MODEL CS60A REMOTE CONTROL AUTO ALARM SYSTEM INSTALLATION & OPERATION INSTRUCTIONS

INTRODUCTION

A. MOUNTING THE SIREN:

- In the engine compartment, place the siren in a location suitable for best sound results. Be careful not to mount the unit near exhaust manifolds or other "hot" equipment and moisture area.
 NOTE: Preferred siren position is facing forward (toward front of vehicle). Siren SHOULD NOT be face up.
- Mark and drill three holes to mount the siren.
- Route the siren cable through the firewall to the control module.

B. MOUNTING CONTROL MODULE:

Mount the control module in the underdash area where easy reach yet secures. The module should mount in as high a position as possible. Fixed the module with tie-wraps or screws. Ensure the module completely secure and will not rattle or come loose.

NOTE: Antenna placement is very important! Ensure that it is unwrapped and stretched out at least 6" straight. Best possible location is along the headliner above a door opening, keep away from metal. Since metal will interference receiver's capability.

C. INSTALLING THE LED STATUS INDICATOR:

The led indicator status should be mounted in a highly visible area such as top of the dashboard, on top of the shifter console or on dashboard face. Leave at least 6mm space behind the mounting location for LED housing. Once a suitable location is chosen, drill a 6mm hole. Run the LED wires through the hole then press the 2 pin LED housing into the place. Route the LED wires to the control module.

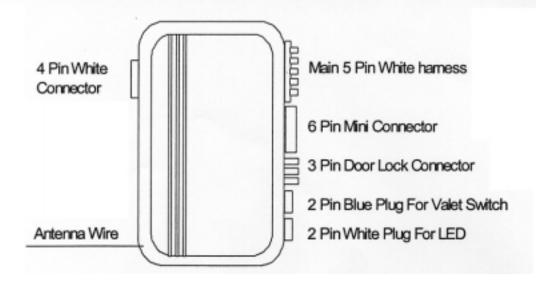
D. INSTALLING THE VALET SWITCH:

Select a mounting location for the switch that is easily accessible to the driver of the vehicle. The switch does not have to be concealed, however, concealing the switch is always recommended, as this provides an even higher level of security to the vehicle. Mount the valet switch in a hidden but accessible location. Route the valet switch wires to the control module.

E. DECALS

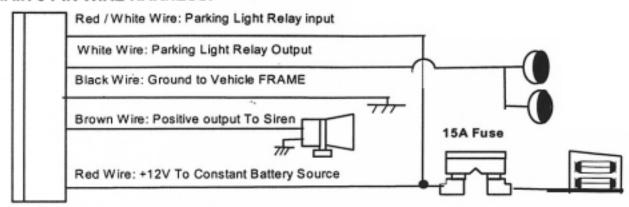
Peel the decals from the paper backing and apply them to the inside of your vehicle's window. These are an effective deterrent to thief. Most thieves pass by vehicles, which are equipped with security system.

INSTALLATION DIAGRAM

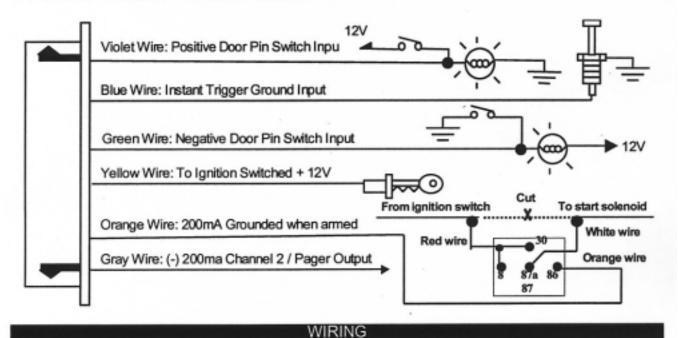


WIRING DIAGRAM

MAIN 5 PIN WIRE HARNESS:



6 PIN MINI CONNECTOR WIRE HARNESS:



Keep wiring away from moving engine parts, exhaust pipes and high-tension cable. Tape wires that pass through holes on the firewall to prevent fraying. Watches out sharp edges that may damage wires and causes short circuit.

CAUTION: Do not connect the wire harness to the control module until all wiring to vehicle is complete.

A. MAIN 5 PIN WIRE HARNESS:

RED / WHITE WIRE – PARKING LIGHT RELAY INPUT –

The RED/WHITE wire is the input to the flashing parking light relay. The connection of the RED/WHITE wire will determine the output polarity of the flashing parking light relay.

If the vehicle you are working on has +12volt switched parking lights, you don't need connect this wire. This wire already connected to +12volt.

If the vehicle's parking lights are ground switched, cut the RED/WHITE wire, connect the RED/WHITE to chassis ground.

WHITE WIRE -- PARKING LIGHT RELAY OUTPUT (+12 V 10A OUTPUT) --

Connect the WHITE wire to the parking light wire coming from the headlight switch. Do not connect the white wire to the dashboard lighting dimmer switch. (Damage to the dimmer will result). The limitation of the white wire is 10 AMP max. Do not exceed this limit or damage to the alarm and parking relay will result.

BLACK WIRE -- SYSTEM GROUND --

This is main ground connection of the alarm module. Make this connection to a solid section of the vehicle frame. Do not connect this wire to any existing ground wires supplied by the factory wire loom, make the connection to the vehicle's frame directly.

4. BROWN WIRE -- SIREN DRIVE OUTPUT --

This is the positive (+) output connection for the siren. Current capacity is 2 amps. Make connection to the (+) red wire from the siren. Make the (-) black wire coming from the siren to a good chassis ground.

RED WIRE -- SYSTEM POWER (+12V CONSTANT) --

The RED wire supplies power to the system. Connect this wire to a constant +12 volt source.

B. 6-PIN MINI CONNECTOR WIRE HARNESS.

BLUE WIRE -- GROUND INSTANT TRIGGER INPUT --

This wire is the ground trigger input wire for hood/trunk pin switches.

VIOLET WIRE -- POSITIVE DOOR SWITCH SENSING INPUT--

This wire is the positive trigger input wire for positive door pin switch. This wire is connection for "positive" type factory door pins(typical FORD MOTOR). Locate the "common wire" for all door pins and make the connection of the Violet Wire here.

YELLOW WIRE – TO IGNITION SWITCHED +12V –

This wire is connected to a switched 12 volts source. This wire should receive "12 Volts" when the ignition key is in the "ON" and "START" position. When the ignition is turned "OFF", this wire should receive "0" voltage.

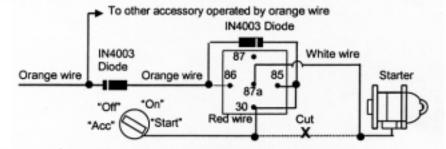
4. GREEN WIRE -- NEGATIVE DOOR SWITCH SENSING INPUT --

This wire is the ground trigger input wire for negative door pin switch. This wire is connection for "grounding" type factory door pins locate the "common wire" that connects the door pin switches. Make the connection of the Green Wire here.

ORANGE WIRE – (-) 200ma GROUNDED OUTPUT WHEN ARMED --

This wire will become grounded when the alarm is armed. The current capacity of this wire is 200mA. This output can control starter disable, when an intrusion is detected and the system is triggered. The vehicles prevent from any unauthorized starting.

- a). Find the wire from the starter solenoid, (usually located on the starter) and going to the ignition switch.
- b). When found, use voltmeter, connect one probe of the voltmeter to ground and connect the other end of the probe to the starter wire, it should receive "12 Volts" only when the ignition key in the "START" position.
- c). After locating the correct wire, cut it in half, try to start the vehicle. The engine should not "crank over".
- d). When the extend wires are needed, they must be exactly same gauge as the cut wire. Connect the cut wire from the key switch to the RED wire (pin #30) of the relay, and connect the starter wire to the WHITE wire (pin #87a) of the relay.
- e). Connect the ORANGE Wire from the control module to the ORANGE wire (pin #86) of the relay. NOTE: If more than one electronic device will be connected to the ORANGE Wire, it will be necessary to isolate the connection of each device control wires with a 1N4003 diode.



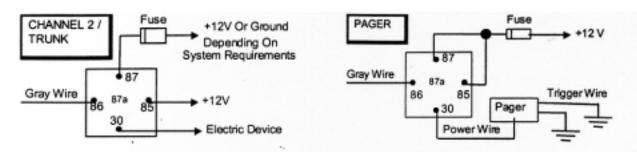
6 . GRAY WIRE - (-) 200ma CHANNEL 2 / PAGER OUTPUT -

CHANNEL 2 OUTPUT (Set Feature I - 9 Programming to "Channel 2 Output)

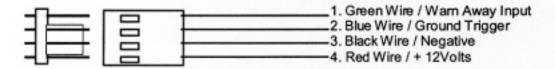
This will become a 1 second pulse ground by press and hold the **DISARM** or **TRUNK** button on transmitter for two seconds, the current capacity of this wire is 200 mA. this feature allows you to remote control trunk release or other electric device.

PAGER OUTPUT (Set Feature I - 9 Programming to *PAGER Output)

This wire provides a negative output, when the alarm triggered. The current capacity of this wire is 200mA. For optional electrical device in this system, please connected to an additional relay. (I.E. Pager interface....)



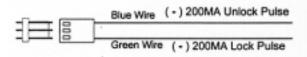
C. 4 PIN WHITE CONNECTOR FOR 2 STAGE SHOCK SENSOR



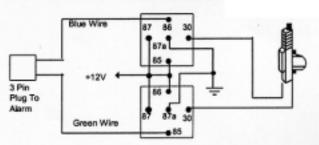
Route the red, black, blue and green wires in the 4 pin white connector from shock sensor to the control module, and plug one end into the shock sensor, and the other end into the mating white connector on the side of the module.

D. 3 PIN DOOR LOCK CONNECTOR:

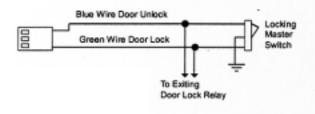
3 Pin Mini-Molex Connector



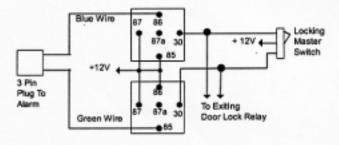
INSTALL NEW DOOR LOCK MOTOR



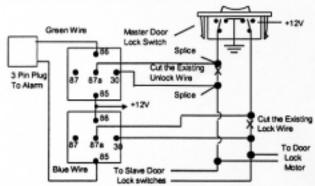
NEGATIVE TRIGGER DOOR LOCK SYSTEM



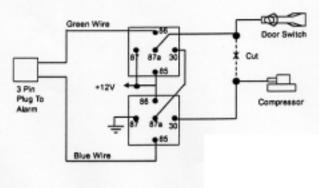
POSITIVE TRIGGER DOOR LOCK SYSTEM



5-WIRE ALTERNATING DOOR LOCK



VACUUM OPERATED CENTROL LOCKING



VACUUM OPERATED DOOR LOCKING SYSTEM:

TYPICAL OF MERCEDES BENZ AND AUDI.

Locate the wire under the driver's kick panel. Use the voltmeter connecting to ground, verify that you have the correct wire with the doors unlocked, the voltmeter willreceive "12 volts". Lock the doors and the voltmeter will read "0 volt". Move the alligator clip to +12V and the voltmeter will receive "12 volts". Cut this wire and make connections. Be sure to program door lock timer to 3 seconds. (See Feature I – 9 Programming)

E. RF ANTENNA - BLACK THIN WIRE

The black thin wire on control module is the receiver antenna wire. Antenna placement is very important! Ensure that it is unwrapped and stretched out with the last 6" straight and keep it away from large metal objects or chassis for best reception.

PROGRAMMING

A. THE TRANSMITTERS:

Maximum is 4 transmitters. Two modes of programming, one is DESIGNATED channel, (Button 1 is ARM/DISARM) the other is AUTO channel setting. (Button 1 is ARM, button 2 is DISARM.)

Enter:

Turn ignition to 'ON' position.

Push valet switch 3 times to enter DESIGNATED channel, or 6 times to enter AUTO channel.

There will be 1 long chirp of confirmation of entering.

Program transmitters:

Press any button on 1st TX, 1 short chirp confirm programmed and ready program 2nd TX.

Press any button on 2nd TX. 2 short chirps confirm programmed and ready program 3rd TX.

Use the same way to program 3rd and 4th, a 3 and 4 chirps respective to confirm programmed.

Exit: Turn ignition to 'OFF' position, or leave it for 15 seconds. A 3 long chirps to confirm exit.

Note: If more than 4 transmitters programmed, the system only kept the last 4 transmitters.

B. PROGRAMMING SYSTEM FEATURES: (Factory preset all features to "ON" position) Enter:

- Turn the ignition 'ON' then 'OFF'.
- Within 10 seconds push the valet switch 3 times. (A long chirp.)
- Again push the valet switch 3 times. One long chirp again. It is on programming mode.

Programming features:

- Push the valet switch times that equal the feature number you want.
- Turn ignition switch from "OFF to ON" or "ON to OFF" to set the feature.

Example:

- Push valet switch 2 times, it's on Active/Passive Arming selection. The siren will chirp 2 times, LED flash 2 times to confirm enter this feature.
- Select Active Arming, turn ignition from 'OFF' to 'ON'. 1 chirp for confirmation.
- Select Passive Arming, turn ignition from 'ON' to 'OFF'. 2 chirps for confirmation.
- If you want to program Auto Rearm (fifth) when the system is on Active/Passive Arming, push valet switch 3
 times again. (Siren chirp 5 times, LED flash 5 times) The system will add on the previous valet switch
 pushing.
- Exit: During programming, if you don't respond to previous step in 15 seconds or any time press the ARM button on the transmitter's, it will exit programming feature, which indicates by 3 long chirps.

Push Valet Chirp /		Turn ignition from OFF to ON	Turn ignition from ON to OFF	
Switch Times:	LED Times	Factory Default Setting		
Show		1 short chirp	2 short chirps	
Select		Feature " ON "	Feature " OFF "	
1	1	Chirp on	Chirp off	
2	2	Active arming	Passive arming	
3	3	Passive arming with door lock	Passive arming without door lock	
4	4	Ignition on/off with door lock/unlock	Ignition on/off without door lock/unlock.	
5	5	Auto rearm on.	Auto rearm off.	
*6	6	2-pulse unlock off	2-pulse unlock on	
7	7	Door lock time 0.9 sec. Door lock time 3 sec.		

8	8	Car-Jacking off	Car-Jacking on
9	9	Channel 2 (Trunk) output	Pager output

OPERATION MANUAL

A. TRANSMITTER OPERATION:

DESIGNATED CHANNEL:

Transmitter Button	System Function	Remark
ARM / DISARM Button	Arm / Lock Door or	
(Button 1)	Disarm / Unlock Door	
ARM / DISARM Button (Button 1) for 3 seconds	Panic function	Press 3 seconds.
ARM - ARM Button (Button 1 – 1)	Arm and Delete Optional Sensor	Press twice.
TRUNK Button (Button 2) for 2 seconds	Pop Trunk Release / Channel 2 output	Press 2 seconds.
ARM + TRUNK Button (Button 1 + 2) both	Silent Arm/Disarm	Ignition in "off" position.
ARM + TRUNK Button (Button 1 + 2) both for 1 second.	Activate Car-Jacking	Ignition in "on" position.

AUTO CHANNEL: (Factory default setting.)

Transmitter Button	System Function	Remark
ARM Button	Arm / Lock door	
(Button 1)		
ARM Button	Panic function	Press 3 seconds
(Button 1) for 3 seconds		
ARM - ARM Button	Arm and Delete Optional Sensor	Press twice.
(Button 1 – 1)		
DISARM Button	Disarm & Unlock Door	
(Button 2)		
DISARM Button	Disarm and Pop Trunk Release	Press 2 seconds
(Button 2) for 2 seconds		
ARM + DISARM Button	Silent Arm / Disarm	Ignition in "off" position.
(Button 1 + 2) both		
ARM + DISARM Button	Activate Car-Jacking	Ignition in "on" position.
(Button 1 + 2) both		
for 1 seconds		

B.LED INDICATORS:

LED	Function
Off	Disarmed
Slow flashing	Armed
Fast flashing	Passive arming
On - (solid)	Valet mode
2 flashes pause	Intrusion

C.CHIRP INDICATORS:

Chirp	Function	
1 chirp	Arm	
2 chirps	Disarm	
4 chirps	Disarm / Intrusion	

D. PARKING LIGHT:

Parking light	Function
1 flash	Arm
2 flashes	Disarm
3 flashes	Disarm / Intrusion

E. ALARM OPERATING CONDITION:

	Siren	Parking Light	LED	Doors	Starter disable	Pager
1. Arming	1 Chirp	1 Flash	Slow flash	Locking	On	
2. Disarming	2 or 4 Chirps	2 or 3 Flashes	Fast flash	Unlocking	Off	
3. Trigger	Alarming	Flashes	Slow flash		On	On
4. Panic	Alarming	Flashes	Slow flash	Locking		

F. ACTIVE ARMING - LOCK & ARM:

- Press ARM button on transmitter.
- The siren will chirp once and parking light will flash once indicating that the system is now armed. The vehicle doors will lock upon arming when interfaced with the security system.

SILENT ARMING / DISARMING: Press the ARM + DISARM button together on the transmitter will arm or disarm your security system, No chirp sound will be heard, arm / disarm confirmation will be through the vehicles parking lights only.

SHOCK SENSOR / OPTIONAL SENSOR BY-PASS: Press the ARM button on the transmitter twice within 3 seconds will arm the security system, by-pass the shock sensor and the optional sensor connected to 4 pin plug. The system will chirp one additional time to confirm the sensor bypass mode was activated. The sensor bypass feature is programmed to activate for one arming cycle only. The security system will return to normal operation during the next arming cycle.

G. PASSIVE ARMING

Active arming / disarming is controlling your security system via the remote transmitter. This security system is equipped with an optional Passive Arming feature, which allows the security system to arm 30 seconds after the last door is closed. Operation is as follows.

- Turn the ignition to the "OFF" position and exit the vehicle.
- After all entrances are closed, the security system LED will flash fast for 30 seconds. If you reopen any door / hood / trunk, the security system LED will stop flashing. It will begin flashing again once the vehicle all entrances are closed.
- After 30-second timer has elapsed, the security system will automatically "ARM". The siren will chirp [1] time and the parking lights will flash [1] time.

PASSIVE DOOR LOCKING: (See Feature "I - 3" Programming)

The vehicle doors will automatically lock after passive arming cycle has been completed.

H. ACTIVE DISARMING – UNLOCK & DISARM:

- Press the DISARM button on the transmitter.
- The siren will chirp twice and parking light will flash twice to indicating that the security system is now disarmed. The vehicle doors will unlock disarming when interfaced with the security system.

TAMPER DISARMING: If alarm triggered, upon disarm the system, siren chirp 4 times, parking light flash 3 times.

AUTOMATIC RE-ARM (See Feature "I = 5" Programming): If this feature is selected, the security system will automatically re-arm itself 60 seconds after disarming with remote transmitter. Automatic rearm will cancel if any door is opened before the 60 seconds timer has elapsed.

I. DISARMING WITHOUT A TRANSMITTER

The Override function may be used if the remote transmitter is lost or inoperative.

- 1. Enter the vehicle and turn the ignition switch to 'ON' position. (Alarm will sound.)
- 2. Within 10 seconds push and release the valet switch

The alarm will stop sounding and enter the disarm mode. You can now start and operate the vehicle normally.

J. VALET MODE:

The valet switch allows you to temporarily bypass all alarm function, eliminating the need to hand your transmitter to parking attendants or garage mechanics. When the system is in valet mode, all alarm function are bypassed, however the remote panic feature and remote door locks will remain operational.

Enter Valet Mode:

- 1. Turn the ignition to "ON" position.
- Push and hold valet switch for 2 seconds until the LED turns on. The LED wills remain on as long as the system is in 'valet mode'.

Exit Valet Mode:

Return to normal operation, turn ignition 'ON'.

Push and hold valet switch for 2 seconds, The LED wills turns off indicate the system are exiting the valet mode.

K. PANIC FUNCTION:

The transmitter can be used as a remote panic switch to manually trigger the alarm in case emergency.

- 1. Press and hold the ARM button on the transmitter for 3 second. The alarm will immediately sound.
- To stop the alarm, press and hold the ARM or DISARM button on the transmitter, the panic mode will be turned off immediately.
- 3. If the button is not pressed, the alarm will automatically stop after 60 seconds.

L. TRIGGER THE SYSTEM

When armed, your vehicle is protected as follows:

- 1. Light impacts will trigger the warn-away signal. A long chirp from siren/horn.
- 2. Heavy impacts / Doors open / Hood open / Trunk open will trigger the programmed sequence.

The starter disable relay (if installed) prevents the vehicle's starter from cranking. The siren and parking lights will turn on to alerting of an intrusion for 60 seconds. Then it will stop and automatic reset and re-arm. If the one of sensors or detectors still active, the alarm system will sound a maximum of 3 times of 60 seconds cycles.

M. ANTI CAR-JACKING

Warning: If you don't need the car jacking function in this alarm system, be sure to set car jacking feature "OFF". This system is default setting all car-jacking "OFF". (See Alarm Feature I - 8 Programming.)

Press and hold the **ARM** + **DISARM** button on the transmitter for 1 seconds while the vehicle's ignition is ON will trigger the car jacking. The parking light wills turns on for 1.5° seconds to indicate this enter.

- 60 seconds after the system has beer triggered. The siren starts alarming and the parking light starts flashing.
- 2. 90 seconds after the system has beer triggered
 - a. The siren still alarming and the parking light flashing, and
 - The starter disable will activate to prevent the vehicle from starting.
 - c. It will remain active until the vehicle's battery power exhausted.

OVERRIDE THE SYSTEM TO TURN OFF CAT JACKING:

Turn the ignition switch from OFF to ON, and within 10 seconds push valet switch, the siren will stop and the system disarmed

O. IGNITION CONTROL DOOR LOCKS. (See Feature I – 4 Programming.).

If the vehicles door locks have been interfaced to the security system, the system will automatically lock the vehicle's doors when the ignition is turned "ON" and /or unlock the vehicle's doors when the ignition is turned "ONE".

P. TRUNK RELEASE. (See Feature I – 9 Programming.).

Press and hold **DISARM** button on transmitter for two seconds to remote control the trunk release or other electric devices.

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference receiver, including interference that may cause undesired operation.

CAUTION: Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment