

INSTALLATION INSTRUCTIONS

CAUTION !

Electricity is dangerous if safety rules are not followed. Never work on equipment with the electricity turned 'ON'. Be absolutely certain the power is turned 'OFF' on the circuit or device you are installing or repairing. If you are not able to determine that power is removed have it checked by a licensed electrician. Be sure you read carefully and understand all of these installation steps and have the necessary tools and supplies before you begin to install the protector. Check and follow your local electrical codes, they are for your protection.



When installing outdoors, care must be taken to comply with all local and national electric codes regarding outdoor or wet locations. Do not touch electric devices when you are wet or you are standing on a wet surface. Use a circuit tester or AC voltmeter to be sure the electricity is 'OFF' before you touch wires or devices. Install Telephone protection per Article 800 of the National Electrical Code on the equipment side of the primary telephone Listed equipment.

NOTE:

**ELECTRICAL GROUND IS REQUIRED FOR THIS UNIT
TO FUNCTION PROPERLY AND SAFELY!**

**Suitable for Use on a Circuit Capable of Delivering Not More
than 25,000 rms symmetrical Amperes, 240 Volts Maximum.**

STEP 1

Verify that all parts are included for your system.

DESCRIPTION	QUANTITY	QUANTITY
	(IG1300-2T-1C)	(IG1300-4T-2C)
PanelGuard IG1300 AC Voltage Protection Device with 30" wire leads	1	1
Mounting Plate	1	1
Wire channel cover	1	1
4-wire (2-pair) Telephone protection module	1	2
1-circuit coaxial cable protection module	1	2

STEP 2

Tools and additional materials required.

AC Voltmeter or Voltage tester

Screwdrivers

Flat or phillips blade for cabinet mounting screws.

Flat blade Torx T-20 for internal screws

Lineman's pliers or wire strippers

Hammer (optional)

3 each 1-1/4" x #10 sheet metal, wood or masonry screws

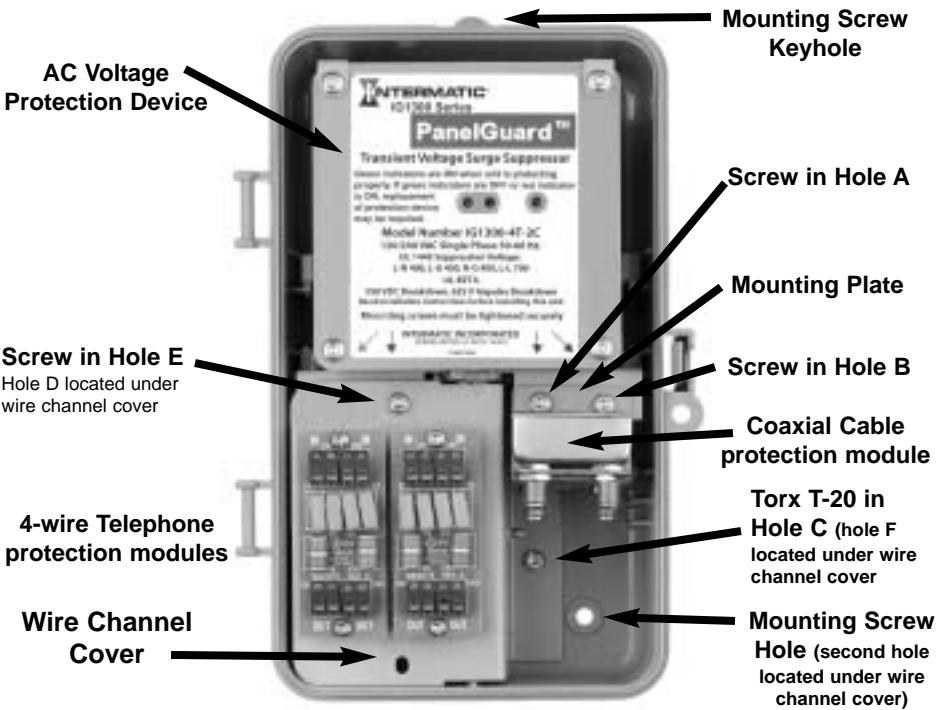


Figure 1

STEP 3

Select a location for the Surge Protection Device (SPD) which will allow convenient connection to the panel while keeping the lead wires as short as possible. Use an AC voltmeter or circuit tester across two breaker outputs to confirm that there is 240 volts between them. If the voltage is 0, select a different breaker or pair of breakers and retest for the presence of 240 volts. A two-pole or two single-pole breakers of no larger than 20 amp capacity should be used.

STEP 4

Select a mounting position for the protector at the electric panel. If you have a panel that is not similar to the diagram in Figure 2, call Intermatic for assistance at the numbers listed at the end of these instructions between the hours of 8:00 am and 4:00 pm central time Monday through Friday.

Note: Operation of the IG1300 Series will be optimized by keeping the wire lead lengths as short and balanced as possible. It is better to use two breakers near the bottom of the electrical panel with short wire leads than to use two breakers at the top of the panel with long wire leads.

STEP 5

Prepare the protector for installation. Open the cover of the NEMA 3R cabinet and remove the screws from holes A, B, C and E using either a flat bladed or Torx T-20 screwdriver or bit.

STEP 6

Lift the coaxial protection module assembly out of the cabinet and place it to one side for future use. **Place the Telephone protection assembly** and

wire channel outside of the cabinet, letting it hang on the ground wire. **Do NOT disconnect the ground wires from the wire channel cover.** Straighten all the 14 AWG wires and let them hang free.

STEP 7

Position the protector on the wall next to the electrical panel and mark the position of the cabinet mounting holes on the wall. Care should be exercised to position the knockout in the protector cabinet in line with a knockout in the electrical panel. At least 2" should be allowed between the protector and the electrical panel to allow the cover to open. Pre-drill the holes and set one screw in the hole for the top mounting screw.

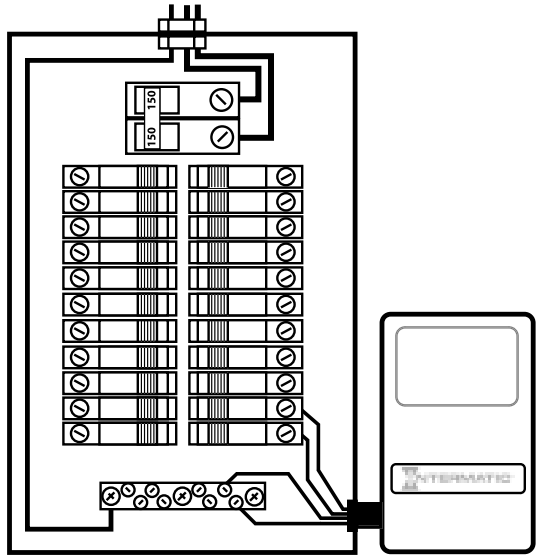


Figure 2

STEP 8

Remove the appropriate knockout from the protector cabinet for connecting the electric panel. Install a 2-1/2" nipple or length of seal-tite or conduit. **Select and remove the appropriate knockout** to use with telephone and coaxial cables. Use a knockout that is accessible after the wire channel cover has been reinstalled. DO NOT route telephone or coaxial cables through the same knockout or conduit with AC power wires. If conduit is used, it is important to keep telephone and cable conductors in a different conduit than AC power conductors.

STEP 9

Make sure that the electric power is OFF in the electrical panel. Remove the front cover or trim panel from the panel. Select and remove the desired knockout through which the protector wiring will enter the panel. Hang the protector cabinet on the screw using the exterior top keyhole of the cabinet. Insert the nipple or conduit into the electrical panel and fasten it loosely. Insert the remaining two mounting screws through the holes in the protector cabinet and tighten all of the cabinet mounting screws. Tighten the connectors on the nipple, seal-tite or conduit between the cabinets.

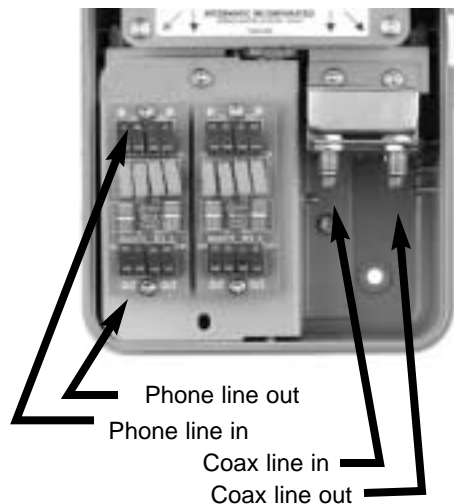


Figure 3

STEP 10

Twist the four 14 AWG power leads around each other at a rate of 1-1/2 turns per foot of length. Wrap a piece of tape on the ends of the wires and feed them through the connector and into the electrical panel.

STEP 11

The IG1300 Series is shipped ready for installation on the right-hand side or top positions of the electrical panel. If the protection panel is mounted on the left side of the electrical panel, refer to the **Special Instructions** at the end of this section to reverse the wire channel cover and telephone and coaxial modules.

Replace the telephone module with wire channel and the coaxial protection module assembly that were removed in Step 6. Replace the screws in holes A, B, C and E. Tighten the screws firmly to ensure a good ground bond.

STEP 12

Identify and confirm wire pairs for each telephone line. Make sure that enough wire is available to reach each terminal block on the telephone protection modules. Cut each wire pair and strip the end to a length of 5/16". Route the wires through the knockout and insert the stripped end of each wire into the terminal blocks as shown in Figure 3. Be sure to route the wires from the outside phone connection to the "IN" terminal and the wires to the house phones to the "OUT" terminal. Secure each wire by tightening the terminal block screws. NOTE: Exercise caution to ensure that each wire of a telephone pair is in line to prevent polarity reversal.

STEP 13

Route the coaxial cable through the knockout. If insufficient space is available in the knockout, the second knockout may be used. Connect the cable to the protection module making sure that the connectors are tightened snugly. Do not overtighten the connectors.

STEP 14

Connect the AC Power protection to the electrical panel. Measure each wire lead and cut it to proper length. Each wire should be as short as possible to provide optimum operation. Do Not coil excess lead.

NOTE: The protector functions best if all bends in the wire leads are rounded, ideally to a 4" radius. Hard 90° bends reduce efficiency.

Connect the Green Ground wire to the panel ground bus first. Connect the White Neutral wire to the Neutral bus if the electrical panel has one. Many panels have a common Neutral and Ground bus which will result in both the Green and White wires connecting to the same bus.

STEP 15

Connect the two black wires to a 15 or 20 amp two-pole circuit breaker or to two single-pole breakers.

STEP 16

Check to be sure that all wires are securely fastened and all screws are tight. Confirm that the protector is wired to the correct breakers by measuring the voltage between the two black leads. A voltage of 220 to 240 VAC means that the IG1300 is connected across both sides of the electrical service.

STEP 17

Replace the cover or trim panel on the electrical cabinet. Return all breakers to their original positions and check the IG1300 for two green indicators.

STEP 18

Close the cover on the IG1300.

SPECIAL INSTRUCTIONS

Use the following steps when installation requires placing the IG1300 on the left side of the electrical panel.

STEP A

Remove the screws in holes A and B that secure the coaxial cable protection module(s) to the ground base. Remove the coaxial modules and set them to one side for future use. Remove screws C and E completely. (Refer to Figure 1)

STEP B

Invert the wire channel cover with the green ground wires and the telephone line protection modules still attached to it and place it into the IG1300 cabinet as shown in Figure 4. Note that Figure 4 shows model IG1300-2T-1C. Install a screw through the hole in the foot of the wire channel cover and into hole F. Insert a second screw through the wire channel and into hole A. Tighten both screws snugly.

STEP C

Insert two screws through the holes in the coaxial protection module(s) and into holes D and E as shown in Figure 4.

STEP D

Tighten the screws firmly to ensure a good ground bond.

NOTE:

The telephone protection Module shown in Figure 4 has been inverted to keep the "IN" and "OUT" markings in the proper position.

STEP E

Return to Step 12.



TROUBLESHOOTING and ASSISTANCE:

Technical Services 815-675-7000

<http://www.intermatic.com>

INTERMATIC IG1300 SERIES

FIVE YEAR LIMITED PRODUCT and CONNECTED EQUIPMENT WARRANTY

(1) What Is Covered By This Limited Warranty

(A) Repair or Replacement of Product

Intermatic Incorporated ("Intermatic") warrants to the original purchaser only, the Intermatic IG1300-2T-1C or IG1300-4T-2C Surge Protection Devices (each a "Product") shall be free from defects in material or workmanship for a period of five years (60 months) from date of purchase or 66 months from date of manufacture. If the purchaser discovers a defect in material or workmanship, the purchaser must promptly submit a warranty claim. Upon a determination by Intermatic that the Product is defective, Intermatic shall correct any defect in material or workmanship by, at Intermatic's option, either repairing or replacing the Defective Product. Any repair, including both parts and labor, shall be at Intermatic's expense. The foregoing remedies are the purchaser's exclusive remedies for a breach of warranty.

The Product must be installed in the appropriate application in complete accordance with the installation instructions. All building wiring and other connections to the Product must conform to all applicable national, state and local electrical codes; the Product must not be opened, modified, exposed to extreme heat or cold, submerged or subjected to abnormal use or service. All products must be used in accordance with the instructions provided with the Product and the purchaser shall be solely responsible for selecting a Product model with specifications appropriate for the equipment to be protected. Intermatic shall determine, in its sole discretion, whether any Product returned by a purchaser has been used in accordance with its instructions, is an appropriate model for the purchaser's use thereof, and whether the Product is defective.

(B) Repair or Reimbursement for Damage to Properly Connected Equipment

In addition to the above described Product warranty, Intermatic warrants to the original purchaser of the Product for a period of five years from the date of purchase, the following: In the event that any major household connected electrical equipment (as defined below) is damaged (the "Damaged Equipment") as a direct result of the failure of a Product to protect the Damaged Equipment from Power Transients (as hereinafter defined) and all of the conditions are satisfied, Intermatic shall, at Intermatic's option, either repair the Damaged Equipment or reimburse the purchaser of the defective product. The limit of Intermatic's liability under this warranty shall be the Fair Market Value (as hereinafter defined) of the Damaged Equipment or the deductible amount of the original purchaser's homeowner's insurance policy, whichever is less. In no event shall Intermatic incur repair costs or reimburse the purchaser for an amount in excess of Ten Thousand Dollars (\$10,000.00).

As used herein, "major household connected electrical equipment" shall mean major household appliances and electronic devices, including refrigerators, freezers, air conditioners, stoves and ovens, microwave ovens, clothes washers and/or dryers, dishwashers, audio and stereo equipment or components, video equipment, televisions and computers. Major household connected electrical equipment that normally requires an additional connection such as phone/modem connection, antenna or cable connection or other temporary or permanent connection must be properly connected to the Intermatic IG1300 Series Surge Protection Device that incorporates surge protection for both the AC (power) and all other input connections. If this is not physically possible, then all input connections for any specific piece of equipment must be properly connected to an Intermatic UL listed Surge Protection Device that incorporates surge protection for both the AC (power) and all other input connections. The Fair Market Value of the Damaged Equipment shall be the current value of the equipment specified in the most recent version of the Orion Blue Book (printed or on-line edition) by Orion Research Corporation, or a comparable publication.

Promptly upon discovering any Damaged Equipment, the purchaser must submit a claim pursuant to the claim procedure provided below. In no event may a purchaser initiate a claim later than (30) days after the Protected Equipment is damaged. In order to receive the Connected Equipment pro-

tection provided in this Section, all of the following conditions must be satisfied with respect to the use of the Product: (a) the Product must be properly installed; (b) all building wiring and other connections to the Product and the Damaged Equipment must conform to all applicable federal, state and local electrical codes; (c) no ground wires or ground connections in addition to the AC power source can be used in connection with the Product or the Damaged Equipment; (d) Equipment with additional wiring or data/cable connections (as defined above) must be properly connected to a UL listed Surge Protection Device (as noted above); and (e) the Product(s) and Protected Equipment must not be opened, modified, exposed to extreme heat or cold, submerged or subjected to abnormal use or service.

For purposes of this Limited Warranty, a Power Transient shall mean over-voltage resulting from momentary voltage spikes or surges on an AC power line of magnitude that the Product, according to its specifications, is designed to stop before such spikes or surges affect downstream equipment.

(2) What Is Not Covered By This Warranty

Intermatic does not warrant (a) defects in the Product or damage to any equipment caused by the failure to properly install the Product, (b) damage caused by use of the Product for purposes other than those for which it was designed, (c) damage caused by disaster such as fire, flood and wind, (d) damage caused by unauthorized attachments or modification of the Product, (e) damage to the Product occurring during shipment, (f) electrical disturbances exceeding published product specifications, (g) damage to the Product caused by any other abuse or misuse by the purchaser.

This warranty applies to residential use of Intermatic IG1300 Series and excludes any commercial applications. This device is not intended to provide protection during Utility voltage swells or loss of neutral conditions which are by definition not transient events and are not covered by this warranty.

(3) Disclaimer of Warranty

THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER EXPRESSED WARRANTIES. TO THE EXTENT ALLOWED BY LAW, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE LIMITED IN DURATION TO THE DURATION OF THIS LIMITED WARRANTY.

(4) Limitation of Remedies

IN NO CASE SHALL INTERMATIC BE LIABLE FOR ANY SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL THEORY. SUCH EXCLUDED DAMAGES INCLUDE, BUT ARE NOT LIMITED TO DAMAGE TO SOFTWARE, LOSS OF DATA, LOSS OF PROFITS, LOSS OF SAVINGS OR REVENUE, LOSS OF USE OF THE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF ANY SUBSTITUTE EQUIPMENT, FACILITIES OR SERVICES, DOWNTIME, THE CLAIMS OF THIRD PARTIES INCLUDING CUSTOMERS, DAMAGE TO PROPERTY AND PERSONAL INJURY. SOME STATES DO NOT ALLOW LIMITS ON WARRANTIES OR ON REMEDIES FOR BREACH IN CERTAIN TRANSACTIONS. IN SUCH STATES, THE LIMITS IN THIS PARAGRAPH AND IN PARAGRAPH (3) MAY NOT APPLY.

(5) Time Limit for Bringing Suit

No action arising out of any claimed breach of warranty may be brought more than one year after the cause of action has occurred.

(6) No Other Warranties

Unless modified in writing signed by both parties, this agreement is understood to be the complete and exclusive agreement between the parties, superseding all prior agreements, oral or written, and all other communications between the parties relating to the subject matter of this agreement. No employee of Intermatic or any other party is authorized to make any warranty in addition to those made in this agreement.

(7) Claim Procedure

In order to submit a claim for warranty service the purchaser must:

(A) Contact the Intermatic Insurance Claims Center at 1-800-270-7227 **before** having the damaged equipment repaired.

(B) Request that an Incident Claim Report be written regarding the damage including descriptions and model identification (if available) of the equipment that was damaged. Record the Warranty Claim Number for future reference.

(C) File a claim for the damaged equipment with your homeowner's (or renter's) insurance company.

(D) Send the INTERMATIC® IG1300 Series Surge Protection Device to the INTERMATIC WARRANTY COORDINATOR at the address listed below. All returned devices must be plainly marked with the INTERMATIC WARRANTY CLAIM NUMBER.

(E) Send all of the following information in a single packet to the INTERMATIC WARRANTY COORDINATOR at the address listed below.

- (1) Claimant's name, address and telephone number
- (2) Original dated sales receipt for the Intermatic IG1300 Series Protection Device
- (3) Original report for repair work
- (4) The damage report
- (5) A copy of the claim report by the homeowner's (renter's) insurance company or a copy of the policy showing the deductible amount exceeds the cost of the repair.

(F) Address all communications and product returns to:

**INTERMATIC WARRANTY COORDINATOR
7777 WINN ROAD,
SPRING GROVE, ILLINOIS 60081
ATTN: SURGE CLAIM PROCESSOR**

PRODUCT & INSTALLATION INFORMATION

Purchase date: _____
Installation date: _____
Installed by: _____

INTERMATIC INCORPORATED
SPRING GROVE, ILLINOIS
<http://www.intermatic.com>