Version 11/14

CE

(D) Funk-Wetterstation mit USB und Touchscreen

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(GB) Radio Weather Station with USB and Touchscreen

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Best.-Nr. / Item No. 672861

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GB

1. Introduction

Dear Customer,

Thank you for purchasing this product.

This product complies with the statutory national and European requirements. To maintain this status and to ensure safe operation, you as the user must observe these operating instructions!

Read the complete operating instructions before taking the product into operation; observe all operating notes and safety information.

If there are any technical questions, please contact:

International: www.conrad.com/contact

United Kingdom: www.conrad-electronic.co.uk/contact

2. Scope of Delivery

- Weather station
- Outdoor sensor for temperature/humidity (with integrated DCF receiver and radio transmitter)
- Weather Protection Housing for Temperature/Humidity Sensor
- Rain sensor
- Wind speed sensor
- Wind direction sensor
- Mast holder with base and assembly material (e.g. cable clamps, cable ties)
- USB cable
- 2 rechargeable batteries (rated voltage 1.5 V) for the outdoor sensor
- CD with software (for Windows operating system as of Windows XP)
- Operating instructions

3. Intended Use

The weather station serves to display different measuring values, e.g. the indoor/outdoor temperature and the indoor/outdoor air humidity, rain volume, wind speed and wind direction.

The data measured by the outdoor sensors are wirelessly transferred to the weather station.

Furthermore, the weather station uses an internal barometric pressure sensor and the barometric pressure change record to calculate a weather forecast that is displayed with graphical symbols.

The time and date can be automatically set by DCF time signal. It can also be set manually, however (e.g. in case of reception problems).

The weather station is operated by the touch-sensitive display (touch screen).

For a list of all features and characteristics of the product, see chapter 5.

The manufacturer assumes no responsibility for incorrect displays, measured values or weather forecasts and their consequences.

The product is intended for private use; it is not suitable for medical use or informing the public.

The parts of this product are no toys. They contain fragile and swallowable glass and small parts, as well as batteries. Keep the product away from children!

Operate all components so that they cannot be reached by children.

The product is operated with batteries. The weather station may be operated via an external plug-in mains adapter (not included in the delivery, available as an accessory) as well.

Any other use than described above may damage the product and poses additional dangers.

Read these operating instructions completely and attentively; they contain a lot of important information on setup, function and operation. Always observe the safety information!

4. Explanation of Symbols

An exclamation mark in a triangle indicates important notes in these operating instructions that must be strictly observed.

The „hand“ symbol indicates special information and advice on operation.

5. Features and Functions

a) Weather Station

- Touch screen for simple operation
- DCF time/date display (DCF receiver integrated in the outdoor sensor), manual setting possible
- Time display format can be switched between 12 and 24 hours
- Display of indoor temperature and humidity
- Display of the outdoor temperature (or wind chill or dew point temperature) and outdoor humidity
- Temperature display can be switched to degrees Celsius (°C) or degrees Fahrenheit (°F)
- Maximum and minimum memory indoor/outdoor temperature and indoor/outdoor humidity
- Maximum value storage for wind speed and rain volume
- Weather forecast for the next 12 - 24 hours via graphical symbols
- Bar graph for display of the barometric pressure progress over the last 12 hours or 24 hours (can be switched)
- Alarm function for wind speed, rain volume, indoor/outdoor temperature, indoor/outdoor humidity (exceeding or undercutting of certain adjustable thresholds)
- Alarm Function
- Wall mounting or table setup possible (by extensible standing bases on the reverse)
- Operation via 3 batteries type AA/Mignon
- USB socket for connection to a computer, incl. software for data display/assessment
- Operation in dry, closed inner rooms
- Background lighting of LC display (for pushing buttons)

b) Temperature/Humidity Sensor

- Integrated DCF receiver
- Wireless radio transmission of the measured data and decoded DCF data for the weather station
- Operation by 2 batteries, type AA/Mignon (special rechargeable batteries with a rated voltage of 1.5 V)
- Operation in the outdoor area

c) Rain Sensor

- Measurement of the rain volume
- Connection to the solar module by cable (connection socket „RAIN“)
- Assembly on the included mast holder
- Operation in the outdoor area

d) Wind Sensor

- Measurement of the wind speed and wind direction
- Connection to the temperature/humidity sensor by cable (connection socket „WIND“)
- Assembly on the included mast holder
- Operation in the outdoor area

e) Solar Module

- Charging of the batteries inserted in the temperature/humidity sensor
- Connection to the temperature/humidity sensor by cable (connection socket „RAIN“)
- Reset button (on the bottom) to reset the outdoor sensor

6. Safety Information

The warranty/guarantee will expire if damage is incurred resulting from non-compliance with these operating instructions. We do not assume any liability for consequential damage!

Nor do we assume any liability for damage to property or personal injury caused by improper use or failure to observe the safety information. The warranty/guarantee will expire in such cases!

Dear customer, the following safety information is intended not only for the protection of your health but also for the protection of the device. Please read the following items carefully:

- The unauthorized conversion and/or modification of the product is prohibited for safety and approval reasons (CE). Do not open or disassemble the product (apart from the necessary steps for inserting/ changing the batteries, cleaning or mounting)!

  Maintenance, adjustment, or repair work must only be carried out by a specialist or a specialist workshop.
- Do not use this product in hospitals or medical facilities. Although the outdoor sensor emits only relatively weak radio signals, they may lead to functional impairment of live-supporting systems there. The same may apply for other areas.
- The weather station is only suitable for dry, closed rooms. Do not expose it to direct sunlight, heavy heat, cold, dampness or wetness; otherwise, it will be damaged.
- The outdoor sensors are suitable for operation in the outdoor area. They must not be operated in or under water, however.
- This product is not a toy and not suitable for children. The product contains small parts, glass (display) and batteries. Place the product so that it cannot be reached by children.
- Do not leave packaging material unattended. It may become a dangerous toy for children.
- The product is only suitable for use in temperate, not tropical, climates.
- If the product is brought from a cold into a warm room (e.g. for transport), it is possible that condensation develops. This may damage the product.

  Therefore, first let the product reach room temperature before using it. This may take several hours.
- In schools, training centres, hobby and self-help workshops, the use of the product must be supervised by responsible trained personnel.
- Handle the product with care; impacts, shock or fall even from low heights will damage it.

7. Information on Batteries and Rechargeable Batteries

The weather station is intended for operation with 3 batteries.

Operation of the weather station with rechargeable batteries is generally possible. However, the lower voltage (rechargeable batteries = 1.2 V, batteries = 1.5 V) and the lower capacity of rechargeable batteries will decrease the operating time.

We recommend that you use high-quality alkaline batteries to ensure long and safe operation of the weather station. If you want to use rechargeable batteries, always use special NiMH batteries with a low self-discharge.

For the outdoor sensor, you have to use the 2 included special rechargeable batteries of 1.5 V; they are charged by the solar module when the sun is bright enough.

- Keep batteries/rechargeable batteries out of the reach of children.
- Ensure that the polarity is correct when inserting the batteries/rechargeable batteries (observe plus/+ and minus/-).
- Do not leave any batteries/rechargeable batteries lying around openly. There is a risk of batteries being swallowed by children or pets. If swallowed, consult a doctor immediately.
- Leaking or damaged batteries/rechargeable batteries can cause chemical burns to skin at contact; therefore, use suitable protective gloves.
- Make sure that batteries/rechargeable batteries are not short-circuited, disassembled or thrown into fire. There is a danger of explosion!
- Do not recharge normal, non-rechargeable batteries. There is a danger of explosion! Only charge rechargeable batteries intended for that purpose.
- If not used for a longer period (e.g. in case of storage), remove the inserted batteries/rechargeable batteries. There is a danger of old batteries/rechargeable batteries leaking, which causes damage to the product, loss of warranty/ guarantee!
- Always replace the entire set of batteries/rechargeable batteries, only use batteries/rechargeable batteries of the same type and by the same manufacturer with the same charge status (do not mix charged with partially charged or empty batteries/rechargeable batteries).
- Never mix batteries and rechargeable batteries. Either use batteries or rechargeable batteries.
- For the environmentally friendly disposal of batteries and rechargeable batteries, read the chapter „Disposal“.

8. Assembly of the Outdoor Sensors

The temperature/humidity sensor and the wind and rain sensor and the solar module all can be installed on the included mast holder.

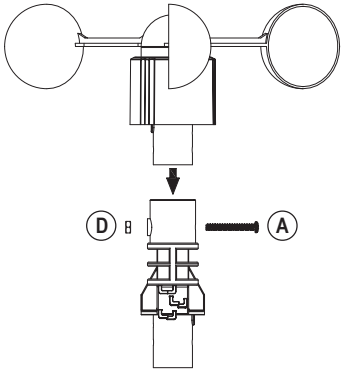
All components are wired to the temperature/humidity sensor, the transmitter for radio transmission of all measured data is integrated in the temperature/humidity sensor.

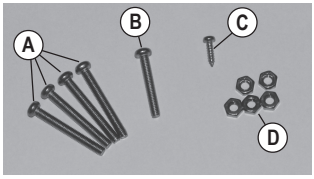
This means that not only can all sensors be very easily installed at one location of your premises, but a total of 2 rechargeable batteries type AA/mignon are sufficient for all sensors. signing on of the sensors to the weather station is much easily than in other weather stations because of this.

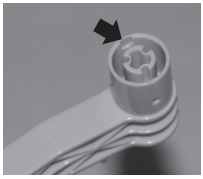
Proceed as follows to assemble and mount the outdoor sensors:

- First remove all components of the outdoor sensors from the packaging.
- Plug the wind speed sensor into one of the two sockets on the plastic Y holder and fasten it with a long screw (A) and a nut (D).

  Observe that the tab at the wind speed sensor is guided precisely into the Y-holder slot (see arrow in the right figure), since the screw can otherwise not be pushed through.





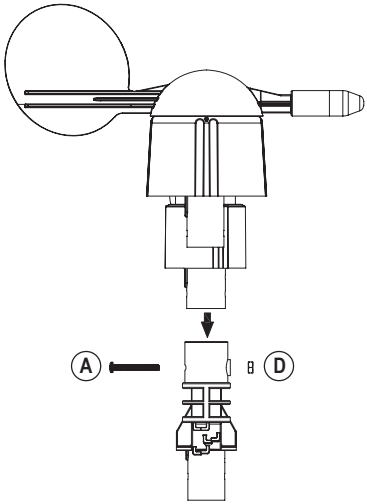


- Then the wind direction sensor must be plugged into the second socket of the plastic Y-holder; again, observe that the tab at the wind direction sensor is guided precisely into the Y-holder's slot.

  Fasten the wind direction sensor to the Y-holder with a long screw (A) and a nut (D).
- The wind speed sensor has a short, thin cable with a Western plug.

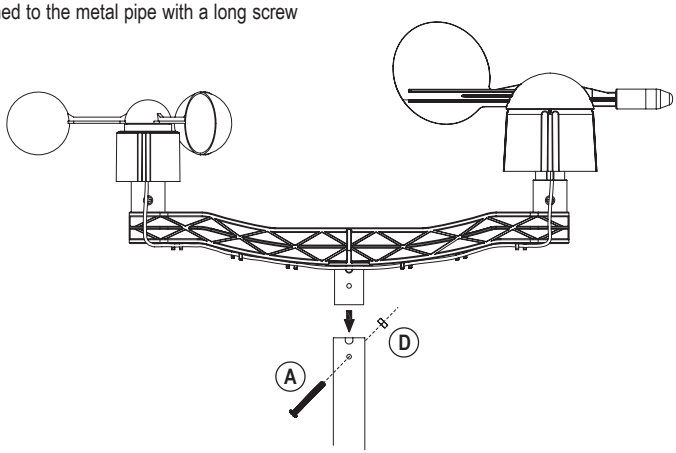
  Connect the Western plug to the corresponding socket at the bottom of the wind direction sensor so that it latches.

  The cable can be attached to the cable brackets at the bottom of the Y-holder.



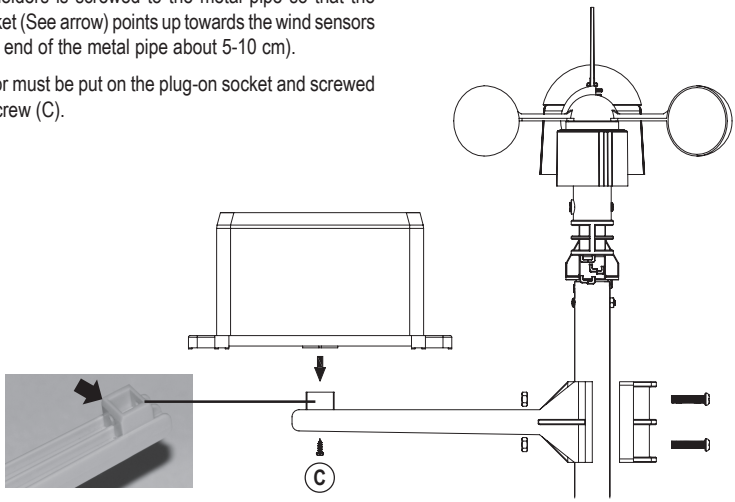
• One of the two included metal pipes has a small slot at the end. Plug the Y-holder right into this end, so that the plastic tab at the Y-holder rests precisely in the slot of the metal pipe.

Then the Y-holder is fastened to the metal pipe with a long screw (A) and a nut (D).



• One of the two L-holders is screwed to the metal pipe so that the square plug-on socket (See arrow) points up towards the wind sensors (distance to the top end of the metal pipe about 5-10 cm).

• Then the rain sensor must be put on the plug-on socket and screwed on with the small screw (C).



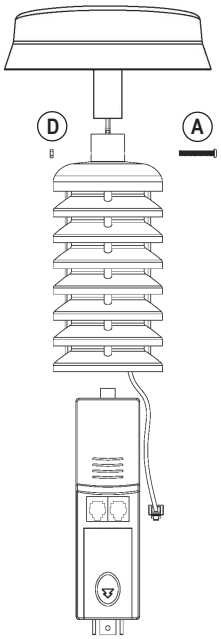
The figure above shows that the rain sensor is plugged onto the L-holder longitudinally. It can also be put on the square plug-on socket tuned by 90° so that water can run off better and will not run onto the L-holder.

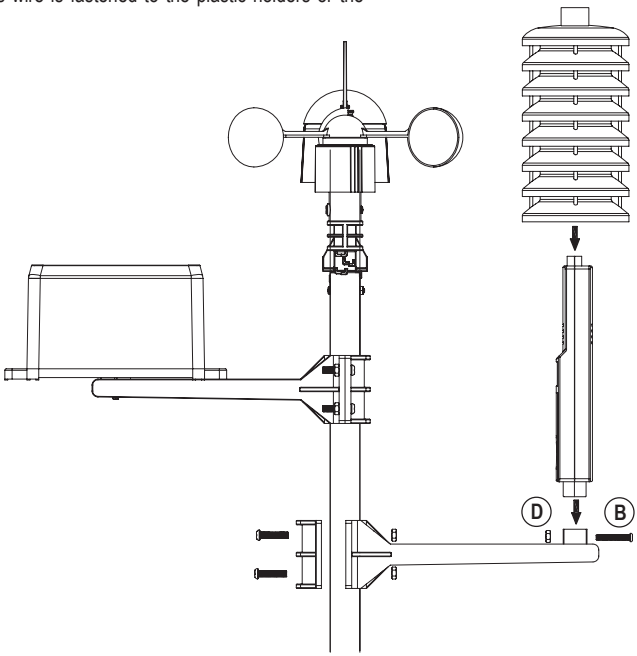
If desired, the rain sensor can be installed in a place father away as well instead of at the mast, due to its long connection cable.

- Plug the solar module into the upper end of the weather protection housing for the temperature/humidity sensor.

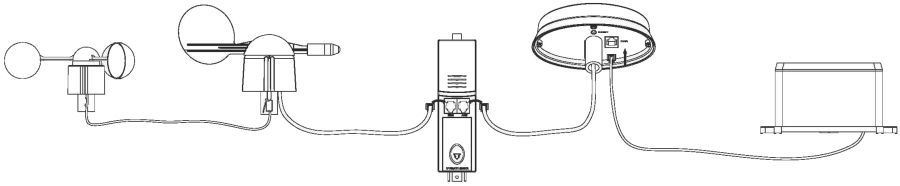
  Observe that the tab at the solar module is guided precisely into the weather protection casing, since the screw can otherwise not be pushed through.
- Fasten the two parts with a long screw (A) and a nut (D).
- Install the second L-holder precisely opposite from the metal pipe.
- Insert the temperature/humidity sensor into the square plug-on socket and screw it on with the short screw (B) and a nut (D).

  The sensor's battery compartment can point either inward or outward.
- The weather protection housing that is pushed onto the top of the temperature/humidity sensor will later service to protect it from precipitation and direct solar irradiation to avoid measuring errors.
- Connect the cable from the solar module to the „RAIN" socket at the temperature/humidity sensor.
- Carefully push the weather protection housing onto the temperature/humidity sensor.
- Connect the cable of the rain sensor to the „RAIN" socket at the bottom of the solar module.
- Last, connect the cable of the wind direction sensor to the „WIND" socket at the temperature/humidity sensor.
- Wiring is now complete. Excess wire is fastened to the plastic holders or the metal rod with cable ties.





• The connection chart for illustration:



The wind speed sensor is connected to wind direction sensor. It in turn is connected to the socket „WIND“ of the temperature/humidity sensor.

The receiver is connected to the socket „RAIN“ of the solar module. The solar module is connected to the socket „RAIN“ of the temperature/humidity sensor.

• Fasten the metal rod to the sensors in the outdoor area at a suitable location. A second included metal rod is used as extension.

Important!

The wind direction sensor has markings for the cardinal points („S“ = South, „N“ = North, „W“ = West, „E“ = East).

Attach the metal rod with the sensors on it so that the „N“ mark points due North. The correct directions can be determined with a compass (e.g. integrated in some smartphones or can be downloaded as an app).

If you do not have a compass, you may also use a map or map material from the internet to perform at least approximate alignment.

Observe the following for selection of the mounting site:

The mounting site must be exposed for wind speed and wind direction to be measured correctly. A minimum distance to buildings of 10 metres is recommended.

Do not mount the outdoor sensor under or close to trees or bushes because dropping foliage may clog the opening in the rain sensor.

The range between the transmitter of the temperature/humidity sensor and the weather station is up to 100 m in a free range (at a direct line of sight between transmitter/receiver).

The range that can actually be achieved, however, is much lower since there are walls, furniture, windows or plants between the weather station and the outdoor sensor.

Another interference that strongly reduces range is proximity to electrical/electronic devices, cables or metal parts. Another problem are reinforced concrete ceilings, metal-vaporised isolating glass windows or other devices on the same transmission frequency.

Before firmly attaching the metal rod with the outdoor sensors, you should perform a function and reception test. After inserting the batteries into the outdoor senor and weather station (see chapter 10), the corresponding measured values should be displayed after several minutes.

9. Commissioning

a) Outdoor Sensor

The DCF receiver is integrated in the temperature/humidity sensor housing. This leads to much less interference in DCF reception than in other weather stations.

Observe:

If you have not installed the holder assembled in chapter 8 with the sensors in the outdoor area yet, but they are still within a building, there may be reception problems (DCF time is not displayed on the weather station).

We recommend that you first install the holder and sensors outdoors and then insert the included batteries into the battery compartment of the temperature/humidity sensor.

- Open the battery compartment at the temperature/humidity sensor by pushing the battery compartment lid downwards.
- Insert the two included batteries into the battery compartment in the correct polarity (observe plus/+ and minus/-) and closed the battery compartment again. A red LED in the housing lights up for about 4 seconds and then goes out again. When the DCF signal was recognised, the LED flashes 5 times and then goes out.
- The DCF receiver in the temperature/humidity sensor now scans for the DCF signal. This may take about 5 minutes. Do not move the holder with the sensors during this time.

b) Weather Station

Please note:

The DCF receiver integrated in the housing of the temperature/humidity sensor requires about 5 minutes at good reception until it has completely received and assessed the data in the DCF signal.

If you insert batteries in the weather station during this time, the weather station may display measured values for temperature, humidity, wind direction and wind speed after a while, but not DCF time and date yet.

Just wait for a few minutes until the DCF time and date are sent in addition to the measured values; the DCF time and date display appears automatically on the weather station then (bottom-most display line).

- Open the battery compartment lid on the rear of the weather station and insert 3 type AA/mignon batteries into with correct polarity (observe plus/+ and minus/-).
- All display segments appear briefly on the weather station's display after the batteries are inserted. Then the weather station issues a signal sound.
- Close the battery compartment again.
- The weather station is now scanning for the outdoor sensor's transmitter signal. Between the display of the indoor and outdoor humidity, the symbol „ “ for transmitter display is displayed.

  Do not touch the weather station touch screen during this time and do not move the weather station.
- After a few minutes, the outdoor temperature/humidity should be displayed, as well as the wind speed, wind direction and rain volume.

- With proper DCF reception (the DCF receiver is installed in the temperature/humidity sensor housing and transfers its data to the weather station), the time and date are displayed correctly as well. Additionally, the radio tower icon „  “ is displayed at the bottom left of the display.

If no data from the outdoor sensors or DCF time are displayed at the weather station, observe the following:

- Recognition and assessment of the DCF signal by the receiver in the temperature/humidity sensor will take several minutes.

  If you have inserted the batteries in the temperature/humidity sensor and the weather station in quick sequence, measured values may be displayed already after a while, but no DCF data. Just wait for a few minutes.

  The transmitter in the temperature/humidity sensor transfers data to the weather station about every 48 seconds; therefore, it may take some time until measured values (or the DCF time and date) are displayed.

 Wait for a few minutes without touching the touch screen.

- Do not put the weather station right next to any other electronic devices, metal parts, cables, lines, sockets, etc., since this may reduce the reception quality for the transmitter signal.
- Reduce the distance between weather station and outdoor sensor. If the reception conditions are detrimental (e.g. reinforced concrete build, metallised isolation glass windows, aluminium windows, etc.), range may be greatly reduced.
- The DCF receiver in the temperature/humidity sensor housing will try to receive the DCF signal every hour.
- Check the cable connections between the sensors.
- Check that the batteries or rechargeable batteries are inserted correctly.
- If you still do not see the outdoor sensor data or correct time/date on the display after 10 minutes, remove the batteries from the weather station and the rechargeable batteries from the outdoor sensor.

  Wait for at least 10 seconds and then proceed as described in chapters 9 a) and b).

  Alternatively, you may briefly push the rest button recessed at the bottom of the solar module.

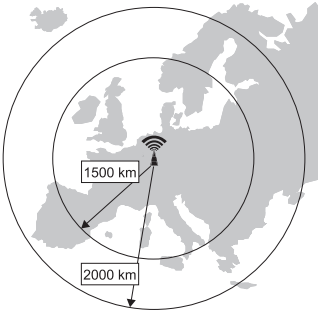
10. Information on DCF Reception

The DCF signal is sent by a station in Mainflingen (near Frankfurt am Main). Its range is up to 1500 km, and under perfect reception conditions even up to 2000 km.

The DCF signal contains, among others, the precise time (deviation theoretically 1 second in one million years!) and the date.

This means you do not have to switch manually between daylight savings time and normal time; the time is adjusted automatically.

The first DCF reception attempt is always performed at initial commissioning (insertion of the rechargeable batteries in the temperature/ humidity sensor); see chapter 9.



The DCF receiver is integrated in the temperature/humidity sensor housing. This leads to much less interference in DCF reception than in other weather stations.

A DCF reception attempt is performed several times per day.

If you want to manually start a DCF reception attempt, you need to remove the rechargeable batteries from the temperature/humidity sensor for a few seconds. Also cover the solar module. Then insert the rechargeable batteries again.

Alternatively, you may briefly push the reset button recessed at the bottom of the solar module.

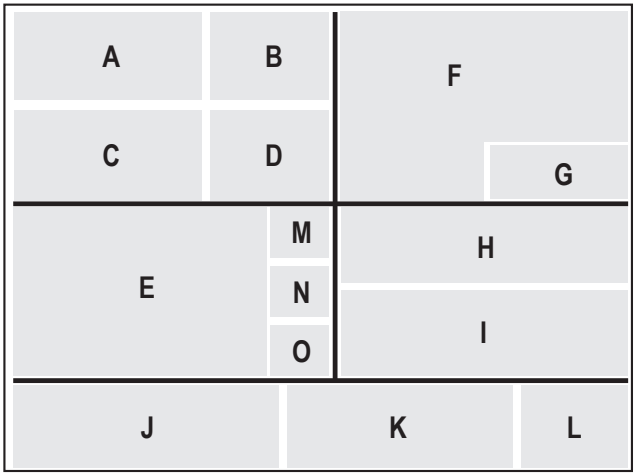
Search for the DCF signal and its evaluation will take at least 5 minutes.

If you still do not see the outdoor sensor data or correct time/date on the display after 10 minutes, remove the batteries from the weather station and the rechargeable batteries from the outdoor sensor. Wait for at least 10 seconds and then proceed as described in chapters 9 a) and b).

11. Weather Station Operation

The display areas combine several functions.

Briefly touching the touch screen permits selection of the desired display area for which you want to display, set or adjust functions.



Display area		Function
A	„IN TEMP“	Indoor temperature
B	„N HUMIDITY“	Indoor humidity
C	„OUT TEMP“	Outdoor temperature
D	„OUT HUMIDITY“	Outdoor humidity
E	„TENDENCY“	Weather trend/weather forecast
F	„WIND“	Wind direction and speed
G	„RAIN“	Rain volume
H	„PRESSURE“	Barometric pressure
I	„PRESSURE HISTORY“	Barometric pressure trend (bar graph)
J	„TIME“	Time/alarm time
K	„DATE“	Date
L	„MEMORY“	Internal memory for weather data

Depending on display area and the functions contained in it (see following pages) multiple touching of the corresponding area of the touch screen selects the respective sub-function.

When setting is possible, the display shows the buttons labelled „+“ (M), „-“ (O) and „ON/OFF“ (N), depending on function. You may use them for your settings, e.g. increasing or reducing hours of the alarm time or activating/deactivating the alarm function, etc.

a) Display Area „TIME“

The following setting and subfunctions are available:

- Setting the Display Contrast
- Setting the Time Zone
- Selecting 12h/24h Mode
- Manually setting the time (if no DCF reception is possible)

Touch the display area „TIME“ briefly repeatedly until the desired subfunction flashes.

■ Setting display contrast

- Touch the display area „TIME“ repeatedly until „lcd....“ flashes.
- Adjust contrast with the buttons „+“ and „-“.

To get to the next subfunction (setting time zone) -> touch the display area „TIME“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ Setting the Time Zone

- Touch the display area „TIME“ repeatedly until a number between „-12“ and „12“ flashes. Here, the time zone in which the weather station is operated can be set. The respective figure set is the number of hours added to the GMT time or subtracted from it (GMT = Greenwich Mean Time, time on the zero meridian that runs through the town of Greenwich near London).
- Adjust the time zone with the buttons „+“ and „-“.

To get to the next subfunction (select 12h/24h mode) -> touch the display area „TIME“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ Selecting 12h/24h Mode

- Touch the display area „TIME“ repeatedly until „24Hr“ or „12Hr“ flashes.
- Select the desired display mode with the buttons „+“ and „-“. In 12h mode, „PM“ is displayed to the left of the hours in the second half of the day.

To get to the next subfunction (manually setting the time) -> touch the display area „TIME“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ Manually setting the time

The time (and date) is usually set automatically. The DCF receiver in the temperature/humidity sensor housing transfers the data to the weather station by radio.

Under difficult reception conditions (no reception), e.g. at too high a distance to the DCF sensor), the time can be set manually.

The date can be set in the display range „DATE“, see chapter 11. b).

- Touch the display area „TIME“ repeatedly until the hours of the time display flash.
- Set the hours of the time with the „+“ and „-“ buttons. Keep the respective button pressed for quick adjustment.
- Touch the display area „TIME“ again briefly. The minutes of the time display flash.
- Set the minutes of the time with the „+“ and „-“ buttons. Keep the respective button pressed for quick adjustment.

To get back to the first subfunction (setting display contrast) -> touch the button „TIME“ briefly 2x

Leaving setting mode -> touch the button „TIME“ briefly 1x (or touch another display area wait for 30 seconds without touching the touch screen)

b) Display Area „DATE“

The following setting and subfunctions are available:

- Selecting Display Mode for the Date
- Switching the display order of date/month
- Manually setting the date (if no DCF reception is possible)
- Setting the alarm time, activating/deactivating the alarm function

Touch the display area „DATE“ briefly repeatedly until the desired subfunction flashes.

■ Selecting Display Mode for the Date

- Touch the display area „DATE“ repeatedly until the date display and „DATE“ flash (e.g..“29.04.12" for 29 April 2012).
- Select the desired display mode with the buttons „+“ and „-“. You may switch between „day/month/year“ (e.g. „29.04.12“) and „day/month/day of the week“ (e.g. „29.04.Mo“).

To get to the next subfunction (switch order of date/month) -> briefly touch the display area „DATE“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ Switching Order of Date/Month

- Touch the display area „DATE“ repeatedly until the date with the display „dM“ or „Md“ flashes on the display (e.g. „04.29.Md“ or „29.04.dM“ for 29 April)
- Select the order in which to display date and month with the buttons „+“ and „-“. You may switch between displaying „date/month“ („dM“) and „month/date“ („Md“).

To get to the next subfunction (manually setting the date) -> touch the display area „DATE“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Manually setting the date**

The date (and time) is usually set automatically. The DCF receiver in the temperature/humidity sensor housing transfers the data to the weather station by radio.

Under difficult reception conditions (no reception), e.g. at too high a distance to the DCF sensor), the date can be set manually.

The time can be set in the display range „TIME“, see chapter 11. a).

- Touch the display area „DATE“ repeatedly until the year of the date display flashes.
- Set the year with the „+“ and „-“ buttons. Keep the respective button pressed for quick adjustment.
- Touch the display area „DATE“ repeatedly until the month display flashes.
- Set the month with the „+“ and „-“ buttons. Keep the respective button pressed for quick adjustment.
- Touch the display area „DATE“ repeatedly until the date display flashes.
- Set the date with the „+“ and „-“ buttons. Keep the respective button pressed for quick adjustment.

To get to the next subfunction (setting alarm time, activity/deactivating the alarm time) -> touch the display area „DATE“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Setting the Alarm Time, Activating/Deactivating the Alarm Function**

- Touch the display area „DATE“ repeatedly until the hours of the alarm time and the display „ALARM“ flash.
- Use the button „ON/OFF“ to switch the alarm function on or off. With the alarm function on, the icon „  “ appears above the seconds.

With the alarm function on, the weather station issues a sound signal at the alarm time set. Touch any area of the display to terminate the alarm signal.

- Set the hours of the alarm time with the „+“ and „-“ buttons. Keep the respective button pressed for quick adjustment.
- Touch the display area „DATE“ again briefly. The minutes of the alarm time flash.
- Set the minutes of the alarm time with the „+“ and „-“ buttons. Keep the respective button pressed for quick adjustment.

To get back to the first subfunction (select display mode for the date) -> touch the display area „DATE“ briefly 2x

Leaving setting mode -> touch the button „DATE“ briefly 1x (or touch another display area wait for 30 seconds without touching the touch screen)

c) Display Area „WIND“ (wind speed/direction)

The following setting and subfunctions are available:

- Switching Display Between Average Wind Speed and Gust Speed
- Selecting Wind Speed Unit (km/h, mph, m/s, knots, bft)
- Setting and Activating/Deactivating Wind Speed Alarm
- Setting and Activating/Deactivating Wind Direction Alarm
- Displaying/Resetting Maximum Value Storage for Wind Speed

Touch the display area „WIND“ briefly repeatedly until the desired subfunction flashes.

■ Switching Display Between Average Wind Speed and Gust Speed

- Touch the display area „WIND“ repeatedly until the wind speed flashes.
- Select the desired display mode with the buttons „+“ and „-“.

You may switch between displaying the average wind speed and displaying the gust speed („GUST“ is displayed additionally then).

To get to the next subfunction (selecting the wind speed unit) -> touch the display area „WIND“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ Selecting Wind Speed Unit (km/h, mph, m/s, knots, bft)

- Touch the display area „WIND“ repeatedly until the wind speed flashes and the corresponding unit (e.g. „km/h“) flashes.
- Select the desired unit with the buttons „+“ and „-“.

km/h = kilometres per hour

mph = miles per hour

m/s = metres per second

knots = knots

bft = Beaufort

To get to the next subfunction (setting and activating/deactivating the wind speed alarm) -> touch the display area „WIND“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Setting and Activating/Deactivating Wind Speed Alarm**

- Touch the display area „WIND“ repeatedly until the wind speed and the display „HI AL“ flashes.
- Select the wind speed with the buttons „+“ and „-“. Keep the respective button pressed for quick adjustment.
- Use the button „ON/OFF“ to switch the alarm function on or off.

With the alarm function on, the icon „□))“ appears below the display „HI AL“. When the threshold value set is exceeded, the weather station will emit an alarm. It is deactivated by touching the display in any location. The display „HI AL“ and the icon „□))“ continue to flash, however, until the measured value drops below the threshold value set.

To get to the next subfunction (setting and activating/deactivating the wind direction alarm) -> touch the display area „WIND“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Setting and Activating/Deactivating Wind Direction Alarm**

- Touch the display area „WIND“ repeatedly until the wind direction flashes.
- Select the wind direction with the buttons „+“ and „-“.
- Use the button „ON/OFF“ to switch the alarm function on or off.

With the alarm function on, the icon „□))“ appears below the display „WIND“. At the receptive wind direction, the weather station will emit an alarm. It is deactivated by touching the display in any location.

To get to the next subfunction (displaying/resetting the maximum value storage for wind speed) -> touch the display area „WIND“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Displaying/Resetting Maximum Value Storage for Wind Speed**

- Touch the display area „WIND“ repeatedly until the maximum wind speed and the display „MAX“ (to the left of the weather icons) flash.
- To reset the maximum value storage, keep the display area „WIND“ pushed for 3 seconds. The currently measured wind speed is assumed as the new maximum.

To get back to the first subfunction (switching display between average wind speed and gust speed) -> touch the button „WIND“ briefly 2x

Leaving setting mode -> touch the button „WIND“ briefly 1x (or touch another display area wait for 30 seconds without touching the touch screen)

d) Display Area „RAIN“

The following setting and subfunctions are available:

- Display Amount of Rain (last hour, last 24 hours, last week, last month, total)
- Selecting rain volume unit (mm, inch)
- Setting and Activating/Deactivating Rain Volume Alarm
- Displaying/Resetting Maximum Value Storage for Rain Volume
- Displaying/Resetting Total

Touch the display area „RAIN“ briefly repeatedly until the desired subfunction flashes.

■ Display Amount of Rain (last hour, last 24 hours, last week, last month, total)

- Touch the display area „RAIN“ briefly repeatedly until the rain volume flashes (e.g. „14.5“)
- Select the desired display with the buttons „+“ and „-“. The display shows the corresponding indication above the rain volume value:

1h	=	Rain volume of the last hour
24h	=	Rain volume of the last 24 hours
week	=	Rain volume of the last week
month	=	Rain volume of the last month
TOTAL	=	Total volume since the storage was last reset

To get to the next subfunction (selecting the rain volume unit) -> touch the display area „RAIN“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ Selecting Rain Volume Unit (mm, inch)

- Touch the display area „RAIN“ repeatedly until the rain volume flashes and the corresponding unit (e.g. „14.5“) flashes.
- Select the desired unit with the buttons „+“ and „-“.

mm	=	millimetres
inch	=	inches

To get to the next subfunction (setting and activating/deactivating the rain volume alarm) -> touch the display area „RAIN“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Setting and Activating/Deactivating Rain Volume**

- Touch the display area „RAIN“ repeatedly until the ‚rain volume and the display „HI AL“ flashes.
- Select the rain volume with the buttons „+“ and „-“. Keep the respective button pressed for quick adjustment.
- Use the button „ON/OFF“ to switch the alarm function on or off.

  With the alarm function on, the icon „ “ appears below the display „HI AL“. When the threshold value set is exceeded, the weather station will emit an alarm. It is deactivated by touching the display in any location.

To get to the next subfunction (displaying/resetting the maximum value storage for rain volume) -> touch the display area „RAIN“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Displaying/Resetting Maximum Value Storage for Rain Volume**

- Touch the display area „RAIN“ repeatedly until the maximum rain volume and the display „MAX“ (to the left of the weather symbols) flash.
- To reset the maximum value, keep the display area „RAIN“ pushed for 3 seconds.

To get to the next subfunction (displaying/resetting the total) -> touch the display area „RAIN“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Displaying/Resetting Total**

- Touch the display area „RAIN“ repeatedly until the total rain volume and the display „TOTAL“ flash; the text message „CLEAR“ will also flash at the bottom in the date area.
- To reset the total value , keep the display area „RAIN“ pushed for 3 seconds. Then the total volume and all other stored values for the rain volume are reset.

To get back to the first subfunction (displaying rain volume) -> touch the display area „RAIN“ briefly 2x

Leaving setting mode -> touch the button „RAIN“ briefly 1x (or touch another display area wait for 30 seconds without touching the touch screen)

e) Display Area „PRESSURE“ (barometric pressure)

The following setting and subfunctions are available:

- Selecting Display of the Relative/Absolute Barometric Pressure
- Selecting Unit of Barometric Pressure (hPa, mmHg, inHg)
- Setting and Activating/Deactivating Upper Barometric Pressure Alarm
- Setting and Activating/Deactivating Lower Barometric Pressure Alarm
- Displaying/Resetting Maximum Value Storage for Barometric Pressure
- Displaying/Resetting Minimum Value Storage for Barometric Pressure

Touch the display area „PRESSURE“ briefly repeatedly until the desired subfunction flashes.

■ Selecting Display of the Relative/Absolute Barometric Pressure

- Touch the display area „PRESSURE“ briefly repeatedly until the barometric pressure flashes (e.g. „963.1“)
- Select the desired display with the buttons „+“ and „-“.

abs = Absolute barometric pressure (currently measured and displayed barometric pressure)

rel = Relative barometric pressure (barometric pressure display converted to sea level)

To get to the next subfunction (selecting the barometric pressure unit) -> touch the display area „PRESSURE“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ Selecting Unit of Barometric Pressure (hPa, mmHg, inHg)

- Touch the display area „PRESSURE“ repeatedly until the wind speed flashes and the corresponding unit (e.g. „963.1 hPa“) flashes.
- Select the desired unit with the buttons „+“ and „-“.

hPa = Hectopascal

mmHg = Millimetre mercury column

inHg = Inch mercury column

To get to the next subfunction (setting and activating/deactivating the upper barometric pressure alarm) -> touch the display area „PRESSURE“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Setting and Activating/Deactivating Upper Barometric Pressure Alarm**

- Touch the display area „PRESSURE“ repeatedly until the barometric pressure value and the display „HI AL“ flashes.
- Select the barometric pressure with the buttons „+“ and „-“. Keep the respective button pressed for quick adjustment.
- Use the button „ON/OFF“ to switch the alarm function on or off.

With the alarm function on, the icon „□)“ appears below the display „HI AL“. When the threshold value set is exceeded, the weather station will emit an alarm. It is deactivated by touching the display in any location. The display „HI AL“ and the icon „□)“ continue to flash, however, until the measured value drops below the threshold value set.

To get to the next subfunction (setting and activating/deactivating the lower barometric pressure alarm) -> touch the display area „PRESSURE“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Setting and Activating/Deactivating Lower Barometric Pressure Alarm**

- Touch the display area „PRESSURE“ repeatedly until the barometric pressure value and the display „LO AL“ flashes.
- Select the barometric pressure with the buttons „+“ and „-“. Keep the respective button pressed for quick adjustment.
- Use the button „ON/OFF“ to switch the alarm function on or off.

With the alarm function on, the icon „□)“ appears above the display „LO AL“. When the threshold value set is undercut, the weather station will emit an alarm. It is deactivated by touching the display in any location. The display „LO AL“ and the icon „□)“ continue to flash, however, until the measured value rises above the threshold value set.

To get to the next subfunction (displaying/resetting the maximum value storage for barometric pressure) -> touch the display area „PRESSURE“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Displaying/Resetting Maximum Value Storage for Barometric Pressure**

- Touch the display area „PRESSURE“ repeatedly until the maximum barometric pressure and the display „MAX“ (to the left of the weather symbols) flash.
- To reset the maximum value storage, keep the display area „PRESSURE“ pushed for 3 seconds. The new maximum is the currently measured barometric pressure until it changes.

To get to the next subfunction (displaying/resetting the minimum value storage for barometric pressure) -> touch the display area „PRESSURE“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Displaying/Resetting Minimum Value Storage for Barometric Pressure**

- Touch the display area „PRESSURE“ repeatedly until the minimum barometric pressure and the display „MIN“ (to the left of the weather symbols) flash.
- To reset the minimum value storage, keep the display area „PRESSURE“ pushed for 3 seconds. The new minimum is the currently measured barometric pressure until it changes.

To get back to the first subfunction (selecting display for relative/absolute barometric pressure) -> touch the display area „PRESSURE“ briefly 2x

Leaving setting mode -> touch the button „PRESSURE“ briefly 1x (or touch another display area wait for 30 seconds without touching the touch screen)

f) Display Area „PRESSURE HISTORY“ (barometric pressure history)

The following setting and subfunctions are available:

- Switch between display of the barometric pressure history of the last 12 or 24 hours

Proceed as follows:

- Touch the display area „PRESSURE HISTORY“ so that the hour figures in the area of the barometric pressure history display flash.
- Select the desired display with the buttons „+“ and „-“.

You may set:

-12h -10h -8h -6h -4h -2h -1h 0h Barometric pressure trend for the past 12 hours

-24h -20h -16h -12h -8h -4h -2h 0h Barometric pressure trend for the past 24 hours

Leaving setting mode -> touch the button „PRESSURE HISTORY“ briefly 1x (or touch another display area wait for 30 seconds without touching the touch screen)

g) Display Area „TENDENCY“ (Weather forecast)

Calculation of weather forecasts only based on barometric pressure leads to a maximum accuracy of about 70%. The actual weather at the next day may be completely different. Since the barometric pressure measured only applies for an area with a diameter of approx. 50 km, the weather may also change quickly. This particularly applies in mountain or high mountain areas.

Therefore, do not rely on the weather station’s forecast but gather information on site, e.g. for mountain tours.

Note:

- The weather image does not show the current weather but a forecast for the next 12 to 24 hours.
- At sudden or larger fluctuations of barometric pressure, the display symbols are updated to show weather changes. If the display symbols do not change, either the barometric pressure did not change or the change is so slow that it could not be registered by the weather station.
- If the forecast „sun“ or „rain“ appears, the display does not change even if the weather improves (display „sun“) or deteriorates (display „rain“), since the displayed symbols already represent the two extremes.
- The symbols show improvement or deterioration of the weather, but this does not necessarily mean sun or rain (as indicated by the symbols).

  If the current weather is cloudy and rain is indicated, this does not mean that the device is malfunctioning, but it indicates that the barometric pressure dropped and weather is expected to deteriorate. It is not necessarily going to rain.
- After first insertion of the batteries, disregard the weather forecasts for the first 12 to 24 hours, because the weather station first has to collect barometric pressure data in this period at a constant height above sea level to make a more exact forecast.
- If the weather station is taken to a site at a much higher or lower altitude than the original one (e.g. from the ground floor to an upper floor of a house), the weather station may consider this a weather change.

The following setting options and subfunctions are available:

- Setting the Current Weather
- Setting threshold 1 for change of the weather forecast symbols
- Setting threshold 2 for bad-weather warning

Touch the display area „TENDENCY“ briefly repeatedly until the desired subfunction flashes.

■ **Setting the Current Weather**

The display for the weather forecast is based on observation of the barometric pressure history of the last hours. This permits accuracy of up to 70%. Setting the current value permits adjustment of the forecast to the current weather station.

- Touch the display area „TENDENCY“ repeatedly until the weather forecast icon flashes (e.g. sun icon).
- Select the current weather with the buttons „+“ and „-“.

To get to the next subfunction (setting threshold 1) -> touch the display area „TENDENCY“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Setting Threshold 1 (change of the weather forecast symbols)**

- Touch the display area „TENDENCY“ repeatedly until two arrows flash at the left and a barometric pressure value flashes at the right in the „PRESSURE“ area (e.g. „2.0 hPa“).
- Select the barometric pressure at which the weather forecast icons should change with the buttons „+“ and „-“.

  Basic settings ex works are 2 hPa. This means that the weather forecast icons change by 2 hPa when the barometric pressure rises or falls. In areas with larger barometric pressure fluctuations (e.g. in the Alps), you should set a higher value.

To get to the next subfunction (setting threshold 2 for bad weather warning) -> touch the display area „TENDENCY“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Setting Threshold 2 for Bad-Weather Warning**

- Touch the display area „TENDENCY“ repeatedly until the weather forecast icon for „rain“ and an arrow to the left of it flash. A barometric pressure value (e.g. „4.0 hPa“) also flashes at the right in the „PRESSURE“ area.
- Select the barometric pressure at which the bad weather warning is to appear with the buttons „+“ and „-“.

  Basic settings ex works are 4 hPa. This means that a change of barometric pressure by 4 hPa within 3 hours will activate the bad weather warning. The icon for „rain“ flashes in the weather forecast area.

To get back to the first subfunction (setting the current weather) -> touch the display area „TENDENCY“ briefly 2x

Leaving setting mode -> touch the button „TENDENCY“ briefly 1x (or touch another display area wait for 30 seconds without touching the touch screen)

h) Display Area „IN TEMP“ (indoor temperature)

The following setting and subfunctions are available:

- Selecting temperature unit (°C, °F)
- Setting and Activating/Deactivating Upper Temperature Alarm
- Setting and Activating/Deactivating Lower Temperature Alarm
- Displaying/Resetting Maximum Value Storage for Indoor temperature
- Displaying/Resetting Minimum Value Storage for Indoor temperature

Touch the display area „IN TEMP“ briefly repeatedly until the desired subfunction flashes.

■ Selecting temperature unit (°C, °F)

- Touch the display area „IN TEMP“ repeatedly until the indoor temperature flashes and the corresponding unit (e.g. „24.5 °C“) flashes.
- Select the desired unit with the buttons „+“ and „-“.

  °C = Degrees Celsius

  °F = Degrees Fahrenheit

To get to the next subfunction (setting and activating/deactivating the upper temperature alarm) -> touch the display area „IN TEMP“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ Setting and Activating/Deactivating Upper Temperature Alarm

- Touch the display area „IN TEMP“ repeatedly until the indoor temperature and the display „HI AL“ flashes.
- Select the upper threshold of the indoor temperature with the buttons „+“ and „-“. Keep the respective button pressed for quick adjustment.
- Use the button „ON/OFF“ to switch the alarm function on or off.

With the alarm function on, the icon „□)“ appears below the display „HI AL“. When the threshold value set is exceeded, the weather station will emit an alarm. It is deactivated by touching the display in any location. The display „HI AL“ and the icon „□)“ continue to flash, however, until the measured value drops below the threshold value set.

To get to the next subfunction (setting and activating/deactivating the lower temperature alarm) -> touch the display area „IN TEMP“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Setting and Activating/Deactivating Lower Temperature Alarm**

- Touch the display area „IN TEMP“ repeatedly until the indoor temperature and the display „LO AL“ flashes.
- Select the lower threshold of the indoor temperature with the buttons „+“ and „-“. Keep the respective button pressed for quick adjustment.
- Use the button „ON/OFF“ to switch the alarm function on or off.

  With the alarm function on, the icon „🔊“ appears above the display „LO AL“. When the threshold value set is undercut, the weather station will emit an alarm. It is deactivated by touching the display in any location. The display „LO AL“ and the icon „🔊“ continue to flash, however, until the measured value rises above the threshold value set.

To get to the next subfunction (displaying/resetting the maximum value storage for indoor temperature) -> touch the display area „IN TEMP“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Displaying/Resetting Maximum Value Storage for Indoor Temperature**

- Touch the display area „IN TEMP“ repeatedly until the indoor temperature maximum and the display „MAX“ (to the left of the weather symbols) flash.
- To reset the maximum value storage, keep the display area „IN TEMP“ pushed for 3 seconds. The new maximum is the currently measured indoor temperature until it changes.

To get to the next subfunction (displaying/resetting the minimum value storage for indoor temperature) -> touch the display area „IN TEMP“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Displaying/Resetting Minimum Value Storage for Indoor Temperature**

- Touch the display area „IN TEMP“ repeatedly until the indoor temperature minimum and the display „MIN“ (to the left of the weather symbols) flash.
- To reset the minimum value storage, keep the display area „IN TEMP“ pushed for 3 seconds. The new minimum is the currently measured indoor temperature until it changes.

To get back to the first subfunction (select the temperature unit) -> touch the display area „IN TEMP“ briefly 2x

Leaving setting mode -> touch the button „IN TEMP“ briefly 1x (or touch another display area wait for 30 seconds without touching the touch screen)

i) Display Area „IN HUMIDITY“ (indoor humidity)

The following setting and subfunctions are available:

- Setting and Activating/Deactivating Upper Humidity Alarm
- Setting and Activating/Deactivating Lower Humidity Alarm
- Displaying/Resetting Maximum Value Storage for Indoor Humidity
- Displaying/Resetting Minimum Value Storage for Indoor Humidity

Touch the display area „IN HUMIDITY“ briefly repeatedly until the desired subfunction flashes.

■ Setting and Activating/Deactivating Upper Indoor Humidity Alarm

- Touch the display area „IN HUMIDITY“ repeatedly until the indoor humidity and the display „HI AL“ flashes.
- Select the upper threshold of the indoor humidity with the buttons „+“ and „-“. Keep the respective button pressed for quick adjustment.
- Use the button „ON/OFF“ to switch the alarm function on or off.

  With the alarm function on, the icon „□))“ appears below the display „HI AL“. When the threshold value set is exceeded, the weather station will emit an alarm. It is deactivated by touching the display in any location. The display „HI AL“ and the icon „□))“ continue to flash, however, until the measured value drops below the threshold value set.

To get to the next subfunction (setting and activating/deactivating the lower humidity alarm) -> touch the display area „IN HUMIDITY“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ Setting and Activating/Deactivating Lower Humidity Alarm

- Touch the display area „IN HUMIDITY“ repeatedly until the indoor humidity and the display „LO AL“ flashes.
- Select the lower threshold of the indoor humidity with the buttons „+“ and „-“. Keep the respective button pressed for quick adjustment.
- Use the button „ON/OFF“ to switch the alarm function on or off.

  With the alarm function on, the icon „□))“ appears above the display „LO AL“. When the threshold value set is undercut, the weather station will emit an alarm. It is deactivated by touching the display in any location. The display „LO AL“ and the icon „□))“ continue to flash, however, until the measured value rises above the threshold value set.

To get to the next subfunction (displaying/resetting the maximum value storage for indoor humidity) -> touch the display area „IN HUMIDITY“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Displaying/Resetting Maximum Value Storage for Indoor Humidity**

- Touch the display area „IN HUMIDITY“ repeatedly until the indoor humidity maximum and the display „MAX“ (to the left of the weather symbols) flash.
- To reset the maximum value storage, keep the display area „IN HUMIDITY“ pushed for 3 seconds. The new maximum is the currently measured indoor humidity until it changes.

To get to the next subfunction (displaying/resetting the minimum value storage for indoor humidity) -> touch the display area „IN HUMIDITY“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Displaying/Resetting Minimum Value Storage for Indoor Humidity**

- Touch the display area „IN HUMIDITY“ repeatedly until the indoor humidity minimum and the display „MIN“ (to the left of the weather symbols) flash.
- To reset the minimum value storage, keep the display area „IN HUMIDITY“ pushed for 3 seconds. The new minimum is the currently measured indoor humidity until it changes.

To get back to the first subfunction (setting and activating/deactivating the upper humidity alarm) -> touch the display area „IN HUMIDITY“ briefly 2x

Leaving setting mode -> touch the button „IN HUMIDITY“ briefly 1x (or touch another display area wait for 30 seconds without touching the touch screen)

j) Display Area „OUT TEMP“ (outdoor temperature)

The following setting and subfunctions are available:

- Switching Temperature Display (temperature, wind chill temperature, dew point temperature)
- Selecting temperature unit (°C, °F)
- Setting and Activating/Deactivating Upper Temperature Alarm
- Setting and Activating/Deactivating Lower Temperature Alarm
- Displaying/Resetting Maximum Value Storage
- Displaying/Resetting Minimum Value Storage

Touch the display area „OUT TEMP“ briefly repeatedly until the desired subfunction flashes.

■ Switching Temperature Display (temperature, wind chill temperature, dew point temperature)

- Touch the display area „OUT TEMP“ repeatedly until the outdoor temperature (e.g. „23.9“) flashes.
- Select the desired temperature display with the buttons „+“ and „-“.

TEMP = Temperature (current measured value)

WINDCHILL = Wind chill temperature

This temperature value is calculated from the interrelation of temperature and wind speed.

For temperatures below +10 °C, higher wind speeds mean that the temperature perceived on the human skin is lower than the actual temperature (example: Present outdoor temperature -20 °C, wind chill temperature -34 °C at a wind speed of 40 km/h).

DEW POINT = Dew point temperature

The dew point is the temperature to which condensate just starts to form on an object.

To get to the next subfunction (selecting the temperature unit) -> touch the display area „OUT TEMP“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ Selecting temperature unit (°C, °F)

- Touch the display area „OUT TEMP“ repeatedly until the outdoor temperature flashes and the corresponding unit (e.g. „23.9 °C“) flashes.
- Select the desired unit with the buttons „+“ and „-“.

°C = Degrees Celsius

°F = Degrees Fahrenheit

To get to the next subfunction (setting and activating/deactivating the upper temperature alarm) -> touch the display area „OUT TEMP“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Setting and Activating/Deactivating Upper Temperature Alarm**

The alarm/threshold se there only applies for the temperature display set initially (measured temperature = „TEMP“, wind chill temperature = „WINDCHILL“ or dew point temperature = „DEW POINT“). An alarm can be set for each of the 3 temperature displays.

- Touch the display area „OUT TEMP“ repeatedly until the outdoor temperature and the display „HI AL“ flashes.
- Select the upper threshold with the buttons „+“ and „-“. Keep the respective button pressed for quick adjustment.
- Use the button „ON/OFF“ to switch the alarm function on or off.

  With the alarm function on, the icon „🔊“ appears below the display „HI AL“. When the threshold value set is exceeded, the weather station will emit an alarm. It is deactivated by touching the display in any location. The display „HI AL“ and the icon „🔊“ continue to flash, however, until the measured value drops below the threshold value set.

To get to the next subfunction (setting and activating/deactivating the lower temperature alarm) -> touch the display area „OUT TEMP“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Setting and Activating/Deactivating Lower Temperature Alarm**

The alarm/threshold se there only applies for the temperature display set initially (measured temperature = „TEMP“, wind chill temperature = „WINDCHILL“ or dew point temperature = „DEW POINT“). An alarm can be set for each of the 3 temperature display.

- Touch the display area „OUT TEMP“ repeatedly until the outdoor temperature and the display „LO AL“ flashes.
- Select the lower threshold with the buttons „+“ and „-“. Keep the respective button pressed for quick adjustment.
- Use the button „ON/OFF“ to switch the alarm function on or off.

  With the alarm function on, the icon „🔊“ appears above the display „LO AL“. When the threshold value set is undercut, the weather station will emit an alarm. It is deactivated by touching the display in any location. The display „LO AL“ and the icon „🔊“ continue to flash, however, until the measured value rises above the threshold value set.

To get to the next subfunction (displaying/resetting the maximum value storage) -> touch the display area „OUT TEMP“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Displaying/Resetting Maximum Value Storage**

- Touch the display area „OUT TEMP“ repeatedly until the temperature maximum (measured temperature, wind chill temperature or dew point temperature) and the display „MAX“ (to the left of the weather symbols) flash.
- To reset the maximum value storage, keep the display area „OUT TEMP“ pushed for 3 seconds.

To get to the next subfunction (displaying/resetting the minimum value storage) -> touch the display area „OUT TEMP“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Displaying/Resetting Minimum Value Storage**

- Touch the display area „OUT TEMP“ repeatedly until the temperature minimum (measured temperature, wind chill temperature or dew point temperature) and the display „MIN“ (to the left of the weather symbols) flash.
- To reset the minimum value storage, keep the display area „OUT TEMP“ pushed for 3 seconds.

To get back to the first subfunction (switching temperature display) -> touch the display area „OUT TEMP“ briefly 2x

Leaving setting mode -> touch the button „OUT TEMP“ briefly 1x (or touch another display area wait for 30 seconds without touching the touch screen)

k) Display Area „OUT HUMIDITY“ (outdoor humidity)

The following setting and subfunctions are available:

- Setting and Activating/Deactivating Upper Humidity Alarm
- Setting and Activating/Deactivating Lower Humidity Alarm
- Displaying/Resetting Maximum Value Storage for Outdoor Humidity
- Displaying/Resetting Minimum Value Storage for Outdoor Humidity

Touch the display area „OUT HUMIDITY“ briefly repeatedly until the desired subfunction flashes.

■ Setting and Activating/Deactivating Upper Indoor Humidity Alarm

- Touch the display area „OUT HUMIDITY“ repeatedly until the outdoor humidity and the display „HI AL“ flashes.
- Select the upper threshold of the outdoor humidity with the buttons „+“ and „-“. Keep the respective button pressed for quick adjustment.
- Use the button „ON/OFF“ to switch the alarm function on or off.

  With the alarm function on, the icon „🔊“ appears below the display „HI AL“. When the threshold value set is exceeded, the weather station will emit an alarm. It is deactivated by touching the display in any location.

To get to the next subfunction (setting and activating/deactivating the lower humidity alarm) -> touch the display area „OUT HUMIDITY“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ Setting and Activating/Deactivating Lower Humidity Alarm

- Touch the display area „OUT HUMIDITY“ repeatedly until the outdoor humidity and the display „LO AL“ flashes.
- Select the lower threshold of the outdoor humidity with the buttons „+“ and „-“. Keep the respective button pressed for quick adjustment.
- Use the button „ON/OFF“ to switch the alarm function on or off.

  With the alarm function on, the icon „🔊“ appears above the display „LO AL“. When the threshold value set is undercut, the weather station will emit an alarm. It is deactivated by touching the display in any location.

To get to the next subfunction (displaying/resetting the maximum value storage for outdoor humidity) -> touch the display area „OUT HUMIDITY“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Displaying/Resetting Maximum Value Storage for Outdoor Humidity**

- Touch the display area „OUT HUMIDITY“ repeatedly until the outdoor humidity and the display „MAX“ (to the left of the weather symbols) flash.
- To reset the maximum value storage, keep the display area „OUT HUMIDITY“ pushed for 3 seconds. The new maximum is the currently measured outdoor humidity until it changes.

To get to the next subfunction (displaying/resetting the minimum value storage for outdoor humidity) -> touch the display area „OUT HUMIDITY“ briefly

Leaving setting mode -> touch another display area (or wait for 30 seconds without touching the touch screen)

■ **Displaying/Resetting Minimum Value Storage for Outdoor Humidity**

- Touch the display area „OUT HUMIDITY“ repeatedly until the outdoor humidity minimum and the display „MIN“ (to the left of the weather symbols) flash.
- To reset the minimum value storage, keep the display area „OUT HUMIDITY“ pushed for 3 seconds. The new minimum is the currently measured outdoor humidity until it changes.

To get back to the first subfunction (setting and activating/deactivating the upper humidity alarm) -> touch the display area „OUT HUMIDITY“ briefly 2x

Leaving setting mode -> touch the button „OUT HUMIDITY“ briefly 1x (or touch another display area wait for 30 seconds without touching the touch screen)

l) Viewing or Deleting Measured Data

View stored measured data/measured values:

- Touch the display area „MEMORY“ in the lower right of the display once. The buttons „+“ and „-“ flash.
- You can use the two buttons „+“ and „-“ to display the measured values now.

The display shows the respective time and date of the measured value dataset.

In the basic setting, a dataset is stored every 30 minutes. This can be adjusted by PC software.

The display mode is left automatically if the touch screen is not touched for approx. 30 seconds.

Delete all stored measured data/measured values:

- Touch the display area „MEMORY“ 2x.

  The display area „MEMORY“ flashes and the message „CLEAR“ appears in the area of the data display at the bottom.

- To delete all measured values that were saved, keep the display area „MEMORY“ pushed for 3 seconds. The memory display stops flashing; the data are deleted.

  If you do not want to delete the data, either touch any other display area or wait for 30 seconds without touching the touch screen.

12. PC Connection

a) Software Installation

Place the CD included in the delivery in the corresponding drive of your computer (Windows operating system required, Windows XP or newer).

If the installation programme does not start automatically, open the file manager and start the CD's installation programme (e.g. „Easyweather.exe").

Follow the software or Windows instructions.

Administrator rights are required to install and operate the software. If you are working under a limited user account, you cannot install the software.

b) Connecting Weather Station to the PC, Starting Software

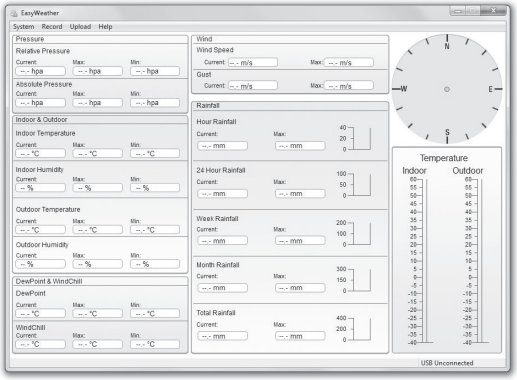
Connect the USB socket at the tight of the weather station to a free USB port of your computer with the included special USB cable. Do not use the cable for any other devices!

Windows recognises new hardware when the weather station is connected for the first time and installs the required drivers.

Start the weather station software. Then the data from the weather station are transferred to the PC.

The software can only be started when you are logged on to the computer with administrator rights (see chapter 12. a).

In Windows 7 or Windows Vista, click the software icon; you can start it as administrator then with the right mouse button.



Depending on data volume, data transfer may take a while. Only after the data was read completely can the software be used.

When the weather station's memory is full, export may take up to 2 minutes; calculation and presentation of the data may take another 2 minutes, depending on the customer's speed.

For more information about the software observe, e.g., its help function.

For example, the software can be used to change the interval for saving measured data in the weather station (default: 30 minutes) between 5 and 240 minutes.

c) General Information

- For time information of the measured data in the weather station and PC to match, the time and date of the weather station and PC must be adjusted to each other.

Usually, the weather station uses the precise DCF time and the PC the precise time of a time server online. Adjustment usually is not required.

However, if you manually set the time/date of the weather station or PC, check and correct the settings before connecting the weather station to the PC.

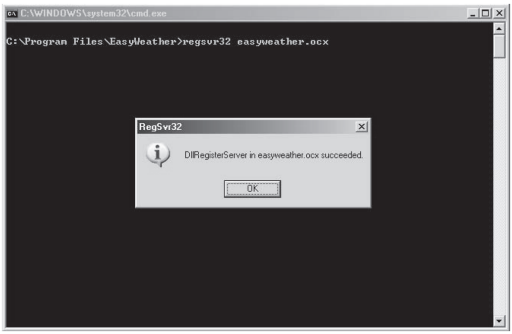
- If you reset/delete the rain sensor data at the weather station, there will be mistakes when displaying measured values after export and assessment of the data in the PC if data has been saved on the PC for a while.
- Before the memory display in the lower right of the weather station display shows 100%, copy the weather station data onto a PC. Otherwise, the oldest measured data will be overwritten with new ones. When assessing the data on the PC, there may be an incorrect display.
- In some PC systems, present programmes may cause an error during entry in the Windows registry when installing the included software.

In this case, proceed as follows:

1. Find the directory in which the programme „EasyWeather.exe“ is installed.
2. Generate a file reg_graph.bat“ with the Windows text editor.
3. Enter the following text line into the file:

   regsvr32 easyweather.ocx

   Save the file in the directory in which the programme „EasyWeather.exe“ is installed.
4. Double-click the file „reg_graph.bat“; the graphics driver for the software should now be integrated into the Windows registry correctly:



d) Uploading the weather data on www.wunderground.com

It is not required to provide the measured data on www.wunderground.com in order to operate the weather station. Uploading your measured data will enable you to participate in the weather observation community at www.wunderground.com (in English language).

In order to obtain the station ID and password required for the upload, visit the following website using a computers internet browser:

http://www.wunderground.com/members/signup.asp

Then follow the information available on this website. Pay attention to the correct spelling when you enter the station ID and password.

At the time of publication of these operating instructions, the registration and further use were free of charge (version financed through advertising). Please take note of the current information on the website www.wunderground.com before signing up.

Afterwards, select „Upload“ in the menu bar of the software and then choose the setting „www.wunderground.com“ under „Website“ in the window that opens. Following that, several setting fields are pre-filled with the required data (e.g. server, port etc.). Enter the station ID in the „ID“ field and the password in the „password“ entry field below. Click on „Save“ to transfer the weather data.

13. Battery/Rechargeable Battery Change

a) Weather Station

The battery must be replaced when the display contrast is very low.

Observe:

Copy the measured data onto the PC before changing the batteries; otherwise, they will be lost.

Proceed as described in chapter 9. b).

b) Outdoor Sensor

The outdoor sensor works with special rechargeable batteries with a rated voltage of 1.5 V. They are charged by the solar module if there is enough solar irradiation.

Usually, the rechargeable batteries do not need to be changed.

Check the solar module from time to time, clear if of foliage and snow and clean if.

If you replace the rechargeable batteries, only use corresponding rechargeable batteries with a rated voltage of 1.5 V.

Never insert conventional non-rechargeable batteries in the outdoor sensor. There is a risk of fire and explosion!

Never insert any other rechargeable batteries (e.g. NiMH batteries) in the outdoor sensor either, since the charging electronics is not suitable for this.

To change the batteries, proceed as described in chapter 9. a) and b).

The outdoor sensor receives a new safety code every time the rechargeable batteries are inserted. Therefore, the weather station usually no longer displays measured data or DCF time/date. Therefore, proceed again as during initial commissioning (see chapter 9).

Back up any measured data stored on the weather station on the PC; otherwise, they will be lost.

14. Troubleshooting

With this weather station, you purchased a product built to the state of the art and operationally safe. Nevertheless, problems or errors may occur. The following contains descriptions for the removal of possible interference.

No reception of the outdoor sensor signal

- The distance between weather station and outdoor sensor is too large. Change the installation site of the weather station or outdoor sensor.
- Objects or shielding materials (metallised insulated glass windows, reinforced concrete, etc.) interfere with radio reception. The weather station is too close to other electronic devices (TV, computer). Change the site of setup of the weather station.
- The outdoor sensor batteries are weak. Observe Chapter 13.
- Very low outdoor temperatures (less than -20 °C) decrease battery performance. Wait until the temperatures have increased again.
- Another transmitter on the same or adjacent frequency interferes with the outdoor sensor radio signal. It may be helpful to reduce the distance between the weather station and outdoor sensor.
- Remove the batteries from the weather station and the rechargeable batteries from the outdoor sensor and proceed as described in chapter 9.

No DCF Reception

- The outdoor sensor is installed close to other electronic devices or close to electrical lines.

  Select a different mounting site (observe correct alignment, mark „N“ on the wind direction sensor must point North).
- After inserting the batteries in the outdoor sensor (DCF receiver is integrated in the temperature/humidity sensor and is supplied with power by it), it will take at least 5 minutes before the DCF signal is received and evaluated. Only then will the outdoor sensor transfer the DCF data to the weather station.

  Therefore, wait for at least 5 - 10 minutes before the weather station displays the DCF time and date.
- If the first reception attempt of the DCF-receiver fails, it will try again every full hour.

  A single successful reception attempt suffices to keep the time deviation of the clock in the weather station to less than one second.
- The DCF reception is best at night, when there are least interferences by electronic devices (e.g. TVs or computers are off).

  Just wait for the next day; the weather station should display the DCF time and date then.
- If you operate the outdoor sensor in a building for test purposes (e.g. at initial commissioning), place the outdoor sensor close to a window and as far away as possible from electronic devices, cables, power outlets, metal parts, etc.

15. Range

The range for radio signal transmission between the outdoor sensor and the weather station is up to 100 m under best conditions.

However, these range values refer to the so-called „free field range“.

This perfect alignment (e.g. weather station and outdoor sensor on a smooth, level meadow without trees, houses, etc.), however, is never present in practice.

Normally the weather station is set up in the house and the outdoor sensor is installed on or at a car port or a garage.

Due to the different influences on radio transmission, no specific range can be guaranteed for, unfortunately.

Usually, however, any operation in a family home is possible without any problems.

When the weather station doesn’t receive any data from the outdoor sensor, reduce the distance between the outdoor sensor and weather station, change the installation site.

The range may be considerably reduced by:

- Walls, reinforced concrete ceilings
- Coated/metallised insulated glass, aluminium windows, etc.
- Vehicles
- Trees, shrubbery, earth, rocks
- Proximity to metal & conductive objects (e.g. heater)
- Proximity to the human body
- Broadband interferences, e.g. in residential areas (DECT telephones, mobiles, radio-controlled headphones, radio-controlled speakers, other radio-controlled weather stations, baby phones etc.)
- Proximity to electric motors, transformers, mains adapters
- Proximity to mains sockets, mains cables
- Proximity to badly shielded or openly operated computers or other electrical devices

16. Maintenance and Cleaning

The product is maintenance-free for you. Servicing or repair must only be carried out by a specialist or specialist workshop. There are no parts that require maintenance by you inside the product. Therefore, never open it (except for the procedure described in these operating instructions for mounting and inserting or replacing the batteries/rechargeable batteries).

A dry, soft and clean cloth is sufficient for cleaning the outside of the weather station.

Do not apply too much pressure to the display; this can cause scratch marks or failures of the display.

When touching the display during cleaning, functions may be triggered inadvertently.

Remove dust on the weather station with a long-haired, soft and clean brush and a vacuum cleaner.

To remove contamination at the outdoor sensor, use a soft cloth slightly moistened with lukewarm water.

Never use any aggressive cleaning agents, cleaning alcohol or other chemical solutions, since these may damage the casing or even impair function.

Check the collection containers of the rain sensor from time to time; foliage may clog the openings at the bottom of the collection container.

17. Disposal

a) General Information

Electrical and electronic products must not be disposed of in domestic waste.

Dispose of the product according to the relevant statutory regulations at the end of its service life.

Remove any inserted batteries/rechargeable batteries and dispose of them separately from the product.

b) Batteries and Rechargeable Batteries

You as the end user are required by law (Battery Ordinance) to return all used batteries/rechargeable batteries. Disposing of them in the household waste is prohibited!

Batteries and rechargeable batteries containing hazardous substances are marked with adjacent symbol to indicate that disposal in the household waste is prohibited.

The descriptions for the respective heavy metal are: Cd=cadmium, Hg=mercury, Pb=lead (the names are indicated on the battery/rechargeable battery e.g. below the rubbish bin symbol shown to the left).

You may return used batteries/rechargeable batteries free of charge at the official collection points of your community, in our stores, or wherever batteries/rechargeable batteries are sold!

You thus fulfil your statutory obligations and contribute to the protection of the environment.

18. Declaration of Conformity (DOC)

We, Conrad Electronic, Klaus-Conrad-Straße 1, D-92240 Hirschau, hereby declare that this product complies with the fundamental requirements and the other relevant regulations of the directive 1999/5/EC.

The declaration of conformity for this product is available at www.conrad.com.

19. Technical Data

a) Weather Station

Power supply	3 AA/mignon batteries
Battery lifetime	approx. 1 year
Dimensions	230 x 145 x 33 mm (W x H x D, no bases)
Weight	490 g (without batteries)

Temperature sensor:

Measuring range	0 °C to +50 °C (+32 °F to +122 °F)
Resolution	0.1 °C

Humidity sensor:

Measuring range	10% to 99% relative humidity
Resolution	1%

Barometric pressure sensor:

Measuring range	300 hPa to 1100 hPa (8.85 inHg to 32.5 inHg)
Resolution	0.1 hPa (0.01 inHg)
Accuracy	±3 hPa (between 700 and 1100 hPa)

b) Outdoor Sensor

Power supply	2 rechargeable batteries, type AA/Mignon (special rechargeable batteries with a rated voltage of 1.5 V)
Transmission frequency	868 MHz
Range	up to 100 m (in the free field, see Chapter 15)
Transmission interval	every 48 seconds
Dimensions	Approx. 388 x 750 x 340 mm (W x H x D)
Weight	approx. 1,035 g

Temperature sensor:

Outdoor temperature measurement range	-40 °C to +65 °C (-40 °F to +149 °F)
Accuracy	±1 °C
Resolution	0.1 °C

Humidity sensor:

Measuring range	10% to 99% relative humidity
Accuracy	±5%
Resolution	1%

Rain sensor:

Measuring range	0 mm to 9,999 mm
Accuracy	±10%
Resolution	0.3 mm (rain volume <1,000 mm) or 1 mm (rain volume >1,000 mm)

Wind sensor:

Wind speed	0 to 160 km/h (0 to 100 mph)
Accuracy	±1 m/s (wind speed <10 m/s) or ±10% (wind speed >10 m/s)

(D) Impressum

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