#### REMOTE TRANSMITTER

Recommended operating range: -10°C to 60°C, -50°F to 140°F

Resolution: 0.1°C/°F(above 0°C/32°F), 1°C/°F(below 0°C/32°F)

Humidity measuring range: 20% RH to 95%RH Operating range: 20% RH to 95%RH

Resolution: 1%RH RF transmission frequency: 433.92MHz

Remote transmitter: 1 unit
RF transmission range: maximum 30 meters
Temperature sensing cycle: around 50 seconds

**POWER** 

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

DIMENSION

 $\begin{array}{lll} \mbox{Main unit:} & 280(\mbox{W}) \times 178(\mbox{H}) \times 22(\mbox{D}) \mbox{mm} \\ & 11.0(\mbox{W}) \times 7.0(\mbox{H}) \times 0.86(\mbox{D}) \mbox{inch} \\ \mbox{Remote transmitter:} & 40(\mbox{W}) \times 130(\mbox{H}) \times 24(\mbox{D}) \mbox{mm} \\ \end{array}$ 

 $1.6(W) \times 5.1(H) \times 0.9(D)$ inch

#### FCC INFORMATION:

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.

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.

Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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 \$6.00 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 SPC1034

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

# **SHARP**

# Atomic Wall Clock Instructions & Warranty

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

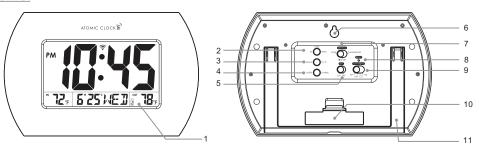
The receiver unit has a clear, easy-to-read display that shows indoor temperature, outdoor temperature, fime, month, date, day. The remote sensor transmits the outdoor temperature. To receive the outdoor temperature, place the sensor anywhere within 30 meters; the 433.92MHz technology means no wire installation is required.

The Atomic Clock will always be accurate to within one second as it receives daily WWVB updates. Daylight Saving Time also automatically updates so there is no need to re-set the clock manually!

# IMPORTANT: If the Atomic Clock does not receive the WWVB signal immediately, wait overnight and it will be set in the morning.

The clock has a built in receiver that automatically synchronizes itself with the WWVB radio signal broadcast by the US Government's National Institute of Standards & Technology (NIST) in Fort Collins, Colorado. The WWVB radio signal daily broadcast ensures that the atomic clock will always display the most accurate date and time.

#### **FEATURES:**



#### Atomic Clock

#### 1. CLOCK DISPLAY:

- Displays time in hours and minutes; calendar display of month, date & day; indoor temperature; outdoor temperature; signal strength indicator; daylight saving (DST).

#### 2. UP / WAVE / 12/24 BUTTON:

- In the TIME / CALENDAR setting mode, press it to increase the setting values. Hold the button for 3 seconds, the display will change rapidly.
- In normal mode, press and hold the button for 3 seconds for receive the RCC signal immediately.
- During the RCC receiving period, press the button again to stop the RCC reception.
- In normal mode, press the button to switch 12/24 time display format.

#### 3. DOWN / °C/°F BUTTON:

- In the TIME / CALENDAR setting mode, press the button to decrease the setting values. Hold the button for 3 seconds, the display will change rapidly.
- In normal mode, press the button to switch temperature unit °C/°F.

#### 4. ENTER / CHANNEL BUTTON:

- In the TIME / CALENDAR setting mode, press the button to confirm the setting
- In normal mode, press the button to switch the between channel 1, 2 and 3 to receive the 433.92MHz signal; press and hold the button for 3 seconds will pairing with the outdoor remote sensor.

#### 5. DST SWITCH:

- In normal mode, slide the switch to ON/OFF the DST function.

#### 6. WALL MOUNT

#### 7. SETTING SWITCH:

- In normal mode, slide the switch to select different setting mode (LOCK/TIME SET/CALENDAR SET).

#### 8. RESET BUTTON:

- In case of malfunction, press the button to reset all values to default values.

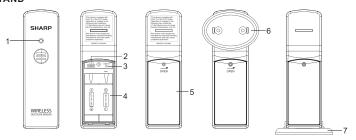
#### 9. TIME ZONE SWITCH:

- In normal mode, slide to select the desired time zone (Pacific Time, Mountain Time, Central Time, Eastern Time).

#### 10. BATTERY COMPARTMENT AND DOOR:

- Use 3 AA size batteries.

#### 11. TABLE STAND



**Remote Transmitter** 

#### 1. LED INDICATOR:

- LED Flashes when the remote unit transmits a reading

#### 2. CHANNEL SLIDE SWITCH (inside battery compartment):

- Assign the transmitter to channel 1, 2 or 3 to receive 433.92MHz signal

#### 3. RESET BUTTON:

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

#### 4. BATTERY COMPARTMENT:

- Use 2 AA Size batteries.

#### 5. BATTERY DOOR

6. WALL MOUNT

# 7. TABLE STAND

### **SETTING UP THE TRANSMITTER:**

- 1. Remove the battery door and insert 2 AA batteries into the battery compartment and follow the polarities marked.
- 2. Slide the switch to Channel 1. Press the RESET button to set the transmitter.
- 3. Press the CHANNEL button at the back of the clock to set channel 1.
- 4. Lock the transmitter battery door with the screw.
- 5. Place the units away from metal objects and electrical appliances to minimize interference. Position the receiver within the effective transmission range 30 meters in usual circumstances.
- 6. If Channel 1 signal is not received properly, change the transmitter slide button to Channel 2 or 3. Press CHANNEL button of the clock to 2 or 3 respectively. Press and hold the CHANNEL button for three seconds. The unit will start to find the new channel.

#### NOTE

- 1. To receive the transmitter signal, the channels of receiver and transmitter must match each other.
- 2. Once the channel is assigned to transmitter, you can only change it by removing the batteries or resetting the unit.

# **SETTING UP THE ATOMIC CLOCK:**

- 1. Remove the battery door from the back of the wall clock and insert 2 AA batteries. Insert them according to the marked polarity.
- 2. Replace the battery door.

# **SIGNAL STRENGTH INDICATOR:**

The signal indicator displays signal strength in 4 levels. Wave segment flashing means time signals are being received.

#### NOTE:

- 1. The unit will automatically search for the time signal at 2:00am (3:00am, 4:00am, 5:00am, 6:00am is also available if the signal was not received at 2:00am)
- 2. Closed area such as airport, basement, tower block or factory is not recommended.
- 3. While the atomic signal is flashing, the control panel is inactive.

#### SUGGESTION:

Make sure you read the instructions before operating this 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 past 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. Areas with access to windows is recommended for better reception.
- 5. Do not start reception in moving articles such as vehicles or trains.









## **DAYLIGHT SAVING TIME (DST):**

The clock has programmed to automatically switch when the daylight saving time is in effect. Your clock will show DST during the summer time if you turn on the DST.

#### TIME ZONE SETTING:

The default time zone is PACIFIC. If your location is not in the Pacific, set the time zone by sliding the TIME ZONE switch to Pacific Time/ Mountain Time/ Central Time/ Eastern Time zone in the normal mode.

#### TIME AND CALENDAR SETTING:

Time and calendar can be set manually. As soon as the transmitter signal is received again, the clock will automatically synchronize with the exact time and calendar.

- 1. Slide the SETTING switch to TIME SET or CALENDAR SET to set the time or calendar.
- 2. Press the UP and DOWN button to change the value and press ENTER button to confirm the setting.
- 3. Follow the sequence: Hour>Minute (TIME) and YEAR>Month>Date>Language (CALENDAR).
- 4. Once the time or calendar is set, slide the switch to LOCK.

#### BATTERY REPLACEMENT:

If the low battery indicator appears beside the outdoor temperature of main unit, it indicates that the transmitter batteries need replacement. If the low battery indicator is displayed at the top left corner, it indicates that the atomic clock batteries need replacement.

#### NOTE:

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

### **BATTERY WARNING:**

- Clean the battery contacts and also those of the device prior to battery installation. Follow the polarity (+) and (-) to place battery.
- Do not mix old and new batteries.
- Do not mix Alkaline, Standard (Carbon Zinc), or Rechargeable (Nickel Cadmium) batteries.
- Incorrect battery placement will damage the clock movement and battery may leak.
- Exhausted battery is to be removed from the product.
- Remove batteries from equipment which is not to be used for an extended period of time.
- Do not dispose of batteries in fire. Batteries may explode or leak.

#### **USING THE WALL MOUNT:**

The transmitter has the desktop and wall mounting structure.

- For the Atomic Clock, use the recessed hold on the back of the clock to hang it.
- For the Transmitter, hang or place the separate wall-mounting part in an area protected from direct rain. Once the stand is mounted, place the transmitter into the stand on the wall.

#### SPECIFICATIONS:

#### MAIN UNIT

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

Resolution: 0.1°C/°F(above 0°C/32°F), 1°C/°F(below 0°C/32°F)

Humidity measuring range: 20% RH to 95%RH Recommended operating range: 20% RH to 95%RH Resolution: 1%RH

Calendar range: from year 2014 to 2099

Radio controlled signal: WWVB