

# WHELEN<sup>®</sup>

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## Installation Guide: Outer Edge<sup>®</sup> Lightbar 2008 - 2011 Chevy Tahoe

### 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<sup>®</sup>, 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)**

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

**Installation:**

1. First, place the lightbar onto the mounting location. The trimmed edge of the lightbar should be flush with the bottom edge and each outer edge of the "D" Pillar (Fig. 1).
2. Mark off and drill a 3/4" wire entry hole into the "D" pillar using the measurements shown (Fig. 2). **Be very careful not to damage any components behind the "D" Pillar.** Measure 2-1/4" from the leading edge and 4" from the bottom edge of the "D" Pillar. The wire entry hole will be located beneath the bottom pod of the lightbar.
3. Remove the 2 screws holding on the taillight (which overlaps the "D" Pillar) and pull the taillight out.
4. Install the wiring and make all the wiring connections (See wiring diagrams) then reinstall the taillight.



Fig. 1

**Mounting the housings:**

1. Place the lightbar onto its mounting location on the vehicle to be sure the lighthoods have a sufficient service loop for lighthouse replacement or service. **Once mounted, the housing is not easily removed.**

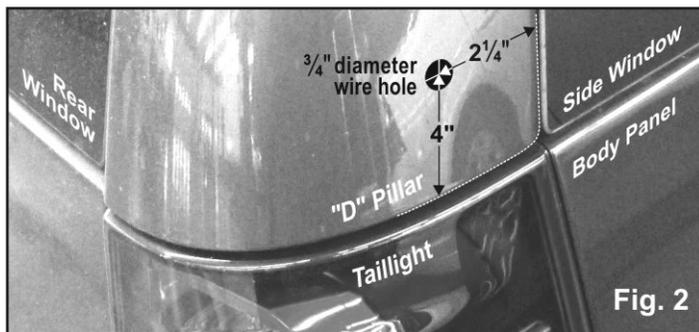


Fig. 2

2. Using isopropyl alcohol (70%), clean the vehicle where it will come in contact with the mounting tape then prime those areas with the supplied 3M Keel Primer. Ready the leaders on the pre applied tape. Be sure the leaders are protruding from under the housing so that you can pull the tape backing off once the housing is in place.
3. **There is a driver and passenger side housing. Be sure to mount them on the correct sides.** Firmly hold the lightbar onto its final mounting position. While pressing the whole housing against the "D" Pillar, (being very careful not to move the housing) slowly remove the tape backing from the top and leading edge of the housing and then from the rear.
4. With the tape backing removed, press the housing firmly against the mounting surface where the tape is, to secure it.

**WARNING! The adhesive used in this procedure is fully bonded after 72 hours @ 70°F (21°C). During this period, do not expose the lights to any unnecessary force, such as a high-pressure car wash.**

**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!**

**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**

**IMPORTANT WARNING!**

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

**Operation:**

**Scan-Lock™**

This feature allows you to program a selected flash pattern into a lighthouse. The lighthouse must be activated to use Scanlock. The Scanlock™ wire is WHITE/VIOLET on the LINZ6™ and WHITE on the Vertex™.

**To cycle forward through patterns** apply power to the Scanlock wire for less than 1 second and release.

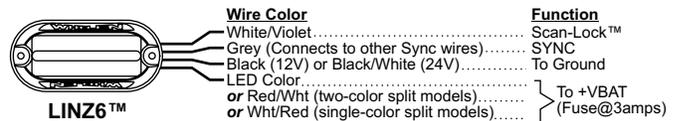
**To cycle backward through patterns** apply power to the Scanlock wire for over 1 second and release. When the desired pattern is displayed, allow it to run for more than 5 seconds. The lighthouse will now display this pattern when active.

**To reset to the factory default pattern** Turn off power. Apply power to the Scanlock wire while turning power back on.

**Sync**

The SYNC wire is GREY on the LINZ6™ and GREEN on the Vertex™. For SYNC to operate, you must connect the SYNC wires together. If you do not want to use the sync feature, cap the sync wires.

**To sync two lighthoods, configure both lighthoods to display the same Phase 1 pattern. With the power off, connect the SYNC wires from each lighthouse together. When the lighthoods are activated, their patterns will be synchronized. To configure lighthoods to alternate their patterns, advance the pattern of that lighthouse to the Phase 2 mode of the current pattern. The same concept applies to Phases 3 & 4.**



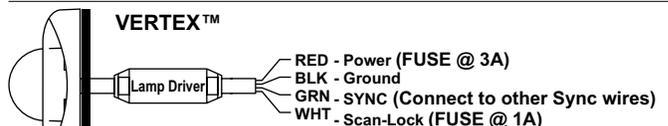
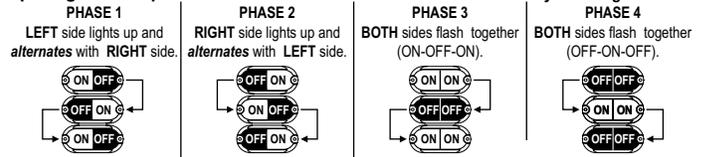
**Flash Patterns:**

NOTE: **BOLD** = California Title XIII Compliant Pattern

1. SignalAlert™75... Phase 1	24. LongBurst75... Phase 4	47. ModuFlash™... ALT
2. SignalAlert75... Phase 2	<b>25. PingPong™75... Phase 1</b>	48. ModuFlash™... SIM
3. SignalAlert75... Phase 3	<b>26. PingPong75... Phase 2</b>	49. DoubleFlash 120... ALT
4. SignalAlert75... Phase 4	<b>27. PingPong75... Phase 3</b>	50. DoubleFlash 120... SIM
5. CometFlash@75... Phase 1	<b>28. PingPong75... Phase 4</b>	51. PingPong™ 120... ALT
6. CometFlash75... Phase 2	29. SSNF75... Phase 1	52. PingPong 120... SIM
7. CometFlash75... Phase 3	30. SSNF75... Phase 2	53. TripleFlash™ 75... ALT
8. CometFlash75... Phase 4	31. SingleFlash 60... ALT	54. TripleFlash 75... SIM
<b>9. DoubleFlash75... Phase 1</b>	32. SingleFlash 60... SIM	55. TripleFlash 120... ALT
<b>10. DoubleFlash75 Phase 2</b>	33. SingleFlash 90... ALT	56. TripleFlash 120... SIM
<b>11. DoubleFlash75 Phase 3</b>	34. SingleFlash 90... SIM	57. SigAlert Cal.™... ALT
<b>12. DoubleFlash75 Phase 4</b>	35. SingleFlash 120... ALT	58. SigAlert Cal... SIM
13. SingleFlash75 Phase 1	36. SingleFlash 120... SIM	59. Action SF 60/120... ALT
<b>14. SingleFlash75... Phase 2</b>	37. SingleFlash 300... ALT	60. Action SF 60/120... SIM
<b>15. SingleFlash75... Phase 3</b>	38. SingleFlash 300... SIM	61. Action SF60/TF120... ALT
<b>16. SingleFlash75... Phase 4</b>	39. DoubleFlash 150... ALT	62. Action SF60/TF120... SIM
17. ComAlert™75... Phase 1	40. DoubleFlash 150... SIM	63. CalScan™... ALT/SIM
18. ComAlert75... Phase 2	41. ComAlert™ 150... ALT	64. ActionScan™... ALT/SIM
19. ComAlert75... Phase 3	42. ComAlert™ 150... SIM	65. SteadyFlash 60
20. ComAlert75... Phase 4	43. ActionFlash™ 50... ALT	66. SteadyFlash 75
21. LongBurst™75... Phase 1	44. ActionFlash™ 50... SIM	67. SteadyFlash 90
22. LongBurst75... Phase 2	45. ActionFlash™ 150... ALT	68. SteadyFlash 120
23. LongBurst75... Phase 3	46. ActionFlash™ 150... SIM	69. Steady & Steady

*Italic* = SYNC Pattern

**Split Lighthouse Operation:**



**Phase Operation**

Phase 1 flashes **simultaneously** with Phase 1  
 Phase 2 flashes **simultaneously** with Phase 2  
 Phase 1 **alternates** with Phase 2

**SYNC Patterns**

1. SignalAlert™75... Phase 1	9. ComAlert™... Phase 1	17. SingleFlash 120
2. SignalAlert 75... Phase 2	10. ComAlert... Phase 2	18. SingleFlash 300
3. CometFlash@75... Phase 1	11. LongBurst™... Phase 1	19. DoubleFlash 150
4. CometFlash 75... Phase 2	12. LongBurst... Phase 2	20. ComAlert 150
5. DoubleFlash 75... Phase 1	13. PingPong™... Phase 1	21. ActionFlash™ 1
6. DoubleFlash 75... Phase 2	14. PingPong... Phase 2	22. ActionFlash 2
7. SingleFlash 75... Phase 1	<b>Non-SYNC Patterns</b>	23. ModuFlash™
8. SingleFlash 75... Phase 2	15. SingleFlash 60	24. ActionScan™
	16. SingleFlash 90	25. Steady