

WHELEN[®]

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Installation Guide: Freedom™ ECE Lightbar

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 owners 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!**

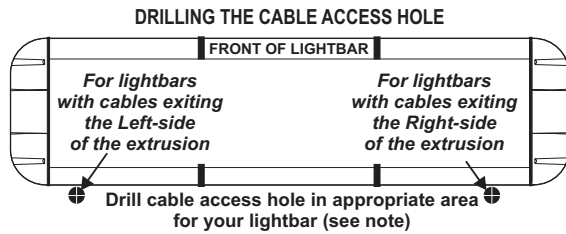
For warranty information regarding this product, visit www.whelen.com/warranty

Mounting your Lightbar:

Refer to the Lightbar mounting guide included with your lightbar.

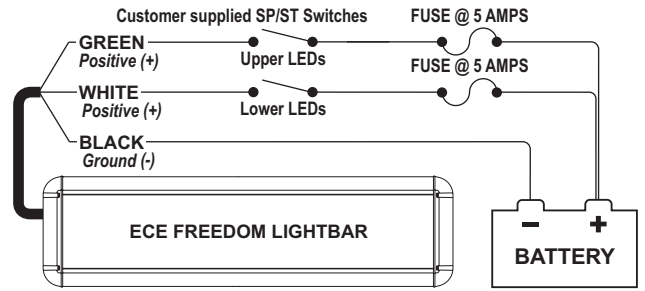
Caution: Permanent mounting of this product will require drilling. It is absolutely necessary to make sure that no other vehicle components could be damaged by this process. Check both sides of the mounting surface before starting. If damage is likely, select a different location.

Routing your Lightbar Cable



WARNING! Many vehicles are now equipped with side curtain and B-pillar air bags. Alternate routing may be required.

- To protect the headliner from damage caused by drilling the cable access hole through the vehicle roof, allow a 5" to 7" distance between roof and headliner by lowering the headliner before drilling.
WARNING! There may be a roof support member that spans the distance between the driver's and passenger's side. **DO NOT DRILL THROUGH THIS MEMBER!** Adjust the location until the hole can be drilled without contacting this support member.
- Using a 1" hole saw, drill the cable access hole. Use a round file to smooth and de-burr the edges and insert a customer supplied grommet.
- Insert the cable through the cable access hole into the vehicle. Use RTV silicone to weatherproof the access hole after the cable is pulled completely into the vehicle.



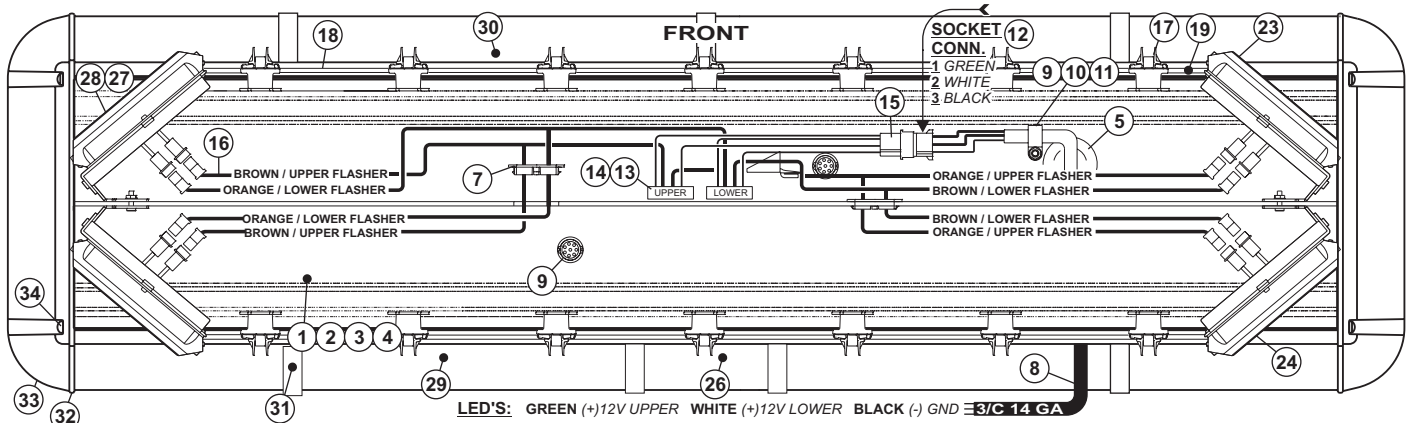
- Route the cable through the vehicle following the manufacturers recommendations.

Connection and Operation:

WARNING! 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!**

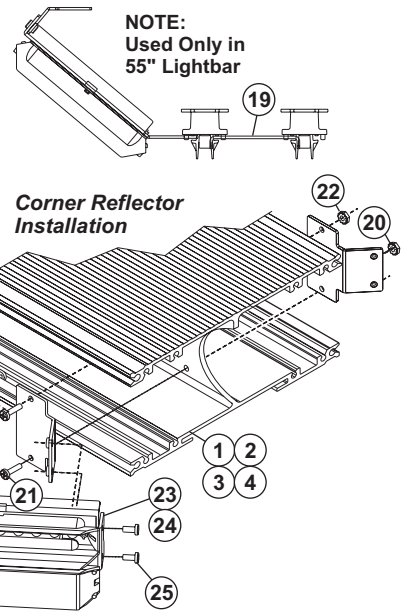
- Connect the BLACK wire to a chassis ground.
- Extend the WHITE and GREEN wires to power. It is recommended that you install switches (customer supplied). Each wire should be fused at 5 AMPS.
- When you apply +12 volts to the GREEN wire, the Upper LED's will be activated and run in *ECE DoubleFlash*. When you apply +12 volts to the WHITE wire, the Lower LED's will be activated and run in *ECE SingleFlash*. Connecting to a switch box (customer supplied) is recommended.

IMPORTANT! It is the responsibility of the installation technician to make sure that the installation and operation of this product will not interfere with or compromise the operation or efficiency of any vehicle equipment!
Before returning the vehicle to active service, visually confirm the proper operation of this product, as well as all vehicle components/equipment.



QTY	QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
	*	*			01-0686058-00	FREEDOM / ECE / 44"
			*		01-0686058-01	FREEDOM / ECE / 50"
			*		01-0686058-02	FREEDOM / ECE / 55"
			*		01-0686058-03	FREEDOM / ECE / 60"
-	-	-	1	1	11-386051-000	EXT. / 40.375" FRE. ECE
-	-	-	1	2	11-386051-001	EXT. / 45.750" FRE. ECE
-	1	-	-	3	11-386051-002	EXT. / 51.125" FRE. ECE
1	-	-	-	4	11-386051-003	EXT. / 56.500" FRE. ECE
1	1	1	1	5	21-11245004-1	1.562" GROMMET
2	2	2	2	6	21-7263998-00	3/4" VENT PLUG
2	2	2	2	7	21-242401-000	1-5/8" BUSHING
1	1	1	1	8	46-0743228-00	3/C 14 GA. 17" CABLE
1	1	1	1	9	26-0115037-06	3/8" CABLE CLAMP
1	1	1	1	10	14-104216-160	#10-24 x 1 PPHMS
1	1	1	1	11	13-104111-063	NUT / #10-24 WHIZ
1	1	1	1	12	39-0403023-04	HOUS. / 3 POS SOC.
2	2	2	2	13	01-0269936-01	FLSHR 2 CH. / ECE
2	2	2	2	14	66-0420982-00	TAPE / 2 SIDED N
1	1	1	1	15	46-0743227-00	HARN. / POW. INPUT
2	2	2	2	16	46-0764240-00	HARNSS / 8 OUTPUT
18	18	14	12	17	07-263103-000	MOUNTING BRCKT
16	12	12	10	18	09-1363158-00	FILLER PANEL / 400
-	4	-	-	19	07-242815-000	SPACER BRACKET
4	4	4	4	20	07-243561-000	BRACKT / HTSNK MT

QTY	QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
4	4	4	4	21	14-082216-100	SCREW / #8-32 x 5/8" PPHMS
4	4	4	4	22	13-082120-05M	8-32 KEPS NUT
2	2	2	2	23	01-026A733-12	CORN. LED / FRE/JUS ECE A/B
2	2	2	2	24	01-026A733-21	CORN. LED / FRE/JUS ECE B/A
8	8	8	8	25	14-082216-060	#8-32 x 3/8" PPHMS
-	-	-	2	26	68-1983816-30	LENS / 5.00" CLR
4	-	4	4	27	68-1983817-30	LENS / 6.562" CLEAR
-	4	-	4	28	68-1984104-30	LENS / 9.25" CLEAR
2	-	-	4	29	68-1183491C02	LENS / 10.375" CLR
4	4	4	-	30	68-1984105-30	LENS / 15.75" CLR
8	6	6	8	31	02-0341448-30	LENS DIVIDER / CLR
2	2	2	2	32	38-0283381-00	GSKT / ENDCAP
2	2	2	2	33	68-1183369-30	ENDCAP / CLR
8	8	8	8	34	14-104286-16J	#10-24 x 1-1/4" SCREW



IMPORTANT WARNING!
CAUTION! DO NOT LOOK DIRECTLY AT THESE LED'S WHILE THEY ARE ON. MOMENTARY BLINDNESS AND/OR EYE DAMAGE COULD RESULT!