

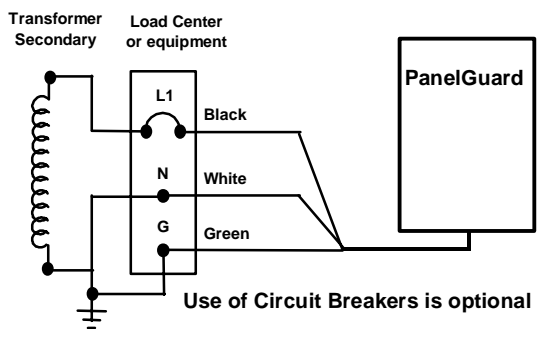
**CAUTION:** Turn off power to the electric service or panel and to equipment to be protected before installing any Surge Protection Device. All wiring should be done by a qualified electrician and comply with the National Electric Code and local electric codes.

## **INSTALLATION**

1. Test and verify system voltage to assure proper model selection of Surge Protection Device (SPD). Refer to the wiring configurations and voltages on page 2 and 3 for additional information.
2. Turn Power OFF.
3. Remove the knockout from the power bus, load center or equipment panel that will position the SPD for the shortest wire lead distance. **Note that the shorter the lead length between the SPD and the connection point, the better the protection.**
4. Open the hinged cover on the PanelGuard unit by unscrewing the locking bolts in the cover.
5. Select and remove the appropriate knockout on the PanelGuard cabinet.
6. Connect the mounting plates to the back of the PanelGuard cabinet using the connectors provided.
7. Mount the PanelGuard cabinet to a rigid surface. If the mounting position prevents direct connection to the load center or equipment panel, conduit must be used to comply with the national Electric Code.
8. Twist or ty-wrap all lead wires to eliminate space or gaps between them. Route the wire leads from the PanelGuard cabinet to the power panel.
9. Cut each wire lead to the proper length. DO NOT coil extra wire length.
10. Connect the GREEN wire lead to the system ground.
11. Connect the WHITE wire lead (when included) to the system neutral bus. When installing at a main panel, the neutral bus may be the same as the ground bus.
12. Connect each phase wire, BLACK or RED, to the power bus. All models have internal line fusing. Select a method of connection that complies with local electric code and the National Electric Code. Make sure that the phase wires have the correct voltage level between them. Note that for the 240 volt High Leg Delta, the wire lead for the High Leg is colored RED, and must be connected to the phase that measures approximately 208 volts to neutral and to ground. Failure to comply with this instruction will result in failure of the SPD and void the warranty.
13. If remote monitoring is used, remove the ½" knockout and connect wire leads to the terminal strip located in the monitoring section of the PanelGuard cabinet. Be sure to comply with local and national wiring codes for the voltage of the monitoring circuit. Refer to the wiring diagram on page 3.
14. Check all connections for proper tightness or torque. Observe the suggested torque values published by the manufacturer when circuit breakers or separate disconnect devices are used.
15. Close and secure the hinged cover using the locking bolts provided with the cover.
16. Turn Power on.
17. Make sure that each Protection Status indicator on the PanelGuard is ON. If not, turn power off and recheck each installation step listed above.
18. Make sure that the Alarm Warning indicator on the PanelGuard is OFF. If not, turn power off and recheck each installation step listed above.
19. For troubleshooting assistance, call Intermatic at 800-391-4555.

# WIRING CONFIGURATIONS

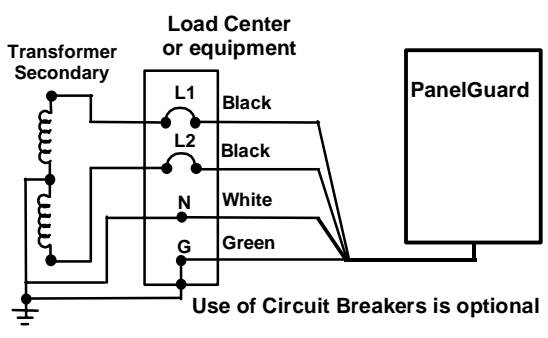
## 120 VAC Single Phase



### VOLTAGE CONFIGURATION CONFIRMATION

MODE	VOLTAGE
Line to Neutral	120
Line to Ground	120

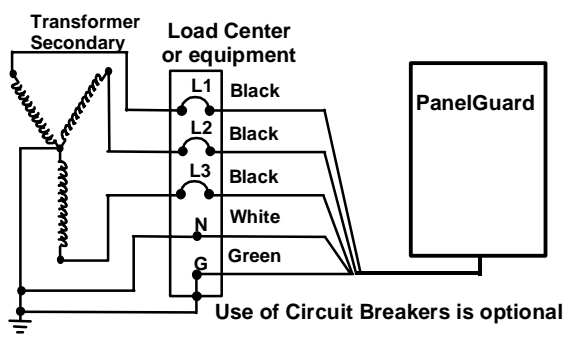
## 120/240 VAC Single (Split) Phase



### VOLTAGE CONFIGURATION CONFIRMATION

MODE	VOLTAGE
Line to Line	240
Line to Neutral	120
Line to Ground	120

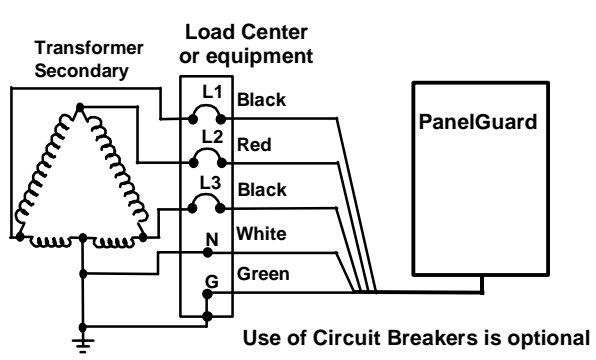
## 120/208 VAC Three Phase WYE



### VOLTAGE CONFIGURATION CONFIRMATION

MODE	VOLTAGE
Line to Line	208
Line to Neutral	120
Line to Ground	120

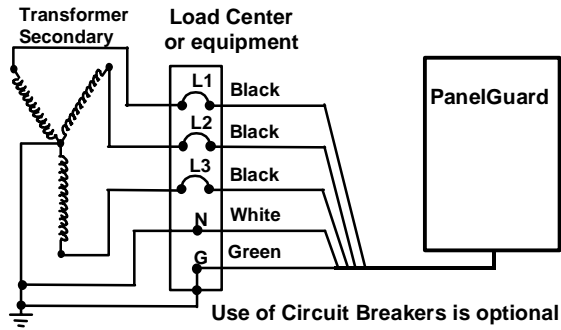
## 120/240 VAC Three Phase Delta High Leg Delta



### VOLTAGE CONFIGURATION CONFIRMATION

MODE	VOLTAGE
Line to Line	240
Line to Neutral	120
High Leg to Neutral	208
Line to Ground	120
High Leg to Ground	208

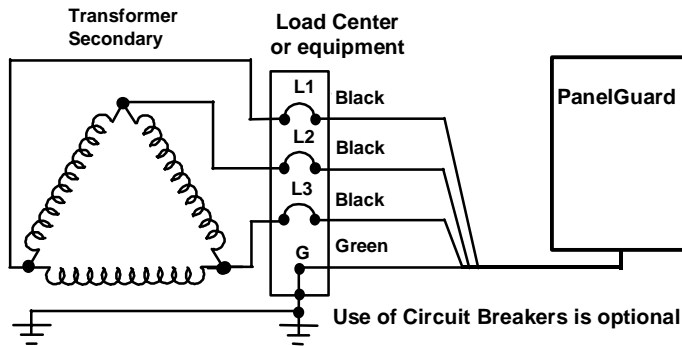
## 277/480 VAC Three Phase WYE



### VOLTAGE CONFIGURATION CONFIRMATION

MODE	VOLTAGE
Line to Line	480
Line to Neutral	277
Line to Ground	277

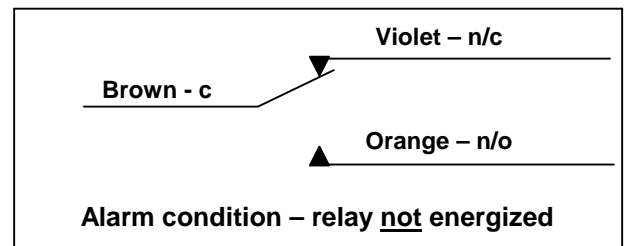
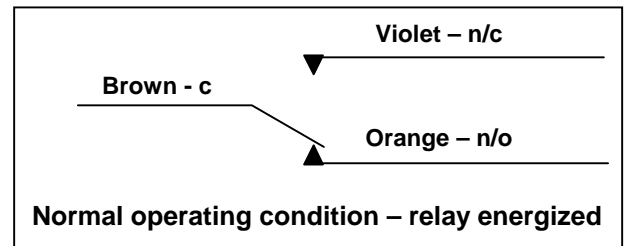
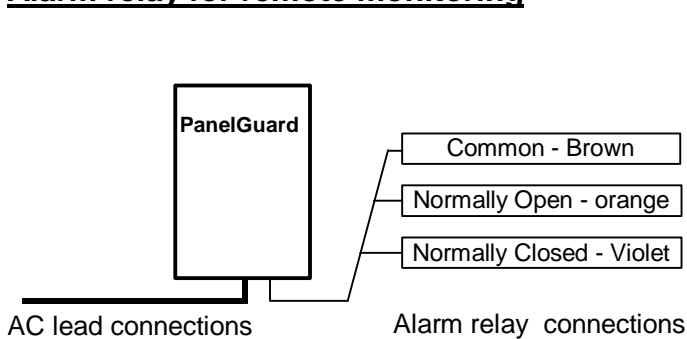
## 480 VAC Three Phase DELTA



### VOLTAGE CONFIGURATION CONFIRMATION

MODE	VOLTAGE
Line to Line	480
Line to Ground	480

## Alarm relay for remote monitoring



Contact your Intermatic Representative or Distributor for information on other hardwired panel Surge Protection Devices. Discover the convenience of integral fusing and the versatility of replaceable protection modules in Intermatic's full line of Surge Protection Devices.

# TEN YEAR LIMITED PRODUCT WARRANTY

For

## PanelGuard™2000 SURGE PROTECTION DEVICES

### **(1) What Is Covered By This Limited Warranty**

#### **Repair or Replacement of Product**

Intermatic Incorporated ("Intermatic") warrants to the original purchaser only, the Intermatic **PanelGuard 2000 Series** Surge Protection Device(s) shall be free from defects in material or workmanship for a period of ten years from date of purchase. If the purchaser discovers a defect in material or workmanship, the purchaser must promptly submit a warranty claim. Upon a determination by Intermatic that the Product is defective, Intermatic shall correct any defect in material or workmanship by, at Intermatic's option, either repairing or replacing the Defective Product. Any repair, including both parts and labor, shall be at Intermatic's expense. The foregoing remedies are the purchaser's exclusive remedies for a breach of warranty.

For purposes of this Limited Warranty, a Power Transient shall mean over-voltage resulting from momentary voltage spikes or surges on an AC power line of magnitude that the Product, according to its specifications, is designed to stop before such spikes or surges affect the stated equipment.

The Product must be installed in the appropriate application in complete accordance with the installation instructions. All building wiring and other connections to the Product must conform to all applicable national, state and local electrical codes; the Product must not be opened, modified, exposed to extreme heat or cold, submerged or subjected to abnormal use or service. All products must be used in accordance with the instructions provided with the Product and the purchaser shall be solely responsible for selecting a Product model with specifications appropriate for the equipment to be protected. Intermatic shall determine, in its sole discretion, whether any Product returned by a purchaser has been used in accordance with its instructions, is an appropriate model for the purchaser's use thereof, and whether the Product is defective.

### **(2) What Is Not Covered By This Warranty**

Intermatic does not warrant (a) defects in the Product or damage to any equipment caused by the failure to properly install the Product, (b) damage caused by use of the Product for purposes other than those for which it was designed, (c) damage caused by disaster such as fire, flood and wind, (d) damage caused by unauthorized attachments or modification of the Product, (e) damage to the Product occurring during shipment, or (f) electrical disturbances exceeding published product specifications, (h) damage to the Product caused by any other abuse or misuse by the purchaser.

### **(3) Disclaimer of Warranty**

THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER EXPRESSED WARRANTIES. TO THE EXTENT ALLOWED BY LAW, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE DURATION OF THIS LIMITED WARRANTY.

### **(4) Limitation of Remedies**

In no case shall Intermatic be liable for any special, incidental, or consequential damages based upon breach of warranty, breach of contract, negligence, strict tort, or any other legal theory. Such excluded damages include, but are not limited to, damage to software, loss of data, loss of profits, loss of savings or revenue, loss of use of the Product or any associated equipment, cost of capital, cost of any substitute equipment, facilities or services, downtime, the claims of third parties including customers, damage to property and personal injury. Some states do not allow limits on warranties or on remedies for breach in certain transactions. In such states, the limits in this paragraph and in paragraph (3) may not apply.

### **(5) Time Limit for Bringing Suit**

No action arising out of any claimed breach of warranty may be brought more than one year after the cause of action has accrued.

### **(6) No Other Warranties**

Unless modified in a writing signed by both parties, this agreement is understood to be the complete and exclusive agreement between the parties, superseding all prior agreements, oral or written, and all other communications between the parties relating to the subject matter of this agreement. No employee of Intermatic or any other party is authorized to make any warranty in addition to those made in this agreement.

**INTERMATIC INCORPORATED**

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<http://www.intermatic.com>