

## PRM-1 Programmable Relay Module

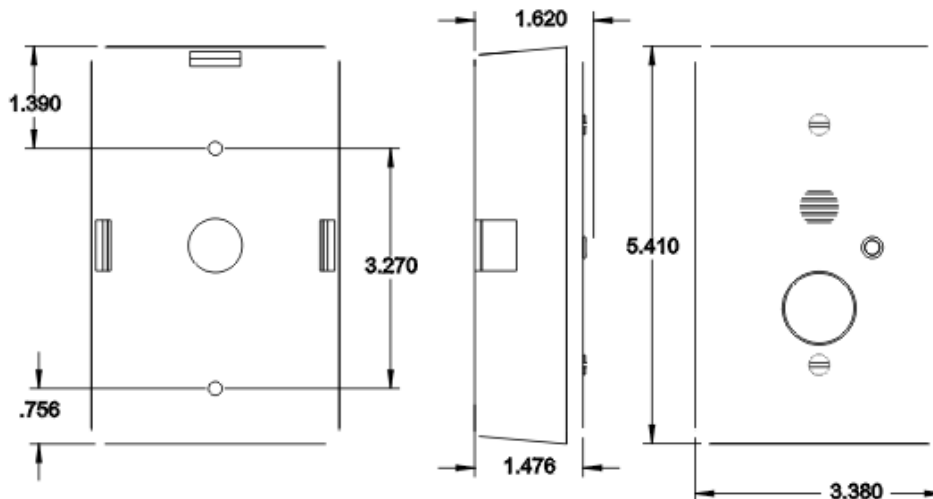


**PRM-1**  
Programmable Relay  
Module

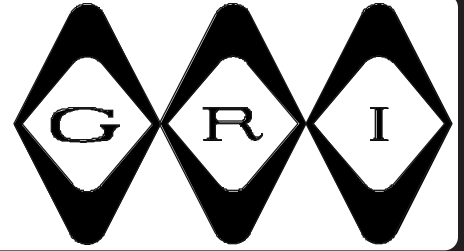
- 9-12 Volts DC - Battery or Externally Supplied Power
- 85 dB Max. Local Annunciation Adjustable
- 2 Form C (SPDT) Relay Outputs
- Visual Indicators for Normal and Alarm Conditions
- User Programming Functions for Timing and Delays
- Preset Factory Defaults. Optional Settings By Request

The PRM-1 is capable of monitoring any open or closed loop sensor using battery or external power (recommended). Incorporating local annunciation, 2 Form C relay outputs, bi-color LED for visual confirmation of normal or alarm mode, an onset button for reset and programming, and a built-in device testing function.

Used as a stand alone system the PRM-1 can provide a local warning alarm with a flashing visual signal, or be limited to a visual signal only. Should remote monitoring and/or equipment control be desired, the relay output(s) may be connected directly to an alarm panel or wireless transmitter to provide monitoring, or to an on/off controller of a pump or blower motor.



# PROGRAMMABLE RELAY MODULE



## PRM-1

- ◆ 9 - 12 Volts DC - Battery or Externally Supplied Power
- ◆ 85 dB Max. Local Annunciation With Adjustable Control
- ◆ 2 Form C (SPDT) Relay Outputs Available For Control
- ◆ Visual Indicators for Normal and Alarm Conditions
- ◆ User Programming Functions For Timing and Delays
- ◆ Factory Defaults (Contact Factory for Options)
- ◆ Available in Almond Only



### DESCRIPTION:

GRI presents the PRM-1, an incredibly flexible appliance capable of monitoring any open or closed loop sensor using battery and/or external power (recommended). The PRM-1 makes use of local annunciation, provides 2 Form C relay outputs, a bi-color LED, an Onset button for reset and programming, and a built-in testing function.

Used as a stand alone system, the PRM-1 can provide a local warning alarm with a flashing visual signal, or be limited to a visual signal only. Should remote monitoring and/or equipment control be desired, the relay output(s) may be connected directly to an alarm panel or wireless transmitter to provide monitoring. The PRM-1 can also be connected to an on/off controller of a pump, blower motor or other similar appliance.

1) The Sounder produces 85dB at 9 volts DC at alarm. The audible alarm will also sound intermittently to indicate low battery condition if voltage drops below 7.5 volts DC.

2) The green LED will flash every 60 seconds indicating normal operating conditions. It will also flash once per second during input shunt delay and also during user programming. The red LED will flash rapidly indicating alarm. A slow flashing red LED indicates alarm activated, but unit is in a timed alarm reset mode.

3) When PRM-1 is in normal monitoring state, depressing and releasing the Onset button will start the shunt time set. Depressing and holding the Onset button will place the PRM-1 into the test function. If PRM-1 is in alarm, depressing and releasing the Onset button will silence the local alarm and reset the relay output. The PRM-1 will then return to the normal monitoring state.

#### Model Options offered:

Model with no sounder

Model with 1, 2 or 4 sensor inputs

Model with 1, 2 or 4 sensor inputs with corresponding transistor outputs

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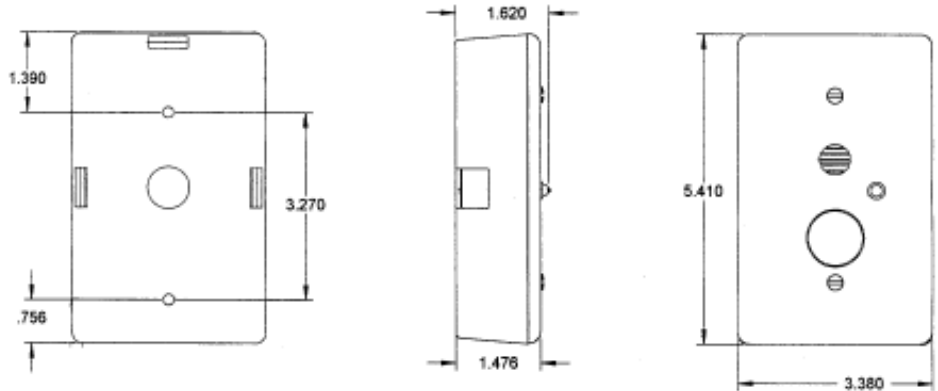
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# PROGRAMMABLE RELAY MODULE

## INSTALLATION:

Upon removing the PRM-1 from the surface mount box a knockout can be observed on the back of the box for the exit/entrance of wires. One can attach the surface mount case directly to the wall or the PRM-1 may be mounted in a single gang electrical box. Attach the sensor wires to the terminal block TM1. The PRM-1 standard factory default programming is set for Open Loop inputs, no alarm delay (instant response) and a seven second manual shunt time. To connect



multiple sensors, contact GRI at the numbers provided at the bottom of this document. Optional external power of 9 to 12 volts DC can be connected to the terminal block TM1 at Pins 1 and 2. Pin 1 for + DC, Pin 2 is ground. An optional remote reset function is available by connecting a Normally Open momentary switch to TM1 Pin 3 and Pin 2. TM2 Pins 1 through 6 are used for the 2 Form C Relay Outputs. Pins 1 and 2, and 4 and 5 for Normally Open contacts and Pins 2 and 3, and 5 and 6 for Normally Closed contacts.

## SPECIFICATIONS:

Battery Type	9 Volt Alkaline (Recommended)
Battery Life	Approximately 9 months
External Power	9 to 12 VDC
Low Battery Mode	7.5 volts (Threshold)
Sounder	85 dB at 10 feet
Relay Contacts	Max contact rating 30W DC 62.5VA AC
	Max switching voltage 125V DC/AC
	Max switching current 1AMP DC/AC

	TM1	TM2
	1 EXT PWR(+)	1 A RELAY N/O
	2 GROUND(-)	2 A COMMON
	3 RESET	3 A RELAY N/C
	4 SENSOR(-)	4 B RELAY N/O
	5 SENSOR 1(+)	5 COMMON
	6 SENSOR 2(+)	6 B RELAY N/C
Available Options	7 SENSOR 3(+)	Available Options
	8 SENSOR 4(+)	
	7 EXT CONTROL(-)	
	8 EXT CONTROL 1(+)	
	9 EXT CONTROL 2(+)	
	10 EXT CONTROL 3(+)	
	11 EXT CONTROL 4(+)	

## TEST MODE:

When the PRM-1 enters the test mode, it tests the condition of the sounder by activating it with two short beeps. It also tests the condition of all LEDs by turning them on, and tests the condition of the battery by disabling external power and measuring battery voltage under a load. If a low battery is detected, the annunciator will sound 3 short beeps 3 times, then the unit re-enters its normal monitoring mode.

## WARRANTY:

One year warranty against workmanship, material and factory defects.

## CONTACT YOUR G.R.I. DISTRIBUTOR OR CALL:

GEORGE RISK INDUSTRIES, INC.  
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MADE IN U.S.A.

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