# RADIO CONTROLLED WIRELESS THERMO CLOCK

## **USER'S INSTRUCTIONS**







reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate ratio 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.

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

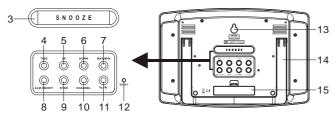
The receiver unit has a clear, easy-to-read display that shows the time, month, date, day of the week, indoor temperature as well as the outdoor temperature measured and transmitted from the remote sensors. It is able to receive and display readings from up to 2 remote sensors.

The 915 MHz technology means no wire installation is required and you can place the sensors anywhere you like.

With radio controlled function, the current time and calendar are automatically synchronized with the time signal transmitted from USA (WWVB).

## MAIN FEATURES: WEATHER STATION





## 1. CLOCK WINDOW:

 Displays time, year, signal strength indicator, daylight savings time (DST), alarm icons and time zone map.

## 2. CALENDAR, DAY AND TEMPERATURE WINDOW:

- Displays the month, date, day of the week as well as the indoor & outdoor temperature.

## 3. SNOOZE:

- Press it to stop the current alarm when it is sounding.

gives you specific rights, and you may have other rights that vary from state to state.

#### **Printed in China**

**SPC900** 

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

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

#### TWO 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 two years 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:

M.Z. Berger Service Center 29-76 Northern Boulevard Long Island City, NY 11101-2224

You must include a proof of purchase, either the original receipt of a photocopy and a check or money order for US\$5.95 to cover the cost of handling. Also include your return address inside the package. M.Z. Berger & Company will repair or replace the clock and return it to you. M.Z. Berger & Company 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. This warranty

#### 4. TIME key:

- In normal time mode, press it to enter alarm1 and alarm2 time mode.
- Press and hold it for 2 seconds to enter the normal time setting mode.
- In normal time setting mode, press it to step the setting items.

#### 5. UP key:

- In normal time mode, press it to switch between M-D (Month-Date) and D-M (Date-Month) formats.
- In alarm time mode, press it to select the proper time zone.
- In time setting mode, press it to increase the setting values.
- Press and hold it for 3 seconds to receive the RC signal for reception testing.

#### 6. DOWN key:

- Press it to switch 12/24-hour format.
- In time setting mode, press it to decrease the setting values.

## 7. MAX/MIN key:

- Press it to show the maximum and minimum temperature records.
- Press and hold it for 3 seconds to delete the maximum and minimum temperature records.

## 8. ALM ON/OFF key:

- In normal time mode, press it to turn on/off alarm1 & alarm2.
- In alarm time mode, press it to turn on/off alarm and temperature pre-alarm.
- In alarm time mode, press and hold it for 2 seconds to enter the alarm time setting mode.
- In alarm time setting mode, press it to step the setting items.
- Press it once to stop the current alarm when it is sounding.

#### 9. SYNC key:

 Press and hold it for 3 seconds to turn on/off the signal reception of transmitter (915 MHz) manually.

## 10. CHANNEL key:

- Press it to switch between channel 1 and 2.
- Press and hold it for 2 seconds to show the channels automatically, and press it once again to exit the automatic display mode.

## 11. °C/°F key:

- Press it to switch between Celsius and Fahrenheit.

## 12. RESET key:

- Press it to reset all values to default values.
- In case of malfunction, the unit may be required to reset.

RF transmission frequency: 915 MHz

No. of remote unit: up to 2 units

RF transmission range: 330 feet (100 meters)

Radio controlled signal: WWVB

## **Power**

Main unit: 3V, use 2 x AA 1.5V

alkaline battery

Remote sensor: 3 V, use 2 x AA 1.5V

alkaline battery

#### **Dimension**

Main unit: 295 (W) x 195 (H) x 25 (D) mm

Remote sensor: 40 (W) x 132 (H) x 24 (D) mm

-







## SPECIFICATIONS MAIN UNIT

Recommended operating range: 0 °C to 45 °C

32 °F to 113 °F

Resolution: 0.1°C (above -9.9°C)

1°C (below -10°C) 0.1°F (-9.9°F ~ 99.9°F) 1°F (above 100°F & below -10°F)

## **REMOTE SENSOR**

Recommended operating range: -20 °C to 55 °C

-4 °F to 131 °F

Resolution: 0.1°C/°F (above -9.9°C/°F)

1°C/°F (below -10°C/°F)

#### 13. WALL-MOUNTING HOLDER:

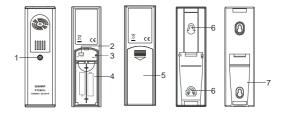
- Use it to support the main unit in the wall mounting.

#### 14. TABLE STAND:

- Use it to stand the clock on the desktop.

#### 15. BATTERY DOOR

#### **TRANSMITTER**



## 1. LED indicator:

- Flashes when the remote unit transmits a reading.

#### 2. CHANNEL slide switch:

- Assign the transmitter to Channel 1 or 2. (Note: Channel 3 is not effective for this model.)

## 3. RESET key:

 Press it to restart the transmitter and return all values to default values.

#### 4. BATTERY COMPARTMENT:

- Accommodates 2 AA size batteries.

#### 5. BATTERY DOOR

#### 6. WALL-MOUNTING HOLDER:

- Use it to support the transmitter on the wall.

#### 7. TABLE STAND:

- Use it to stand the transmitter on the desktop.

## RECEPTION OF TRANSMITTER SIGNAL OPERATING THE WEATHER STATION

- Remove the battery door and insert 2 AA size batteries into the battery compartment as per the polarity information marked on the battery compartment.
- Replace the battery door.
- 3. Press "RESET" key to restart the clock.
- 4. Press "CHANNEL" key to set the desired channel.

## NOTE:

- The building material and position of receiver and transmitter affect the effective range. So try various locations to obtain the best result.
- Place the units away from metal objects and electrical appliances to minimize the interference. Position the receiver within the effective transmission range: 330 feet (100 meters) in usual circumstances.

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 also place it on the desktop by its table stand.





#### **BATTERY REPLACEMENT**

If the low battery indicator "" appears beside the outdoor temperature of main unit, it indicates that you should replace batteries of transmitter at once.

While if the low battery indicator displays beside the indoor temperature, it means that the battery power of main unit is not enough and you should replace batteries of clock immediately.

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





#### NOTE:

Attention! Please dispose of used unit or batteries in an ecologically safe manner.  $\begin{tabular}{c} \end{tabular}$ 

## **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 in the back of it or just simply place it on the desktop by its table stand.

#### **OPERATING THE TRANSMITTER**

- Remove the transmitter from the stand and open the battery door.
- Insert 2 AA size batteries into the battery compartment as per the polarity information marked on the battery compartment.
- Slide "CHANNEL" switch to synchronize the channel with receiver.
- 4. Press "RESET" key individually by a pin to confirm the channel setting.
- Replace the battery door.

#### NOTE:

- To receive the transmitter signal, the channels of receiver and transmitter must be synchronized.
- Once the channel is assigned to a transmitter, you can only change it by removing the batteries or resetting the unit.

#### RECEPTION OF RADIO CONTROLLED TIME SIGNAL

The time and calendar are radio-controlled. The current time and calendar are automatically synchronized with the signal transmitted from USA (WWVB).

When used for the first time (after inserting the batteries or pressing "RESET" key), the clock will start to receive the signals and the reception display will flash in 8 seconds.

#### 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.

#### SIGNAL STRENGTH INDICATOR

The signal indicator displays signal strength in 4 levels. Wave segment flashing means time signals are being received. The signal quality could be classified into 4 types:





Weak signal quality





Acceptable signal quality

Excellent signal quality

#### NOTE:

- The unit will automatically search for the time signal at 2:00 (3:00 or 4:00 is also available if the signal was not received at 2:00), 8:00, 14:00 and 20:00 each day.
- Always place the unit away from interfering sources such as TV set, computer etc.
- Avoid placing the unit on or next to metal plates.
- Closed area such as airport, basement, tower block or factory is not recommended.
- Do not start reception in moving articles such as vehicles or trains.

## **HOW TO READ TEMPERATURE RECORDS**

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

#### NOTE:

- If no signals are received or the transmission is interfered, "---" will appear on the LCD.
- 2. Relocate the clock or transmitter in other positions and make sure the transmission is within the effective range of 30 meters approx.
- 3. After several trials in vain, please reset the clock thoroughly. Try out where your multifunctional alarm clock receives the signals best.

#### CHECKING & DELETING MAX./MIN. TEMPERATURE RECORDS

- Press "MAX/MIN" key once to check the maximum temperature records. Press it twice to check the minimum records. Press it again to exit.
- Press and hold "MAX/MIN" key for 3 seconds to delete the max. and min. temperature records.

MAX. Temperature records



MIN. Temperature records



- The temperature pre-alarm can sound 30 minutes earlier than the alarm only when the outdoor temperature is below 26.0°F (-3.0°C).
- If no key is pressed during the alarm period, the clock will enter the snooze mode automatically. Besides, you can also press "SNOOZE" key once to stop the current alarm and activate the snooze function.
- Once the snooze function is activated, the 4-step crescendo alarm will sound 13 times in 5-minute interval. The alarm duration is 60 seconds.



## **VIEWING THE CHANNEL**

The default channel is Channel 1. Press "CHANNEL" key to view the channels from 1 to 2.

Besides, press and hold "CHANNEL" key for 2 seconds to show the channels automatically; press it once again to exit the automatic display mode.









#### TIME ZONE SETTING

The default time zone is PACIFIC. If your location is not in the Pacific, set the time zone as follows:

- In normal time mode, press "TIME" key to enter the alarm time mode.
- Press "UP" key to select the proper time zone: P=Pacific M=Mountain C=Central E=Eastern
- Press "TIME" key to save the setting and return to normal time mode.

#### 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 synchronize with the exact time and calendar.

- Press and hold "TIME" key for 2 seconds until the Year digit flashes.
- 2. Press "UP" or "DOWN" key to change its value.
- 3. Press "TIME" key once until the Month digit flashes.

9

Press "UP" or "DOWN" key to change its value.

- Repeat the above operations (point 3, 4) to set the below items in this order: Date > Hour > Minute > Second > Day language > +/-23 hours time difference.
- Press "TIME" key to save and exit the setting mode, or let it exit automatically 30 seconds later without pressing any key.

#### NOTE:

- Through "+/-23 hours time difference" setting, the precise time of another area will be shown.
- The 5 languages weekday settings are represented by the below abbreviations: GB=English FR=French DE=German ES=Spanish IT=Italian.

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

## **ALARM TIME SETTING**

- 1. In normal time mode, press "TIME" key to enter the alarm1 (alarm2) time mode.
- Press and hold "ALM ON/OFF" key for 2 seconds until the alarm Hour digit flashes.

- 3. Press "UP" or "DOWN" key to change its value.
- Press "ALM ON/OFF" key once until the alarm Minute digit flashes.
- 5. Press "UP" or "DOWN" key to change its value.
- Press "ALM ON/OFF" key to save and exit the setting mode, or let it exit automatically 30 seconds later without pressing any key.

### NOTE:

- The alarm will be automatically turned on when you set the alarm time.
- The dual-alarm (alarm1 & alarm2) design of this unit provides you with more convenience, and you can set two-alarm time if needed.

## **USING ALARM & TEMPERATURE PRE-ALARM FUNCTIONS**

- 1. Set the alarm time as the above section with alarm1 (alarm2) turned on when you set the alarm time.
- 2. In alarm1 (alarm2) time mode, press "ALM ON/OFF" key once to turn on the temperature pre-alarm with the icon "\*" displayed.
- Press it again to turn off both of them until the icons disappear.

#### NOTE:

1. To turn on temperature pre-alarm, ALARM must be on.