

WHELEN[®]

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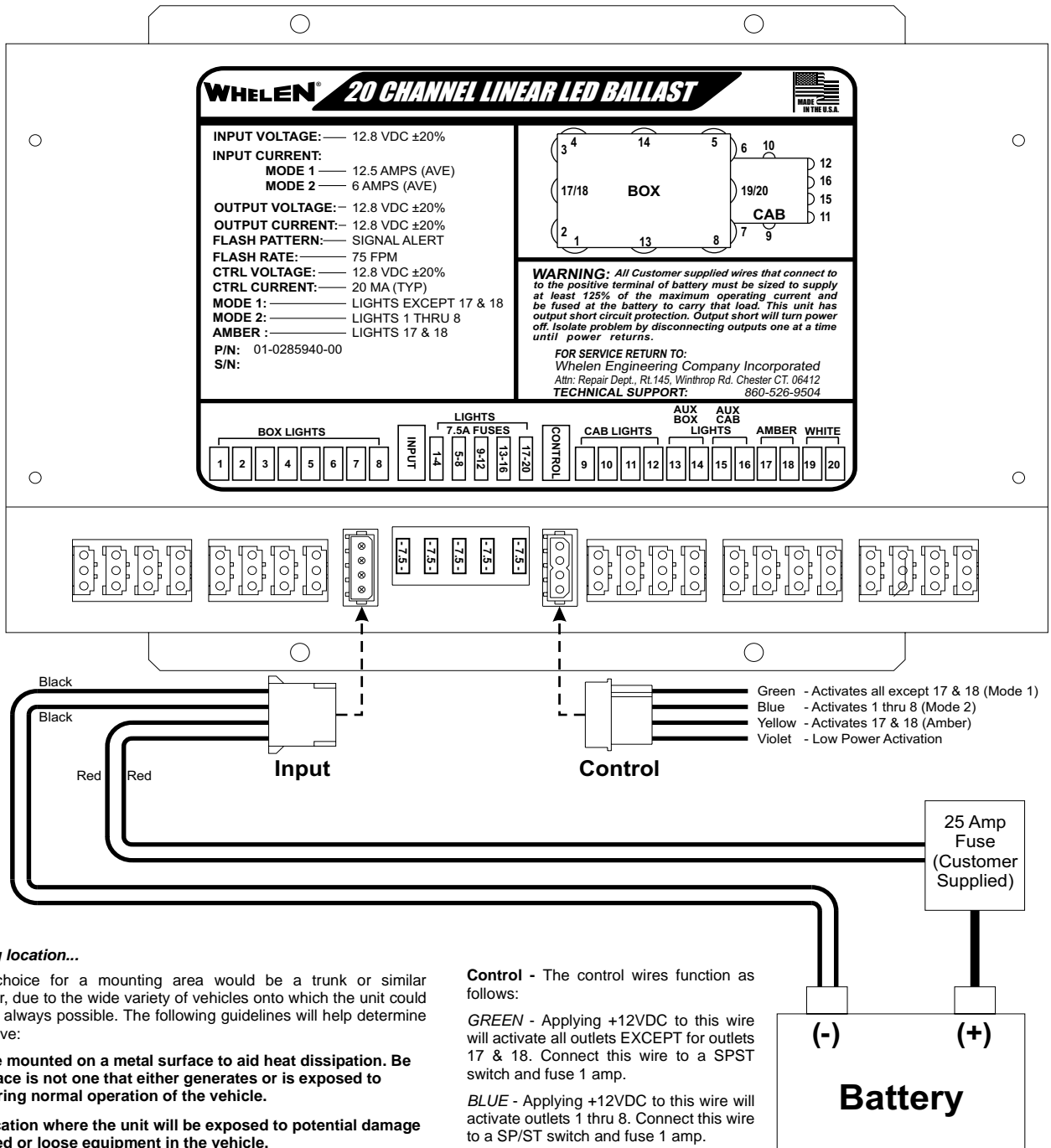
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Installation Guide: 20 Channel LED Ballast

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 product is mounted with 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.**
- **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!**



Selecting a mounting location...

The most common choice for a mounting area would be a trunk or similar compartment. However, due to the wide variety of vehicles onto which the unit could be installed, this is not always possible. The following guidelines will help determine an acceptable alternative:

- The unit should be mounted on a metal surface to aid heat dissipation. Be sure that this surface is not one that either generates or is exposed to excessive heat during normal operation of the vehicle.
- Do not select a location where the unit will be exposed to potential damage from any unsecured or loose equipment in the vehicle.
- Be sure the area selected will not allow the unit to be exposed to water!
- When routing wires, it is important to choose a path that will keep these wires away from excessive heat and from any vehicle equipment that could compromise the integrity of the wires (ex. trunk lids, door jams, etc.).
- When the best mounting location has been determined, securely fasten the unit to it's mounting surface using the supplied hardware.

1. Position the unit in its proposed mounting location to ensure that it fits properly. With the unit in place, insert an awl or other suitable tool into the mounting screw area of the power supply and scribe the areas that are to be drilled.
2. Remove the unit from its mounting area and, using a drill bit sized for a #10 sheet metal screw, drill a hole in each of the areas scribed in the previous step.
3. Return the unit to its mounting location. Using the supplied #10 sheet metal screws, secure it onto its mounting surface.

Wiring...

Input - Extend all BLACK and RED wires towards the battery. Connect the two RED wires to a 25 Amp fuse (customer supplied) and then to the POS (+) battery terminal. Connect the two BLACK wires to the NEG (-) battery terminal.

Control - The control wires function as follows:

GREEN - Applying +12VDC to this wire will activate all outlets EXCEPT for outlets 17 & 18. Connect this wire to a SPST switch and fuse 1 amp.

BLUE - Applying +12VDC to this wire will activate outlets 1 thru 8. Connect this wire to a SPST switch and fuse 1 amp.

YELLOW - Applying +12VDC to this wire will activate outlets 17 & 18. Connect this wire to a SPST switch and fuse 1 amp.

VIOLET (Low Power Activation) - There are two ways to achieve low power activation with this LED ballast; Latching Mode & Level Mode.

Latching Mode - By applying +12VDC to the Violet wire for less than 1 sec., the power supply is "latched" into low power operation. The unit must be turned off and then back on to restore normal, Hi power operation. A momentary switch is desired for this style.

Level Mode - Applying +12VDC to the Violet wire for more than 1 sec. holds the power supply in low power mode until that voltage is removed. A toggle switch is desired for this style.

Standard KKK Operation Modes:

To achieve Mode 1 operation, it is necessary to activate BOTH the GREEN and the YELLOW wires.

To achieve Mode 2 operation, it is necessary to activate BOTH the BLUE and the YELLOW wires.