



BIOREP TEMPERATURE MONITOR

MODEL No: BTM-01

USER MANUAL

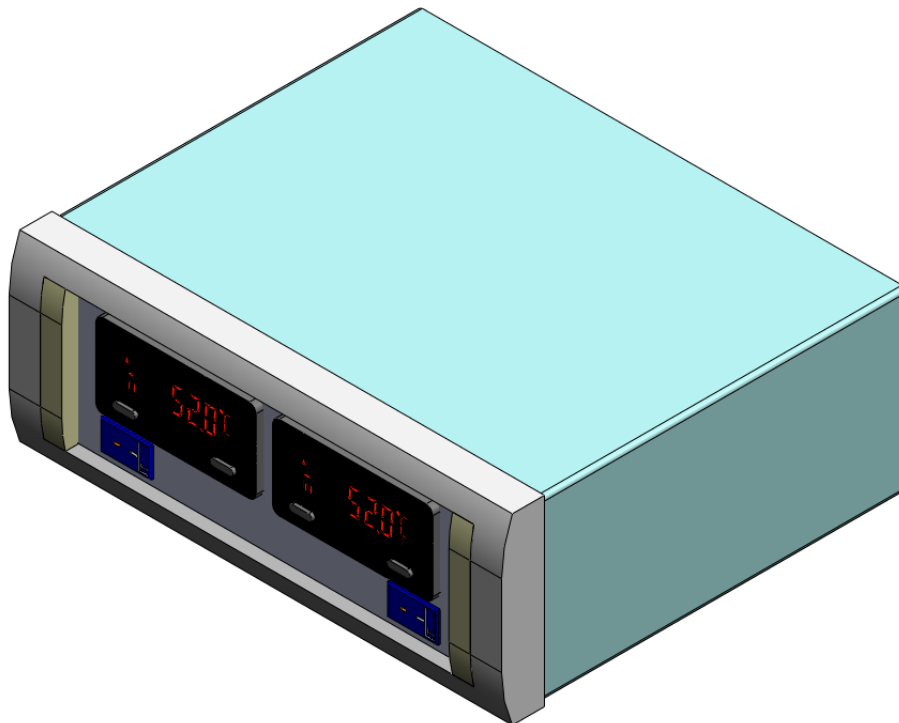




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1 Getting Started



1.1 Symbols Used in this Manual



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of dangerous voltage within the machine's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important information in the literature that accompanies the device.



This symbol warns of moving parts may cause personal injury.



This symbol is used when two people are needed to do the task.

1.2 Machine Information

In the spaces provided below, record the Model and Serial No. located on the rear panel of this machine.

Model No. _____

Serial No. _____

Retain this information for future reference.

1.3 Contact Information

Biorep Technologies, Inc.

3225 NW 112th Street

Miami, FL 33167

info@biorep.com

www.biorep.com

Tel: 305-687-8074

Fax: 305-688-8029

1.4 Safety Information



PLEASE READ AND OBSERVE ALL WARNINGS AND INSTRUCTIONS GIVEN IN THIS USER'S MANUAL AND THOSE MARKED ON THE UNIT. RETAIN THIS BOOKLET FOR FUTURE REFERENCE.



DO NOT REMOVE THE MACHINE'S COVER OR YOU MAY BE EXPOSED TO DANGEROUS VOLTAGE. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.



TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS DEVICE TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE.

READ AND FOLLOW THESE INSTRUCTIONS:

1. Keep these instructions for future reference and heed all warnings stated in this manual.
2. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong, which is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet or contact Biorep Technologies, Inc. at (305) 687-8074.
3. Protect the power cord and the plug from being damaged. Avoid walking on or pinching the cord or plugs.
4. Refer all servicing of the machine to qualified personnel. Servicing is required when the apparatus has been damaged in any way.

1.5 Packing List

The following items are included with the purchase of a Biorep Temperature Monitor:

Qty	Reference	Description
1	BTM-01	Biorep Temperature Monitor
1	TC-02	Biorep Thermoprobe
1	86610610	Medical-Rated Power Cord
1	BTM01-UM	User Manual

Packing List

2 Introduction

The BTM-01 provides the user the flexibility and convenience of a self contained dual-temperature display. The BTM-01 accepts dual type-T thermocouple input and provides a temperature display in either Celcius or Farenheit. The meter also features:

- Temperature offset adjustment (Field Calibration)
- Select between °F or °C units
- Dual color (Green OR Red)
- Display brightness control

The BTM-01 display has 0.48" (12.2 mm) high digits. The LCD can display a red or green backlight with variable display intensity.

3 Machine Parts Identification

3.1 Front View

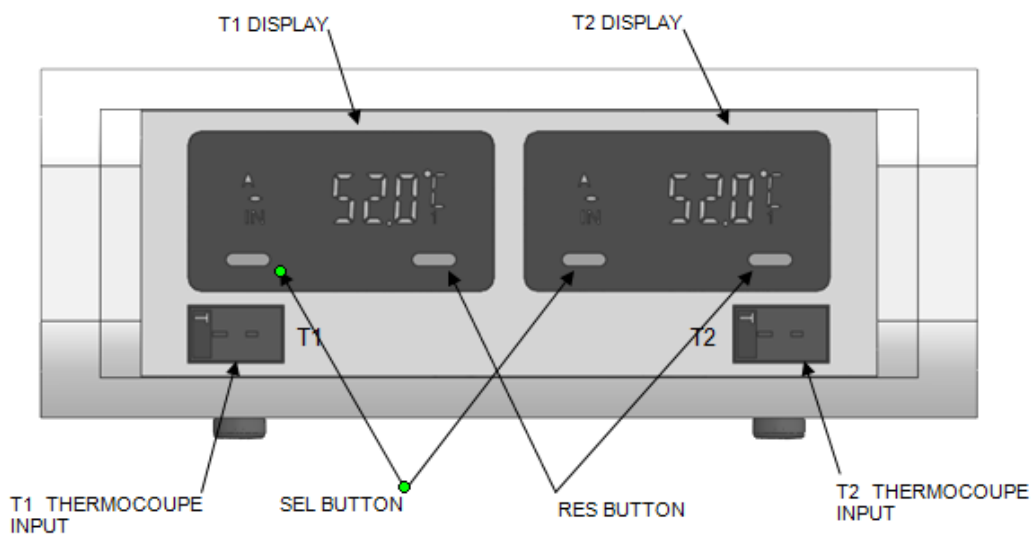


Figure 1, Front View

3.2 Rear View

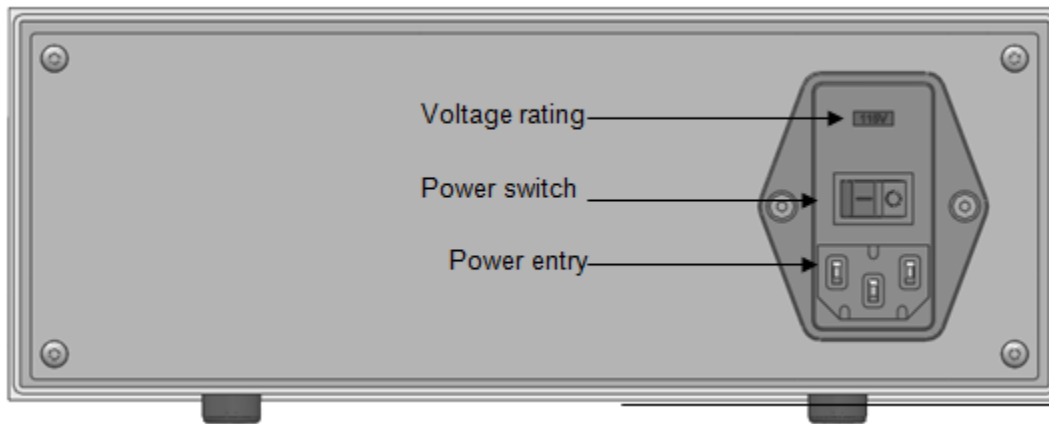


Figure 2, Rear View

4 Accessories

The following disposable accessories are included with the Temperature monitor. For ordering information, please consult our webpage www.biorep.com or contact one of our sales representatives at (305) 687-8074.

4.1 Biorep Thermoprobe (TC-02)

The Biorep Thermoprobe is a sterile, disposable type-T Thermocouple. It has a universal mini-plug connector that measures temperature at the site of any female Luer connection.

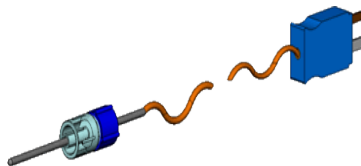


Figure 3, Biorep Thermoprobe

5 BTM Set-up

The Biorep temperature monitor is factory calibrated and should be ready to be used upon arrival to your facility. The default settings are to measure in degrees centigrade (°C), and with a 0.1 degree resolution.



5.1 Field Calibration

1- Connect Type-T thermocouple calibrating unit, such as the Fluke® Multifunction Process Calibrator 725 to the thermocouple to the T1 input of the Biorep Temperature Monitor. Generate the temperature desired for calibration.

2- Wait 30 seconds.

3- Verify the temperature is within +/- 1 °C of the target value.

4- If the value is within an acceptable tolerance, follow these steps to change the offset of the display.

1. Press and hold SEL button to enter Programming Mode.
2. Press RST button once to enter I-INP Mode.
3. Press the SEL button until "OFFSET" is displayed.
4. Press RST button to edit the values.
5. Change the offset value by pressing RST to increment the value of the selected digit. Press the SEL button to change the digit.
6. After the desired value is displayed, press and hold SEL button.
7. Press the SEL button continuously until "END" is displayed. The Monitor will resume normal operation after a few seconds with the new offset.

Repeat the steps 1 through 7 for Monitor 2.

5.2 Changing Units

To change the display units between Celsius and Fahrenheit, follow the following steps:

1. Press and hold SEL button to enter Programming Mode.
2. Press RST button once to enter I-INP Mode.
3. Press the SEL button until "SCALE" is displayed.
4. Press RST button to toggle between Celsius and Fahrenheit.
5. After the desired setting is displayed, press the SEL button continuously until "END" is displayed. The Monitor will resume normal operation after a few seconds with the new scale

Repeat the steps 1 through 5 for Monitor 2.



5.3 Changing Display Color

To change one or both of the display colors to Green or Red, follow the following instructions:

1. Press and hold SEL button to enter Programming Mode.
2. Press RST button until "3-dSP" is displayed.
3. Press the SEL button until "COLOr" is displayed.
4. Press RST button to toggle between Red "rEd" and Green "Grn".
5. After the desired setting is displayed, press the SEL button continuously until "END" is displayed. The Monitor will resume normal operation after a few seconds with the new color.

5.4 Adjusting Display Brightness

To change one the display brightness, follow the following instructions:

1. Press and hold SEL button to enter Programming Mode.
2. Press RST button until "3-dSP" is displayed.
3. Press the SEL button until "d-LEV" is displayed.
4. Press RST button to change the brightness level from 1(dim) to 5(bright).
5. After the desired setting is displayed, press the SEL button continuously until "END" is displayed. The Monitor will resume normal operation after a few seconds with the new brightness setting.

If you encounter any problems or have additional questions regarding the operation of the Biorep Temperature Monitor, please contact customer support at:

Biorep Technologies, Inc. info@biorep.com; Tel: 305-687-8074