

# WHELEN<sup>®</sup>

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Installation Guide:  
LED Traffic Advisor™  
Models: RFCF85, RFNF85

## Safety First

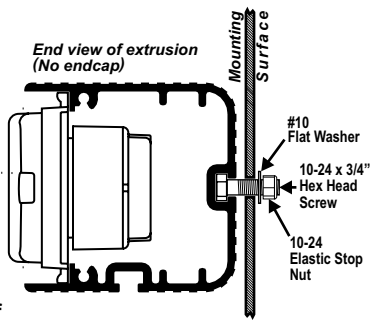
This document provides all the necessary information to allow your Whelen product to be properly and safely installed. Before beginning the installation and/or operation of your new product, the installation technician and operator must read this manual completely. Important information is contained 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. Lens 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!**

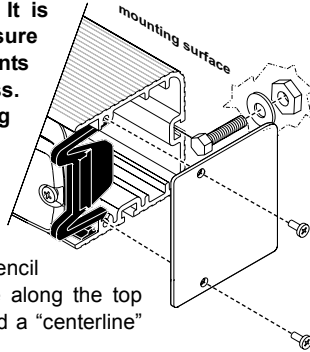
**For warranty information regarding this product, visit [www.whelen.com/warranty](http://www.whelen.com/warranty)**

**Installation:**

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



Note: 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 mounting location.

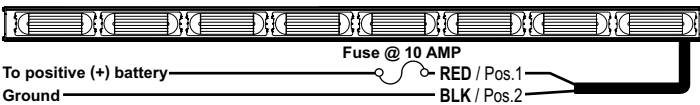


1. Position the unit onto its mounting location. Draw a pencil line onto the mounting surface along the top and bottom of the extrusion and a "centerline" centered between the two.
2. Four 13/64" holes are required to mount this unit. These holes may be located anywhere along the horizontal centerline 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 #9 drill bit, drill a hole in each of the hole locations marked.
4. Remove the end cap and slide the two hex-head mounting bolts (included) into the channel provided at the rear of the extrusion and reinstall the endcap.
5. Align these bolts with the 4 mounting holes and insert them into the mounting holes.
6. Install a flat washer and elastic stop nut onto each bolt and tighten.

**Wiring:**

**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!**

**WIRING / RNF85 & RFCF85**



**Wire Connections:**

1. Extend the RED wire to the battery and install a 10 amp fuse block (customer supplied) on the end of the wire. Remove the fuse before connecting any wires to the battery. Connect the RED wire to the POSITIVE (+) battery terminal.

**IMPORTANT:** There must not be more than 2 feet of wire between fuse block and battery. The wire between fuse and battery is unprotected, do not allow this wire to come in contact with any other wires.

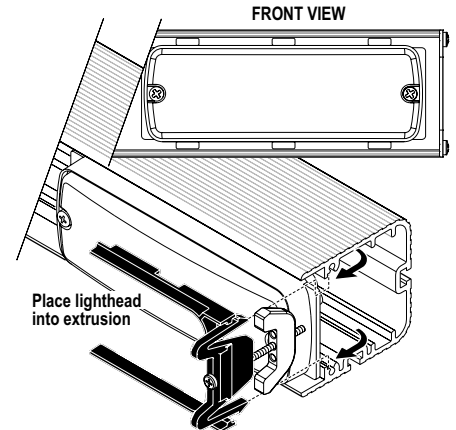
2. Extend the BLACK wire to the battery and connect it to the battery ground. If your vehicle has a cable extending from the negative terminal of the battery to the chassis, it is best to attach the black wire at the chassis connection.

**Operation:**

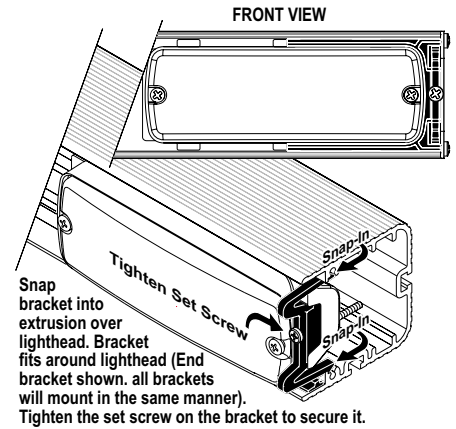
This T/A is controlled by the Whelen wireless Traffic Advisor™ controller. Refer to the instructions that come with the controller for operation.

**Service:**

This section shows you how to access the lightbar for service or lighthouse replacement. To replace a lighthouse, first loosen the set screw(s) on the bracket. Now squeeze the clip together so that it disengages from the extrusion and pull the bracket straight out. With the bracket removed the lighthouse lifts out and can be unplugged from the harness and removed from the lightbar.



**IMPORTANT!** It is the responsibility of the installation technician and operation of this product will not interfere with or compromise the operation or efficiency of any vehicle equipment!

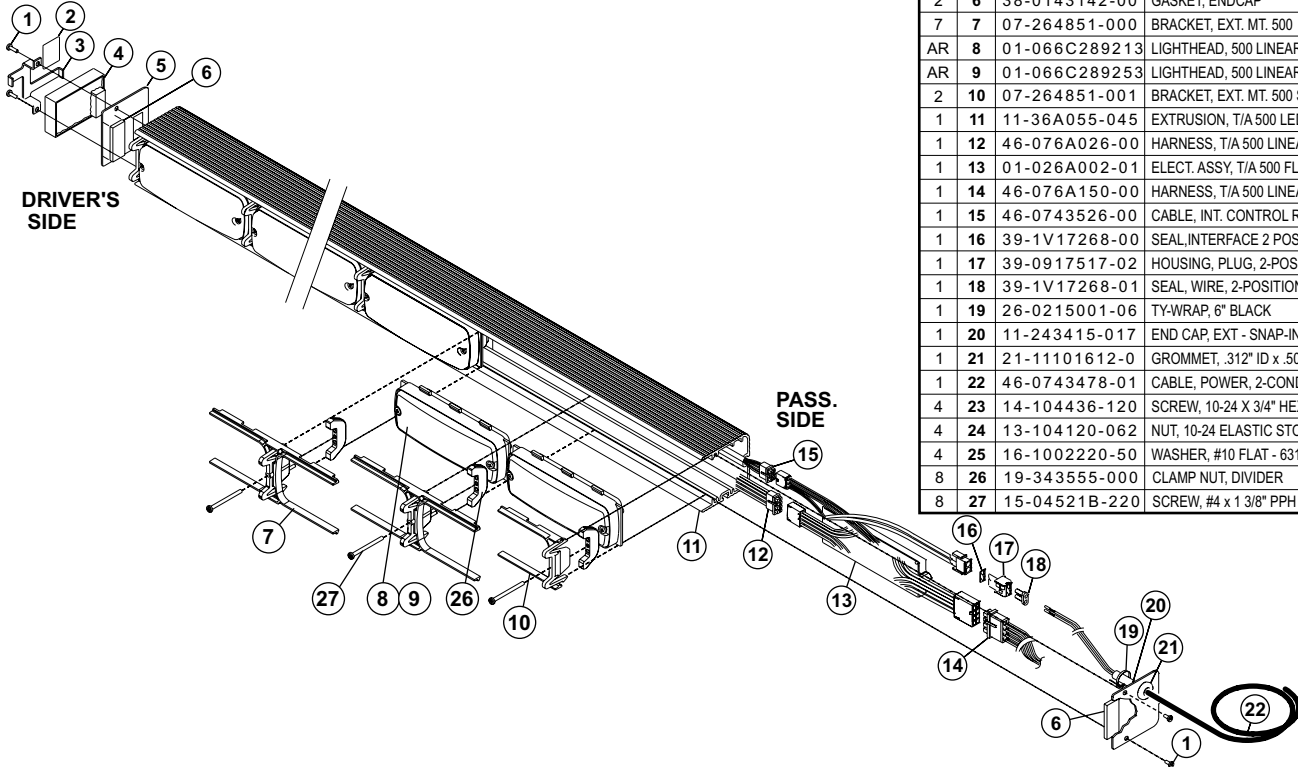


**IMPORTANT!** Before returning this vehicle to active service, visually confirm the proper operation of this product, as well as all vehicle components/equipment.

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

PART NO. KEY:  
 01-0684727-8 LED/LENS COLOR { 1 = AMBER/CLEAR  
 5 = RED/CLEAR

QTY	ITEM	PART NUMBER	DESCRIPTION
*		01-0684727-8	T/A, 500 LINEAR LED®
4	1	14-062219-06D	SCREW, #6-32 X 3/8" PPHMS
AR	2	10-0523343-*8	LABEL
1	3	07-243514-000	BRACKET, MTG. - RF MODULE
1	4	01-026A286-00	RF RECEIVER MODULE - T/A 500
1	5	11-243415-037	END CAP, EXTR. MOUNT w/SLOT
2	6	38-0143142-00	GASKET, ENDCAP
7	7	07-264851-000	BRACKET, EXT. MT. 500 SNAP-IN
AR	8	01-066C289213	LIGHTHEAD, 500 LINEAR LED, STEADY, AMBER
AR	9	01-066C289253	LIGHTHEAD, 500 LINEAR LED, STEADY, RED
2	10	07-264851-001	BRACKET, EXT. MT. 500 SNAP-IN
1	11	11-36A055-045	EXTRUSION, T/A 500 LED SNAP-IN
1	12	46-076A026-00	HARNESS, T/A 500 LINEAR LED, DRIVER
1	13	01-026A002-01	ELECT. ASSY, T/A 500 FLASH 8-LIGHT
1	14	46-076A150-00	HARNESS, T/A 500 LINEAR LED, PASSENGER
1	15	46-0743526-00	CABLE, INT. CONTROL RF
1	16	39-1V17268-00	SEAL, INTERFACE 2 POS UMNL
1	17	39-0917517-02	HOUSING, PLUG, 2-POSITION
1	18	39-1V17268-01	SEAL, WIRE, 2-POSITION
1	19	26-0215001-06	TY-WRAP, 6" BLACK
1	20	11-243415-017	END CAP, EXT - SNAP-IN with .50 HOLES
1	21	21-11101612-0	GROMMET, .312" ID x .50" OD
1	22	46-0743478-01	CABLE, POWER, 2-CONDUCTOR, 14AWG.
4	23	14-104436-120	SCREW, 10-24 X 3/4" HEX HD MS SS not shown
4	24	13-104120-062	NUT, 10-24 ELASTIC STOP, SS not shown
4	25	16-1002220-50	WASHER, #10 FLAT - .631" OD X .060" not shown
8	26	19-343555-000	CLAMP NUT, DIVIDER
8	27	15-04521B-220	SCREW, #4 x 1 3/8" PPH



PART NO. KEY:  
 01-0684912-8 LED/LENS COLOR { 1 = AMBER/CLEAR  
 5 = RED/CLEAR

QTY	ITEM	PART NUMBER	DESCRIPTION
*		01-0684912-8	T/A ASSY, 500 CONICAL LED SNAP-IN I/C
4	1	14-062219-06D	SCREW, #6-32 X 3/8 PPHMS
AR	2	10-0523376-8	LABEL
1	3	07-243514-000	BRACKET, MTG. - RF MODULE
1	4	01-026A286-00	RF RECEIVER MODULE - T/A 500
1	5	11-243415-037	END CAP, EXTR. MOUNT w/SLOT
2	6	38-0143142-00	GASKET, ENDCAP
7	7	07-264851-000	BRACKET, EXT. MT. 500 SNAP-IN
AR	8	01-066B983-10	LHEAD 500 CON3 LED STEADY AMBER
AR	9	01-066B983-50	LHEAD 500 CON3 LED STEADY RED
2	10	07-264851-001	BRACKET, EXT. MT. 500 SNAP-IN-HALF
1	11	11-36A055-045	EXTRUSION, T/A 500 LED SNAP-IN
1	12	46-076A150-00	HARNESS ASSY, PASS. - T/A 500 LIN LED
1	13	01-026A002-01	ELECT. ASSY, T/A 500 FLASH 8-LIGHT
1	14	46-076A026-00	HARNESS ASSY, DR. - T/A 500 LIN LED
1	15	46-0743526-00	CABLE ASSY, INT. CONTROL RF
1	16	39-1V17268-00	SEAL, INTERFACE 2-POS
1	17	39-0917517-02	HOUSING, PLUG, 2-POS
1	18	39-1V17268-01	SEAL, WIRE, 2-POS
1	19	26-0215001-06	TY-WRAP, 6" BLACK
1	20	11-243415-017	END CAP, EXT, SNAP-IN
1	21	21-11101612-0	GROMMET, .312" ID x .50" OD
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4	23	14-104436-120	SCREW, 10-24 X 3/4" HEX HD MS SS
4	24	13-104120-062	NUT, 10-24 ELASTIC STOP SS
4	25	16-1002220-50	WASHER, #10 FLAT - .631" OD X .060"
9	26	19-343555-000	CLAMP NUT, DIVIDER
9	27	15-04521B-220	SCREW, 4 x 1-3/8 PPH PLASTI-LOK

