



## Model APS-997 Owner's Manual

### 4 Button Remote Start Security System With Plug-In Shock Sensor & Starter Disable

**IMPORTANT !** In order to provide you with the highest level of security to your vehicle, this system is equipped with selectable manual override circuitry. It is possible that you will need to override you security system if the transmitter becomes lost, or inoperative due to battery failure. Reading the sections on "Manually Overriding Your System" is necessary to fully understand the procedure required to enable your vehicle in such situations. In addition, the chart on the last page of this manual has a section for the particular features and options installed in your vehicle as well as the override method selected. Although the default mode is "Valet Switch" operation, the system can be configured for "Custom Code" operation for enhanced security. Confirm the override mode selected on the last page of this manual, and familiarize yourself with the section on it's operation.

#### **FEATURES :**

- ◆ 1 Two Way 5 Button Remote Control And 1 One Way 5 Button Remote Control
- ◆ Six Channel Code Learning Programmable Receiver
- ◆ External Superheterodyne Transceiver Antenna
- ◆ Single Or Two User Programmable W/Separate Control Outputs
- ◆ Single Button Lock/Unlock or Separate Button Lock/Unlock or Both
- ◆ Remote Keyless Entry With Optional Access Guard (must have power door locks)
- ◆ Selectable Manual Override Mode
- ◆ New Enhanced Panic Feature (Any button other than unlock stops siren, no change to the units state)
- ◆ Smart Disarm (If triggered, elect to shut off siren, or disarm entire unit )
- ◆ Adjustable Shock Sensor Via The Transmitter (Pre-Detect Off, Pre & Full Detect Off, City Mode)
- ◆ Safe Start Output Controlled From Channel 3 (Option Channel 3 For Trunk, Or For R/S)
- ◆ 24 Hour Time Start Mode
- ◆ Cold Temperature Start Mode
- ◆ 2 or 4 Hour Automatic Start Mode
- ◆ Parking Meter Count Down Timer On LCD Remote
- ◆ Additional Count Down Timer Mode
- ◆ Remote Panic In All Modes (Press & Hold Lock /Unlock Button For 3 Seconds To Engage)
- ◆ Improved Custom Code Override, User Selectable and Programmable

"A" Revision to show PBLED  
Change 06/06  
Also wrong Transmitter depicted on page 3 change to APS2K4

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- ◆ Protected Push Button Valet/Override Switch
- ◆ 7-Function LED-Arm / Disarm / Zone 1 / Zone 2 / Zone 3 / Valet / Arming
- ◆ Intrusion Alert With Memory
- ◆ Instant Siren Activation
- ◆ Starter Disable Output
- ◆ Additional Engine Immobilizer Output, (Optional Relay Required)
- ◆ True Last Door Arming (Hardwire Only)
- ◆ Defective Zone By-Pass
- ◆ Defective Zone Chirp Confirmation (Unit Chirps To Report Zone Cleared)
- ◆ 6 Tone Mini Siren
- ◆ Car Horn Output For Additional Alarm Response (Improved Timing To Minimize RF Interference.)
- ◆ Additional Negative Trigger Input (Hood and Trunk)
- ◆ RF Inhibit With Ignition On
- ◆ Parking Light Flasher (Relay On Board)
- ◆ Plug In Dual Stage Shock Sensor (Pre-detect, Full Trigger and "City Mode")
- ◆ Audible Arm, Disarm, Defect, and Tamper Chirp Indications
- ◆ Headlight Control Output
- ◆ Illuminated Entry Control Output
- ◆ Active or Passive Arming Selectable
- ◆ Programmable Auto Lock On / Off
- ◆ Programmable Auto Unlock On / Off/Drivers Door/All Doors
- ◆ Programmable Door Lock Pulse Duration 1 Second / 3.5 Seconds/1 Sec L/ DbL. U/L
- ◆ Programmable Active or Passive Door Locks
- ◆ User Programmable Permanent Chirp Delete
- ◆ On Command RF Chirp Delete from Transmitter Or Selectable Through Software
- ◆ Dome Delay Learn Circuitry (Patent Pending)

**OPTIONS :**

- ◆ Remote Trunk Release (must have electric trunk release)
- ◆ Remote Keyless Entry (must have power door locks)
- ◆ Multiple Vehicle Capable
- ◆ Remote Power Window Roll Up
- ◆ Remote Garage Door Interface

**CAUTION!** Be certain that the vehicle is outdoors before using this or any remote vehicle starting device. A running engine produces dangerous carbon monoxide fumes which can be harmful or fatal if prolonged exposure occurs. DO NOT remote start the vehicle if it is garaged.

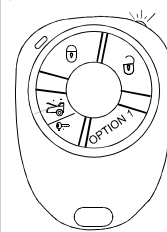
**YOUR "CODE HOPPING" TRANSMITTERS**

The transmitters included with your new security system use the most advanced and secure form of radio frequency transmission available on any current automotive security system. Some of today's sophisticated auto thieves use a device

known as a code grabber, which will receive and store the signal from your keychain transmitter and re-transmit at a later time to disarm your system.

Your Keeloq Code Hopping transmitters will change their signal every time the button is pressed, so when a thief grabs then re-transmits your signal, the alarm system *will not* respond.

If your transmitter button is pressed more than fifty times while it is out of range of the vehicle (children playing with your keys), the transmitter will not operate when you return to the vehicle, and will need to be re-aligned to the receiver. To do this, simply press button 1, (lock), two times within a one second time period. The system will now respond to that transmitter each time a button is pressed.



**NOTE:** This system is custom configurable and can be set up to operate with a number of options controlled from any transmitter button or button combination. For reference, we will describe operation assuming that your system is programmed for separate lock and unlock buttons. Also reference will be made to the icons as shown on the buttons left.

**NOTE:** The LCD based remote will be explained in detail further in this manual See "System Status" described later in this manual.

Consult your installation center if your system has been configured differently.

**NOTE:** Your system has the option of using a siren, the vehicle horn, or both for the sounding device. Where the siren is referenced below, the horn or both may in fact chirp, or beep.

#### **ARMING THE SYSTEM - ACTIVE**

1. Turn off the engine, exit the vehicle, and close all doors, hood lid and trunk lid.
2. Press and release Lock/Arm button on the keychain transmitter.

- The dash mounted LED begins to flash slowly.
- Parking Lights flash one time.
- Siren sounds one chirp.

If the siren/horn sounds 3 chirps, then you have left a door, trunk, or hood lid ajar. Simply close the opened entry point to provide full protection. If the siren "chirped" three times, sometime after arming, the exclusive delayed dome light learn circuit has been programmed and the system detected an open entry point after the learned delay expired. Again, closing the hood, trunk, or doors will correct the problem and you do not need to disarm the system to make the correction. If the siren/horn did not sound when arming, then the chirps have been turned off and you should refer to the section titled "ELIMINATING THE ARM/DISARM CHIRPS" in this manual.

- Doors Lock - Optional

**NOTE:** If the optional Headlamp illumination feature has been added, and has been selected for operation when arming, as an added convenience, the system will turn on the headlights when the system is armed.

#### **SILENT ARMING - ACTIVE (Must be activated during programming)**

1. Turn off the engine, exit the vehicle and close all doors, hood lid and trunk lid.
2. Press and hold the Lock/Arm button on the keychain transmitter for 2 seconds.

- The dash mounted LED begins to flash slowly.
- Parking Lights flash one time.
- Siren will not sound.

If the siren "chirped" three times, sometime after arming, the exclusive delayed dome light learn circuit has been programmed and the system detected a open entry point after the learned delay expired. Closing the hood, trunk, or doors will correct the problem and you do not need to disarm the system to make the correction.

- Doors Lock - Optional

**NOTE:** If the optional Headlamp illumination feature has been added, and has been selected for operation when arming, as an added convenience, the system will turn on the headlights when the system is armed.

The LCD Remote has the following response:

**ARMING THE SYSTEM - PASSIVE (AUTOMATIC)**

(Must be activated during programming)

1. Turn off the engine, exit the vehicle and close and lock all doors, hood lid and trunk lid.

- The dash mounted LED begins to flash rapidly, indicating 30 second passive arming has begun.

2. Opening any protected entry point during the 30 second passive arming cycle will immediately suspend automatic arming and the 30 second passive arming cycle will restart when all doors are closed. At the end of the passive arming cycle;

- The dash mounted LED begins to flash slowly.
- Parking Lights flash one time.
- Siren sounds one chirp

If the siren did not sound when arming, then the chirps have been turned off and you should refer to the section titled "ELIMINATING THE ARM / DISARM CHIRPS" in this manual.

- Doors Lock - Optional

Door locking during passive arming is a selectable feature. The alarm can be programmed to allow the doors to lock only when arming using the keychain transmitter and they will not automatically lock during passive arming.

**PROTECTION WHILE THE SYSTEM IS ARMED**

- Opening any protected door, hood or trunk lid will cause the alarm to immediately sound. The alarm will continue to sound for 30 seconds, then stop and continue to monitor all protected entry points. If the thief left a door opened, the alarm will sound for six 30 second cycles, remain armed and ignore that triggered zone.)

- Whenever the system is armed, the dash mounted LED indicator will slowly flash. This serves as a visual deterrent to the potential thief. The LED is a very low current bulb and will not cause the vehicle's battery to drain, even when left unattended for extended periods.

- Whenever the system is triggered, the vehicle's parking lights will flash for the full 30 second alarm cycle, attracting visual attention to the vehicle.

- Optional - Whenever the system is armed, the vehicle's starting circuit will be bypassed. If the thief should choose to ignore the siren, the vehicle can not be started.

Any mild impact to the vehicle's glass will cause the alarm to sound a short series of warning tones.

Any strong impact to the vehicle's glass will cause the alarm to trigger for the full 30 second alarm cycle.

**NOTE:** If the optional interior illumination circuit was installed, the interior light will flash as well for the full 30 second alarm cycle.

#### **DISARMING THE SYSTEM**

**NOTE:** If the optional 2 step door unlock circuit is installed, when the unlock transmitter button is activated, the drivers door only will unlock, pressing the unlock button a second time will cause all doors to unlock.

**NOTE:** If your transmitter has been configured with single button Lock/Unlock, to activate the all door unlock feature operate the Lock/Unlock button a second time within 3 seconds of the first unlock command.

1. As you approach the vehicle, press and release the Unlock/Disarm button on the keychain transmitter.

The dash mounted LED turns off.

The LED will start flashing rapidly, indicating that the system is re-arming automatically. Open any door to suspend the automatic arming.

Parking Lights flash two times.

If the parking lights flashed three times, then the alarm was triggered in your absence. Before turning the key on, examine the LED to identify which zone was triggered.

Siren sounds two chirps.

If the siren sounds 4 chirps, then the alarm was triggered in your absence. Before turning the key on, examine the LED and refer to the INTRUSION WARNING SIGNALS section of this manual to identify which zone was triggered.

If the siren did not sound when disarming, then the chirps have been turned off and you should refer to the section titled "ELIMINATING THE ARM / DISARM CHIRPS" in this manual.

Doors Unlock - Optional

2 Step Doors Unlock - Optional

**NOTE:** If the optional Headlamp illumination feature has been added and has been selected for operation when disarming, as an added convenience, the system will turn on the headlights when the system is disarmed.

#### **SILENT DISARMING (Must be activated during programming)**

**Note:** If the optional 2 step door unlock circuit is installed, when the unlock transmitter button is activated, the drivers door only will unlock, pressing the unlock button a second time will cause all doors to unlock.

**NOTE:** If your transmitter has been configured with single button Lock/Unlock as shown, to activate the all door unlock feature operate the Lock/Unlock button a second time within 3 seconds of the first unlock command.

1. Press and hold button the Unlock/Disarm button on the keychain transmitter for 2 seconds.

The dash mounted LED turns off.

The LED will start flashing rapidly, indicating that the system is re-arming automatically. Open any door to suspend the automatic arming.

- Parking Lights flash two times.

If the parking lights flashed three times, then the alarm was triggered in your absence. Before turning the key on, examine the LED to identify which zone was triggered.

- Siren will not sound.

If the siren sounds 4 chirps, then the alarm was triggered in your absence. Before turning the key on, examine the LED and refer to the INTRUSION WARNING SIGNALS section of this manual to identify which zone was triggered.

- Doors Unlock - Optional

- 2 Step Doors Unlock - Optional

**NOTE:** If the optional Headlamp illumination feature has been added and has been selected for operation when disarming, as an added convenience, the system will turn on the headlights when the system is disarmed.

#### **WHILE THE SYSTEM IS SOUNDING**

If during a triggered state, you wish to shut off the siren without disarming your security system, simply press and release any transmitter button other than the Unlock/Disarm button. This action will turn off the siren yet leave the vehicle fully armed and protected. This feature is particularly useful if you are aware of children playing near your vehicle that may accidentally trigger your security system. In this case you can cancel the siren sounding without disarming your alarm.

#### **INTRUSION WARNING SIGNALS**

This system will inform you if an intrusion attempt has occurred while you were away from the vehicle. If an intrusion attempt has occurred, the siren will chirp 4 times and the parking lights will flash 3 times when disarming the system. Enter the vehicle and observe the red dash mounted LED to identify which zone was triggered.

- ❶ If the LED is flashing one time...pause...one time...pause...etc., then an intrusion attempt was made to the shock sensor, or an accessory triggering device that may have been added to the system.
- ❷ If the LED is flashing two times...pause...two times...pause...etc., then an intrusion attempt was made to a hood or trunk pin switch that was added to the system or to a light activated entry point if the alarm was installed using the voltage sensing feature.
- ❸ If the LED is flashing three times...pause...three times...pause...etc., then an intrusion attempt was made through one of the vehicle's doors.

These intrusion warning indicators are stored in the system's memory and will only be erased when the ignition key is turned on.

#### **VALET SWITCH**

**NOTE:** Some units may include a combination Push-Button/LED Switch in these systems the LED and Switch are one and the same.

The valet switch allows you to temporarily bypass all alarm functions, eliminating the need to hand your transmitter to parking attendants or garage mechanics. When the system is in valet mode, all alarm functions are bypassed, however the remote panic feature and remote door locks will remain operational. In addition, the parking lights will flash to indicate locking and unlocking. To use the valet mode, the system must first be disarmed either by using your keychain transmitter or by activating your personalized manual override code.

1. Enter the vehicle and turn the ignition key to the on position.

2. Press and hold the valet pushbutton switch until the dash mounted LED turns on solid. The system will remain in the valet mode.
3. To return to normal operation, press and release the pushbutton switch any time the ignition is on.

**NOTE:** Always remember to return the system to normal operation. This will ensure that the vehicle remains protected at all times.

**MANUALLY OVERRIDING YOUR SYSTEM:  
USING THE VALET SWITCH MANUAL OVERRIDE**

Your Security System can be disarmed without the use of the keychain transmitter. This is necessary, since you will need the ability to operate your vehicle if the transmitter is lost or its battery fails. If your system has been selected for Valet Switch manual override as indicated on the last page of this manual, to bypass the alarm system;

1. Open the vehicle door. The alarm will sound.
2. Turn the ignition key to the on position.
3. Within 5 seconds, press and release the valet pushbutton switch.

The alarm system will stop sounding and enter the (bypass) mode. You can now start and operate the vehicle normally.

Typically this override mode is used only if the transmitter has become inoperative.

**PROGRAMMING YOUR CUSTOM OVERRIDE CODE:**

Unlike override switches easily found, and defeated, this security system allows the consumer to program a personal override code, offering a higher level of security. To take advantage of this option, programmable feature # 10 must be selected for the Custom Code Option. Consult your installation center for programming details. The system comes from the factory with a pre-programmed override code of 11. To change this default override code, do the following:

1. Disarm the system by use of the transmitter, or by use of the emergency override sequence. Turn the ignition switch to the on position.
2. Within 10 seconds, press and release the valet/override switch, 3 times.
3. Within 10 seconds turn the ignition switch off, on, off, on, off, on. (The siren or horn will beep and the lights will flash one time.)
4. Within 10 seconds, begin to enter your chosen 10ths digit by pressing and releasing the pushbutton switch from 1 up to 9 times.
5. Within 10 seconds of the last entered 10ths digit, turn the ignition switch off then on.
6. Within 10 seconds, begin to enter your chosen units digit by pressing and releasing the pushbutton switch from 1 up to 9 times.
7. Finish by turning the ignition switch to the off position.

If the new code was accepted, the unit will report back the newly entered code, by flashing the LED, first indicating the 10ths digit, pause and then the units digit. The unit will report the new code three times with a one second pause between each code, then the system will begin arming. If the LED flash pattern reports the previously stored code, the new code was not entered correctly. Please repeat steps 1 through 7 above considering the following.

**NOTE:** Acceptable digits 10ths or units are 1 through 9. The unit will not recognize a 0 (Zero), or no digit entered in any place, units or tenths.

**NOTE:** If 15 seconds of inactivity expire or if the ignition switch is turned off for more than 5 seconds during any of the above steps, the unit will revert back to the last successfully stored code.

### **Custom Code Programming Example:**

To Change the code from the factory pre-assigned code of 11 to "52" you would do the following:

1. Disarm the system by use of the transmitter or by use of the emergency override sequence.
2. Turn the ignition switch to the on position.
3. Within 10 seconds, press and release the valet/override switch, 3 times.
4. Within 10 seconds turn the ignition switch off, on, off, on, off, on.  
(The siren or horn will beep and the lights will flash one time.)
5. Within 10 seconds, begin to press and release the pushbutton switch to set the tenths digit.  
(As per the example, press and release 5 times to set the tenths digit to 5)
6. Within 10 seconds of the last press of the pushbutton, turn the ignition switch off then on.
7. Within 10 seconds, begin to press and release the pushbutton switch to set the units digit.  
(As per the example, press and release 2 times to set the units digit to 2).
8. Turn the ignition switch to the off position. Immediately observe the LED flash pattern.

You will note the LED flashing five times, pause, and then flash two times, pause. This pattern will be repeated three times indicating the new code (52) has been accepted and stored in memory.

**NOTE:** If after step 7, the LED flashes a code other than what was just entered, this indicates that the code has not been changed. You will have to repeat steps 1 through 7 above being certain to note the following:

Acceptable digits 10ths or units are 1 through 9. The unit will not recognize a 0 (Zero), or no digit entered in any place, units or tenths.

**NOTE:** If 15 seconds of inactivity expire, or if the ignition switch is turned off for more than 5 seconds during any of the above steps, the unit will revert back to the last successfully stored code.

### **MANUALLY OVERRIDING YOUR SYSTEM:**

#### **USING THE CUSTOM CODE OVERRIDE**

Assuming the override code programmed has not been changed, and the default override code of 11 is in the system's memory.

1. Enter the vehicle and turn the ignition switch to the on position.

**NOTE:** The siren will sound.

2. Within 5 seconds, press and release the pushbutton switch 1 time.
3. Within 5 seconds, turn the ignition switch off then on.
4. Within 5 seconds, press and release the pushbutton switch 1 time.
5. Turn the ignition switch off then on and start the vehicle.

**NOTE:** If you have changed the programmed override code then substitute your new code tenths for step 2 above, and units for step 5 above.

#### **ELIMINATING THE NORMAL ARM / DISARM CHIRPS**

As explained earlier in the manual, you can eliminate the chirps selectively any time you arm or disarm the system, if the feature has been activated, simply by holding the ARM or DISARM button for two seconds. If you find the normal arming and disarming chirps annoying, they can be turned off permanently, eliminating the need to hold the ARM / DISARM button for 2 seconds. To do this:



1. Turn the ignition key on then off.
2. Within 10 seconds, press and release valet switch three times.
3. If the chirps were on before you started, then you will hear two chirps indicating they have been turned off.

If the chirps were off before you started, then you will hear one chirp indicating they have been turned on.

**NOTE:** Whenever the chirps are bypassed, the 4-chirp intrusion indicator and 3 chirp defective zone indicator will always operate. Since these are important warnings to you that something has happened, they cannot be eliminated.

**NOTE:** Your system must be programmed by the installation center to enable this feature.

#### **REMOTE PANIC OPERATION**

The Lock or Unlock button on your keychain transmitter also functions as a panic switch for use in emergency situations. To use remote panic,

1. Press and hold the Lock or Unlock button on the keychain transmitter for 3 or more seconds. The alarm will immediately sound.
2. To stop the alarm, press and hold the Lock or Unlock button on the transmitter again for 3 seconds. If the button is not pressed, the alarm will automatically stop after 30 seconds. Also if any transmitter button other than the Lock or Unlock button is pressed and released, the Panic mode will be turned off immediately. The normal function of this transmitter button will be suspended during the Panic sounding period.
3. During the panic mode, the Lock and Unlock buttons can be used to lock and unlock the doors, (if the option is installed), however once the unlock/disarm button is pressed, the vehicle's starter inhibit device, (where installed) will be disabled allowing the vehicle to start.

**NOTE:** While in the Panic mode, pressing and releasing the Lock or Unlock buttons will, if the option is installed, lock and unlock the doors respectively. While in the panic mode, anytime the Unlock button is pressed, the panic feature will continue for the allotted 30 seconds, however, the security system will be disarmed allowing the vehicle to start.

#### **RF SHOCK SENSOR MODE SELECTION**

The way in which your alarm system reacts to threatening vibrations, created by attempts to enter the vehicle by breaking a window, is adjustable by the transmitter immediately after arming. There are 4 modes of operation that can be selected by the operator:

1. Normal Operation (default mode)  
In this mode, any strong vibrations will cause the siren to sound (full detect) for 30 seconds. Any lesser vibration will cause the siren to emit about 6 short warn away chirps, (pre-detect).
2. Stage 1 (Omit pre-detect)  
In this mode, the warn away chirps created by the lesser vibration will be deleted. If strong vibration occurs, the siren will sound.
3. Stage 2 (Omit pre & full detect)  
In this mode, both the pre-detect stage and the full trigger stage of the sensor are defeated. The unit will not react to vibration of any magnitude.

**NOTE:** Shock Sensor Icon Is Displayed On The LCD Panel.

4. Stage 3 (City Mode)

In this mode, the pre-detect chirps will change from six pre-warning tones to a full 10 seconds of warning chirps.

The full detect trigger duration will be reduced from 30 seconds to 15 seconds.

**NOTE:** Setting the stage of the shock sensor will be effective for one arming cycle only. Once the system has been disarmed, the very next arming cycle will cause the sensor to default to the normal operation stage.

To change or adjust the shock sensor, press and release the ARM button of your keychain transmitter.

1. Within 2 seconds of arming, press and release the ARM button 1 time, to defeat the pre-detect stage of the shock sensor. (The lights will flash and the siren will chirp once.)
2. Within 2 seconds of step 1, press and release the ARM button 2 times, to defeat the pre and full detect stages of the shock sensor. (The lights will flash and the siren will chirp twice.)
3. Within 2 seconds of step 1, press and release the ARM button 3 times to enter the "City Mode" of operation. (The lights will flash and the siren will chirp three times.)

While under control of the remote start the system can be programmed to allow you to shunt the shock sensor from the transmitter. If the system has been such programmed, simply press the lock button of your keychain transmitter anytime during the remote start cycle. The shock sensor will be shunted for the entire run cycle and will resume normal operation after the remote start unit shuts off.

Check with your installation center to determine if this feature has been programmed into your system.

#### **SAFETY (Red Handled) CONTROL SWITCH**

The control switch allows you to temporarily disable the remote starting function of your system. To disable the unit, move the red handled control switch to the off position.

The control switch also allows you to select between 2 hour start up and 4 hour start up when using the automatic start up timer mode. The factory preset start up time for this mode is every 4 hours. To select between 2 or 4 hour start-up timer:

1. Begin with the control switch in the on position.
2. Turn the ignition switch on then off.
3. Within 10 seconds, move the control switch off, on, off, on (2 switch cycles) to select a 2 hour start timer. After 10 seconds expire, the parking lights will flash and the siren will chirp 2 times confirming that the two hour start cycle is set. Or, within 10 seconds move the control switch off, on, off, on, off, on, off, on (4 switch cycles) to select a 4 hour start timer. The parking lights will flash and the siren will chirp 4 times confirming that the 4 hour start timer is set.

#### **REMOTE STARTING THE VEHICLE**

The system WILL NOT start the vehicle if any one of the following conditions exists:

1. The Vehicle Hood Is Opened.
2. The Gear Selector Is In Any Gear Other Than Park.
3. The Brake Is Depressed.
4. The Safety Control Switch Is In The Off Position.

**WARNING!** Be certain that the vehicle is outdoors before using this or any remote vehicle starting device. A running engine produces dangerous carbon

monoxide fumes which can be harmful or fatal if prolonged exposure occurs. DO NOT remote start the vehicle if it is garaged.

**To Remote Start The Vehicle:**

Press and release the programmed channel of your keychain transmitter two times within 2 seconds. The vehicle will start and remain running for the pre-programmed 5, 10, 15, or 20 minutes. As a visual indication, the parking lights will flash or turn on depending on the programming set up by your installation center.

When you arrive at your vehicle, disarm the alarm system by pressing and releasing the arm/disarm button of your keychain transmitter. Enter the vehicle and turn the ignition key to the on position.

**CAUTION!** Do not turn the key to the start position. This will cause the starter motor to engage with the already running engine which could result in damage. Step on the brake pedal to disengage the remote start unit. The vehicle will continue to run but now on it's own power.

**NOTE:** The engine will stop running before the expiration of the pre-programmed run timer if you complete any of the following:

1. Press and release the programmed channel of your keychain transmitter two times within 2 seconds.
2. Depress the brake pedal.
3. Open the hood.
4. Move the red handled control switch to the off position.
5. Race the engine to above 4000 RPM.

**OPERATING ON AUTOMATIC START UP TIMER MODE**

Your system has the ability to automatically start the vehicle every 2 or 4 hours over a 48 hour period. This feature is especially useful in cold climates where the only means to keep the engine and engine fluids warm is to periodically start the engine.

**WARNING!** Be certain that the vehicle is outdoors before using this or any remote vehicle starting device. A running engine produces dangerous carbon monoxide fumes which can be harmful or fatal if prolonged exposure occurs. DO NOT remote start the vehicle if it is garaged.

**TO BEGIN THE AUTOMATIC START UP TIMER**

1. Turn the ignition key on then off.
2. Within 10 seconds, activate the RF start command two times. (Push the programmed channel button of your keychain transmitter 4 times).

The parking lights will flash and the siren will chirp 4 times indicating the timed start mode is activated.

The vehicle, on a 2 or 4 hour interval basis, will automatically start, run for the pre-programmed time (5,10,15 or 20 minutes), and then shut off. This will continue for 48 hours.

**NOTE:** The automatic start up timer can also be initiated from the keychain transmitter. To do this:

1. Start the vehicle using the keychain transmitter by pressing and releasing the second channel transmitter button 2 times.
2. Shut off the vehicle using the keychain transmitter by pressing and releasing the second channel transmitter button 2 times.
3. Within 10 seconds of step 2, activate the RF start command two times. (Push

the second channel button of your keychain transmitter 4 times). The parking lights will flash and the siren will chirp 4 times indicating the timed start mode is activated.

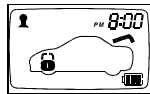
#### **CANCELING THE AUTOMATIC START UP TIMER**

To cancel the automatic start up timer do one of the following;

1. Start the vehicle manually with the use of the ignition key and depress the brake pedal.
2. Remote start the vehicle using your keychain RF transmitter.

**NOTE:** Option button used in combination is only available on the alternate remote transmitter and not available on the LCD Transmitter.

#### **OPTIONAL DEVICE OUTPUT ( CHANNEL 3 )**



**Controlled By:** Trunk/Key Button

Other Transmitter button configurations are also available. Consult your installation center for other configurations not listed above that may have been programmed to operate a specific feature of your system.

This security system is equipped with an output which will activate when the appropriate transmitter button is depressed for 4 seconds. Although this output is intended to activate the trunk release option, any other optional devices may be connected to this channel. Consult your installation center for more information about this output.

#### **ADDITIONAL REMOTE FUNCTION ( CHANNEL 4 )**

**Controlled By:**  Trunk/Key Button  Option Button  Lock + Unlock Buttons  Lock + Trunk/Key Buttons  Unlock + Trunk/Key Buttons

Other Transmitter button configurations are also available. Consult your installation center for other configurations not listed above that may have been programmed to operate a specific feature of your system.

This security system has an additional feature that can be connected to a number of different optional accessories. Some of the more common uses for this channel are;

- Remote Car Starter
- Remote Window Closure
- Remote Garage Door Interface

To remotely operate the device indicated, momentarily press, or press and hold the appropriate transmitter button(s) as indicated above.

#### **ADDITIONAL REMOTE FUNCTION ( CHANNEL 5 )**

**Controlled By:**  Trunk/Key Button  Option Button  Lock + Unlock Buttons  Lock + Trunk/Key Buttons  Unlock + Trunk/Key Buttons

Other Transmitter button configurations are also available. Consult your installation center for other configurations not listed above that may have been programmed to operate a specific feature of your system.

This security system has an additional feature that can be connected to a number of different optional accessories. Some of the more common uses for this channel are:

- Remote Car Starter
- Remote Window Closure
- Remote Garage Door Interface

To remotely operate the device indicated, momentarily press, or press and hold the appropriate transmitter button(s) as indicated above.

**ADDITIONAL REMOTE FUNCTION ( CHANNEL 6 )**

Channel 6 is an alternate output that can be controlled by the unlock button of the transmitter, or by an independent button or combination of buttons. For your vehicle this output is:

- Controlled By:**  Trunk/Key Button  Option Button  Lock + Unlock Buttons  Lock + Trunk/Key Buttons  Unlock + Trunk/Key Buttons

Other Transmitter button configurations are also available. Consult your installation center for other configurations not listed above that may have been programmed to operate a specific feature of your system.

This security system has an additional feature that can be connected to a number of different optional accessories. Some of the more common uses for this channel are:

- Remote Car Starter
- Remote Window Closure
- Remote Garage Door Interface

To remotely operate the device indicated, momentarily press, or press and hold the appropriate transmitter button(s) as indicated above.

**ADDITIONAL REMOTE FUNCTION ( CHANNEL 7 )**

Channel 7 is an alternate output that can be controlled by the unlock button of the transmitter or by an independent button or combination of buttons. For your vehicle this output is:

- Controlled By:**  Trunk/Key Button  Option Button  Lock + Unlock Buttons  Lock + Trunk/Key Buttons  Unlock + Trunk/Key Buttons

Other Transmitter button configurations are also available. Consult your installation center for other configurations not listed above that may have been programmed to operate a specific feature of your system.

This security system has an additional feature that can be connected to a number of different optional accessories. Some of the more common uses for this channel are:

- Remote Car Starter
- Remote Window Closure
- Remote Garage Door Interface

To remotely operate the device indicated, momentarily press, or press and hold the appropriate transmitter button(s) as indicated above.

**TURBO TIMER MODE**

This system provides a means to cool down the vehicles turbo charger, if so equipped, by allowing the vehicle to continue to run for a prescribed period of time every time the vehicle's engine is turned off. This feature requires the system to be set up for turbo timer during installation. Consult with your installation center to be certain this feature was activated and how long the vehicle will continue to run, 3, 5, or 10 minutes after the ignition switch is turned off.

To activate the turbo timer:

Anytime the engine is running for more than 15 seconds:

- 1) Place the gear selector in park.
- 2) Set the parking, (hand), brake.
- 3) Be certain your foot is off the brake pedal.
- 4) Press the program/Push-Button switch 2 times within 5 seconds.

The parking lights will flash two times indicating the mode was successfully entered.

If your parking lights flashed four times, this indicates the turbo mode was on and is now turned off.

With the turbo timer mode selected on, after you've arrived at your destination, while the engine is still running, set the parking brake, pause 2 seconds, then turn the ignition switch to the off position. The engine will continue to run the allotted time according to the selection during installation.

If you do not want the vehicle to continue to run for one cycle, simply step on the vehicle's brake, or release the parking brake, or activate the transmitter's start button two times in succession. Any of these will cause the engine to turn off.

**TELEMATIC UPGRADE:**

This system has the ability to have a telematic upgrade module connected to it. This is a upgrade that can give you control of certain functions of your vehicle from a Telephone, or in some cases a computer interface. Please check with your installation center for most recent Telematic Upgrades. If you had a Telematic Upgrade installed, the manual supplied with the upgrade unit will provide a operators manual advising of the features of the system and means available to control these features of your vehicle.

**TRANSCEIVER ICONS AND THEIR INDICATIONS**



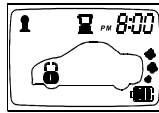
When Disarmed, Press the Arm/Lock button to Lock and Arm the System. The Lock Icon is displayed on the LCD panel & the parking lights flash once.



When Armed, Press the Disarm/Unlock button to Unlock and Disarm the System. The Unlock Icon is displayed on the LCD panel & the parking lights flash twice.



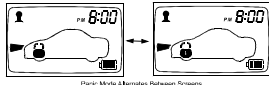
When the Key Icon Button Has Been Operated for 3 seconds the trunk open icon will flash on the LED Screen. If text mode was selected, the words Trunk Open will appear and remain on the screen until the trunk is shut.



When the Key Icon Button is pressed 2 times in succession The three puffs of smoke are displayed on the LCD screen while the vehicle is running. The exhaust indication will flash and the hour glass will indicate count down timer based on the 5, 10, 15, or 20 minute run time set up by your installation center. When the unit shuts off the exhaust indication will turn off and the transmitter

will play a melody.

Note Engine can be started in many modes armed, disarmed, valet, etc... The screen shown is Locked/Armed and running.

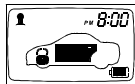


lights will flash unlock icon will be displayed and the siren will beep on the LCD screen.

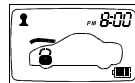


When ever the vehicle is operated from the two way transmitter, the unit will beep responsive to the function executed at the vehicle. 1 beep when armed, 2 beeps when disarmed, etc... at times It may be inconvenient or too noisy to hear the beep tones, so the system allows you to set the unit for vibrate mode. To toggle on or off beep tones/vibrate, Simultaneously press the "F" and unlock buttons. The icons shown left will appear in the upper left hand corner of the screen to indicate vibrate..

If the alarm system has been triggered, the icon displayed on the transmitter LCD will indicate which zone has been activated, as well sound the beep tones, or vibrate dependent upon the setting as shown above. The following trigger patterns will be displayed.

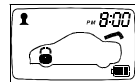


Triggered and the entry attempt was made to one of the vehicle Doors.

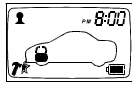


Triggered and entry attempt was made to the vehicles Hood

or

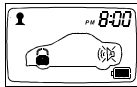


Trunk.



Triggered and entry attempt was made to the vehicles glass, or the vehicle has been hit or bumped hard enough to cause a response from the vibration detector.

**ADDITIONAL ICONS THAT MAY BE DISPLAYED ARE:**

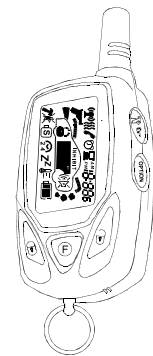


If the arm/disarm chirp tones have been turned off at the vehicle, when you arm, or disarm, the display will indicate this as shown and there will be no arm/disarm chirps at the transmitter. This is true if the transmitter is set for vibrate mode.

When the vehicle is armed, and a door is opened, or ajar, the transmitter will chirp 3 times, the lights will flash, and the display will indicate a door trigger as shown on the previous page. When the door is closed or the zone clears, the transmitter will chirp 1 time, and the display will clear.

When the vehicle is armed, and the hood or trunk, is opened or ajar, the transmitter will chirp 3 times, the lights will flash, and the display will indicate a hood or trunk trigger as shown on the previous page. When the hood or trunk is closed, or the zone clears, the transmitter will chirp 1 time, and the display will clear.





#### ADDITIONAL REMOTE FEATURES:

The two way remote control unit allows you to access status information from the vehicle, check temperature, light the display, toggle the transmitter from beep tones to vibrate mode, initiate daily start timer, and temperature start. Selection of these and other features are shown below:

NOTE: Transmitter must be within operating range of the vehicle, approximately 1000 ft.

#### Check Vehicle Status:

Press the lock+key+option buttons simultaneously for 1 second. The vehicle's alarm will display the systems current status.

#### Check Temperature: (Only available on certain remote start units)

Press the option+key buttons simultaneously for 1 second.

The vehicle's alarm will display the temperature. Temperature is read from the alarm's module located below the dashboard. This reading may be higher than actual ambient temperature due to the greenhouse and is relative only to the inside vehicle temperature.



#### Temperature Start Mode: (Available on certain models)

To toggle this feature on or off, from the armed mode, press the Option & Unlock Buttons simultaneously, the temperature icon appear on, or disappear from the display, and the transmitter will emit a tone.

NOTE: This feature must be active in the feature selection menu of your system. Check with your installing dealer to insure this feature is set to the on position.

#### Light The Display:

Press and release the "F" (Function) button one time. The display will illuminate for 10 seconds.

#### Vibrate Or Tones:

Press the "F" and unlock buttons simultaneously to toggle this feature on and off.



#### Daily Start Timer: (Only available on certain remote start units)

Press the option+lock buttons simultaneously for 1 second. The transmitter will beep and display the 24hr timer. The vehicle will start automatically when the time set is reached. (See chart for time settings). Pressing this button combination a second time will toggle this feature off. Note the transmitter must be within range of the vehicle to set this feature and within range to cause the vehicle to start at the preset time. The unit will start at the prescribed time once only. This function must be selected each time you want the vehicle to start. To activate this function, (a) Turn the ignition switch off. (b) Within 10 seconds of step (a), depress and hold the brake pedal, while pressing the key icon transmitter button 2 times. (c) the unit will emit 2 chirps, the transmitter will beep and the start timer icon on the display will remain on.

Note this feature must be activated at the vehicle at the prescribed time. Once activated at the vehicle, you can toggle the feature on simultaneously pressing the Lock + Option buttons of the transmitter. The 24 hour icon will appear and the transmitter will emit a tone confirming the feature is active.

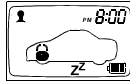
Note: the unit will start once and run for the prescribed time. If you require more frequent starting please refer to auto start up timer mode shown earlier in this guide.

**NOTE:** To insure accurate 24 Hour Start up, it is advisable to reset the start time periodically as time may drift slightly each day.

#### Timing Count Down:



The unit offers an additional count down timer for situations where an alert tone may be needed to remind you of something important. For instance you may have a meeting 4 hours from now and you want a reminder in 3 Hrs and 45 Mins. This additional count down timer allows you to set the count down up 19 Hours and 59 Minutes from the current time and when the timer reaches zero, the transmitter will emit a tone or vibrate dependent on your preferred setting. See chart for setting the count down time for this feature.



#### Valet:

When the System is in the valet mode, the icon shown will show in the display when the status check buttons are activated.

#### Parking Meter Counter:

The transmitter has a built in clock that can count down from 10, 20, 30, 60, 90, or 120 minutes. This feature is useful when parking the vehicle in a metered parking lot. If the time on the parking meter is 30 minutes, you can set the count down timer to 20 minutes. The transmitter will emit a beep tone when the timer expires to remind you to get back to your vehicle. See following chart for setting the parking meter count down timer feature.



#### Alarm Clock Mode:

The transmitter has a built in alarm clock that can be set to beep at a certain time each day. The alarm clock mode must be set, and the feature turned on. To use this feature please refer to the chart on the following page.


**NOTE:** Your system is shipped with two transmitters, 1 two way, shown on the left and the one way transmitter, shown right.



The one and two way transmitters are programmed from the factory with separate lock & unlock buttons, the trunk/key icon button operates remote start and remote trunk release where applicable. The option button and any button combination may be programmed to operate various options. Consult your installation center for button programming and options that may have been added to your vehicle. Although this is the default programming from the factory, this can be changed for you to any configuration you prefer. Please refer to the transmitter program guides included with your kit.





**NOTE:** A maximum of two of either style transmitter may be programmed to your unit.


**Battery Indicator:** Your transmitter has a battery indicator that is shown in  the upper right


corner of the screen as shown left. This icon indicates a new battery shown with 3 bars. As the battery deteriorates, the bars will disappear. 1 bar indicates the battery should be replaced. Replace battery with a fresh 1.5V AAA battery and dispose of the used battery properly.


Other icons that will be displayed at times when certain functions and features are active in the vehicle or on the remote:


 **Range Indicator.** The range indicator will have bars to the side of the icon if the unit is out of range.


 **Vibrate Mode On,** this icon will be displayed if you select vibrate instead of tones. To toggle vibrate on and off, press "F" + Unlock simultaneously.

 **Alarm Clock.** This icon will be toggled on and off when the "F" + Trunk/Key buttons are pressed simultaneously. The feature must be set in the feature selection menu of the transmitter.

 **Timing Count Down:**  
The unit offers an additional count down timer for situations where an alert tone may be needed to remind you of something important. Setting information shown on previous page.

 **Power Save Feature.** Press the "F" and Lock buttons simultaneously to toggle this feature on and off. With this mode on, the battery in the transmitter will go into a power down mode when the unit is disarmed.







 **24 Hour Start Timer.** This icon is displayed when the 24 hour start timer is activated. Press the option+lock buttons simultaneously for 3 second. The transmitter will beep and display the 24hr timer. The vehicle will start automatically when the time set is reached. (See chart for time settings). Pressing this button combination a second time will toggle this feature off. Note the transmitter must be within range of the vehicle to set this feature and within range to cause the vehicle to start at the preset time. The unit will start at the prescribed time once only. This function must be selected each time you want the vehicle to start. To activate this function, (a) Turn the ignition switch off. (b) Within 10 seconds of step (a), depress and hold the brake pedal, while pressing the key icon transmitter button 2 times. (c) the unit will emit 2 chirps, the transmitter will beep and the start timer icon on the display will remain on.

 **Temperature Start Mode.** This icon will appear when the temp start mode is activated. The vehicle will start one time automatically when the temperature reaches 0\*. Caution, Be certain vehicle is outside before activating this mode. To toggle this feature on of off, from the Locked/Armed mode, press the Option and Lock buttons simultaneously. (Available on certain remote start models only).

Throughout this manual you will find screen shots where they apply if using the two way transmitter. If using the one way transmitter while the two way transmitter is within range of the vehicle, the two way transmitter will update it's screen.

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TRANSMITTER FUNCTION SELECTION	BUTTON	ICON	TONE/VIBRATE
TIMING ADJUST MODE (HRS)	(F) PRESS FOR 5 SECONDS	AM PM 18:88	2 BEEP TONES
TIMING ADJUST MODE (MINS)	(F) 1 X	AM PM 18:88	
ALARM CLOCK ADJUST MODE (HRS)	(F) 2 X	AM PM 18:88	
ALARM CLOCK ADJUST MODE (MINS)	(F) 3 X	AM PM 18:88	
ALARM CLOCK & POWER UP MUSIC SELECT	(F) 4 X	8	5 SELECTIONS PRESS KEY BUTTON OR OPTION BUTTON TO SELECT
ALARM CLOCK ADJUST MODE ON/OFF	(F) 5 X	ON/OFF	
TIMING COUNT DOWN ADJUST MODE (HRS)	(F) 6 X	18:88	
TIMING COUNT DOWN ADJUST MODE (MINS)	(F) 7 X	18:88	
TIMING COUNT DOWN END MELODY SELECTION	(F) 8 X	8	5 SELECTIONS PRESS KEY BUTTON OR OPTION BUTTON TO SELECT
TIMING COUNT DOWN MODE SELECT ON/OFF	(F) 9 X	ON/OFF	
REMOTE START ON MELODY SELECT 2	(F) 10 X	5 8	5 SELECTIONS PRESS KEY BUTTON OR OPTION BUTTON TO SELECT

TRANSMITTER FUNCTION OPERATION	BUTTON	ICON	TONE/VIBRATE
10 MIN PARKING COUNT DOWN TIMER	(F) + Option 1 X	0:10	MELODY
20 MIN PARKING COUNT DOWN TIMER	(F) + Option 2 X	0:20	MELODY
30 MIN PARKING COUNT DOWN TIMER	(F) + Option 3 X	0:30	MELODY
60 MIN PARKING COUNT DOWN TIMER	(F) + Option 4 X	1:00	MELODY
90 MIN PARKING COUNT DOWN TIMER	(F) + Option 5 X	1:30	MELODY
120 MIN PARKING COUNT DOWN TIMER	(F) + Option 6 X	2:00	MELODY
PARKING COUNT DOWN TIMER OFF MODE	(F) + Option 7 X	0:00	MELODY
BACKLIGHT DISPLAY FOR 10 SECONDS	(F) 1 X		ILLUMINATES DISPLAY
VIBRATE/TONE SELECT	(F) +  1 X		VIBRATE 4 TIMES OR BEEP 1 X
ALARM CLOCK MODE SELECT ON/OFF	(F) +  1 X	AM PM 18:88	MELODY
FAHRENHEIT/CELSIUS SELECT	(F) +  + OPTION 1 X	F or C	MELODY
POWER SAVE MODE	(F) +  1 X		MELODY

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**APS 997  
SYSTEM FUNCTIONS AT A GLANCE**

**DASH LED INDICATORS**

RAPID FLASHING	=	PASSIVE ARMING/ACTIVE REARMING
SLOW FLASHING	=	ARMED
OFF	=	DISARMED
ON SOLID	=	VALET MODE
3 FLASH...PAUSE	=	INTRUSION ZONE 3
2 FLASH...PAUSE	=	INTRUSION ZONE 2
1 FLASH...PAUSE	=	INTRUSION ZONE 1

**SIREN CHIRP INDICATORS**

1 CHIRP *	=	ARM
2 CHIRPS *	=	DISARM
3 CHIRPS	=	ARM / DOOR OPENED
4 CHIRPS	=	DISARM / INTRUSION

\* These chirps are optional, and can be de - activated.

**PARKING LAMP INDICATORS**

1 FLASH	=	ARM
2 FLASHES	=	DISARM
3 FLASHES	=	DISARM / INTRUSION

**FEATURE AND FUNCTION SETTINGS**

To Be Completed By Installing Technician

Settings			
Remote Start Function	<input type="checkbox"/> 1 Sec	<input type="checkbox"/> 3.5 Sec	<input type="checkbox"/> 1 Sec L/Dbl. UL
Door Lock Time	<input type="checkbox"/> Pulse	<input type="checkbox"/> Steady	
Parking Lights	<input type="checkbox"/> 5 Min	<input type="checkbox"/> 10 Min.	<input type="checkbox"/> 15 Min
Run Time	<input type="checkbox"/> On	<input type="checkbox"/> Off	<input type="checkbox"/> 20Min
Remote Activation Chirp			
Remote Alarm Function	<input type="checkbox"/> Arm/Disarm/Disarm 2	<input type="checkbox"/> Arm Only	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
Channel 1	<input type="checkbox"/> Not Used	<input type="checkbox"/> Disarm/Disarm 2	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
Channel 2	<input type="checkbox"/> On	<input type="checkbox"/> Off	
Auto Door Lock	<input type="checkbox"/> Drivers	<input type="checkbox"/> All	
Auto Door Unlock	<input type="checkbox"/> On	<input type="checkbox"/> Off	
Passive Lock	<input type="checkbox"/> On	<input type="checkbox"/> Off	
Passive Arm	<input type="checkbox"/> Siren & Horn	<input type="checkbox"/> Siren Only	<input type="checkbox"/> Horn Only
Siren / Horn	<input type="checkbox"/> 10mS	<input type="checkbox"/> 16mS	<input type="checkbox"/> 30mS
Horn Chirp	<input type="checkbox"/> Coded	<input type="checkbox"/> Valet	
Valet / Coded Ovrride	<input type="checkbox"/> On	<input type="checkbox"/> Off	
Chirp On The Fly			
Remote Trunk Release (And Remote Start)	Channel 3		<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
Remote Window Close			<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
Additional Option _____		Channel 4, 5, 6, or 7	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
Additional Option _____		Channel 4, 5, 6, or 7	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
Additional Option _____		Channel 4, 5, 6, or 7	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4
Remote Garage Interface			<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4

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