MARATHON

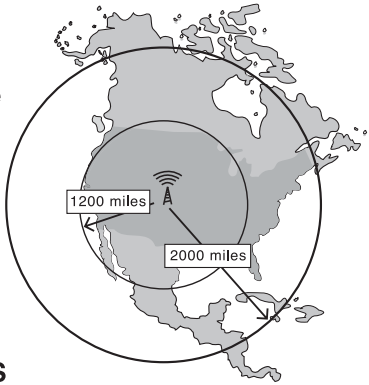
ATOMIC WALL CLOCK WITH INDOOR/OUTDOOR TEMPERATURE & DATE

INSTRUCTION MANUAL

MODELS: CL030027BK - CL030027GG

WHAT IS RADIO CONTROLLED CLOCK

A Radio-Controlled Clock synchronizes with radio signals from an Atomic Clock, giving the most accurate timekeeping available. Time signals transmitted by the National Institute of Standards and Technology (NIST) are regulated by 3 atomic clocks and deviate less than 1 second over 3,000 years. The NIST broadcasts the time signals (WWVB, 60kHz) continuously from Fort Collins, Colorado. The signals can reach a distance of 2,000 miles from the transmitter. Your Radio-Controlled clock will receive the signal in any place that an AM signal can be received. However, the signal cannot be picked up in metal or concrete structures unless positioned near a window. In addition, some environmental conditions (see below) may affect the reception.

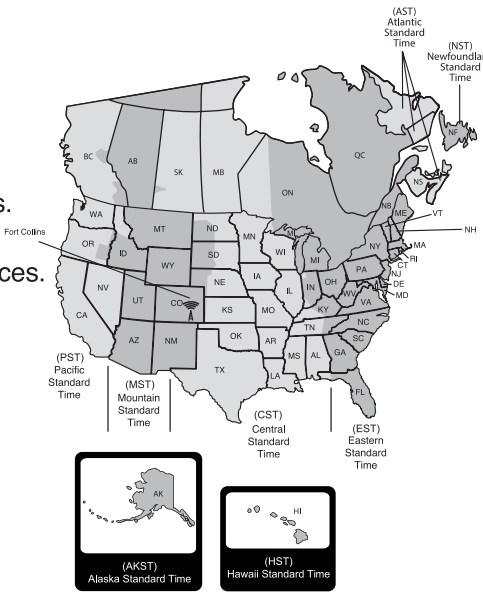


For more information, please study the WWVB WEB page of NIST at : http://www.boulder.nist.gov/timefreq/

ENVIRONMENTAL RECEPTION EFFECTS

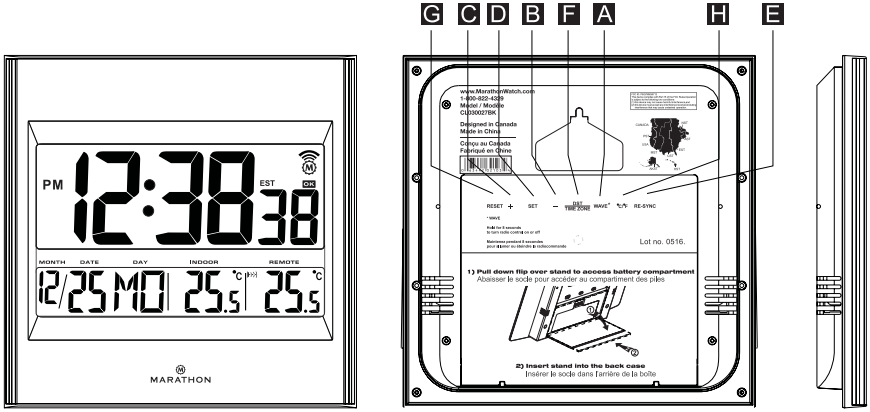
The Radio-Controlled Clock obtains the accurate time with wireless technology. Same as all wireless devices, the receiving ability may be affected by, but not limited to, the following conditions.

- Long transmitting distance.
- Close proximity of mountains and valleys.
- Close proximity of tall buildings.
- Close proximity of railways, high voltage cables, etc.
- Close proximity of freeways,
- Close proximity of construction sites.
- Being Inside concrete buildings.
- Close proximity of electrical appliances.
- Bad weather.
- Being Inside moving vehicles.
- Close proximity of metal structures.



SPECIFICATIONS

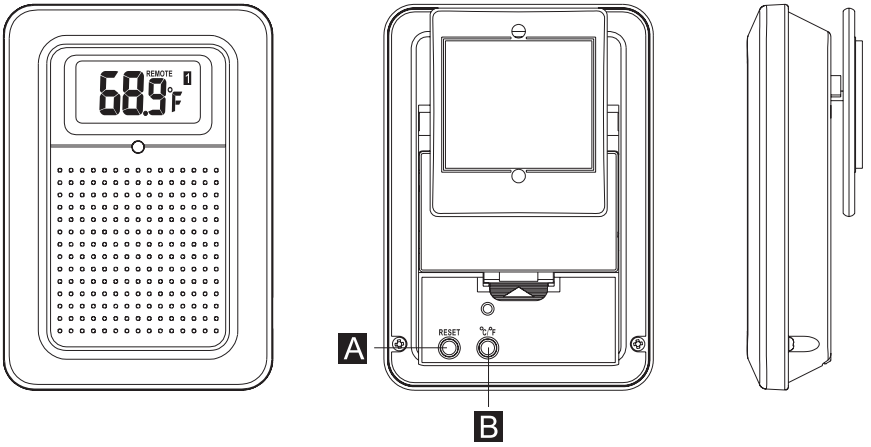
- Receives 60kHz WWVB signal transmitted by NIST at Fort Collins Colorado
- Automatic time adjustment after signal reception
- Calendar with day of the week display
- Hour, minute and second display
- 12 or 24-hour format
- Indoor and remote temperature
- Centigrade or Fahrenheit readout
- Indoor temperature measurement range from -20°C ~ 70°C (-4°F ~ 158°F)
- Outdoor temperature measurement range from -50°C ~ 70°C (-58°F ~ 158°F)
- Temperature resolution 0.1°C (0.1°F)
- Clock operation temperature from 0°C ~ 40°C (32°F ~ 104°F)
- Time accuracy (Atomic clock): 1 second over 3000 years.



LOCATION CONTROL

Main Unit (Receiver)

A WAVE BUTTON
B - BUTTON
C + BUTTON
D SET BUTTON
E RE-SYNC BUTTON
F DST / TIME ZONE BUTTON
G RESET BUTTON
H °C/°F BUTTON



Remote Unit (Transmitter)
A RESET BUTTON
B °C/°F BUTTON

LOCATION PRECAUTIONS

This clock receives a radio wave much like a TV or radio. Be sure to locate it near a window or some other locations where reception is good. Avoid the following locations, which can interfere with proper reception.

Inside or near concrete/ steel bulidings or structures, unless the clock is close/ next to a window (with curtain open).

Next or close to power station.

Inside moving vehicles (automobile, train, airplanes etc) which radio transmission or electronics will interfere the reception of radio-controlled clock.

Too close to household appliances (Computer, TV, video/audios, fax machines, speakers).

Near construction sites, traffic lights, roadside, neon lights etc.

Close to or on top of metal surfaces / plates.

Before You Begin

To ensure proper functioning of the unit, please follow this set up procedure.

- Insert batteries for the main unit (Refer to section of Battery Installation)
- Place the main unit as close as possible next to the remote unit and insert batteries for the remote unit.
- Position the remote unit and main unit within effective transmission range, which in usual circumstances is 30 to 45 meters.

Note that the effective range is affected by the building materials and where the main and remote unit are positioned. Try different arrangements for the best results.

Battery Installation

Battery Installation of the Main Unit
- Open the battery door.
- Load full set (2pcs AA size battery) of new batteries in polarity (+) and (-) as indicated.
- Close the battery door.

Battery Installation of the Remote Unit
- Open the battery door.
- Load full set (2pcs AA size battery) of new batteries in polarity (+) and (-) as indicated.
- Close the battery door.

Warning : Do not mix old and new batteries.
Do not mix alkaline, standard (carbon-zinc) or rechargeable (nickel cadmium) batteries.

Do not touch any other button or setting on your main unit. It will automatically receive the remote temperature and time signal after batteries inserted.

Getting Started

Thermometer
Once powered up, the remote unit (or by pressing the RESET button) sends the temperature RF signal to the main unit immediately. The main unit attempts to search for the RF temperature signal for 5 minutes after power up (or after pressing the RESET button).

If the RF signal is received within the first 5 minutes, the temperature will show on the remote temperature display; otherwise it will show blank "--.-°F".

After the main unit successfully shows the remote temperature on display, the synchronization of main unit and remote unit has been established. Place the remote unit outside in a shaded, dry area to protect it.

If the RF temperature signal is not received within the first 5 minutes, press the RE-SYNC button on the main unit to search for remote temperature for another 6 minutes.

Radio Controlled Clock
As long as the batteries are supplying power to the main unit, it will receive the time signal and adjust the time automatically. No manual adjustment is required after the unit is turned on.

It is recommended to leave the clock near a window overnight to search for the time signal as better transmission of the time signal takes place at night.

Wave Signal Receive Operation
The main unit automatically receives the time signal every day at 01:00am and makes any required adjustment to the time setting, signal reception is indicated by the flashing tower icon.

If the time signal is successfully received, the icon will stop flashing and will display steadily. A **OK** indicator OK will appear on display.

Important : Do not perform any button or switch operation while a signal receive operation is in progress.

Triggering a Wave Receive Operation manually
You can trigger a signal receive operation at any time by pressing the **WAVE** button, which cause the main unit to perform an immediate signal receive operation.

Unsuccessful Wave Signal Reception

If the automatic updates at 1:00am fail, the wave on top of the Ⓜ tower and the **OK** icon will disappear.

If the signal reception is unsuccessful after battery installation or after reset, the main unit will keep trying for 10 minutes every hour until time signal reception is successful.

Status of RCC Signal

	**NO SIGNAL OR UNSUCCESSFUL RECEPTION**
	**SUCCESSFUL RECEPTION**
	**SIGNAL STRONG SEARCHING**
	**SIGNAL MEDIUM SEARCHING**
	**SIGNAL WEAK SEARCHING**

RCC ON / OFF

To Set RCC OFF

- Press and hold the “WAVE” button for 8 seconds until the “OFF” sign displays on the LCD.
- The Time Zone icon and wave on top of the Ⓜ icon will disappear after the “OFF” sign flashes for 5 seconds.

To Set RCC “ON”

- Press and hold the “WAVE” button for 8 seconds until the “ON” displays on the LCD.
- The Time Zone icon and wave on top of the Ⓜ icon will appear after the “ON” sign flashes for 5 seconds.

Manually Set the Clock

To Set DST

- Press and hold the “DST/TIME ZONE” button until On or Off display on LCD.
- Press “+” or “-” button to toggle between DST ON and DST OFF.
- Press “DST/TIME ZONE” button to confirm and leave setting mode.

To Set TIME ZONE

- Press “DST/TIME ZONE” sequentially to select your local time zone. (PST->MST->CST->EST->AST->NST->AKST->HAST->PST->

To Set the Calendar

1. Press and hold SET button to enter calendar set mode.
2. Press + or – button sequentially to set year.
3. Holding down either + or – button to change the year at high speed.
4. Press SET button to confirm year set and go to date set.
5. Press + or – button sequentially to set date.
6. Holding down either + or – button to change the date at high speed.

To Set the Time

1. Press SET button after calendar set mode.
2. Press + or – button sequentially to set minutes, when you press the + or – button once, the seconds count reset to 00.
3. Holding down either + or – button to change the time at high speed.
4. Press SET button after desired time set and go to time format set mode.
5. Press + or – button to toggle between 12hr and 24 hr time display format.
6. Press SET button to confirm and quit the set mode.

Check IN / REMOTE Temperature

The indoor temperature displays on the INDOOR temperature field while the OUTDOOR temperature display on the Remote temperature field.

Display Unit

The default unit for temperature is °F, press °C/°F button will toggle the display unit of temperature between °C and °F.

Signal Indicator

The RF signal status on main unit and remote unit display represents by below icon:

	**NO SIGNAL DETECTION**
	SIGNAL DETECTION
	**SUCCESSFUL RECEPTION**

Losing Synchronization of the Wireless Thermometer
If the base unit received remote temperature successfully, but now displays blank "--", the remote unit and the main unit may have lost synchronization. If this occurs, press the RE-SYNC button of the main unit. The main unit will attempt outdoor temperature reception for another 6 minutes and reinitiate synchronization with the remote unit. If the remote temperature cannot be received, check:

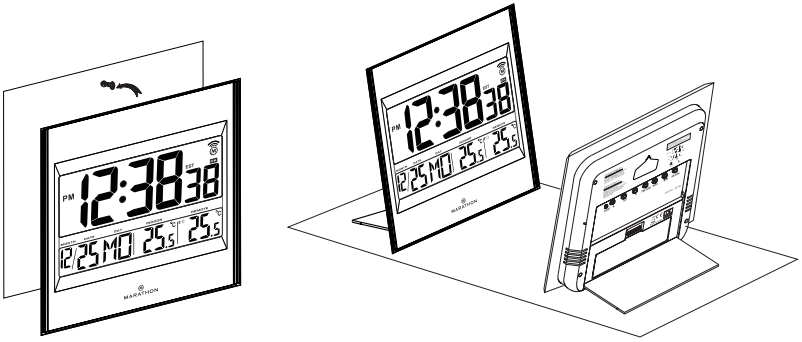
1. If the distance between of the main unit or remote unit is at least 3-4 feet away from any interfering sources such as computer monitors or TV sets.
2. If the main unit is in the immediate proximity of metal window frames.
3. If using other electrical products such as headphones or speaker operating on the same signal frequency (433MHz) are preventing correct signal transmission and reception.
4. If neighbors using electrical devices operation on the 433MHz signal frequency are causing interference.

Note: When the 433MHz signals is received correctly, do not open the battery cover of either the remote unit or the main unit, as the batteries may spring free from the contacts and force a false reset. Should the batteries come out, reset both units otherwise transmission problems may occur.

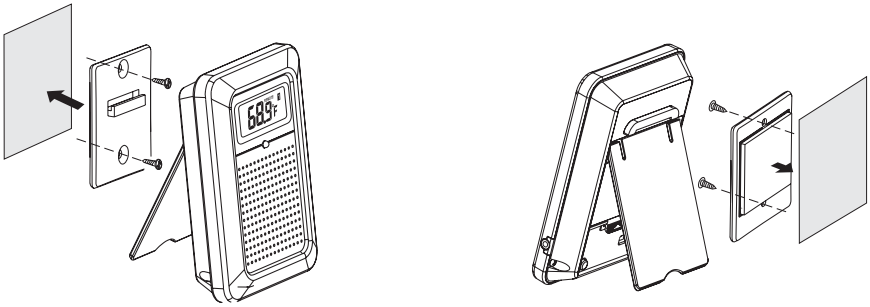
The maximum transmission range is 150 feet from the remote unit to the main unit (in open space). However, this depends on the surrounding environment and interference levels. The temperature signal travels in a straight line from the remote unit to the clock. The signal will not curve around blocking objects. If no reception is possible despite the observation of these factors, all units have to be reset.

Wall Mounting or Using the Stand

The main unit has a built in stand that you can flip open to support the main unit on a flat surface. You can close the flip and mount the unit on a wall as well. Drive a screw into the wall until the head extends about 1/8 inch from the wall, then locate the keyhole slot over the screw head and slide the Atomic Clock down to secure it in place.



The remote unit comes with a wall mount holder which can be used to hold the unit on a wall or support it on a flat surface.



Interference

Signals from other household devices, such as entry controls, door bells and home security systems, may temporarily interfere with the units and cause reception failure. This is normal and does not affect the general performance of the product. The transmission and reception of temperature reading will resume once the interference has stopped.

Trouble Shooting

- Press the RESET button when the clock is displaying incorrect time even when the tower icon is shown on the display. This may happen when the external noise is strong enough to interfere with the time signal.
- Press the RESET button on the transmitter if the readout is incorrect or does not respond.

Care of Your Clock

- Avoid exposing your clock to extreme temperatures, water or severe shock.
- Avoid contact with any corrosive materials such as perfume, alcohol or cleaning agents.
- Do not subject the clock to excessive force, shock, dust, temperature or humidity as this will damage the clock.
- Do not tamper with any of the internal components of this clock. This will void the warranty and may cause damage to the components of the clock.

Specification

Temperature Operation Range
Receiver : 0°C to +40°C
32°F to 104°F
Transmitter : 0°C to +40°C
32°F to 104°F

Receiver : every 32 seconds
Transmitter : every 16 seconds

Power Source (Alkaline batteries recommended)
Receiver : 2 “AA” batteries, 1.5V batteries
Transmitter : 2 “AA” batteries, 1.5V batteries
Battery life : about 12 months

Dimension (L x W x H)
Receiver : 205 x 25 x 210 mm
Transmitter : 68 x 20 x 98 mm

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Disposal of Your Old Product

Your product is designed and manufactured with high quality materials and components, which can be recycled and reused. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC. Please inform yourself about the local separate collection system for electrical and electronic products.

Please act according to your local rules and do not dispose of your old products with your normal household waste. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

Disposal of Flat Batteries / Accumulators

You, as the end user, are legally obliged (**Battery Ordinance**) to return all flat batteries and rechargeable batteries. **Disposal in the household waste is prohibited.** "European Directive 2006/66/EC" Batteries, including rechargeable batteries, which contain hazardous substances are marked by symbols which indicate the prohibition of disposal in the household waste.

The designations for the heavy metals concerned are as follows:
Cd = cadmium, **Hg** = mercury, **Pd** = lead. You can return flat batteries / rechargeable batteries free of charge to the collection points in your community or anywhere where batteries / rechargeable batteries are sold.
You thus fulfil your statutory obligations and help protect the environment.

Caution

Replace only with the same or equivalent type of battery, please refer to the engraved battery marks inside the battery compartment for the correct battery polarity (+) and (-). Danger of explosion is possible if battery is incorrectly replaced.

FCC Statement

Company	:	**Marathon Watch Company Ltd.**
Address	:	**313 Broad Street, Suite A, Montoursville, Pa 17754-2273**
Tel	:	**+1 570-279-2502**

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- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Japan Radio Law Statement

This product contains the certified module by Japan Radio Law.
The certification number is  R 018-140077

BAC

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

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- **Reorient or relocate the receiving antenna.**
- **Increase the separation between the equipment and receiver.**
- **Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- **Consult the dealer or an experienced radio/TV technician for help.**

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2 YEAR
warranty
Garantie
de 2 ANS

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Ontario, Canada L4B 1B5
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Designed in Canada / Conçu au Canada
Made in China / Fabriqué en Chine

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