Operation and Installation Guide

Obsolete.
Rev: 2
Note: In general, if you do a TI on a building: ...
A Permit is required, which usually requires bringing all components up to Current Code.
This panel is a Fire-Burg panel and
Might it be required to be upgraded it to SK? or UTC?

Battery Dischrge/Recharge Schedule	**Discharge Cycle**	13.9 VDC	Charging float level
		13.8 VDC	Charging Status LED on
		12.1 VDC	Low Battery & AC Fail reports if programmed, Low Battery LED on
		10.2 VDC	Battery load shed (processing functions continue if AC is present)
	Recharge Cycle	AC ON	Load shed relay resets battery charging begins, Battery Trouble and AC Restoral reports sent.
		13.7 VDC	Battery Restoral report sent, Low Battery LED off
		13.9 VDC	Charging Status LED off, battery float charged
Environmental	**Temperature:**	+32°F to +122°F (0°C to 50°C)	
	Relative Humidity:	5-85% at 86°F (30°C) non-condensing	
Arming Stations	D720 Command Center, D1255 Command Center, D1256 Fire Command Center; D1257 Fire Alarm Annunciator; Keyswitch		
Point Thresholds	**On board Points 1 to 8**		

	Voltage	Resistance
Normal	2.3	1 kΩ
Short	1.85	0.657 kΩ
Open	2.93	1.6 kΩ

Compatible Enclosures	D8103 Universal Enclosure, D8109 Fire Enclosure, D8108A Attack Resistant Enclosure

Table 4: Specifications

Compatible Accessories

See the Radionics Product Catalog for complete list.

D122	Dual Battery Harness
D125B	Powered Loop Interface Module
D126	12 V, 7 Ah Rechargeable Battery
D127	Reversing Relay
D129	Dual Class A Initiation Circuit Module
D130	Relay Module
D136	Plug-In Relay
D161	Phone Cord
D162	Phone Cord
D185	Reverse Polarity Module
D192C/D	Bell Circuit Supervision Module
D268/D269	Independent Zone Control (On-Board and OctoPOPIT points)
D279	Independent Zone Control (On-Board and OctoPOPIT points)
D442	Bells (10-inch)
D448/D449	Mini-Horns
D720	Command Center (Area LED)
D720R	LED Command Center (red)
D720W	LED Command Center (white)
D928	Dual Phone Line Switcher
D1218	12 V, 17.2 Or 18 Ah Rechargeable Battery
D1255	Command Center (General Purpose)
D1255R	Command Center (red)
D1255W	Command Center (white)
D1256	Fire Command Center
D1257	Fire Annunciator
D1640	16.5 VAC 40 VA Transformer
D5200	Programmer
D5500	Remote Account Manager IV
D8004	Transformer Enclosure
D8121A, D8122	Derived Channel S.T.U.
D8125	POPEX Module
D8125MUX	Multiplex Bus Interface
D8128D	OctoPOPIT Module
D8129	OctoRelay Module
D8130	Release Module
D8132	Battery Charger Module
D900	
D912	
D913	
D9210B	Access Control Module
ZX776Z	PIR Motion Sensor (50 ft.) with POPIT
ZX794Z	PIR Motion Sensor (80 ft.) with POPIT
ZX835	PIR/Microwave Motion Sensor (35°) with POPIT
ZX938Z	PIR Motion Sensor (60 ft.) with POPIT
ZX970	PIR/Microwave Motion Sensor (35°) with POPIT

12Volt. OBSOLETE items???
We use 24V Devices

14.0 Quick Reference Terminal Description

Must Sync & this is 12v system. We usly 24v Systems. Upgrade perhaps

Terminal	Name	Description
1, 2	CLASS 2 TRANSFORMER	Connect 16.5 VAC, 40 VA transformer for primary power supply.
	+ AUX POWER	Supplies up to 1.4 A at 10.2 VDC to 13.9 VDC to powered devices. Use Terminal 9 for common. Shares PTC with Terminal 24.
	BATTERY NEGATIVE ONLY	Connect rechargeable lead acid type battery's negative terminal (-) to Terminal 4. (See *Appendix D* to determine battery size requirements.)
5 (+)	BATTERY POSITIVE ONLY	Connect rechargeable lead acid type battery's positive terminal (+). (See *Appendix D* to determine battery size requirements.)
6 (+)	+ STEADY OR PULSED ALARM POWER	Supplies up to 2 A at 10.2 VDC to 13.9 VDC for steady or pulsed alarm output. Use Terminal 9 for common. Programmed as Relay A. Shares PTC with Terminals 7 and 8.
7 (+)	+ ALTERNATE ALARM POWER	Supplies up to 2 A at 10.2 VDC to 13.9 VDC for steady or pulsed alarm output. Use Terminal 9 for common. Programmed as Relay B. Shares PTC with Terminals 6 and 8. ***D136 Plug-in Relay required:*** Install a D136 in the ALT ALARM socket for output at Terminal 7.
8 (+)	+ SWITCHED AUX POWER	Supplies up to 1.4 A at 10.2 VDC to 13.9 VDC. Use Terminal 9 for common. Programmed as Relay C. Continuous output interrupted by RESET SENSORS or alarm verification. Shares PTC with Terminals 6 and 7. ***D136 Plug-in Relay required:*** Install a D136 in the SW AUX socket for output at Terminal 8.
9	COMMON	Terminal 9 is common for Auxiliary Power, Steady or Pulsed Alarm Power, Alternate Alarm Power, and Switched Aux Power (Terminals 3, 6, 7, and 8).
10	EARTH GROUND	Connect to earth ground. A cold water pipe or grounding rod is preferred. Do not connect to telephone or electrical ground.
11, 13, 14, 16, 17, 19, 20, 22	ON-BOARD POINTS (Inputs)	Connect normally open and/or normally closed detection devices to loop wiring. 1 kΩ resistor required at end of loop.
12, 15, 18, 21	ON-BOARD POINTS (Common)	Loop returns for on-board points.
23 (-) 24 (+)	ZONEX COMMON ZONEX POWER +	[D9412G only] Use Terminals 23 and 24 to power ZONEX modules such as the D8125 POPEX module, the D8128D OctoPOPIT, and the D8129 OctoRelay. Shares PTC with Terminal 3.
25 26	ZONEX IN 2 ZONEX OUT 2	[D9412G only] Connect ZONEX modules for Points 129 to 247 and Relays 65 to 128 to these terminals.
27 28	ZONEX IN 1 ZONEX OUT 1	Connect ZONEX modules for Points 9 to 127 and Relays 1 to 64 to these terminals. (The D7412G uses Points 9 to 75.)
29 (-)	COMMON	Common terminal for SDI devices.
30 31	DATA BUS B DATA BUS A	Terminals 30 and 31 are a two-wire bus that drives the command centers, printer interface, and access control modules.
32 (+)	POWER +	Power for SDI devices. This separate, protected power output for SDI devices is not affected by shorts on any other terminal.

Table 17: Quick Reference Terminal Description