

WS-9031U Quick Set-up instructions

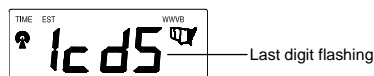
- 1) Insert two AA batteries into the remote transmitter.
- 2) Insert three AA batteries into the Weather Projection Station and/or plug into wall.

Note: When starting or restarting your weather projection station the transmitter should be started first and then your weather projection station. After power is supplied (either battery or AC) ensure that no buttons are pressed for 15 minutes. This will allow time for the weather projection station to communicate with the remote transmitter as well as receive the WWVB signal.

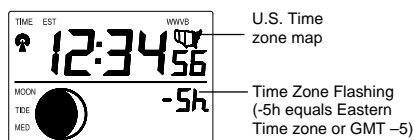
- 3) Wait 15 minutes for WWVB reception and remote temperature and humidity.
- 4) If there is no WWVB reception, manually set the time, date and time zone (instructions are also in the **Manual Settings** section of the main manual).

Manually setting the time zone and time

- 1) Press and hold the SET button (located on the back of the unit) until the LCD digits start flashing.



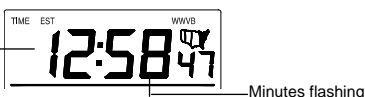
- 2) Press and release the SET button once or until the current TIME ZONE is displayed.



- 3) Press and release the CH/+ key to advance the time zone to your time zone.

- 4) Press and release the SET key four times or until the HOUR digit begins to flash.

Hour flashing



- 5) Press and release the CH/+ key to select the correct hour. "PM" will appear for hours from 12 noon until midnight.

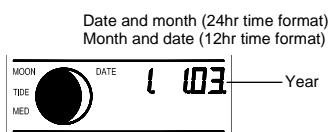
- 6) Press and release the SET key to advance to the MINUTE setting mode.
- 7) Press and release the CH/+ key to select the correct minute.

-Optional- setting the Day, Month and Year (This will be set automatically upon WWVB reception)

- 8) Press and release the SET key to advance to the YEAR setting mode.

- 9) Press and release the CH/+ key to select to the correct year.

- 10) Press and release the SET key to advance to the MONTH setting mode.



- 11) Press and release the CH/+ key to select to the correct month.

- 12) Press and release the SET key to advance to the DAY setting mode.

- 13) Press and release the CH/+ key to select the correct day of the month.

- 14) Press and release the SET key three times to complete the settings or wait 15 seconds and the display will exit the set-up screen automatically.

Note: All manual settings will be updated and corrected once the WWVB signal is received (typically overnight when the signal is strongest).

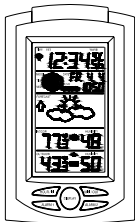
- 5) Place the WS-9031U in your desired location.
- 6) Mount the transmitter in a shaded area protected from rain, where remote temperature and humidity measurements are desired (on the North side of a house for example).

Note: When placing and mounting the transmitter and weather projection station please keep in mind that the transmitting distance from the transmitter to the weather projection station is 80 feet. Any obstacles (such as walls) will decrease the effective range of the transmission.

Note: The remote transmitter is weather resistant but not waterproof. High humidity and mist will not damage the transmitter but direct rain will. The maximum range between the transmitter and weather projection station is 80ft. open air (no obstructions). Any resistance (i.e. walls, furniture, etc) between the two will decrease the effective operating range.

- 7) The projector will activate and remain on if the Weather Projection Station is plugged in. If only batteries are used, the projector will only be activated when the SNOOZE button is pressed.
- 8) See "**How to use the projector**" instructions for projection direction, etc.

WS-9031U
WEATHER PROJECTION STATION
POSTE METEO A PROJECTION
ESTACION CON PROYECCIÓN DEL ESTADO
DEL TIEMPO



Instruction Manual
Mode d'emploi
Manual de Instrucciones

LA CROSSE[®]
TECHNOLOGY
technology tools for home & office

WEATHER PROJECTION STATION

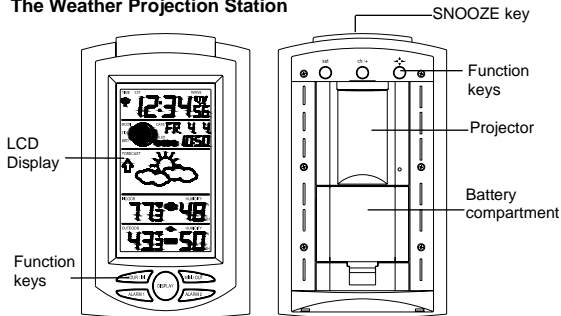
Instruction Manual

INTRODUCTION:

Congratulations on purchasing this state-of-the-art weather projection station as an example of innovative design and quality piece of engineering. Providing radio controlled time, date, calendar, moon phase, indoor and outdoor temperature, indoor and outdoor relative humidity, this unit will never keep you guessing on current and future weather conditions. Operation of this product is simple and straightforward. By reading this operating manual, the user will receive a better understanding of the weather projection station together with the optimum benefit of all its features.

FEATURES:

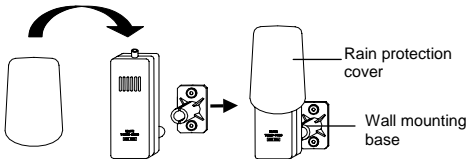
The Weather Projection Station



- WWVB Radio controlled time with manual setting option
- Time reception ON/OFF (user selectable)
- 12/24 hour time display
- DST ON/OFF (daylight saving time)
- US time zone map
- Time zone option ± 12 hours
- Month, date, weekday calendar display
- Alarm setting with snooze function
- Automatic daylight saving time
- Display 12 moon phases throughout the year with moon/tide indication
- Weather forecasting with 3 weather icons
- Weather tendency indicator
- Indoor comfort indicator
- Temperature display with MIN/MAX records and time of reception
- Indoor and outdoor temperature display in $^{\circ}\text{C}/^{\circ}\text{F}$
- Humidity data with MIN/MAX records
- Indoor and outdoor humidity display as RH%
- Can receive up to 3 sensors
- Time projection display (hour and minute)
- Outdoor temperature projection display (degrees $^{\circ}\text{C}$ or $^{\circ}\text{F}$)
- Alternate projection display mode selectable

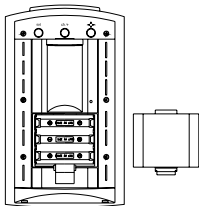
- Projection with adjustable brightness and projection orientation possible
- LCD contrast selectable
- LED back light
- Low battery indicator
- Table standing
- AC/DC power adapter included

The Outdoor Thermo-hygro Sensor



- Remote transmission of outdoor temperature and humidity to Weather Projection Station by 433 MHz
- Rain proof casing
- Wall mounting case

TO INSTALL AND REPLACE BATTERIES IN THE WEATHER PROJECTION STATION



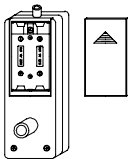
The Weather Projection Station uses 3 x AA, IEC LR6, 1.5V batteries. To install and replace the batteries, please follow the steps below:

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

TO INSTALL AND REPLACE BATTERIES IN THE THERMO-HYGRO SENSOR

The Thermo-hygro sensor uses 2 x AA, IEC LR6, 1.5V batteries. To install and replace the batteries, please follow the steps below:

1. Remove the battery cover.



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

Note:

In the event of changing batteries in any of the units, all units need to be reset by following the setting up procedures. This is due to a random security code assigned by the sensor at start-up. This code must be received and stored by the Weather Projection Station in the first 3 minutes of power being supplied to the sensor.

BATTERY CHANGE:

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



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

SETTING UP

The Weather Projection Station can be either batteries-operated or powered by the provided AC-DC adapter.

BATTERY INSTALLATION:

1. First, insert the batteries into the Weather Projection Station (see **“To install and replace batteries in the Weather Projection Station”**). Once the batteries are in place, all segments of the LCD will light up briefly and a short signal tone will sound. Then the ALM1 6:00, the indoor temperature and humidity, the time as 12:00, the date as WE 1.1., the moon icon, the weather icons (sun and clouds) will be displayed. If the indoor temperature and indoor humidity are not displayed after 15 seconds, remove the batteries and wait for at least 3 minutes before reinserting them. Once the indoor data is displayed proceed to step 2.
2. Within 4 minutes of activating the Weather Projection Station, place the batteries into the sensor (see **“To install and replace batteries in the Thermo-hygro Sensor”**).
3. After inserting the batteries into the sensor, the Weather Projection Station will start receiving data from the sensor. The outdoor temperature and humidity should then be displayed on the Weather Projection Station. If this does not happen after 3 minutes, the batteries will need to be removed from both units and reset from step 1.
4. The Weather Projection Station can receive up to 3 remote Outdoor Thermo-hygro sensors. If you have purchased additional sensors, repeat from step 3 for all extra sensors. However, ensure that you leave 10 seconds in between the reception of the last sensor and the set-up of the

- following sensor. The Weather Projection Station will number the sensors in the order of set-up, i.e. the first sensor will have the temperature/humidity displayed with the number 1 against it and so on.
5. With less than 3 sensors received, the Weather Projection Station will try to pick up the remaining one in approximately another 3 minutes. If 3 sensors are received, the Weather Projection Station will stop further reception.
 6. Once the outdoor temperature and the humidity have been received and displayed on the Weather Projection Station, the WWVB time code reception is automatically started. This takes typically between 6-8 minutes in good conditions.
 7. If after 10 minutes, the WWVB time has not been received, use the SET key to manually enter a time initially. The clock will automatically attempt to receive the WWVB time from 12:00 to 6:00 a.m. for a successful reception. When WWVB reception signal is successful, the received time will override the manually set time. The date is also updated with the received time. The next reception attempt will occur on the following day. (Please refer to notes on “**About WWVB Radio controlled Time**” and “**Manual Time Setting**”).

Your Weather Projection Station is now operational!

Note:

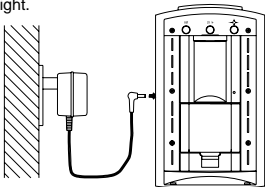
If the batteries are used as the main power source:

1. Projected image brightness, alarm volume and back-light strength will be weaker when batteries are low
2. Battery life time will be much less than 1 year; depending on the frequency of projection and alarm.

TO USE THE PROJECTOR POWER ADAPTER

The unit comes with an AC-DC adapter for using the projector for an extended period of time, such as throughout the night.

To connect the AC-DC adapter:



Important!

Make sure that your household voltage is 120V! Otherwise it can result in damaging your Weather Projection Station.

1. Connect the AC-DC adapter to a wall socket. Plug the adapter into the jack at the side of the Weather Projection Station. All segments of the LCD will light up briefly and a short signal tone will sound. Then the ALM 1 6:00, the indoor temperature and humidity, the time as 12:00, the date as WE 1.1., the moon icon, the weather icons (sun and clouds) will be displayed. If the indoor temperature and indoor humidity are not displayed after 15 seconds, remove the batteries and wait for at least 3 minutes before reinserting them.
2. Within 4 minutes of activating the Weather Projection Station, place the batteries into the sensor (see "**To install and replace batteries in the Thermo-hygro Sensor**").
3. After inserting the batteries into the sensor, the Weather Projection Station will start receiving data from the sensor. The outdoor temperature and humidity should then be displayed on the Weather Projection Station. If this does not happen after 3 minutes, the batteries will need to be removed from both units and reset from step 1.
4. The Weather Projection Station can receive up to 3 remote Outdoor Thermo-hygro sensors. If you have purchased additional sensors, repeat from step 3 for all extra sensors. However, ensure that you leave 10 seconds in between the reception of the last sensor and the set-up of the following sensor. The Weather Projection Station will number the

- sensors in the order of set-up, i.e. the first sensor will have the temperature/humidity displayed with the number 1 against it and so on.
5. With less than 3 sensors received, the Weather Projection Station will try to pick up the remaining one in approximately another 3 minutes. If 3 sensors are received, the Weather Projection Station will stop further reception.
 6. Once the outdoor temperature and the humidity have been received and displayed on the Weather Projection Station, the WWVB time code reception is automatically started. This takes typically between 6-8 minutes in good conditions.
 7. If after 10 minutes, the WWVB time has not been received, use the SET key to manually enter a time initially. The clock will automatically attempt to receive the WWVB time from 12:00 to 6:00 a.m. for a successful reception. When WWVB reception signal is successful, the received time will override the manually set time. The date is also updated with the received time. The next reception attempt will occur on the following day. (Please refer to notes on “**About WWVB Radio controlled Time**” and “**Manual Time Setting**”).

Your Weather Projection Station is now operational!

Note:

If the Weather Projection Station is powered through the AC-DC adapter, the projection will be constantly ON.

If the Weather Projection Station is battery operated, only when the SNOOZE key is pressed, the projection will turn ON. Once the SNOOZE key is released, there will be no projection.

USING BOTH BATTERIES THE POWER ADAPTOR

If the Weather Projection Station is first powered by batteries and the AC-DC adapter is subsequently used for extended period of time, the main power source of the Weather Projection Station will switch to AC power. The batteries will then act as a backup power source in the case of power failure.

RESETTING

The Weather Projection Station and the Thermo-hygro sensor need to be reset when one of the following conditions occur:


- Unsuccessful 433MHz signal reception.
- Malfunction on the units.
- Batteries replacement.

For resetting, remove all batteries from the units and unplug the AC-DC adapter from any power source. Wait at least for **3 minutes** before powering

up the Weather Projection Station again. Proceed from step 1 in “**Setting Up**”, “**Battery Installation**” or “**How to use the Projector Adaptor**”.

HOW TO USE THE PROJECTOR


The projector projects the current time and the current outdoor temperature onto the ceiling, preferable within a darkened room. The projection image can also be adjusted in 4 upright positions, each with a rotation of 90° by

using the  key .

TO PROJECT THE TIME OR TEMPERATURE ONTO A FLAT SURFACE:

The projector will only project the current time, outdoor temperature or alternate between time/outdoor temperature only.

1. Point the projection lens to the appropriate direction (maximum distance of the projection is 6 feet/2 meters).
2. Press the DISPLAY key to select the desired mode for the projection. There are 3 display modes:
 - M0 – projecting the current time only.
 - M1 – projecting the current outdoor temperature only.
 - M2 – projecting by switching the display of the current time and the current outdoor temperature for every 5 seconds.

3. Adjust the projection image in an upright position with the  key.

Note:

If more than one Thermo-hygro Sensor is used, only the temperature from sensor 1 will be projected.

ABOUT WWVB RADIO CONTROLLED TIME

The NIST (National Institute of Standards and Technology—Time and Frequency Division) WWVB radio station is located in Ft. Collins, Colorado, and transmits the exact time signal continuously throughout the United States at 60 kHz. The signal can be received up to 2,000 miles away through the internal antenna in the Weather Projection Station. However, due to the nature of the Earth's Ionosphere, reception is very limited during daylight hours. The Weather Projection Station will search for a signal every night when reception is best.

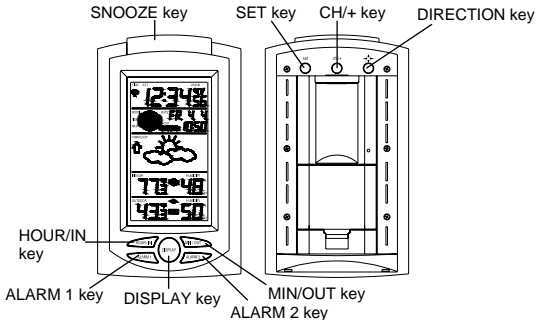
The WWVB radio station receives the time data from the NIST Atomic clock in Boulder, Colorado. A team of atomic physicists is continually measuring every second, of every day, to an accuracy of ten billionths of a second per day. These physicists have created an international standard, measuring a second as 9,192,631,770 vibrations of a Cesium-133 atom in a vacuum. For more detail, visit <http://www.boulder.nist.gov/timefreq.htm>. To listen to the NIST time, call (303)499-7111. This number will connect you to an automated time,

announced at the top of the minute in “Coordinated Universal Time”, which is also known as Greenwich Mean Time (GMT). This time does not follow Daylight Saving Time changes. After the top of the minute, a tone will sound for every second. It is possible that your Weather Projection Station may not be exactly on the second due to the variance in the quartz. However, the clock will adjust the quartz timing over the course of several days to be very accurate; under 0.10 seconds per day.

FUNCTION KEYS:

Weather Projection Station:

The Weather Projection Station has 9 easy to use function keys; 5 on the front, 3 on the back, and 1 on the top of the unit:



SET key

- Enter manual setting modes: LCD contrast, time zone, DST ON/OFF, Time reception ON/OFF, 12/24 hour display, manual time setting, calendar, snooze function, temperature °F or °C, and weather icon sensitivity setting

- Stop the alarm during alarm ringing
- Stop snooze mode
- Back-light on

CH/+ key

- Increase value in all setting modes
- Stop the alarm during alarm ringing
- Toggle between the outdoor sensor 1, 2 and 3 (if more than 1 sensor is used)
- Stop snooze mode
- Back-light on



Key (DIRECTION key)

- Project the image direction (can display 4 different orientations)
- Back-light on

DISPLAY key

- Toggle between the time and outdoor temperature or automatic alternates time/outdoor temperature every 5 seconds display mode for projection
- Back-light on

ALARM 1 key

- Enter/exit the alarm 1 setting mode
- Active/de-active the alarm time 1 (even inside snooze mode)
- Stop the alarm during alarm ringing
- Back-light on

HOUR/IN key

- Press to set the alarm hour (inside alarm setting mode)
- Press shortly to toggle between MIN/MAX and current indoor temperature and humidity data
- Press and hold for 4 seconds to reset the MIN/MAX indoor temperature and humidity data
- Stop the alarm during alarm ringing
- Stop snooze mode
- Back-light on

MIN/OUT key

- Press shortly to toggle between MIN/MAX and current temperature/humidity values for selected outdoor temperature channel.
- Press and hold for 4 seconds to reset the MIN/MAX records for selected channel.
- Press to set the alarm minute (inside alarm setting mode)

- Stop the alarm during alarm ringing
- Stop snooze mode
- Back-light on

ALARM 2 key

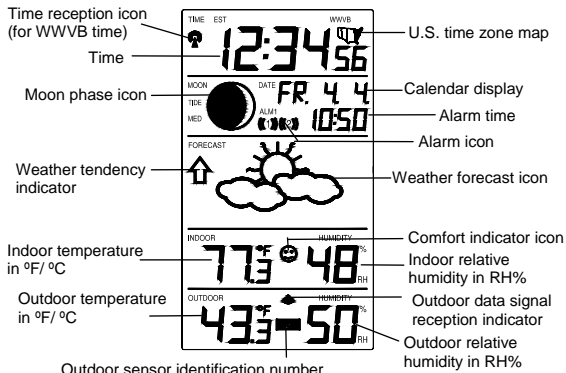
- Enter/exit the alarm 2 setting mode
- Active/de-active the alarm time 2 (even inside snooze mode)
- Stop the alarm during alarm ringing
- Back-light on

SNOOZE key

- Active/de-active snooze function
- Active the projection in battery operated mode
- Press and hold 2 seconds to stop the alarm during alarm ringing
- Exit the setting modes
- Back-light on

LCD SCREEN

The LCD screen is split into 5 sections displaying the information for time and time zone, moon phase and date, weather forecast, indoor data, and outdoor data.

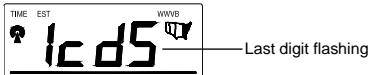


MANUAL SETTINGS:

The following manual settings can be changed when pressing the SET key for:

- LCD contrast setting
- Time zone setting
- DST (Daylight Saving Time) setting
- Time reception ON/OFF setting
- 12/24-Hour setting
- Manual time setting
- Calendar setting
- Snooze setting
- °F/°C setting
- Weather forecasting icon sensitivity setting

LCD CONTRAST SETTING:

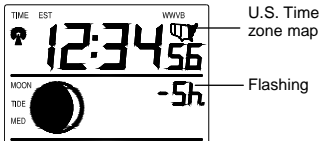


The LCD contrast can be set within 8 levels, from LCD 0 to LCD7 (Default setting is LCD 5):

1. Press and hold the SET key until the digit starts flashing.

2. Use the CH/+ key to view all levels of contrast.
3. Select the desired LCD contrast. Confirm with the SET key and enter in the **Time Zone setting**.

TIME ZONE SETTING:



The time zone default of the Weather Projection Station is EST -5. To set a different time zone:

1. The current time zone value starts flashing.
2. Use the CH/+ key to set the time zone. The range runs from 0 to -12 and then runs from +12 back to 0 in consecutive 1-hour intervals. The LCD also displays U.S. time zone map available for -5hr(EST), -6hr(CST), -7hr(MST) and -8hr(PST) zones.
3. Confirm with the SET key and enter the **DST (Daylight Saving Time) setting**.

DST (DAYLIGHT SAVING TIME) SETTING:



Note: The DST default is "ON", meaning that the received time will automatically be adjusted according to Daylight Saving Time in the spring and fall. For areas that do not recognize DST changes (Arizona and parts of Indiana) turn the DST "OFF".

1. The digit "ON" will start flashing on the LCD.
2. Use the CH/+ key to turn OFF the DST function.
3. Confirm with the SET key and enter the **Time Reception ON/OFF setting.**

TIME RECEPTION ON/OFF SETTING:



In area where reception of the WWVB time is not possible, the WWVB time reception function can be turned OFF. The clock will then work as a normal Quartz clock. (Default setting is ON).

1. The digit "ON" will start flashing on the LCD.
2. Use the CH/+ key to turn OFF the time reception function.
3. Confirm with the SET key and enter the **12/24-HOUR setting**.

Note:

If the Time Reception function is turned OFF manually, the clock will not attempt any reception of the WWVB time as long as the Time Reception OFF function is activated.

The Time Reception and the "WWVB" icons will not be displayed on the LCD.

12/24-HOUR SETTING:



The hour display can be selected to show hours in 12-hour or 24-hour settings. (Default 12-Hour)

1. Use the CH/+ key to toggle between "12H" or "24H".
2. Confirm with the SET key and enter the **Manual time setting**.

MANUAL TIME SETTING:

In case the Weather Projection Station cannot detect the WWVB-signal (for example due to disturbances, transmitting distance, etc.), the time can be manually set. The clock will then work as a normal Quartz clock.



1. The hour digit will start flashing.
2. Use the CH/+ key to set the hour.
3. Press again the SET key to set the minutes. The minute digits start flashing.
4. Use the CH/+ key to set the minutes.
5. Confirm with the SET key and enter the **Calendar setting**.

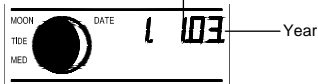
Note:

The unit will still try to receive the signal between 12:00 to 6:00 a.m. every day despite it being manually set and if the WWVB time reception function has been set ON. When it does receive the signal, it will change the manually set time into the received time. During reception attempts the WWVB tower icon will flash. If reception has been unsuccessful, then the WWVB tower icon will not appear but reception will still be attempted the following hour.

CALENDAR SETTING:

Date and month (24hr time format)

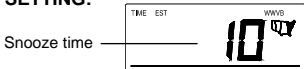
Month and date (12hr time format)



The date default of the Weather Projection Station is 1. 1. in the year 2003. Once the radio-controlled time signals are received, the date is automatically updated. However, if the signals are not received, the date can also be set manually.

1. The year starts flashing.
2. Use the CH/+ key to set the year (between year 2003-2029).
3. Press the SET key again to confirm and to enter the month setting. The month starts flashing.
4. Use the CH/+ key to set the month.
5. Press the SET key again to confirm and to enter the date setting mode. The date starts flashing.
6. Use the CH/+ key to set the date.
7. Confirm all calendar settings with the SET key and enter the **Snooze setting**.

SNOOZE SETTING:



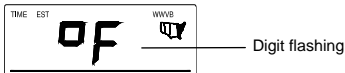
The snooze time can be set OFF to a maximum time of 30 minutes (default is 10 minutes):

1. Use the CH/+ key to set the snooze time. Each pressing of the key will increase the snooze time by 5 minutes. The snooze can also be set OFF when the "OFF" digit is being displayed.
2. Confirm with the SET key and enter the **Temperature setting**

Note:

If the snooze time has been set "OFF", the snooze function will not be activated.

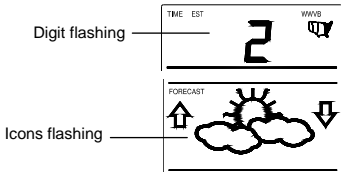
°F/°C TEMPERATURE SETTING:



The temperature display can be selected to show temperature data in °F or °C (Default °F).

1. Use the CH/+ key to toggle between "°F" or "°C".
2. Confirm with the SET key and enter the **Weather forecasting icon sensitivity setting**.

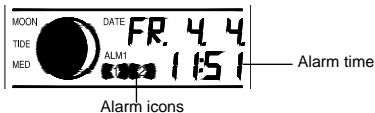
WEATHER FORECASTING ICON SENSITIVITY SETTING:



For locations with rapid changes of weather conditions, the weather icons can be set to a different level for faster display of weather conditions.

1. The current sensitivity value will start flashing.
2. Use the CH/+ key to set the weather sensitivity level. There are 3 levels of setting: 1, 2 and 3; level 1 is the most sensitive setting; level 3 is the slowest recording setting (default setting is "2").
3. Confirm with the SET key and exit the **Manual settings**.

ALARM SETTING:



The alarm time can be set when pressing the ALARM 1 or ALARM 2 key.

1. Press the ALARM 1 or ALARM 2 key until the alarm digits flash.
2. Use the HOUR/IN key to set the alarm hour.
3. Use the MIN/OUT key to set the alarm minute.
4. Confirm with the ALARM 1, ALARM 2, or Snooze key and exit the **Alarm setting.**

Note:


The maximum alarm ring duration is 2 minutes. The alarm setting can be activated or deactivated manually by pressing the ALARM 1 or ALARM 2 key, depending on which one is activated. The alarm icon will be displayed on the LCD if the setting is activated.

SNOOZE ACTIVATION AND STOPPING THE ALARM:

The snooze function can be activated when the alarm is ringing by pressing the SNOOZE key. However the snooze will only be activated when the snooze time is set other than OFF in snooze setting.

Otherwise the snooze function will not be activated.

When the alarm is snoozing, the alarm icon ((1)) or ((2)) will start flashing indicating that the alarm is active but is in Snooze mode. To stop the snooze function when it is in snooze period, press and hold the SNOOZE key for 2 seconds until a "Beep" is sounded. You can also press the HOUR/IN or MIN/OUT keys once to stop the snooze function.

To stop the alarm, press any key (except the DISPL and  keys) during alarm ringing. Or press and holds the SNOOZE key for 2 seconds (a beep sound can be heard).

MOON PHASES SYMBOL

The moon icon of the Weather Projection Station will also display all 12 moon phases throughout the year accordingly to the set calendar.



New Moon



Small Waxing Crescent
Gibbous



Large Waxing Crescent
Gibbous



First Quarter



Small Waxing Gibbous
Crescent



Large Waxing Gibbous
Crescent



Full Moon



Large Waning



Small Waning



Last Quarter



Large Waning



Small Waning

Moon Tide:

The moon Tide information is indicated on the left side of the moon phase icon as follow:

- High Tide occurs during New Moon and Full Moon phase
- Medium Tide (Med) occurs during any of the other moon phases
- Low Tide occurs during First and Last Quarter phase

WEATHER FORECAST AND WEATHER TENDENCY:

WEATHER FORECASTING ICONS:

Weather icons in the third section of LCD that can be displayed in any of the following combinations:



Sunny



Cloudy with sunny intervals



Rainy

For every sudden or significant change in the air pressure, the weather icons will update accordingly to represent the change in weather. If the icons do not change, then it means either the air pressure has not changed or the change has been too slow for the Weather Projection Station to register. However, if the icon displayed is a sun or raining cloud, there will be no change of icon if the weather gets any better (with sunny icon) or worse (with rainy icon) since the icons are already at their extremes.

The icons displayed forecasts the weather in terms of getting better or worse and not necessarily sunny or rainy as each icon indicates. For example, if the current weather is cloudy and the rainy icon is displayed, it does not mean that the product is faulty because it is not raining. It simply means that the air pressure has dropped and the weather is expected to get worse but not necessarily rainy.

Note:

After setting up, readings for weather forecasts should be disregarded for the next 12-24 hours. This will allow sufficient time for the Weather Projection Station to collect air pressure data at a constant altitude and therefore result in a more accurate forecast.

Common to weather forecasting, absolute accuracy cannot be guaranteed. The weather forecasting feature is estimated to have an accuracy level of about 75% due to the varying areas the Weather Projection Station has been designed for use. In areas that experience sudden changes in weather (for example from sunny to rain), the Weather Projection Station will be more accurate compared to use in areas where the weather is stagnant most of the time (for example mostly sunny).

If the Weather Projection Station is moved to another location significantly higher or lower than its initial standing point (for example from the ground floor to the upper floors of a house), discard the weather forecast for the next 12-24

hours. By doing this, the Weather Projection Station will not mistake the new location as being a possible change in air-pressure when really it is due to the slight change of altitude.

WEATHER TENDENCY INDICATOR

Working together with the weather icons is the weather tendency indicators (located on the left and right sides of the weather icons). When the indicator points upwards, it means that the air-pressure is increasing and the weather is expected to improve, but when indicator points downwards, the air-pressure is dropping and the weather is expected to become worse.

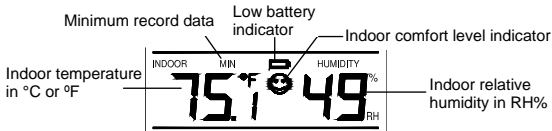
Taking this into account, one can see how the weather has changed and is expected to change. For example, if the indicator is pointing downwards together with cloud and sun icons, then the last noticeable change in the weather was when it was sunny (the sun icon only). Therefore, the next change in the weather will be cloud with rain icons since the indicator is pointing downwards.

Note:

Once the weather tendency indicator has registered a change in air pressure, it will remain permanently visualized on the LCD.

INDOOR RELATIVE HUMIDITY AND INDOOR TEMPERATURE:

The indoor temperature and humidity data, the indoor comfort indicator are automatically updated and displayed on the fourth section of the LCD.



The comfort level indicator:

Comfortable: A happy face icon “☺” indicating a temperature level between 68.0°F and 78.6°F and relative humidity reading between 45% and 65%.

Uncomfortable: A sad face icon “☹” indicating any value outside the comfortable range.

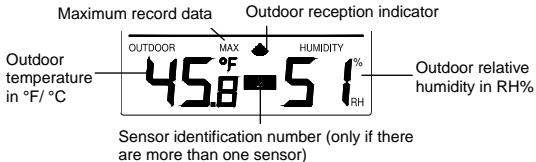
TOGGLING AND RESETTING THE INDOOR READINGS:

1. Press the HOUR/IN key to toggle between the indoor current, MIN/MAX temperature and humidity data. The time and dates of the recorded

- data will also be displayed in the time and calendar sections (for temperature data only).
- To reset the MIN/MAX data, press and hold the HOUR/IN key for about 4 seconds. This will reset all recorded indoor data to the current temperature and humidity readings.

OUTDOOR RELATIVE HUMIDITY AND OUTDOOR TEMPERATURE

The last LCD section shows the outdoor temperature and humidity, the reception indicator, the MIN/MAX outdoor data. A number in the center will also be shown if more than one sensor has been used.



TOGGLING AND RESETTING THE OUTDOOR RECORDINGS:

1. To toggle between the outdoor current, MIN/MAX temperature and humidity data and the times (for temperature data only) they were recorded press the MIN/OUT key:
Once to show the MAX outdoor temperature and humidity data with the recorded time and date.
Twice to show the MIN outdoor temperature and humidity data with the recorded time and date.
Three times to return to the current displayed values.
 2. To toggle between sensors, press the CH/+ key:
Once to show sensor 2
Twice to show sensor 3
Three times to return to sensor 1
- Note: The sensor number will only be displayed if there is more than one sensor being used.**
3. To reset the MIN/MAX outdoor temperature, and the time at which they were recorded, press and hold the MIN/OUT key for about 4 seconds. This will reset all MIN/MAX data recorded to the displayed values for that particular sensor.

TO EXIT THE MANUAL SETTING MODE

To exit the manual setting mode anytime during the manual setting modes, press the SNOOZE key anytime or wait for automatic timeout. The mode will return to normal time display.

BACK-LIGHT

The back-light is automatically switched ON when any keys are pressed. The back-light will be switched on for approximately 10 seconds before automatically switching OFF. However, if the SNOOZE key is pressed and held down, then back-light will remain ON constantly until the key is released.

ABOUT THE OUTDOOR THERMO-HYGRO SENSOR

The range of the Thermo-hygro Sensor may be affected by the temperature. At cold temperatures the transmitting distance may be decreased. Please bear this in mind when positioning the sensor. Also the batteries may be reduced in power.

CHECKING FOR 433MHz RECEPTION

If the outdoor temperature and humidity data is not being received within three minutes after setting up (the display shows “- - °F” and “- -%” on the outdoor section of the Weather Projection Station after 3 attempts during normal operation), please check the following points:

1. The distance of the Weather Projection Station or sensor should be at least 6 feet (2 meters) away from any interfering sources such as computer monitors or TV sets.
2. Avoid placing the Thermo-hygro sensor onto or in the immediate proximity of metal window frames.
3. Using other electrical products such as headphones or speakers operating on the 433MHz-signal frequency may prevent correct signal transmission or reception. Neighbors using electrical devices operating on the 433MHz-signal frequency can also cause interference.

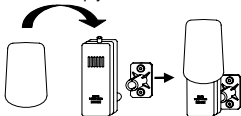
Note:

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

The transmission range is around 65-82 feet (20-25 meters) from the sensor to the Weather Projection Station (in open space). However, this depends on the surrounding environment and interference levels. If no reception is possible despite the observation of these factors, all system units have to be reset (see “**Setting up**” above).

POSITIONING THE THERMO-HYGRO SENSOR:

Each sensor is supplied with 2 wall mounting screws and plastic anchors. To wall mount simply:



1. Secure the wall base onto a desired wall using the screws and plastic anchors.
2. Insert the sensor to the wall base.

Note:

Before permanently fixing the sensor wall base, place all units in the desired locations to check that the outdoor temperature and humidity readings are receivable. In event that the signal is not received, relocate the sensors or move them slightly as this may help the signal reception.

CARE AND MAINTENANCE:

- Extreme temperatures, vibration and shock should be avoided as these may cause damage to the units and give inaccurate forecasts and readings.
- When cleaning the display and casings, use a soft damp cloth only. Do not use solvents or scouring agents as they may mark the LCD and casings.

- Do not submerge the units in water.
- Immediately remove all low powered batteries to avoid leakage and damage. Replace only with new batteries of the recommended type.
- Do not make any repair attempts to the units. Return it to their original point of purchase for repair by a qualified engineer. Opening and tampering with the units may invalidate their guarantee.
- Do not expose the units to extreme and sudden temperature changes, this may lead to rapid changes in forecasts and readings and thereby reduce their accuracy.

SPECIFICATIONS:

Temperature measuring range:

Indoor	:	+14.2°F to +139.8°F with 0.1°F resolution -9.9°C to +59.9°C with 0.1°C resolution ("OFL" displayed if outside this range)
Outdoor	:	-21.8°F to +157.8°F with 0.1°F resolution -29.9°C to +69.9°C with 0.1°C resolution ("OFL" displayed if outside this range)

Relative humidity measuring range:

Indoor and outdoor	:	1% to 99% with 1% resolution ("- -" displayed if outside this range)
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Indoor temperature checking interval : every 15 seconds
Indoor humidity checking interval : every 20 seconds
Outdoor temperature reception : every 5 minutes
Sensor checking interval : every 1 minute
Power supply:
Weather Projection Station : 3 x AA, IEC LR6, 1.5V
Thermo-hygro sensor : 2 x AA, IEC LR6, 1.5V
Battery life cycle : approximately 12 months, less if the projection is used) (Alkaline batteries recommended)

Dimensions (L x W x H)

Weather Projection Station : 3.97" x 2.48" x 7.16" / 101 x 63 x 182mm
Thermo-hygro sensor : 2.36" x 2.87" x 4.76" / 60 x 73 x 121mm

LIABILITY DISCLAIMER

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

by this product should be taken only as an indication and not as being totally accurate.

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

WARRANTY INFORMATION

La Crosse Technology, Ltd provides a 1-year limited warranty on this product against manufacturing defects in materials and workmanship.

This limited warranty begins on the original date of purchase, is valid only on products purchased and used in North America and only to the original purchaser of this product. To receive warranty service, the purchaser must contact La Crosse Technology, Ltd for problem determination and service procedures. Warranty service can only be performed by a La Crosse Technology, Ltd authorized service center. The original dated bill of sale must be presented upon request as proof of purchase to La Crosse Technology, Ltd or La Crosse Technology, Ltd's authorized service center.

La Crosse Technology, Ltd will repair or replace this product, at our option and at no charge as stipulated herein, with new or reconditioned parts or products

if found to be defective during the limited warranty period specified above. All replaced parts and products become the property of La Crosse Technology, Ltd and must be returned to La Crosse Technology, Ltd. Replacement parts and products assume the remaining original warranty, or ninety (90) days, whichever is longer. La Crosse Technology, Ltd will pay all expenses for labor and materials for all repairs covered by this warranty. If necessary repairs are not covered by this warranty, or if a product is examined which is not in need or repair, you will be charged for the repairs or examination. The owner must pay any shipping charges incurred in getting your La Crosse Technology, Ltd product to a La Crosse Technology, Ltd authorized service center. La Crosse Technology, Ltd will pay ground return shipping charges to the owner of the product to a USA address only.

Your La Crosse Technology, Ltd warranty covers all defects in material and workmanship with the following specified exceptions: (1) damage caused by accident, unreasonable use or neglect (including the lack of reasonable and necessary maintenance); (2) damage occurring during shipment (claims must be presented to the carrier); (3) damage to, or deterioration of, any accessory or decorative surface; (4) damage resulting from failure to follow instructions contained in your owner's manual; (5) damage resulting from the performance of repairs or alterations by someone other than an authorized La Crosse Technology, Ltd authorized service center; (6) units used for other than home

use (7) applications and uses that this product was not intended or (8) the products inability to receive a signal due to any source of interference.. This warranty covers only actual defects within the product itself, and does not cover the cost of installation or removal from a fixed installation, normal set-up or adjustments, claims based on misrepresentation by the seller or performance variations resulting from installation-related circumstances.

LA CROSSE TECHNOLOGY, LTD WILL NOT ASSUME LIABILITY FOR INCIDENTAL, CONSEQUENTIAL, PUNITIVE, OR OTHER SIMILAR DAMAGES ASSOCIATED WITH THE OPERATION OR MALFUNCTION OF THIS PRODUCT. THIS PRODUCT IS NOT TO BE USED FOR MEDICAL PURPOSES OR FOR PUBLIC INFORMATION. THIS PRODUCT IS NOT A TOY. KEEP OUT OF CHILDREN'S REACH.

This warranty gives you specific legal rights. You may also have other rights specific to your State. Some States do not allow the exclusion of consequential or incidental damages therefore the above exclusion of limitation may not apply to you.

For warranty work, technical support, or information contact:

La Crosse Technology

2809 Losey Blvd. S.
La Crosse, WI 54601
Phone: 608.782.1610
Fax: 608.796.1020

e-mail:

support@lacrossetechnology.com
(warranty work)

sales@lacrossetechnology.com
(information on other products)

web:

www.lacrossetechnology.com

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All trademarks and patents are acknowledged.

FCC ID: OMO-01RX (receiver), OMO-01TX (sensor)
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES.
OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS:

- 1. THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND**
- 2. THIS DEVICE MUST ACCEPT INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.**