

# WHELEN<sup>®</sup>

## ENGINEERING COMPANY INC.

51 Winthrop Road  
Chester, Connecticut 06412-0684  
Phone: (860) 526-9504  
Internet: [www.whelen.com](http://www.whelen.com)  
Sales e-mail: [autosale@whelen.com](mailto:autosale@whelen.com)  
Customer Service e-mail: [custserv@whelen.com](mailto:custserv@whelen.com)

### Installation Guide: PCC10W Power Control Center

**DANGER!** Sirens produce extremely loud emergency warning tones! Exposure to these tones without proper and adequate hearing protection, could cause ear damage and/or hearing loss! The Occupational Safety & Health Administration ([www.osha.gov](http://www.osha.gov)) provides information necessary to determine safe exposure times in Occupational Noise Exposure Section 1910.95. Until you have determined the safe exposure times for your specific application, operators and anyone else in the immediate vicinity should be required to wear an approved hearing protection device. Failure to follow this recommendation could cause hearing loss!

#### Warnings to Installers

Whelen's emergency vehicle warning devices must be properly mounted and wired in order to be effective and safe. Read and follow all of Whelen's written instructions when installing or using this device. Emergency vehicles are often operated under high speed stressful conditions which must be accounted for when installing all emergency warning devices. Controls should be placed within convenient reach of the operator so that they can operate the system without taking their eyes off the roadway. Emergency warning devices can require high electrical voltages and/or currents. Properly protect and use caution around live electrical connections. Grounding or shorting of electrical connections can cause high current arcing, which can cause personal injury and/or vehicle damage, including fire. Many electronic devices used in emergency vehicles can create or be affected by electromagnetic interference. Therefore, after installation of any electronic device it is necessary to test all electronic equipment simultaneously to insure that they operate free of interference from other components within the vehicle. Never power emergency warning equipment from the same circuit or share the same grounding circuit with radio communication equipment. All devices should be mounted in accordance with the manufacturer's instructions and securely fastened to vehicle elements of sufficient strength to withstand the forces applied to the device. Driver and/or passenger air bags (SRS) will affect the way equipment should be mounted. This device should be mounted by permanent installation and within the zones specified by the vehicle manufacturer, if any. Any device mounted in the deployment area of an air bag will damage or reduce the effectiveness of the air bag and may damage or dislodge the device. Installer must be sure that this device, its mounting hardware and electrical supply wiring does not interfere with the air bag or the SRS wiring or sensors. Mounting the unit inside the vehicle by a method other than permanent installation is not recommended as unit may become dislodged during swerving; sudden braking or collision. Failure to follow instructions can result in personal injury. Whelen assumes no liability for any loss resulting from the use of this warning device. PROPER INSTALLATION COMBINED WITH OPERATOR TRAINING IN THE PROPER USE OF EMERGENCY WARNING DEVICES IS ESSENTIAL TO INSURE THE SAFETY OF EMERGENCY PERSONNEL AND THE PUBLIC.

#### Warnings to Users

Whelen's emergency vehicle warning devices are intended to alert other operators and pedestrians to the presence and operation of emergency vehicles and personnel. However, the use of this or any other Whelen emergency warning device does not guarantee that you will have the right-of-way or that other drivers and pedestrians will properly heed an emergency warning signal. Never assume you have the right-of-way. It is your responsibility to proceed safely before entering an intersection, driving against traffic, responding at a high rate of speed, or walking on or around traffic lanes. Emergency vehicle warning devices should be tested on a daily basis to ensure that they operate properly. When in actual use, the operator must ensure that both visual and audible warnings are not blocked by vehicle components (i.e.: open trunks or compartment doors), people, vehicles, or other obstructions. It is the user's responsibility to understand and obey all laws regarding emergency warning devices. The user should be familiar with all applicable laws and regulations prior to the use of any emergency vehicle warning device. Whelen's audible warning devices are designed to project sound in a forward direction away from the vehicle occupants. However, because sustained periodic exposure to loud sounds can cause hearing loss, all audible warning devices should be installed and operated in accordance with the standards established by the National Fire Protection Association.

#### 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.

**⚠ WARNING:** This product can expose you to chemicals including Lead which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

- Proper installation of this product requires the installer to have a good understanding of automotive electronics, systems and procedures.
- Whelen Engineering requires the use of waterproof butt splices and/or connectors if that connector could be exposed to moisture.
- Any holes, either created or utilized by this product, should be made both air- and watertight using a sealant recommended by your vehicle manufacturer.
- Failure to use specified installation parts and/or hardware will void the product warranty.
- 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 the 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 (this does not include products that use cigar power cords).
- If this product uses a remote device for activation or control, make sure that this device is located in an area that allows both the vehicle and the device to be operated safely in any driving condition.
- 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!

**ACTIVATION OF THIS  
SIREN MAY DAMAGE  
UNPROTECTED EARS!**



**CAUTION**

Loud siren noise can cause hearing damage and/or loss. Refer to OSHA Section 1910.95 prior to putting ANY siren into service!

## Model PCC10W

**WARNING!** These switches are suitable for 25 amp, 12 volt DC applications. Any attempt to load these switches above 25 amps will result in switch failure.

**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 be **FUSED** at the battery to carry that load. **DO NOT USE CIRCUIT BREAKERS WITH THIS PRODUCT!**

Congratulations on selecting the PCC10W ten switch power control center. This product offers a unique and distinctive collection of features. Features include:

- Ignition controlled LED backlighting
- Compact design
- Switch 'active' LED indicators
- Ten 25 amp switches
- Three separate 'banks' of switches
- A common Ground Post
- 72 switch function labels

## Mounting:

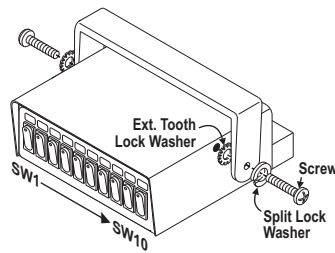
An aftermarket center console is recommended for the mounting location of the PCC10W. This not only allows the driver to reach the controls easily, but also keeps the unit safely out of the path of the vehicle's SRS air-bag. Follow the console manufacturer's instructions for mounting information. If a console-type mount is not possible, the PCC10W includes a bail strap mounting kit for over or under dash mounting.

**WARNING: Regardless of the style selected, be sure to observe the air-bag warning on the cover of this manual.**

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

### Bail Strap Mount:

1. Position the bail strap in the selected mounting location. Using an awl or other suitable tool, scribe the surface where the mounting holes are to be drilled.
2. Carefully drill the mounting holes in the areas scribed in step one. The size of the drill bit should be determined by the size of the mounting hardware (customer supplied) and the thickness of the mounting surface.
3. Using the customer supplied mounting hardware, secure the bail strap to the mounting location.



### Console Mount:

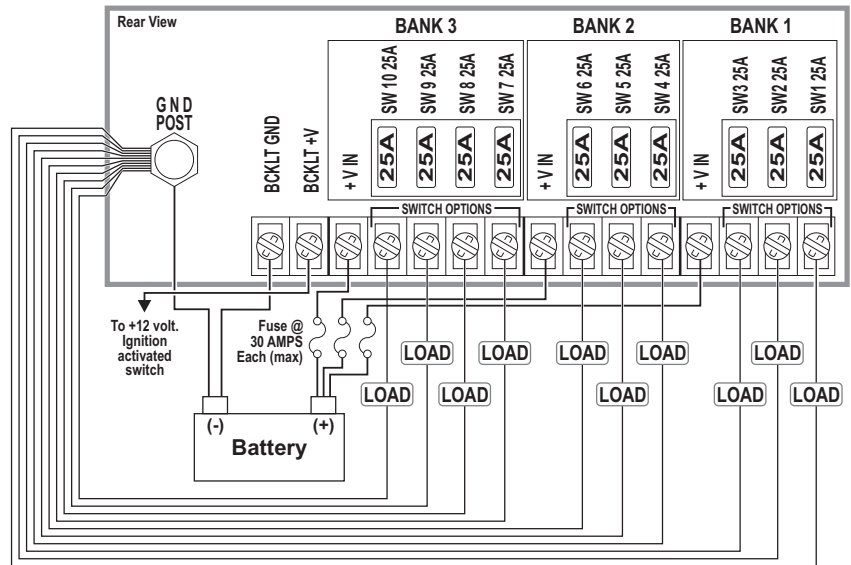
Console manufacturers offer mounting kits that include all the necessary hardware and brackets required to mount this unit into their console. The console mount brackets are secured onto the unit the same way the bail bracket is. Refer to the manual included with your console.

**Function Labels:** Take the supplied label kit and determine which label describes the function of switch 1. Peel the label off the backing and place it in the label window above switch 1. Press the label lightly into place. Repeat for each switch.

## Wiring:

**BACKLT GND:** This terminal supplies ground to both the units function window backlighting and the switch 'active' LED indicators located on the front of each switch. This terminal can be connected to any vehicle ground that can supply 100ma.

## PCC10W WIRING DIAGRAM



**BACKLT +V:** This terminal supplies power to the units window backlighting. This terminal can be connected to any ignition controlled +VBAT power source that can supply 100ma.

**GND POST:** The ground post has been included as a convenient place to terminate the switched loads return path to ground (See wiring diagram). To prepare the post, Remove the provided ring terminal and attach it to a 10 AWG wire, now run this wire from the ground post to the negative post of the battery. All of the loads return ground wires can now use the ground post for termination using a spade or a ring terminal (customer supplied).

**+V IN:** There are three terminals marked "+V IN". One terminal provides power for switch bank #1 (Switches 1,2 & 3), one for switch bank #2 (switches 4, 5 & 6) and one for switch bank #3 (switches 7, 8, 9 & 10). Each switch can accommodate a maximum 25A current draw. However, the total combined current draw for a given switch bank can not exceed 30 AMPS. Each terminal will be wired directly to the Positive battery terminal using a minimum 14AWG wire and fused at 125% of the combined current draw for all the switches in that bank (30A max).

**Note: Remove the fuse from the fuse block before connecting any wires to the battery.** There must not be more than 2 ft. of wire between the fuse block and the battery. Since the wire between the fuse and the battery is "unprotected", do not allow this wire to come in contact with other wires.

**OPTIONAL WIRING FOR +V IN:** Since each bank of switches have their own individual power source (labeled +V IN), if there is a requirement for some of the vehicles equipment to be switched to ground rather than +Vbat, it is possible to wire one of the banks power inputs (labeled +V IN) to the negative post of the battery and use the associated switches in that bank to enable the ground activated devices. (Note: if the bank is used for ground activation, the Switch 'active' LED indicators will not light for any switch in that bank)

**SW1-SW10:** Connect these terminals to the desired equipment (loads) as shown in the wiring diagram, be sure to use the proper wire size to handle the current required to power the equipment.

**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.**