CYTOTHERM PLASMA THAWER SETTINGS REFERENCE

USING PROGRAM MODE TO MODIFY TARGET TEMPERATURE

Program Mode allows the operator to adjust unit parameters that do not change frequently and to calibrate the unit. These parameters include setting the pre-programmed THAW TIME, calibrating the unit with CALIBRATE TEMP, and setting the target temperature for thawing with TARGET TEMP. Below is an example of the steps necessary to modify the target temperature (TARGET TEMP).

Instructions To Modify Target Temperature (TARGET TEMP)	What Will Appear On The Display (Example)
1. Turn the POWER SWITCH on while pressing the *ENTER* button. After the unit powers on, release the *ENTER* button.	PROGRAM VALUES
2. Press *PLUS* or the unit will display the instructions for how to navigate the PROGRAM VALUES menu. Displaying the instructions lasts approximately 25 seconds.	PLUS TO SKIP INSTRUCTIONS
3. When the instructions have been skipped or displayed, the first option (THAW TIME) of the PROGRAM VALUES menu will appear on the display.	THAW TIME 16 Minutes
4. Press *PLUS* repeatedly until "TARGET TEMP" is shown on the top line of the display. The bottom line of the display will show the currently selected target temperature.	TARGET TEMP 37.0°C
5. Press *MINUS* to allow modification to the TARGET TEMP option.	TARGET TEMP 37.0°C
6. Press *PLUS* or *MINUS* to change the TARGET TEMP in increments of 0.1°C.	TARGET TEMP 36.5°C
7. Press *ENTER* to record the new setting.	TARGET TEMP DATA RECORDED
8. Turn off the POWER SWITCH. The next time the unit is turned on it will be set to the updated TARGET TEMP.	

CytoTherm PLASMA THAWER SETTINGS REFERENCE

USING PROGRAM MODE TO CALIBRATE UNIT TEMPERATURE

Below is an example of the steps necessary to calibrate the unit temperature (CALIBRATE TEMP).

Instructions To Calibrate Unit Temperature (CALIBRATE TEMP)	What Will Appear On The Display (Example)
1. Turn the POWER SWITCH on and let the BATH water heat up to the thawing temperature (preset to 37.0°C). Check the displayed temperature with an accurate, calibrated thermometer with the sensor end in the water in the BATH.	36.9°C *HEAT ON*
2. If the displayed temperature is correct, the unit is calibrated and no further action is required. a. If the displayed temperature needs to be changed, turn the POWER SWITCH off and proceed with the steps below.	
3. Turn the POWER SWITCH on while pressing the *ENTER* button. After the unit powers on, release the *ENTER* button.	PROGRAM VALUES
4. Press *PLUS* or the unit will display the instructions for how to navigate the PROGRAM VALUES menu. Displaying the instructions lasts approximately 25 seconds.	PLUS TO SKIP INSTRUCTIONS
5. When the instructions have been skipped or displayed, the first option (THAW TIME) of the PROGRAM VALUES menu will appear on the display.	THAW TIME 16 Minutes
6. Press *PLUS* repeatedly until "CALIBRATE TEMP" is shown on the top line of the display.	CALIBRATE TEMP
7. Press *MINUS* to allow modification of the calibrated temperature. The current temperature of the BATH water will appear on the top line of the display.	37.0°C
8. Press *PLUS* or *MINUS* to match (in increments of 0.1°C) the displayed temperature with the calibrated thermometer. Wait for the temperature to stabilize then repeat this step as necessary until it matches the calibrated thermometer.	36.5°C *HEAT ON*
9. Press *ENTER* to record the new setting. The unit temperature has now been calibrated.	37.0°C DATA RECORDED
10. Turn off the POWER SWITCH. If the unit cannot be calibrated, or if the calibrated temperature is not stable, have a technician check the unit. See TECHNICIAN FUNCTIONS.	

Ver. 01

CYTOTHERM PLASMA THAWER SETTINGS REFERENCE
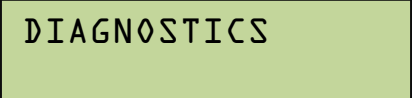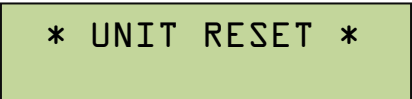
OVER-TEMPERATURE ALARM TEST

The Over-Temperature Alarm Test is an assessment check to ensure that the unit temperature sensor and temperature alarm system is working properly. The unit should not be left unattended during this test.

Instructions For Over-Temperature Alarm Test (* ALARM TEST *)	What Will Appear On The Display (Example)
1. Turn on the POWER SWITCH while pressing the *MINUS* button. After the unit powers on, release the *MINUS* button.	DIAGNOSTICS
2. Press the *ENTER* button to display the first Diagnostics test.	PUMP TEST -PMP +ADV ROCK
3. Press *PLUS* repeatedly to advance until "* ALARM TEST *" is shown on the top line of the display.	* ALARM TEST *
4. Press *ENTER* to begin the Over-Temperature Alarm Test. The display will show the current BATH temperature. The heater will heat continuously and the pumps will turn on.	37.0°C *HEAT ON*
5. Wait as the unit heats the BATH water. When the temperature reaches 1.0°C above the target temperature, the Over-Temperature Alarm will sound. a. Once the Over-Temperature Alarm sounds, the test is a success. Turn off the POWER SWITCH. b. If the Over-Temperature Alarm does not sound or if the unit does not come up to temperature, turn off the POWER SWITCH and contact Technical Support at CytoTherm.	38.0°C *HEAT ON* *TOO HOT*

CytoTherm PLASMA THAWER SETTINGS REFERENCE

UNIT RESET

Resetting the unit returns the unit software to the original factory settings. All of the settings in Program Mode, such as the Thaw Time and Target Temperature, will be reset. The unit must be temperature calibrated after it has been reset. See the section titled **USING PROGRAM MODE TO CALIBRATE UNIT TEMPERATURE**.

Instructions To Return Unit Software To Factory Settings (UNIT RESET)	What Will Appear On The Display (Example)
| 1. Turn on the POWER SWITCH while pressing the *MINUS* button. Do not release the *MINUS* button. | ```
DIAGNOSTICS
``` |
| 2. Press the *ENTER* button while continuing to hold the *MINUS* button. | ```
DIAGNOSTICS
SETTING RECORD
``` |
| 3. When "*UNIT RESET*" appears on the display, the operation is complete and the buttons may be released. | ```
* UNIT RESET *
``` |
| 4. Turn off the POWER SWITCH and resume normal operation of the unit. The unit must be temperature calibrated after it has been reset. See the section labeled **USING PROGRAM MODE TO CALIBRATE UNIT TEMPERATURE**. | |