

TRACEABLE® GIANT-DIGITS™ ATOMIC CLOCK WITH INDOOR & OUTDOOR TEMPERATURE INSTRUCTIONS

Cat. No. 1087

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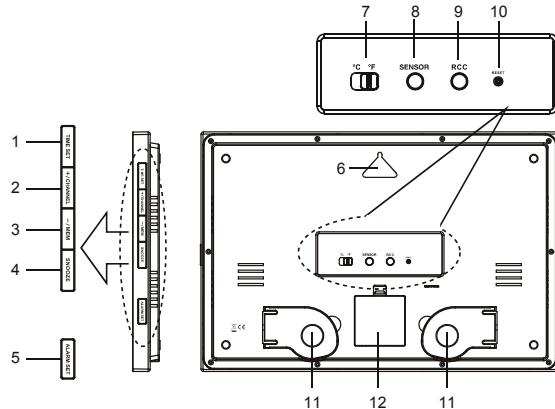
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PRODUCT OVERVIEW

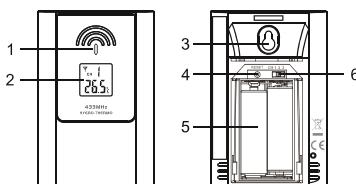
Main unit

1. [TIME SET] button
2. [+/CHANNEL] button
3. [-/MEM] button
4. [SNOOZE] button
5. [ALARM SET] button
6. Wall-mounting hole
7. $^{\circ}\text{C}/^{\circ}\text{F}$ slide switch
8. [SENSOR] button
9. [RCC] button
10. [RESET] button
11. Table stand
12. Battery door



Remote sensor

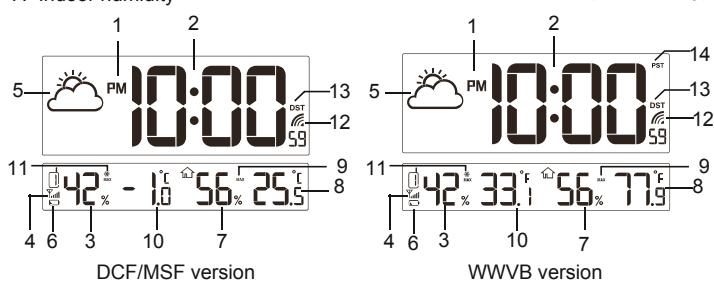
1. LED indicator
2. LCD
3. Wall mount hole
4. [RESET] button
5. Battery compartment
6. [CHANNEL 1/2/3] slide switch



Display

Normal time mode

1. AM/PM (12 Hour format)
2. Time
3. Outdoor humidity
4. Sensor signal indicator
5. Weather forecast indicator
6. Low battery indicator for sensor
7. Indoor humidity
8. Indoor temperature
9. MAX/MIN indicator
10. Outdoor temperature
11. Ice Alert on
12. RC signal strength indicator
13. DST
14. Time zone indicator (WWVB only)



Alarm time mode

1. Alarm time
2. Alarm icon/Alarm on
3. Alarm mode indicator



- Remove the battery door of the clock and sensor.
- Insert 4 new AA size batteries to the clock, and 2 to the sensor according to the “+/-” polarity mark on the battery compartment.
- Replace the battery door.
- Once the batteries are inserted, full segment of the LCD will be shown.
- Press [**RESET**] button of main unit first, and press [**RESET**] button of transmitter.
- It will automatically receive 433 MHz signal from transmitter for the channel test in 8 seconds.
- After 5 minutes channel test, it will turn to RC signal reception automatically.
- The RC clock will automatically start scanning for the radio controlled time

NOTE:

In some cases, you may not receive the signal immediately due to the atmospheric disturbance, the best reception often occurs during nighttime.

HOW TO PAIR MAIN UNIT AND SENSOR

1. Press [**+/CHANNEL**] button on main unit to select a channel.
2. On sensor, slide channel switch to corresponding channel. (For additional sensors, select a different channel). Press [**RESET**] button.
3. Press [**SENSOR**] on main unit to initiate search for 433 MHz reception.

433 MHz WIRELESS SENSOR RECEPTION

If the main unit receives wireless sensor signal successfully, the signal icon “  ” displays. While if it cannot receive sensor signal or signal is lost, icon “  ” displays.

DAYLIGHT SAVING TIME (DST)

The clock will automatically advance the time by one hour in the spring and back an hour in the fall. Your clock will display “DST” during summer.

RECEPTION OF RADIO CONTROLLED SIGNAL

This RC clock includes a built-in receiver which picks up the signal from the DCF/MSF/WWVB station. Therefore, the clock automatically sets the time, date and weekday.

- The clock automatically carries out four periodic synchronization procedures (at 2:00 AM, 8:00 AM, 2:00 PM and 8:00 PM daily) with the RC signal to correct any deviations to the exact time.
- Once the unit synchronizes successfully to the RC signal, the signal icon “  ” will show up. Each synchronization process will take between 6 to 16 minutes.
- To manually start or stop the RC signal reception, press [**RCC**] button or press and hold it for 3 seconds.

NOTE:

- The strength of radio-controlled time signal from the transmitter tower may be affected by geographical location or building around.
- Always place the unit away from interfering sources such as TV set, computer, etc.
- Avoid placing the unit on or next to metal plates.
- Closed areas such as airport, basement, tower block, or factory are not recommended.

SIGNAL RECEPTION INDICATOR

The signal indicator displays signal strength in 4 levels. Wave segment flashing means time signals are being received. The signal quality could be classified into 4 types:

- RC synchronize process
- Weak signal quality
- Acceptable signal quality
- Excellent signal quality

TIME ZONE SETTING (WWVB VERSION ONLY)

Your clock is designed to display time for different time zones. Please refer to the **SETTING THE TIME AND CALENDAR** section to set your desired time zone in following order:

PST (Pacific) → **MST** (Mountain) → **CST** (Central) → **EST** (Eastern)

SETTING THE TIME AND CALENDAR

- In normal time mode, press and hold [**TIME SET**] button for 3 seconds until the 12/24 Hr flashes.
- Press [**+/CHANNEL**]/[**- MEM**] button to set 12/24 Hour format.
- Press [**TIME SET**] button again until Hour digit flashes and press [**+/CHANNEL**]/[**- MEM**] button to adjust its value.
- Repeat above operations to set the time and calendar in this sequence:
DCF/MSF version: 12/24Hr>Hour>Minute>Second>+/-23 Hour offset
WWVB version: 12/24Hr>Hour>Minute>Second>Time Zone
- Press [**TIME SET**] button to save the setting and return to normal time mode. Or the clock will automatically exit the setting mode after 1 minute without pressing any button.

NOTE:

- When setting second, press [**+/CHANNEL**]/[**- MEM**] button to set its value to 00.

SETTING THE ALARM TIME

- In normal time mode, press [**ALARM SET**] button to enter alarm time mode. Press and hold [**ALARM SET**] button for 3 seconds until Hour digit flashes.
- Press [**+/CHANNEL**]/[**- MEM**] button to set its value.
- Press [**ALARM SET**] button again to step to Minute setting. Press [**+/CHANNEL**]/[**- MEM**] button to set its value.
- Press [**ALARM SET**] button to save the setting and return to normal time mode. Or the clock will automatically exit the setting mode after 1 minute without pressing any button.

NOTE:

After pressing [**+/CHANNEL**]/[**- MEM**] button, alarm function is automatically turned on (icon “” displayed).

USING THE ALARM AND SNOOZE

- In normal time mode, press [**ALARM SET**] button to enter alarm time mode. Press [**ALARM SET**] button again to turn on (icon “” displayed) or turn off alarm function.
If alarm is turned on, alarm beeps at the alarm time.
Alarm beeping can be stopped by:
 - Auto stop if no button is pressed during alarm sound beeping. Alarm beeping lasts for 2 minutes.
 - Press [**SNOOZE**] button to stop the current alarm and enter snooze. Alarm icon will be flashing continuously. The alarm will sound again in 5 minutes. Snooze can be operated continuously in 24 hours.
 - Press [**ALARM SET**] button to turn off alarm function.

TEMPERATURE AND HUMIDITY

To Select Temperature Unit

Slide [**°C / °F**] switch on main unit to <**°C**> or <**°F**> position.

To Read Outdoor Temperature and Humidity

The default displayed channel is channel 1.

1. In normal mode, press [**+/CHANNEL**] button repeatedly to view readings of channel 1, 2 and 3.
2. Press and hold [**+/CHANNEL**] button for 2 seconds to enter channel auto-change, and channels change automatically in every 4 seconds.
3. Press [**+/CHANNEL**] again to return to normal mode.

NOTE:

1. Once the channel is assigned to one sensor, you can only change it by removing the batteries or resetting the unit.
2. If no signals are received or the transmission is interfered, “---” will appear on the LCD.
3. Relocate the main unit and sensor in other positions and make sure the transmission is within the effective range of 50 meters approx.
4. After several trials in vain, please reset the main unit thoroughly. Try out where your multifunctional main unit receives the signals best.

VIEWING MAXIMUM AND MINIMUM RECORDS

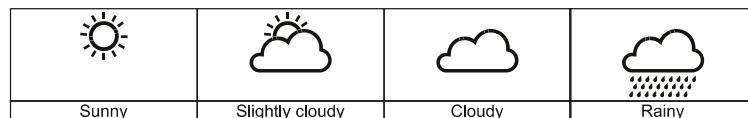
1. Press [- / MEM] button to review maximum and minimum indoor & outdoor temperature and humidity records.
2. While reviewing the maximum and minimum records, press and hold [- / MEM] button for 3 seconds to clear both max & min records.

NOTE:

1. Record value will be updated by new higher or low record.
2. Once you re-insert batteries to the main unit, all of the value will be defaulted.

WEATHER FORECAST

This main unit contains built-in sensitive pressure sensor to predict weather forecast in next 12 to 24 hours.



NOTE:

1. The accuracy of a general pressure-based weather forecast is about 70% to 75%.
2. The weather forecast is meant for the next 12 ~ 24 hours, it may not necessarily reflect the current situation.

ICE ALERT

When the outdoor temperature falls between -2°C to 3°C (28°F to 37°F), the ice alert icon will display on the LCD and flash continuously, and disappear once the temperature is out of this range.



SPECIFICATIONS

Radio Controlled signal:	DCF77/MSF/WWVB
RF transmission frequency:	433 MHz
RF transmission range:	Maximum 50 meters
No. of remote sensor:	Up to 3 units
Temperature sensing cycle:	Around 60~64seconds

INDOOR TEMPERATURE

Displayed range:	-40°C ~ 70°C (-40°F ~ 158°F)
Operating range:	0°C ~ 45°C (32°F ~ 113°F)
Accuracy:	-20°C ~ 0°C: +/- 2°C (+/- 4.0°F) 0°C ~ 40°C: +/- 1°C (+/- 2.0°F) 40°C ~ 60°C: +/- 2°C (+/- 4.0°F)

INDOOR HUMIDITY

Displayed range:	1% ~ 99%
Operating range:	20% ~ 90%
Resolution:	1%
Accuracy:	20% ~ 39%: +/- 8% @ 25°C 40% ~ 70%: +/- 5% @ 25°C 71% ~ 90%: +/- 8% @ 25°C

OUTDOOR TEMPERATURE

Displayed range:	-40°C ~ 70°C (-40°F ~ 158°F)
Operating range:	-20°C ~ 60°C (-4°F ~ 140°F)
Accuracy:	-20°C ~ 0°C: +/- 2°C (+/- 4.0°F) 0°C ~ 40°C: +/- 1°C (+/- 2.0°F) 40°C ~ 60°C: +/- 2°C (+/- 4.0°F)

OUTDOOR HUMIDITY

Displayed range:	1% ~ 99%
Operating range:	20% ~ 90%
Resolution:	1%
Accuracy:	20% ~ 39%: +/- 8% @ 25°C 40% ~ 70%: +/- 5% @ 25°C 71% ~ 90%: +/- 8% @ 25°C