

Overview

The Deadbolt Data Line Surge Suppressor (Model 9830) protects your electronic control equipment from transient voltages appearing on the data lines. It features three stages of protection: a gas discharge tube, transient voltage suppressor diodes and two easily replaced surge rated slow-acting fuses.

Installation and Wiring

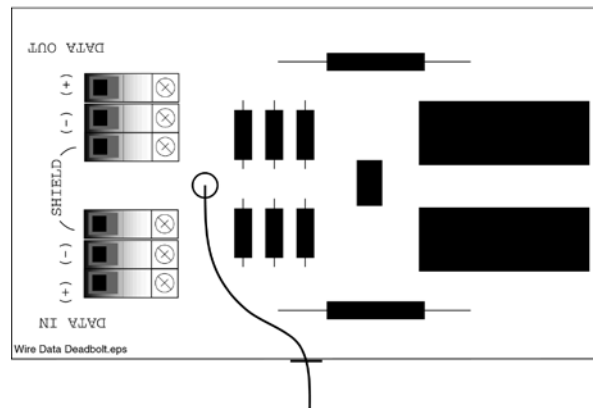
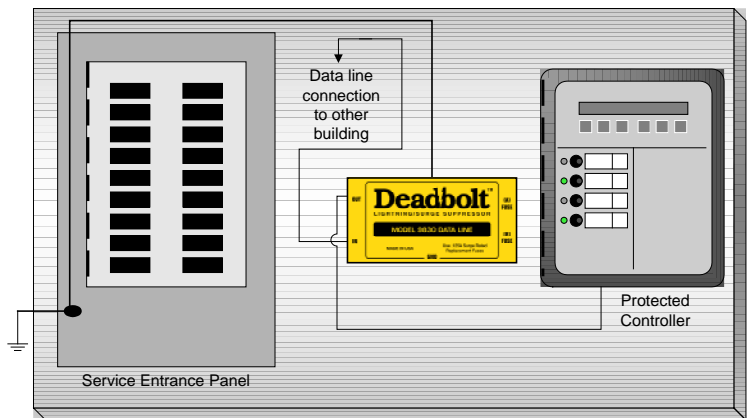
Your Deadbolt protects your electronic equipment by redirecting damaging transient surge voltages to earth ground. A good ground connection is essential for proper operation of your Deadbolt.

For optimum protection, mount the Deadbolt as close as possible to the data line entry point into the building. Mounting tabs are provided for easy installation.

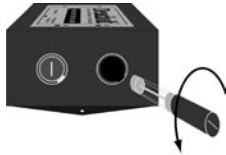
If possible, connect the Deadbolt's ground wire to a nearby electrical service entrance panel's ground.

This is generally a good place to make your ground connection. However, some panels may not be properly grounded. An alternate good ground connection would be a long buried grounding rod. A qualified electrician should complete any wiring inside the electrical service panel.

- 1) Remove the cover from the Deadbolt (four screws).
- 2) Route the incoming data cable through the IN opening on the side of the enclosure.
- 3) Route the data cable going to the controller through the OUT opening.
- 4) Attach the (+), (-), and shield wires to the respective terminals inside the Deadbolt.



Operation



Press and turn counterclockwise with a screwdriver to open.

While your Deadbolt will automatically reset after redirecting a transient surge voltage, a long duration surge could blow the fuses, disconnecting your equipment from the data line. Blown fuses can be removed with a screwdriver by pressing in and then turning the fuse holder in a counterclockwise direction. Fuses should be replaced with a slow-acting surge rated 1.25 amp fuse rated for 250 volt operation. Two spare fuses are included and additional fuses can be purchased from Blue Earth Research. If after replacing the fuses your equipment still doesn't work, the Deadbolt may have suffered permanent damage and should be replaced.

Specifications

Signals Protected.....	Data + and Data –
Connections.....	Screw Terminal Blocks (3-Position X2)
Fuses	1.25 amp, 250 volts (slow-acting, surge rated)
3 Stages of Protection	1) Gas discharge tube 2) Transient voltage suppressor diodes 3) Slow-acting surge rated fuses
Maximum Operating Voltage	10 volts
Maximum Output Voltage	16.3 volts
Maximum Surge Current	20,000 amps
Power Handling Capability.....	500 watts per signal line
Reaction Time	< 5 nanoseconds

Service

Before requesting technical assistance from Blue Earth Research, make sure you have reviewed this document. Often times product related problems can be traced back to improper installation or operation.

Blue Earth Research, Inc.
1415 1st Avenue, Suite 400
Mankato, MN 56001 USA

Phone: 1 (507) 387-4001
FAX: 1 (507) 387-4008

www.blueearthresearch.com

Refer to the Deadbolt Lightning and Surge Protection Plan Application enclosed with your Deadbolt for an opportunity to protect your Deadbolt and environmental control system investment.

Deadbolt Warranty

PLEASE READ THIS WARRANTY CAREFULLY. IF YOU (THE PURCHASER) DO NOT AGREE WITH THE WARRANTY LIMITATIONS OR ITS TERMS AND CONDITIONS, PROMPTLY RETURN THIS PRODUCT, UNUSED, TO THE PLACE WHERE YOU OBTAINED IT FOR A FULL REFUND.

LIMITED WARRANTY: Blue Earth Research, Inc. (hereinafter BEaR) warrants this Product to be free from defects in material and workmanship and agrees to repair or replace any Product which proves defective under these terms and conditions.

IMPROVEMENTS: BEaR reserves the right to alter or improve this Product without notice and without incurring obligation to alter or improve existing Products.

LENGTH OF WARRANTY: This Product is warranted for a period of twelve (12) months from the date of installation.

WHO IS PROTECTED: This warranty is valid only for the original installation and is not transferable.

WHAT IS NOT COVERED: The following are not covered by this warranty:

- 1) Damage, deterioration or malfunction resulting from, but not limited to: accident, misuse, abuse, neglect, fire, water, corrosion, acts of nature INCLUDING LIGHTNING, improper storage, unauthorized Product repair or modification, damage in shipment, removal or installation of this Product, or any other cause not related to a Product defect.
- 2) Cartons, batteries, and other accessories used in connection with this Product.
- 3) Product returned without customer identification.
- 4) Service required as a result of third party components.

WHAT IS NOT REIMBURSABLE: The following items are not reimbursable:

- 1) Troubleshooting, removal or installation charges.
- 2) Setup, calibration, adjustment or maintenance of this Product.
- 3) Shipping and insurance charges for returning this Product to BEaR.
- 4) Customer training.
- 5) Travel expenses.

HOW TO GET WARRANTY SERVICE: You have the option of having your dealer replace/exchange any defective Product or returning this Product freight prepaid and insured to BEaR. All Product returned to BEaR must have customer identification attached.

CONSUMER CAUTION: While this Product is considered compatible with its intended purpose, the specific functional implementation by the customers of this Product may vary. The responsibility for using this Product and installing it to achieve the intended purpose, is the sole responsibility of the Purchaser.

LIMITATION OF DAMAGES AND IMPLIED WARRANTIES:

BEaR'S SOLE LIABILITY UNDER THIS WARRANTY AND PURCHASER'S EXCLUSIVE REMEDY FOR ANY DEFECTIVE PRODUCT, IS LIMITED TO THE REPAIR OR REPLACEMENT OF THIS PRODUCT, AT BEaR'S OPTION. IN THE EVENT BEaR CANNOT DO EITHER, THEN THE PURCHASER'S ALTERNATIVE EXCLUSIVE REMEDY SHALL BE A REFUND OF THE PURCHASE PRICE IN EXCHANGE FOR THE RETURN OF THE DEFECTIVE PRODUCT TO THE PLACE OF PURCHASE. BEaR SHALL NOT BE LIABLE FOR:

- 1) **DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THIS PRODUCT, INCLUDING BUT NOT LIMITED TO DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE OF THIS PRODUCT, LOSS OF TIME OR DATA, OR ANY OTHER LOSS.**
- 2) **ANY OTHER DAMAGES, WHETHER INCIDENTAL, CONSEQUENTIAL, OR OTHERWISE FROM USE OR INABILITY TO USE THIS PRODUCT.**

THIS WARRANTY IS EXCLUSIVE AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES OR THE LIMITATION OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. THEREFORE, THE ABOVE EXCLUSIONS OR LIMITATIONS MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE IN THE UNITED STATES OF AMERICA.

PURCHASER AGREES THAT THE SALE OF THIS PRODUCT BEARS A REASONABLE RELATIONSHIP TO THE STATE OF MINNESOTA AND THE LAWS OF THE STATE OF MINNESOTA SHALL GOVERN THE VALIDITY, CONSTRUCTION AND ENFORCEABILITY OF THIS WARRANTY, WITHOUT GIVING EFFECT TO THE CONFLICT OF LAWS PRINCIPLES THEREOF.

THE PURCHASER OF THIS PRODUCT AGREES THAT ALL CLAIMS BROUGHT IN RESPECT OF THIS WARRANTY SHALL BE BROUGHT IN A COURT LOCATED IN THE STATE OF MINNESOTA.

Deadbolt is a trademark of Blue Earth Research, Inc.

Copyright © 1999 Blue Earth Research, Inc. All rights reserved.