

WS9767 - INSTRUCTION MANUAL

TEMPERATURE STATION WITH RADIO CONTROLLED CLOCK AND ALARM

ENVIRONMENTAL RECEPTION EFFECTS

The temperature station obtains the accurate time with wireless technology. Same as all wireless devices, the reception is maybe affected by the following circumstances:

- Long transmitting distance
- Nearby mountains and valleys
- Among tall buildings
- Near freeway, railway, airports, high voltage cable etc.
- Near construction site
- Inside concrete buildings
- Near electrical appliances (computers, TV's, etc)
- Inside moving vehicles
- Near metallic structures

Place the temperature station at a location with optimal signal, i.e. close to a window and away from metal surfaces or electrical appliances.

QUICK SETUP

1. Keep the temperature station and outdoor sensor next to each other. Slide open the battery cover at the back of the outdoor sensor. Make sure the channel selector is set at position CH1 (when using multiple transmitters: for second transmitter CH2, for third transmitter CH3), then insert 2 x AAA batteries (not included) into the outdoor sensor by observing the correct “+/-” polarity signs inside the battery compartment. Replace the battery door.
2. Slide open the battery cover at the back of the temperature station, then insert 2 x AA batteries (not included) by observing the correct “+/-” polarity signs inside the battery compartment. Then replace the battery cover.
3. Peel off the protective label on the front. The temperature station is ready to work for you.

The temperature station will receive data signal from the outdoor sensor in few seconds. Then place the outdoor sensor in a dry and shaded area outdoor.

DCF SIGNAL RECEPTION AND SIGNAL INDICATOR

The time base for the radio controlled time is a Cesium Atomic Clock operated by the Physikalisch Technische Bundesanstalt Braunschweig which has a time deviation of less than one second in one million years. The time is coded and transmitted from Mainflingen near Frankfurt via frequency signal DCF-77 (77.5 kHz) and has a transmitting range of approximately 1,500 km. The clock of the temperature station receives this signal and converts

it to show the precise time in summer or wintertime.

The quality of the reception depends greatly on the geographic location. In normal cases, there should be no reception problems within a 1500 km radius around Frankfurt.

After the temperature station is powered up, it starts to receive DCF signal. The  icon flashes.

Receiving DCF signal ( icon flashing)

Successful reception ( icon becomes static)

Failed reception ( icon disappear)

Note: The DCF-77 reception is only available in Europe. Outside the reception range the clock of the temperature station is usable as normal quartz clock.

MANUAL TIME SETTING

1. Press and hold the **CLOCK** button for 2 seconds, the time display format 24Hr flashes. Press the **SET/RESET** button to select the 12h or 24h time display format.
2. Then press the **CLOCK** button again, language for weekday display GE flashes. Press the **SET/RESET** button to select the language for weekday display (GE – German, FR – French, SP – Spanish, IT – Italian, EN – English).
3. Then press the **CLOCK** button again, time zone digit O flash. Press the **SET/RESET** button to select the time zone ($\pm 12h$).
4. Then press the **CLOCK** button again, the hour digits flash. Press the **SET/RESET** button to set the hours.
5. Then press the **CLOCK** button again, the minute digits flash. Press the **SET/RESET** button to set the minutes.
6. Then press the **CLOCK** button again, the year digits flash. Press the **SET/RESET** button to set the year.
7. Then press the **CLOCK** button again, the month digits flash. Press the **SET/RESET** button to set the month.
8. Then press the **CLOCK** button again, the date digits flash. Press the **SET/RESET** button to set the date.
9. Press the **CLOCK** button again to store the settings and return to normal time display. The clock will automatically return to normal mode in around 30 seconds if no further press of any other buttons.

ALARM SETTING

1. Press and hold the **ALARM** button for 2 seconds, the **AL** icon appears on the display, the hour digits flash. Press the **SET/RESET** button to set the desired alarm hours.
2. Press the **ALARM** button again, the minute digits flash. Press the **SET/RESET** button to set the desired alarm minutes.
3. Press the **ALARM** button again to store the alarm settings and return to normal time display. The clock will return to normal mode in around 30 seconds if no further press of any other buttons.

Turn on or off the alarm

Single press the **SET/RESET** button during normal time display to turn on or off the alarm. When the alarm function is turned on the  icon appears on the display on top of the time digits.

Snooze function

When time reaches the set alarm time, the station will give a beep sound to wake you up. The  icon will flash.

1. Press the **SNOOZE/CH/REGISTER** button once to stop the alarm temporarily, the snooze icon **Zz** keeps flashing. The alarm will beep again after snooze duration of 6 minutes.
2. To stop the alarm, press any button except the **SNOOZE/CH/REGISTER** button when alarm is beeping. The snooze icon **Zz** disappears. The alarm will beep again same time next day.

Note: Alarm duration is approximately 2 minutes.

TEMPERATURE DISPLAYS

The **INDOOR** temperature displays the temperature of the location of the temperature station. The **OUTDOOR** temperature displays the temperature of the location of the outdoor temperature sensors (outdoor area or another indoor rooms p.e. cellar, loft, etc.).

Outdoor transmitter reception and signal indicator

After the station is powered up, it starts to search for outdoor transmitter signal. The  icon flashes. To start the reception of outdoor transmitter signal manually, press and hold the **SNOOZE/CH/REGISTER** button for 2 seconds.

Receiving signal ( icon flashing)

Successful reception ( icon becomes static)

Failed reception ( icon disappear)

Press the **SNOOZE/CH/REGISTER** button once to display continually the temperature of only one outdoor sensor (1 channel).

Press the **SNOOZE/CH/REGISTER** button repeatedly to display sequentially the temperatures of all outdoor sensors (channel 1, 2 and 3).

Press the **SNOOZE/CH/REGISTER** button repeatedly until the  icon is shown. The temperature display will switch automatically between all 3 outdoor sensor channels (channel 1, 2 and 3). Press the **SNOOZE/CH/REGISTER** button to cancel.

°C/°F Display

Press and hold the **SELECT** button for 2 seconds, the temperature display format °C/°F flashes. Press the **SET/RESET** button to select the °C (Celsius) or °F (Fahrenheit) temperature display format. Press the **SELECT** button again to store the setting.

Temperature trend indicator

The indoor and outdoor temperature trend indicators are updated every 30 minutes. These trend indicators represent the temperature changes over the past three hours:

- Temperature rose more than 1°C (2°F) in the past three hours.
- Temperature has not changed more than 1°C (2°F) in the past three hours.
- Temperature fell off more than 1°C (2°F) in the past three hours.

The temperature trend indicators are shown next to the indoor and outdoor temperature readings.

MIN/MAX INDOOR AND OUTDOOR TEMPERATURES

Simply press the **SELECT** button to view the maximum indoor and outdoor temperatures.

Then press the **SELECT** button again to view the minimum indoor and outdoor temperatures.

Then press the **SELECT** button again to return to current indoor and outdoor temperature display.

Reset MIN/MAX temperatures

While displaying the MAX or MIN temperatures, press the **SET/RESET** button to reset all maximum and minimum temperatures.

LOW BATTERY INDICATOR

When the low battery icon  appears in the indoor temperature section, the batteries in the temperature station need to be replaced.

When the low battery icon  appears in the outdoor temperature section, the batteries in the outdoor transmitter need to be replaced.

Note: When the batteries in the temperature station will changed, time and calendar will reset to default setting.

TROUBLE SHOOTING

In case the temperature station shows false time, it maybe affected by electrostatic discharge or interferences from other devices. Press and hold the **SET/RESET** button for 2 seconds. The temperature station will start to receive radio controlled time signal again.

Lost of outside temperature display

When the outdoor temperature digits show “--”, the wireless transmission is either interrupted or lost. Press the **TX** button located into the battery compartment of the outdoor sensor and thereafter the **SNOOZE/CH/REGISTER** button at the temperature station. If you continue to lose the outdoor temperature display, try placing the outdoor sensor at a different location until you have smooth transmission of temperature data.

Note: Keep in mind that the outdoor sensor only has a 30 meter transmission range in open area

with no obstructions. Each obstruction between the outdoor sensor and the temperature station (roof, walls, floors, ceilings, thick trees, etc.) will effectively cut the transmission range in half.

SAFETY WARNINGS

- The temperature station is intended to only be used indoors.
- When the units are not used for a long period of time, remove the batteries.
- Do not subject the units to excessive force or shock.
- Do not expose the units to extreme temperatures, direct sunlight, dust or humidity.
- Do not immerse the units in water.
- Avoid contact with any corrosive materials. Do not use abrasive or solvent-based cleaner.
- Do not dispose the units in fire. Risk of explosion!
- Keep the units out of reach of children.
- Do not open the inner back case or tamper with any components of the units. Maintenance and repairs must be performed only by an expert or a specialist workshop. If you have any questions that are not answered in this manual, please contact our Technical Advisory Service or another specialist.

BATTERIES SAFETY WARNINGS

- Please read all instructions carefully before use.
- Use only alkaline batteries, not rechargeable batteries.
- Install batteries correctly by matching the polarities (+/-).
- Always replace a complete set of batteries.
- Never mix used and new batteries.
- Remove exhausted batteries immediately.
- Remove batteries when not in use.
- Do not recharge and do not dispose of batteries in fire. Risk of explosion!
- Do not expose the batteries to extreme temperatures, direct sunlight, dust or humidity.
- Ensure batteries are stored away from metal objects as contact may cause a short circuit.
- Keep all batteries out of reach from children. They are a choking hazard.

SPECIFICATIONS

Dimensions:

Temperature station: 65 x 45 x 165mm

Outdoor sensor: 40 x 22 x 100mm

Power requirements:

Temperature station: 2 x AA Mignon R06, 1.5V (not included)

Outdoor sensor: 2 x AAA Micro R03, 1.5V (not included)

Operation temperature: 0°C to +45°C (32°F to 113°F)

Temperature measuring range:

Indoor: 0°C to +50°C (32°F to 122°F)
(display shows HH.H / LL.L if out of this range)

Outdoor: -40°C to +60°C (-40 to 140°F)
(display shows HH.H / LL.L if out of this range)

Resolution: 0.1°C (0.2 °F)

Accuracy: ± 1°C (± 2°F)

Transmission frequency: 433 MHz

Transmission range: max. 30m (open area)

Integrated radio receiver: Receiving frequency 77.5 kHz

Aerial: Internal ferrite aerial

Alarm duration: 2 minutes

Snooze duration: 6 minutes

Consideration of duty according to the battery law

Old batteries do not belong to domestic waste because they could cause damages of health and environment. End-users are committed by law to bring back needed batteries to distributors and other collecting points!

