

Canford Radio Controlled Clocks



- 58-561 CANFORD RADIO-CONTROLLED CLOCK MSF 250mm, white case, stepped second hand
- 58-563 CANFORD RADIO-CONTROLLED CLOCK MSF 300mm, white case, stepped second hand
- 58-560 CANFORD RADIO-CONTROLLED CLOCK MSF 300mm, white case, sweep second hand
- 58-570 CANFORD RADIO-CONTROLLED CLOCK MSF 300mm, white case, stepped second hand, extended runtime
- 58-569 CANFORD RADIO-CONTROLLED BROADCASTERS CLOCK MSF 300mm, white case, stepped second hand

Independent clocks, taking their reference from the clock at the National Physical Laboratory, Teddington, which is transmitted by VT Communications from Anthorn Radio Station at Cumbria, UK as a 'time-code' on 60kHz long wave (known as 'MSF'). The clock will operate in any location where reasonable long wave reception is possible, within a range of up to 600 miles from Cumbria. The clock controller receives and decodes the coded time signals, and uses these to verify the accuracy of its own internal precision timebase. As the time signal is coded, it automatically resets the clock for British Summer Time.

Available with 250mm or 300 mm diameter white cases, white dials with black numerals. They have a red, stepped or sweep second-hand, and require 1 x AA size battery (supplied). Extended runtime version is similar, but uses 4 x AA size batteries (supplied) and gives up to 4 years operation before battery change.

Broadcasters Clock

A special model with 300mm diameter white case. The dial has ten-seconds-to-the-hour countdown graphics.

Instructions

Insert battery/batteries ensuring correct polarity

The clock will carry out a 'fast forward' test before stopping at a pre-determined time, (usually 12 o' clock).

Once the clock has 'locked on' to the time signal it will advance to the correct time, note this *may* take some time so best left overnight before investigating any potential problems.

The clock synchronises daily to the time signal ensuing accurate time display as well as accommodating summer/winter time changes.

Battery should be changed annually, (every 4 years for extended runtime clock), using good quality AA alkaline cells.

Troubleshooting

The MSF time and date signal has a signal strength in excess of 100uV/m. The signal level should be sufficient to allow time code reception throughout the UK but localised environmental conditions may inhibit such. Typical scenarios that inhibit reception include:

Locations within building structures with a steel frame, steel re-enforced concrete and metal cladding constructions.

Locations nearby pylons, scaffolding and overhead power cables

Locations nearby localised interference such as electric motors, fluorescent tubes, CRT computer and TV screens.

When experiencing reception difficulties first check that the MSF time signal is currently active. Maintenance outages reported here:

<http://www.npl.co.uk/science-technology/time-frequency/products-and-services/time/msf-outages>

Suggestions to improve reception

If the clock is not operating correctly ensure the unit has a fresh battery installed.

If the clock is located deep within a building and isn't 'locking on' to the MSF time signal, try leaving the clock overnight on a window ledge on the peripheral of the building to aid reception and move back to its display position when synchronisation takes place.

You may need to try different mounting locations within the room/building to ensure good signal reception if problems persist.

Try rotating the clock 90 degrees if reception is unreliable. The radio-controlled clocks have an internal antenna that picks up the signal most effectively when it is facing directly towards or away from the Anthorn radio station.

The following link may provide further assistance/information:

<http://www.npl.co.uk/science-technology/time-frequency/time/faqs/>

