

# UPM

## WS330 + WT440H Wireless Weather Station



### OWNERS MANUAL

Congratulations on your purchase of this weather station set, WS330 + WT440H. Please take the time to read and understand this manual so you can begin to enjoy the convenience and features this product has to offer.

#### FEATURES

- Main Display Unit WS330
  - 12/24 hour clock and alarm
  - local temperature display
  - receives and displays temperature and humidity readings from up to 4 remote transmitters via RF technology of 433MHz
  - minimum and maximum temperature record
  - high/low temperature alarm function
  - temperature and humidity trend indicator
  - weather report symbols
  - user selectable C or F
  - battery type: 2 x AA
- Remote Transmitter WT440H
  - drip-proof design with LCD
  - socket of external sensor probe
  - temperature display is user-selectable C or F
  - humidity display
  - transmission range: up to 40 meters in open area
  - battery type: 2 x AA

### GETTING STARTED

- button placement
- CHANNEL - scrolls through remote channels 1-4
  - ALARM (AM/PM)/(C/F) - toggles between C and F, 12 and 24 hour format, turns alarm on/off, clears temperature alarm, presets
  - MODE/SNOOZE - scrolls through time, alarm and temperature alarm set points (high/low); activates alarm snooze
  - UP/HOUR/MAX - scrolls through hours; shows maximum temperature
  - DOWN/MINUTE/MIN - scrolls through minutes; show minimum temperature
  - Table Stand
  - SET - enter to House code and Channel setting mode
  - C/F - change between C or F, change channel and house code
  - Battery compartment
  - LCD display
  - Socket for external sensor probe.
  - Wall Mount Holder & Table Stand

### GETTING STARTED

- battery installation
- remove battery cover
  - 2 AA size batteries (WS330)
  - 2 AA size batteries (WT440H)
  - insert between terminals observing proper polarity then replace cover
- LOW BATTERY INDICATION:** Low battery indication will be indicated by flashing trend box on the receiver (for both indoor & outdoor). On transmitter, **1** will be displayed.
- setting remote transmitters
- Insert batteries to start setup
  - HOUSE CODE will flash for 8 seconds
  - Select HOUSE CODE (1-15) by pressing Transmitters for each receiver must be set to the same HOUSE CODE
  - CHANNEL will flash for 8 seconds
  - Select CHANNEL(1-4) by pressing C/F
  - Humidity & Temperature will display
  - Select C or F of Temperature by pressing C/F key
- \* Use a different house code if your weather station detects other signals from neighboring sources  
\* Factory default: house code = 01 and channel = 01

### SETUP

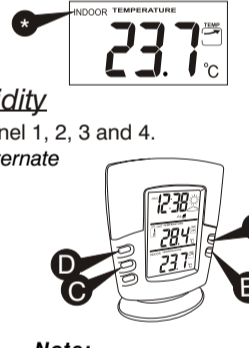
- synchronization
- Automatic Learn Function:**
- Learn function executes automatically and runs for approximately 3 minutes when batteries are first installed in the receiver.
  - Within these 3 minutes, receiver picks up the temperature & humidity signals from remote transmitter and displays the readings.
- Manual-Learn (Searching for Remote Signals):**  
If a new remote transmitter is added or if signal is lost (outdoor display blinking), learn function must be executed again.
- Press & hold **ALARM (AM/PM)/(C/F)** for 3 seconds to start.
  - Beep sound indicates that learn function has started.
  - CHANNEL symbol will flash and unit will beep as each transmitter is detected.
  - Temperature & humidity readings of remote transmitter displays on the receiver.
- \* Press & hold **Channel** for 3 seconds to start auto channel scroll function. In this mode, the display will scroll through the data from all the valid channels, each of which will be shown for 8 seconds. Press & hold **Channel** for 3 seconds again to disable this function.

### CLOCK & ALARM SETTING

- Modes are arranged in a circular pattern starting with clock:
- clock → alarm clock → high temperature alarm → low temperature alarm
- clock setting**
- Press and hold **MODE** until time flashes
  - Select hour using **HOUR**
  - Select minute using **MINUTE**
  - Press **AM/PM** to toggle between 12 or 24 hour format
  - Press **MODE** to finish setting
- alarm setting**
- Select alarm mode using **MODE**
  - Select hour using **HOUR**
  - Select minute using **MINUTE**
  - In alarm mode, press **ALARM** to toggle alarm On and Off
  - When alarm sounds, **1** will flash. Press **SNOOZE** to snooze the alarm for 5 minutes. After that the alarm will sound again.
  - Press **ANY** other key will shut off the alarm. Without interruption, alarm will shut off automatically after one minute.

### WEATHER DISPLAY

- Check Local Temperature**
- Local temperature displays instantly after batteries are inserted.
- Check Remote Temperature & Humidity**
- Press **CHANNEL** to toggle between Channel 1, 2, 3 and 4. Temperature and humidity readings will alternate on the receiver.
  - Toggle between C and F by pressing **C/F** in clock mode.
  - Min and Max Temperature**
  - Press **MIN** in Clock mode to display minimum temperature record
  - Press **MAX** in Clock mode to display maximum temperature record
- Note:**  
Min/Max temperature records are automatically cleared daily at 00:00



### WEATHER DISPLAY

- temperature & humidity trend
- The trend indicator shows the trend of temperature and humidity determined by the particular transmitter in the past half-hour interval.
- | Arrow Indicator | Trend   |
|-----------------|---------|
|                 | Rising  |
|                 | Steady  |
|                 | Falling |
- weather report symbols
- The receiver is able to monitor and display the weather status based on collected data from Channel 1.
- | Weather Indicator | Sunny | Cloudy | Raining | Snowing | Freeze Warning |
|-------------------|-------|--------|---------|---------|----------------|
|                   |       |        |         |         |                |
- About Freeze Warning**
- Snow symbol will flash to warn of 'freezing'.
  - Activated when Channel 1's temperature is between -1.9 C and +2.9 C
  - Snow will appear solid if and when Channel 1's temperature falls below -1.9 C.
- Note:**
- Initially, the weather will be cloudy
  - Remote transmitter Channel 1 will be used for weather indication.
  - If Channel 1 is empty, then weather will always be cloudy.
  - If Channel 1 has no humidity data, weather indication will always be cloudy, but freeze warning and snow indication will be available.

### TEMPERATURE ALARM

- The temperature alarm function allows you to have an alarm sound if the temperature rises above or drops below a particular set point.
- high temperature alarm**
- Select high temperature alarm mode **1** using **MODE**
  - Select channel (1, 2, 3, 4 or local) using **CHANNEL**
  - Press **DOWN** or **UP** to set high temperature
  - Press **MODE** to finish setting
- low temperature alarm**
- Select low temperature alarm mode **2** using **MODE**
  - Select channel (1, 2, 3, 4 or local) using **CHANNEL**
  - Press **DOWN** or **UP** to set low temperature
  - Press **MODE** to finish setting
- \* Once the high/low temperature alarm is set for a particular channel, **1** and/or **2** will appear on display for that channel.
- When alarm sounds, the sounding channel is displayed, and **1** or **2** flashes to indicate whether it is the high or low temperature alarm.
- \* Press any button to shut off alarm.

### to clear high/low temperature alarm

- Select high/low temperature alarm set point using **MODE**
- Press **ALARM** to clear value
- Press **MODE** to finish setting

### OTHER FEATURES

- to view maximum temperature**
- Toggle between current and maximum temperature using **MAX**
  - Press **CHANNEL** to view the maximum temperature for other channels
- to view minimum temperature**
- Toggle between current and minimum temperature using **MIN**
  - Press **CHANNEL** to view the minimum temperature for other channels

### TROUBLESHOOTING

- problem solution
- The temperature measurement of remote transmitter and receiver does not match.
    - Temperature reading of the outdoor remote transmitter seems too high.
    - Receiver is no longer receiving remote transmitter signals or temperature display reads Lo
  - Re-synchronize receiver by holding **ALARM** for 3 seconds until a beep is heard.
  - Ensure the remote transmitter is out of direct sunlight, and away from sources of heat.
  - Repeat the learning procedures.
    - Temperature may be below -30C.
    - Batteries in remote transmitter may need changing.
    - Move remote transmitter closer to the receiver.
    - Make sure remote transmitter is away from sources of electrical disturbance.

### SPECIFICATIONS

Weather Station Receiver WS330	Weather Station Transmitter WT440H
Battery Type: 2 X 1.5V AA batteries	Battery Type: 2 X 1.5V AA batteries
Temp. Range: -20C to +55C	Temp. Range: -30C to +70C
	Humidity Range: 15 to 95%
	Transmission Frequency: 433.92 MHz
	Transmission Range: up to 40 meters in open area

### NOTICE

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.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning:  
Changes or modifications made to this equipment not expressly approved by the manufacturer may void the FCC authorization to operate this equipment.