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- A** Manual Time Setting Button
- B** Time Zone Selection Buttons
- C** Daylight Saving Time Button

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BATTERIES

Explanation: Many problems are resolved with fresh batteries of the appropriate voltage. Many items sent in under warranty work, when tested with fresh batteries. Batteries manufactured this year will have an expiration date 10 years (or more) in the future. Battery technology has improved and batteries will maintain voltage longer in storage. However, the environment the batteries reside in for the 10 years can deplete the power.

- ✓ We suggest a name-brand Alkaline battery.
- ✓ A minimum voltage of 1.48V is necessary for proper performance.
- ✓ Use a battery dated at least six years in advance of the current year. Batteries dated earlier than six years from now may still work, but may be unstable in performance.
- ✓ Good name-brand batteries make less noise, which reduces the chance of RF (radio frequency) interference from the battery compartment.

ATOMIC CLOCK FACTORY RESTART

Explanation: The factory restart returns the atomic clock to an “out-of-the-box” state and often resolves an issue.

Factory Restart:

1. Remove the battery from the clock for 15 minutes.
2. Press the Set button at least 20 times to clear all memory.
3. Slide the switch to select a time zone.
4. Insert 1 fresh AA, LR6 1.5 volt ALKALINE battery according to the polarity marked on the case.
5. Position the clock on an exterior wall that faces Ft. Collins Colorado. During the night, your clock will automatically set itself.

Note: The hands will move to the 12:00 position and search for the radio signal. If the clock does not receive the radio signal in the first 10 minutes, **the clock will start running from the 12:00 position and will continue to run.** Do not attempt to reset the hands manually even though the time on the clock is incorrect. The clock is synchronizing to the WWVB signal and once the radio signal is decoded, the hands will automatically adjust to the correct time. This may take up to 5 nights.

SUPPORTED TIME ZONES

- ✓ This atomic clock offers four time zones: Pacific, Mountain, Central and Eastern.
- ✓ The manufacturer does not make an analog clock with more than four time zones.
- ✓ The atomic clock works in North America.
- ✓ Outside of North America, the atomic clock will not receive a WWVB signal, but will keep time as a quartz clock if manually set.

TIME IS INCORRECT

- ✓ Indicative of non-receipt of WWVB signal

- ✓ Electrical storms between you and Colorado can interfere with the WWVB signal
- ✓ Replace battery and perform restart procedure. Allow up to 5 days to receive a signal.
- ✓ Reposition the atomic clock with the front or back facing Colorado.
- ✓ Try a different location, ideally near a window. The clock should be at least six feet from computers, TVs, air conditioners, other atomic clocks and other electrical appliances that cause interference.
- ✓ Large buildings, metal roofed buildings and buildings or rooms full of electrical and/or radio equipment make it difficult to receive the WWVB time signal.

CLOCK IS INCORRECT BY HOURS BUT MINUTES ARE CORRECT

- ✓ This is a Time Zone issue. Hold your Time Zone button for 5 seconds. The clock should correct itself.
- ✓ Check that DST is on. Press and release the small, unmarked gray button between the ET and CT button one time.

DAYLIGHT SAVING TIME

- ✓ Dependent on your location, the position of the clock in your home, and atmospheric interference, it may take up to 5 nights for the change from Daylight Savings Time to Standard Time and vice-versa to occur.
- ✓ Check that the DST selector bar is in the ON position.
- ✓ Check for fresh batteries. Without proper batteries, the antenna will have a harder time picking up the signal.
- ✓ Position the atomic clock in a window (with the front or back) facing Ft. Collins, Colorado and leave for up to five nights. If you do not have a window facing this direction, position the clock near an outside wall and point the unit in this general direction.

MANUALLY SET TIME

Note: Allow up to five nights for the clock to receive the WWVB signal **before** manually setting the time.

Set the clock manually:

1. Hold the SET button for 3+ seconds to activate the manual mode. Once the clock is in manual mode, there are two ways to move the minute hand forward.
2. Hold the SET button down to move the minute hand forward consistently.
3. Alternatively, press and release the SET button rapidly (more than once per second) to move the minute hand forward step by step (in minute increments).
4. Use these features to move the minute hand forward until the correct time is set. The clock will automatically leave manual mode after the SET button is not pressed for 6+ seconds.

HOW LONG WILL THE BATTERY LAST?

- ✓ A good AA Alkaline battery will last over 12 months.

CAN I SHUT OFF THE WWVB SIGNAL?

- ✓ No. If you manually set the time, when the clock receives a WWVB signal, that signal will override the manual set.

IS THERE A BOOSTER ANTENNA TO RECEIVE THE WWVB SIGNAL IN A DIFFICULT LOCATION?

- ✓ No, the clock cannot work with a booster antenna.
- ✓ Opening the clock or movement voids the warranty.

CAN I WIRE A CONTROL TIMING CIRCUIT TO THIS ATOMIC CLOCK?

- ✓ No, the clock cannot work on a timing circuit.
- ✓ Opening the clock voids the warranty.

WHY DO THE HANDS SPIN ONCE OR TWICE EVERYDAY?

- ✓ When the hands spin about the same time every day the clock is auto-correcting the time. The **hour hand** should not spin more than twice around the clock.
- ✓ Hands may spin if the battery is underpowered or over powered.
- ✓ Use only Alkaline batteries in the clock.

HANDS SPIN NON-STOP

- ✓ This is indicative of a low or overpowered battery (number 1 warranty issue).
- ✓ Replace battery and perform restart procedure. Allow 5 days to catch the WWVB signal
- ✓ If constant spinning continues, the movement may need replacement.

HANDS JUMPS OR JERKS AROUND THE DIAL

- ✓ This is indicative of a low or overpowered battery (number 1 warranty issue).
- ✓ Replace battery and perform the restart procedure. Allow up to 5 days to receive a signal.
- ✓ If the hands continue to jump, the movement may need replacement.

HANDS STUCK AT CERTAIN TIME

- ✓ This is indicative of a low or overpowered battery (number 1 warranty issue).
- ✓ Replace battery and perform restart procedure. Allow up to 5 days to receive a signal.
- ✓ Check to see if the hands may be bent.
- ✓ Movement may need replacement.

POSITION THE CLOCK

- ✓ This atomic clock is designed for indoor or outdoor use.

- ✓ **INDOOR:** Select a location to place the radio-controlled clock where it will be at least six feet away from a TV, computer, air conditioner or other household electrical appliances. The optimal location is near a window. Windows facing Colorado provide the best signal.