TAYLOR.1507Digital WirelessWeather System

Thermometer & Hygrometer with NOAA Weather Radio and Remote Sensor

Leading the Way in Accuracy®



Instruction Manual

Thank you for purchasing the Taylor® Digital Wireless Weather System: Thermometer & Hygrometer with NOAA Weather Radio and Remote Sensor. This state-of-the art measurement instrument is engineered and designed to meet the highest quality standards...to assure you uncompromising accuracy and consistently dependable, convenient performance. In order to optimize its function, please read this instruction manual carefully before use...and keep it handy for future reference. **Description of Parts**



1 - LCD Readout:

Line 1: Clock displays current time. Press "CLOCK" button on front of unit to toggle to month/date and day of the week. Press "ALARM" to view alarm time. If the weather radio is turned on, the "NOAA" icons appear on the right. (See Setting the Time & Alarm and NOAA Weather Radio sections of this manual).

Line 2: Displays color bars, moon phase, weather forecast icons, altitude and barometric pressure. The color bars graphically represent current conditions The Moon phase will automatically display according to the current calendar. The weather forecast icons and barometric pressure reading will automatically display based on altitude. (See How to Read Temperatures and Other Displays section of this manual).

Line 3: Displays indoor/outdoor temperatures and humidity, minimum/maximum readings, heat index, dew point, comfort levels, and trend indicators. (See How to Read Temperatures and Other Displays section of this manual.)

2 - LED Indicator (Remote Unit):

Flashes when remote sensor transmits a reading.

3 - Channel/Search Button (Receiver Unit):

Press to view the readings of channel 1, 2, 3 or auto scroll (which will show each display for 10 seconds). Press and hold 3 seconds to search for a remote sensor signal.

4 - Memory Button (Receiver Unit):

Press once to view maximum temperature and humidity readings, and press again to view minimum readings. Press again to return to current readings. While the min or max reading is displayed, press and hold for 3 seconds to clear the min or max memory.

5 - Pressure Button (Receiver Unit):

Press to toggle between hPa, inHg and mb barometric pressure displays. Press and hold for 3 seconds to enter Altitude Setting mode (See How to Read Temperatures and Other Displays section of this manual.)

6 - Heat Index/Dew Point Button (Receiver Unit):

Press once to display the heat index reading. Press twice to display the dew point reading. Press again to return to current readings.

7 - NOAA/Channel Button (on front of Receiver Unit):

When NOAA weather radio is on, press to select between NOAA radio channels 1-7. (see NOAA Weather Radio section of this manual)

8 - NOAA On/Off Button (on top of Receiver Unit):

Press to toggle between NOAA On, NOAA standby and NOAA off modes (see NOAA Weather Radio section of this manual).

9 - Snooze/Light Button:

When alarm sounds, press to snooze for 10 minutes. When receiver unit is operating on battery power, press to activate backlight and view LCD screen. Main Features (continued)

10 - Multi-Function Button (Receiver Unit):

1) **CLOCK** Press to toggle between time, month/date and day of the week display. Press and hold 3 seconds to enter Clock & Calendar Setting mode.

2) ▲ / ▼ Buttons: Press to advance / reverse settings one step forward or backward. Press and hold 3 seconds to fast advance / reverse.

3) ALARM: Press to view alarm time and to enable or disable the alarm. Press and hold for 3 seconds to enter Alarm Setting mode.

11 - Volume Dial (on side of Receiver unit):

Turn to adjust volume of NOAA radio.

12 - ZONE Button (inside battery compartment of Receiver Unit): Press to select between U.S. time zones. Press and hold 3 seconds to enter Daylight Savings Time (DST) Setting mode.

13 - P Antenna Button (inside battery compartment of Receiver Unit): Press to search for radio-controlled Atomic Clock signal.

14 - °C/°F Button (inside battery compartments of Receiver Unit and Remote Sensor):

Press to select °F or °C temperature scale. **Note:** Temperature scale selected on receiver unit will control what is displayed on the receiver.

15 - Reset Button (inside battery compartment of Receiver Unit): Press to reset system to default settings.

16 - Tx Button (inside battery compartment of Remote Unit)): Press to send a transmission signal to receiver unit.

17 - Channel Switch (Remote Unit):

Slide to designate the remote sensor channel 1, 2, or 3.

18 - Battery Compartment (On back of Receiver and Remote Units): The remote unit requires 2AAA Alkaline batteries. The home receiver unit may use 3AA Alkaline batteries as a backup or alternate power source (see Power Sources section of this manual).

19 - Table Stand (Fits on base of Receiver Unit):

Allows stable placement of receiver unit on a flat surface. Insert table stand prongs into slots in the bottom of the receiver unit.

20 - Wall Mount (On back of Receiver and Remote Units):

The receiver features a recessed key hole and the remote features a detachable holder with a keyhole slot to secure each unit to a wall.

21 - AC adaptor jack (on back of Receiver Unit):

To power the receiver using the included AC adaptor, insert the connector plug into the jack and plug the other end into the proper electrical outlet.

(Receiver Unit)



(Remote Unit)



How To Set Up Your Wireless Thermometer

• Place the receiver unit as close as possible to the remote unit.

This will ensure easy synchronization between the transmission and reception of signals as you set up your wireless thermometer. After set up is completed, position the receiver unit and remote unit within effective transmission range.

Note: The effective range is vastly affected by the building materials and where the receiver and remote units are positioned. Try various set ups for the best results. Shorten the distance between receiver and remote units when necessary.

Important: Though the remote unit is weather proof, it should be placed away from direct sunlight, rain, snow and should never be submerged in water.

Power Sources

Important: Insert the power supply cord into the home receiver first, then install batteries into the remote unit:

Home Receiver

- 1. Insert the AC adaptor jack into the back of the unit, then insert the cord into a 120V household outlet.
- 2. Three AA alkaline batteries may be used as a back up or alternate power source: Lift off the battery compartment on the back of the unit, install 3 alkaline AA batteries according to the polarity indicated, and close the battery cover. Note: to conserve battery power, the LCD screen will not be continuously lit when the receiver unit is running only on batteries. To view the screen, press the Snooze/Light button on the top of the receiver unit.
- Please note: This digital thermometer is also an extremely sophisticated weather forecasting system. When it is first powered on, the receiver unit will take approximately one minute to analyze its surrounding environmental conditions. This "ANALYZING" mode is indicated by dashes ("----") in the Barometric Pressure display. During this minute, some functions (such as Clock Setting or the NOAA weather radio) may not be operational. Once the "ANALYZING" mode is complete, a default Barometric Pressure appears in place of the dashes. The other system functions will then become operational.

Remote Sensor

- 1. Lift off the bracket stand, located on the back of the unit, to access the battery compartment cover.
- 2. Remove the 4 screws that secure the battery compartment cover and then remove the cover.
- **3.** Select the Channel setting by sliding the CH switch to Channel 1 to register the first sensor, included in this package.

Note: Maximum of 3 remote sensor units can be registered. Should you purchase one or two additional remote units (Model 1438, sold separately) to expand your thermometer monitoring capabilities to multiple locations, slide the CH switch to Channel 2 to register the second sensor and select Channel 3 to register the third sensor.



Remote Sensor (continued)

- **4.** Insert 2 AAA alkaline batteries as indicated by the polarity symbols marked inside the battery compartment.
- 5. Press the C/F button to select the desired temperature measurement scale.
- 6. Press the Tx button in the remote battery compartment to send a transmission to the receiver. The red LED Indicator light will flash when a signal is transmitted. Remote unit temperature updates will then be transmitted approximately every 30 seconds.

Note: If dashes are still displayed on the receiver unit, press the Tx button to send a transmission.

- Replace the battery compartment cover, replace and tighten screws and reattach the bracket stand.
- 8. Press and hold the "CHANNEL" button on the front of the receiver unit to search for the remote sensor signal. A beep sounds when a signal is sent.
- 9. When transmission connection is established, the respective temperature and humidity of the selected remote channel will appear on the home receiver's LCD screen.
- **10.** Press the "**CHANNEL**" button to toggle between indoor and remote sensor temperature/humidity displays.

Power Sources (continued)

Low Battery Warning: when the batteries on the receiver unit or the remote unit are low, the Low Battery Indicator icon will light up on the relevant displays. Follow the steps above to replace the batteries.

A maximum of 3 remote sensor units can be registered. One remote sensor is included. To purchase additional Remote Sensors (Taylor model 1438), please call 1-877-858-0065 Monday-Friday 9am to 6pm CST or visit www.partshelf.com.

Setting the Time & Alarm

1. Radio-Controlled Clock

The Home Receiver will automatically start synchronizing the clock after battery/adapter installation or reset. To force searching of the radio-controlled Atomic Clock signal , press the "P" " button inside the receiver's battery compartment during normal mode. The antenna icon (P) will appear near the Time display during synchronization. If the "P" icon disappears afterwards, Atomic time signal is not available at the moment. **Try other locations later.** Place the unit away from source of interference such as mobile phones, appliances, TV etc.

When the Atomic Clock is successfully synchronized, a full strength antenna icon (\mathbb{P}) will appear. The Atomic Clock will have a daily synchronization at **2:03 am** everyday. Each reception cycle is 2.5 minutes minimum and 10 minutes maximum.

2. U.S. Time Zone & DST Setting

Press the **"ZONE"** button inside the receiver's battery compartment to select between Pacific ("PA"), Mountain ("MO"), Central ("CE") and Eastern ("EA") time zones. Press **"CLOCK"** on the front of the receiver to confirm the zone selection.

Press and hold **"ZONE"** to enter DST (Daylight Saving Time) setting mode. Press **"▲"**or **"▼"** on the front of the unit to enable or disable the DST setting. Press **"ZONE"** to confirm DST setting.

3. Clock & Calendar

Press **"CLOCK"** on the front of the unit to toggle between time, calendar and day of the week displays.

The clock may be set to display in 12 or 24 hour format, and the calendar may be set to display in Month/Day or Day/Month format. This set up procedure will also allow manual setting of the time and date:

Press and hold the **"CLOCK"** button on the front of the unit. The unit will beep and the time display will show 12H or 24H. Press " \blacktriangle "or " \checkmark " buttons to select data in the following sequence: 12/24 hour>hour>minutes>year>Day/Month or Month/Day>month>date. After each selection press the **"CLOCK"** button to enter. Press the **"CLOCK"** button after the last entry to return to the time display.

4. MOON PHASE

The Moon phase will automatically display according to current calendar.

5. ALARM SETTING

Press and hold "ALARM" on the front of the unit. The alarm time and an "ALA" icon appear to the right of the alarm display. The hour digits will flash. Press " \blacktriangle "or " \P " buttons to change the alarm hour and then press "ALARM" to confirm the hour. The minutes digits will flash. Press " \blacktriangle "or " \P " buttons to change the alarm minutes and then press "ALARM" to confirm the minutes.

The LCD will return to the clock display and the bell icon (\bigstar) will indicate that the alarm is enabled.

To disable the alarm: press the "ALARM" button until the bell icon disappears. Press "CLOCK" to return to the clock display.

6. SNOOZE / LIGHT

When alarm sounds, press **"SNOOZE / LIGHT"** on the top of the receiver to trigger the snooze alarm. A **"Zz"** icon will appear above the bell icon. To stop the alarm for one day, press **"ALARM"** button. To disable the alarm, press the **"ALARM"** button until the bell icon disappears. Press **"CLOCK"** to return to the clock display. Press **"SNOOZE / LIGHT"** for an extended backlight when the adapter is not connected.

INDOOR/OUTDOOR TEMPERATURE & HUMIDITY

- 1. The current Temperature display is located at the lower left of the LCD screen. The Humidity display is on the lower right.
- Press "C/F" button inside the battery compartment of the receiver to select °F or °C temperature scale.
- **3.** Press **CHANNEL** button to toggle between indoor, Ch1, Ch2, or Ch3 or auto scroll displays (depending on how many remote sensors are in use). The auto scroll option will display the indoor readings and remote sensor readings for 10 seconds each.

WEATHER FORECAST / BAROMETRIC PRESSURE

The Weather Forecaster function will estimate weather conditions of the next 12 hours: Sunny, Partly Cloudy, Cloudy, Rainy, or and Stormy. Predictions are based on altitude and changes in barometric pressure. Barometric pressure refers to the pressure exerted by the atmosphere at the time. It may be expressed in either millibars (mb), inches of mercury (inHg), or hectopascals (hPa). To toggle between "mb", "inHg", and "hPa" barometric pressure displays, press the "**PRESSURE**" button.

These on-screen animated icons illustrate predicted weather conditions:



Note: Altitude factors into weather forecasting and barometric pressure readings. Enter the correct current Altitude to obtain the most accurate weather forecast / barometric pressure readings. (If the current altitude is unknown, one reference for altitude maps in the US is http://www.ngdc.noaa.gov/mgg/topo/state.html.)

How to read temperature and other displays (*continued*)

TO PROGRAM ALTITUDE

When first powered up, the receiver will automatically be in Altitude Setting mode for one minute. For this minute, the Barometric Pressure display will display "---" and the 'hPa' icon will blink for one minute. To input the current Altitude during Automatic Altitude Setting mode:

- Press "▲" or "▼" to toggle to the desired Barometric Pressure display ('mb', 'inHg', or 'hPa').
- 2. Press "PRESSURE" to confirm 'mb', 'inHg', or 'hPa'.
- 3. Press "▲" or "♥" to reach the current altitude height. (Note: Both 'mb' and 'hPa' altitudes will be expressed in meters, while 'inHg' is expressed in feet.)
- Press "PRESSURE" to confirm the altitude. The display will shortly return to the Barometric Pressure display.

If an altitude is not entered within one minute of powering on, the receiver will default to 'hPa' at an altitude of **"0"** (or when the **"RESET"** button is pushed). To enter Altitude Setting mode again:

- If not previously done, press "PRESSURE" to toggle to the desired Barometric Pressure display ('mb', 'inHg', or 'hPa').
- Press and hold the "PRESSURE" button for 3 seconds to enter Altitude Setting mode. The display will change to the current altitude setting. (Note: Both 'mb' and 'hPa' altitudes are automatically expressed in meters, while 'inHg' is expressed in feet.)
- 3. Press "▲" or "▼" to reach the current altitude height. Press "PRESSURE" to confirm the altitude. The display will shortly return to the Barometric Pressure display.

MAXIMUM / MINIMUM MEMORY

Press the **"MEMORY"** button on the front of the home receiver repeatedly to view the maximum & minimum values of temperature, humidity, heat index or dew point readings. To clear the memory record, hold the **"MEMORY"** button while the respective values are displayed onscreen.

TEMPERATURE & HUMIDITY TREND INDICATORS

One of 3 Trend Indicator arrow icons display near the temperature and the humidity display.

- indicates: Rising Temperature readings if the change is more than 2 degrees in an hour

indicates: Falling Temperatures if the change it is more than 2 degrees in an hour.

INDOOR/OUTDOOR HEAT INDEX

The Heat Index combines temperature and relative humidity for an *"apparent"* temperature, or how hot the heat-humidity combination actually feels.

How to read temperature and other displays (continued)

In normal mode, press the "Heat Index/Dew Point" button on the front of the home receiver once. The "HEAT INDEX" icon will appear. The heat index will appear in the lower left display. Press the "CHANNEL" button to toggle between indoor home receiver and outdoor remote sensor heat indexes. Press the "Heat Index/Dew Point" button twice to return to normal mode.

During conditions indicating a high heat index, a Heat Index Alert Indicator will appear on screen:

CAUTION ·····	Exercise more fatiguing than usual
EXTREME CAUTION	Heat cramps, exhaustion possible
DANGER	Heat exhaustion likely
EXTREME DANGER ······	Heat stroke imminent

INDOOR/OUTDOOR DEW POINT

Dew point is the saturation point of the air, or the temperature to which the air has to be cooled in order to get condensation.

In normal mode, press the "Heat Index/Dew Point" button on the front of the home receiver twice. The "DEW POINT" icon will appear. The dew point will appear in the lower left display. Press the "CHANNEL" button to toggle between indoor home receiver and outdoor remote sensor dew points. Press the Heat Index/Dew Point button once to return to normal mode.

INDOOR/OUTDOOR COMFORT LEVEL

The effects of temperature and humidity are combined and determine an Indoor/Outdoor Comfort level, which appears next to the humidity display on the LCD screen:

COMF ······ Comfortable level, ideal range for both		
temperature & humidity		
WET ······Contain excess moisture		
DRY ·····Contain inadequate moisture		

Color Bar Graphs

The color graphs are designed as an intuitive way to gauge the weather at a glance. The left color bar graph represents the respective Indoor/Outdoor temperature, heat index or dew point of the current display mode. The right graph represents the respective Indoor/Outdoor humidity. As the measurements change, the number of illuminated bars changes automatically. The higher the temperature and humidity, the taller the bars. Lower temperatures and humidity show shorter bars.

NOAA Weather Radio

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from a nearby National Weather Service office. It is the lone government-operated radio system that provides direct warnings to the public for natural and man- made hazards, from floods to forest fires to oil spills. NWR broadcasts National Weather Service warnings, watches, forecasts and other hazard information 24 hours a day. These broadcasts air on one of 7 channels.

To check the NOAA channel (Frequency) available for your area, visit the web site below and select your state & county/city/area. Then use the **"NOAA CHANNEL"** button on the front of the receiver unit to select the NOAA channel number corresponding to the frequency of your area.

http://www.nws.noaa.gov/nwr/indexnw.htm

Frequency Coverage of NOAA weather radio

Channel 1	: 162.400 MHz
Channel 2	: 162.425 MHz
Channel 3	: 162.450 MHz
Channel 4	: 162.475 MHz
Channel 5	: 162.500 MHz
Channel 6	: 162.525 MHz
Channel 7	: 162.550 MHz

NOAA On mode:

Press the **"NOAA ON/OFF"** once to turn on NOAA radio and listen to the weather broadcast. "NOAA" and its channel icon (1-7) will appear at the upper right of the LCD. Press **"NOAA CHANNEL"** button on the front of the receiver to toggle to one of the seven channels

Use the **"VOL"** dial on the side of the receiver to adjust the volume level.

NOAA Standby mode:

Stand by mode will mute the weather radio until an alert broadcast is received. While the radio is on, press **"NOAA ON/OFF"** once to enter NOAA standby mode. The "STANDBY" icon appears and the sound will mute. When an NWS (NOAA) alert broadcast is received, the unit will automatically switch to "NOAA On mode" and broadcast for 5 minutes.

NOAA Off mode:

While the radio is in Standby mode, press **"NOAA ON/OFF"** once to switch off weather radio completely.

NOTE: To conserve battery power, it is recommended to always use the adapter to power the unit while the weather radio is on. The radio can still operate with backup batteries alone during power outages.

Trouble-Shooting

Disconnected Signals

• If the receiver unit does not receive a transmission from a remote unit channel for 1 hour, the display will show dashes. To correct this problem:

- 1. Go to the remote location of that channel to check that the unit is properly positioned, within the appropriate transmission range.
- 2. If new batteries are faulty on the initial installation, install fresh batteries. If you did not notice the Low Battery icon warning and

the product performed correctly after initial set up, the batteries have lost their charge. Replace batteries (see the Power Sources section of this manual.)

3. Check to make sure the transmission path is clear of obstacles and interference.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

--Reorient or relocate the receiving antenna.

--Increase the separation between the equipment and receiver. Modifications not authorized by the manufacturer may void users authority to operate this device.

Note: FCC ID: L5CW044TX-F (transmitter)

Transmission Collision

Signals from other household devices, such as doorbells, home security systems and entry controls, may interfere. This is normal and does not affect the general performance of this product. The transmission will resume once the interference recedes.

Precautions

This Wireless Thermometer with Remote Sensor is engineered to give you years of satisfactory service if you handle it carefully, following these guidelines:

- 1. The receiver is intended for indoor use only. It is not sealed against moisture and could be damaged if used outdoors.
- **2. Do not** immerse the unit in water. If you spill liquid on it, dry immediately with a soft, lint-free cloth.
- **3. Do not** clean the unit with abrasive or corrosive materials. This may scratch plastic parts and corrode electronic circuits.
- **4. Do not** subject unit to excessive force, shock, dust, temperature or humidity. This may result in malfunction, shorter electronic life span, damaged battery or distorted parts.
- **5. Do not** tamper with the unit's internal components. Doing so will invalidate the warranty on this product and may cause damage. The unit contains no user-serviceable parts.
- 6. Do not mix old and new batteries. Do not dispose of batteries in fire. Batteries may explode or leak. Remove the batteries if the units will not be used for a long period of time.
- 7. Always read the instruction manual before operating this product.

Important: Though the remote unit is weather proof, it should be placed away from direct sunlight, rain, snow and should never be submerged in water. Also please note that below 32° F / 0° C the LCD readout on the remote unit may begin to fail display. When this happens the remote will still transmit correct temperature readings to the receiver unit but can not be viewed at the remote location. When the temperature rises above 32° F / 0° C the display will begin to function normally again.

Specifications

Range of temperature measurement:

Receiver unit (indoor only): 32°F to 122°F (0°C to 50°C)

Remote unit: -4°F to 140°F (-20°C to 60°C)

Indoor Humidity: 20% - 99% RH

Channel: max. 3 remote sensors

Transmission: Max. 60M (200 ft.) open area, RF434 MHz

Resolution: 0.2 degree for temperature, 1% for humidity

Clock: WWVB Radio-Controlled, Quartz back-up

NOAA Channel: 7 channels

Power: 6.0V adapter (included) or 3 AA alkaline batteries (not included) for receiver unit 2 AAA alkaline batteries for remote sensor (not included)

One Year Warranty

This product is warranted against defects in materials or workmanship for one (1) year from date of original purchase. It does not cover damages or wear resulting from accident, misuse, abuse, commercial use, or unauthorized adjustment and/or repair.

Should this product require service (or replacement at our option) while under warranty, do not return to retailer. Please pack the item carefully and return it prepaid, along with store receipt showing date of purchase and a note explaining reason for return to:

Taylor Precision Products 2220 Entrada Del Sol Las Cruces, New Mexico 88001 www.taylorusa.com

There are no express warranties except as listed above. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.

Made to our exact specifications in China.

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