

# TRACEABLE® DIGITAL RADIO ATOMIC WALL CLOCK INSTRUCTIONS

## SPECIFICATIONS:

Display: 3<sup>5</sup>/<sub>8</sub>" LCD  
Timing Resolution: 1-second  
Timing Accuracy: 0.0001%  
Temperature Range: 32°F to 122°F (-5 to 50°C)  
Temperature Resolution: 0.1  
Size/Weight: 8<sup>1</sup>/<sub>2</sub> x 9<sup>1</sup>/<sub>4</sub> x 3<sup>3</sup>/<sub>4</sub>", 1.1 lb.  
Features: 12/24-hour selectable, °F/°C selectable,  
Giant easy-to-read display, No AC  
requirements, Timing traceable to NIST

## QUICK REFERENCE

1. **°C/°F Button** Push to toggle between degrees Celsius (°C) and degrees Fahrenheit (°F).
2. **Reset Button** Push when clock is displaying irrelevant time even when "Wave Signal" is okay.
3. **MONTH/HR** Push to change month in calendar mode or hour in time set mode.
4. **DATE/MIN** Push to change date in calendar mode or minutes in time set mode.
5. **YEAR/12/24HR** Push to choose year in calendar mode or 12/24-hour time format in time set mode
6. **LOCK/TIME SET/CALENDAR** Slide switch to manually set time or calendar, slide to lock position to save settings.
7. **ON/OFF/DST** Slide switch to change clock to daylight savings time
8. **PST/MST/CST/EST** Slide switch to choose appropriate time zone
9. **Battery Compartment** accommodates two AA batteries.



Figure 1. Digital Radio Atomic Wall Clock (front view)

## OPERATION

This unit 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).

Upon installation of the batteries, the unit automatically activates its receiver. It attempts to receive the signal every four (4) hours and make any necessary changes to the display.

You may not receive a signal immediately. It may take as long as 72 hours to receive a complete signal from the Atomic

Clock. While the unit is attempting to receive a complete signal for the first time, the clock may be set manually (see "Manual Clock Setting" section). Best signal reception often occurs between midnight and 4 a.m.

Successful reception of the Atomic Clock signal is dependent upon positioning and location of the unit. Insufficient signal strength or external electrical interference may prevent unit from receiving a complete signal. Main causes for poor reception are heavily reinforced concrete and steel structures and/or placement of unit close to video or PC monitors. Certain areas of Eastern United States may experience urban interference from United Kingdom's Atomic Clock that distort or interfere with the signal from U.S. Atomic Clock.

## INSTALLING BATTERIES

1. Lift the battery compartment door on back of unit.
2. Insert 2 AA Alkaline batteries using +/- signs inside battery compartment for correct placement.

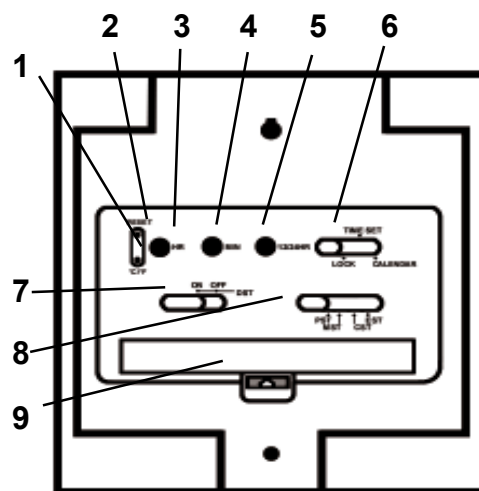


Figure 2. Digital Radio Atomic Wall Clock (back view)

**NOTE:** After installing batteries, you may wish to manually set all functions. Instructions follow for setting calendar, time and temperature preferences.

## SETTING CALENDAR

This unit constantly displays the current month, date and day of the week.

To set the calendar:

1. On back of the unit, slide the LOCK/TIME SET/CALENDAR switch to the CALENDAR position.
2. Press MONTH, DATE, and YEAR buttons until the correct settings are displayed.
3. Slide the LOCK/TIME SET/CALENDAR switch to the LOCK position.

**NOTE:** An incorrect calendar setting will automatically be adjusted (i.e., April 31 will be adjusted to April 1 and with the exception of a Leap Year - February 29 will be adjusted to February 1).

**NOTE:** Year is not viewable in LOCK or TIME SET mode. To view year, switch to CALENDAR position.

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## TRACEABLE® DIGITAL RADIO ATOMIC WALL CLOCK INSTRUCTIONS (continued from previous page)

Calendar/Thermometer Clock displays the current time of day in either 12- or 24-hour format. To set:

1. Slide the LOCK/TIME SET/CALENDAR switch to TIME SET position.
2. On the back of the unit slide the time zone switch to the appropriate position (i.e. EST, CST, MST or PST).
3. Slide the DST (Daylight Savings Time) to the ON position unless you are in an area without Daylight Savings Time (i.e. parts of Arizona and Indiana).
4. On the back of the unit, press the 12/24 HR button to select between a 12-hour (A.M./P.M.) and a 24-hour (international) time format.
5. Press the HOUR and MIN buttons until the current time is displayed.
6. Slide the LOCK/TIME SET/CALENDAR switch to the LOCK position.

### SETTING TEMPERATURE

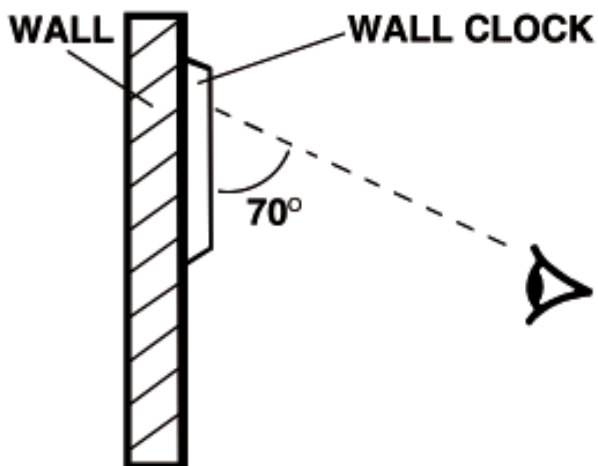
This unit constantly displays the current room temperature in either degrees Fahrenheit (°F) or degrees Celsius (°C). To choose a temperature scale depress °C/°F button on the back of the unit with the tip of a pen until the desired temperature scale (°C or °F) is displayed on front of the unit. Each press of the °C/°F button toggles between degrees Celsius and degrees Fahrenheit.

### TROUBLESHOOTING

If external "noise" is severe, the clock may display irrelevant time even when the "Wave Symbol" shows that reception is good. Press the RESET button on the back of the unit with the tip of a pen or the "wave" button on the bottom of the clock. The clock will start to search for the signal and reset itself.

### ON A WALL

This clock is supplied with a screw for hanging on a wall. For best viewing of the LCD, hang the clock at a minimum height of 6 foot 5 inches to obtain the viewing angle of approximately 70° as indicated.



### CARE AND MAINTENANCE

This product is engineered to provide years of satisfactory service if handled carefully. Here are a few precautions:

1. Never use chemicals such as benzene or petroleum-based solvents for cleaning, as they may damage the case.
2. Do NOT expose the clock to direct sunlight, spotlight, or extremely hot or cold temperatures.
3. Clean the case by using a cloth slightly dampened with water and wipe dry.

### OPERATIONAL DIFFICULTIES

If this clock does not function properly for any reason, replace the batteries with new, high-quality batteries (see "Battery Replacement" section). Low battery power can occasionally cause any number of "apparent" operational difficulties, such as screen dimming or difficulty in reading the display. Replacing the batteries with new, fresh batteries will solve most difficulties.

### BATTERY REPLACEMENT

Erratic readings, a faint display, or no display are indicators that the batteries must be replaced. Lift the battery compartment door on back of unit. Remove the exhausted batteries and replace with two new AA alkaline batteries. Replace the battery compartment door. The clock will start running from 12:00 a.m., January 1, 1999.

### WARRANTY, SERVICE, OR RECALIBRATION

For warranty, service, or recalibration contact:

## CONTROL COMPANY

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Fax 281-482-9448  
E-mail sales@control3.com  
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Control Company is  
ISO 9001 Quality-Certified by DNV  
and ISO 17025 accredited as a  
Calibration Laboratory by A2LA.

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