# SEP-200 Surge Protector Five Year Product Warranty and Connected Appliance Protection Policy

(Valid only in the United States and Canada)

#### PRODUCT WARRANTY

Panamax warrants to the original owner of the Panamax SEP-200 surge protector, for five (5) years following the date of purchase of the protector, that the surge protector shall be free of defects in design, material or workmanship. Panamax will repair or replace any such defective unit during the warranty period.

#### **CONNECTED MAJOR APPLIANCE PROTECTION POLICY**

Panamax will pay to repair or replace covered major household appliances, up to an aggregate three year total of \$10,000, if the major household appliance, as defined herein, is damaged by an AC power or lightning surge. The Panamax surge protector must show signs of damage or be operating outside of design specifications.

Original owner is defined as: either the original purchaser of the SEP-200 protector or the first homeowner to reside in the residential household with the SEP-200 protector. Major household appliances are defined as the following motor driven household loads: refrigerator, freezer, oven, range, washer, dryer, ceiling fan, or dishwasher.

#### THIS WARRANTY IS SUBJECT TO THE CONDITIONS BELOW

- 1. COVERED RISK: This warranty covers the above described major household appliances from any and all damage resulting from either an AC power surge or line overvoltage for the warranty period defined herein. This coverage is secondary to any existing manufacturer's warranty, implied or expressed; or any service contract in existence at the time of the loss, or to any applicable insurance policy in effect.
- 2. WARRANTY PERIOD: The SEP-200 Warranty shall be in effect for three (3) years following the date of purchase of the protector. Panamax reserves the right to require proof of proper installation in the event of a claim.
- 3. PROPER INSTALLATION: The SEP-200 surge protector must be properly installed by a certified electrician. Building wiring, grounding and other electrical connections must conform to current applicable codes (NEC or CEC). Panamax installation instructions and diagrams must be followed.
- 4. DETERMINATION OF FAILURE: The Panamax SEP-200 protector must show signs of damage or must be performing outside of design specifications. OPENING THE ENCLOSURE, TAMPERING WITH, OR MODIFYING THE PROTECTOR IN ANY WAY SHALL VOID YOUR WARRANTY.

5. EXCLUSIONS: The SEP-200 WARRANTY DOES NOT COVER: service charges; installation costs; reinstallation costs; setup cost; diagnostic charges; periodic checkups; routine maintenance; loss of use of the product; costs or expenses arising out of reprogramming or loss of programming; shipping charges or fees; service calls; loss or damage occasioned by fire, theft, flood, wind, accident, abuse or misuse.

#### 6. MAKING A CLAIM:

- a) Contact the Panamax Customer Relations department by internet at www.panamax.com or call toll-free at 1-800-472-5555 to obtain a Return Authorization (RA) number. If YOU BELIEVE YOU HAVE DAMAGE TO A MAJOR HOUSEHOLD APPLIANCE AS DEFINED, YOU MUST NOTIFY PANAMAX AT THIS TIME.
- **b)** Panamax will send you a one page claim statement to be completed and returned. You must include either the original proof of purchase of the be followed.protector or the work order for the installation of the SEP-200 protector with your completed claim statement.
- c) Once you obtain an RA number, please clearly mark your RA number on the side of your protector. Place your protector in a box and add packing materials. On the outside of the box, please clearly mark the RA number
- **d)** Ship the protector to Panamax. You are responsible for charges for shipping the protector to Panamax.
- e) Once Panamax has received your claim statement and has confirmed your eligibility, Panamax, at its sole option, will either pay the deductible amount of the original owner's insurance policy covering major household appliances or pay to repair or replace said major household appliances.
- f) Panamax reserves the right to inspect the damaged appliance(s), parts, or circuit board, as well as the customer's facility (at Panamax's expense). Damaged appliances deemed uneconomical to repair must remain available for inspection by Panamax until the claim is finalized.
- **8. GENERAL:** If you have any questions regarding this warranty, please contact the Panamax Customer Relations Department at www.panamax.com or toll-free at 1-800-472-5555. This warranty supersedes all previous warranties. This is the only warranty provided with the protector and any other implied or expressed warranties are non-existent. This warranty may not be modified except in writing, signed by an officer of the Panamax corporation.

IWS00856 RFV A

EFFECTIVE JAN. 2009

## INDOOR / OUTDOOR INSTALLATION & OPERATING INSTRUCTIONS FOR SERVICE ENTRANCE PROTECTOR

**SEP-200** 

## **DESCRIPTION**

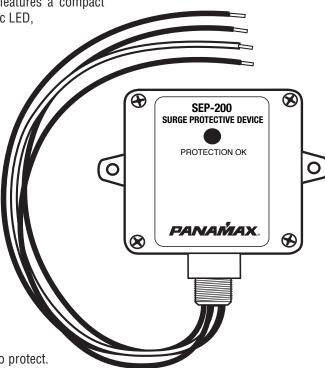
AC surge protector permanently connected to main service panel. SEP-200 SERVICE ENTRANCE PROTECTOR features a compact chassis for easy installation, visible diagnostic LED, 120/240 V, 1 Phase, 3 wire plus ground.

For use with panels rated up to 400 Amps.

## APPLICATION

SEP-200 protects against electrical surges that can cause damage to electric and electronic equipment. Catastrophic failures and gradual component degradation can be caused by high voltage surges, which are generated by harsh weather conditions, external power problems, or day-to-day electrical component switching.

The SEP-200 will protect electrical equipment against surges caused by the above factors. Panamax also recommends using secondary plug-in protectors at the equipment you would like to protect.



## SAFETY CONSIDERATIONS

A licensed electrician must install the SEP-200. Installation must follow applicable electrical codes. Failure to follow installation instructions may result in personal injury, equipment damage and invalidation of the warranty. Your electrical system must be grounded per Article 250 of the NEC. Surge protection works best when a secure ground is established. Check grounding before restoring power.



INSO0856 REV. B



CAUTION: When installing or removing this protector from service, disconnect power. Failure to do so may result in equipment damage, serious injury or death.

## **MOUNTING INSTRUCTIONS**

Install the SEP-200 according to local electrical codes, or using instructions below. Lead lengths must be as short as possible to keep voltage drop to a minimum. Trim excessive length to minimize wire impedance to the surge protector. In the event of lightning or other power transients, a one foot reduction of lead length can result in a decrease of 100 volts or more across leads.

Use a threaded nipple or thin-wall conduit to connect the SEP-200 to the service panel. Feed the wires through the conduit and into the panel.

Using the screw holes on the back plate corners, mount SEP-200 as close as possible to the service panel (Figure 2).

Figure 1

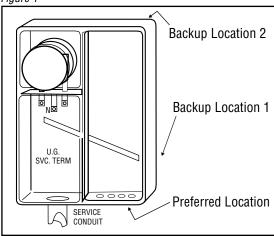
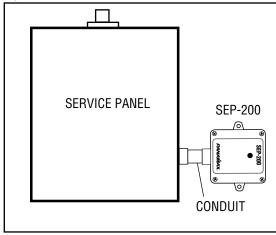
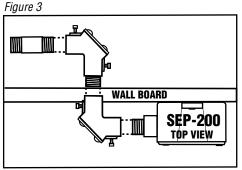


Figure 2



## **Back Mounting**

For back mounting, use pull-through elbow conduit(s) and additional conduit sections as needed. (Figures 3 & 4).



2

SERVICE PANEL SERVICE PROTECTOR CONDUIT ELBOW WALL

### TYPE1 (INSTALLATION **BEFORE** THE MAIN DISCONNECT - Figure 5)

WARNING: REMOVE THE METER OR OTHERWISE DISCONNECT THE AC POWER BEFORE BEGINNING THE INSTALLATION!!!

#### USE A TEST LAMP TO CONFIRM THAT THE POWER HAS BEEN REMOVED!!

The SEP-200 is UL Listed for installation either before or behind the main service disconnect. Proper installation before the service disconnect usually provides better protection (lower limiting voltage)than installations behind the service disconnect. The mechanical installation to the meter pan or meter side of the service panel is as described in figures 1-3, as close as possible to the wiring between the meter and the service disconnect.

#### CONNECTIONS:

- 1. The 4 SEP-200 wires should be connected to the points"B" in figure 5. The connections can be made at the meter socket or on the wiring to the main disconnect
- 2. Connect the SEP-200 green (ground) wire to the service raceway, the panel ground bus, or any other part of the grounding electrode system. The ground wire should be kept as short appossible.
- 3. Connect the white (neutral) wire to the neutral bus.
- **4.** Connect the two SEP-200 black wires to the two phase terminals of the meter socket or to the conductors to the disconnect. An insulated tap connector such as ILSCO KUPLER IPC 4/0-#6 is a fast and easy way to connect the black (phase) wires to the service conductors.
- 5. Check the connections!
- **6.** Replace the meter, or turn the AC power switch back on. The green light on the SEP-200 should come on, confirming that the connections are correct and there is power to both phases.

B HOT

A 240V NEUTRAL

B 120V HOT

30A BREAKER
or SUB-FEED
LUG SET

BUILDING GROUND

## TYPE 2 (INSTALLATION AFTER THE MAIN DISCONNECT - Figure 6)

- 1. The SEP-200 should be installed by a qualified electrician.
- 2. Turn "OFF" and lock out the power to the enclosure in which the SEP-200 is to be installed.
- 3. Connect the green (ground)wire to the ground bus or connector.
- 4. Connect the white (neutral) wire to the neutral bus.
- **5.** Install the appropriate 2 pole, 30 ampere (or larger) circuit breaker or lug kit to the panel board or meter combination device. If a sub-feed lug kit is available, it is a better and more economical connection than a breaker.
- **6.** Connect the black leads to the load terminals of the circuit breaker or lug kit and tighten to the required torque.

3

- 7. Double check connections, then reconnect power.
- 8. When the LED is on, the protector is functioning as desired.

