

# TRACEABLE® ANALOG RADIO ATOMIC WALL CLOCK INSTRUCTIONS

## SPECIFICATIONS

Receiver:	Integrated radio receiver for reception of the time signal
Internal Timing:	Quartz Crystal
Accuracy:	1/10,000 of a second when receiving signal
Signal Reception:	Seven (7) times per day

## OPERATION

The clock contains a pre-tuned internal radio receiver that receives a 60 kHz frequency signal generated by the U.S. Atomic Clock. The U.S. Atomic Clock is located in Boulder, Colorado and is operated by NIST (National Institute of Standards and Technology).

Prior to installing the battery, slide the time zone switch to the desired time zone:

P = Pacific Standard Time  
M = Mountain Standard Time  
C = Central Standard Time  
E = Eastern Standard Time

Once the desired time zone has been selected, install the battery. Upon installation of the battery, the clock will activate its receiver and initiate signal reception (See the "Signal Reception" section).

## SIGNAL RECEPTION

Upon installation of the battery, or upon pressing the REC button, the clock will initiate signal reception:

The seconds hand will advance rapidly and stop near the 12 o'clock position.

The minutes hand advance rapidly and stop near the 12 o'clock position once the hours hand reaches the 12, 4, or 8 o'clock position (whichever is closest).

The clock will attempt to receive the Atomic Clock signal every hour over the next 24 hours. While attempting to receive the signal during the first 24 hours, the clock hands will not move until a complete signal has been received.

The clock may not receive a signal immediately. It may take as long as 24 hours to receive a complete signal from the Atomic Clock. Best reception often occurs between midnight and 4 a.m.

Upon successful reception of the signal from the Atomic Clock, the clock will display the correct time and will attempt to receive the signal seven times per day and make any necessary adjustments.

If the clock is unable to receive a complete signal within the first 24 hours, the clock hands will start moving; however, the incorrect time will be displayed. After 24 hours, if the clock hands are moving and displaying the incorrect time, the clock should be moved to a different location that provides for better signal reception (See the "Manually Initiating Signal Reception" section).

The successful reception of the Atomic Clock signal is dependent upon the positioning and location of the clock. Insufficient signal strength or external electrical interference may prevent the clock from receiving a complete signal. The main causes for poor reception are heavily reinforced concrete and steel structures, structures with few or no windows, and/or placement of the clock close to video or PC monitors. There are certain areas of the Eastern United States where urban interference or signals from the United Kingdom's Atomic Clock may distort or interfere with the signal from the U.S. Atomic Clock.

## MANUALLY INITIATING SIGNAL RECEPTION

When the clock is moved to a new location, it is recommended that you manually initial signal reception to insure that the clock will receive a complete signal in the new location.

To manually initiate signal reception, press and hold the REC button until the seconds hand begins to advance rapidly (See the "Signal Reception" section). Pressing the REC button while the clock is already in signal reception mode will have no affect.

## DAYLIGHT SAVING TIME

The DST switch should remain in the ON position unless the clock is being utilized in a location that does not observe Daylight Savings Time. For locations that do not observe Daylight Savings Time, slide the DST switch to the OFF position.

## MANUAL CLOCK SETTING

Setting the clock manually is only recommended if the clock is being utilized in a location that is unable to receive a signal from the Atomic Clock.

To set the clock manually, press and hold the M.SET button until the correct time appears on the clock.

## ALL OPERATIONAL DIFFICULTIES

If this clock does not function properly for any reason, replace the battery with a new high quality battery (see "Battery Replacement" section). Low battery power can occasionally cause any number of "apparent" operational difficulties. Replacing the battery with a new fresh battery will solve most difficulties.

## BATTERY REPLACEMENT

Open the battery cover door. Remove the exhausted battery and replace with a new AA alkaline battery. Close the battery cover door. Upon installation of the battery, the clock automatically initiates signal reception (See the "Signal Reception" section).

## WARRANTY, SERVICE, OR RECALIBRATION

For warranty, service, or recalibration, contact:

### CONTROL COMPANY

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Control Company is ISO 9001 Quality-Certified by DNV and ISO 17025 accredited as a Calibration Laboratory by A2LA.