

# MTA-1B

## TEMPERATURE ALARM

### SET-UP AND TECHNICAL MANUAL



**Custom**  
**BioGenic**  
**Systems**

[www.custombiogenics.com](http://www.custombiogenics.com)

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Leading the World with Innovative Cryopreservation Technology Solutions

**- IMPORTANT INFORMATION -**

We at Custom Biogenic Systems are proud of our work, and appreciate your purchase of this product. With proper care, this equipment will be trouble free for many years to come. Before setting up and using your new cryogenic system, first check to see that all parts are accounted for and that no damage has occurred during shipping. Also, read this manual completely before proceeding to set-up. If at any time you are unsure of the procedures for set-up and use of this product, please contact Custom Biogenic Systems or your Custom Biogenic Systems representative.

**PRODUCT WARRANTY**

Custom BioGenic Systems warrants all manufactured cryogenic equipment to be free from defects in workmanship and materials for a period of one year. Custom BioGenic Systems' liabilities under the warranty shall be limited to correcting or replacing the defective workmanship or materials. A claimant under the warranty must notify CustomBioGenic Systems within ten (10) days after discovery of the defect and immediately discontinue use of the defective equipment. Custom BioGenic Systems reserves the right, at their discretion, to correct the defect(s) in the field without return shipment to Romeo, Michigan. This warranty does not cover defects on cryogenic equipment resulting from abusive handling and subsequent failure.

Serial Number \_\_\_\_\_

Model number \_\_\_\_\_

For Technical Assistance Call: 1.800.523.0072 (U.S. Only)

Phone: 586.331.2600 Fax: 586.331.2588

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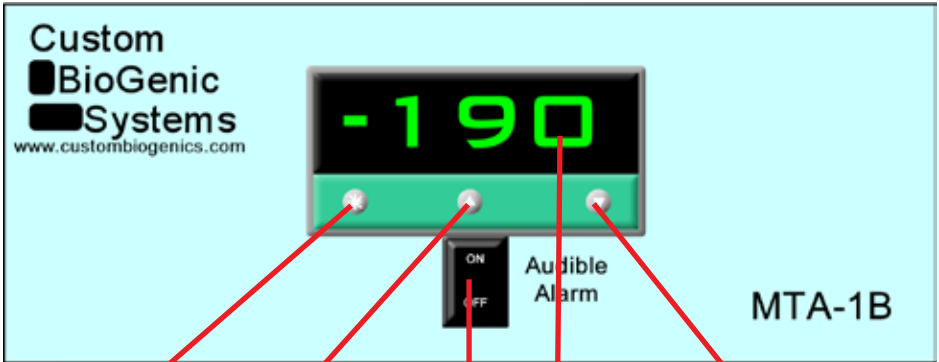
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- BEFORE USE -

**Caution:** Do not plug in the AC power plug before completing initial set-up. Check to see that all parts are accounted for and are damage-free.

- PARTS IDENTIFICATION -



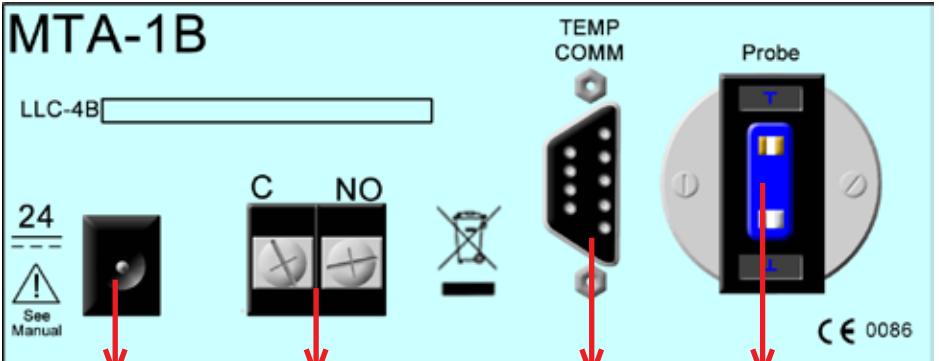
" \* " Button

"▲" Button

Mute  
Switch

Temperature  
Display

"▼" Button



Power  
Jack

Remote  
Contact

Optional PC  
Communication

Probe  
Jack

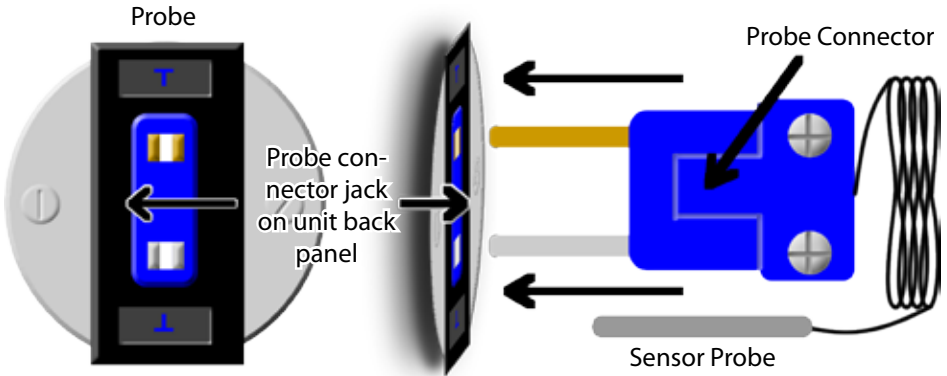
**- PROGRAMMING THE ALARM SET POINT -**



1. Press and hold down the \* button.
2. Press the "▲" button (while holding "\*" ) to increase set point temperature.
3. Press the "▼" button (while holding "\*" ) to decrease the set point temperature.

**- PROBE CONNECTION -**

Push into place (only goes one way)



**- REMOTE ALARM CONNECTION & POWER CONNECTION -**

C NO



NO = Normally Open  
C = Common

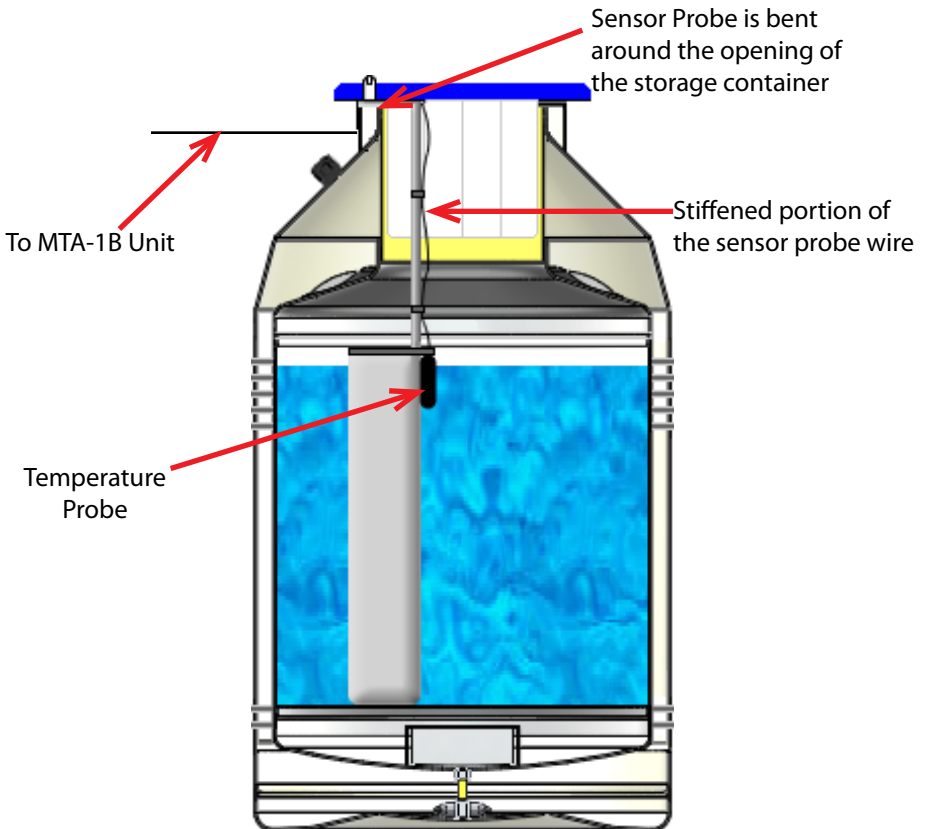
24  
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AC Power Adaptor Jack

## - SUGGESTED INSTALLATION -

1. Remove sensor plug from connector terminal.
2. Bend the stiffened portion of the sensor probe wire over the edge of the storage container so it will hang firmly in place with the sensor extending down into the container. (See illustration below). Do not attempt to bend the wire immediately after removing it from liquid nitrogen.
3. Position the sensor so it accurately monitors the temperature.
4. Mount the MTA-1B temperature alarm as desired. The temperature alarm does not need to be mounted in a level position, but should be readily visible. Also, do not close in the MTA-1B unit creating a situation where the audible alarm cannot be heard.
5. Attach the sensor probe connector to the corresponding jack on the back panel.
6. Connect the remote alarm if desired
7. Connect the power supply to the jack on the back panel.
8. Plug the power adaptor into a standard wall socket.
9. Double check installation, including all connections, to ensure accurate trouble free operation.



## - SUGGESTIONS FOR SAFETY -

**NOTE:** Liquid nitrogen can cause severe frostbite. Do not touch liquid nitrogen or frosted materials. Wear a face shield and gloves whenever possible.

- ◆ Nitrogen gas can cause suffocation quickly and without warning, do not use liquid nitrogen in confined areas without proper ventilation.
- ◆ Use caution when making electrical connections. Do not make electrical connections when hands and/or parts are wet.
- ◆ If unsure, contact qualified personnel rather than taking unnecessary risks.

## - CLEANING AND MAINTENANCE -

- ◆ Clean unit with a mild, non-abrasive household cleaner.
- ◆ Visually check wires and connections for signs of wear, and to locate potential future problems
- ◆ Avoid exposing the unit to conditions that may cause damage or interrupt proper operation.
- ◆ The MTA-1B is intended to operate in the following environment:
- ◆ Indoor use only
- ◆ Installation Category II per IEC664
- ◆ Pollution Degree Level II per IEC61010-1
- ◆ Temperature: 10°C to 50°C operating per IEC61010-1  
Humidity: Maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C.
- ◆ MTA-1B Power Requirements: 24V DC Power Supply. Use only power supply provided by Custom Biogenic Systems.

**AVAILABLE FROM CBS**

**Liquid Nitrogen Equipment Including:**

- Freezers & Dewars**
- Controlled Rate Freezing Systems**
- Freezer Racks and Boxes**
- Transfer Lines**
- Solenoid Valves**
- Liquid Level & Temperature Alarms**
- Liquid Level & Temperature Controls**
- Temperature Recorders / Monitors**
- Cryogenic Accessories**



**Custom  
BioGenic  
Systems**

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**MTA1B.TM0609**

**Revision: A**

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