Warning

Changes or modifications to this unit not expressly approved by the party responsible for compliance will void the user's authority to operate the equipment. Any change to the equipment will void FCC grant.

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 a particular installation. 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 relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

CAR ALARM SYSTEM Model: GS-500A

User's Manual





Remote Control



About Your GS-500A

System Contents:

- Two 4-button Metallic Transmitters
- Main Unit
- Dual Stage Shock Sensor
- Status LEDValet Button
- Siren

System Installation:

- Thoroughly read and become familiar with the installation instructions before beginning the installation.
- Review the system contents.
- Verify with the owner the mounting locations for all visible components. This includes the LED and override switch.
- Verify with the owner the programmable features that must be programmed during the installation.
- Inspect and perform a function test of all the vehicle systems before and after the installation.
 Always use a multi-motor when testing vehicle systems.
- 6. Always use a multi-meter when testing vehicle systems. Never use a test light.
- Look before drilling any holes or mounting self tapping screws. Be sure fuel lines and exterior wiring looms are clear as they are often close to the chassis and difficult to see.
- Protect all wires running from the engine compartment to the interior of the vehicle by covering with electrical tape and split loom tubing. Be sure to use a grommet when routing wires through the firewall.
- Properly fuse any additional accessories such as window modules, door lock actuators, etc. Make sure to power them separate from the alarm module. This will ensure the functionality of the security system in the event of an accessory failure.





About Your GS-500A

Mounting the Control Unit:

The control unit must only be mounted in the interior of the vehicle. Do not mount the main unit in the engine compartment. Choose a mounting Location that will not be easily accessible to a thief. Make sure not to interfere with the operation of any vehicle components such as foot pedals, steering column, air vents, seat rails, etc.

Mounting the Siren:

Choose a siren mounting location that is away from heat sources such as exhaust manifolds, and where it cannot be easily accessed from underneath the vehicle. Be sure to face the siren downward to prevent the collection of water in the siren's housing.

ways route all wires from the engine compartment into the interior of the vehicle through a proper grommet.

Mounting the Shock Sensor:

Choose a suitable interior mounting location for the shock sensor that provides ample coverage of the vehicle. Keep the sensor away from the vehicle's ECM or other sources of electrical interference. Suggested mounting locations include dashboard braces and center console supports.

Mounting the Valet / Override Switch:

*You must mount the Valet/Override Switch in a location that is accessible to the owner of the vehicle. This switch is the only way to disarm the alarm in the event the transmitter is lost or becomes inoperative.

System Operation

Remote Arming:

- 1. Turn off the ignition.
- 2. Press and release Button 1. The siren will chirp once.
 - The doors will lock.
- The parking lights will flash once.
- The LED will turn on.
- 3. 5 seconds after arming
 - · The LED will blink to indicate the doors and trunk inputs are being monitored.

Remote Disarming:

- 1. Press and release Button 2
- The siren will chirp twice.
- The doors will unlock.
- The parking lights will flash twice.
- · The dome light will turn on.
- · The LED will turn off.

Passenger Unlock:

- Press and release Button 2 to disarm the system.
- 2. Within 5 seconds press Button 2 again

1. Press and hold button 1 for two seconds.

The siren will sound and the parking lights will flash for 30 seconds.

Activating Aux 1 (Trunk Release):

- 1. Press and hold Button 2 for two seconds.
- 2. This output can be programmed to be Pulsed, Latched or Timed for 10 seconds.





System Operation

Bypassing shock sensor:

- 1. Press and release Button 1.
- 2. Within 5 seconds press Button 1 again.
- 3. The shock sensor will remain disabled until the next arming cycle.

Activating Aux2:

- 1. Press and hold Button 1 and Button 2 for two seconds.
- 2. This output can be programmed to be Pulsed, Latched or Timed for 10 seconds.

Activating Car Finder:

- Press and hold button 3 for Two seconds.
- 2. The parking lights will flash, the siren will chirp 5 times.

Silent Arming:

- 1. Press and release Button 3.
- 2. Within 10 seconds press Button 1.
- 3. The doors will lock.
- 4. The system will arm silently.

Silent Disarming:

- 1. Press and release Button 3.
- 2. Within 10 seconds press Button 2.
- 3. The doors will unlock
- 4. The system will disarm silently.

Two Car Operation:

If two vehicles are equipped with this system, for the convenience

- both can be operated using the same remote transmitter.

 1. Program your 2 primary transmitters to your primary vehicle using the regular transmitter learning sequence.
- 2. Program your 2 primary transmitters to your secondary vehicle:
 - Turn on the ignition On, Off, On, Off, and On. . The siren will chirp 3 times.

System Operation

- . Press and hold the Override switch for 4 seconds.
- · The siren will chirp 5 times.
- · The LED will illuminate.
- · Press Button 1 on the first transmitter.
- · The siren will chirp once.
- · Press Button 1 on the first transmitter again.
- The siren will chirp twice to indicate that the code has been
- 3. You will now be able to operate the second vehicle by pressing the shift button twice and the desired function button.

Valet Mode

The valet mode temporarily disables the security system so the vehicle may be operated by a mechanic or valet parking attendant. To activate or deactivate the valet mode:

- 1. Turn on the ignition. 2. Press and hold the override switch for 5 seconds.
- 3. The siren will chirp once to confirm the valet mode is on.
- (The siren will chirp twice to confirm the valet mode is off.)
- 4. Turn the ignition off.

While in valet mode the transmitters will continue to lock and unlock the doors, and operate the optional auxiliary functions.

If the system is triggered while away, the LED will flash to indicate which zone triggered the system after disarming and turning on the ignition. The LED indication will repeat 1 minute.

- 1 Flash = optional sensor
- 2 Flashes = Shock Sensor 4 Flashes = Door Pin
- 5 Flashes = Trunk Pin 10 Flashes = Main power interrupt





System Operation

Emergency Override:

If the transmitter becomes lost or inoperable, the system can still be disarmed using the following procedure

Before beginning this procedure make sure to have the ignition key ready and know the location of the override switch.

To Emergency Override the system:

- 1. Unlock the door using the key.
- 2. Enter the vehicle.
- 3. The system will trigger and the siren will sound.
- 4. Turn the ignition key on.
- 5. Press and hold the override switch for 5 seconds.
- 6. The system will disarm.
- 7. The vehicle will now be able to start.

Optional Secret Code Emergency Override:

As an extra measure of security, the system is equipped with an optional Coded Emergency Override feature. Once an Emergency Override Code is chosen and programmed during the installation, the system can no longer be disarmed using the standard override procedure

To set the Emergency Override Code:

- 1. Turn on the ignition.
- 2. Within 5 seconds, press the valet switch 5 times. The siren will provide one long chirp to indicate that you have entered the programming.
 3. Press the valet switch 3 times. The siren will chirp each time
- the valet switch is pressed.
- 4. Within 4 seconds, press button 3 on the transmitter. The
- siren will chirp 3 times.

 5. Press the Valet Switch the number of times equal to your desired secret Override Code.
- 6. Turn the ignition off.

System Operation

To enter the Emergency Override Code:

- 1. Unlock the door using the key.
- 2. Enter the vehicle.
- 3. Turn the ignition key to the on position.
- 4. Press the valet switch the number of times equal to the Override Code which you previously programmed. Hold the button for 5 seconds on the last pres
- 5. If the code is entered incorrectly, turn the ignition off and start over.

Adding / Replacing Transmitters:

If a transmitter is lost or inoperable, a new transmitter can be programmed into the system. Up to 4 transmitters can be programmed to operate the system. To erase any previously stored transmitter codes, be sure to program all 4 transmitter memory locations.

To program the transmitters:

- 1. Turn on the ignition On, Off, On, Off, and On.
- 2. The siren will chirp 3 times
- 3. Press and hold the Override switch for 4 seconds.4. The siren will chirp 5 times.
- 5. The LED will illuminate
- 6. Press Button 1 on the first transmitter.
- 7. The siren will chirp once.
- 8. Press Button 1 on the first transmitter again.
- 9. The siren will chirp twice to indicate that the code has been learned.
- 10. Repeat steps 6 to 9 for each transmitter (up to 4).
- 11. Turn off the ignition.

Entering System Programming: Most features of the GS-500A can be activated or de-activated



System Operation

through the programming menu.

- 1. Turn the ignition on.
- 2. Within 5 seconds, press the valet switch 5 times. The siren will provide one long chirp indicating that you have entered the System Programming.
- 3. Press the valet switch the number times equal to the system option you want to change. The siren will chirp each time the valet switch is pressed.

 4. Within 5 seconds, press the transmitter button corresponding
- to the desired operating mode for that System Option.
- 5. The siren will chirp to indicate the setting.

1 chirp Button 1

= 2 chirps Button 2

3 chirps Button 3

6. When you are finished, turn off the ignition to save the changes.

Default Reset:

Following this procedure will set all Programmable System Options to the factory default settings.

- Enter System Programming.
 Press Transmitter button 3. The siren will chirp 4 times indicating that the reset signal was received. programmable options are now set to factory default settings.
- 3. Turn the ignition off.

Battery Replacement:

Your Remote Transmitter uses a 12 volt alkaline battery (Type 27A), Which will require replacement in time. Depending on the amount of use, the battery may last up to six months or more before it needs replacement.

Programming Options:

Branch Feature	Button1 (default)	Button2	Button3
Horn Chirps W/Arm & Disarm	Normal	Horn chirps	Horn chirps w/warn
2. Arm mode	Manual arming	Passive arming	Passive w/countdown
3. Passive door locking	Disabled	Enabled	Set override code
4. Ignition controlled locks	On	Off	Lock only
5. Channel 2 mode	0.5s pulse	10s	latched
6. Channel 3 mode	0.5s pulse	10s	latched
7. Door lock pulse length	1 Second	3 seconds	0.1 second
10. Ignition armed mode	Disabled	Enabled	
11. Door input monitoring	5 Seconds	10 Seconds	60 Seconds
12. Auto rearming	Disabled	Enabled	
13. Door unlock pulse	Single	Double	
14. Arming chirps	Normal	Silent	
15. Extended parking lights	Off	On	
16. Disarm chirp	Normal	Silent	

1. Horn Chirps W/ Arm and Disarm

Selects one of three modes: Normal, Horn Chirps, And Horn Chirps W / Warn.

Normal: When Selected, the horn will honk only when the alarm is triggered.





Programming Options:

Horn chirps: When selected, the horn will provide arm/disarm trigger indications, allowing the siren installation to be skipped. Horn Chirps with Warn: when selected, the horn will provide arm/disarm, trigger, and warn-away indications.

2. Arm Mode

Selects one of three modes: Manual Arming or Passive Arming, and the passive arming with Countdown.

Manual arming: The system will only arm when Button 1 is pressed on the transmitter.

Passive arming: Automatically arms the system after the ignition is turned off and a door is opened then closed for 30

<u>Passive arming with countdown</u>: The system will chirp every 2 seconds for 30 seconds, after the ignition is turned off and a door is opened then closed.

3. Passive Door Locking

Disabled: The doors will lock only when Button 1 is pressed on the transmitter.

Enabled: The system automatically locks the doors after the ignition is turned off and a door is opened then closed for 30 seconds.

Set Override Code: Changes the Emergency Override Code for a higher level of security.

4. Ignition Controlled Locks.

This option allows the system to lock and unlock the doors when the ignition is turned on and off. If lock only is selected, the doors will not automatically unlock when the ignition is turned off.

Programming Options:

5. Aux 1 (Trunk Release).

This option allows three settings of a pulsed, timed or latched output of the Aux 1(Trunk Release) Channel. 0.5 Second Pulse: Activates the Aux 1 wire for 0.5 Seconds. 10 Second Pulse: Activates the Aux 1 wire for 10 Seconds. Latched: Activates the Aux 1 wire for as long as you hold

6. Aux 2.

This option allows three settings of a pulsed, timed or latched output of the Aux 2 Channel.
0.5 Second Pulse: Activates the Aux 1 wire for 0.5 Seconds.

10 Second Pulse: Activates the Aux 1 wire for 10 Seconds.
Latched: Activates the Aux 1 wire for as long as you hold down the button.

7. Door Lock Pulse Length

This option allows you to modify the door lock output pulse to meet your required duration.

1 Second: The door lock output duration is 1 second.

3 Seconds: The door lock output duration is 3 seconds.(For vehicles with vacuum door lock systems.)

0.1 Seconds: The door lock output duration is 0.1 seconds.

10. Ignition Armed Mode.

When this option is enabled, the security system may be manually armed and disarmed while the ignition is on.

11. Door Input Monitoring.

This option allows you to select when the security system starts to monitor your door inputs. This option is helpful with cars that have a factory delayed dome light.



Programming Options:

5 Seconds: The unit waits 5 seconds after the system is armed, before it monitors the door inputs.

10 Seconds: The unit waits 10 seconds after the system is armed, before it monitors the door inputs.

60 Seconds: The unit waits 60 seconds after the system is armed, before it monitors the door inputs.

12. Auto Re-arming.

When selected, the system will automatically re-arm 30 seconds after it is disarmed if the doors have not been opened.

13. Door Unlock pulse.

ome cars require 2 negative pulses to unlock all doors. When this option is activated, the system can be directly interfaced to the vehicle without using any extra parts.

14. Arming Chirps.

Choose to have the siren give a confirmation chirp when arming the system.

Normal: The siren will chirp normally when arming the system. Silent: The siren will not chirp when the system is armed.

15. Extended Parking Lights.

When activated, the parking lights will remain on for 30 seconds after disarming the system.

16. Disarm Chirp.

Choose to have the siren give a confirmation chirp when disarming the system. Normal: The siren will chirp when the system is disarmed.

Silent: The siren will not chirp when the system is disarmed.

Installation and Wiring Diagram





