



Basic Setting Procedure WWV Clock

1. Insert one (1) "AA" alkaline battery into the clock.
2. Turning the GRAY WHEEL, on the back of the clock (See Illus. A), set the time to approximately 5 minutes before the actual time. Note: the clock does not have to be set to the exact time.
3. When the second hand reaches the 12:00 position (See Illus. B), press and release the RED BUTTON on the back of the clock (See Illus. A). You will hear a beep. If you do not hear a beep, remove the battery and briefly insert it backwards for one second, then reinsert it properly and repeat all steps.
4. After the second hand has passed one hash mark past the minute hand, (See Illus. C) press and release the RED BUTTON. You will hear a beep. If you do not hear a beep, remove the battery and briefly insert it backwards for one second then reinsert it properly and repeat all steps.
5. The initial set-up is now complete. The second hand will double-step until it receives the signal and adjusts to the correct time. Once the signal is received the second hand will move in a normal sweep.

It is important that you press the red button as indicated in steps 3 and 4. If you press the red button too soon or too slow in the set-up process, your clock's accuracy may vary by a minute or two. Once the clock has received the signal, you may manually adjust the hands to the correct minute by turning the gray wheel on the back of the clock. Do not adjust the hands before the signal is received.

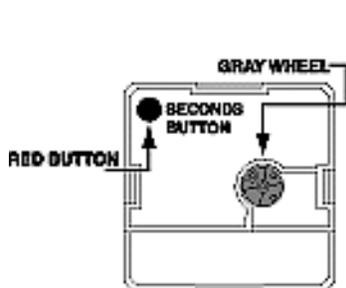


Illustration A

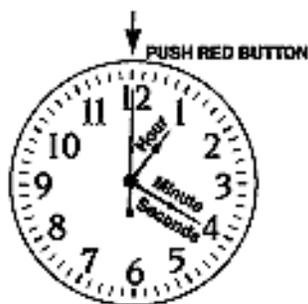


Illustration B



Illustration C

Battery Replacement:

When changing an old battery repeat steps 1-5 in the Basic Setting Procedure.

Theory of Operation:

The clock movement has a very specialized AM radio receiver that is tuned to receive the 60KHz WWVB time signal broadcast from the U.S. Government's Atomic Clock in Boulder, Colorado.

The signal is an AM radio signal; weather conditions, electrical interference, solar conditions and the position of the clock's internal antenna effect its reception. As a general rule, best reception is at night and just before or after sunrise or sunset. Although the clock can work in most locations, the number of times that it adjusts itself to the U.S. Atomic Clock's time signal may depend on its location. Under certain weather conditions or in areas of poor reception it may take several days to receive a signal for the correct time. You can leave the clock where it is and wait a little longer or look for a better location (See Finding a Good Location).

Finding a Good Location:

To aid in finding areas or walls with better reception, the movement has an audible beeper. To activate the beeper press the RED BUTTON while the clock is double stepping (see step 5 in the Basic Setting Procedure).

After pressing the red button, you will hear one of the following options:

1. No beeping means you are near a very strong interference signal source such as a TV, or computer monitor, or metal wall.
2. Static or erratic sound means that the signal is very weak or there is interference.
3. On/off pulse (similar to a heartbeat) every second means a good, strong signal. Hang your clock on the wall and it will set to the correct time within 24-48 hours.

Some electronic appliances such as computers, TVs, florescent lights, microwaves, power lines, and metal siding walls can interfere with the clock's reception as well. Try to place the clock at least 3 feet from these objects or near a window for optimum performance.

Daylight Savings Time ByPass:

If you live in an area, such as Arizona, Indiana, or Hawaii that does not observe daylight savings time changes, you can prevent automatic daylight saving time adjustments by pressing the RED BUTTON while inserting the battery. Release the RED BUTTON only after the battery has been completely inserted. Daylights savings time has now been bypassed, and you may follow the Basic Setting Procedure.

FAQ (Frequently asked Questions)

Q. Why does the clock keep double stepping?

A. The clock has not received the signal yet. You can leave the clock where it is and wait a little longer or look for a better location (See Finding a Good Location).

Q. The minute hand does not quite point to the 12:00 on the hour. How can I fix this?

A. Carefully adjust the GRAY WHEEL on the motor to correct the hand position. On rare occasions, the second hand adjusts when adjusting the minute hand. If this occurs, reset the clock by following the Basic Setting Procedure to correct the misalignment.

Q. Will the clock adjust for daylight savings time?

A. Yes, the clock will automatically adjust for daylight savings time. The adjustment will take place after the clock receives the radio signal. **DO NOT MANUALLY ADJUST THE CLOCK FOR DAYLIGHT SAVINGS TIME CHANGES, THE CLOCK WILL ADJUST ITSELF.**

Q. I live in an area where we do not observe daylight savings time. Can I prevent the clock from making the automatic daylight savings time adjustment?

A. Yes, press the RED BUTTON while inserting the battery. Release the RED BUTTON after the battery is fully inserted then follow the Basic Setting Procedure.

Q. Can I set the clock so that it will always be exactly five minutes fast?

A. Yes, after the clock has received the signal, turn the GRAY WHEEL to advance the hands five minutes.

Q. How can I find the correct time in my area?

A. Check your phone book for a local number, call (303)499-7111 and wait for an announcement, or visit <http://www.nist.gov>

The atomic feature of this clock may not work in all areas due to the strength of the radio signal or your geographical location. If the clock does not pick up the signal, it will function as a standard quartz clock.