OWNER'S MANUAL

Wireless Weather Station
WS2300+WT440

WS2300 RECEIVER:
- Receiver with LDC display
- Temperature display options (local/remote) (°C or °F)
- Temperature trend arrows
- Daily minimum / maximum temperature record
- High/low temperature alert
- Clock (12/24 hour)
- Dual alarm clock
- Calendar
- Backlight illumination
- Desk or wall mount
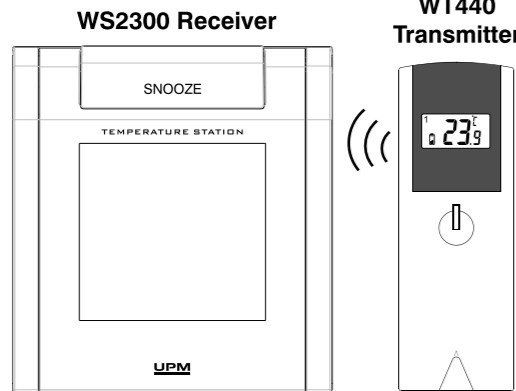- Transmits up to 130′ (40m)
- 2 x AA batteries

WT440 TRANSMITTER:
- Temperature sensor
- Up to 4 remote channels
- Transmission range: up to 40 meters in open area
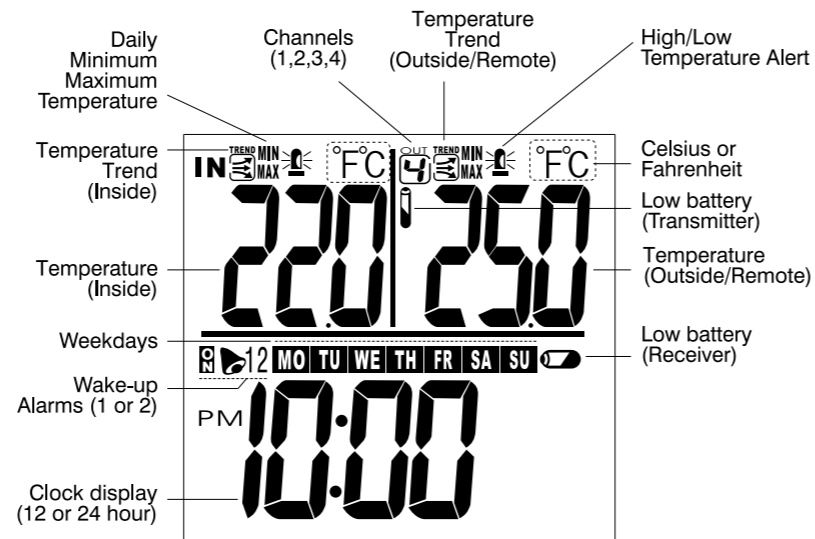- LCD display
- Transmits up to 130′ (40m)
- 2 x AA batteries

UPM

WS2300 Receiver

SNOOZE

TEMPERATURE STATION

UPM

WT440 Transmitter

LCD Diagram

- Daily Minimum Maximum Temperature
- Channels (1,2,3,4)
- Temperature Trend (Outside/Remote)
- High/Low Temperature Alert
- Temperature Trend (Inside)
- Celsius or Fahrenheit
- Temperature (Inside)
- Low battery (Transmitter)
- Temperature (Outside/Remote)
- Weekdays
- Low battery (Receiver)
- Wake-up Alarms (1 or 2)
- Clock display (12 or 24 hour)

IN °F°C 4 °F°C

22.0 25.0

MO TU WE TH FR SA SU

PM 10:00

Calendar Diagram

(Weekday / Date / Month)

Example: Monday, the 31st of December

MO

31 12

DAY   MONTH

Button Diagram

- Channel
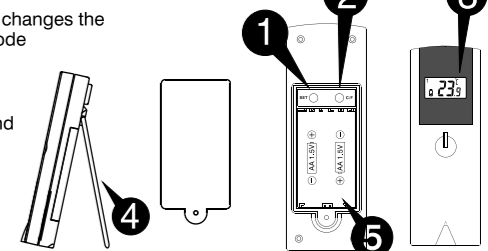- Minute/–
- Hour/+/Min/Max
- Mode
- Wall Mount or Desk Mount
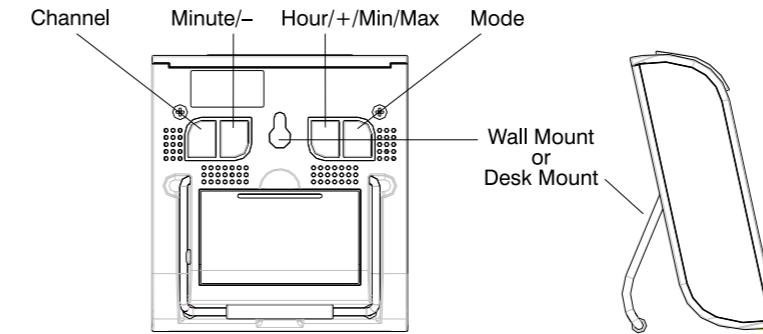
RECEIVER BUTTONS

- **Channel:** scrolls through the local temperature and the remote temperature channel(s), may be used with up to 4 remote transmitters. (Channel - 1,2,3,4)
- **Minute/– :** adjusts the clock and calendar values
- **Hour/+/Min/Max:** adjusts clock and calendar values; displays the minimum/maximum daily temperatures; clears temperature alarm
- **Mode:** scrolls through the setting modes: alarm1/ alarm2 / temperature alert(s) After holding for 3 seconds: current time / calendar date (Weekday: with channel button)
- **Snooze:** Delays the wake-up alarm for 5 minutes, toggles between 12 or 24 hour clock format; activates temperature alarm modes; enables/disables backlight function

TRANSMITTER BUTTONS

1. **SET:** enters the House code (1-15) and Channel setting mode (1-4)
2. **C/F:** toggles between °C or °F, changes the frequency channel or house code
3. **LCD** display
4. Wall mount holder & table stand
5. Battery compartment

CLOCK SETTING

1. Press and hold **MODE** for 3 seconds to enter the clock setting mode (the HOUR /MINUTE / SECOND will flash)
2. Press **HOUR** to adjust the hour
3. Press **MINUTE** to adjust the minute
4. Press **SNOOZE** to toggle between **12 or 24** hour display
5. Press **MODE** to exit the clock setting mode (this will advance to date the setting) OR do not press any key for 1 minute; normal display will return automatically.

12 hour display

SA
1:00

24 hour display

SA
13:00

DAY / MONTH SETTING

1. Press and hold **MODE** for 3 seconds to enter the clock setting mode
2. Press **MODE** again to enter the Date/Month setting mode(once activated DAY/MONTH will flash)
3. Press **+** to set the day
4. Press **-** to set the month
5.
6. Press **CHANNEL** to set the weekday
   Press **MODE** again to exit the date setting mode; OR do not press any key for 1 minute and normal display will return automatically
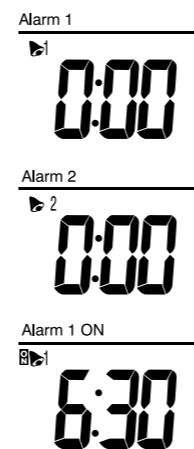   **Note:** February will have 29 days

Example: Wednesday, the 18th of June

WE
18 6
DAY   MONTH

DUAL ALARM CLOCK

Alarm 1 and Alarm 2 setting

1. Press **MODE** to scroll to Alarm1 or Alarm2
2. Press **HOUR/+/min/Max** to set hour
3. Press **MINUTE/–** to set minute
4. Press **CHANNEL** to turn the alarm on or off
5. When an alarm is on, the bell symbol ♪1 /♪2 plus ON will display

When alarm sounds

a. ♪1 or ♪2 will flash, and the sound volume will gradually rise from low to high
b. Press **SNOOZE** to delay the alarm for 5 minutes, after that the alarm will sound again
c. Press **ANY** other key to shut off the alarm OR without interruption, the alarm will shut off automatically after one minute

Alarm 1
1
0:00

Alarm 2
2
0:00

Alarm 1 ON
1
6:30

LOW BATTERY INDICATION

RECEIVER:
If the low battery symbol "⬛" displays (in the LCD time area) then the receiver LCD batteries are low. A low battery may affect the units performance, for example:
- the LCD display appears faint;
- the transmission range is reduced;
- the data from remote transmitter(s) may not display
You will need 2 x AA batteries for the receiver.
* Note: Changing the batteries in the receiver will cause all settings to be erased.)
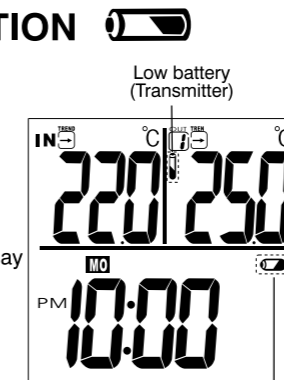
TRANSMITTER:
If the low battery symbol "▯" is displayed on the LCD display of the transmitter, then the remote transmitter batteries are low.

The low battery symbol "⬛" for the transmitter will also display on the receiver (in the Outside temperature area)

* Note: The transmitter requires 2 x AA batteries. If a transmitter is exposed to very low or high temperatures for an extended period of time, the batteries may lose power, which may cause reduced transmission range.

Low battery (Transmitter)

IN °C °C

22.0 25.0

MO

PM 10:00

Low battery (Receiver)

Low battery (Transmitter)

OUT °C
25.0
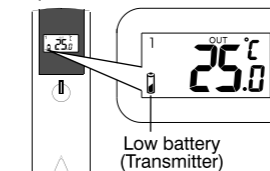
BACKLIGHT ILLUMINATION

This Weather Station transmitter is equipped with backlight illumination, which makes the LCD screen easier to see in dim light

* Press **SNOOZE** to turn on the backlight. The backlight will remain on for 8 seconds. To save battery power, you may choose to turn off the backlight feature with the following steps:

1. Press and hold **MODE** for 3 seconds to the clock setting mode
2. Press **MODE** again to enter the date setting mode
3. Press **SNOOZE** key to enable / disable the backlight

FOR BEST TRANSMISSION

● Insert batteries into the remote transmitter(s) first, and then the receiver.

● Place the receiver and remote transmitter(s) close together. This will ensure that the receiver synchronizes with remote transmitter(s).

● Place the remote transmitter(s) outdoors within an effective transmission range.

● Although remote transmitters are weather resistant, it is not recommended to place it directly in sunlight, rain or snow.

● The transmission range can be affected by the dense walls or electronic interference in between the receiver and transmitter. Try various set-ups for the best results.

SETTING THE TRANSMITTER

❶ Remove battery cover and insert **2 AA size** batteries to start setup.

❷ The **HOUSE CODE** will flash for 8 seconds

❸ Select the **HOUSE CODE** by pressing **C/F**

❹ The range of **House Codes** are from "01" to "15". Make sure all transmitters in your system are set to the same House Code.

❺ Select **CHANNEL**(1-4) by pressing **C/F**. This number will be confirmed upon pressing the **SET** button, or if no key is pressed for 10 seconds. If only one transmitter is available, it is recommended to leave the CHANNEL be "01"

❻ Temperature will display

❼ Select °C or °F of Temperature by pressing **C/F**. Once setup of remote transmitter is completed, it will start transmitting at one minute intervals
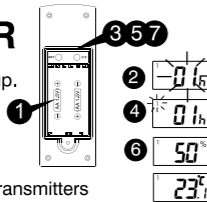
* Use a different house code if your weather station detects other signals from neighbouring sources
* Factory default: house code = 01 and channel = 01

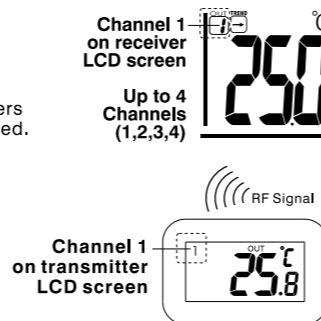## SYNCHRONIZATION

RF Signal

Automatic Learn Function:

❶ The Learn function begins automatically and runs for 3 minutes when receiver batteries are first installed.

❷ Within these 3 minutes, the receiver will display the temperature signals from transmitter(s).

✱ If the signals are not received within this 3 minutes, the outside temperature will show "- - -". If this is the case, bring the units closer together, then try the manual learn function (as outlined below) or try a different house code on the transmitter. (see page 9)
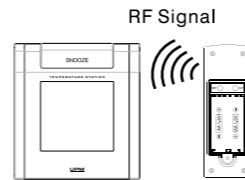
Manual-Learn Function (Searching for Remote Signals):

If extra transmitters are added, or if signal is lost and the outdoor display is blinking, the learn function must be executed again.

❶ Press and hold **Channel** for 3 seconds in clock display mode.

❷ A beep will sound to indicate that the learn function has begun. If using multiple transmitters a beep will sound for each sensor at it is detected.

❸ Press **Channel** to scroll through each channel (1-4).

❹ The Channel number (1-4) will display, and the temperature reading from each remote transmitter will also display.

Channel 1 on receiver LCD screen

Up to 4 Channels (1,2,3,4)

RF Signal

Channel 1 on transmitter LCD screen

TEMPERATURE DISPLAY

Check Inside Temperature
After inserting the batteries, the inside temperature readings will display on the receiver.

Alternating Remote Temperature Display
Although this weather station comes with only 1 transmitter it is compatible with up to 4. If you have multiple transmitters; Press **CHANNEL** to scroll through the channels (1-4) Remote temperature readings for each channel will display on the receiver. You may press and hold SNOOZE for 3 seconds to activate / deactivate auto scroll mode, which will automatically alternate the LCD display between multiple channels.

°C or °F Temperature Display
To toggle between °C and °F press **MODE** 3 times, to enter the "Inside Temperature **Alert**" mode, then press **CHANNEL** to toggle between °C or °F display.

*Note: If the outside temperature falls below -30°C, the symbol "**LO**" will appear on the screen; If the temperature rises above +70C, the symbol "**HI**" will appear on the screen. Both displays are normal, only meaning that the temperature is above or below the sensors specification range.

Temperature trend

The trend indicator shows the trend of inside/outside temperature ,as determined by the sensor(s) in the past half hour interval.

Arrow Indicator	➚	➡	➘
Trend	Rising	Steady	Falling

TEMPERATURE ALERT

You may set a high or low temperature alert for the local temperature or for one remote channel. An alert will sound if the temperature goes above or below the specified range. This is a handy feature for wine cellars or green houses.

Local temperature alarm
❶ Press **MODE** to scroll to the local temperature alert mode (The default value 14°C or the existing preset will flash)
❷ Press **SNOOZE** to select the high temperature alert, low temperature alert or disable the alert
❸ Press **+** or **-** key to set the temperature limit value
❹ Press **MODE** to finish

Remote temperature alarm
❶ Press **MODE** to set the remote channel temperature alert
❷ Press **SNOOZE** to select the high temperature alert, low temperature alert or disable the alert
❸ Press **+** or **-** key to set the temperature limit value
❹ Press **MODE** to finish

When temperature alert sounds
✱ This alert indicates that the temperature has exceeded the preset temperature range. The alert symbol will also flash.

❶ Press any key to stop temperature alarm; or if no key is pressed, the temperature alert will automatically stop itself after one minute. The temperature alert will sound again 5 minutes later. Once triggered, the temperature alert comes on as a distinctive sound, different to wake-up Alarm1 and Alarm2.

MIN./ MAX. TEMPERATURE

This weather station records the daily minimum and maximum temperature values, for both the local and remote temperature channel(s).

Press **Hour/+/Min/Max** in clock display mode, to display the local and remote minimum / maximum temperatures. (**MIN** or **MAX** will display on the LCD screen.

Press and hold **Hour/+/Min/Max** for 3 seconds in clock display mode to clear maximum/ minimum temperature record.
Note: Min/Max readings are automatically cleared daily at 00:00

FCC / Industry Canada COMPLIANCE

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:
(1) this device my not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

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.

FC

TROUBLESHOOTING

Problem	Solution
Receiver is no longer receiving remote data or the display is incorrect.	- Wait for 1-2 minutes to ensure the units are not in a phase change. - Ensure the remote sensor is out of direct sunlight, and away from other sources of heat. - Repeat the learn procedures. (see synchronization section) - Temperature may be below -30°C. - Batteries in transmitter may need changing. - Move the transmitter closer to the receiver. - Make sure transmitter is away from sources of electrical disturbance.
Operation is not normal or certain functions do not perform	Reset the unit (to default mode) by removing the batteries in both the receiver and transmitter(s). Then re-insert the batteries and re-enter your settings.

SPECIFICATIONS

Weather Station Receiver WS2300
Battery Type: 2 X 1.5V AA batteries
Temp. Range: -5°C to +55°C
Temp. Range: -23°F to +131°F

Weather Station Transmitter WT440
Battery Type: 2 X 1.5V AA batteries
Temp. Range: -30°C to +60°C
Temp. Range: -22°F to +140°F
Transmission Frequency: 433.92 MHz
Transmission Range: up to 40 meters in open area

1 YEAR WARRANTY

This product carries a one (1) year warranty against defects in workmanship and materials. At their discretion, retailers may replace the unit within the stated warranty period, when returned with proof of purchase. This product is not guaranteed against wear or breakage due to misuse and/or abuse.

If the product is defective, return it, with a dated proof of purchase, to the retailer from which you purchased it.
Note: shipping and handling for returns is not included under this warranty.

Customer Service Centre
1-888-468-6876 / www.upm-marketing.com