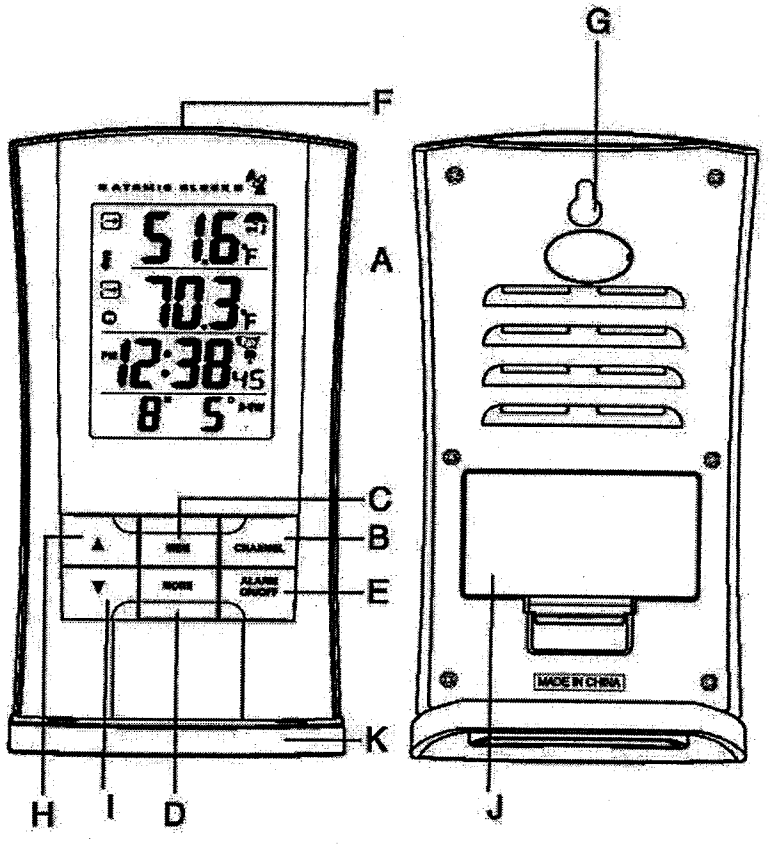
Wireless Indoor / Outdoor Thermometer with US Atomic Clock

USER'S MANUAL

(MANUAL FOR TE219W-EL-NL)

Instruction Manual

Thank you for your purchase of this quality Honeywell temperature monitor. The utmost care has gone into its design and manufacture. Please read these instructions and store them in a safe place for future reference.



A FOUR-LINE DISPLAY
Facilitates easy reading of remote and indoors temperatures and calendar clock

B CHANNEL BUTTON
Display different sensor temperature

C MEMORY [MEN] BUTTON
Recalls the maximum or minimum temperature of main and remote unit

D MODE BUTTON
Toggles the display modes and confirms entry while setting the values for display

E ALARM BUTTON
Displays the alarm time or sets the alarm status

F SNOOZE / LIGHT BUTTON
Activate the snooze function or LCD backlight

G WALL-MOUNT RECESSED HOLE
For mounting the main unit on a wall

H UP (▲) BUTTON
Advances the value of a setting

I DOWN (▼) BUTTON
Decreases the value of a setting

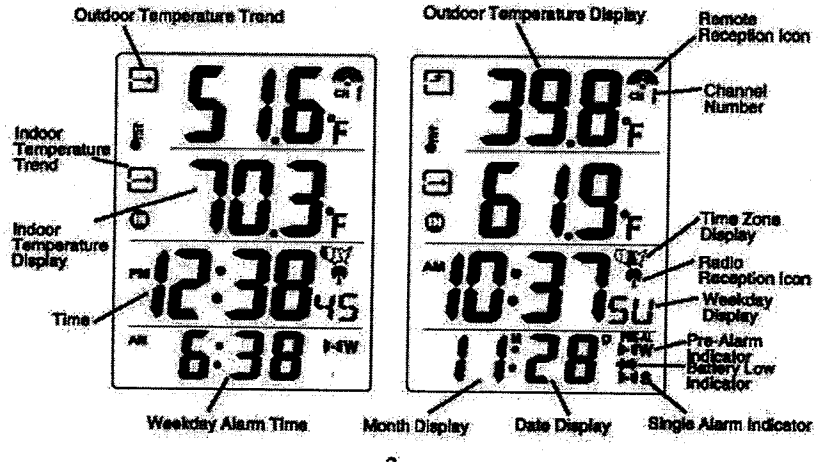
J BATTERY COMPARTMENTS
Accommodates two UM-3 or "AA" size 1.5V alkaline batteries

K REMOVABLE TABLE STAND
For standing the main unit on a flat surface

FEATURES:

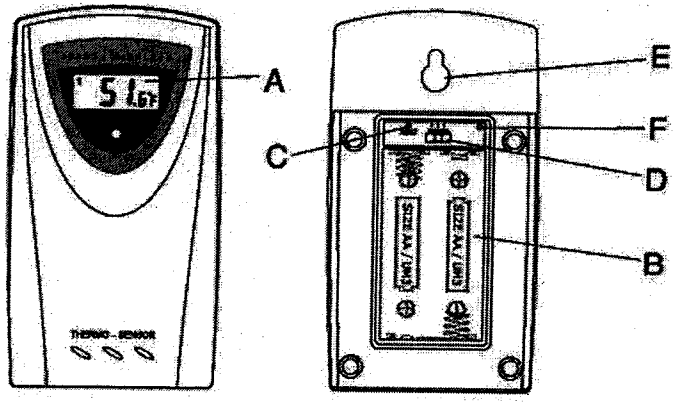
ATOMIC THERMOMETER MAIN UNIT:

* Extremely accurate Atomic time keeping with automatic daily clock updates
* Time display shows hours, minutes and seconds
* Calendar display show month, date
* Four time zone settings (Pacific Time, Mountain Time, Central Time & Eastern Time)
* Radio controlled signal reception indicator
* Selectable 12/24 hour time display format
* Choice of 5 different languages for display of the weekday – English, Spanish, French, German, Italian
* Selectable temperature display in °C or °F
* Indoor temperature display
* Outdoor temperature display from a maximum of 3 remote units via 433MHz transmission (one remote is included)
* Wall mount or table stand
* Selectable weekday or single event alarms
* Pre-alarm warns of icy conditions prior to regular alarm time



OUTDOOR TEMPERATURE TRANSMITTER:

* Remote transmission of outdoor temperature to the Atomic weather station via 433MHz signal
* Case can be wall mounted using built-in hanger
* 100 foot transmission range without interference
* LCD display of outdoor temperature



A LED INDICATOR
Flashes once when the remote unit transmits a reading
Flashes twice when low battery is detected on sensor unit

B BATTERY COMPARTMENT
Accommodates two AA-size batteries

C RESET BUTTON
Press to reset all setting if you have selected different channel.

D CHANNEL SELECTOR
Select the channel before you install batteries.

E WALL-MOUNT RECESSED HOLE
Supports the remote until in wall-mounting

F °C/ °F BUTTON

BEFORE YOU BEGIN

For the best operation,

1. Alkaline batteries are recommended for use in both units.
2. Avoid using rechargeable batteries.
3. Insert batteries for the remote unit before doing so for the main unit.
4. Place the main unit as close as possible to the remote unit.
5. Position the remote unit and main unit within the effective transmission range of 100 feet.

NOTE: 1. Do not set the clock until the outdoor temperature is displayed.
2. The effective range can be vastly affected by a building's materials and where the main and remote units are positioned. Try various set-ups for best result.
3. Though the remote units are weather proof, they should be placed away from direct sunlight, rain or snow.

TO INSTALL OR REPLACE BATTERIES IN TEMPERATURE TRANSMITTER DISCONNECTED SIGNALS

1. Remove the screws on the battery compartment.
2. Select the channel. Channel 1 is typically selected if only 1 remote is being used.
3. Install 2 "AA" size batteries (not included) according to the polarities shown in the battery compartment.
4. Replace the battery compartment door and secure its screws.

TO INSTALL OR REPLACE BATTERIES IN THE ATOMIC WEATHER STATION

The Atomic weather station uses 2 "AA" batteries (not included) When the LCD becomes dim or the respective low battery indicator shows up on the indoor or outdoor temperature display, battery replacement is required. To install or replace the batteries, please follow these steps:

1. Remove the battery compartment door on the back of the case.
2. Insert 2 "AA" size batteries (not included) according to the polarities shown.

3. Replace battery compartment door.

HOW TO USE THE TABLE STAND OR WALL MOUNTING

The main unit has a removable table stand, which when connected, can support the unit on a flat surface. Or you can remove the stand and mount the unit on a wall using the recessed screw hole. As for the remote unit, you can place it on a flat surface or mount the unit on a wall using recessed screw hole.

GETTING STARTED

1. When the batteries are installed in the temperature transmitter(s), it will start transmitting the temperature readings at around 45 second intervals.
2. The main unit will start searching for the temperature signal and will continue to do so for about two minutes once the batteries are installed.
3. Upon successful reception, the outdoor temperature will be displayed on the top line and the indoor temperature will be displayed below the outdoor temperature.
4. The main unit will automatically update its readings at about 45-second intervals.
5. After the main unit finishes searching for the temperature signal from the remote unit(s), within 2 minutes, the WWVB Radio Controlled time signal receiver will start to automatically search for the time signal. This typically takes 5-8 minutes in good conditions. If after 8 minutes the WWVB Radio Controlled time signal has not been received, use the MODE button to set the time manually (see "setting the time and date manually" below.) The clock will then automatically attempt to receive the WWVB time signal from 1:00am through 4:30am each day. When this is successful, the received time will update the manually set time and date.
6. You may activate the clock to receive the radio signal at any time by pressing the ↑ button in the Hour/Minute/ Seconds display for 3 seconds.

FUNCTION KEYS

Your atomic weather station has 5 easy to use function keys that control operation:

Use the MODE button to:

* To set the time manually
* To view the calendar

Use the ↑ button to:

* To increase the hour, minute, year, month and date, select 12/24 hour format, select temperature display °C & °F, select the language of weekday during time setting
* To select the time zone
* To activate reception of the WWVB signal immediately.

Use the ↓ button to:

* To decease the hour, minute, year, month and date, select 12/24 hour format, select temperature display °C & °F, select the language of weekday during time setting
* To search for the temperature transmitter signal immediately.

Use the CHANNEL button to:

* To view the temperature of different temperature transmitter(s)

Use the MEM button to:

* To view the maximum or the minimum temperature of temperature transmitter(s) selected
* To clear the previous temperature records

Use the ALARM button to:

* To view the weekday alarm, single alarm and the pre-alarm
* To set the alarm times.
* To turn off the alarm.

CALENDAR CLOCK DISPLAY MODES

The alarm time and the calendar share the same section of the display while the seconds field in the time display and the day of week share the same section of the display. The calendar is displayed in the month-day format.

If the alarm time is displayed, pressing **MODE** will display the calendar in month-day format. Each press on **MODE** button will change the display between the clock with the seconds displayed and the clock with day of week.

THE DATE AND TIME SETTING

1. In the normal time, press **MODE** to change to the Hour,Minute, Weekday display. Select the time zone by pressing and holding the ↑ button for 3 seconds. Keep pressing until the desired time zone (Pacific Time, Mountain Time, Central Time or Eastern Time) is shown on the face of the weather station. A dark section on the map indicates the time zone selected.
2. Press and hold **MODE** for 3 seconds: The year digit will begin to flash. Press ↑ or ↓ to select the correct year.
3. Press **MODE** again: The month digit will begin to flash. Press ↑ or ↓ to select the correct month.
4. Press **MODE** again: The date digit will begin to flash. Press ↑ or ↓ to select the correct date
5. Press **MODE** again: The "12 Hr" digit will flash to prompt for 12 hour display format. Press ↑ or ↓ to select "24 Hr" for 24 hour display format or vice versa.
6. Press **MODE** again: The hour digit will begin to flash. Press ↑ or ↓ to select the correct hour.
7. Press **MODE** again: The minute digit will begin to flash. Press ↑ or ↓ to select the correct minute.

LANGUAGE SETTING

The weekday may be displayed with one of five languages: English, Spanish and French, German, or Italian

1. After the minute is set, press **MODE** again, the weekday display will indicate the current preset language, "EN" for English.
2. Press ↑ or ↓ to set the desired language for the weekday display. The selection sequence is "EN" for English, "SP" for Spanish, "FR" for French, "GE" for German, and "IT" for Italian.

°C or °F TEMPERATURE SETTING

1. When the language of weekday is set, press **MODE** again.
2. "°F" will flash to prompt Fahrenheit display.
3. Press ↑ or ↓ to select desired temperature display: "°F" for Fahrenheit or "°C" for Celsius.

EXIT THE MANUAL SETTING MODES

* When the temperature display is set, press MODE to return to the normal Hours, Minutes and Seconds display.
* If during any part of the setting procedure no key is pressed for 30 seconds, the weather station will revert to normal time display.

VIEWING THE ALARM TIME SETTINGS

The alarm time and the calendar share the same section of the display.
There are 3 different alarms available: weekday alarm, single alarm and the pre-alarm.

* Weekday Alarm

The alarm sound will be activated and the alarm icon " ((W " will flash on weekdays when it is armed and the current time reaches the alarm time. This allows you to set one alarm time that will be used each day, Monday - Friday. Just right for the work week.

* Single Alarm

The alarm sound will be activated and the alarm icon " ((S " will flash once when it is armed and the current time reaches the alarm time. Once it is finished, it will be disabled automatically. This is useful for weekends, holidays or any day when you wish to wake at a time other than your normal weekday alarm time. No need to reset your regular alarm time. This alarm can be bypassed during the set up if you choose not to use it.

* Pre-Alarm

The pre-alarm sound will be activated and the alarm icon "PRE-AL" will flash if channel 1 of temperature transmitter registers a temperature under or equal to 32°F at a programmable period of 15, 30, 45, 60, 75 or 90 minutes earlier than the weekday or the single alarm time. This alarm will only sound if either the Weekday or Single alarms are armed. This can help you avoid delays caused by icing conditions by waking you earlier in case of potential ice or snow. This alarm can be bypassed during the set up if you choose not to use it.
If the calendar is displayed, pressing **ALARM** will display the weekday alarm. Each press on **ALARM** button will display the next available alarm in the sequence of weekday alarm, single alarm and pre- alarm.
Pressing **MODE** will return to the calendar display.

WEEKDAY ALARM SETTING

Select the weekday alarm. If the alarm is disarmed, the alarm time will not be showing and the display will read "OFF".

1. Press ↑ to view the previous weekday alarm time and arm the alarm.
2. Press ↓ to disarm the weekday alarm and have the display read "OFF".
3. When the weekday alarm time is visible, press and hold **ALARM** for 3 seconds;
4. The alarm hour digit will flash, then press ↑ or ↓ to adjust the desired hour.
5. Press **ALARM** again, the alarm minute digit will flash, then press ↑ or ↓ to adjust the desired minute.
6. Press **ALARM** again and the weekday alarm is set with the alarm enabled and the icon " ((W " visible on the display.

SINGLE ALARM SETTING

Press **ALARM** again to select the single alarm. If the alarm is disarmed, the alarm time will be displayed as "OFF". If you choose not to set the **SINGLE ALARM** press **ALARM** again to advance to the **PRE-ALARM** setting procedure.

1. Press ↑ to view the previous single alarm time and arm the alarm.
2. Press ↓ to disarm the single alarm and have the display read "OFF".
3. When the single alarm time is visible, press and hold **ALARM** for 3 seconds;
4. The alarm hour digit will flash, then press ↑ or ↓ to adjust the desired hour.
5. Press ALARM again, the alarm minute digit will flash, then press ↑ or ↓ to adjust the desired minute.
6. Press ALARM again and the single alarm is set with the alarm enabled with the icon
7. " ((S " will be visible on the display.

PRE-ALARM SETTING

Press **ALARM** again to select the pre-alarm. If the alarm is disarmed, the alarm time will be displayed as "OFF". The pre-alarm can be set only if weekday alarm or the single alarm is set. If you choose not the set the **PRE-ALARM** press **ALARM** again to exit the setting procedure.

1. Press ↑ to view the previous pre-alarm time and arm the alarm.
2. Press ↓ to disarm the pre-alarm time and have the display read "OFF".
3. When the pre-alarm time is visible, press and hold **ALARM** for 3 seconds;
4. The minute digit will flash, then press ↑ or ↓ to adjust the desired pre-alarm period in the sequence of 15, 30, 45, 60, 75, 90 minutes.
5. Press **ALARM** again and the pre-alarm is set with the alarm enabled with the icon "PRE-AL" visible on the display.

USING THE ALARM AND SNOOZE

1. When the current time reaches the alarm time, the alarm will be activated
2. Press **SNOOZE/LIGHT** and the alarm will stop but will sound again in 5 minutes.
3. The repeat alarm indicator "Zz" will flash.
4. If the alarm is not turned off, or **SNOOZE/LIGHT** is not pushed, it will stop automatically after 4 minutes.
5. Press **ALARM** to turn the alarm off.

DISCONNECT THE AUTOMATIC ATOMIC TIME SIGNAL RECEPTION

The main unit can be set manually to disable the daily reception of the WWVB time signal.

Press and hold the ↑ and ↓ button for 3 seconds and the radio reception icon will disappear.

To enable the main unit's ability to receive the WWVB time signal daily, press and hold ↑ and ↓ button for 3 seconds and the radio reception icon turns on and flashes. The unit will attempt reception of the WWVB time signal immediately.

OUTDOOR TEMPERATURE TRANSMITTER

The main unit will automatically update its readings at about 45 second intervals.

If no signals are received, blank " ▪▪.- " will be displayed.

Hold ↓ for 3 seconds to force another search of the remote unit(s) for about 2 minutes. This is useful in synchronizing the transmission and reception of the remote and the main units. Repeat this step whenever you find discrepancies between the reading shown on the main unit and that on the remote unit.

If without obvious reasons the display of the outdoor temperature goes blank, hold ↓ for 3 seconds to force an immediate search.

If that fails, check:

1. The outdoor transmitter is still in place.
2. The batteries of both the outdoor transmitter and the main unit are still functioning.
3. The transmission is within the 100'range and path is clear of clear of obstacles and interference. Shorten the distance when necessary.

Note: When the temperature falls below the freezing point the batteries in the outdoor transmitter(s) will freeze lowering their voltage output and effective range. During prolonged periods of extreme cold it is advisable to bring the remote transmitter indoors.

SIGNAL TRANSMISSION INTERFERENCE

Signals from other household devices, such as door bells, home security systems and entry controls, may interfere with those of this product and cause temporarily reception failure. This is normal and does not affect the general performance of the product. The transmission and reception of the temperature readings will resume once the interference recedes.

HOW TO CHECK REMOTE AND INDOOR TEMPERATURE

The indoor temperature is shown on the second line of the display. The outdoor temperature is shown on the top line of the display. The wave display on the outdoor temperature indicates the reception of the remote unit is in good order. If no readings are received from the remote unit for more than two minutes, blank "--.-" will be displayed until further readings are successfully received. Check that the remote unit is sound and secure. If the temperature goes above or below the temperature measuring range of the main unit or the remote unit (as stated in the specifications), the display will show "HH" or "LL" respectively.

TEMPERATURE TREND

The trend indicator shows the trend of temperatures collected at particular remote sight. Three trends: rising, steady, and falling will be shown.

Arrow indicator			
Temperature	Rising	Steady	Falling

MAXIMUM AND MINIMUM TEMPERATURE

The maximum and minimum record of the indoor and outdoor temperature will be automatically stored in the memory. It will display the minimum, maximum and the current reading upon each press of the MEM button. If the MEM button is not pressed while the minimum or the maximum readings are being displayed, the unit will revert back to the current temperature display after 15 seconds. To clear the memory, press and hold MEM for 3 seconds. The maximum and minimum readings will be erased.

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	
Temperature readings are securely registered	
No signals.	--.- °F

WWVB RADIO CONTROLLED TIME

The NIST radio station, WWVB, is located in Ft. Collins, Colorado and transmits the exact time signal continuously throughout the United States at 60KHz. The signal can be received up to 2,000 miles away through the internal antenna in the Radio Controlled Clock. However, due to the nature of the Earth's ionosphere, reception is very limited during the day time. The radio control clock will search for a signal every night when reception is best. The WWVB radio station derives its signal from the NIST Atomic clock in Boulder, Colorado.

The WWVB tower icon on the clock display will flash to indicate that the clock is receiving a radio signal from the WWVB radio station. When the time signal is received, the WWVB tower icon turns on and the time of the selected time zone will be displayed. If only part of the WWVB tower icon turns on or the WWVB tower does not appear at all and the time is not set, please note of the following:

* We recommend keeping the minimum distance of 8 feet from any interference source such as a TV, computer monitors, microwave ovens, etc

* Within concrete rooms (basements, superstructures, office buildings), the received signal will be weakened. In extreme cases, the unit should be placed close to a window and/or point it's front or back towards the Fort Collins, Colorado transmitter.
* During the night time, the atmospheric disturbances are usually less severe and reception is possible in most cases. A single daily reception is sufficient to keep the accuracy reading within 1 second.

Note: In case the radio-controlled clock is not able to detect the WWVB signal (due to disturbances, transmitting distance, etc), the time can be manually set and will be maintained accurately until a signal is available.

CARE OF YOUR ATOMIC THERMOMETER

This product is engineered to give you years of satisfactory service if you handle it carefully. Here are a few precautions:

1. Do not immerse the unit in water.
2. Do not use any corrosive cleanser or chemical solution on the unit. They may scratch the plastic parts and corrode the electronic circuit.
3. Do not subject the unit to excessive force, shock, dust, temperature or humidity, which may result in malfunction, shorter electronic life span, damaged batteries and distorted parts.
4. Do not tamper with the unit's internal components. Doing so will invalidate the warranty on the unit and may cause unnecessary damage. The unit contains no user-serviceable parts.
5. Only use fresh batteries as specified in the user's manual. Do not mix new and old batteries as the old ones may leak. Always replace both batteries at the same time.
6. Always read the user's manual thoroughly before operating the unit.
7. Replace the batteries promptly when necessary (Display becomes dim) or store the batteries when not in use.
8. A soft cloth or paper towel may be used to clean your unit.
9. Keep the unit clean and dry to avoid any problems.

SPECIFICATIONS

Temperature Measurement

Indoor Temperature	: +23°F to +122°F with 0.1°F resolution -5°C to 50°C with 0.1°C resolution
Outdoor Temperature	: -4°F to +158°F with 0.1°F resolution -20°C to 70°C with 0.1°C resolution

Temperature checking interval

Indoor Temperature	: every 15 seconds

Transmission interval

Outdoor Temperature	: around 45 seconds

RF Transmission Frequency	: 433MHz
Number of Outdoor Transmitter	: Maximum 3 (1 is included with this unit)

Transmission Distance: Maximum of 100 feet (30 meters) in open field. Depending upon surrounding structures, mounting location and possible interference sources the transmission distance my be reduced.

Power source (Alkaline batteries recommended)

Main unit	: 2 – "AA", 1.5V batteries (not included)
Transmitter	: 2 – "AA", 1.5V batteries (not included)

Dimensions:

Main unit	: 3.33"(L) x 6.19"(H) x 1.11"(W)/ 84 mm(L) x 156mm(H) x 28mm(W)
Transmitter	: 2.38"(L) x 4"(H) x 0.99"(W)/ 60 mm(L) x 101 mm(H) x 25 mm(W)

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 any interference received, including interference that may cause undesired operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.
- 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.

Name : _____

Add : _____

_____

Tel : _____