EN TE87 Weather station



Thank you for purchasing our equipment. Please read this manual carefully and heed the safety warnings and instructions before installing, using or repairing the equipment. This will ensure not only the protection of persons, but also the long life of the equipment.

DESCRIPTION OF EQUIPMENT

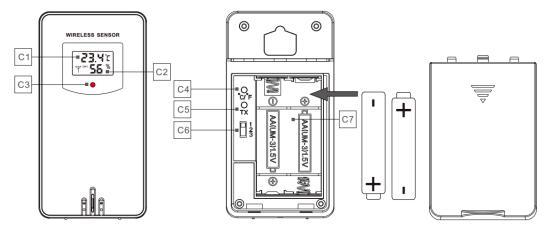
- Part A Display description
- Part B Description of buttons and power supply
- Part C Wireless Sensor Description





- A1. Outdoor temperature
- A3. Outdoor temperature warning
- A5. Barometric pressure
- A7. Indoor humidity
- A9. Indoor temperature
- A11. Outdoor comfort indicator
- B1. Touch button "SNOOZE/LIGHT"
- B3. Button "ALARM"
- B5. Button "-"
- B7. Button "★"
- B9. Power input

- A2. Outdoor humidity
- A4. Time/Calendar or Alarm Time/Day
- A6. Histogram of 24h atmospheric pressure
- A8. Indoor comfort indicator
- A10. Weather forecast
- B2. "SET/MODE" button
- B4. Button "+"
- B6. Button "ALERT"
- B8. Button "MEM"
- B10. Battery compartment



- C1. Temperature display
- C3. Signal LED
- C5. "TX" button
- C7. Battery compartment

- C2. Humidity display
- C4. °C/°F button
- C6. "CHANNEL" button

BASIC INFORMATION

- DCR Clock radio control function
- Calendar to 2099
- Displaying days of the week in CZ, EN, DE, FR, ES, IT, NL, DK, PT, NO, SE, PL, FI, HU, RU
- Time format 12/24h
- Daily alarm clock
- Automatic alarm snooze function
- Barometric pressure:
 - o Barometric pressure measurement range: $600 \text{ hPa/mb} \sim 1100 \text{ hPa/mb} & 17.72 \text{ inHg} \sim 32.50 \text{ inHg}$
 - Pressure display in hPa/mb or inHg
- Humidity: Indoor and outdoor measurable range 20%RH ~ 95%RH
- Temperature:
 - o Indoor temperature measurement range: -9.9°C (13.9° F) ~ 50°C (122°F)
 - Outdoor temperature measurement range: -40°C (-44°F) ~ 70°C (158°F)
 - Temperature can be measured in °C and °F
 - Selected outdoor temperature warning, frost warning
- Maximum and minimum humidity/temperature display
- Wireless outdoor sensor:
 - o Can be mounted to the wall or placed on a selected base
 - o One wireless sensor included
 - Transmitter frequency 433,92MHz
 - o Range approx. 60m in open space
- Weather forecast function
- Power
 - Weather station: 2 x AA batteries (LR6)
 - Wireless outdoor sensor: 2 x AA batteries (LR6)

NOTE: The operating temperature of the outdoor wireless sensor is from -30°C to 70°C. Therefore, select suitable batteries to power the sensor.

- Alkaline zinc-manganese battery can operate at temperatures from -20 °C to +60 °C
- Polymer lithium-ion rechargeable battery can operate at temperatures from -40°C to +70°C

FIRST LAUNCH

- 1. Open the battery compartment cover on the wireless outdoor sensor.
- 2. Insert 2 x AA batteries and observe polarity.
- 3. Open the battery compartment cover on the weather station.
- 4. Insert 2 x AA batteries and observe polarity.
- 5. When the batteries are inserted, all icons on the LCD display will light up for 3 seconds, an audible signal will sound and the Indoor temperature and humidity will be displayed.
- 6. The weather station will now start establishing a connection with the outdoor sensor. This operation takes about 3 minutes. Once the sensor has connected, the antenna icon will appear on the display in the OUT area.
- 7. After the receiver establishes a connection with the outdoor sensor, it enters the time reception mode from the radio signal.

RADIO SIGNAL RECEPTION

- The device will automatically start searching for a DCF signal after 7 minutes from any reboot or battery change.
- The radio mast icon will flash.

At 1:00/2:00/3:00, the device automatically synchronizes with the DCF signal to correct for any deviations. If this synchronization attempt is unsuccessful (the radio mast icon disappears from the display), the system will automatically attempt another synchronization at the next full hour. This procedure is automatically repeated up to five times.

To start manual reception of a DCF signal, press and hold the "+" button for 2 s. If no signal is received within 7 minutes, the search will stop (the radio mast icon will disappear) and start again in the next full hour.

To abort the search, press the "+" button.

NOTE:

- A flashing transmitter icon indicates that DCF signal reception has started.
- A continuously displayed transmitter icon indicates that the DCF signal has been successfully received.
- We recommend a minimum distance of 2.5 metres from any sources of interference such as TVs or computer monitors.
- Radio reception is weaker in rooms with concrete walls. In these circumstances, place the equipment near a window.
- Only the "+" button works during RCC reception. If you want to perform other operations, press the "+" button first to stop receiving RCC.

MANUAL TIME SETTING AND GENERAL SETTINGS

- Press the button **SET/MODE** to switch between date and seconds display
- Press and hold the SET/MODE button for about 2 seconds to enter the general and time settings. First set the temperature unit ($^{\circ}$ C / $^{\circ}$ F) using the "+" and "-" buttons.
- Press the SET/MODE button to confirm and go to the pressure unit settings. Use the "+" and "-" buttons to set the pressure unit (hPa, inHg, mmHg).
- Press the SET/MODE button to confirm and go to the Radio Controlled Clock (RCC) settings. Use the "+" and "-" buttons to set the RRC reception function to ON/OFF.
- Press the SET/MODE button to confirm. The time zones will start flashing and use the "+" and "-" buttons to set the correct time zone (-12 to +12).
- Press the SET/MODE button to confirm. The 12/24h time format will start flashing. Use the "+" and "-" buttons to set the desired time display format.
- Press the **SET/MODE** button to confirm. The HOURS display will start flashing. Use the "+" and "-" buttons to set the current hour.
- Press the SET/MODE button to confirm. MINUTES will flash on the display. Use the "+" and "-" buttons to set the current minute.
- Press the SET/MODE button to confirm. The MONTH and DATE icons will flash on the display. Use the "+" and "-" buttons to set the date display to MONTH/DATE or DATE/MONTH.
- Press the **SET/MODE** button to confirm. YEAR will flash on the display. Use the "+" and "-" buttons to set the current year.
- Press **SET/MODE** to confirm. The MONTH will flash on the display. Use the "+" and "-" buttons to set the current month.
- Press the SET/MODE button to confirm. The DATE will flash on the display. Use the "+" and "-" buttons to set the
 current date.
- Press the SET/MODE button to confirm. The display will flash the language selection for the days display. Use the "+" and "-" buttons to set the desired language.
- Press the SET/MODE button to confirm. The weather forecast will flash on the display. Use the "+" and "-" buttons to set the current outdoor weather
- Press the **SET/MODE** button to confirm and exit the settings. You will then enter the time display mode.

COMMENT:

After 20 seconds without pressing any button, the device will automatically switch from setup mode to time display mode.

ALARM SETTINGS

- Press ALARM to toggle the calendar or alarm time display.
- Press and hold the ALARM button for about 2 seconds to enter the alarm settings. First, enter the settings for Alarm1.
 Use the "+" and "-" buttons to set the desired time.
- Press the ALARM button to confirm and go to the MINUTES settings. Use the "+" and "-" buttons to set the minute.
- Press the ALARM button to confirm. Now set the repeat of Alarm 1. Use the "+" and "-" buttons to set the alarm repeat mode: Mon-Fri/Mon-Sun.
- Press the ALARM button to confirm. You will now go to the Alarm 2 settings. Use the "+" and "-" buttons to set the
 desired time.
- Press the ALARM button to confirm and go to the MINUTE alarm2 setting. Use the "+" and "-" buttons to set the minute.
- Press the ALARM button to confirm. Now set the repeat of Alarm 2. Use the "+" and "-" buttons to set the alarm repeat mode: Mon-Fri/Mon-Sun.
- Press the ALARM button to confirm the settings and exit the alarm setting.

COMMENT:

After 20 seconds without pressing any button, the device automatically switches from setup mode to time display mode.

ALARM CONTROL

- Press the "+" button to switch the alarm on or off. Press and hold the "+" button to change the alarm status.
 - o 1st press Alarm 1 active
 - o 2nd press Alarm 2 active
 - o 3rd press Both alarms are active
 - 4th press Both alarms are inactive
- Press the ALARM button to view the times of Alarm 1 or Alarm 2. In Alarm 1 or Alarm 2 display mode, you can press
 the "+" button to turn on/off individual alarms.
- When Alarm1 and Alarm2 are switched on, the icons or or are displayed. When the alarms are switched off, the icons disappear.
- If you do not deactivate the alarm by pressing any button (Except SNOOZE/LIGHT), it will sound for 2 minutes. In this case, the alarm will automatically repeat after 24 hours. If you deactivate the alarm by pressing the button, it is not necessary to reactivate the alarm. It will automatically switch itself to the already set alarm time.
- When the alarm rings, the volume increases 4 times.

To snooze the alarm: press the button snooze/LIGHT. The snooze time is about 5 minutes.

Turning off the alarm: Press any button except the snooze/LIGHT button. Or hold the snooze/LIGHT button for 3s.

TEMPERATURE DISPLAY IN °C / °F

- Press the "+" button to toggle between °C and °F.

COMFORT DISPLAY

- The indoor comfort level is calculated according to the humidity, there are 3 levels in total.

PICTURE	Comfortable	O Dry	Wet
Humidity value	40%~70%	<40%	>70%

Display of temperature/humidity/barometric pressure and temperature/humidity trend

- The display shows the current indoor temperature/humidity/barometric pressure and the temperature/humidity trend (indoors).
- After a successful connection to an outdoor sensor, the weather station can display the remote temperature/humidity and the temperature/humidity trend (OUT section).

The following information may be displayed.

Air temperature/humidity rising

- Temperature/humidity remains constant

- Temperature/humidity decreasing

WIRELESS OUTDOOR SENSOR

- When the weather station receives a signal from the wireless sensor, the temperature and humidity are displayed in the "OUT SENSOR" column.
- Weather stations and outdoor sensors can operate on up to three channels. No more than one sensor can operate
 on the same channel at the same time.
- Press the "-" button to switch the display of different channels. When is displayed, the channel switches automatically every 5 seconds.
- If the weather station failed to receive a transmission from the wireless sensor, "- -" will be displayed on the LCD. Press and hold the "-" button for 3 seconds to receive the signal manually. The RF antenna symbol will be displayed on the wireless sensor, the weather station will receive the wireless signal from the outdoor sensor again.

NOTE

The default channel setting on the wireless sensor is channel 1.

Maximum/minimum temperature/relative humidity

To toggle the indoor/outdoor maximum and minimum temperature and humidity readings, press the "MEM" button.

- 1. Press Displays the maximum temperature and humidity values.
- 2. Press Displays the minimum temperature and humidity values.
- 3. Press Return to the current temperature and humidity values.

To reset the maximum and minimum temperature and humidity, press and hold the "MEM" button for about 2 seconds.

NOTE:

If the measured temperature is below the measurement range, LL.L is displayed.If the measured temperature is above the range, HH.H is displayed.

OUTDOOR TEMPERATURE ALERT SETTING

- Press and hold the ALERT button for 2 seconds until the temperature alert icon flashes.
- Use the "+" and "-" buttons to set the desired maximum temperature.
- Confirm the settings by pressing the ALERT button. The temperature alarm lower limit icon will then flash. Use the "+" and "-" buttons to set the desired minimum temperature.
- Press ALERT to confirm the settings and exit.

COMMENT:

You must select a remote channel before entering the settings. Different channels can be set to different temperature alarm ranges.

OUTDOOR TEMPERATURE WARNING

- Press the ALERT button to activate or deactivate the temperature alarm. When the alarm is active, the temperature
 alarm icon is displayed.
- When the temperature value on the wireless sensor exceeds the set temperature range, an alarm is activated. The weather station will alert 5 times continuously every minute and the alarm icon will flash simultaneously. If the alarm is activated the upper limit icon, or the lower limit icon will also be displayed.
- If the outdoor sensor measures a temperature between -1°C and +3°C, the frost warning will be activated and the symbol " will be displayed at the same time.

F.Y.I:

When the temperature is higher than the upper limit set on the temperature alarm, the symbol " I flashes.

When the temperature is below the lower limit set on the temperature alarm, the " symbol flashes.

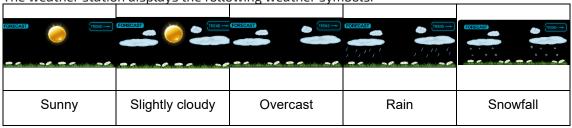
BATTERIES

- If the battery icon appears, the batteries in the outdoor wireless sensor must be replaced as soon as possible.

WEATHER FORECAST

Based on the barometric pressure, the weather station calculates the weather forecast for the next 12 hours or so. Of course, this forecast cannot be equal to the forecasts of professional weather services, which are supported by satellites and powerful computers, but it provides only an approximate indication of the current trend. Always give preference to forecasts from professional weather stations.

The weather station displays the following weather symbols:



The weather station can display the barometric pressure trend. The following data can be displayed:

- Barometric pressure will increase.

- Barometric pressure remains constant.

- Barometric pressure will drop.

DISPLAY BACKLIGHT

If the device is battery powered, press **SNOOZE/LIGHT** for the backlight for 15 seconds. When the power supply is connected to the product, the batteries are automatically disconnected from the power supply and the backlight is always on.

Press * to adjust the backlight brightness or turn it off. The backlight has 5 states. The backlight can be switched off by pressing the **snooze/Light** button for 15 seconds.

The product has been issued with a CE declaration of conformity in accordance with the applicable regulations. On request from the manufacturer: info@solight.cz, or downloadable from www.solight.cz/en.

The maximum radiated power of the device in the working frequency band 433,92MHz is 10mW (+10dbm).

Manufacturer: Solight Holding, s.r.o., Na Brně 1972, Hradec Králové 500 06.



