

Overview

The Deadbolt Control Circuit Surge Suppressor (Model 9840) protects your electronic control equipment from transient voltages appearing on the power lines.

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.

The Deadbolt has a threaded connector that allows you to attach the unit directly to a service entrance panel. This is generally a good place to make your connections including the ground connection. However, some panels are not properly grounded. An alternate good ground connection would be a long buried grounding rod.



Refer to the illustrations on the following page for 120 volt and 240 volt wiring. Be sure to shut off all power before attempting to connect the Deadbolt to the electrical service panel. A qualified electrician should complete all wiring.

Operation

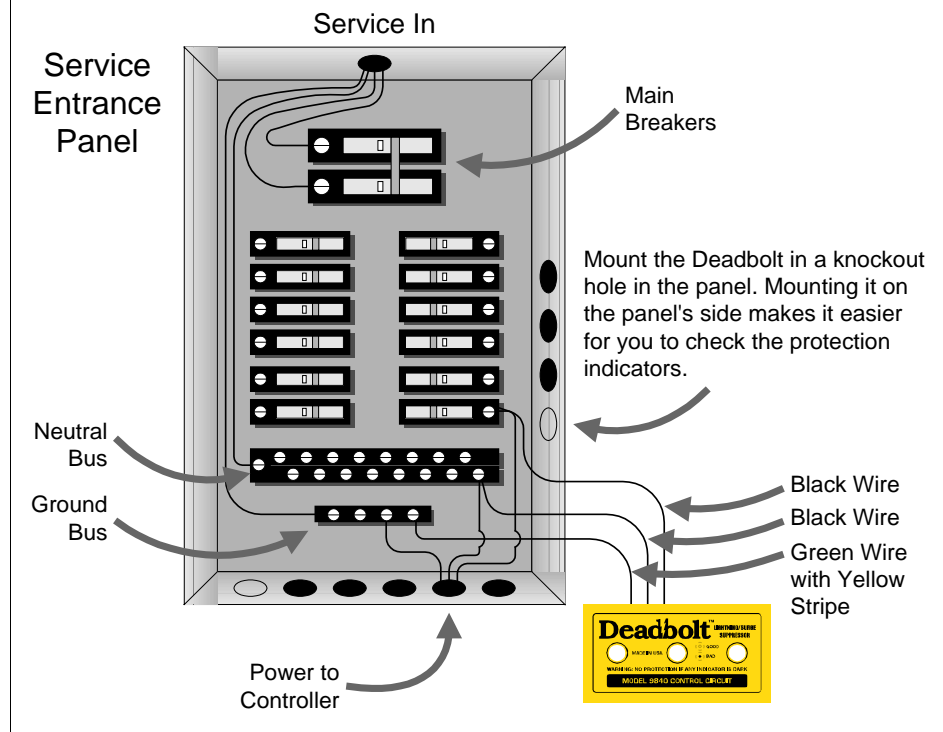
The Deadbolt has three round viewing windows on its front. Check these windows periodically, especially after a thunderstorm, to ensure the unit is still operating properly. If any window shows a dark circle in the center, the unit is no longer protecting the circuit.

While your Deadbolt will automatically reset after redirecting a transient surge voltage, intense or long duration surges could damage the unit. One of these conditions will result:

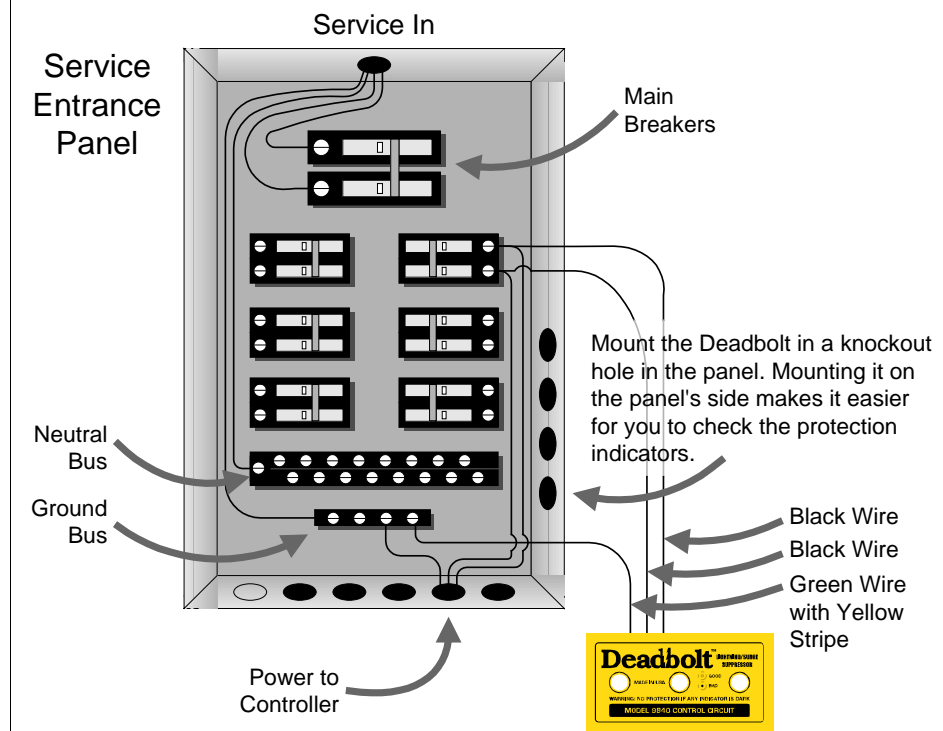
- The indicators will become dark. This indicates that the Deadbolt has been damaged in the process of protecting your circuit and that it has been disconnected from the circuit. The circuit breaker will be tripped, but you will be able to reset the circuit breaker. That is why it is important to regularly inspect the viewing windows.
- The indicators will not become dark, but the circuit breaker will be tripped. If this occurs, the circuit breaker will continue to trip when you attempt to reset it.

There are no serviceable parts in the Deadbolt model 9840 so it must be replaced if either of the conditions described above occurs.

120 Volt Wiring Diagram



240 Volt Wiring Diagram



Specifications

Maximum Operating Voltage	265 VAC 50/60 Hz
Rated Clamping Voltage (8 μ S x 20 μ S waveform)	
Hot to Neutral (H-N).....	710 volts (@ 200 amps)
Hot to Ground (H-G)	710 volts (@ 200 amps)
Neutral to Ground (N-G)	710 volts (@ 200 amps)
Maximum Surge Current	18,000 (X3) amps
Energy Handling Capability	360 (X3) joules (10 μ S x 1000 μ S waveform)
Reaction Time.....	<50 nanoseconds
Connection Wire Size and Length	AWG 12, 30 inches (2.05 mm diameter, 76.2 cm)

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.

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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.

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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.