

# TF-PRO IR Thermometer

User Manual



Thank you for your purchase of the TF-PRO Wall Mounted IR Thermometer. Please read these instructions carefully before operating unit.



# **1.0 CONTENTS**



TF-PRO



**RF Relay Box** 



**USB** Charging Cable



18650 Battery



Adapter



# **2.0 Introduction**



# **3.0 Display Area**





# 4.0 Battery and Power

4.1—Connect the power supply to activate the device for the first time.

4.2—You can monitor the battery charging state by the built-in LED. Green LED indicates a full charged battery, Red LED indicates battery is charging. Flashing light indicates insufficient battery.

4.3—The device may either be powered by the re-chargeable 18650 battery. Alternatively, the USB cable both charges the battery, while also powering the device.

4.4—In order to use the barcode scanner, an external power supply must be used.



# **5.0 Mounting Options**

Note: Before using adhesive strips for mounting, ensure you have a long enough charging cable to charge the device on the wall. Access to the battery and charging ports will be lost once device is mounted via adhe-



# 6.0 Relay Box Diagram

## 5.1 Wiring Diagram



## 5.2 Access Control Wiring



5.3 Door Lock Wiring





# 7.0 The Display Screen

## 7.1 Display Screen Mode

### 7.1.1—Standby Mode

When in standby mode, the calendar and time display, along with the current ambient temperature, and number of previous measurements (measurement count).

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#### 7.1.2—Normal Temperature

When a normal temperature is taken, the buzzer will beep once (when the sound is on), the temperature will be displayed, and the green light flashes once. The measurement count will increment by one (Max 999 before restarting at 0).



### 7.1.3 – Low Warning

When the temperature measured is lower than 89.6 F (32 C), the display will show "LO". The buzzer will beep three times (when the sound is on) and the red LED will flash three times. This typically indicates the IR scanner did not get a good reading. Look for signs of possible interference such as clothing, hair, or glasses, and scan again.



#### 7.1.4 — High Warning

When the temperature measured is higher than the Alarm Set Point (default of 99.1 F, 37.3 C), the buzzer will give a continuous alarm beep (when the sound is on), and the red light will continue to flash. This will continue until the next normal temperature reading.







## 8.1 Power On / Off

### 8.1.1-Power On

With the device turned off, press and hold the "power" button for 3 seconds. The buzzer will beep once (if sound is turned on) and the digital display will illuminate, indicating power is on.



### 8.1.2-Power Off

With the device turned on, press and hold the "power" button for 3 seconds. The buzzer will beep once (if sound is turned on) and the digital display will turn off, indicating power is off.



## 8.2 Mode Switching

### 8.2.1—Surface Mode

Long Press the "Plus" button for 3 seconds. The buzzer will beep once (if sound is turned on), and the display will show "SUR". Indicating the unit is now in "Surface Mode". *NOTE: Surface Mode is NOT approved for reading body temperatures!* 



8.2.3 Count Mode

8.2.2 Body Mode

Long Press the "Plus" button for 3 seconds. The buzzer will beep once (if sound is turned on), and the display will show "BOD". Indicating the unit is now in "Body Mode".



Long Press the "Plus" button for 3 seconds. The buzzer will beep once (if sound is turned on), and the display will show "COU". Indicating the unit is now in "Count Mode".





# 8.0 Operating Instructions (cont.)



## 8.3 Temperature Settings

8.3.1—Change Temperature Mode (F1)

Press and hold the "plus" and the "minus" buttons together for 3 seconds. Release the buttons when the screen displays "F1"



### 8.3.2—Fahrenheit

While the display shows "F1", press the "plus" button to select Fahrenheit Mode. The screen will display a large red "F". Press the power button four times to save change.



### 8.3.3—Celsius

While the display shows "F1", press the "minus" button to select Celsius Mode. The screen will display a large red "C". Press the power button four times to save change.



## 8.3.4 — High Temperature Alarm Set Point (F2)

Press and hold the "plus" and "minus" buttons at the same time for 3 seconds. Release the buttons when the screen displays "F1". Press the "power" button to enter F2 mode. Press the "plus" or "minus" buttons to adjust the high temperature alarm set point. Press "power" button three times to confirm the new set point.

### 8.3.5 — Temperature Offset (F3)

Press and hold the "plus" and "minus" buttons at the same time for 3 seconds. Release the buttons when the screen displays "F1". Press the "power" button twice to enter F3 mode. Press the "plus" or "minus" buttons to adjust the temperature offset. Press "power" button twice to confirm the new set point.

### 8.3.6 — Buzzer Setting (F4)

Press and hold the "plus" and "minus" buttons at the same time for 3 seconds. Release the buttons when the screen displays "F1". Press the "power" button tgree times to enter F4 mode. Press the "plus" or "minus" buttons to turn the buzzer on or off. Press "power" once to confirm the setting.



# 9.0 Access Control Settings

## 9.1 Relay Box Configuration

### 9.1.1—Pairing the Relay Box

1—Ensure the TF-PRO is set to "Mode 0" (default) using the included software configuration package.

2—Ensure relay box is powered with 12VDC power source (not included). Press the "Key" button inside the relay box. The LED inside the relay box will illuminate RED to indicate box is in pairing mode.

3—Use the TF-PRO to take a normal body temperature reading. This step will pair the unit to the relay box.

4—Relay box red LED will turn green indicating pairing is successful.



# 9.2 Access Control Configuration

### 9.2.1—Access Control Modes

- "Mode 0" - Relay Integration Mode. Normal temperature reading initiates change of state in any paired relay for the length of time as determined by "delay" jumpers in relay box. RFID and Scanner Mode disabled.

- "Mode 1" - RFID Mode Enabled. Normal temperature reading allows RFID badge information to be uploaded to cloud. Cloud server (not included) initiates door opening. Relay and Scanner Mode disabled.

- "Mode 2" - Scanner Mode Enabled. Normal temperature reading allows scanned QR code / bar code information to be uploaded to cloud. Cloud server (not included) initiates door opening. Relay and RFID Mode disabled.

# **10.0 Memory Settings**

## **10.1 Memory Query**

While in "Body" or "Surface" mode, the TF-PRO will record the previous 99 temperature readings. (Use of the included software package allows unlimited storage of temperature readings). Once 99 readings are taken, the TF-PRO will automatically delete the oldest recordings first. To view previous readings:

- Ensure the unit is in standby mode
- Press the "plus" or "minus" buttons to view previous readings.



# 11.0 PC Software

## 11.1 PC Software Tabs

# NOTE: See TF-PRO software guide for a more complete understanding of software function.

Settings Tab—Used to Read / Write Configuration for the TF-PRO. Select Measurement Mode, Selection Mode (Local or Cloud), WiFi Settings, and IP Address Settings.

Display Tab— Displays real time measurement information (to be used as a "dashboard" by remote monitoring personnel)

Data Tab— Displays previous measurement data in grid display, along with filter and export functionality.

Management Tab—Allows set up of RFID and Scanner functionality.



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# **12.0 Specifications**

Screen	LCD Display
Accuracy	+/2 Degrees
Response Time	.5 Seconds
Flashing & Beep	Flashing plus audible (when turned on)
Measuring Distance	2—4 inches
Charging Method	USB Cable, 4.2—5VDC, 18650 Li-Ion Battery
Ambient Temperature Range	32—122 Degrees F
Weight	13 oz
Dimensions	6.75" x 4.5" x 5.5"



Note:

After entering the setting menu operation, if you need to modify a setting, you can press the menu key continuously to select. Save the new settings after the completion of sequential settings. After the settings are successful, a long beep will sound (when the sound is turned on), and the new settings will not be saved when the system is shut down and exits automatically.

