

WARRANTY STATEMENT

During the applicable warranty period, any Total Protection Solutions® surge protector device which fails due to defect in materials, workmanship, or any transient surge event to include lightning, shall be repaired or replaced at the expense of Total Protection Solutions.

Prior to shipment of any suspect or known defective product a Return Material Authorization (RMA) number must be obtained. An official RMA number and shipping instructions can be obtained from the distributor where the product was originally purchased. Distributors can obtain the official RMA number by contacting the Total Protection Solutions Customer Service Department at 800-647-1911. Products arriving without an official RMA number will not be accepted and will be returned freight collect to the original point of shipment.

Products being returned with an official RMA number should be shipped by prepaid freight to the nominated point of return as shown on the RMA documentation.

The Company shall have no liability under this warranty for problems or defects directly or indirectly caused by misuse of the Product, alteration of the Product (including removal of any warning labels), accidents, improper installation, application, operation or improper repair of the Product.

THIS WARRANTY REPRESENTS THE ENTIRE WARRANTY OF THE COMPANY. ALL OTHER WARRANTIES EXPRESS OR IMPLIED, ORAL OR WRITTEN, INCLUDING, BUT NOT LIMITED TO, THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. THE LIABILITY OF THE COMPANY, AT ITS SOLE OPTION, UNDER THIS WARRANTY IS EXPRESSLY LIMITED TO THE REPLACEMENT OR REPAIR OF THE DEFECTIVE PART THEREOF. IN NO EVENT SHALL THE COMPANY BE LIABLE OR RESPONSIBLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND OR CHARACTER, NOR SHALL ITS LIABILITY EVER EXCEED THE PURCHASE PRICE PAID FOR SUCH DEFECTIVE PRODUCT.

Warranty period begins from the date of original owner purchase. This warranty is not transferable and may only be enforced by the original purchaser. Claims under this warranty must be submitted to Total Protection Solutions within thirty (30) days of discovery of any suspected product defect.

Warranty Period

PKD Protector 10 Years



P.O. Box 3760
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PanelTrack®

Surge Protective Device

PanelTrack PKD Protector Series:

TK-PK025D-24VDC
30VDC max, 25VAC max, 1Ø, 2 Wire + Ground

TK-PK025D-48VDC
60VDC max, 45VAC max, 1Ø, 2 Wire + Ground

TK-PK025D-90VDC
90VDC max, 65VAC max, 1Ø, 2 Wire + Ground

TK-PK025D-125VDC
150VDC max, 110VAC max, 1Ø, 2 Wire + Ground

TK-PK040D-48VDC-LA*
65VDC max, 1Ø, 2 Wire + Ground

TK-PK040D-125VDC-LA*
200VDC max, 1Ø, 2 Wire + Ground

TK-PK050D-550VDC-L*
700VDC max, 1Ø, 2 Wire + Ground

* Intended for DC applications only.

Note: All units come with 18 inches of #14 AWG leads, except for the 550VDC unit which comes with #12 AWG

Installation Operation and Maintenance Manual



INTRODUCTION

The PanelTrack PKD Surge Protective Device (SPD) is designed to protect sensitive AC and DC electrical and electronic equipment against the damaging effects of lightning strikes and internally or externally-generated over voltage transients. All units come standard with status indicating lights to verify that the unit is working properly.

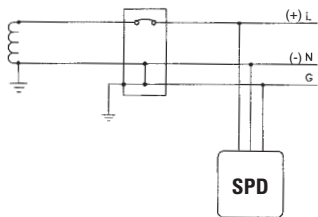


WARNING – Hazardous voltages can cause severe personal injury or death and/or property damage. Remove all power before installing or servicing this device.

IMPORTANT SAFETY INFORMATION

- All work must be performed by qualified electrical personnel.
- The electrical system must be properly grounded in accordance with applicable codes for this unit to work correctly.
- Confirm that the voltage and service configuration shown on the PanelTrack product label are consistent with the voltage and service configuration of the electrical system. See Figure 1 for electrical relationship between PanelTrack and service configuration.
- TK-PK025D-125VDC is not intended for connection to 110-120VAC “household” power system.
- TK-PK040D-48VDC-LA, TK-PK040D-125VDC-LA and TK-PK050D-550VDC-L are not intended for connection to AC power system.
- Read complete installation instructions before beginning installation.

FIG. 1: Single Phase, 2-Wire



INSTALLATION

The SPD can be connected directly to the service bus. Alternately the unit can be connected to a dedicated branch circuit breaker (15 amp minimum rating). The advantage of using a dedicated breaker for the SPD is that it allows the suppressor to be de-energized during service without disturbing the electrical system to the rest of the facility. A careful consideration must be made in selecting the breaker and knockout location. PanelTrack's performance will be limited severely if the conductors are (a) too long, (b) have too many bends or (c) have sharp bends. The factors listed above should be addressed during the design of an installation to reserve a suitable place for PanelTrack next to its point of connection to the electrical system. The selected mounting location should allow for the shortest possible conductor runs and a direct route with a minimum of bends. If bends are required, they should be *sweeping* bends. Do not make sharp 90° bends for appearance purposes because they will severely decrease the effectiveness of PanelTrack. Binding or twisting conductors together using tie-wraps or electrical tape increases the protection performance of the device.

1. Disconnect input power supply.
2. Mount the SPD through 1/2" knockout or by the device's L-shaped mounting bracket.
3. Connect the red wire to positive (for DC application) or hot bus (for AC application)
4. Connect the black wire to negative (for DC application) or neutral bus (for AC application).
5. Connect the green/yellow wire to ground bus.

OPERATION

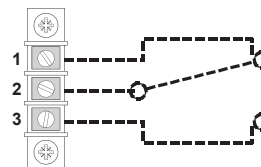
1. Apply power to the unit. If the electrical and grounding wirings are done properly, the green function status LED indicators on the SPD will be on. If the lights are not on, remove the power and review all of the previous installation procedures.
2. If, after a known heavy lightning strike, the breaker is found tripped, reset the breaker. If the function status lights are lit, then the SPD is fine. If the lights are out or you cannot reset the breaker, the unit must be replaced.

TECHNICAL ASSISTANCE

Our staff is ready to support you and answer any questions.
Monday through Friday, 8:00 a.m. to 5:00 p.m. (EST) at 800-647-1911.

REMOTE RELAY CONTACTS (MODELS END WITH “-A” SUFFIX ONLY)

For "Fail-safe" form A monitoring, connect the alarm leads to terminals 2 and 3. Terminals 2 and 3 will be closed during normal (Power ON) operation and the SPD is functioning properly. If the suppressor should fail contacts 2 and 3 will open and contacts 1 and 2 will close. Relay contacts are rated at 5A at 250VAC or 30VDC maximum, 50mVA minimum.



Relay contacts shown in the relaxed position (suppressor alarm or loss of power).

Note:
Maximum torque on terminals is 10 in-lb