WIRELESS WEATHER STATION

INSTRUCTION MANUAL

MODEL NO.: WH0233/ WH0234

This Operation Manual is part of this product and should be kept in a safe place for future reference. It contains important notes on setup and operation.

NOTE: This is a combined operation manual for WH0233 and WH0234. WH0233 can receive and display the radio controlled time and date (RCC function). WH0234 maintain all the functions of WH0233 but without RCC function.

1. Introduction

Thank you for purchasing this Wireless Weather Station. Designed for everyday use, the weather station will prove to be an asset of great value for your personal use in the home or office. Please read this instruction manual thoroughly to fully understand the correct operation of your weather station and benefit from its unique feature.

1.1 Package Contents

- 1x Weather station base unit
- 1x remote Sensor with mounting bracket
- Mounting Screws
- Instruction manual

### 1.2 Feature

1) Wireless outdoor and indoor temperature (°F or °C)
2) Records min. and max. temperature
3) Receive and displays the Radio controlled time (DCF, WWVB) and date with manual setting option (WH0233)
4) Time and date with manual setting (WH0234)
5) Time Alarm and Zone Setting
6) 12 or 24-hour time display
7) 100 year calendar with week (2000-2099)
8) Can receive up to 3 sensors

2. Installation

2.1 Installing the Batteries

Temperature sensor

Battery compartment

Battery cover

LED light
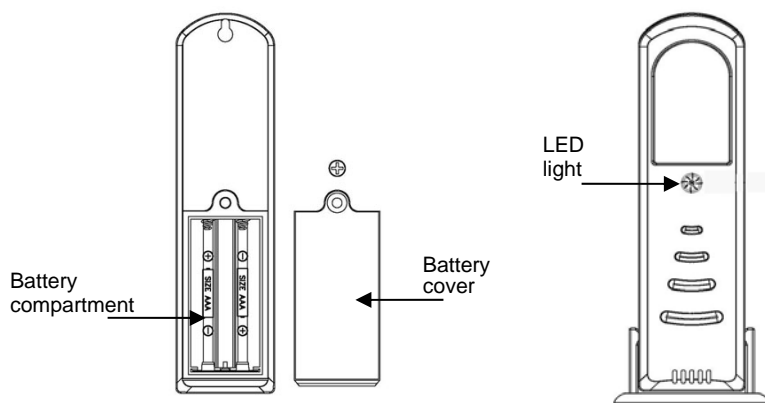
> **Note**: Please note the polarity when inserting/replacing batteries in the unit, failure to do so may result in permanent damage. Use good quality Alkaline Batteries and avoid rechargeable batteries.

1) Open the battery compartment of the display unit and the transmitter and place both instruments on a desk with a distance of approximately 1.5 meter. Check that no other electronic devices are close.
2) Insert 2XAAA 1,5V Alkaline batteries first into the battery compartment of the transmitter and immediately afterwards 2XAAA 1,5 V in the display unit, observing the correct polarity. When battery is first inserted, the red LED light will be light up for 3-4 seconds.

2.2 Reception of outdoor temperature and RCC time
1) When the base station is powered up, a short beep will sound and all LCD segments will light up for about 4 seconds before it enters into learning mode to learn the sensors security code.
2) After the remote sensor is powered up, the LED indicator will light up for 4 seconds (if no LED light up or is lighted permanently, make sure the battery is inserted the correct way or a proper reset is happened) the sensor will transmit weather data every 48 seconds.
3) **Note**: *DO NOT PRESS ANY KEY* during the first 10 minutes learning period or before radio controlled time is displayed on the receiver. After both outdoor temperature and radio controlled time are displayed you can place your remote sensor outdoors at the final destination. In case the clock cannot detect the RCC signal (for example due to disturbances, transmitting distance, etc.), the time can be set manually. If the outdoor weather data is not displayed or if any key is pressed before the weather station receives the signal, or when changing batteries you will need to follow the battery installation procedure again. **Please wait 10 seconds before re-insert the battery again to make a proper reset for both transmitter and receiver.**

Note for Radio Controlled Time:
The DCF WWVB or MSF time signal is an AM modulated time-of-day signal broadcasted by the Federal Government of Germany, NIST from USA or National Physical Lboratory. The time base is generated from an atomic time generator which is accurate to 10 billions of one second.

Please take note of the following for RCC time reception:

- Recommended distance to any interfering sources like computer monitors or TV sets is a minimum of 1.5-2 meters.
- Within ferro-concrete rooms (basements, superstructures), the received signal is naturally weakened. In extreme cases, please place the unit close to a window and/or point its front or back towards the Frankfurt transmitter.
- During night-time, the atmospheric disturbances are usually less severe and reception is possible in most cases. A single daily reception is adequate to keep the accuracy deviation below 1 second.
- The clock automatically scans the time signal at 2.00 a.m., 8.00 a.m., 2..00 p.m. everyday to maintain accurate timing. If the reception is not successful, the RCC reception symbol disappears, but the RCC time reception will be repeated again. The manually set time will be overwritten by the RCC time when the signal is received successfully.

2.3 Additional transmitters
The wireless weather station can receive up to 3 temperature sensors. If you have purchased additional remote sensors, repeat step 1) for all extra sensors. However, ensure that you **leave 10 seconds in between the reception of the last sensor and the set-up of the following sensor**. The wireless weather station will number the sensors in the order of set-up automatically, i.e. the first temperature sensor will have the temperature displayed with **CH1.** If only have one sensor, **CH1** won't be display.

2.4 Mounting

2.4.1 Base Station
With one connected leg at the back of the unit, the base station can be placed onto any flat surface or wall mounted at the desired location by the hanging holes at the back of the unit. It is important to check that the radio signal can be received before permanently mounting any of the units
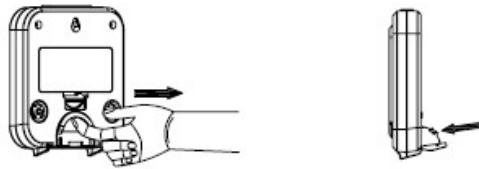
2.4.2 Remote Sensor

Note: To achieve a true temperature reading, avoid mounting remote sensor in direct sunlight. We recommend that you mount the remote sensor on an outside North-facing wall; obstacles such as walls, concrete, and large metal objects will reduce the range.

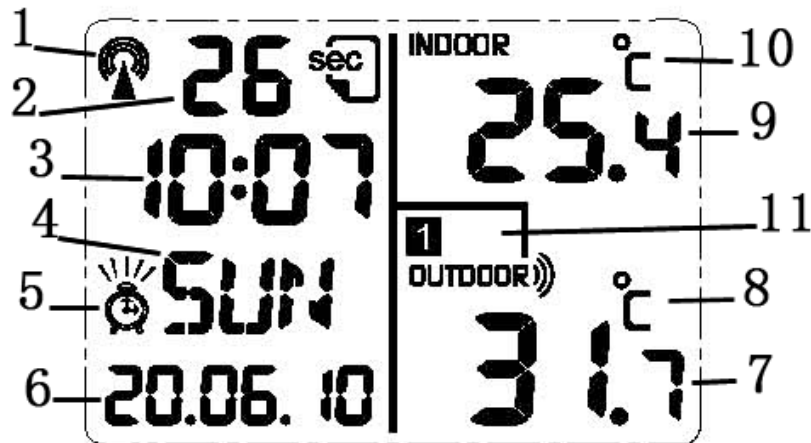The outdoor temperature sensor bracket can be affixed by screws in 2 ways:

This end up to prevent water damage

①   ②
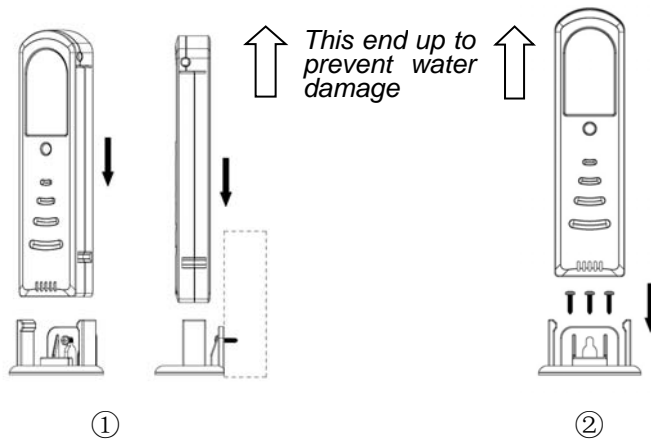
3. Overview
Base unit-LCD
The following illustration shows a normal LCD display for description purposes only.

1. RCC Tower icon   6. Calendar
    (for the time reception)   7. Outdoor temperature display
2. Second display   8. Temperature display unit
3. Time display   9. Indoor temperature display
4. Week display   10. Temperature display unit
5. Alarm icon   11. Number showing sensor unit

4. Program Mode

- The base station has three keys for easy operation: **SET** key (at the back of the unit)**, MIN/MAX** key, **+** key, **and ALARM/SNOOZE** key.
- Press "CH/+" key to toggle between the outdoor sensor 1, 2, 3 (If more than 1 sensor is used)
- The setting mode will return to normal display mode while key idle 30s.

4.1 Time Modes
- While in normal mode, press the "**SET**" key shortly to select ALARM TIME or calendar display.
- While in normal mode, press the "**SET**" key for 2 seconds to enter the following setting modes in the following order :
    - Time Zone Setting +/-12hrs: the time zone is used for countries where the DCF signal can be received but the time zone is different form the German time(e.g. +1=one hour later)
    - 12/24 hour format

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- Manual time setting (hours/minutes)
- Calendar setting(in the order of year /month/ date)
- Temperature display unit degree Celsius or Fahrenheit

Note: Date display format is "DD-MM" in DCF or MSF radio control areas. Date display format is "MM-DD" in WWVB or JJY radio control areas.

- In the setting modes, press "**MIN/MAX** "or "**+**"key to select the units or scrolls the value. Holding the keys will increase/ decrease digits in great steps. Press the "**SET**"key to accept the change and advance to the next setting mode. Continue to press the "**SET**" key to toggle through the setting mode until return to the normal Mode

4.2 MIN/MAX Mode

- While in normal mode, press "**MIN/MAX** " key to display the following values in sequence:
  - Indoor temperature maximum
  - Indoor temperature minimum
  - Outdoor temperature maximum
  - Outdoor temperature minimum

- Press "**MIN/MAX** "key for approx 2 seconds, the above individual minimum or maximum record will be reset to current temperature.

4.3 Alarm clock Mode

- While in normal mode, press "**ALARM/SNOOZE**"key for 2 seconds to enter alarm
  time setting. Press "**MIN/MAX** "or "**+**" key to adjust the alarm time. Confirm hours
  with "ALARM/SNOOZE"key and switch to minutes setting. Confirm with "ALARM/SNOOZE"

Press ALARM/SNOOZE key to switch alarm on or off. If it is on, 🔔is shown on the LCD

The snooze time is 10minutes. The snooze function can be activated when the alarm is ringing by pressing the ALARM/SNOOZE key. When the alarm is snoozing, 🔔will start

flashing indicating that the alarm is active but is in snooze mode. To stop the snooze function when it is in snooze period, press and release any of the SET , MIN/MAX/- key, or

CH/+ keys
- Press the **SET , MIN/MAX** key, or **+** keys to stop the alarm

If longer than 30s no key operation, the unit will switch itself to normal display mode automatically.

5. Battery replacement
- When the batteries are used up, the low battery indicator appears on the display

- If battery change happened on remote sensor side, then the base station must be power up again to re-learn the transmitter.
- Please use Alkaline Batteries, do not use rechargeable batteries. Please take note of correct battery polarity.

Note:
Please participate in the preservation of the environment by properly disposing of all used-up batteries and accumulators at designated disposal points. Never dispose of batteries in a fire as this may cause explosion, risk of fire or leakage of dangerous chemicals and fumes

6. Troubleshooting

Q 1.   No signal from remote sensor
A   There can be many reasons for this, the following steps should help you troubleshoot this problem.

1.1 Make sure that the batteries in the remote sensor are not depleted.

1.2 Reduce the distance between transmitter and receiver

1.3 Remove the batteries from the base station and the remote sensor and reset the weather station in the right order as described in section 2 of this manual.

1.4 This problem could also be a result of radio interference in your neighborhood, try relocating the sensor and the base station

Q 2   Remote sensor drops off intermittently
A   Possible interference from other sources, try relocating the sensor or the base station. Radio device operation on the same frequency can also cause interference.

Q 3   Temperature,is incorrect.
A   Check/ Replace the batteries. Also make sure that the remote sensor is not place near objects that can act as sources of heat or cold.

7. Specifications

Outdoor data
Transmission distance in open field :   100meter max.
Frequency   :   433MHz
Temperature range   :   -40℃ to +65℃ (show OFL if outside range)
Resolution   :   0.1℃
Measuring interval remote sensor   :   48 sec
Water proof level   :   IPX3

Indoor data
Temperature   :   30 sec

Indoor temperature range	:	-9.9℃ to +60℃
Resolution	:	0.1℃
Alarm duration	:	120 sec

Power consumption

Base station batteries	:	2XAAA 1.5V LR03 Alkaline
Remote sensor batteries	:	2xAAA 1.5V LR03 Alkaline

Battery life
Minimum 12 months for base station
Minimum 12 months for remote sensor