



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

Door lock interface and transponder override firmware compatible with Hyundai and Kia vehicles.
No extra relay required!

Note: this document is compatible with firmware version 1.04 and later.



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Vehicle Application Guide

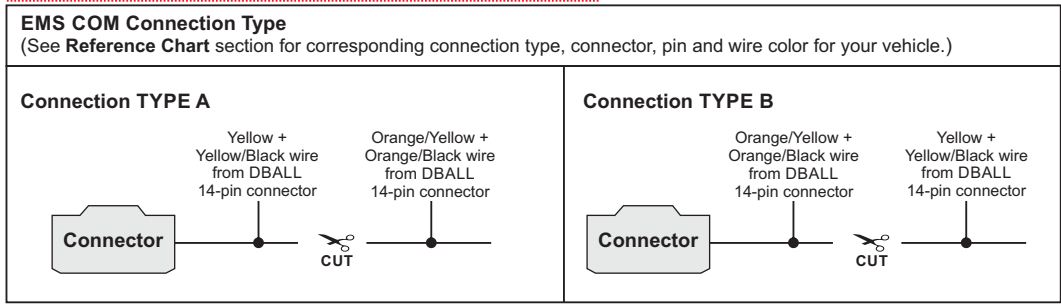
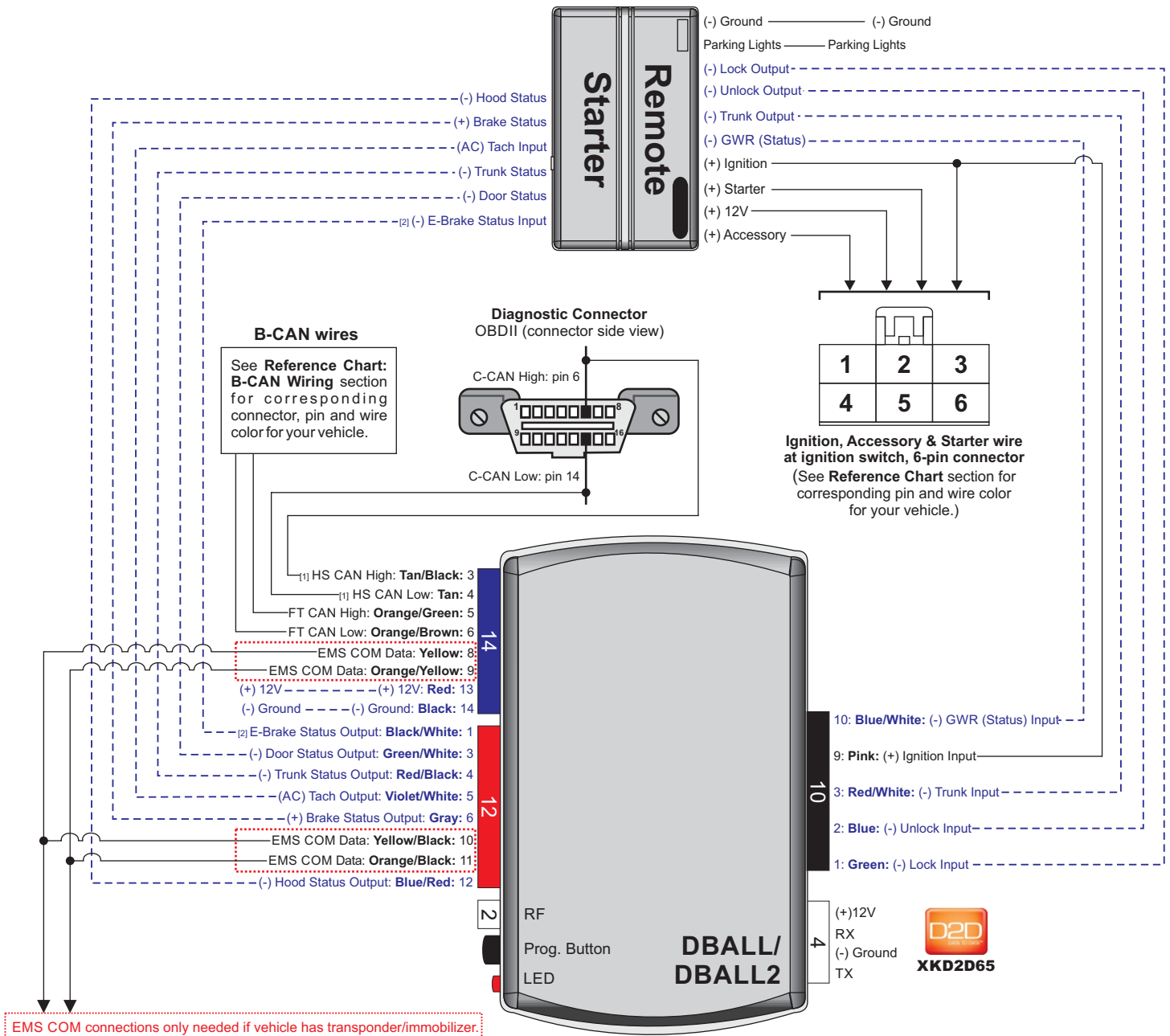
The following table lists the vehicles and features which are compatible with this product. The number assigned to each year allows you to determine which installation type should be used for your vehicle.

Vehicles	2016	2015	2014	2013	2012	2011	2010	2009	2008	PK-Immobilizer Bypass-Data No Key Req'd	DL-Arm Factory Security	DL-Disarm Factory Security	DL-Door Lock Control	DL-Door Unlock	DL-Trunk / Hatch Release	FOB-Control of aftermarket alarm with OEM remote	RS-RAP Shut Down (Retained ACC Power)	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
Hyundai																									
Accent	3	3	3	3	3					•							•								
Accent						2	2	2	2	•							•								
Elantra	1	1	1	1	1	1				•	•	•	•	•	•	D	•	•	•	D	•	•	•	D	•
Elantra							2	2	2	•								•							
Elantra Coupe			1	1						•	•	•	•	•	•	D		•	•	D	•	•	•	D	
Elantra Touring					3	3	3	3		•								•							
Genesis Coupe					2	2	2			•								•							
Santa Fe					3	3	3	3	3	•								•						•	
Sonata			1	1	1	1				•	•	•	•	•	•	D	•	•	•	D	•	•	•	D	•
Sonata							1	1	1	•	•	•	•	•	•	D	•	•	•	D	•	•	•		•
Tucson	1	1	1	1	1	1	1			•	•	•	•	•	•	D	•	•	•	D	•	•	•	D	•
Kia																									
Forte				3	3	3	3			•								•							•
Forte5				3	3	3				•								•							•
Magentis							2	2		•								•							
Optima				1	1	1				•	•	•	•	•	•	D	•	•	•	D	•	•	•	D	•
Optima							2	2	2	•								•							
Rio						2	2	2	2	•								•							
Rondo					3	3	3	3	3	•								•							•
Sorento		2	2	2	2	2				•								•							
Soul				3	3	3	3			•								•							•
Sportage	1	1	1	1	1	1				•	•	•	•	•	•	D	•	•	•	D	•	•	•	D	•
Sportage (4-cylinder)							2	2	2	•								•							
Sportage (V6)							2	2	2	•								•							

Legend:

- DL: OE Door Lock & Alarm Controls
- FOB: Sync CAN Interface w / FOB Remote
- PK: Transponder & Immobilizer Override
- RS: Remote Start & Engine Control
- SS: Integrated Security & Monitoring
- ST: Function/Feature Status

Installation Type 1



----- Not required in D2D mode.


[1] CAN wires MUST be connected for proper operation.

[2] Elantra equipped with manual transmission: Only available when the engine is running.

Unless specified otherwise, all connectors are displayed from the wire side, with the exception of the OBDII diagnostic connector.

Type 1 - Vehicle Wiring Reference Chart

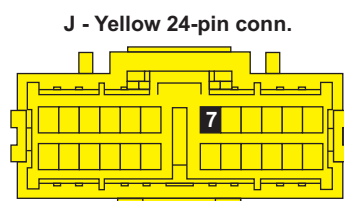
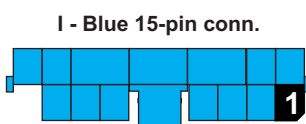
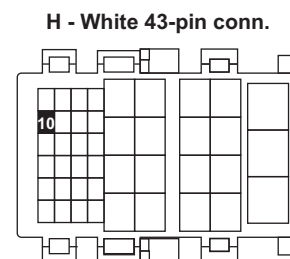
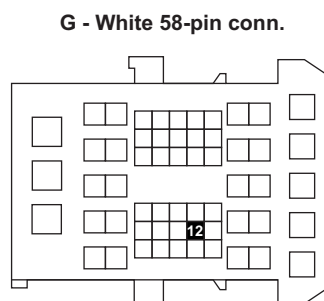
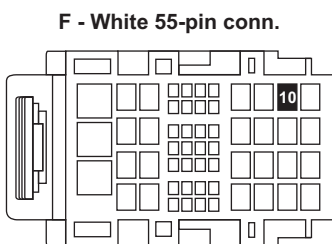
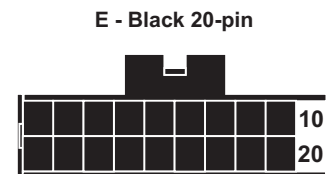
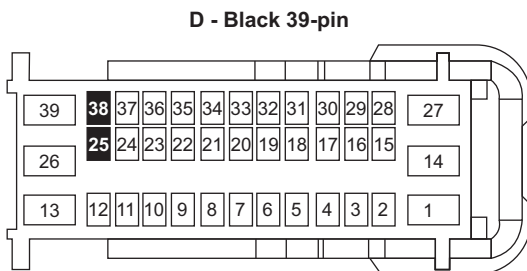
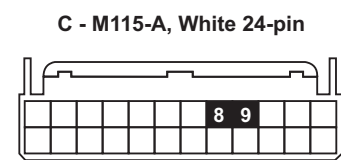
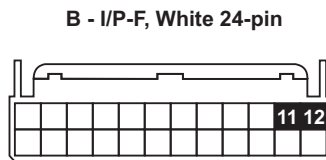
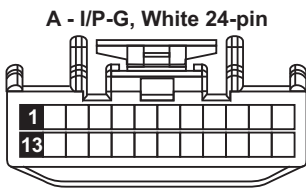
Wire Information				Connector Information		
Function	Color	Pin	Polarity	Location	Color	Pins
Hyundai Elantra 2011-2013						
C-CAN High	White	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Yellow	14	Data	OBDII diagnostic connector.	Black	16
B-CAN High	White/Orange or Brown	13	Data	Junction Box (Rear), I/P-G (A*).	White	24
B-CAN Low	Yellow/Orange or White	1	Data	Junction Box (Rear), I/P-G (A*).	White	24
Accessory	Orange	2	(+)	Ignition switch.	White	6
Ignition	Pink	4	(+)	Ignition switch.	White	6
12V	Green	1	(+)	Ignition switch.	White	6
Starter	Yellow	3	(+)	Ignition switch.	White	6
EMS COM	Blue or Blue/Orange	10	Data	Driver kick panel, EM11 (F*). (Connection Type A [2])	White	55
Hyundai Elantra 2014-2016						
C-CAN High	White	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Yellow	14	Data	OBDII diagnostic connector.	Black	16
B-CAN High	Green or Brown	13	Data	Junction Box (Rear), I/P-G (A*).	White	24
B-CAN Low	Orange or White	1	Data	Junction Box (Rear), I/P-G (A*).	White	24
Accessory	Orange	2	(+)	Ignition switch.	White	6
Ignition	Pink	4	(+)	Ignition switch.	White	6
12V	Green	1	(+)	Ignition switch.	White	6
Starter	Yellow	3	(+)	Ignition switch.	White	6
EMS COM	Blue	12	Data	Driver kick panel, EM11 (G*). (Connection Type A [2])	White	58
Hyundai Elantra Coupe 2013						
C-CAN High	White	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Yellow	14	Data	OBDII diagnostic connector.	Black	16
B-CAN High	White/Orange or Brown	13	Data	Junction Box (Rear), I/P-G (A*).	White	24
B-CAN Low	Yellow/Orange or White	1	Data	Junction Box (Rear), I/P-G (A*).	White	24
Accessory	Orange	2	(+)	Ignition switch.	White	6
Ignition	Pink	4	(+)	Ignition switch.	White	6
12V	Green	1	(+)	Ignition switch.	White	6
Starter	Yellow	3	(+)	Ignition switch.	White	6
EMS COM	Blue	10	Data	Driver kick panel, EM11 (F*). (Connection Type A [2])	White	55
Hyundai Elantra Coupe 2014						
C-CAN High	White	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Yellow	14	Data	OBDII diagnostic connector.	Black	16
B-CAN High	Green or Brown	13	Data	Junction Box (Rear), I/P-G (A*).	White	24
B-CAN Low	Orange or White	1	Data	Junction Box (Rear), I/P-G (A*).	White	24
Accessory	Orange	2	(+)	Ignition switch.	White	6
Ignition	Pink	4	(+)	Ignition switch.	White	6
12V	Green	1	(+)	Ignition switch.	White	6
Starter	Yellow	3	(+)	Ignition switch.	White	6
EMS COM	Blue	10	Data	Driver kick panel, EM11 (F*). (Connection Type A [2])	White	55
Hyundai Sonata 2011-2014						
C-CAN High	White	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Yellow	14	Data	OBDII diagnostic connector.	Black	16
B-CAN High	White/Orange or Blue	12	Data	Junction Box (Rear), I/P-F (B*).	White	24
B-CAN Low	Yellow/Orange	11	Data	Junction Box (Rear), I/P-F (B*).	White	24
Accessory	Orange	2	(+)	Ignition switch.	White	6
Ignition	Pink	4	(+)	Ignition switch.	White	6
12V	Green	1	(+)	Ignition switch.	White	6
Starter	Yellow	3	(+)	Ignition switch.	White	6
EMS COM	Blue or Blue/Black	10	Data	Driver kick panel, EM11 (H*). (Connection Type A [2])	White	43
Hyundai Tucson 2010-2015						
C-CAN High	Green	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Orange	14	Data	OBDII diagnostic connector.	Black	16
B-CAN High	Blue	8	Data	Instrument Cluster, M115-A (C*).	White	24
B-CAN Low	Red	9	Data	Instrument Cluster, M115-A (C*).	White	24
Accessory	Blue	2	(+)	Ignition switch.	White	6
Ignition	Pink	4	(+)	Ignition switch.	White	6
12V	Red	1	(+)	Ignition switch.	White	6
Starter	Green	3	(+)	Ignition switch.	White	6
EMS COM	Blue	1	Data	Driver kick panel, MC41 (I*). (Connection Type B [2])	Blue	15

 *Refer to the next page for a visual representation of each connector.

Type 1 - Vehicle Wiring Reference Chart

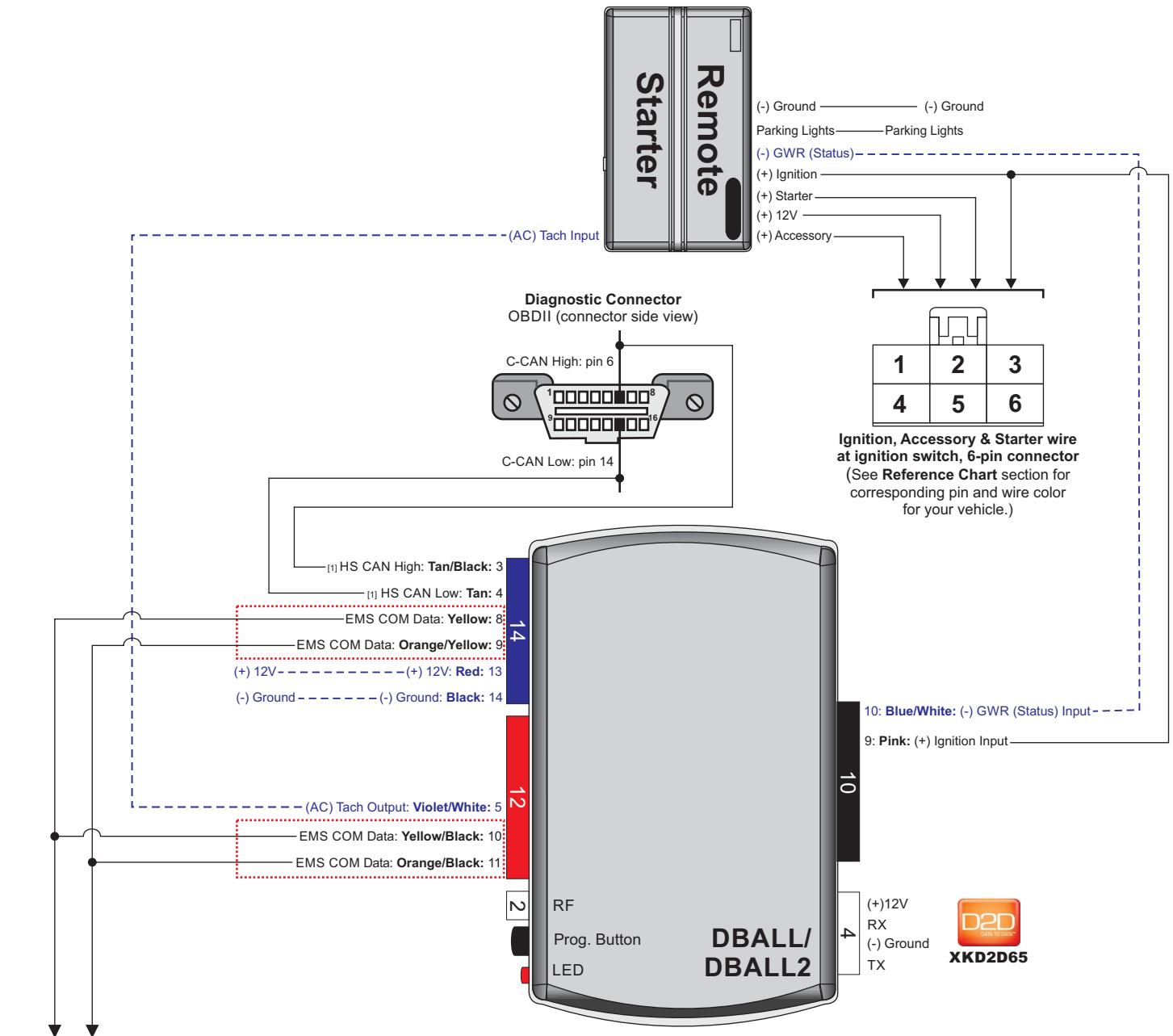
Wire Information				Connector Information		
Function	Color	Pin	Polarity	Location	Color	Pins
Kia Optima 2011-2013						
C-CAN High	White	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Yellow	14	Data	OBDII diagnostic connector.	Black	16
B-CAN High	White/Orange	25	Data	Junction Box (Rear), I/P-E (D*).	Black	39
B-CAN Low	Yellow/Orange	38	Data	Junction Box (Rear), I/P-E (D*).	Black	39
Accessory	Orange	2	(+)	Ignition switch.	White	6
Ignition	Pink	4	(+)	Ignition switch.	White	6
12V	Green	1	(+)	Ignition switch.	White	6
Starter	Yellow	3	(+)	Ignition switch.	White	6
EMS COM	Blue	10	Data	Driver kick panel, EM11 (H*). (Connection Type B [2])	White	43
Kia Sportage 2011-2016						
C-CAN High	Green	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Orange	14	Data	OBDII diagnostic connector.	Black	16
B-CAN High	Blue	20	Data	Junction Box (Right), JM01 (E*).	Black	20
B-CAN Low	Red	10	Data	Junction Box (Right), JM01 (E*).	Black	20
Accessory	Blue	2	(+)	Ignition switch.	White	6
Ignition	Green	4	(+)	Ignition switch.	White	6
12V	Red	1	(+)	Ignition switch.	White	6
Starter	White	3	(+)	Ignition switch.	White	6
EMS COM	Blue	7	Data	Passenger kick panel, MC11 (J*). (Connection Type A [2])	Yellow	24

[2] See EMS COM connection Types on page 3.

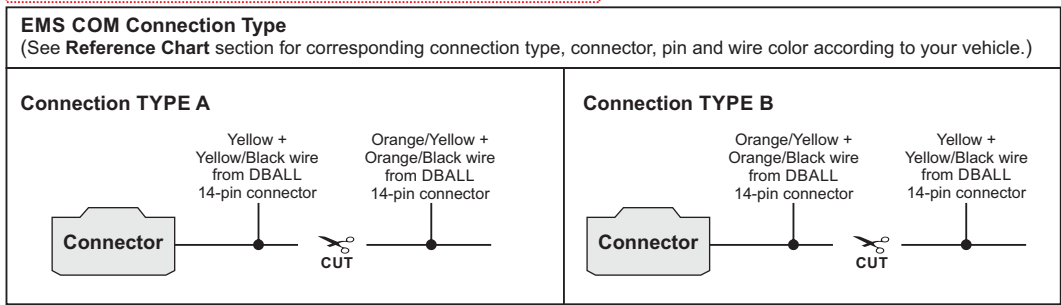


All adapters are displayed from the wire side (unless specified otherwise).

Installation Type 2



EMS COM connections only needed if vehicle has transponder/immobilizer.




----- Not required in D2D mode.

[1] CAN wires MUST be connected for proper operation.

Unless specified otherwise, all connectors are displayed from the wire side, with the exception of the OBDII diagnostic connector.

Type 2 - Vehicle Wiring Reference Chart

Wire Information				Connector Information		
Function	Color	Pin	Polarity	Location	Color	Pins
Hyundai Accent 2008-2011						
C-CAN High	Red	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Blue	14	Data	OBDII diagnostic connector.	Black	16
Accessory	Orange	3	(+)	Ignition switch.	White	6
Ignition	Pink	6	(+)	Ignition switch.	White	6
12V	Green	5	(+)	Ignition switch.	White	6
Starter	White	1	(+)	Ignition switch.	White	6
EMS COM	Blue/Black	15	Data	Left of Junction Box, EM11 (A*). (Connection Type A [2])	Black	39
Hyundai Elantra 2008-2010						
C-CAN High	White	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Yellow	14	Data	OBDII diagnostic connector.	Black	16
Accessory	White or Orange	3	(+)	Ignition switch.	White	6
Ignition	White/Blue or Blue	6	(+)	Ignition switch.	White	6
12V	Black	5	(+)	Ignition switch.	White	6
Starter	Black/Yellow or White	1	(+)	Ignition switch.	White	6
EMS COM	Blue/Black	15	Data	Passenger kick panel, EM11 (B*). (Connection Type B [2])	Gray	39
Hyundai Genesis Coupe 2010-2012						
C-CAN High	Red	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Blue	14	Data	OBDII diagnostic connector.	Black	16
Accessory	Orange	3	(+)	Ignition switch.	White	6
Ignition	Blue	6	(+)	Ignition switch.	White	6
12V	White	5	(+)	Ignition switch.	White	6
Starter	Pink	1	(+)	Ignition switch.	White	6
EMS COM	Yellow	24	Data	Passenger kick panel, EM51 (A*). (Connection Type A [2])	Black	39
Hyundai Sonata 2008-2010						
C-CAN High	White	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Yellow	14	Data	OBDII diagnostic connector.	Black	16
Accessory	Orange	3	(+)	Ignition switch.	White	6
Ignition	Blue	6	(+)	Ignition switch.	White	6
12V	Pink	5	(+)	Ignition switch.	White	6
Starter	Green	1	(+)	Ignition switch.	White	6
EMS COM	Green	23	Data	Driver kick panel, EM21 (C*). (Connection Type B [2])	White	33
Kia Magentis 2009-2010						
C-CAN High	White	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Black	14	Data	OBDII diagnostic connector.	Black	16
Accessory	Black	3	(+)	Ignition switch.	Black	6
Ignition	Green	6	(+)	Ignition switch.	Black	6
12V	Pink	5	(+)	Ignition switch.	Black	6
Starter	Green	1	(+)	Ignition switch.	Black	6
EMS COM	Yellow/Orange	21	Data	Driver kick panel, EM31 (C*). (Connection Type A [2])	White	33
Kia Optima 2008-2010						
C-CAN High	White	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Black	14	Data	OBDII diagnostic connector.	Black	16
Accessory	Black	3	(+)	Ignition switch.	Black	6
Ignition	Green	6	(+)	Ignition switch.	Black	6
12V	Pink	5	(+)	Ignition switch.	Black	6
Starter	Green	1	(+)	Ignition switch.	Black	6
EMS COM	Yellow/Orange	21	Data	Driver kick panel, EM31 (C*). (Connection Type A [2])	White	33
Kia Rio 2008-2011						
C-CAN High	Red	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Blue	14	Data	OBDII diagnostic connector.	Black	16
Accessory	Orange	3	(+)	Ignition switch.	White	6
Ignition	Pink	6	(+)	Ignition switch.	White	6
12V	Green	5	(+)	Ignition switch.	White	6
Starter	White	1	(+)	Ignition switch.	White	6
EMS COM	Blue/Black	15	Data	Right of Junction Box, EM01 (B*). (Connection Type A [2])	Gray	39
Kia Sorento 2011-2013						
C-CAN High	White	6	Data	OBDII diagnostic connector.	Black	16
C-CAN Low	Red	14	Data	OBDII diagnostic connector.	Black	16
Accessory	Blue	2	(+)	Ignition switch.	Black	6
Ignition	Orange	4	(+)	Ignition switch.	Black	6
12V	Red	1	(+)	Ignition switch.	Black	6
Starter	Green	3	(+)	Ignition switch.	Black	6
EMS COM	Blue/Orange or Blue	18	Data	Passenger kick panel, MC21 (D*). (Connection Type B [2])	Green	18

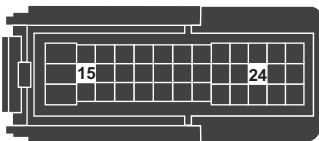
 *Refer to the next page for a visual representation of each connector.

Type 2 - Vehicle Wiring Reference Chart

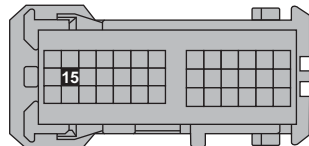
Wire Information				Connector Information			
Function	Color	Pin	Polarity	Location	Color	Pins	
Kia Sorento 2014-2015							
C-CAN High	White	6	Data	OBDII diagnostic connector.	Black	16	
C-CAN High	Red	14	Data	OBDII diagnostic connector.	Black	16	
Accessory	Blue	2	(+)	Ignition switch.	Black	6	
Ignition	Orange	4	(+)	Ignition switch.	Black	6	
12V	Red	1	(+)	Ignition switch.	Black	6	
Starter	Green	3	(+)	Ignition switch.	Black	6	
EMS COM	Blue/Orange	15	Data	Driver kick panel, EM11 (E*). (Connection Type B [1])	Black	46	
Kia Sportage (4-cylinder) 2008-2010							
C-CAN High	Green	6	Data	OBDII diagnostic connector.	Black	16	
C-CAN High	Orange	14	Data	OBDII diagnostic connector.	Black	16	
Accessory	Orange	3	(+)	Ignition switch.	Black	6	
Ignition	Blue	6	(+)	Ignition switch.	Black	6	
12V	White	5	(+)	Ignition switch.	Black	6	
Starter	Green	1	(+)	Ignition switch.	Black	6	
EMS COM	Blue/Black	14	Data	Passenger kick panel, MC01 (F*). (Connection Type B [1])	Brown	23	
Kia Sportage (V6) 2008-2010							
C-CAN High	Orange	6	Data	OBDII diagnostic connector.	Black	16	
C-CAN High	Green	14	Data	OBDII diagnostic connector.	Black	16	
Accessory	Orange	3	(+)	Ignition switch.	Black	6	
Ignition	Blue	6	(+)	Ignition switch.	Black	6	
12V	White	5	(+)	Ignition switch.	Black	6	
Starter	Green	1	(+)	Ignition switch.	Black	6	
EMS COM	Brown/Orange	7	Data	Passenger kick panel, MC11 (G*). (Connection Type B [1])	Yellow	24	

[1] See EMS COM connection Types on page 6.

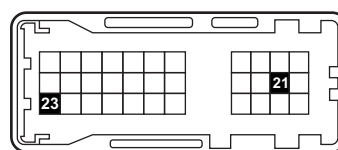
A - Black 39-pin conn.



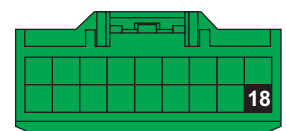
B - Gray 39-pin conn.



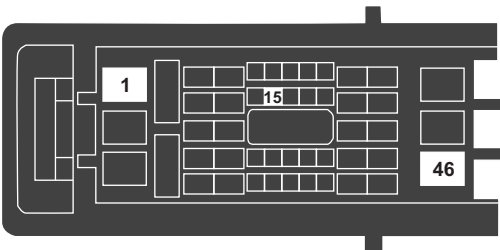
C - White 33-pin conn.



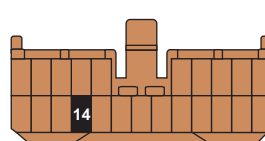
D - Green 18-pin conn.



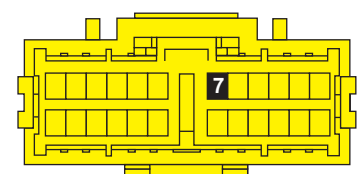
E - Black 46-pin conn.



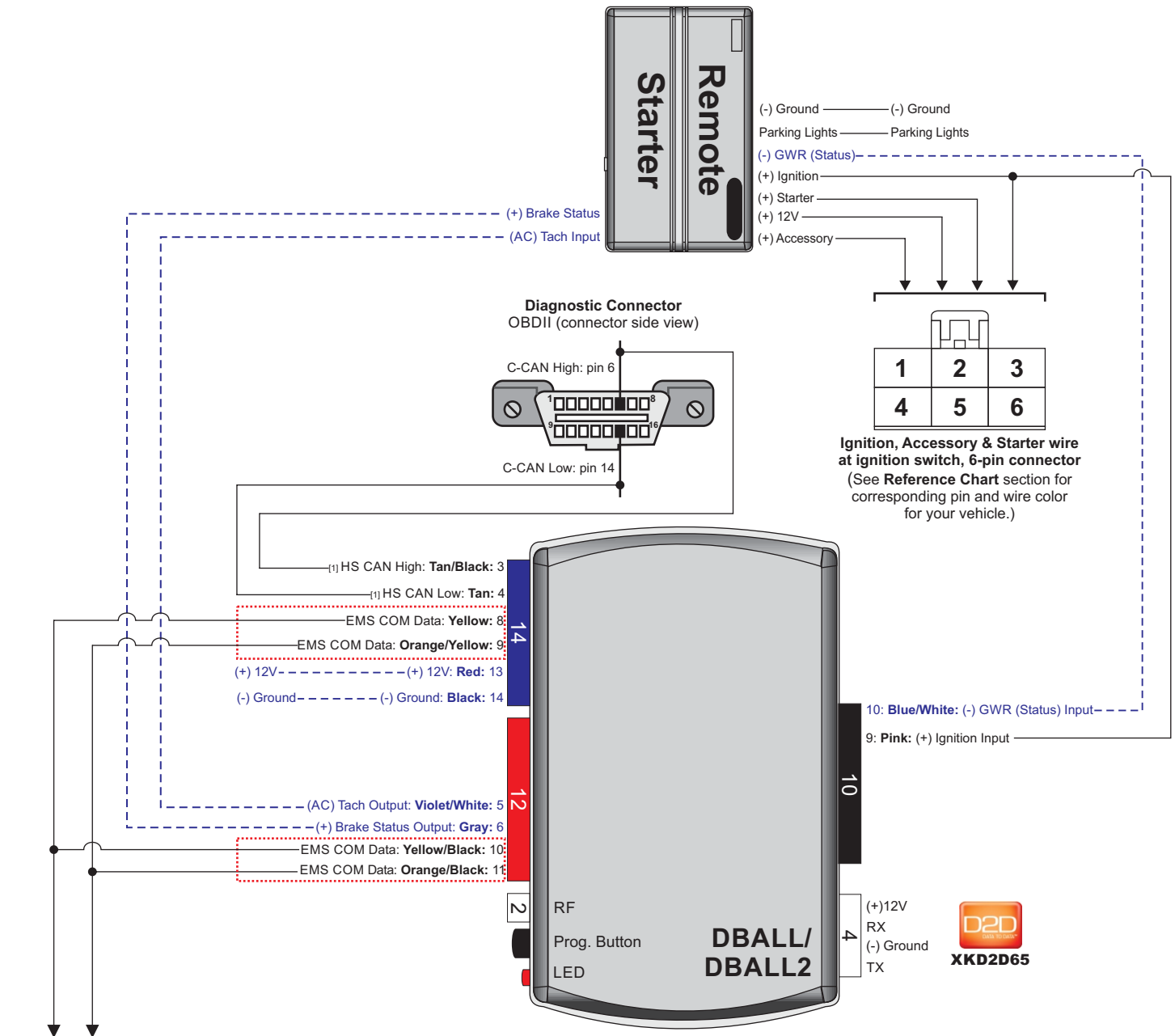
F - Brown 23-pin conn.



G - Yellow 24-pin conn.



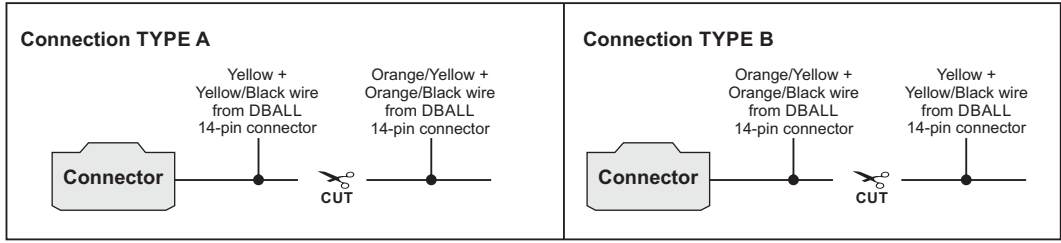
Installation Type 3



EMS COM connections only needed if vehicle has transponder/immobilizer.

EMS COM Connection Type

(See Reference Chart section for corresponding connection type, connector, pin and wire color for your vehicle.)



----- Not required in D2D mode.


[1] CAN wires MUST be connected for proper operation.

⚠ Unless specified otherwise, all connectors are displayed from the wire side, with the exception of the OBDII diagnostic connector.

Type 3 - Vehicle Wiring Reference Chart

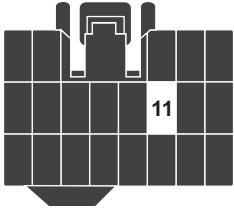
Wire Information				Connector Information		
Function	Color	Pin	Polarity	Location	Color	Pins
Hyundai Accent 2012-2016						
C-CAN High	Green	6	Data	OBDDII diagnostic connector.	Black	16
C-CAN Low	Orange	14	Data	OBDDII diagnostic connector.	Black	16
Accessory	Orange	2	(+)	Ignition switch.	Black	6
Ignition	Pink	4	(+)	Ignition switch.	Black	6
12V	Green	1	(+)	Ignition switch.	Black	6
Starter	White	3	(+)	Ignition switch.	Black	6
EMS COM	Blue/Orange	11	Data	Left of Junction Box, EM01 (A*). (Connection Type B [1])	Black	21
Hyundai Elantra Touring 2009-2012						
C-CAN High	White	6	Data	OBDDII diagnostic connector.	Black	16
C-CAN Low	Yellow	14	Data	OBDDII diagnostic connector.	Black	16
Accessory	Pink	3	(+)	Ignition switch.	White	6
Ignition	Blue	6	(+)	Ignition switch.	White	6
12V	Orange	5	(+)	Ignition switch.	White	6
Starter	White	1	(+)	Ignition switch.	White	6
EMS COM	Blue/Black	15	Data	Passenger kick panel, EM11 (B*). (Connection Type B [1])	Gray	39
Hyundai Santa Fe 2008-2012						
C-CAN High	Red/Black or Blue	6	Data	OBDDII diagnostic connector.	Black	16
C-CAN Low	Red or Orange	14	Data	OBDDII diagnostic connector.	Black	16
Accessory	Red or Blue	3	(+)	Ignition switch.	Black	6
Ignition	Orange	6	(+)	Ignition switch.	Black	6
12V	Red	5	(+)	Ignition switch.	Black	6
Starter	Green	1	(+)	Ignition switch.	Black	6
EMS COM	White/Orange or White or Red	19	Data	Passenger kick panel, MC211 (C*). (Connection Type A [1])	Blue	24
Kia Forte 2010-2013						
C-CAN High	Black	6	Data	OBDDII diagnostic connector.	Black	16
C-CAN Low	White	14	Data	OBDDII diagnostic connector.	Black	16
Accessory	Orange	3	(+)	Ignition switch.	Black	6
Ignition	Blue	6	(+)	Ignition switch.	Black	6
12V	Black	5	(+)	Ignition switch.	Black	6
Starter	White	1	(+)	Ignition switch.	Black	6
EMS COM	Blue/Black	15	Data	Passenger kick panel, MC12 (B*). (Connection Type B [1])	Gray	39
Kia Forte5 2011-2013						
C-CAN High	Black	6	Data	OBDDII diagnostic connector.	Black	16
C-CAN Low	White	14	Data	OBDDII diagnostic connector.	Black	16
Accessory	Orange	3	(+)	Ignition switch.	Black	6
Ignition	Blue	6	(+)	Ignition switch.	Black	6
12V	Black	5	(+)	Ignition switch.	Black	6
Starter	White	1	(+)	Ignition switch.	Black	6
EMS COM	Blue/Black	15	Data	Passenger kick panel, MC12 (B*). (Connection Type B [1])	Gray	39
Kia Rondo 2008-2012						
C-CAN High	Red	6	Data	OBDDII diagnostic connector.	Black	16
C-CAN Low	Blue	14	Data	OBDDII diagnostic connector.	Black	16
Accessory	White or Pink	3	(+)	Ignition switch.	Black	6
Ignition	White/Blue or Blue	6	(+)	Ignition switch.	Black	6
12V	Red or Pink	5	(+)	Ignition switch.	Black	6
Starter	Black/Yellow or Green	1	(+)	Ignition switch.	Black	6
EMS COM	Brown	18	Data	Driver kick panel, EM11 (D*). (Connection Type B [1])	Blue	42
Kia Soul 2010-2013						
C-CAN High	Red	6	Data	OBDDII diagnostic connector.	Black	16
C-CAN Low	Blue	14	Data	OBDDII diagnostic connector.	Black	16
Accessory	White	3	(+)	Ignition switch.	Black	6
Ignition	Pink	6	(+)	Ignition switch.	Black	6
12V	White	5	(+)	Ignition switch.	Black	6
Starter	Blue	1	(+)	Ignition switch.	Black	6
EMS COM	Blue/Black	10	Data	Above driver kick panel, EM11 (E*). (Connection Type B [1])	Blue	39

[1] See EMS COM connection Types on page 9.

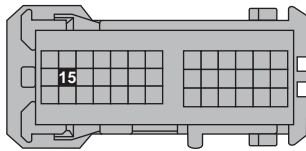
 *Refer to the next page for a visual representation of each connector.

Type 3 - Vehicle Wiring Reference Chart

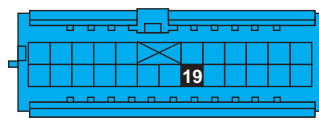
A - Black 21-pin conn.



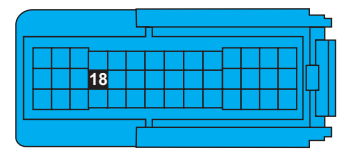
B - Gray 39-pin conn.



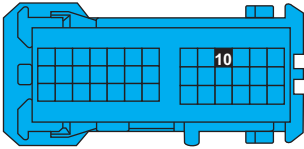
C - Blue 24-pin conn.




D - Blue 42-pin conn.



E - Blue 39-pin conn.




 All adapters are displayed from the wire side (unless specified otherwise).

Type 1: Module Programming

 Refer to the LED Diagnostics section on page 16 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.

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

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.

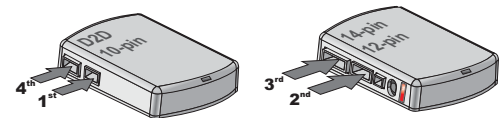
Flashing a module using your smartphone or tablet

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 programming instructions below.

D2D Installation

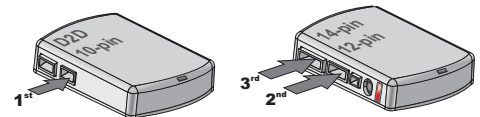
If required for your installation, connect the 10-pin, 12-pin and 14-pin harnesses to the module, then connect the 4-pin D2D harness.



OR

W2W Installation

If required for your installation, connect the 10-pin and 12-pin harnesses to the module, then connect the 14-pin harness to the module.



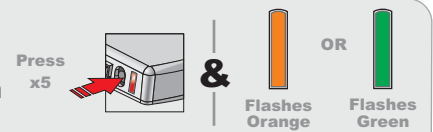
- 1 Wait until the LED turns ON solid red.
Note: To skip the transponder programming and use convenience features only, press the programming button 5 times. The LED will turn orange then proceed to step 2.



- 2 Turn the key to the ON position. The LED flashes green once.



- 3 The LED flashes orange slowly to indicate the bypass is being programmed (After 2 minutes, if the unit did not program, the LED will start flashing green for another 2 minutes maximum).



If the vehicle doesn't have a transponder, the LED flashes red 3 times. Press the programming button 5 times to skip the transponder programming.



- 4 The LED turns ON solid green for 3 seconds then shuts off when the transponder will be programmed.

- 4 **If the transponder programming has been skipped**, the LED turns ON solid orange for 3 seconds then shuts off when programming is done.



- 5 Turn the key to the OFF position and remove it from the ignition.




You have successfully completed the module programming sequence.

Types 2 & 3: Module Programming

 Refer to the LED Diagnostics section on page 16 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.

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

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.

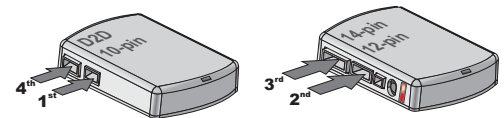
Flashing a module using your smartphone or tablet

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 programming instructions below.

D2D Installation

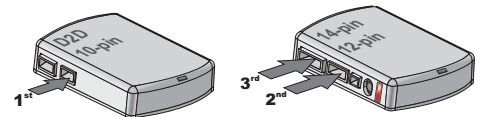
If required for your installation, connect the 10-pin, 12-pin and 14-pin harnesses to the module, then connect the 4-pin D2D harness.



OR

W2W Installation

If required for your installation, connect the 10-pin and 12-pin harnesses to the module, then connect the 14-pin harness to the module.



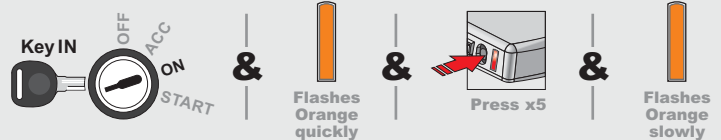
1 Wait until the LED turns ON solid red.

Note: To skip the transponder programming and use convenience features only, press the programming button 5 times. The LED will turn orange then proceed to step 2.



2 Turn the key to the ON position.

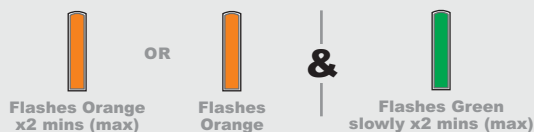
Installation Type 2 & Type 3 ONLY:
Wait for the LED to flash orange quickly, press then programming button 5 times, the Led will then flash orange slowly.



Vehicle with transponder:

The Led flashes orange slowly (flashing at 1 second rate) to indicate the bypass is being programmed. (Depending on your vehicle, it may take up to 4 minutes to complete programming. After 2 minutes, the Led will start flashing green slowly for another 2 minutes maximum).

3



Vehicle without transponder:

The Led will start flashing red 3 times. Press the programming button 5 times to skip the transponder programming.

3



Go to the next page to complete the module programming. 

4

When complete, the LED turns ON solid green for 3 seconds then shuts OFF, module is now programmed.



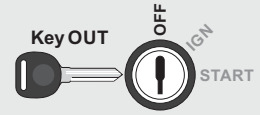
4

The LED turns ON solid orange for 3 seconds then shuts OFF when programming is done.



5

Turn the key to the OFF position and remove it from the ignition.

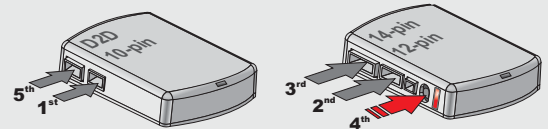


Module Reset

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.

D2D Installation

If required for your 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.

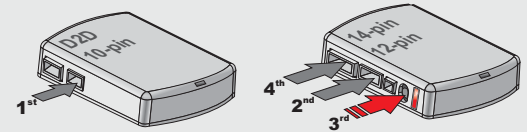


1

OR

W2W Installation

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 then turns ON solid red.



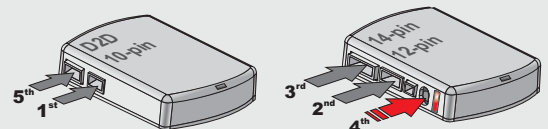
Hard Reset

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

D2D Installation

If required for your 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.

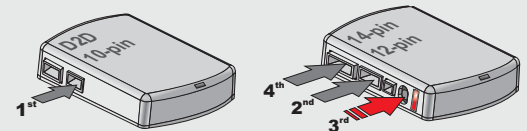


1

OR

W2W Installation

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 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 & Option List

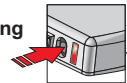
It is recommended to configure all the features and options listed below using the configuration tool found on the module flashing page on www.directechs.com. The web offers more options; however, manual configuration of the features is possible using the information on this page.

* Default Option

Feat.	Operation	Flashes/Option	Description
1	RF Output	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	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	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. 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.
- 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 & Troubleshooting

LED	Description	Troubleshooting
Module Programming		
 Off	Module has no power.	Make sure the D2D harness is connected or that the 12 Volt is present between the red and black wires. If the 12 Volt is present, the module may be defective.
 Solid red	Waiting for the vehicle ignition to turn ON.	Make sure that all the connections are correct (see wiring diagram) and press the Push-to-Start (PTS) button twice to turn the vehicle ignition ON and begin the programming sequence.
 Flashes green and red	Initialisation 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.
 Solid orange x3 sec.	Sequence successfully programmed.	Module successfully programmed without bypass.
 Flashes red	Timeout occurred during programming.	A timeout can occur if: -the bypass has not been detected in the allotted time -the VIN of the vehicle was needed and hasn't been detected. Verify your connections, reset the module and try to program again.
 Flashes green	B-CAN & C-CAN successfully detected.	Normal operation.
 Flashes orange	Only B-CAN has been detected.	Might be normal operation. Refer to Installation section to confirm.
 Solid green x3 sec.	Module programmed successfully.	Normal operation.
Module Programming - Error codes		
 Flashes red x 1	HS CAN not detected.	Check the B-CAN Tan - Tan/Black wire connections. Turn the ignition on to wake up data bus and retry.
 Flashes red x 2	FT CAN not detected.	Check the C-CAN Orange/Green - Orange/Brown wire connections. Turn the ignition on to wake up data bus and retry.
 Flashes red x 3	Bypass data not detected.	Check the bypass line connection. If more than one wire is used, make sure that they are not inverted.
External Module Synchronisation		
 Flashes red, red, orange	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	Ground out (GWR) is active.	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	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	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 x1	Lock command received.	If it does not flash, the bypass module did not receive the signal. Verify the connections between the bypass and the remote starter module. Commands can come from RF, D2D or W2W.
 Flashes orange x2	Unlock command received.	
 Flashes orange x3	Trunk command received.	

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 its 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.

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
