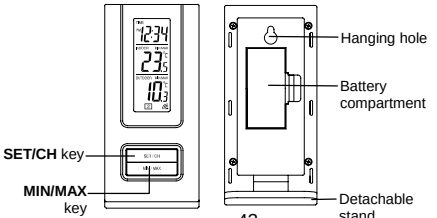
433 MHZ TEMPERATURE STATION

Instruction Manual

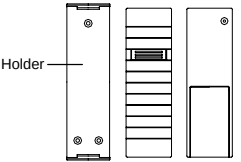
INTRODUCTION:

Congratulations on purchasing this innovative 433MHz Temperature Station which displays the time with up to the minute indoor and up to three outdoor temperature readings. To enjoy the full benefits of this innovative product, please read this operating manual.

TEMPERATURE STATION:



TEMPERATURE TRANSMITTER:



FEATURES:

- LCD clock in 12 or 24 hour time display
- Indoor and outdoor temperature reading in degrees Celsius or Fahrenheit
- Can receive up to three Outdoor transmitters
- Indoor and outdoor temperature with Minimum and Maximum records and time received for outdoor only
- Table standing or wall mountable (detachable table stand)

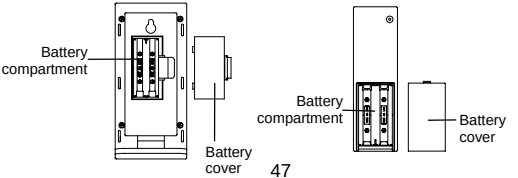
BATTERIES REPLACEMENT & MAINTENANCE:

For best performance, batteries to all units should be replaced at least once a year to maintain optimum running accuracy. Ensure that the batteries used are new of the correct size.

Please help in the preservation of the environment and return used batteries to an authorized depot.

SETTING UP:

Please follow these steps to ensure that your new Temperature Station works correctly with the temperature transmitter(s):



1. Flip open the battery cover at the back of the Temperature Station as indicated above.
2. Checking the correct polarization, insert 2 x AAA, IEC LR3, 1.5V batteries into the battery compartment and replace the cover (all the segments of the LCD screen will light up momentarily).
3. Now slide the battery cover open on the transmitter as indicated above
4. Checking the correct polarization, insert 2 x AA, IEC LR6, 1.5V batteries into the battery compartment and replace the cover.
5. If you have purchased additional outdoor transmitter(s) wait until the outdoor temperature has been received from the one

transmitter before activating the next transmitter by repeating steps 3 and 4.

6. However, ensure that you leave 10 seconds in between the reception of the last transmitter and the set-up of the following transmitter. The Temperature Station will number the transmitters in the order of set-up, i.e. the first transmitter will have the temperature displayed with the number 1 against it and so on.
7. When the outdoor temperature(s) is received the Temperature Station and transmitter(s) should be positioned in the desired places (see **Positioning & securing** below)

Note:
Should the total time of inserting the batteries into the transmitters take longer than 2-1/2 minutes from the time of inserting the batteries into the Temperature Station then temperature reception problems may occur. If the temperature is not be received, then see **Checking for 433 MHz reception**, before resetting the units (see **Resetting the Temperature Station** below).

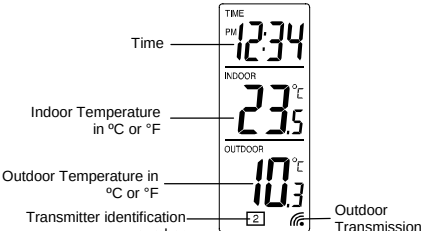
In the event of changing batteries in any of the units, all units need to be reset by following the setting up procedures. This is because a random security code is assigned by the transmitter at start-up and this code must

be received and stored by the Temperature Station in the first 2-1/2 minutes of power being supplied to it.

LCD SCREEN

The Temperature Station's LCD is comprised of three lines and once the batteries are inserted, all the segments will light up momentarily before displaying:

1. Time "-:- -"
2. Indoor and outdoor temperature in degree Celsius (°C) or Fahrenheit (°F)


TIME
PM
12:34
INDOOR
23.5
°C
OUTDOOR
10.3
°C
2
Time
Indoor Temperature in ºC or °F
Outdoor Temperature in ºC or °F
Transmitter identification number
Outdoor Transmission signal

12 or 24 hour setting:

After the batteries are inserted, set the time display as follow:

1. Press and hold the **"SET/CH"** key about 3 seconds to enter the set mode
2. Either a ": 12h" or ": 24h" will appear on the LCD. If ": 12h" is displayed then the current time display is set to 12-hour time. If ": 24h" is displayed then the current time is set to 24-hour time.
3. To alternate between the two times display mode, simply press the **"MIN/MAX"** key.
4. When the desired time display is selected, press the **"SET/CH"** key once more to enter the Celsius or Fahrenheit degree setting mode.

CELSIUS OR FAHRENHEIT DEGREE SETTING:

Following from the 12 or 24 hour setting mode.

1. Either a "°C" or "°F" will appear on the LCD. If "°C" is displayed then the current temperature reading is set to Celsius. If "°F" is displayed then the current temperature reading is set to Fahrenheit.
2. To alternate between the two temperature reading modes, simply press the **"MIN/MAX"** key.
3. Press **"SET/CH"** key to confirm and enter the time setting mode.

TIME SETTING:

Following from the Celsius or Fahrenheit degree mode.

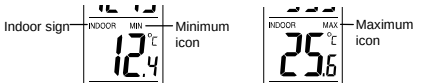
1. The Hour digit in the time section starts flashing
2. Using the **"MIN/MAX"** key, enter the hours of the current time and then followed by pressing the **"SET/CH"** key to advance to the minute mode
3. Again, using the **"MIN/MAX"** key, enter the minutes of the current time (by holding the key down, the digits are incremented in steps of five) and then finally followed by pressing the **"SET/CH"** key to exit the setting mode. Your Temperature Station is now fully operational.

USING THE TEMPERATURE STATION:

INDOOR TEMPERATURE:

The indoor temperature is displayed on the second line of the LCD under the time. The Temperature Station's built in sensor automatically measures the temperature once the batteries are inserted.

MINIMUM AND MAXIMUM INDOOR TEMPERATURE RECORDINGS:



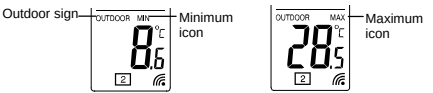
By pressing the **"MIN/MAX"** key the current indoor temperature will alternate between the minimum, maximum and current temperature recordings (also changes for outdoor temperature). Once a new indoor temperature high or low is reached, it will automatically set into the Temperature Station's memory.

OUTDOOR TEMPERATURE READING:

The outdoor temperature reading is on the bottom line of the LCD under the indoor temperature. The Temperature Station receives the outdoor temperature via 433 MHz frequency when the batteries are inserted into the transmitter within the 2-1/2 minutes of the setting up time (See **Setting up** above).

Note: Should the outdoor temperature not be received within 2-1/2 minutes after inserting the batteries into a transmitter, then see **"Checking 433 MHz reception"** below.

MINIMUM AND MAXIMUM OUTDOOR TEMPERATURE READING:



By pressing the **"MIN/MAX"** key the current indoor and outdoor temperature will alternate between the minimum, maximum and current temperature recordings. The time when the minimum and maximum outdoor temperature records were received will be also shown on the LCD blinking (recorded time is for outdoor temperature only). Once a new outdoor temperature high or is low reached, it will automatically be set into the Temperature Station's memory.

RESETTING THE MINIMUM AND MAXIMUM TEMPERATURE RECORDING:

By pressing and holding down the **"MIN/MAX"** key for about 3 seconds, both the indoor and outdoor minimum and maximum temperature recordings will be reset to the current indoor and outdoor temperatures. Only the outdoor temperature channel being displayed on the LCD will be reset. To reset another outdoor temperature channel, user shall first move to the desired transmitter No.

OUTDOOR TEMPERATURE 1, 2, AND 3

If the more than one transmitter is being used, to alternate between the

temperature readings of transmitter 1, 2, and 3, simply press the **"SET/CH"** key. If the reading is from transmitter 1, then the identification numbers 1 will be displayed in the outdoor temperature section of the LCD. The same will apply to the next transmitter and so on. However, if only one transmitter is used, no identification number will be displayed on the LCD.

CHECKING FOR 433 MHz RECEPTION:

In normal surroundings (for example away from interfering sources such as TV sets), the outdoor temperature can usually be easily received within 2-1/2 minutes. If the outdoor temperature is not displayed on the LCD after 2-1/2 minutes, then check the following:

1. The distance of the units should be at least 1.5 - 2.0 meters away from interfering sources such as computer monitors or TV sets.
2. Avoid placing the units onto or in the immediate proximity of metal doors, window
frames or structures.
3. Using other electrical products such as headphones and speakers that operate on the same signal (433 MHz) can prevent the transmission pick up.
4. Neighbours using electrical products operating on the 433 MHz signal can also cause interference. In most severe cases, the

reception is only possible once all other electrical products using the 433 MHz are switched off.

5. Within thick concrete rooms such as basements and tower blocks, the 433 MHz signal can be weakened (avoid placing near metal frames and structures).
6. Transmission can be affected by exposure to extreme temperature conditions. For example, if the weather has been extremely cold (under -25ºC) for an extended period of time then the transmission signal may be weakened. (Please bears this in mind when positioning the transmitter).

Note: Should after checking the above list and the outdoor temperature is still not received, then reset the units (see **Resetting the Temperature Station** below).

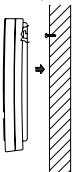
RESETTING THE TEMPERATURE STATION:

1. Remove the batteries from the Temperature Station and the transmitter(s)
2. Wait at least 30 seconds and repeat the procedures specified in **Setting up** above.

Note: Remember when resetting, all units have to be reset and to always insert the batteries into the Remote Thremo first and then followed by the transmitter(s).

POSITIONING
TEMPERATURE STATION:

The Temperature Station comes complete with a detachable stand that gives the option of table standing or wall mounting. To wall mount:

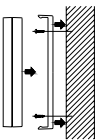


1. Fix a screw into the desired wall, leaving the head extended out the by about 5mm.
2. Using the Temperature Station's hanging hole, carefully hang it onto the screw.

Note: Always ensures that the unit locks onto the screw head before releasing.

OUTDOOR TRANSMITTER:

The Outdoor Transmitter is supplied with a holder that may be attached to a wall with the three screws or double-sided tape supplied. To attach to the wall using screws, please follow the steps below:



1. Mark the wall using a pen through the holes in the holder to obtain the exact drilling position.
2. Drill holes in the wall at the points marked.
3. Screw holder onto wall.

The Outdoor Transmitter simply clicks in or out of the holder. When inserting or removing the Outdoor Transmitter to or from the wall holder please hold both units securely to avoid tearing the holder from the wall.

There is also double sided tape included with the wall holder. On smooth surfaces this can be used instead of drilling holes. The mounting surface can, however, affect the transmission range. If for example the unit is attached to a piece of metal, it may then either reduce or increase the transmitting range. For this reason, we recommend not placing the unit on any metal surfaces or in any position where a large metal or highly polished surface is in the immediate proximity (garage doors, double-glazing, etc.). Before

securing in place, please ensure that the Temperature Station can receive the 433 MHz signal
from the Outdoor Transmitter at the positions that you wish to situate them.

CARE AND MAINTENANCE:

- Avoid placing the units in areas prone to vibration and shock as these may cause damage.
- Avoid areas where the units can be exposed to sudden changes in temperature, i.e. direct sunlight, extreme cold and wet/moist conditions as these will lead to rapid changes in temperature which reduces the accuracy of readings.

- When cleaning the LCD and casing, use a soft damp cloth only. Do not use solvents or scouring agents.
- Do not submerge the units into water.
- Immediately remove all low powered batteries to avoid leakage and damage. Replace only with new batteries of the recommended size.
- Do not make any repairs to the units. Please return them to the original point of purchase for repair by a qualified engineer. Opening and tampering with the units may invalidate its guarantee.

SPECIFICATIONS:

Temperature measuring range

Indoor	:	0ºC to +60ºC with 0.1ºC resolution
		32ºF to +140ºF with 0.2ºF resolution
		(--.- displayed if outside this range)
Outdoor	:	-29.9ºC to +69.9ºC with 0.1ºC resolution
		-21.8°F to +157.2°F with 0.2°F resolution
		(--.- displayed if outside this range)

Temperature checking intervals		
Indoor temperature	:	every 10 seconds
Temperature Station Outdoor		
Temperature reception	:	twice in 10 minutes
Transmitter	:	one minute
Transmitting frequency	:	433.92 MHz
Temperature transmitting	:	range up to 25 meters (Open space and free from interference)

Power source:		
Temperature Station	:	2 x AAA, IEC LR3, 1.5V batteries
Transmitter	:	2 x AA, IEC LR6, 1.5V batteries

Battery life for both units	:	Approximately 12 months (Alkaline batteries recommended)
Dimensions (L x W x H):		
Temperature Station	:	58 x 23 x 125 mm
Transmitter	:	39 x 21 x 128 mm

LIABILITY DISCLAIMER

- The electrical and electronic wastes contain hazardous substances. Disposal of electronic waste in wild country and/or in unauthorized grounds strongly damages the environment.
- Please contact your local or/and regional authorities to retrieve the addresses of legal dumping grounds with selective collection.
- All electronic instruments must from now on be recycled. User shall take an active part in the reuse, recycling and recovery of the electrical and electronic waste.
- The unrestricted disposal of electronic waste may do harm on public health and the quality of environment.

- As stated on the gift box and labeled on the product, reading the “User manual” is highly recommended for the benefit of the user. This product must however not be thrown in general rubbish collection points.
- The manufacturer and supplier cannot accept any responsibility for any incorrect readings and any consequences that occur should an inaccurate reading take place.
- This product is designed for use in the home only as indication of the temperature.
- This product is not to be used for medical purposes or for public information.

- The specifications of this product may change without prior notice.
- This product is not a toy. Keep out of the reach of children.
- No part of this manual may be reproduced without written authorization of the manufacturer.

R&TTE Directive 1999/5/EC

Summary of the Declaration of Conformity : We hereby declare that this wireless transmission device does comply with the essential requirements of R&TTE Directive 1999/5/EC.