

# IOM: Installation, Operation & Maintenance Manual



# Model # TPD-DM Series

## IMPORTANT—PLEASE READ

Application: residential structure with GFCI breakers and/or GFCI receptacles. This LT you are installing is commercial grade surge protection with enhanced EMI/RFI filtration.

If you experience nuisance tripping when the LT is installed, what is causing the problem is the GFCIs have a lower tolerance than most other GFCI equipment and are reacting to the small amount of earth leakage current filter in the LT unit. The filter can be easily disabled.

## WARRANTY STATEMENT

During the applicable warranty period, any Transient Protection Design<sup>™</sup> device which fails due to defect in materials, workmanship, or any transient event, including lightning, shall be repaired or replaced at TPD's discretion without charge. In the event of a return the device must be shipped FOB TPD place of business within the applicable warranty period. The applicable warranty period for the TPD surge protective device is outlined below in the Warranty Period section. The warranty period for any repaired devices or replacement devices will be only the remaining portions of the original limited warranty.

A Return Material Authorization (RMA) number must be obtained from the Company's Customer Service department before returning any Products.

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 MERCHANT ABILITY 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 TO COMPANY FOR SUCH DEFECTIVE PRODUCT.

This warranty is not transferable and may only be enforced by the original end user. Claims under this warranty must be submitted to Transient Protection Design within thirty (30) days of discovery of any suspected product defect.

#### Warranty Period

TPD-DM Series Ten Years Unlimited Free Replacement

Model#

### SAVE THESE INSTRUCTIONS

Note: If devices are received damaged, notify the shipping company immediately. Retain containers and packing materials for inspection.

#### CAUTION—IMPORTANT SAFETY INFORMATION

- Never install surge suppression during a lightning storm.
- This product is for INDOOR USE ONLY. INSTALL IN WEATHERPROOF ENCLOSURE FOR OUTDOOR USE.
- Read and understand all instructions prior to installation and operation.

#### Model # TPD-DM Series

Protect 24 or 48 volt AC and DC, 15 and 20 Amp Options.

**NOTICE:** All instructions and measurements must be completed by a qualified electrician in accordance with the National Electric Code and/or other applicable state and local codes. The U.S. National Electric Code and/or applicable state/local requirements supersede these instructions.

#### CAUTION: HAZARDOUS VOLTAGES PRESENT

Improper installation or misapplication of these devices may result in serious injury to the installer and/or damage to electrical system(s) or related equipment. Read and understand all instructions before commencing with the installation.

Units must be connected to the electrical service with appropriate ampacity Class T Fuse, rated 300 V. Equipment Safety Grounds MUST be run separately - not through the traces of the Surge Protection Device.

#### INSTALLATION

1. The DM Series of Surge Protective Devices are installed/connected in either series or parallel with the line and the equipment to be protected.

2. Identified or indicated Leads/Wires must be connected exactly with respect to the power feeding/supplying the SPD and equipment. Failure to do so may result in damage to the SPD, the equipment/system or pose a danger to personnel.

3. Incorrect installation may significantly impair the performance of the SPD. It is particularly important that all installation procedures and guidelines be followed exactly.

4. Before starting any installation procedures, verify service voltages (AC or DC) with a volt meter to ensure that the correct model has been selected for the supply voltage.

5. DO NOT INSTALL THE SPD IF MEASURED VOLTAGE EXCEEDS UNIT RATINGS.

6. The SPD MUST BE mounted in an enclosure to assure personnel safety from exposed terminals.

7. REMOVE POWER FROM ELECTRICAL SYSTEM PRIOR TO INSTALLATION.

8. The SPD should be positioned as the last device in the circuit prior to protected equipment.

9. The SPD Line/Load designations are for orientation purposes only and do not effect the install.

10. Mechanically mount the SPD utilizing the mounting tabs or attach to din rail.

- 11. For Series (AC) Applications
  - a) Connect "LINE" Side:
    - \* System Ground to the terminal labeled "G".
    - \* Neutral or Line 2 wire to the terminal labeled "L2" .
    - \* HOT wire to the terminal labeled "L1".

b) Connect "LOAD" Side:

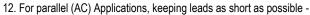
- \* System Ground to the terminal labeled "G" (connect safety ground directly to enclosure ground).
- \* Neutral or Line 2 wire to the terminal labeled "L2".
- \* HOT wire to the terminal labeled "L1".



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## INSTALLATION CONTINUED



- \* System Ground, to the terminal labeled "G".
- \* Neutral or Line 2 wire to the terminal labeled "L2".
- \* HOT wire to the terminal labeled "L1".

**Note:** In parallel applications, units are not current limited as they are in series applications. For parallel applications, unused output terminals are left empty, no plugs are provided.

13. ENSURE THAT ALL CONNECTIONS ARE CORRECT BEFORE ENERGIZING.

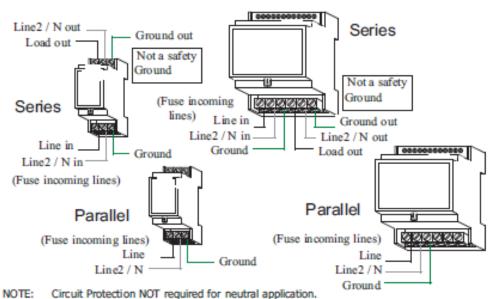
14. Apply power (energize). LED indicator should illuminate. If light fails to illuminate contact supplier. If LED is out, unit requires service.

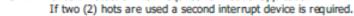
15. Keep this MANUAL in a safe, dry place for future reference.



Din Rail or Screw Down Mountable

Tabs slide out for screw down mounting.





#### WIRING DIAGRAMS