Multi-Channel RF Wireless Thermo-Clock

Model No. W288

User Manual

Congratulations on purchasing the Multi-channel RF Wireless Thermo-Clock (W288). With innovative design and user-friendly functions, it is surely your best selection. The product can measure indoor temperature as well as temperature in different locations maximum 30 meters far from you. Up to 3 remote sensors can be installed for one main unit. Other features like real time clock, calendar and daily alarm are also available. Read this manual carefully before you use the product.
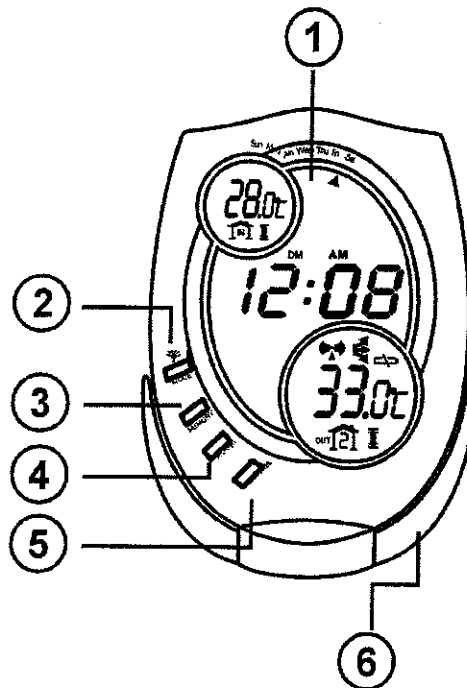
Features

1. Indoor and remote temperature (max. 3 channels)
2. Max/min temperature memory for both indoor and remote temperature
3. Temperature high/low limit alert for both indoor and remote temperature
4. Temperature trend indication
5. User selectable Celsius or Fahrenheit reading
6. Real time clock with calendar and daily alarm
7. 12/24-hour format for clock display
8. User programmable summer time
9. LED backlight for main unit
10. Splash-proof design for remote sensor
11. Low battery indication for both main unit and remote sensor

Main Unit

1. LCD display
   Shows clock, indoor and remote temperature
2. MODE / ☀ button
   To change display mode and to turn on backlight
3. MEMORY button
   To show maximum and minimum temperature
4. ALARM button
   To enable/disable daily alarm
5. CHANNEL button
   To select channel of remote sensors
6. Stand
   To let the unit stand on table

7. SET/+ button
   To enter setting mode or increase value in setting mode
8. C/F/- button
   To select temperature unit or decrease value in setting mode
9. CLEAR/12/24 button

To reset max/min temperature memory or change 12/24-hour format of clock display.
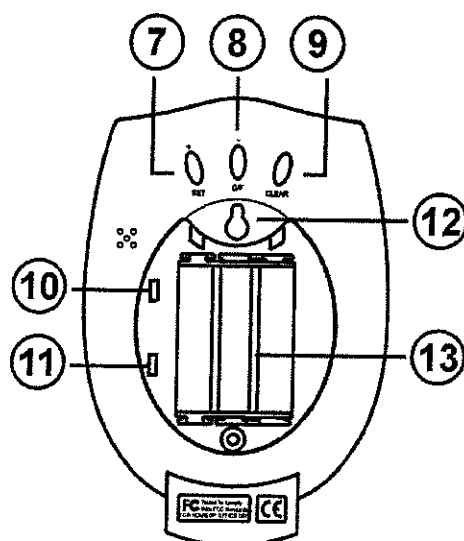10. RESET button
To reset the whole system

11. SCAN button
To search and install remote sensors
12. Wall mounting hole
13. Battery compartment

Sensor Unit
1. LCD display
2. C/F slide switch
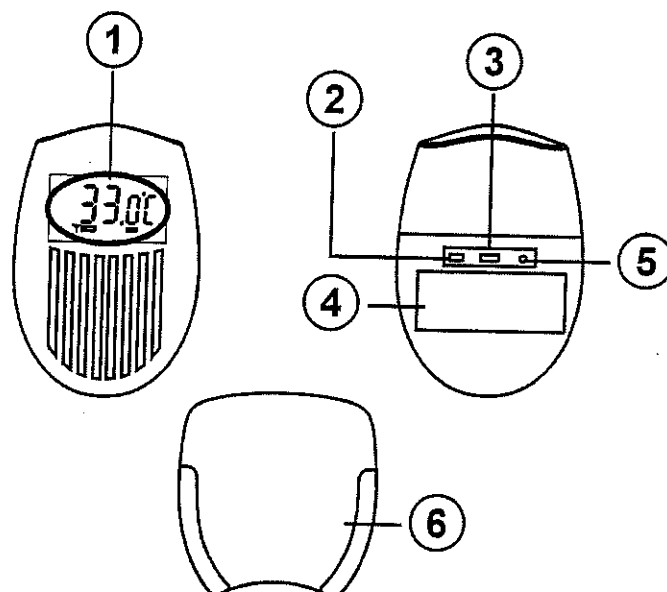To select temperature unit
3. CHANNEL slide switch
To select channel number
4. Battery compartment
5. RESET button
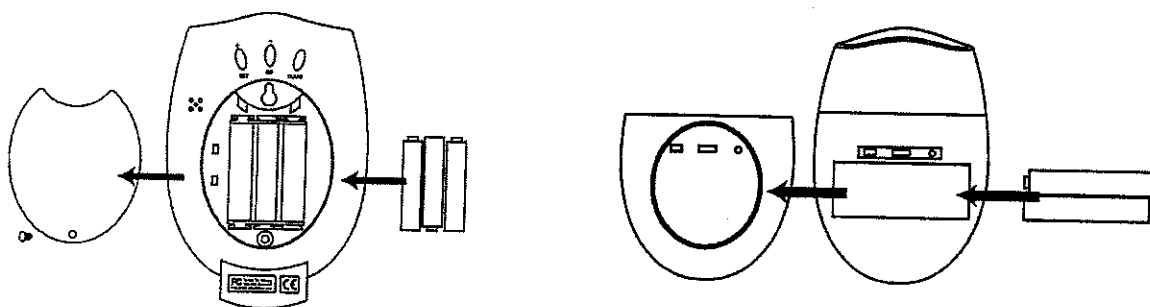Reset the sensor unit
6. Wall mounting bracket

HOW TO SET UP THE UNIT

Battery Installation

The main unit is powered by 3 pcs "AAA" or UM-4 size 1.5V battery, and the sensor unit is powered by 2 pcs "AAA" or UM-4 size 1.5V battery.

1. Loosen screws on the battery compartment doors of main unit and sensor unit, and gently remove the doors.
2. Insert batteries according to polarity indication inside the battery compartment.
3. Replace the battery doors and tighten the screws
   [see illustration]

Linking remote sensor with main unit

Use the CHANNEL slide switch on remote sensor to select channel number. (One main unit can only connect to one sensor for each channel.) Then insert batteries into the sensor unit. Now also insert batteries into main unit. The display of main unit will show full segment for a few

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seconds and return to normal display mode. The symbol at remote temperature display area will flash and the receiver will search for remote sensor automatically for one minute. Once the main unit receives the signal, beep tone will be heard and the display will show temperature and channel number of this remote sensor. The symbol will then flash continuously. However, if no remote sensors can register successfully within one minute, remote channel number and temperature will be shown as "-" and "--.-" respectively. The symbol will disappear.

It is possible that RF linking between main unit and remote sensor is interrupted by strong interference generated from some devices e.g. mobile phone, cordless phone, TV, Radio, etc. The product has the function to search and pick up signals automatically after interference becomes weak. However, if you reset the remote sensor or replace its batteries, the linking will be lost. Then you need to register this remote sensor with main unit by the following procedures:

1. Open the battery door of main unit.
2. Use a pin to press **SCAN** button inside the battery compartment of main unit, the symbol will 《«ͺͻ》 start to blink and signals will be received.

If you want to change the channel of remote sensor, slide the CHANNEL slide switch to your desired channel position and use a pin to insert into the hole of RESET button. Then, register this sensor using the above procedures.

Note: Use above procedures to register extra remote sensors if necessary. If main unit suddenly disconnects with remote sensor, it will keep tracing the signal continuously until 6:00 a.m. of the next day. Afterward, it will no longer receive the signal and re-register will be required.

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Setting the Clock

Using following steps to set the clock and calendar (default is 0:00, 1 Jan. 2000 for 24 hours format or 12:00 am, 1 Jan. 2000 for 12 hours format)

1. Press **SET** and **MODE** buttons simultaneously for 2 second in normal display mode, the unit will enter year setting mode, the digits of year will flash.
2. Press "**+**" or "**-**" button on the back side of the unit to increase or decrease the value of year. Press and hold the button for more than 2 seconds to fast increase or decrease the value.
3. Press **MEMORY** button to confirm and enter month/date setting mode, the digits of month will flash. Press "**+**" or "**-**" to change the value.
4. Press **MEMORY** button to confirm and start date setting, the digits of date will flash. Press "**+**" or "**-**" to change the value.
5. Press **MEMORY** button to confirm and start clock setting, hour digits will flash. Press "**+**" or "**-**" to change value. Press **MEMORY** again to start minute setting, minute digits will flash. Press "**+**" or "**-**" to change the value.
6. Press **MEMORY** button to confirm, the unit will quit setting mode and return to normal clock display mode.

Note: During calendar setting, the indicator for day of week will move accordingly.
The unit will quit from setting mode and return to normal display mode automatically if there is no key action within 10 seconds.
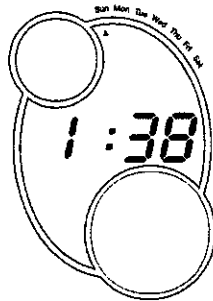
Summer Time

Press and hold **SET** and **CLEAR** buttons simultaneously for 2 seconds to enable or disable summer time. The icon ☀ will display for summer time mode.
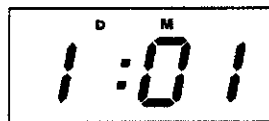
12/24-hour Format

Press and hold CLEAR button for 2 seconds in clock display mode to change 12/24-hour format of the clock display.

Clock Function

The product has real time clock function with year, month, date and day of week. Day of week indicator will show in any display mode to point out the day. [see illustration]

1. Press **MODE** once in normal display mode to show date and month.

2. Press **MODE** again to show year

3. Press **MODE** again to return to clock mode

Note: If no key action within 10 seconds in year or date mode, it will return to normal display mode automatically.

Daily Alarm

Setting Alarm Clock

1. Press and hold **SET** and **ALARM** buttons simultaneously for 2 seconds to enter alarm clock setting mode. Alarm symbol   and alarm hour digits will flash.
2. Press "**+**" or "**-**" button to change the value

3 Press **MEMORY** button to confirm and to set alarm minute. Minute digits will flash.
4 Press "+" or "-" to change the value
5 Press **MEMORY** button to confirm
6 The unit will quit from   alarm setting mode and return to normal clock mode. The 🔔 alarm symbol   will display and alarm will be active automatically

Note: If no key action within 10 seconds, it will quit from alarm setting mode and return to normal display mode.
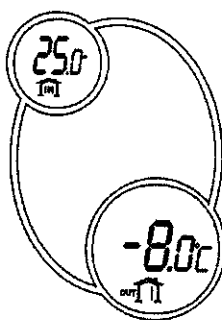
Turn on/off daily alarm

Press **ALARM** button once in normal display mode to enable or disable daily alarm. Alarm symbol 🔔 will be on if alarm is enable.

When the time is up, alarm will sound for 2 minutes if no key action. Press any key to stop the alarm.

Temperature Function

The upper side round window of display shows indoor temperature and the lower side round window shows remote temperature. [see picture]

Remote temperature display

1. In normal display mode, press **CHANNEL** button to select desired channel of remote temperature. The display will show channel number.

2. If you select "A", the display will enter auto-scroll mode, and show every

channel temperature for a while from channel 1 to 3 repeatedly.

3. Press **CHANNEL** again to select any channel and quit from auto-scroll mode.

Maximum/minimum memory

The unit will record maximum and minimum temperature for both indoor and remote channel.

1. In normal display mode, press **MEMORY** button once to show maximum value of both indoor and remote temperature. The symbol will display in both indoor and remote temperature display areas.
2. Press **CHANNEL** button to show maximum value of different channels.
3. Press **MEMORY** button again to show minimum value of both indoor and remote temperature. The symbol will display.
4. Press **CHANNEL** button to show minimum value of different channels.
5. Press **MEMORY** button again to return to normal display mode.

Note: If there is no key action within 10 seconds, it will automatically return to normal display mode.
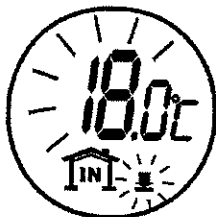
To Clear Memory

1. When the display shows maximum value, press **CLEAR** button at the back side of the unit to clear maximum memory of both indoor and remote temperature of one channel. To clear maximum memory of other channels, press **CHANNEL** to select desired channel and press **CLEAR**.
2. When the display shows minimum value, press **CLEAR** button to clear minimum value of both indoor and remote temperature. To clear minimum memory of other channels, select channel and press **CLEAR**.
3. The memory record will be updated by current reading immediately

Temperature alert function

Temperature alert function allows you to set high/low limits for both indoor and remote temperature. Once the temperature is over the limits, alert tone will sound and high/low limit symbol flash for 30 seconds if no key action. If the alert is due to one remote channel, the display will show that channel number and reading. After 30 seconds, the symbol will keep flashing until the temperature come back to the range or any key is pressed. Press any key to stop alert and the symbol will also disappear.

Setting high/low limits

1. Press **SET** and **MEMORY** button simultaneously for more than 2 seconds in normal display mode, the unit enter lower limit setting of indoor temperature. The display shows previous setting with the symbol ≡ and flash at indoor temperature display area. (see picture)

Note: If this is first time to set high/low limits, the display will show "--.- °C"

2. Press "**+/-**" to increase or decrease the value
3. During setting, you can press **CLEAR** to clear value
4. Press **MEMORY** to enter upper limit setting of indoor temperature Previous setting and the symbol ≣ will display and flash.
5. Press "**+/-**" to change the value
6. Press **MEMORY** to confirm and enter channel 1 setting
7. Repeat step 2 to 5 and press **MEMORY** to enter next channel setting if it is available

Note: The upper limit temperature is always 1°C (or 2°F) higher than lower limit.

If there is no key action within 10 seconds during setting, the unit will return to normal display mode automatically.

Temperature trend indicator

The temperature trend indicator is available for both indoor and remote temperature. ⤴ indicates temperature rising, ⤵ indicates temperature dropping and ➡ means steady.

Other Functions

Backlight

The display has LED backlight which allows you to use and operate the unit in dark. Press and hold **MODE** button for 2 seconds, the backlight will be turned on for 5 seconds. Further pressing any button within 5 seconds will

extend the backlight for another 5 seconds. The backlight will be off if there is no key action within 5 seconds.

Low Battery Indication

The main unit can show low battery power for main unit and particular remote sensor. The sensor unit can also detect and show low battery power. When the battery power is low, battery icon ⊏\⊐ will display.

Specification

Main Unit

Display   : LCD display with clock and temperature
Clock   : 12/24 hour format
Time format   : hh:mm
Calendar   : 2000 – 2049 year
Date format   : dd:mm or mm:dd
Temperature unit : C/F selectable
Temperature range: Indoor 0°C to 50°C (32°F to 122°F)
                            Remote -20°C to 60°C (-4°F to 140°F)
Resolution   : 0.1°C (0.2°F)
Accuracy   : +/- 1°C (from 0 to 40°C)
                      +/- 2°C (other range)
Power   : 3 x "AAA" or UM-4 size 1.5V battery

Sensor Unit

Display   : LCD with temperature reading
RF transmission   : 433MHz
Water-resistance : splash-proof
Temperature unit : C/F selectable
Temperature range: -20°C to 60°C (-4°F to 140°F)
Resolution   : 0.1°C (0.2°F)
Accuracy   : +/- 1°C (from 0 to 40°C)
                      +/- 2°C (other range)
Power   : 2 x "AAA" or UM-4 size 1.5V battery

Note on Compliance

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 receiver.
☐ Connect the equipment into an outlet on a circuit different from that to which the receiver is needed.
☐ Consult the dealer or an experienced radio/TV technician for help.

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