



CliniLogger™

User Manual





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CLINILOGGER™

INSTALLATION AND OPERATING INSTRUCTIONS

Overview and Installation

Introduction

The purpose of the CliniLogger™ device is to save the CritiCool® / Allon® systems' vital data for further reference. By means of the CliniLogger™ Viewer software, the user can use an external PC to review this saved data.

Using the CliniLogger™ Application

The CliniLogger™ device connects to the RS-232 (serial) connector in the rear of the CritiCool® for data transfer. While the device is connected, **data is saved at each one-minute interval.**

Connect the CliniLogger™ device to the CritiCool® before the start of the medical procedure.

Belmont Medical Technologies recommends recording CritiCool® device data for one patient at a time. At the end of the procedure, disconnect the CliniLogger™ device from the Thermoregulation machine and connect to a PC. Download the data from the device and then reconnect the CliniLogger™ to the Thermoregulation machine so it is ready for the next procedure.

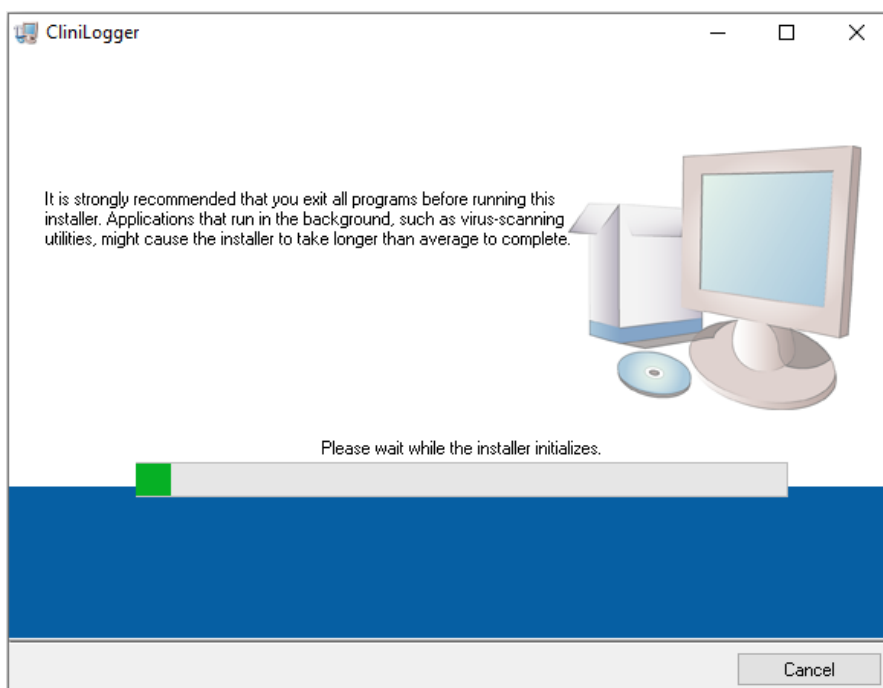
The CliniLogger™ Software

The CliniLogger™ device is supplied with a CliniLogger™ Viewer software in a USB Flash Drive to be installed on a PC for downloading and viewing the saved data from the CritiCool®.

Installing the Software

To install the CliniLogger™ software:

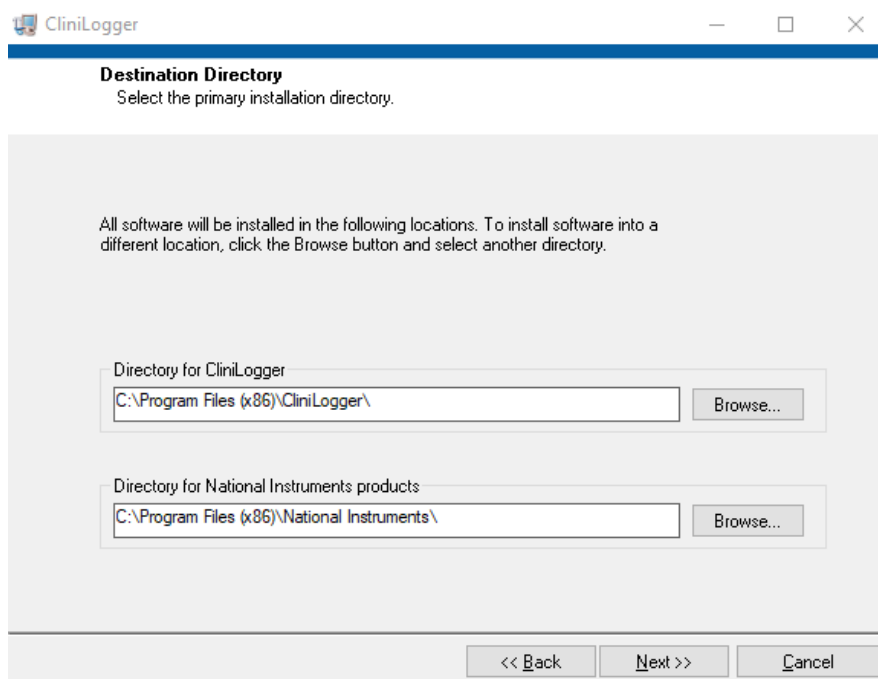
1. On your PC, double-click on **My Computer** and open the USB Flash drive.
2. Double-click the **Installer** folder.
3. Double-click the **Volume** folder
4. Double-click **setup**; the CliniLogger™ install window appears.



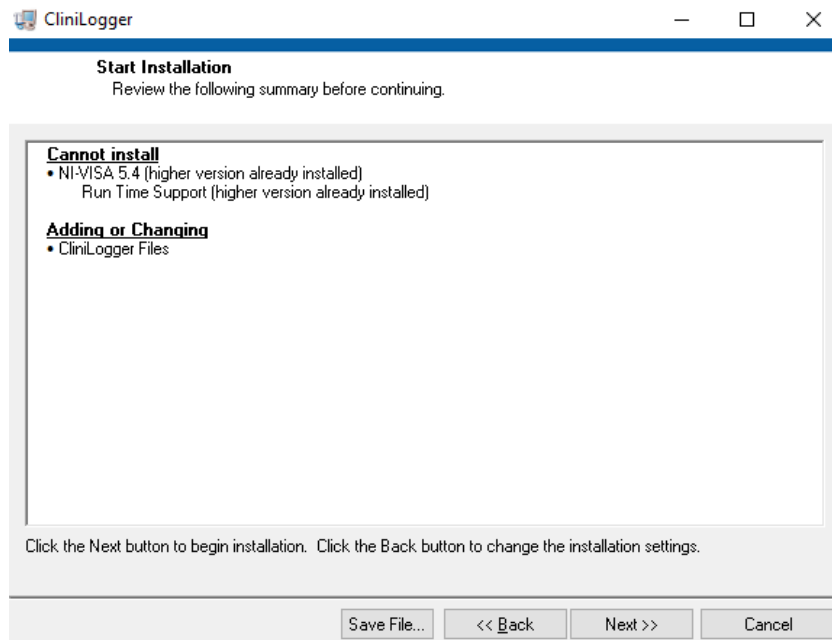
CliniLogger™ Initialization

When initialization finishes the following screen appears:

CliniLogger™ Installation

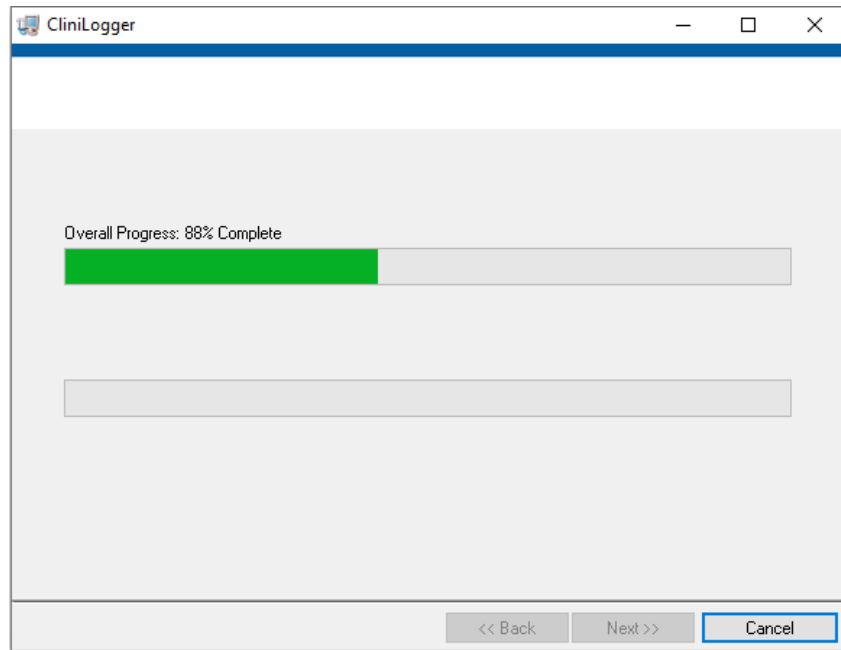


5. You can change the installation location by clicking **Browse** and selecting a new location. Click **Next. The License Agreement window appears.**
6. Select **I accept the above License Agreement(s)** to accept the license agreements and click **Next.** The Start Installation window appears.



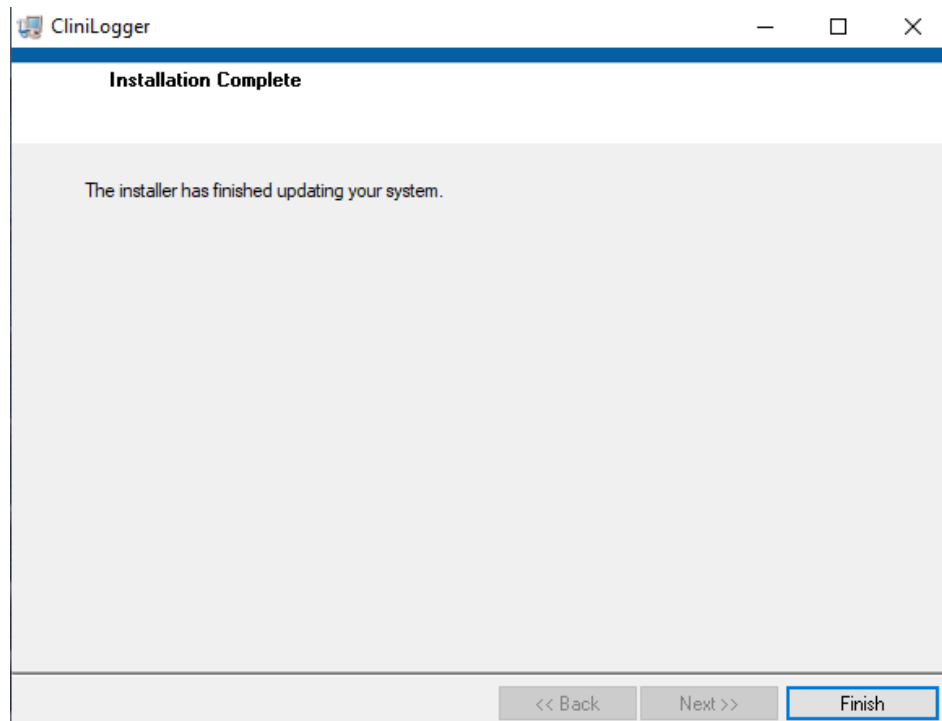
Start Installation.

7. Click **Next**; you can follow the installation progress in the progress bars until it finishes.



Installation in Progress

When the installation is finished, the **Installation Complete** window appears:



Installation Complete.

9. Click **Finish** to complete and exit the software installation.
10. Copy "User Ver XX" folder from USB Flash Drive to your desktop.
11. You can now open "User Ver XX." folder and click the CliniLogger.exe file to start the application.

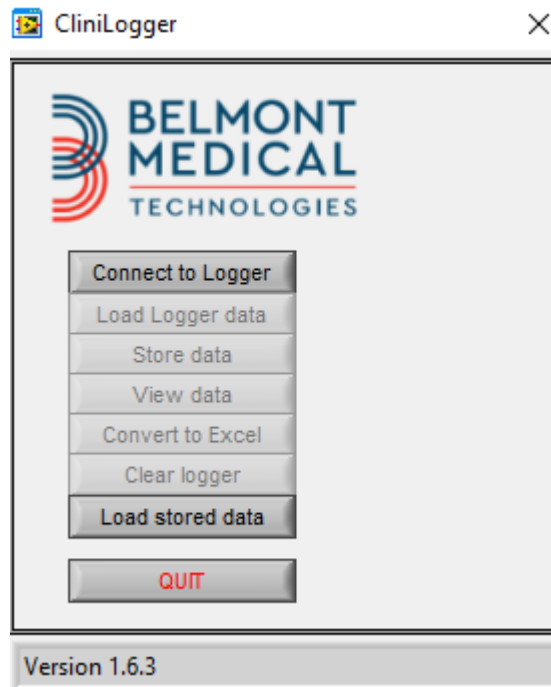
Using the CliniLogger™ Viewer Application

Downloading Data

You can download data from the CliniLogger™ Device to the CliniLogger™ Viewer Application on the PC.

To start the CliniLogger™ application:

1. From the Windows **Start** menu, click **Programs > CliniLogger**.
2. Click on the **CliniLogger™** icon; the CliniLogger™ window appears.



CliniLogger™ Application Window

3. Connect the CliniLogger™ device to the serial COM1 port of the PC.

NOTE: Verify that the CliniLogger™ device is connected to the COM 1 –10 port or you can use with USB to RS232 adaptor.

4. Click **Connect to Logger**, the software traces the COM port where the CliniLogger™ is connected – wait for the **Connected** message.

5. Click **Load Logger data**, wait for the  message.
6. Click **Store data** and choose a file and a location.
7. Click **View data**; the graph opens.
8. You can also click **Convert to Excel** to present the data in Excel format.
9. Click **Clear logger** after saving the data to prepare the device for the next use.

IMPORTANT! *You should erase the data on the CliniLogger™ manually after each patient, otherwise, the CliniLogger™ continues to burn data from the earliest patient on record on CliniLogger™.*

Viewing Downloaded Data

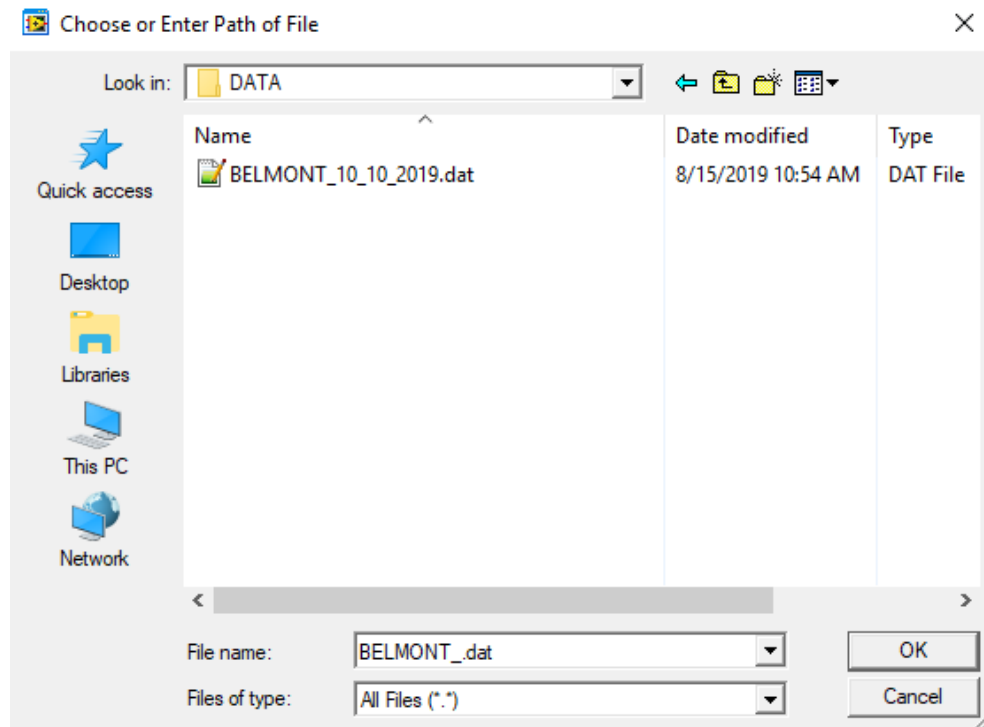
To view downloaded data:

1. Double-click the CliniLogger™ Viewer icon. The CliniLogger™ window appears.



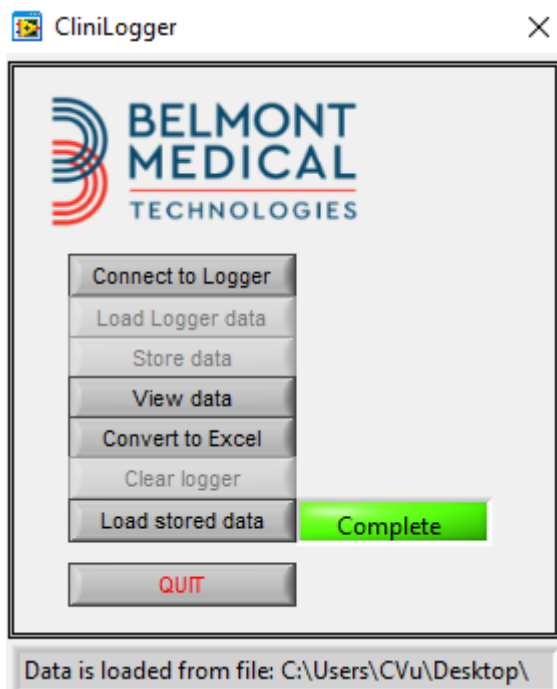
CliniLogger™ Window

2. Click **Load stored data** and choose the file you would like to view.



Choose CliniLogger™ File Window.

When the data has been loaded, the “Complete” message appears

**Complete Message.**

3. Click **View data** - the graph opens.
4. To convert to Excel, click **Convert to Excel** – the data is presented in Excel format.

CliniLogger™ Viewing Panel

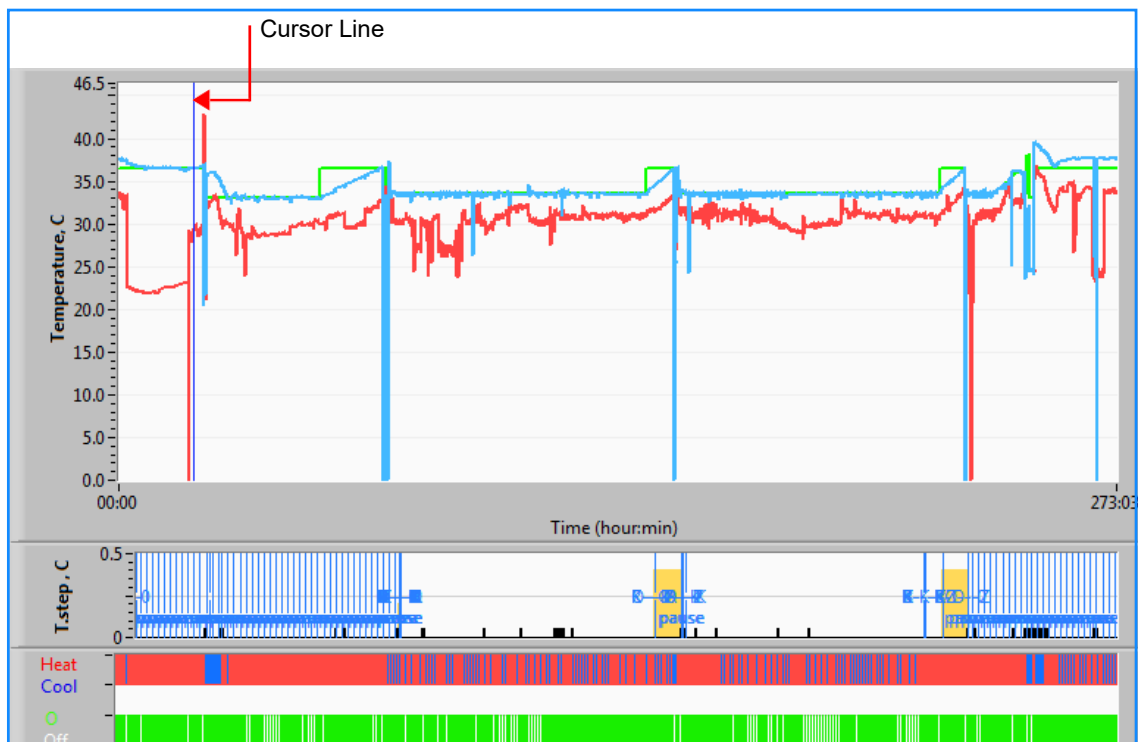


CliniLogger™ Viewing Panel

The CliniLogger™ viewing panel includes the following data:

- Start date and time received from the thermoregulation device (Criticool® / Allon®)
- Software version of the thermoregulation device
- **Close Window** button
- Function Selection area: control keys
- Graphic Display area with a graphic presentation of the Thermoregulation system variables.

Graphic Display Area

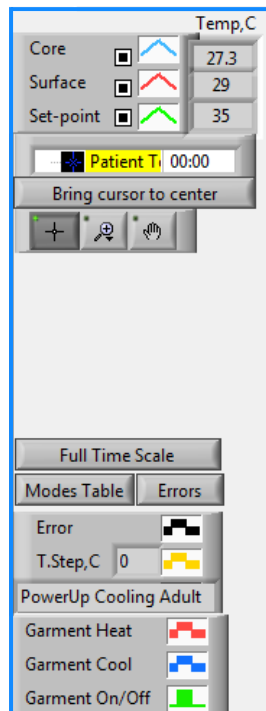


Graphic Display Area

The Graphic Display area consists of three parts:

- **Temperature graphs:** Set-point, Core and Surface as a function of time
- **Modes and Error area:** Thermoregulation modes, rewarming step and errors as a function of time
- **Device Functional Status area:** Heat/Cool and Pump On/Off

Function Selection Area

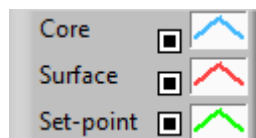


Example: Functional Status Area

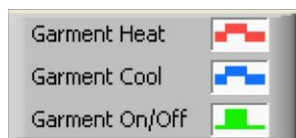
The Function Selection area includes the keys that provide the ability to modify the Graphic Display area, such as zooming in and out, moving between time zones and detailing the viewed data.

Temperature Graph Control Buttons:

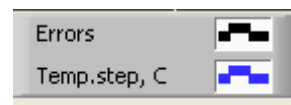
These buttons define the shape of the curves in the temperature graphs area, the water heat/cool graph and the water flow graph.



Temperature Settings



Wrap Settings



Errors/TempStep Settings

Example: Modes and Errors Area.

Temperature graph control buttons enable modifying the display of each of the temperature graphs.

Display / Hide Buttons

Use the Temperature Setting toggle buttons to Display / Hide each of the temperature graphs.

Color Buttons

These buttons give the abilities to change the graph features and colors.

NOTE: It is recommended to keep the default settings.

View Manipulation Buttons

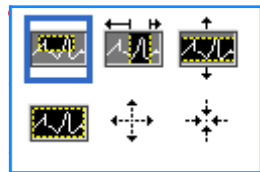
A set of three buttons is shown under the temperature buttons



Hand - Click the Hand  button, using the mouse move the hand cursor to the temperature graph area; and “grab” the curve by pressing the mouse left button and moving the mouse.

Moving the mouse horizontally will move the graphs horizontally - in time, and moving the mouse vertically, will move the graphs vertically - in temperature.

Zoom Clicking the Zoom button shows 6 modes of zoom use:



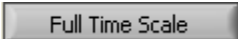
Zoom Tool Buttons

Button	Click to...	How to use...
	return the graphs to the default (un-zoomed) display	
	zoom out symmetrically in X and Y directions	Click this zoom tool button. Using the mouse move the cursor to the Temperature graph; the cursor image changes to the button icon. Click the mouse to zoom out. You can click again to zoom out again.

Table 8-1: Zoom Tool Buttons

Button	Click to...	How to use...
	zoom in symmetrically in X and Y directions	Click this zoom tool button. Using the mouse move the cursor to the Temperature graph; the cursor image changes to the button icon. Click the mouse to zoom in. You can click again to zoom in again.
	create an XY zoom in box.	Click this zoom tool button. Using the mouse move the cursor to the Temperature graph; the cursor image changes to zoom icon. Press the left mouse button and select the box in the graph for zooming in. Once you release the mouse button the image is zoomed in.
	zoom in, in the X (Time) direction.	Click this zoom tool button, using the mouse move the Zoom tool cursor to the required point of time, click to insert the low limit line, keep the left key pressed and pull horizontally to the end of the time period desired. Once you release the mouse button the image is zoomed in.
	zoom in, in the Y (Temperature) direction.	Use the mouse move the Zoom tool cursor to the lower temperature limit, click to insert the low limit line, keep the left key pressed and pull vertically. Release the key to view the temperature graphs zoomed in the selected vertical area.

To return to full time scale after zoom actions:

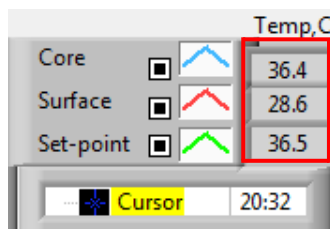
- Click on .

The graph returns to the full-time range, without affecting the Temperature scale.

NOTE: To return to the original display, click the unzoom button .

Cursor Line

The values of the temperatures at the cursor line location appear in the window adjacent to the curve color window



You can change the time of the Cursor Line on the graph (see in Figure 8-11).

To set the time of the cursor:

1. Use the keyboard to set the required time in the **Cursor** textbox. Make sure to select the time as displayed on the graph (and in the HH:MM format).
2. Press ENTER.

The cursor moves to the selected time spot and the Temperatures displayed are the temperatures of the new spot.

To move the cursor line, in time (X direction)

1. Click the Cursor  icon.
2. Bring the + to the cursor location, the + will convert to a double line .
3. Use the mouse to move the double line to a new cursor location.

NOTE: The values of the temperature at the cursor location appear in the window adjacent to the curve color window

Modes and Error Area

This area provides the following information:

System mode marked by letters (See Table) and a vertical line.

Rewarming steps between 0°C and 0.5°C shown in the example in pink (the step was first 0.4°C and then changed to 0.2°C).

Error: Period with no control, in the example due to system pause (yellow markings).



Example of Modes and Error Area.

Mode Codes

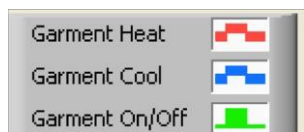
Code	Indicates		
A	PowerUp	Cooling	Adult
B	PowerUp	Cooling	Neonate
C	PowerUp	Warming	Adult
D	PowerUp	Warming	Neonate

Mode Codes

Code	Indicates		
E	PowerUp	Rewarm	Adult
F	PowerUp	Rewarm	Neonate
G	PowerUp	Standby	
H	PowerUp	Sel.Mode	Adult
I	PowerUp	Sel.Mode	Neonate
J	Cooling	Adult	
K	Cooling	Neonate	
L	Warming	Adult	
M	Warming	Neonate	
N	Rewarming	Adult	
O	Rewarming	Neonate	
P	Standby		
Q	Select Mode		Adult
R	Select Mode		Neonate

Functional Status Area – Heat/Cool and Pump On/ Power Off

The graphs indicate the state of the wrap: **Heat / Cool** modes and the **On/Off of water circulation** in the wrap.



Heat/Cool- When CritiCool® is cooling the water in the tank, the line is blue. When the device is warming the water in the tank- the line is red.

Pump On/Off- When the pump is pumping water into the Wrap, the line is green. When CritiCool® is circulating the water internally (i.e. in "Standby mode"), the line is white.

Converting to Excel

To convert to Excel:

1. On the CliniLogger™ menu panel select **Convert to Excel**; an Excel file opens with two options:

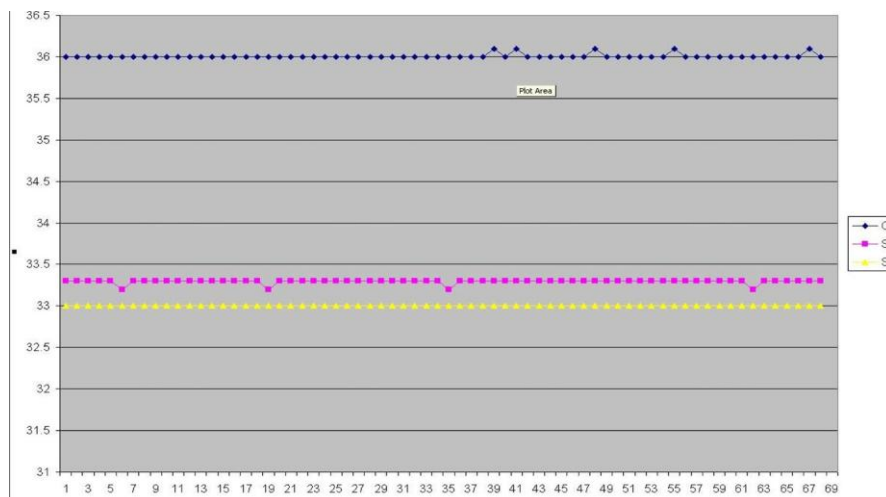
Measurement Table (Sheet 1)

	A	B	C	D	E	F	G	H
1	Date&Time	Record Time	Core	Surface	Set-Point	Mode	Errors	
2	2018/ 6/11 1:50:34	0: 0	33.2	29.7	33.5 K			
3	2018/ 6/11 1:51:34	0: 1	33.3	29.9	33.5 K			
4	2018/ 6/11 1:52:34	0: 2	33.3	30.2	33.5 K			
5	2018/ 6/11 1:53:34	0: 3	33.2	30.3	33.5 K			
6	2018/ 6/11 1:54:34	0: 4	33.3	30.6	33.5 K			
7	2018/ 6/11 1:55:34	0: 5	33.3	30.7	33.5 K			
8	2018/ 6/11 1:56:34	0: 6	33.3	30.8	33.5 K			
9	2018/ 6/11 1:57:34	0: 7	33.4	30.8	33.5 K			
10	2018/ 6/11 1:58:34	0: 8	33.4	33.8	33.5 K			
11	2018/ 6/11 1:59:34	0: 9	33.4	34.2	33.5 K			
12	2018/ 6/11 2: 0:34	0:10	33.4	34.5	33.5 K			
13	2018/ 6/11 2: 1:34	0:11	33.4	28.5	33.5 K			
14	2018/ 6/11 2: 2:34	0:12	33.5	27	33.5 K			
15	2018/ 6/11 2: 3:34	0:13	33.5	27	33.5 K			
16	2018/ 6/11 2: 4:34	0:14	33.5	27.7	33.5 K			
17	2018/ 6/11 2: 5:34	0:15	33.5	27.1	33.5 K			
18	2018/ 6/11 2: 6:34	0:16	33.5	27.6	33.5 K			
19	2018/ 6/11 2: 7:34	0:17	33.6	30.2	33.5 K			

Section of Excel Table

Graphic Chart

A second page in the Excel file shows a graphic description of the Excel table with the Y axis showing the temperatures, and the X axis the Excel table lines.



Section of Graphic Chart.

Ending a Viewing Session

To end a session:

Click **Quit** on the Main Menu to exit the Viewing Session.

Technician Software

Note: The Technician Software can only be run after performing a full installation of the User Software. See 'Installing the Software' section for more information on this process.

Installation Procedure:

- Copy the folder "900-00350 CliniLogger Viewer Software_Tech v1.6.3" from the USB Flash Drive to a location on the desired PC
- Run the CliniLogger tech.exe application