

DIRECTED[®]

3305 & 3105 Installation Guide

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

Bitwriter®, Code Hopping™, DEI®, Doubleguard®, ESP™, FailSafe®, Ghost Switch™, Learn Routine™, Nuisance Prevention® Circuitry, NPC®, Revenger®, Silent Mode™, Soft Chirp®, Stinger®, Valet®, VRS®, and Warn Away® are all Trademarks or Registered Trademarks of Directed.



The Bitwriter® (P/N 998T) requires chip version 2.4 or newer to program this unit.

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.

Important information

Government regulations



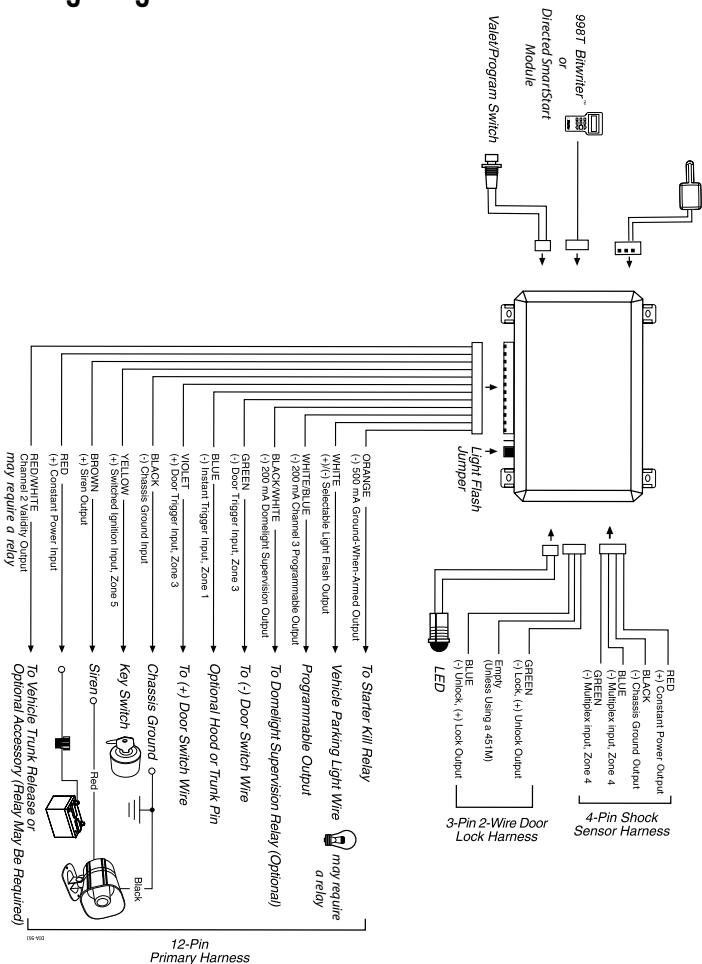
Read the **Government regulations** section of this manual prior to operating this system.

Warning! Failure to heed this information can result in injury, damage or the illegal use of the system beyond its intended purpose.

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Wiring Diagram



Wiring Connections

Main (Primary) Harness, White 12-pin connector

1	ORANGE	(-) 500mA GWA (Ground When Armed) OUTPUT
2	WHITE	(+/-) SELECTABLE PARKING LIGHT OUTPUT
3	WHITE/BLUE	(-) 200mA CHANNEL 3 PROGRAMMABLE OUTPUT
4	BLACK/WHITE	(-) 200mA DOMELIGHT SUPERVISION OUTPUT
5	GREEN	(-) DOOR TRIGGER INPUT, ZONE 3
6	BLUE	(-) INSTANT TRIGGER INPUT, ZONE 1
7	VIOLET	(+) DOOR TRIGGER INPUT, ZONE 3
8	BLACK	(-) CHASSIS GROUND INPUT
9	YELLOW	(+) SWITCHED IGNITION INPUT, ZONE 5
10	BROWN	(+) SIREN OUTPUT
11	RED	(+) CONSTANT POWER INPUT
12	RED/WHITE	(-) 200mA CHANNEL 2 OUTPUT

Important: NEVER connect 200mA/500mA low current outputs directly to a motor or high current device WITHOUT a relay.

Door Lock Harness, 3-pin connector

1	LIGHT BLUE	200 mA (-) UNLOCK, 200 mA (+) LOCK OUTPUT
2	EMPTY	NOT USED
3	GREEN	200 mA (-) LOCK, 200 mA (+) UNLOCK OUTPUT

Important: Never use this wire to drive anything but a relay or a low-current input! The transistorized output can only supply 200 mA of current. Connecting directly to a solenoid, motor, or other high-current device will cause it to fail..

LED Plug-In Harness, 2-pin white

1	BLUE	(-) 2V OUTPUT
2	RED	(+) 12V OUTPUT

Control Center Button/Valet Program Switch, 2-pin blue

1	GREY	(+) 12V INPUT
2	BLACK	(+) 12V OUTPUT

Primary Harness - 12-pin connector

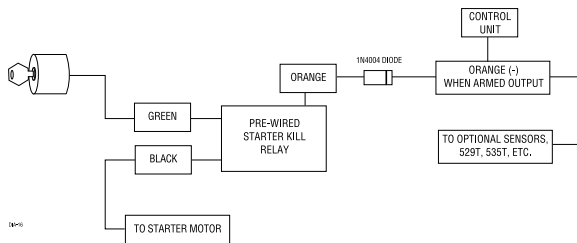
This guide describes in detail the connection of each wire. Also included are possible applications of each wire. This system was designed with the ultimate in flexibility and security in mind. Many of the wires have more than one possible function. Please read carefully to ensure a thorough understanding of this unit.

1	ORANGE	(-) 500 mA GWA (Ground When Armed) OUTPUT
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This wire supplies a (-) ground as long as the system is armed. This output ceases as soon as the system is disarmed. The Orange wire is pre-wired to control the 8618 starter disable relay. It can supply up to 500 mA of current.

Note: If using the this Orange wire to activate an add-on accessory such as window automation, or voice module a 1-amp diode must be installed to ensure proper operation. Insert the diode as shown in the following diagram.

Important: Never interrupt any wire other than the starter wire.



2	WHITE	(+/-) SELECTABLE PARKING LIGHT OUTPUT
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As shipped, this White wire should be connected to the (+) parking light wire. If the parking light polarity jumper is moved to the (-) position (**see the Parking light jumper section of this installation guide**), this wire supplies a (-) 200 mA output.

For parking light systems that draw 10 amps or more, the jumper must be switched to a (-) parking light output (see the **Parking light jumper** section of this guide). P/N 8617 or a standard automotive SPDT relay must be used for the parking light output.

Important: DO NOT connect the white parking light output to a negative vehicle parking light wire before changing the programming jumper to the negative polarity position or damage to vehicle light circuit may occur.

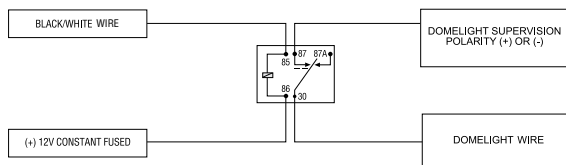
3	WHITE/ BLUE	200mA CHANNEL 3 PROGRAMMABLE OUTPUT
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This wire provides a (-) 200 mA output, whenever the remote control button(s) controlling channel 3 output is pressed. This wire can be programmed to provide different types of outputs (see "System features learn routine" on page 14 of this guide).

Important: Never use this wire to drive anything but a relay or a low-current input! This transistorized output can only supply 200mA, and connecting directly to a solenoid, motor, or other high-current device will cause the module to fail.

4	BLACK/WHITE	200mA (-) DOMELIGHT SUPERVISION OUTPUT
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Connect this wire to an optional domelight supervision relay as shown in the following diagram:



This wire supplies a (-) 200 mA output for 30 seconds when the system is disarmed, and when the ignition is turned off (programmable On/Off). It will pulse continuously during the alarm trigger duration.

Important: This output is only intended to drive a relay. It cannot be connected directly to the domelight circuit, as the output cannot support the current draw of one or more bulbs.

5	GREEN	(-) DOOR TRIGGER INPUT
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Most vehicles use negative door trigger circuits. Connect the Green wire to a wire showing ground when any door is opened. When con-

necting to newer model vehicles use individual door triggers (see *Tech Tip # 1076* for wiring instructions). This wire reports Zone 3.

Note: If using a door trigger wire that has a delay, Menu 2, Feature # 2-6 or the 998T Bitwriter can be used to turn door trigger error chirp off.

6	BLUE	(-) INSTANT TRIGGER INPUT
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This input will respond to a negative input with an instant trigger. It is ideal for hood and trunk pins and will report on Zone 1. It can also be used with Directed single-stage sensors. The Blue instant trigger wire can also be used to shunt sensors during operation of auxiliary channels or remote start. (See "*Bypassing sensor inputs*" on page 14 of this guide.)

7	VIOLET	(+) DOOR TRIGGER INPUT
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Connect the Violet wire to a wire that shows (+) 12V when any door is opened. This wire will report Zone 3. If using a door trigger wire that has a delay, Menu 2, Feature # 2-6 or the 998T Bitwriter can be used to turn door trigger error chirp off.

8	BLACK	(-) CHASSIS GROUND
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Connect this wire to a clean, paint-free sheet metal location (driver kick panel). A screw should only be used when in conjunction with a two-sided lock washer. Under dash brackets and door sheet metal are not acceptable ground points. It is recommended that all security components be grounded at the same location.

9	YELLOW	(+) IGNITION INPUT
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Connect this wire to the vehicle's (+) 12V ignition wire. This wire is pre-wired to the starter disable relay and must show (+) 12 volts with the key in RUN position and during cranking.

10	BROWN	(+) SIREN OUTPUT
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Connect this to the siren Red wire. Connect the Black wire of the siren to (-) chassis ground, preferably at the same point you connect the control module's Black ground wire.

11	RED	(+) 12V CONSTANT POWER INPUT
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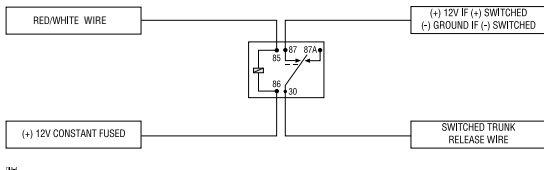
Before connecting this wire, remove the supplied fuse. Connect to the battery positive terminal or the constant 12V supply to the ignition switch.

Note: Always use a fuse within 12 inches of the point you obtain (+)12V. Do not use the 15 amp fuse in the harness for this purpose. This fuse protects the control module.

12	RED/WHITE	(-) 200mA CHANNEL 2 OUTPUT
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When the system receives the code controlling channel 2 for longer than 1.5 seconds, the RED/WHITE wire will supply an output as long as the transmission continues. This is often used to operate a trunk/hatch release or other relay/driven function.

Important: Never use this wire to drive anything but a relay or a low-current input! The transistorized output can only supply 200 mA of current. Connecting directly to a solenoid, motor, or other high-current device will cause it to fail.



Door Lock Harness, White 3-pin connector

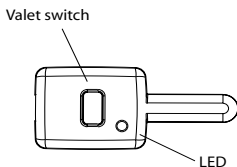
For detailed instructions about connecting to the vehicle's power door lock systems, refer to the Door Lock Wiring guide (*Tech Tip # 1041*) available to authorized dealers under the resource tab at: www.Directechs.com.

Control Center

The LED and the valet switch are incorporated into the Control Center. The LED wiring plugs into the White 2-pin port, and the valet switch plugs in to the Blue 2-pin port.

NOTE: The onboard LED can be substituted with an optional outboard LED (P/N 8634 for Blue LED and 8633 for Red LED). The LED fits into a 9/32 inch mounting hole. Be sure to check for clearance prior to drilling the mounting hole.

You can also substitute an external valet switch for the Control Center valet switch (P/N 8631 is a 5-pack of these switches).



Control Center

Important! With the Control Center more customers will want the Ghost Switch coded disarm feature - make sure to check with the customer.

Bitwriter/Directed SmartStart, Black 3-pin connector



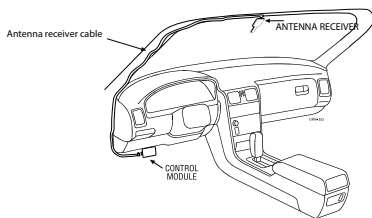
The Black 3-pin port connection is for programming the unit or when using the optional Directed SmartStart module. When using the 998T Bitwriter, it is possible to configure any and all of the programmable functions. For more information please refer to the guide packaged with the Bitwriter/Directed SmartStart.

Mounting the Control Center

The Control Center position should be discussed with the vehicle owner prior to installation, since the antenna may be visible to the vehicle's operator. The best location for the Control Center is centered high on the front windshield. For optimal range, the Control Center should be mounted vertically. It can be mounted horizontally in relation to the windshield or under the dashboard away from metal, but range will be diminished. AM/FM radio antennas embedded in the vehicle glass, metallic window tint or dot matrix (small black dots at top of windshield) can also affect range when determining the mounting location.

After determining the best mounting location, follow these steps:

1. **Clean** the mounting area with a quality glass cleaner or alcohol to remove any dirt or residue.
2. **Plug** the Control Center cable into the Control Center.
3. **Mount** the Control Center using the supplied double-sided tape.
4. **Route** the Control Center cable to the control module and **plug** it into the 4-pin connector.



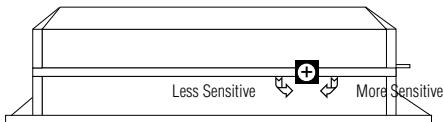
Important: To achieve the best possible range, DO NOT leave the antenna cable bundled under the dash. Always extend the cable full length during installation, regardless of the antenna mounting location.

Onboard Dual Stage Shock Sensor

There is a dual-stage shock sensor inside the control unit. Adjustments are made via the rotary control as indicated in the diagram. The shock sensor does not work well when mounted firmly to metal, we recommend that you do not screw the control module to metal.

The full trigger of the on-board shock sensor reports Zone 2 (see Table of Zones section of this guide).

Note: When adjusting the sensor, it must be in the same mounting location it will be after the installation is completed. Adjusting the sensor and then relocating the module requires readjustment.



Optional Sensor Harness, White 4-pin connector

You can add an external sensor using the White 4-pin sensor harness, as described below, however, this harness is not included with this unit, and must be ordered separately.

The RED wire supplies constant (+) 12 volts, and the BLACK wire supplies (-) Ground.

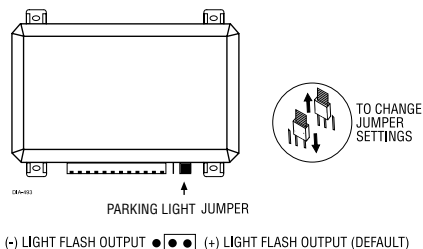
Important: The power and ground outputs of this plug cannot support high current sensors such as a 508D. Power and ground for the sensor should be connected to the red and black wire of the primary 12-pin harness connection.

BLUE and GREEN (-) Multiplex Sensor Trigger Input: These wires are multiplex sensor trigger inputs. If a (-) input of less than 0.8 seconds is supplied to either wire, a Warn Away response occurs. A (-) input of longer than 0.8 seconds to either wire initiates the triggered sequence and report Zone 4.

Parking Light Jumper

This jumper is used to determine the parking light output polarity. In the (+) position, the on-board relay is enabled and the unit outputs (+)12V on the White wire of the primary 12-pin harness. In the (-) position, the onboard relay is disabled. The White wire supplies a 200 mA (-) output suitable for driving factory parking light relays.

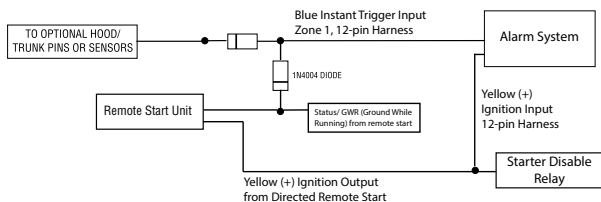
Note: For parking light circuits that draw 10 amps or more, the jumper must be switched to a (-) parking light output. P/N 8617 or a standard automotive SPDT relay must be used on the parking light output wire of the primary 12-pin harness.



Important: DO NOT connect the parking light wire of the primary 12-pin harness to a negative vehicle parking light wire before changing the programming jumper to the negative polarity position or damage to vehicle light circuit may occur.

Bypassing Sensor Inputs

There are times when you need to temporarily bypass all sensor inputs to the unit, such as during remote start. Anytime an auxiliary channel output is used, all inputs are bypassed for five seconds. During the five second bypass period, ground can be supplied to the Blue Instant Trigger Input wire of the primary 12-pin harness without triggering the unit. This can be done using the status and ignition output of a Directed remote engine starting unit, as described in the following diagram:



When the five second bypass period ends, if the unit senses ground on the Blue Instant Trigger Input wire of the primary 12-pin harness, all trigger inputs except the door trigger inputs remain bypassed until five seconds after ground is removed from the Blue wire. The ignition input needs to be bypassed during remote start also.

System Features Learn Routine

The System Features Learn Routine dictates how the unit operates. It is possible to access and change the settings using the Control Center button. However, this process can be greatly simplified by using the 998T Bitwriter.

Any of the settings can be changed and assigned to a particular remote, up to four - this is called Owner Recognition. When that particular remote is used to disarm the system, the assigned feature settings are recalled. Owner Recognition is only possible when programming the unit via the 998T Bitwriter.



If the system was previously programmed using the 998T Bitwriter, the Learn Routine may be locked. If the siren generates one long chirp when attempting to program the unit, the Learn Routine is locked and must be unlocked using the 998T Bitwriter.


1. **Open** a door. The Green wire or the Violet wire of the primary 12-pin harness must be connected.
2. **Turn** the ignition on, then off. The Yellow wire of the primary 12-pin harness must be connected.
3. **Select** a Menu. **Press** and **hold** the Control Center button. The button must be plugged into the Blue port.

After three seconds the siren will chirp once indicating entry to the Features Menu 1. If this is the menu you wish to access, **release** the button and go on to next step. If the button is not released, you will jump to the Advanced Features Menu 2 and the siren will chirp twice.

After you select the menu you want, **release** the Control Center button and then proceed to the next step.

4. **Select** a Feature. **Press** and release the Control Center button the number of times corresponding to the feature you wish to change. For example, to access the third feature, **press** and release the switch three times. Then **press** the switch once more and **HOLD** it. The siren will chirp the number of times equal to the step you have accessed.
5. **Program** the Feature. While **holding** the Control Center button,

you can program the feature using the remote control. Pressing  selects the 1-chirp setting. Pressing  selects the 2-chirp setting.

The valet pulse count feature (2-5) and the Channel 3 Output (2-10) each have five possible settings. Pressing  toggles through all the 2-chirp settings.

6. **Release** the Control Center button.

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:

- **Press** and release the Control Center 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 Center button once more and **hold** it.

For example, if you have just programmed the third feature in the menu and you would like to program the seventh feature in the menu, you would then press and release the Control Center button four times and then press it once more and hold it. The siren chirps seven times to confirm access to the seventh feature.

To select another menu:

- **Press** and **hold** the Control Center button.
- After three seconds, the unit advances to the next menu, the siren chirps and LED flashes indicating which menu has been accessed.

The Learn Routine exits if any of the following occurs:

- Close the open door.

- Ignition is turned On
- There is no activity for 30 seconds
- The Control Center button is pressed too many times

Feature Menus

Menu 1

Items in **bold** are default settings programmed at the factory.

Feature #	1- chirp setting	2- chirp setting
1-1	Active arming	Passive arming
1-2	Chirps ON	Chirps OFF
1-3	Ignition controlled door locks ON	Ignition controlled door locks OFF
1-4	Active locking only	Passive locking
1-5	Panic w/ignition ON	No Panic w/ignition ON
1-6	0.8 second door lock pulses	3.5 second door lock pulses
1-7	Forced passive arming ON	Forced passive arming OFF
1-8	Automatic Engine Disable ON	Automatic Engine Disable OFF
1-9	Armed When Driving (AWD)	Vehicle Recovery System (VRS)
1-10	Code Hopping ON	Code Hopping OFF

Menu 2

Items in **bold** are default settings programmed at the factory.

Feature #	1- chirp setting	2- chirp setting
2-1	Siren	Horn Honk
2-2	30 second siren duration	60 second siren duration *
2-3	NPC ON	NPC OFF
2-4	Progressive door trigger	Instant door trigger
2-5	Valet switch input: 1 pulse	Valet switch input 2-5 pulses
2-6	Door trigger error chirp ON	Door trigger error chirp OFF
2-7	Ignition controlled domelight ON	Ignition controlled domelight OFF
2-8	Single unlock pulse	Double unlock pulse
2-9	Single lock pulse	Double lock pulse
2-10	Channel 3 output type: Validity	Channel 3: latched/ latched reset with ignition/ 30- second timed/ second unlock output* **
2-11	Comfort Closure (ON, 20 sec)	Comfort Closure (OFF)

* Bitwriter allows programming from 1-180 seconds.

** Second unlock available only if feature 2-8 is programmed to single pulse.

Feature Descriptions

System features are described below. Features that may only be programmed with the 998T Bitwriter, as by this icon .

Menu 1

1-1 Active/Passive Arming: With active arming the system arms using the remote control only. When set to passive, the system arms automatically 30 seconds after the last door is closed. The siren chirps 20 seconds after the door is closed to notify the user of Passive Arming. At the 30 second mark, the system arms, but the siren does not chirp.

1-2 Siren Chirps ON/OFF: This feature controls the siren chirps that confirm the arming and disarming of the system.



1-3 Ignition Controlled Door Locks ON/OFF: When set to on, the doors lock three seconds after the ignition is turned on and unlock when the ignition is turned off. If the door is open when the ignition is turned on, the system will not lock the doors. The 998T Bitwriter procedure for ignition lock and ignition unlock may be programmed On or Off independently.

1-4 Active/Passive Locking: If Passive Arming is selected in feature # 1-1, you can program the doors to lock when Passive Arming occurs, or program doors to lock when arming with the remote control. With Active Locking the doors do not lock when the system is passively armed. When Passive Arming is selected, the system chirps 20 seconds after the last door is closed. Arming the system or locking the doors occurs 30 seconds, after the door closes.

1-5 Panic With Ignition ON: Control whether Panic Mode is available with the ignition on. Some state laws prohibit a siren from sounding in a moving vehicle. This feature makes the system compliant with these regulations.

1-6 Door Lock Pulse Duration: Some European vehicles, such as Mercedes-Benz and Audi, require longer lock and unlock pulses to operate the door lock vacuum pump. Programming the system to provide 3.5 second pulses, accommodates the door lock interface in these vehicles. The default setting is 0.8 second door lock pulses.

1-7 Forced Passive Arming ON/OFF: To use this feature, Passive Arming must be selected in feature # 1-1. When turned on, Forced Passive Arming ensures the system will passively arm, even if a zone is left open or invalid. Forced Passive Arming occurs one hour after the ignition is turned off.

1-8 AED (Automatic Engine Disable) ON/OFF: AED is a full-time, passive starter disable. When turned on, the Orange, GWA (Ground When Armed) output wire (of the primary 12-pin harness) goes active 30 seconds after the ignition is turned off. The LED flashes at half normal rate. This indicates that AED is active and will interrupt the starter in 30 seconds. AED does not occur in Valet mode and can be bypassed using the emergency override procedure. The remote control can also disarm AED.

1-9 Armed While Driving/VRS (Vehicle Recovery System): In the default setting (Armed While Driving), the system can be armed with the ignition on. When armed, the ground-when-armed is not active and the sensors are bypassed. The door triggers remain active. If programmed to the VRS (Vehicle Recovery System) setting, VRS is activated.

1-10 Code-Hopping ON/OFF: The system uses a mathematical algorithm to change its code each time the remote control and receiver communicates. This makes the group of bits or “words” from the remote control very long. The longer the word is, the easier it is to block its transmission to the unit. Disabling the Code-Hopping feature lets the receiver ignore the Code-Hopping part of the transmitted word. As a result, the unit may have better range with Code-Hopping off.

Menu 2

2-1 Siren/Horn Honk: The system can be programmed to output pulses instead of a continuous output when the system is triggered. This is useful to honk the factory horn in applications where a siren is undesirable. Remember that the unit is only capable of supplying a (+) 12V output with 1A of current.. A relay will be required to interface with most factory horn systems.



2-2 Siren Duration 30/60 Seconds: It is possible to program the unit to sound for 30 or 60 seconds during a security trigger. Some states have laws regulating how long a security system can sound. When using the 998T Bitwriter, the siren can be programmed to sound for any length of time ranging from 1 to 180 seconds. Using the SELECT button of the 998T Bitwriter will adjust the siren duration in one second increments.

2-3 NPC (Nuisance Prevention Circuitry) ON/OFF: NPC stops repeated triggering of the same zone. If one zone is triggered three times in one hour, that zone is bypassed for one hour, at the start of the third trigger. During that hour if a trigger occurs on same zone again, the system resets the one hour timer. If after an hour the zone has not triggered again, it is activated and able to trigger the system. NPC monitors sen-

sensor inputs, but does not bypass ignition trigger. If NPC is turned off the system responds to repeated triggers sensor inputs, indefinitely. Some states have laws regulating how many times a security system can trigger before it is considered a nuisance and the vehicle is towed away.

2-4 Progressive Door Trigger ON/OFF: The system responds to a door trigger input with a progressive response. When the door is opened with the system armed, the siren will chirp 10 times prior to the full triggered sequence. The door trigger is still treated as an instant trigger and closing the door quickly will not prevent a full triggered sequence from occurring. If the progressive door trigger is programmed off, the full siren output will occur the moment the door is opened.

2-5 Valet Pulse Count 1-5 Pulses: The system can be programmed to count the number presses of the Control Center button before disarming the security system or VRS. The factory default setting is one pulse. The unit can be set for two to five pulses using the two-chirp setting to select the pulse count. Ghost Switch Option: For added security, the Gray wire 2-pin Valet switch can be connected to any switch in the vehicle that provides a positive (+) momentary pulse.

2-6 Door Trigger Error Chirp ON/OFF: when programmed ON, an active zone input during arming generates an error notification chirp. When programmed OFF, no notification chirps are generated if a zone is active during arming.

2-7 Ignition-Controlled Domelight Supervision ON/OFF: If turned ON, domelight illuminates for 30 seconds when the ignition is turned OFF. Domelight Supervision is an optional feature and may require additional parts and labor.

2-8 Double Pulse Unlock ON/OFF: Some vehicles require two pulses on a single wire to unlock the doors. When the double pulse unlock feature is turned ON, the Blue wire of the 3-pin Door Lock harness will supply two negative pulses instead of a single pulse. At the same time, the Green wire in the 3-pin door lock harness will supply two pulses instead of a single pulse. This makes it possible to directly interface with door lock circuits requiring a double pulse, without any extra parts.


2-9 Double/Single Pulse Lock: Some vehicles require two pulses on a single wire to lock the doors. When the double pulse lock feature is turned ON, the Blue wire in the 3-pin door lock harness will supply two positive pulses instead of a single pulse. At the same time the Green wire of the 3-pin Door Lock harness will supply two pulses instead of a single pulse. This makes it possible to directly interface door lock circuits requiring a double pulse, without any extra parts.

2-10 Channel 3 Output Type: The unit is set to the validity output as default. To change the configuration use the two-chirp setting and toggle to various configurations.

1. **Validity:** When the command for Channel 3 is received, the system will output a (-) and will remain on until the command from the remote ceases.
2. **Latched:** When the command for Channel 3 is received, the system will output a (-) and will remain on until the command from the remote is received again.
3. **Latch/Reset with Ignition:** When the command for Channel 3 is received, the system will output a (-) and will remain on until the command from the remote is received again or the ignition is turned on/off.
4. **Timed (30 seconds):** When the command for Channel 3 is

received, the system will output a (-) for 30 seconds (programmable for up to 90 seconds in 1 second increments with the Bitwriter).

5. **Second Unlock Output:** The output will operate as a 2nd Unlock and will only activate when pressing the "unlock" button on the remote a second time (within five seconds of disarming). This feature is used when drivers door priority unlocking is desired.

2-11 Comfort Closure: The system can be programmed to close the windows when the system is armed 800ms after the door lock output pulses (or 2nd pulse for double pulses) - the output turns on again for 20 seconds. The Comfort Closure output will be cancelled if the  button is pressed.

Note: Comfort Closure is deleted if one-time bypass is activated.

Pairing a Remote Control

The system comes with two remote controls already paired to the system. The control module can store up to four different remote control codes in memory.

If the system was previously programmed using the 998T Bitwriter, the Learn Routine may be locked. If the siren generates one long chirp when attempting to program the unit, the Learn Routine is locked and must be unlocked using the 998T Bitwriter before proceeding.

1. **Open a door.** The Green wire or the Violet wire of the primary 12-pin harness must be connected.
2. **Turn the ignition on.** The Yellow wire of the primary 12-pin harness must be connected.
3. **Select a channel.** **Press** and release the Control Center button the number of times necessary to access the channel you want, and then **press** and **hold** the Control Center button once more. The siren chirps and the LED blinks the number of times corresponding to the channel accessed.

Note: When programming channels 1 - 6, a button must be learned to the unit in Channel 1 or Channel 5 position prior to programming remaining channels.

Channel/ Function		
Channel #	Function	Wire Color
1	Arm/Disarm	
2	Panic Only	

Channel/ Function		
3	Silent mode, Remote Valet, Trunk Release	Red/White
4	Remote starter or other accessories	White/Blue
5	Arm Only	
6	Disarm Only	
7	Auto learn standard 4- btn configuration*	
8	Auto learn 3-btn configuration*	
9	Delete all transmitters	

Note: For auto learn configurations, see "Remote Control Configurations" on page 28 of this guide.

- While **holding** the Control Center button, **press** the button on the remote control you want to assign to the selected channel. The unit chirps indicating successful programming.

Note: It is not possible to teach a remote control button to the system more than once.

Channels 2, 5, 6: Use Channels 2, 5, and 6 to assign the arm, disarm and panic functions to buttons on the remote control. Teaching a button to Channel 5 or Channel 1 erases some memory information, and auxiliary functions may have to be reprogrammed.

Channel 9: If a button from a taught remote is programmed to Channel 9, all remote controls will be erased from memory and system features revert to the default settings.

This is useful when a customer's remote is lost or stolen. All remote

controls are erased from the system's memory. You can also start from scratch, if the remote buttons are programmed incorrectly.

5. **Release** the Control Center button, once the remote control is learned.






The Learn Routine is exited if any of the following occurs:



- Ignition is turned off.
- Door is closed.
- Control Center button is pressed too many times.
- More than 15 seconds elapse between steps.

One long chirp indicates that the Learn Routine has been exited.

Remote Control Configurations

The standard four-button 2-way and 1-way remote controls may be programmed using the Auto Learn function in the Learn Routine.

Standard configuration	
Arm	
Disarm	
Channel 2/Silent Mode	AUX
Panic	
Channel 3	 and 

3-button configuration (optional, not included)	
Arm/Disarm	
Channel 2/Silent Mode	AUX
Panic	

Note: Multi Level Security Arming feature is not available with the 3-button remote control.

Diagnostics

The system's microprocessor monitors and reports all active and violated zones when arming and disarming. LED flashes indicate the active or violated zone, siren chirps indicate system status.

Arm/disarm diagnostics

The number of siren chirps indicates the alarm status when arming and disarming. For information on which zone is active or has been violated refer to the Table of Zones.

Status Chirps

Action	Chirps	System status
Arm	1	Armed
	2	Armed with bypass notification
Disarm	2	Disarmed
	4	Disarmed with tamper alert
	5	Disarmed/NPC active

Table of zones

Zone	Trigger type	Description
1	Instant	Blue wire of the primary 12-pin harness Connect to optional hood/trunk
2	Onboard shock sensor	Heavy impact detected by the onboard shock sensor. Armed with bypass notification
3	Two-stage, Progressive	Door switch circuit. Green or Violet wire of the primary 12-pin harness warning to full alarm.
4	Multiplexed input	BLUE and GREEN wires of optional sensor plug. Inputs shorter than 0.8 seconds will trigger a Warn Away response, while inputs longer than 0.8 seconds will instantly trigger a full alarm sequence.
5	Two-staged	Ignition input. Yellow wire of the primary 12-pin harness.

Note: The Warn Away response does not report on the LED.

Long Term Event History

The system stores the last two full triggers in memory. These are not erasable. Each time the unit sees a full trigger, the older of the two triggers in memory will be replaced by the new trigger.

To access long term event history:

1. With the ignition off, **press** and **hold** the Control Center button.
2. **Turn on** the ignition.
3. **Release** the Control Center button.
4. **Press** and release the Control Center button again within five seconds. The LED will flash in groups indicating the last two zones that triggered the unit. The LED will flash for one minute or until the ignition is turned off.

Note: Warning Zone triggers are not stored to memory and will not be reported.

Multi-Level Security Arming

Multi-Level Security arming allows the operator to select which inputs and sensors are active during a particular arming cycle. For a full description of Multi-Level Security Arming operation for testing purposes refer to the Owner's Guide.

Note: This feature is not available with the optional three-button remote control.

VRS (Vehicle Recovery System)

VRS is an optional feature designed to disable a vehicle during a car-jacking event. It must be programmed in the features menu and the Failsafe Starter Disable must be installed for it to work properly. For operational instructions when testing VRS refer to the Owner's Guide.

NPC (Nuisance Prevention Circuitry)

NPC bypasses any zone that triggers the system more than three times within a one-hour period. For a full description of NPC operations refer to the Owner's Guide.

<p>Important: When testing the systems sensor and trigger inputs reset NPC by turning on the ignition after every third system trigger.</p>
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Rapid Resume Logic

Rapid Resume Logic ensures that when the system is powered up it returns to the same state it was in before power was disconnected. For a full description of Rapid Resume Logic refer to the Owner's Guide.

Troubleshooting: Security

Starter Disable doesn't work.

- Is the correct starter wire being interrupted? If the car starts when the starter disable relay is completely disconnected, the wrong starter wire has been cut and interrupted.
- Yellow wire is not connected to true ignition. It is connected to an accessory circuit.

Shock sensor doesn't trigger the alarm.

- Has the NPC system been triggered? If so, you will hear five chirps when disarming. To check this, **turn** the ignition key **on** and **off** to clear the NPC from memory, and then retest the shock sensor. For a detailed description of NPC (see Owner's Guide).

Door input does not immediately trigger full alarm. Instead, I hear chirps for the first three seconds.

- That's how the Progressive Two-Stage Door Input works! This is the instant response feature of this system. Even if the door is closed immediately, the system provides an instant trigger by chirping, and then progressing to a constant siren.

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 type of door input has been used.

System will not passively arm until it is remotely armed and then disarmed.

- Are the door inputs connected? Is a Blue wire connected to the door trigger wire in the vehicle? Either the Green or the Violet wire of the primary 12-pin harness should be used instead.

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

- What zone does the LED indicate? If the LED indicates that the impact sensor caused the trigger, the sensor may be detecting the door opening. Reducing the sensitivity or relocating the sensor can often solve this problem.
- If the LED indicates that the door caused the trigger, you may have programmed the progressive door trigger OFF. (See Feature 2-4 in the "Feature Descriptions" on page 19 of this guide.)

The Control Center button doesn't work.

- Is it plugged into the correct connector? Check the System Features Learn Routine for the programmed Valet pulse count.

Status LED doesn't work.

- Make sure that it is plugged into the correct connector.

Government Regulations

This device complies with Part 15 of 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 undesirable operation.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates 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. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

Remote Controls

To satisfy FCC RF exposure compliance requirements, this device should be used in hand-held, hand operated configurations only. The device and its antenna must maintain a separation distance of 20 cm or more from the person's body, except for the hand and wrists, to satisfy RF exposure compliance. This device is designed to be used in a person's hands and its operating configurations do not support normal transmissions while it is carried in pockets or holsters next to a person's body.

Receiver antenna

To satisfy FCC RF exposure compliance requirements, the device and its antenna must maintain a separation distance of 20 cm or more from the person's body, except for the hand and wrists, to satisfy RF exposure compliance.

This device complies with the Industry Canada Radio Standards Specification RSS 210. Its use is authorized only on a no-interference, no-protection basis; in other words, this device must not be used if it is determined that it causes harmful interference to services authorized by IC. In addition, the user of this device must accept any radio interference that may be received, even if this interference could affect the operation of the device.

WARNING! Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device

The company behind this system is Directed

Since its inception, Directed has had one purpose, to provide consumers with the finest vehicle security and accessories available. The recipient of nearly 100 patents and Innovations Awards in the field of advanced electronic technology.

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