the cord.

- Do not attempt to clean the unit with chemical solvents as this might damage the finish. Use a clean, dry cloth.

- Keep this manual in a safe place for future reference.

## Maintenance

If the surface of the unit gets dirty, wipe with a soft cloth or use a diluted mild liquid soap. Be sure to remove any excess liquid completely. Do not use thinner, benzine or alcohol as they may damage the surface of the unit. Allow the surface of the unit to dry completely before using.

---

**CAUTION**

Ensure this product is not exposed to dripping or splashing and that no object filled with liquids, such as vases, is placed on the product.

Do not install this equipment in a confined space such as a book case or similar unit. Allow adequate air circulation around this product.

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# Rechargeable Batteries

The R-3 uses a Nickel-Metal-Hydride battery pack stored in the battery compartment. Leaving the AC adaptor connected to the R-3 and plugged into an AC line, even when not in use, ensures the batteries will be fully charged when you need to use the R-3 on battery power. The R-3 can be used for 3 to 3.5 hours after batteries are fully charged. (When the volume is set to 20.)

● When the batteries need to be recharged, the STANDBY/ON indicator blinks at regular intervals. The blinking interval will grow faster as the batteries get closer to discharge until the R-3 shuts off automatically to protect the batteries.
● When the R-3 is not being used but the AC adaptor is plugged in, the batteries will be completely charged within approximately 3.5 hours from a full discharge. During this period the STANDBY/ON indicator will flash.
● When the R-3 is ON and the AC adaptor plugged in, the batteries will be completely charged within approximately 24 hours.
● It may take up to 4 charge and discharge cycles before the batteries are operating at full capacity when the R-3 is new or left unused for several weeks.
It is suggested that the R-3 be plugged in for about 12 hours before you use it for the first time.
● Once the R-3 has been fully charged while it is STANDBY, do not unplug the AC adaptor and then immediately plug it again. This will restart the charging cycle even though the batteries are fully charged. Doing this repeatedly will damage the batteries.
● If the R-3 is not plugged in, the batteries will slowly discharge as a safety measure.

## Battery Replacement

When the batteries are exhausted, replace the battery pack with a new one.

1. Remove the battery compartment cover.
2. Disconnect the battery pack connector, and remove it.
3. Insert a new battery pack and attach its connector.
4. Close the cover.

**Caution:**
● Do not heat or disassemble rechargeable batteries. Never dispose of old batteries by throwing them in a fire
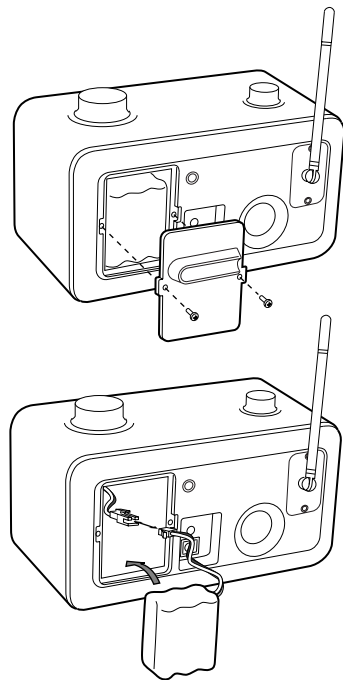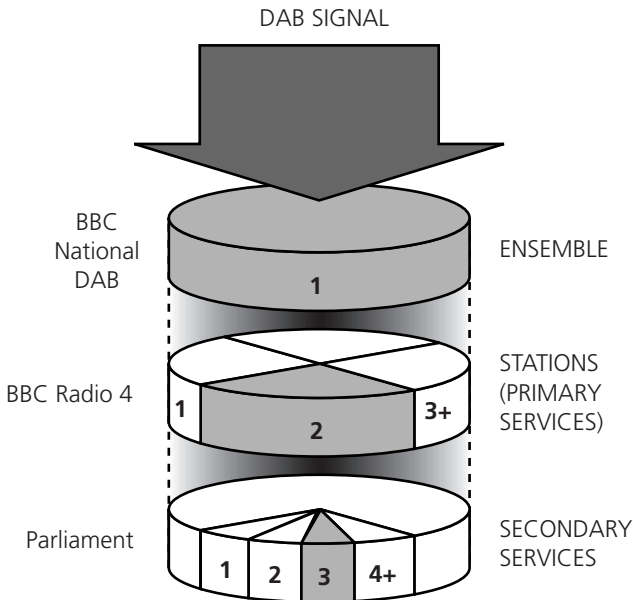
# About DAB

With this unit you can receive and listen to Digital Audio Broadcast (DAB) programmes. DAB uses digital, not analogue signals, resulting in near CD-quality audio with virtually interference-free reception. Along with superior quality audio, DAB can also deliver additional audio channels and text. In the future, computer data and images are also possible.
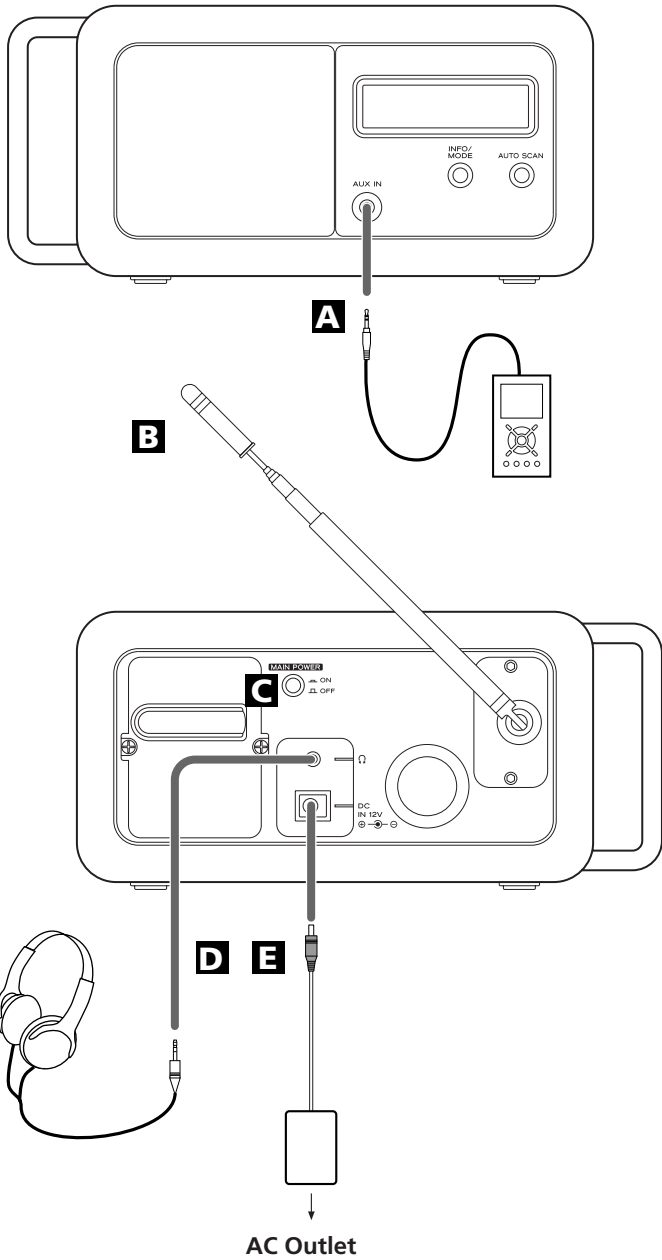
Digital radio is broadcast as groups of data called Ensembles or Multiplexes. Each Ensemble can contain a number of stations (services) and each station contains a primary service and can contain secondary services as illustrated in the following diagram.

Each Ensemble is transmitted in a set frequency range and received by this unit for decoding. You can receive Ensembles broadcast in the 174-240 MHz (Band III) or 1453-1490 MHz (L-band) frequency band and store the services in each Ensemble for you to access. The number of Ensembles you receive depend on your location. Channels used in the UK are in the range 10A to 12D, and for international 5A to 13F. For L-band the channels of LA to LW are available.

Ensembles and stations have labels (names) that are used to identify them. Instead of needing to know the particular frequency of your favourite broadcast, you can simply select the station name. Secondary services and additional data such as text or Ensemble information are also available.

DAB SIGNAL

BBC National DAB — ENSEMBLE — 1

BBC Radio 4 — STATIONS (PRIMARY SERVICES) — 1 2 3+

Parliament — SECONDARY SERVICES — 1 2 3 4+

INFO/
MODE

AUTO SCAN

AUX IN

**A**

**B**

MAIN POWER

ON
OFF

**C**

Ω

DC
IN 12V

**D** **E**

**AC Outlet**

**CAUTION:**
- Switch off the power before making any connections.
- Read the instructions of each component you intend to use with this unit.
- Be sure to insert each plug securely. To prevent hum and noise, do not bundle the connection cords.

## A AUX IN jack

You can connect a portable audio player to this jack.
Connect the LINE OUT or PHONES jack (audio output jack) of the player using the supplied stereo mini plug cable.

When using the PHONES jack of your mini player, you must adjust the volume of the mini-player or you may hear no sound from your R-3.

- Turning the volume of the mini player up too high may cause the sound from your R-3 to be distorted. If this is the case, reduce the volume of the mini player until the distortion stops and then adjust the volume level of the R-3 to a comfortable listening level

## B Telescopic Antenna

Stretch the telescopic antenna to it's fullest length and rotate it to the direction that gives the best reception.

## C MAIN POWER switch

Use this button to turn the unit on or off.
Turn this switch OFF when you don't use the unit to save the battery power.

- Even when the unit is off, you can recharge the battery.

> The equipment draws a nominal amount of power from the AC outlet even with its MAIN POWER switch in the ON position.

## D Headphone jack

For private listening, insert the headphone plug into this jack, and adjust the volume using the VOLUME knob.

- You can listen to stereo source in stereo using headphones.

## E DC IN 12V

Connect the provided AC adaptor to this jack. Then connect the AC adaptor's plug to the AC wall socket.

- Do not use any AC adaptors other than the one included with this unit to avoid fire, electric shock, etc. Be sure to connect the adaptor to an AC outlet that supplies the correct voltage.

A
B
C
D

1 2 3 4 5

VOLUME

FUNCTION
DAB/FM/AUX

SLEEP

ALARM

ENTER

⏻/❘

STANDBY/ON

S N O O Z E

TUNING/
MULTI JOG

I
H
G
F
E

J
K
L

INFO/
MODE

AUTO SCAN

AUX IN
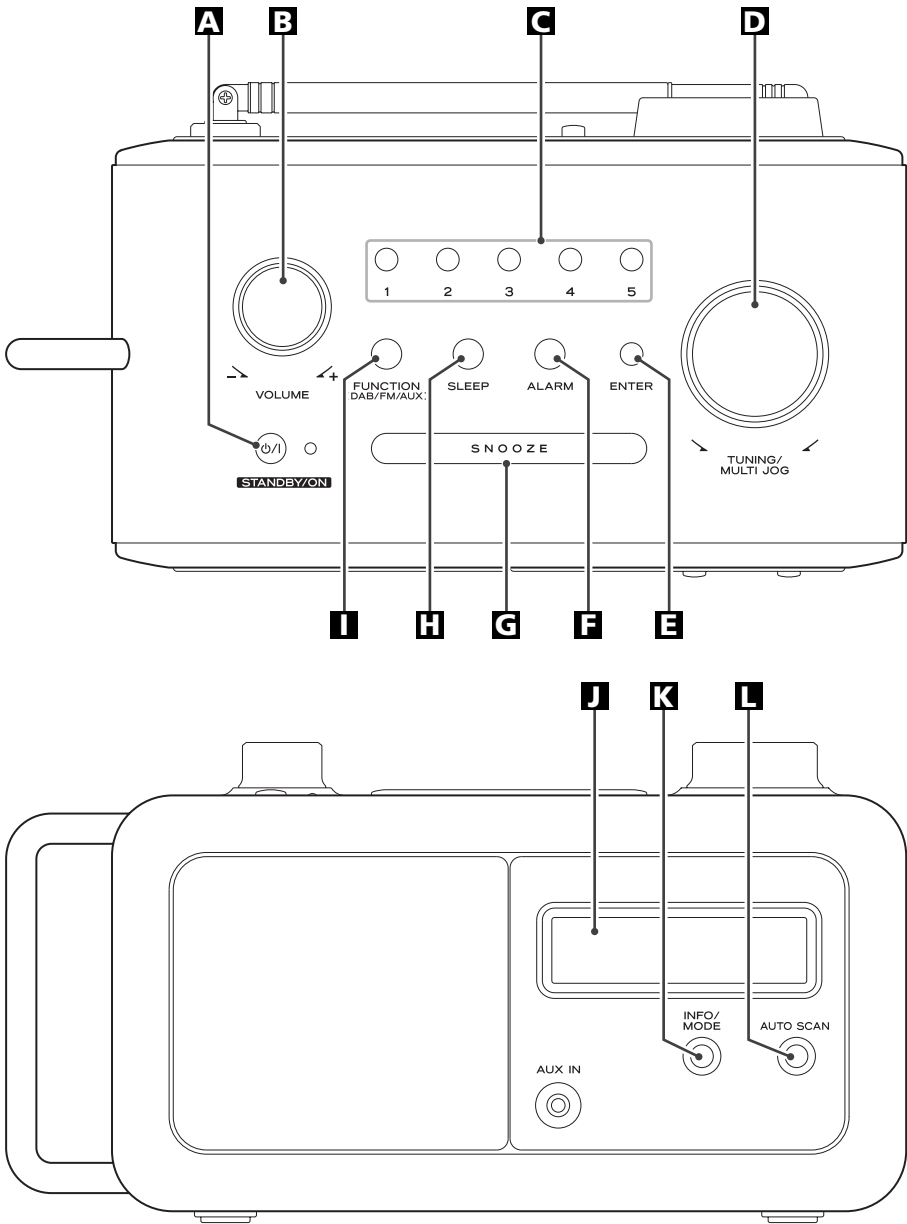
**A STANDBY/ON**

Use this button to turn the unit on or standby.

The indicator lights when the unit is turned on.

● When the batteries become discharged and need to be recharged, the STANDBY/ON indicator blinks at regular intervals.

● Even when the unit is standby, the indicator flashes at regular intervals while charging the batteries.

**B VOLUME**

Turn this knob to adjust the volume level.

**C 1-5 button**

Use these buttons to select a preset station.

**D TUNING/MULTI JOG**

Turn this knob to tune in a station.
This knob is also used to adjust the time, change timer settings, etc.

**E ENTER**

Use this button to enter the selection.

**F ALARM**

Use this button to enter the timer setting mode or to check the timer status.

**G SNOOZE**

When the unit is turned on by the timer, press this button to turn the unit standby for 5 minutes.

**H SLEEP**

Use this button to enter the sleep timer setting mode or check remaining time.

**I FUNCTION (DAB/FM/AUX)**

Use this button to select DAB, FM or AUX.

When a component is connected to the AUX IN jack, select AUX to listen to the external source.

**J Display**

**K INFO/MODE**

In DAB mode use this button to choose the type of information displayed.

Press and hold this button for longer than 2 seconds and press the ENTER button to enter the 'Manual Tune' mode. To tune in a station in L-band, use this mode.

**L AUTO SCAN**

In DAB mode use this button to start scanning the stations that you can listen to in the UK.
Press and hold this button for more than 2 seconds to start 'Full Scan' (all the Band III).

# Basic Operation
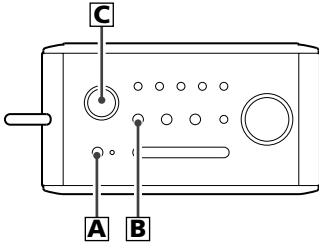


### A To turn the unit ON or to standby
Press the STANDBY/ON button.



● If the MAIN POWER switch on the rear panel is turned off, press the switch to turn the unit on.

### B To select a source
Each time the FUNCTION button is pressed, the mode is changed as follows.



→ DAB → FM → AUX ⌐
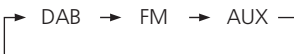
### C Adjust the volume
To protect the speaker from a sudden high-level signal, gradually turn up the volume to the required level using the VOLUME knob.



VOLUME
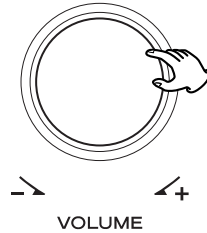
### D To turn off the main power (To save battery)
When the R-3 is not being used, you can save battery power by turning off the MAIN POWER switch on the rear panel.
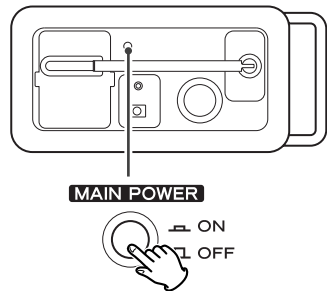


MAIN POWER
⊥ ON
⌐ OFF

● While the MAIN POWER switch is turned off, display goes out but the R-3 can continue to recharge the battery.

E **Listening through headphones**

Insert the headphones plug into the phones jack ( Ω ), and adjust the volume. The sound from the speaker will be cut off.

When a stereo broadcast is received, you can listen to stereo sound by connecting your stereo headphones to this jack.

Also you can listen to stereo sound from an external source that is connected to the AUX IN jack.
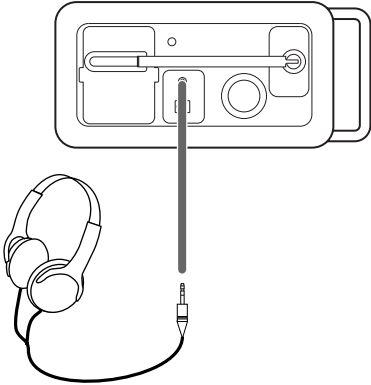


● Both stereo and monaural phones can be used with this jack.

**CAUTION**

Always lower the volume level prior to plugging in your headphones. TO AVOID DAMAGING YOUR HEARING - Do not place your headphones on your head until after you have plugged them in.

## If you want to initialize the setting:

**In DAB mode:**

1. Press and hold the INFO/MODE button for longer than 2 seconds and then press once more the INFO/MODE button to display 'System Reset'.

2. Press the ENTER button.

**In FM mode:**

1. Press and hold the INFO/MODE button for longer than 2 seconds to display 'System Reset'.

2. Press the ENTER button.



INFO/
MODE

System Reset

ENTER
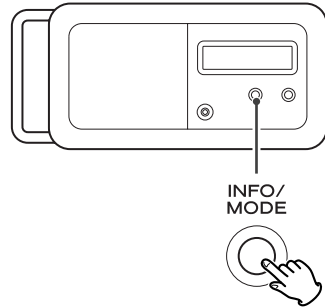
● Preset stations and the volume level will be reset to the factory default settings. Any alarm setting will be erased.

*11*
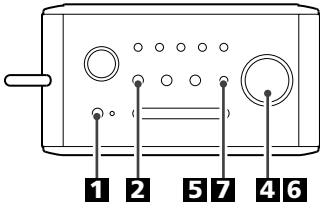
## Auto Tuning

**1** **Press the STANDBY/ON button to turn the unit on.**



**2** **Press the FUNCTION button repeatedly to switch to DAB mode.**



When the unit is switched to DAB mode for the first time, the auto tuning process will start automatically.

**3** **Press the AUTO SCAN button.**
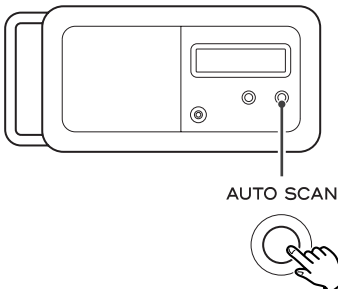


AUTO SCAN

The unit will start scanning the stations that you can listen to. (10A to 13F)



```
Scan Services
   Quick Scan
```

```
■■■■———————    11C
 42%
```
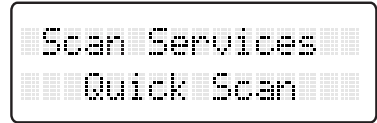
● Press and hold the AUTO SCAN button for longer than 2 seconds to activate 'Full Scan' (5A to 13F).



```
Scan Services
   Full Scan
```

```
■■■■———————     9C
 42%
```
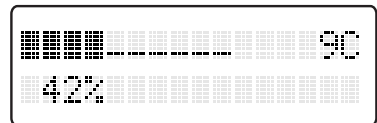
**4** **When the scanning process has finished, turn the TUNING knob to select the DAB-ensemble that contains the station you want to listen to.**



TUNING/
MULTI JOG

Ensemble

BBC
iXtra
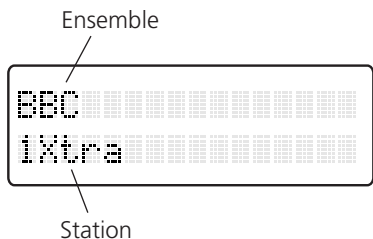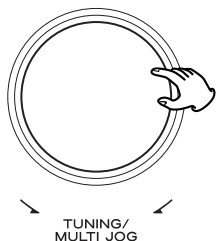
Station

**5** **Press the ENTER button.**
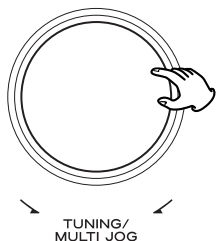


ENTER

● The station name is displayed in the first line.

**6** **Select the station you want to listen to.**

Turn the TUNING knob until the station you want to listen to is displayed.



TUNING/
MULTI JOG

BBC Radio5
Tuning
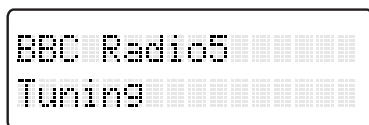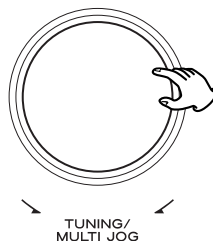
● If you set 'Autoselect' to ON, the station is automatically tuned in. You don't need step **7**.
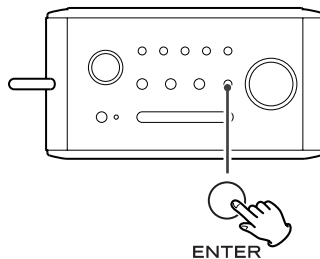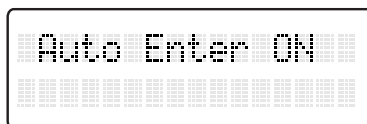
**7** **Within 3 seconds press the ENTER button.**



ENTER

● If you don't press the ENTER button within 3 seconds, the display will return to the current tuning station.

**2 4 6  3 5**
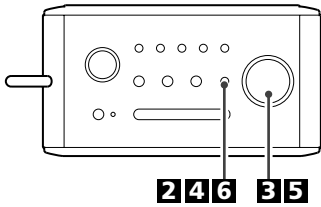
## Manual Tuning (How to listen to L-band)

**1 While listening to a DAB station, press and hold the INFO/MODE button for longer than 2 seconds.**



INFO/
MODE

Manual tune
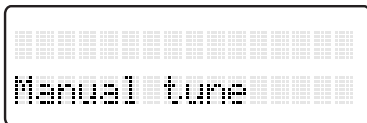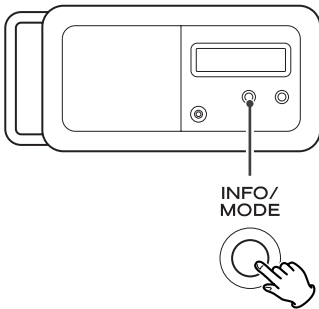
**2 Press the ENTER button.**

ENTER

● The band name and frequency are displayed.

**3 Turn the TUNING knob to select the frequency of DAB-ensemble that contains the station you want to listen to.**



TUNING/
MULTI JOG

Band name          Frequency

12B 225.648 MHz
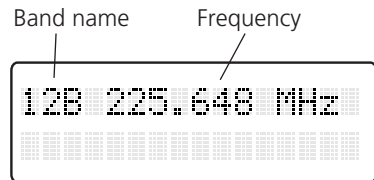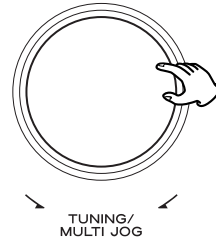
After tuning up to the end of band III, L-band will be displayed continuously.

LA  1452.96 MHz

**4 Press the ENTER button.**

ENTER

● The station name is displayed in the first line.

**5** **Select the station you want to listen to.**

Turn the TUNING knob until the station you want to listen to is displayed.



TUNING/
MULTI JOG

```
BBC Radio5
Tuning
```
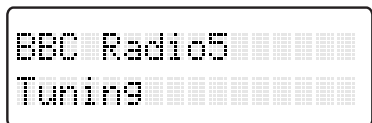
● If you set 'Autoselect' to ON, the station is automatically tuned in. You don't need step **6**.

**6** **Within 3 seconds press the ENTER button.**



ENTER

● If you don't press the ENTER button within 3 seconds, the display will return to current tuning station.

## Auto Select function

**To switch the Auto Select function ON or OFF, press and hold the ENTER button for 2 seconds in DAB mode.**



ENTER

**ON**: After selecting the station, it is automatically tuned in without pressing the ENTER button.

```
Auto Enter ON
```

**OFF**: the ENTER button must be pressed within 3 seconds after selecting the station.

```
Auto Enter OFF
```
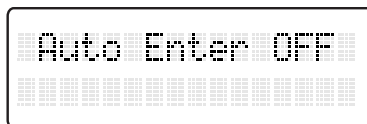
You can choose the type of information displayed in the second line of the display while listening to DAB.

**Each time the INFO/MODE button is pressed, the information is displayed as follows.**

INFO/
MODE

Ensemble name ←
 ↓
Date and Time
 ↓
DLS (Dynamic Label Segment)
 ↓
Programme type
 ↓
Date and Time
 ↓
Signal level
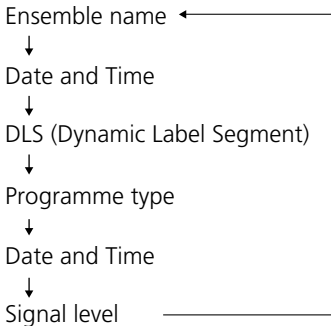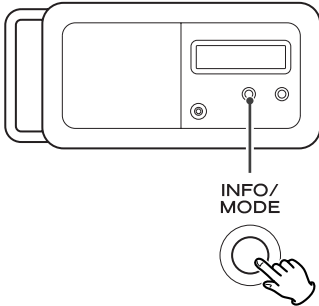
**Ensemble name**

This displays the name of the Ensemble that is broadcasting the programme.

Station

    BBC Radio5
    BBC National DAB

Ensemble name
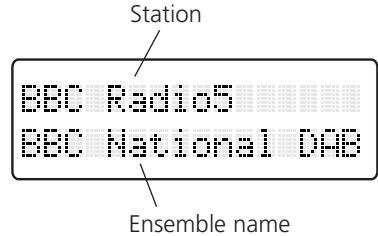
**Date and time**

This displays the current date and time, which is supplied by the radio station and should always be accurate.

    BBC Radio5
    04:53 31-12-2005

**DLS**

The Dynamic Label Segment (DLS) is the scrolling text label supplied by the radio station. It may be information on music titles or details regarding the programme or station.

    BBC Radio5
    WEEKDAY NEWS & D

**Signal level**

Signal strength display to check the antenna adjustment or positioning for the best reception.
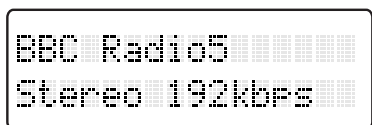
```
BBC Radio5
T▁▁▃▅██
```
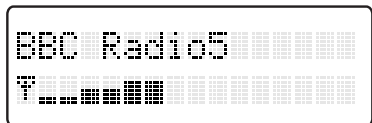
**Programme type**

This is a description of the type of broadcast supplied by the radio station such as Pop, Rock or Classical music.

```
BBC Radio5
News
```
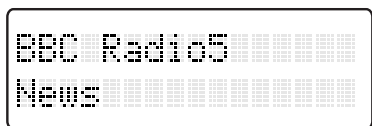
**Bitrate**

The bitrate and sound mode of the current receiving broadcast is displayed.

```
BBC Radio5
Stereo 192kbps
```

## Software version

**To display the software version:**

1. Press and hold the INFO/MODE button for longer than 2 seconds. In DAB mode 'Manual tune' is displayed. In FM mode 'System Reset' is displayed.

2. Press the INFO/MODE button once or twice to display software version.

INFO/
MODE

```
TEAC v100
```
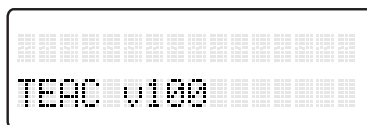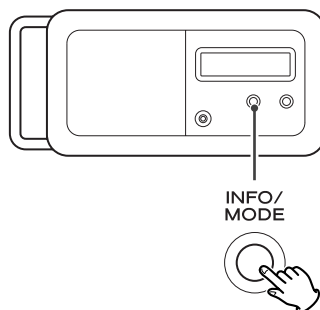
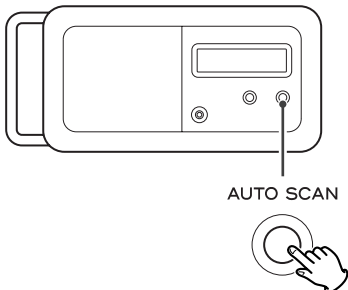# Listening to the FM Radio
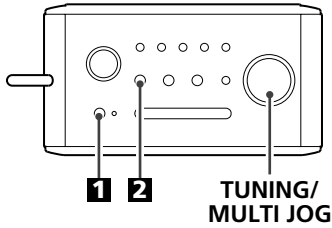


**1** **2** **TUNING/ MULTI JOG**

## Auto Tuning

**1** **Press the STANDBY/ON button to turn the unit on.**



STANDBY/ON

**2** **Press the FUNCTION button repeatedly to switch to FM mode.**



FUNCTION (DAB/FM/AUX)

**3** **Tune in a station using the AUTO SCAN button.**



AUTO SCAN

**Press the AUTO SCAN button briefly:**

Frequency display begins to increase and when a station is tuned in the tuning process will stop automatically.
Repeat this until the station you want to listen to is found.

**Press and hold the AUTO SCAN button for longer than 2 seconds:**

Frequency display begins to decrease and when a station is tuned in the tuning process will stop automatically.
Repeat this until the station you want to listen to is found.



87.50 MHz        FM
Auto(Stereo)
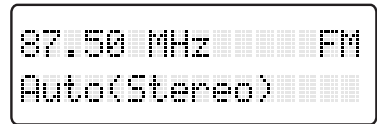
● To stop the auto tuning process turn the TUNING knob.

## Manual Tuning

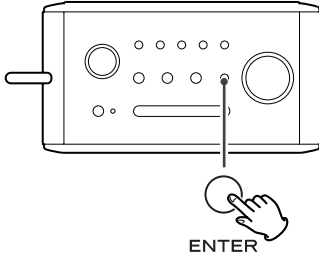When the TUNING knob is turned, the frequency changes by a fixed step.
Turn the TUNING knob repeatedly until the station you want to listen to is found.



TUNING/ MULTI JOG
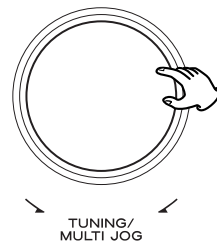
## FM mode

Pressing the ENTER button in FM mode alternates between Auto(Stereo) mode and Mono mode.



ENTER

### Auto:

FM stereo broadcasts are received in stereo.



Radio mode:Auto

### Mono:

To compensate for weak FM stereo reception, select this mode. Reception will now be forced monaural, reducing unwanted noise.
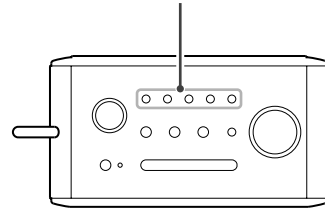


Radio mode:Mono

## How to preset stations

In each DAB and FM broadcast, up to 5 stations can be stored in preset memories.

**1 Tune in a station to be stored as a preset station.**

**2 Press and hold the number button (1-5) you want to preset the station.**





BBC Radio5
Preset 4 Saved

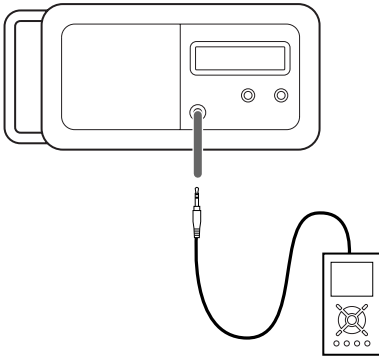## How to select preset stations

**While listening to DAB or FM broadcast, press the number button (1-5) that the station you want to listen to is stored.**

# Listening to an External Source
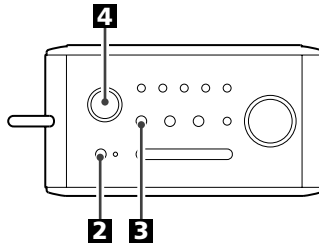
**1** **Connect the PHONES jack (audio output jack) of a portable audio player to the AUX IN jack of the R-3 using the supplied stereo mini plug cable.**
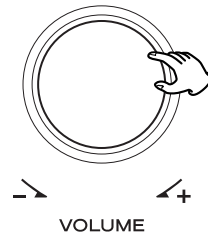
**2** **Press the STANDBY/ON switch to turn the unit on.**

STANDBY/ON

**3** **Repeatedly press the FUNCTION button to select AUX.**

FUNCTION
(DAB/FM/AUX)

**4** **Play the source, and adjust the volume using the VOLUME knob of the R-3 and the audio player.**

VOLUME

When using the PHONES jack of your mini player, you must adjust the volume of the mini-player or you may hear no sound from your R-3.
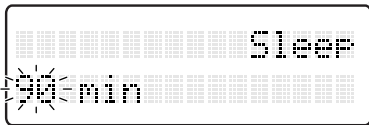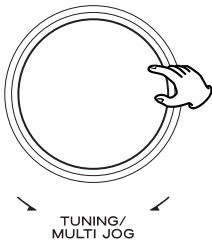
# Sleep Timer
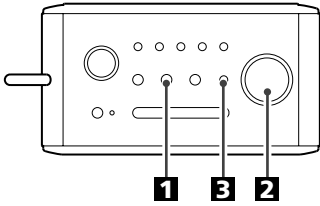


The power can be switched off after a specified amount of time.

### 1 Press and hold the SLEEP button for more than 2 seconds.



### 2 Select the time by turning the MULTI JOG knob.





The time setting will be changed by 15 minutes step from 90 to OFF.

**90, 75, 60, 45, 30, 15:**
> The power will be switched off after a specified amount of time.

**OFF:**
> The sleep timer is off.

### 3 Press the ENTER button twice.



● If the ENTER button is not pressed within 5 seconds, the display will return to normal mode but the sleep time is automatically set .

's' will appear on the display.

● If you want to check the remaining time, press the SLEEP button briefly. The remaining time will be displayed for 5 seconds, and then return to the normal display.

**ENTER**

**ALARM**     **TUNING/ MULTI JOG**
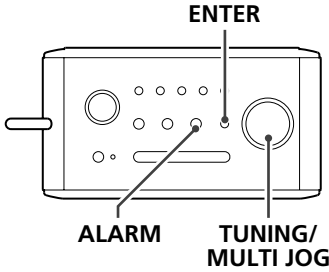
- The clock is automatically set when the DAB broadcast is received.
- During timer setting, if no button is pressed for 5 seconds the display will return normal, but the timer is set.
- **When the unit is turned on by the timer, the volume can not be adjusted**.

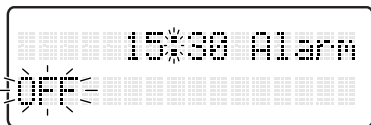**1** **Press and hold the ALARM button for more than 2 seconds.**

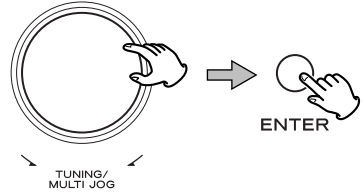ALARM

Clock and the alarm status will appear on the display.

When the timer is ON:

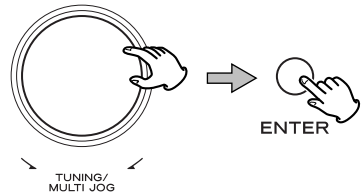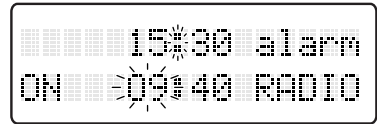15☀30 Alarm
ON    09:40 RADIO
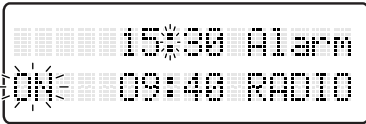
When the timer is OFF:

15☀30 Alarm
OFF

**2** **Turn the MULTI JOG knob to select the alarm ON and then press the ENTER button.**

ENTER

TUNING/ MULTI JOG

**3** **Turn the MULTI JOG knob to set the start time (hour) and then press the ENTER button.**
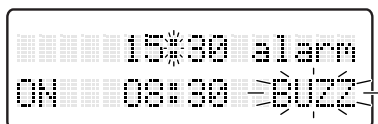
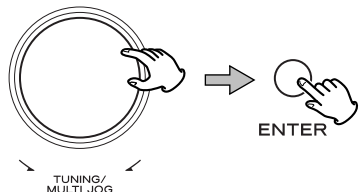15☀30 alarm
ON   09:40 RADIO

ENTER

TUNING/ MULTI JOG

**4** **Turn the MULTI JOG knob to set the start time (minute) and then press the ENTER button.**

15☀30 alarm
ON   08:40 RADIO

ENTER

TUNING/ MULTI JOG
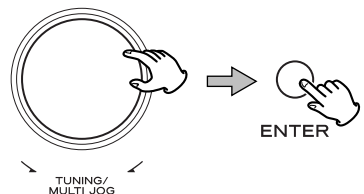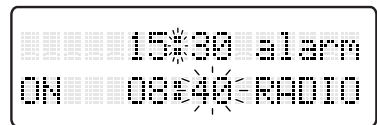
**5** **Turn the MULTI JOG knob to select RADIO or BUZZ and then press the ENTER button.**

When the current source is AUX, select AUX or BUZZ.





```
        15✳30 alarm
ON    08:30 RADIO
```

```
        15✳30 alarm
ON    08:30  AUX
```

```
        15✳30 alarm
ON    08:30  BUZZ
```
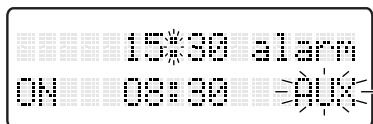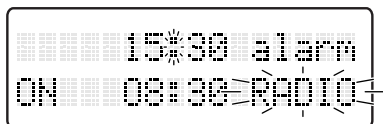
RADIO: DAB or FM (selected source)
AUX: AUX
BUZZ: buzzer

● If no DAB staion is available but you have selectted 'RADIO' in DAB mode, the timer will start the buzzer instead of DAB radio.

**6** **Press the ENTER button to complete the timer setting.**



'🕭' appears on the display.

The unit will turn on at the specified time every day and after 60 minutes the unit turns off.

For the timer to start the radio, tune in a station and adjust the volume before turning the unit off.
For the timer to start the buzzer, adjust the volome before turning the unit off.
For the timer to start an external source, connect it and prepare for the timer playback.

**Don't forget to turn the unit standby, or the timer won't work.**

● When the unit is turned on by the timer, '🕭' blinks on the display.

● If the unit is disconnected from the power supply and the batteries have been completely discharged for about an hour, clock and timer settings will be lost.

*23*

**ENTER**

**ALARM**   **TUNING/ MULTI JOG**
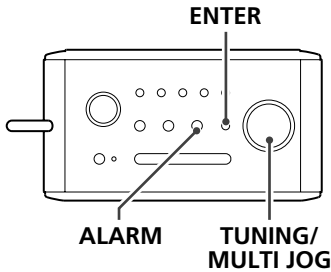
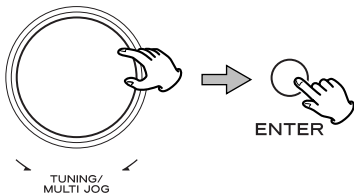## To turn the timer off

**1** **Press and hold the ALARM button for more than 2 seconds.**

ALARM

Current time and the alarm status will appear on the display.

**2** **Turn the MULTI JOG knob to select the alarm OFF and then press the ENTER button.**

TUNING/ MULTI JOG ➡ ENTER

**3** **Press the ENTER button to complete the setting.**

ENTER

' ▓ ' disappears from the display.

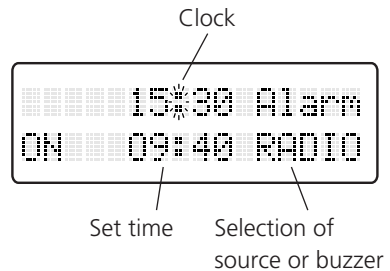## To check the timer setting

Press the ALARM button briefly.

ALARM

Clock and the alarm status will appear on the display.

When the timer is ON:

Clock
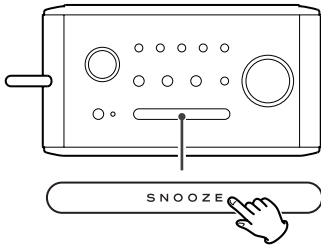
```
        15:30 Alarm
ON      09:40 RADIO
```

Set time    Selection of source or buzzer

When the timer is OFF:

```
        15:30 Alarm
OFF
```
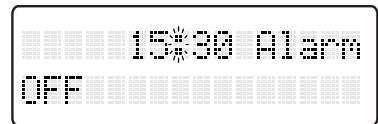
● To exit the checking mode, press the ALARM button again or leave the unit idle for 5 seconds.

## Snooze Function



After the timer has turned on the unit, press the SNOOZE button.

'z' will appear on the left of '⊞' on the display and the unit enters STANDBY mode. After 5 minutes, the unit will turn on again.
You can use this function repeatedly for up to 60 minutes.

● Note that if you press the ALARM button to stop snoozing, the timer is also turned off.

## To stop the timer working
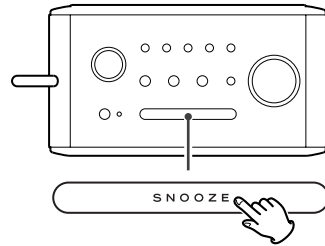


If you want to stop the timer working after the timer has turned on the unit, press the ALARM button or the STANDBY/ON button.

The timer will work again after 24 hours.

# Troubleshooting

If you have problems with your system, look through this chart and see if you can solve the problem yourself before calling your dealer or TEAC service centre.

## No power

➜ If the batteries are discharged, connect the AC adaptor to the unit and the AC line to recharge the batteries.
➜ Check the connection to the AC power supply. Check and make sure the AC source is not a switched outlet and that, if it is, the switch is turned on. Make sure there is power to the AC outlet by plugging another item such as a lamp or fan into the outlet.
➜ Press the MAIN POWER switch on the rear panel to turn the unit on.

## No sound

➜ Turn the unit on and adjust the volume.
➜ Select the source by pressing the FUNCTION button.
➜ Pull out the headphone's plug from the headphones jack.
➜ Ensure that the R-3 has been able to locate DAB stations.

## The sound is noisy.

➜ The unit is too close to a TV set or similar electronic appliances. Install the unit further from them, or turn them off. Also try a different electrical outlet or use your R-3 on battery power to see if the noise is coming from your electrical connection.

## Cannot listen to any station, or the signal is too weak.

➜ Tune in the station properly.
➜ Rotate the antenna for the best reception.

## Though the FM broadcast is stereo and you use a stereo headphones, it sounds monaural using headphones.

➜ In FM mode, press the ENTER button to switch to AUTO mode.

## 'NO stations Available' appears on the display.

➜ Check that antenna is stretched.
➜ Ensure that DAB coverage exists in your area.

## Cannot access secondary services.

➜ Not many secondary services are available at the moment. This will increase as more DAB stations start broadcasting.

## Display goes out or displays 'service off air'.

➜ This may occur if a broadcaster changes the label of a service or removes a label whilst you are listening to it. The R-3 will try to retune to this station, or alternatively follow the procedure for auto tune on page 12.

**Cannot listen to the selected station.**

→ Ensure you have pressed the ENTER button when you want to listen to your selection. The station you are currently listening to will be displayed on the first line of the display, as you scroll through the station order list the second line will show other station options. Press the ENTER button to activate your selection.

**A burbling sound is heard on some stations.**

→ DAB like other digital media is good at producing quality audio from a low level signal. However, if this signal level is too low, a 'burbling' sound can sometimes be heard. To reduce this, try repositioning your antenna to gain maximum signal strength.

**If normal operation cannot be established, initialize the unit.**

# Specifications

**Frequency Range (DAB):**
   Band III: 5A to 13F
   (174.928 MHz to 239.200 MHz)
   L-band: LA to LW
   (1452.960 MHz to 1490.624 MHz)
**Frequency Range (FM):**
   87.50 MHz to 108.00 MHz (50 kHz step)
**Speaker Type:**
   65 mm
**Impedance:**
   4 ohms
**Output Power:**
   1.5 W

**Power Requirement (AC adaptor):**
   230 V, 50 Hz
**Power Consumption:**
   15 W
**Dimension (W x H x D):**
   238 x 127 x 130.8 mm
   (With antenna folding)
**Weight:**
   1.4 kg

**Standard Accessories:**
   AC Adaptor x 1
   Stereo mini plug cable x 1
   Owner's Manual x 1
   Warranty Card x 1

● Design and specifications are subject to change without notice.
● Illustrations may differ slightly from production models.

# TEAC

This appliance has a serial number located on the rear panel. Please record the model number and serial number and retain them for your records.

Model number                               Serial number

1105·MA-1038A