MODEL 929 ALARM CONTROLLER
INSTALLATION GUIDE

The Model 929 Alarm Controller is an accessory for use with any Garnet stationary gauge system. It is used to provide power for an external lamp or sounder (not supplied).

TERMINAL BLOCK CONNECTIONS

Terminal	Description
GAUGE ALM 2 FOR LAMP	- When using an external lamp connect to Alarm 2 in gauge display.
+18VDC POWER	- Power for sounder. Jumper to one of the NO Relay contacts .
GAUGE/SOUNDER GND	- Connect the gauge ground and the sounder ground here.
RED DISPLAY PWR	- Used to power gauge display backlights where required.
GAUGE ALARM 1	- Connect to Alarm 1 in gauge display if needed.
GAUGE ALARM 2	- Connect to Alarm 2 in gauge display if needed.
GAUGE ALARM 3	- Connect to Alarm 3 in gauge display if needed.
GAUGE ALARM 4	- Connect to Alarm 4 in gauge display if needed.
RELAY NO ALM 1	- Normally open relay contact for Alarm 1.
RELAY NO ALM 1	- Normally open relay contact for Alarm 1.
RELAY NO ALM 2	- Normally open relay contact for Alarm 2.
RELAY NO ALM 2	- Normally open relay contact for Alarm 2.
RELAY NO ALM 3	- Normally open relay contact for Alarm 3.
RELAY NO ALM 3	- Normally open relay contact for Alarm 3.
RELAY NO ALM 4	- Normally open relay contact for Alarm 4.
RELAY NO ALM 4	- Normally open relay contact for Alarm 4.
LAMP HOT	- Power for lamp.
LAMP NEUTRAL	- Neutral for lamp.
LINE GROUND	- Connect to line ground.
LINE HOT	- Connect to line hot.
LINE NEUTRAL	- Connect to line neutral.

INSTALLATION GUIDELINES

To use a 110 VAC lamp
1) Connect a wire from the **ALARM 2** output on the gauge display to the **GAUGE ALM 2 FOR LAMP** terminal.
2) Connect the **GROUND** on the gauge display to the **GAUGE/SOUNDER GND** terminal.
3) Connect the lamps hot wire to the **LAMP HOT** terminal.
4) Connect the lamps neutral wire to the **LAMP NEUTRAL** terminal.
5) Connect 110VAC power to the **LINE GROUND**, **LINE HOT**, and **LINE NEUTRAL** terminals.
6) Determine the alarm set point and program this value into the Alarm 2 location on the gauge. Program the alarm as a startup if you want the lamp to come on at the alarm point or as a shutdown if you want the lamp to turn off.

To use a sounder
1) Connect a wire from the **ALARM 1** output on the gauge display to the **GAUGE ALARM 1** terminal.
2) Connect a wire from the **+18VDC POWER** terminal to one of the two **RELAY NO ALM 1** terminals.
3) Connect the sounder's positive or hot lead to the other **RELAY NO ALM 1** terminal.
4) Connect the sounder's ground lead to the **GAUGE/SOUNDER GND** terminal.
5) Connect the **GROUND** on the gauge display to the **GAUGE/SOUNDER GND** terminal.
6) Connect 110VAC power to the **LINE GROUND**, **LINE HOT**, and **LINE NEUTRAL** terminals.
7) Determine the alarm set point and program this value into the Alarm 1 location on the gauge. Program the alarm as a startup so that the sounder will turn on at the alarm point.

Other uses
If no lamp or sounding device is being used then the four **GAUGE ALARM** terminals and the corresponding **RELAY NO ALM** terminals can be used as needed. Each alarm relay has a maximum load rating of 3A at 120VAC.

Some versions of the gauge display require external power for the LCD backlights. If this is the case for the model of display you have then you can obtain power from the **RED DISPLAY PWR** terminal.