

# CBS

Run Test.vi

Custom Diogenic Systems

## Run Screen

| Step # | Cooling Rate (C/Min) | Demand Temp (C) | Hold Time (min:ss) | Alarm Reason |
|--------|----------------------|-----------------|--------------------|--------------|
| 2      | 0.00                 | 4.00            | 0.00               |              |

Graph View Program

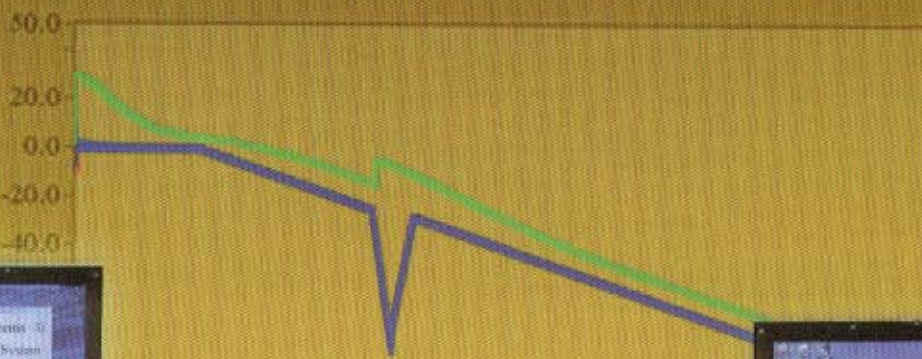
Chamber Temp



Sample Temp



Target



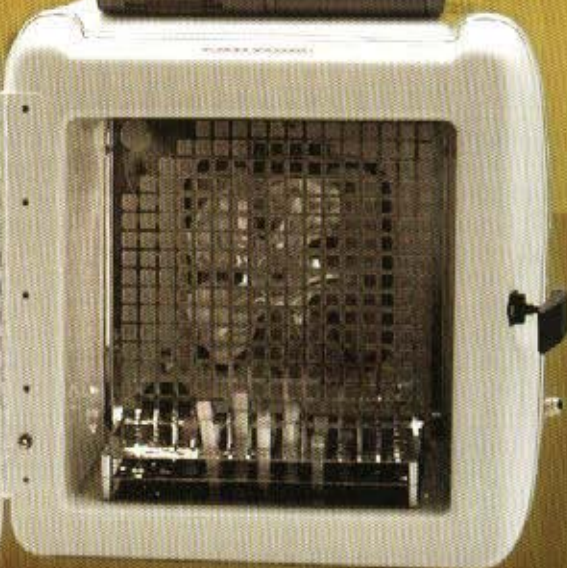
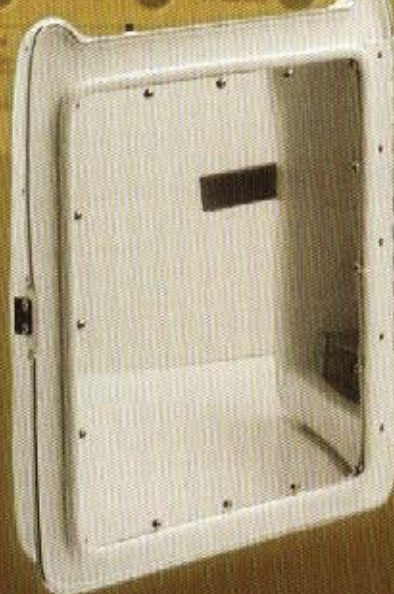
Target  
Sample  
Chamber  
Alarm Pro

4:22:21



Manual Operation

Cool + Warm



# 2100 Controlled Rate Freezing System

## Model 2100 Features:

- Laptop computer using Windows based operating system
- Unlimited programming capability
- Multi-color graph - sample, chamber, program temperature
- Temperature setpoints by sample or chamber
- Continuous control status indication
- Programs and freeze data saved to hard drive or disc
- Password protected software
- Selectable password security levels
- Searchable data base for freeze run history
- Freeze run graphs and data available via any standard computer printer.

- 30 data fields available for each freeze run
- Continuous digital and graph display for time and temperature during operation
- Manual overrides for all operating functions
- Temperature range +50°C to -180°C
- Freezing rates .01° to 99.9° per minute
- Program temperature hold 1 second to 99 hours
- Audible and visual indicators -
  - End of each freeze run
  - Temperature probes
  - Freeze run tracking
- Six pre-set easy to run freeze programs
- Optional temperature strip chart recorder
- On screen help

## Standard System Consists of:

- Laptop computer with 2100 software
- Freezing chamber
- Choice of sample rack
- 4 ft. transfer line

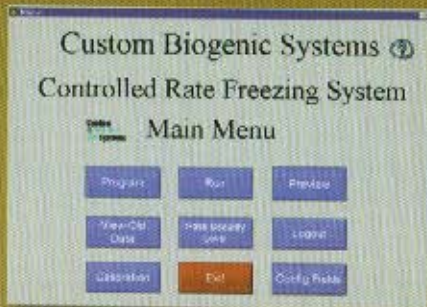
## Chamber Specifications:

- Power requirements  
120/220 volt, 50/60 Hz, 10 amp
- Outside dimensions  
25" (635mm) D including vent  
24" (609mm) H including computer  
21" (533mm) W
- Inside dimensions  
9 1/2" (241mm) D x 13 1/2" (342mm)  
W x 13 1/2" (342mm) H  
28 Liters
- Optional roller cart dimensions  
24" (609mm) W x 24" (609mm)  
L x 32 1/2" (825mm) H

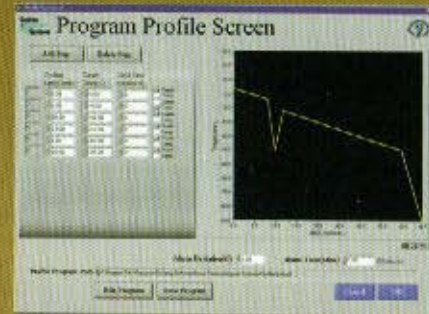


Model 2100 Pictured with Optional Roller Cart and Strip Chart Recorder

# Operating and Programming Screens



Main menu screen for selection of all system functions.



Program profile screen for actual input and saving of freeze run rates and temperatures.



Data base search screen for locating saved freeze run information and graphs.



Run screen provides all details of actual freeze runs during operation, plus all manual override controls.

## Laptop Computer Minimum Specifications:

- 120/240 volt, 50/60 Hz
- 900 MHZ processor
- 128 MB ram
- 14" color monitor
- Windows XP
- 24X CD
- 3.5 Floppy
- 20 GB hard drive
- Modem/ network interface



Data base screen for input of information regarding each individual freeze run.

# Chamber Racks



4ml/5ml Vial Rack  
(Capacity - 130 Vials)



4ml/5ml Vial Rack Holder  
(Capacity - 3 racks - 390 Vials)



Bag Canister Rack  
(Capacity - 10-20 Canisters)



1.2ml/2ml Vial Rack  
(Capacity - 130 Vials)



1.2ml/2 ml Vial Rack Holder  
(Capacity - 5 Racks - 650 Vials)



Cane Rack  
(Capacity - 130 Canes)



Bag Freezing Press



Sample Probes

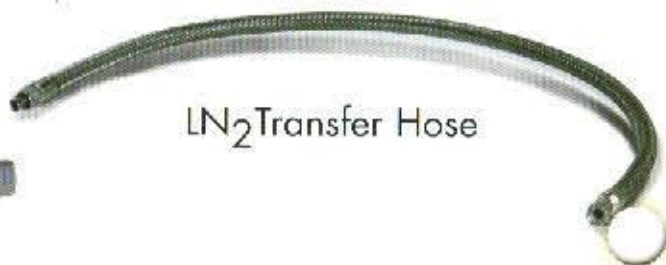
# Accessories



Cryo Gloves



"T" Valve Assembly



LN<sub>2</sub> Transfer Hose