



ClassicOne & UltraOne

Version 1.2

Keyless Entry and Security

COPYRIGHT: OMEGA RESEARCH & DEVELOPMENT, INC. 1999

Introduction

Welcome to the convenience and security of your Model One system. Model One is designed and manufactured by Omega Research and Development, a world leader in vehicle convenience and security since 1975. Your system offers easy, carefree operation, and the modular design allows its many impressive features to be customized to suit your needs

Therefore, please note that this guide is written to reflect:

- that a power doorlock interface is installed with your system. This interface may vary from one vehicle to the other, and in some cases may involve optional components.
- that the vehicle's horn is used for the audible output; an optional electronic siren is also available and is used with the UltraOne system.
- the Programmable Features in the default settings; the operations of these features, if selected otherwise, are also explained in detail.

The addition of an optional sensor is also affects the exact operations, as several types of auxiliary threat-detection sensing devices are available.

This sophisticated, state-of-the-art product deters theft of your vehicle, and its contents. Model One systems are designed for professional installation, and are available through new car retail outlets only.

Table Of Contents

Introduction <i>Remote Transmitter, LED Status Light & Valet Switch</i>)	3-4
Remote Transmitter Operations (<i>Operations At A Glance</i>)	5
Arming and Disarming the System	
<i>Active Arming & Sensor By-Pass</i>	6-7
<i>Passive Arming</i>	7-8
<i>Disarming</i>	8-9
The Armed System	9-11
The Valet Switch - Valet Mode and Override	
<i>Easy Valet™</i>	11-12
<i>Selectable Code Override</i>	12-14
Remote Panic	14-15
The LED Status Light <i>System Status, ATV™ & Zone Violation</i>	15-17
Audible and Visual Indicators	17-18
Option Output and Additional Output	19
Shock Sensor Port with Prewarn	22
Programming Transmitters	22-25
Programming Features	25-28
Programmable Features	29-39
Limited Lifetime Warranty	Back Cover

Your Model One system has three principal user components: the Remote Transmitter, the red LED Status Light and the Valet Switch.

The Remote Transmitter: Each system is capable of being operated by up to four different remote transmitters. The remote transmitter has four push-button switches, each being labeled as to function. These are:

- The LOCK button arms the security system, which also locks the doors. This button can also operate an additional "option" output.
- The UNLOCK button disarms the security system, unlocking the doors. This operation can be configured to unlock the driver's door only upon one press of the button; then, if desired, all of the doors upon a second press of the button.
- The OPTION button is used to silently arm or disarm the system, and can also operate an additional remote control function such as trunk release.
- The PANIC button is used to easily engage and disengage the panic feature.

The Red LED Status Light: Informs you at a glance of the different conditions the security system is in and also serves as a visual deterrent to break-ins and theft.

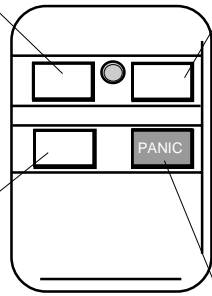
The Valet Switch: Is used to access Valet Mode, which allows the operator to suspend some of the security system's normal functions. The valet switch may also be used, instead of the remote transmitter, to override an armed and activated system.

Remote Transmitter Operations

Pressing and releasing the **LOCK** button arms the security system and locks the doors. Pressing and holding this button for two seconds will, in addition to the arming and locking, also activate the optional additional output.

Pressing and releasing the **OPTION** button twice arms or disarms the system without the confirmation horn chirps. Pressing this button for two seconds can be used to activate an optional function such as trunk release.

Transmitter part number: #104-07



Pressing and releasing the **UNLOCK** button disarms the system and unlocks the doors unless the system is activated. The unlock operation may be configured so that pressing the unlock button once disarms the system and unlocks only the driver's door, and pressing a second time will unlock all of the doors.

Pressing the **PANIC** button for 2 seconds will activate the system, flashing the lights and sounding the horn; a further press of this button will deactivate the system, into the disarmed state. If desired, this button can be programmed to operate the additional optional output instead of the panic feature.

Page - 5

system from the transmitter, but with the indication that a protected circuit is not secure. After arming, the bypassed circuit will automatically be reinstated for protection should it become operative, i.e., if the trunk is closed, 3 seconds later protection of this circuit is restored. When a circuit is in a bypassed state, all other operating circuits will be protected normally. If desired, this feature may be custom programmed to also operate if a door is open upon when arming the system with the transmitter.

Passive Arming: The Model One can be custom programmed to arm itself automatically when the vehicle's last door is closed; this is the **Last Door Arming** feature. If this feature is programmed to operate, the moment the last open door is closed the horn chirps once and the parking lights flash once to confirm that all points of entry are closed, and that the arming sequence has begun. The arming period lasts 30 seconds, and is indicated by a fast-flashing LED status light. Thirty seconds after the last door was closed, the horn will chirp again, the parking lights will flash once, confirming completion of the Last Door Arming sequence. Three seconds later, the LED status light changes to flashing slowly, and the system is fully armed. If a point of entry is reopened before the single chirp and parking light flash occurs at 30 seconds, the Last Door Arming sequence stops, but will start over again when the opened point of entry is closed again. To temporarily prevent the system from Last Door Arming (example: while vehicle is being refueled), you should put the system into Valet Mode or leave the vehicle's door open (in most cases, turning on

Page - 7

Arming and Disarming the System

"Arming" the Model One locks the doors places the security system into a state in which the vehicle is monitored for intrusion attempts. There are two different methods of arming the system: "active" arming by use of the remote transmitter, and automatic, or "passive" arming, which is programmable.

Active Arming: The Model One can always be armed with the remote transmitter, provided the ignition switch is "off" and the system is not in Valet Mode. Simply press the transmitter LOCK button once. The doors will lock, the parking lights will flash once, the vehicle's horn will chirp once, the LED Status Light will begin flashing, and the starter interrupt circuit engages to prevent any attempt to start the vehicle. When arming the UltraOne system, the dome light also flashes once. Three seconds after the horn chirp the system becomes fully armed, as indicated by the LED status light changing from a rapid flashing to a slow flashing. Once armed, the system will activate if an intrusion attempt is detected. If desired, the system may be armed without the normal confirmation horn chirp by pressing and releasing the transmitter's OPTION button twice within 3 seconds.

Upon active arming, if any protected circuit except for the doors is inoperable, the horn will chirp three times and the parking lights will flash three times. This is **Arming Bypass**, and when it occurs, protection for the affected circuit will be temporarily bypassed. For example, if the trunk is left open, you can still actively arm the

Page - 6

the dome light will suffice). The "Last Door Arming" feature offers a high level of security, since you do not have to remember to arm the system each time you exit from your vehicle, and may qualify you for an insurance discount.

A separate programmable feature may be utilized to have the doors automatically lock when the 30 second horn chirp and light flash occurs. The previously mentioned Arming Bypass feature cannot operate with Last Door Arming; it only works when actively arming the system from the transmitter because all protected entries must be closed to initiate Last Door Arming. Of course, you can still arm the system instantly from the remote transmitter at any time during the 30 second Last Door Arming sequence.

Disarming: Press and release the remote transmitter's UNLOCK button once to disarm the system and unlock either the driver's door only, or all of the doors. How the doors unlock is determined by the installation configuration of the doorlock interface. Disarming is confirmed by the horn chirping twice and the parking lights turning on for 30 seconds to illuminate the way to your vehicle; the UltraOne will also illuminate the interior lights. During this 30 second period of illumination, if the ignition switch is turned "on" the lights will immediately turn off.

If the transmitter is not available or inoperative, the system must be disarmed by use of the Selectable Code Override, which is explained in detail on pages 12-14.

Page - 8

However, if the security system was activated while you are away, the disarm confirmation will be 4 horn chirps, and the lights will flash 4 times before staying on for 30 seconds. The system will have this disarming response until the ignition switch is turned "on". Also, anytime the security system has been activated, upon disarming the LED status light will indicate which of the protected zones caused the activation by flashing a code of numbered flashes between pauses. Again, this indication remains until the ignition switch is turned "on".

The system may be disarmed without the normal confirmation chirps by pressing and releasing the transmitter's OPTION button twice within 2 seconds.

The Armed System

When the Model One is armed, the LED status light flashes continuously in a slow and steady manner. In this state, any violation of a protected entry or optional sensor will instantly activate, or "trigger" the system. If the system is activated:

- The vehicle's horn or the optional electronic siren will sound. The horn will repeatedly sound for one second, then pause for one second. Every ten seconds, the horn will stop sounding completely for 5 seconds; this prevents the horn from overheating. This audible output will occur for the duration of the activated cycle. The optional siren, used with the UltraOne, features six different tones, and every 5 seconds the siren will change the tone to generate more attention to the vehicle.
- The parking lights will flash on and off repeatedly.

Page - 9

The Valet Switch - Valet Mode and Override

The valet switch, which is typically contained within the same housing as the LED status light, allows the operator to suspend certain functions of the Model One's normal operations. It is also used in an emergency override disarming of an armed and activated system, should the transmitter be unavailable or inoperative.

These are two separate and distinct operations: the first is **Easy Valet™**, whereby a *disarmed* system may be placed into an "off" or "standby" condition (Valet Mode) without use of the ignition key; the second operation is **Selectable Code Override**, which will disarm an *armed or activated* system and requires the use of the ignition key. The valet switch is also used in transmitter and features programming operations, which are described in later sections of this guide.

Easy Valet™: This unique feature can be utilized anytime the security system is in the disarmed state. Easy Valet™ is unique because other security systems require the ignition switch to be "on" to enter Valet Mode, but with the Model One, the ignition can be either "on" or "off", so the ignition key is not required.

Whenever the security system is disarmed, simply press and hold the valet switch for two seconds to enter the Valet Mode. The system will confirm it is entered Valet Mode with two horn chirps and the LED status light will illuminate and stay on constantly. The system will remain in Valet Mode if the ignition is turned "on" or "off", or even if the system is disconnected from the vehicle's electrical system. This is useful for servicing the vehicle; unless in a Valet Mode, the security system will

Page - 11

- The doors will relock. If opened, relocking will occur when the door is closed.

The horn will sound and lights will flash for 60 seconds, unless you disarm the system with the transmitter by pressing the UNLOCK button. If needed, the valet switch and ignition key may be used to disarm the system (Selectable Coded Override; pages 12-14). Please note that while the system is activated, pressing the UNLOCK button will only disarm the system, and not unlock the doors; simply press UNLOCK again to unlock the doors.

If all protected entries are secure at the end of 60 seconds, the system will stop itself and rearm automatically to detect another entry attempt. If there is a protected entry still open, or a sensor still in a violated state at the end of 60 seconds, the system will reactivate for two more 60 second cycles. If this occurs, the system will still stop itself after a total of 3 minutes and rearm automatically, and ignore the open entry or violated sensor circuit while protecting the other circuits. Should the entry be closed or the sensor return to normal, protection will be reinstated for the affected circuit.

After the security system is activated, the confirmation upon disarming will no longer be the normal two horn chirps, and the lights staying on for 30 seconds. Instead, the system will have 4 horn chirps and the lights will flash 4 times before staying on for 30 seconds. Additionally, the LED Status Light will change to flashing two to five times between pauses, indicating which protected zone activated the system. The LED Status Light will continue flashing this Violation Code until the ignition key is turned "on".

Page - 10

activate immediately when power and ground are first applied, such as when reconnecting a battery.

While in the Valet Mode, the remote transmitters can still operate the panic feature, the power door locks, or the trunk release, if equipped. Valet Mode prevents the system's alarm from being armed; using the transmitter to lock the doors still engages the starter interrupt, resulting in the LED status light flashing in a normal manner as an indication of this. To subsequently start the vehicle, either the transmitter must be used to unlock the doors, or valet switch must be used to disengage the starter interrupt. Additionally, the doors will lock when the ignition is turned "on" and unlock when it is turned "off", if the system is programmed to do so. To remove the system from the Valet Mode, simply momentarily press the valet switch. The system will instantly revert to the disarmed condition. To confirm that the system has exited the Valet Mode, the LED status light will be extinguished. Remember, Easy Valet™ only operates when the system is in a disarmed state - an armed state, or if the doors are locked from using the transmitter, requires using the Selectable Code Override.

How to Disarm the System Without Using the Transmitter

Selectable Code Override: In the event the transmitter is lost, damaged, or it is otherwise inoperable, the valet switch and your ignition key may be used to disarm the system. Selectable Code Override offers a high level of security because, in

Page - 12

addition to requiring the ignition key, one to two separate stages of pressing the Valet Switch may also be custom programmed as a requirement to accomplish the disarming of the system. Each of these stages may be further customized by programming multiple presses of the valet switch. This programmable feature, which is explained in detail on pages 29-30), allows you to further enhance the effectiveness of your security system by "hardening" its resistance to being defeated. The factory-set default for Selectable Code Override is one press at stage 1, and NO press at stage 2; this is the most convenient and user-friendly setting. Therefore, the following step-by-step instructions reflects first the default setting, and then the following text continues to explain the custom-programmed setting:

Step 1 - While the system in the armed condition, enter via the driver's door. Be aware that the system will activate when the door is opened, sounding the horn, flashing the parking and dome lights, and locking the doors if the door entered is closed again before disarming the system.

Step 2 - Using your key, turn the ignition "on". The following step must be performed within the next 10 seconds.

Step 3 - Momentarily press the valet switch equal to the number programmed for stage #1; the factory setting is one. *If the factory default setting of 1 and 0 presses is retained, the system will disarm.* The disarming will be accompanied by four horn chirps.

Page - 13

Pressing and holding the PANIC button for 2 seconds will activate this feature, sounding the horn, flashing the parking lights for 60 seconds, and locking the doors.

After 60 seconds, the system will stop and reset. The car's doors will remain locked, and the system will remain in the armed condition. If the system was in Valet Mode when Remote Panic was engaged, the system will be in an armed state if panic is stopped or if it is allowed to reset at 60 seconds. If you wish to stop the Panic feature during the 60 second period, press either the PANIC, LOCK or UNLOCK button. When doing this, pressing PANIC leaves the system armed without a door lock operation; pressing LOCK to stop panic will leave the system armed with locked doors, and pressing UNLOCK will leave the system disarmed with unlocked doors. If desired, the PANIC button may be used to operate the Additional Output; this programmable feature is described on page 39.

The LED Status Light

There are 12 distinct indications that the LED Status Light can show in normal daily use; these are categorized into three areas: Security System Status, Automatic Transmitter Verification™, and Zone Violation.

System Status: The LED status light is a visual indicator of what state the security system is in at any given time. It is normally positioned in a location that is easily observed by the driver. There are 4 possible status conditions that the system can be in, and are reflected by the LED status light:

Page - 15

If the valet switch is pressed an incorrect number of times, or if stage #2 presses have been programmed, the system will not disarm, but pause and chirp the horn before continuing to sound. When a stage #2 entry is required, at this point the stage #2 entry must be made within 10 seconds. After a failed attempt to achieve Selectable Code Override, the ignition switch must be turned "off", then "on" again before another attempt is made. If two failed Selectable Code Override attempts are made, the system will ignore any further presses of the valet switch for two minutes. If this occurs, the system will reset to the armed state, then sound the horn twice after 2 minutes to indicate that another attempt may be made to achieve Selectable Code Override. See pages 29-30 for further explanation of the Selectable Code Override.

Once the system is disarmed, if Valet Mode is desired, use the Easy Valet™ procedure to place the system into Valet Mode. Remember, if the Selectable Code Override factory setting of "stage 1, one valet switch press and stage 2, no valet switch press" is still present, simply pressing the valet switch once within 10 seconds of turning the ignition switch "on" will override and disarm the system.

Remote Panic

Your Model One system includes a **Remote Panic** feature. In the event of attack or assault, or any time you feel threatened or in need of assistance, you can use your remote transmitter to activate this feature. This feature operates regardless of the system's status, or if the ignition switch is "on" or "off".

Page - 14

- Off = The system is disarmed and not performing any automatic functions.
- On Constant = The system is in the Valet Mode.
- Flashing Slow = The system is fully armed.
- Flashing Fast = The Last Door Arming or Automatic Rearming features are in progress. This indication also occurs during the 3 second arming delay (a 45 second arming delay is optional).

Automatic Transmitter Verification™: After the ignition is turned "on", the LED status light will flash to indicate the number of transmitters programmed to operate the system. For example: two flashes and a pause indicates that only two transmitters are programmed to operate the system. This display is shown for 10 seconds every time the ignition switch is turned "on". More importantly, for 48 hours after any transmitter programming has occurred, the horn will chirp for two seconds and the LED status light will flash for 90 seconds. This warning protects against unauthorized transmitters from being added to your system.

Zone Violation: If the system is activated, the LED status light will start to flash and pause the following coded sequences to indicate which protected circuit caused the activation. This will be seen at all times, until the ignition switch is turned "on", which will clears the system's memory. The unit's memory can store four different codes, and if multiple violations involving different zones occurred, the different

Page - 16

zones will be shown in the order of the violation.

- Flash-2x & Pause = System was activated from the hood or trunk circuit.
- Flash-3x & Pause = System was activated from the door circuit.
- Flash-4x & Pause = System was activated from the optional sensor input.
- Flash-5x & Pause = System Prewarned from the optional sensor input.

Audible and Visual Indicators

This system has programmable audible output which allows utilization of the vehicle's existing horn; as an option, an optional electronic siren may be used, as with the UltraOne. Also, the vehicle's parking lights and, in some cases, the interior light are utilized to indicate a number of events or processes associated with the system's operation:

- One horn chirp and one light flash: *The system has started a passive Last Door Arming countdown and will become armed after the countdown expires. This chirp indicates that the starter interrupt, if present, will engage and the doors will lock, if programmed to do so, when the system becomes armed 30 seconds later.*
- One horn chirp, one light flash, and the doors lock (if programmed): *The system has armed passively from the optional Last Door Arming feature or actively from*

Page - 17

Option Output ("Trunk Release") and Additional Output

Your Model One vehicle security system can have up to two additional outputs which offer additional convenience features. The first of these outputs, the "**Option Output**", is standard with the UltraOne and is programmed to disarm the system when it is utilized. The most common use for the Option Output is remotely-activated trunk release. This output is activated by pressing and holding the transmitter's OPTION button for two seconds, except when the ignition switch is "on". However, this output may be operated when the ignition switch is "on" if the vehicle has a door opened. The Option Output is also operable while the system is in Valet Mode.

If the OPTION button is pressed for 2 seconds and then released, the output will be momentary. If the OPTION button is held depressed, the output will remain for as long as the button is held, for up to 15 seconds. The extended output operation is useful for custom applications.

The further **Additional Output** is activated by pressing and holding the transmitter's LOCK button for 2 seconds. Of course, the system will arm as soon as the LOCK button is pressed. This output can also be activated for up to 15 seconds, as long as the transmitter's LOCK button is held. This output is ideal for an optional remote starting unit. If desired, the Additional Output can be operated by the PANIC button; this is a programmable feature, and explained on page 39.

Page - 19

the transmitter. The starter interrupt, if present, has engaged and the doors have locked. The system will become fully armed 3 seconds later.

- One horn chirp after the previous arming chirp: *The optional sensor circuit is bypassed from pressing the transmitter OPTION button within 3 seconds after pressing the transmitter LOCK button to arm the system.*
- Two horn chirps, the lights stay on for 30 seconds and the doors unlock: *The system has just disarmed.*
- Two horn chirps and no light activity: *The system has just entered the Valet Mode.*
- Four horn chirps, four light flashes before staying on for 30 seconds and the doors unlock: *The system has just disarmed and was activated while you were away. The system will have this disarming confirmation until the ignition is turned "on".*
- Three horn chirps, the lights flash three times and the doors lock: *The system has been actively armed with a protected entry open or an optional sensor activated.*
- Horn sounding, pausing every 10 seconds, and lights flashing on and off: *The system has detected an intrusion attempt and is in an activated state.*
Note: Optionally, and with the UltraOne, the siren will continually sound, changing tones every 5 seconds.
- A series of horn chirps lasting two seconds after the ignition switch is turned "on": *The Automatic Transmitter Verification™ feature (page 23) has been activated. This will occur for 48 hours after installation or transmitter programming.*
- A series of horn chirps lasting 1.5 seconds while the system is armed: *The Prewarning feature has been activated. This will also relock the doors.*

Page - 18

LIMITED LIFETIME WARRANTY

Products manufactured and sold by OMEGA RESEARCH & DEVELOPMENT, INC. (the Company), are warranted to be free from defects in materials and workmanship under normal use. If a product sold by the Company proves to be defective, the Company will repair or replace it free of charge within the first year and thereafter all parts to be repaired will be free with only a nominal charge for Omega Research and Development, Inc.'s labor and return shipping, to the original owner during the lifetime of the car in which it was originally installed.

All products for warranty repair must be sent postage prepaid to Omega Research & Development, Inc., P.O. Box 508, Douglasville, Georgia 30133, with bill of sale or other dated proof of purchase. This warranty is nontransferable and does not apply to any product damaged by accident, physical or electrical misuse or abuse, improper installation, alteration, any use contrary to its intended function, unauthorized service, fire, flood, lightning, or other acts of God.

This warranty limits the Company's liability to the repair or replacement of the product. The Company shall not be responsible for removal and/or reinstallation charges, damage to or theft of the vehicle or its contents, or any incidental or consequential damages caused by any failure or alleged failure of the product to function properly. Under No Circumstances Should This Warranty, Or The Product Covered By It, Be Construed As A Guarantee Or Insurance Policy Against Loss. The Company neither assumes nor authorizes any person or organization to make any Warranties or assume any liability in connection with the sale, installation, or use of this product.

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

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Features Programming Checklist

This checklist helps when programming features. Before attempting feature programming, please carefully read pages 29-39 to become familiar with the features and the programming procedure. Mark each applicable box with "✓" next to the feature to be changed before entering Features Programming Mode. As each feature is programmed, change its mark to "X".

Step 1 - Turn the ignition "off", and press the valet switch 5 times. (the system will respond by briefly sounding the horn)

Step 2 - Enter the Selectable Code Override. (the system will respond by sounding the horn for a short period, followed by two chirps)

Step 3 - Press the valet switch the same number of times as the feature number. (the system will acknowledge the valet switch entry by repeating the same number of chirps)

Step 4 - Press the transmitter's LOCK button to turn the feature "on", or press the UNLOCK button to turn the feature "off". (turning the feature "on" is indicated by one horn chirp; turning the feature "off" is indicated by two horn chirps)

Repeat - Steps 3 and 4 for each feature to be changed

#	FEATURE	DEFAULT
1	<input type="checkbox"/> Selectable Coded Override	1 & 0 (see page 29)
2	<input type="checkbox"/> Last Door Arming	OFF
3	<input type="checkbox"/> Automatic Rearming	OFF
4	<input type="checkbox"/> Starter Interrupt Circuit	ON
5	<input type="checkbox"/> Automatic Starter Interrupt	OFF
6	<input type="checkbox"/> Ignition Activated Override	OFF
7	<input type="checkbox"/> Doors Lock With Last Door Arming	OFF
8	<input type="checkbox"/> Doors Lock With Automatic Rearming	OFF
9	<input type="checkbox"/> Doors Lock With Ignition	ON
10	<input type="checkbox"/> Ignition OFF Unlock #1	ON
11	<input type="checkbox"/> Ignition OFF Unlock #2	ON
12	<input type="checkbox"/> Open Door Bypass To Previous Three Features	ON
13	<input type="checkbox"/> Confirmation Chirps	ON
14	<input type="checkbox"/> Confirmation Chirps In Valet Mode	OFF
15	<input type="checkbox"/> Activated Alarm Cycle	60 Seconds (LOCK)
16	<input type="checkbox"/> Lights On Upon Disarm	30 Seconds (UNLOCK)
17	<input type="checkbox"/> Disarm Alarm Upon Trunk Release	ON
18	<input type="checkbox"/> Doorlock Pulse Time	.8 second (LOCK)
19	<input type="checkbox"/> Double Unlock Pulse	OFF
20	<input type="checkbox"/> Arming Delay	3 Seconds (LOCK)
21	<input type="checkbox"/> Pulsed Horn / Steady Siren Output	Pulsed Horn (LOCK)
22	<input type="checkbox"/> Loud or Soft Confirmation Chirps	Loud (LOCK)
23	<input type="checkbox"/> Total Closure Lock Output	OFF
24	<input type="checkbox"/> Alarm Functions Bypass	OFF
25	<input type="checkbox"/> Ignition-Activated Anti-Carjacking Protection	OFF
26	<input type="checkbox"/> Door-Activated Anti-Carjacking Protection	OFF
27	<input type="checkbox"/> Open Door Warning Upon Arming	OFF
28	<input type="checkbox"/> PANIC Button Operates "Panic" or Additional Output	Panic (LOCK)

Shock Sensor Port with Prewarn

Your Model One system features a port which allows an optional auxiliary shock sensor to easily be added to increase the effectiveness of your system when it is armed. A light shock or impact to the vehicle will produce a "Prewarn", which chirps the horn and locks the doors. A heavier shock or impact will fully activate the security system. Other sensors are available which include those that detect changes in atmospheric pressure within the vehicle, and radar proximity sensors that can detect moving objects inside and outside the vehicle. If the system does include a sensor, it may be temporarily bypassed when arming by pressing the OPTION button within 5 seconds after pressing the LOCK button to arm the system. If the system is activated by the optional sensor, the Zone Violation feature will flash the LED status light four times between pauses and Prewarn activation will produce five flashes.

Programming Transmitters

Each remote transmitter has as part of its operation a unique digital code which identifies it as an authorized controller to the processor within the Model One unit. Your Model One system is capable of being operated by up to four different remote transmitters, which must be programmed to operate the system. The process of programming additional transmitters is relatively easy, creating an inherent weakness shared by virtually every remote controlled device. Your Model One system,

however, has patented technology, **Automatic Transmitter Verification™**, which eliminates this weakness.

In normal daily operation, every time the ignition switch is turned "on", the LED status light indicates how many remote transmitters are capable of operating your system. For example: two flashes and a pause indicate that only two transmitters are coded to operate your system; this display occurs for a period of 10 seconds every time the ignition switch is turned "on".

Note: For the first 48 hours after your new system is installed, every time the ignition switch is turned "on", the horn will chirp rapidly for two seconds and the LED status light will flash the number of transmitters between pauses for 90 seconds. This will also occur in the event of a new transmitter code being programmed into the system.

48 hours after installation, or transmitter programming activity, the audible and visual **ATV Warning** will revert to the 10 second visual display upon turning the ignition switch "on".

In the event the system alerts you to a recent transmitter addition, you should immediately reprogram your transmitters to the system, which will effectively erase any unauthorized transmitters.

Using a simple programming process, extra or replacement transmitters are easily added to your security system. To access the **Transmitter Programming Mode**, follow this procedure:

Step 1 - Turn the ignition "on". Within 7 seconds, press the valet switch 5 times. The system will respond by briefly sounding the horn once.

Step 2a - Factory-set Selectable Code Override of one and no presses of the valet switch: press the valet switch equal to the Selectable Code Override number for stage #1 (the factory setting is one press). The system will respond by briefly sounding the horn and then two chirps, in which case proceed to Step 4.

Step 2b - Customized Selectable Code Override: press the valet switch equal to the Selectable Code Override number for stage #1. The system will respond by briefly sounding the horn and then one chirp. You now have 8.5 seconds to initiate the Step 3.

Step 3 - Momentarily press the valet switch equal to the Selectable Code Override number programmed for stage #2. The system will acknowledge the entry by sounding the horn and then two chirps.

Step 4 - Now press the LOCK button on each transmitter to programmed. The system will respond to each with a brief sounding of the horn and a chirp, with subsequent chirps increasing in number as each transmitter is entered; the maximum being four chirps after the brief sounding of the horn when the fourth transmitter, if presented, is acknowledged.

Page - 24

Step 2b - If the system has had the Selectable Code Override custom-programmed, once stage #1 been properly entered (which can be up to nine valet switch presses) the system will acknowledge the entry by sounding the horn for a short period, then one chirp. You now have 8.5 seconds to initiate stage #2 of completing the entering of the Selectable Code Override. Momentarily press the valet switch equal to the number programmed for stage #2. The system will acknowledge a successful entry by sounding the horn for a short period, then two chirps.

Step 3 - You now have 15 seconds in which access the desired feature. This done by pressing the valet switch the number of times that equal to feature number. For example, to utilize the optional siren, the audible output must be changed from pulsed to steady. This is the twenty-first feature on the list, and therefore to access it, you must press the valet switch 21 times. The system will acknowledge the valet switch entry by chirping the horn a like number of times equal to the valet switch presses; in this case 21 chirps will indicate access to the twenty-first feature.

Step 4 - You have 15 seconds to change the chosen feature. Press the transmitter's LOCK button to turn the feature "on", or press the UNLOCK button to turn the feature "off". Turning the feature "on" is indicated by one horn chirp; turning the feature "off" is indicated by two horn chirps.

Page - 26

Turning the ignition switch "off", or 15 seconds of no programming activity, will cause the system to exit the Transmitter Programming Mode, which the system will indicate by briefly sounding the horn twice.

Programming Features

Your Model One vehicle security system has 28 features which may be programmed to suit your needs via the **Features Programming Mode**. This is accessed by turning the ignition switch "off" and pressing the valet switch five times. Once in Features Programming Mode, the valet switch is further used to specify which of the 28 features is to be changed, then the transmitter is used to change the selected feature's setting.

To access the Features Programming Mode, follow these steps:

Step 1 - Within 5 seconds of turning the ignition "off", momentarily press the valet switch 5 times. The system will respond by briefly sounding the horn. The Selectable Code Override must be entered within the next 10 seconds.

Step 2a - Press the valet switch the correct number of times to enter the Selectable Code Override. The factory-set default is one press for stage #1 and no press for stage #2. If the system is configured with the default setting, it will respond by sounding the horn for a short period, followed by two chirps. In this case proceed directly to Step 3.

Page - 25

Once a particular feature has been configured to the desired setting, the next feature to be programmed may be accessed by repeating Step 3; i.e. press the valet switch equal to the number of the next feature. As each is programmed, proceed to access each in turn for programming until finished.

If 15 seconds expire without programming activity (i.e. - not pressing the LOCK or UNLOCK buttons or pressing the valet switch to select another feature), the system will exit the Features Programming Mode, which is indicated by the horn sounding twice. If two failed attempts are made to enter the Features Programming Mode, two minutes must expire before another attempt can be made.

The 28 Programmable Features, their factory-set default settings, and the transmitter button which equals the default setting are as follows:

- #1 Selectable Coded Override: Default 1 & 0 (see pages 29-30).
- #2 Last Door Arming: Default OFF (UNLOCK).
- #3 90 Second Automatic Rearming: Default OFF (UNLOCK).
- #4 Starter Interrupt Circuit: Default ON (LOCK).
- #5 90 Second No Ignition Starter Interrupt: Default OFF (UNLOCK).
- #6 Ignition Activated Override: Default OFF (UNLOCK).
- #7 Doors Lock With Last Door Arming: Default OFF (UNLOCK).
- #8 Doors Lock With 90 Second Automatic Rearming: Default OFF (UNLOCK).
- #9 Doors Lock With Ignition: Default ON (LOCK).
- #10 Ignition OFF Unlock #1: Default ON (LOCK).

Page - 27

- #11 Ignition OFF Unlock #2: Default ON (LOCK).
- #12 Open Door Bypass To Previous Three Features: Default ON (LOCK).
- #13 Confirmation Chirps: Default ON (LOCK).
- #14 Confirmation Chirps In Valet Mode: Default OFF (UNLOCK).
- #15 Activated Alarm Cycle: Default 60 Seconds (LOCK).
- #16 Lights On Upon Disarm: Default 30 Seconds (UNLOCK).
- #17 Disarm Alarm Upon Trunk Release: Default ON (LOCK).
- #18 Doorlock Pulse Time: Default .8 second (LOCK).
- #19 Two Unlock Pulses: Default OFF (UNLOCK).
- #20 Arming Delay: Default 3 Seconds (LOCK).
- #21 Pulsed Horn / Steady Siren Output: Default Pulsed Horn (LOCK).
- #22 Horn Chirp Loud or Soft: Default Loud (LOCK).
- #23 Total Closure Lock Output: Default OFF (UNLOCK).
- #24 Alarm Functions Bypass: Default OFF (UNLOCK).
- #25 Ignition-Activated Anti-Carjacking Protection: Default OFF (UNLOCK).
- #26 Door-Activated Anti-Carjacking Protection: Default OFF (UNLOCK).
- #27 Open Door Warning Upon Arming: Default OFF (UNLOCK).
- #28 PANIC Button Operates "Panic" or Additional Output: Default Panic (LOCK).

The following pages explain each feature in detail, and the centerfold pages of this guide contain a checklist designed to assist in the programming of features.

Page - 28

resumes, and the "stage 2" entry, nine presses must be entered, which achieves an override and disarms the system. However, if either entry is incorrect, the system will not disarm. Another override attempt may be made, but two consecutive incorrect entries will cause the system to ignore any further attempts for two minutes. If a customized valet switch entry is desired for the Selectable Code Override, please note that the "stage 2" is optional; either the first stage only may be used, or both the first and second stages.

To custom program the Selectable Code Override from the default setting, follow Steps 1, 2, and 3 on pages 25-26. At Step 4, press and release the transmitter's LOCK button a number of times equal to the desired Selectable Code Override for stage 1. The system will respond to each transmitter button press with a horn chirp. After pressing the transmitter button the desired number of times, wait for the system to chirp the horn an equal number of times. Now press and release the transmitter's UNLOCK button a number of times equal to the desired Selectable Code for stage 2. The system will again chirp the horn in the same fashion as the code entered for stage 1. Should the system have an unknown customized Selectable Override Code already entered, the factory-set default of one press and no press can be obtained by resetting the system: on the bottom of the system control module is small round access opening with two solder contacts visible below. Use a small slotted screwdriver to short the solder contacts together until the system responds with a brief sounding of the horn, indicating a successful reset.

Page - 30

Programmable Features

#1 Selectable Code Override: Default 1 & 0. The valet switch is an important part of your Model One system; it allows an emergency override to disarm the system in place of the remote transmitter, and it is crucial to the programming of transmitters and features. Your Model One's advanced design includes this programmable feature, which allows you to configure the valet switch operation for the most convenient ease of use, or for personally-customized maximum security.

The Selectable Code Override must be entered as part of three of the Model One's operations: to achieve an override disarming of the system, to access Transmitter Programming Mode and Features Programming Mode. For a more secure access to these operations, the vehicle owner may select the number of valet switch presses, from 1 to 9 presses, which are needed to achieve the successful entry of the Selectable Code Override. Additionally, this customized number of valet switch presses may be "single stage" or "double stage".

As an illustration of this feature, with the default setting of "one and no presses", to disarm the system without the transmitter, after entering the vehicle, the ignition switch is turned "on", and the valet switch is pressed once, at which the system will instantly disarm. With a custom-programmed Selectable Code Override of, for example, "3 and 9 presses", upon entering the vehicle and turning the ignition "on", the valet switch must be pressed three times. This causes the audible output (i.e. - horn or siren) to stop sounding and emit one chirp. The audible output then

Page - 29

#2 Last Door Arming: Default OFF. This feature automatically arms the system upon your exiting the vehicle, and is explained in detail on pages 7-8. If desired, having the doors lock when the system automatically arms may be added to this feature's operation. The Last Door Arming feature is independent of the Automatic Rearming Feature.

#3 Automatic Rearming: Default OFF. This feature ensures that your Model One is always armed. It is possible, on occasion, to accidentally and unknowingly disarm the system by having an object press the transmitter button while in a pocket or purse. If this feature is programmed to operate, the system will automatically rearm itself 90 seconds after being disarmed, unless the ignition switch is turned "on" or a door is opened. Also, if feature #7 (Doors Lock With Automatic Rearming) is utilized, the doors will also lock upon the system automatically rearming.

In daily operation, upon disarming the system, Automatic Rearming is confirmed by a fast flashing LED status light. Once the ignition switch has been turned "on", the system will stay disarmed condition until it is armed again from the transmitter or by Last Door Arming. Opening a door will also stop Automatic Rearming; it will be cancelled completely if Last Door Arming is off, and temporarily suspended while the door is open if Last Door Arming is turned on.

#4 Starter Interrupt Circuit: Default ON. This feature controls the starter interrupt circuit, which operates if this feature is on. Programming this feature off turns off the starter interrupt output, leaving all other system operations fully functional.

Page - 31

#5 Automatic Starter Interrupt: Default OFF. Programming this feature "on" will cause the starter interrupt circuit to automatically engage 90 seconds after the ignition switch is turned "off", and also 90 seconds after disarming unless the ignition switch is turned "on" during the 90 second period. This feature controls the starter interrupt circuit independently of all other system functions; the engagement of starter interrupt will occur even if the system is in an otherwise disarmed state. Once the starter interrupt output is activated by this feature, the system must be armed, then disarmed with the transmitter, or placed into the Valet Mode to disengage it in order to start the vehicle.

#6 Ignition Activated Override: Default OFF. This feature allows an activated system to be overridden and disarmed by simply turning the ignition switch "on" within 10 seconds of the system being activated. After the 10 second period, the Selectable Code Override only can be used to disarm the system in place of the remote transmitter.

#7 Doors Lock With Last Door Arming: Default OFF. This feature adds the locking of the doors to feature #2; when the system automatically arms 30 seconds after the vehicle's last door is closed, the doors will also lock.

8) Doors Lock With Automatic Rearming: Default OFF. This feature adds the locking of the doors to feature #3; if the system is allowed to automatically rearm 90 seconds after being disarmed from the transmitter, the doors will also lock.

Page - 32

configured to unlock only the driver's door upon disarming with the transmitter, this feature may be utilized. This feature, when activated, will unlock all of the doors, after the driver's door, when the ignition switch is turned "off".

#12 Open Door Bypass To Previous Three Features: Default ON. This feature only operates in conjunction with the previous three feature's ignition-activated door locking operations. Programming this feature on, along with the any of the previous three features, will cancel any automatic doorlock operations associated with the ignition switch if a door is open at the time the ignition switch is turned "on" or "off". For example, if the system is programmed to unlock the doors when the ignition is turned "off", if a door is opened before turning the ignition "off", the doors will not automatically unlock.

#13 Confirmation Chirps: Default ON. This feature removes the audible arming and disarming confirmation horn chirps (or optionally, siren chirps). This feature is the "full time" removal of the confirmation chirps; the silent operation may be achieved on a onetime temporary basis by pressing and releasing the transmitter's OPTION button twice when arming or disarming the system. Even if this feature is used to remove the confirmation chirps, the audible Automatic Transmitter Verification™ feature will still operate as described on page 23.

#14 Confirmation Chirps While In Valet Mode: Default OFF. While the system is in the Valet Mode, the transmitter will still remotely lock and unlock the vehicle's

Page - 34

#9 Doors Lock With Ignition: Default ON. This feature automatically locks the vehicle's doors 1.75 seconds after the ignition switch is turned "on".

#10 Ignition "Off" Unlock #1: Default ON. This feature automatically unlocks either the driver's door or all of the vehicle's doors instantly when the ignition switch is turned "off". Please note that the exact operating parameters of this feature depends upon the installation configuration of the Model One system and your vehicle's power door lock system. As previously noted, this system is capable of being configured to unlock only the driver's door upon disarming. Then, if desired, pressing the transmitter's UNLOCK button again anytime thereafter (unless the system is armed again or the ignition switch is turned "on") will unlock all of the doors. Therefore, this feature can operate one of two ways: first, if all of the doors unlock upon disarming the system with the transmitter, this feature will unlock all of the doors when the ignition is turned "off". Second, if your vehicle is configured to unlock the driver's door only upon disarming, this feature will unlock only that door upon turning the ignition "off". Please consult with the installer as to the feasibility of adding the driver's door only unlock configuration to your vehicle, as power door locking systems differ in compatibility to this feature. If the second configuration discussed above is present, the next feature allows the option of unlocking of all of the doors when the ignition is turned "off".

#11 Ignition "Off" Unlock #2: Default ON. As discussed in the previous feature, your security system is capable of a second door unlock output. If your system is

Page - 33

doors. This feature adds the confirmation horn chirps if the transmitter is used to lock or unlock the doors while the system is in Valet Mode.

#15 Activated Alarm Cycle 60 or 30 Seconds: Default 60 Seconds. This feature offers a choice of activated alarm durations. When programming, please note that pressing the remote transmitter's LOCK button sets the cycle at 60 seconds, and pressing the UNLOCK button sets the 30 second time.

#16 Lights On Upon Disarm 5 or 30 Seconds: Default 30 Seconds. This feature sets the length of time that the parking (and interior lights with the UltraOne) stay on upon disarming the system. The longer time allows inspection of the area around and inside the vehicle when dark. When programming, please note that pressing the remote transmitter's LOCK button sets the lights being on for 5 seconds, and pressing the UNLOCK button sets the 30 second time.

#17 Disarm Alarm Upon Trunk Release: Default ON. This Feature automatically disarms the system when the OPTION button is pressed to operate the Option Output, or trunk release. If this Feature is turned off, the trunk release will still operate, but the system will remain armed. When this feature is on, activating the trunk release will be accompanied by two horn chirps to confirm disarming; when off there are no confirmation chirps.

Page - 35

#18 Doorlock Pulse Time .8 or 3 Seconds: Default .8 Second. Certain vehicle's power door locking systems require a longer output pulse to operate properly. This feature allows the installer the flexibility to accommodate such systems. When programming, please note that pressing the remote transmitter's LOCK button sets the 3 second pulse, and pressing the UNLOCK button sets the .8 second pulse.

#19 Double Unlock Pulse: Default OFF. This is another power door lock-related feature provided for the installer's use. Some newer vehicles require a double pulse to remotely unlock the doors and/or to disarm a factory-equipped security system.

#20 3 or 45 Second Arming Delay: Default 3 Seconds. Some installation situations require an extra amount of time for the system to become fully armed. Where needed, this feature may be changed to delay the full arming of the system to 45 seconds. Please note when the 45 second arming delay is used, it adds 45 seconds to all three forms of arming: active arming from the transmitter, Last Door Arming, and Automatic Rearming. When programming, please note that pressing the remote transmitter's LOCK button sets the 3 second arming delay, and pressing the UNLOCK button sets the 45 second delay.

#21 Pulsed Horn or Steady Siren Output: Default Pulsed Horn. This feature allows the choice using of an optional electronic siren for the audible output of the security system instead of the vehicle's horn. When programmed for use with a

Page - 36

operations and features. When this feature is programmed on, the Model One has remote keyless entry operation only.

#25 Ignition-Activated Anti-Carjacking Protection: Default OFF. Your Model One offers two separate forms of anti-carjacking protection in this and the following features. When this feature is utilized, you must press the valet switch once within 60 seconds after turning the ignition switch "on" and starting the vehicle.

If this is not done within this period, the system will begin chirping the horn 53 seconds after the ignition was turned "on". These chirps are to warn you that the anti-carjacking protection is about to engage; pressing the valet switch before the 60 seconds expires will stop the anti-carjacking protection feature. Once starting, the chirping will last for 7 seconds; unless the anti-carjacking feature is cancelled as described, once 60 seconds has passed from the time the ignition was turned "on", the horn will start sounding fully, and the parking lights will begin flashing. Thirty seconds after this occurs, or if the ignition is turned "off", the starter interrupt circuit will also activate.

Once the Anti-Carjacking is fully engaged, i.e. sounding the horn and flashing the lights, the only way to disengage it is to turn the ignition "off", then "on" again, and then press the valet switch within 5 seconds.

#26 Door-Activated Anti-Carjacking Protection: Default OFF. This feature's operation is the same as described in the previous section, with the exception of being activated by the opening of a door while the ignition switch is "on". Once the

Page - 38

vehicular horn, this output pulses for 10 seconds, then pauses for 5 seconds, repeating this cycle for the duration of the activated alarm period. When set for use with the electronic siren, the output is continuous and steady. When programming, please note that pressing the remote transmitter's LOCK button sets the pulsed horn, and pressing the UNLOCK button sets the steady siren.

#22 Loud or Soft Confirmation Chirps: Default Loud. If the system is configured to use the vehicle's horn, this feature allows a degree of compensation for the variance which is found in the length of the pulse required to chirp the vehicle's horn in a satisfactory manner. When programming, please note that pressing the remote transmitter's LOCK button sets the chirp loud, and pressing the UNLOCK button sets the chirp soft. This feature is only available for use when the previous feature is programmed for the "Pulsed Horn" setting.

#23 Total Closure Lock Output: Default OFF. If the vehicle is has an existing total closure feature, this programmable feature allows the installer the option of interfacing the Model One to operate this feature. Typically, this option would close all windows and the sunroof, in addition to locking the doors, when arming the system. Consult with the installer on this option, as the vehicle must be properly equipped to utilize this Feature.

#24 Alarm Functions Bypass: Default OFF. This feature converts the system into a Remote Keyless Entry System only by eliminating all antitheft alarm-oriented

Page - 37

engine is running, if a door is opened the valet switch must be pressed before 60 seconds expires. Otherwise, the operation of this feature is identical to that described for "Ignition Activated Anti-Carjacking Protection". This and the previous feature are independently programmable, and either or both may be programmed to operate.

#27 Open Door Warning Upon Arming: Default OFF. When this feature is programmed to operate, if one of the vehicle's doors is open when the system is armed using the remote transmitter, the horn will chirp 3 times instead of once when arming the system with the transmitter.

#28 PANIC Button Operates Additional Output: Default OFF. This feature changes the remote transmitter's operation of the panic feature and the additional output. With this feature is used, pressing the transmitter's PANIC button for 2 seconds will operate the additional output. The remote panic feature can still be operated, but changes to pressing the LOCK button for 2 seconds to activate it. Once activated, pressing the LOCK, UNLOCK or PANIC button will deactivate the remote panic feature. Deactivating the remote panic feature is the same regardless of whether the PANIC or LOCK button is programmed to activate it. The remote panic feature's operation is explained on page 14.

Page - 39