



BCSE 1000
SOFTWARE
MANUAL

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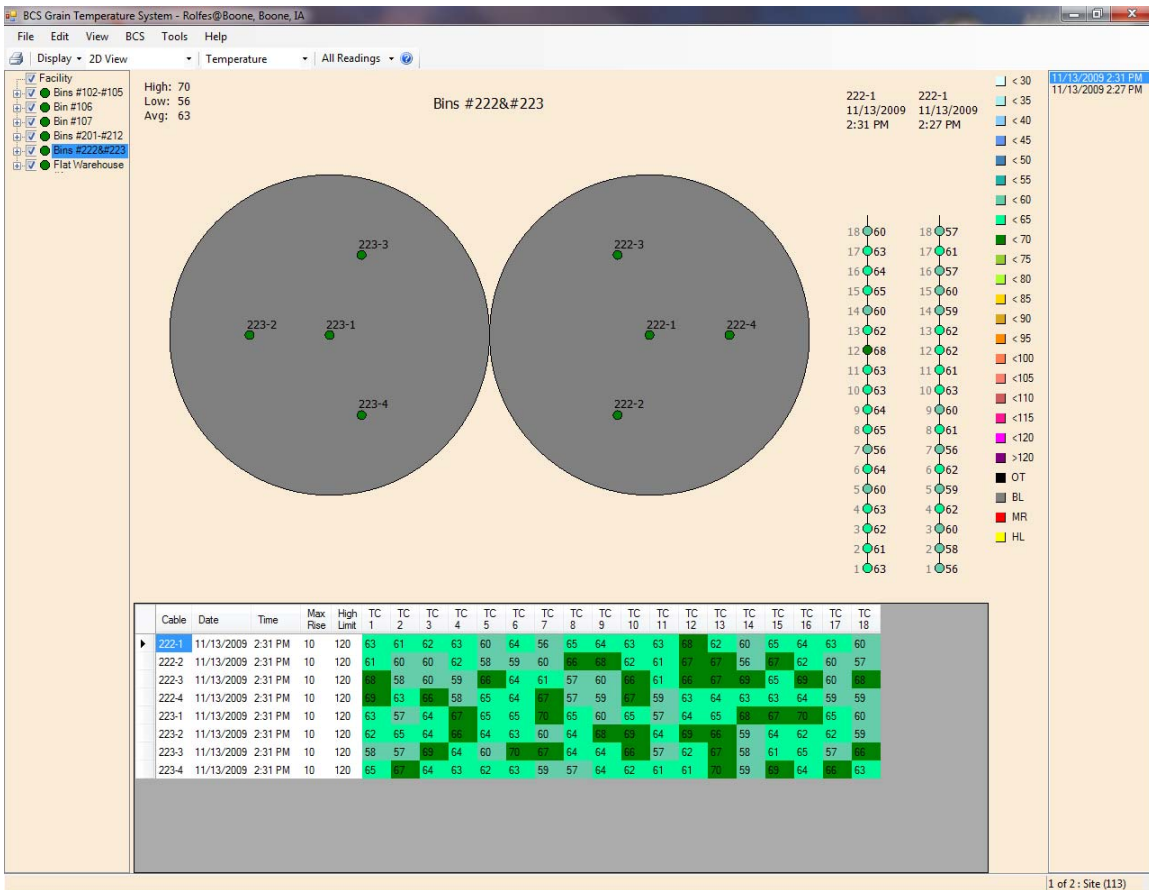
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1 GENERAL

Boone Cable Works & Electronics, Inc. offers a comprehensive line of temperature monitoring equipment. Our complete product range and extensive systems experience allows us to offer effective solutions to a wide spectrum of your practical requirements. Our extensive background in temperature monitoring along with a constant program of innovation and technological development, allows us to offer cost-effective and user orientated solutions. This manual covers the Windows software version for the BCSE 1000 and KF200 Systems which are P.C. based systems of commodity temperature measurement.

1.1 Main Screen



The main screen consists of the following elements

- Menu Bar
- Tool Bar
- Facility List
- Text View
- Graphics View
- Color Legend
- Date Time List

The **Facility List** shows all bin/cable groups. The data (temperature or resistance values) can be displayed in one of three ways: A Text View, 2D overview or 3D view. The Text software package offers only the text view capability. The 3D Graphics software packages offer all three options.

To go from the facility overview to the cables in a bin/cable grouping, place the mouse arrow on the selected grouping and left click.

1.2 Menu Bar

File

Save or print data reports or exit from the program.

Edit

Select all cables.

View

Access Event Log, Terminal, Comment, and Summary Screens.

BCS/KF200

Read the cables. Schedule Reads.

Tools

Access Options screen, Block OT Sensors, and Data Utility.

Help

Program Version

1.3 Tool Bar

Print Icon

Display

View List

Temperature/Resistance

All Readings

1.4 Facility List

Tree View that lists all bins and cable in facility. The top item (Facility) is used to select the entire facility. Items in the facility list are selected by clicking on the item name. Individual bins or cables can be included in the next read by the check box next to the item.

A colored dot located by the bin/cable in the facility list is an indication of the hottest point on the cable or an alarm condition color.

1.5 Text View

Text View is a grid (spreadsheet) view of the currently selected read data. It includes the cable name, date and time of read, Max Rise, High Limit, and the data read for each thermocouple.

1.6 Graphics View

Graphics view is a 2D or 3D representation of the actual facility or bin. In the Facility list select Facility to show the overview of the entire facility or select any bin or cable to zoom into a view of an individual bin.

1.7 Color Legend

On the right side of the screen is a vertical row of colors and numbers. The colors beside the numbers indicate the color that the temperature will be displayed. Below the last temperature is OT. **OT** represents an Open Thermocouple. BL is for Blocked Cables. MR stands for Maximum Rise alarm. HL stands for the High Limit alarm. Change the color by right clicking on the color block and selecting a new color.

1.8 Date Time List

The list of Date Times is on the far right of the screen. It is used to select the current read. The top item in the list is the last read taken.

2 Menu Bar

2.1 File

2.1.1 Save

Save current data to a text file on the computer. The file name includes the date and time of the read.

2.1.2 Save As

Save the text file to any folder on the computer.

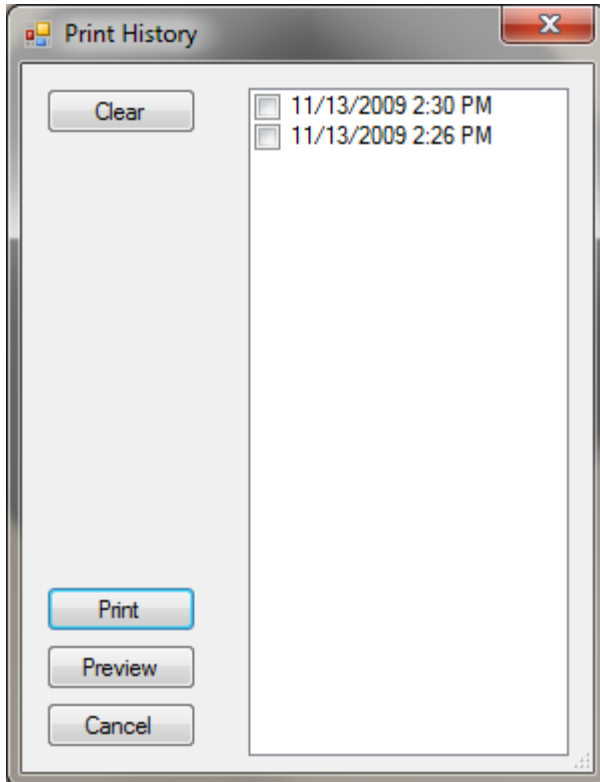
2.1.3 Page Setup

Open the standard Page Setup dialog for setting the paper size, source, orientation, and margins.

2.1.4 Print

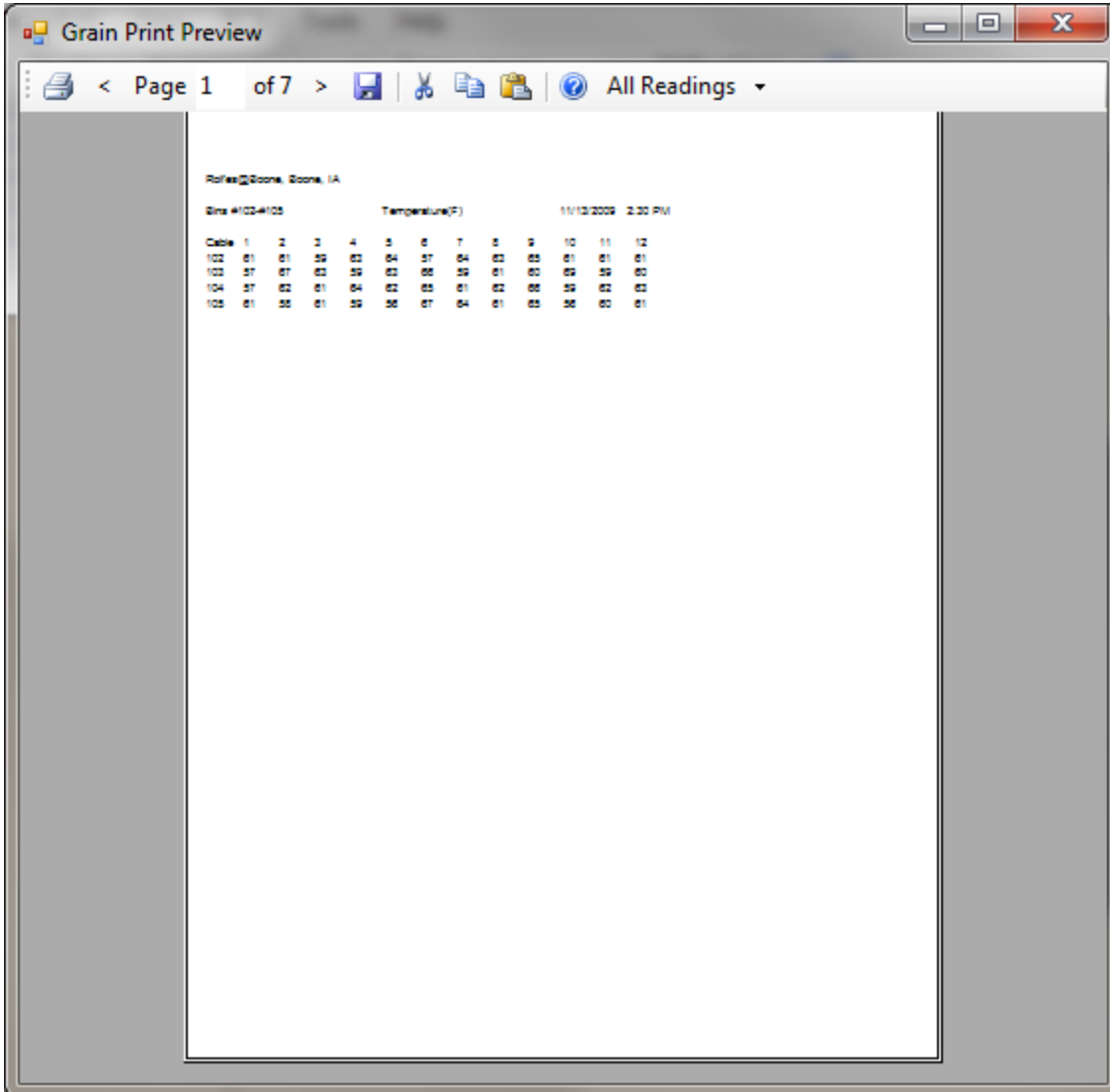
Prints the temperature or resistance of the cables enabled in the facility list. The print dialog box is used to select the current printer. In temperature mode, temperature data will be printed and in resistance mode, resistance data will be printed.

2.1.5 Print History



Prints the history data for all currently enabled bins and cables. Check the dates in the date time list, and then select Print or Preview.

2.1.6 Print Preview



Open a Print Preview Screen with the same data as the Print button. The data can be previewed before printing. Toggle between All Readings and Alarms Only by clicking on the button in the toolbar.

2.2 Edit

2.2.1 Select All

Check this to select all the bins/cable in the facility.

2.3 View

2.3.1 Event Log

All Events are displayed in this log screen. Events are temperature alarms and system events.

2.3.2 Terminal

This is a feature for Boone Cable Works & Electronics service personnel. DO NOT USE THIS FEATURE WITHOUT CONSULTING Boone Cable Works & Electronics. THIS FEATURE MAY CAUSE THE SYSTEM TO MALFUNCTION.

2.3.3 COMMENT (Cable Comment Area)

Select this option and a notepad window opens on the screen. This allows notes on each cable to be stored in the system. In the facility level the notes are about the whole facility. At the bin level the notes are for the cable displayed at the right side of the screen. The comments will be shown in the bottom right area of the screen.

2.3.4 Summary

Display summary information for the currently selected read. This is the same information that can be emailed after each read. The summary data can also be sent directly from this screen.

2.4 BCS/KF200

This menu has different functions for the BCSE 1000 System and KF200 Portable.

Using a BCS1000 System, the **Begin Read** Button starts to read the cables that have been enabled. Enable by checking the box in the facility list. In temperature mode temperature data will be read and in resistance mode resistance data will be read. These readings will be stored in the BCS Grain database on the computer.

Using a KF200 Portable, the **Begin Read** button is used to download cable data to the computer. See the KF200 Operators Manual for directions on downloading the system configuration and data and skip the remainder of this section.

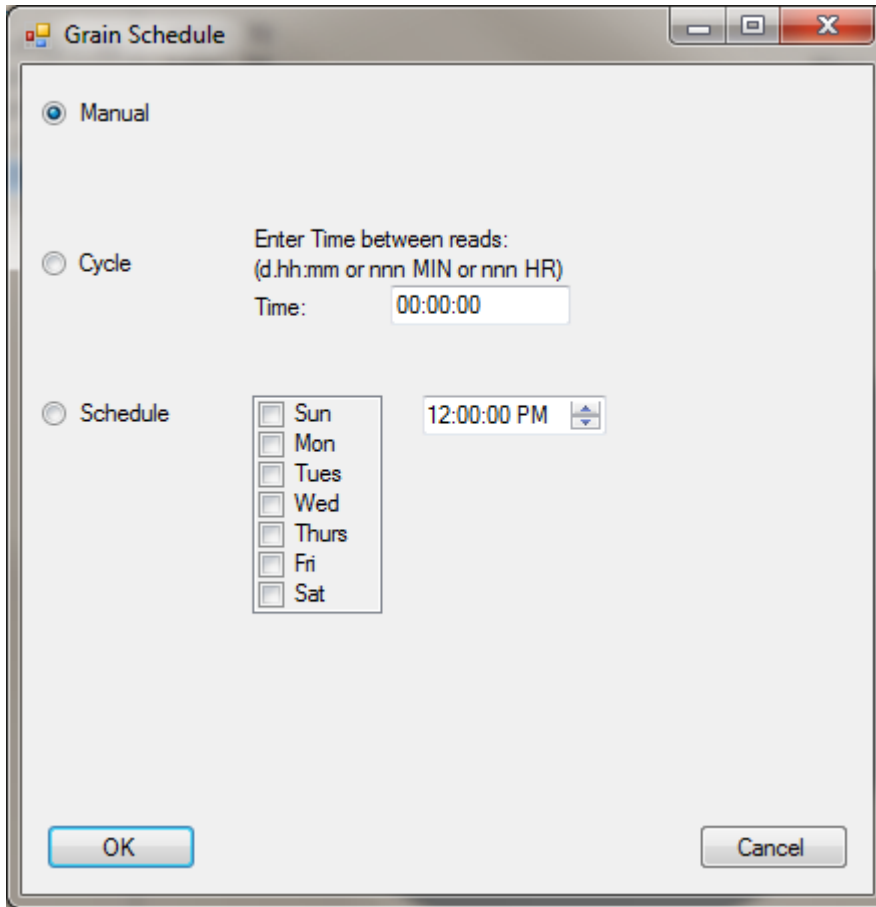
2.4.1 Begin Read

Start a read of the cables that have been enabled. A report can be printed or emailed after the read is completed. Enable these features in the Grain Options dialog box in Tools menu.

2.4.2 Halt Read

Halt the current read. The read can be restarted by selecting **Begin Read**. This item is only enabled while a read is in progress.

2.4.3 Schedule



2.4.3.1 Manual

The system reads all the currently enabled bins/cables.

2.4.3.2 Cycle

The system will read the cables that have been enabled at the interval time that was selected. As an example, enter 01:00:00 (one hour) and the cables that are selected will be read every hour.

2.4.3.3 Schedule

Select what day/days in the week and at what time. The system will read the cables that have been selected at the days and times selected. As an example, input 12:00 am on Monday, Tuesday and Wednesday and the cables will be read every week at those days and times.

2.5 Tools

2.5.1 Options

2.5.1.1 System

The screenshot shows the 'Grain Options' dialog box with the 'System' tab selected. The 'IP Address' field contains '192.168.0.195'. The 'BCS Wait Times' section includes 'Section' (1000), 'Cable' (400), and 'Tc' (1000). The 'BCS Read' section includes 'Wait' (750) and 'Accuracy' (2). There are five unchecked checkboxes: 'Default Colors', 'Color Print', 'Bin FormFeed', 'Print Report after Read', and 'Save CSV File after Read'. A 'Folder:' field is empty with a 'Browse' button. At the bottom, there are buttons for 'Data Folder', 'OK', and 'Cancel'.

2.5.1.1.1 Set IP Address

IP Address of the BCS1000 Ethernet module

2.5.1.1.2 Default Colors

Check this option, and then click on OK to restore default settings for all temperature, resistance, and alarm colors.

2.5.1.1.3 Color Print

Enables color printing. The default is black and white.

2.5.1.1.4 Bin FormFeed

Print a separate page for each bin. Increases the total number of pages printed.

2.5.1.1.5 Print Report after Read

Enables a report to be printed after each read.

2.5.1.1.6 Save CSV File after Read

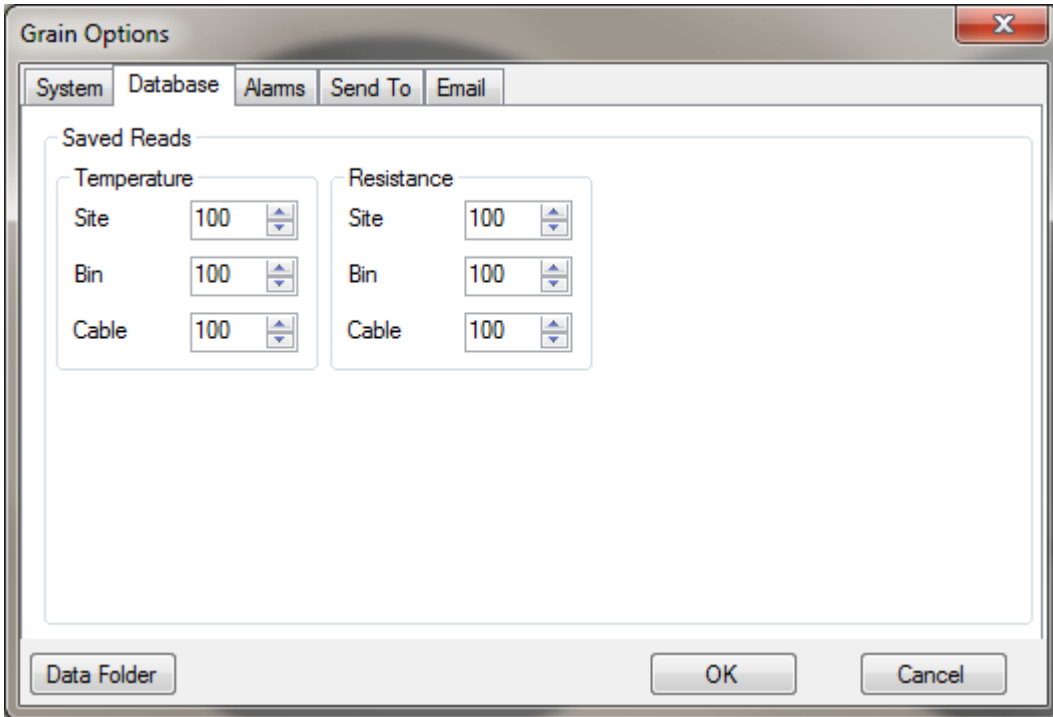
Save CSV File to folder after read is complete. Use Browse button to select folder.

The following two features are for Boone Cable Works & Electronics service personnel. DO NOT USE THIS FEATURE WITHOUT CONSULTING Boone Cable Works and Electronics. CHANGING THE VALUES MAY CAUSE THE SYSTEM TO MALFUNCTION.

2.5.1.1.7 BCS Wait Times

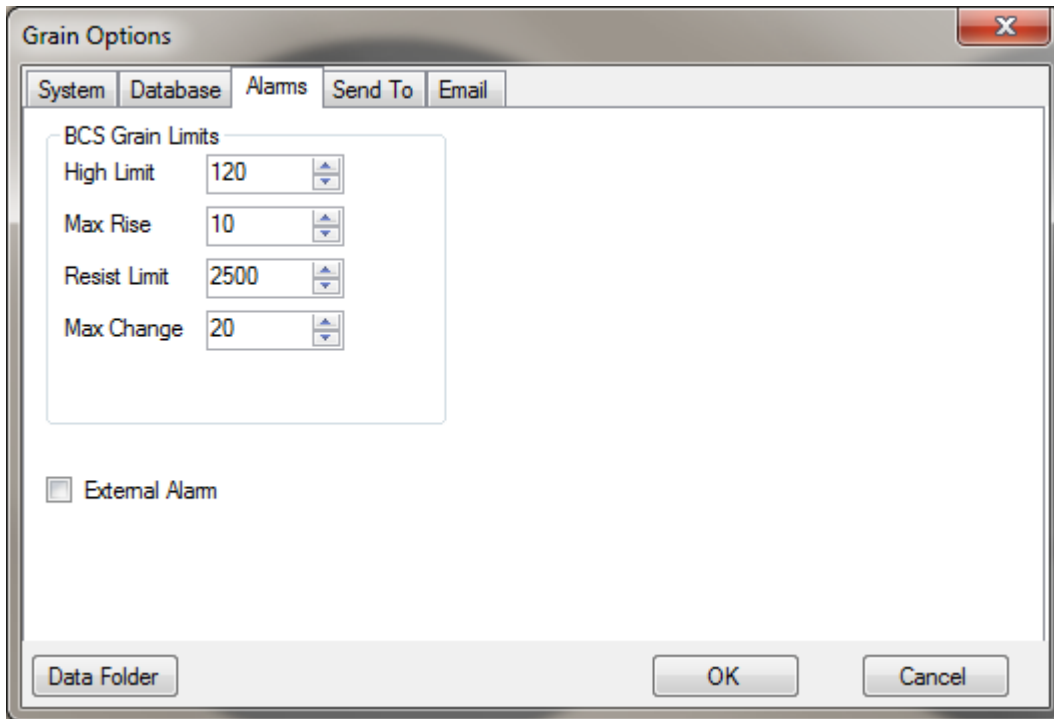
2.5.1.1.8 BCS Read

2.5.1.2 Database



This option sets the number of saves that will be stored in the database.

2.5.1.3 Alarms

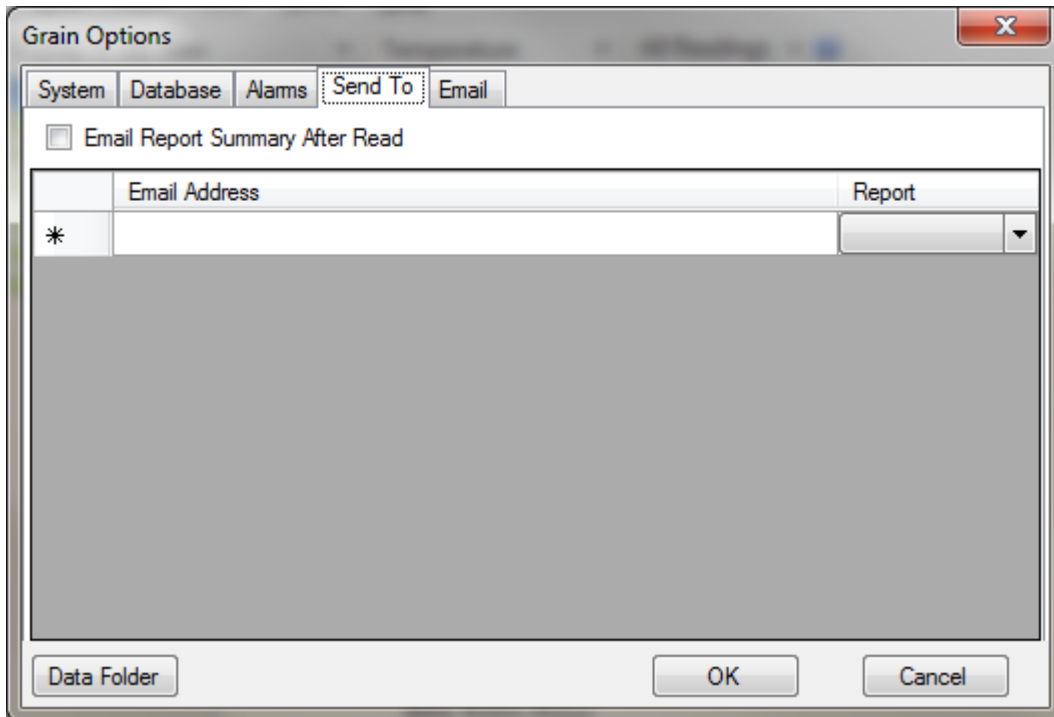


Alarm set points of high limit and maximum rise can be changed. The high limit is an absolute number; if any readings are above it an alarm will be activated. The maximum rise is a check on the temperature rise on the cable. If the temperature has risen more than the maximum rise number since the last reading an alarm will be activated.

2.5.1.3.1 External Alarm

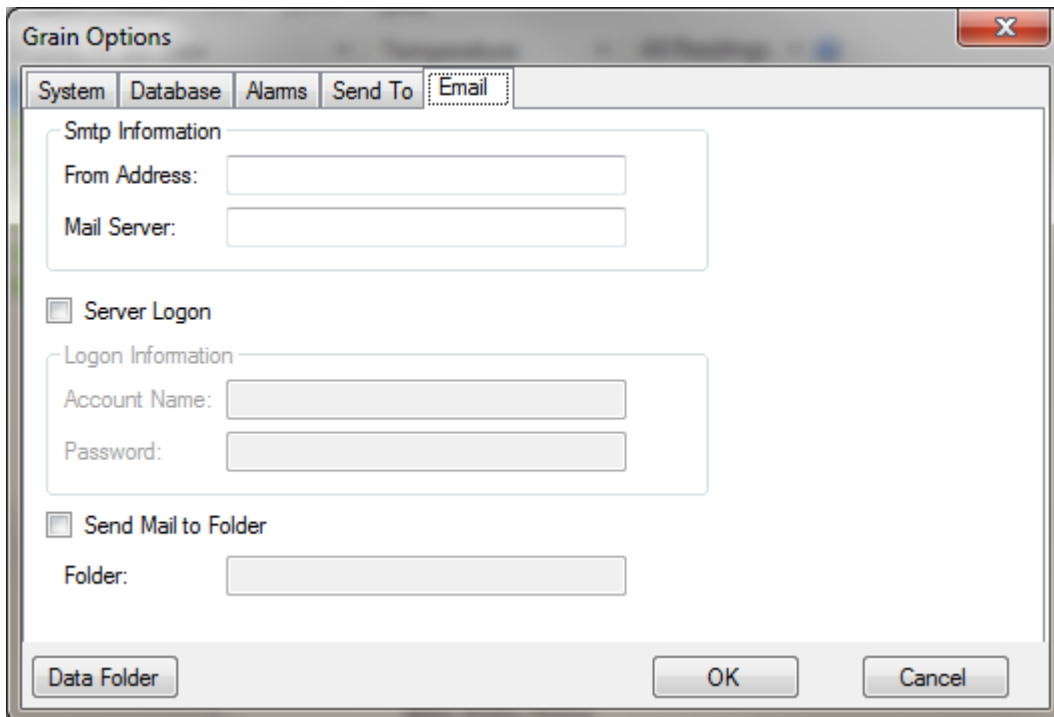
An external alarm contact on the BCSE 1000 Ethernet module can be enabled. Check to enable or uncheck to disable the external alarm.

2.5.1.4 Send To



Enable Email Report Summary After Read. Email address list for the Send to feature.

2.5.1.5 Email



Configuration information for the Send To feature.

2.5.2 Block OT

Automatically blocks all cables/thermocouples that are currently in OT.

2.5.3 Data Utility

Opens a dialog box to check, backup, or create a new database.

3 Tool Bar

3.1 Print Icon

Selecting this is the same as selecting Print in the main menu.

3.2 Display

Display a list of items and features on the screen that can be toggled Hide or Show.

3.2.1 Read in Progress

While the system is reading, the readings can be displayed in real time. To stop the readings from being displayed as they are read, click on this option and the readings will stop updating on the screen.

3.2.2 Temperature Legend

Hide/Show the temperature legend on right side of screen.

3.2.3 Date Time List

Hide/Show the Date Time list on right side of screen.

3.2.4 Cable View

Hide/Show the Cable View in Graphics View (2D or 3D only).

3.3 Tool Bar List

The temperature/resistance data can be shown in a variety of views. This list shows the current view type and allows the view to be changed.

3.3.1 Text

The Text view shows the currently selected read data in a spreadsheet type view. The data can be changed by selecting a new date time from the Date Time list on the right side of the screen.

3.3.2 2D View

On the Graphics View shows a 2D overview of the site if Facility is selected. Shows a 2D overview of the bin selected. This is only available if the 3D color overview software package was purchased.

3.3.3 3D View

On the Graphics View shows a 3D view of the site. The mouse can be used to rotate the facility and adjust the vertical viewing angle. This is only available if the 3D color overview software package was purchased.

3.3.4 Show All Cables

The cables in the selected bin/cable grouping will be displayed across the screen. (D/T buttons) up/down arrows on the top of the right hand column to scroll back and forth in time. Use the scroll bar on the bottom of the view to show more cables.

3.3.5 Show Cable History

In the graphics view, a single cable is located on the right side with its two last readings. This cable is selected by clicking on the desired cable in the facility list. Select this option, then that cable is listed across the entire screen with its readings back in history. The most current read is on the left with each previous read to the right. Use the scroll bar on the bottom of the right view to show more cables.

3.4 Temperature/Resistance

Switch between the temperature and resistance display modes. In temperature mode, temperature readings can be taken and displayed. In resistance mode, resistance readings can be taken and displayed.

3.5 All Readings/Alarms Only

Toggle between all readings and alarms only. Alarms Only shows reads that have at least one alarm in the read data.

4 Facility List

The **Facility** list allows selected cables to be read or printed. Jump around the system selecting individual cables and/or bin/cable groupings

4.1 *Enable Entire Site*

Check the top item in the facility list to enable all bins/cables in the entire site. To disable all bins/cables, clear the box.

4.2 *Select TC(s) to Block/Unblock*

Right click on any cable/thermocouple to bring up a menu. Select Block on menu to enable or disable block.

5 Text View

Text view (spreadsheet format) of all data for currently selected read.

6 Graphics View

6.1 *Home 3D View*

Use the mouse to rotate/zoom the view of the facility or bin. Click the H key in the center for the screen to default back to a preset rotation angle.

7 Color Legend

7.1 *Change Temperature Colors*

The colors associated with various temperatures, resistances and alarms can be changed by clicking on the desired color in the color legend. A standard color dialog will appear where the colors can be changed. Click **OK** to accept or **Cancel** to reject the color changes. The default colors can be restored view the Options menu.

8 Date Time List

The **Date/Time List** moves through all of the saved reads on the cables. The last read is on the top of the list. Use the mouse or arrow keys to select a new Date Time, the current view will be updated with the data from that read.

9 Help

9.1 *ABOUT*

Clicking on the option brings up a dialog box displaying the version, Boone Cable Work's address and phone number, user information, and serial number.

10 TYPICAL APPLICATION

To read and then print the entire facility:

Click BCS on main menu.

Click on **Begin Read**.

The system reads the entire facility.

Click on **Print**.

Verify all printer options and select printer.

Click on **Print**.

The system prints the reading for the entire facility.