# **Directed Digital System**

# NISS3HT 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.



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# 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 NISS3HT firmware for Directed Digital Systems is a complete solution for remote start, security (if applicable), bypass interface, and convenience needs compatible with specific Infiniti and Nissan vehicles.



Warning! This module can only be programmed via the web tool, which can be found on 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 table below lists the vehicles and features which are compatible with this product. Refer to the following pages for more information on installation wiring, programming and troubleshooting for these vehicles.

			_									_		_		_									_		
Vehicles	2016	2015	2014	2013	2012	2011	2010	5009	8007	2007	2006	PK-Immobilizer Bypass-Data No Key Req'd	AV-Parking Lights Control	DL-Trunk / Hatch Release	FOB-Control of aftermarket alarm with OEM remote	RS-3x LOCK START (Start control using OEM Remote)	RS-3x LOCK STOP (Stop control using OEM Remote)	RS-RAP Shut Down (Retained ACC Power)	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	ST-Brake Status (foot brake)	ST-Door Locks Status	ST-E-Brake Status
Infiniti																											
EX35 (Smart Key)					•	•	٠	٠	٠			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
EX37 (Smart Key)				•	•	•	٠	٠				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FX35 (Smart Key)					•	•	٠	٠				•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
FX50 (Smart Key)				•	•	•	٠	٠				٠	٠	•	•	•	•	•	•	٠	•	•	•	٠	•	•	•
G25 (Smart Key)					•	•						•	٠	•	•	•	•	•	٠	٠	•	•	•	٠	•	٠	•
G35 (Smart Key)*								٠				•	٠	•	•	•	•	•	•	٠	•	•	•	٠	٠	•	•
G35 (Smart Key)									٠	•		•	٠	•	•	•		•	٠	٠	•	•	•	٠	•	٠	•
G37 (Smart Key)				•	•	•	٠	٠	٠			•	٠	•	•	•	•	•	٠	٠	•	•	•	٠	•	٠	•
M35 (Smart Key)							٠	٠	٠	•	•	•	٠	•	•	•	•	•	٠	٠	•	•	•	٠	•	٠	•
Q60 (Smart Key)		٠	•									•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
QX50 (Smart Key)		٠	٠									•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•
QX70 (Smart Key)		٠	٠									•	٠	•	•	•	•	•	٠	٠	•	•	•	٠	•	٠	•
Nissan																											
370Z (Smart Key)	•	٠	٠	•	•	•	٠	٠				•	٠	•	•	•	•	•	•	٠	•	•	•	٠	•	•	•
Altima (Smart Key)					•	•	٠	٠				•	٠	•	•	•	•	•	٠	٠	•	•	•	٠	•	٠	•
Altima (Smart Key)*									٠	•		٠	٠	•	•	•		•	•	٠	•	٠	•	٠	•	•	•
Altima Coupe (Smart Key)				•								•	٠	•	•	•	•	•	•	٠	•	•	•	٠	٠	•	•
GT-R (Smart Key)				•	•	•	٠	٠				٠	٠	٠	•	٠	•	•	•	٠	٠	٠	٠	٠	٠	•	•
Maxima (Smart Key)			٠	•								٠	٠	٠	•	٠	•	•	•	٠	٠	٠	٠	٠	٠	•	•
Maxima (Smart Key)					•	•	٠	٠				•	٠	•	•	•	•	•	•	٠	•	•	•	٠	•	•	•
Murano (Smart Key)			٠	•	•	•	٠	٠				•	٠	•	•	•	•	•	•	٠	•	•	•	٠	•	•	•

<sup>\*</sup>For 3XLS: some vehicles like the Nissa Altima 2007-2008 and the Infiniti G35 2007-2008 will not shutdown when using the 3x Lock Start.

#### Legend:

PK: Transponder & Immobilizer Override

AV: Horn & Lights Controls

DL: OE Door Lock & Alarm Controls

FOB: Sync CAN Interface w/ FOB Remote

RS: Remote Start & Engine Controls

SS: Integrated Security & Monitoring

ST: Function/Feature Status

# **Wiring connections**

The wiring connections listed below are specific to this firwmare.

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

Conn./Pin	Color	Description			
H1/1	White	Relay 3 COM – Brake /Clutch Relay 1			
H1/2	White/Brown	Relay 3 N.O Brake /Clutch Relay 1			
H1/3	Brown/Red	Relay 2 N.O No Connection			
H1/4	Yellow/Red	Relay 2 COM – Clutch Relay			
H1/5	Orange/Red	Relay 2 N.C. – Clutch Relay			
H1/6	Yellow	Relay 1 COM – Data (veh.side) 1			
H1/7	White	Relay 3 COM – Brake /Clutch Relay 1			
H1/8	White/Brown	Relay 3 N.O Brake /Clutch Relay 1			
H1/9	Black	(-) Ground			
H1/10	Red	(+) 12 Volt (Battery)			
H1/11	Orange/Yellow	Relay 1 N.C. – Data (key port side) 1			
H1/12	Brown	Relay 1 N.O No Connection 1			

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

Conn./Pin	Color	Description			
H2/1	Violet/Brown	No Connection			
H2/2	Yellow/Black	Clock			
H2/3	Orange/Black	Data			
H2/4	Tan	HS CAN Low			
H2/5	Tan/Black	HS CAN High			
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	(-) PTS Output			
H2/11	White/Violet	No Connection <sup>2</sup>			
H2/12	White/Red	(+) Keysense Output <sup>2</sup>			
H2/13	Lt. Blue/Black	(-) RAP Off <sup>2</sup>			
H2/14	Green/Red	No Connection <sup>2</sup>			
H2/15	N/A	No Connection			
H2/16	Violet/Yellow	No Connection			

<sup>1.</sup> If these outputs are not used by the firmware, they can be configured by the installer when the module is flashed.

<sup>2.</sup> 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 2			
H3/7	Dark Blue	(-) Unlock Output			
H3/8	Brown/Black	No Connection			
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	No Connection			
H3/15	Dark Green	(-) Lock Output			
H3/16	Brown/White	(+) Brake Input <sup>2</sup>			
H3/17	Brown	(+) Siren Output			
H3/18	Blue/White	No Connection			

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

Conn./Pin	Color	Description
H4/1	Pink/White	No Connection
H4/2	Red/White	No Connection
H4/3	Pink	No Connection
H4/4	Red	No Connection
H4/5	Orange	No Connection
H4/6	Red	No Connection
H4/7	Green	No Connection
H4/8	Violet	No Connection

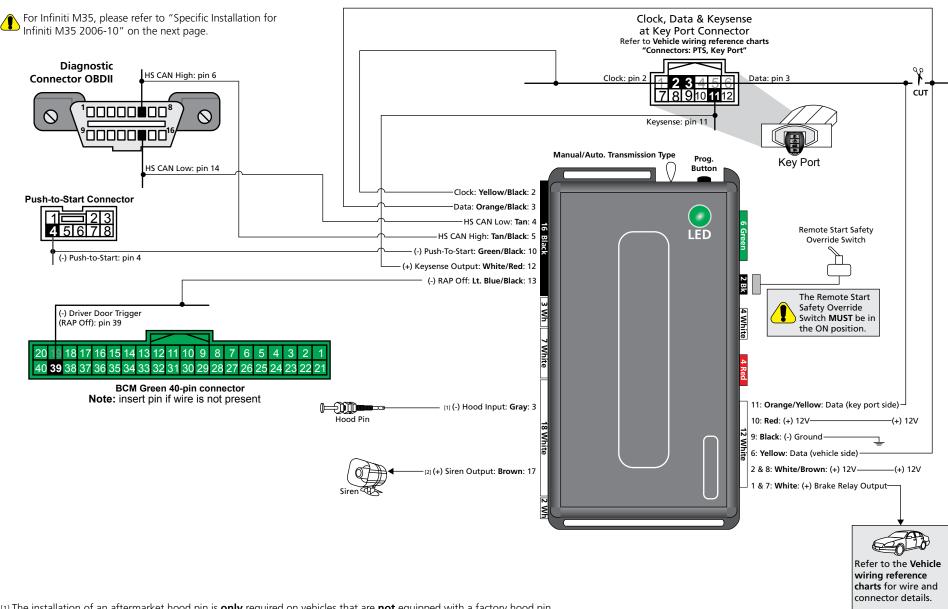
<sup>1.</sup> If these outputs are not used by the firmware, they can be configured by the installer when the module is flashed. Note that they are

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" on page 4 for a list of compatible features.

# Installation

#### Automatic transmission vehicle without T-Harness THNISS3C

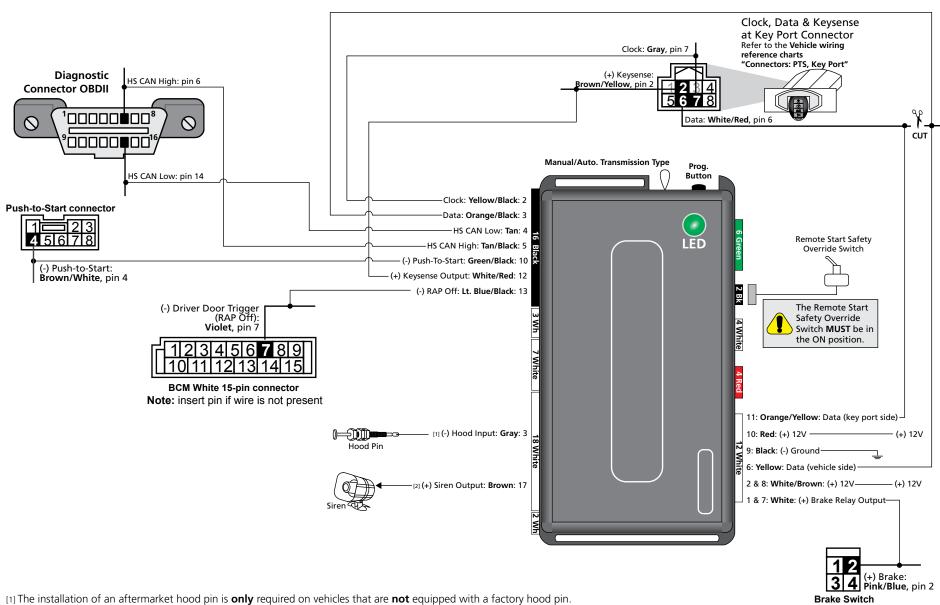


<sup>[1]</sup> The installation of an aftermarket hood pin is **only** required on vehicles that are **not** equipped with a factory hood pin.

<sup>[2]</sup> 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).

### Specific Installation for Infiniti M35 2006-10

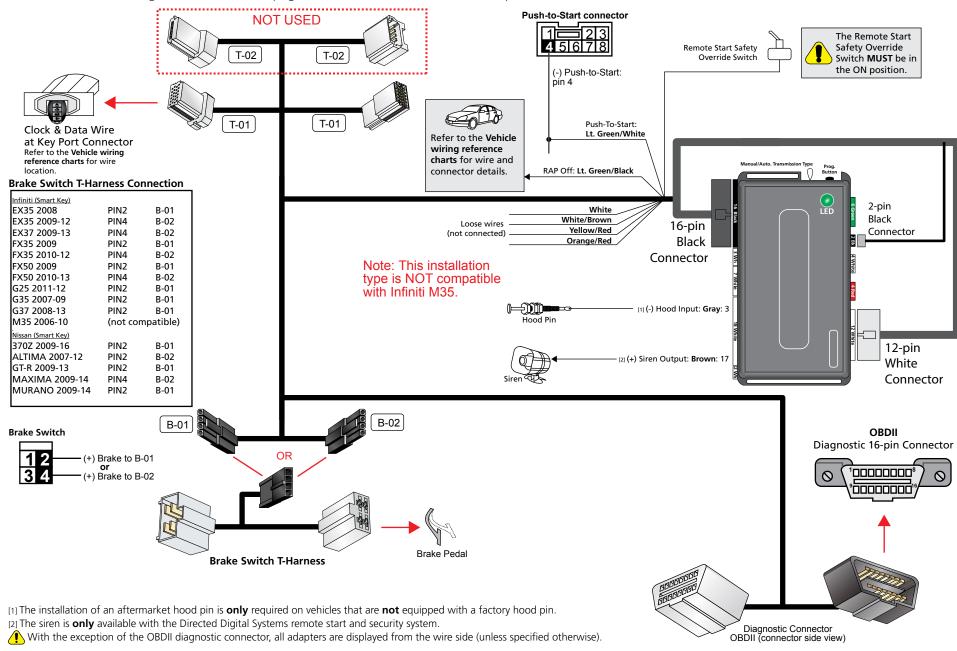


[2] The siren is **only** available with the Directed Digital Systems remote start and security system.

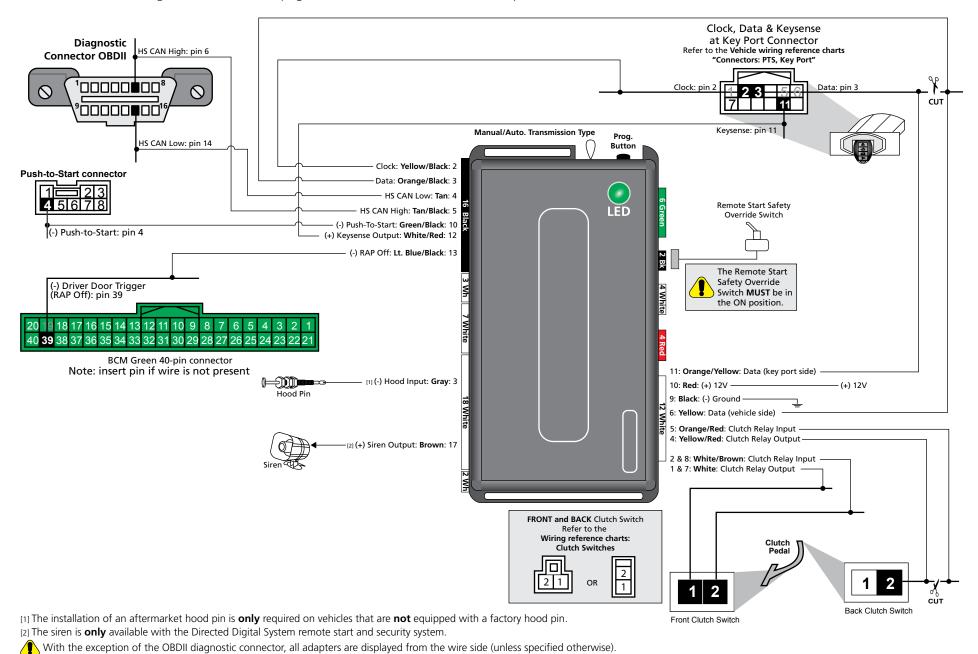
With the exception of the OBDII diagnostic connector, all adapters are displayed from the wire side (unless specified otherwise).

#### Automatic Transmission vehicle with T-Harness THNISS3C



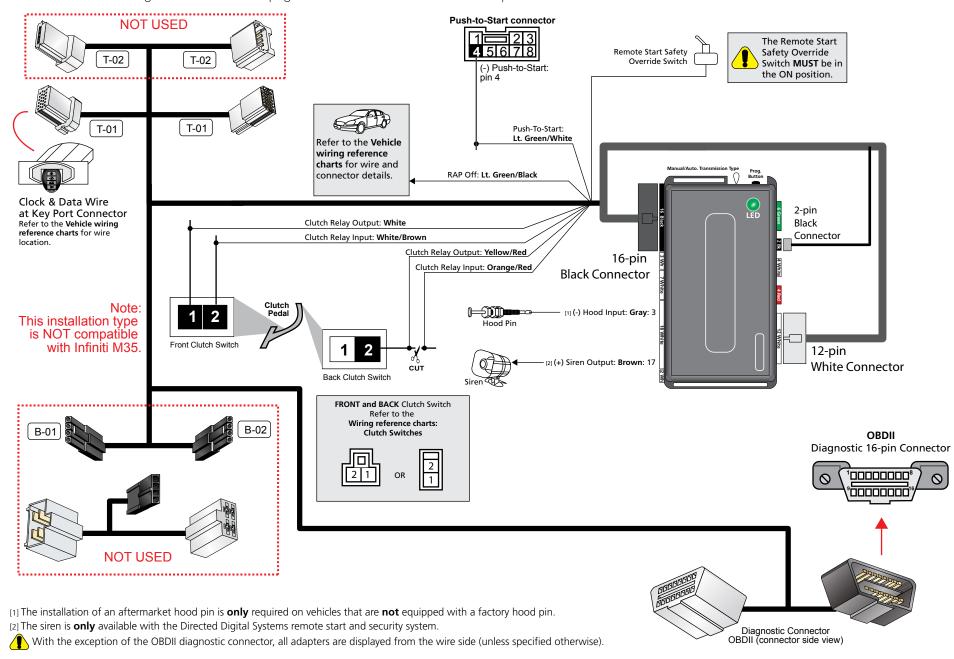


#### Manual transmission vehicle without T-Harness THNISS3C



## Manual transmission vehicle with T-Harness THNISS3C





# Vehicle wiring reference charts

This section provides information on the following connections:

- "Connectors: PTS, Key Port"
- "Connectors: BCM Green 40-pin, Brake Switch"
- "Clutch Switches: Front Clutch Switch, Back Clutch Switch"



Refer to directechs.com for more information on additional connections.

## Connectors: PTS, Key Port

(see figure on the next page)

Vehicles	Years	PTS Connecte	or			Key Port Connecto	or		
Vollicios	rours	PTS Wire	Pin	Keysense	Pin	Clock	Pin	Data	Pin
Infiniti									
EX35 (Smart Key)	2008-12	Brown	4	Brown	11	Gray	2	White	3
EX37 (Smart Key)	2009-13	Brown	4	Brown	11	Gray	2	White	3
FX35 (Smart Key)	2009-12	Lt. Blue	4	Brown	11	Gray	2	White	3
FX50 (Smart Key)	2009-13	Lt. Blue	4	Brown	11	Gray	2	White	3
G25 (Smart Key)	2011-12	Brown	4	Lt. Blue	11	Gray	2	White	3
G35 (Smart Key)	2007-09	Brown	4	Lt. Blue	11	Gray	2	White	3
G37 (Smart Key)	2008-13	Brown	4	Lt. Blue	11	Gray	2	White	3
M35 (Smart Key)	2006-10	Brown/White	4	Brown/Yellow	2	Gray	7	White/Red	6
Q60 (Smart Key)	2014-15	Brown	4	Lt.Blue	11	Gray	2	White	3
QX50 (Smart Key)	2014-15	Brown	4	Brown	11	Gray	2	White	3
QX70 (Smart Key)	2014-15	Lt. Blue	4	Brown	11	Gray	2	White	3
Nissan									
370Z (Smart Key)	2009-16	Brown	4	Red	11	Gray	2	White	3
Altima (Smart Key)	2007-12	Brown	4	Yellow	11	Green/Orange	2	Orange	3
GT-R (Smart Key)	2009-13	Brown	4	Red	11	Gray	2	Blue	3
Maxima (Smart Key)	2009-14	Brown	4	Yellow	11	Green/Orange	2	Orange	3
Murano (Smart Key)	2009-14	Brown	4	Yellow	11	Lt. Blue	2	Orange	3

# Connectors: BCM Green 40-pin, Brake Switch

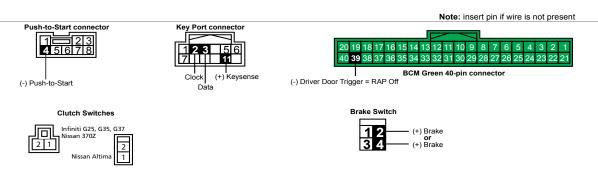
(see figure on the next page)

Vehicles	Years	BCM Green 40-Pin Conne	ctor		Brake Switch
		Driver Door Trigger = RAP Off	Pin	Brake	Pin
Infiniti					
EX35 (Smart Key)	2008-12	Lt. Green	37	White	2008 is pin 2, 2009 and up is pin 4
EX37 (Smart Key)	2009-13	Gray	37	White	4
FX35 (Smart Key)	2009-12	Gray	37	White	2009 is pin 2, 2010 and up is pin 4
FX50 (Smart Key)	2009-13	Gray	37	White	2009 is pin 2, 2010 and up is pin 4
G25 (Smart Key)	2011-12	Gray or Red	37	White	2
G35 (Smart Key)	2007-09	Gray or Red	37	White	2
G37 (Smart Key)	2008-13	Gray or Red	37	White	2

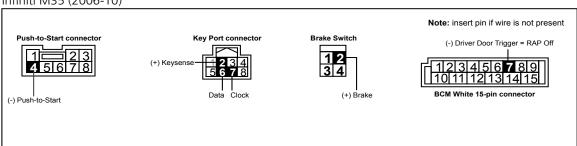
VI.1	V	BCM Green 40-Pin Conne	ctor	В	Brake Switch
Vehicles	Years	Driver Door Trigger = RAP Off	Pin	Brake	Pin
BCM White 15-pin Co	onnector (For	Infiniti M35 ONLY)			
Infiniti					
M35 (Smart Key)	2006-10	Violet	7	Pink/Blue	2
Infiniti					
Q60 (Smart Key)	2014-15	Gray(coupe) or Red (convertible)	39	Violet	2
QX50 (Smart Key)	2014-15	Lt.Green	39	White	2 or 4
QX70 (Smart Key)	2014-15	Gray	39	White	2009 is pin 2, 2010 and up is pin 4
Nissan					
370Z (Smart Key)	2009-16	Gray	37	White	2
Altima (Smart Key)	2007-12	Lt. Blue	39	Lt. Green or Red/Green	2
GT-R (Smart Key)	2009-13	Gray	39	White	2
Maxima (Smart Key)	2009-14	Lt. Blue	39	Lt. Green	4
Murano (Smart Key)	2009-14	Lt. Blue	39	Lt. Green	2

# Clutch Switches: Front Clutch Switch, Back Clutch Switch

Vehicles	Years	Front Clutch	Back Clutch Switch				
venicies	tears	Pin 1 (Input)	Pin 2 (Output)	Pin 2 (Output)			
Infiniti							
G25 (Smart Key)	2011-12	Green	Gray	Lt.Blue or Red			
G35 (Smart Key)	2007-09	Green	Gray	Lt.Blue or Red			
G37 (Smart Key)	2008-13	Green	Gray	Lt.Blue or Red			
Q60 (Smart Key)	2014-15	Green	Gray	Red			
Nissan							
370Z (Smart Key)	2009-16	Green	Gray	Black or Brown			
Altima (Smart Key)	2007-12	Green/White or White	Red/Black or Red	Green/Black or White			







# 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 to use the latest version of the online tool.

To make this selection:

- 1. Disconnect the main module from any (+)12V power source, then connect it to your computer using the XKLoader.
- 2. Open the Internet Explorer browser (version 6.0 and later) and go to www.directechs.com; the programming window will be displayed automatically.
- 3. Follow the instructions in the pop up window that will be displayed when the module is detected. Note: If the latest firmware is already loaded, only the feature options will be flashed. Check the Yes box if you wish to flash the firmware as well.

Once the module is programmed, 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.  Note: 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 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" on page 19 for more information and for troubleshooting purposes.

#### To connect the module:

Please ensure that the vehicle is in a safe location an cannot move forward during programming.

For vehicles equipped with a manual transmission, make sure the gearshift lever is in the neutral position.



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



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



Ensure that all keyfobs except one are located at a minimum of 10 feet (3 meters) away from the 4 vehicle BEFORE proceeding with the following programming sequence.

Press the Unlock button on the OEM keyfob. The 5 LED flashes orange.







Insert the OEM keyfob into the key port. The LED will continue to flash orange.





Press and hold the brake (or clutch if manual) 7 pedal until LED turns ON solid green 3 seconds then goes off.









The module is now programmed.

**Troubleshooting:** If in step 7 the LED flashes orange after 15 seconds, press and hold the programming button until the LED flashes red. When you release the programming button, the LED starts flashing orange again. Repeat step 7.









Remove the OEM keyfob from the key port.



8

Pair remotes (if applicable). For information on how to pair a specific remote, please refer to its 10 corresponding owner documentation, which can be found inside the product packaging of the complete system or on www.directechs.com.\*



By default, the tachometer is preprogrammed for the vehicle. For instructions on how to program 11 tach, refer to the Analog Installation Guide, which can be found on www.directechs.com.



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

Important! If connected to a SmartStart, please ensure that its Gray wire is connected to a ground source or the D2D communication between the two (2) modules will NOT work.

#### Instructions for Infiniti M35

#### Steps 1 to 3 are identical for all vehicles in this firmware.

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



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



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



4 Remove battery from OEM keyfob.



5 Insert the OEM keyfob into the key port.



Cycle ignition ON and OFF two times.







LED turns ON solid green 3 seconds then goes off.







Turn vehicle ignition OFF once the module is successfully programmed.



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.\*



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.



- \* Your aftermarket remote may differ from the model shown in the illustrations.
- \*\* Tach comes preprogrammed

Important! If connected to a SmartStart, please ensure that its Gray wire is connected to a ground source or the D2D communication between the two (2) modules will NOT work.

# 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.

#### Module programming

LED	Description	Troubleshooting	Comment	
Solid	Waiting to begin the programming sequence.	Make sure that all the connections are correct (see wiring diagram).	Normal operation.	
Flashes	CAN bus detected.	N/A	Normal operation.	
Flashes slowly	Server ready.	N/A	Normal operation.	
Solid x3 seconds	Module was successfully programmed.	N/A	Normal operation.	
Solid x3 seconds	Module was successfully programmed without the bypass.	N/A	Normal operation.	

## Module programming - Error codes

LED	Description	Troubleshooting	Comment
Flashes red x1	CAN/J1850 not detected.	Check the Orange/Green - Orange/Brown wire connections. Wake up the data bus by turning the ignition on and try again.	Some installation types do not need this connection. Skip by pressing the programming button 5 times.
Flashes red x2	CAN2 not detected.	Check the Tan - Tan/Black wire connections. Wake up the data bus by turning the ignition on and try again.	Some installation types do not need this connection. Skip by pressing the programming button 5 times.
Flashes red x3	Bypass data not detected.	Check the bypass line connection. If more than one wire is used, make sure they are not inverted.	Start vehicle using the key to confirm the OEM equipment is still operational.
Flashes red x4	Bypass processing error.	Bypass calculation failed. Reset the module and try again.	Might be caused by a bad reading in the first programming attempt or by an unknown bypass value. If a second attempt fails, connect the module to Directechs and call Tech Support with the module ID in hand.

## External module synchronization

LED	Description	Troubleshooting	Comment
(Flashes red, red, then orange) x10	OBDII feature not supported.	Diagnostic data bus not detected.	Some features are not supported by SmartStart. Check the Tan - Tan/Black and/or Orange/Green - Orange/Brown wire for proper connections. Refer to the wiring installation section to check the connections.

# 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 or D2D.
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.		
Flashes orange x 2	UNLOCK command received.	If the bypass module fails to flash, it means the module did not receive the signal.	Commands can come from RF or D2D.
Flashes orange x 3	TRUNK command received.		

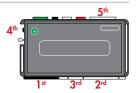
# Remote Start Shutdown Code

LED	Description	Troubleshooting	Comment
Flashes red x1	Run safe shutdown.	N/A	
Flashes red x2	Brake shutdown.	N/A	Used to check the installation and for troubleshooting purposes. Used to check for internal safety operation. Does not represent an
Flashes red x3	No key detected shutdown.	N/A	error.

#### Module reset

A module reset will only erase the steps performed in "Module programming" on page 16. All settings (firmware) and settings flashed to the module using the web configuration tool will not be affected.

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.



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

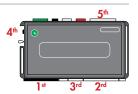


#### Hard reset

#### 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.

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.



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 soild.
- 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, NEGLECT, 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.

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.

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# Quick Reference Guide — Viper, Clifford, Python, Avital & Automate

#### Vehicle takeover with Get In and Go

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



Press the **Unlock** button on the factory or aftermarket remote \*





#### Complete the following steps within 45 seconds or the vehicle will shut down.

Enter the vehicle, while making sure the factory remote is inside with you.



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



<sup>\*</sup> Your aftermarket remote may differ from the model shown in the illustrations.

#### Get In and Go

Get In and Go is designed to provide users with easy takeover when entering their Push-to-Start (PTS) equipped vehicle, once it has been remote started.

Typically, users would have to remote start their vehicle, then get inside and press the vehicle start button to perform a takeover. There is therefore a physical action required to drive away. With Get In and Go technology, you simply remote start the vehicle, unlock the doors, get in and go... All that's left to do is put the gear in drive and enjoy your vehicle.

This unique feature monitors a variety of parameters such as the key fob, vehicle speed sensor and door sensor, in order to perform takeover securely.

#### Manual transmission ready mode

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



Depress the vehicle's foot brake.



Apply the emergency brake.



Release the vehicle's foot brake.

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.

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.





Exit the vehicle.



Press the Lock button on the factory or aftermarket remote.\*

The vehicle engine will shut Off after locking the system.



<sup>\*</sup> Your aftermarket remote may differ from the model shown in the illustrations.

#### Pit stop mode

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



Press the Remote Start button on the transmitter.\*

The parking lights will flash once to indicate the vehicle is now in **Pit Stop Mode**.



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

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



<sup>\*</sup> 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
<u> </u>	Press & hold for 1 second to lock.
2	Press & hold for 1 second to unlock.
(3)	Press & hold for 1 second to remote start.
(AUX)	Press & hold for 5 seconds to activate the trunk release (optional).

#### SmartStart compatible



This system is compatible with Directed SmartStart 3.0. For a complete list of supported features, please visit 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.

# **Quick Reference Guide — Autostart**

#### Vehicle takeover with Get In and Go

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



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





Enter the vehicle, while making sure the factory remote is inside with you.



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



 $<sup>^{\</sup>star}$  Your aftermarket remote may differ from the model shown in the illustrations.

#### Get In and Go

Get In and Go is designed to provide users with easy takeover when entering their Push-to-Start (PTS) equipped vehicle, once it has been remote started.

Typically, users would have to remote start their vehicle, then get inside and press the vehicle start button to perform a takeover. There is therefore a physical action required to drive away. With Get In and Go technology, you simply remote start the vehicle, unlock the doors, get in and go... All that's left to do is put the gear in drive and enjoy your vehicle.

This unique feature monitors a variety of parameters such as the key fob, vehicle speed sensor and door sensor, in order to perform takeover securely.

# Manual transmission ready/idle mode sequence

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



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.

Within 10 seconds, 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 sequence and will need to repeat steps 1 to 5.



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.



Press Lock to shut vehicle Ott or Trunk (aftermarket remote only) to enter idle mode

<sup>\*</sup> Your aftermarket remote may differ from the model shown in the illustrations.

## Idle mode (automatic transmission only)

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



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.

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



<sup>\*</sup> 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
<u></u>	Press & hold for 1 second to lock.
2	Press & hold for 1 second to unlock.
<b>⑤</b>	Press & hold for 1 second to remote start.
(AUX)	Press & hold for 5 seconds to activate the trunk release (optional).

#### SmartStart compatible



This system is compatible with Directed SmartStart 3.0. For a complete list of supported features, please visit 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:

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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.

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