



# Safety First

This document provides all the necessary information to allow your Grote® 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 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 magnets or any other temporary mounting style, 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 (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.
- 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!

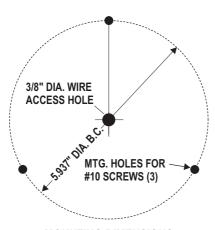
# Specifications:

#### <u>12V</u>

Input Voltage	12.8 VDC +/- 20%
Input Current / Peak	1 AMP
Input Current / Avg	0.4 AMPS
24V	
Input Voltage	25.6 VDC +/- 20%
Input Current / Peak	
Input Current / Avg	

## Permanent Mount:

- Using the base as a template, mark the 3 mounting holes onto mounting the surface. Remove the base and mark the location of the wire access hole. centered between the 3 mounting holes.
- Drill the mounting holes using a drill bit sized for a #10 screw. Drill a wire access hole using a 3/8" drill bit. Remove the burrs from the



MOUNTING DIMENSIONS PERMANENT MOUNT

wire access hole so as not to damage the wires. It is recommended that a rubber grommet be installed to further protect the wires. A gasket will be used between the beacon base and the mounting surface.

 After connecting the beacon to the power cable, feed the wires through the cable access hole and place the base and gasket on the mounting surface. Align the mounting holes in the base with the mounting holes in the mounting surface. Secure beacon firmly to the mounting surface using the #10 X 5/8 Sheet Metal Screws provided.

### 1 Inch (NPT) Pipe Mount:

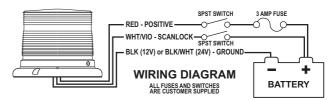
Threading for a 1" NPT pipe mounting is precast into the base. Feed the power cable through the 1 " pipe and connect to wires of beacon. Screw the beacon to the threads on the pipe, taking precaution not to damage the power wires. **NOTE: Do not tighten the base too hard so as not to damage the threads.** 

### Temporary Mount (Magnetic, Suction Cup, etc.)

With the magnetic or magnetic/suction cup mounting options you will be able to mount your beacon so that you can remove it if necessary and avoid drilling.

Magnetic/suction: Thoroughly clean the proposed mounting surface prior to mounting. For suction cup mounting, wipe the suction cup clean, place the beacon onto its mounting surface and apply gentle pressure to ensure a good seal has been achieved. The Magnetic/Suction Cups mount the same way as standard suction cups but are best suited to a flat, steel surface.

**Magnetic:** Place the beacon onto the mounting surface and plug it into the vehicle cigar lighter.



## 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 the load. DO NOT USE CIRCUIT BREAKERS WITH THIS PRODUCT!

This product is polarity sensitive. If the positive and negative wires are reversed the unit will not function. Fuse the positive (RED) wire @ 3 Amps at the battery.

- Connect the RED wire to positive voltage (+VBAT). A customer supplied single pole/single throw (SPST) switch may be used to control the ON/OFF function of the beacon.
- Connect the BLK or BLK/WHT wire to chassis ground.

# Operation:

## Scan-Lock™ (White/Violet):

To use Scan-Lock™, the beacon must be turned on:
TO CHANGE PATTERNS: To cycle forward to the next available pattern apply +VBAT to the WHT/VIO wire for less than 1 second and release. To cycle back to the previous pattern apply +VBAT to the WHT/VIO wire for more than 1 second and release.

**TO CHANGE THE DEFAULT PATTERN:** When the desired pattern is displayed, allow it to run for more than 5 seconds. The beacon will now display this pattern when initially activated.

TO RESTORE THE FACTORY DEFAULT PATTERN: With the power to the beacon off, apply +VBAT to the WHT/VIO wire. Turn power to the beacon on. The factory default pattern should now be displayed. A normally open momentary switch can be used to control ScanLock™ operation.

#### Flash Patterns:

1	. SignalAlert™ 75	7.	PingPong™ 75	13.	ComAlert™ 150
2	. CometFlash® 75	8.	SingleFlash 60	14.	ActionFlash™ 50
3	. DoubleFlash 75	9.	SingleFlash 90	15.	ActionFlash 150
4	. SingleFlash 75	10.	SingleFlash 120	16.	ModuFlash™
5	. ComAlert™ 75	11.	SingleFlash 300	17.	ActionScan™
6	. LongBurst™ 75	12.	DoubleFlash 150	18.	Steady

#### **IMPORTANT WARNING!**

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

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! 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.

