

# SMARTRO

## Instruction Manual

Time & Temperature Projection Alarm Clock

Model:SC91



Weather  
Forecast



Time &Temp  
Projection



Time



Indoor & Outdoor  
Temperature



Indoor & Outdoor  
Humidity



Color Digital  
Display



Snooze



°C/°F  
Selectable



Dual Alarm



Adjustable  
Backlit & Projection

## FCC Statement:

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.

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

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

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## 1. Preface

Thanks for choosing this device from SMARTRO.

### Before You Start Using It

- Make sure to read the instruction manual carefully. This information will help you to familiarize yourself with your new device, to learn all of its functions, and to get advice in the event of problems.
- Following the instructions will prevent damage to your device.
- We shall not be liable for any damage occurring as a result of not-following of these instructions.
- Please keep this instruction manual for future reference.

## 2. Attention

- Please follow the instructions for operation.
- Please use the original or manufacturer specified attachments or accessories.
- Do not disassemble the product, so as not to cause trouble or safety hazards.
- Do not place any items on top of the product or damage the product.
- Do not place the product near water source or in a damp place.
- Please terminate use immediately upon damage which is caused as a result of improper use or repair by a non-factory approved

technician.

- Do not place the product in direct sunlight and high temperature places (radiator, electric heater, stove, etc.).
- Keep the product away from strong electromagnetic waves, strong static electricity, or moisture and condensation.
- Use by children below 10 years old should be supervised by an adult.
- Clean your device with a soft damp cloth. Do not use solvents or scouring agents.

## 3. Package Content

- Alarm clock (with battery)\*1
- Instruction manual\*1
- DC power adapter\*1
- Wireless remote sensor \*1

## 4. Product Specification

- Projection time and temperature onto a wall or ceiling (digital)
- Two alarms with Snooze function
- Calendar (up to the year of 2099)
- 12/24 hour format is alternative
- 7 Languages of Weekday selectable: English, German, Italian,

French, Spanish, Dutch and Danish

- Adjustable brightness of backlit and projection
- Humidity: Indoor & Outdoor measurable range: 19%RH ~ 96%RH
- Temperature:
  - Indoor temperature measurement ranges: 15°F (-9.9°C) to 122°F (50°C)
  - Outdoor temperature measurement ranges: -40°F (-40°C) to 158°F (70°C)
  - Temperature alternatively in °F or °C
  - Outdoor thermometer and frost alert
- Minimum/maximum display for air humidity and temperature
- Outdoor dew point temperature and heat index query
- Three level display mold risk
- Wireless remote sensor
  - 3 channels available
  - Wall mount or table stand
  - 200 feet signals range in an open area
- Weather forecast function
- Power supply:

Weather Station:

- Battery: CR2032 x1
- DC power adapter: 5.0V 1.2A

Wireless remote sensor

- Battery: 2xAA 1.5V

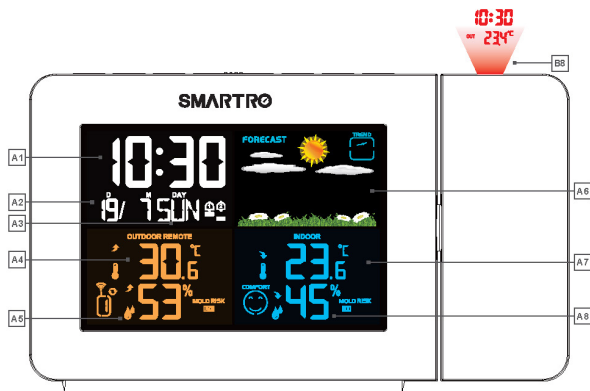
#### **F.Y.I.:**

The wireless remote sensor can work at -40°C to +70°C. Please choose the right battery according to the limit temperature of the wireless sensor:

Alkaline zinc manganese battery can work at -20°C to +60°C.

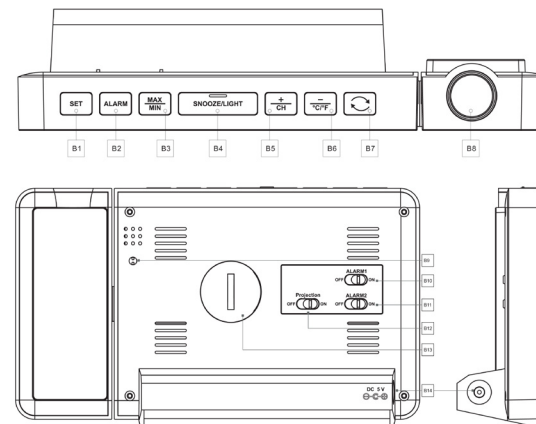
Polymer lithium ion rechargeable battery can work at -40°C to +70°C.

## 5. Function Introduction



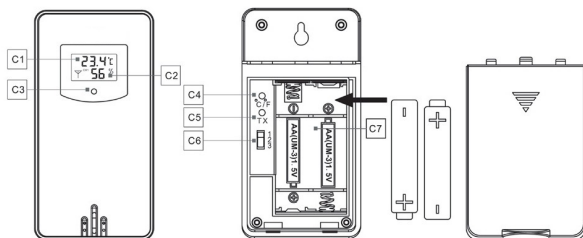
### Part A-Positive LCD

- A1: Time
- A2: Calendar
- A3: Week
- A4: Weather Forecasting
- A5: Outdoor Temperature
- A6: Outdoor Humidity
- A7: Indoor Humidity
- A8: Indoor Temperature



### Part B – Back Button and Power

- B1: "SET" button
- B2: "ALARM" button
- B3: "MAX/MIN" button
- B4: "SNOOZE/LIGHT" button
- B5: "+CH" button
- B6: "°C/°F" button
- B7: "button" (circular arrow icon)
- B8: Projector
- B9: Temperature sensor
- B10: Alarm1 on/off switch
- B11: Alarm2 on/off switch
- B12: Projection on/off switch
- B13: Battery compartment
- B14: Power supply socket



### Part C –Wireless Remote Sensor

C1: LCD display – Temperature

C2: LCD display – Humidity

C3: Transmit signal LED

C4: "°C/°F" button

C5: "TX" button

C6: "CHANNEL 1 or 2 or 3" switch

C7: Battery compartment

## 6. Getting Start

- Plug in the power adapter to the clock.
- When the clock is successfully connected to the power supply, all the symbols on the LCD display will light up. You will hear a "di di di" sound. The projection clock starts to detect indoor temperature and humidity.
- At the same time, unscrew the battery cover according to the OPEN direction note, take out the battery insulation sheet. Screw the battery cover back. This battery is used for keeping manual setting only, it can't be used as a normal working power supply.
- Open the wireless remote sensor battery compartment cover, set channel for the wireless remote sensor through the C7 position and Insert 2 x AA batteries to each wireless remote sensor. Ensure that the battery polarities [ "+" and "-" ] are correct. Close the battery compartment.
- The projection clock starts to make a connection with the wireless remote, displayed by a flashing reception RF antenna symbol in the channel display area on the LCD screen. This procedure will take about 3 minutes maximum.
- After the clock receiver made a connection to the outdoor wireless remote sensor, it will enter the normal mode.

## 7. Manual Setting

- Press and hold the " **SET** " button for more than 3 seconds, 12Hr/24Hr display starts to flash. Use the "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the time format to 24Hr mode or 12Hr mode.
- Press " **SET** " to confirm your setting, the Hour display starts to flash. Use "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the correct hour.
- Press " **SET** " to confirm your setting, the Minute displays starts to flash. Use "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the correct minute.
- Press " **SET** " button to confirm your setting, the Year display 2018 starts to flash, Use "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the correct year.
- Press " **SET** " button to confirm your setting, the Month display starts to flash. Use "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the correct month.
- Press " **SET** " button to confirm your setting, the Date display starts to flash. Use "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the correct date.
- Press " **SET** " button to confirm your setting, the Month and Date icon display starts to flash. Use "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the date display on Month/Date or Date/Month.
- Press " **SET** " button to confirm your setting, the language selection for the Weekday displays starts to flash. Use " + " and "  $\frac{-}{C/F}$  " buttons to select a language.

Language	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
German, GER	SON	MON	DIE	MIT	DON	FRE	SAM
English, ENG	SUN	MON	TUE	WED	THU	FRI	SAT
French, FRE	DIM	LUN	MAR	MER	JEU	VEN	SAM
Italian, ITA	DOM	LUN	MAR	MER	GIO	VEN	SAB
Spanish, SPA	DOM	LUN	MAR	MIE	JUE	VIE	SAB
Dutch, DUT	ZON	MAA	DIN	WOE	DON	VRI	ZAT
Danish, DAN	SON	MAN	TIR	ONS	TOR	FRE	LOR

- Press " **SET** " button to confirm your setting, the weather forecast pattern display starts to flash. Use "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to select the current weather pattern.
- Press " **SET** " to confirm your setting and to end the setting procedures, enter the clock mode.

### Please take note of the following:

- The clock will automatically quit the manual setting mode to clock mode if no button is pressed within 30 seconds.
- There are 7 languages of Weekday: English, German, Italian, French, Spanish, Dutch and Danish.

## 8. Alarm Function Setting

### 8.1 Activate/Deactivate the Alarm Function

- When the switch of alarm 1 or alarm 2 is moved to the " **ON** " position, the symbol of " ① " or " ② " appears on the LCD display. The alarm function will be activated.

- When the switch of alarm 1 or alarm 2 is moved to the " OFF " position, the symbol of " ① " or " ② " disappears. The alarm function will be deactivated.

## 8.2 Manual Setting of the Alarm

- Press " **ALARM** " button can switch the display ALARM1 time or ALARM2 time.
- Press and hold " **ALARM** " button for more than 3 seconds the hour display of the Alarm 1 starts to flash. Use the "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the required hour.
- Press " **ALARM** " button to confirm your setting, the Minute display of the Alarm 1 starts to flash. Use the "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the required minute.
- Press " **ALARM** " button to confirm your setting, the Repeat icon "M-F" of the Alarm 1 starts to flash. Use the "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the alarm repeat in " **M-F** ", " **S-S** " or " **M-F** " and " **S-S** ".
- Press " **ALARM** " button to confirm your setting, the snooze time of the Alarm 1 starts to flash. Use the "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the snooze time you need or turn off the Snooze function.
- Press " **ALARM** " button to confirm your setting, the Hour display of the Alarm 2 starts to flash. Use the "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the required hour.
- Press " **ALARM** " button to confirm your setting, the Minute display of the Alarm 2 starts to flash. Use the "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the required minute.

- Press " **ALARM** " button to confirm your setting, the repeat icon " **M-F** " of the Alarm 2 starts to flash. Use the "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the alarm repeat in " **M-F** ", " **S-S** " or " **M-F** " and " **S-S** ".
- Press " **ALARM** " button to confirm your setting, the snooze time of the Alarm 2 starts to flash. Use the "  $\frac{+}{CH}$  " and "  $\frac{-}{C/F}$  " buttons to set the snooze time you need or turn off the Snooze function.
- Press " **ALARM** " button to confirm your setting and to end the setting procedure.
- Alarm repeat setting.
  - M-F:The alarm function will be activated from Monday to Friday.
  - S-S:The alarm function will be activated on Saturday and Sunday.
  - M-F and S-S:The alarm function will be activated throughout the week.

### Please take note of the following:



- The clock will automatically switch from setting mode to normal mode if no button is pressed within 30 seconds.
- The alarm will sound for 2 minutes if you do not deactivate it by pressing any button. In this case the alarm will be repeated automatically after 24 hours.



### 8.3 Turn off the Alarm Tone

- Alarm tone will automatically turn off after 2 minutes or you can press any button except " **SNOOZE/LIGHT** " to turn off the alarm tone. The alarm will repeat automatically at the same time of the next day.



### 8.4 Snooze Function

- Under the Snooze function activated status. You can activate the Snooze function by pressing " **SNOOZE/LIGHT** " when the alarm is ringing. The symbol of "  " or "  " starts to flash, then alarm will ring again after the Snooze time.
- Under the Snooze function activated status. Press any button except " **SNOOZE/LIGHT** " button or press and hold " **SNOOZE/LIGHT** " button for 2 seconds to exit the snooze mode.
- If one alarm is in Snooze function, the other alarm rings, it will automatically stops the Snooze function of the first alarm.

#### Please take note of the following:

- The alarm will keep ringing for 2 minutes if you do not deactivate it by pressing any button. In this case the alarm will automatically repeat the next day.
- The ring of the alarm changes 4 times in total during the past 2 minutes.
- The Snooze time setting range: 5 ~ 60MIN, OFF, when set to OFF, means no Snooze function.

## 9. Projection Setting

- When the projection shift switch is pushed in the " **ON** " position, the projection display will light up.
- When the projection shift switch is pushed in the " **OFF** " position, the projection display will be closed. Under this states, press " **SNOOZE/LIGHT** " button to light up the projection for 15 seconds.
- Press and hold "  " button for about 3 seconds to switch the brightness of projection from high to low, or low to high.
- Shot press "  " button to adjust the projection angle by 180°.
- The suggested distance of projection is 3.3 ~ 9.8 ft (1 ~ 3 m). When there is no light at night, the clock can clearly display the time and temp on the wall or ceiling.
- The contents of the projection display are time and indoor or outdoor temperature composition. The projection will circularly display every 5 seconds for indoor / outdoor temperature.

## 10. Backlit Adjustment

- When the clock is powered by DC power adapter, the battery will automatically disconnect with the power supply, the backlit will be bright all the time.
- Press " **SET** " button to adjust 4 backlit brightness, light - medium - low - out.
- Press " **SNOOZE/LIGHT** " button to light up backlit for 15 seconds when the backlit in out status.

## 11. Wireless Remote Sensor Pairing & Manual Setting

### 11.1 Wireless Remote Sensor Pairing

#### Step 1:

- Connect the weather station with power supply.
- Insert 2 x AA batteries to each wireless remote sensor.

#### Step 2:

- Select channel through the "1 2 3" knobs for the wireless remote sensor. The indicator light up once to indicate the detected temperature and humidity were sent out by wireless remote sensor.
- Select a channel for the weather station that corresponds to the wireless remote sensor. Press "  $\frac{+}{CH}$  " button to select CH1, CH2, CH3 or CH1 to CH3 (every 5 seconds automatically switch a channel).
- The weather station can connect up to 3 wireless remote sensors at the same time. If multiple wireless remote sensors were used simultaneously, they can not be set as the same channel (a total of 1, 2, 3 channel can be set).
- When the weather station successfully receives signals from the wireless remote sensor, the temperature and humidity detected by the wireless remote sensor are displayed on " **OUTDOOR REMOTE** " column of the weather station.

### 11.2 Manually Start the Wireless Remote Sensor Signal Reception

If "--" displayed on the weather station, it indicates the weather

station failed to receive signals from wireless remote sensor, please take following operations.

- Press and hold "  $\frac{+}{CH}$  " button for 3 seconds to receive signals manually. The outdoor temperature will show an animation of the RF antenna symbol, the weather station will try to receive signals from the wireless remote sensor again.
- Press " **TX** " button on wireless remote sensor to send out signals manually.


### 11.3 °C/°F Temperature Display

The temperature displayed on wireless remote sensor either in °C or °F. Briefly press " **°C/°F** " button allows you to switch between the individual modes.

### 11.4 Placement of wireless sensors

- The wireless remote sensor is not waterproof.
- The sensor can be placed anywhere (indoor or outdoor) you want to measure the temperature remotely.
- If you want to measure the outdoor temperature, please place the sensor outside away from direct sunlight and rain such as under eaves or on a porch.

#### Please take note of the following:

- When the outdoor temperature is between  $-1^{\circ}\text{C} \sim 2.9^{\circ}\text{C}$  ( $30.2^{\circ}\text{F} \sim 37.3^{\circ}\text{F}$ ), the frost alarm function will be activated and a flashing "  " symbol will be displayed on the weather station.

## 12. Temperature

### 12.1 Display and Trend of Temperature/Humidity

- The current indoor temperature/humidity and the temperature/humidity trend (indoor) are shown on the LCD display.
- After connected with the outdoor sensor successfully, the outdoor temperature/humidity and the temperature/humidity trend (outdoor) can be shown on the LCD display.

You may see the following displays:

↗: The temperature/humidity is rising.

↘: The temperature/humidity is falling.

No display: The temperature/humidity is remaining constant.

### 12.2 °C or °F Temperature Display

- The temperature displayed on the weather station either in °C or °F. Briefly pressing the " $\frac{°C}{°F}$ " button allows you to switch between the individual modes.

### 12.3 Max/Min Temperature & Humidity, Dew Point Temperature and Heat Index

- To toggle indoor/outdoor sensor maximum, minimum temperature data, outdoor sensor dew point temperature date, heat index, press the " $\frac{MAX}{MIN}$ " button:
- Once to display the maximum temperature values of indoor and outdoor sensor.

- Twice to display the minimum temperature values of indoor and outdoor sensor.
- Three times to display the dew point temperature values of outdoor sensor.
- Four times to display the heat index values of outdoor sensor.
- Five times to return to the current temperature levels.
- To reset the maximum and minimum temperature, press and hold down the " $\frac{MAX}{MIN}$ " button more than 2 seconds. This will reset all minimum and maximum data recorded to the current displayed values.

**Please take note of the following:**

- If the temperature reading is below the measurement range, LL.L will be displayed.
- If the temperature reading is above the measurement range, HH.H will be displayed.

### 12.4 Outdoor Temperature Frost Alarm

- When the outdoor temperature is between  $-1^{\circ}\text{C} \sim 2.9^{\circ}\text{C}$  ( $30.2^{\circ}\text{F} \sim 37.3^{\circ}\text{F}$ ), the frost alarm function will be activated and a flashing " $\text{ice}$ " symbol will be displayed on the weather station.

### 12.5 Outdoor Sensor Mold Risk

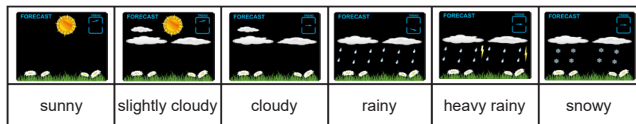
- Moldy risk total 3 levels: LO ME and HI, when the risk level is HI, please check the room or outdoor sensor and pay attention to dehumidification.

## 13. Weather Forecast

### 13.1 Weather Forecast Statement

- The weather station calculates weather forecast for the next 12 hours based on the barometric pressure trend.
- The weather forecast can't be compared with the professional weather services supported by satellites and high performance computers. It provides an approximate indication of current developments.
- Please take the weather forecast from local weather station as authoritative.

### 13.2 The Symbols of Weather Forecast



#### Please take note of the following:

- When the wireless sensor detects that the outdoor temperature falls below -4°C (24.8°F) in a rainy day. The weather forecast will display snowy (The default detection temperature is from CH1 to CH2, CH3).

### 13.3 Barometric Pressure Trend

You may see the following symbols:

- The barometric pressure will rise.
- The barometric pressure will remain constant.
- The barometric pressure will fall.

## 14. Low Battery

- If the " **INDOOR** " column displays battery icon " ", you need to replace the weather station's battery as soon as possible.
- If the " **OUTDOOR REMOTE** " column displays battery icon " ", you need to replace the outdoor sensor battery corresponding to the current displayed channel.

## 15. Troubleshooting

PROBLEM	CAUSE	COUNTERMEASURE
No projection or backlit.	Clock did not connect with DC power adapter.	Connect the clock with DC power adapter.
	Backlit or projection was turned off.	Press " <b>SET</b> " button to adjust the backlit brightness. Switch on the projection.
Projection not clear.	Projection distance is too close or too far.	Keep the projection distance to 3.3 ~ 9.8 ft (1 ~ 3 m).
		Press and hold "  " button for 3 seconds to adjust the brightness of projection from low to high.

Projection image upside down.		Short press "↻" button to adjust the angle by 180°.
Backlit is too bright or too dark.		Press "SET" button to adjust 4 backlit brightness, light - medium - low - out.
Can't display the outdoor temperature.	The batteries are depleted.	Replace new batteries for outdoor sensor.
	The weather station can't receive outdoor sensor's signals.	Press and hold "⊕/CH" button for 3 seconds to receive signal manually. Press "TX" button on the outdoor sensor to send out signals manually.
	The displayed channel of the weather station is different with the channel of the outdoor sensor.	Select corresponding channel through the "1 2 3" knobs for the outdoor sensor or press "⊕/CH" button to switch the weather station displayed channel.
Display an inaccurate outdoor temperature.	The outdoor sensor is exposed to direct sunlight or rain.	Avoid the outdoor sensor with direct sunlight and rain.
Fuzzy projection/ Missing pixels projection image/ Have trouble with manual setting.		Contact after-sales service.

## 16. After-sales Support

Please contact us if your device fails to work despite these measures or your experience with us is less than perfect in anyway.

Or Join our Instagram or Facebook group for more support and discount information.



: support@smartro.co



: +1 (323) 287-5798



: [http://bit.ly/smartro\\_01](http://bit.ly/smartro_01)



: smartro\_01

## 17. Waste Disposal

- This product has been manufactured using high-grade materials and components which can be recycled and reused.
- As a consumer, you are legally required to take them to your retail store or to an appropriate collection site depending on national or local regulations in order to protect the environment.
- The symbols for the heavy metals contained are: Cd=cadmium, Hg=mercury, Pb=lead.
- Please do not dispose of this instrument in household waste. The user is obligated to take end-of-life devices to a designated collection point for the disposal of electrical and electronic equipment, in order to ensure environmentally-compatible disposal.



## **After-sales Support**



: support@smartro.co



: +1 (323) 287-5798



: [http://bit.ly/smartro\\_01](http://bit.ly/smartro_01)



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