Honeywell

Wireless Weather Projection Clock with Light Detector

USER MANUAL

(PCR325W)

INTRODUCTION

Thank you for selecting the Honeywell Wireless Weather Projection Clock with Light Detector. This device includes precise time keeping, weather forecast, alarm, and temperature monitoring features that you can use from the comfort of your home.

In this package you will find:

- Main unit (receiver)
- Remote sensor (transmitter) TS13
- AC/DC Adapter

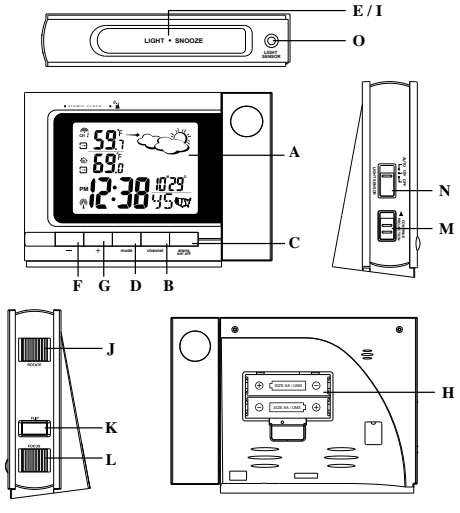
Please keep this manual handy as you use your new item. It contains practical step-by step instructions, as well as technical specifications and precautions you should know.

PRODUCT OVERVIEW

MAIN UNIT

FEATURES

- Light Sensor detects low light conditions and lights up the LCD display
- Multi-channel capability to monitor temperature in up to three remote locations (additional sensors required)
- Outdoor temperature
- Barometric pressure with three trend indicators: Rising, Steady, Falling
- Weather forecast in five large graphic icons: Sunny, Partly Cloudy, Cloudy, Light Rain and Heavy Rain
- Current time and remote temperature projected onto the wall or ceiling in bright red digits
- Precise time and date are set via RF signal from the U.S. Atomic Clock in Colorado
- Projected image rotation, flip and focus control
- Calendar displays date with month, weekday in English, Spanish and French
- Dual crescendo alarm with snooze
- Programmable low temperature pre-alarm warns about icy or inclement weather conditions
- LCD with blue backlight for convenient night-time viewing
- AC-DC adaptor included for continuous projection



A LCD DISPLAY
Allows easy reading of indoor/ outdoor temperature, weather conditions, and calendar and time.

B CHANNEL SELECTOR
Selects different remote sensor readings.

C ALARM ON/OFF BUTTON
* Switches between the calendar display and three different alarm modes.
* Sets the weekday alarm, single alarm or pre-alarm.

D MODE BUTTON
* Toggles between the clock modes – the time with the seconds and the time with the day of week.
* Sets the clock manually.

E LIGHT/SNOOZE BUTTON
Activates the snooze feature, backlight and projection.

F DOWN (–) BUTTON
Decreases the setting.

G UP (+) BUTTON
Increases the setting.

H BATTERY COMPARTMENT
Holds two "AA" batteries.

I [LIGHT/SNOOZE]
Activates the projection for 5 seconds.

J [ROTATE]
Rotates the projection image.

K [FLIP]
Flips the projected image180°.

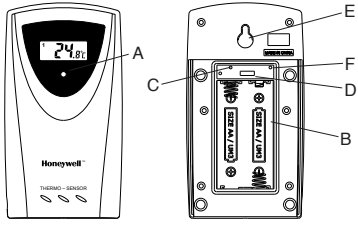
L [FOCUS]
Adjusts the sharpness of the projected image.

M [CONTINUOUS PROJECTION]
Sets a continuous time and temperature projection.

N [LIGHT SENSOR] SWITCH
When AC adapter is connected, position the light sensor switch to:
* "AUTO" to activate an auto backlight.
* "ON" to set continuous LCD backlight.
* "OFF" to deactivate LCD backlight.
The built-in light sensor detects the environmental light conditions. If the light conditions are lower than 100 LUX, the LCD lights up automatically.

REMOTE SENSOR

FEATURES
- Remote temperature transmission to the main unit via 433 MHz signal
- Case can be wall mounted using built-in hanger
- 100 feet transmission range without interference
- LCD display of measured temperature
- Temperature display unit (C°or F°) selection
- Transmission channel selection



A LED INDICATOR
Flashes once when the remote sensor transmits a reading to the main unit.
Flashes twice when battery power is low.

B BATTERY COMPARTMENT
Holds two AA batteries.

C RESET
Resets all previous settings.

D CHANNEL SELECTOR
Selects the desired channel ***before*** installing batteries.

E WALL-MOUNT RECESSED HOLE
Keeps the remote sensor on the wall.

F °C/ °F SWITCH
Selects the temperature display in Fahrenheit or Celsius.

BEFORE YOU BEGIN
1. We recommend using alkaline batteries for the main unit and remote sensor.
2. Avoid using rechargeable batteries.
3. Insert batteries before first use, matching the polarity as shown in the battery compartment.
4. Always install batteries in the remote sensor before the main unit.
5. Press RESET after each battery change, using paper clip or similar tool.
6. During an initial setup, place the main unit as close as possible to the remote sensor.
7. After reception is established (remote temperature will appear on the receiver's display), position the remote sensor and main unit within the effective transmission range of 100 feet.

NOTE:
1. Avoid setting the time and date on the main unit before the outdoor temperature is displayed.
2. The effective operating range may be influenced by the surrounding building materials and how the receiver and transmitter are positioned.

3. Position the remote sensor so that is faces the main unit (receiver), minimizing obstructions such as doors, walls, and furniture.
4. Though the remote sensors are weather-resistant, they should be placed away from direct sunlight, rain or snow.

BATTERY INSTALLATION
REMOTE SENSOR
NOTE: Install the batteries; select the channel and type of temperature (ºC/ºF) before you mount the sensor.
1. Remove the screws from the battery compartment with a small Phillips screwdriver.
2. Set the channel. The switch is located in the battery compartment. Channel 1 is typically selected if only 1 remote sensor is being used.
3. If you are using more than one sensor, select a different channel for each sensor.
4. Install two "AA" size alkaline batteries (not included) matching to the polarities shown in the battery compartment.
5. Replace the battery compartment door and secure the screws.
6. Secure the remote sensor in the desired location.

BATTERY INSTALLATION
MAIN UNIT
1. Open the battery compartment door.
2. Install two AA batteries (not included) matching to the polarities shown.
3. Replace the battery compartment door.

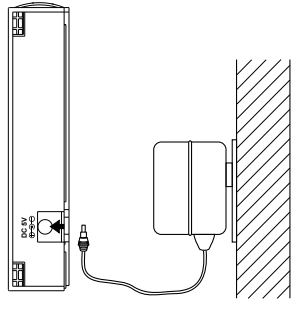
LOW BATTERY WARNING
A low-battery indicator [ ] will appear on the indoor or outdoor temperature reading line of the main unit warning that the corresponding sensor's batteries need replacement.

GETTING STARTED
After batteries are installed, remote sensors will transmit a temperature readings at 45 second intervals. The main unit may take up to 2 minutes to receive the initial readings. Upon successful reception, remote temperature will be displayed. The main unit will automatically update readings at 45-second intervals.

If no signals are received from the remote sensor(s) within 2 minutes, dashes " - - " will be displayed.
Press and hold DOWN button [–] for 2 seconds to activate another signal search.

CHECKING REMOTE AND INDOOR TEMPERATURES
The indoor temperature is shown on the middle line of the main unit display. The remote temperature is shown on the top line of the display. The wave icon near the remote sensor reading indicates that there is a good signal reception from the remote unit. If there is no signal received from the remote unit for more than 2 minutes, a dashes " - - " will be displayed. Hold [–] button for 2 seconds to enforce an immediate search.

CONTINUOUS PROJECTION



Insert 2 AA batteries and connect the included AC adapter (AC120V, 60Hz-DC5.0V, 100mA).

CURRENT TIME AND INDOOR/OUTDOOR TEMPERATURE PROJECTION

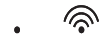
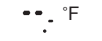
1. Press "**FLIP**" to rotate projection image 180° clockwise.

2. Press and hold the "**FLIP**" button for 2 seconds to change temperature information from outdoor to indoor.

3. Press and hold the "**FLIP**" button for 2 seconds again, and the display will switch between indoor and outdoor temperatures every 5 seconds.

READING THE KINETIC WAVE DISPLAY

The kinetic wave display shows the main unit (receiver) signal reception strength.

Searching for signal	
Temperature signals successfully received.	
No signal.	

WWVB RADIO CONTROLLED TIME

The NIST (National Institute of Standards and Technology) radio station is located in Ft. Collins Colorado. It transmits an exact time signal continuously throughout the continental United States at 60 KHz frequency. The Wireless Weather Projection Clock with Light Detector can receive this WWVB signal through its internal antenna from up to 2,000 miles away. Due to the nature of the Earth's ionosphere, reception can be limited during the daylight hours. The radio controlled clock will search for an alternate station that derives its signal from the NIST Atomic clock in Boulder, Colorado.

The WWVB tower icon on the main unit's display will flash indicating radio signal reception from the WWVB station. If the tower icon is not fully lit, or if the time is not set automatically, please consider the following:

* During night-time hours, atmospheric disturbances are typically less severe and reception may improve. A single daily reception is sufficient enough to keep the accuracy reading within 1 second.

* Make sure the main unit is positioned at 8 feet minimum distance from any interference source such as a TV, computer monitor, microwave, etc. The successful reception of the atomic time signal depends on the positioning and location of the clock. Always place the main unit by the window for better reception.

* Within concrete wall rooms such as basements or office buildings, the received signal may be weakened. Always place the unit near the window.

WEATHER FORECAST

The weather projection clock is capable to detect an atmospheric pressure changes. Based on collected data, it forecasts the weather for the next 12 to 24 hours.

When the display shows...					
Forecast is...	Sunny	Partly Cloudy	Cloudy	Light Rain	Heavy Rain

NOTE:

1. The weather forecast accuracy is approximately 70%.
2. Display shows forecasted, not current conditions.
3. The "Sunny" icon indicates clear weather, even when displayed during nighttime hours.

BAROMETRIC PRESSURE

The barometric pressure arrows indicate if pressure is rising, steady, or falling.

Arrow indicator			
Pressure Trend	Rising	Steady	Falling

INDOOR ANR OUTDOOR TEMPERATURES

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

Arrow indicator			
Temperature Trend	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 both **[channel]** & **[–]** buttons, the unit will return to the current temperature display in 15 seconds.
To clear the memory, press & hold [**channel]** for 3 seconds and all stored readings will be erased.

LOST COMMUNICATION

If the main unit display for the remote sensor goes blank, press and hold [–] for 2 seconds to begin a new signal search. If the signal still isn't received, please make sure that:

1. The remote sensor is in its proper location.
2. The distance between the main and remote units is not over 100 feet.
3. The path between units is clear of obstacles. Shorten the distance between units if necessary.
4. Fresh batteries are installed correctly in both remote sensor and main unit.

Note: When the temperature falls below freezing, the batteries in outdoor remote sensor(s) may have reduced voltage supply and a shorter effective range. We recommend to ***Use lithium-ion batteries at the temperatures below 32°F***

If everything listed above in order and there is no reception anyway, please perform the following steps:

1. Bring main unit and remote sensor close together.
2. Remove 4 small screws from the back of the remote sensor and open the battery compartment.
3. Remove the batteries from the battery compartment and reinstall them in the same manner. Remote sensor LED indicator will flash showing transmission of the signal.
4. Remove the batteries from the main unit and reinstall them in the same manner.
5. On the main unit select the same channel number as set on the remote sensor. Remote temperature appeared on the main unit's display will show that transmission is being received successfully.

TRANSMISSION COLLISION

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

HOW TO SET THE RADIO CONTROLLED CLOCK

1. After the main unit receives temperature readings from the remote sensor, the WWVB time signal receiver will automatically search for the time signal. It takes about 5-8 minutes. Always place clock by the window for better reception.
2. If the radio signal is received, the date and time will be set automatically, and the [] icon will appear.
3. If after 8 minutes the time signal has not been received, press the "**MODE**" button to set the time manually. The clock will continue to search for the WWVB time signal daily from 1:00 am to 4:30 am.
   When the signal has been successfully received, the time and date will be updated automatically.

CALENDAR AND CLOCK DISPLAY MODES

The date is displayed in month-date format. Each press of the **MODE** button will change the clock display setting between the time with the seconds, and the time with the day of week.

MANUAL SETTINGS

TIME ZONE

1. Press **MODE** to select the time with the day of week display mode.
2. Select the time zone by pressing and holding the " + " button for 3 seconds.
3. Keep holding until the desired time zone (Pacific, Mountain, Central or Eastern) is selected on the display map.

YEAR, DATE, TIME, TEMPERATURE UNIT

Press and hold **MODE** for 3 seconds: the year will flash.
Press " + " or " - " to change the flashing digits.
After the first value is set, press **MODE** again. Continue setting month, day, hour, minute, display language, Fahrenheit or Celsius display. When you've set the last value, press **MODE** for the last time to return to regular mode.

ALARMS

* Weekday Alarm

The alarm will sound and the alarm icon will flash at the set time Mondays through Fridays.

* Single Day Alarm

The alarm will sound and the alarm icon will flash at the set time, but will not activate on subsequent days.

* Pre-Alarm

If the remote temperature is 32º F/0º C or below, the pre-alarm feature will be activated. The pre-alarm time interval can be set for 15, 30, 45, 60, 75 or 90 minutes before the weekday or single alarm time. Press and hold [**ALARM ON/OFF**] for 2 seconds in Pre-Alarm mode to set the pre-alarm interval.

" (W" (Weekday alarm), " (S" (Single day alarm), and "Pre-AL" (Pre-alarm) icons will indicate which alarm mode is armed. You can enable or disable an alarm by pressing the [+],[–] buttons in alarm display mode. Press **MODE** to toggle between alarm modes or to return to the default display.

SETTING THE ALARM
To set any alarm,
1. Press [**ALARM ON/OFF**] once to display a specific alarm time. If the selected alarm is off, "OFF" will be displayed.
2. Press and hold [**ALARM ON/OFF**] for 2 seconds. The hour digit will flash.
3. Enter the hour using [-] or [+] buttons.
4. Press [**ALARM ON/OFF**] again. The minute digits will flash.
5. Enter the minutes using [-] or [+] buttons.
6. Press [**ALARM ON/OFF**] again to exit from the alarm time mode.
7. Repeat the same procedure to set any of alarms (weekly, daily or pre-alarm).

SNOOZE
When the alarm sounds, press the **LIGHT/ SNOOZE** button to temporarily stop the alarm. After depressing, the alarm sound will resume in 5 minutes.
If the alarm is not disabled after that, it will sound for 4 more minutes and then will stop by itself.

HOW TO STOP AN ALARM
Press [**ALARM ON/OFF**] on the main unit to disable any alarm.

PRECAUTIONS
This product is engineered to give you years of satisfactory service if handled carefully. Here are a few precautions:
1. Do not immerse the units in water.
2. Do not clean the units with abrasive or corrosive materials. They may scratch the plastic parts and corrode the electronic circuits.
3. Do not subject the product to excessive force, shock, dust, temperature, or humidity, which may result in malfunctions, shorter lifespan, damaged batteries, and damaged parts.
4. Do not tamper with the units' internal components. Doing so will invalidate the warranty and may cause damage. These units contain no user-serviceable parts.
5. Use only fresh batteries. Do not mix new and old batteries.
6. Read the user's manual thoroughly before operating the units.

SPECIFICATIONS

Temperature Measurement

Main unit

Indoor Temperature

Proposed operating range	: -5°C to +50°C / 23°F to 122°F
Temperature resolution	: 0.1°C/ 0.2°F

Remote Sensor

Proposed operating range with alkaline batteries	: -20°C to + 70°C / -4 °F to 158°F
Proposed operating range with lithium batteries	: - 38°F to 158°F (-38.8 C° to 70°C)
Temperature resolution	: 0.1°C/ 0.2°F

RF Transmission Frequency	: 433 MHz
Maximum number of remote sensors	: 3
RF Transmission Range	: Maximum 100 feet
Temperature sampling cycle	: approximately 45 seconds

Calendar and Clock

12 hour display in hh : mm format
Date Format: Month – Day format
Day of week: User- selectable in 3 languages
(English, French, Spanish)
Dual 4-minute crescendo alarm with snooze
Pre-alarm for ice alert with programmable time intervals

Power

Main unit : 2 x UM-3/ AA (1.5V) batteries
- alkaline are suggested (not included)
: AC adapter (AC120V, 60Hz-DC5.0V, 100mA).
Remote Sensor : 2 x UM-3/ AA (1.5V) batteries
- alkaline are suggested (not included)
Lithium batteries are suggested (not included) at 32°F temperature and below

Dimensions

Main unit : 3.25(L) x 4.5(H) x 1.25(D) inches
Remote sensor : 2(L) x 4(H) x 1 (D) inch

FCC STATEMENT

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 modification 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 had 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 to 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.

DECLARATION OF CONFORMITY

We

Name: Hideki Electronics, Inc.
Address: 7865 SW Mohawk, Tualatin, OR 97062
Telephone No.: 1-503-612-8395

declare that the product

Product No.: PCR325W
Product Name: Wireless Weather Projection Clock with Light Detector
Manufacturer: Hideki Electronics Ltd.
Address: Unit 2304-06, 23/F Riley House, 88 Lei Muk Road, Kwai Chung, New Territories, Hong Kong

is in conformity with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
1. This device may not cause harmful interference.
This device must accept any interference received, including interference that may cause undesired operation.

The information above is not to be used as contact for support or sales. Please call our customer service hotline (refer to the warranty statement) for all inquiries instead.

STANDARD WARRANTY INFORMATION
This product is warranted from the manufacturing defects for one year from date of retail purchase. It does not cover damages or wear resulting from accident, misuse, abuse, commercial use, or unauthorized adjustment and repair.

Note that online product registration is required to ensure valid warranty protection.
To register your product, go to our Company website at: www.hidekielectronics.us. Click Online Product Registration under the Customer Service menu.
Should you require assistance with this product and its operation, please contact our
Customer Service Hotline 1(866) 443 3543
Please direct all returns to the place of the original purchase. Should this not be possible, contact Customer Service Hotline for assistance and to obtain a Return Merchandise Authorization (RMA). Returns without a return authorization will be refused. Please retain your original receipt as you may be asked to provide a copy for proof of purchase.
Hideki Electronics, Inc. reserves the right to repair or replace the product at our option.