Thermo Recorder
Push Wireless RTR-61

Wireless Core Temperature Data Logger
User’s Manual

What is RTR-61?
Thermo Recorder Push Wireless RTR-61 is a handy-type device which acts both as a thermometer and a temperature recorder, which has been designed to easily measure and record the internal temperature of food items and liquid temperature using a needle-type sensor.

This product has been designed to meet IP44 standards (splash resistant; rated for use in daily life).

The unit incorporates a battery life warning function, which informs the user when it is time to replace the battery. When the battery power becomes low, all normal operations will stop in order to protect the data.

The LCD Backlight allows the display to be easily read even in low light. The LCD contrast can also be easily adjusted for better viewing.

These units are also designed with short range wireless functions that when coupled with our exclusive software set “Push Wireless Communication Set (RTR-61W)”, makes it possible to carry out wireless communication, allowing for easy and effective management of multiple RTR-61 units.

Package Contents
- RTR-61 Main Unit (Service included)
- AAA alkaline batteries (LR6) x 2
- User’s Manual (Warranty)

Part Names and Functions

Judgment LED (Red / Green)
This LED illuminates when the temperature measurement is over or under the set temperature. The red and green LED will be illuminated at the same time.

LCD Display
This LCD Display shows the temperature that was measured. The LCD display shows the temperature in both Celsius and Fahrenheit.

Temperature Sensor
This sensor is water resistant; make sure not to get wet.

Power Button
Press and hold to turn the unit on. 

LCD Backlight
This allows the display to be easily read even in low light. The LCD contrast can also be easily adjusted for better viewing.

Thermometer Sensor (Optional)
- TR-6110: Short Temperature Sensor
- Sensor Length: 200mm
- Temperature Range: -20°C to 100°C
- TR-6130: Long Temperature Sensor
- Sensor Length: 300mm
- Temperature Range: -20°C to 100°C

Installing Batteries
Read the following for details about battery life and battery installation.

Battery Life Indicator
The battery indicator on the LCD display allows you to see the status of the battery life. If the remaining battery power becomes zero, a battery replacement message will appear. Once the message appears, please change the battery as soon as possible.

Installing the Batteries

Batteries are rechargeable (Li-Ion). A battery replacement message will appear if the batteries are not charged. LCD display goes blank.

1. Open the RTR-61 by pushing up on the bottom of the battery case on the back of the unit.
2. Insert 2 AAA alkaline batteries, making sure that the + and - are in the correct direction. (The + of two batteries should face toward the bottom of the case).
3. Be sure to securely close the cover until you hear a clicking sound.

Troubleshooting
- If there is no response, please try to reset the product by changing the batteries.
- If the judgment LED does not come on, please try removing and reinserting the batteries.
- If the judgment LED continues to be on, please try to change the batteries.
### Operations Table

This is a table of operations for RTR-61. When using, please refer to the following chart.

<table>
<thead>
<tr>
<th>Operation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Take Temperature</td>
<td>Measure and record the temperature.</td>
</tr>
<tr>
<td>2. Store Data</td>
<td>Store the recorded temperature.</td>
</tr>
<tr>
<td>3. Display Data</td>
<td>Display the recorded temperature.</td>
</tr>
</tbody>
</table>

### Main Window Names and Functions

See the following for the items displayed in the Top Window and the Main Menu Window.

#### Top Window
- By turning the Power ON, the Top Window will appear. Following are the main display items and marks that appear in the Top Window:
  - **Main Menu Window**
  - **Check Data**
  - **Select User**
  - **Select Item**

#### Main Menu Window
- While the Top Window is being displayed, pressing the <MENU> button on the face of the unit will display the Main Menu.
  - **Cursor**: Highlight the item.
  - **Title**: The title of the menu will be displayed.
  - **Select Item**: Select the item by moving the Cursor up and down by pressing the arrow buttons (< or >) or by pressing the <ENT> button on the face of the unit.

### About PUSH Recording Window

This window will appear by pressing the <REC> button on the RTR-61 unit to record temperature.

<table>
<thead>
<tr>
<th>PUSH Recording Window</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recorded Temp</strong></td>
<td>(Displayed normally after PUSH Recording)</td>
</tr>
<tr>
<td><strong>Wait for Temp</strong></td>
<td>(Measuring in progress and waiting for the constant temp)</td>
</tr>
</tbody>
</table>

### Menu Contents

Details about the Main Menu and the Operational Settings Menu are as follows.

#### Check Data
- All recorded data is displayed in descending order from the newest to the oldest data in a single line. You can view data by selecting the desired item and pressing the <ENT> button on the face of the unit.

#### Data List
- The data list contains data from the RTR-61 to the manager's computer and can be sorted by selecting the data item you want to view.

#### Select User
- Select the user name from the list in the [Select User] window.

#### Select Item
- Select the measurement item or user registration that has been applied to your RTR-61 unit. The selected item will be displayed on the face of the unit.

#### Set Operation
- It is possible to turn ON/OFF the blinking of Upper and Lower Limit Judgment LED.

#### Button Sound
- It is possible to turn ON/OFF the beep sounds when pressing a button.

#### Backlight
- The backlight factory default setting for the RTR-61 is "OFF". Select the backlight window for 3 seconds only when in operation. You can change the setting using "Always ON" or "Always OFF".

#### Unit of Temp.
- Select Fahrenheit (°F) or Celsius (°C).

#### Contrast
- It is possible to adjust the contrast of the display.

#### Remote Info
- Before carrying out wireless communication, it is necessary for the Management Operator to register RTR-61 units as Remote Units and register them into Groups. The Group Name and Remote Unit Name can be viewed here for the RTR-61 unit being used.

#### Memory Usage
- Each RTR-61 can record and store up to 1,800 data readings. The number of stored data can be viewed here.

### About Message Display

Even when the power is OFF, an automatic Power-ON may occur to display a message.

#### Created Messages
- When a Measurement Command is received, the following messages will be displayed.

#### Settings Change Messages
- If any settings have been made via wireless communication, the RTR-61 unit will display a notification message. It will be displayed for about two seconds. After that, you will automatically return to the Top Window.

#### Measurement Error Messages
- If a temperature measurement error occurs, there may be a poor sensor connection. In such a case, an Error Message will appear.