ALERT[™] 4000-2 <u>ELECTRONIC SIREN & PA SYSTEM</u> Model 4000-2



Your purchase of a Wolo electronic siren, ALERT 4000-2, is the perfect choice for reliable service. ALERT 4000-2 is manufactured with the finest materials and each siren is tested to meet our high standards, ensuring a perfect working siren controller. Wolo's quality workmanship and components are your assurance that this product will provide years of dependable service.

Before installation of the siren is attempted, it is important to read these instructions completely. The lives of people are dependent on the proper installation of this product. The person installing this siren must have advanced knowledge of the proper method for installation of safety warning equipment, connecting and securing wires to a vehicle's electrical system and knowledge of the vehicle's electrical system. Again, read this manual completely and note any messages marked "**IMPORTANT**" or "**WARNING**". A safe installation will prevent serious injury or damage to the vehicle.

SOUND HAZARD

IMPORTANT: This siren, like all effective sirens, produce a powerful audible sound that could cause permanent hearing loss. **Note:** Hearing loss can occur from short exposure to very loud sounds and or long exposure to moderate loud sounds. To protect your hearing and the hearing of others in or close proximity to the emergency vehicle using this siren, always use proper ear protection. Refer to federal, state, local municipality regulations and OSHA Standard 1910.95 for guidelines of "Permissible Noise Exposure".

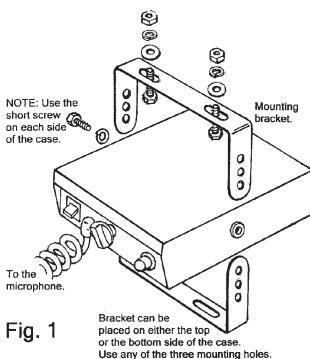
INSTALLATION RECOMMENDATIONS

- The speaker should be mounted facing forward on the vehicle. To obtain maximum sound output, make sure that the speaker is unobstructed. The siren's sound can be severely reduced if objects are in front or blocking the speaker.
- **IMPORTANT:** Installation of siren controller and wire routing must be out of the deployment path of vehicles air bags.
- The siren controller must be installed in a location that will ensure safe operation of the controls and microphone.
- The siren's controller must be mounted in a location that will provide good ventilation. Never install siren controller close to a vehicle's heater duct.
- Before drilling any surface for mounting of the siren controller or for routing wires, carefully inspect the desired location to ensure that there are no components, wires and or any other vehicle parts that could be damaged by drilling.
- Before connecting the siren controller to the vehicle, carefully review the vehicle's shop or build manual to ensure the connection point will not affect the circuit or the vehicle's operation.

IMPORTANT: Failure to follow all safety precautions and installation procedures outlined in these instructions could result in property damage to the vehicle, serious injury or death to you or others.

MOUNTING SIREN CONTROLLER Fig. 1

- **1. IMPORTANT:** Do not connect the siren controller's wires to any vehicle power point until mounting of the controller is completed.
- 2. WARNING: If the vehicle is equipped with air bags, the installer MUST consult the vehicle's shop or build manual to ensure that siren controller and it's wires will not affect deployment of air bags. This siren must be installed only in a location recommended by vehicle manufacturer. If necessary consult manufacturer for their recommendation. Failure to adhere to this warning could result in damage to the air bag and or reduce the effectiveness of the air bag, which could result in bodily injury, or death to driver or others.
- **3.** The swing bracket included has been designed to mount to the siren controller either from the top for hanging under dash or bottom for top surface mounting.



CAUTION

- Before drilling any surface for mounting siren controller or for routing wires, carefully inspect the desired location to ensure that there are no components, wires and or any other vehicle parts that could be damaged by drilling.
- The siren controller must be mounted in a location that will provide good ventilation. Never install siren controller close to a vehicle's heater duct.
- 4. Using the swing-mounting bracket as a template, mark the locations of mounting holes to be drilled.
- 5. Drill holes on the marked locations using a 7/32" drill bit.
- **6.** Secure the swing-mounting bracket to the desired location using the hardware provided: 2-screws, flat-washers, lock-washers and nuts.
- 7. The siren controller is secured to the mounting bracket using the hardware provided, screws, lock-washer. Tilt and position the siren controller so that it is easily reachable by user. Tighten the two screws that secure the siren controller to the swing bracket.

HARNESS WIRE INFORMATION Fig. 2

8. The wire harness provided with the siren has a male plug end that mates with the connector located in the back of the siren controller. The plug is designed to connect and lock only in one position.

WARNING

- Do not connect the wire harness plug to the siren controller until all connections have been completed, wires are secured and the installer inspects and verifies that no short circuits exist.
- Fig. 2 Fig. 2 Fig. 2 BLACK TO GROUND RED TO +12 VOLTS BROWN WIRES TO A 80 WATT SPEAKER
- Before wiring the siren controller to the vehicle, carefully review the vehicle's shop or build manual to ensure the connection points will not affect the circuit or the vehicle's operation.
- If the vehicle is equipped with air bags, the installer MUST consult the vehicle's shop or build manual to ensure that the siren's harness wires will not affect deployment of the air bags. If necessary consult manufacturer for their recommendation.
- Any wires that pass through the vehicle's firewall or drilled sheet metal must have a rubber grommet or approved insulator inserted into the hole to protect the wires from being shorted or damaged from rough edges.
- Failure to follow these instructions could cause hazardous sparks, electrical fire, burns and personal injury.

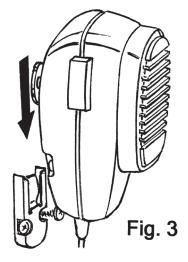
HARNESS WIRING

- 9. BROWN WIRES are connected to speaker. If the harness wires need to be extended, use 18 gauge or heavier wire.
- **10. BLACK WIRE** is connected to ground. Secure black wire under a metal body bolt in the dashboard area; make sure that the METAL surface around the bolt is clean of rust and paint to make a good electrical connection.
- 11. RED WIRE is connected to the vehicle's fuse-block or under dash wire that can provide +12-volts. The red wire is provided with an in-line fuse, that must be used. The fuse must not be more than 10" from the power source. (Note: if you need to replace the fuse use a 15 amp.) IMPORTANT: Carefully review the vehicle's shop or build manual to ensure that the +12-volt electrical connection point will not affect the circuit or the vehicle's operation.
- **NOTE:** Tape all connections and secure wires.
- **12.** Connect the wire harness male plug to its female mate in the rear of the siren controller. **Note:** The plug is designed to connect and lock only in one position.

NOTE: The siren's controller electronic circuit is fuse protected. The fuse can be accessed at the rear of the siren controller. Replacement fuse is 15 amp type SFE.

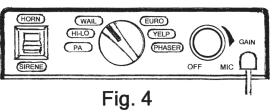
MOUNTING MICROPHONE HANGER BRACKET Fig. 3

Select a location that the microphone can easily be reached. Using the microphone hanger bracket as a template, mark the two locations and drill to size, 1/8" drill bit. Secure the microphone bracket with the two-(2) sheet metal screws provided. **CAUTION:** Before drilling the surface for mounting of the microphone bracket, inspect the desired location to ensure that there are no components, wires and or any other vehicle parts that could be damaged by drilling.



TESTING AFTER INSTALLATION Fig 4.

VOLUME CONTROL: The VOLUME CONTROL is used to turn on/off the siren controller and adjust the volume. Turn the rotary control clockwise, which will turn on the siren controller. Further clockwise rotation of the control will increase the volume of all siren sounds and P.A system. The maximum clockwise position of the control is determined by either feedback or squeal



being amplified. Adjust the rotary control to be positioned just before feedback occurs or to a sound level that is desired.

SELECTOR SWITCH: The rotary switch located in the center of the front panel is used to control six functions, which are: five (5) different siren sounds and P.A..

- **13.** Test each siren sound by positioning the selector control to the following positions:
- HI-LO: When the selector is in this position the siren produces a two-tone "HI-LO" sound that is continuous.
- WAIL: When the selector is in this position the siren produces a "WAILING" sound that is continuous.
- EURO: When the selector is in this position the siren produces a "EURO HI-LO" sound that is continuous.
- YELP: When the selector is in this position the siren produces a "YELP" sound that is continuous.
- PHASER: When the selector is in this position the siren produces a "PHASER" sound that is continuous
- MANUAL CONTROL SWITCH: The switch position allows the user to manually control two (2) siren sounds, AIR HORN / SIREN. The manual control is located on the left side of the siren's control panel. Lifting and holding the switch activates the air horn sound. Pressing down and holding the switch will active a powerful siren. The manual switch will also design to override any siren that is in use.

P.A. SYSTEM:

• Position the selector control to P.A. To test the P.A. system, depress the microphone's push-to-talk button. Speak into the microphone in a normal voice. The volume is controlled by the rotary control. The P.A. system will also override any siren that is sounding.

SPECIFICATIONS: Siren controller

- 12-volt / 80 watts maximum output
- L 4-1/2 in. x Depth (front to back) 6-1/8 in. x H 1-3/8 in.
- Current 10 amperes volume control set at maximum
- Case is all metal black enamel painted
- Adjustable metal swing bracket provided
- LED Illuminated front control panel
- Noise canceling microphone
- · Power harness is six-(6) ft. in length and has an inline fuse-holder
- Weight 2 lbs. (controller without swing bracket)

Cycle Rate Wail – 20 cycles/min Yelp – 120 cycles/min Hi-Lo – 60 cycles/min Phaser – 120 cycles/min