

SPC1003/1005 Atomic Weather Station

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.

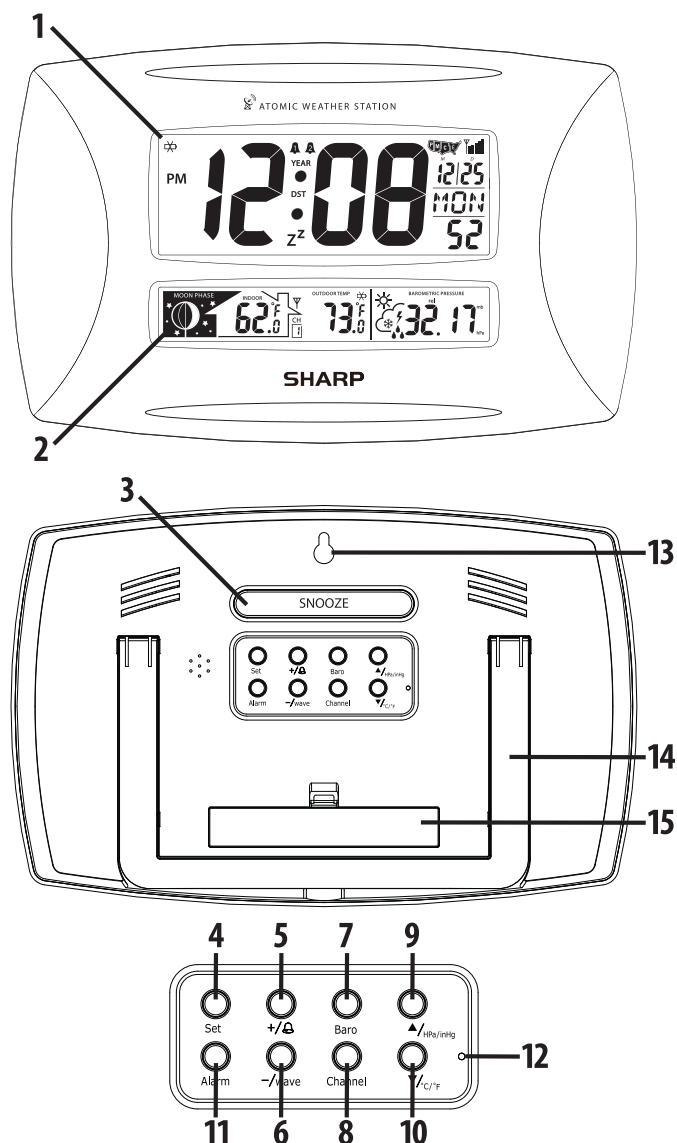
The weather station is equipped with many weather information functions. The unit has a clear, easy-to-read display that shows a visual forecast, indoor & outdoor temperature, barometric pressure, moon phase, time, month, date, day & dual alarm. The remote sensor transmits the outdoor temperature. To receive the outdoor temperature, place the sensor anywhere within 330 feet; the 915MHz 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.

Atomic Clock Features & Controls



Clock Features & Controls Continued...

1) CLOCK DISPLAY (TOP)

- Displays time in hours & minutes; calendar display of day, month & year; signal strength indicator; daylight savings (DST), alarm indicators & time zone.

2) MOON PHASE, TEMPERATURE & BAROMETRIC PRESSURE DISPLAY (BOTTOM)

- Displays moon phase, barometric pressure, indoor & outdoor temperature.

3) SNOOZE BUTTON

- When the alarm is active, press SNOOZE button to stop alarm for 5 minutes. After 5 minutes, the alarm will turn on again.

4) SET BUTTON

- In **TIME** mode, press & hold the **SET** button to enter the time setting mode.
- In **TIME** mode, press the **SET** button to change time zones: Pacific/ Mountain/ Central/ Eastern
- In **TIME** mode, **SET** button to confirm the setting & enter the next setting.

5) +/- BUTTON

- In **TIME & ALARM** mode, press the +/- button to activate the alarm mode. Hold the button for 3 seconds, the display will change rapidly.
- In **TIME** mode, press & hold +/- button for 3 seconds to switch 12/24 hour format.
- In **TIME** mode, press +/- button to increase the setting values.

6) - / WAVE BUTTON

- In **TIME & ALARM** mode, press the - / WAVE button to decrease the setting values. Hold the button for 3 seconds, the display will change rapidly.
- In **TIME** mode, press & hold the - / WAVE button for 3 seconds to receive the RCC signal immediately.
- During the RCC receiving period, press the button again to stop the RCC reception.

7) BARO BUTTON (BAROMETRIC PRESSURE)

- While the clock is running in normal **TIME** mode, press the BARO button to switch relative pressure & absolute pressure; press & hold for 3 seconds

8) CHANNEL BUTTON

- In normal **TIME** mode, press the **CHANNEL** button to switch between channels 1, 2 & 3; press & hold the button for 3 seconds will pair the outdoor remote sensor. See **Setting Up The Transmitter** section

9) ▲ BUTTON

- In normal **TIME** mode, press the ▲ button once to switch the barometric unit abs or inHg.
- In normal **TIME** mode, press & hold the ▲ button for 3 seconds to enter the weather icon setting mode to set the current weather status, press the ▲ button to switch the weather icon. In the weather icon setting mode, press ▲ button to exit the setting mode.
- In the **BAROMETRIC** pressure setting mode, press the ▲ button once to increase the setting value; press & hold for 3 seconds, the display will change rapidly.

10) ▼ BUTTON

- In normal **TIME** mode, press the ▼ button to switch temperature unit °C/°F.
- In the **BAROMETRIC** pressure setting mode, press the ▼ button to decrease the setting value; press & hold for 3 seconds, the display will change rapidly.

11) ALARM BUTTON

- In normal **TIME** mode, press the **ALARM** button to turn on/off alarm 1 & 2.

12) RESET BUTTON

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

13) WALL MOUNT

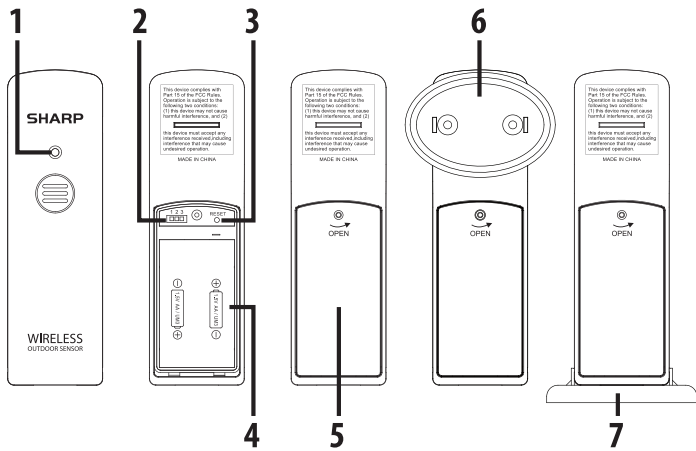
14) TABLE STAND

- The weather station has a built-in stand so it can be viewed from a table surface.

15) BATTERY COMPARTMENT & DOOR

- Use 2 AA size batteries

Remote Transmitter Features & Controls



Transmitter Features & Controls Continued...

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

Using The Wall Mount

The weather station & transmitter both have the desktop and wall mounting structure.

- For the weather station, 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.

Setting Up The Weather Station

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

SIGNAL STRENGTH INDICATOR

- The signal indicator displays signal strength in 5 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.

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.



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 weather station to set channel 1.
- Lock the transmitter battery door with the screw.
- Place the unit away from metal objects & electrical appliances to minimize interference. Position the receiver within the effective transmission range 330 feet (100 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.

Daylight Savings Time (DST)

- The weather station has programmed to automatically update when the daylight saving time is in effect. You must activate the DST setting. In the normal **TIME** mode, press & hold the SET button for 3 seconds, then you can set the Year, Month, Day, Language, Hour, Minute & DST on/off. Your weather station will show DST during summer time if you turn on DST.

Time Zone Setting

- The default time zone is **PACIFIC**. If your location is not in the Pacific, set the time zone by pressing **SET** button to change the **Pacific Time/ Mountain Time/ Central Time/ Eastern Time zone** in the normal **TIME** mode.

Manual Time & Calendar Setting

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

- Press & hold the **SET** button on the back of the weather station for 3 seconds, the year digits will flash.
- Press the **+/-** button & **-/WAVE** button to change the value.
- Press the **SET** button once until the Month/Date flashes.
- Press the **+/-** button & **-/WAVE** button to change Month or Date.
- Press the **SET** button once until the Month or Date digit flashes.
- Press the **+/-** button & **-/WAVE** button to change its value.
- Repeat the above operations 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.

Dual Alarm Time Setting

- In normal **TIME** mode, press the **ALARM** button once to enter **ALARM 1 (A1)** time mode or twice to enter the **ALARM 2 (A2)** time mode.
- In normal **ALARM 1** mode, press & hold the **ALARM** button for 3 seconds until the alarm hour digit flashes.
- Press the **+/-** button & **-/WAVE** button to change value.
- Press the **ALARM** button once until alarm minute digit flashes.
- Press the **+/-** button & **-/WAVE** button to change its value.
- Press the **ALARM** button to save and exit the setting mode; or let it exit automatically 20 seconds later without pressing any key.

NOTE

The alarm will be automatically turned on when you set the alarm time; a bell (🔔 🔔) will show on the top weather station display.

Weather Forecast (Forecast every 6 to 12 Hours)

There are 6 visual weather references:

- Sun, Sun Intervals, Cloudy, Rain, Heavy Rain, Snow

Barometric Pressure Setting

- In **NORMAL TIME MODE**, press & hold the **BARO** button for 3 seconds to enter **BAROMETRIC PRESSURE SETTING MODE**.
- In barometric pressure setting mode, press **▲** & **▼** buttons to adjust the value of relative barometric pressure.
- Press the **BARO** button to save the setting & exit the barometric pressure setting mode & return to normal time mode.

NOTE:

- Press the **BARO** button once to switch to relative barometric pressure (Rel) from Absorb barometric pressure (ABS)
- The barometric pressure will automatically update once an hour.
- The adjustable range of the barometric pressure is 850 - f

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:	915MHz
Remote transmitter:	1 unit
RF transmission range:	Maximum 100 meters (around 330 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

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 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.