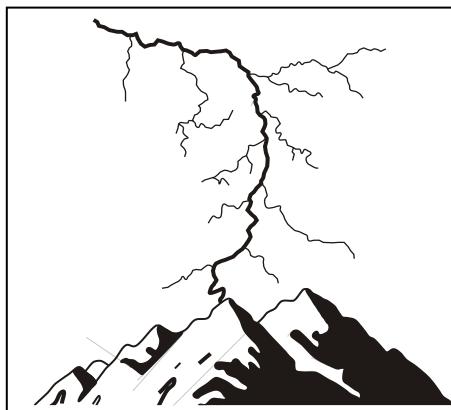
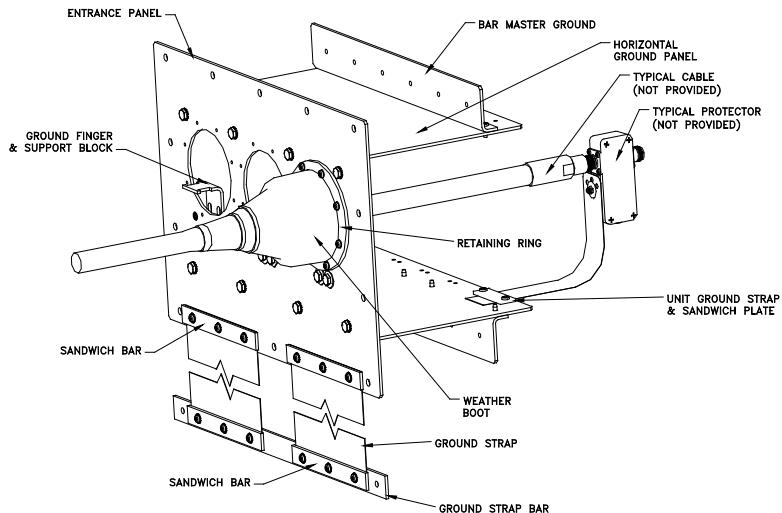


PolyPhaser® Corporation



Installation Guide for PolyPhaser® COAX ENTRY PROTECTION SYSTEM

3 PEEP Assembly Guide



- 1) Read all instructions thoroughly. Keep this guide for future reference.
- 2) Remove all protective vinyl from copper components prior to installation.

NOTE: Due to numerous shelter construction materials, PolyPhaser does not provide hardware to attach the bulkhead entrance panel to the equipment shelter; use lag screws, wood screws, anchor bolts, etc. Pre-drilling screw holes is recommended. To provide an improved electrical connection, use cleaning pad and ***conductive joint compound*** from the (CCK) Copper Cleaning Kit at all copper-to-copper attachments. **[CAUTION: The conductive joint compound may cause irritation to sensitive skin. Precautions should be taken to protect skin during application. See instructions and MSDS provided with CCK.]** **WARNING:** When assembled, entrance panel systems are heavy and awkward to lift. Lifting the assembled system for fitting or installation may require 2 or more installers.

These commodities or technology are exported from the U.S. in accordance with the Export Administration Regulations. Diversion contrary to U.S. law prohibited.

LIMITED TEN YEAR WARRANTY

ENG-F-016 Rev. E 05/03

PolyPhaser Corporation warrants this product to meet or exceed the published specifications of the time of manufacturing and to be free of manufacturing defects for a ten year period after proven date of purchase. PolyPhaser Corporation makes no claims, nor extends any warranty to include an "IMPLIED WARRANTY OF MERCHANTABILITY OR IMPLIED WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE". PolyPhaser Corporation assumes no responsibility for personal injury, property damage, and any other losses. This warranty is limited to the repair, replacement or refund of purchased price of this product only and it will be PolyPhaser Corporation's decision as to whether this unit is defective and as to which of the above mentioned actions will be taken. PolyPhaser Corporation extends no obligation to update or modify any of its existing products as newly developed products are marketed.

Products may be covered under the following U.S. Patents: 5,986,869 6,061,223 6,115,227 6,236,551 6,243,247 other U.S. and Foreign Patents Pending

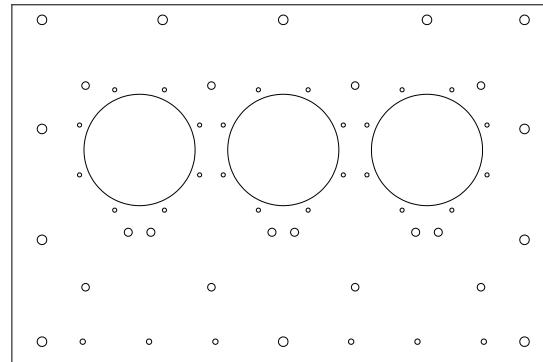
2225 Park Place
P.O. Box 9000
Minden, NV 89423 U.S.A.
Global Lightning Solutions

PolyPhaser®
CORPORATION

Tel: 800-325-7170
775-782-2511
Fax: 775-782-4476
www.polyphaser.com

3 PEEP PARTS GUIDE AND QUANTITIES

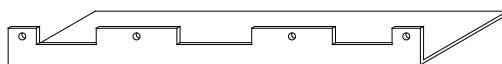
- 1241-0311-08 1/4-20 x 1/2" SLOT RD HEAD 8EA
- 1241-0711-12 1/4-20 X 3/4 HEX HEAD 17EA
- 1243-0002 1/4-20 EXT. LOCKWASHER 24EA
- 1229-0900 1/4 RUBBERIZED WASHER 10EA
- 1242-0001 1/4-20 HEX NUT 8EA
- 1208-0001 #10 TAKE UP WASHER 5EA
- 1211-0114-08 10-32 X 1/2 SLOT PAN HD BRASS 6EA
- 1211-0211-05 10-32 X 5/16 PHIL PAN 16EA
- 1213-0004 #10 EXT. LOCKWASHER BRASS 12EA
- 1213-0002 #10 EXT. LOCKWASHER 16EA
- 1212-0004 10-32 HEX NUT BRASS 6EA
- 1171-0211-08 8-32 X 1/2 PHIL PAN HD 40EA
- 1173-0002 #8 INT. LOCKWASHER 40EA
- 1009-0001 WORMGEAR CLAMP 3EA
- 1009-0002 WORMGEAR CLAMP 3EA



5410-0069 3 PORT MAIN PANEL TAPPED 1EA



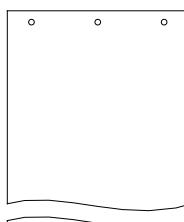
5410-0136 UNIT GROUND STRAP 3EA



5410-0144-01 2EA
 GROUNDING PANEL



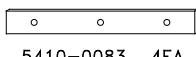
5410-0084 3 PORT GROUND BAR 1EA



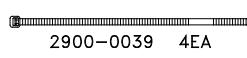
4033-0001 2EA
 GROUND STRAP



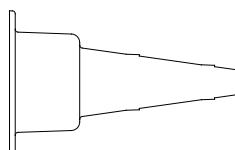
5410-0143-01 2EA
 BAR MASTER GROUND



5410-0083 4EA
 SANDWICH BAR



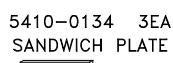
2900-0039 4EA
 NYLON CABLE TIE



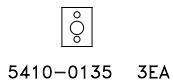
5900-0060 3EA
 WEATHER BOOT



5410-0078 3EA
 GROUNDING FINGER



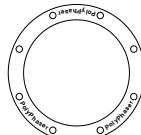
5410-0134 3EA
 SANDWICH PLATE



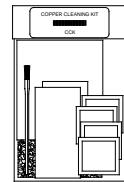
5410-0135 3EA
 BACK-UP PLATE



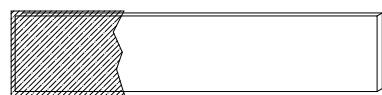
5410-0082 3EA
 SUPPORT BLOCK



5430-0004 3EA
 RETAINING RING



CCK 1EA
 COPPER CLEANING KIT



6050-0022 1EA
 WEATHER SEALANT

POLYPHASER® EARTHED ENTRANCE PANEL INSTALLATION

1. Entrance panel is installed on the exterior side of the equipment shelter. It has 5/16" holes arranged to coincide with standard 16" on-center studs. (For hole cut-out dimensions, see below.) A weatherproof sealant should be used between panel and siding.
2. The adjustable grounding finger provides a means of centering the cable or waveguide in the hold and a ground connection for the shield. Place the finger inside the panel protruding to the exterior. It is held in place by the support block using the 1/4-20 hex nuts and rubber washers provided.
3. After trimming the weather boot appropriately (see drawing below), slide the retaining ring and then the boot over the cable; slightly soapy water may ease the assembly. All future use ports should have boots attached, as in step 12, to assure weather tightness.
4. Install sandwich plates to horizontal grounding bars using the 10-32 x 5/16" Phillips™ screws and lock washers. Use these as the connection point for ground straps from Impulse Suppressors.
5. Thread 1/4-20 x 3/4" bolts with 1/4" lock washers to the flat entrance panel. Using 1/4" lock washer and nut, secure the horizontal ground bars with sandwich plates to the bolts.
6. Prepare the interior opening: Determine the approximate location for the panel. Using a suitable tool, locate the stud nearest the desired location. Using the stud as your reference, measure and mark the opening per the hole cutout guide. Remove any sheetrock and insulation in the openings. Do not cut studs.
7. Prepare the exterior opening: Using the openings on the inside as a guide, drill the exterior siding at each corner. From the outside, use a straight edge to connect the holes. Remove the siding in the openings. Do not cut studs or remove siding on studs. Apply sealant to siding and install panel system.
8. Install each of the 6" wide ground straps in a sandwich between the entrance panel and the sandwich bars provided. Use the ***conductive joint compound*** in the (CCK) Copper Cleaning Kit to ensure a weatherproof electrical connection. Attach with 10-32 x 5/16" screws and lock washers.
9. The ground bar attaches to an existing perimeter ground system. Attach it to the 6" ground straps using brass 10-32 x 1/2" screws and 10-32 nuts. A full 15' of strap is included for each connection and may be trimmed as needed. Bolt or exothermically weld the ground bar to the perimeter ground system. Joint compound should be used on all bolted connections. PolyPhaser's CCK contains all the necessary equipment needed to clean and protect all of the copper joints.
10. Install the master ground bars using 1/4-20 round head screws, nuts and washers. These bars can be used as a central grounding location for internal equipment.
11. The coax/waveguide must be stripped to expose the shield (approx. 2" long) at the point of entrance. Determine the point of entrance (or how much cable should extend internally) prior to stripping coax or waveguide. Apply joint compound and secure the coax/waveguide with one of the worm-gear clamps provided. Use 2 clamps for larger diameters.
12. Slide the weather boots and retaining rings back to the panel and attach using 8-32 x 1/2" machine screws and #8 lock washers. If there has been an error in cutting the boot, use the weather sealant provided to obtain a watertight seal between the coax/waveguide and the weather boot.
13. Use the nylon cable tie to secure the weather boot around the coax/waveguide.

