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1. Introduction

The 4180 is compatible with the following Silent Knight models:

- 2615
- 4720
- 5204
- 5207

If you are connecting the 4180 to one of these compatible modules, the module installation manual for complete information.

2. Installation

2.1 Mounting and Wiring Requirements

The 4180 must be mounted within 3 feet of the control panel and wired in conduit.

2.2 Electrical Specifications

Power requirements:	24 VDC
Current requirements:	24 mA standby 140 mA alarm

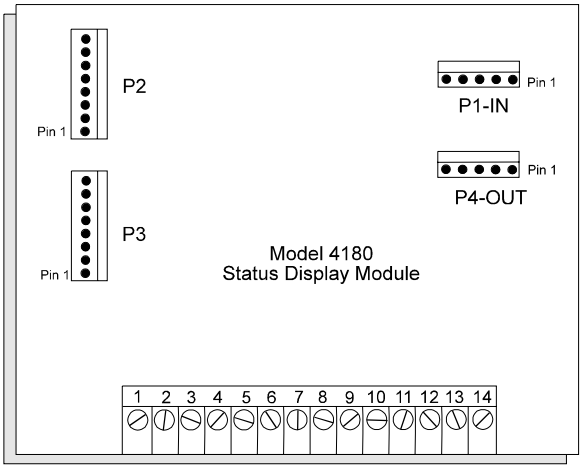

Figure 1: 4180 Board Layout

2.3 Terminal Block Description

Terminal #	Description
1	Relay #1 Coil
2	Relay #1 Common
3	Relay #1 Normally Open Contact
4	Relay #2 Coil
5	Relay #2 Common
6	Relay #2 Normally Open Contact
7	Relay #3 Coil
8	Relay #3 Common
9	Relay #3 Normally Open Contact
10	Relay #4 Coil
11	Relay #4 Common
12	Relay #4 Normally Open Contact
13	Circuit Ground
14	+12 VDC

2.4 Pin Connectors

The following sections explain the purpose of each 4180 connector.

2.4.1 P1 Connector

Table 1: P1 Connector Description

Pin #	Description
1	Circuit Ground
2	+12 VDC
3	Enable Input
4	Clock Input
5	Serial Data Input

2.4.2 P2 Connector

Connector P2 is an active high output rated at +12 VDC. Each output can provide up to 100 mA of current. Do **not** exceed 700 mA total current on this connector. P2 outputs can also be used to activate the relays on the circuit board.

EXAMPLE:
In this example, Zone 8 of a 4720 panel activates a bell using Relay #1.

Connect Pin 1 from Connector P2 to Terminal 1 on the 4180. Connect one side of the bell to Terminal 13 (Circuit Ground) and the other side of the bell to Terminal 2 (Relay #1 Common). Connect Terminal 14 (+12 VDC) to Terminal 3 (Relay #1 N.O. Contact).

When Zone 8 goes into alarm, it will cause P2, Pin 1 to go high, activating Relay #1. Power will be supplied to the bell and an audible signal will be sounded.

Table 2: P2 Connector Description

Pin #	2615, 5204, 5207	4720
1	Zone 1	Zone 8
2	Zone 2	Zone 7
3	Zone 3	Zone 6
4	Zone 4	Zone 5
5	Zone 5	Zone 4
6	Zone 6	Zone 3
7	Zone 7	Zone 2
8	Zone 8	Zone 1

2.4.3 P3 Connector

Connector P3 is an active high output rated at +12 VDC. Each output can provide up to 100 mA of current. Do **not** exceed 700 mA total current on this connector. P3 outputs can also be used to activate the relays on the circuit board.

Table 3: P3 Connector Description

Pin #	2615	4720	5204, 5207
1	Trouble	Trouble	Trouble Zone 1
2	Chime	Auxiliary	Trouble Zone 2
3	Any Alarm	Alarm	Trouble Zone 3
4	Armed	Armed	Trouble Zone 4
5	Holdup	Ready	Trouble Zone 5
6	Intrusion	Intrusion	Trouble Zone 6
7	Special	Emergency	Trouble Zone 7
8	Fire	Fire	Trouble Zone 8

2.4.4 P4 Connector

Table 4: P4 Connector Description

Pin #	Description
1	Circuit Ground
2	+12 VDC
3	Enable Input
4	Clock Output
5	Serial Data Output