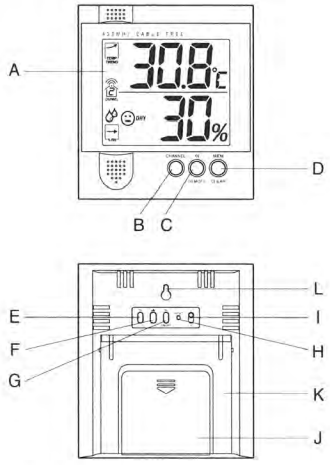
WARRANTY, SERVICE, OR RECALIBRATION

For warranty, service, or recalibration, contact:

TRACEABLE® RADIO-SIGNAL REMOTE HUMIDITY METER/ THERMOMETER INSTRUCTIONS

Cat. No. 4380

No wire installation is required between the main and remote units.



FEATURES: MAIN UNIT

A. Extra-large two-line Liquid Crystal Display (LCD)
B. CHANNEL button
- Selects among different channels
- Activates remote sensor scanning mode

C. IN/REMOTE
- Selects between the main unit display and a selected remote unit
- Activates search mode

D. MEM/CLEAR button
- Recalls the maximum or minimum temperature and humidity readings
- Clears the maximum and minimum temperature and humidity memory of remote sensor channels or the main unit display

E. HI/LO button
- Set the upper or lower temperature alarm limits
- Confirm\alarm settings

F. ▲ button
- Sets the reading for the upper or lower temperature and humidity of individual channels

G. AL ON/OFF button
- Activate or deactivate alarm

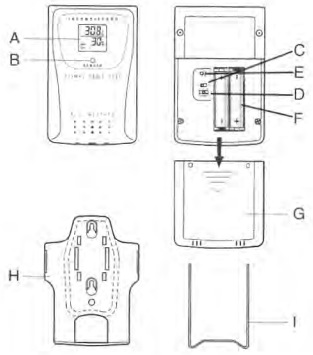
H. RESET
- Returns all settings to default values and erases all memories

I. °C/°F Slide Switch
- Selects between degree Centigrade (°C) and Fahrenheit (°F)

J. Battery compartment
- Accommodates two AA-size batteries

K. Retractable table stand
- For standing the main unit on a flat surface

L. Recessed wall-mount hole
- For mounting the main unit on a wall



FEATURES: REMOTE SENSOR

A. Two-line LCD
- Displays the current temperature and humidity monitored by the remote unit

B. LED indicator
- Flashes when the remote unit transmits a reading.

C. °C/°F slide switch
- Selects between °C and °F

D. Channel slide switch
- Designates the remote unit Channel 1, Channel 2 or Channel 3

E. RESET
- Returns all setting to default values

F. Battery compartment
- Accommodates two AAA-size batteries

G. Battery door

H. Wall-mount holder
- Supports the remote unit in wall-mounting

I. Removable table stand
- For standing the remote unit on a flat surface

SPECIFICATIONS

Main Unit Ambient

Temperature:

Range	–4 to 140°F and –20 to 60°C
Resolution	0.1°
Accuracy	±1°C

RH:

Range	25 to 90% RH
Resolution	1% RH
Accuracy	±2% RH midrange to ±4% otherwise

Remote Device Ambient

Temperature:

Range (IN)	–4 to 140°F and –20 to 60°C
Resolution	0.1°
Accuracy	±1°C

RH:

Range	25 to 90%
Resolution	1%
Accuracy	± 5% midrange, ±7% otherwise

Setup Procedure

For best operation:

1. Assign different channels to different remote units.
2. Insert batteries for remote unit before doing so for

the main unit (see battery installation section).

3. Place the main unit as close as possible next to the remote unit, reset the main unit after installing batteries. This will ensure easier synchronization between the transmission and reception of signals.
4. Position the remote unit and main unit within effective transmission range, which in usual circumstances, is 20 to 30 meters.

Note: Effective range is vastly affected by the building materials and where the main unit and remote units are positioned. Try various set-ups for the best results.

GETTING STARTED

Once batteries are in place for the remote units, they will start transmitting temperature readings at 30-second intervals.

The main unit will also start searching for signals for about 2 minutes once batteries are installed. Upon successful reception, the individual channel temperatures reading will be displayed on the top line and the respective humidity reading on the bottom line. The main unit will automatically update its readings at about 30-second intervals.

If no signals are received, blanks "- - -" will be displayed and the kinetic wave icon will not show.

To force a signal search:

- Press and hold IN/REMOTE for 2-seconds to enforce a 3-minute search.

This is useful in synchronizing the transmission and reception of the remote and main unit.

Repeat this step whenever you find discrepancies between the reading shown on the main unit and that on the respective remote unit.

HOW TO CHECK REMOTE AND INDOOR TEMPERATURES

Display of readings from a remote sensor or the main unit is a one step procedure. The remote sensor channel or the main unit display is indicated in a box under the kinetic wave icon.

Kinetic-wave Icon				
Designated Display	Indoor Display	Remote Display Channel One	Remote Display Channel Two	Remote Display Channel Three

To display temperature/humidity readings from the main unit:

- Press IN/REMOTE until the dot is displayed in the box under the kinetic-wave.

To display temperatures/humidity readings from a remote sensor:

- Press CHANNEL until the appropriate remote sensor channel is displayed in the box under the kinetic-wave.

If no readings are received from one particular channel for more than 15 minutes, blanks, "- - -" will be displayed until further readings are successfully searched. Verify the remote unit is sound and secure.

HOW TO READ THE KINETIC WAVE DISPLAY

The kinetic wave display shows the signal receiving status of the main unit. There are three possible forms.

The unit is in searching mode.	
Transmission data are securely registered.	
No signals.	

COMFORT LEVEL ICONS

The comfort level is based on the recorded relative humidity. An indicator will be displayed or show if the level is comfortable, wet or dry.

Comfort-level	COMFORT	DRY	WET

Arrow indicator	TEMP TREND	TEMP TREND	TEMP TREND
Temperature Trend	Rising	Steady	Falling

Arrow indicator	%RH	%RH	%RH
Humidity Trend	Rising	Steady	Falling

TEMPERATURE AND HUMIDITY TREND INDICATORS

NOTE: If the temperature goes above or below the temperature measuring range of the main unit or the remote unit (stated in specifications), the display will show "HHH" or "LLL".

REMOTE SENSOR SCANNING

This unit can be set to automatically scan and display readings from the remote sensors. When the remote-sensor mode is active, the display will show the readings from one channel for about 4-seconds and then proceed to the next channel display.

To activate the remote-sensor scanning mode:

- Press and hold CHANNEL for 2 seconds.

To deactivate the remote-sensor scanning mode:

- Press any button.

MAXIMUM AND MINIMUM TEMPERATURE AND HUMIDITY

The maximum and minimum recorded temperatures and humidity will automatically be stored in memory.

To display the Min/max readings:

1. Select the channel to be checked.
2. Press MEM/CLEAR once to display the maximum temperature/humidity. Press again to display the minimum temperature/humidity. The respective indicators (MAX or MIN) will be displayed.

To clear the memory:

Press and hold the MEM/CLEAR for 2-seconds.

HOW TO USE CHANNEL-1 TEMPERATURE/HUMIDITY ALARM

Upper and lower temperature and humidity limits for channel-1 can be set so that an alarm activates when the limits are exceeded.

The high and low temperature and humidity displays are selected sequentially pressing HI/LO.

The high-low displays are as follows:

Sequence	Respective Display
Pressing **HI/LO** once	Enters HI temperature display
Pressing **HI/LO** twice	Enters HI humidity display
Pressing **HI/LO** three times	Enters LO temperature display
Pressing **HI/LO** a four time	Enters LO humidity display

To set the alarm:

1. Press HI/LO, channel-1 will be displayed.
2. Press ▲ to set the temperature or humidity limit. Each press will increase increments by 1° or %RH. Press and hold the button for rapid-scrolling sequence by increments of 5.
3. Repeat the steps to set the upper humidity setting and the lower temperature and humidity settings.
4. When finished, press HI/LO to set another limit or wait 16-seconds and the unit will automatically return to the normal display. The respective HI, LO or both indicators will light up to signify the status of the alarm.

If another channel other than channel one is selected, when the alarm activates the display will switch to channel-1 and the display will flash. If left untouched, the alarm will activate for 1-minute. Press any key to momentarily stop the alarm. The alarm will activate again if the limit continues to exceed the set limits.

Note: If a second limit is passed while an alarm is active, the first alarm will complete its 1-minute cycle and the alarm will continue to activate for a second minute to indicate that a second limit has been surpassed.

To disable alarm:

1. Enter the setting mode by pressing HI/LO.
2. Then press AL ON/OFF. The alarm has been disabled and will not sound at the previously set limit.

To disable a sounding alarm:

Press any button, the alarm sound will stop.

DISCONNECTED SIGNALS

If without obvious reasons the display for a particular channel goes blank, press IN/REMOTE to force an immediate search.

If that fails, check:

1. Remote unit for that channel to see if it is still in place.
2. Batteries of both the remote unit and the main unit. **Note:** When the temperature falls below the freezing point, the batteries of outdoor remotes will freeze, lowering their voltage supply and effective range.
3. Transmission is within range and path is clear of obstacles and interference. Shorten distance if necessary.

TRANSMISSION COLLISION

Signals from other radio devices may interfere with those of this product and cause temporary reception failure. This is normal and does not affect the general performance of the product. The transmission and reception of temperature readings will resume once the interference recedes.

LOW BATTERY WARNING

When it is time to replace batteries, the respective low-battery indicator will show up when the respective channel is selected. The battery indicator for the main unit will be shown on the indoor temperature display.

HOW TO USE THE BENCH STAND OR WALL MOUNTING

The main unit has a retractable bench stand, which when flipped open, can support the unit on a flat surface. Or, close the stand and mount the unit on a wall using the recessed screw hole.

The remote unit comes with a wall-mount holder and a removable stand. Use either to hold the unit in place.

THE RESET BUTTON

This button is only used then the unit is operating in an unfavorable way or malfunctioning. Use a blunt stylus or straightened paper clip to hold down the button. All settings will return to default values.

OPERATIONAL DIFFICULTIES

If this temperature meter does not function properly for any reason, please replace the batteries with new, high-quality batteries (see “Battery Installation” sections). Low battery power can occasionally cause any number of “apparent” operational difficulties. Replacing the batteries with new fresh batteries will solve most difficulties.

What to do if the unit appears to not be receiving a signal.—Suggestions

Keep in mind that the remote transmitter sends a signal to the main receiver every thirty seconds. Be patient, wait 2 minutes to see if a signal has been received.

Make certain that the channel number on the remote transmitter (displayed on the remote transmitter LCD) and the channel number on the main receiver (displayed on the receiver LCD) are identical.

If there are two or more remote transmitters, make certain that none are set to the same channel number.

Remove the battery cover on the main receiver (unit with large LCD display). Remove the batteries. Do not put the batteries in until the remote transmitter is activated. The goal is to activate the remote transmitter before the main receiver.

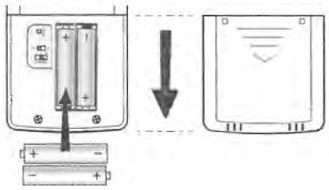
Remove the back panel of the remote transmitter. Remove the batteries, wait 20 seconds, and put them back in the unit. Then, using a stylus or straightened paper clip, press the RESET button. Observe on the remote transmitter LCD a momentary reset to “888” on the display, release the RESET button.

Place the batteries in the main receiver unit. Replace the battery cover. Using a stylus or straightened paper clip, press the RESET button on the main receiver. Observe on the receiver LCD a momentary reset to “888” on the

display, release the RESET button.
First make certain that the unit will pick up a nearby signal. Do this by placing the remote transmitter in a vertical position. Place the main receiver (large digital display) in a vertical position approximately 6 feet away from the remote transmitter. There should be no obstructions between the units.
Make certain main receiver is set to correct channel. On main receiver simultaneously press IN/REMOTE button. This will force main receiver to search for signal. Again, make certain main receiver is still set on correct channel. If the main receiver is now displaying the temperature from the remote transmitter then the units are functioning correctly. These units will perform within their limitations. All radio signals are inherently affected by interference or blockage. Even the most powerful megawatt radio station transmitter is occasionally blocked when driving. Powerful cellular phones (which are simply radio transmitters/ receivers) still "drop" calls when interference or blockage occurs. Some of the causes of interference and blockage are metal, reflective surfaces, motors, elevators, florescent lights with electrically noisy ballasts, sparking environments such as welding, emergency vehicle radios, power lines, portable/mobile radio transmitters and walkie-talkies.

BATTERY AND CHANNEL INSTALLATION: REMOTE UNIT

Remote sensor unit uses two (AAA) size alkaline batteries. Replace the butteries, when low-battery indicator of the particular channel lights up on main unit.
Note: Once a channel is assigned to a remote unit, to change the assigned channel, remove the batteries or press the reset button.



Follow these steps to install / replace batteries:

1. Slide open the battery compartment door.
2. Insert battery according to polarities shown above.
3. Replace battery compartment door.
   Note: Removing/replacing the batteries will reset the unit to default settings. Revisit **Setup Procedure.**

BATTERY INSTALLATION: MAIN UNIT

The main unit uses two AA batteries. To install them:

1. Slide open the battery compartment door.
2. Insert batteries according to polarities shown.
3. Replace the battery compartment door.
4. Replace the batteries when the low-battery indicator of the indoor temperature lights up.
   Note: Removing/replacing the batteries will reset the unit to default settings. Revisit **Setup Procedure.**