

# Directed Digital System

## TL1 Firmware Specific 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.

# **DIRECTED**<sup>®</sup>

© 2015 Directed, Vista, CA  
Directed Digital System 2016-01

# Contents

---

Warning! Safety first .....	3
Introduction .....	4
Vehicle application guide .....	4
OEM Remote Starter Detection .....	6
Wiring connections .....	7
Main power harness (H1), 12-pin thick gauge connector .....	7
Analog harness (H3), 18-pin white connector .....	8
MC501 harness (H4), 8 thick-gauge wires (optional) .....	8
Installation .....	9
Type 1 (Key-Type Vehicles with CAN) .....	9
Type 2a (Push-to-Start Vehicles with CAN) .....	10
Type 2b - with T-Harness THTL12 (Push-to-Start Vehicles with CAN) .....	11
Type 3a -Without T-Harness THTL12 (Push-to-Start Vehicles with CAN) .....	12
Type 3b - with T-Harness THTL12 (Push-to-Start Vehicles with CAN) .....	13
Type 4 (Key-Type Vehicles without CAN) .....	14
Type 5 (Push-to-Start Vehicles without CAN) .....	15
Type 6 (Push-to-Start Vehicles with Keyport without CAN) .....	16
Vehicle wiring reference charts .....	17
Pit Stop/ Idle Mode .....	17
Installation Type 1 .....	17
Installation Type 2 .....	19
Installation Type 3 .....	19
Installation Type 4 .....	21
Installation Type 5 .....	23
Installation Type 6 .....	25
Connecting the module .....	26
Important! .....	26
Manual or automatic transmission selection .....	26
Optional sensors .....	27
RF kits .....	27
When used in conjunction with SmartStart .....	27
Module programming .....	28
LED diagnostics and troubleshooting .....	32
Module reset .....	34
Hard reset .....	34
Learning the Tach (not needed with Virtual Tach) .....	35
Initializing Virtual Tach (not needed with hardwired or data tach applications) .....	35
Limited lifetime consumer warranty .....	36
Quick Reference Guide – Viper, Clifford, Python, Avital & Automate (Regular Key) .....	37
Quick Reference Guide – Autostart (Regular Key) .....	39
Quick Reference Guide – Viper, Clifford, Python, Avital & Automate (Smart Key) .....	41
Quick Reference Guide – Autostart (Smart Key) .....	43

## Warning! Safety first

---

 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 dealer.
- When properly installed, this system can start the vehicle via a command signal from the remote control. Therefore, never operate the system in an area that does not have adequate ventilation.

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

- Never use a test light or logic probe when installing this unit. Always use a multimeter.
- Never operate the system in an enclosed or partially enclosed area without ventilation (such as a garage).
- When parking in an enclosed or partially enclosed area or when having the vehicle serviced, the remote start system must be disabled using the installed toggle switch. It is the user's sole responsibility to properly handle and keep out of reach from children all remote controls to assure that the system does not unintentionally remote start the vehicle.
- USER MUST INSTALL A CARBON MONOXIDE DETECTOR IN OR ABOUT THE LIVING AREA ADJACENT TO THE VEHICLE. ALL DOORS LEADING FROM ADJACENT LIVING AREAS TO THE ENCLOSED OR PARTIALLY ENCLOSED VEHICLE STORAGE AREA MUST REMAIN CLOSED AT ALL TIMES.

Use of this product in a manner contrary to its intended mode of operation may result in property damage, personal injury, or death. Except when performing the Safety Check outlined in this installation guide, (1) Never remotely start the vehicle with the vehicle in gear, and (2) Never remotely start the vehicle with the keys in the ignition. The user is responsible for having the neutral safety feature of the vehicle periodically checked, wherein the vehicle must not remotely start while the car is in gear. This testing should be performed by an authorized Directed dealer in accordance with the Safety Check outlined in this product installation guide. If the vehicle starts in gear, cease remote start operation immediately and consult with the user to fix the problem immediately.

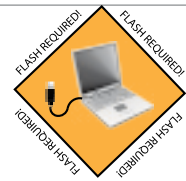
OPERATION OF THE REMOTE START MODULE IF THE VEHICLE STARTS IN GEAR IS CONTRARY TO ITS INTENDED MODE OF OPERATION. OPERATING THE REMOTE START SYSTEM UNDER THESE CONDITIONS MAY RESULT IN PROPERTY DAMAGE OR PERSONAL INJURY. IMMEDIATELY CEASE THE USE OF THE UNIT AND REPAIR OR DISCONNECT THE INSTALLED REMOTE START MODULE. DIRECTED WILL NOT BE HELD RESPONSIBLE OR PAY FOR INSTALLATION OR REINSTALLATION COSTS.

Remote starters for manual transmission pose significant risks if not properly installed and operated. When testing to ensure the installation is working properly, only remote start the vehicle in neutral gear, on a flat surface and with a functional, fully engaged parking brake. Do not allow anyone to stand in front of or behind the vehicle.

This product should not be installed in any convertible vehicles, soft or hard top with a manual transmission. Installation in such vehicles may pose certain risk.

# Introduction

The TL1 firmware for Directed Digital Systems is a complete solution for remote start, security (if applicable), bypass interface, and convenience needs compatible with specific Toyota and Scion vehicles.



**Warning!** This module can only be programmed via the web tool, which can be found on [www.directechs.com](http://www.directechs.com) or using the Directechs Mobile application for smartphones. Features and functions will become accessible when you connect the module using the XKLoader.

## Vehicle application guide

The following table lists the vehicles and features which are compatible with this product. The number assigned to each year allows you to determine which installation type should be used for your vehicle.

Vehicles	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	PK-Immobilizer Bypass Data No Key Req'd	DL-Arm Factory Security	DL-Disarm Factory Security	DL-Door Lock Control	DL-Door Unlock	DL-Driver Priority Unlock	DL-Hatch Glass Release	DL-Trunk / Hatch Release	RS-3x LOCK START (Start control using OEM Remote)	RS-SmartStart	RS-Tach / RPM Output	SS-Entry Monitoring ALL Door Pins	SS-Entry Monitoring Driver Door Pin	SS-Entry Monitoring Hood Pin	SS-Entry Monitoring Trunk/Hatch Pin	SS-Factory Alarm Trigger Monitoring	ST-Brake Status (foot brake)	ST-E-Brake Status	ST-Ignition Status				
<b>Lexus</b>																																		
ES 330								4	4	4		*								*	*	*	*	*	*	*	*	*	*	*	*			
ES 350 (Smart Key)	3	3	3	3	3	3	3					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*			
GS 300 (Smart Key)								5				*								*	*	*	*	*	*	*	*	*	*	*	*			
GS 350 (Smart Key)						5	5					*								*	*	*	*	*	*	*	*	*	*	*	*			
GS 430 (Smart Key)								5				*								*	*	*	*	*	*	*	*	*	*	*	*			
GS 450h (Smart Key)						5	5					*								*	*	*	*	*	*	*	*	*	*	*	*			
GS 460 (Smart Key)						5						*								*	*	*	*	*	*	*	*	*	*	*	*			
GX 470					4	4	4	4	4	4	4	*								*	*	*	*	*	*	*	*	*	*	*	*	*		
IS 250 (Smart Key)						5	5	5				*								*	*	*	*	*	*	*	*	*	*	*	*	*		
IS 350 (Smart Key)						5	5	5				*								*	*	*	*	*	*	*	*	*	*	*	*	*		
IS F (Smart Key)						5						*								*	*	*	*	*	*	*	*	*	*	*	*	*		
LS 430							4	4	4			*								*	*	*	*	*	*	*	*	*	*	*	*	*		
LS 460 (Smart Key)						5	5					*								*	*	*	*	*	*	*	*	*	*	*	*	*		
LS 600h (Smart Key)						5						*								*	*	*	*	*	*	*	*	*	*	*	*	*		
LX 470							4	4	4	4	4	*								*	*	*	*	*	*	*	*	*	*	*	*	*	*	
RX 330								4	4	4		*								*	*	*	*	*	*	*	*	*	*	*	*	*	*	
RX 350					4	4	4					*								*	*	*	*	*	*	*	*	*	*	*	*	*	*	
RX 400h						4	4	4				*								*	*	*	*	*	*	*	*	*	*	*	*	*	*	
<b>Pontiac</b>																																		
Vibe				1	1							*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Vibe						4						*								*	*	*	*	*	*	*	*	*	*	*	*	*	*	
<b>Scion</b>																																		
tC				4	4	4	4	4	4			*								*	*	*	*	*	*	*	*	*	*	*	*	*	*	
xB				1	1	1						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
xD				1	1	1						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Legend:  
 PK: Transponder & Immobilizer Override  
 DL: OE Door Lock & Alarm Controls  
 RS: Remote Start & Engine Controls  
 SS: Integrated Security & Monitoring  
 ST: Function/Feature Status

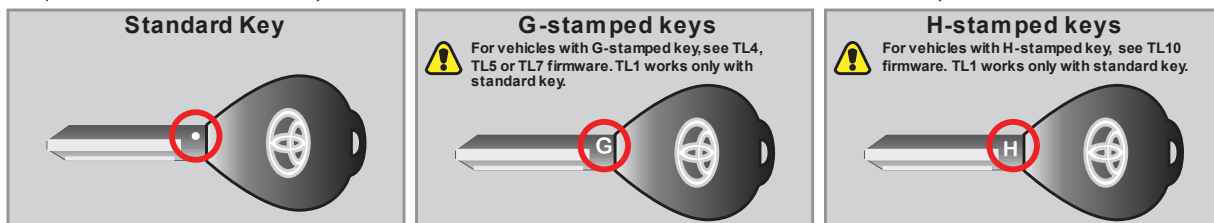
Vehicles	2013	2012	2011	2010	2009	2008	2007	2006	2005	2004	2003	PK-Immobilizer Bypass/Data No Key Rec'd	DL-Arm Factory Security	DL-Diarm Factory Security	DL-Door Lock & Control	DL-Door Unlock	DL-Driver Priority Unlock	DL-Hatch Glass Release	DL-Trunk / Hatch Release	RS-3x LOCK START (Star control using OEM Remote)	RS-SmartStart	SS-Tach / RPM Output	SS-Entry Monitoring ALL Door Pins	SS-Entry Monitoring Driver Door Pin	SS-Entry Monitoring Hood Pin	SS-Entry Monitoring Trunk/Hatch Pin	SS-Factory Alarm Trigger Monitoring	ST-Brake Status (foot brake)	ST-E-Brake Status	ST-Ignition Status	
Toyota																															
4Runner				4	4	4	4	4	4	4	4	*									*										
Avalon				4	4	4	4	4	4	4	4	*									*										
Avalon (Smart Key)					5	5	5	5	5	5		*									*										
Camry			1	1	1	1	1	1				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Camry (Smart Key)				3	3	3	3	3				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Camry Hybrid				3	3	3	3	3				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Corolla				1	1							*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Corolla (Smart Key)	2	2	2	2	2	2						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
FJ Cruiser					4	4	4					*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Highlander				1	1	1						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Highlander (Smart Key)	3	3	3	3	3	3						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Highlander Hybrid	3	3	3	3	3	3						*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Highlander Hybrid						4	4					*									*										
Land Cruiser						4	4	4	4	4	4	*									*										
Land Cruiser (Smart Key)				5	5	5						*									*										
Matrix				1	1							*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Matrix (Smart Key)					4	4	4	4	4			*									*										
Prius (Smart Key)					6	6	6	6	6	6		*									*										
RAV4				1	1	1	1	1				*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
RAV4 (Smart Key)	2	2	2	2	2							*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	
Sequoia				4	4	4						*									*										
Sienna				4	4	4	4	4	4	4		*									*										
Solara				4	4	4	4	4	4	4		*									*										
Tacoma				4	4	4	4	4	4			*									*										
Tundra				4	4	4	4					*									*										
Venza				4								*									*										
Yaris			4	4	4	4	4	4				*									*										
Yaris Sedan			4	4	4	4	4					*									*										

Legend:  
 PK: Transponder & Immobilizer Override  
 DL: OE Door Lock & Alarm Controls  
 RS: Remote Start & Engine Controls  
 SS: Integrated Security & Monitoring  
 ST: Function/Feature Status

**!** No takeover feature is available on Push-to-Start vehicles.  
 If equipped, OE remote start must be removed before installation. See page 6 for more information.

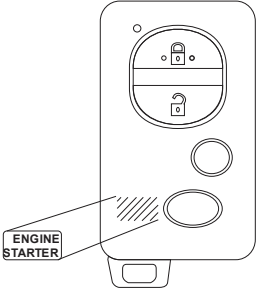

### Key Types

Some Toyota 2010+ models have different encryption types. Please look at your key blade and identify the markings. A dot "." means the vehicle is compatible with TL1 firmware. "G" or "H" indicates the vehicle is not compatible with this firmware.



## OEM Remote Starter Detection

### How to Know if the vehicle is Equipped with an OEM Remote Starter

<p>1- An "ENGINE STARTER" sticker should be on the remote.</p> 	<p>2- Remote start the OEM remote starter: Press the remote control's lock button twice within 2 seconds, then press and hold the lock button for 3 seconds.</p> <p>The parking lights flash after 3 seconds. The engine starts and the parking lights flash repeatedly for 20 seconds.</p> 
--	--

### If the Vehicle is Equipped with an OEM Remote Starter

If the vehicle is equipped with an OEM remote starter, the Directed Digital System LED will start flashing orange to indicate its detection. To skip bypass and use convenience only, press the programming button 5 times. \* The reason for this is to allow aftermarket security to be installed while keeping the factory remote starter active. If you wish to use Directed Digital System to control the remote start sequence, the factory remote starter must be disconnected before programming the Directed Digital System as both modules cannot coexist.

\* The Directed Digital System LED turns ON solid orange for 3 seconds after programming or power up to indicate the bypass is not active. Refer to "LED diagnostics and troubleshooting" starting on page 32 for more information.

### Locating the OEM Remote Starter

Vehicle	OEM Remote Starter & Connector Location
Toyota Camry (key) 2007-2010	Behind Glove Box & Passenger kick panel
Toyota Corolla (key) 2009-2010	Behind Glove Box & Passenger kick panel & Junction Box & Steering column
Toyota Highlander (key) 2007-2010	Behind Glove Box & Steering column
Toyota Matrix (key) 2009-2010	Junction Box & Behind Glove Box & Passenger kick panel
Pontiac Vibe (key) 2009-2010	Behind Glove Box & Junction Box & Passenger kick panel
Scion xB (key) 2008-2010	Behind Glove Box & Passenger kick panel & Junction Box & Steering column
Scion xD (key) 2008-2010	Behind Glove Box & Passenger kick panel & Junction Box & Steering column
Toyota Rav4 (key) 2006-2010	Behind Glove Box & Passenger kick panel & Junction Box & Steering column
Toyota Sequoia (key) 2008-2010	Behind Glove Box & Passenger kick panel & Steering column
Toyota Tundra (key) 2007-2010	Behind GloveBox & Passenger kick panel & Steering column
Toyota Yaris (key) 2006-2010	Behind Glove Box & Junction Box & Steering column
Toyota Corolla (Smart Key) 2009-2013	Behind Glove Box & Passenger kick panel & Junction Box & Steering column
Toyota Rav4 (Smart Key) 2009-2012	Behind Glove Box & Junction Box
Toyota Camry (Smart Key) 2007-2011	Behind Glove Box & Passenger kick panel
Toyota Camry Hybrid (Smart Key) 2007-2011	Behind Glove Box & Passenger kick panel
Toyota Highlander (Smart Key) 2008-2013	Behind Glove Box & Passenger kick panel
Toyota Highlander Hybrid (Smart Key) 2008-2013	Behind Glove Box & Passenger kick panel

## Wiring connections

The wiring connections listed below are specific to this firmware.

### Main power harness (H1), 12-pin thick gauge connector

Conn./Pin	Color	Description
H1/1	White	Relay 3 COM – Clutch Bypass Output (Type 2 & 4) <sup>1</sup>
H1/2	White/Brown	Relay 3 N.O.– Clutch Bypass Input (Type 2 & 4) <sup>1</sup>
H1/3	Brown/Red	Relay 2 N.O.– No Connection
H1/4	Yellow/Red	Relay 2 COM – Autolight Off (Type 1 & 4)
H1/5	Orange/Red	Relay 2 N.C. – Autolight Off (Type 1 & 4)
H1/6	Yellow	Relay 1 COM – Starter 2 (Type 1); STSW (Types 2 & 3); Brake (Types 5 & 6) <sup>1</sup>
H1/7	White	Relay 3 COM – Clutch Bypass Output (Type 2 & 4) <sup>1</sup>
H1/8	White/Brown	Relay 3 N.O.– Clutch Bypass Input (Type 2 & 4) <sup>1</sup>
H1/9	Black	(-) Ground
H1/10	Red	(+) 12 Volt (Battery) <sup>1</sup>
H1/11	Orange/Yellow	Relay 1 N.C. – Brake (Types 5 & 6) <sup>1</sup>
H1/12	Brown	Relay 1 N.O.– (+) 12V (Types 1-3, 5 & 6)

### Auxiliary output harness (H2), 16-pin black connector

Conn./Pin	Color	Description
H2/1	Violet/Brown	No Connection
H2/2	Yellow/Black	Data TX (Types 1, 4-6)
H2/3	Orange/Black	Data RX (Types 1, 4-6)
H2/4	Tan	HS CAN Low (Types 1-3)
H2/5	Tan/Black	HS CAN High (Types 1-3)
H2/6	Light Green	No Connection
H2/7	Orange/Green	No Connection
H2/8	Orange/Brown	No Connection
H2/9	Violet/Green	No Connection
H2/10	Green/Black	(-) Parking Lights
H2/11	White/Violet	No Connection <sup>2</sup>
H2/12	White/Red	(+) No Connection <sup>2</sup>
H2/13	Lt. Blue/Black	(-) Push-To-Start (PTS) Output (Types 2, 3, 5 & 6)
H2/14	Green/Red	No Connection <sup>2</sup>
H2/15	N/A	No Connection
H2/16	Violet/Yellow	No Connection

1. If these outputs are not used by the firmware, they can be configured by the installer when the module is flashed.
2. If these outputs are not used by the firmware, they can be configured by the installer when the module is flashed. Note that they are low current and a relay may be necessary.

## Analog harness (H3), 18-pin white connector

Conn./Pin	Color	Description
H3/1	Lt. Blue/Red	No Connection
H3/2	Black/White	(-) Parking Brake Input (Manual Transmission) <sup>2</sup>
H3/3	Gray	(-) Hood Input <sup>2</sup>
H3/4	N/A	No Connection
H3/5	Gray/Black	(+) Glow Plug Input <sup>2</sup>
H3/6	Violet/White	(AC) Tach Input <sup>2</sup>
H3/7	Dark Blue	No Connection <sup>1</sup>
H3/8	Brown/Black	No Connection <sup>1</sup>
H3/9	Red/White	No Connection
H3/10	White/Green	(-) Door Input <sup>2</sup>
H3/11	Yellow/Green	(+) Door Input <sup>2</sup>
H3/12	Blue/Red	No Connection
H3/13	Light Blue	(-) Trunk Trigger Input <sup>2</sup>
H3/14	Pink/Yellow	(-) Activation (Start Trigger) Input
H3/15	Dark Green	No Connection <sup>1</sup>
H3/16	Brown/White	(+) Brake Input <sup>2</sup>
H3/17	Brown	(+) Siren Output <sup>1</sup>
H3/18	Blue/White	(-) Active When Running (Status) Output <sup>1</sup>

## MC501 harness (H4), 8 thick-gauge wires (optional)

Conn./Pin	Color	Description
H4/1	Pink/White	(+) Ignition 2/Flex Relay Output <sup>3</sup>
H4/2	Red/White	(+) Fused (30A) Ignition 2/Flex Relay Input
H4/3	Pink	(+) Ignition Output (Also Input to Yellow in Ribbon Cable)
H4/4	Red	(+) 12 Volt (Battery) Input
H4/5	Orange	(+) Accessory Output
H4/6	Red	(+) 12 Volt (Battery) Input
H4/7	Green	Starter Input (From Key Switch) <sup>4</sup>
H4/8	Violet	(+) Starter Output (To Starter)

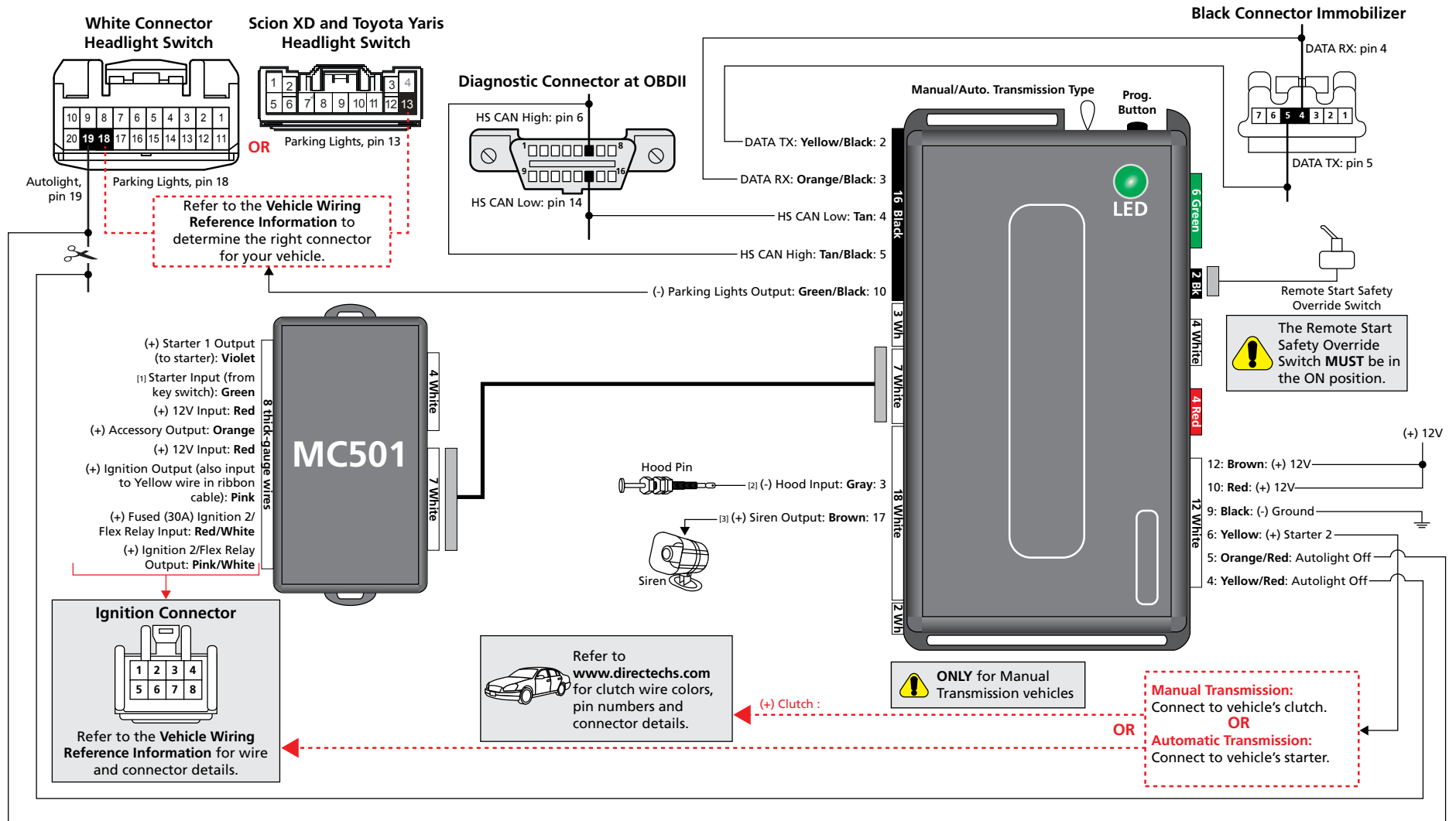
1. If these outputs are not used by the firmware, they can be configured by the installer when the module is flashed. Note that they are low current and a relay may be necessary.
2. These connections are only required if the corresponding statuses are not supported by the firmware. See "Vehicle application guide" starting on page 4 for a list of compatible features.
3. If these outputs are not used by the firmware, they can be configured by the installer when the module is flashed.
4. The Green wire is only required for starter kill and antigird applications.



# Installation

## Type 1 (Key-Type Vehicles with CAN)

**!** Refer to "Vehicle wiring reference charts" starting on page 17 for more information on vehicle-specific connections.



[1] The Green wire is only required for starter kill and antigrind connections.

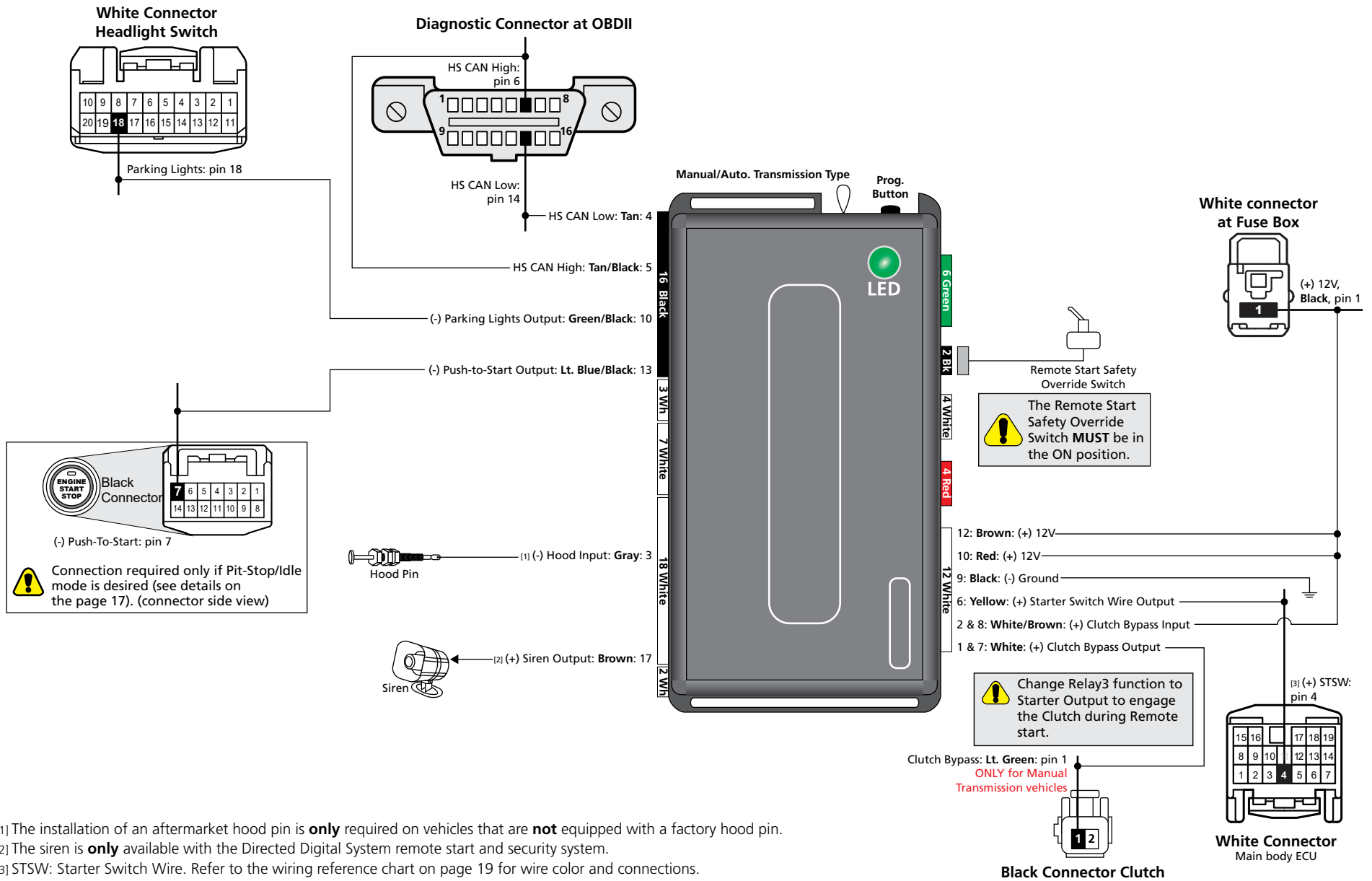
[2] The installation of an aftermarket hood pin is **only** required on vehicles that are **not** equipped with a factory hood pin.

[3] The siren is **only** available with the remote start and security system.

**!** With the exception of the OBDII diagnostic connector, all adapters are displayed from the wire side (unless specified otherwise).

## Type 2a (Push-to-Start Vehicles with CAN)

 Refer to "Vehicle wiring reference charts" starting on page 17 for more information on vehicle-specific connections.



[1] The installation of an aftermarket hood pin is **only** required on vehicles that are **not** equipped with a factory hood pin.

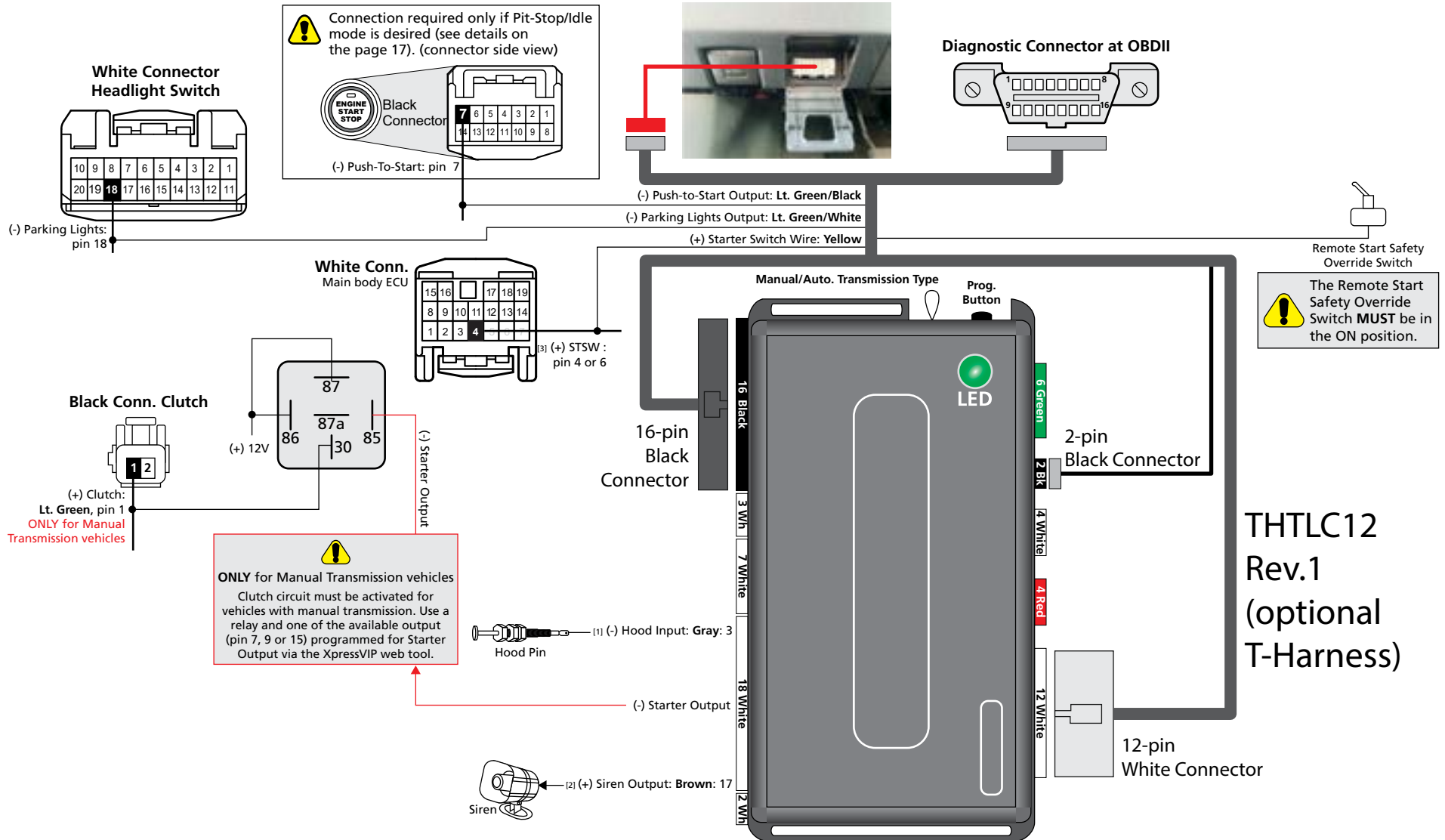
[2] The siren is **only** available with the Directed Digital System remote start and security system.

[3] STSW: Starter Switch Wire. Refer to the wiring reference chart on page 19 for wire color and connections.

 With the exception of the OBDII diagnostic connector, all adapters are displayed from the wire side (unless specified otherwise).

## Type 2b - with T-Harness THTLC12 (Push-to-Start Vehicles with CAN)


 Refer to "Vehicle wiring reference charts" starting on page 17 for more information on vehicle-specific connections.



[1] The installation of an aftermarket hood pin is **only** required on vehicles that are **not** equipped with a factory hood pin.

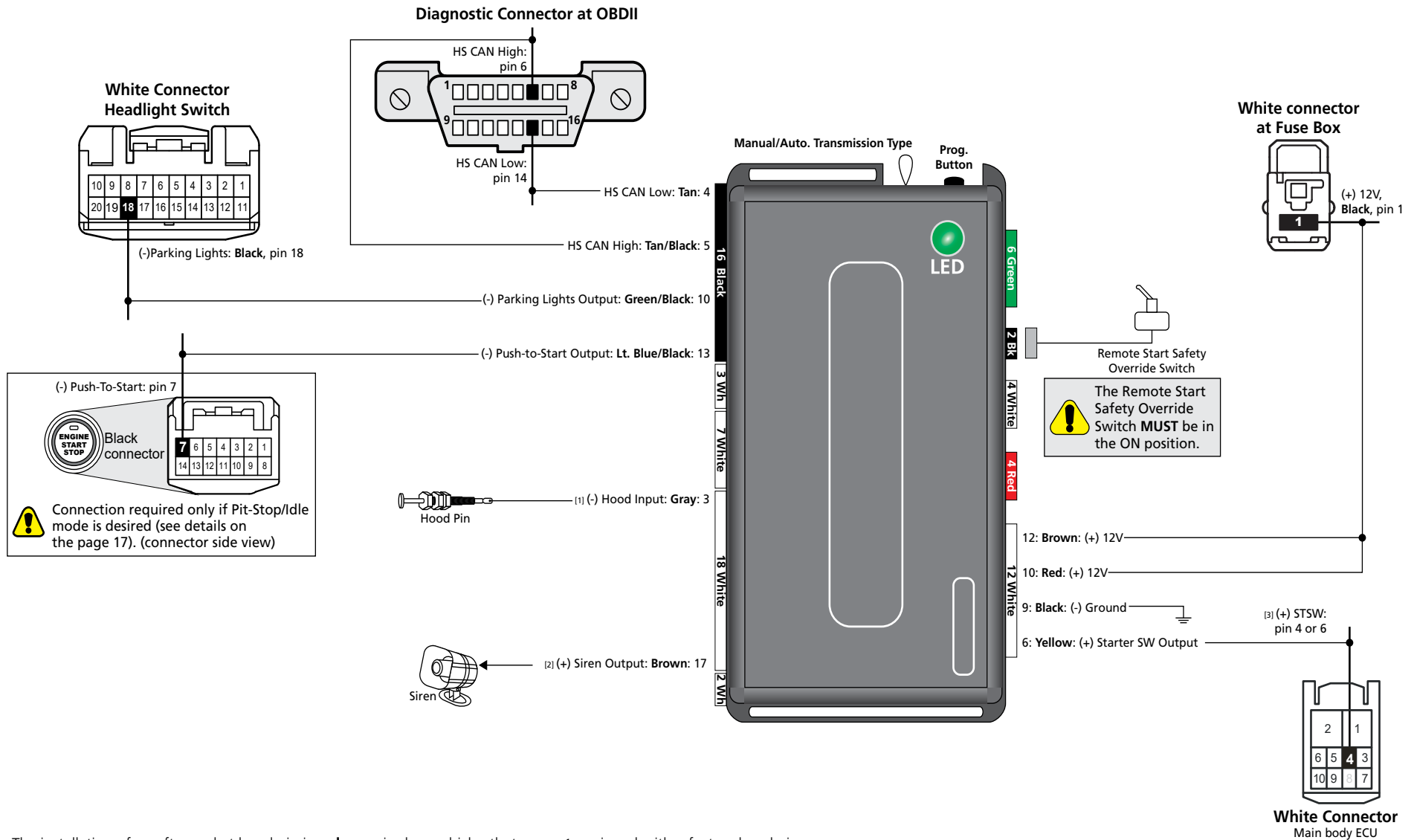
[2] The siren is **only** available with the Directed Digital System remote start and security system.

[3] STSW: Starter Switch Wire. Refer to the wiring reference chart on page 19 for wire color and connections.

 With the exception of the OBDII diagnostic connector, all adapters are displayed from the wire side (unless specified otherwise).

## Type 3a -Without T-Harness THTLC12 (Push-to-Start Vehicles with CAN)

 Refer to "Vehicle wiring reference charts" starting on page 17 for more information on vehicle-specific connections.



[1] The installation of an aftermarket hood pin is **only** required on vehicles that are **not** equipped with a factory hood pin.

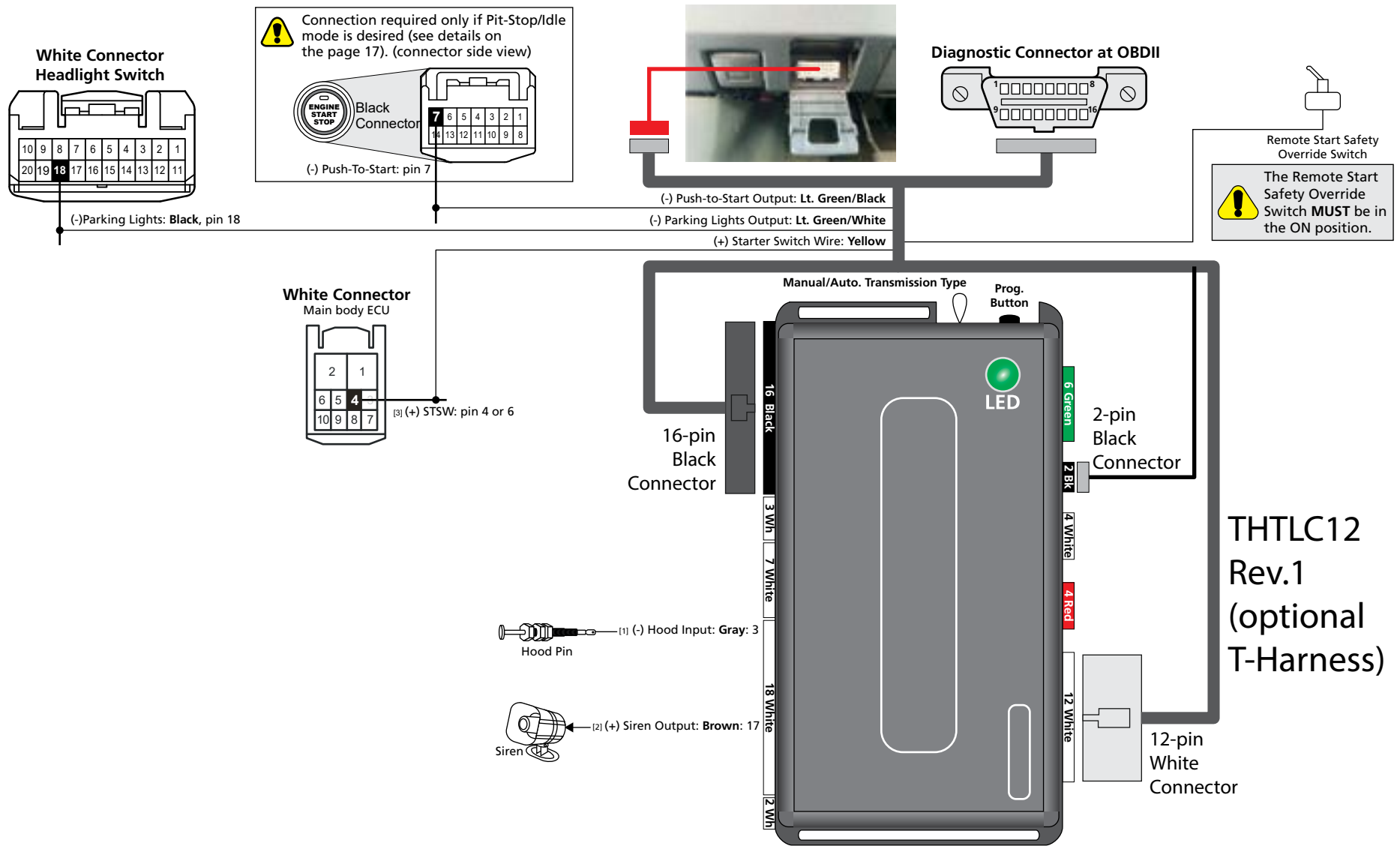
[2] The siren is **only** available with the Directed Digital Systems remote start and security system.

[3] STSW: Starter Switch Wire. Refer to the wiring reference chart on page 19 for wire color and connections.

 With the exception of the OBDII diagnostic connector, all adapters are displayed from the wire side (unless specified otherwise).

## Type 3b - with T-Harness THTL12 (Push-to-Start Vehicles with CAN)

Refer to "Vehicle wiring reference charts" starting on page 17 for more information on vehicle-specific connections.



[1] The installation of an aftermarket hood pin is **only** required on vehicles that are **not** equipped with a factory hood pin.

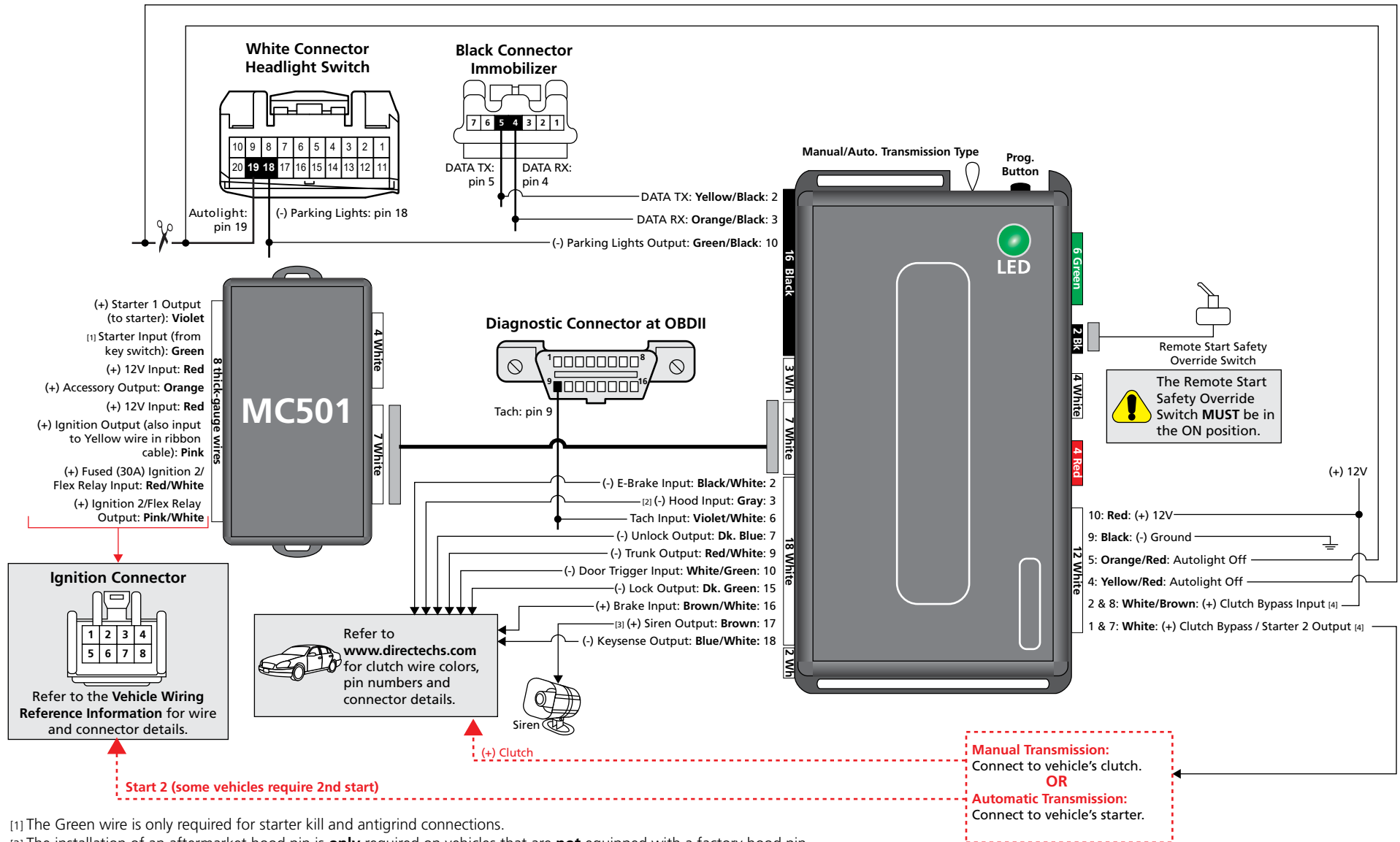
[2] The siren is **only** available with the Directed Digital System remote start and security system.

[3] **STSW**: Starter Switch Wire. Refer to the wiring reference chart on page 20 for wire color and connections.

With the exception of the OBDII diagnostic connector, all adapters are displayed from the wire side (unless specified otherwise).

## Type 4 (Key-Type Vehicles without CAN)

**!** Refer to "Vehicle wiring reference charts" starting on page 17 for more information on vehicle-specific connections.



[1] The Green wire is only required for starter kill and antigrind connections.

[2] The installation of an aftermarket hood pin is **only** required on vehicles that are **not** equipped with a factory hood pin.

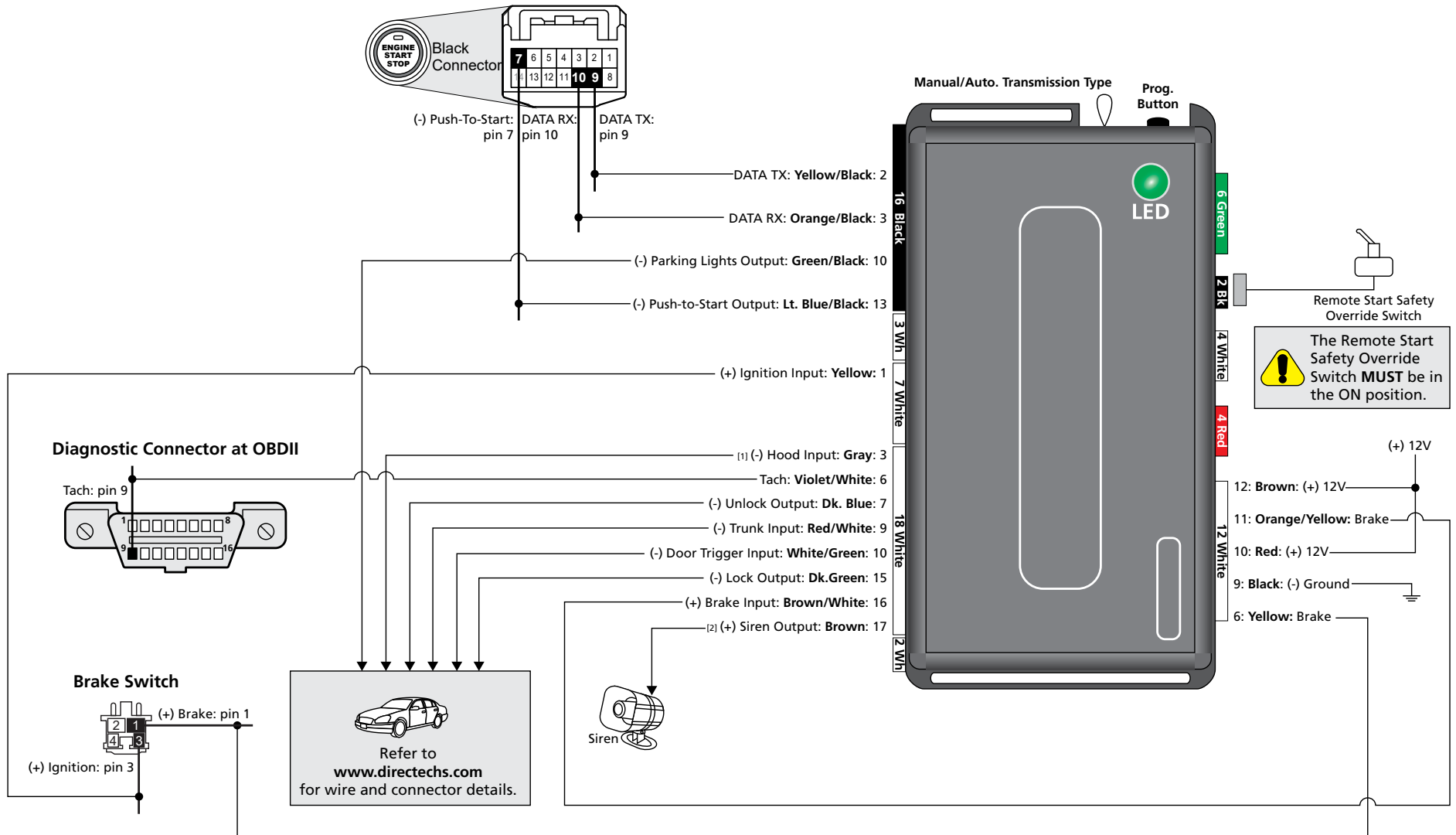
[3] The siren is **only** available with the Directed Digital System remote start and security system.

[4] Reprogramming the default feature to starter is required for the clutch bypass.

**!** With the exception of the OBDII diagnostic connector, all adapters are displayed from the wire side (unless specified otherwise).

## Type 5 (Push-to-Start Vehicles without CAN)

 Refer to "Vehicle wiring reference charts" starting on page 17 for more information on vehicle-specific connections.



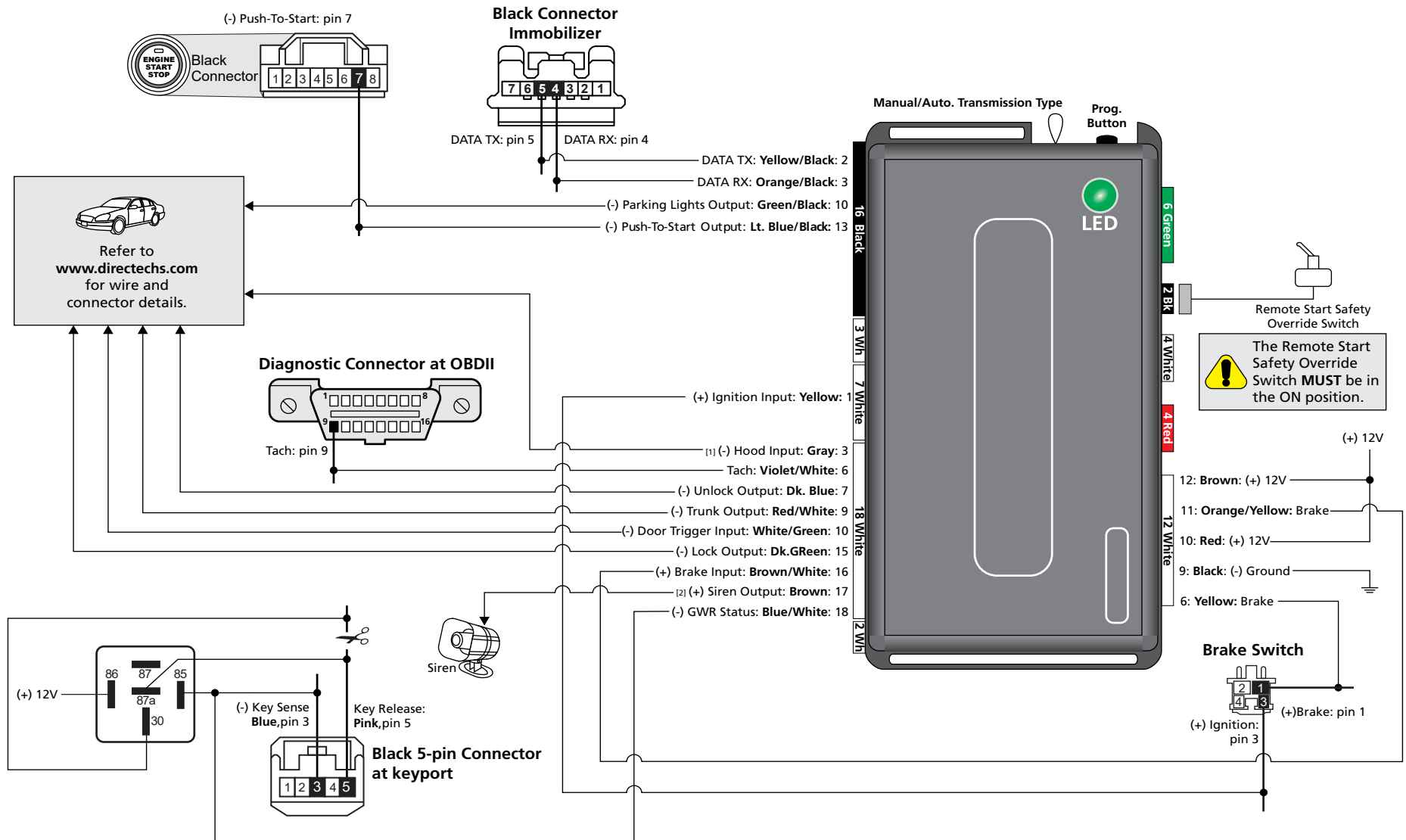
[1] The installation of an aftermarket hood pin is **only** required on vehicles that are **not** equipped with a factory hood pin.

[2] The siren is **only** available with the Directed Digital Systems remote start and security system.

 With the exception of the OBDII diagnostic connector, all adapters are displayed from the wire side (unless specified otherwise).

## Type 6 (Push-to-Start Vehicles with Keyport without CAN)

 Refer to "Vehicle wiring reference charts" starting on page 17 for more information on vehicle-specific connections.



[1] The installation of an aftermarket hood pin is **only** required on vehicles that are **not** equipped with a factory hood pin.

[2] The siren is **only** available with the Directed Digital System remote start and security system.

 With the exception of the OBDII diagnostic connector, all adapters are displayed from the wire side (unless specified otherwise).



## Vehicle wiring reference charts

This section provides information on the following connections:

- "Installation Type 1"
- "Installation Type 2"
- "Installation Type 3"
- "Installation Type 4"
- "Installation Type 5"
- "Installation Type 6"

 Refer to [www.directechs.com](http://www.directechs.com) for more information on additional connections.

### Pit Stop/ Idle Mode

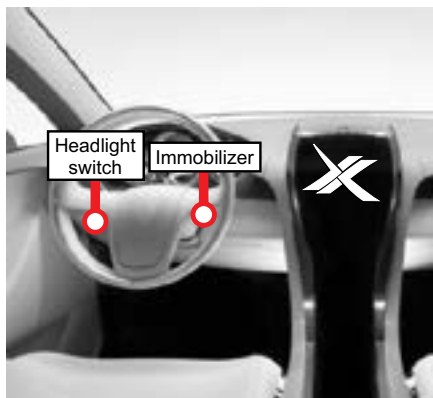
The Pit Stop/Idle feature allows the vehicle to remain running after leaving the vehicle. Refer to the owner's guide of your remote starter for more details.

### Installation Type 1

Vehicle	Wire function	Connector	Pin position	Wire color
<b>Pontiac Vibe (Key) 2009-2010</b>	CAN High	Diagnostic Connector	6	Light Green
	CAN Low	Diagnostic Connector	14	White
	Autolight	Not equipped		
	Parking Lights	Headlight Switch	18	Brown
	RX	Immobilizer	4	Light Blue
	TX	Immobilizer	5	Beige
<b>Scion xB (Key) 2008-2010</b>	CAN High	Diagnostic Connector	6	Light Green
	CAN Low	Diagnostic Connector	14	White
	Autolight	Not equipped		
	Parking Lights	Headlight Switch	18	Brown
	RX	Immobilizer	4	Light Blue
	TX	Immobilizer	5	Beige
<b>Scion xD (Key) 2008-2010</b>	CAN High	Diagnostic Connector	6	Violet
	CAN Low	Diagnostic Connector	14	White
	Autolight	Not equipped		
	Parking Lights	Headlight Switch	13	White
	RX	Immobilizer	4	Green
	TX	Immobilizer	5	Violet
<b>Toyota Camry (Key) 2007-2011</b>	CAN High	Diagnostic Connector	6	Black
	CAN Low	Diagnostic Connector	14	White
	Autolight	Headlight Switch	19	Green
	Parking Lights	Headlight Switch	18	Black
	RX	Immobilizer	4	Brown
	TX	Immobilizer	5	Red

Vehicle	Wire function	Connector	Pin position	Wire color
<b>Toyota Corolla (Key) 2009-2010</b>	CAN High	Diagnostic Connector	6	Light Green
	CAN Low	Diagnostic Connector	14	White
	Autolight	Not equipped		
	Parking Lights	Headlight Switch	18	Brown or White
	RX	Immobilizer	4	Light blue or Pink
	TX	Immobilizer	5	Beige or Green
<b>Toyota Highlander (Key) 2008-2010</b>	CAN High	Diagnostic Connector	6	Blue
	CAN Low	Diagnostic Connector	14	White
	Autolight	Headlight Switch	19	Green
	Parking Lights	Headlight Switch	18	Light Blue
	RX	Immobilizer	4	Red
	TX	Immobilizer	5	Light blue
<b>Toyota Matrix (Key) 2009-2010</b>	CAN High	Diagnostic Connector	6	Light Green
	CAN Low	Diagnostic Connector	14	White
	Autolight	Not equipped		
	Parking Lights	Headlight Switch	18	Brown
	RX	Immobilizer	4	Light blue
	TX	Immobilizer	5	Beige
<b>Toyota RAV4 (Key) 2006-2010</b>	CAN High	Diagnostic Connector	6	Black
	CAN Low	Diagnostic Connector	14	White
	Autolight	Headlight Switch	19	Green
	Parking Lights	Headlight Switch	18	White
	RX	Immobilizer	4	Pink
	TX	Immobilizer	5	Green

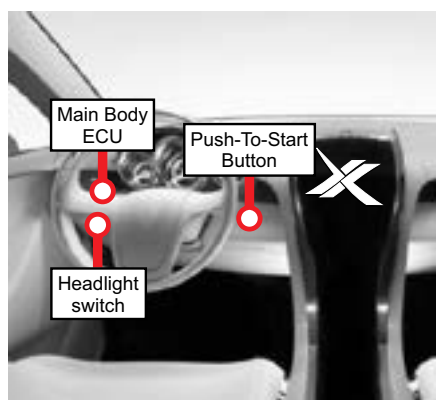
### Locating Key Components in the vehicle



## Installation Type 2

Vehicle	Wire function	Connector	Pin position	Wire color
<b>Toyota Corolla (Smart Key) 2009-2013</b>	CAN High	Diagnostic Connector	6	Light Green
	CAN Low	Diagnostic Connector	14	White
	Autolight	Not equipped		
	Parking Lights	Headlight Switch	18	Brown or White
	Push-to-Start	PTS button	7	White
	STSW	Main Body ECU (E52)	4	Black or White
	12V	Fuse Box (2G)	1	White
<b>Toyota RAV4 (Smart Key) 2009-2012</b>	CAN High	Diagnostic Connector	6	Black
	CAN Low	Diagnostic Connector	14	White
	Autolight	Headlight Switch	19	Green
	Parking Lights	Headlight Switch	18	White
	Push-to-Start	PTS button	7	White
	STSW	Main Body ECU (E17)	4	Red
	12V	Fuse Box (1G)	1	White

### Locating Key Components in the vehicle

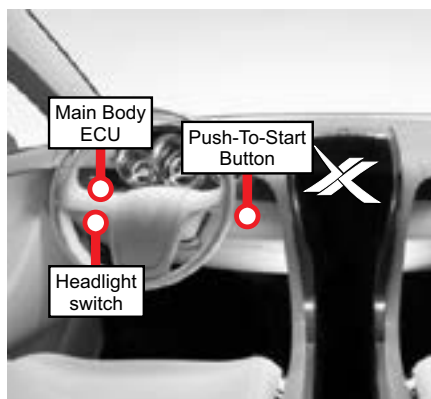


## Installation Type 3

Vehicle	Wire function	Connector	Pin position	Wire color
<b>Lexus ES 350 (Smart Key) 2007-2012</b>	CAN High	Diagnostic Connector	6	Light Green
	CAN Low	Diagnostic Connector	14	Pink
	Autolight	Headlight Switch	19	Yellow
	Parking Lights	Headlight Switch	18	Black
	Push-to-Start	PTS button	7	Blue
	STSW	Main Body ECU (E58)	4 or 6	Red or Violet
	12V	Fuse Box (DA)	1	White

Vehicle	Wire function	Connector	Pin position	Wire color
<b>Toyota Camry (Smart Key) 2007-2011</b>	CAN High	Diagnostic Connector	6	Black
	CAN Low	Diagnostic Connector	14	White
	Autolight	Headlight Switch	19	Green
	Parking Lights	Headlight Switch	18	Black
	Push-to-Start	PTS button	7	Blue
	STSW	Main Body ECU (E9)	4 or 6	Gray or Violet
	12V	Fuse Box (1A)	1	Black
<b>Toyota Camry Hybrid (Smart Key) 2007-2011</b>	CAN High	Diagnostic Connector	6	Black
	CAN Low	Diagnostic Connector	14	White
	Autolight	Headlight Switch	19	Green
	Parking Lights	Headlight Switch	18	Black
	Push-to-Start	PTS button	7	Blue
	STSW	Main Body ECU (E9)	4	Gray
	12V	Fuse Box (1A)	1	Black
<b>Toyota Highlander (Smart Key) 2008-2013</b>	CAN High	Diagnostic Connector	6	Black
	CAN Low	Diagnostic Connector	14	White
	Autolight	Headlight Switch	19	Green
	Parking Lights	Headlight Switch	18	Light Blue
	Push-to-Start	PTS button	7	Pink
	STSW	Main Body ECU (D10)	4	Pink
	12V	Fuse Box (1A)	1	Black
<b>Toyota Highlander Hybrid (Smart Key) 2008-2013</b>	CAN High	Diagnostic Connector	6	Black
	CAN Low	Diagnostic Connector	14	White
	Autolight	Headlight Switch	19	Green
	Parking Lights	Headlight Switch	18	Light Blue
	Push-to-Start	PTS button	7	Pink
	STSW	Main Body ECU (D10)	4	Yellow
	12V	Fuse Box (1A)	1	Black

### Locating Key Components in the vehicle



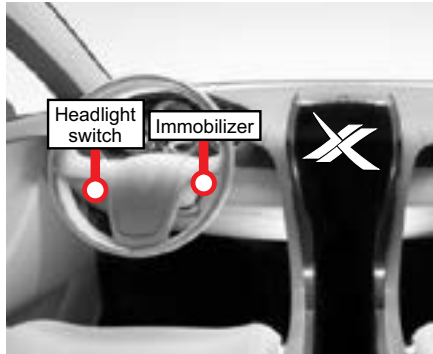
## Installation Type 4

Vehicle	Wire function	Connector	Pin position	Wire color
<b>Lexus ES 330(Key) 2004-2006</b>	Autolight	Headlight Switch	12	White
	RX	Immobilizer	4	Green/White
	TX	Immobilizer	5	Blue/Yellow
<b>Lexus GX 470 (Key) 2003-2009</b>	Autolight	Headlight Switch	12	Green/Orange
	RX	Immobilizer	4	Yellow
	TX	Immobilizer	5	Yellow/Black
<b>Lexus LS 430 (Key) 2004-2006</b>	Autolight	<i>Not Equipped</i>		
	RX	Immobilizer	4	Red/White
	TX	Immobilizer	5	Blue/Black
<b>Lexus LX 470 (Key) 2004-2006</b>	Autolight	Headlight Switch	12	Green/Orange
	RX	Immobilizer	4	Blue/Black
	TX	Immobilizer	5	Violet/Green
<b>Lexus RX 330 (Key) 2004-2006</b>	Autolight	Headlight Switch	12	Brown
	RX	Immobilizer	4	Light Green
	TX	Immobilizer	5	Brown
<b>Lexus RX 350 (Key) 2007-2009</b>	Autolight	Headlight Switch	19	Brown
	RX	Immobilizer	4	Light Green
	TX	Immobilizer	5	Brown
<b>Lexus RX 400h (Key) 2006-2008</b>	Autolight	Headlight Switch	19	Brown
	RX	Immobilizer	4	Green
	TX	Immobilizer	5	Violet
<b>Pontiac Vibe (Key) 2008</b>	Autolight	<i>Not Equipped</i>		
	Clutch	Clutch Switch	2	Black
	RX	Immobilizer	4	Blue
	TX	Immobilizer	5	Green
<b>Scion tC (Key) 2005-2010</b>	Autolight	<i>Not Equipped</i>		
	Clutch	Clutch Switch	1 & 2	Yellow (in) Black (out)
	RX	Immobilizer	4	Yellow
	TX	Immobilizer	5	Red
<b>Toyota 4Runner (Key) 2003-2009</b>	Autolight	Headlight Switch	12	Green/Orange
	RX	Immobilizer	4	Pink/Green
	TX	Immobilizer	5	Light Green/Yellow
<b>Toyota Avalon (Key) 2005-2010</b>	Autolight	Headlight Switch	19	Orange
	RX	Immobilizer	4	Lt.Green
	TX	Immobilizer	5	Brown
<b>Toyota Camry (Key) 2003-2006</b>	Autolight	Headlight Switch	12	White
	RX	Immobilizer	4	Green/White
	TX	Immobilizer	5	Blue/Yellow
<b>Toyota Corolla (Key) 2005-2008</b>	Autolight	<i>Not Equipped</i>		
	Clutch	Clutch Switch	2	Black
	RX	Immobilizer	4	Blue
	TX	Immobilizer	5	Green

Vehicle	Wire function	Connector	Pin position	Wire color
<b>Toyota FJ Cruiser (Key) 2007-2009</b>	Autolight	<i>Not Equipped</i>		
	Clutch	Clutch Switch	2	Black/Yellow
	RX	Immobilizer	4	Pink/Green
	TX	Immobilizer	5	Light Green/Red
<b>Toyota Highlander (Key) 2004-2007</b>	Autolight	Headlight Switch	12	Pink
	RX	Immobilizer	4	Gray
	TX	Immobilizer	5	White
<b>Toyota Land Cruiser (Key) 2003-2007</b>	Autolight	Headlight Switch	12	Green/Orange
	RX	Immobilizer	4	Blue/Black
	TX	Immobilizer	5	Violet/Green
<b>Toyota Matrix (Key) 2005-2008</b>	Autolight	<i>Not Equipped</i>		
	Clutch	Clutch Switch	2	Black
	RX	Immobilizer	4	Blue
	TX	Immobilizer	5	Green
<b>Toyota RAV4 (Key) 2004-2005</b>	Autolight	<i>Not Equipped</i>		
	RX	Immobilizer	4	Blue/Red
	TX	Immobilizer	5	Pink
<b>Toyota Sequoia (key) 2008-2010</b>	Autolight	Headlight Switch	19	White
	RX	Immobilizer	4	Blue/Red
	TX	Immobilizer	5	Pink
<b>Toyota Solara (Key) 2004-2009</b>	Autolight	Headlight Switch	19	Green
	Clutch	Clutch Switch	2	Black/White
	RX	Immobilizer	4	Yellow or Green/White
	TX	Immobilizer	5	Yellow/Red or Blue/Yellow
<b>Toyota Sienna (Key) 2004-2010</b>	Autolight	<i>Not Equipped</i>		
	RX	Immobilizer	4	Yellow
	TX	Immobilizer	5	Yellow/Red
<b>Toyota Tacoma (Key) 2004-2010</b>	Autolight	<i>Not Equipped</i>		
	Parking Lights	Headlight Switch	18	Green
	Clutch	Clutch Switch	2	Black/Yellow
	RX	Immobilizer	4	Pink/Green
	TX	Immobilizer	5	Lt. Green/Red
<b>Toyota Tundra (Key) 2007-2010</b>	Autolight	Headlight Switch	19	Green
	Parking Lights	Headlight Switch	18	Orange or Beige
	RX	Immobilizer	4	Light Green
	TX	Immobilizer	5	Blue

Vehicle	Wire function	Connector	Pin position	Wire color
<b>Toyota Venza (Key) 2009</b>	Autolight	Headlight Switch	19	Brown
	RX	Immobilizer	4	Green
	TX	Immobilizer	5	Violet
<b>Toyota Yaris (Key) 2006-2011</b>	Autolight	<i>Not Equipped</i>		
	Clutch	Clutch Switch	1	Black
	RX	Immobilizer	4	Green
	TX	Immobilizer	5	Violet

### Locating Key Components in the vehicle

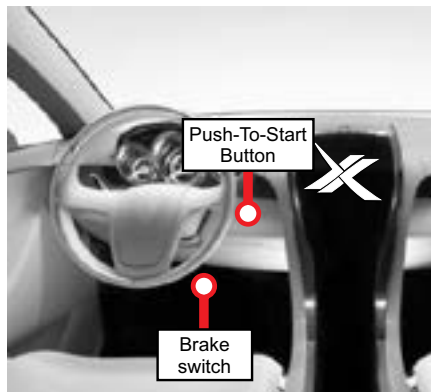


### Installation Type 5

Vehicle	Wire function	Connector	Pin position	Wire color
<b>Lexus GS 300 (Smart Key) 2006</b>	Push-to-Start	PTS button	7	Pink
	RX	PTS button	10	Yellow
	TX	PTS button	9	Blue
	Brake	Brake Switch	1	Red/Black
<b>Lexus GS 350 (Smart Key) 2007-2008</b>	Push-to-Start	PTS button	7	Pink
	RX	PTS button	10	Yellow
	TX	PTS button	9	Blue
	Brake	Brake Switch	1	Red/Black
<b>Lexus GS 430 (Smart Key) 2006-2007</b>	Push-to-Start	PTS button	7	Pink
	RX	PTS button	10	Yellow
	TX	PTS button	9	Blue
	Brake	Brake Switch	1	Red/Black
<b>Lexus GS 450h (Smart Key) 2007-2008</b>	Push-to-Start	PTS button	7	Pink
	RX	PTS button	10	Yellow
	TX	PTS button	9	Blue
	Brake	Brake Switch	1	Red/Black
<b>Lexus GS 460 (Smart Key) 2008</b>	Push-to-Start	PTS button	7	Pink
	RX	PTS button	10	Yellow
	TX	PTS button	9	Blue
	Brake	Brake Switch	1	Red/Black

Vehicle	Wire function	Connector	Pin position	Wire color
<b>Lexus IS 250 (Smart Key) 2006-2008</b>	Push-to-Start	PTS button	7	Black
	RX	PTS button	10	Light Blue
	TX	PTS button	9	Blue
	Brake	Brake Switch	1	Red/Black
<b>Lexus IS 350 (Smart Key) 2006-2008</b>	Push-to-Start	PTS button	7	Black
	RX	PTS button	10	Light Blue
	TX	PTS button	9	Blue
	Brake	Brake Switch	1	Red/Black
<b>Lexus IS F (Smart Key) 2008</b>	Push-to-Start	PTS button	7	Black
	RX	PTS button	10	Light Blue
	TX	PTS button	9	Blue
	Brake	Brake Switch	1	Red/Black
<b>Lexus LS 460 (Smart Key) 2007-2008</b>	Push-to-Start	PTS button	7	White
	RX	PTS button	10	White
	TX	PTS button	9	Orange
	Brake	Brake Switch	1	Blue
<b>Lexus LS 600h (Smart Key) 2008</b>	Push-to-Start	PTS button	7	White
	RX	PTS button	10	White
	TX	PTS button	9	Orange
	Brake	Brake Switch	1	Blue
<b>Toyota Avalon (Smart Key) 2005-2009</b>	Push-to-Start	PTS button	7	Blue
	RX	PTS button	10	White
	TX	PTS button	9	Gray
	Brake	Brake Switch	1	White
<b>Toyota Land Cruiser (Smart Key) 2008-2010</b>	Push-to-Start	PTS button	7	Black
	RX	PTS button	10	Green
	TX	PTS button	9	Lt. Green
	Brake	Brake Switch	1	Red

### Locating Key Components in the vehicle

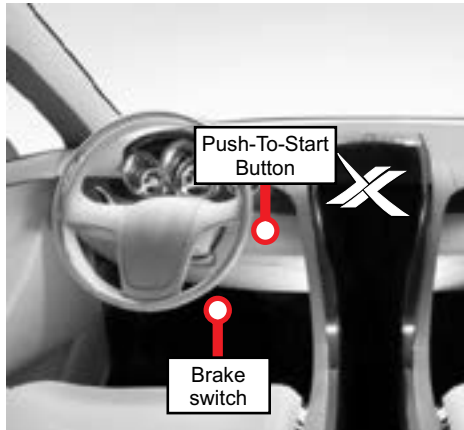




## Installation Type 6

Vehicle	Wire function	Connector	Pin position	Wire color
Prius 2004-2009	Push-to-Start	PTS button	7	Yellow
	RX	Black 7-pin at keyport	4	Blue
	TX	Black 7-pin at keyport	5	Light Green
	Brake	Brake Switch	1	Blue

### Locating Key Components in the vehicle



## Connecting the module

### Important!

Before connecting the Directed Digital System, it is important to ensure that the proper feature and function programming is selected using the configuration wizard. Visit [www.directechs.com](http://www.directechs.com) to use the latest version of the online tool.

Flashing a module using your computer:

1. Disconnect the main module from any (+) 12V power source, then connect it to your computer using the **XKLoader2**.
2. Go to **www.directechs.com** using Internet Explorer; the configuration wizard will be displayed automatically.
3. Follow the instructions in the pop up window that will be displayed when the module is detected.

Flashing a module using your smartphone or tablet:

1. Disconnect the main module from any (+) 12V power source, then connect it to the **XKLoader3**.
2. Launch the **Directechs Mobile** app on your smartphone or tablet.
3. Select **FLASH YOUR MODULE** and follow the on-screen instructions.

When the flashing operation is successful, you can proceed with the instructions below.

### Manual or automatic transmission selection

The yellow loop on the Directed Digital System controls which transmission type the unit is configured for. The state of the loop (uncut or cut) when the main module is powered up will determine which type is selected.

- Uncut (default): Manual transmission.
- Cut: Automatic transmission.

For safety reasons, all Directed Digital Systems are shipped ready to use with a manual transmission (the yellow loop is untouched). If the loop is cut after power has been applied, it is necessary to cycle power to the main module (via the white 12-pin main power harness) so the unit will see the state change on the loop and appropriately configure the transmission type.

### Ready mode

To successfully remote start a vehicle equipped with a manual transmission, the Ready Mode feature must be enabled before exiting the vehicle. Please refer to the Owner's Guide for more details on this required process.

### *Additional connections required for vehicles equipped with a manual transmission (if not supported by firmware)*

Connection	Description
(-) Emergency Brake Input (black/white, pin 2)	Must be connected to a working emergency brake in the vehicle. Although most vehicles have simple (-) trigger emergency brake circuits note some vehicles do not and may require unique integration methodologies.
(-) Door Input (white/green, pin 10) OR (+) Door Input (yellow/green, pin 11)	Must be connected to a working door trigger in the vehicle, which monitors all doors. The unit must monitor the door pins to allow the Ready Mode process to be enabled. <b>Note:</b> Some vehicles may require unique integration methodologies for this circuit.
(AC) Tachometer Input (violet/white, pin 6)	Must be connected to a working tachometer signal in the vehicle (fuel injector, ignition coil, true tach, etc.) and learned successfully to the Directed Digital System.

**Note:** Refer to [www.directechs.com](http://www.directechs.com) for more information.

## Optional sensors

**Note:** The sensor port is only active on hybrid systems.

The 4-pin sensor port is compatible with a number of different Directed sensors including, but not limited to:

- Shock Sensor – 504D
- Field Disturbance Sensor – 508D
- Ultrasonic Sensor – 509U

**Note:** In the case of 508D, power and ground must be hardwired to the vehicle – power and ground should **NOT** be obtained from the 4-pin sensor port.

Each sensor will have its own instructions, which must be followed for installation and adjustment.

## RF kits

An RF kit consists of one or multiple remotes, a Control Center (antenna), and an antenna cable – various combinations exist. An RF kit allows the vehicle owner to control the system with enhanced range. Two-way models are available. Please follow the instructions included with the kit for appropriate installation and programming information.

When flashing the Directed Digital System, make sure to pick the remote you will be using. This way the main module will have the necessary firmware to interact with the remote and Control Center (antenna) combination.

## When used in conjunction with SmartStart


The Directed Digital System main module must be disconnected from any power source before SmartStart can be connected to it. Failing to do so could damage main module.

To ensure that the D2D communication between the Directed Digital System and SmartStart works properly, one of the following actions must be executed, depending on the hardware you are using:

- Rev **A** SmartStart – The brown or blue loop must be cut.
- Rev **B** SmartStart – The gray wire must be connected to a ground source.

Do **NOT** connect the SmartStart 2-pin power harness. Power and ground will be provided by the D2D connector on main module.


## Module programming


 Refer to "LED diagnostics and troubleshooting" starting on page 32 for more information and for troubleshooting purposes.

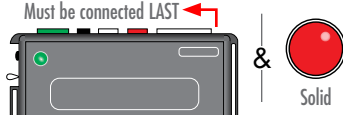
### Installation Type 1: Key-Type Vehicles with CAN

To connect the module:

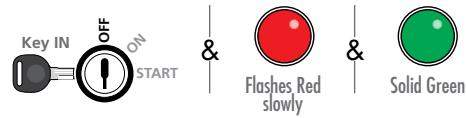
- 1** Please ensure that the vehicle is in a safe location and cannot move forward during programming. For vehicles equipped with a manual transmission, make sure the gearshift lever is in the neutral position.

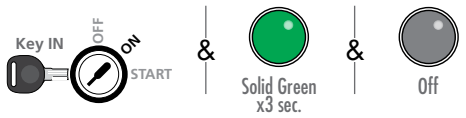

- 2** Connect all the harnesses to the Directed Digital System, **EXCEPT** the white 12-pin main power harness.

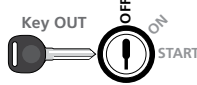

- 3** Connect the white 12-pin main power harness, and wait until the LED turns ON solid red.



- 4** Insert the key in the ignition switch. The LED flashes red slowly for a few seconds to indicate the key is in learning mode AND the LED will then turn ON solid green.\*


\*If the LED starts to flash orange, it indicates the vehicle is equipped with a factory remote starter. Refer to "LED diagnostics and troubleshooting" starting on page 32 for more information.


- 5** Turn the ignition to ON position. After 3 seconds, the LED shuts OFF.


- 6** Turn vehicle ignition OFF once the module is successfully programmed.


- 7** Pair remotes (if applicable). For information on how to pair a specific remote, please refer to its corresponding owner documentation, which can be found inside the product packaging of the complete system or on [www.directechs.com](http://www.directechs.com).\*


- 8** By default, the tachometer is preprogrammed for the vehicle. For instructions on how to program tach, refer to the Analog Installation Guide, which can be found on [www.directechs.com](http://www.directechs.com).




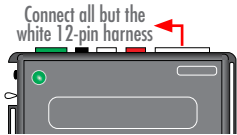
\* Your aftermarket remote may differ from the model shown in the illustrations.

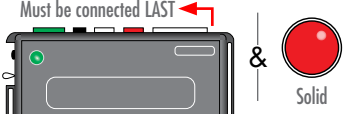
## Installation Types 2 & 3: Push-to-Start (PTS) Vehicles with CAN

To connect the module:


- 1** Please ensure that the vehicle is in a safe location and cannot move forward during programming. For vehicles equipped with a manual transmission, make sure the gearshift lever is in the neutral position.



- 2** Connect all the harnesses to the Directed Digital System, **EXCEPT** the white 12-pin main power harness.



- 3** Connect the white 12-pin main power harness, and wait until the LED turns ON solid red.



- 4** Make sure the key is inside the vehicle. Press the Push-to-Start (PTS) button twice to turn the ignition ON. The LED flashes red slowly for a few seconds to indicate the key is in learning mode AND the LED will then turn ON solid green for 3 seconds then shut off.\*

\*If the LED starts to flash orange, it indicates the vehicle is equipped with a factory remote starter. Refer to "LED diagnostics and troubleshooting" starting on page 32 for more information.


- 5** Turn vehicle ignition OFF once the module is successfully programmed.


- 6** Pair remotes (if applicable). For information on how to pair a specific remote, please refer to its corresponding owner documentation, which can be found inside the product packaging of the complete system or on [www.directechs.com](http://www.directechs.com).\*


- 7** By default, the tachometer is preprogrammed for the vehicle. For instructions on how to program tach, refer to the Analog Installation Guide, which can be found on [www.directechs.com](http://www.directechs.com).




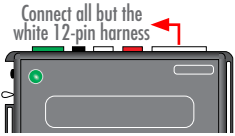
\* Your aftermarket remote may differ from the model shown in the illustrations.

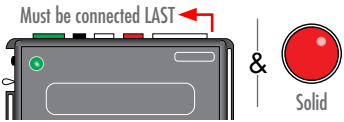
## Installation Type 4: Key-Type Vehicles without CAN

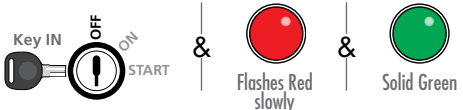
To connect the module:

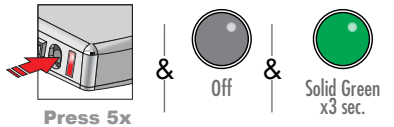
- 1** Please ensure that the vehicle is in a safe location and cannot move forward during programming. For vehicles equipped with a manual transmission, make sure the gearshift lever is in the neutral position.

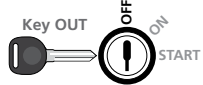

- 2** Connect all the harnesses to the Directed Digital System, **EXCEPT** the white 12-pin main power harness.



- 3** Connect the white 12-pin main power harness, and wait until the LED turns ON solid red.



- 4** Insert the key in the ignition switch. The LED flashes red slowly for few seconds to indicate the key is in learning mode. Wait until the LED turns ON solid green.


- 5** Press the IPB 5 times to skip the CAN programming. The LED turns off quickly then the green LED will turn on for 3 seconds.


- 6** Remove the key from the ignition once the module is successfully programmed.


- 7** Pair remotes (if applicable). For information on how to pair a specific remote, please refer to its corresponding owner documentation, which can be found inside the product packaging of the complete system or on [www.directechs.com](http://www.directechs.com).\*


- 8** By default, the tachometer is preprogrammed for the vehicle. For instructions on how to program tach, refer to the Analog Installation Guide, which can be found on [www.directechs.com](http://www.directechs.com).




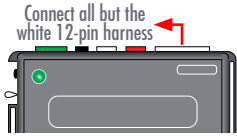
\* Your aftermarket remote may differ from the model shown in the illustrations.

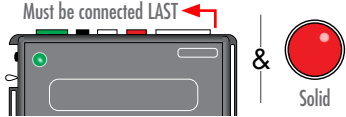
## Installation Types 5 & 6: Push-to-Start (PTS) Vehicles without CAN

To connect the module:

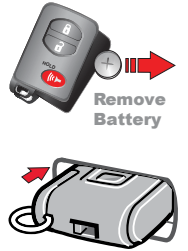
- 1** Please ensure that the vehicle is in a safe location and cannot move forward during programming. For vehicles equipped with a manual transmission, make sure the gearshift lever is in the neutral position.



- 2** Connect all the harnesses to the Directed Digital System, **EXCEPT** the white 12-pin main power harness.

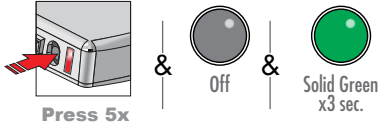

- 3** Connect the white 12-pin main power harness, and wait until the LED turns ON solid red.

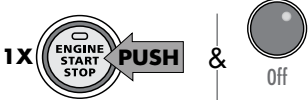

- 4** Open the OEM key fob and remove the battery, then place the OEM key fob in front of the PTS button.


**For Prius (Smart Key) 2004-2009**  
Insert key fob into keyport.



- 5** Press the Push-to-Start (PTS) button twice to turn the ignition ON. The LED flashes red slowly for a few seconds to indicate the key is in learning mode and the LED will then turn ON solid green for 3 seconds then shut off. If the LED starts to flash orange, it indicates the vehicle is equipped with a factory remote starter. Refer to "LED diagnostics and troubleshooting" starting on page 32 for more information.


- 6** Press the IPB 5 times to skip the CAN programming. The LED turns off quickly then the green LED will turn on for 3 seconds.


- 7** Turn vehicle ignition OFF once the module is successfully programmed.


- 8** Pair remotes (if applicable). For information on how to pair a specific remote, please refer to its corresponding owner documentation, which can be found inside the product packaging of the complete system or on [www.directechs.com](http://www.directechs.com).\*


- 9** By default, the tachometer is preprogrammed for the vehicle. For instructions on how to program tach, refer to the Analog Installation Guide, which can be found on [www.directechs.com](http://www.directechs.com).











\* Your aftermarket remote may differ from the model shown in the illustrations.

## LED diagnostics and troubleshooting

This section provides LED diagnostics and troubleshooting information to guide you through the various stages of your installation.




 For more details on "Remote start shutdown/startup diagnostics", refer to the Analog Installation guide, which can be found on [www.directechs.com](http://www.directechs.com).

### Module programming






LED	Description	Troubleshooting	Comment
 Off	Module has no power.	Make sure the D2D harness is connected or that the 12 Volt is present between the red and black wires. If the issue persists, the module may be defective.	
 Solid red	Waiting to begin the programming sequence.	Refer to the wiring diagram to make sure that all the connections are correct.	
 Solid Green	Cannot connect. Waiting to press programming button 5 times.	Check all CAN connections.	For an older car no CAN is available on OBD connector.
 Flashes red (slowly)	In learning mode.	Normal operation.	
 Flashes green and red	Initialisation failed.	If a second attempt fails after a complete Hard Reset, connect the module to <a href="http://Directechs.com">Directechs.com</a> and call Tech Support with the module ID in hand.	Normal operation.
 Flashes orange	OEM RS detected.	If the user wants to use the module as a convenience only, the bypass should be skipped (by pressing the programming button 5 times). However, if the user wants to use the module as a remote starter, the OEM remote starter should be disconnected and the programming sequence repeated.	
 Solid green x 3 secs	Module successfully programmed.	Normal operation	Normal operation
 Solid orange x3 secs	Module successfully programmed without bypass (convenience only).	Normal operation. An OEM remote starter was detected (convenience mode only). If the user wants to use the module as a remote starter, he should disconnect the OEM remote starter and repeat the programming sequence, by doing a short reset.	



### Active ground when running (status)

LED	Description	Troubleshooting	Comment
 Flashes green	GWR (Status) command received.	Used to ensure the module has received the remote start message and has enabled the remote start runtime.	Commands can come from RF, D2D or W2W.  In a W2W install, it will show only if the ignition input wire is used.
 Flashes red & orange	IGNITION ON command received.	Used to ensure the module received the ignition command.	
 Flashes green quickly	START ON command received.	Used to ensure the module received the start command.	

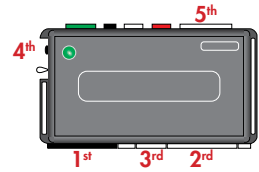
### External commands

LED	Description	Troubleshooting	Comment
 Flashes orange x 1	LOCK command received.	If the bypass module fails to flash, it means the module did not receive the signal.	Commands can come from RF, D2D or W2W.
 Flashes orange x 2	UNLOCK command received.		
 Flashes orange x 3	TRUNK command received.		
 Flashes orange x 4	AUX1 command received.		
 Flashes orange x 5	AUX2 command received.		

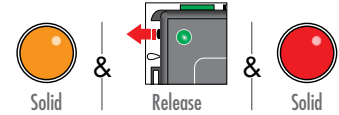
## Module reset

A module reset will only erase the steps performed in "Module programming" starting on page 28. All settings (firmware) and settings flashed to the module using the web configuration tool will not be affected.

- 1 If required for your installation, connect both black 16-pin and white 18-pin harnesses, as well as the white 7-pin harness to the module. Press and hold the programming button, then connect the white 12-pin harness to the module.



- 2 Wait 3 seconds until the LED turns ON solid orange then release the programming button. The LED turns ON solid red.

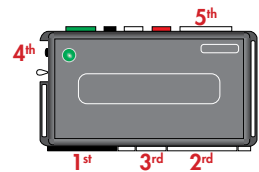


## Hard reset

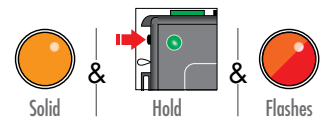
### Warning Against Executing a Hard Reset!

A hard reset will revert the flashed firmware back to its default settings. Depending on the installation, some settings may need to be reconfigured. Connect your module to a computer and use the web configuration tool to edit its programmable features.

- 1 If required for your installation, connect both black 16-pin and white 18-pin harnesses, as well as the white 7-pin harness to the module. Press and hold the programming button, then connect the white 12-pin harness to the module.



- 2 After 3 seconds the LED turns ON solid orange. Keep holding the programming button until the LED flashes red, then orange slowly.



- 3 Release the programming button. The LED turns ON solid red.



## Learning the Tach (not needed with Virtual Tach)

---

Tach comes preprogrammed, therefore learning is not required; however, it can be readjusted with the following operations:

1. Start the vehicle using the key.
2. Within 5 seconds, press and hold the Control Center\* (antenna) or the main module programming button, until the LED on the Control Center (antenna) or the main module turns ON solid.
3. Release the button. Tachometer value is now stored in memory.  
If the LED does not turn ON solid, find an alternate tach source.

\* If the Control Center (antenna) was not included in your kit, the tach can be programmed using the programming button directly on the main module.

**Note:** When the tachometer is programmed, the main module automatically enters the Tachometer engine checking mode.

## Initializing Virtual Tach (not needed with hardwired or data tach applications)

---

To program Virtual Tach:

1. After the install is complete, remote start the engine. The programming operation may require 3 cranks of the starter before the engine starts and runs. Do not turn off the remote start if this happens, it is a normal programming operation.
2. Once the engine begins running, let it run for at least 30 seconds.
3. Using the Remote, send the Remote start command to turn remote start off. Virtual Tach is programmed. To reset Virtual Tach, a module reset must be done.

**Note:** Virtual Tach cannot be used in Manual Transmission Mode. It is also not recommended for diesel trucks.

Virtual Tach handles disengaging the starter motor during remote starting – it does not address over-rev. If the customer wants to have the over-rev protection capability, the tach wire or data tach must be used.

**Important!** After successfully learning Virtual Tach, a small minority of vehicle starters may over crank or under crank during remote start. Use the VirtualTach Fine tune feature in the configuration wizard to adjust the starter output time in 50mS increments to compensate for such an occurrence.

## Limited lifetime consumer warranty

---

Directed Electronics. ("Directed") promises to the original purchaser to repair or replace (at Directed's election) with a comparable reconditioned model any Directed unit (hereafter the "unit"), excluding without limitation the siren, the remote transmitters, the associated sensors and accessories, which proves to be defective in workmanship or material under reasonable use during the lifetime of the vehicle provided the following conditions are met: the unit was purchased from an authorized Directed dealer, the unit was professionally installed and serviced by an authorized Directed dealer; the unit will be professionally reinstalled in the vehicle in which it was originally installed by an authorized Directed dealer; and the unit is returned to Directed, shipping prepaid with a legible copy of the bill of sale or other dated proof of purchase bearing the following information: consumer's name, telephone number and address; the authorized dealers name, telephone number and address; complete product description, including accessories; the year, make and model of the vehicle; vehicle license number and vehicle identification number. All components other than the unit, including without limitation the siren, the remote transmitters and the associated sensors and accessories, carry a one-year warranty from the date of purchase of the same. ALL PRODUCTS RECEIVED BY DIRECTED FOR WARRANTY REPAIR WITHOUT PROOF OF PURCHASE FROM AN AUTHORIZED DEALER WILL BE DENIED. This warranty is non-transferable and is automatically void if: the unit's date code or serial number is defaced, missing or altered; the unit has been modified or used in a manner contrary to its intended purpose; the unit has been damaged by accident, unreasonable use, neglect, improper service, installation or other causes not arising out of defects in materials or construction. The warranty does not cover damage to the unit caused by installation or removal of the unit. Directed, in its sole discretion, will determine what constitutes excessive damage and may refuse the return of any unit with excessive damage.

TO THE MAXIMUM EXTENT ALLOWED BY LAW, ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO EXPRESS WARRANTY, IMPLIED WARRANTY, WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF NON-INFRINGEMENT OF INTELLECTUAL PROPERTY, ARE EXPRESSLY EXCLUDED; AND DIRECTED NEITHER ASSUMES NOR AUTHORIZES ANY PERSON OR ENTITY TO ASSUME FOR IT ANY DUTY, OBLIGATION OR LIABILITY IN CONNECTION WITH ITS PRODUCTS. DIRECTED DISCLAIMS AND HAS ABSOLUTELY NO LIABILITY FOR ANY AND ALL ACTS OF THIRD PARTIES INCLUDING ITS AUTHORIZED DEALERS OR INSTALLERS. DIRECTED SECURITY SYSTEMS, INCLUDING THIS UNIT, ARE DETERRENTS AGAINST POSSIBLE THEFT. DIRECTED IS NOT OFFERING A GUARANTEE OR INSURANCE AGAINST VANDALISM, DAMAGE OR THEFT OF THE AUTOMOBILE, ITS PARTS OR CONTENTS; AND HEREBY EXPRESSLY DISCLAIMS ANY LIABILITY WHATSOEVER, INCLUDING WITHOUT LIMITATION, LIABILITY FOR THEFT, DAMAGE AND/OR VANDALISM. THIS WARRANTY DOES NOT COVER LABOR COSTS FOR MAINTENANCE, REMOVAL OR REINSTALLATION OF THE UNIT OR ANY CONSEQUENTIAL DAMAGES OF ANY KIND. IN THE EVENT OF A CLAIM OR A DISPUTE INVOLVING DIRECTED OR ITS SUBSIDIARY, THE VENUE SHALL BE SAN DIEGO COUNTY IN THE STATE OF CALIFORNIA. CALIFORNIA STATE LAWS AND APPLICABLE FEDERAL LAWS SHALL APPLY AND GOVERN THE DISPUTE. THE MAXIMUM RECOVERY UNDER ANY CLAIM AGAINST DIRECTED SHALL BE STRICTLY LIMITED TO THE AUTHORIZED DIRECTED DEALER'S PURCHASE PRICE OF THE UNIT. DIRECTED SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, ANY CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, DAMAGE TO VEHICLE, DAMAGES FOR THE LOSS OF TIME, LOSS OF EARNINGS, COMMERCIAL LOSS, LOSS OF ECONOMIC OPPORTUNITY AND THE LIKE. NOTWITHSTANDING THE ABOVE, THE MANUFACTURER DOES OFFER A LIMITED WARRANTY TO REPLACE OR REPAIR THE CONTROL MODULE SUBJECT TO THE CONDITIONS AS DESCRIBED HEREIN. THIS WARRANTY IS VOID IF THE UNIT HAS NOT BEEN PURCHASED FROM DIRECTED, OR AN AUTHORIZED DIRECTED DEALER, OR IF THE UNIT HAS BEEN DAMAGED BY ACCIDENT, UNREASONABLE USE, NEGLIGENCE, ACTS OF GOD, NEGLIGENCE, IMPROPER SERVICE, OR OTHER CAUSES NOT ARISING OUT OF DEFECT IN MATERIALS OR CONSTRUCTION.

Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights and you may also have other rights that vary from State to State.

This warranty is only valid for sale of product(s) within the United States of America and in Canada. Product(s) sold outside of the United States of America or Canada are sold "AS-IS" and shall have NO WARRANTY, express or implied.



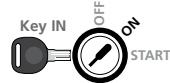

For further details relating to warranty information of Directed products, please visit the support section of Directed's website at: [www.directed.com](http://www.directed.com).

This product may be covered by a Guaranteed Protection Plan ("GPP"). See your authorized Directed dealer for details of the plan or call Directed Customer Service at 1-800-876-0800.

(920-10011-01 2011-06)





# Quick Reference Guide – Viper, Clifford, Python, Avital & Automate (Regular Key)

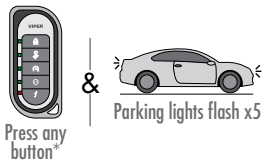
## Vehicle takeover with regular key

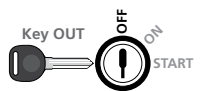
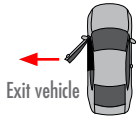

- 1 Close the vehicle doors, hood and trunk, then press the **Remote Start** button on the transmitter to start the vehicle.\* 
- 2 Press the **Unlock** button on the factory or aftermarket remote.\* 
- 3 Enter the vehicle and turn the key into ON position. 
- 4 Depress the brake pedal, put the car in gear and drive off. 

\* Your aftermarket remote may differ from the model shown in the illustrations.

## Manual transmission ready mode




- 1 While the vehicle is running, put the gear in **Neutral (N)**. 
- 2 Depress the vehicle's foot brake. 
- 3 Apply the emergency brake. 
- 4 Release the vehicle's foot brake. 

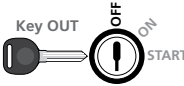
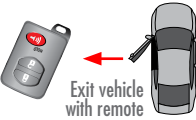
**Warning!** Depressing the brake pedal again after this step will disable the remote start feature.
- 5 Press any button on the transmitter.\* The parking lights flash 5 times confirming that the remote start feature is active. 

**Note:** If the parking lights do not flash 5 times, you have not entered manual transmission mode and will need to repeat steps 1 to 5.
- 6 Turn ignition OFF and remove the key from the ignition barrel. 
- 7 Exit the vehicle. 
- 8 Press the **Lock** button on the factory or aftermarket remote.\* The vehicle engine will shut Off after locking the system. 

\* Your aftermarket remote may differ from the model shown in the illustrations.

## Pit stop mode

- 1 Stop the vehicle in a safe parking spot and put the gear in **Park (P)**. 
- 2 Press the **Remote Start** button on the transmitter. \*  & 





The parking lights will flash once to indicate the vehicle is now in **Pit Stop Mode**.
- 3 Turn ignition OFF and remove the key from the ignition barrel. 
- 4 It is safe to leave the engine running and exit the vehicle with the key in hand. 

**Note:** We recommend that you always lock the doors of your vehicle when leaving it unattended.

\* Your aftermarket remote may differ from the model shown in the illustrations.

## List of available commands

Note that the information below is for Viper, Clifford and Python models. Icons and commands may differ depending on the remote brand and model purchased. Refer to your authorized installation center for more information.

Button(s)	Actions
	Press & hold for 1 second to lock.
	Press & hold for 1 second to unlock.
	Press & hold for 1 second to remote start.
	Press & hold for 5 seconds to activate the trunk release (optional).

\* This output is configurable. see your authorized installation center for more information.

## SmartStart compatible



This system is compatible with Directed SmartStart 3.0. For a complete list of supported features, please visit [www.mysmartstart.com](http://www.mysmartstart.com).

### What is SmartStart?

Now you can remote start, lock and unlock your car just by pushing a button on your smartphone; using the SmartStart App from Directed, the leader in vehicle security and remote start. The simple graphical interface gives you control over the following features of your installed remote start or security with remote start system:

- Lock/Arm
- Unlock/Disarm
- Remote Car Starter
- Trunk Release
- Panic
- Aux Channels





You can also control multiple vehicles – great for families – and assign more than one user to control a vehicle. It's easy with SmartStart! But, this is only the beginning! SmartStart is loaded with additional features including GPS tracking, SmartSchedule, vehicle status, roadside assistance, home control, parked car finder and more.

3.0 enables a "Cloud-Connected Car" like never before, providing an entirely new level of 2-way interaction with your vehicle. Connectivity is managed through the Directed Cloud Services (DCS) network linking car, app, end user, and the Internet.

For more information, visit [www.mysmartstart.com](http://www.mysmartstart.com).






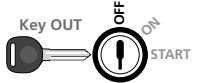
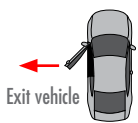

# Quick Reference Guide – Autostart (Regular Key)

## Vehicle takeover with regular key

- 1 Close the vehicle doors, hood and trunk, then press the **Remote Start** button on the transmitter to start the vehicle.\*  

- 2 Press the **Unlock** button on the factory or aftermarket remote.\*  

- 3 Enter the vehicle and turn the key into ON position.  

- 4 Depress the brake pedal, put the car in gear and drive off.  






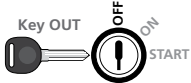

\* Your aftermarket remote may differ from the model shown in the illustrations.

## Manual transmission ready/idle mode sequence

- 1 While the vehicle is running, put the gear in **Neutral (N)**.  

- 2 Depress the vehicle's foot brake.  

- Apply the emergency brake twice (2), then release the vehicle's foot brake and skip to step 5.  
**OR**  
 Apply the emergency brake, then release the vehicle's foot brake.  

- Warning!** Depressing the brake pedal again after this step will disable the remote start feature.
- 4 Within 10 seconds, press any button on the transmitter.\*  

- The parking lights flash 5 times confirming that the remote start feature is active.  

- 5 **Note:** If the parking lights do not flash 5 times, you have not entered manual transmission sequence and will need to repeat steps 1 to 5.
- 6 Turn ignition OFF and remove the key from the ignition barrel.  

- 7 Exit the vehicle.  

- Press the:
  - **Lock** button on the factory or aftermarket remote\* to shut the vehicle Off and lock the doors.
  - **Trunk** button on the aftermarket remote only to lock the doors and enter idle mode.

\* Your aftermarket remote may differ from the model shown in the illustrations.





## Idle mode (automatic transmission only)

- 1 Stop the vehicle in a safe parking spot and put the gear in **Park (P)**. 
- 2 Press the **Remote Start** button on the transmitter. \*  & 
  
The parking lights will flash once to indicate the vehicle is now in **Idle Mode**.
   

- 3 Turn ignition OFF and remove the key from the ignition barrel. 
  
It is safe to leave the engine running and exit the vehicle with the key in hand.
   

- 4 **Note:** We recommend that you always lock the doors of your vehicle when leaving it unattended.

\* Your aftermarket remote may differ from the model shown in the illustrations.

## List of available commands

Note that the information below is for Viper, Clifford and Python models. Icons and commands may differ depending on the remote brand and model purchased. Refer to your authorized installation center for more information.

Button(s)	Actions
	Press & hold for 1 second to lock.
	Press & hold for 1 second to unlock.
	Press & hold for 1 second to remote start.
	Press & hold for 5 seconds to activate the trunk release (optional).

\* This output is configurable. see your authorized installation center for more information.

## SmartStart compatible



This system is compatible with Directed SmartStart 3.0. For a complete list of supported features, please visit [www.mysmartstart.com](http://www.mysmartstart.com).

### What is SmartStart?

Now you can remote start, lock and unlock your car just by pushing a button on your smartphone; using the SmartStart App from Directed, the leader in vehicle security and remote start. The simple graphical interface gives you control over the following features of your installed remote start or security with remote start system:

- Lock/Arm
- Unlock/Disarm
- Remote Car Starter
- Trunk Release
- Panic
- Aux Channels

You can also control multiple vehicles – great for families – and assign more than one user to control a vehicle. It's easy with SmartStart! But, this is only the beginning! SmartStart is loaded with additional features including GPS tracking, SmartSchedule, vehicle status, roadside assistance, home control, parked car finder and more.

3.0 enables a "Cloud-Connected Car" like never before, providing an entirely new level of 2-way interaction with your vehicle. Connectivity is managed through the Directed Cloud Services (DCS) network linking car, app, end user, and the Internet.







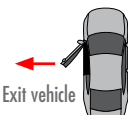

For more information, visit [www.mysmartstart.com](http://www.mysmartstart.com).



# Quick Reference Guide – Viper, Clifford, Python, Avital & Automate (Smart Key)





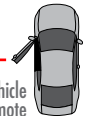
**⚠ Note:** There is no vehicle **takeover** in this firmware. The vehicle will shut down as soon as a door is opened.

## Manual transmission ready mode

- 1 While the vehicle is running, put the gear in **Neutral (N)**. 
- 2 Depress the vehicle's foot brake. 
- 3 Apply the emergency brake.   
Release the vehicle's foot brake.
- 4 **Warning!** Depressing the brake pedal again after this step will disable the remote start feature.   
Press any button on the transmitter.\* The parking lights flash 5 times confirming that the remote start feature is active.  &  Parking lights flash x5
- 5 **Note:** If the parking lights do not flash 5 times, you have not entered manual transmission mode and will need to repeat steps 1 to 5.
- 6 Exit the vehicle.  Exit vehicle
- 7 Press the **Lock** button on the factory or aftermarket remote.\*  Press Lock on either remote\*  
The vehicle engine will shut Off after locking the system.

\* Your aftermarket remote may differ from the model shown in the illustrations.





## Pit stop mode

- 1 Stop the vehicle in a safe parking spot and put the gear in **Park (P)**. 
- 2 Press the **Remote Start** button on the transmitter.\*  &  Parking lights flash x1  
The parking lights will flash once to indicate the vehicle is now in **Pit Stop Mode**. 
- 3 It is safe to leave the engine running and exit the vehicle with the key in hand.  Exit vehicle with remote  
**Note:** We recommend that you always lock the doors of your vehicle when leaving it unattended.

\* Your aftermarket remote may differ from the model shown in the illustrations.

## List of available commands

Note that the information below is for Viper, Clifford and Python models. Icons and commands may differ depending on the remote brand and model purchased. Refer to your authorized installation center for more information.

Button(s)	Actions
	Press & hold for 1 second to lock.
	Press & hold for 1 second to unlock.
	Press & hold for 1 second to remote start.
	Press & hold for 5 seconds to activate the trunk release (optional).

\* This output is configurable. see your authorized installation center for more information.

## SmartStart compatible



This system is compatible with Directed SmartStart 3.0. For a complete list of supported features, please visit [www.mysmartstart.com](http://www.mysmartstart.com).

### *What is SmartStart?*

Now you can remote start, lock and unlock your car just by pushing a button on your smartphone; using the SmartStart App from Directed, the leader in vehicle security and remote start. The simple graphical interface gives you control over the following features of your installed remote start or security with remote start system:

- Lock/Arm
- Unlock/Disarm
- Remote Car Starter
- Trunk Release
- Panic
- Aux Channels

You can also control multiple vehicles – great for families – and assign more than one user to control a vehicle. It's easy with SmartStart! But, this is only the beginning! SmartStart is loaded with additional features including GPS tracking, SmartSchedule, vehicle status, roadside assistance, home control, parked car finder and more.

3.0 enables a "Cloud-Connected Car" like never before, providing an entirely new level of 2-way interaction with your vehicle. Connectivity is managed through the Directed Cloud Services (DCS) network linking car, app, end user, and the Internet.

For more information, visit [www.mysmartstart.com](http://www.mysmartstart.com).

## Notes

---

---

---

---

---

---

---

---

---

---

# Quick Reference Guide – Autostart (Smart Key)

**⚠ Note:** There is no vehicle **takeover** in this firmware. The vehicle will shut down as soon as a door is opened.

## Manual transmission ready/idle mode sequence

**1** While the vehicle is running, put the gear in **Neutral (N)**.



**2** Depress the vehicle's foot brake.



Apply the emergency brake twice (2), then release the vehicle's foot brake and skip to step 5.

**OR**

**3** Apply the emergency brake, then release the vehicle's foot brake.



**Warning!** Depressing the brake pedal again after this step will disable the remote start feature.

**4** Within 10 seconds, press any button on the transmitter.\*



The parking lights flash 5 times confirming that the remote start feature is active.

**5** **Note:** If the parking lights do not flash 5 times, you have not entered manual transmission sequence and will need to repeat steps 1 to 5.

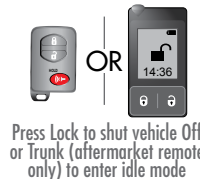


**6** Exit the vehicle.



**7** Press the:

- **Lock** button on the factory or aftermarket remote\* to shut the vehicle Off and lock the doors.
- **Trunk** button on the aftermarket remote only to lock the doors and enter idle mode.



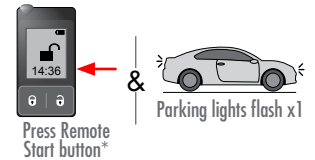
\* Your aftermarket remote may differ from the model shown in the illustrations.

## Idle mode (automatic transmission only)

**1** Stop the vehicle in a safe parking spot and put the gear in **Park (P)**.



**2** Press the **Remote Start** button on the transmitter.\* The parking lights will flash once to indicate the vehicle is now in **Idle Mode**.



It is safe to leave the engine running and exit the vehicle with the factory remote in hand.

**3** **Note:** We recommend that you always lock the doors of your vehicle when leaving it unattended.



\* Your aftermarket remote may differ from the model shown in the illustrations.

## List of available commands

Note that the information below is for Viper, Clifford and Python models. Icons and commands may differ depending on the remote brand and model purchased. Refer to your authorized installation center for more information.

Button(s)	Actions
	Press & hold for 1 second to lock.
	Press & hold for 1 second to unlock.
	Press & hold for 1 second to remote start.
	Press & hold for 5 seconds to activate the trunk release (optional).

\* This output is configurable. see your authorized installation center for more information.

## SmartStart compatible



This system is compatible with Directed SmartStart 3.0. For a complete list of supported features, please visit [www.mysmartstart.com](http://www.mysmartstart.com).

### *What is SmartStart?*

Now you can remote start, lock and unlock your car just by pushing a button on your smartphone; using the SmartStart App from Directed, the leader in vehicle security and remote start. The simple graphical interface gives you control over the following features of your installed remote start or security with remote start system:

- Lock/Arm
- Unlock/Disarm
- Remote Car Starter
- Trunk Release
- Panic
- Aux Channels

You can also control multiple vehicles – great for families – and assign more than one user to control a vehicle. It's easy with SmartStart! But, this is only the beginning! SmartStart is loaded with additional features including GPS tracking, SmartSchedule, vehicle status, roadside assistance, home control, parked car finder and more.

3.0 enables a "Cloud-Connected Car" like never before, providing an entirely new level of 2-way interaction with your vehicle. Connectivity is managed through the Directed Cloud Services (DCS) network linking car, app, end user, and the Internet.

For more information, visit [www.mysmartstart.com](http://www.mysmartstart.com).

## Notes

---

---

---

---

---

---

---

---

---

---