⚠️ **Update Alert**: Firmware updates are posted on the web on a regular basis. We recommend that you check for firmware and/or install guide updates prior to installing this product.

Installation Guide

This guide supports the installation of a DBALL in Remote Start Ready (RSR) mode. This solution offers three (3) configuration options to control your system: 3x OEM Lock Remote Start Activation,RF Kit or SmartStart (all sold separately).

The optional Plug & Play T-Harness **THCHD3** (sold separately) provides simpler and faster installation.

Remote Start Ready (RSR) is a function that enables the interface module to remote start the vehicle completely on its own. Consequently, there is no need for an aftermarket or an OEM remote starter in order to start the vehicle from a distance.

🚦 **Important!**
This product is NOT compatible with vehicles equipped with a manual transmission.

Index

SmartStart Compatible

SmartStart is equipped with D2D, which means it can be connected to an interface module and used in Remote Start Ready (RSR) mode without the use of a remote starter. See the **Module Programming** section for more information.

® Dodge is a registered trademark and property of its respective company.

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	2015	2014	2013	PK-Immobilizer Bypass-Data No Key Req'd	AV-Panic Mode Activation	AV-Parking Lights Control	DL-Arm Factory Security	DL-Disarm Factory Security	DL-Door Lock Control	DL-Door Unlock	DL-Driver Priority Unlock	FOB-Control of aftermarket alarm with OEM remote	Key2GO	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 Trunk/Hatch Pin	ST-Brake Status (foot brake)
Dodge/Ram																				
1500	•	•	•	•	•	•	•	•	•	•	•	D	•	•	D	•	•	D	•	•
2500	•	•	•	•	•	•	•	•	•	•	•	D	•	•	D	•	•	D	•	•
3500	•	•	•	•	•	•	•	•	•	•	•	D	•	•	D	•	•	D	•	•

Legend:

•: D2D & Wire-to-Wire (W2W)

D: Data-to-Data (D2D) only

PK: Transponder & Immobilizer Override
AV: Horn & Lights Controls
CC: Comfort & Convenience 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

Key2GO
CAR KEY REPLICATOR SYSTEM

This feature is mandatory to control the immobilizer override in this firmware.

Key2GO has been designed and developed to bypass the advanced encryption layers found in modern vehicles. It uses an array of servers to generate a duplicate of the original key, allowing the installation of a remote starter without having to give up a key.

The advantage is that this feature allows you to use one original key and the server to configure the bypass in the vehicle.
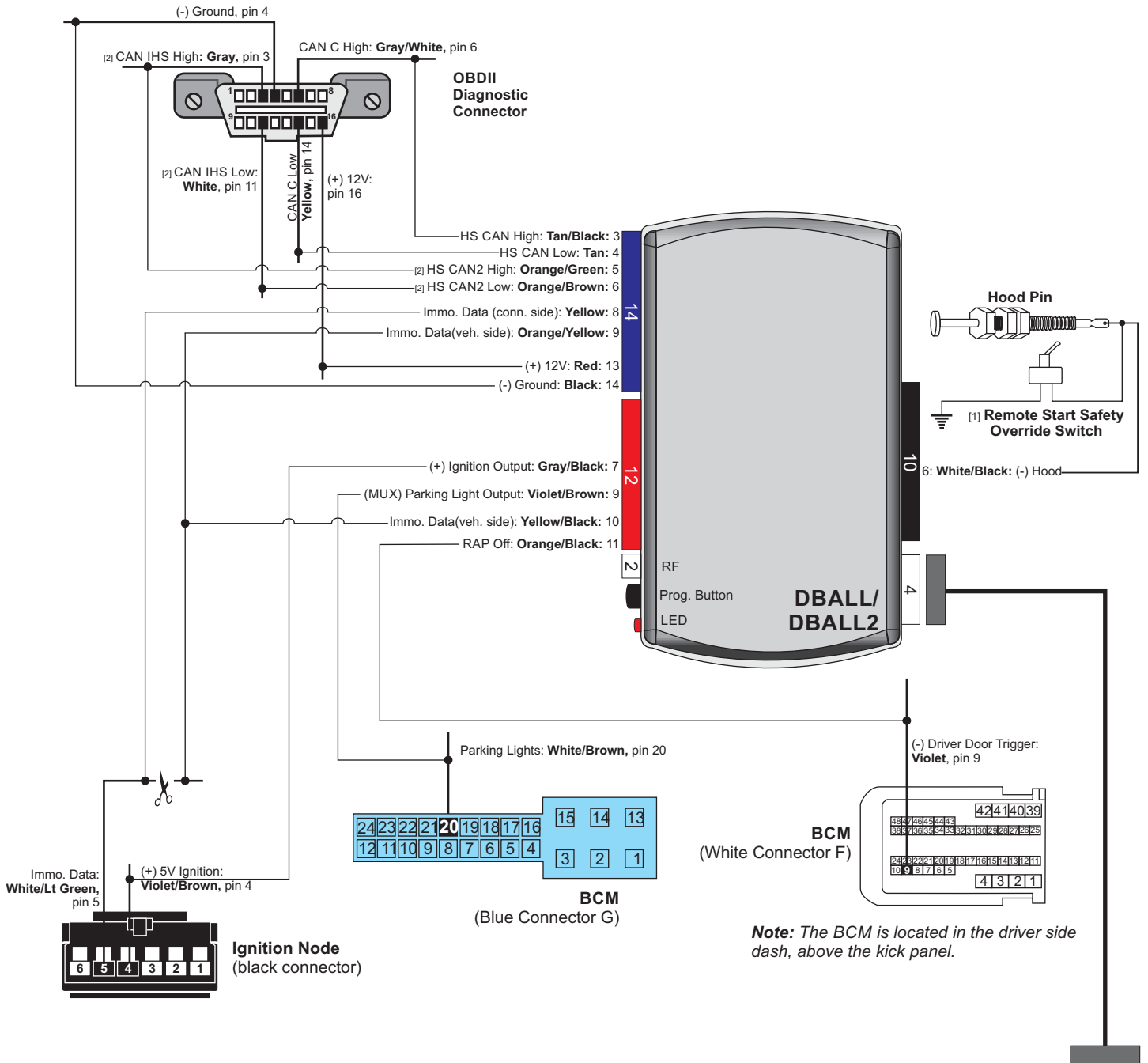
All Key2GO-compatible firmware are clearly indicated in the function list of each vehicle search result page and will also appear on the flash page. Any first-time user must re-register to gain access to Key2GO, and some additional information will be required to complete the registration process, such as your Directed account number and store name.

Key2GO is compatible with XpressVIP 4.5 or higher and requires an XKLoader.

Refer to page 7 of this guide for instructions on how to program features using Key2GO.

Installation Diagram

⚠ **Important!**
The Hood Pin and Remote Start Safety Override Switch are mandatory safety devices, but are NOT supplied with the DBALL.

(-) Ground, pin 4

[2] CAN IHS High: **Gray**, pin 3

CAN C High: **Gray/White**, pin 6

OBDII Diagnostic Connector

[2] CAN IHS Low: **White**, pin 11

CAN C Low **Yellow**, pin 14

(+) 12V: pin 16

HS CAN High: **Tan/Black**: 3
HS CAN Low: **Tan**: 4
[2] HS CAN2 High: **Orange/Green**: 5
[2] HS CAN2 Low: **Orange/Brown**: 6
Immo. Data (conn. side): **Yellow**: 8
Immo. Data (veh. side): **Orange/Yellow**: 9
(+) 12V: **Red**: 13
(-) Ground: **Black**: 14

Hood Pin

[1] **Remote Start Safety Override Switch**

6: **White/Black:** (-) Hood

(+) Ignition Output: **Gray/Black**: 7
(MUX) Parking Light Output: **Violet/Brown**: 9
Immo. Data (veh. side): **Yellow/Black**: 10
RAP Off: **Orange/Black**: 11

RF
Prog. Button
LED

DBALL/ DBALL2

Parking Lights: **White/Brown**, pin 20

(-) Driver Door Trigger: **Violet**, pin 9

15 14 13
24 23 22 21 **20** 19 18 17 16
12 11 10 9 8 7 6 5 4
3 2 1

BCM (Blue Connector G)

42 41 40 39
48 47 46 45 44 43
38 37 36 35 34 33 32 31 30 29 28 27 26 25
24 23 22 21 20 19 18 17 16 15 14 13 12 11
10 9 8 7 6 5
4 3 2 1

BCM (White Connector F)

Note: The BCM is located in the driver side dash, above the kick panel.

Immo. Data: **White/Lt Green**, pin 5

(+) 5V Ignition: **Violet/Brown**, pin 4

6 5 4 3 2 1

Ignition Node (black connector)
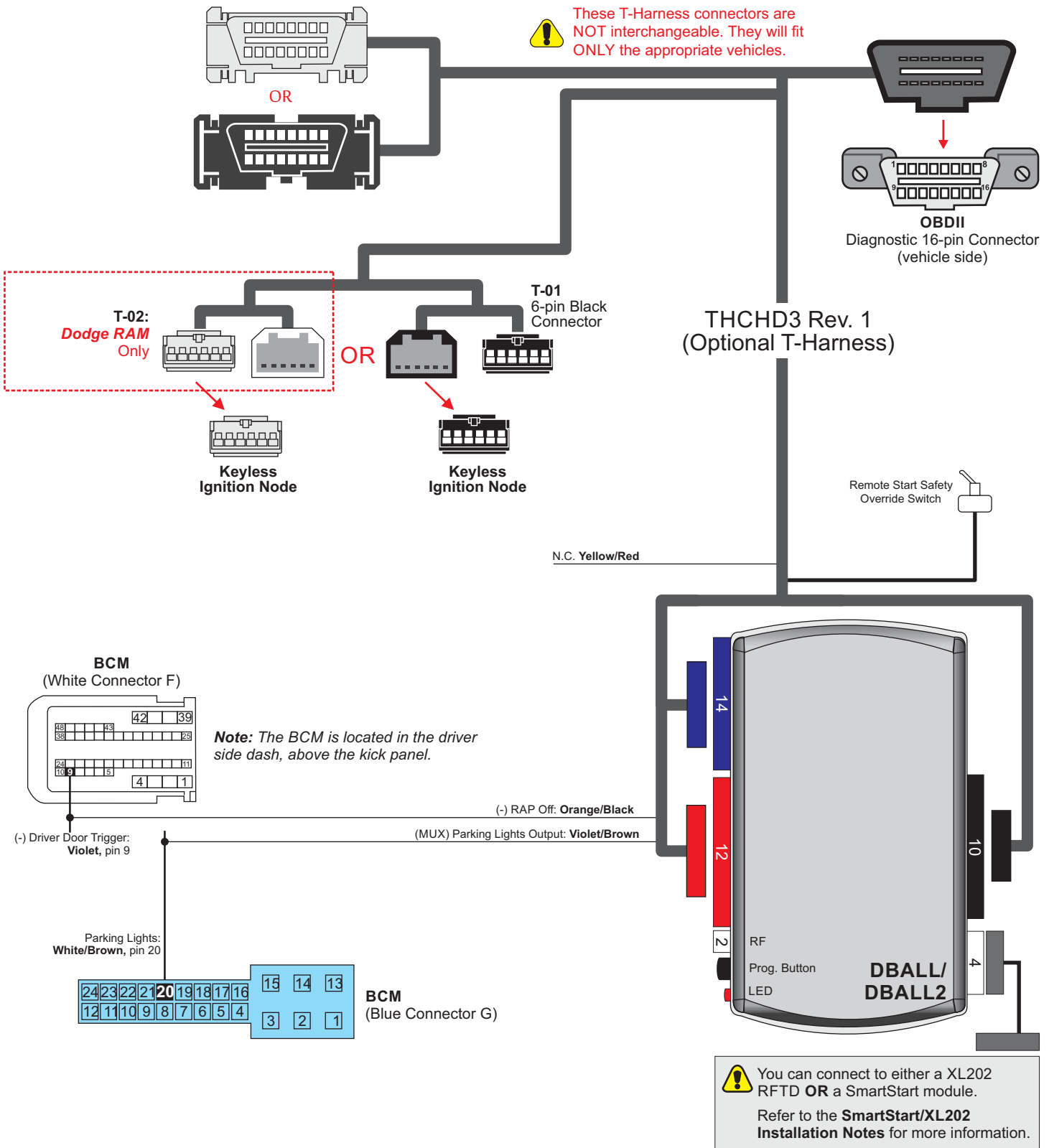
⚠ You can connect to either a XL202 RFTD **OR** a SmartStart module.

Refer to the **SmartStart/XL202 Installation Notes** for more information.

[1] If grounded, the vehicle will NOT start.
[2] **DBALL2** Only. Required for heated seats.
⚠ With the exception of the OBDII Diagnostic connector, all connectors are displayed from the wire side.

DIRECTED®

Installation with T-Harness THCHD3

These T-Harness connectors are NOT interchangeable. They will fit ONLY the appropriate vehicles.

OBDII
Diagnostic 16-pin Connector
(vehicle side)

OR

T-02:
Dodge RAM
Only

T-01
6-pin Black
Connector

OR

THCHD3 Rev. 1
(Optional T-Harness)

Keyless
Ignition Node

Keyless
Ignition Node

Remote Start Safety
Override Switch

N.C. **Yellow/Red**

BCM
(White Connector F)

Note: The BCM is located in the driver side dash, above the kick panel.

(-) RAP Off: **Orange/Black**

(MUX) Parking Lights Output: **Violet/Brown**

(-) Driver Door Trigger:
Violet, pin 9

Parking Lights:
White/Brown, pin 20

BCM
(Blue Connector G)

RF
Prog. Button
LED

DBALL/
DBALL2

You can connect to either a XL202 RFTD **OR** a SmartStart module.

Refer to the **SmartStart/XL202 Installation Notes** for more information.

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

SmartStart/XL202 Installation Notes

The DBALL Remote Start Ready (RSR) solution offers three (3) configuration options to control your system: 3x OEM Lock Remote Start Activation, RF Kits or SmartStart (all sold separately). This section provides specific installation information for SmartStart and XL202..

SmartStart Revision A

SmartStart is **optional** and not included. It MUST be purchased separately.
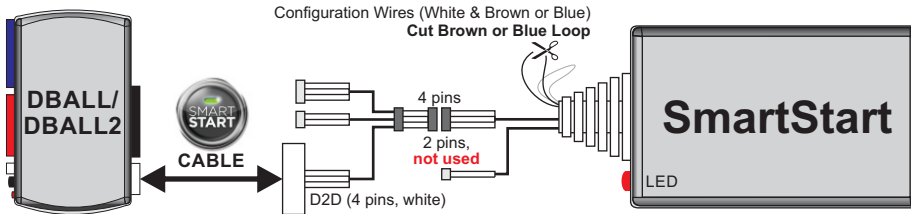
⚠ The modules must be connected in a specific order. Refer to the **Module Programming** section for more information.

SmartStart Revision B

SmartStart is **optional** and not included. It MUST be purchased separately.
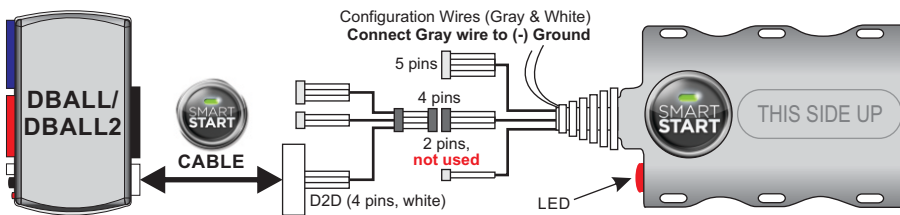
⚠ The modules must be connected in a specific order. Refer to the **Module Programming** section for more information.

RF Kit

The **optional** XL202 and antenna are not included and MUST be purchased separately.
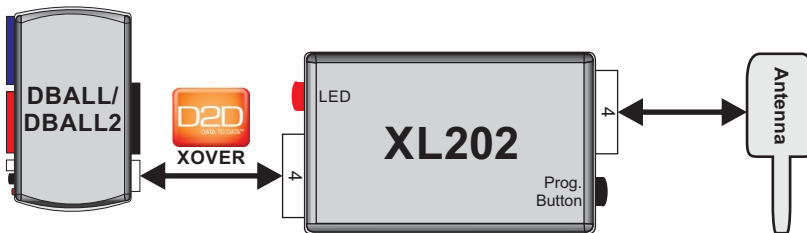
⚠ 1. Use the D2D Crossover (XOVER) cable that is provided with XL202, and NOT the one in the DBALL package.
2. The modules must be connected in a specific order. Refer to the **Module Programming** section for more information.

RF Kit & PKE Combination

Refer to the Passive Keyless Entry (PKE) Installation Guide (N2102T) for detailed wiring information.

RF Kit, PKE & SmartStart BT Combination

Refer to the Passive Keyless Entry (PKE) Installation Guide (N2102T) for detailed wiring information.

DIRECTED.

Page 6

Module Programming

⚠️ Refer to the LED Diagnostics section on page 11 for more information and for troubleshooting purposes.

Important

Make all the required connections to the vehicle, as described in the wiring diagram(s) found in this guide, and double check to ensure everything is correct prior to moving onto the next step.

Note: Before connecting either the XL202 or SmartStart module to DBALL, it is important to ensure that the proper feature and function programming is selected using XpressVIP (version 4.5 or higher). Visit www.directechs.com to download the latest version of the application.

⚠️ **Warning!** To take advantage of advanced features, you must use XpressVIP 4.5 or higher. Using version 2.9 or 3.1 will limit available functions and features.

1. Connect the interface module to your computer using the **XKLoader**.

2. Open an Internet Explorer browser (version 6 or higher), and go to www.directechs.com. The detail of the platform and firmware that is currently saved on the interface module will be indicated in the top right corner of the page.

3. Select the **year**, **make** and **model** of the vehicle; the page will refresh to display the compatible firmware.

4. In the search result page, select **Config for RSR**, and follow the instructions provided on the screen.
5. Once you have configured your options, click on the **FLASH** button to upload the firmware onto the interface module.
6. The following message will be displayed when the upload is completed:
   "The flashing is successfully completed. You may now unplug the kit."
   You can now proceed with the programming instructions below.

SmartStart Installation

⚠️ The DBALL module **must** be disconnected from any power source before SmartStart can be connected to it. Failing to do so could damage DBALL.

a. To ensure that the D2D communication between SmartStart and DBALL works properly, the Gray wire must be connected to a ground source (**Rev B** SmartStart), and the Brown or Blue loop must be cut (**Rev A** SmartStart).

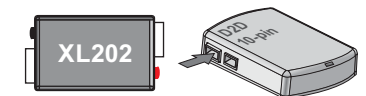b. Do **NOT** connect the 2-pin harness (on SmartStart). Power and ground will be provided by the DBALL D2D connector.
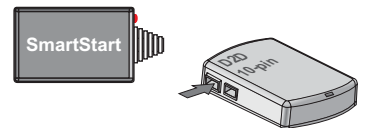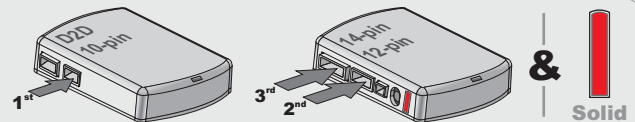
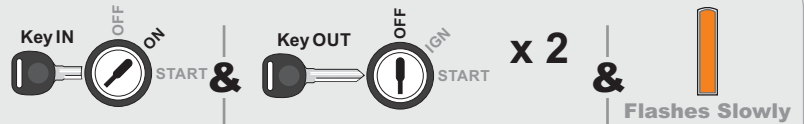Connect SmartStart to DBALL using the D2D port.

OR

XL202 Installation

Connect XL202 to DBALL using the D2D port.

1	Connect the 10-pin, 12-pin and 14-pin harnesses to DBALL, then wait until the LED turns ON solid red.	

Solid

2	Turn the key to ignition position, then back to OFF position two (2) times. The LED flashes orange slowly.	Key IN & Key OUT x 2 &

Flashes Slowly

| **3**	Disconnect the module and complete the **Key2GO** programming.	

DIRECTED

Web Programming (for Key2GO)

⚠️ Refer to the LED Diagnostics section for more information and for troubleshooting purposes.
Version 4.5 or higher of XpressVIP must be installed on your computer to complete this programming sequence.

1 Remove the module from the vehicle and reconnect it to your computer. The web site will automatically recognize that you are moving onto the second phase of the programming sequence.

2 Click on **Submit Key2GO Request**.

3 Once the configuration is completed, reconnect the module.
The LED turns ON solid green for 3 seconds, then turns off.

Solid x3 Secs **&** Off
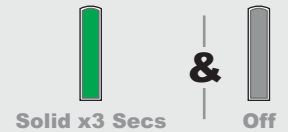
You have successfully completed the module programming sequence.

Module Reset

A module reset will only erase programming performed in the previous steps. All settings (firmware) and settings flashed to the module using the web config tool will not be affected.

1 If required for your installation, connect the 10-pin & 12-pin harnesses to the module. Press and hold the programming button, then connect the 14-pin harness to the module.
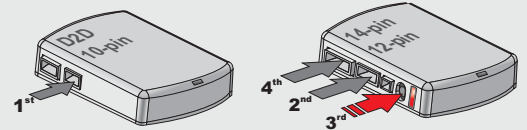
2 Wait 3 seconds until the LED turns ON solid orange then release the programming button. The LED turns ON solid red.

Solid & Release & Solid

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 (such as RFTD and D2D options) may have to be reconfigured. See the **Feature & Option List** section of this guide.

1 If required for your installation, connect the 10-pin & 12-pin harnesses to the module. Press and hold the programming button, then connect the 14-pin harness to the module.
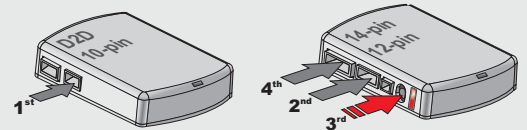
2 Wait 3 seconds until the LED turns ON solid orange, and wait 10 more seconds until the LED starts to flash orange and red.

Solid & Flashes

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

Release & Solid

DIRECTED®

Feature and Option List

It is recommended to configure all the features and options listed below using the configuration tool found on the module flashing page on www.directechs.com. The web offers more options; however, manual configuration of the features is possible using the information on this page.

* Default option

Feat.	Operation	Flashes / Option	Description
1	RF Output Type	**1. Disabled***	Module is connected to a remote starter using a standard installation.
		2. RFTD Output	Module is connected to an XL202 using an RSR or RXT installation (when available).
		3. SmartStart	Module is connected to SmartStart using an RSR or RXT installation (when available).
2	Unlock Driver Priority	**1. Driver Priority***	Unlocks only the driver door on first press and unlocks all doors on a second press within 5 seconds.
		2. All	Unlocks all doors on first press.
3	Heated Seats	**1. Disabled***	No operation.
		2. Enabled	When the feature is enabled, it will activate the heated seats and heated steering wheel.
4	Defroster	**1. Disabled***	No operation.
		2. Enabled	When the feature is enabled, it will activated the rear defrosrter and heated mirrors.
5	Heated Seats/Defroster Temperature Control	**1. 32° Farenheit (0°Celsius)***	When Heated Seats or Defroster feature is enabled, it will activate the feature upon remote start when temperature is below 32 °F (0 °C)
		2. 23° Farenheit (-5°Celsius)*	When Heated Seats or Defroster feature is enabled, it will activate the feature upon remote start when temperature is below 23 °F (-5 °C)
		3. 41° Farenheit (5°Celsius)*	When Heated Seats or Defroster feature is enabled, it will activate the feature upon remote start when temperature is below 41 °F (5 °C).
		4. Always ON	When Heated Seats or Defroster feature is enabled, it will activate the feature at any temperature.
6	Heated Seats Temperature Level	**1. High***	When Heated Seats are activated, they will be set to HIGH.
		2. Low	When Heated Seats are activated, they will be set to LOW.
7	Smart OEM Alarm Control	1. Disabled	The OEM alarm will not be controlled by DBALL upon remote start. No disarm or arm command will be executed at the beginning or end of the sequence; it must be controlled by the Remote Starter.
		2. Normal / Safelock	Smart OEM Alarm Control will behave like a standard Safelock feature on a remote starter. It will unlock at the beginning of the sequence, and relock after start and shutdown.
		3. Enabled*	Smart OEM Alarm Control will synchronize with the OEM alarm so that it will disarm and rearm the vehicle in the remote start sequence, only when required. The reason for this is, factory alarm control must often be done by lock or unlock operation. This could create unnecessary actions on door lock modules, such as the horn to honk. When possible, Smart OEM Alarm Control will monitor the alarm and door lock status to detect if the disarm or rearm is required. If the vehicle is unlocked or is not equipped with factory alarm, the disarm/rearm will not be executed. Smart OEM Alarm Control will also monitor the remote starter actions so that the factory alarm control is not done twice. A remote starter, for which the Safelock feature is active, will work perfectly with this option and will make it invisible to the user.

Feature Programming

Programming
Button
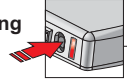
To enter feature programming routine
- Turn the ignition ON, then OFF.
- **Within 5 seconds**, press and HOLD the programming button until the LED turns ON orange (after 3 seconds). Release the Programming button.
- The LED will flash green once slowly to indicate the feature number is 1. After a short delay, the LED flashes red rapidly to indicate the current option of feature 1 (i.e. 1x green followed by 1x red indicates feature 1 is set to option 1). The flashing sequence will repeat until a new command is entered.

Changing feature options
- Press the lock/arm or unlock/disarm button on aftermarket transmitter to change the option of the selected feature. When installing the DBALL in RSR using 3x OEM Lock Remote Start Activation only, there is no aftermarket transmitter on which to press lock/unlock to change the options of the selected feature. Tapping the green or blue lock/unlock wires on the black 10-pin harness to ground will change the option for the selected feature.
- The LED flashes red rapidly the number of times equal to the current option number. After a short delay, the LED flashes green slowly the number of times to indicate the current feature. The flashing sequence will repeat until a new command is entered.

Accessing another feature
- Press and release the programming button a number of times to advance from the current feature to the next desired feature.
- The LED flashes green slowly the number of times equal to the feature number. After a short delay, the LED flashes red rapidly to indicate the current option of the current feature. The flashing sequence will repeat until a new command is entered.

When the maximum number of features or options is reached, the LED will start flashing again from the first feature or option.

Once a feature is programmed
- Other features can be programmed.
- The feature programming can be exited.

Exiting feature programming
- No activity for 30 seconds; after 30 seconds, the LED will turn ON orange for 2 seconds to confirm the end of the programming sequence.
  OR
- Press and HOLD the programming button for 3 seconds. After 3 seconds, the LED will turn ON orange for 2 seconds to confirm the end of the programming sequence.

LED Diagnostics and Troubleshooting

LED	Status	Description	Troubleshooting
Module Programming			
Off	Off	Module has no power.	Make sure the D2D harness is connected or that the 12 Volt is present between the red and balck wires. If the 12 Volt is present, the module be be defective.
Solid red	Solid red	Waiting to begin the programming sequence.	Check if the ignition input is properly connected.
Green & red	Green & Red	Initialization failed.	If a second attempt fails after a complete Hard Reset, connect the module to Directechs.com and call Tech Support with the module ID in hand.
Flashes green	Flashes green	Module is programming.	Make sure that the bypass connections are correct (see wiring diagram).
Flashes orange slowly	Flashes orange slowly	Ready for Key2GO programming.	Normal operation.
Solid green then orange x 3 secs	Solid green then orange for 3 secs.	Bypass was skipped.	Normal operation.
Solid orange x 3 secs	Solid orange for 3 seconds.	Module was successfully programmed without bypass.	Normal operation.
Solid green x 3 secs	Solid green for 3 seconds	Module was successfully programmed.	Normal operation.
Module Programming - Error codes			
Flashes red x 2	Flashes red x 2	CAN C not detected.	Check the CAN connections
Flashes red x 3	Flashes red x 3	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.
External module synchronization			
Flashes red, red & orange x 10 secs	Flashes red, red then orange, x 10	OBDII feature not supported.	Diagnostic data bus not detected. Some features are not supported by SmartStart. This can be caused by missing wire connections or module hardware limitation. Refer to the wiring installation section to check the connections.
Active Ground While Running			
Flashes green	Flashes green	GROUND OUT ON (GWR) command received.	Otherwise, the Ground While Running (status) signal was lost or was never received by the module. Commands can come from RF, D2D or W2W.
Flashes red & orange	Flashes red & orange	IGNITION ON command received.	Otherwise, the ignition signal was not received by the module. In a W2W install, it will show only if the ignition input wire is used.
Flashes green quickly	Flashes green quickly	START ON command received.	Otherwise, the start signal was not received by the module. In a W2W install, it will show only if the ignition input wire is used.
D2D and W2W Commands			
Flashes orange x 1	Flashes orange x 1	LOCK command received.	If the bypass module fails to flash, it means the module did not receive the signal.
Flashes orange x 2	Flashes orange x 2	UNLOCK command received.	

DIRECTED.

Parking Light Error Codes

The parking lights on your vehicle will flash a specific number of times 3 seconds following an unscheduled shutdown or failure to start. Each flashing pattern is described below.

Flashes	Diagnostic
1	Runtime expired.
2	Over-rev shutdown.
3	Low/No RPM.
4	Transmitter shutdown.
5	Brake shutdown.
6	Hood shutdown/Remote start safety override switch is ON*.
7	Remote start safety override switch is ON*.

* If the vehicle hood status is supported through data, safety override switch input will report 7 flashes.

DIRECTED.

Limited One Year Consumer Warranty

For a period of ONE YEAR from the date of purchase of a Directed Electronics remote start or security product, Directed Electronics. ("DIRECTED") promises to the original purchaser, to repair or replace with a comparable reconditioned piece, the security or remote start accessory piece (hereinafter the "Part"), which proves to be defective in workmanship or material under normal use, provided the following conditions are met: the Part was purchased from an authorized DIRECTED dealer; and the Part is returned to DIRECTED, postage prepaid, along with a clear, legible copy of the receipt or bill of sale bearing the following information: consumer's name, address, telephone number, the authorized licensed dealer's name and complete product and Part description.

This warranty is nontransferable and is automatically void if the Part has been modified or used in a manner contrary to its intended purpose or the Part has been damaged by accident, unreasonable use, neglect, improper service, installation or other causes not arising out of defect in materials or construction.

TO THE MAXIMUM EXTENT ALLOWED BY LAW, EXCEPT AS STATED ABOVE, ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO EXPRESS WARRANTY, IMPLIED WARRANTY, WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE AND WARRANTY OF NONINFRINGEMENT 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 HEREBY DISCLAIMS AND HAS ABSOLUTELY NO LIABILITY FOR ANY AND ALL ACTS OF THIRD PARTIES INCLUDING DEALERS OR INSTALLERS. DIRECTED IS NOT OFFERING A GUARANTEE OR INSURANCE AGAINST VANDALISM, DAMAGE, OR THEFT OF THE AUTOMOBILE, ITS PARTS OR CONTENTS, AND DIRECTED HEREBY DISCLAIMS ANY LIABILITY WHATSOEVER, INCLUDING WITHOUT LIMITATION, LIABILITY FOR THEFT, DAMAGE, OR VANDALISM. IN THE EVENT OF A CLAIM OR A DISPUTE INVOLVING DIRECTED OR ITS SUBSIDIARY, THE PROPER 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 PART. DIRECTED SHALL NOT BE RESPONSIBLE FOR ANY DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, ANY CONSEQUENTIAL DAMAGES, INCIDENTAL DAMAGES, 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 AT DIRECTED'S OPTION THE PART AS DESCRIBED ABOVE.

This warranty only covers Parts sold within the United States of America and Canada. Parts sold outside of the United States of America or Canada are sold "AS-IS" and shall have NO WARRANTY, express or implied. 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. DIRECTED does not and has not authorized any person or entity to create for it any other obligation, promise, duty or obligation in connection with this Part. For further details relating to warranty information of Directed products, please visit the support section of DIRECTED's website at: www.directed.com
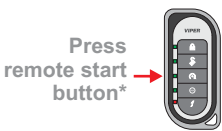
920-10012-01 2013-07

This Interface kit / Data Bus Interface part has been tested on the listed vehicles. Other vehicles will be added to the select vehicle list upon completion of compatibility testing. Visit website for latest vehicle application guide. DISCLAIMER: Under no circumstances shall the manufacturer or the distributors of the bypass kit / data bus interface part(s) be held liable for any consequential damages sustained in connection with the part(s) installation. The manufacturer and it's distributors will not, nor will they authorize any representative or any other individual to assume obligation or liability in relation to the interface kit / data bus interface part(s) other than its replacement. N.B.: Under no circumstances shall the manufacturer and distributors of this product be liable for consequential damages sustained in connection with this product and neither assumes nor authorizes any representative or other person to assume for it any obligation or liability other than the replacement of this product only.

Protected by U.S. Patents: 5,719,551; 6,011,460 B1 *; 6,243,004 B1; 6,249,216 B1; 6,275,147 B1; 6,297,731 B1; 6,346,876 B1; 6,392,534 B1; 6,529,124 B2; 6,696,927 B2; 6,756,885 B1; 6,756,886 B2; 6,771,167 B1; 6,812,829 B1; 6,924,750 B1; 7,010,402 B1; 7,015,830 B1; 7,031,826 B1; 7,046,126 B1; 7,061,137 B1; 7,068,153 B1; 7,205,679 B1; Cdn. Patent: 2,320,248; 2,414,991; 2,415,011; 2,415,023; 2,415,027; 2,415,038; 2,415,041; 2,420,947; 2,426,670; 2,454,089; European Patent: 1,053,128; Pat. Pending: 2,291,306. Made in Canada.

Vehicle Takeover

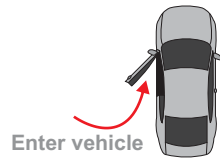**1** Press the remote start button on the transmitter to start the vehicle.*

Press remote start button*

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

Press Unlock button on either remote* OR
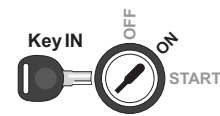
3 Enter the vehicle

Enter vehicle
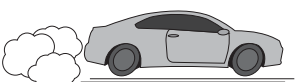
4 Insert the key into the ignition barrel and turn it to the ON position.

Key IN   OFF ON START

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

Ready to drive off

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

Pit Stop Mode
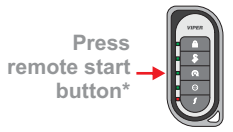
The Pit Stop Mode feature is practical when you need to stop and run an errand, but wish to keep the engine running.

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

& (P)

Stop & put vehicle in Park (P)
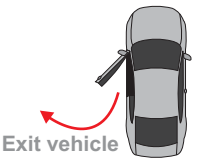
2 Press the button to remote start the vehicle.*

Press remote start button*

3 Remove the key from ignition. It is now 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.

Exit vehicle

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

Parking Light Error Codes

The parking lights on your vehicle will flash a specific number of times 3 seconds following an unscheduled shutdown or failure to start. Each flashing pattern is described below.

Flashes	Diagnostic
1	Runtime expired.
2	Over-rev shutdown.
3	Low/No RPM.
4	Transmitter shutdown.
5	Brake shutdown.
6	Hood shutdown/Remote start safety override switch is ON*.
7	Remote start safety override switch is ON*.

* If the vehicle hood status is supported through data, safety override switch input will report 7 flashes.

Remote Start Ready (RSR)

Remote Start Ready (RSR) is a function that enables the interface module to remote start the vehicle completely on its own. Consequently, there is no need for an aftermarket or an OEM remote starter in order to start the vehicle from a distance.

3x OEM Lock Remote Start Activation

This solution includes the option to remote start your vehicle by pressing the Lock button 3 times consecutively. If your vehicle allows the OEM remote to remain active while the engine is running, you may shut down your remote starter by pressing the Lock button 3 times once more.

Note: The range offered by OEM remotes is limited and typically requires you to be within eyesight of the vehicle to control it.

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.
AUX	Press & hold for 5 seconds to activate the trunk release (optional).
ƒ x1 + AUX	Press ƒ once, then AUX to activate the rear hatch/tail glass release (optional).*
ƒ x3 + AUX	Press ƒ 3 times, then AUX to activate the panic mode.
ƒ x1 + ⟳	Press ƒ once, then ⟳ to reset the remote starter runtime.

* 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.

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.

Notes

DIRECTED