



MVE Tech Tips



September, 2007

Changes to specifications of the SC 4/2V and Doble 11

Please note that the hold time for the SC 4/2V has been reduced from 14 days to 13 days. On a similar note, the hold time for the Doble 11 has also been reduced. Previously the hold time of the Doble 11 was listed as 21 days. The new specification is 17 days. This change is related to the amount of liquid nitrogen that may be absorbed by the Doble 11. The old design Doble would absorb 3.4 Liters of LN₂, while the new design will only hold 3 Liters. These specification changes have been published in our new Cryopreservation Equipment Catalog.

Power Conditioner

Q: How many freezers can be connected to the MVE power conditioner (11807011)?

A: This power conditioner supports the connection of up to three freezers. Some users have reported that they can connect more than three freezers to a single power conditioner successfully. This is due to the fact that in monitoring mode, MVE freezers consume far less power than while filling. To ensure reliability and to avoid problems while filling, no more than three freezers should be connected to a single power conditioner.

Built In Time Delays

TEC 3000 controllers have a built in time delay for ALL alarms. When any parameter (level, temperature, etc) exceeds the programmed high or low threshold (high temperature alarm, low level alarm, etc), the audible and visual alarms will not activate until 60 seconds after the alarm condition is present. This operation is intentional and is intended to prevent “nuisance alarms” for parameters that may temporarily exceed the programmed thresholds. This behavior needs to be considered when validating the function of the freezer. For example, when testing the high temperature alarm on a freezer, consider the following procedure:

1. Initiate “Hi Temp Alarm Test” from the controller keypad. (this function can be found in the “temperature settings” menu)
2. Observe the temperature of the probe being tested. When the temperature exceeds the high temperature alarm setting (default is -110°C), measure the amount of time it takes for the audible alarm to sound. This time should be 60 seconds.
3. If the alarm sounds 60 seconds after the temperature exceeds the high temperature alarm setting, the controller is functioning properly.

NOTE: Because the temperature probe heats rapidly during the high temperature alarm test, it is common for the displayed temperature to read -50°C or more before the audible alarm sounds. This operation is normal, and is due to the previously mentioned built-in time delay for all alarms.

For questions regarding alarm delays, consult the TEC 3000 Technical Manual (available at www.chartbiomed.com/tec2000.cfm) or contact Technical Service at 1-800-482-2473.

Downloading Data from the TEC 2000 and TEC 3000

TEC 2000s and TEC 3000s can be connected together on the same network. They both support the same RS-485 protocol. In order to successfully set up a mixed network, make sure that all TEC 2000s are set at a baud rate of 9600 and all TEC 3000s are set at 9600 N81.

Both controllers can be connected to a PC in the same manner. They use an RS485 to USB converter, which connects to the computer's USB port. A serial port is emulated on the USB port of the computer. The USB port is used as the physical connection and the power supply for the converter, so no external power supply is required. In order to allow communication, TEC 2000s should be set at a baud rate of 9600. TEC 3000s should be set at 9600 N81 using ASCII as the port setting on the controller.

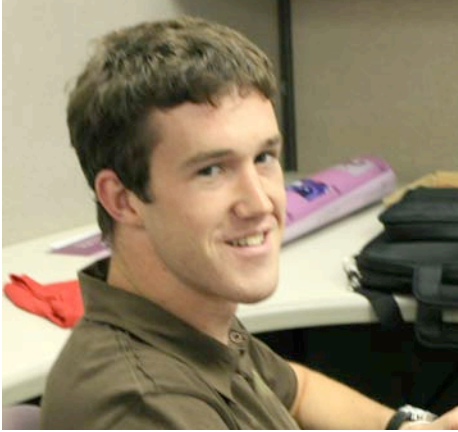
Replacement Parts and Accessories

TEC-3000 Upgrade Kits

MVE P/N	Description
13319491	Stand alone upgrade kit LSCI TEC 2000 to TEC 3000
13319512	Stand alone upgrade kit MDC TEC 2000 to TEC 3000
13319475	Cabinet upgrade kit LSCI TEC 2000 to TEC 3000
13319504	Cabinet upgrade kit MDC TEC 2000 to TEC 3000
13319459	Stand alone TEC 3000 with numeric display
13319467	Stand alone TEC 3000 with symbolic display
13223844	Stand alone TEC 3000 (no display panel)
13223861	Front panel TEC 3000 cabinet with symbols
13223836	Front panel TEC 3000 cabinet with text
13223908	Rear panel TEC 3000 cabinet models
11943012	Power supply kit w/brackets and cord Note: This can be used on cabinet models
11795030	110/220V Jerome power supply (cord not included)
10946596	110V power cord
10995363	220V power cord
13281972	TEC 3000 wire harness
10713418	44" Temperature probe
10713354	96" Temperature probe
10713400	Hot gas bypass temperature probe/sensor

New Faces at Chart BioMedical

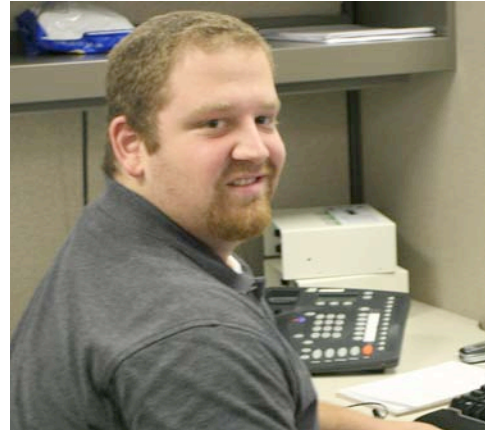
Please welcome these new additions to our biomedical customer service staff. Kieran Taheny is our new Technical Service Representative working out of the UK facility in Bracknell. Brittany Banko will be responsible for Customer Service for U.S. and Canada out of the Marietta office. Our new Technical Service Representative, also out of the Marietta office, is Marc Seaman.



Kieran Taheny



Brittany Banko



Marc Seaman

Customer/Technical Info

For ordering information contact

Customer Service:

USA & Canada: 800 482-2473
Europe: +44 1344-403100
Asia/Australia: +61 297-494333

For technical information contact

Technical Service:

USA & Canada
Jim Bachman: 952 758-8411
jim.bachman@chart-ind.com
Mark Baglia: 770 257-1269
mark.baglia@chart-ind.com
Marc Seaman: 770 257-1279
marc.seaman@chart-ind.com
UK & Europe
Kieran Taheny: +44 1344 403100
kieran.taheny@chart-ind.com

w w w . c h a r t b i o m e d . c o m