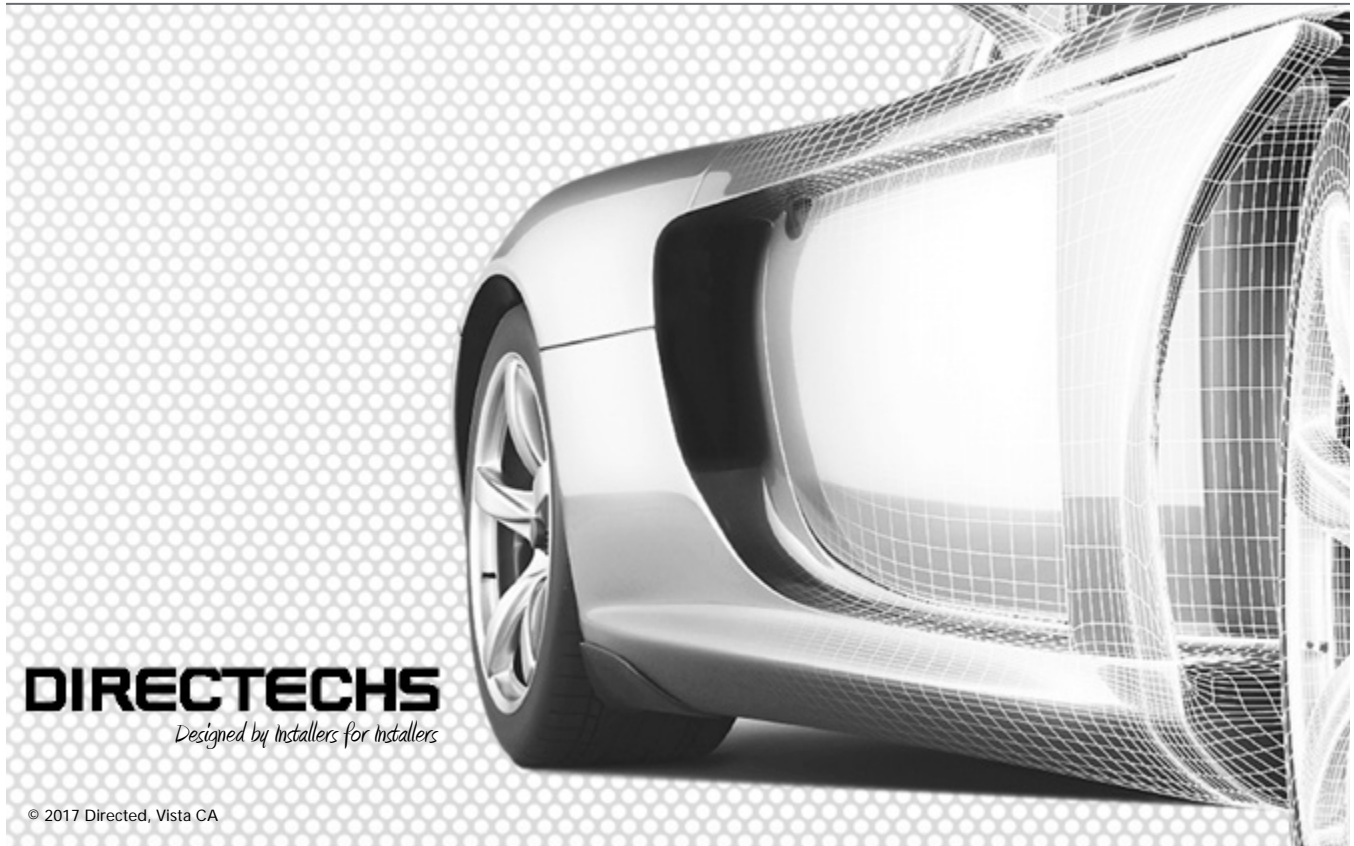


INSTALLATION GUIDE

DB3

2008 Ford Mustang. 403.FORD1 4.11



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®

Contents

- Introduction 4
 - Vehicle function compatibilities 4
 - Pre-installation and application warnings 5
- Installation 5
 - Wiring diagram with Factory Alarm 5
 - Wiring diagram without Factory Alarm 7
- Vehicle connections 8
- Key2GO 11
- Understanding the difference between a Ford 80 bit & a 40 bit 11
- Disarm testing 12
- Connecting the module 12
 - Module programming 14
 - Method2: Key2GO programming for 40-bit key types ONLY (using 1 key) - Optional 13
 - Method 1 (using 2 keys) 14
 - LED diagnostics and troubleshooting 16
 - Soft reset 18
 - Hard reset 18
- Feature programming 19
- Feature and option list 20
- Limited one year consumer warranty 21
- Quick reference guide 22

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

DB3 is an all-in-one door lock and override module.

Warning!

This module can only be flashed and configured using DirectLink at www.directechs.com or using the Directechs Mobile application for smartphones. Refer to "Connecting the module" for more information.



Vehicle function compatibilities

Compatible functions

This section lists all the functions compatible with this vehicle for the installation illustrated in this guide.

- Disarm Factory Security
- Key2GO
- Immobilizer Bypass-Data No Key Req'd
- RAP Shut Down (Retained ACC Power)
- SmartStart

Pre-installation and application warnings

Start here

Firmware notes: This section highlights important information for this specific firmware and will assist in pricing accordingly, as well as bringing awareness to any operational or vehicle limitations.

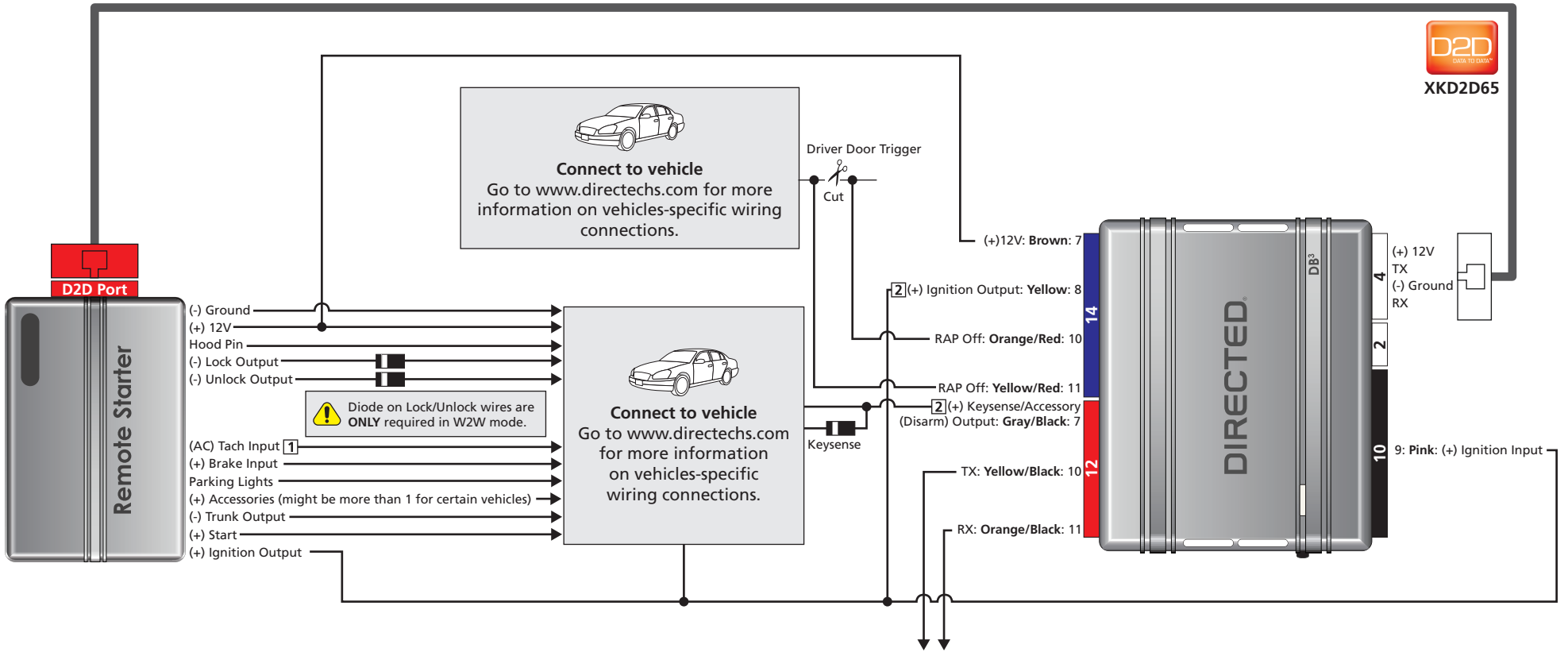
T-Harness compatible 	No <input type="checkbox"/>		Keys required for programming	1 or 2	Keys required for operation	0
---	------------------------------------	---	--------------------------------------	---------------	------------------------------------	----------

- ◆ Key2GO is required if only one key is available. You can program the interface without the need for Key2GO if two keys are present.
- ◆ Unless specified otherwise, all connectors are displayed from the wire side, with the exception of the OBDII diagnostic connector.
- ◆ Refer to "Vehicle connections" following the wiring diagram.

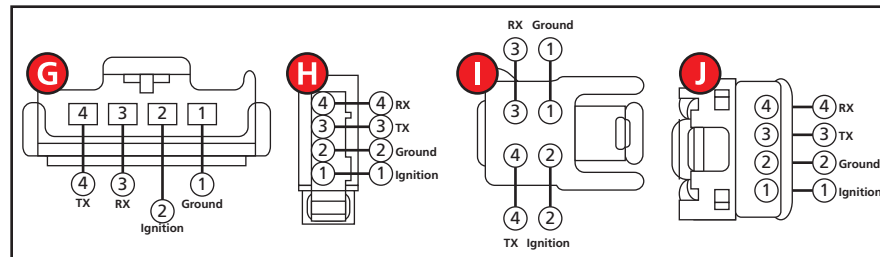
General notes: This section highlights important information for this specific firmware.

- [1] Tach wire is an optional connection required on some remote starters, which do not support a tach signal in D2D.
- [2] These outputs are for disarming upon unlock and trunk release, refer to "Vehicle connections" for more information.

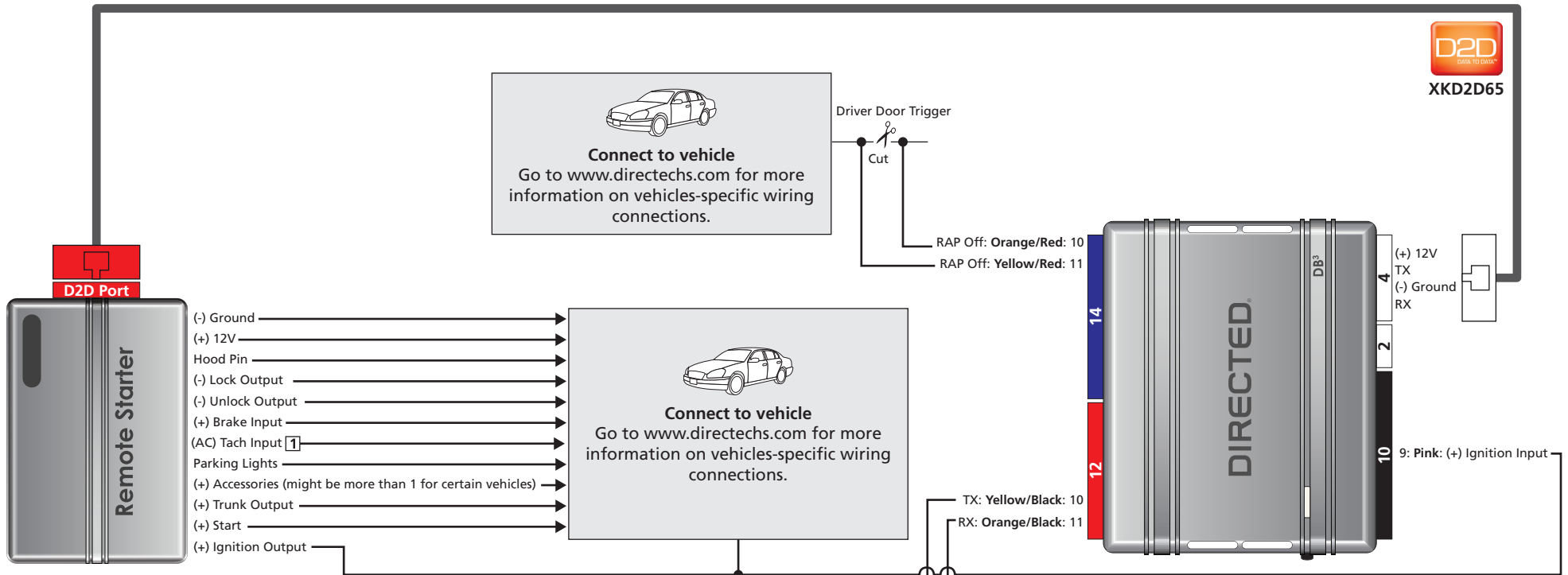
Wiring diagram with Factory Alarm



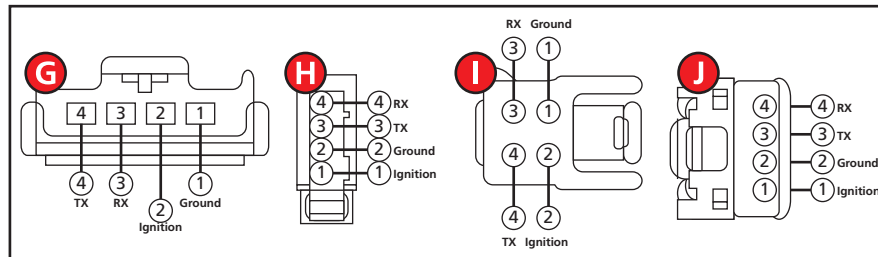
Passive Anti-Theft Security System (PATS) connectors (wire-side view)
See the **Vehicle Wiring Charts** for more information



Wiring diagram **without** Factory Alarm



Passive Anti-Theft Security System (PATS) connectors (wire-side view)
See the **Vehicle Wiring Charts** for more information



Vehicle connections

The connection information listed below is specific to the 2008 Ford Mustang. Refer to "Pre-installation and application warnings" for a list of important notes.

Data 14-pin blue connector (H1)

Module			Connects To			
Conn./Pin	Color	Description	Wire Location	(+/-)	Wire Color	Ref.
H1/1	Light Green	No Connection	No Connection			
H1/2	Violet/Yellow	No Connection	No Connection			
H1/3	Tan/Black	No Connection	No Connection			
H1/4	Tan	No Connection	No Connection			
H1/5	Orange/Green	(DATA) HS CAN High	OBD-Data Link Connector, black 16 pin plug, pin 6	Data	White/Lt. Green (HS CAN)	
H1/6	Orange/Brown	(DATA) HS CAN Low	OBD-Data Link Connector, black 16 pin plug, pin 14	Data	Pink/Lt. Green (HS CAN)	
H1/7	Brown	Relay N.O. 12 Volt	Ignition Switch, black 7 pin plug, pin 4	+	Lt. Green/Violet (20A)	
H1/8	Yellow	Relay COM Ignition Output	Ignition Switch, black 7 pin plug, pin 1	+	White/Yellow	
H1/9	Orange/Yellow	Relay N.C. No Connection	No Connection			
H1/10	Orange/Red	Relay N.C. RAP Off	driver kick or SJB in passenger kick, black 26 pin plug (E), pin 2	- N.C.	lt. green/black	
H1/11	Yellow/Red	Relay COM RAP Off	driver kick or SJB in passenger kick, black 26 pin plug (E), pin 2	- N.C.	lt. green/black	
H1/12	Brown/Red	Relay N.O. RAP Off Ground	Not Applicable			
H1/13	Red	(+) W2W Only - 12 Volt	Ignition Switch, black 7 pin plug, pin 4	+	Lt. Green/Violet (20A)	
H1/14	Black	(-) W2W Only - Ground			(chassis ground)	

Output 12-pin red connector (H2)

Module			Connects To			
Conn./Pin	Color	Description	Wire Location	(+/-)	Wire Color	Ref.
H2/1	Black/White	(-) W2W Only - E-Brake Output	Remote Starter			
H2/2	Green/Black	No Connection	No Connection			
H2/3	Green/White	(-) W2W Only - Door Output	Remote Starter			
H2/4	Red/Black	(-) W2W Only - Trunk Output	Remote Starter			
H2/5	Violet/White	(AC) W2W Only - Tach Output	Remote Starter			
H2/6	Gray	(+) W2W Only - Brake Output	Remote Starter			
H2/7	Gray/Black	(+) Keysense/Accessory (Disarm) Output	Ignition Switch, black 7 pin plug, pin 6 Ignition Switch, black 7 pin plug, pin 5	+ +	Black/Pink Lt. Green/Violet	
H2/8	Violet/Green	No Connection	No Connection			
H2/9	Violet/Brown	No Connection	No Connection			
H2/10	Yellow/Black	TX	PATS Transceiver on ignition switch, black 4 pin plug, pin 3	Data	White/Lt. Green	
H2/11	Orange/Black	RX	PATS Transceiver on ignition switch, black 4 pin plug, pin 4	Data	Gray/Orange	
H2/12	Blue/Red	(-) W2W Only - Hood Output	Remote Starter			

Input 10-pin black connector (H3)

Module			Connects To			
Conn./Pin	Color	Description	Wire Location	(+/-)	Wire Color	Ref.
H3/1	Green	(-) W2W Only - Lock Input	Remote Starter			
H3/2	Blue	(-) W2W Only - Unlock Input	Remote Starter			
H3/3	Red/White	(-) W2W Only - Trunk Input	Remote Starter			
H3/4	White/Violet	No Connection	No Connection			
H3/5	Violet/Black	No Connection	No Connection			
H3/6	White/Black	No Connection	No Connection			
H3/7	Pink/White	No Connection	No Connection			
H3/8	Violet	No Connection	No Connection			
H3/9	Pink	(+) Ignition Input	Remote Starter			
H3/10	Blue/White	(-) W2W Only - Ground When Running (Status) Input	Remote Starter			

D2D 4-pin white connector (H4)

Module		
Conn./Pin	Color	Description
H4/1	Blue	(Data) TX
H4/2	Black	(-) Ground
H4/3	Green	(Data) RX
H4/4	Red	(+) 12 Volt

RF 2-pin white connector (H5)


Module		
Conn./Pin	Color	Description
H5/1	N/A	No Connection
H5/2	N/A	No Connection

Additional remote start connections

(Not all of these connections may be required for your installation. Refer to the wiring diagram for vehicle-specific connections.)

Wire	Connects To			
	Wire Location	(+/-)	Wire Color	Ref.
12 Volts	Ignition Switch, black 7 pin plug, pin 4	+	Lt. Green/Violet (20A)	
Accessory	Ignition Switch, black 7 pin plug, pin 6	+	Black/Pink	
Brake Wire	brake pedal switch or SJB in passenger kick, gray 36 pin plug (H), pin 16	+	lt. green	
Hood Pin	hood pin sw or SJB in passenger kick, black 52 pin plug (C), pin 15	- N.C.	violet/orange	
Ignition	Ignition Switch, black 7 pin plug, pin 1	+	White/Yellow	
Parking Lights (-)	headlight switch, gray 10 pin plug, pin 5	-	black/lt. green	
Parking Lights (+)			SJB controls each light separately, use negative	
Power Lock	either kick or SJB in passenger kick, black 26 pin plug (E), pin 3 or 8	-	white/violet (driv sw) or orange/black (pass sw)	
Power Unlock	either kick or SJB in passenger kick, black 26 pin plug (E), pin 1 or 5	-	dk. blue/lt. grn (driv sw) or yellow/red (pass sw)	
Second Accessory	Not Applicable			
Starter	Ignition Switch, black 7 pin plug, pin 7	+	Dk. Green	
Tachometer	any fuel injector	ac	NOT red	
Third Accessory	Not Applicable			
Trunk/Hatch Release	SJB in passenger kick, black 52 pin plug (C), pin 13	-	white/violet	

Key2GO

 This feature is required if only one key is available. You can program the interface without the need for Key2GO if two keys are present.

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 firmwares 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 XKLoader2 and the online web tool, as well as XKLoader3 and the Directechs Mobile application.

Refer to "Module programming" of this guide for instructions on how to program features using Key2GO.

Understanding the difference between a Ford 80 & 40 bit

Ford introduced an 80-bit encryption in late 2009 and this caused a lot of confusion as to which models it was available on. The main question is which models use the 80 and which use the old 40 bit?

Contrary to popular belief, the SA marking on the key does NOT indicate a vehicle uses 80-bit encryption. In reality, the SA marking indicates that the key is 80-bit compatible, but the vehicle itself could still be using 40-bit encryption.

What does it mean?

It means that Ford did in fact release SA keys equipped with an 80-bit transponder, but the reality is that the same transponder can also be used in 40-bit vehicle, making it backward compatible with older vehicles. Consequently, if you see an SA key it is important that you do not automatically assume it is an 80-bit type. It all depends on the vehicle, not the key.

How do I differentiate between the 40 & 80 bit?

To determine which encryption type you are dealing with, you must test pin 1 at the 4-pin IMMO connector on the key barrel for the following conditions to determine if it is 40 or 80-bit type.

An **80**-bit vehicle should provide the following values:

- NO key in barrel: 0v
- Key in barrel with IGN OFF: (+) 12V
- Key in barrel with IGN ON: (+) 12V

A **40**-bit vehicle should provide the following values:

- NO key in barrel: 0v
- Key in barrel with IGN OFF: 0v
- Key in barrel with IGN ON: (+) 12V

Disarm testing

 It is important to read through all the steps before proceeding.

Note: This testing is to be done if you want to use the DB3 to disarm the factory alarm on unlock and trunk release. This install type can only be done on low current ignition switch and on vehicles that do not disarm using the key to unlock the driver's door. If using a one-button system or door locks are not being connected, the disarm will automatically be done upon remote start.

1 **Position** the key next to the ignition barrel in a way that you can free your hands, and have a few jumpers ready for the next steps.



2 **Arm** the factory alarm on your vehicle.



3 **Trigger** the factory alarm by opening a door.



You must now try to **power up** the ignition, accessory and keysense wires with jumpers in order to determine what is required to disarm the system. It can be a combination of two wires.

4  **Note:** The key must be **near (but not inserted into)** the ignition barrel during the entire length of the testing.

Common scenarios include *Ignition* only, *Ignition + Accessory* or *Ignition + Keysense*, but may differ.

5 When you have found what combination works to disarm the system, **refer** to the installation wiring diagram to make the proper connections to the DB3 module.



Connecting the module

Important!

Make all the required connections to the vehicle, as described in this guide, and double check to ensure everything is correct prior to moving onto programming.

Warning! To take advantage of advanced features, you must use DirectLink 4.5 (and higher) or the Directechs Mobile application.

Flashing a module using your computer:

1. **Connect** the interface module to your computer using the **XKLoader2**.
2. **Go** to www.directechs.com using Internet Explorer, and **select** the Flash Module button.
3. **Follow** the instructions to **select** your vehicle, installation type, and configure your options.
4. Once you have configured the firmware options, **click** on the FLASH button.

Flashing a module using your smartphone or tablet:

1. **Connect** the interface module to your **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.

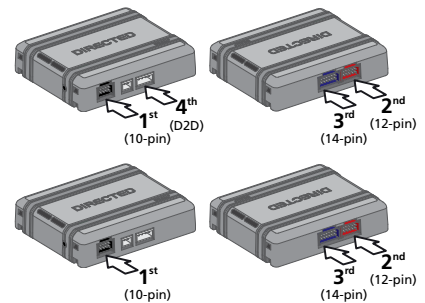
D2D installation

Recommended: **Connect** the 10-pin, 12-pin and 14-pin harnesses to the module, then **connect** the 4-pin D2D harness.

OR

W2W installation




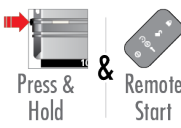
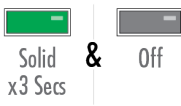

If required: **Connect** the 10-pin and 12-pin harnesses to the module, then **connect** the 14-pin harness to the module.



Module programming



 Refer to "LED diagnostics and troubleshooting" for more information and for troubleshooting purposes.

Method 1 (using 2 keys)

- 1 Wait** until the LED turns ON solid red. 
- 2 Insert** the first key and turn it to the ON position, **wait** at least 3 seconds but no more than 10 seconds, then **remove** it. The LED turns ON solid red. 
- 3 Insert** the second key and turn it to the ON position, **wait** at least 3 seconds but no more than 10 seconds, then **remove** it. The LED now flashes orange. 
- 4 Press and hold** the module programming button and then **remote start** the vehicle using the transmitter (**keep holding** the programming button). 
- 5** The LED turns ON solid green for 3 seconds, then turns OFF once the module has been successfully programmed. 
- 6 Release** the programming button. 

You have successfully completed the module programming sequence.

Method2: Key2GO programming for 40-bit key types ONLY (using 1 key) - Optional

- 1 Do NOT connect other harnesses to the DB3 module.**
Connect the 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 left corner of the page.
- 3 Flash** your module with the firmware corresponding to FORD1 Key2GO.
- 4 Connect** the module wiring to the vehicle first, and only then, **plug** the harnesses to the DB3 without pressing the programming button. The LED turns ON solid red. 
- 5 Insert** your key into the ignition barrel, then **turn** the ignition ON and OFF twice. The LED starts flashing orange, indicating that it is ready for the next step. 

6 **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.

7 **Click** on Submit Key2GO Request.

8 Once the configuration is completed, **reconnect** the module. The LED flashes orange once, turns ON solid green for 3 seconds, then turns OFF.












You have successfully completed the module programming sequence.









LED diagnostics and troubleshooting

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


Module Programming

LED	Description	Troubleshooting
 Off	Module has no power.	Make sure the D2D harness is connected and that 12 Volt is present between the red and black wires. If 12 Volt is present, the module may be defective.
 Solid red	Waiting to begin the programming sequence.	Ensure the correct programming procedure is being followed.
 Flashes green & red	Initialization failed.	Reset the module and complete the programming again. If the issue persists, please contact Technical Support.
 Solid orange	Transponder functions were skipped.	(If compatible) when RXT mode is not desired or convenience features are needed, please reset the and reprogram the module.
 Flashes green	All required CAN networks has been detected.	Normal operation.
 Flashes orange	1 of 2 CAN networks has been detected.	Normal operation.
 Flashes orange slowly	Key2GO initiated.	Please follow the steps indicated in "Module programming" to complete the Key2GO programming.
 Solid green x 3 secs	Module was successfully programmed with all functions.	Normal operation.
 Solid orange x 3 secs	Module was successfully programmed without transponder functions.	Normal operation.






Module Programming - Error codes

LED	Description	Troubleshooting
 Flashes red x 1	CAN2 not detected.	Check the CAN2 Orange/Green and Orange/Brown wire connections. Wake up the data bus by turning the ignition on and try again. If your installation does not require this connection, skip this step by pressing the programming button 5 times.
 Flashes red x 1	J1850 not detected.	Check the J1850 wire connection. Wake up the data bus by turning the ignition on and try again.
 Flashes red x 2	CAN1 not detected.	Check the CAN1 Tan and Tan/Black wire connections. Wake up the data bus by turning the ignition on and try again. If your installation does not require this connection, skip this step by pressing the programming button 5 times.
 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. Ensure the vehicle still operates correctly using the factory key.
 Flashes red x 4	Bypass processing error.	The bypass calculation failed. Reset the module and try again. If the condition persists, please contact Technical Support.
 Flashes red x 5	ISO 1 not detected.	The Yellow/Black wire did not detect the expected signal. Refer to "Installation (wiring diagrams & vehicle wiring reference charts)" to check the connections.
 Flashes red x 6	ISO 2 not detected.	The Orange/Black wire did not detect the expected signal. Refer to "Installation (wiring diagrams & vehicle wiring reference charts)" to check the connections.
 Flashes red x 7	MUX not detected.	The Violet/Green or Violet/Brown wire did not detect the expected voltage value. Refer to "Installation (wiring diagrams & vehicle wiring reference charts)" to check the connections.







External Module Synchronization

LED	Description	Troubleshooting
 (Flashes red, red, then orange) x 10	OBDII feature not supported.	The diagnostic data bus was not detected, therefore the SmartStart features will be limited.






Active Ground When Running (Status)

LED	Description	Troubleshooting
 Flashes green	Ground When Running (Status) command received.	The module has initialized the remote start sequence.
 Flashes red & orange	Ignition ON command received.	The module has received the Ignition ON command and is processing the remote start sequence.
 Flashes green quickly	Start ON command received.	The module has received the Start ON command and is processing the remote start sequence.
 Flashes red x 10	PTS shutdown error.	The PTS output from the module was not activated due to safety protection.
 Flashes red x 21	CAN bus incorrectly detected.	Verify the CAN1 and CAN2 connections. Refer to "Installation (wiring diagrams & vehicle wiring reference charts)" to check the connections.

Commands

LED	Description	Troubleshooting
 Flashes orange x 1	LOCK command received.	If the bypass module fails to flash, it did not receive the signal. Commands can come from RF or D2D.
 Flashes orange x 2	UNLOCK command received.	If the bypass module fails to flash, it did not receive the signal. Commands can come from RF or D2D.
 Flashes orange x 3	TRUNK command received.	If the bypass module fails to flash, it did not receive the signal. Commands can come from RF or D2D.
 Flashes orange x 4	AUX1 command received.	If the bypass module fails to flash, it did not receive the signal. Commands can come from RF or D2D.
 Flashes orange x 5	AUX2 command received.	If the bypass module fails to flash, it did not receive the signal. Commands can come from RF or D2D.
 Flashes orange x 6	AUX3 command received.	If the bypass module fails to flash, it did not receive the signal. Commands can come from RF or D2D.

Shutdown Codes

LED	Description	Troubleshooting
 Flashes green x 1	Takeover successful.	Normal operation.
 Flashes red x 1	Runsafe was not disabled.	No UNLOCK command was received prior to opening the door, or the 45 second timer expired in takeover mode.
 Flashes red x 2	Brake was not detected.	The brakes were not detected, which prevents the system from shutting down the vehicle.
 Flashes red x 3	Smart key was not detected.	The smart key was not detected, which prevents the system from shutting down the vehicle.
 Flashes red x 4	Speed was detected.	The vehicle was detected as moving, which prevents the system from shutting it down.

Soft reset

A module reset will only erase the steps performed in "Module programming". The firmware and settings flashed to the module will not be affected.

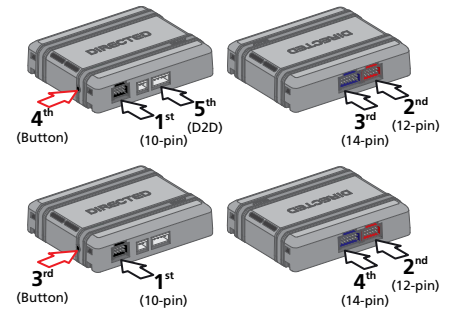
D2D installation

Connect the 10-pin, 12-pin & 14-pin harnesses to the module. **Press and hold** the programming button, then **connect** the 4-pin D2D harness.

1 **OR**

W2W 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.



Hard reset

Warning Against Executing a Hard Reset!

A hard reset will revert the flashed firmware back to its default factory settings. Depending on the installation, some settings (such as RFTD and D2D options) may have to be reconfigured. Refer to "Feature and option list".

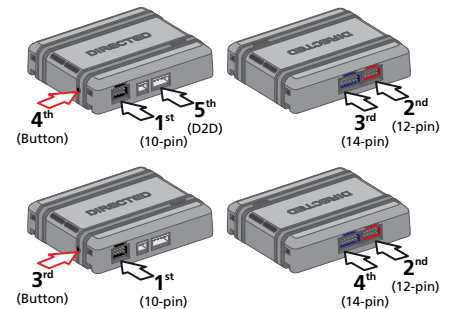
D2D installation

Connect the 10-pin, 12-pin & 14-pin harnesses to the module. **Press and hold** the programming button, then **connect** the 4-pin D2D harness.

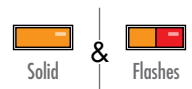
1 **OR**

W2W 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.



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



Feature programming

To enter feature programming routine:

1. **Turn** the ignition ON, then OFF.
2. Within 5 seconds, **press** and **hold** the programming button until the LED turns ON orange (after 3 seconds).
3. **Release** the Programming button.
4. 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 (e.g. 1 x green followed by 1 x red indicates feature 1 is set to option 1). The flashing sequence will repeat until a new command is entered.

Changing feature options:

1. **Press** the lock/arm or unlock/disarm button on aftermarket transmitter to change the option of the selected feature.
2. 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:

1. **Press** and **release** the programming button a number of times to advance from the current feature to the next desired feature.
2. 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.

Exiting feature programming:

To exit feature programming, **press** and **hold** the programming button for 3 seconds or ensure there is no activity on the interface for 30 seconds. The LED will turn ON orange for 2 seconds to confirm the end of the programming sequence.

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 at 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	RFTD Output Type	1. No RF Output*	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	OEM Security Equipped	1. Without OEM alarm*	The hood sensing feature is not available.
		2. With OEM alarm	The hood sensing feature is available.

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.

DBALL/DBALL2-FORD1

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).
<i>f</i> x1 + 	Press <i>f</i> once, then  to activate the rear hatch/tail glass release (optional).*
<i>f</i> x3 + 	Press <i>f</i> 3 times, then  to activate the panic mode.
<i>f</i> x1 + 	Press <i>f</i> once, then  to reset the remote starter runtime.

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

Notes
