

# WHELEN<sup>®</sup>

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## Installation Guide: Dominator™ Lightbar with End Flashers Models: D2\*\*, D4\*\*\*\*, D6\*\*\*\*\*, D8\*\*\*\*

### 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)**

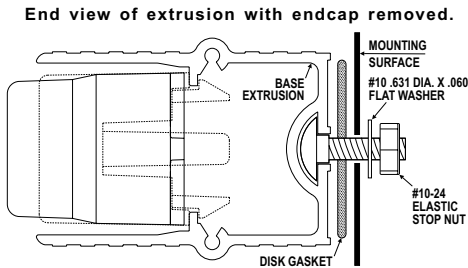
## Specifications:

<b>Input Voltage:</b>	12.8 VDC +/- 20%
<b>Input Current - Sim:</b>	Peak - 3.2 Amps (Avg.: 1.28 Amps)
<b>Input Current - Alt:</b>	Peak - 1.6 Amps (Avg.: 0.64 Amps)
<b>Input Sync:</b>	Active Low
<b>Sync Phase:</b>	Phase I & II @ 400ms
<b>Input Scan-Lock™:</b>	+12 VDC @ 20 ma

## Installation:

**IMPORTANT! The lightbar should be located a minimum of 16" from any radio antennas!**

**Note:** When routing the wires, it is very important that you choose a path that will keep the wires away from excessive heat or any vehicle equipment that could compromise the integrity of the wires (ex. trunk lids, door jams, etc.).



1. Position the unit in its proposed mounting location. Draw a pencil line onto the mounting surface along the top and bottom of the extrusion and a "centerline" centered between the two.
2. Two 1/4" holes are required to mount this unit. These holes may be located anywhere along the horizontal centerline that you drew in step one. It's best to locate the holes as far apart as possible. Mark the hole location onto the mounting surface.
3. Using a 1/4" drill bit, drill a hole in each of the areas scribed in the previous step.
4. Slide the 2 carriage bolts (installed in the rear of the bar) over to the 2 mounting holes, install the rubber gaskets onto the bolts then insert them into the mounting holes.
5. Secure the unit by threading the flat washer and elastic stop nut onto each bolt and tightening them firmly.

**Wiring:** Refer to the wiring diagram on the next page.

**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!**

## Operation: White/Violet / Scan-Lock™

Scan-Lock allows you to choose from several flash patterns. To change a flash pattern, turn on the desired lighthead:

**CYCLE THROUGH ALL PATTERNS:** To cycle forward, apply +12 volts to the WHITE/VIOLET wire for less than 1 second and release. To cycle backward, apply +12 volts to the WHITE/VIOLET wire for more than 1 second and release.

**SET A PATTERN AS DEFAULT:** When the desired pattern is displayed, allow it to run for more than 5 seconds. The lighthead will now display this pattern when active.

**RESET TO THE FACTORY DEFAULT PATTERN:** Turn off power and apply +12 volts to the WHITE/VIOLET wire while turning power back on.

**Note:** If you wish to connect the pattern selection wire (WHITE/ VIOLET) to a switch, an SPST momentary switch is recommended.

**Available Scan-Lock™ Flash Patterns:**

**4, 6 & 8 Lamp Arrays:** SignalAlert™ 75 > CometFlash® 75 > SingleFlash 375 > SingleFlash 75 > ActionFlash™ > ModuFlash™ > ZigZag 60 > ZigZag 90 ZigZag 120 > ActionScan™

**2 Lamp Array:** Signal Alert™ 75 > CometFlash® 75 > SingleFlash 375 SingleFlash 75 > ActionFlash™ > ModuFlash™ > ActionScan™

## Grey / SYNC:

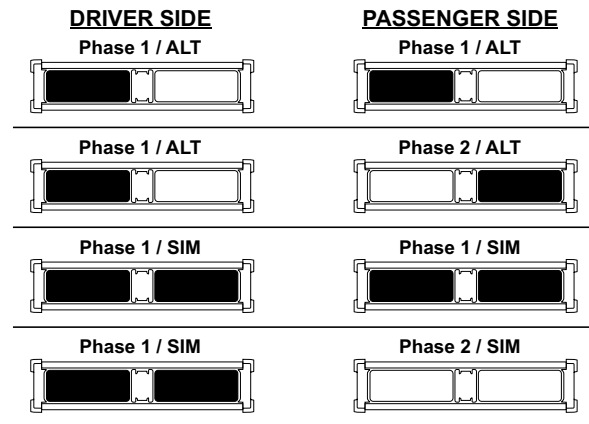
As an example, we will synchronize two 2 lighthead Dominators™. The 2-lighthead Dominator™ has 4 unique modes for each of the 4 flash patterns that can be synchronized; Alternating Phase 1, Alternating Phase 2, Simultaneous Phase 1 and Simultaneous Phase 2.

**In Alternating Mode:** The left lighthead alternates with the right lighthead.

**In Simultaneous Mode:** The left and right lightheads flash simultaneously.

### EXAMPLE:

**Two, 2-light Dominators™ mounted on the rear deck.**



Synchronized lightbars, must be set to the same pattern. Not all patterns can be synchronized. Below are patterns available for SYNC.

### Available Sync Patterns

### Pattern Sequence

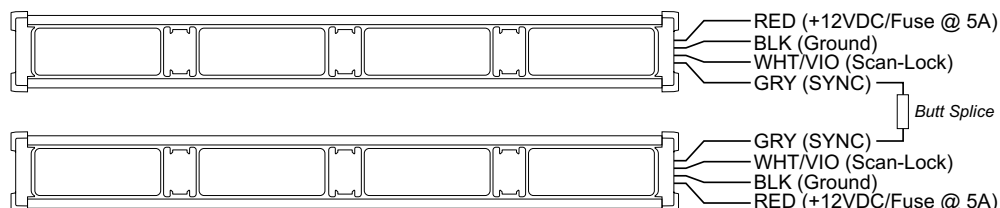
#### 4, 6 & 8 Lamp Arrays

SignalAlert™ 75 ..... Alt. - In-Out - Checker Board - Sim. Phase I - Sim. Phase II  
 CometFlash® 75 ..... Alt. - In-Out - Checker Board - Sim. - Phase I - Sim. Phase II  
 SingleFlash 375 ..... Alt. - In-Out - Checker Board - Sim. - Phase I - Sim. Phase II  
 SingleFlash 75 ..... Alt. - In-Out - Checker Board - Sim. - Phase I - Sim. Phase II

#### 2 Lamp Array:

SignalAlert™ 75 ..... Alternating - Simultaneous - Phase I - Simultaneous Phase II  
 CometFlash® 75 ..... Alternating - Simultaneous - Phase I - Simultaneous Phase II  
 SingleFlash 375 ..... Alternating - Simultaneous - Phase I - Simultaneous Phase II  
 SingleFlash 75 ..... Alternating - Simultaneous - Phase I - Simultaneous Phase II

## Wiring



QTY	QTY	QTY	QTY	ITEM	PART NUMBER	DESCRIPTION	"A"
		*			01-0684607-( )	DOMINATOR™ / FLASHER - 2 LT	7.11
		*			01-0684607-( )	DOMINATOR™ / FLASHER - 4 LT	14.21
	*				01-0684607-( )	DOMINATOR™ / FLASHER - 6 LT	23.26
	*				01-0684607-( )	DOMINATOR™ / FLASHER - 8 LT	30.36
1	1	1	1	1	11-263726-000	ENDCAP, (3)TIR EXTR. MT. W/O HOLE	
9	7	3	1	2	38-0463725-00	DIVIDER, EXTRUSION MOUNT	
A/R	A/R	A/R	A/R	3	02-036B494612	LTHEAD ASSY, 3TIR LED - AMB/STDY	
A/R	A/R	A/R	A/R	4	02-036B494622	LTHEAD ASSY, 3TIR LED - BLU/STDY	
A/R	A/R	A/R	A/R	5	02-036B494632	LTHEAD ASSY, 3TIR LED - WHT/STDY	
A/R	A/R	A/R	A/R	6	02-036B494652	LTHEAD ASSY, 3TIR LED - RED/STDY	
-	-	-	1	7	01-0264929-01	ELECT. ASSY, 2 LIGHTHEAD FLASHER	
-	-	1	-	8	01-0269777-A4	ELECT. ASSY, 4 LIGHTHEAD FLASHER	
-	1	-	-	9	01-0269777-A6	ELECT. ASSY, 6 LIGHTHEAD FLASHER	
1	-	-	-	10	01-0269777-A8	ELECT. ASSY, 8 LIGHTHEAD FLASHER	
-	-	-	1	11	46-0743087-A2	CABLE ASSY, W/ MINI UMNL CONN. 13"	
-	-	1	-	12	46-0743087-A4	CABLE ASSY, W/ MINI UMNL CONN. 17"	
-	1	-	-	13	46-0743087-A6	CABLE ASSY, W/ MINI UMNL CONN. 20"	
1	-	-	-	14	46-0743087-A8	CABLE ASSY, W/ MINI UMNL CONN. 24"	
-	-	-	1	15	11-443031-006	EXTRUSION, MACH'D - 6.75 3TIR TA	
-	-	1	-	16	11-443031-013	EXTRUSION, MACH'D - 13.85 3TIR TA	
-	1	-	-	17	11-443031-022	EXTRUSION, MACH'D - 22.90 3TIR TA	
1	-	-	-	18	11-443031-030	EXTRUSION, MACH'D - 30.00 3TIR TA	
1	1	1	1	19	11-263726-002	ENDCAP,(3)TIR EXTR. MT. W/.375 HOLE	
2	2	2	2	20	21-11091202-0	GROMMET,	
4	4	4	4	21	14-062219-06D	SCREW, #6-32 X 3/8 PPHMS ROLOK ZN	
2	2	2	2	22	14-104066-100	CARRIAGE BOLT, #10-24 X 5/8 LG SS	
2	2	2	2	23	38-0223063-00	GASKET, DISK	
2	2	2	2	24	16-1002220-50	WASHER, #10 FLAT .631 DIA. X .060	
2	2	2	2	25	13-104120-062	NUT, #10-24 ELASTIC STOP	
1	1	1	1	26	10-0584635-___	LABEL	
A/R	A/R	A/R	A/R	27	02-036B494642	LTHEAD ASSY, 3TIR LED - GRN/STDY	

