

C8249E-PD10122M (WWVB)

Size:105 x 130 (mm)

FCC Remarks

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.



SHARP

RADIO CONTROLLED WIRELESS WEATHER STATION

Instruction Manual & Warranty



For **Customer Service** Please Call
Toll Free at 1-(800)-221-0131
and ask for **Customer Service.**
Monday-Friday 9:00 AM - 4:00 PM EST
Please call for assistance before
returning the clock to the store.

One Year Limited Warranty

M.Z. Berger & Company warrants the original consumer purchaser of this product that it shall be free of defects in materials and workmanship for one year from the purchase date of this product. Defects caused by tampering, improper use, unauthorized modifications or repairs, immersion in water or abuse are not covered by this warranty. If a defect covered by this warranty occurs during the warranty period, wrap your clock carefully and send it to the following address:

MZ Berger Service Center
29-76 Northern Boulevard
Long Island City, NY 11101

You must include a Proof of Purchase, either the original receipt or a photocopy and a check or money order for USD \$9.00 to cover the cost of handling. Also include your return address inside the package. M.Z. Berger will repair or replace the clock and return it to you. M.Z. Berger will not be liable for any loss or damage, including incidental or consequential damages of any kind; from any breach of warranty either expressed or implied relating to the product. Since some states do not allow the exclusion or limitation of incidental or consequential damages, this limitation may not apply to you.

Printed in China

Model SPC502

SHARP registered in the U.S. Patent and Trademark Office.

REMOTE SENSOR

Recommended operating range:	-20°C to 55°C -4°F to 131°F
Resolution:	0.1°C/1°F(above 0°C/32°F) 1°C/1°F(below 0°C/32°F)
Humidity measuring range:	20%RH to 90%RH
Operating range:	20%RH to 90%RH
Resolution:	1%RH
RF transmission frequency:	915MHz
Remote sensor:	1 unit
RF transmission range:	maximum 100 meters
Temperature sensing cycle:	around 60-64 seconds

POWER

Main unit:	4.5V, use 3 x AA 1.5V alkaline battery
Remote sensor:	3V, use 2 x AA 1.5V alkaline battery

DIMENSION

Main unit:	253(W) x 181(H) x 71(D)mm
Remote sensor:	40(W) x 132 (H) x 24 (D)mm

TABLE OF CONTENTENCE

Pg1 - Pg6-----	Weather Station Main Features
Pg6 - Pg7-----	Setting Up the Transmitter
Pg8 - Pg9-----	Setting Up the Weather Station
Pg10 - Pg11--	Manually Setting the Time and Calendar
Pg11 - Pg12--	Setting the Alarm and Snooze
Pg12 - Pg17--	Weather Forecast Features
Pg17-----	Low Battery Indicator
Pg18-----	Transmitter Wall Mounting
Pg19 - Pg20--	Weather Station Specifications

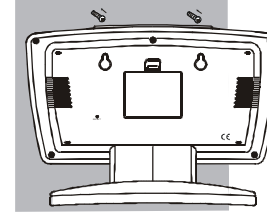
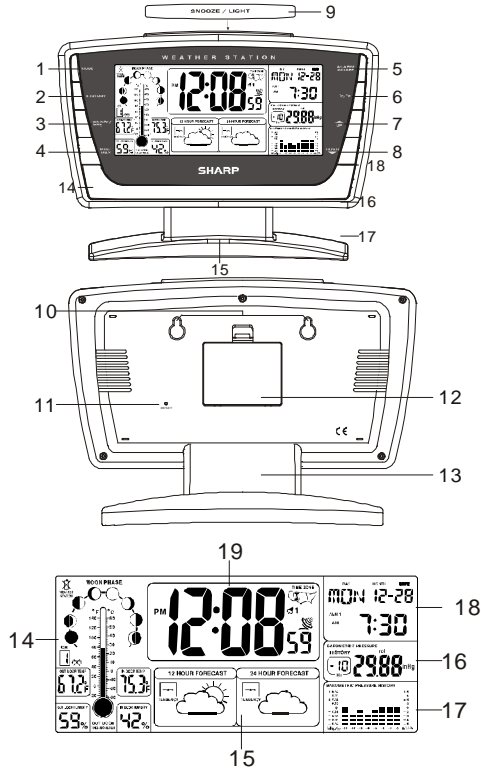
Thank you for your purchase of this delicate clock. The utmost care has gone into the design and manufacture of your clock. Please read these instructions carefully and keep them well for future reference.

The multifunctional weather station is equipped with many functions providing thorough weather information to you. The receiver unit has a clear, easy-to-read display that shows the weather forecast, indoor temperature & humidity, moon phase, time, month, date as well as the temperature & humidity measured and transmitted from the remote sensor.

The 915 MHz technology means no wire installation is required and you can place the sensor anywhere you like within 100 meters.

With radio controlled function, the current time and date are automatically synchronized with the time signal transmitted from U.S.A (WWVB).

**MAIN FEATURES:
WEATHER STATION:**



SPECIFICATION

MAIN UNIT

Recommended operating range: 0°C to 45°C
32°F to 113°F

Resolution: 1°C/°F(above 0°C/32°F)
1°C/°F(below 0°C/32°F)

Humidity measuring range: 20%RH to 90%RH

Recommended operating range: 20%RH to 90%RH

Resolution: 1%RH/1%RH

Pressure measuring range: 850mb to 1050mb

Pressure sampling cycle: 15 minutes

Moon phase scanner range: from year 2000 to 2099

Radio controlled signal: WWVB

NOTE:

Attention! Please dispose of used unit or batteries in an ecologically safe manner.

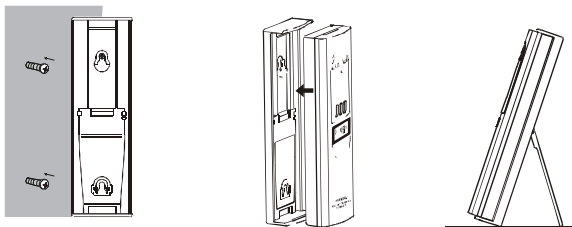


USING THE TABLE STAND OR WALL-MOUNTING STAND

The receiver and transmitter have both the desktop and wall-mounting structures.

For the receiver, place the screw on the desired wall and hang the receiver by the recessed hole at the back of the clock or just simply place it on the desktop by the table stand.

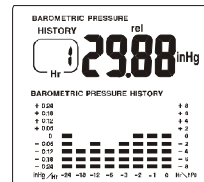
For the transmitter, fix the separate wall-mounting stand outside in the area protected from direct rain by the screw. Once the stand is mounted, place the transmitter into the stand on the wall. Besides, you can place it on the desktop by its table stand.




1. **MODE** key:
 - Press it to switch between alarm1 and alarm2.
 - Press and hold it for 2 second to enter normal time setting.
 - In normal time setting, press it to step the setting items.
2. **HISTORY** key:
 - Press it to check the pressure records in the past 24 hours.
3. **mb-hPa/inHg** key:
 - Press it to switch between mb-hPa and inHg.
 - Press and hold it for 2 seconds to enter the “rel” and “abs” switch mode.
4. **MAX/MIN** key:
 - Press it to check the maximum/minimum temperature & humidity records.
 - Press and hold it for 3 seconds to delete the maximum and minimum records.
5. **ALM** key:
 - In normal mode, press it to turn on/off alarm1 and alarm2.
 - In alarm1/alarn2 mode, press and hold it for 2 seconds to enter alarm time setting.
 - In alarm setting mode, press it to step the setting items.
6. **°C/°F** key:
 - Press it to switch between Celsius and Fahrenheit.



- Press and hold it for 3 seconds to receive the RC signal for reception testing.
- UP key:
 - In setting mode, press it to increase the setting value.
 - Press it to select the channel 1, 2 or 3.
 - DOWN key:
 - In setting mode, press it to decrease the setting value.
 - In normal mode or alarm mode, press it switch between 12 and 24 hour format.
 - SNOOZE/LIGHT key:
 - Press it once to turn on the backlight for 5 seconds.
 - Press it to stop the current alarm when it is sounding and enter the snooze mode.
 - WALL-MOUNTING HOLDER:
 - Use it to support the main unit on the wall.
 - RESET:
 - Press it to reset all values to default values.
 - In case of malfunction, the unit may be required to reset.
 - BATTERY COMPARTMENT:
 - Accommodates 3 x AA size batteries (alkaline batteries recommended).
 - TABLE STAND:
 - Support the main unit on the desktop.

in the past 24 hours are displayed in a bar chart below the **BAROMETRIC PRESSURE** window.

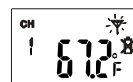


LOW BATTERY INDICATOR

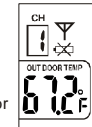
When the batteries do not have enough power to operate the main unit, the low battery indicator “” will display beside the moon phase window to remind you to replace with new batteries.

The indicator “” above the outdoor temperature and “” on the LCD of transmitter indicate that the battery power of transmitter is not enough, and you should replace batteries at once.

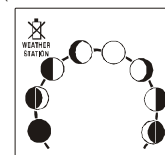
Transmitter's low battery indicator (shows on transmitter)

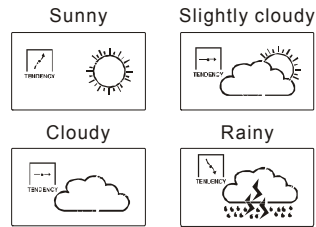


Transmitter's low battery indicator (shows on the main unit)



Receiver's low battery indicator (shows on the main unit)

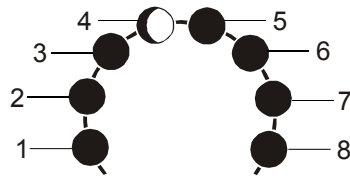




ABOUT THE MOON PHASE

The unit has 8 different moon phases. It will change according to the lunar calendar.

1. New moon
2. Waxing crescent
3. First quarter
4. Waxing gibbous
5. Full moon
6. Waning gibbous
7. Last quarter
8. Waning crescent



PRESSURE RECORDS IN THE PAST 24 HOURS

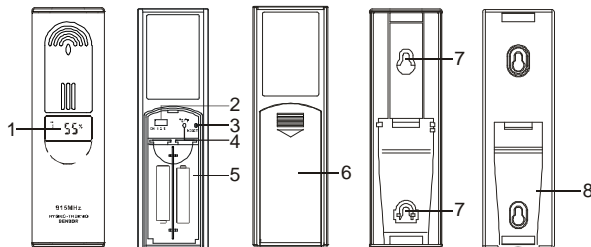
The current and historical atmosphere is shown in the **BAROMETER PRESSURE** window. The atmosphere can be displayed in mb/hPa or inHg by pressing the “mb-hPa/inHg” key. To check the pressure history in a particular hour during the past 24 hours, press the “HISTORY” key. Each press on the key will go back by an hour. The recorded pressure changes

14. Temperature & Moon phase window:
 - Shows the indoor and outdoor temperature, the max/min temperature records and current moon phase.
15. Weather forecast window:
 - Shows the weather forecast for coming 12 and 24 hours.
16. Barometric pressure window:
 - Displays the current barometric pressure data and indicates the barometric pressure in the past 24 hours.
17. Barometric pressure history chart:
 - Displays the barometric pressure trend in the past 24 hours.
18. Calendar window:
 - Displays the month, date, day of the week and alarm time.
19. Clock window:
 - Displays clock time, alarm icon and time zone map.

TRANSMITTER:

1. LCD indicator:
 - Displays the current temperature and humidity monitored by the remote unit alternatively.
2. CHANNEL slide switch:
 - Assign the transmitter to default Channel 1.

3. RESET:
 - Press it to restart the transmitter and return all values to default values.
4. °C/°F:
 - Switches between Celsius and Fahrenheit.
5. BATTERY COMPARTMENT:
 - Accommodates 2 x AA size batteries.
6. BATTERY DOOR
7. WALL-MOUNTING HOLDER:
 - Use it to support the transmitter on the wall.
8. TABLE STAND:
 - Use it to stand the transmitter on the desktop.



BEFORE USING THE TRANSMITTER

1. Remove the transmitter from the stand and open the battery door.

Max. temp.& humidity records Min. temp.& humidity records



WEATHER TREND INDICATOR

The pressure-trend indicators show the changes in the forthcoming few minutes. Arrows indicate a rising, steady or falling trend.

Arrow indicator			
Pressure trend	Rising	Steady	Falling

WEATHER FORECAST INDICATOR

The built-in barometer can notice atmosphere pressure changes. Based on the data collected, it can predict the weather conditions in the forthcoming 12-24 hours.

Note:

1. The accuracy of a general pressure-based weather forecast is about 70% to 75%.
2. The weather forecast is meant for next 12 to 24 hours. It may not necessarily reflect the current situation.
3. The “Sunny” icon, when applied to nighttime, implies clear weather.

VIEWING THE CHANNEL

The **default channel is Channel 1**. In normal time mode, press “UP” key for 3 seconds, with “beep” tone sound to view the channel 1 temperature and humidity.

HOW TO READ INDOOR AND OUTDOOR TEMPERATURE & HUMIDITY RECORD

Change the temperature unit to °C for Celsius or °F for Fahrenheit by pressing the “°C/°F” key.

Note:

1. If no signal are received or the transmission is interfered, “—” will appear on the LCD.
2. Relocated the clock or transmitter in other positions and make sure the transmission is within the effective range of 100 meters approx.
3. After several trails in vain, please reset the clock thoroughly. Try out where your multifunctional alarm clock receives the signal best.

CHECKING AND DELETING MAX./MIN. TEMPERATURE & HUMIDITY RECORDS

1. Press the “MIN/MAX” key once to check the maximum temperature and humidity records. Press it twice to check the minimum records. Press it again to exit.
2. Press and hold the “MIN/MAX” key for 3 seconds to delete the maximum and minimum temperature & humidity records.

2. Insert 2 x AA size batteries into the battery compartment. Make sure you insert them the right way according to the polarity information marked on the battery compartment.
3. The receiver can receive humidity and temperature data. **Channel 1 is the default channel**. Make sure the small switch in the battery compartment is set to Channel 1.
4. Press the “RESET” button in the battery compartment with a pin or paperclip to confirm the channel is set.
5. Select the temperature unit by pressing the “°C/°F” button in the battery compartment with a pin or paperclip.
6. Replace the battery door.

NOTE:

1. Avoid placing the transmitter in direct sunlight, rain or snow.

SETTING UP THE WEATHER STATION

1. Remove the battery door and insert 3 x AA size batteries into the battery compartment. Make sure you insert them the right way according to the polarity information marked on the battery compartment.
2. Replace the battery door.
3. Press the “RESET” button on the back of the clock with a pin or paperclip to re-start the clock. The clock will synchronize with the transmitter set to **default Channel 1** automatically.

NOTE:

1. The building material and the position of receiver and transmitter affect the effective range. So try various locations to obtain the best result.
2. Place the units away from metal objects and electrical appliances to minimize the interference. Position the receiver and transmitter within the effective transmission range: 30 meters in usual circumstances.

DAYLIGHT SAVINGS TIME (DST)

The clock has been programmed to automatically switch when the daylight savings time is in effect. Your clock will show "DST" during the summer.

RECEPTION OF RADIO CONTROLLED TIME SIGNAL

The time and date are radio-controlled. The current time and date are automatically synchronized with the time signal transmitted from U.S.A (WWVB)
When used for the first time (after inserting the batteries or pressing the "RESET" key), the clock will start to receive the RC signal in 5 minutes with the signal strength indicator flashing.

1. Get the atmosphere pressure data of the sea level (it is also the relative atmosphere pressure data of your home area) through the local weather service, internet and other channels.
2. Press and hold "mb-hPa/inHg" key for 2 seconds until "abs" or "rel" icon flashes.
3. Press "UP"/"DOWN" key to switch to "rel" mode.
4. Press "mb-hPa/inHg" key once again until the "rel" atmosphere pressure digit flashes.
5. Press "UP" or "DOWN" key to change its value.
6. Press "mb-hPa/inHg" key to save and exit the setting mode, or let it exit automatically 30 seconds later without pressing any key.

NOTE:

1. The default relative atmosphere pressure value is 1013 mb/hPa (29.91 inHg), which refers to the average atmosphere pressure.
2. When you change the relative atmosphere pressure value, the weather indicators will change along with it.
3. The built-in barometer can notice the environmental absolute atmosphere pressure changes. Based on the data collected, it can predict the weather conditions in the forthcoming 12-24 hours. Therefore, the weather indicators will change according to the detected absolute atmosphere pressure after you operate the clock for 1 hour.
4. The relative atmosphere pressure is based on the sea level, but it will change with the absolute atmosphere pressure changes after operating the clock for 1 hour.

- The dual-alarm (ALM1 & ALM2) design of this unit will provide you with more convenience, and you can set two-alarm time if needed.

USING ALARM & TEMPERATURE PRE-ALARM FUNCTIONS

- Set the alarm time as described in the previous section.
- Press “ALARM ON/OFF” key once to turn on alarm1, press it twice to turn on alarm2, with the bell icon “🔔1” (“🔔2”) displays on the LCD. Press it again to turn off both alarm1 and alarm2, with the icons disappear.

NOTE:

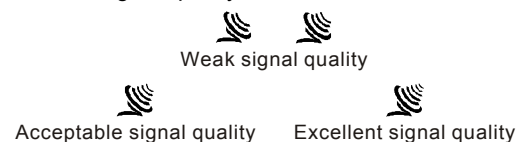
- If set the temperature pre-alarm is ON, the temperature pre-alarm can sound 30 minutes earlier than the alarm only when the outdoor temperature is below -3°C (26°F).
- If no key is pressed during the alarm period, the alarm will turn off automatically. You can press “SNOOZE/ LIGHT” key to stop the current alarm and enter the snooze mode. With the bell icon keep flashing.
- Once the snooze function is turned on, the 4-step crescendo alarm will sound 13 times in 5-minute interval. The alarm duration is 120 seconds.

RELATIVE ATMOSPHERE PRESSURE SETTING

The “rel” display on the LCD is the abbreviation of “relative”, which refers to the relative atmosphere pressure based on the sea level; while “abs” is the abbreviation of “absolute”, which means the absolute atmosphere pressure of your location. You can set the relative atmosphere pressure value according to the following steps:

SIGNAL STRENGTH INDICATOR

The signal indicator displays signal strength in 3 levels. Wave segment flashing means time signals are being received. The signal quality could be classified into 3 types:



If the RC clock receives signal successfully, a sync-time symbol “📶” will appear on the LCD. The unit has already synchronized with the time signal transmitter. Otherwise the segment will disappear from the LCD display.

NOTE:

You may use the “°C/°F” key to receive the time signal manually. Be caution of using the RECEIVE mode, which will consume more battery power and thus may reduce the battery lifetime. The RECEIVE mode will be off automatically in 6-12 minutes.

SUGGESTION:

Make sure you read the instructions before operating this delicate clock. We have developed this sophisticated instrument for the best reception performance; however, the signal transmitted from USA Atomic Clock transmitter will be affected in certain situations. We advise you to note the following instructions:

1. It is strongly recommended to start this clock at night and let the clock receive the signal automatically during midnight.
2. Always place the unit away from interfering sources such as TV set, computer, etc.
3. Avoid placing the unit on or next to metal plates.
4. Closed area such as airport, basement, tower block or factory is not recommended.
5. Do not start reception in moving articles such as vehicles or trains.



TIME AND CALENDAR SETTING

If you are out of reach of the Radio Controlled transmitter or if the reception is not reachable, the time and calendar can be set manually, as soon as the signal of transmitter is received again, the clock will automatically synchronized with the exact time and calendar.

1. In normal time mode, press and hold the “MODE” key for 2 seconds to enter the normal time setting mode.
2. Press the “UP” or “DOWN” key to change the value of the flashing Hour digit.
3. Repeat the above operations to set time and calendar in this order: Time Zone > Year > Month > Date > DST > Hour > Minute > Second > Day language.
4. The time zone setting are represented by the below abbreviations: P=Pacific M=Mountain C=Central E=Eastern

5. The 5 languages weekday setting are represented by the below abbreviations: GB=English FR=French DE=German ES=Spanish IT=Italian

English	Germany	French	Spanish	Italian
SUN	SON	DIM	DOM	DOM
MON	MON	LUN	LUN	LUN
TUE	DIE	MAR	MAR	MAR
WED	MIT	MER	MIE	MER
THU	DON	JEU	JUE	GIO
FRI	FRE	VEN	VIE	VEN
SAT	SAM	SAM	SAB	SAB

6. Press “MODE” key to save and exit the setting mode. Or let it exit automatically 30seconds later without pressing any key.

ALARM AND SNOOZE SETTING

1. In normal time mode, press “MODE” key once to select the alarm1 or alarm2.
2. In alarm1/alarm2 mode, press and hold “ALM ON/OFF” key for 2 seconds until alarm Hour digit flashes.
3. Press “UP” or “DOWN” key to change the value.
4. Repeat the above operations to set time and calendar in this order: Hour > Minute > Temperature pre-alarm ON/OFF.
5. Press “ALM ON/OFF” key to save and exit the setting, or let it exit automatically 30 seconds later without pressing any key.

NOTE:

1. The alarm will be automatically turned on when you set the alarm time with the icon “🕒 1” or “🕒 2” displayed.