

# WHELEN<sup>®</sup>

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## Installation Guide: Pioneer™ Series LED Floodlight Brow Mount (2.75" Radius)

### Safety First

This document provides all the necessary information to allow your Whelen product to be properly and safely installed. Before beginning the installation and/or operation of your new product, the installation technician and operator must read this manual completely. Important information is contained herein that could prevent serious injury or damage.

- **Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems and procedures.**
- **If mounting this product requires drilling holes, the installer MUST be sure that no vehicle components or other vital parts could be damaged by the drilling process. Check both sides of the mounting surface before drilling begins. Also de-burr any holes and remove any metal shards or remnants. Install grommets into all wire passage holes.**
- **If this manual states that this product may be mounted with suction cups, magnets, tape or Velcro®, clean the mounting surface with a 50/50 mix of isopropyl alcohol and water and dry thoroughly.**
- **Do not install this product or route any wires in the deployment area of your air bag. Equipment mounted or located in the air bag deployment area will damage or reduce the effectiveness of the air bag, or become a projectile that could cause serious personal injury or death. Refer to your vehicle owner's manual for the air bag deployment area. The User/Installer assumes full responsibility to determine proper mounting location, based on providing ultimate safety to all passengers inside the vehicle.**
- **For this product to operate at optimum efficiency, a good electrical connection to chassis ground must be made. The recommended procedure requires the product ground wire to be connected directly to the NEGATIVE (-) battery post.**
- **If this product uses a remote device to activate or control this product, make sure that this control is located in an area that allows both the vehicle and the control to be operated safely in any driving condition.**
- **Do not attempt to activate or control this device in a hazardous driving situation.**
- **This product contains either strobe light(s), halogen light(s), high-intensity LEDs or a combination of these lights. Do not stare directly into these lights. Momentary blindness and/or eye damage could result.**
- **Use only soap and water to clean the outer lens. Use of other chemicals could result in premature lens cracking (crazing) and discoloration. Lenses in this condition have significantly reduced effectiveness and should be replaced immediately. Inspect and operate this product regularly to confirm its proper operation and mounting condition. Do not use a pressure washer to clean this product.**
- **It is recommended that these instructions be stored in a safe place and referred to when performing maintenance and/or reinstallation of this product.**
- **FAILURE TO FOLLOW THESE SAFETY PRECAUTIONS AND INSTRUCTIONS COULD RESULT IN DAMAGE TO THE PRODUCT OR VEHICLE AND/OR SERIOUS INJURY TO YOU AND YOUR PASSENGERS!**

**For warranty information regarding this product, visit [www.whelen.com/warranty](http://www.whelen.com/warranty)**

**Mounting...**

1. Secure the appropriate Pioneer™ mounting bracket (Item #11 or #12) to the Pioneer assembly using Item #13 (apply a drop of LocTite® 242 to the threads). Insert floodlight brackets (Item #9) into the mounting bracket as shown. Secure these brackets using the hardware provided (#10).
2. Using the appropriate hardware (Items #1, #2 & #3), install the Adjustable mounting brackets (Items #4 & #17) onto the floodlight brackets.
3. Position the floodlight/mounting bracket assembly onto its proposed mounting location. Make sure that the mounting brackets fit properly onto the mounting surface.
4. When the best location has been determined, carefully mark the areas where the mounting holes are to be drilled. Remove the assembly from the mounting area.
5. Using an 11/32" drill bit, drill 4 mounting holes through the brow. The floodlight can now be mounted onto the vehicle using the appropriate hardware (Items #5, #6, #7 & #8). Insert the bolts into their holes in the mounting bracket and install a rubber washer (Item #6) onto each bolt.
6. Install a 5/16 flat washer (#7) and a elastic stop nut (#8) onto each bolt. Using a torque wrench, tighten each nut until a value of between 10-12 ft./lbs. has been achieved.

**Wiring...**

All customer supplied wires that connect to the positive terminal of the battery must be sized to supply at least 125% of the maximum operating current and FUSED at the battery to carry that load. DO NOT USE CIRCUIT BREAKERS WITH THIS PRODUCT!

Drill and de-burr a .670" dia. wire passage hole through the mounting surface. Route the Pioneer cable through the cordgrip pigtail components and the mounting surface as shown. Be sure all unions are joined securely. Do not overtighten.

**Pioneer Single...**

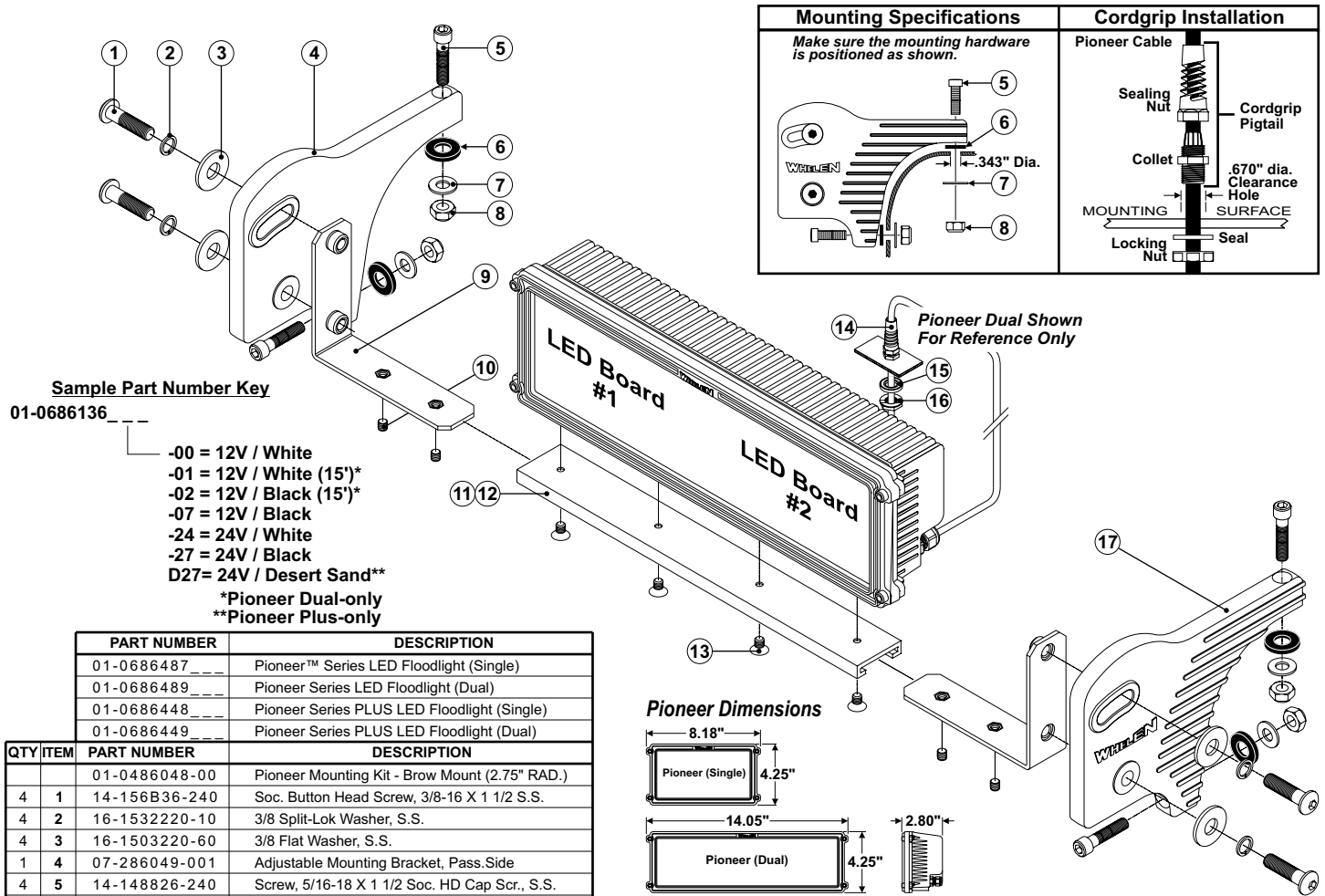
1. Extend the RED wire to the customer supplied SP/ST switch. From the switch, extend an appropriately sized wire to the POS battery terminal. Fuse this wire using the text shown in the graphic below (customer supplied fuse).
2. Extend the BLACK wire to chassis ground

**Pioneer Dual...**

1. Extend the WHT wire to the customer supplied SP/ST switch designated to control LED Board #1. From this switch, extend an appropriately sized wire to the POS battery terminal. Fuse this wire using the text shown in the graphic below (customer supplied fuse).
2. Extend the RED wire to the customer supplied SP/ST switch designated to control LED Board #2. From this switch, extend an appropriately sized wire to the POS battery terminal. Fuse this wire using the text shown in the graphic below (customer supplied fuse).
3. Extend and connect the BLK and GRN wires to chassis ground.

NOTE: If the user chooses, a single switch of sufficient capacity may be used to activate both LED boards simultaneously. If wired as such, double the fuse value shown.

**IMPORTANT!** Before returning the vehicle to active service, visually confirm the proper operation of this product, as well as all vehicle components/equipment.



**Sample Part Number Key**  
 01-0686136 ---  
 -00 = 12V / White  
 -01 = 12V / White (15")\*  
 -02 = 12V / Black (15")\*  
 -07 = 12V / Black  
 -24 = 24V / White  
 -27 = 24V / Black  
 D27= 24V / Desert Sand\*\*  
 \*Pioneer Dual-only  
 \*\*Pioneer Plus-only

PART NUMBER		DESCRIPTION
01-0686487		Pioneer™ Series LED Floodlight (Single)
01-0686489		Pioneer Series LED Floodlight (Dual)
01-0686448		Pioneer Series PLUS LED Floodlight (Single)
01-0686449		Pioneer Series PLUS LED Floodlight (Dual)

QTY	ITEM	PART NUMBER	DESCRIPTION
		01-0486048-00	Pioneer Mounting Kit - Brow Mount (2.75" RAD.)
4	1	14-156B36-240	Soc. Button Head Screw, 3/8-16 X 1 1/2 S.S.
4	2	16-1532220-10	3/8 Split-Lok Washer, S.S.
4	3	16-1503220-60	3/8 Flat Washer, S.S.
1	4	07-286049-001	Adjustable Mounting Bracket, Pass.Side
4	5	14-148826-240	Screw, 5/16-18 X 1 1/2 Soc. HD Cap Scr., S.S.
4	6	16-0017882-00	Washer, Rubber
4	7	16-1402420-05	5/16 Flat Washer
4	8	13-148120-082	5/16 Elastic Stop Nut
2	9	07-243735-000	Light Bracket, Floodlight
4	10	14-130536-04M	Screw, 1/4-20 X 1/4 Socket Set, S.S.
A/R	11	07-243901-001	Pioneer Mounting Bracket, Single
A/R	12	07-26B854-001	Pioneer Mounting Bracket, Dual
4	13	14-104116-060	Screw, #10-24 X 3/8 PFHMS, S.S.
1	14	21-4016659-01	Cordgrip Pigtail
1	15	16-0017992-00	Seal
1	16	13-15S140-176	Nut, Locking
1	17	07-286048-001	Adjustable Mounting Bracket, Driver Side

**Wiring: Pioneer Single**  
 RED - +VBAT\*  
 BLK - GROUND

**Wiring: Pioneer Dual**  
 WHT - LED Board #1 / +VBAT\*  
 BLK - LED Board #1 / GROUND  
 RED - LED Board #2 / +VBAT\*  
 GRN - LED Board #2 / GROUND

\*see text at right for appropriate fuse values for your application.

**Fusing (12 Volt):**  
 Pioneer Single - 5A  
 Pioneer Dual - 10A  
 Pioneer PLUS Single - 10A  
 Pioneer PLUS Dual - 15A

**Fusing (24 Volt):**  
 Pioneer Single - 3A  
 Pioneer Dual - 5A  
 Pioneer PLUS Single - 5A  
 Pioneer PLUS Dual - 10A