Power Supply:

Weather station	:	3 x AA, IEC, LR6, 1.5V
Outdoor Transmitter	:	2 x AA, IEC, LR6, 1.5V
Battery life cycle	:	approximately 12 months (Alkaline batteries recommended)

Dimensions (L x W x H)

Weather Station	:	106 x 36.3 x 138 mm
Outdoor Transmitter (excluding stand):		43 x 23 x 160mm

LIABILITY DISCLAIMER

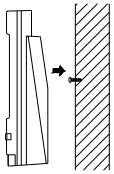
- The manufacturer and supplier cannot accept any responsibility for any incorrect readings and any consequences that occur should an inaccurate reading take place.
- This product is not to be used for medical purposes or for public information.
- This product is only designed to be used in the home as indication of the future weather and is not 100% accurate. Weather forecasts given by this product should be taken only as an indication and not as being totally accurate.
- 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 consent 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.

The transmission range is about 20 - 25 m from the transmitter to the Weather Station (in open space). However, this depends on the surrounding environment and interference levels. If no reception is possible despite the observation of these factors, all system units have to be reset (see **Setting up**).

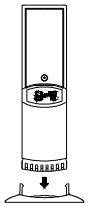
POSITIONING THE WEATHER STATION:



Before wall mounting, please check that the outdoor temperature and humidity values can be received from the desired locations. To wall mount:

1. Fix a screw (not supplied) into the desired wall, leaving the head extended out by about 5mm.
2. Hang the weather station onto the screw. Remember to ensure that it locks into place before releasing.

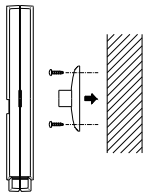
AFFIXING THE OUTDOOR DATA TRANSMITTER:



The Transmitter is supplied with a holder that may be attached to a wall with the two screws supplied. The Transmitter can also be position on a flat surface by securing the stand to the bottom to the Transmitter. Before securing the transmitter, ensure that the 433MHz signal (outdoor readings) is properly received.

TO AFFIX BY SCREW, FOLLOW THESE STEPS:

1. Using the holes in the holder as a guide, mark the holes on the drilling surface.
2. Drill the marked area to the required depth.
3. Screw the holder onto wall and click the transmitter into holder.



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.). Choose a sheltered place. Avoid direct rain and sunshine.

Before securing in place, please ensure that the Weather station can receive the 433MHz signal from the outdoor transmitter at the positions that you wish to situate them.

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

CARE AND MAINTENANCE:

- Extreme temperatures, vibration and shock should be avoided as these may cause damage to the unit and give inaccurate forecasts and readings.
- When cleaning the display and casings, use a soft damp cloth only. Do not use solvents or scouring agents as they may mark the LCD and casings.
- Do not submerge the unit in water.
- Immediately remove all low powered batteries to avoid leakage and damage. Replace only with new batteries of the recommended type.
- Do not make any repair attempts to the unit. Return them to their original point of purchase for repair by a qualified engineer. Opening and tampering with the unit may invalidate their guarantee.
- Do not expose the units to extreme and sudden temperature changes, this may lead to rapid changes in forecasts and readings and thereby reduce their accuracy.

SPECIFICATIONS:

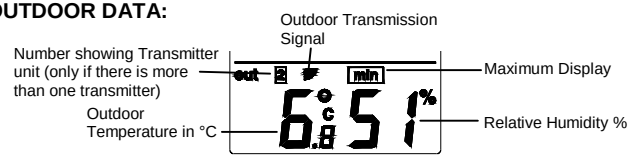
Temperature measuring range:		
Indoor	:	-9.9ºC to +69.9ºC with 0.1ºC resolution (**"OF.L"** displayed if outside this range)
Outdoor	:	-29.9ºC to +69.9ºC with 0.1ºC resolution (**"OF.L"** displayed if outside this range)
Relative humidity measuring range:		
Indoor	:	1% to 99% with 1% resolution (**"- -"** displayed if outside this range)
Outdoor	:	1% to 99% with 1% resolution (**"- -"** displayed if outside this range)
Indoor Temperature checking interval	:	every 10 seconds
Indoor Humidity checking interval	:	every 20 seconds
Outdoor Data reception	:	every 5 minutes

Uncomfortable: A sad face icon "**L**" indicating any value outside the comfortable range.

TOGGLING AND RESETTING THE INDOOR RECORDINGS:

1. To toggle between the indoor current, minimum and maximum temperature and humidity data and the times at which minimum/maximum temperatures were recorded, press the IN key:
   Once to show the minimum temperature and humidity values with time and date recorded for minimum temperature
   Twice to show the maximum temperature and humidity values with time and date recorded for maximum temperature
   Three times to return to the current time, date, temperature and humidity levels
2. To reset the minimum and maximum temperature and humidity data and the times at which minimum/maximum temperatures were recorded, press the IN key continuously for about 3 seconds. This will reset all minimum and maximum data recorded to the current time, date, temperature and humidity. The current time taken is the normal displayed time and does not regard the time zone set for the unit.

OUTDOOR DATA:



The last LCD section shows the outdoor temperature and humidity, a transmission signal and a number beside the temperature will also show if more than one transmitter has been used.

TOGGLING AND RESETTING THE OUTDOOR RECORDINGS:

1. To toggle between the outdoor current, minimum and maximum temperature and humidity data and the times at which minimum/maximum temperatures were recorded, press the OUT key:
   Once to show the minimum temperature and humidity values with time and date recorded for minimum temperature
   Twice to show the maximum temperature and humidity values with time and date recorded for maximum temperature
   Three times to return to the current time, date, temperature and humidity levels
2. To toggle between transmitters, press the CH key:
   Once to show transmitter 2
   Twice to show transmitter 3
   Three times to return to transmitter 1

Note: ***The transmitter number will only be displayed if there is more than one transmitter detected***.

3. To reset the minimum and maximum temperature and humidity data, and the times at which minimum/maximum temperature were recorded, press the OUT key continuously for about 3 seconds. This will reset all minimum and maximum data recorded to the current time, date, temperature and humidity. The current time taken is the normal displayed time and does not regard the time zone set for the unit.

OUTDOOR TRANSMITTER:

The temperature and humidity are measured and transmitted every 60 seconds. The temperature may affect the range of the Outdoor Transmitter. At cold temperatures the transmitting distance may be decreased. Please bear this in mind when placing the transmitter.

433MHz RECEPTION CHECK

If the temperature and humidity data is not being received 15 minutes after setting up (the display shows "- - -" after checking for the transmission 3 times) please check the following points:

1. The distance of the weather station or transmitter should be at least 1.5 to 2 meters away from any interfering sources such as computer monitors or TV sets.
2. Avoid positioning the Weather Station onto or in the immediate proximity of metal window frames.
3. Using other electrical products such as headphones or speakers operating on the same signal frequency (433MHz) may prevent correct signal transmission and reception.
4. Neighbours using electrical devices operating on the 433MHz signal frequency can also cause interference.

Note:
When the 433MHz signal is received correctly, do not re-open the battery cover of either the transmitter or Weather Station, as the batteries may spring free from the contacts and force a false reset. Should this happen accidentally then reset all units (see **Setting up** above) otherwise transmission problems may occur.

- Recommended distance to any interfering sources like computer monitors or TV sets is a minimum of 1.5 - 2 metres.
- 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 nighttime, 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.

MANUAL CLOCK SETTING:

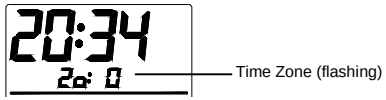
In case the Weather station is unable to detect the DCF-signal (disturbances, transmitting distance, etc.), the time can be manually set. The clock will then work like a normal Quartz clock.

1. Press the SET key until the time display flashes.
2. Use the IN key to set the hours and the OUT key to set the minutes. Pressing these keys continuously moves the hours consecutively by 1 and the minutes consecutively by 5.
3. Either press the SET key once more to enter the set mode for the time zone and date section or do not touch any buttons for around 30 seconds to confirm the set time.

Note:

The unit will still try to receive the signal every hour despite it being manually set. When it does receive the signal, it will change the manually set time into the received time. During reception attempts the DCF tower icon will flash. If reception has been unsuccessful, then the DCF tower icon will not appear but reception will still be attempted the following hour.

TIME ZONE SETTING:



The time zone default of the Weather station is 0. To re-set the time zone:

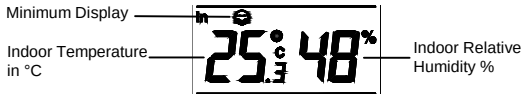
1. Press the SET key after completing the time setting in order to enter the Time Zone setting (flashing).
2. Using the IN key, set the time zone. The range runs from 0 to +9 and then runs from -9 back to 0 in consecutive 1-hour intervals.
3. Press the SET key to enter the date setting mode or do not touch any buttons for around 30 seconds to confirm the time zone setting.

DATE SETTING:

The date default of the Weather station is 1. 1 or TH 1. in the year 1998. Once the radio-controlled time signals are received, the date is automatically updated. However. if the signals are not received, you can adjust the date manually. To do this:

1. Press the SET key after entering the time zone setting in order to enter the year setting (flashing). Reset the year by pressing the IN key. The range runs from 1998 to 2020.
2. Press the SET key again to enter the month and date display (flashing).
3. Using the OUT key, set the month required. Using the IN key, set the date required.
4. Press the SET key again to enter the weekday and date display (flashing).
5. Using the IN key, set the weekday required.
6. Press the SET key once more to confirm all settings or do not touch any buttons for around 30 seconds. The mode will return to normal.

INDOOR TEMPERATURE AND HUMIDITY READING WITH COMFORT LEVEL INDICATOR:



The indoor temperature and humidity are received automatically and displayed on the second section of the LCD.

THE COMFORT LEVEL INDICATORS:

Comfortable: A happy face icon "**J**" indicating a temperature level between 20.0°C and 25.9°C and humidity between 45% and 65%.

SET key (Setting):

- Used to enter the set mode for the following functions: Time, Time zone, Year, Date and Weekday
- The year can also be displayed in the set mode (not displayed in normal mode)

IN key (Indoor)

- Used to toggle between the current/ minimum/ maximum indoor temperature and humidity
- Press for over 3 seconds to reset the indoor maximum and minimum temperature and humidity records (will reset all records to current level)
- Changes the hour, time zone, year, day and weekday setting when in set mode

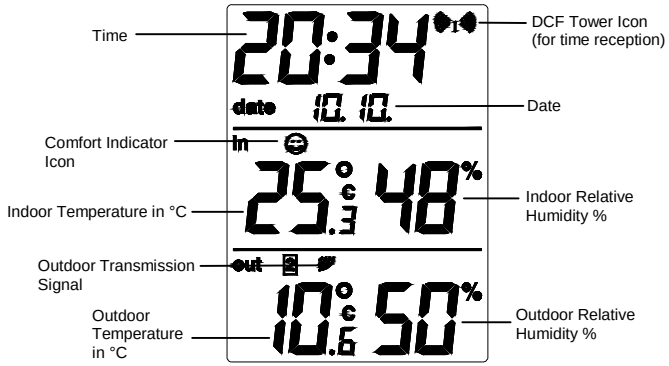
OUT key (Outdoor)

- Used to toggle between the current/ minimum/ maximum outdoor temperature and humidity
- Press for around 3 seconds to reset the outdoor maximum and minimum temperature and humidity records (will reset all records to current level of the relative transmitter being reset- each transmitter's data must be reset separately)
- Changes the minute and month setting when in set mode

CH key (Channel)

- Used to toggle between the Outdoor Transmitters 1, 2 and 3.

LCD SCREEN AND SETTINGS:



For better distinctness the LCD screen is split into 3 sections displaying the informations for time, date, indoors and outdoors.

RADIO CONTROLLED TIME:

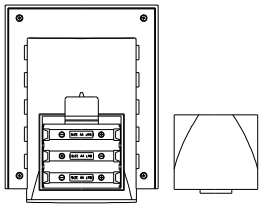
The time base for the radio controlled time is a Cesium Atomic Clock operated by the Physikalisch Technische Bundesanstalt Braunschweig which has a time deviation of less than one second in one million years. The time is coded and transmitted from Mainflingen near Frankfurt via frequency signal DCF-77 (77.5 kHz) and has a transmitting range of approximately 1,500 km. Your radio-controlled Weather Station receives this signal and converts it to show the precise time in summer or wintertime. The quality of the reception depends greatly on the geographic location. In normal cases, there should be no reception problems within a 1,500km radius around Frankfurt.

Once the outdoor data reception completes on the Weather station, the DCF tower icon in the clock display will start flashing in the upper right corner. This indicates that the clock has detected that there is a radio signal present and is trying to receive it. When the time code is received, the DCF tower becomes permanently lit and the time and data will be displayed.
If the tower icon flashes, but does not set the time or the DCF tower does not appear at all, then please take note of the following:

have the temperature and humidity displayed with the number 1 against it and so on.

5. When all the transmitters are set up, there is a testing period, during which the display switches quickly between all the received transmitters at random, according to which random transmission it receives. Pressing any key will stop this process and the display will show the temperature and humidity for the first transmitter. The process also stops automatically if no keys are pressed for a few minutes.
6. Once the remote data has been received and displayed on the Weather station, the DCF-77 time code reception is automatically started. This takes typically between 3-5 minutes in good conditions. This time period is an excellent opportunity to locate the transmitter(s) in suitable location(s) outdoors. In order to ensure sufficient 433 MHz transmission however, this should under good conditions be no more than 20 - 25 metres from where the Weather station will be finally positioned (see notes on **"Positioning"** and **"433 MHz Reception"**).
7. If after 10 minutes, the DCF time has not been received, use the SET key to manually enter a time initially. The clock will automatically attempt each hour to receive the DCF time. When this is successful, the received time will override the manually set time. The date is also updated with the received time. (Please refer also to notes on **"Radio controlled Time Reception"** and **"Manual Time Setting"**).

HOW TO INSTALL AND REPLACE BATTERIES IN THE WEATHER STATION

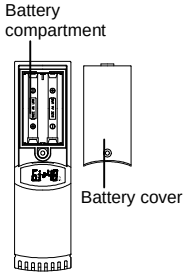


The Weather station uses 3 x AA, IEC LR6, 1.5V batteries. When batteries will need to be replaced, the battery symbol will appear on the LCD. To install and replace the batteries, please follow the steps below:

1. Insert finger or other solid object in the space at the top center of the battery compartment and lift up to remove the cover.
2. Insert batteries observing the correct polarity (see marking).
3. Replace compartment cover.

HOW TO INSTALL AND REPLACE BATTERIES IN THE OUTDOOR TRANSMITTER

The outdoor transmitter uses 2 x AA, IEC LR6, 1.5V batteries. To install and replace the batteries, please follow the steps below:



1. Remove the battery cover.
2. Insert the batteries, observing the correct polarity (see marking).
3. Replace the battery cover on the unit.

Note:
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 Weather station in the first 3 minutes of power being supplied to it

BATTERY CHANGE:

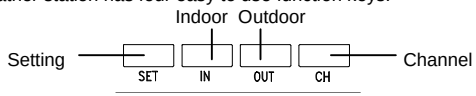
It is recommended to replace the batteries in all units on an annual basis to ensure optimum accuracy of these units.

Please participate in the preservation of the environment. Return used batteries to an authorised depot.

FUNCTION KEYS:

Weather station:

The weather station has four easy to use function keys:



WIRELESS 433 MHz WEATHER STATION

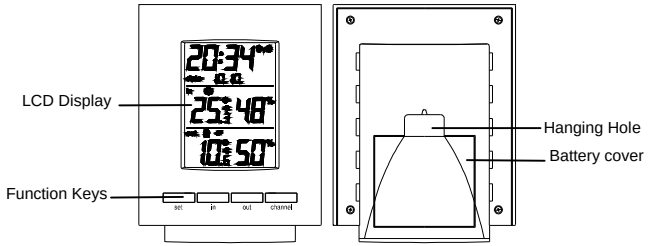
Instruction Manual

INTRODUCTION:

Congratulations on purchasing this Weather Station with wireless 433MHz transmission of outdoor temperature and humidity and display of indoor temperature and humidity. It is further featuring a DCF-77 radio controlled clock with date display. With four easy to use function keys, this innovative product is ideal for use in the home or office.

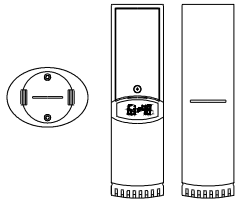
FEATURES:

The Weather Station



- DCF-77 Radio Controlled Clock with manual setting option
- 24 hour display
- Hour and minute display, seconds indicated by flashing dot
- Time zone option ±9 hours
- Date with month calendar display
- Indoor temperature reading in °C with minimum and maximum recording
- Indoor humidity reading displayed as RH% with minimum and maximum recording
- Indoor comfort level indicator- happy or sad face icons
- Outdoor temperature reading (for up to 3 transmitters) in °C with minimum and maximum recording
- Outdoor humidity reading displayed as RH% with minimum and maximum recording
- Minimum and maximum recordings for indoor and outdoor temperature show date and time received and can be reset
- Can take up to three outdoor transmitters
- Table standing or wall mounting
- Low battery indicator

The Outdoor Transmitter



- Remote transmission of outdoor data to Weather Station by 433 MHz
- Shower proof casing
- Wall mountable or table standing
- Mounting at a sheltered place. Avoid direct rain and sunshine

SETTING UP:

1. First, insert the batteries into the Weather station (see "**How to install and replace batteries in the Weather station**" below**)**. Once the batteries are in place, all segments of the LCD will light up briefly. Then the indoor temperature and humidity, the time as 0:00, and the date as 1.1. will be displayed. If the indoor temperature and humidity are not displayed after a few seconds, remove the batteries and wait for at least 10 seconds before reinserting them. Once the indoor data is displayed proceed to step 2.
2. Within 3 minutes of activating the Weather station, place the batteries into the transmitter (see "**How to install and replace batteries in the Outdoor Transmitter**" below).
3. After inserting the batteries into the transmitter, the Weather station will start receiving data from the transmitter. The outdoor temperature and humidity should then be displayed on the Weather station. If this does not happen after 5 minutes, the batteries will need to be removed from both units and reset from step 1.
4. The Weather station can take up to 3 remote transmitters. If you have purchased additional transmitters, follow step 2 for all extra transmitters. However, ensure that you leave 10 seconds in between the reception of the last transmitter and the set-up of the following transmitter. The Weather station will number the transmitters in the order of set-up, i.e. the first transmitter will