

# Model LM-500 Liquid Cryogen Monitor - Quick Guide

## I. Start-Up

Step 1: Connect the liquid level sensor to the "Sensor(s), I/O port" (DSUB15Pin connector on the rear panel of the monitor).

Step 2: Insert the power cable plug into the power socket (rear panel).

## II. Measurement of Liquid Level

Step 1: Turn on the power switch (rear panel). → The liquid level will be displayed on the screen.

## III. Sample/Hold and Continuous Modes

### 1. Sample/Hold Mode

The level of liquid He is measured/updated by pressing the Enter key or at pre-programmed intervals (Intvl menu). Unless the Enter key is pressed, the last measurement result is displayed.

### 2. Continuous Mode

The level of liquid He is measured continuously and kept up-to-date. Please note that in this mode measurements may be performed more often than necessary.

### 3. Switching Modes

Step 1: Press the Menu key to display the Menu screen.

Step 2: Highlight the "Mode" using  $\Delta$  or  $\nabla$  key.

Step 3: Press the Enter key and choose either "Sample/Hold" or "Continuous."

Step 4: Press the Menu key while the selected mode is displayed to go back to the display screen.

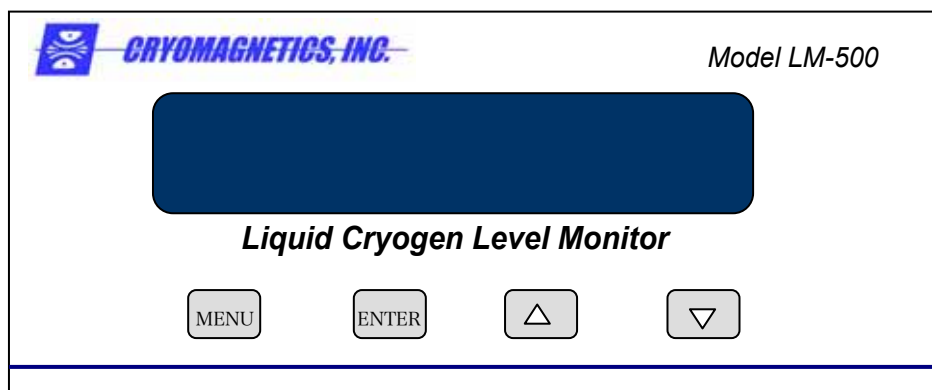
### 4. Measurement Operation

Sample/Hold mode: Press the Enter key. → The level of liquid He is measured and the value is updated.

Continuous mode: The level of liquid He is measured/updated automatically.

## IV. Finishing-Up

Step 1: Turn off the power switch.



FRONT PANEL

## V. Menuing System

### 1. Mode

You can configure the mode settings to measure the level of liquid He. Choose either “Sample/Hold” or “Continuous.”

### 2. Limits

The Limits menu configures the alarm feature and the liquid level set points for the external signal for automatic refill.

### 3. Fill

The Fill menu can configure the automatic refill feature.

### 4. Intvl

The Intvl menu is used to configure the settings for measurement intervals. Keep pressing the  $\triangle$  or  $\nabla$  key until the desired interval is displayed.

### 5. Units

With the Units menu, you can choose a measurement unit from “cm,” “%,” and “in.”

### 6. Boost

The Boost menu is used for the sensor defrost mode setting. (This mode sends a stronger electric current when the sensor gets frozen.)

### 7. Ports

The Ports menu can configure the parameters for RS-232, GPIB, and analog output port.

### 8. Cal

The Cal menu is utilized as a calibration parameter to configure the settings for sensor length, characteristic resistance, and wiring resistance.

## VI. Menu Operation

1. Press the Menu key.
2. Highlight the desired menu item using  $\triangle$  or  $\nabla$  key and press the Enter key.
3. Press the Menu key to exit.

