Cryotemp User Guide

Basic Operation

To monitor the cryostat temperature, type CRYOTEMP at the VMS prompt.   The Cryostat Monitor Window will appear.

Cryostat Monitor Window

The current cryostat temperature is updated every five seconds and displayed in the **Cryostat Temperature** text field.

Anyone who uses an SMB-XAS cryostat will be given a pager. Whenever you leave the beam line for more than a couple of hours, you must press the **E-mail Warning On/Off** toggle button and bring the pager with you. If the temperature in the cryostat exceeds the set point (displayed in the **Set Point** text field), the cryostat monitor will send a text message to the pager as a warning. The message will be sent approximately every ten minutes until you turn the warning off.

By default, the set point is 25 K. You can change this by pressing the **Set Pt./Options** button. Enter the new value in the **Set Point** text field and press **Apply**.

Important: This warning system is not completely failsafe - it is simply an added layer of protection for the cryostat and other beam line equipment. It is possible that there will be a power or network outage, which could prevent a message from being sent to the pager. Please do not leave the beam line unattended for long periods of time, whenever possible.
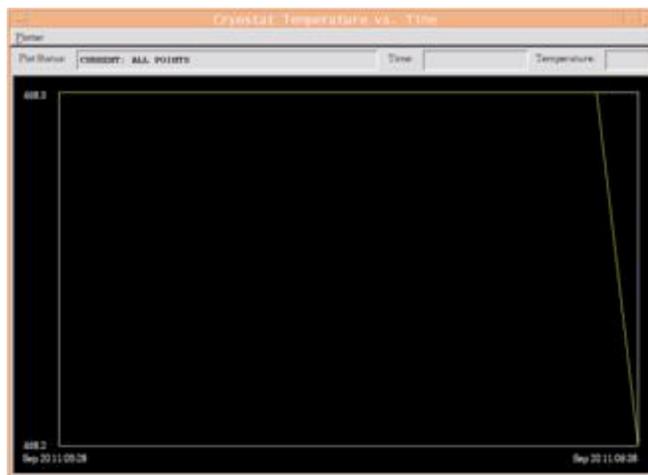
Pager Operation

To answer a page: Press the button with the green line on it to stop the alert. Press it again to access the message. Keep pressing the button to scroll through the message.

To delete a message: Press the button with the red dot on it. Using the left or right arrow

buttons, scroll through the icon list until the screen says, "DELETE MESSAGE". Press the button with the red dot again. The pager will prompt you, "DELETE MESSAGE?" Press the button again to confirm.

Additional Operations

Plotting the cryostat temperature - To plot the temperature history, press the **Plot Temperature** button in the Cryostat Monitor Window. The Cryostat Plotting Window will appear.

Cryostat Plotting Window

By default, the current temperature will be displayed. You can plot a subset of the current history by selecting **Plot Current** from the **Plotter** menu. Select the **Plot Subset** radio button, enter the boundaries of the subset, and press **Apply**. To display the entire history, press the **Plot All** radio button, and press **Apply**.

Saving and opening a file – To save the cryostat history, press the **Set Pt./Options** button. Press the **Save To File** button, enter a file name in the file selection box, and press **Ok**. Press **Apply** to start saving. To open a file in the plotter, select **Plot File** from the **Plotter** menu. Select the file from the list and press **Ok**.

Changing the poll rate – By default, the cryostat temperature is updated every five seconds. To change this rate, press the **Set Pt./Options** button and enter a new value between 1 and 60 seconds in the **Poll Time** field. Press **Apply**.

Changing the temperature controller sensor – By default, the cryostat monitor reads Sensor 1 of the temperature controller. You can change this to read Sensors 2 or 3 by pressing the **Set Pt./Options** button and entering the sensor number in the **Temperature Controller Sensor** text field.

Sending a warning e-mail to an additional address – By default, the cryostat monitor program only sends a warning to the cryostat pager. You can also enter an additional e-mail address to send the warning to. This can be useful if you have a personal cellular phone or pager that accepts e-mail messages. Press the **Set Pt./Options** button, enter an e-mail address in the **Secondary E-mail** text field, and press **Apply**.

Note: Any settings you change in the Options window (including the set point) will not be saved if you exit the program.