Responder LC Models
Viper
Clifford
Python
Security System
Installation Guide

This product is intended for installation by a professional installer only! Attempts to install this product by a person other than a trained professional may result in severe damage to a vehicle's electrical system and components.



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Bitwriters with a date code of 6a or older require an IC upgrade (p/n 998M). Some bitwriters with a date code of 6B do not require the IC upgrade, refer to tech tip # 1112 for more information.



# Contents

Warning! satety tirst	4
Warning! satety tirst	4
Wiring Connections	
Main Harness (H1), 12-pin connector	5
Door Lock Harness (H2), 8-pin connector	
Auxiliary Harness (H3) 7-pin connector	5
Starter Kill Harness, 3-pin connector	5
GWA Mux Harness, 3-pin connector	
Adjusting the Shock Sensor	6
Pairing a Remote Control	7
Programming System Features	8
Feature Menus	9
Menu 1	9
Menu 2	12
Bitwriter - Only Options	15
Basic Remote Functions	17
Reset and Deletion	17
Long Term Event History	17
Table of Zones	18
Troubleshooting: Alarm	

# Warning! safety first

 $\triangle$ 

The following safety warnings must be observed at all times:

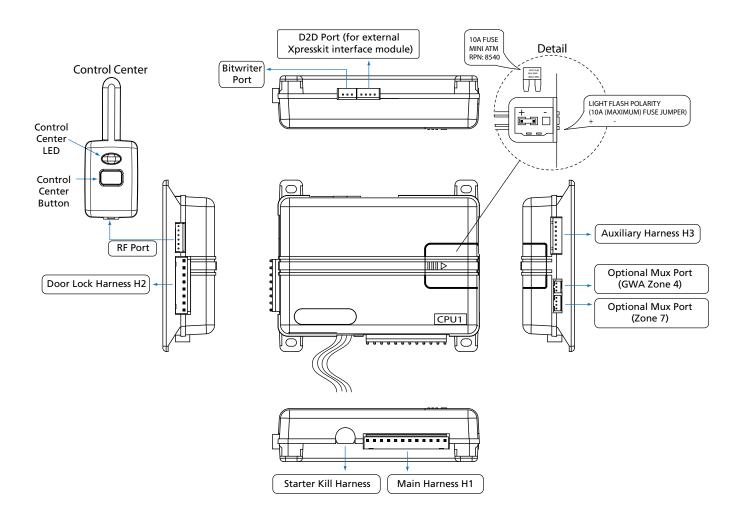
 Due to the complexity of this system, installation of this product must only be performed by an authorized Directed Electronics dealer.

The following precautions are the sole responsibility of the user; however, authorized Directed Electronics dealers should:

Never use a test light or logic probe when installing this unit. Always use a multimeter.

Use of this product in a manner contrary to its intended mode of operation may result in property damage, personal injury, or death.

# Wiring Diagram



# Wiring Connections

### Main Harness (H1), 12-pin connector

12

H1/1	RED/WHITE	(-) 200mA AUX/TRUNK OUTPUT	
H1/2	RED	(+)12VDC CONSTANT INPUT	
H1/3	BROWN	(+) SIREN OUTPUT	
H1/4	WHITE/BROWN	PARKING LIGHT ISOLATION WIRE - PIN 87a of onboard relay	
H1/5	BLACK	(-) CHASSIS GROUND	
H1/6	VIOLET	(+) DOOR TRIGGER INPUT	
H1/7	BLUE	(-) TRUNK PIN/ INSTANT TRIGGER INPUT (N/C OR N/O)	
H1/8	GREEN	(-) DOOR TRIGGER INPUT (N/C* OR N/O)	
H1/9	BLACK/WHITE	(-) 200mA DOME LIGHT SUPERVISION/FLEX RELAY (Programmable) OUTPUT	
H1/10	WHITE/BLUE	200 mA AUX 1 OUTPUT	
H1/11	WHITE	PARKING LIGHT OUTPUT	
H1/12	ORANGE	(-) 500mA GROUND WHEN ARMED OUTPUT	

<sup>\*</sup>When using the normally closed setting, this wire only covers one door. Use auxiliary outputs 2, 3 or 4 (as necessary) programmed as N/C door switch inputs (wired to each individual door of the vehicle) to cover the other doors. The auxiliary outputs are also programmable as N/O door switch inputs so you can connect multiple doors without the use of diodes.

When the auxiliaries are programmed for these types of circuits and connected to the vehicle, the alarm reports a door violation when triggered.

### Door Lock Harness (H2), 8-pin connector

1 8

H2/1	VIOLET*	UNLOCK #87 NORMALLY OPEN (INPUT)
H2/2	BLUE/BLACK	UNLOCK #30 COMMON (OUTPUT)
H2/3	BROWN/BLACK	UNLOCK #87a NORMALLY CLOSED
H2/4	VIOLET/BLACK*	LOCK #87 NORMALLY OPEN (INPUT)
H2/5	GREEN/BLACK	LOCK #30 COMMON (OUTPUT)
H2/6	WHITE/BLACK	LOCK #87a NORMALLY CLOSED
H2/7	WHITE/VIOLET	FLEX RELAY #87 NORMALLY OPEN (INPUT)**
H2/8	WHITE/BROWN	FLEX RELAY #87a NORMALLY CLOSED**

<sup>\*</sup> Violet and Violet/Black are common at the fuse holder.

### Auxiliary Harness (H3) 7-pin connector

1 7

H3/1	ORANGE/BLACK	(-) 200mA AUX 4 OUTPUT	
H3/2	WHITE/BLACK	(-) 200mA AUX 3 OUTPUT	
H3/3	VIOLET/BLACK	(-) 200mA AUX 2 OUTPUT	
H3/4	LIGHT GREEN/BLACK	(-) 200mA FACTORY ALARM DISARM OUTPUT	
H3/5	YELLOW	+) IGNITION INPUT	
H3/6	BROWN	(-) 200mA HORN HONK OUTPUT	
H3/7	GREY	(-) HOOD PIN INPUT (N/C OR N/O)	

# Starter Kill Harness, 3-pin connector

- tu to						
1	GREEN/WHITE	STARTER - COMMON (KEY SIDE)				

<sup>\*\*</sup> These wires work in conjunction with the Black/white H1/9 wire. The white/violet determines what the polarity of the H1/9 wire will be and the white/brown will only be used if a five wire circuit is required.

2	GREEN	STARTER - NORMALLY OPEN (MOTOR SIDE)
3	GREEN/BLACK	STARTER - NORMALLY CLOSED (MOTOR SIDE)

### GWA Mux Harness, 3-pin connector

1	RED	-12 VDC TO SENSOR	
2	BLACK	GND TO SENSOR	
3	BLUE/WHITE	MUX WIRE INPUT	

# Adjusting the Shock Sensor

Using the 2-way remote control:

- 1. Disarm the system, turn the ignition off and close all the doors, hood and trunk.
- 2. Press and hold the f button of the remote control until a long beep is emitted and Main Menu is displayed. (if programmed to operate two systems, ignore the car 1 or car 2 text and beeps at 3 seconds).
- 3. Release the f button to view the main menu. Setup Remote is displayed.
- Sensor Adjust is displayed. 4. Press and release the 🕥 button.
- 5. Press and hold the f button until a long beep is emitted and the siren emits a long chirp. The current sensitivity Sen ## is displayed, adjustment mode is ready.
- 6. Adjust the sensitivity:
  - a. Press and release the and in buttons change the sensitivity.
  - b. Press and hold the f button. The adjustment is sent to the system and the remote control emits a long beep as confirmation.
  - c. Release the button.

Note: After each adjustment the sensitivity can be tested by cautiously impacting the vehicle with increasing intensity. The siren will chirp to indicate the impact level required to fully trigger the alarm.

#### Exit adjustment mode:

- Press and release the  $\triangle$  or  $\mathcal{S}$  button any time.
- Open the hood or trunk
- Turn the ignition on
- Wait for 30 seconds between steps

The siren will emit one long chirp when exiting adjustment mode.

#### Adjusting the sensor with the 1 way remote:

- 1. Disarm the system, turn the ignition Off and close all the doors.
- 2. Press and hold the f button of the remote control for 8 seconds until the transmit LED turns on then release it (If programmed to operate two systems, ignore the transmit LED flashes at three seconds).
- 3. Press and hold the 🚨 button until the transmit LED flashes off then on and the siren emits a long chirp. Adjustment mode is ready.
- 4. Adjust the sensitivity:

  - Press and release the button to increase the sensitivity. The siren chirps two times.

    Press and release the button to decrease the sensitivity. The siren chirps one time.

    Press and release the button to reset sensitivity to default setting. The siren chirps three times.

Note: After each adjustment the sensitivity can be tested by cautiously impacting the vehicle with increasing intensity. The siren will chirp to indicate the impact level required to fully trigger the alarm.

#### Exit adjustment mode:

- Press and release the f button any time to exit adjustment mode, and then press and hold to return the remote control to normal operation (transmit LED turns off).
- Open the hood or trunk
- Turn the ignition on
- Wait for 30 seconds between steps

The siren will emit one long chirp when exiting adjustment mode.

### Pairing a Remote Control

#### Prepare the system

- Open a door.
- 2. Turn the ignition on.
- 3. Press and release then press and hold the control center button. The control center LED flashes and the siren chirps one time to confirm the system is prepared.
- Release the button and proceed below.

Note: Begin Pairing within 60 seconds or the system will exit (indicated by a long siren chirp) and need to be prepared again.

Prepare the LC remote control

Select the desired car 1 (default) or car 2 operation before proceeding.

- 1. Press and hold the f button of the remote control until a long beep is emitted and Main Menu is displayed (if programmed to operate two systems, ignore the car 1 or car 2 text and beeps at 3 seconds). Release the f button to view the main menu. Remote Setup is displayed.

  Press and release the button two times. Pair Remote is displayed.
- Press and release the button two times. Pair Remote is displayed.
   Press and hold the f button until Pair is displayed, and then release it.
- 5. Press and hold the  $\triangle$  button until the siren emits a long chirp. Success is displayed with a sequence of chimes.
- 6. Note: If Failed is displayed, make sure the system is still prepared and repeat step 5 until successful.

Prepare the system to be paired with the companion 1-way remote as described above.

Note: If no remote pairing results, the system will exit after 60 seconds.

Prepare the companion 1-way remote control to be paired with the system: Select the desired car 1 (default) or car 2 operation before proceeding.

- 1. Press and hold the f button for 8 seconds until the transmit LED turns on, and then release it (If programmed to operate two systems, ignore the transmit LED flashes at 3 seconds).
- Press and hold the button until the transmit LED flashes off and on three times.
   Press and hold the button until the siren emits one long chirp to confirm Pairing.

#### To exit Pairing mode:

- 1. Turn off the ignition, the siren will emit one long chirp.
- 2. Press and hold the f button on the remote and then press and hold to return the remote control to normal operation (transmit LED turns off).

## **Programming System Features**

The System Features Learn Routine dictates how the unit operates. It is possible to access and change most of the feature settings using the Control button.

- 1. Open a door.
- 2. Turn the ignition on, then off.
- 3. Select a Menu. Press and hold the Control button. The number of siren chirps indicates the menu number. 1 chirp indicates menu 1, 2 chirps for menu 2.
- 4. When the desired menu chirps are heard, release the Control button.
- 5. Select a Feature. Press and release the Control button the number of times corresponding to the feature you wish to change. Then press and hold one more time to select the features.
- 6. Program the Feature. While holding the Control button, you can program the feature using the remote control.

For features with only two options;  $\triangle$  = option 1 while  $\mathcal{S}$  = option 2. For features with more than two options;  $\triangle$  selects the options in ascending order, while  $\mathcal{S}$  selects them in descending order.

Note: Pressing 😯 button resets the feature to the factory default.

#### Once a feature is programmed:

- Other features can be programmed within the same menu
- Another menu can be selected
- The learn routine can be exited if programming is complete

#### To access another feature in the same menu:

- 1. Press and release the Control button the number of times necessary to advance from the feature you just programmed to the next one you want to program.
- Then press the Control button once more and hold it.

#### To select another menu:

- 1. Press and hold the Control button.
- 2. After 3 seconds, the unit advances to the next menu and the siren chirps, indicating which menu has been accessed.

#### The learn routine exits if any of the following occurs:

- The open door is closed
- The ignition is turned On
- There is no activity for 30 seconds
- The Control button is pressed too many times

# Feature Menus

Default settings are Opt. 1.

### Menu 1

Menu Item	Feature	Opt. 1	Opt. 2	Opt. 3	Opt.4	Opt. 5+
1	System Arming Mode	Active	Passive Arm – no lock	Passive Arm & lock	Auto Re-arm - no lock	Auto Re-arm & Lock
2	Panic Mode	On	Ignition Off Only	Off		
3	Confirmation Chirps	On - Warn chirps on	On - Warn chirps off	Off - Warn chirps on	Off - Warn chirps off	
4	Siren Duration	30 sec.	60 sec.			
5	Ign-controlled Locks	No Ign- lock- ing	Lock & Unlock	Lock Only	Unlock Only	
6	Door Lock Pulses	Single	Double Unlock Only	Double Lock Only	Double Lock & Unlock	
7	Door Lock Output Duration	0.8 sec.	3.5 sec.	0.4 sec.		
8	2nd Unlock**	2nd unlock on Ign-control after first unlock	2nd unlock on Ign-control with first unlock			
9	Comfort Closure	No Comfort Closure	Comfort Closure 1	Comfort Closure 2		
10	Horn Function	Full Alarm Only	Siren Function 20 ms	Siren Function 30 ms	Siren Function 40 ms	Siren Function 50 ms
11	Hood Switch type	Normally Open	Normally closed			
12	Trunk Switch Type	Normally open	Normally closed			
13	Door Switch Type	Normally open	Normally closed			
14	Immobilizer Type	Normally Closed	Normally Open			
15	Sensor Trigger	Single sensor	Double sensor			
16	Nuisance Prevention	On	Off			
17	Flex Relay	Dome	Horn	Trunk release		
18	VRS	Off	On - Disarm chirps off	On - Disarm chirps on		
19	Remote Button unlock (Ign off)*	On	Off			

<sup>\*</sup> Not available with the 1-way remote control.
\*\* Requires 2nd unlock option to be set for an Aux channel.

#### 1. System Arming mode

- 1. Active: the transmitter must be used to arm the system
- 2. Passive Arm w/o lock: after exiting the vehicle the system will automatically arm. The doors will not lock
- 3. Passive Arm w/lock: after exiting the vehicle the system will automatically arm and lock the doors
- 4. Auto re-arm w/o lock: if the vehicle is not entered after receiving a disarm command, the system will automatically re-arm. The doors will not lock
- 5. Auto re-arm w/lock: if the vehicle is not entered after receiving a disarm command, the system will automatically re-arm and lock the doors

#### 2. Panic Mode

- 1. On: the Panic output can be activated at any time
- 2. Ign Off Only: the Panic output can be activated only when the ignition is off
- 3. Off: the Panic output is defeated

#### 3. Confirmation Chirps

- 1. On w/Warn Chirps On: arm, disarm, and sensor warn-away chirps are active
- 2. On w/Warn Chirps Off: arm and disarm chirps are active, warn-away chirps are defeated
- 3. Off w/Warn Chirps On: arm and disarm chirps are defeated, warn-away chirps are active
- 4. Off w/Warn Chirps Off: arm, disarm, and sensor warn-away chirps are defeated

#### 4. Siren Duration

- 1. 30sec: the siren output for full trigger activations and Panic mode is 30 seconds
- 2. 60sec: the siren output for full trigger activations and Panic mode is 60 seconds

#### 5. Ign-controlled Locks

- 1. No Ign-locking: the door lock/unlock outputs will not activate when ignition is turned on/off
- 2. Lock & Unlock: the door lock & unlock output will activate when ignition is turned on & off
- 3. Lock Only: the door lock output will activate when ignition is turned on
- 4. Unlock Only: the door unlock output will activate when ignition is turned off

#### 6. Door Lock Pulses

- 1. Single: the door lock & unlock outputs will pulse once
- 2. Double Unlock only: the unlock output only will pulse twice
- 3. Double Lock Only: the lock output only will pulse twice
- 4. Double Lock & Unlock: the lock & unlock outputs will pulse twice

#### 7. Door Lock Output Duration

- 1. 0.8sec.: the door lock output pulses will be 800mS in duration
- 2. 3.5 sec.: the door lock pulses will be 3.5 seconds in duration
- 3. 0.4 sec.: the door lock pulses will be 400mS in duration

### 8. Ignition Controlled 2nd Unlock

- After first unlock: for Ign-controlled unlocking, the 2nd unlock will activate 800mS after the first (driver door) unlock
- 2. With first unlock: for Ign-controlled unlocking, the 2nd unlock will activate at the same time as the first (driver door) unlock

#### 9. Comfort Closure

- 1. No comfort Closure: Comfort Closure is defeated when arming
- Comfort Closure 1: the door lock pulse (or 2nd pulse for double pulses) will remain on for 20 seconds.
- 3. Comfort Closure 2: 800mS following the end of the door lock pulse (or 2nd pulse for double pulses); the door lock output will turn on again for 20 seconds.

#### 10. Horn Function

- 1. Full Alarm Only: the horn output will pulse only during full trigger events.
- 2. Siren Function 20/30/40/50ms: The horn output will emulate the siren output with selectable chirp output timing to compensate for OEM horn inefficiency.

11. Hood Switch Type

- 1. Normally Open: for vehicles with a hood switch that rests at ground when the hood is OPEN
- 2. Normally Closed: for vehicles with a hood switch that rests at ground when the hood is CLOSED

12. Trunk Switch Type

- 1. Normally Öpen: for vehicles with a trunk switch that rests at ground when the trunk is OPEN
- 2. Normally Closed: for vehicles with a trunk switch that rests at ground when the trunk is CLOSED

13. Door Switch Type

- 1. Normally Open: for vehicles with door switches that rest at ground when the door is OPEN
- 2. Normally Closed: for vehicles with door switches that rest at ground when the door is CLOSED

14. Immobilizer Type

- 1. Normally Open: the starter kill relay will rest OPEN when main power is disconnected
- 2. Normally Closed: the starter kill relay rests CLOSED when main power is disconnected

15. Sensor Full Trigger

- 1. Single: full trigger activation of only one sensor is required to fully trigger the alarm
- 2. Double: full trigger activation of two sensors within a ten second period is required to fully trigger the alarm.

#### 16. Nuisance Prevention

- On: sensors that trigger excessively will be defeated until they have been stable for more than one hour
- 2. Off: sensors will not be defeated if triggered excessively

#### 17. Flex Relay

- 1. Dome: the (H1/9) Black/White wire will operate as Dome Light Supervision
- 2. Horn: the (H1/9) Black/White wire will operate as Horn Honk Output; the (H3/6) Brown wire will operate as Dome Light Supervision.
- 3. Trunk: the (H1/9) Black/White wire will operate as Trunk Release Output; the (H1/1) Red/White wire will operate as Dome Light Supervision.

#### 18. VRS

- 1. Off: The Vehicle Recovery System is disabled
- 2. On Disarm chirps off: The Vehicle Recovery System is enabled and, when disarmed by Remote Control, will not chirp the siren.
- 3. On Disarm chirps on: The Vehicle Recovery System is enabled and, when disarmed by Remote Control, will chirp the siren 3 times to confirm.

19. Remote Button Unlock (Ign off)

- 1. On: a message telling the remote control to unlock the keypad is sent each time the vehicle ignition is turned off
- 2. Off: no message is sent

### Menu 2

Menu   Feature   Opt. 1   Opt. 2   Opt. 3   Opt. 4   Opt. 5 +	IVICII	4 <b>~</b>					
bypass Off bypass On bypass On bypass On bypass On Dor Trigger Error Chirp On Off Off OPT ON Off OPT OPT ON OFF OPT ON OFF OPT ON OFF OPT ON OPT		Feature	Opt. 1	Opt. 2	Opt. 3	Opt.4	Opt. 5+
3   Door Trigger Error Chirp   On Off	1	One-time Bypass					
4 Ign-controlled Dome light On Off 5 OEM Alarm Disarm w/Aux- Trunk 6 OEM Alarm Disarm Output With Unlock Before Unlock 7 OEM Alarm Disarm Pulses 1 2 8 Aux/Trunk Output type Validity Off Arm Link to Disarm Link to Arm/ Linking Link to Arm Link to Disarm Link to Arm/ 10 Aux 1 Output type Validity Latch Latch/reset/ign Timed Off (5) OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8) 11 Aux 2 Output Type Validity Latch Latch reset/ign Timed Off (5) OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8) 12 Aux 2 Output Type Validity Latch Latch reset/ign Timed Off (5) OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8) 13 Aux 2 Linking No Linking Link to Arm Link to Disarm Link to Arm/ Disarm Disarm (6), 2nd Unlock (8), No Door Switch (8),	2	Override Pulse count	1	2	3	4	5
5 OEM Alarm Disarm w/Aux. Trunk 6 OEM Alarm Disarm Output With Unlock Before Unlock 7 OEM Alarm Disarm Pulses 1 2 8 Aux/Trunk Output type Validity Off OEM Alarm 2nd unlock Arm Link to Disarm Disarm 9 Aux Trunk Linking No Linking Link to Arm Link to Disarm Disarm 10 Aux 1 Output type Validity Latch Latch/reset/ign Timed Off (5) OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8) 11 Aux 2 Output Type Validity Latch Latch reset/ign Timed Off (5) OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8) 12 Aux 2 Output Type Validity Latch Latch reset/ign Timed Off (5) OEM Alarm Arm (6), 2nd Unlock (7), Oem Switch (8), Oem Sw	3	Door Trigger Error Chirp	On	Off			
Trunk 6 OEM Alarm Disarm Output 7 OEM Alarm Disarm Pulses 1 2 8 Aux/Trunk Output type 9 Validity 10 Aux 1 Cutput type 11 Aux 1 Linking 11 Aux 1 Linking 12 Aux 2 Output Type 13 Aux 2 Linking 14 Aux 3 Output Type 15 Aux 3 Utput Type 16 Aux 3 Utput Type 17 Aux 4 Linking 18 Aux 4 Linking 19 Aux 4 Linking 10 Aux 1 Cutput type 19 Validity 10 Aux 1 Link to Disarm 10 Aux 1 Linking 10 Aux 1 Linking 11 Aux 1 Linking 12 Aux 2 Output Type 13 Aux 2 Output Type 14 Aux 3 Output Type 15 Aux 3 Output Type 16 Aux 6 Aux 6 Aux 6 Output Type 17 Aux 8 Linking 18 Aux 9 Linking 19 Validity 10 Latch 11 Link to Disarm 11 Link to Disarm 12 Link to Arm 13 Aux 1 Linking 14 Aux 3 Output Type 15 Aux 6 Linking 16 Aux 6 Linking 17 Aux 6 Linking 18 Link 10 Arm 19 Link 10 Arm 10 Link 10 Disarm 10 Link 10 Arm 10 Link 10 Disarm 10 Link 10 Arm 10 Link 10 Ar	4	Ign-controlled Dome light	On	Off			
7 OEM Alarm Disarm Pulses 1 2 8 Aux/Trunk Output type Validity Off OEM Alarm 2nd unlock Arm 9 Aux Trunk No Linking Link to Arm Link to Disarm Link to Arm/Disarm 10 10 Aux 1 Output type Validity Latch Latch/reset/ign Timed Off (5) OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8) 11 Aux 2 Output Type Validity Latch Latch reset/ign Timed Off (5) OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8) 12 Aux 2 Output Type Validity Latch Latch reset/ign Timed Off (5) OEM Alarm Arm (6), 2nd Unlock (7), O Door Switch (8), C Door Sw	5		On	Off			
8 Aux/Trunk Output type Validity Off OEM Alarm 2nd unlock Arm Link to Disarm Link to Arm/Disarm Link to Arm/Disarm Link to Disarm Link to Disarm Disarm Off (5) OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8)  11 Aux 1 Linking No Linking Link to Arm Link to Disarm Link to Arm/disarm  12 Aux 2 Output Type Validity Latch Latch reset/ign Timed Off (5) OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8)  13 Aux 2 Linking No Linking Link to Arm Link to Disarm Link to Arm/Disarm Disarm  14 Aux 3 Output Type Validity Latch Latch reset/ign Timed Off (5) OEM Alarm Arm (6), 2nd Unlock (8) O Door Switch (9), 2nd Unlock (8), O Door Switch (9), O Door Switch (9), 2nd Unlock (7), O Door Switch (8), O Door S	6	OEM Alarm Disarm Output	With Unlock	Before Unlock			
Arm    Arm   Arm   Arm   Arm   Link to Disarm   Link to Arm   Link to Disarm   Link to Arm   Link to Disarm	7	OEM Alarm Disarm Pulses	1	2			
Linking  10 Aux 1 Output type  Validity  Latch  Latch/reset/ign  Timed  Off [5] OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8)  11 Aux 2 Uniput Type  Validity  Latch  Latch reset/ign  Link to Disarm  Link to Disarm  Link to Arm/ disarm  Off (5) OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8)  Latch reset/ign  Timed  Off [5] OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8)  Latch reset/ign  Link to Disarm  Link to Disarm  Link to Arm/ Disarm  Off [5] OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8)  Latch reset/ign  Link to Arm/ Disarm  Off [5] OEM Alarm Arm (6), 2nd Unlock (7), Remote Start Report* (8)  Latch reset/ign  Link to Disarm  Link to Disarm  Link to Disarm  Link to Disarm  Off [5] OEM Alarm Arm (6), 2nd Unlock (8), Remote Start Report* (10), Remote Start Report* (10), Remote Start Report* (10), Remote Start Report* (10)  Latch reset/ign  Link to Arm/ Disarm  Disarm  Disarm  Link to Disarm  Link to Disarm  Link to Arm/ Disarm	8	Aux/Trunk Output type	Validity	Off		2nd unlock	
Aux 1 Linking   No Linking   Link to Arm   Link to Disarm   Link to Arm   Link to Disarm   Link to Arm   Link t	9		No Linking	Link to Arm	Link to Disarm		
Aux 2 Output Type  Validity  Latch  Latch reset/ign  Timed  Off (5) OEM Alarm Arm (6), 2nd Unlock [7] N/C Door Switch (8), N/C Door Switch (9)  13 Aux 2 Linking  No Linking  Link to Arm  Link to Disarm  Link to Arm/ Disarm  Off (5) OEM Alarm Arm (6), 2nd Unlock [7] N/C Door Switch (9)  Latch  Latch reset/ign  Timed  Off (5) OEM Alarm Arm (6), 2nd Unlock [7] N/C Door Switch (8), N/C Do	10	Aux 1 Output type	Validity	Latch	Latch/reset/ign	Timed	(/), Remote Start Re-
No Linking   Link to Arm   Link to Disarm   Link to Arm	11	Aux 1 Linking	No Linking	Link to Arm	Link to Disarm	Link to Arm/ disarm	
Disarm	12	Aux 2 Output Type	Validity	Latch	Latch reset/ign	Timed	N/O Door Switch (8), N/C Door Switch
No Linking   Link to Arm   Link to Disarm   Link to Arm   Disarm    16   Aux 4 Output Type   Validity   Latch   Latch reset/ign   Timed   Off (5) OEM Alarm Arm (6), 2nd Unlock (7)   N/O Door Switch (8), N/C Door Switch (9)   Remote Start Report* (10)    17   Aux 4 Linking   No linking   Link to Arm   Link to Disarm   Link to Arm   Disarm   Di	13	Aux 2 Linking	No Linking	Link to Arm	Link to Disarm		
Disarm  16 Aux 4 Output Type  Validity  Latch  Latch reset/ign  Timed  Off (5) OEM Alarm Arm (6), 2nd Unlock (7), N/O Door Switch (8), N/C Door Switch (9) Remote Start Report* (10)  17 Aux 4 Linking  No linking  Link to Arm  Link to Disarm  Link to Arm/ Disarm	14	Aux 3 Output Type	Validity	Latch	Latch reset/ign	Timed	(7), N/O Door Switch (8),
N/O Door Switch   R    N/C Door Switch   R    N/C Door Switch   R    N/C Door Switch   R    Remote Start Report* (10)	15	Aux 3 Linking	No Linking	Link to Arm	Link to Disarm		
Disarm	16	Aux 4 Output Type	Validity	Latch	Latch reset/ign	Timed	(/), N/O Door Switch (8), N/C Door Switch (9) Remote Start Re-
18 Remote Start Button Control None Aux 1 Aux 4	17	Aux 4 Linking	No linking	Link to Arm	Link to Disarm		
	18	Remote Start Button Control	None	Aux 1	Aux 4		

 $<sup>^{\</sup>star}$  Not available with the 1-way remote control.

#### 1. One-time Bypass

1. Off: Óne-Time Bypass is not available

2. On: the One-Time Bypass feature will defeat Passive Arming once and, if Armed by remote control, will defeat Comfort Closure and Aux outputs linked to Arming

#### 2. Override Pulse Count

• 1-5: sets the number of presses (1-5) on the Control Button required to override the alarm system

#### 3. Door Trigger error Chirp

- 1. On: if the door trigger is active when arming, the siren will emit a chirp and a message will be sent to the 2way remote control as an alert
- 2. Off: an active door trigger when arming will not create an alert output

#### 4. Ign-controlled Dome light

- 1. On: the dome light output will activate when the ignition is turned off
- 2. Off: the dome light output will not activate when the ignition is turned off

#### 5. OEM Alarm Disarm w/Aux/Trunk

- 1. On: the OEM Alarm Disarm wire will pulse as programmed when the Aux/Trunk output is activated
- 2. Off: the OEM Alarm Disarm wire will not pulse when the Aux/Trunk output is activated

#### 6. OEM Alarm Disarm Output

- With Unlock: the ÖEM Alarm Disarm wire will pulse as programmed at the same time as the unlock (Blue) wire
- 2. Before Unlock: the OEM Alarm Disarm wire will pulse as programmed before the unlock wire

#### 7. OEM Alarm Disarm Pulses

- 1. 1: the OEM Alarm Disarm wire will pulse once per operation
- 2. 2: the OEM Alarm Disarm wire will pulse twice per operation

#### 8. Aux/Trunk Output Type

1. Refer to Aux 1 Output Type descriptions

#### 9. Aux/Trunk Linking

1. Refer to Aux 1 Linking descriptions

#### 10. Aux 1 Output Type

- Validity: when the Aux command is received the wire will turn on and remain on until the command ceases
- 2. Latch: when the Aux command is received the wire will turn on and remain on until the command is received again
- 3. Latch/reset/Ignition: when the Aux command is received the wire will turn on and remain on until the command is received again or the ignition is turned on/off
- 4. Timed: when the Aux command is received the wire will turn on for the programmed time duration (default 30sec)
- 5. Off: the output will not activate for a remote control command, use this option when the Aux command controls an external device such as a garage door module
- 6. OEM alarm arm: the output will not activate for a remote control command, it will pulse when the system arms to activate the OEM alarm system.
- 7. 2nd unlock: the wire will operate as 2nd unlock and will not activate for remote control commands
- 8. Remote start report: the output will pulse once to activate an add-on remote start module and the Trunk Pin wire (H1/7) will be monitored for a ground input to confirm remote start activation.

#### 11. Aux 1 Linking

- 1. No Linking: the Aux output will not activate for a remote control command
- 2. Link to Arm: the Aux output will activate for the Arm command
- 3. Link to Disarm: the Aux output will activate for the Disarm command
- 4. Link to Arm/Disarm: the Aux output will activate for the Arm & Disarm commands

#### 12. Aux 2 Output Type

- 1. Validity: refer to Aux 1 output type description
- 2. Latch: refer to Aux 1 output type description
- 3. Latch/reset/Ignition: refer to Aux 1 output type description
- 4. Timed: refer to Aux 1 output type description
- 5. Off: refer to Aux 1 output type description
- 6. OEM alarm arm: refer to Aux 1 output type description7. 2nd unlock: refer to Aux 1 output type description
- 8. N/O door switch: for vehicles with multiple door switches that rest at ground when the door is
- 9. N/C door switch: for vehicles with multiple door switches that rest at ground when the door is

#### 13. Aux 2 Linking

refer to Aux 1 Linking description

#### 14. Aux 3 Output Type

- 1. Validity: refer to Aux 1 output type description
- 2. Latch: refer to Aux 1 output type description
- 3. Latch/reset/Ignition: refer to Aux 1 output type description
- 4. Timed: refer to Aux 1 output type description
- 5. Off: refer to Aux 1 output type description
- 6. OEM alarm arm: refer to Aux 1 output type description
- 7. 2nd unlock: refer to Aux 1 output type description
- 8. N/O door switch: refer to Aux 2 output type description
- 9. N/C door switch: refer to Aux 2 output type description

#### 15. Aux 3 Linking

refer to Aux 1 Linking description

#### 16. Aux 4 Output Type

- 1. Validity: refer to Aux 1 output type description
- 2. Latch: refer to Aux 1 output type description
- 3. Latch/reset/Ignition: refer to Aux 1 output type description
- 4. Timed: refer to Aux 1 output type description
- 5. Off: refer to Aux 1 output type description
- 6. OEM alarm arm: refer to Aux 1 output type description
- 7. 2nd unlock: refer to Aux 1 output type description
- 8. N/O door switch: refer to Aux 2 output type description
- 9. N/C door switch: refer to Aux 2 output type description
- 10. Remote start report: refer to Aux 1 output type description

#### 17. Aux 4 Linking

1. refer to Aux 1 Linking description

#### 18. Remote start button control

- None: The button has no function
   Aux 1: The button will command Aux 1
   Aux 4: The button will command Aux 4

# Bitwriter - Only Options



If programming with the Bitwriter®, the learn routine can be locked or unlocked. If the learn routine has previously been locked, it must be unlocked with Bitwriter® - this cannot be done manually with the Control button.

The Bitwriter® gives you access to a wider range of system options. These features and the adjustments that may be programmed are described in the table below.

Menu Item	Feature	Default	Opt. 2	Opt. 3	Opt.4	Opt. 5+
1	Siren Duration (Seconds)	30 sec.	Options: 1 to 180 sec.			
2	Shock Sensor Level	7	Options: 0 to 15	in increments of 1		
3	Zone 4 Sensor Icon Type*	None	Shock	Field Distur- bance	Tilt Sensor	Glass Break/Ultra- sonic/Sensor
4	Zone 7 Sensor Icon Type*	None	Shock	Field Distur- bance	Tilt Sensor	Glass Break/Ultra- sonic/Sensor
5	Aux/Trunk lcon type*	Trunk	Windows	Sunroof	Audio	Lights/Left dr/ Right dr /Rear Hatch
6	Aux 1 Timed Output (Seconds)	30 sec.	Options: 1 to 90	sec.		
7	Aux 1 Icon type*	Pulsed	Trunk	Window	Sunroof	Audio/Lights/Left dr/ Right dr /Rear Hatch/ Timed/ Latched
8	Aux 2 Timed Output (Seconds)	30 sec.	Options: 1 to 90	sec.		
9	Aux 2 lcon type*	Pulsed	Trunk	Window	Sunroof	Audio/Lights/Left dr/ Right dr /Rear Hatch/ Timed/ Latched
10	Aux 3 Timed Output (Seconds)	30 sec.	Options: 1 to 90 sec.			
11	Aux 3 Icon type*	Pulsed	Trunk	Window	Sunroof	Audio/Lights/Left dr/ Right dr /Rear Hatch/ Timed/ Latched
12	Aux 4 Timed Output (Seconds)	30 sec.	Options: 1 to 90	sec.		
13	Feature Programming	Unlocked	Locked			
14	Transmitter Programming	Unlocked	Locked			

<sup>\*</sup> Not available with the 1-way remote control.

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- 1. Siren Duration: sets the Full Trigger output duration in 1 second intervals up to 180 seconds.
- 2. Sensor 1 level: directly sets the sensor level of the on-board shock sensor
- 3. Zone 4 Sensor Icon Type: sets the Zone 4 (Sensor 2) name to be displayed in the Text Field for Warnaway and Full Trigger activations
- 4. Zone 7 Sensor Icon Type: sets the Zone 7 (Sensor 3) name to be displayed in the Text Field for Warnaway and Full Trigger activations
- 5. Aux/Trunk Icon Type: sets the name to be displayed in the text field when the Aux/Trunk output is activated/de-activated
- 6. Aux 1 Timed Output: sets the output duration in 1 second intervals up to 90 seconds for Aux 1
- Aux 1 Icon Type: sets the Accessory name to be displayed in the text field when the Aux 1 output is activated/de-activated
- 8. Aux 2 Timed Output: sets the Aux 2 "Timed" output in 1 second intervals up to 90 seconds
- Aux 2 Icon Type: sets the Accessory name to be displayed in the text field when the Aux 2 output is activated/de-activated
- 10. Aux 3 Timed Output: sets the Aux 3 "Timed" output in 1 second intervals up to 90 seconds
- 11. Aux 3 Icon Type: sets the Accessory name to be displayed in the text field when the Aux 3 output is activated/de-activated
- 12. Aux 4 Timed Output: sets the Aux 4 "Timed" output in 1 second intervals up to 90 seconds
- 13. Feature Programming: locks and unlocks the user's ability to enter the feature menus and manually change the main unit programming using the Control Center
- 14. Transmitter Programming: locks and unlocks the user's ability to enter the remote control/Reset menu and manually change any functions using the Control Center

### **Basic Remote Functions**

See Owner's guide for functionality details on both the LC and 1-way companion remote control.

### Reset and Deletion

If a feature needs to be reset or the remote controls need to be deleted, use the following procedure.

- 1. Open a door.
- 2. Turn the ignition to the ON position.
- 3. Within 10 seconds, press and release the Control button: 2 times if you want to delete remotes or 3 times to reset features. These function steps are described next.

Delete remotes: This feature erases all remotes from the memory of the security system. This is useful in cases when a customer's remote is lost or stolen.

Note: This does not reset the programmed features of the security system.

Reset Features: This resets all features of the security system to the factory default settings.

Note: This feature does not delete the remotes from the security system.

- 4. Once you have selected the function step, press the Control button once more and hold it. The LED flashes and the siren chirps to confirm the selected functional step. Do not release the Control button
- 5. While holding the control button, press the \(\textit{\textit{D}}\) button on the remote control. The unit chirps to confirm that the feature has been successfully reset.

Once the feature is reset, the Control button can be released.

Note: For step 1, the + or - Door Trigger Input wire needs to be connected unless using an interface module that supplies the door trigger through D2D.

# Long Term Event History

The system stores the last six full triggers in memory. These are not erasable. To access long term event history:

- 1. With the ignition Off, press and hold the Control button (on Control Center).
- 2. Turn the ignition On.
- 3. Release the Control button.
- 4. Within 5 seconds, press and release the Control button. The status LED flashes in groups indicating the last six zones that triggered the unit for 1 minute or until the ignition is turned off (indicated in the order of most recent first to oldest last). Refer to Table of Zones.

Note: The Warn Away triggers are not stored to memory and is not reported.

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### Table of Zones

A zone is represented by the number of status LED flashes used by the system to identify a particular type of input.

Zone	Description	Input Description
1	Trunk Pin	H1/7 Blue wire
2	Instant trigger: a heavier impact detected by the onboard shock sensor	On board shock sensor.
3	Door switch trigger	H1/8 Green or H1/6 Violet wire
4	Instant trigger: For optional sensors	3 pin optional GWA MUX port
5	Ignition trigger	H3/5 Yellow wire
6	Hood Pin	H3/7 Grey wire
7	Instant trigger: For optional sensors	4 pin optional MUX port

# Troubleshooting: Alarm

Shock sensor doesn't trigger the alarm:

- 1. Was the onboard shock sensor adjusted before the brain was mounted? If so re-adjust the sensor.
- 2. Has the onboard shock sensor been turned off? The sensor has the ability to be turned off when adjusting.
- 3. Has the NPC® system been triggered? If so, you hear 5 chirps when disarming. To check this, turn the ignition key on and off to clear the NPC® memory, and then retest the shock sensor. For a detailed description of NPC®, see Nuisance Prevention Circuitry section of the owners guide.

Door input does not immediately trigger full alarm. Instead, chirps are heard for the first 3 seconds:

That's how the progressive two-stage door input works! This is a feature of this system even if the door
is instantly closed again, the progression from chirps to constant siren continues.

Closing the door triggers the system, but opening the door does not:

• Have you correctly identified the type of door switch system? This happens often when the wrong door input has been used.

System does not passively arm until it is remotely armed and then disarmed:

- 1. Is passive arming programmed ON?
- 2. Are the door inputs connected? Is the H1/7 blue wire connected to the door trigger wire in the vehicle? Either the H1/8 green or the H1/6 violet should be used instead.

Door input does not respond with the progressive trigger, but with immediate full alarm:

Does the Status LED indicate that the trigger was caused by the shock sensor? (See Table of Zones section of this guide.) The shock sensor, if set to extreme sensitivity, may be detecting the door unlatching before the door switch sends its signal. Reducing the sensitivity can solve this problem.