SP-102
SECURITY SYSTEM

CONGRATULATIONS on your choice of a CrimeStopper Remote Security System. This booklet contains all the necessary information for using, and installing your security system. If any questions should arise, contact CrimeStopper technical support at 1-800-998-6880 or check out the Knowledge Base at www.crimestopper.com.

CRIMESTOPPER
SAFETY & SECURITY

INSTALLATION MANUAL

Pre-Installation

We suggest that you read the entire manual prior to starting your installation. This manual is a general guideline as our product is universal and your installation may differ from vehicle to vehicle.

Check all of the vehicle's manufacture warnings and cautions regarding electrical service (air bags, abs, brakes, engine/body computers and battery)

We recommend you find and test all wiring prior to prepping and installing the product. This will allow you to better plan out your installation.

Best installation practices recommend the use of a DMM (digital multi-meter) to test all of the wiring.

Be sure that you will not need any additional parts prior to the installation.

Cautions and Warnings

- Damage resulting from improper installation is not covered under warranty.

- Do not start the vehicle in an enclosed area without proper ventilation.

- Do not route any wiring where it may become entangled.

- Remove the main fuse to the system prior to jump starting the vehicle.

- Do not exceed the rated output current of any of the circuits.

FCC Compliant

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

CAUTION: Changes or modifications not expressly approved by TESSONICS Inc. Could void the user's authority to operate this device.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense

BLACK WIRE: CHASSIS GROUND - The BLACK wire MUST be attached to a paint-free surface of solid metal.

YELLOW WIRE: SWITCHED IGNITION - Connect this wire to an IGNITION wire. The IGNITION wire will show 12 Volts when the IGNITION switch is in the ON position as well as in the START position. This wire can be found at the IGNITION switch or possibly at the fuse box.

RED WIRE: 12 VOLT INPUT (15A) - Connect the RED wire to a 12 Volt constant source in the vehicle utilizing the supplied fuse and fuse holder.

WHITE WIRE: (+) PARKING LIGHT OUTPUT (10A) - Connect to the POSITIVE parking light wire of the vehicle. This wire will flash the parking lights when the alarm is armed, disarmed or triggered.

BLUE/WHITE WIRE: (-) TRUNK TRIGGER - Input wire for the trunk pin switch. This wire is used to tell the alarm if the trunk is open (ground on the trunk pin wire). If the vehicle does not have a trunk pin from the factory, an aftermarket one will need to be installed. This wire is not needed if the vehicle does not have a trunk.

PURPLE WIRE: (+) DOOR TRIGGER - Identify the wire that reads 12 Volts when any door is open and ground when all doors are closed. Some vehicles may have isolated door triggers. In this case you may need to run additional wires from other doors or go directly to the wire that triggers the vehicle's interior dome light.

GREEN WIRE: (-) DOOR TRIGGER - Same as the PURPLE wire above except this wire is used for vehicles that has a ground when the door is open and a 12 Volt (+) when the doors are closed. You will only need to use either the GREEN or PURPLE door trigger wire.

BROWN WIRE: (+) SIREN OUTPUT (3A MAX) - Connect this wire to the RED wire on the siren in the engine compartment. It is best to run in BOTH the RED and BLACK wire from the siren into the vehicle and connect the BLACK wire from the siren to the BLACK wire on the the alarm system.

GREY WIRE: (-) AUX OUTPUT 1/ TRUNK RELEASE OUTPUT - Connect to the Negative trunk release circuit or to the Negative activation circuit of an auxiliary module or device. A relay may be required.

BLACK/WHITE: (-) AUX OUTPUT 2 - This wire is either a single output or a timed output. This output is triggered from pressing the LOCK and UNLOCK buttons at the same time. A single press will give you a single output. If you hold the LOCK and UNLOCK button the output will activate until you release the buttons.
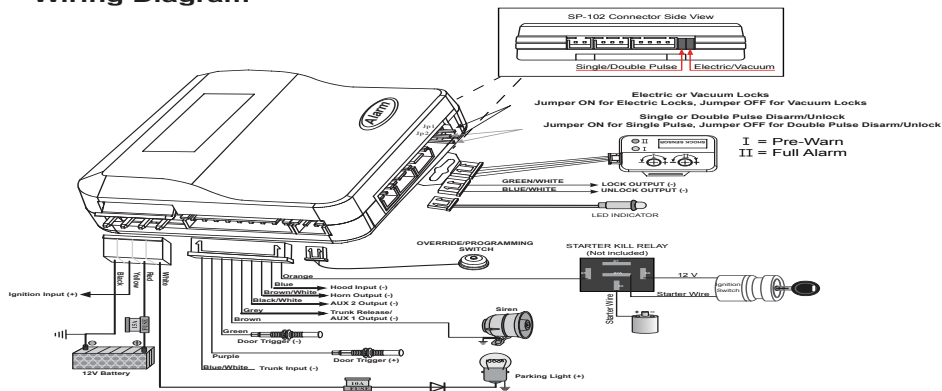
BROWN/WHITE WIRE: (-) HORN PULSE OUTPUT - Output for the Negative HORN trigger. This wire will trigger the vehicles horn on alerts and confirmations.

BLUE WIRE: (-) HOOD TRIGGER - Input wire for the hood pin. This wire is used to tell the alarm if the hood is open (ground on hood pin wire). If the vehicle does not have a hood pin from the factory, you will need to install the one supplied with the unit.

ORANGE WIRE: (-) NEGATIVE WHEN ARMED/ STARTER DISABLE (500mA) - This wire has a negative output when the system is armed. This output is used for disabling the starter or to activate the optional devices such as extra sensors, LED's, window roll-up modules, voice modules, etc.

COMPONENT MOUNTING

Wiring Diagram

SP-102 Connector Side View

Single/Double Pulse | Electric/Vacuum

Electric or Vacuum Locks
Jumper ON for Electric Locks, Jumper OFF for Vacuum Locks

Single or Double Pulse Disarm/Unlock
Jumper ON for Single Pulse, Jumper OFF for Double Pulse Disarm/Unlock

I = Pre-Warn
II = Full Alarm

GREEN/WHITE → LOCK OUTPUT (-)
BLUE/WHITE → UNLOCK OUTPUT (-)
LED INDICATOR

OVERRIDE/PROGRAMMING SWITCH

STARTER KILL RELAY (Not included)

12 V
Ignition Switch
Starter Wire

Ignition Input (+)

Orange
Blue → Hood Input (-)
Brown/White → Horn Output (-)
Black/White → AUX 2 Output (-)
Brown → Trunk Release/ AUX 1 Output (-)
Green → Door Trigger (-)
Purple → Door Trigger (-)
Blue/White → Trunk Input (-)

Siren

Parking Light (+)

12V Battery

10 A

5

Door Lock Wiring – 3 Pin Harness

Blue/White - Pulse for unlock- negative output

Green/White - Pulse for lock- negative output

How to determine which door locks the vehicle has- It is recommended to learn which style of door locks the vehicle has prior to connecting any wires. Failure to do so could result in damage to the vehicle. Testing of the wires should be done with a DMM as any other way of testing could result in damage to the vehicle.

Negative trigger- This means the doors will lock and unlock from a ground (negative) pulse to the corresponding wires.

Positive trigger- This means the doors will lock and unlock from a 12V (positive) pulse to the corresponding wires.

Reverse Polarity- What happens here is that the lock/unlock wires rest at ground. When you trigger the lock wire it will go to 12V and the unlock wire will stay on ground. When you trigger the unlock wire it will be vice-versa.

Single wire- This is also called dual voltage as lock and unlock work on the same wire just different voltages. This can may also be accomplished with different resistances as well if it is a negative system. In this system you are triggering the body computer instead of the door lock motors or switches like in the previous methods. These different voltages/resistances will tell the body computer what it should do.

Data locks- This system is controlled via a data interface module that is sold separately. This module will send a digital signal along the can lines telling the computer system what it should do, whether to lock or unlock the vehicle.

Shock Sensor 4 Pin Harness

The shock sensor is what tells the alarm that something has struck the vehicle or is trying to break in.

The system has 2 leds and 2 adjustment dials on it. The I LED is for pre-warn while the II LED is for full alarm trigger. For a more sensitive alarm turn the dials to the right. For less sensitivity turn them to the left. These settings should be done independently of each other and may need fine-tuned after the initial install.

Wiring of Shock Sensor

- **Blue** - Full alarm trigger

- **Yellow** – Pre-warn

- **Red** - 12V constant

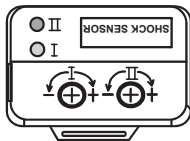- **Black** – Ground

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I = **Pre-Warn**

II = **Full Alarm**

SHOCK SENSOR: The sensor supplied with this system does not require any additional wiring. Simply mount the sensor in a suitable location, plug it in, and adjust the sensitivity.

SENSOR ADJUSTMENT
Clockwise = More Sensitive
Counter Clockwise = Less Sensitive

I = Pre-Warn
II = Full Alarm

Option Programming

- Turn the ignition ON and press the Override/Program button 5 times. After a slight delay, the system will chirp and flash the parking lights 5 times.

- Within the next few seconds, press the Override/Program button the number of times that corresponds to the feature list below. The system will chirp for each button press.

- When you get to the desired option number, quickly press the appropriate button on the remote control according to the chart below. Button 1 (LOCK) will give a single system chirp. Button 2 (UNLOCK) will give 2 system chirps. Button 3 (SILENT) will give 3 system chirps.

NOTE: Siren or Horn must be connected in order to hear the chirps to know that the command was accepted.

Turn the ignition OFF. The system will chirp the system and flash the parking lights 3 times on programming exit. When you are finished customizing options, check for proper operation.

Option #	Option Description	LOCK, Button #1	UNLOCK, Button #2	Silent, Button #3
1	Factory Horn Pulse	Pulse w/trigger only	Arm/Disarm, Warn & Pulse w/trigger	
2	Passive Arming	ON	OFF	
3	Ignition Controlled Locks	ON	OFF	LOCK only (NO UNLOCK)
4	Door Open Warning	60 Seconds	60 Seconds	
5	Active Re-Arm	Enabled	Disabled	
6	Disarm w/Trunk Release	Disabled	Enabled	
7	Carjack Protection Type	Active	Active & Passive	Full-Time
8	Carjack Feature	Disabled	Enabled	
9	Parking Lights ON w/Disarm		Enabled	Disabled
10	Passive LOCKON	OFF		

PROGRAMMING OPTIONS EXPLAINED

HORN CHIRP PULSES - This option controls the system's Horn-honk output. There are 3 selections: Button 1 (LOCK) Horn pulse only when alarm is triggered. Button 2 (UNLOCK) Horn chirps for Arm, Disarm, Single Pre-warn protection and full trigger alarm. Button 3 (SILENT) Horn chirps for Arm, Disarm, Multiple Pre-warn protection and full trigger alarm.

PASSIVE ARMING - This option controls the Passive (automatically) arming feature. If ON, arming will occur 40 seconds after the ignition is turned OFF and the last door has been closed. The LED will begin to flash rapidly while counting down. If a door is opened before the countdown ends, the system will wait for the door or zone (trunk or hood) to close before arming. The system will chirp and flash the lights once when the system arms as well as lock the doors if passive locking is selected and the vehicle has electric locks and they are connected to the alarm system. NOTE: If you disarm the system and re-enter the vehicle, you will need to turn the ignition ON and OFF for Passive Arming to reactivate.

IGNITION CONTROLLED LOCKS - This option controls whether the locks are controlled by ignition. There are 3 selections: Button 1 (LOCK) Lock/Unlock with ignition ON/OFF. Button 2 (UNLOCK) No ignition locks. Button 3 (SILENT) Ignition lock only.

DOOR AJAR WARNING - This setting fixed at a 60 Second delay in which the alarm system begins to monitor the door circuit. This option can prevent the alarm from giving warning chirps on vehicles with a delayed dome light.

ACTIVE RE-ARMING - Active re-arming allows the system to re-arm itself 40 seconds after being disarmed with the remote if a door, hood, trunk has not been opened.

DISARM WITH TRUNK RELEASE - This will control whether the alarm system will DISARM when the Trunk Release feature is used. When Option 6 is turned ON, the alarm will disarm when pressing button 4 (TRUNK). When this option is turned OFF, the trunk can be opened by pressing button 4 (TRUNK) without triggering the alarm and the rest of the alarm will remain active.

ACTIVE, PASSIVE, or FULL TIME CARJACK PROTECTION - This feature controls the type of Carjack protection the alarm will provide. There are 3 options: Button 1 (LOCK) Active protection. Button 2 (UNLOCK) Active and Passive protection. Button 3 (SILENT) full time protection. Option 8 must be ENABLED to allow Carjack functions to operate.

CARJACK FEATURES - This option control's the unit's Carjack features. Enable or Disable Carjack (Turn ON or OFF) with this option.

PROGRAMMING OPTIONS

PARKING LIGHTS ON WITH DISARM - With this feature enabled, the parking lights will flash twice and then stay on for 30 Seconds when the system is disarmed. This is for added security and to assist in locating your vehicle in a crowded parking lot. The parking lights will stay on for 30 Seconds or until the ignition is turned ON.

PASSIVE LOCKS - This option controls whether the doors will lock when Passive Arming occurs. NOTE: This feature may increase the risk of locking your keys in the vehicle.

CARJACK MODES

ACTIVE CARJACK

This feature provides Active Carjack protection and MUST be enabled before use through the alarm programming. To activate, with the ignition ON, press button 2 (UNLOCK). The parking lights will flash twice to confirm Carjack countdown has begun. After 90 seconds the unit will begin the Carjack cycle consisting of pre-warning chirps for 20 seconds then turning into a full system alarm activation with the siren and parking lights flashing for 5 minutes. To reset the Active Carjack, turn the ignition to the ON position and press button 2 (UNLOCK) again.

PASSIVE CARJACK

This feature provides Passive Carjack protection and MUST be enabled before use through the alarm programming. To activate, the ignition has to be ON and a door must be opened. The parking lights will flash twice to confirm Carjack countdown has begun. After 90 seconds the unit will begin the Carjack cycle consisting of pre-warning chirps for 20 seconds then turning into a full system alarm activation with the siren and parking lights flashing for 5 minutes. To reset the Passive Carjack protection, turn the ignition ON with the doors CLOSED, then press the Override/Program button 3 times.

PROGRAMMING OPTIONS EXPLAINED

FULL-TIME CARJACK

Full-time Carjack mode should only be used in extreme conditions. This feature provides Full-time Carjack protection and MUST be enabled before use through the alarm programming. Every time the ignition is turned ON OR a door is opened the Carjack countdown will be initiated. The parking lights will flash twice to confirm Carjack countdown has begun. After 90 seconds the unit will begin the Carjack cycle consisting of pre-warning chirps for 20 seconds then turning into a full system alarm activation with the siren and parking lights flashing for 5 minutes. You MUST reset the unit every time the ignition is turned ON or a door is opened. To reset the Full-time Carjack feature, the ignition must be ON and the doors must be closed, then press the Override/Program button 3 times.

NOTE: When Full Time Carjack mode is in effect, you must reset it every time the key is turned ON, a door is opened, before you are able to enter Valet mode and before you will be able to program any options or remotes. It is always in effect each time the ignition is turned ON and/or a door is opened with the ignition ON.

COMPONENT MOUNTING

Control module – The main control module (aka "The BRAIN") should be mounted under the dash and secured to a metal brace using either zip ties or screws. Ensure that the main control module and the wiring will not be in the way of any moving parts that it may be caught on such as the steering wheel, pedals or e-brake.

Siren – The siren should be mounted to a solid metal surface with the open area of the siren facing towards the ground. The siren should never be mounted so that the open area is to the sky.

LED – The led should be mounted in a visible location centrally located using a 5/16 drill bit to create the hole. Before drilling be sure that there is adequate room for the LED in the mounting location.

Shock Sensor – The shock sensor should be mounted to a solid piece of metal under the dash that will allow vibrations to transfer to it easily. The main support (sub dash support) is generally a good choice as that will usually be connected to the main body of the vehicle with no vibration dampeners between them. Be sure to set and test the shock sensor prior to reassembling the dash.

Program Button – The program button will be used by you, the installer and by the end user, so mounting location is **important. It**

COMPONENT MOUNTING

should be mounted in a location that the end user will be able to get to without having to take apart panels that will require tools. Some of the generally used locations will be near the OBDII port or driver's side fuse panel.

REMOTE PAIRING

Pairing a Remote to the System

A quick note before you begin. Once you enter programming mode it will erase all of the other remotes paired to the system, therefore we recommend having all remotes for the system ready to pair prior to entering pairing mode. The SP-102 can pair up to 4 remotes.

- Turn the ignition to the ON position

- Press the Override/Program button 4 times. You will know you are in pairing mode once the system "chirps" the siren and flashes the parking lights 4 times.

- Once in pairing mode, press Button #1 or the LOCK/ARM button of the first remote you want to learn. You will know that the remote has paired when the parking lights flash twice indicating that the system is ready for the next remote. Now press Button #1 or LOCK/ARM button of the next remote. The parking lights will flash 3 times indicating the system is ready for the next remote. Continue this until you have added all of the remotes you wish to add to control the system or up to 4 remotes.

After you have programmed all of your remotes, exit programming by turning the ignition to OFF position.

Security Trigger Diagnostics

Alarm Trigger Diagnostics (This feature is only available w/Active Rearm Enabled)

If the system was triggered when you were away from your vehicle, the system will give 4 chirps and flashes from the parking lights when you disarm the system. After you Disarm the system the LED will flash a sequence giving you which trigger was activated. The graph below will show what the different flashes represent.

- 1 Flash – Ignition was turned on
- 3 Flashes – Door, Hood or Trunk trigger
- 4 Flashes – Shock Sensor

Alarm Trigger Reset - After the alarm has been triggered, you will need to reset the system by turning the ignition to the ON position then turning the ignition to the OFF position. Once you rearm the vehicle all of the triggers will be reset.

TECH TIPS

Tech Tips

For more information about relays, immobilizers, wire isolation, diodes and more head over to crimestopper.com then click the Support tab then on the Knowledge Base tab. This will take you to the home page of the CrimeStopper Knowledge Base. Once here, under the heading of Featured Support Categories click on the Install/Troubleshoot tab. This will bring you to all of our Tech Tips as well as all of the Videos, or click here