



# Driveway Alarm

## INSTALLATION MANUAL



### Kit Includes:

- Transmitter Module
- Sensor
- Receiver
- Transformer
- Mounting post (3 pieces)
- Installation manual

*Thank you for purchasing the Mighty Mule Driveway Alarm. Please read the directions carefully and completely before installing.*

### How it works:

#### The Transmitter - Sensor:

The operating voltage for the transmitter is 3V from two alkaline 'AA Size' batteries (not included) inside the transmitter. In cold weather lithium-alkaline batteries will perform best. There is no power switch for this unit. Once the batteries are installed, the unit starts to function. **IMPORTANT:** Batteries should be installed at the mounting location to ensure proper calibration of the sensor. You should install the batteries at the location by removing the transmitter cover and then replacing it. The approximate transmitting range from the transmitter to the receiver is 400 ft. (at 433MHz). The range may vary depending on environmental conditions such as RF interference, topography and construction of the building.

#### The Receiver:

The receiver is powered by an external power adaptor (AC120V 60Hz / DC 12V 100 mA). A rotary switch controls the alert buzzer's volume on the receiver. There are three LEDs on the front panel of the cabinet, representing power (red), visitor alert (green) and low battery (red). A "RESET" button on the front panel is used to clear the alert LED after it has registered passing vehicles.

For more information on Mighty Mule's full line of automatic gate openers and access controls visit our web site at [www.mightymule.com](http://www.mightymule.com)

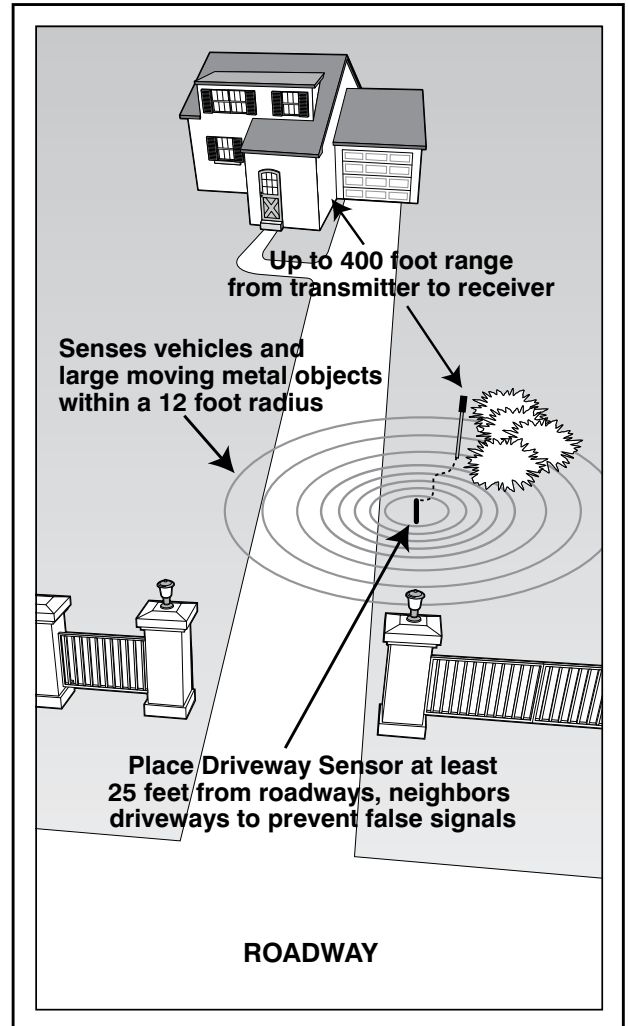
## Installation Overview

Place the **SENSOR** immediately next to the driveway to maximize the sensing range, but at least 25 feet from roadways, neighbor's driveways or large moving metal objects.

The 15 ft. cable connecting the **SENSOR** and **TRANSMITTER** allows for the placement of the **TRANSMITTER** away from the driveway in the concealment of landscape or closer to the **RECEIVER**.

The approximate transmitting range from the **TRANSMITTER** to the **RECEIVER** is 400 ft. Range can vary depending on environmental conditions such as RF interference and topography. Some adjustment may be required.

**NOTE: DO NOT place the TRANSMITTER in the direct path of a sprinkler. The module is water resistant but not waterproof.**



### For Optimum Performance:

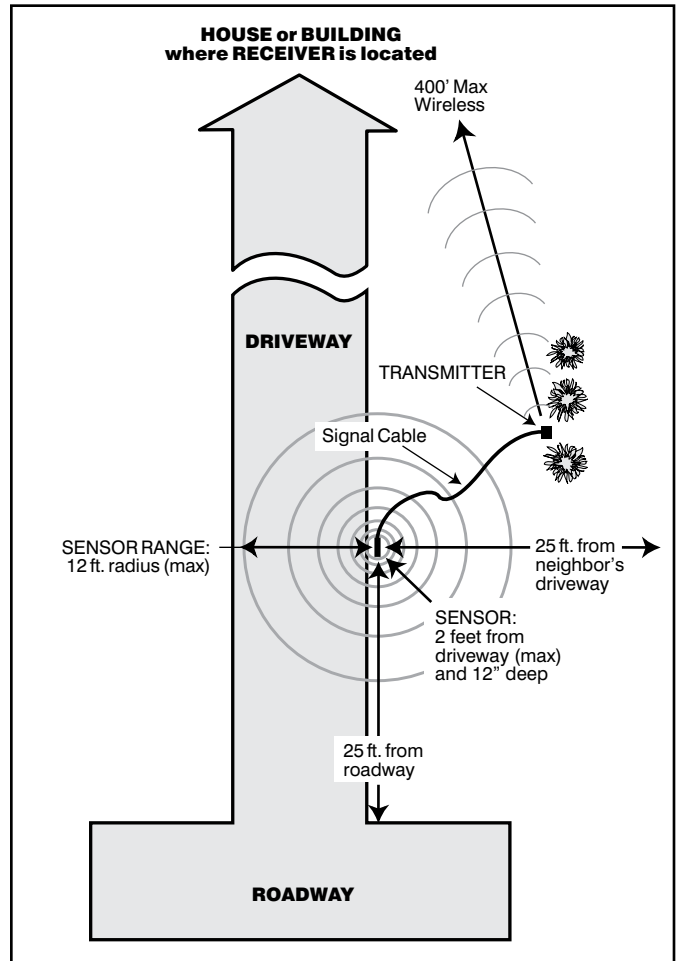
- Locate the **SENSOR** as far as possible away from power transformers, power lines, underground gas line, and telephone lines.
- Locate the **SENSOR** away from general moving traffic to prevent unwanted activation. Remember that the **SENSOR** detects **MAGNETIC DISTURBANCES** caused by a vehicle's mass and velocity.
- Range distance is approximate and will vary due to outside interference, type of soil, vehicle mass, speed, etc.
- It is recommended that you run the Signal Cable inside PVC conduit to prevent accidental damage.
- Do not run the Signal Cable in conduit with other wires such as AC power or other control wires.
- The **SIGNAL CABLE CANNOT BE SPLICED**. If you need more wire, contact the GTO Sales Department at 1-800-543-GATE (4283).

# Sensor Placement

## Determining Sensor Location

**IMPORTANT:** Clear an area 25 feet in all directions of metal tools, toys and automobiles, to prevent magnetic disturbance during testing and installation.

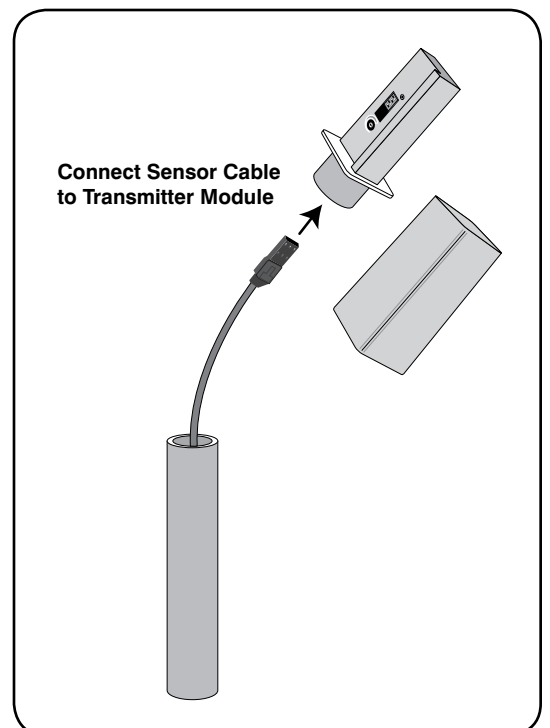
- Determine the optimum location for the SENSOR using the information found in “Installation Overview”.
- Dig a hole approximately 10 - 12 inches deep and 24 inches long within 2 feet and parallel to the edge of the driveway.
- Keep the SENSOR and the cable uncovered at this time.



## Transmitter Placement

### Determining Transmitter Location

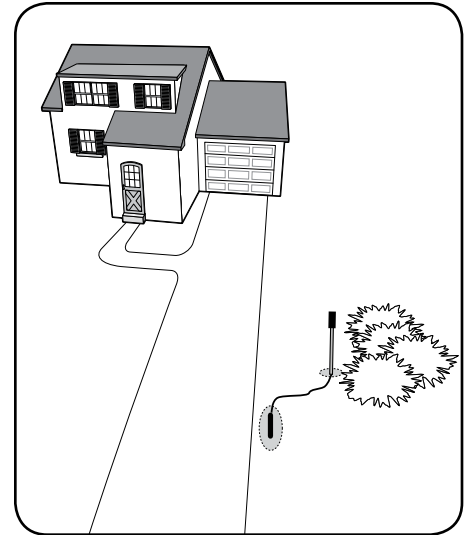
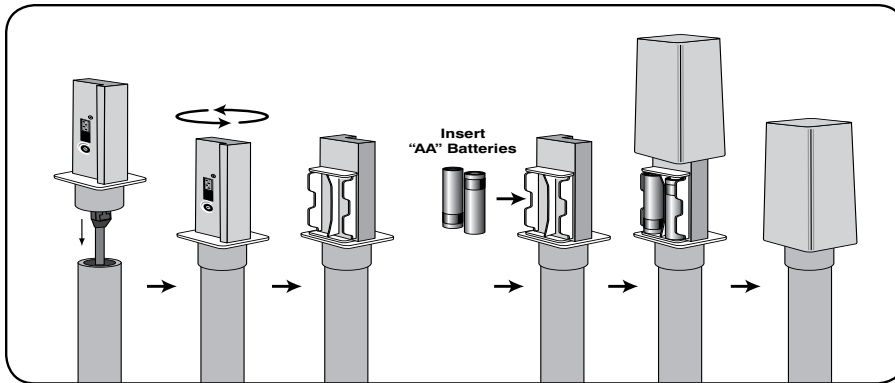
- Choose a location for the TRANSMITTER module that is far enough from the driveway edge that vehicles are unlikely to hit it.
- Fifteen feet of wire is included to allow the TRANSMITTER to be 12 to 15 feet from the driveway.
- Run the SENSOR cable through the PVC mounting post and plug it into the connector at the bottom of the Transmitter module.
- Test the chosen location before permanently trenching and setting the TRANSMITTER (see “Placing Receiver and Testing System” section).



## Installing Transmitter Batteries

**IMPORTANT:** "AA" batteries must be installed at the site where the TRANSMITTER will be located to ensure proper calibration of the transmitter.

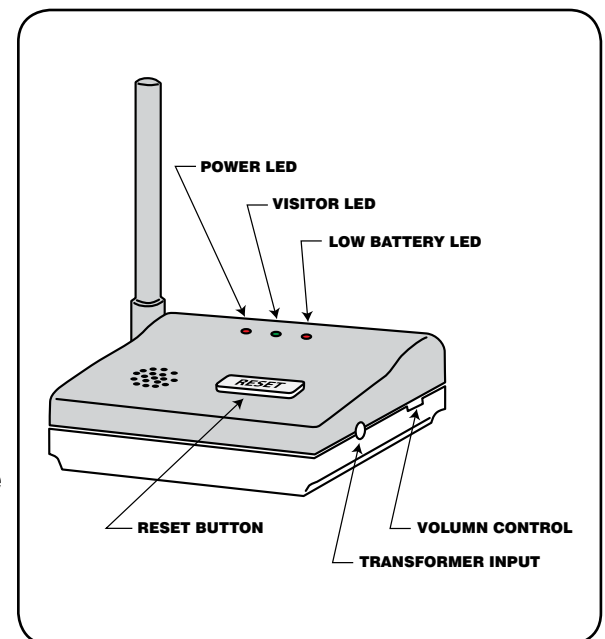
- With TRANSMITTER in desired location install two (2) "AA" batteries.
- Temporarily place TRANSMITTER on the mounting post in ground.



## Placing Receiver and Testing System

### Receiver Placement

- Place the indoor RECEIVER in a convenient location that is approximately 3 ft. above the floor level.
- Plug the AC transformer into a 110 VAC outlet and the charger cable into the receiver.
- The power LED on the front panel will light up, and there will be a confirmation "beep" tone.
- When a car passes the SENSOR, a signal is transmitted to the RECEIVER from the TRANSMITTER by means of a 433MHz carrier frequency. After the RECEIVER receives the signal, the buzzer will "beep" twice, and the visit alert LED (green) will flash 3 times and remain lit, until the RESET button is pressed.
- The LOW BATTERY LED alerts you when the two (2) "AA" batteries in the TRANSMITTER need to be replaced.

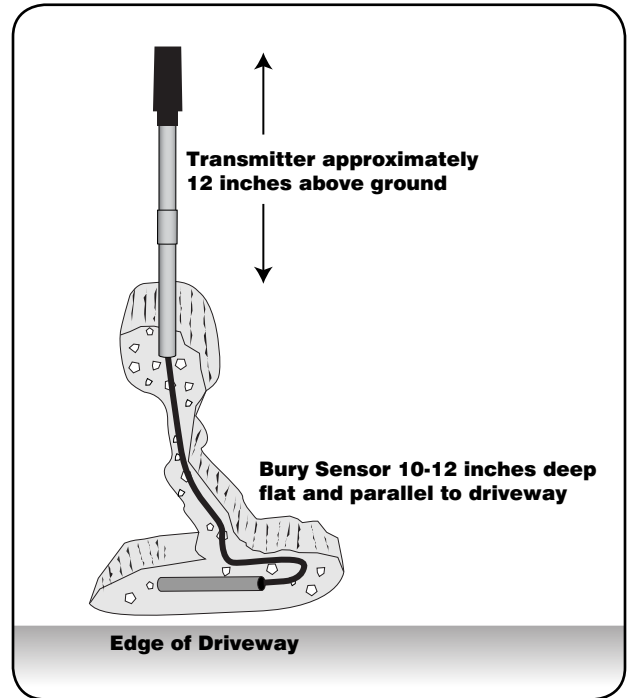


### Testing the System

- Test the range and system by having someone drive an automobile past the SENSOR to be sure the RECEIVER is activated when the vehicle has passed the SENSOR. It may necessary to adjust the position of the TRANSMITTER for optimum results.

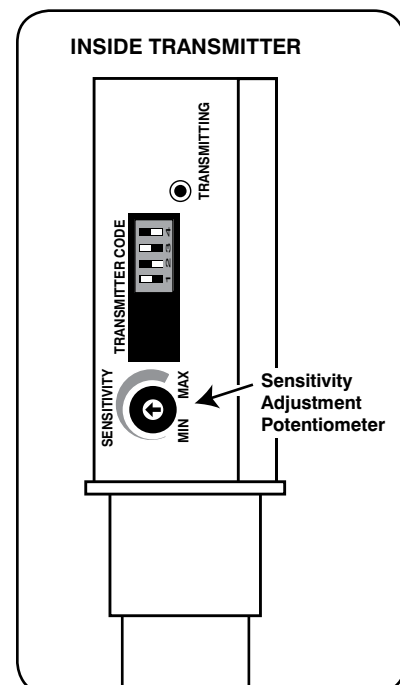
## Permanently Install Sensor and Transmitter

- Once the system is tested and working, permanently install the SENSOR, SIGNAL CABLE and TRANSMITTER.
- Bury the SENSOR approximately 10"-12" deep, **flat and parallel**, next to the driveway.
- Dig a narrow trench or slit from the SENSOR to the TRANSMITTER location using a flat spade or other tool. The wire from the SENSOR to the TRANSMITTER should be at least six inches deep to avoid possible damage from edgers, or lawn aerators.
- Secure the Transmitter Module on the supplied 3 piece PVC pipe by burying the bottom third of the pipe in the soil and tamping the ground around the pipe. **DO NOT** cover the electronics module with a metal cover as this will cause signal interference.
- Secure the TRANSMITTER mounting post in the ground so that the TRANSMITTER is upright and approximately 12" above ground.



## Sensitivity Adjustment

- The RANGE distance can be adjusted from a 3 to 12 foot radius from the SENSOR.
- The potentiometer varies the sensitivity range of the SENSOR to avoid unwanted moving metal objects from activating the ALARM, such as: moving gates, metal play equipment, garage doors, other vehicular traffic, etc.
- With the RANGE adjusted to the maximum of 12 feet, a large metal object moving slowly will be detected up to 12 feet from the SENSOR, while a small metal object moving slowly might not be detected at the same distance. As you move closer toward the SENSOR, the small moving metal object will at some point cause a DISTURBANCE in the MAGNETIC FIELD and activate the ALARM.



# Trouble Shooting

## System not detecting vehicles:

- Are the DIP switches on the indoor and outdoor units both set the same?
- Is the sensor installed close to driveway as shown?
- Is the distance to the base unit well within max range? Remember that foliage, trees, and buildings in the line from transmitter to indoor unit will reduce the transmitting range.
- Metal buildings such as mobile homes can block the signal. Try placing the indoor unit close to a window facing the outdoor sensor.
- Remove the outer cover from transmitter and check to see if LED blinks when a vehicle passes the sensor. The LED indicates that a vehicle was detected and it is transmitting.
- Remove the "AA" batteries - make sure there are no large metal objects or vehicles within 25 feet of the SENSOR - replace the "AA" batteries and allow 60 seconds for it to recalibrate.
  - Replace TRANSMITTER batteries when indoor RECEIVER's low battery light comes on.
  - In locations where weather varies extremely use Lithium-Alkaline "AA" batteries for best performance.

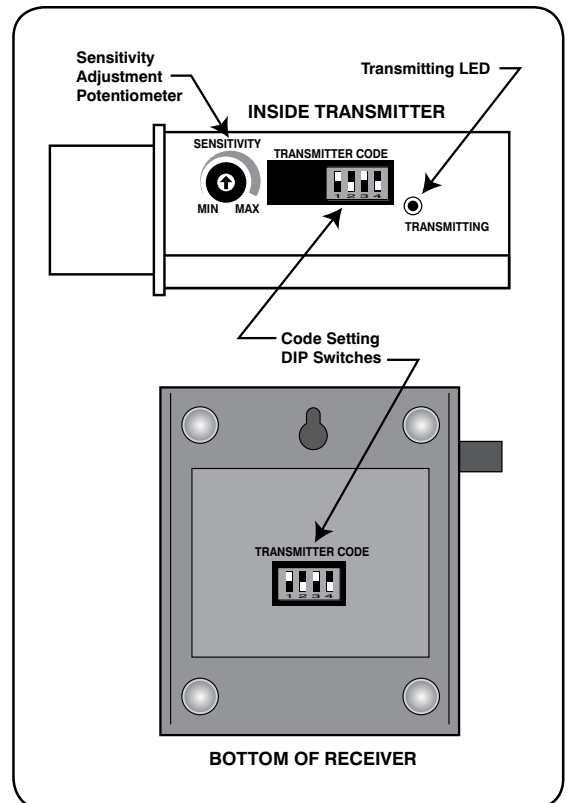
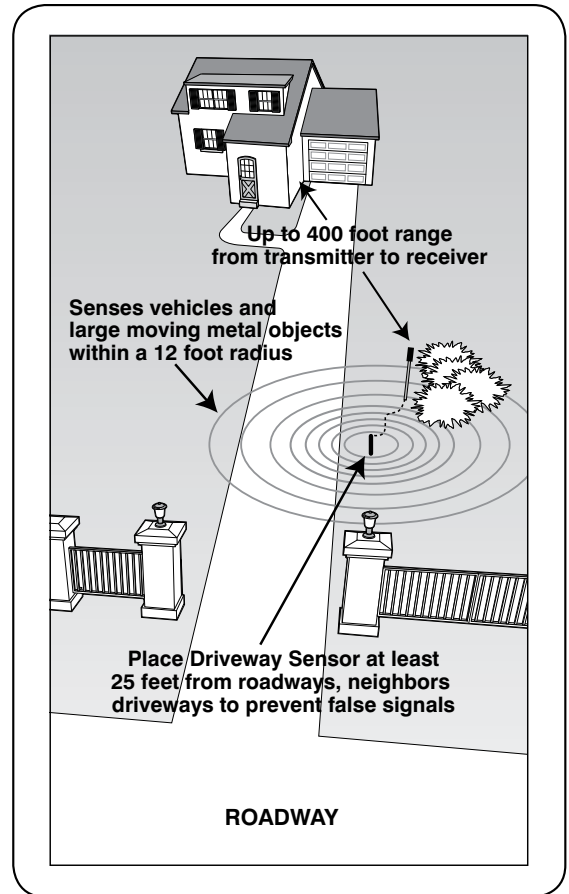
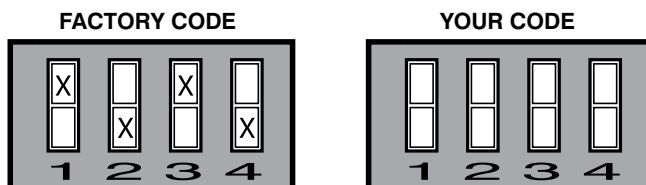
## Sensor detecting vehicles on the street:

- Is the sensor probe at least 25 feet from the edge of the road? Try moving the sensor farther from the road. Remember to keep it close to the edge of the driveway.
- Adjust the sensitivity control to reduce sensitivity. Make small changes until street vehicles are not detected. Counterclockwise adjustments make the sensor less sensitive

## Indoor base unit detecting a neighbor's driveway alert:

- Select a different TRANSMITTER/RECEIVER code using the 4 position DIP switch on the transmitter and the indoor unit. Both sets of switches must be set exactly the same.

If you change your DIP switch settings make note here for future reference.



**FCC WARNING:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In accordance with FCC Part 15, Section 15.21, the manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could VOID the user authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in particular installations. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: • Reorient or replace the receiver antenna. • Increase the separation between the equipment and the receiver. • Connect the equipment into an outlet on a circuit different from that which the receiver is connected. • Consult the dealer or an experienced radio/TV technician for help.

## **GTO Limited One Year Warranty**

GTO, Inc., gate openers and accessories are covered under warranty by the manufacturer against defects in materials and manufacturer workmanship for a period of one (1) year from date of purchase, *provided the recommended installation procedures have been followed.*

In the case of product failure due to defective material or manufacturer workmanship within the one (1) year warranty period, the product will be repaired or replaced (at the manufacturer's option) at no charge to the customer, if returned freight prepaid to GTO, Inc., 3121 Hartsfield Road, Tallahassee, Florida, USA 32303. **IMPORTANT: Call (800) 543-1236 for a Return Goods Authorization (RGA) number before returning accessory to factory.** Products received at the factory without an RGA number will not be accepted. Replacement or repaired parts are covered by this warranty for the remainder of the one (1) year warranty period or six (6) months, whichever is greater. GTO, Inc. will pay the shipping charges (equal to United Parcel Service GROUND rate) for return to the owner of items repaired under warranty.

The manufacturer will not be responsible for any charges or damages incurred in the removal of the defective parts for repair, or for the reinstallation of those parts after repair. This warranty shall be considered void if damage to the product(s) was due to improper installation or use, connection to an improper power source, or if damage was caused by lightning, wind, fire, flood, insects or other natural agent.

After the one (1) year warranty period, GTO, Inc. will make any necessary repairs for a nominal fee. Call GTO at (800) 543-1236 for more information. This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state. This warranty is in lieu of all other warranties, expressed or implied. **NOTE: Verification of the warranty period requires copies of receipts or other proof of purchase. Please retain these records.**

GTO, Inc. • 3121 Hartsfield Road • Tallahassee, Florida 32303  
1-800-543-GATE (4283) • Technical Support 1-800-543-1236  
[www.mightymule.com](http://www.mightymule.com)

For online Technical Support visit the Online Troubleshooter Wizard 24 hrs/day 7 days/week at

**<http://support.gtoinc.com/support/troubleshooter.aspx>**

and open a Tech Ticket

Technical Support Hours: MON - FRI 8:00AM - 7:00PM (ET)

(800) 543-1236