SHARP
SPC936
ATOMIC
WALL CLOCK


# SHARP SPC936 Atomic Wall Clock User Manual



Contents



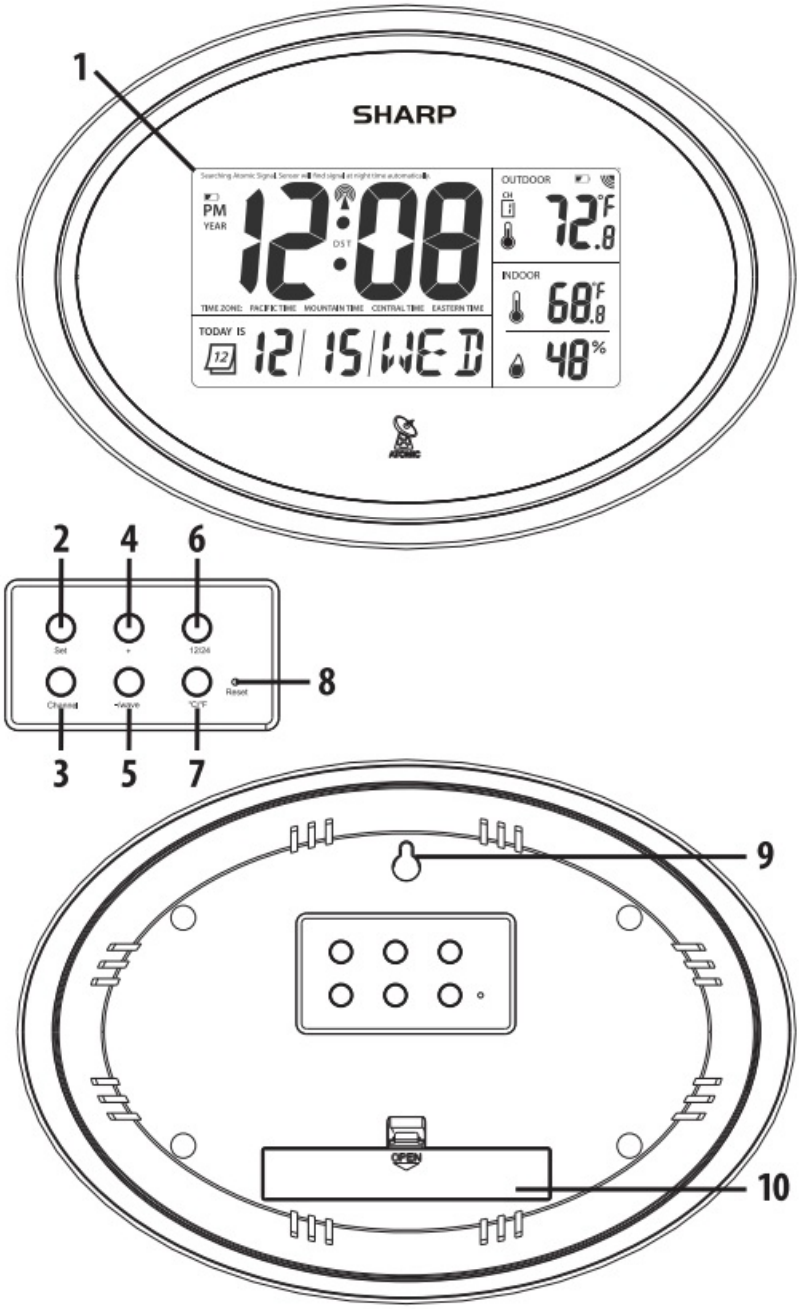
SHARP

## SHARP SPC936 Atomic Wall Clock User Manual


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 and , outdoor temperature, time, month, date, day. The remote sensor transmits the outdoor temperature. To receive the outdoor temperature, place the sensor anywhere within 30 meters; the 433MHz 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 WW/B 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.

### Atomic Clock Features & Controls




## Clock Features & Controls Continued…

1. **CLOCK DISPLAY**
   Displays time in hours and minutes; calendar display of day, month and year: indoor temperature and humidity: outdoor temperature; signal strength indicator: daylight saving (DST); and time zone.
2. **SET BUTTON**
   Press the set, pits to confirm the setting de emer the nine setting mode.
3. **CHANNEL BUTTON**
   In the normal mode, press the button to switch the between channel 1, 2 and 3; press & hold the button for 3 seconds will pairing with the outdoor remote sensor.
4. **+ BUTTON**
   In the TIME setting mode, press it to increase the setting values. Hold the button for 3 seconds, the display will change rapidly.
5. **– / WAVE BUTTON**
   - In the TIME setting mode, press the button to decrease the setting values. Hold the button for 3 seconds,

the display will change rapidly.

- In the 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.

6. **12/24 BUTTON**

   In NORMAL mode, press the 12/24 button to switch time format.

7. **°C/°F BUTTON**

   In NORMAL mode, press the °C/°F button to switch temperature format.

8. **RESET BUTTON**

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

9. **WALL MOUNT**

   Clock can be hung from this location.

10. **BATTERY DOOR & COMPARTMENT**

    Use 2 AA size batteries.

### Daylight Savings 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 pressing -/WAVE button to change the Pacific Time/ Mountain Time/ Central Time/ Eastern Time zone in the normal time mode and will disappear after setting.

### Setting Up The Atomic Clock

- Remove the battery door from the back of the weather station and insert 2 AA batteries. Insert them according to the marked polarity.
- Replace the battery door.
- Press the RESET button on the back of the clock to set and synchronize the transmitter automatically.

### SIGNAL STRENGTH INDICATOR

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

**NOTE:**

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

### Manual Time & 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.

- Press & hold the SET button on the back of the clock for 3 seconds, the year digits will flash.
- Press the + button and -/WAVE button to change the value.
- Press the SET button once until the Month digit flashes, press the + button & -/WAVE button to change it's value.
- Press the SET button once until the Date digit flashes, press the + button & -/WAVE button to change it's value.
- Repeat the above operation to set the below data in this sequence: Month> Date> Language> Hour>Minute> DST(on/off).
- Press the SET button to save and exit the setting mode; or let it exit automatically 20 seconds later without pressing any key.

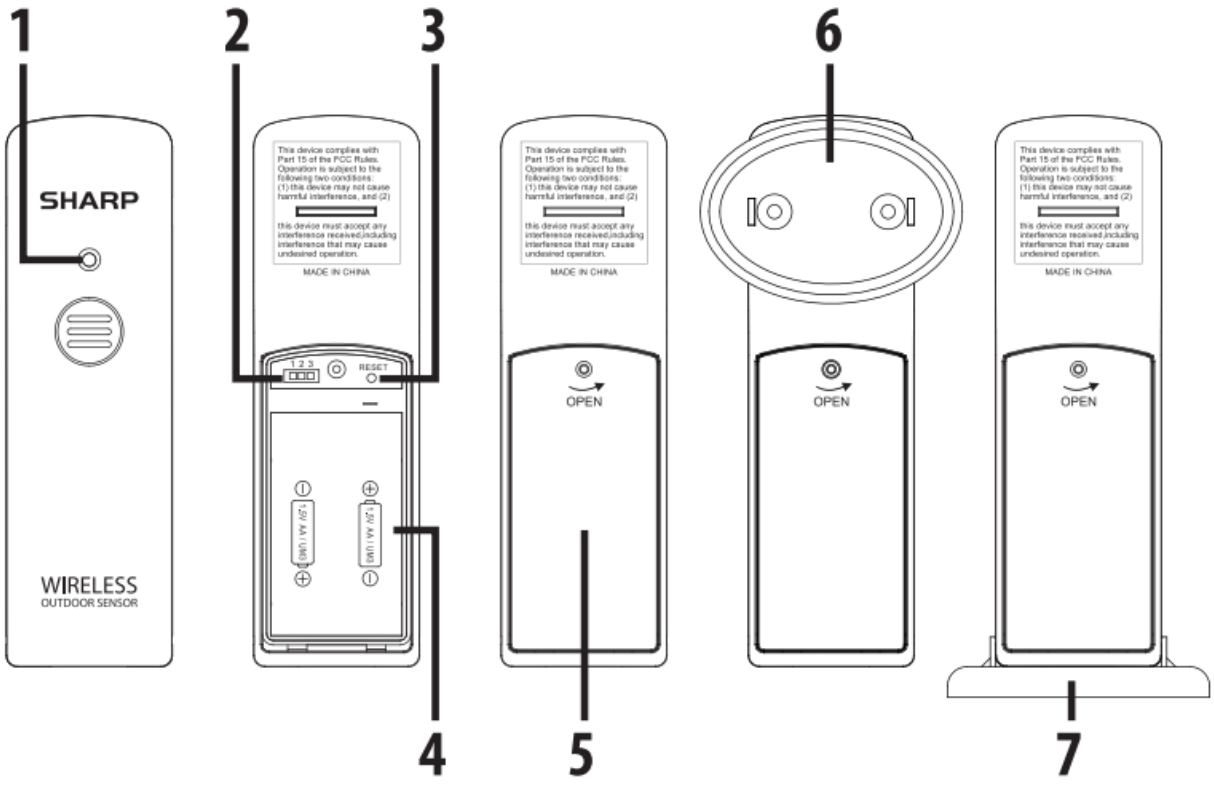
### Using The Wall Mount

The receiver and transmitter both have a 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.

### Remote Transmitter Features & Controls

1.




**LED INDICATOR**

LED Flashes when the remote unit transmits a reading

2. **CHANNEL SLIDE SWITCH**

   Assign the transmitter to channel 1, 2 or 3.

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

- Remove the battery door & insert 2 AA batteries into the battery compartment & follow the polarities marked.
- Slide the switch to Channel 1. Press the RESET button to set the transmitter.
- Press the CHANNEL button at the back of the clock to set channel 1.
- Lock the transmitter battery door with the screw.
- 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.
- 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 & hold the CHANNEL button for three seconds. The unit will start to find the new channel.

**NOTE:**

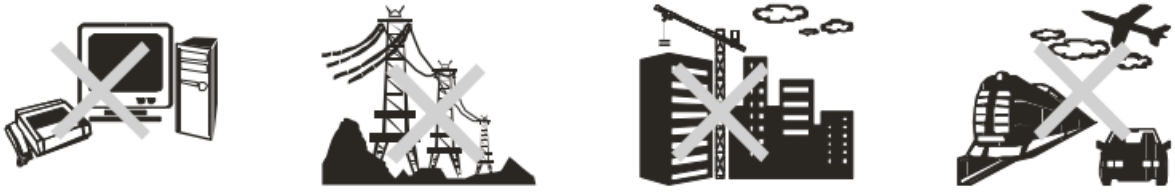
- To receive the transmitter signal, the channels of receiver and transmitter must match each other.
- Once the channel is assigned to transmitter, you can only change it by removing the batteries or resetting the unit.

## 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:**

- It is strongly recommended to start this clock at night and let the clock receive the signal automatically past midnight.
- Always place the unit away from interfering sources such as TV set, computer, etc.
- Avoid placing the unit on or next to metal plates.
- Areas with access to windows is recommended for better reception.
- Do not start reception in moving articles such as vehicles or trains.



## 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 (+) & (-) to place battery.
- Don’t mix old and new batteries.
- Don’t 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.
- Don’t dispose of batteries in fire. Batteries may explode or leak.

## 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 2000 to 2099 |
| Radio controlled signal: | WWVB |

## REMOTE TRANSMITTER

| | |
|---|---|
| Recommended operating range: | -50°C to 70°C, -122°F to 158°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: | 433MHz |
| Remote transmitter: | 1 unit |
| RF transmission range: | Maximum 30 meters (around 100 feet) |
| Temperature sensing cycle: | Around 30 seconds |

## POWER

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

## DIMENSION

| | |
|---|---|
| Main unit: | 300(W) x 210(H) x 25.5(D)mm<br>11.8(W) x 8.3(H) x 1(D)inch |
| Remote transmitter: | 40(W) x 130(H) x 24(D)mm<br>1.6(W) x 5.1(H) x 0.9(D)inch |

### FCC Information

**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 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.



### References

- **User Manual**