

# (MANUAL FOR PCR325W)

## Weather Forecast with Cable Free in-out Sensor and Radio Controlled Projection Clock

USER'S MANUAL (PCR325W)

### INTRODUCTION

Congratulations on your purchase of the PCR325W. The basic package comes with a main unit, which is the weather forecast station and, three remote units, the thermo sensor. The main unit is capable of keeping track of the maximum and minimum temperature of different sites. And no wire installation is required and operates at 433MHz.

### A LCD DISPLAY

Facilitates easy reading of weather forecast remote and indoors temperatures and calendar clock

### B CHANNEL BUTTON

Display different sensor temperature

### C ALARM BUTTON

Displays the alarm time or sets the alarm status

### D MODE BUTTON

Toggles the display mode and confirms entry while setting the values for display

### E LIGHT/SNOOZE BUTTON

Activate the snooze function and backlight

### F DOWN (⇩) BUTTON

Decreases the value of a setting

### G UP (⇧) BUTTON

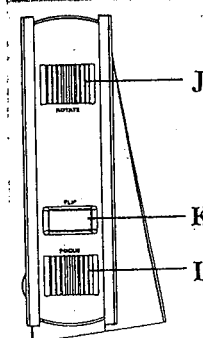
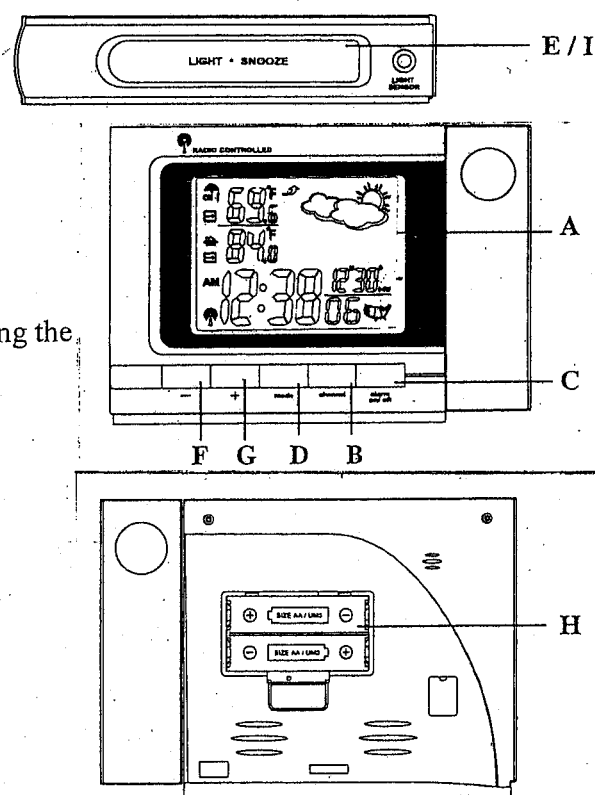
Advances the value of a setting

### H BATTERY COMPARTMENT

Accommodates two UM-3 or "AA" size batteries, 1.5V

### I PROJECTION LIGHT AND ITS ADJUSTMENT

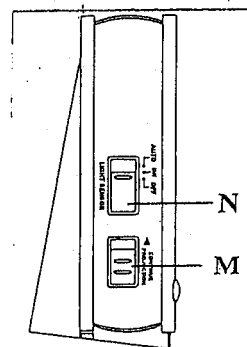
- \* Press button **E / I** [LIGHT/SNOOZE]- Projection light will come on and turn off automatically after 5 seconds.
- \* When plug-in adapter and turn on the button **M** [CONTINUE - PROJECTION], projection light will turn on continuously until the button is switched off or the AC adapter is pulled off.
- \* Turn the button **L** [FOCUS] key knob to adjust the focus of projection image.
- \* Press button **K** [FLIP] key to rotate the projection image in 180° orientation clock wise.
- \* Turn the button **J** [ROTATE] knob to rotate the image manually.



### N LIGHT SENSOR BUTTON

When plug-in adapter, and the button is at position

- \* "Auto" : the light sensor function is activated and the LED backlight will turn on automatically when it is dark.
- \* "ON" : the LED backlight will turn on whatever the environment is.
- \* "OFF" : light sensor function is off.



### MAIN FEATURES: REMOTE UNIT

#### 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.

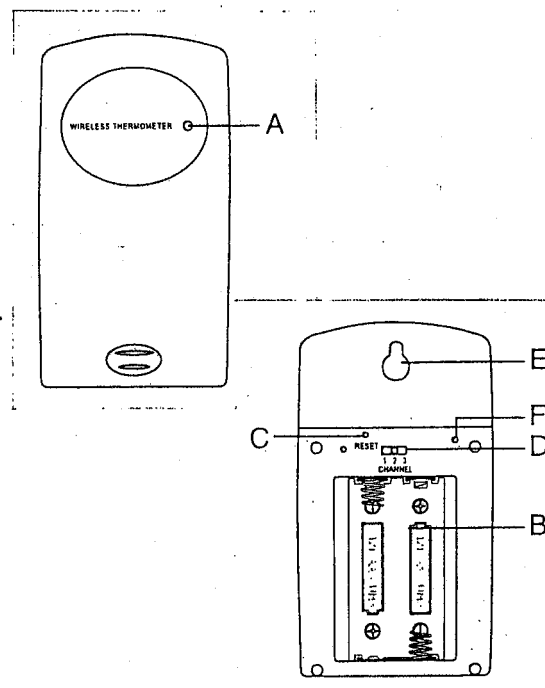
#### D CHANNEL SELECTOR

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 best operation,

1. Insert batteries for remote units before doing so for the main unit.
2. Position the remote unit and main unit within effective transmission range, which, in usual circumstances, is 20 to 30 meters.

Note that the effective range is vastly affected by the building materials and where the main and remote units are positioned. Try various set-ups for best result. Though the remote units are weather proof, they should be placed away from direct sunlight, rain or snow.

### BATTERY INSTALLATION: REMOTE UNIT

1. Remove the screws on the battery compartment.
2. Select the channel
3. Install 2 batteries (UM-3 or "AA" size 1.5V) strictly according to the polarities shown.
4. Replace the battery compartment door and secure its screws.

### BATTERY INSTALLATION: MAIN UNIT

1. Open the battery compartment door.
2. Install 2 batteries (UM-3 or "AA" size 1.5V) strictly according to the polarities shown.
3. Replace the battery compartment door.

### LOW BATTERY WARNING

When it is time to replace batteries, the respective low-battery indicator [★] will show up on the indoor or outdoor temperature.

### GETTING STARTED

Once batteries are in place for the remote unit, they will start transmitting temperature readings at around 45 seconds intervals. The main unit will also start searching for signals for about two minutes once batteries are installed. Upon successful reception, the outdoors temperatures will be displayed. The main unit will automatically update its readings at about 45-second intervals.

If no signals are received, blanks "--" will be displayed. Hold [—] for 2 seconds to enforce another search for about 2 minutes. This is useful in synchronizing the transmission and reception of the remote and main units. Repeat this step whenever you find discrepancies between the reading shown on the main unit and that on the remote unit.

### HOW TO CHECK REMOTE AND INDOOR TEMPERATURES

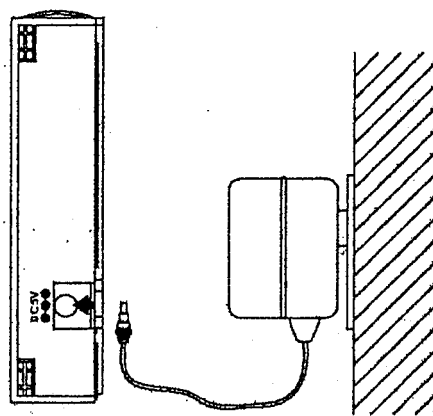
The wave display on the outdoors temperature indicates the reception of the remote unit is in good order. If no readings are received from the remote unit for more than two minutes, blanks "--" will be displayed until further readings are successfully searched. Check the remote unit is sound and secure. You can wait for a little while or Hold [—] for 2 seconds to enforce an immediate search. If the temperature goes above or below than the temperature measuring range of the main unit or the remote unit (stated in specification), the display will show "HH" or "LL" respectively.

### To install the AC-DC adapter for Continue Projection:

Use 2 X AA, 1.5V batteries and AC-DC adapter (AC120V, 60Hz-DC5.0V, 100mA) included.

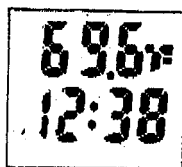
#### Important:

Please make sure your household voltage matched with the voltage supported by the adapter, or it will damage your clocks and adapter.

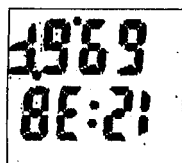


## PROJECTION IMAGE OF CURRENT TIME AND OUT-DOOR TEMPERATURE:

1.



2. Press "FLIP" key to rotate projection image 180° clockwise.



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

4. Press and hold the "FLIP" key for 2 seconds again, the temperature image will swap indoor/ outdoor for every 5 seconds automatically.

## 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.	

## 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 60 KHz. 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 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 from 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, superstructure, office buildings), the received signal will be weakened. In extreme case, 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.

### WEATHER FORECAST

The unit is capable of detecting atmospheric pressure changes. Based on collected data, it can predict the weather for the forthcoming 12 to 24 hours.




Indicator displays on the unit					
Forecast	Sunny	Slightly Cloudy	Cloudy	Partly Rainy	Heavy Rainy

#### NOTE:

1. The accuracy of a general pressure-based weather forecast is about 70%.
2. The weather forecasts. It may not necessarily reflect the current situation.
3. The "Sunny" icon, as applies to night time, implies clear weather.




### ATMOSPHERIC PRESSURE

The atmospheric pressure indicator, in the weather forecast window, uses arrows to indicate if the atmospheric pressure is rising, steady, or falling.

Arrow Indicator			
Pressure Trend	Rising	Steady	Falling

### INDOOR AND OUTDOOR TEMPERATURES

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

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 the "channel" & "-" buttons.

If the "channel" / "-" button is not pressed while the minimum or the maximum reading is being displayed, the unit will revert back to the current temperature display after 15 seconds. To clear the memory, press and hold "channel" for 3 seconds. The maximum and minimum readings will be erased.

### DISCONNECTED SIGNALS


If without obvious reasons the display of the outdoor temperature goes blank, Hold [—] for 2 seconds to enforce an immediate search. If that fails, check:

1. The remote unit is still in place.
2. The batteries of both the remote unit and main unit. Replace as necessary.  
Note: When the temperature falls below freezing point, the batteries of outdoor units will freeze, lowering their voltage supply and the effective range.
3. The transmission is within range and path is clear of obstacles and interference.  
Shorten the distance when necessary.

### TRANSMISSION COLLISION

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 temperature readings will resume once the interference recedes.

### HOW TO SET THE RADIO CONTROLLED CLOCK

1. 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, press and hold “+” button for 3 seconds, it will be enforced to receive the WWVB time signal. If the radio signal is still not received, use the “MODE” button to set the WWVB time signal manually. The clock will then automatically attempt to receive the WWVB time signals for every hour from 1:00 am to 4:00 am each day. When this is successful, the received time will update the manually set time and date.
2. If the radio signal is received, the date & time will be set automatically with radio control signal icon  turns on.
3. If the clock fails to receive the time signal, it will be show as [▲] icon. Then user can set the time manually.
4. To deactivate the radio controlled time signal, hold both “+” & “—” buttons for 3 seconds. Then user can set the time manually.

### CALENDAR CLOCK DISPLAY MODES

The clock and the calendar share the same section of the display. The calendar is displayed in a month-day format. Each press on the **MODE** button will change the display between clock with second, clock with day of week.

### HOW TO SET THE CLOCK MANUALLY

In the normal time display, 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.

Press and hold MODE for 3 seconds: the year, month, date, hour & minute digit will begin to flash, press “+” or “—” to select the correct figure.

After the minute is set, press MODE again, the weekday display will indicate the current preset language, “EN” for English. Press “+” or “—” to set the desired language for the weekday display. The selection sequence is “EN” for English, “SP” for Spanish and “FR” for French.

When the language is set, press MODE again, “°F” will flash to prompt Fahrenheit display. Press “+” or “—” to select the desired temperature display: “°F” for Fahrenheit or “°C” for Celsius.

## **HOW TO SET AND ARM THE ALARM**

To set an alarm,

1. Press [**ALARM**] once to display alarm time. If the alarm is disarmed, the time will be displayed as “OFF”.
2. Hold [**ALARM**] for two seconds. The hour digits will blink.
3. Enter the hour using [—] or [+].
4. Press [**ALARM**]. The minute digits will blink.
5. Enter the minutes using [—] or [+].
6. Press [**ALARM**] to exit.
7. Repeat the same procedure to set single alarm.

The alarm “W” “S” and “Pre-AL” icons will be displayed indicating which alarm is armed. You can also arm or disarm an alarm by pressing the [— ],[+] button at alarm display mode. Press **MODE** to return to clock display mode.

## **SNOOZE FEATURE**

When the alarm sound is on, press the snooze key enter snooze mode. After 5 minutes, alarm sound will be wake up automatically. The snooze cycle will be restarted if you press the snooze key again. If you leave the alarm sound on for 4 minutes, it will stop automatically.

## **HOW TO STOP AN ALARM**

Press [**ALARM**] on the unit to stop an alarm.

## **ALARM FEATURE**

### **\* Weekday Alarm**

The alarm sound will be activated and the icon will be flashed on weekday when it is armed and the alarm time is reach.

### **\* Single Alarm**

The alarm sound will be activated and the icon will be flashed once when it is armed and the alarm time is reach. Once it finished, it will be disabled automatically.

#### \* Pre-Alarm

The pre-alarm sound will be activated and the icon will be flashed if outdoor temperature under or equal zero degree, which is programmable 15, 30, 45, 60 or 90 minutes earlier than the weekday alarm or single alarm time.

### PRECAUTIONS

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 clean the unit with abrasive or corrosive materials. 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 battery 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.
6. Always read the user's manual thoroughly before operating the unit.

### SPECIFICATIONS

#### *Temperature Measurement*

##### *Main unit*

Indoor Temperature measurement

Proposed operating range:  $-9.9^{\circ}\text{C}$  to  $+60.0^{\circ}\text{C}$  /  $14.0^{\circ}\text{F}$  to  $122.0^{\circ}\text{F}$

Temperature resolution:  $0.1^{\circ}\text{C}$  /  $0.1^{\circ}\text{F}$

##### *Remote unit*

Proposed operating range:  $-53.0^{\circ}\text{C}$  to  $+73.0^{\circ}\text{C}$  /  $-63.4^{\circ}\text{F}$  to  $163.4^{\circ}\text{F}$

Temperature resolution:  $0.1^{\circ}\text{C}$  /  $0.1^{\circ}\text{F}$

RF Transmission Frequency: 433 MHz

Maximum no. of Remote unit: 3

RF Transmission Range: Maximum 100 feet (30 meters)

Temperature sensing cycle: around 45 seconds

#### *Calendar Clock*

12 hour display with hh : mm

Date Format: Month-Day

Day of week selectable in 3 languages (English, Spanish, French)

Dual 4-minute crescendo alarm with snooze

Pre-alarm for ice alert



#### *Power*

Main unit : use 2 pcs UM-3 or "AA" 1.5V battery

Remote sensing unit : use 2 pcs UM-3 or "AA" 1.5V battery

#### *Weight*

Main unit : 305g (without battery)

Remote sensing unit : 60g (without battery)

#### *Dimension*

Main unit : 161(L) x 116(H) x 31(D) mm

Remote sensing unit : 55.5(L) x 101(H) x 24(D) mm

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 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 turning the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio / TV technician for help.