# THERMOMETER WITH CLOCK

## INSTRUCTION MANUAL

***MODEL NO.: WH0230/ WH0231***

**Page**

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 WH0230 and WH0231. WH0230 can receive and display the adio controlled time and date (RCC function). WH0231 maintain all the functions of WH0230 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*

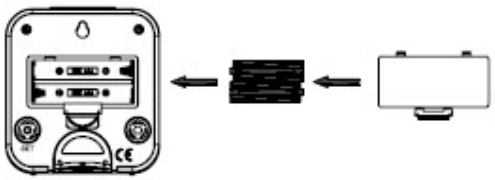
- 1x Weather station base unit
- Mounting Screws
- Instruction manual

### *1.2 Feature*

1) Indoor temperature (°F or °C)
2) Records min. and max. temperature
3) Radio controlled time (DCF, WWVB) and date with manual setting option (WH0230)
4) Time and date with manual setting (WH0231)
5) Time Alarm and Zone Setting
6) 12 or 24-hour time display
7) Calendar 2000-2099
8) Weekday

## 2. Installation

### *2.1 Installing the Batteries*



**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;
2) Insert 2XAAA 1,5V Alkaline batteries into the battery compartment of the Base station, observing the correct polarity. When battery is first inserted, you will listen to one tick sound.

2.2 Quick SETUP

1) When the base station is powered up, all LCD segments will light up for 3 seconds.
2) Wait 10 seconds before re-insert the battery again to make a proper reset.
3) Do not press any keys for 8 minutes
4) After the learning mode, the receiver will start to search RCC signal. If there is no RCC signal found within 70s, the unit will turn off the receiver. If there is time signal received, then the clock will have the radio controlled time icon flashing indicating that the clock is in the time reception progress. Normally within 8 minutes the clock should have the correct time displayed.
5) If no time reception is possible, then manually set the time. The clock will try to make radio controlled time reception every hour. When radio controlled time is received, the radio controlled time icon will be turned on and overwrite the manually set time.
6) If the clock can't have radio controlled time received after 24 hours, then try to put the clock in a place near window. The clock should not be placed on metal table or near monitor.

**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.

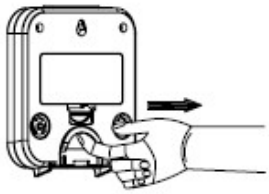
**Please take note of the following for Radio controlled time reception:**

- 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. and 8.00 p.m. Everyday to maintain accurate timing. If the reception is not successful, the RCC(radio controlled clock) time 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 Mounting*

With one foldable 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



## 3. Overview

The following illustration shows the full segments of the LCD for description purposes only.


1. Time display
2. Week display
3. RCC Tower icon (for the time reception)
4. Alarm icon
5. Calendar time
6. Indoor temperature display
7. Temperature display unit
8. MIN/MAX information

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

Note: If selected MSF or DCF by solder option default DD-MM format, otherwise (WWVB or JJY) default MM-DD format.

- 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 temperatuer maxiimum and minimum values

- 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 **+** 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.

**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**

## 5. Specifications

**Indoor data**

Measure temperature interval : 30 sec

Indoor temperature range : -9.9℃ to +60℃ (display – if out of range)

| | | |
|---|---|---|
| Resolution | : | 0.1℃ |
| Alarm duration | : | 120 sec |

**Power consumption**

| | | |
|---|---|---|
| Base station | : | 2XAAA 1.5V LR03 Alkaline batteries |
| Battery life | : | Minimum 12 months for base station |