VascuTherm3-M

10. Display Messages and Alarm Indicators

10.1. Normal Operation

The following list contains display messages that you may encounter during normal therapy operation:

- **VascuTherm Rev: Vascu_xx_yy**: Boot-up screen displayed temporarily.

- Default display screen is Status screen with the left side showing Thermal Therapy operation mode and the right side showing Compression Therapy operation mode.

Left Side Display Options:

- **TEMP OFF:** Thermal subsystem in idle.

- **COOL SET XX ºC:** Preset cool mode therapy temperature is active. (XX in 6.0-10.0 ºC range).

- **HEAT SET 40.5 ºC:** Preset heat mode therapy temperature is active.

- **CONTRAST SET XX ºC:** Preset cycling between cool and heat therapy temperatures (XX = 9.5 or 40.5).

Right Side Display Options:

- **CMP-OFF:** Pneumatic subsystem in idle. System ready to begin prescribed therapy.

- **STD-CMP:** Compression Therapy for Edema and Lymphedema (standard) is active.

- **DVT- FTB:** DVT Foot therapy mode is active and currently providing alternating compression treatment between the left and right feet by the preset cycle.

- **DVT- FTL:** DVT Foot therapy mode is selected and currently providing compression cycles to the left foot only.

- **DVT- FTR:** DVT Foot therapy mode is active and currently providing compression cycles to the right foot only.

- **DVT- CFB:** DVT Calf therapy mode is active and currently providing alternating compression treatment between the left and right feet by the preset cycle.

- **DVT- CFL:** DVT Calf therapy mode is selected and currently providing compression cycles to the left foot only.

- **DVT- CFR:** DVT Calf therapy mode is active and currently providing compression cycles to the right foot only.

10.2. Alarms and System Errors

The VascuTherm3-M Therapy System has many internal software safeguards to help protect the patient and the unit from unsafe operation. In this section you will find a list of possible system warnings and alarms that may occur if a potentially unsafe situation arises while using the VascuTherm3-M unit.

Alarms indicate that an unsafe condition is currently present and halts all current therapies to protect the patient. The alarm state must be corrected before any therapy can be restarted. Alarm notification combines the use of "ALARM ACTIVE" text on the upper line and an alarm description on the lower line of the display. An audible notification is also initiated by a slow beeping noise. Press any button to clear the active alarm. If the alarm state is still present, the alarm message will reappear and prevent the start of any therapy.

System Errors indicate that an internal software or hardware error has occurred and that an unsafe condition is currently present and all current therapies are halted to protect the patient. An example of this is when there is a problem reading from one of the internal sensors. System errors typically require service to the unit to identify and correct the problem. If you encounter a system error, please write down the 3-digit number indicated on the display and contact the clinic or hospital that prescribed the unit or the Healthcare provider. If assistance is not available or ineffective, please contact ThermoTek technical assistance toll-free at 001-(877)-242-3232 during the hours of 8am-5pm Central Time. If technical assistance is needed after these hours, you may contact the 24-hour line at 001-(214)-502-8800.

Below is a list of common user-related warnings and alarms that may occur during therapy operation of the unit.

!!ALARM ACTIVE!! CHECK FLOW/FLUID: When using either the COOL or HEAT temperature therapies available on the unit, the software monitors the units ability to change the coolant temperature. If the software suspects that the unit was not able to properly alter the coolant temperature due to a **low coolant level** or **blocked flow condition** this alarm will activates.

!!ALARMS ACTIVE!! HIGH TEMP ALARM: Anytime the unit is turned ON, the software constantly monitors the temperature of the internal coolant media. If the software determines that the temperature of the coolant is hotter than a safe level, this alarm activates.

!!ALARM ACTIVE!! LOW TEMP ALARM: Anytime the unit is turned ON, the software constantly monitors the temperature of the internal coolant media. If the software determines that the temperature of the coolant is colder than a safe level, this alarm activates.

!!ALARM ACTIVE!! HIGH H-SINK TEMP: Anytime the unit is turned ON, the software constantly monitors the temperature of the heat sink fins visible on either side of the unit. If the software determines that the heat sink fin temperature is hotter than a safe level this alarm activates.

!!ALARM ACTIVE!! LOW H-SINK TEMP: Anytime the unit is turned ON, the software constantly monitors the temperature of the heat sink fins visible on either side of the unit. If the software determines that the heat sink fin temperature is colder than a safe level this alarm activates.

!!ALARM ACTIVE!! CHECK WRAP-LEAK: When using any of the pneumatic compression therapies available on the unit, the software monitors the amount of time taken to properly inflate the wrap. If the wrap does not inflate in a pre-determined time interval, an air leak is suspected and the alarm activates.

!!ALARM ACTIVE!! CHECK WRAP-BLOCK: When using any of the pneumatic compression therapies available on the unit, the software monitors the amount of time taken to properly inflate the wrap. If the air pressure rises faster than a predetermined rate, an air blockage is suspected and the alarm activates.

!!ALARMS ACTIVE!! KINKED WRAP – S: When using any of the pneumatic compression therapies available on the unit, the software monitors the current air pressure value by way of an internal pressure sensor in the event that unsafe high pressure is detected by the pressure sensor, the software executes an emergency pressure vent and this alarm activates to notify the patient of the therapy termination.

!!ALARMS ACTIVE!! KINKED WRAP - H: When using any of the pneumatic compression therapies available on the unit, an independent backup pressure sensing circuitry constantly monitors the system air pressure value. This alarm activates if the software controlled pneumatic solenoids fail to properly activate during an emergency pressure vent and the backup over pressure detection circuitry activates. The software monitors and detects that the pressure safety circuitry has engaged and this alarm activates.

SYSTEM ERROR XXX: This alarm indicates that an internal software or hardware error has occurred. The unit potentially requires service by an authorized technician. If you encounter a system alarm, please write down the 3-digit number indicated on the display and contact the clinic or hospital that prescribed the unit or the Healthcare provider. If assistance is not available or ineffective, please contact ThermoTek technical assistance toll-free at 001-(877)-242-3232 during the hours of 8am-5pm Central Time. If technical assistance is needed after these hours, you may contact the 24-hour line at 001-(214)-502-8800.

11. Taking Care of Your Vascu-Therm3-M

⚠ Do not use abrasive or solvent-based cleaners on the unit.

⚡ There are no user serviceable internal parts. The system warranty is voided if the tamper seals are breached or removed.

⚡ Keep water away from vents, power ON/OFF switch and the power cord connection of the unit.

⚡ To avoid possible electric shock, do not remove the cover of the unit.

⚡ Do not immerse the unit in water or any liquid.

- **Check the fluid level weekly.**

  If the coolant mixture ever becomes discolored or offensive to smell, contact the clinic or hospital that prescribed the unit or the Healthcare provider for assistance. If microbial growth is present and the unit should not be used.

  If assistance is not available or is ineffective, please contact ThermoTek technical assistance toll-free at 001-(877)-242-3232 during the hours of 8am-5pm Central Time. If technical assistance is needed after these hours, you may contact the 24-hour line at 001-(214)-502-8800.

- **Wipe the exterior of the unit with a damp cloth.**

  Do not use abrasive or solvent-based cleaners on the unit.

- **Clean off the therapy wrap if used for longer than 2-weeks or when noticeably dirty.**

  Disposable therapy wraps are designed for single patient use only and may only be used on the same patient for the length of the treatment.

  The therapy wrap should be periodically cleaned if it is used on the same patient for an extended period of time.

  Clean exposed surfaces of the therapy wrap with either a mild anti-bacterial soap and water solution or an isopropyl alcohol and water solution. Do not use bleach on therapy wraps.