

## 58-577 CANFORD RADIO-CONTROLLED DESK CLOCK MSF

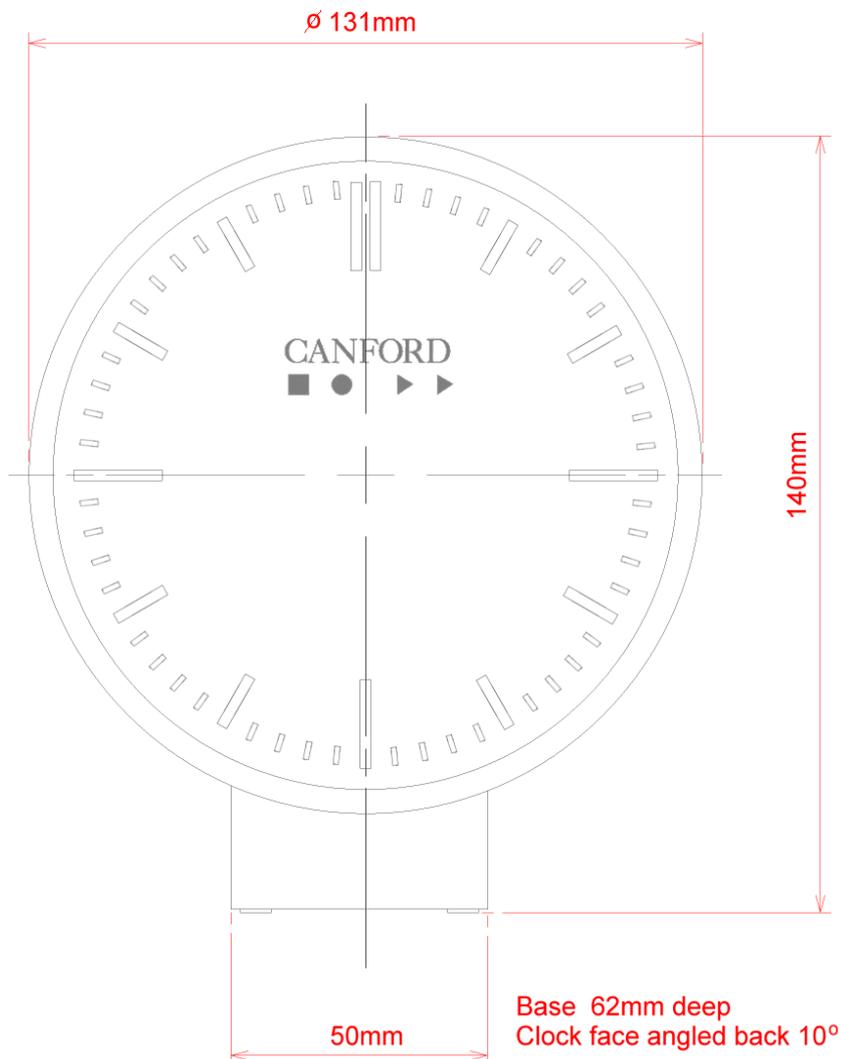


Free-standing, battery-powered clock, ideal for use on outside broadcasts when time accuracy is required.

Avoids on-air embarrassment caused when temporarily rigged wall clocks fall off in mid programme. White face and black hands, face diameter 131mm. This clock takes its reference from the UK master clock at the National Physical Laboratory, Teddington, which is transmitted by VT Communications from Anthon Radio Station in Cumbria, UK, as a 'time-code' on 60kHz long wave. 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.

Uses 1 x AA size battery (supplied).

### Dimensions:



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### 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/>