

ROBERTS

Sound for Generations



CR2003

3 band Auto set PLL
Synthesised Clock Radio

MILANO 3

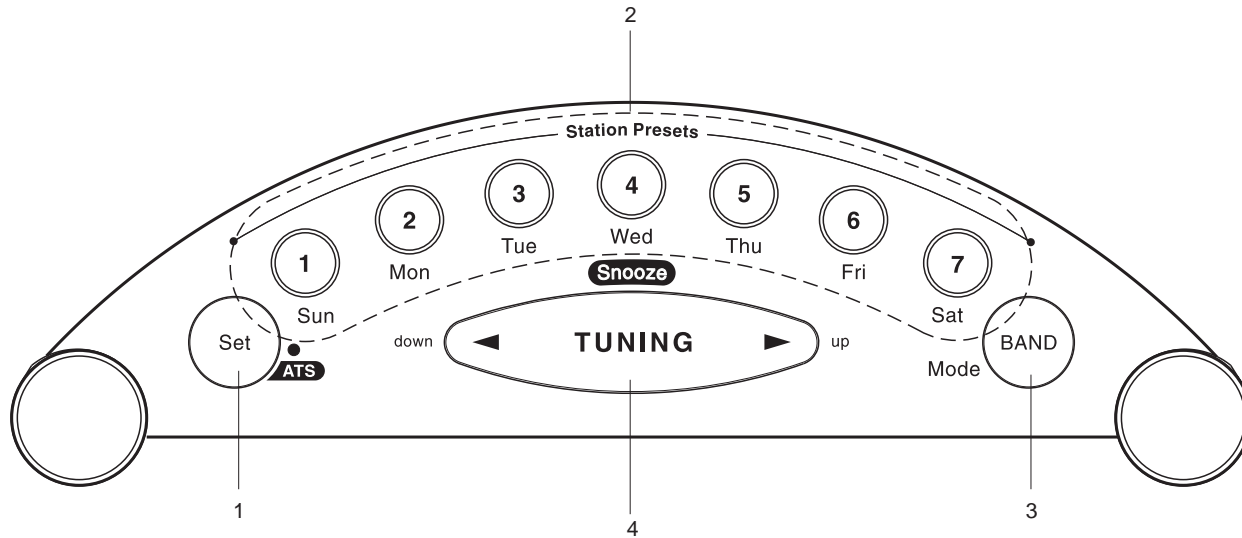
Please read this manual before use

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Controls

(Top)

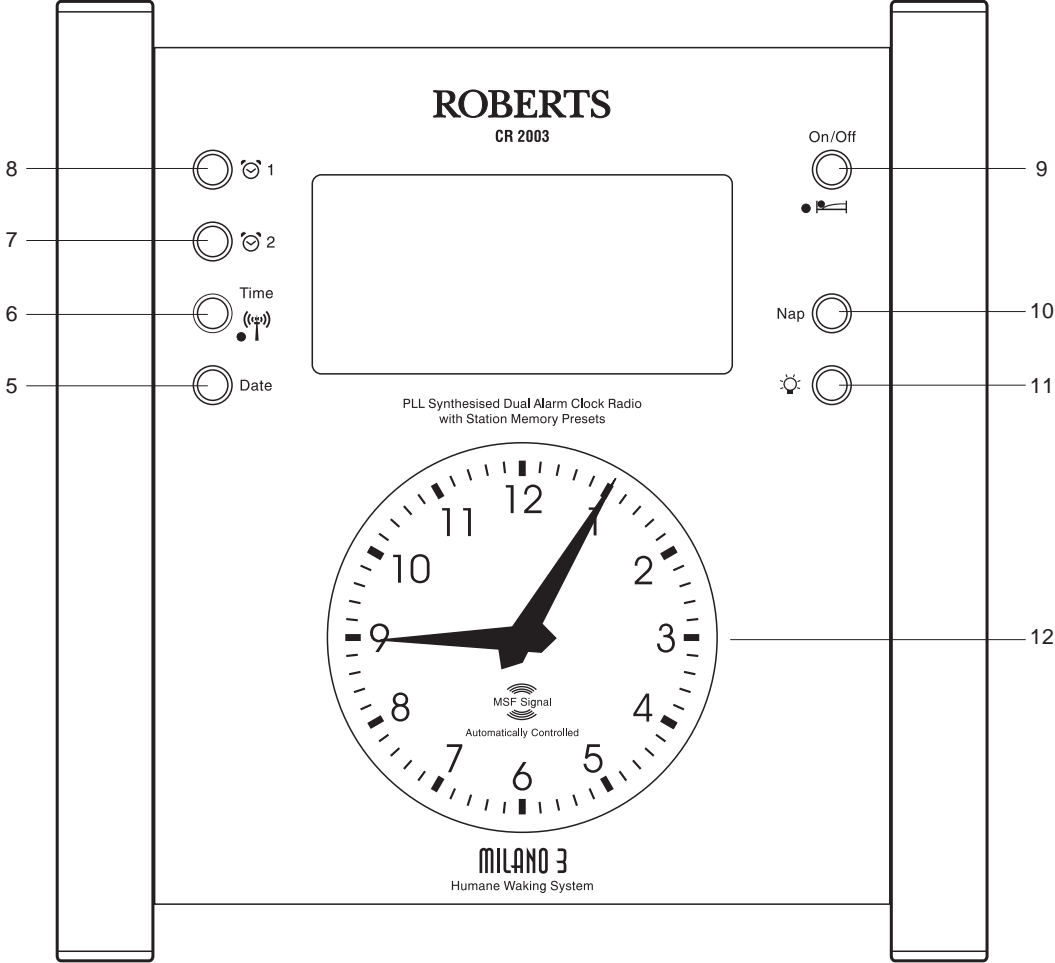


1. Time/Date/Alarm set and ATS button
2. Preset memories and Alarm days buttons
3. Waveband and Alarm mode button
4. Tuning Up/Down and Snooze button

*If you need any further advice, please call our Technical Helpline on :-
020 8758 0338 (Mon-Fri)*

Controls

(Front)

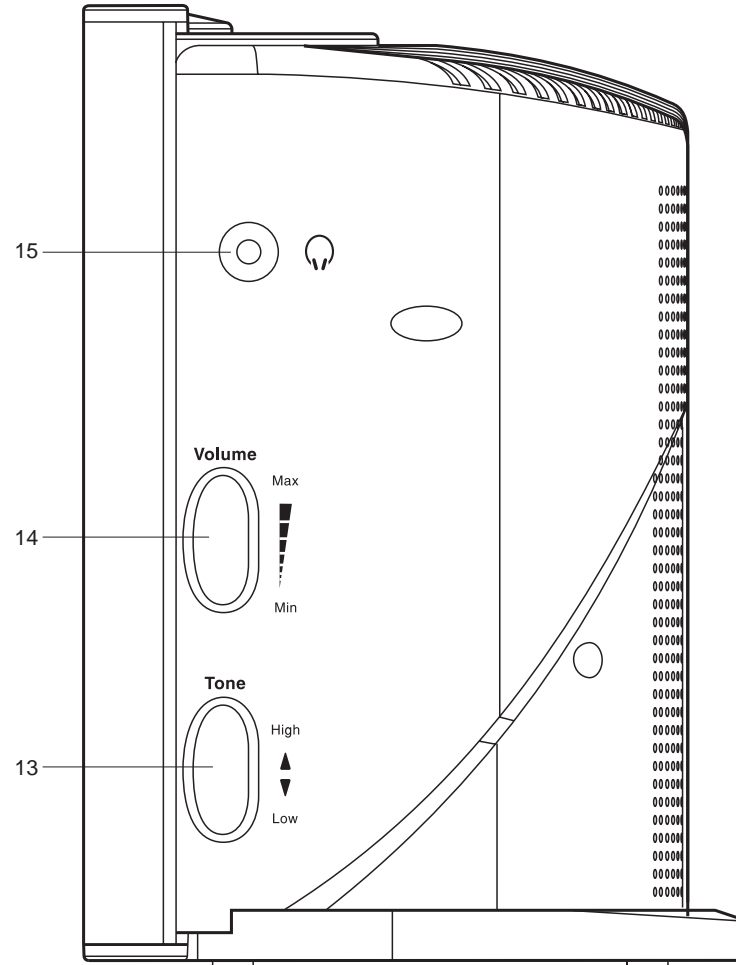


- 5. Date button
- 6. Time button
- 7. Alarm 2 button
- 8. Alarm 1 button
- 9. On/Off and sleep button
- 10. Nap button
- 11. Light button
- 12. Analogue clock

Controls

(Right hand side)

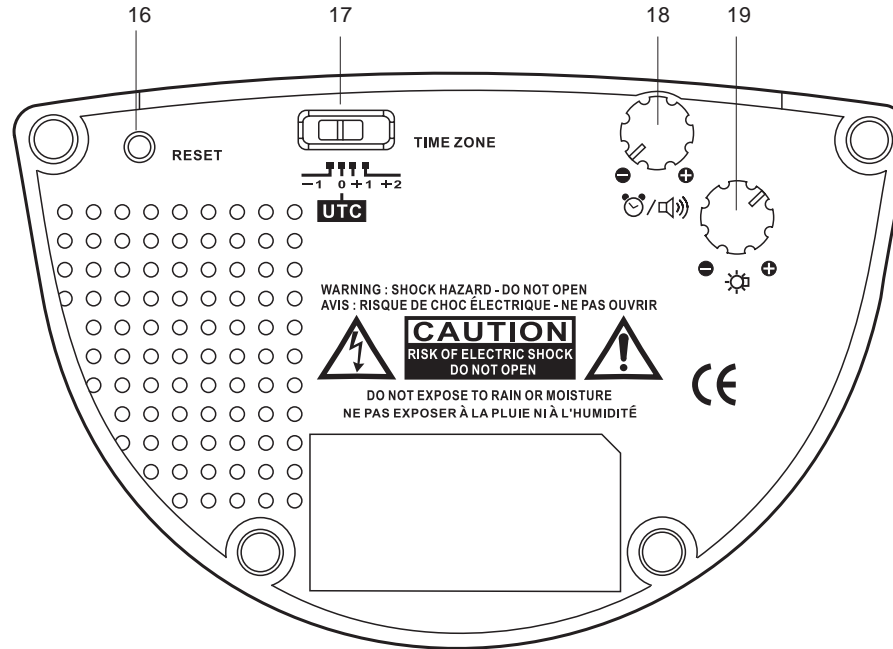
- 13. Tone control
- 14. Volume control
- 15. Headphone socket



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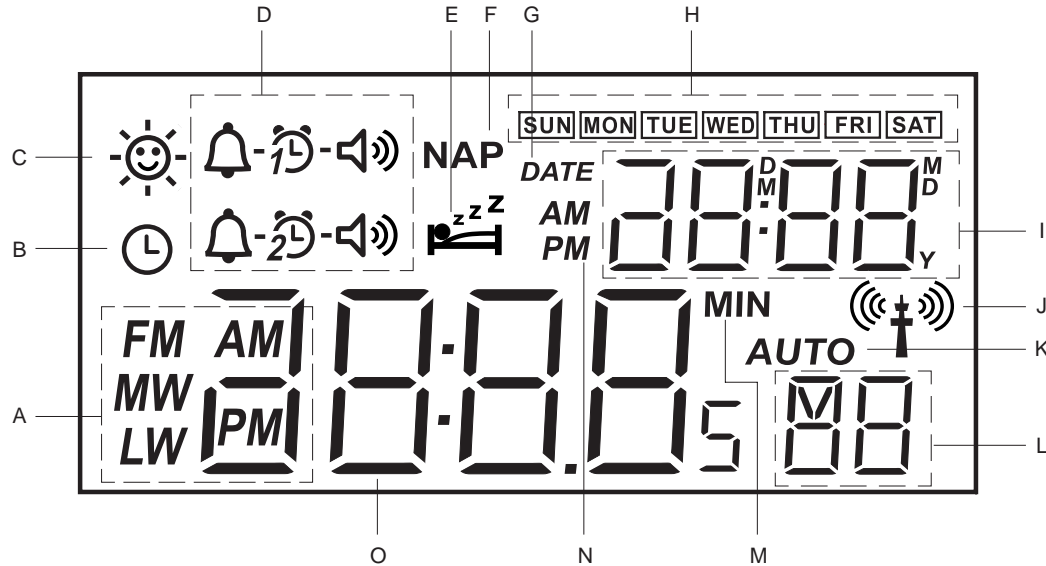
Controls

(Base)



- 16. Reset button
- 17. Time zone switch
- 18. Alarm sound level control
- 19. Display brightness control

Display



- A. Waveband and clock AM/PM indicators
- B. Time set indicator
- C. Summer time indicator
- D. Alarm indicators
- E. Sleep indicator
- F. Nap indicator
- G. Date indicator

- H. Day of week indicators
- I. Month, date, year and alarm time display
- J. MSF indicator
- K. Auto tuning indicator
- L. Memory and seconds indicator
- M. Minute indicator
- N. Alarm AM/PM indicators
- O. Time indicators


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Automatic Tuning System (ATS)

1. Place your radio on a flat surface and connect the mains plug to a wall socket and switch on the wall socket.

When connected to power for the first time or if power is restored after temporary loss the clock hands will set to the 12:00 o'clock position. Automatic tuning system (ATS) will commence. Your clock radio will start searching the FM band followed by MW and finally the LW band. ATS will search and store stations in presets based on signal strength order - up to 7 stations will be stored on FM, 7 on MW and 7 on LW.


Automatic clock setting

1. After ATS completes your clock radio will display **--:--** and the MSF indicator  will flash in the display.

2. After approximately 3 minutes your clock radio will synchronise to the official UK standard time signal transmitter (MSF) located at Rugby in the U.K. The MSF indicator  will stop flashing and the

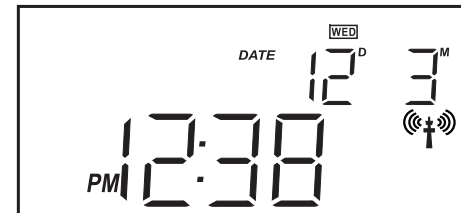
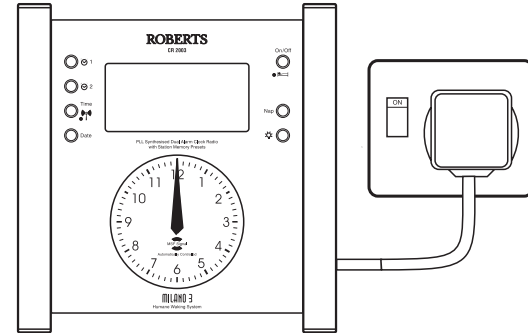
correct time and date will appear in the LCD display.

The analogue clock movement will automatically move the hands to the correct position. **Once synchronised to the radio time signal the LCD and analogue clock will automatically switch from summer to winter time and vice versa.**

3. If the MSF indicator  continues to flash try to re-position your

clock radio so as to improve reception of the radio time signal. (See also section headed Troubleshooting on page 21)

4. If the two clock displays fail to set automatically due to local interference it may be necessary to set the clock manually - see section headed Manual setting of the clock displays.



MSF radio signal


At certain times of the year the MSF radio transmitter closes down for maintenance. During this time the clock will not automatically set (see the section headed Manual setting of the time).

Recorded information on transmitter status can be obtained on 020 8943 6493.

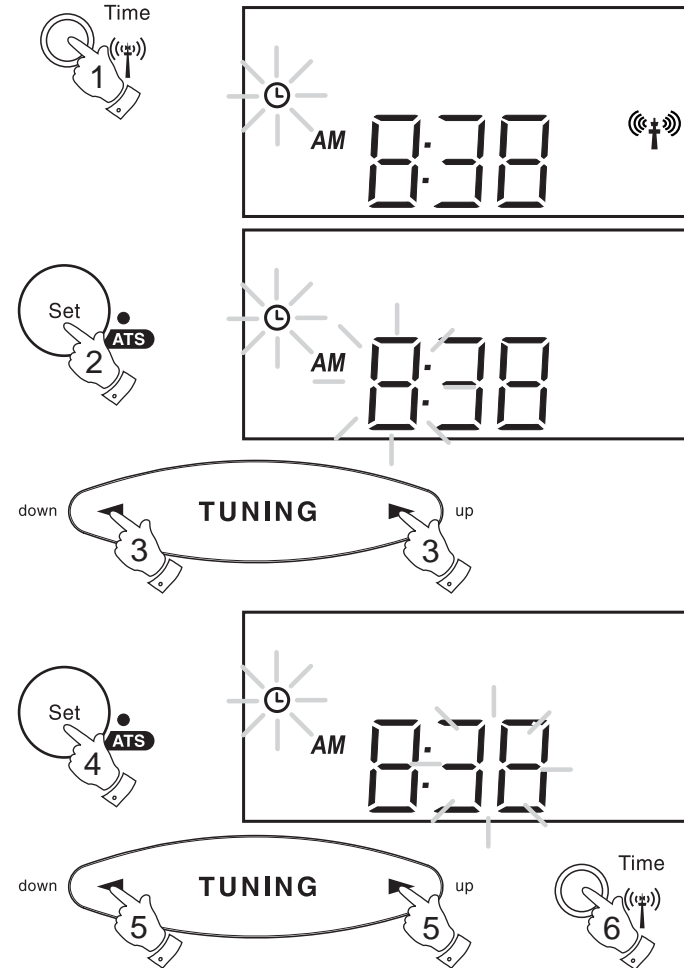
Your clock radio will need to be set manually if the transmitter is closed down when your clock radio is first connected to the mains.

At all other times if the transmitter closes down your clock radio will continue to run on its own highly accurate internal quartz crystal time base.

Manual setting of the clock displays (only if automatic setting fails)

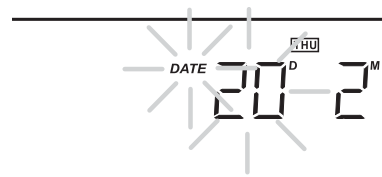
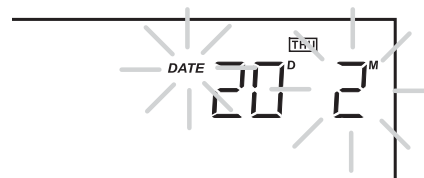
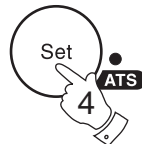
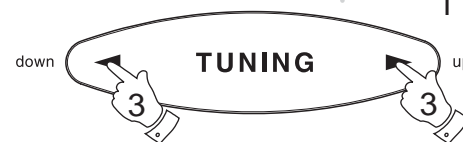
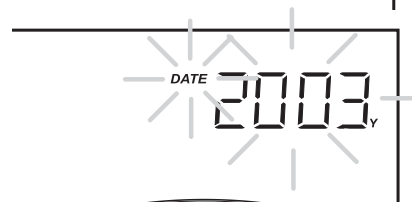
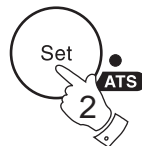
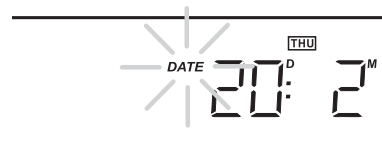
1. Press the **Time button**, display will flash .
2. Press the **Set button**, the hour digits will flash in the display.
3. Press the **up or down button** to adjust the hours. The LCD clock uses a 12 hour display with a **AM/PM indicators**. Please ensure that the correct 12 hour cycle is selected.
4. Press the **Set button**, the minute digits will flash in the display.
5. Press the **up or down button** to adjust the minutes.
6. Press the **Time button** to complete time setting.

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Setting the date (only if automatic setting fails)

1. Press the **Date button**, DATE will flash in the LCD display.
2. Press the **Set button**, Year will flash in the LCD display.
3. Press the **up or down button** to adjust the year.
4. Press the **Set button**, Month will flash in the LCD display.
5. Press the **up or down button** to adjust the month.
6. Press the **Set button**, Day will flash in the LCD display.
7. Press the **up or down button** to adjust the day.
8. Press the **Date button** to complete setting of the date

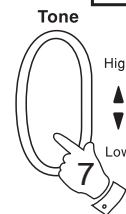
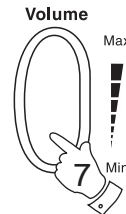
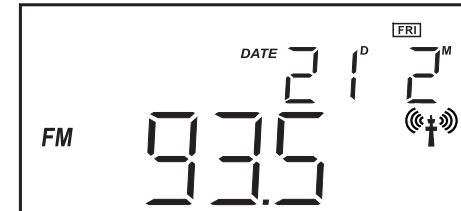
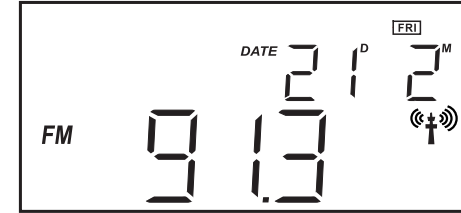
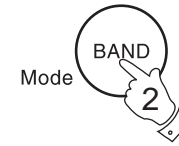


Operating the radio

Your clock radio is equipped with three tuning methods:- Scan tuning, Manual tuning and Memory preset tuning. When switched-on your clock radio will display the waveband and frequency in use.

Scan tuning

1. Press the **On/Off button** to switch on the radio.
2. Select the required waveband by repeatedly pressing the **Band button**. On the FM waveband fully extend the **Wire aerial** located on the rear of your clock radio - for MW and LW rotate your clock radio for best reception.
3. Press and hold down either the **up or down button** buttons for more the 0.5 sec and then release to commence scan tuning.
4. Your radio will scan the selected waveband and stop automatically when it finds a station of sufficient strength. The station frequency will appear in the display.
5. To recommence scan tuning, again press and hold down either the **up or down button** buttons for more the 0.5 sec and then release to recommence scan tuning.
6. When the waveband end is reached the radio will beep and continue tuning from the opposite waveband end.
7. Set the **Volume control** and **Tone controls** to the desired settings.
8. To switch off your radio press the **On/Off button**.



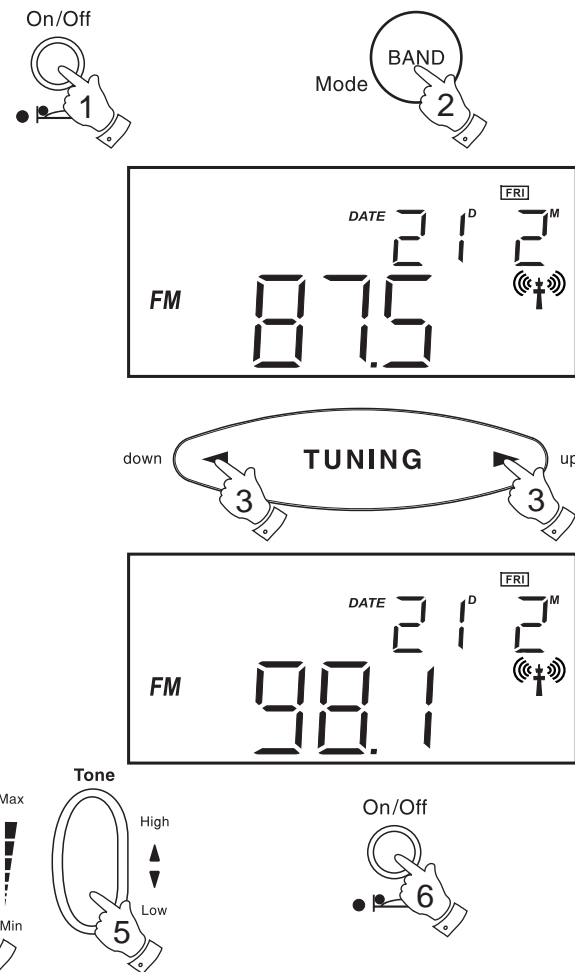
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Manual tuning

1. Press the **On/Off button** to switch on your radio.
2. Select the required waveband by repeatedly pressing the **Band button**. On the FM waveband fully extend the **Wire aerial** located on the rear of your clock radio - for MW and LW rotate your clock radio for best reception.
3. A single press on either the **up or down button** will change the frequency in the following increments:-

FM	50kHz
MW	9kHz
LW	3kHz

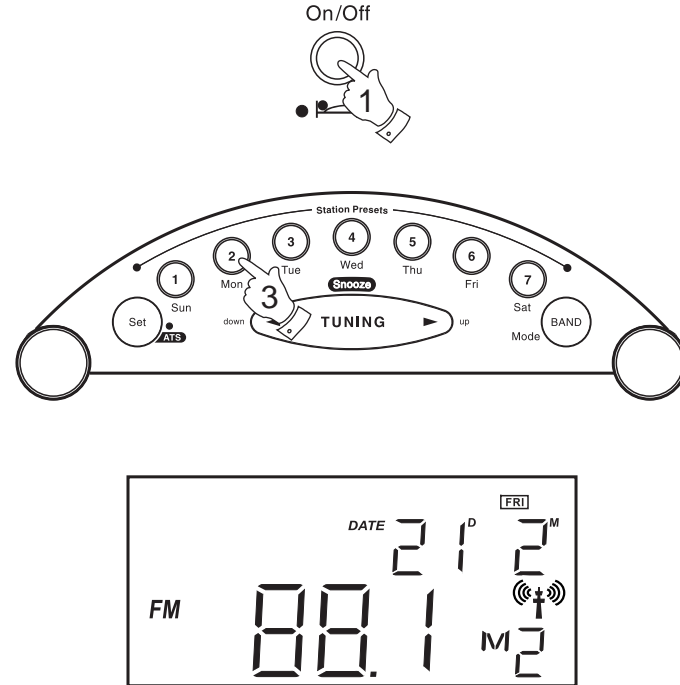
4. When the waveband end is reached the radio will beep and continue tuning from the opposite waveband end.
5. Set the **Volume** and **Tone controls** to the desired settings.
6. To switch off your radio press the **On/Off button**.



Presetting stations

There are 7 memory presets for each of the 3 wavebands.

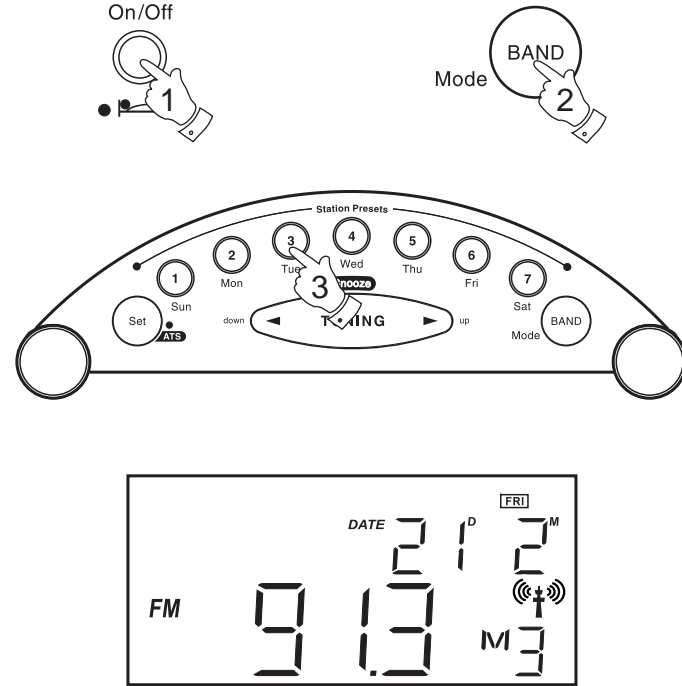
1. Press the **On/Off button** to switch on the radio.
2. Tune to the required station using one of the methods previously described.
3. Press and hold down the required **Preset button** until the radio beeps (greater than 2 seconds) The preset number will appear in the display and the station will be stored under the chosen preset button.
4. Repeat this procedure for the remaining presets.
5. Stations stored in preset memories may be overwritten by following the above procedure.



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Recalling a preset station

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



Alarms

Your clock radio is equipped with two alarms which can be operated independently of each other.

Each of the alarms can be set so that you wake to either the radio or buzzer alarms.

The alarms can be set with the radio switched On or Off.

The LCD and analogue clock displays will change from Amber colour to Blue colour when the alarms sound and during snooze period.

Setting alarms to wake to radio

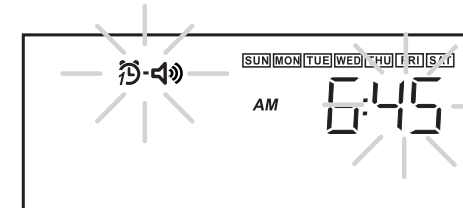
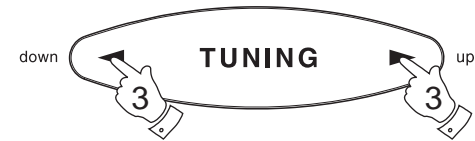
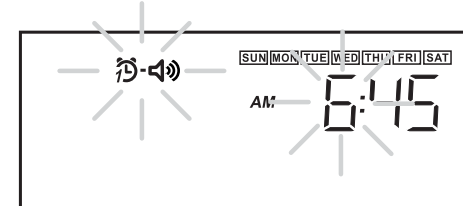
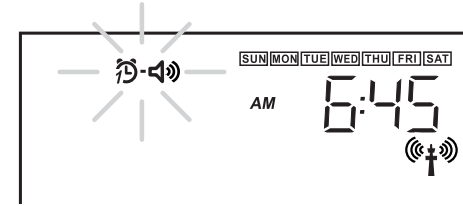
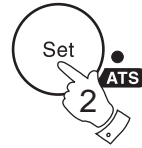
The radio alarm will sound for one hour unless turned off by pressing the **On/Off button**. Pressing the **On/Off button** whilst the alarm is sounding will cancel the alarm for 24 hours.

Note: the radio alarm sound level is controlled by the **Sound level control** (see page 18).



1. Press the **Alarm 1 or Alarm 2 buttons** alarm 1 or alarm 2 time will flash in the display.
2. Press the **Set button**, alarm hour will flash in the display.
3. Press the **up or down button** to adjust the hour. The clock uses a 12 hour display with a **AM/PM indicators**. Please ensure that the correct 12 hour cycle is selected.
4. Press the **Set button**, alarm minute will flash in the display.
5. Press the **up or down button** to adjust the minute.

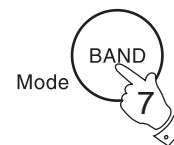
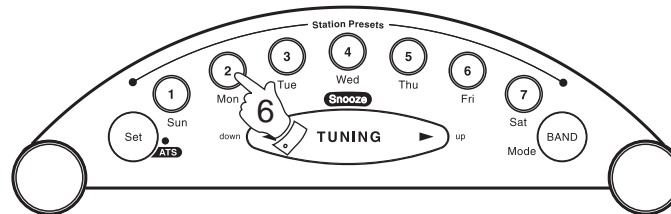
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Setting alarms to wake to radio (continued)

6. Press the **Day of week** buttons to select required days of week on which the alarm will sound. Display will show day of week on which alarm will sound e.g. **MON TUE WED THU FRI**
7. Repeatedly press and release **Mode button** until the radio alarm symbol  or  appears in the display.
8. Press the **Alarm 1 or Alarm 2** buttons to complete setting of the radio alarm time.
note: the alarm symbols will remain on the display showing alarm or alarms have been set.
9. Tune into the station that you wish to wake up to. Press and hold down the **Alarm 1 or Alarm 2** buttons until a beep sound is heard.
10. Press the **On/Off button** to switch off the radio.
11. Your clock radio will switch on at the preset alarm time tuned to the station selected in step 9.



Setting alarms to wake to buzzer

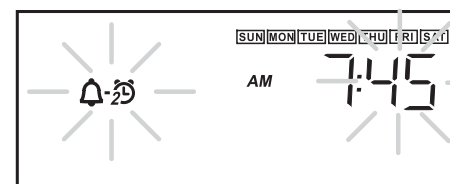
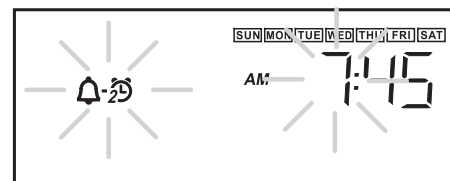
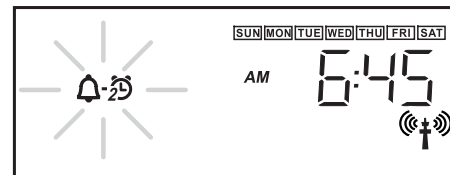
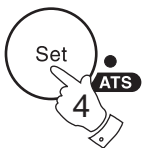
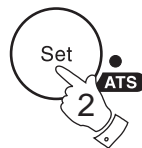
A beep tone will sound when using the buzzer alarm. The alarm beep will increase in volume every 15 seconds for one minute followed by one minutes silence before repeating the cycle.

The buzzer alarm will sound for one hour unless turned off by pressing the **On/Off button**. Pressing the **On/Off button** whilst the alarm is sounding will cancel the alarm for 24 hours.

Note: the buzzer alarm sound level is controlled by the **Sound level control** (see page 18)



1. Press the **Alarm 1 or Alarm 2 buttons** alarm 1 or alarm 2 time will flash in the display.
2. Press the **Set button**, alarm hour will flash in the display.
3. Press the **up or down button** to adjust the hour. The clock uses a 12 hour display with a **AM/PM indicators**. Please ensure that the correct 12 hour cycle is selected.
4. Press the **Set button**, minute will flash in the display.
5. Press the **up or down button** to adjust the minute.

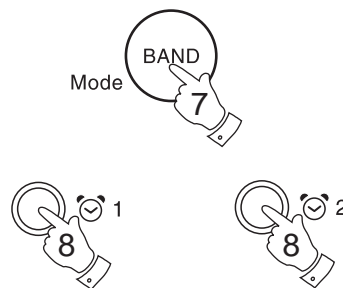
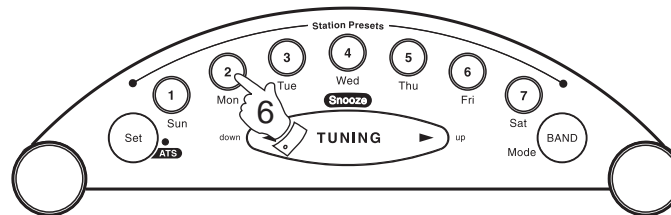
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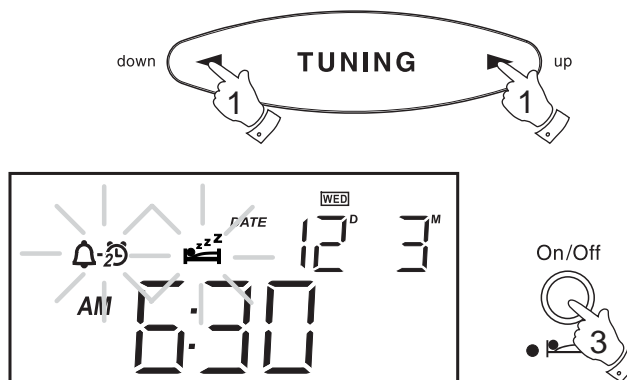
Setting alarms to wake to buzzer (continued)

- Press the **Day of week** buttons to select required days of week on which the alarm will sound. Display will show day of week on which alarm will sound e.g. **MON TUE WED THU FRI**
- Repeatedly press and release **Mode button** until the buzzer alarm symbol  or  appears in the display.
- Press the **Alarm 1 or Alarm 2** to confirm setting of the buzzer alarm time.
note: the alarm symbols will remain on the display showing alarm or alarms have been set.







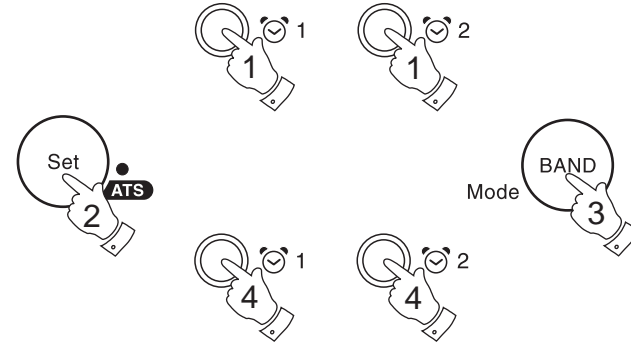
Snooze function

- Whilst an alarm is sounding press the **up or down button** to activate the snooze function. The Radio or Buzzer alarms will be silenced for 5 minutes.
- The Display will flash both the snooze symbol  and the alarm symbol. The snooze function can be repeated during the period that the alarms are active.
- Press the **On/Off button** to cancel the snooze function.



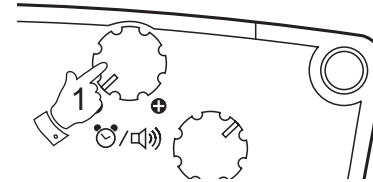
Cancelling alarms

1. Press the **Alarm 1 or Alarm 2 buttons** (depending on which alarm you wish to cancel).
2. Press the **Set button** the alarm symbols will flash in the display.
3. Repeatedly press and release **Mode button** until only the  or  symbols appear in the display.
4. Press the **Alarm 1 or Alarm 2 button** to confirm cancellation of alarms. Alarm symbols  or  will disappear from the display after 3 seconds indicating alarms have been cancelled.



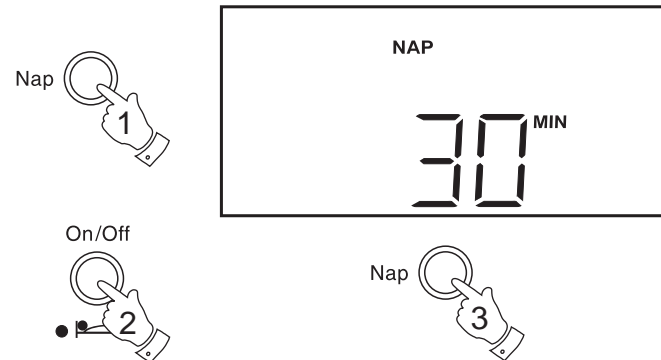
Alarm sound level control

1. The alarm sound level on both radio and buzzer alarms can be adjusted using the **Alarm sound level control** located on the underside of your clock radio.



Nap timer




1. The Nap timer is a short term alarm which can be set for a delay of 10-120 minutes in 10 minute steps. Press and release the **Nap button** until the required Nap time is shown on the display. The buzzer alarm will sound after the Nap time has elapsed.
2. Press the **On/Off button** to silence the Nap buzzer alarm
3. The Nap timer can be cancelled before the Nap time has elapsed by pressing and releasing the **Nap button** until the word OFF appears in the display.

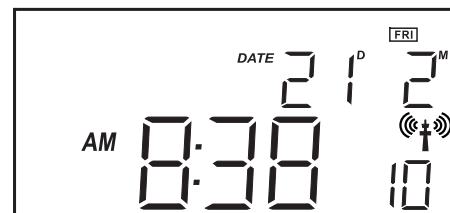
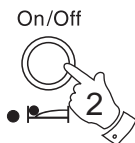
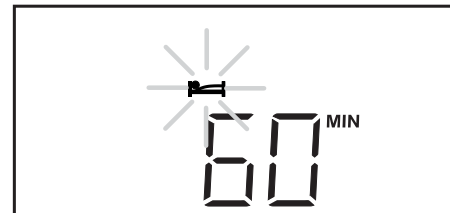


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Sleep timer


The sleep timer will automatically switch off your clock radio after a preset time has elapsed. The sleep time is adjustable from 15-120 minutes in 15 minute steps.

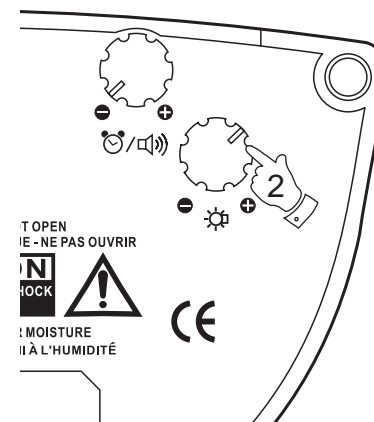
1. Press and continue to hold down the  **button** and the display will cycle through the available sleep times. Release the button when the required sleep time appears in the display. The  symbol will appear in the display and the radio will play the last station selected.
2. To cancel the sleep function, press the **On/Off button**, the  symbol will disappear and the display will revert to showing real time.



Display back light

The display backlight can be set to high brightness or low brightness mode.

1. Press the  button to toggle between the two modes.
2. The low brightness mode is controlled using the **Brightness control** located on the underside of your clock radio.

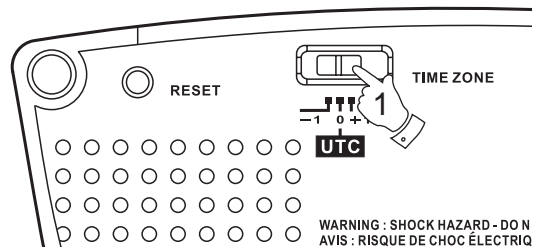


Time zone switch

1. The **Time zone switch** is used to provide offsets of -1 to +2 hours relative to GMT (UTC).

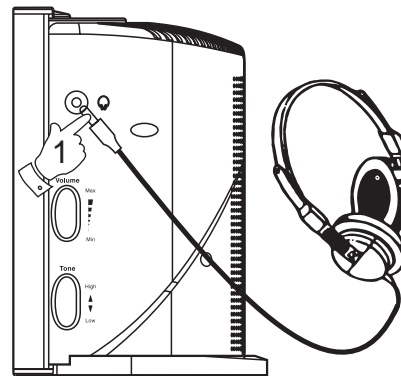
This facility would only be used if your clock radio is used in another country that is within range of the UK time signal transmitter e.g. France where the time is GMT (UTC) +1.

For normal operation within UK please ensure the **Time zone switch** is set to the 0 UTC position (factory set position).



Headphone socket

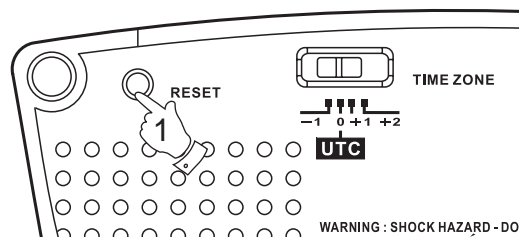
1. A 3.5mm **Headphone Socket** located on the right-hand end of your clock radio is provided for use with either headphones or an earpiece. Inserting a plug automatically mutes the internal loudspeaker.



Reset


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

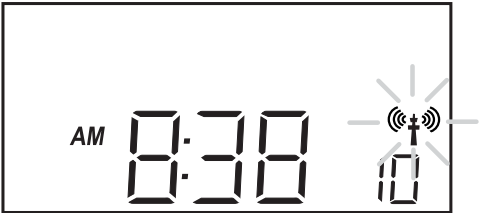
1. With the aid of a suitable implement (the end of a paper clip) press the reset button located on the underside of your radio for at least 3 seconds, this will reset the microprocessor, clock time and clear all stations stored in preset memory.



If you need any further advice, please call our Technical Helpline on :-
020 8758 0338 (Mon-Fri)

Troubleshooting

- 1. If the time does not set automatically it may be necessary to rotate your clock radio to a position giving better reception of the MSF signal.
- 2. It is recommended that your clock radio is placed as far away as possible from any sources of interference such as computers or televisions, etc.
- 3. To re-synchronise with the MSF time signal, press and hold down the time button until your clock radio beeps. The MSF indicator  will flash whilst synchronisation takes place. Synchronisation is complete when the MSF indicator stops flashing.



At certain times of the year the MSF transmitter closes down for maintenance. During this time the clock will not automatically set (see the section headed Manual setting of the clock displays).

Recorded information on MSF transmitter status can be obtained on 020 8943 6493.

Specifications

Power Requirements

Mains AC 230 volts, 50Hz  only

Output Power 800 mW
Headphone socket 3.5mm dia

Frequency Coverage

FM 87.5-108MHz
MW 522- 1629kHz
LW 153- 279kHz

Aerial System FM Wire aerial
MW Built-in Ferrite aerial
LW Built-in Ferrite aerial

Loudspeaker 75mm x 100mm 4ohms

General

Do not allow this unit to be exposed to moisture (e.g. dripping or splashing). It is recommended that the FM band be used wherever possible as better results in terms of quality and freedom from interference will usually be obtained than on the MW or LW bands.

Mains supply

The CR2003 will operate from a supply of AC 230volts, 50Hz \sim only.

For your convenience this product is supplied with a plug which is fitted with a fuse of the appropriate rating. If the plug supplied is not suitable for your socket outlet, it should be removed by unscrewing the plug top, the terminal screws and removing the cable.

The correct style of plug to suit your household together with a correctly rated fuse should be fitted.

IF IN DOUBT - CONSULT A QUALIFIED ELECTRICIAN

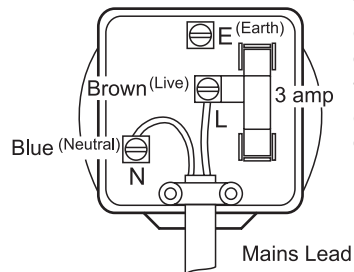
IMPORTANT. DO NOT make any connection to the larger terminal which is marked with the letter E or by the safety earth symbol \perp or coloured Green or Green-and-yellow.

The wires in the mains lead are coloured in accordance with the following codes :-

BLUE - NEUTRAL

BROWN - LIVE

As these colours may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:-



The wire coloured BLUE must be connected to the terminal marked N or coloured BLACK.

The wire coloured BROWN must be connected to the terminal marked L or coloured RED.

*If you need any further advice, please call our Technical Helpline on :-
020 8758 0338 (Mon-Fri)*

Fuse

This apparatus must be protected by a 3A fuse (BS1362) in a 13A plug (BS1363). If another type of plug is used a 5A fuse should be fitted in the plug, adaptor or distribution board.

IF IN DOUBT - CONSULT A QUALIFIED ELECTRICIAN.

Guarantee

This instrument is guaranteed for twelve months from the date of delivery to the original owner against failure due to faulty workmanship or component breakdown, subject to the procedure stated below. Should any component or part fail during this guarantee period it will be repaired or replaced free of charge.

The guarantee does not cover:

1. Damage resulting from incorrect use.
2. Consequential damage.
3. Receivers with removed or defaced serial numbers.

Procedure:

Any claim under this guarantee should be made through the dealer from whom the instrument was purchased. It is likely that your Roberts' dealer will be able to attend to any defect quickly and efficiently, but should it be necessary the dealer will return the instrument to the company's service department for attention. In the event that it is not possible to return the instrument to the Roberts' dealer from whom it was purchased, please contact Roberts Radio Technical Services at the address shown below.

ROBERTS RADIO TECHNICAL SERVICES

97-99 Worton Road
Isleworth Middlesex
TW7 6EG

