



**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 and Electronic Ignition Interface Audi vehicles. Features include trunk release, comfort closure, door locks, fuel door release, turn signals, door trigger sensing, hood pin, trunk/hatch, ignition and tach output.

 One universal transponder bypass module and one factory programmed key is required to install a remote starter.



**Audi**

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## 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	2012	2011	2010	2009	2008	2007	2006	2005	AV-Turn Signal ON/OFF Control	CC-Comfort Closure windows	DL-Arm Factory Security	DL-Disarm Factory Security	DL-Door Lock Control	DL-Door Unlock	DL-Fuel Door Release	DL-Trunk / Hatch Release	FOB-Control of aftermarket alarm with OEM remote	KI-Push To Start Ign Sw Interface	PK-Push To Start Ignition Compatible	RS-SmartStart	RS-Tach / RPM Output	SS-Entry Monitoring ALL Door Pins	SS-Entry Monitoring Driver Door Pin	SS-Entry Monitoring Hood Pin	SS-Entry Monitoring Trunk/Hatch Pin	ST-Brake Status (foot brake)	ST-E-Brake Status		
<b>Audi</b>																																
A6					•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	D	•	D	D	•	D	W	D	D	•	D	
Q7	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	D	•	D	D	•	D	W	D	D	•	D
RS6					•	•	•	•				•	•	•	•	•	•	•	•	•	•	D	•	D	D	•	D	W	D	D	•	D
S6					•	•	•	•	•	•		•	•	•	•	•	•	•	•	•	•	D	•	D	D	•	D	W	D	D	•	D

**Legend:**

- AV: Horn & Lights Controls
- CC: Comfort & Convenience Controls
- DL: OE Door Lock & Alarm Controls
- FOB: Sync CAN Interface w/ FOB Remote
- KI: Ignition Key Sw itch Interface
- PK: Transponder & Immobilizer Override
- RS: Remote Start & Engine Controls

## A NOTE REGARDING CLIMATE CONTROLS

Audi climate controls are key memory sensitive. This means that the last key used to operate the vehicle will determine the setting for the climate controls. In order to make changes to environment control settings, the following procedure is necessary:

- 1) Remote start the vehicle
- 2) Make your climate control adjustments, ensuring NOT to use the AUTO mode on the control head as this makes the Audi adjust its HVAC settings based on external factors such as engine temperature.
- 3) When the adjustments are complete, turn off the car started, either by remote or footbrake.

This will ensure the climate controls function as the customer desires them too.

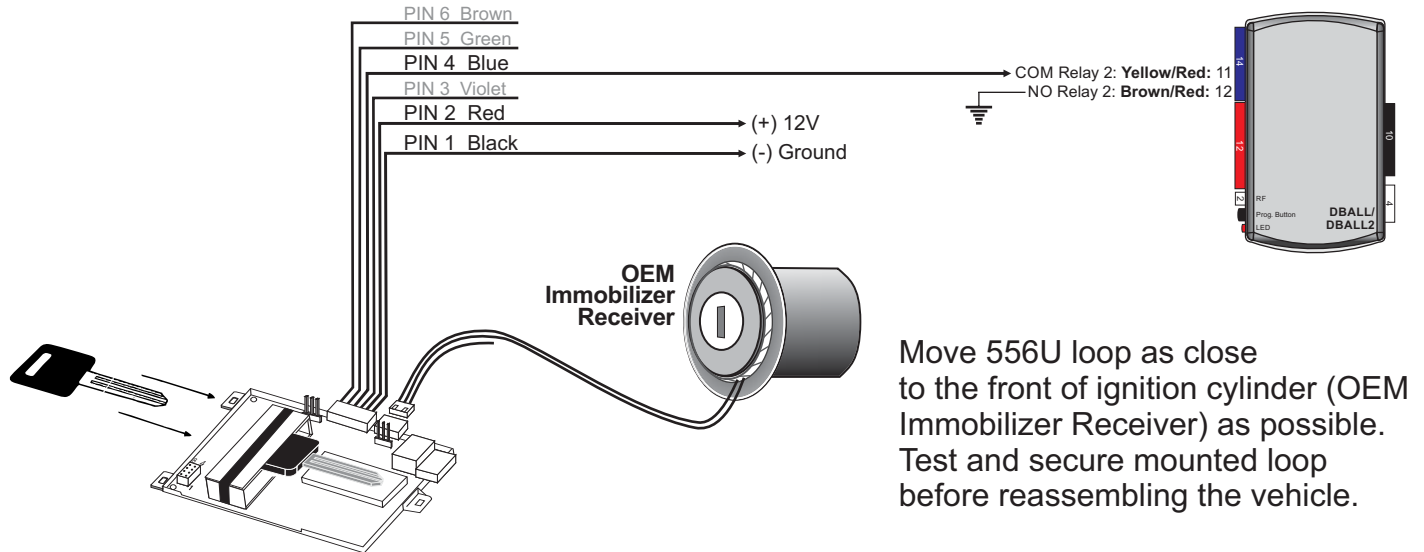
## Immobilizer interface



**For vehicles with Keyless Entry you must remove battery from OEM key (your OEM remote may differ from the models shown in the illustrations).**

### Method 1: Immobilizer interface with 556U (Regular Key)

556U or 556UW is sold SEPARATELY.

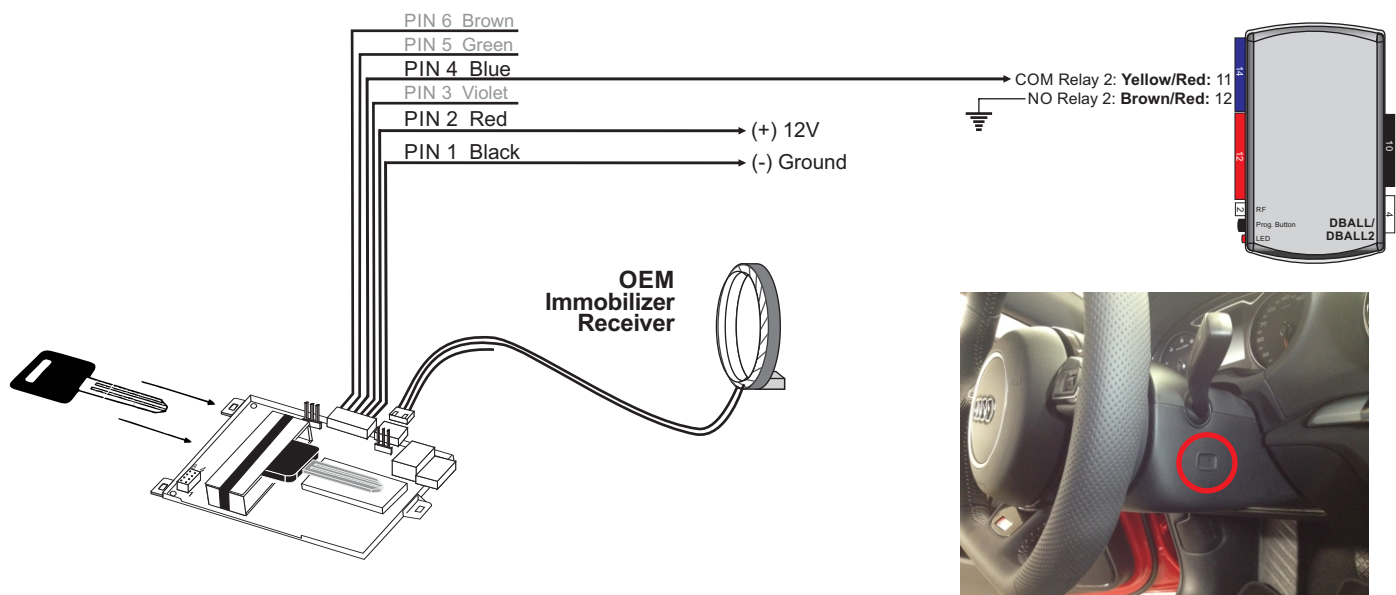


**IMPORTANT!:** Not all OEM keys can be inserted in 556U because of their size.

Make sure the key will fit, otherwise it is recommended to use a different method.

### Method 2: Immobilizer interface with 556U (PTS)

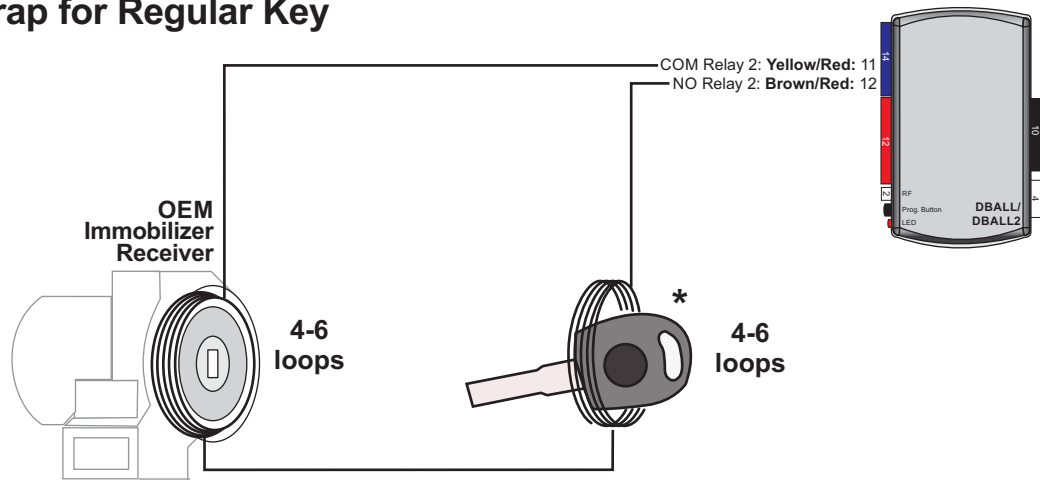
556U or 556UW is sold SEPARATELY.



**IMPORTANT!:** Not all OEM keys can be inserted in 556U because of their size.

Make sure the key will fit, otherwise it is recommended to use a different method.

### Method 3: Key wrap for Regular Key

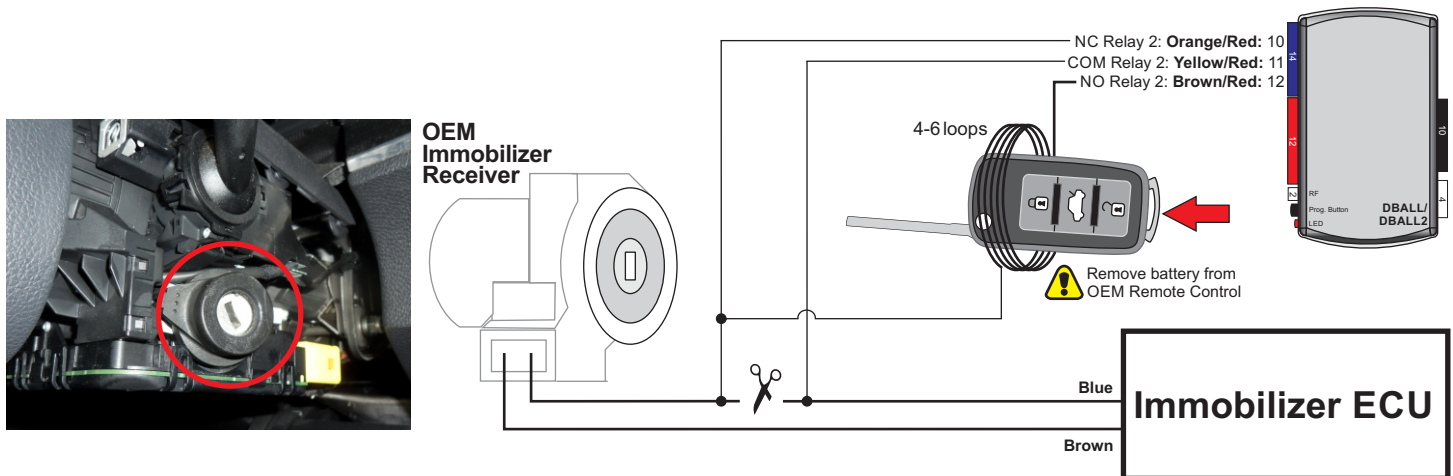


**NOTE:**

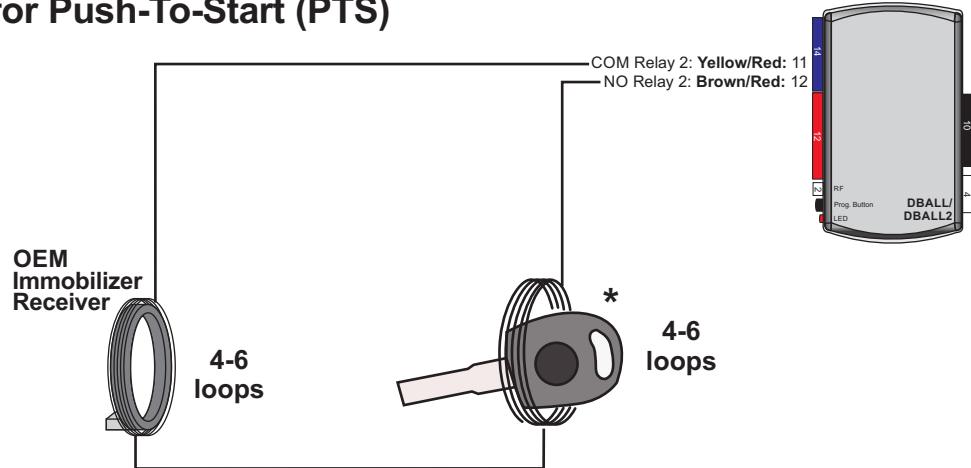
- Make 4-6 loops and place them as close to the front of ignition cylinder (OEM Immobilizer Receiver) as possible.
- Make 4-6 loops and place them around the front of the plastic body of the vehicle's coded key as shown above.
- Test and secure mounted loops before reassembling the vehicle.

\* When possible use valet key for key wrap, if blade key is used, battery must be removed.

### Method 4: Key wrap for Regular Key - Alternate



## Method 5: Key wrap for Push-To-Start (PTS)

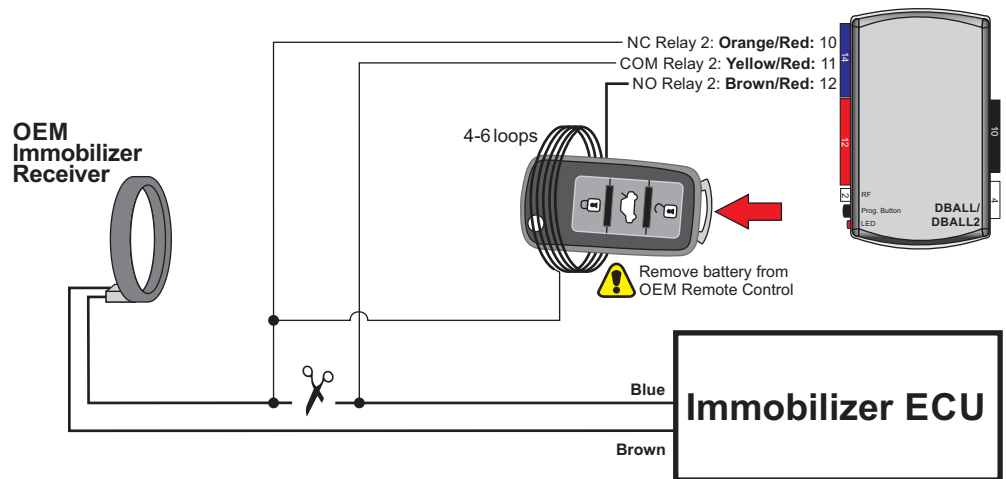


**NOTE:**

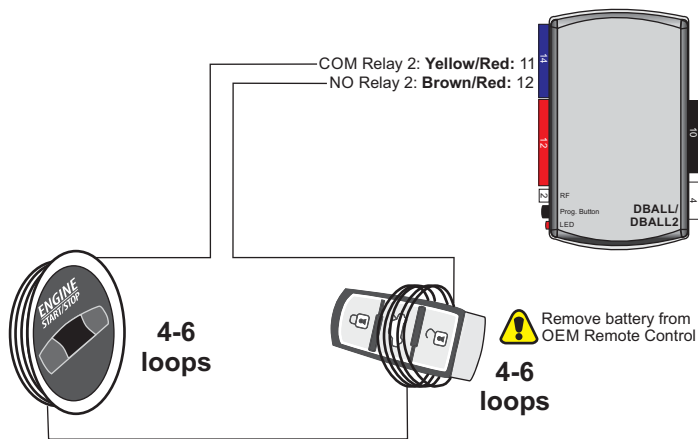
- Make 4-6 loops and place them as close to the front of the OEM Immobilizer Receiver as possible.
- Make 4-6 loops and place them around the front of the plastic body of the vehicle's coded key as shown above.
- Test and secure mounted loops before reassembling the vehicle.

\* When possible use valet key for key wrap, if blade key is used, battery must be removed.

## Method 6: Key wrap for Push-To-Start (PTS) - Alternate



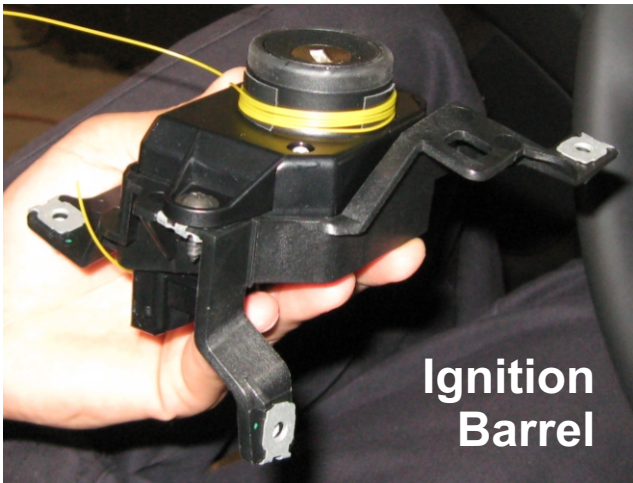
## Method 7: Key wrap for Key Port



### NOTE:

- Make 4-6 loops and place them as close to the front of ignition cylinder (OEM Immobilizer Receiver) as possible.
- Make 4-6 loops and place them in between trunk and unlock button of the plastic body of the vehicle's coded key as shown above.
- Test and secure mounted loops before reassembling the vehicle.

## Ignition Barrel Disassembly

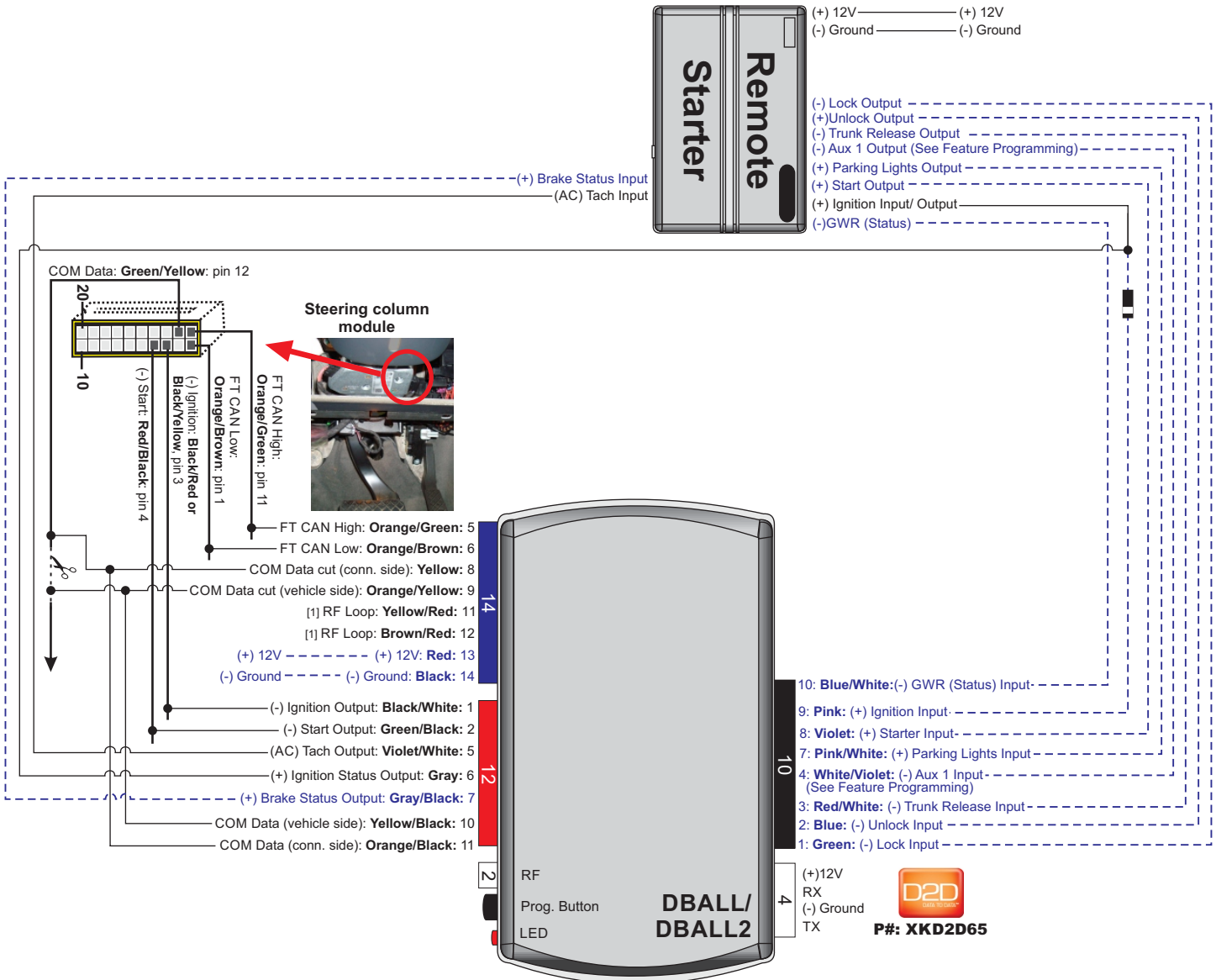


## Wiring Diagram - Automatic Transmission



**Important!**

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



Remote Start menu feature "Diesel Start Delay" must be set to Wait to Start with a minimum 10 seconds to be remote started successfully. This feature must be set **for both gas or diesel** vehicles.  
All doors, hood and trunk must be closed for the vehicle to be remote started successfully.

---- Not required in D2D mode.

[1] For Key Wrap instruction refer to Immobilizer Interface pages.

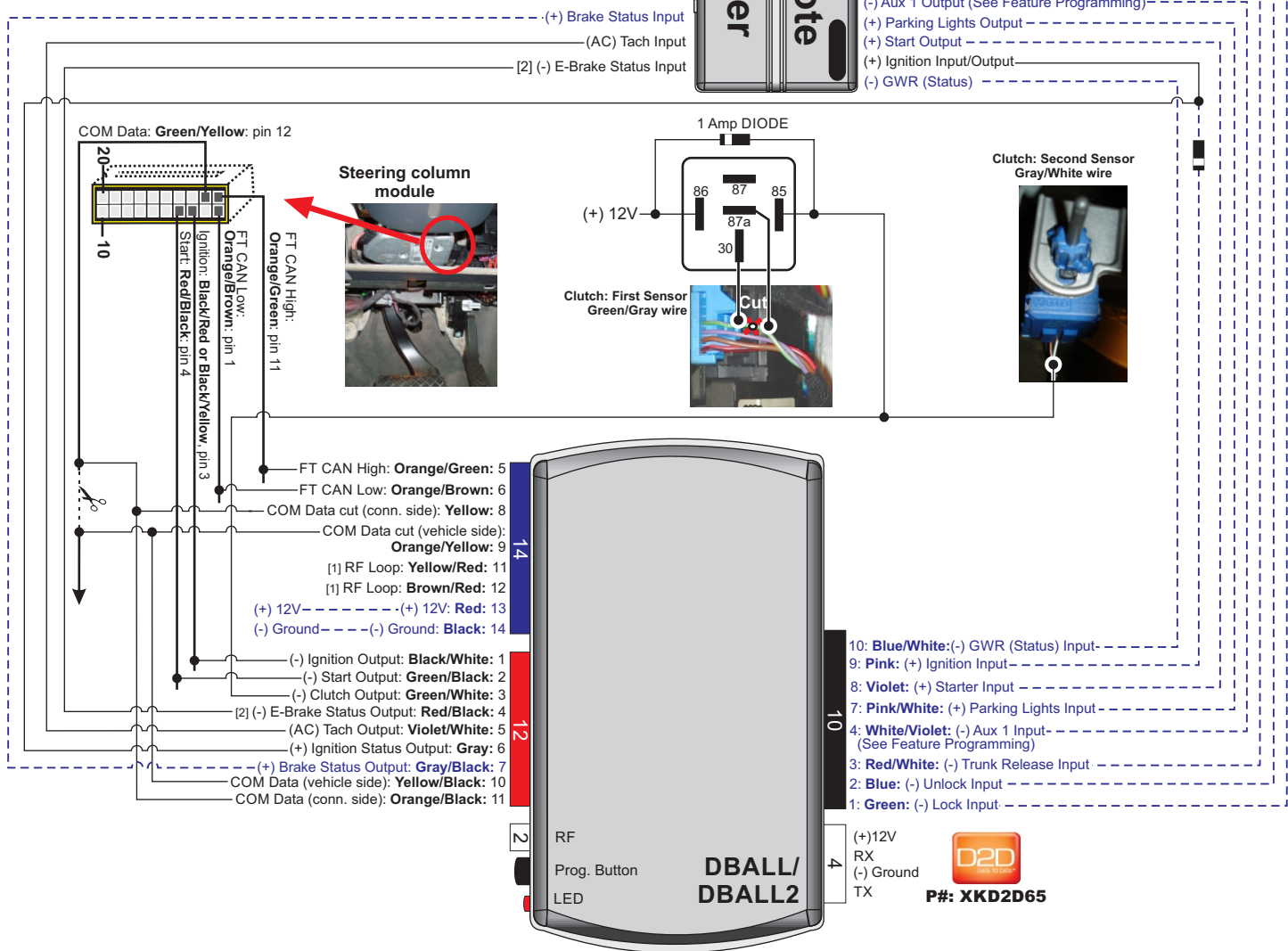
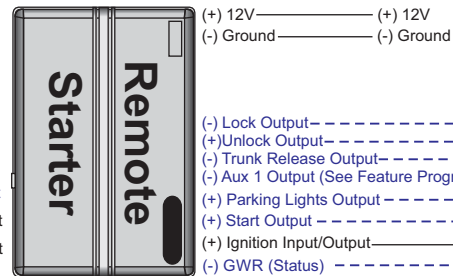


Wires are listed by pin numbers. This display is not representative of connector pin layouts, which are often stacked.



# Wiring Diagram - Manual Transmission

**!** E-Brake Status Output is not available on Audi Q7. You must connect the E-Brake Status Input from Remote Starter to E-Brake Switch.



**!** Remote Start menu feature "Diesel Start Delay" must be set to Wait to Start with a minimum 10 seconds to be remote started successfully. This feature must be set **for both gas or diesel** vehicles. All doors, hood and trunk must be closed for the vehicle to be remote started successfully.


----- Not required in D2D mode.

[1] For Key Wrap instruction refer to Immobilizer Interface pages.

[2] Manual transmission only, E-Brake Status Output is not available on Audi Q7. You must connect the E-Brake Status Input from Remote Starter to E-Brake Switch.


**!** Wires are listed by pin numbers. This display is not representative of connector pin layouts, which are often stacked.

## Module Programming

 Refer to the LED Diagnostics section for more information and for troubleshooting purposes.

### Important

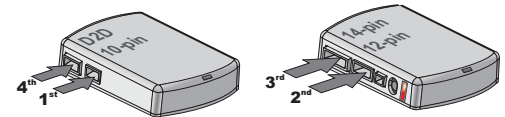
Make all the required connections to the vehicle, as described in the wiring diagram(s) found in this guide, and double check to ensure everything is correct prior to moving onto the next step.

 **Warning!** To take advantage of advanced features, you must use XpressVIP 4.5 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](http://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 **Flash Standard install**, 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.

### D2D Installation

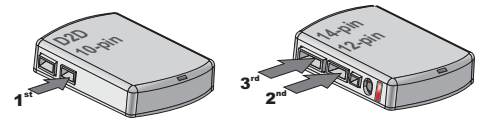
If required for your installation, connect the 10-pin, 12-pin and 14-pin harnesses to the module, then connect the 4-pin D2D harness.



### OR

### W2W Installation

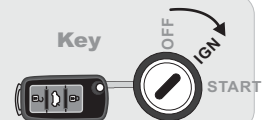
If required for your installation, connect the 10-pin and 12-pin harnesses to the module, then connect the 14-pin harness to the module.



- 1** Wait until the LED turns ON solid red.



- 2** Turn the ignition ON.



- 3** The green LED turns ON for 3 seconds and shuts off.



- 4** Turn the ignition OFF.



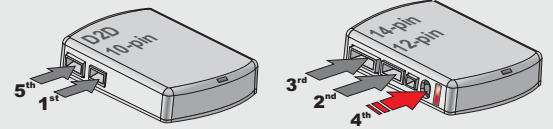
You have successfully completed the module programming sequence.

## 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.

### D2D Installation

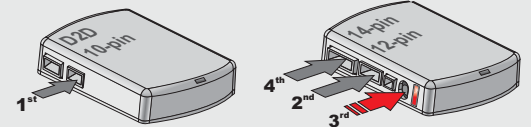
If required for your installation, connect the 10-pin, 12-pin & 14-pin harnesses to the module. Press and hold the programming button, then connect the 4-pin D2D harness.



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.



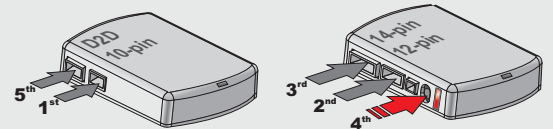
## Hard Reset

### 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

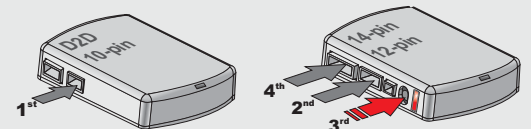
If required for your installation, connect the 10-pin, 12-pin & 14-pin harnesses to the module. Press and hold the programming button, then connect the 4-pin D2D harness.



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, 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 & Option List

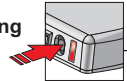
It is recommended to configure all the features and options listed below using the configuration tool found on the module flashing page on [www.directechs.com](http://www.directechs.com). The web offers more options; however, manual configuration of the features is possible using the information on this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

\* Default Option

GNMB	Operation	Flashes / Option	Description
1	RFTD Output Type	<b>1. No RF Output*</b>	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	Comfort Closure with Lock	<b>1. Disabled*</b>	No action.
		2. Enabled for Windows	Module will perform windows roll up upon lock command.
		3. Enabled for Windows and Sunroof	Module will perform windows roll up and close sunroof upon lock command.
3	Light Control	<b>1. Flashing*</b>	Module will flash the turn markers every 30 seconds.
		2. Disabled	Module will not perform control light flashing. Use remote starter to control parking lights.
4	Vehicle Takeover	1. Disabled	Engine shuts down when door opens.
		<b>2. Enabled*</b>	Takeover is activated for 45 seconds after pressing unlock button on aftermarket remote.

## 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	Status	Description	Troubleshooting
<b>Module Programming</b>			
	Off	Module has no power.	Check the power connections.
	Solid red	Module is powered. Waiting for programming to begin.	Check if the ignition input is properly connected.
	Flashing green continuously	Module has detected IGN ON. Waiting for VIN information.	The CAN wires may be incorrectly connected. Refer to the wiring diagram to make the right connections.
	Solid green for 3 seconds	Module was successfully programmed with transponder.	Normal operation
<b>Module Programming - Error codes</b>			
	Flashes red x 1	FT CAN not detected.	The CAN wires may be incorrectly connected. Refer to the wiring diagram to make the right connections.
	Flashes red x 9	Invalid CAN network.	The CAN wires was detected but the ignition message on CAN is not detected. Check if the firmware is correct
	Flashes red x 11	Internal error	Report issue to technical suport.
<b>External Module Synchronisation</b>			
	Flashes red, red, 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.
<b>Active Ground While Running</b>			
	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	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.
<b>D2D and W2W Commands</b>			
	Flashes orange x 1	LOCK command received.	Normal operation
	Flashes orange x 2	UNLOCK command received.	
	Flashes orange x 3	TRUNK command received.	
	Flashes orange x 4	AUX1 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](http://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.

## Vehicle Takeover for regular key vehicles

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



**2** Press the Unlock button on the aftermarket remote.\*



**3** Enter the vehicle.



**4** Turn the key into the run/ignition position.



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

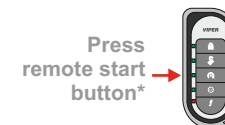


\* Your aftermarket remote may differ from the model shown in the illustrations.

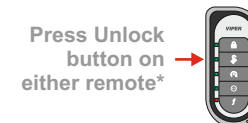
*Note: If the brake pedal is not pressed within 45 seconds after the Unlock button is pressed, takeover becomes inactive. If takeover is inactive, Remote Starter will stop the engine when the door opens or when the brake is pressed.*

## Vehicle Takeover for PTS vehicles

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



**2** Press the Unlock button on the aftermarket remote.\*



**3** Enter the vehicle



**4** You can now press the brake pedal, put the car in gear and drive off.





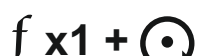



\* Your aftermarket remote may differ from the model shown in the illustrations.

*Note: If the brake pedal is not pressed within 45 seconds after the Unlock button is pressed, takeover becomes inactive. If takeover is inactive, Remote Starter will stop the engine when the door opens or when the brake is pressed.*

## 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).
	Press <i>f</i> once, then  to reset the remote starter runtime.

## 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.

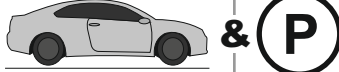
Flashes	Diagnostic
1	Runtime expired.
2	Over-rev shutdown.
3	Low/No RPM.
4	Transmitter shutdown.
5	Brake shutdown.
6	Hood shutdown/Remote start safety override switch is ON*.
7	Remote start safety override switch is ON*.

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

## 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).



Stop & put vehicle in Park (P)

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- 2** Press the button to remote start the vehicle.\* The turn signal lights will flash once to indicate the vehicle is now in Pit Stop Mode.



Press remote start button\*

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- 3** 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 with Key

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



## SmartStart Compatible



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



## What is SmartStart?

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

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

You can also control multiple vehicles – great for families – and assign more than one user to control a vehicle. It's easy with SmartStart!

But, this is only the beginning! SmartStart is loaded with additional features including GPS tracking, SmartSchedule, vehicle status, roadside assistance, home control, parked car finder and more.

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

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

## Notes

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