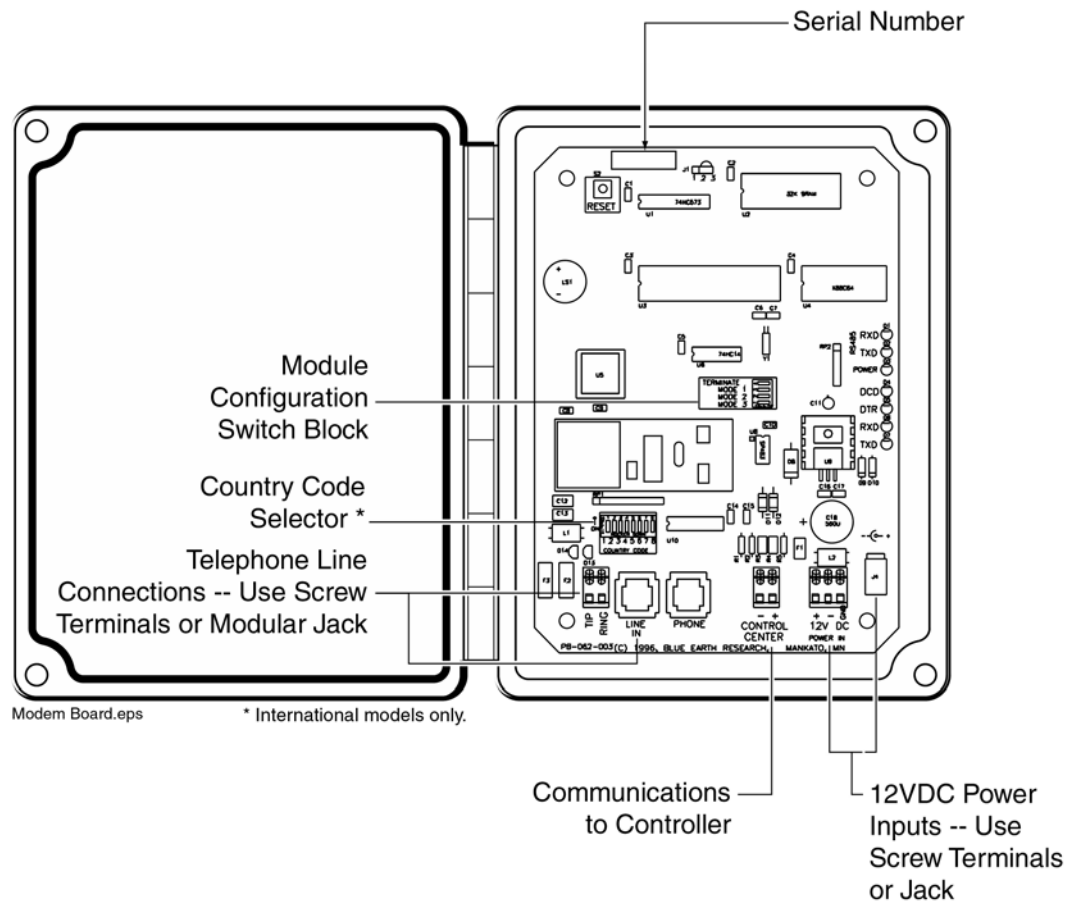


Installation

You can attach a modem to your controller to allow remote access from a computer. This access gives you many of the same capabilities as using the controller's keypad.

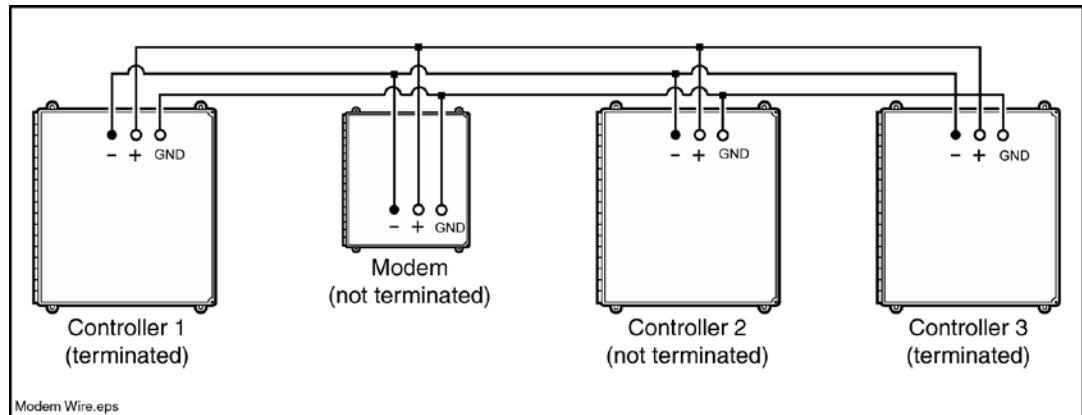
Three sets of wires must be connected to the modem:

- 1) 9V wire from the 110V power transformer that comes with the modem (or other power source 9V to 12V). The modem must be grounded. If there is no ground wire from the power supply, connect a grounding wire to the GND connection. You can attach it to a ground connection in the controller or any good electrical ground close by.
- 2) Standard telephone line hooked into the phone system.
- 3) Two-lead communications wire (22 or 24 gauge) attaching the modem output terminals to the input/output board in the controller. Shielded wire can be used to connect communication grounds between controllers, modems and other equipment.



Wiring with Multiple Controllers

The modem should be wired in a daisy chain with the controllers as shown below. The connections inside the controller are made at the Modem terminal block. Up to 16 controllers can be wired to the same modem. A maximum of 1000 ft. (300m) of communications wire can be run in any direction from the modem or interface.

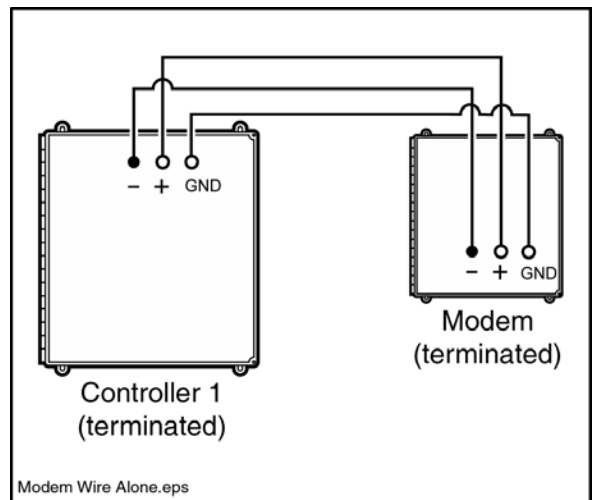


If the modem is at the beginning or end of the daisy chain, you will need to set the termination switch inside the modem to ON (refer to the *Modem Termination* section). If the modem is anywhere in the middle of the chain, you will need to set the termination switch inside the modem to OFF.

Refer to your controller's *Installation Manual* for information about terminating the controller.

Wiring with a Single Controller

Connect the controller's Modem terminal block connections to the corresponding terminals inside the modem. Termination should be ON for both devices since they are each at the end of the communication chain.



Setting the Rings before Answer

You can set the number of rings the modem will wait before answering. This is done by turning switches 1 and 2 (on the modem configuration DIP switch) on or off.

Rings	DIP 1	DIP 2
1 Ring	OFF	OFF
3 Rings	OFF	ON
4 Rings	ON	OFF
5 Rings	ON	ON

Note: Switch 3 is always set to OFF.

Modem Termination

If the modem is at the beginning or end of the communications daisy chain, you will need to set the termination switch inside the modem to ON. Otherwise, termination should be OFF.

DIP 4 OFF – The modem is wired between controllers.

ON – The modem is at the beginning or end of the chain.



Country Code Selector (International Versions Only)

Set the country code selector DIP switch to the appropriate country's standard.

DIP Settings (1 through 8)	Country
00000000	U.S. and Canada
00010000	Japan
00100001	Belgium
00100010	Finland
00100011	France
00100100	Iceland
00100101	Italy
00100110	Netherlands
00100111	Sweden
00101000	Switzerland
00101001	United Kingdom
00101010	Unused
00101011	Unused
00101100	Unused
01001101	Austria
01001100	Germany

ENVIRONMENTAL PRODUCTS 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. Sensors are warranted for a period of twelve (12) months from the date of manufacture or six (6) 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: power fluctuations or surges, accident, misuse, abuse, neglect, fire, water, corrosion, lightning or other acts of nature, 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: System configuration, software, operator control of the system, and the application, among other things, will affect this Product's performance. 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 programming 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.