

# Instruction Manual

for Smartro

Projection Alarm Clock with Thermometer

SM3531B



## Read Before Use:

Important notes when you start to use this projection clock.

1. Please set the time zone manually before the first use and reset it EVERY TIME after restart.  
(See Instructions 7.1 Manual Setting)
2. Customer who lives in AZ, please turn off the Daylight Saving Time (DST) function.
3. Press the "-" button and hold it down for about 3 seconds to adjust projection image by 180°. (See Instructions 13 Projection)

Contact us via message if you are NOT SATISFIED with this projection clock and need to RETURN, REFUND, or to contact after-sales support.

Contact Us: Email: [support@smartrostore.com](mailto:support@smartrostore.com)  
Telephone: +1(323)287-5798

<http://metricpioneer.com/free-download/>

# Instruction Manual

Thanks for choosing this device from Smartro.

## 1. 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 faults.
- Following the instructions will prevent damage to your device and loss of your statutory rights arising from defects due to incorrect use.
- We shall not be liable for any damage occurring as a result of non-following of these instructions.
- Likewise, we take no responsibility for any incorrect readings and for any consequences which may result from them.
- Please take particular note of the safety advice!
- Please keep this instruction manual for future reference.

## 2. Scope of Delivery

- Radio-controlled projection weather station
- Wireless Remote Sensor
- Instruction manual
- Power adaptor

## 3. Field of Operation and All the Benefits of Your New Device at a Glance

- Projection of the time and temperature onto a wall or ceiling (digital)
- Two alarms with Snooze function
- Weather forecasting function
- Radio-controlled time function
- Calendar (Up to the Year of 2099)
- 12/24 hour format selectable
- Colorful Backlight
- Temperature:
  - Indoor temperature:  $-9.9^{\circ}\text{C} \sim 50^{\circ}\text{C}$  ( $14^{\circ}\text{F} \sim 122^{\circ}\text{F}$ )
  - Outdoor temperature:  $-40^{\circ}\text{C} \sim 70^{\circ}\text{C}$  ( $-40^{\circ}\text{F} \sim 158^{\circ}\text{F}$ )
  - $^{\circ}\text{C} / ^{\circ}\text{F}$  selectable
- Wireless Remote Sensor
- Wall Mounting or Table Stand
- 433.92MHz RF transmitting frequency
- 60-meter transmission range in an open area
- Battery: LR03 AAA
- DC Power: DC 5V 1.2A
- USB charger function

## 4. For Your Safety

- This product is exclusively intended for the field of application described above. It should only be used as described within these instructions.
- Unauthorized repairs, modifications or changes to the product are prohibited.



**Caution! Risk of electrocution!**

- The device and the mains adapter must not come into contact with water or moisture. Only suitable for operation in dry interiors.
- Do not use the unit if the housing or the mains adapter is damaged.
- Keep the unit out of reach of persons (including children) who cannot fully appreciate the potential risks of handling electrical equipment.
- Pull the plug out of the socket immediately if any fault occurs or if the unit is not used for a long period of time.
- Only use the supplied mains adapter.
- Do not pull the plug out of the socket by its lead.
- Route the mains lead so that it does not come into contact with sharp-edged or hot objects.

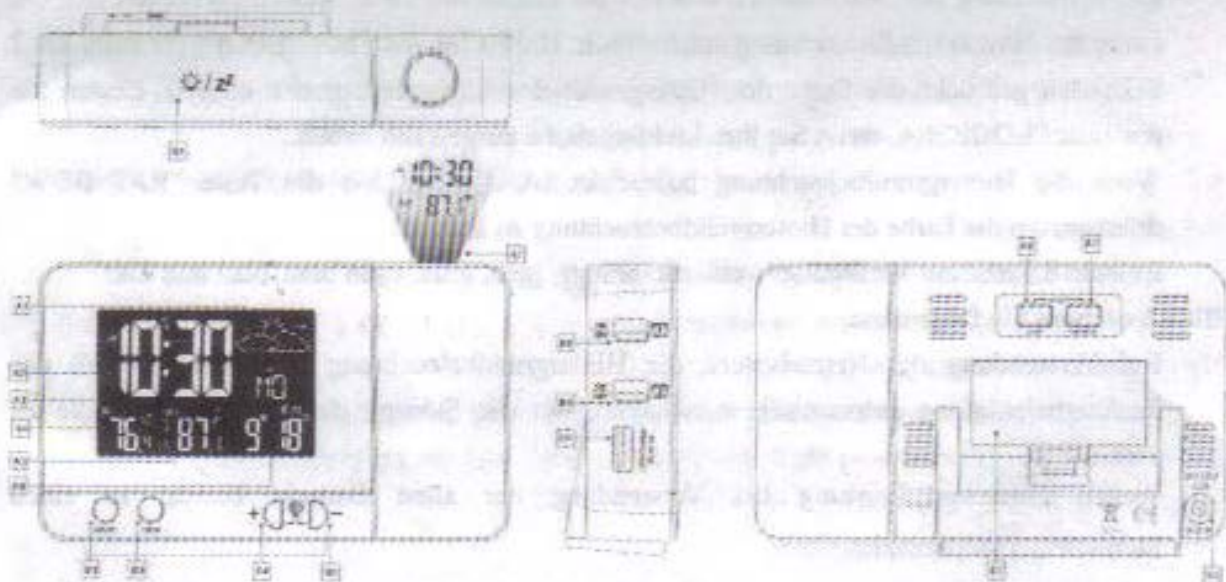
**⚠ Caution! Risk of injury!**

- Keep this device and the batteries out of the reach of children.
- Batteries must not be short-circuited, taken apart, recharged or thrown into a fire. Risk of explosion!
- Batteries contain harmful acids. Low batteries should be changed as soon as possible to prevent damage caused by leaking. Never use a combination of old and new batteries together or use different types of batteries.
- Wear chemical-resistant protective gloves and safety glasses when handling leaking batteries.

**⚠ Important information on product safety!**

- Do not place your product near extreme temperatures, vibrations or shocks.

**5. Functions**



**Part A: LCD Display**

- A1: Weather Forecasting
- A2: Time
- A3: Week
- A4: Indoor Temperature
- A5: Outdoor Temperature
- A6: Month and Date

## A7: Projection Display: Time and Indoor/Outdoor Temperature

### Part B: Button and Power

B1: "☀️ / zZ" Touch button

B2: "MODE" button

B3: "MEM" button

B4: "+" button

B5: "-" button

B6: "LOOP" button

B7: "RAINBOW" button

B8: Alarm 1 on/off switch

B9: Alarm 2 on/off switch

B10: USB charger output socket

B11: Battery compartment

B12: Power supply socket



### Part C: Wireless Remote Sensor

C1: Battery compartment

## 6. Initial Operation:

- Open the battery compartment of weather station and insert two new 1.5V AAA batteries. Ensure that the battery polarities [ "+" and "-" ] are correct.
- When you insert the batteries, all the symbols on the LCD display will light up for 3 seconds. You will hear a "beep" sound. The weather station starts to detect indoor temperature.
- Open the battery compartment of Wireless Remote Sensor and insert new two 1.5V AAA batteries. Ensure that the battery polarities [ "+" and "-" ] are correct.
- The weather station will now start to make a connection to the Remote Sensor, displayed by a flashing reception RF antenna symbol in the "OUT" display area on the receiver. This operation takes about 3 minutes.
- After the receiver has made a connection to the remote sensor, it will enter the radio-controlled time receive mode.

### 6.1 Radio-controlled time reception

- Change the batteries, or restart the device. After 7 minutes, the weather station automatically starts the WWVB signal search. The radio mast symbol starts to flash.
- At 1:00 / 2:00 / 3:00 am, the weather station automatically carries out the synchronization procedure with the WWVB signal to correct any deviations to the exact time. If this synchronization attempt is unsuccessful (the radio mast symbol disappears from the display), then the next reception takes place the next hour and so on until the reception is successful. This procedure is automatically repeated up to a total of 5 times. If the reception is not successful, then the next attempt will take place the next day at 01:00 am.
- To start manual WWVB signal reception, press and hold both "+" and "-" button at the same

- time for a few seconds. If no signals are received within 7 minutes, the search of WWVB signal stops. (The radio mast symbol disappears.) The next reception takes place the next hour.
- During radio-controlled time reception, to stop searching WWVB signal, press and hold the “-” button for more than 2 seconds.

**Please take note of the following:**

- A flashing radio mast symbol indicates that the WWVB signal reception starts.
- A continuously displayed radio mast symbol indicates that the WWVB signal is received successfully.
- The recommended distance to any interfering sources like computer monitors or TV sets is at least 2.5 meters.
- The received signal is naturally weakened in rooms with concrete walls (cellars, basements) and in offices. In such extreme circumstances, place the device close to the window.
- During the RC reception mode, only the “-” button works while the other buttons have no function.
- If you want the other buttons to function again, press and hold the “-” button for more than 2 seconds to quit the RC reception mode.

**7. Operation**

**7.1 Manual Setting**

- Press “MODE” button once, you can switch the symbol of calendar to the symbol of Alarm 1 / Alarm 2.
- Press and hold the “MODE” button for more than 2 seconds, the Year display starts to flash. Press “+” / “-” button to adjust year. Press “MODE” button to confirm the setting.
- The Month display starts to flash. Press “+” / “-” button to adjust month. Press “MODE” button to confirm the setting.
- The Date display starts to flash. Press “+” / “-” button to adjust date. Press “MODE” button to confirm the setting.
- The symbol of Month and Date starts to flash. Press “+” / “-” button to choose between Month/Date and Date/Month. Press “MODE” button to confirm the setting.
- The Time Zone display starts to flash. Press “+” / “-” button to set the correct time zone. (PST:-08, MST:-07, CST:-06 and EST:-05) Press “MODE” to confirm the setting.
- The DST display starts to flash. Press “+” / “-” button to turn on / off the DST function. Press “MODE” to confirm the setting.
- The symbol of 12H or 24H starts to flash. Press “+” / “-” button to choose 12H or 24H system. Press “MODE” to confirm the setting.
- The Hour display starts to flash. Press “+” / “-” button to adjust hour. Press “MODE” to confirm the setting.
- The Minute display starts to flash. Press “+” / “-” button to adjust minute. Press “MODE” button to confirm the setting.
- The symbol of temperature unit starts to flash. Press “+” / “-” button to choose the temperature unit (°C / °F). Press “MODE” button to confirm the setting.
- The symbol of weather forecast pattern starts to flash. Press “+” / “-” button to select the current weather pattern. Press “MODE” to confirm the setting and end the setting procedure.

**Please take note of the following:**

- The weather station will automatically quit the setting mode if no button is pressed within 20 seconds.
- American Time Zones:  
EST: Eastern Standard Time (-5)  
CST: Central Standard Time (-6)  
MST: Mountain Standard Time (-7)  
PST: Pacific Standard Time (-8)
- Time zone must be chosen correctly according to the area of weather station. Or the time will be incorrect when the signal is received.
- When Daylight Saving Time (DST) is not implemented in the area, turn off the DST function.

## 8. Alarm

### 8.1 Manual Setting of the Alarm

- Press and hold "MEM" button for more than 2 seconds, and the hour display of Alarm 1 starts to flash. Press "+" / "-" button to set the hour. Press "MEM" button to confirm the setting.
- The minute display of the Alarm 1 starts to flash. Press "+" / "-" button to set the minute. Press "MEM" button to confirm the setting.
- The hour display of the Alarm 2 starts to flash. Press "+" / "-" button to set the hour. Press "MEM" button to confirm the setting.
- The minute display of the Alarm 2 starts to flash. Press "+" / "-" button to set the minute. Press "MEM" button to confirm the setting and end the setting procedure.

#### Please take note of the following:

- The weather station will automatically switches from setting mode to normal mode if no button is pressed within 20 seconds.

### 8.2 Activate/Deactivate the Alarm Function

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

### 8.3 Turn off the Alarm

- Press any button except the "🔔 / ZZ" to turn off the alarm. It is not necessary to reactivate the alarm. It will reactivate the alarm function automatically.
- If it is not stopped manually, the alarm will automatically turn off after 2 minutes and will be reactivated at the same time.

#### 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 be repeated automatically after 24 hours.
- The ring of the alarm is a rising crescendo of voice, which changes 4 times in total during the past 2 minutes.

### 8.4 Snooze Function

- You can activate the snooze function by touching the "🔔 / ZZ" button. The alarm will ring again in 5 minutes.

## 9. Wireless Transmission:

- When the weather station receives signals from the Wireless Remote Sensor successfully, outdoor temperature ("Out") is displayed on the weather station.
- The weather station can connect up to three Wireless Remote Sensors. When the weather station connects to multiple Sensors, the Wireless Remote Sensor cannot choose the same channel at the same time. (The Wireless Remote Sensor has 3 selectable channels: channel 1, channel 2, and channel 3.)
- Press the "+" button to switch from the display of channel 1 outdoor temperature to the display of channel 2 outdoor temperature.
- If the weather station fails to receive wireless transmission from Remote Sensor ("--" is displayed on the LCD), press and hold "+" button for more than 2 seconds to receive transmission manually. The outdoor temperature will show an animation of the RF antenna symbol, the weather station will try again to receive the wireless signal of the Remote Sensor.

**Please take note of the following:**

- When the Wireless Remote Sensor is set up a different channel, the outdoor temperature ("OUT") will switch to the same channel with Remote Sensor. If there is no signal transmission on the channel, "--" will be displayed on the LCD.
- When the Wireless Remote Sensor has no channel selection function, the Sensor defaults to channel 1.


## 10. Temperature


### 10.1 The Display of the Temperature and Temperature Trend


The current indoor temperature and the temperature trend (indoor) are shown on the LCD display.

After connected with the Wireless Remote Sensor successfully, the outdoor temperature and the temperature trend (outdoor) can be shown on the LCD display.

You may see the following symbols:

 The temperature is rising.

 The temperature remains constant.

 The temperature is falling.

### 10.2 Maximum/Minimum temperature

- To change the data of indoor/outdoor maximum, minimum temperature, press the "MEM" button.
- Press the "MEM" button once to show the maximum temperature values.
- Press the "MEM" button twice to show the minimum temperature values.
- Press the "MEM" button three times to return to the current temperature levels.
- To reset the maximum and minimum temperature, press and hold the "-" button for more than 2 seconds.

**Please take note of the following:**

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


### 10.3 Outdoor Temperature Frost Alarm

- When the outdoor temperature is between  $-1^{\circ}\text{C}$  ~  $+3^{\circ}\text{C}$  ( $+30^{\circ}\text{F}$  ~  $+37^{\circ}\text{F}$ ), the frost alarm function will be activated and the symbol of "❄" will be flashing.

## 11. Low battery

- If in the "IN" column, the LCD display shows the symbol of "🔋", please replace the







battery of the weather station as soon as possible.

- If in the "OUT" column, the LCD display shows the symbol of "", please replace the battery of Wireless Remote Sensor as soon as possible.

## 12. The Weather Forecast

- The weather station calculates the weather forecast for the next 12 hours based on the barometric pressure trend.
- The weather forecast of the weather station can't compare to that of professional weather services supported by satellites and high performance computers. It provides an approximate indication of current developments.
- Please take the weather forecast from your local weather forecasting service into account as well as the weather forecast of the weather station. If there are discrepancies, please use the former as authoritative.

### 12.2 The Symbols of Weather Forecast:

					
sunny	slightly cloudy	cloudy	rainy	heavy rainy	snowy

### 12.3 The weather station can display the 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.


## 13. Projection

- When using the battery of the weather station, touch " / Z<sup>2</sup>", the projection will turn on for a few seconds.
- When using the power adapter, the projection will always light up.
- Press the "-" button and hold it down for about 3 seconds to adjust projection image by 180°.
- The effective distance of projection is 1~ 3 meters. When there is no light at night, the weather station can clearly display the contents of the projection on the wall or ceiling.
- Time and indoor / outdoor temperature will be displayed on the wall or ceiling.

### Please take note of the following:

- When using the power adapter, during Radio-controlled reception, in order to prevent the interference of electric wave, the projection display will turn off automatically.

## 14. Backlight

- When using the battery of the weather station, touch " / Z<sup>2</sup>", the backlight will light up for a few seconds.
- When using the power adapter, the battery will automatically disconnect the power supply, and the backlight will always light up if you don't turn it off manually.
- Press the "-" button to adjust the brightness of the backlight. You can adjust the brightness for 4 times: 3 different brightness or turn off the backlight. When the backlight is off, touch



“☀/Z” to turn on the backlight. It will light up for a few seconds. Choose the brightness of backlight or turn off the backlight according to your personal preferences.

- When using the power adapter, press “LOOP” button once, the backlight will automatically change the color. Press and hold the “LOOP” button for more than 2 seconds, the color of backlight will be changing fast. Release the “LOOP” button when you have selected your favorite color.
- When the backlight is on, press the “RAINBOW” button to change the color of backlight. There are 8 colors selectable: white, red, orange, yellow, green, cyan, blue, and purple.

**Please take note of the following:**

- When using the power adapter, during Radio-controlled, in order to prevent the interference of electric wave, the backlight will turn off automatically.
- Since the power is not enough when using the old battery, there will be color difference. Please use the power adapter as far as possible.

**15. USB Charger**

- When using the power adapter, the USB socket can charge the handheld mobile devices.

**16. Care and Maintenance**

- Clean your device with a soft damp cloth. Do not use solvents or scouring agents.
- Remove the batteries and pull out the plug of the socket if you do not use the device for a long period of time.
- Keep the device in a dry place.

**17. Troubleshooting**

**Problem A: No display**

- Ensure that the battery polarity is correct.
- Change the batteries.

**Problem B: No projection**

- Check the power adapter.

**Problem C: No WWVB Reception**

- Change the location.
- Remove the batteries and insert them again.
- Manual clock setting

**Problem D: Incorrect indication**

- Change the batteries.

If your device fails to work despite these measures, please contact the seller from whom you purchased it.

**18. Waste Disposal**

- This product has been manufactured using high-grade materials and components which can be recycled and reused.
- Never dispose of empty batteries and rechargeable batteries in household waste.
- 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.

