

485 ALARM PANEL

P.N. 811-4850

DOCUMENT No. 025-4850

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CPC

ALARM 485 SET UP AND OPERATION

1. Modes of Operation

There are two modes of operation for the unit. They are:

Mode	Display Indication
1. No Unacknowledged Alarms	Date/Time & "NO ALARMS" displayed. You may press an arrow key to view any "old" alarms in memory.
2. Unacknowledged alarms	Date/Time & "ALARMS" displayed. Press an arrow key to view current alarms. Press "RESET" ONCE TO SILENCE, TWICE TO COMPLETELY RESET ALARM. If alarm reoccurs, the annunciator will sound again.

When the unit is first powered ON, the display will indicate the time, date, and "NO ALARMS". If the unit has been powered up previously, the internal memory may contain alarm messages. If this is the case, the stored alarms may be reviewed by pressing either of the arrow buttons. If no alarms have been stored, the display will show blank alarms when scrolling with the arrow buttons.

2. Displaying Alarms

The following will describe the use of the arrow buttons to scroll through alarms stored in memory.

The alarm messages may be thought of as a list on a sheet of paper. The display is simply a window moving up or down the page viewing the first two or second two lines of any one alarm. Each alarm is made up of four lines (two screens).

The down arrow will take you to the second two lines of an alarm, or to the next alarm, depending on where you are at when you press it. The first two lines of an alarm give information about time and date and unit number, the second two lines give a description of the alarm.

The up arrow will take you to previous alarms or from the second two lines of a given alarm to the first two lines of that alarm.

Pressing both arrow keys simultaneously will set the display back to viewing "ALARMS" or "NO ALARMS" and the scrolling window back to Alarm #1. The unit will store a maximum of 20 alarms.

3. Receiving Alarms

When the unit receives an alarm message, the LCD will display the word "ALARMS", the alarm L.E.D. will illuminate, and the audible alarm will sound (if the unit is set to do this). At this point, the RESET button can be pressed once to silence the audible alarm. This will allow the user to view the current alarm(s) without the annoyance of the audible alarm. If the RESET button is pressed a second time, the current alarms in the 485 Alarm will be acknowledged and a "Reset Alarms" message will be broadcast to all attached devices that respond to the 485 Alarm. Before resetting alarms, the pending problems should be solved or the alarm will reoccur and equipment problems or product loss could occur.

If the 485 Alarm loses communications, it will turn on both the LED and audible alarms and display "Network Down". This may be acknowledged by pressing the RESET button. This error suggests a wiring or switch setting problem. Communications will be initiated by another device in less than 5 minutes or immediately upon powering up the 485 alarm.

4.0 Clearing Alarms

Using either the power switch behind the lower access panel, or the power cord, remove power from the 485 Alarm. Hold down all four keys and power up the unit. All alarms will be cleared. If the unit goes into the "Clock Set" mode, press the RESET button until "No Alarms" appears on the display.

5.0 485 Clock Setting

The following procedure sets the 485 Alarm Panel internal clock.

1. Insure that the display shows "No Alarms".
2. Press and hold down the RESET button.
3. Press and release the TEMPS button.
4. Use the arrow buttons to increment/decrement the month.
5. Quickly press and release the RESET button. Notice the indicator on the second line points to the "days" position.
6. Repeat steps 4 and 5 for the day, hour, minute and AM/PM indicator.
7. When the date and time are as desired, a final press of the RESET button will return the user to the "No Alarms" or "Alarms" display.

6. Hardware Setup

The network and mode switches are located under the bottom access panel.

6.1 Network Switches set the device ID and baud rate.

Switches 1 thru 5 define the board device number (1-16).
Most applications are set for ID=1.

<u>ID</u>	<u>POSITION</u>					
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	
0	0	0	0	0	0	1 = ON
1	1	0	0	0	0	2 = OFF
2	0	1	0	0	0	
3	1	1	0	0	0	

Switches 6 and 7 set the baud rate (normally 4800 baud). Set the baud rate using the table below.

<u>BAUD</u>	<u>POSITION</u>		
	<u>6</u>	<u>7</u>	
1200	0	0	
2400	1	0	1 = ON
4800	0	1	2 = OFF
9600	1	1	

6.2 Jumpers JU3, JU4, and JU5 set terminating resistance for the RS 485 communications bus.

DEVICES AT THE ENDS OF THE 485 BUS WIRING REQUIRE TERMINATING RESISTORS FOR PROPER OPERATION OF THE ENTIRE NETWORK. IF THE NETWORK ENDS AT THE 485 ALARM, MOVE THE TERMINATING JUMPERS FURTHEST AWAY FROM THE 485 TERMINAL BLOCK (TOP POSITION).

These jumpers are located on the 485A board right next to the RS-485 communication terminal block. The jumper positions depend on how the Expansion Communication Bus is wired.

6.3 Printer Port Setup

Mode switch 1 should be ON to enable the printer. OFF disables the printer.

6.4 Audible Alarm.

Mode switch 2 enables/disables the audible alarm. Off ENABLES the audible alarm.

7.0 Installation

Mount the 485 Alarm using the six mounting holes on the outside of the enclosure. Figure 1. shows mounting dimensions. Figure 2. shows the wiring. Power may be via the supplied drop cord and a standard duplex outlet at 120VAC, or wired directly to a convenient power supply. Connect terminals 6, 7, and 8 to the RS 485 network on any 1602's that you are monitoring.

8.0 Specifications

Microprocessor	8751 Microcontroller
Communications	RS-485 Interface operating at 1200, 2400, 4800, or 9600 Baud.
Power Requirement	120 VAC/208VAC Selectable
Features	Parallel printer port, Real time clock, Audible and LED alarm, Alarm Reset
Dimensions	8.75" X 8.625" X 4.75"
Mounting Dimensions	See Figure 1.
Weight	Approx. 4 LB.

MOUNTING DIMENSIONS

For CPC Part No. 811-4850 RS485 Alarm

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Version 1.2

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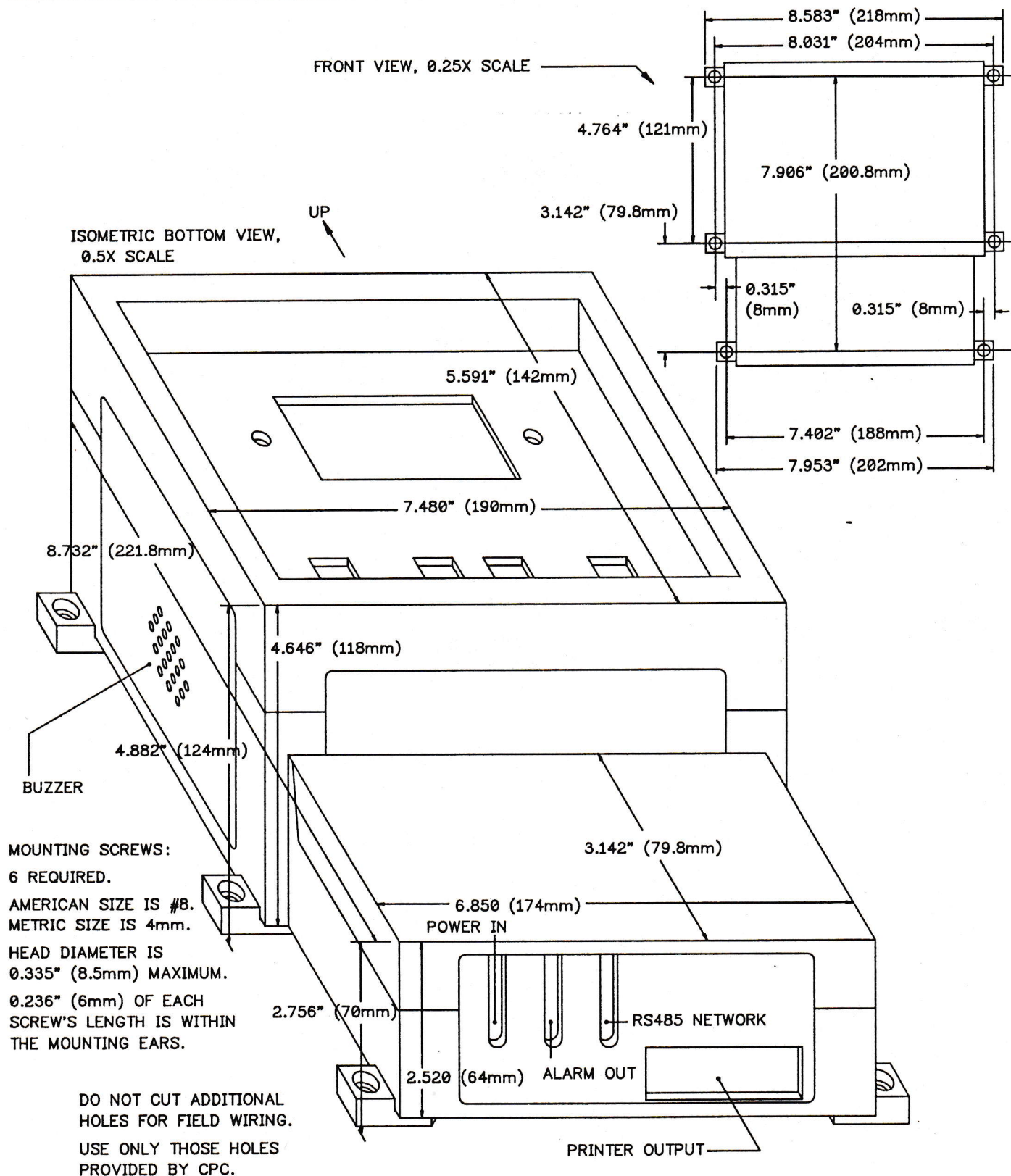
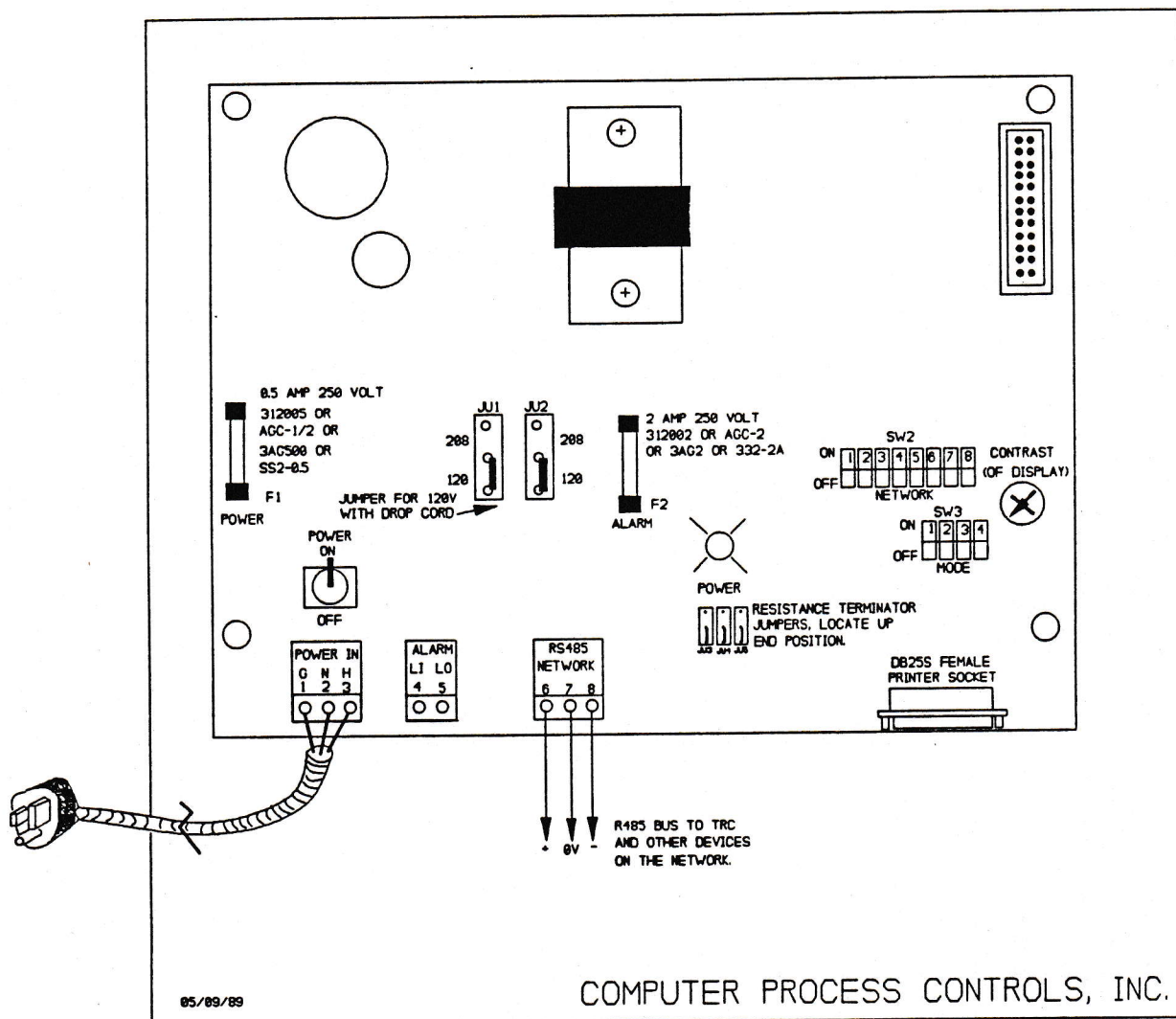


Figure 1



TRC ALARM PANEL WIRING

Figure 2

