



## Cry-Ac<sup>®</sup>Tracker<sup>®</sup>

### INSTRUCTIONS FOR USE



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

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**Instruction for Use in the following languages are available at**

**[www.brymill.com](http://www.brymill.com)**

English  
German  
French  
Italian  
Dutch

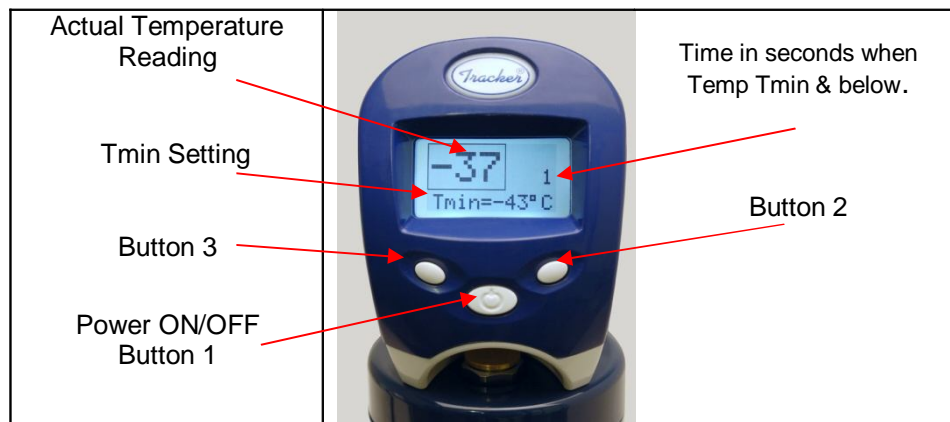
Swedish  
Danish  
Portuguese  
Spanish  
Japanese

**BEFORE USING THE CRY-AC®TRACKER® ENSURE YOU HAVE  
READ THE FOLLOWING**

**INSTRUCTIONS FOR USE - CRY-AC®TRACKER®  
INSTRUCTIONS FOR USE - CRY-AC®**

**The Cry-Ac®Tracker® is US Patent Protected**

## Section 2 - Cry-Ac®Tracker® Quick Start Guide



### Turning on the Cry-Ac®Tracker® for the first time

1. Your Cry-Ac®Tracker® is supplied with 2 AA batteries already fitted.
2. To turn on the device – press **Power ON/OFF, Button 1**.
3. The display will indicate the Actual Temperature Reading in the large box and the Tmin will indicate -10°C.
4. Factory Setting. Tmin = -10°C. Mode = 1. Waiting Time = 30min
5. Before proceeding with the setting up or any treatment carry out the simple **User Self-Test** detailed on page 5 of this Instruction for Use.

### Setting up the Cry-Ac®Tracker® for the first time.

1. Select the required Operating Mode. – See page 7

### To change Operating Modes

1. To change the operating mode press **button 1** to turn power on.
2. Press and hold **button 2** (it will display the previous **Mode**).
3. To change the Mode press **button 3** to scroll to the desired Mode.
4. Press **button 1** to save setting.

### Adjust the Tmin to temperature between -1°C and -70°C

1. With unit switched on press and hold button 2 until the selected Mode appears and then press button 2 again immediately. Set Tmin will appear in the display
2. Using button 3 adjust Tmin to the required setting. Note that the temperature will only scroll down.
3. Press button 1 once to save the Tmin setting.
4. The Tmin setting is now confirmed in the display.
5. After completing the freeze the display will indicate the lowest temperature achieved and the number of seconds at Tmin or below.
6. To turn the device off at any time – press and hold button 1 for 2-3 seconds until display turns off.
7. Even if the power is turned off or the batteries are replaced, each time the device is turned on it will always remember the previous settings.

During the treatment the LEDs will change color as follows: -

**Blue = Actual Temperature to 0°C**

**Green = 0°C to Tmin**

**Red = Tmin & below**

## **Section 3 - Indication for Use**

The Cry-Ac®Tracker® is a device that measures the temperature of the skin when spraying Liquid Nitrogen via the Cry-Ac® delivery system to the selected skin lesion. In accordance with these Instructions for Use the operator can set the Cry-Ac®Tracker® to indicate when a predetermined freeze temperature of between -1°C and -70°C has been achieved at the lesion.

It is the physician's responsibility to decide which skin lesions are to be treated using Liquid Nitrogen since some respond better than others. Published literature and textbooks are available that identify those skin lesions best suited to treatment using Liquid Nitrogen.

The target population is Dermatologists, Licensed Physicians and Family Practitioners.

### **3.1 Handling Warning**

The Cry-Ac®Tracker® contains some components that are very sensitive to vibration or shock, namely the Infrared Sensors and the LCD Display Screen, resulting from improper handling.

Brymill Cryogenic Systems have taken every possible precaution to ensure the integrity of these components during manufacture and delivery. It is therefore the responsibility of the End-user that every effort is made to protect the Cry-Ac®Tracker® against vibration or Shock that could ultimately result in a component failure.

Ensure the Cry-Ac®Tracker® is kept in an upright position at all times when the Liquid Nitrogen

### **3.2 Warranty**

The Tracker® section of the Cry-Ac®Tracker® is covered by a 12 month limited warranty against manufacturing defects in materials and workmanship. The warranty does not cover damage resulting from abuse, neglect, improper handling or improper use.

The Cry-Ac® section of the Cry-Ac®Tracker® is covered by the same 3-year warranty defined in the Cry-Ac® Instructions For Use booklet supplied with each unit.

## **Section 4 - Routine Maintenance**

### **4.1 Cleaning**

If necessary the plastic case can be cleaned with a clean damp cloth and soapy water or alcohol wipe. The cloth should only be moist and NOT dripping wet to reduce any risk of water entering the device. Avoid using abrasive cleansers that could scratch and damage the surface of the Tracker®. Also avoid touching or contaminating the optical sensors and light emitting diodes on the Tracker®.

Do NOT immerse the Tracker® in any liquid.

### **4.2 Care and Maintenance**

The Tracker® has no user serviceable components. During normal use the Tracker® only requires changing batteries as necessary. Use high-quality 2 X AA batteries.

Do not drop or subject the Tracker® to strong shocks.

### **4.3 Storage**

Always store the Cry-Ac®Tracker® device in a dry place at temperatures between 40 and 100 degrees (F). Keep Tracker® away from heat, humidity, or harmful chemicals.

Avoid direct exposure to sunlight to protect the plastic components.

#### **4.4 User Self-Test**

Before using the device turn the Tracker® Unit on and carry out a simple self-test.

1. When the display is turned on the Temperature Reading in the main box will read Room Temperature.
2. Now focus the 2 blue beams together on the back of your hand. The temperature reading should be 30°C +/- 3°C.

#### **4.5 Waiting Time**

Waiting time is Factory set at 30min. This can be adjusted to either 30, 60, 90 or 120mins.

To change the Waiting time,

1. Turn device on by pressing Button 1.
2. Press and hold Button 2 until display changes to Mode and then press twice more.
3. Set Waiting Time will appear in the display. Press button 3 to scroll to required time and press Button 1 to set.

### **Section 5 - Troubleshooting**

**The Tracker® does not have any effect on the operation of the Cry-Ac®.**

#### **5.1 Tracker® Troubleshooting**

Troubleshooting by an end-user is limited to checking the battery Connections or battery replacement.

#### **Battery Replacement**

The battery compartment is located on the top of the main housing. To remove and check the batteries open the compartment and remove the batteries from the housing.

Check that the battery terminals are clean and there is no sign of corrosion due to leaking battery. Clean terminals if necessary before replacing batteries. Ensure they have been placed in the correct way round.

**If the problem with the Tracker® is not resolved by checking or replacing the battery then the complete device must be returned for repair.**

#### **5.2 Cry-Ac® Troubleshooting**

For troubleshooting please refer to Section 9 of the Cry-Ac® Instructions For Use booklet. However since the Main Valve and Trigger Assembly are now incorporated within the Tracker® housing any problems relating to a sticking Valve or Trigger then the complete Cry-Ac®Tracker® must be returned for repair.

The other problems details in Section 9 of the Cry-Ac® Instructions For Use booklet relating to intermittent spray or the bottle frosting still apply.

**Any attempt to access any part of the Tracker® housing other than the battery compartment will result in the warranty becoming void.**

### **Section 6 – Technical Specification**

#### **6.1 Performance Requirements**

- Measurement accuracy better than  $\pm 5$  °C.
- Minimum temperature reading -70 °C.
- Sampling rate greater than 2 Hz
- Sample area at focus less than 2 mm

## **6.2 Power**

- 2 x AA batteries. The batteries should be removed if the device will not be used for periods of 1 week or over.
- When device is not used for 1 minute the device goes into Sleep Mode.
- In Sleep Mode the LED's are turned off and the Display will dim and show a Room temperature reading 0s.
- To exit sleep mode simply press button 1.
- If device remains in Sleep Mode for 30min (Waiting Time) device turns off completely.

## **6.3 User Interface**

- LCD screen to display ACTUAL TEMPERATURE, Tmin, and TIME AT Tmin.
- POWER- MODE buttons to turn ON/OFF and select operating MODE.
- 2 SELECT BUTTONS
  - Function determined by mode and state. Used to scroll through measurements and set SET POINTS
- LED to identify location of infrared temperature measurement
  - LED color changes as a function of temperature
    - Temp 30 – 0 °C BLUE
    - Temp 0 - Tmin °C GREEN
    - Temp - Tmin °C RED & Below
- Bleep sound to count and indicate when Tmin is achieved.

## **6.4 Operating Modes**

- **MODE 1**
  - Display shows Actual temperature reading during use in the large window.
  - Display also shows the total time that Tmin temperature or below was achieved during the freeze cycle.
  - Sound beeps once a second as long as <Tmin is achieved.
- **MODE 2 (AS MODE 1 except)**
  - Sound beeps once a second and twice every 5 seconds.
- **MODE 3 (AS MODE 1 except)**
  - No sound.

## **6.5 Software**

Firmware is the software that is running inside the microprocessor on the Cry-Ac®Tracker®. It controls LED's and User Button interface.

**There are no known EMC interference issues.**