

Notice to Installer

This quick install guide is intended to be an overview of the DS3+/DS3 and DS4+/DS4 systems. Based on vehicle-specific firmware flashed to the DS3+/DS3 and DS4+/DS4 these wiring connection descriptions may change. You should flash for the intended application and use the install guide provided.

Warning!

This module can only be programmed via the web tool, which can be found on www.directechs.com or using the Directlink application for smartphones.

Wiring Connections

Analog Input/Output Harness (H4), 22-pin white connector

1	Lt. GREEN/BLACK	(-) Factory Alarm Arm Output ¹
2	BLUE/WHITE	(-) Ground When Running (Status) Output ¹
3	Dk. GREEN/BLACK	(-) Lock Output ¹
4	RED/WHITE	(-) Trunk Output ¹
5	BROWN/BLACK	(-) Horn Output ¹
6	BROWN/WHITE	(-) Aux 1 Output ¹
7	WHITE	(+) Aux 1 Output ¹
8	VIOLET/BLACK	(+) Aux 4 Output ¹
9	Dk. BLUE/BLACK	(-) Unlock Output ¹
10	Lt. BLUE/BLACK	(-) Factory Alarm Disarm Output ¹
11	BROWN/RED	(+) Siren Output ¹
12	PINK	(+) Ignition Input
13	VIOLET	(+) Door Input ²
14	BROWN	(+) Brake Input ²
15	WHITE/BLUE	(-) Activation Input ²
16	RED/BLUE	(-) Trigger 3 Input ²
17	BLACK/WHITE	(-) E-Brake Input (manual transmission) ²
18	ORANGE/BLACK	(+) Not Configured Input ²
19	BLUE	(-) Trunk Input ²
20	GREEN	(-) Door Input ²
21	GRAY	(-) Hood Input ²
22	VIOLET/WHITE	(AC) Tach Input

Main Harness (H1), 12-pin black connector

1	BLUE/WHITE	Relay 1 N.C. (87A) ¹
2	BLUE/RED	Relay 1 N.O. (87) ¹
3	BLUE	Relay 1 COM. (30) ¹
4	WHITE/BROWN	Relay 3 N.C. (87A) ¹
5	WHITE	Relay 3 COM (30) - Parking Light Output ¹
6	RED	(+) 12 Volt (battery)
7	Lt. GREEN/RED	Relay 2 N.O. (87) ¹
8	Lt. GREEN	Relay 2 COM. (30) ¹
9	Lt. GREEN/WHITE	Relay 2 N.C. (87A) ¹
10	BLACK	(-) Ground
11	WHITE	Relay 3 COM (30) - Parking Light Output ¹
12	RED	(+) 12 Volt (battery)

N.C. = Normally Closed, N.O. = Normally Open, COM. = Common.

- If these outputs are not used by the firmware, they can be configured by the installer when the module is flashed. Note that some are low current and a relay may be necessary.
- These connections are only required if the corresponding statuses are not supported by the firmware. If these inputs are not used by the firmware, they can be configured by the installer when the module is flashed.

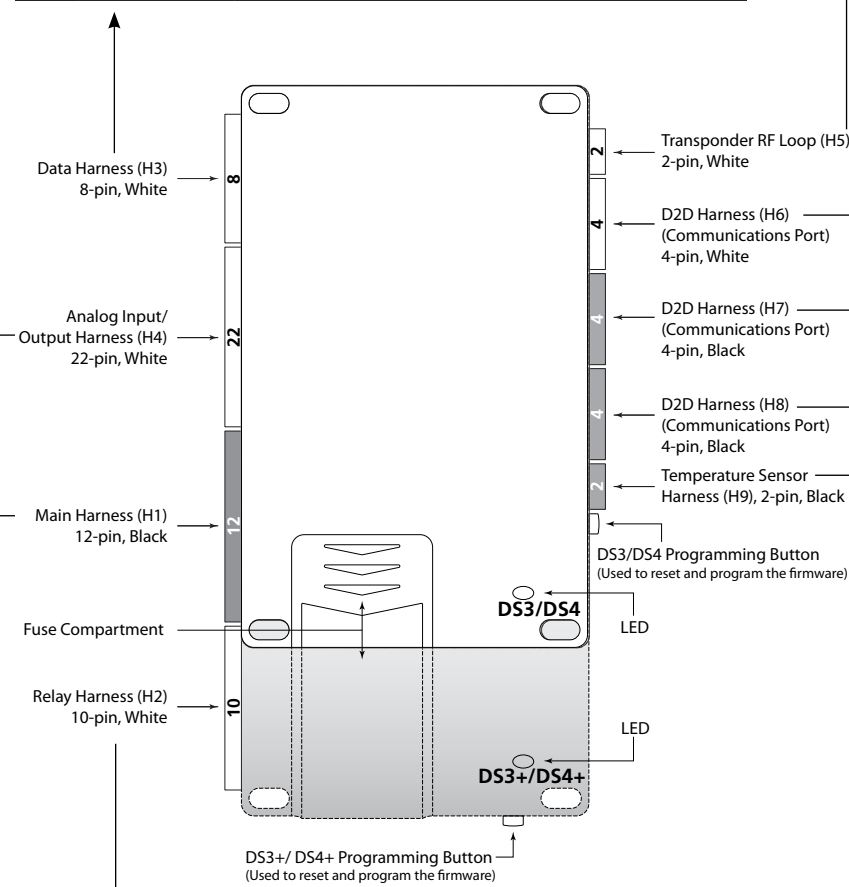
* See Programmable Options Table for list of configurations.

Notice to Installer

A Remote Start Safety Check must be performed before returning the vehicle to the owner. This Safety Checklist document (TB101) can be found online by going to www.directechs.com.

Data Harness (H3), 8-pin white connector

1	TAN	HS CAN Low 1
2	TAN/BLACK	HS CAN High 1
3	ORANGE/BROWN	HS CAN Low 2
4	ORANGE/GREEN	HS CAN High 2
5	Lt. GREEN	SWCAN/J1850
6	VIOLET/BROWN	MUX
7	ORANGE/BLACK	ISO2
8	YELLOW/BLACK	ISO1



Relay Harness (H2), 10-pin white connector

1	N/A	No Connection
2	RED/BLACK	(+) 12V Input (accessory/starter)
3	PINK/BLACK	Flex Relay Terminal 87A (N.C.) ¹
4	PINK/WHITE	Flex Relay Output, Terminal 30 (COM) ¹
5	RED	(+) 12V Input (ignition)
6	GREEN	(+) Starter Disable (key side) ¹
7	VIOLET	(+) Starter Output (starter side) ¹
8	ORANGE	(+) Accessory Output ¹
9	RED/WHITE	Flex Relay Input, Terminal 87 (N.O.) ¹
10	PINK	(+) Ignition Output

(Optional) Transponder RF Loop (H5), 2-pin white connector

1	N/A	RF Loop
2	N/A	RF Loop

N/A = Not Applicable.

D2D 1.0 SmartStart & XKLoader Communications Port (H6), 4-pin white connector

1	BLUE	(Data) TX
2	BLACK	(-) Ground
3	GREEN	(DATA) RX
4	RED	(+) 12 Volt

D2D 2.0 Accessory Communications Port (H7), 4-pin black connector

1	BLUE	(Data) TX
2	BLACK	(-) Ground
3	GREEN	(DATA) RX
4	RED	(+) 12 Volt

D2D 2.0 Accessory Communications Port (H8), 4-pin black connector

1	BLUE	(Data) TX
2	BLACK	(-) Ground
3	GREEN	(DATA) RX
4	RED	(+) 12 Volt

Temperature Sensor P/N 8556T (H9), 2-pin black connector

1	BLACK	Temperature Sensor
2	BLACK	Temperature Sensor

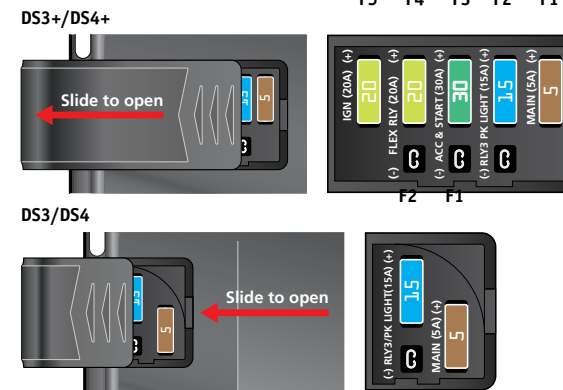
Fuse Compartment

F1	5 Amp	Main Module (+) 12V Input.
F2	15 Amp	Parking Light/Relay 3 Input
F3	30 Amp	Accessory and Starter Relay Input
F4	20 Amp	Flex Relay Input
F5	20 Amp	IGN1 Relay Input

The DS3/DS4 module does not have Fuses F3 - F5 (found in DS3+/DS4+ module only).

Fuse Selection

To ensure correct functionality of your system, please follow the vehicle specific instruction in the firmware guide or configure the fuses on your system as follows:



Quick Reference Install Guide

Directed Digital System for: DS3/DS3+ and DS4/DS4+

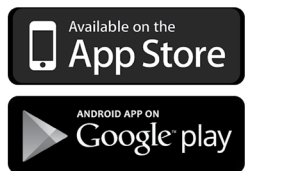
Programmable Options Table

Programmable Outputs can be set to ANY of the following functions.

Factory Alarm Arm	Accessory
Ground When Arm	Ignition
Factory Alarm Disarm	Starter
Lock	Parking Lights
Ground When Locked	Dome Light
Unlock	Siren/Horn
Pulse on 2nd Unlock	Starter Disable/Anti-Grind
Ground When Unlocked by User 2	Defroster (Latched)
Trunk Release	Defroster (Pulsed 800ms)
Aux 1	LED Flash Status
Aux 2	Comfort Closure
Aux 3	Ground When in Ready Mode
Aux 4	Status (Ground While Running)
Pulse After Startup	Not Configured

DIRECTLINK

Download the DirectLink app to flash module and program settings and features*.



To Download the App:

Scan the QR code or search for DirectLink in your mobile app portal

Para descargar la aplicación :

Escanear el código QR o buscar DirectLink en la portal de aplicación móvil

Pour télécharger l'application :

Scannez le code QR ou recherchez DirectLink dans le portail de votre application mobile



*Note: Directlink is not available for DS3/DS3+, you will also need to use [directechs.com](http://www.directechs.com) and an XKLOADER2 to flash the module.

Guide Translations

For a Spanish (La traducción al Español) or French (Traduction en français) version of the Installation Guide, please download it from www.directechs.com under "Resources".

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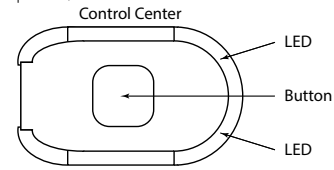
See full Installation Guide and more online at: www.directechs.com

DIRECTED

Control Center Installation

The 8620D control center is a plug and play accessory that combines the DS3/DS4 system's LED and Valet switch capabilities. It is compatible with the following modules: DS3+/DS3 and DS4/DS4+.

Note: This is a plug and play device, and no pairing to the DS3/DS4 system is required. You must simply make sure it is connected to the DS3+/DS3 and DS4/DS4+ module before connecting it to a power source. This device is not RF capable, and it cannot be used with Directed remotes.



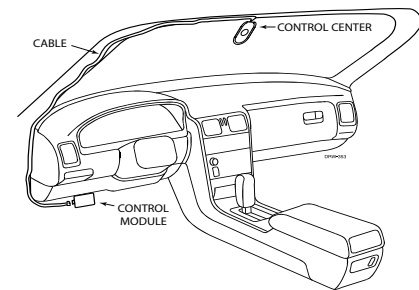
Mounting the Control Center

The control center's position should be discussed with the vehicle owner prior to installation, since the built-in status LED and Valet/Program Switch must be visible and accessible to the customer.

The best position to locate the control center is centered high on the windshield. It can be mounted vertically or horizontally relative to the windshield.

After you determine the best mounting location, follow these steps:

- 1 Clean the mounting area with a quality glass cleaner or alcohol to remove any dirt or residue.
- 2 Plug the cable into the control center.
- 3 Mount the control center with double-sided tape.
- 4 Route the cable down the left A-pillar to the control module, and plug the cable in the control module.



Learning the Tach (not needed with Virtual Tach)

Tach comes preprogrammed, therefore learning is not required; however, it can be readjusted with the following operations:

1. **Start** the vehicle using the key.
2. Within 5 seconds, **press** and **hold** the Control Center* (antenna) or the main module programming button, until the LED on the Control Center (antenna) or the main module turns ON solid.
3. **Release** the button. Tachometer value is now stored in memory. If the LED does not turn ON solid, find an alternate tach source.

* If the Control Center (antenna) was not included in your kit, the tach can be programmed using the programming button directly on the main module.

Note: When the tachometer is programmed, the main module automatically enters the Tachometer engine checking mode.

Remote start shutdown/startup diagnostics

To perform shutdown diagnostics:

1. With the ignition Off, **press** and **hold** the Control button (on the Control Center/antenna).
2. **Turn** the ignition On and then back Off while **holding** the Control button.
3. **Release** the Control button.
4. **Press** and **release** the Control button. The status LED flashes to report the last shutdown for one minute (or until the ignition is turned on) , as shown in the following table:

Status LED Flashes	Shutdown Mode
1	Runtime expired.
2	Overrev shutdown.
3	Low or no RPM.
4	Transmitter shutdown (or optional push button).
5	(+) Brake shutdown.
6	(-) Hood shutdown
7	Time mode/Turbo mode/Manual mode error.*
8	N/A
9	Low battery (voltage mode).
10	Alarm triggered.**
11	Wait-to-start input timed out.

- * Time mode error: Ignition is on or shutdown input is active when activating timer mode.
 Turbo mode error: Turbo mode is programmed off, engine is not on or shutdown input is active.
 Manual mode error: Manual Transmission Mode not enabled.
 ** Alarm was triggered during remote start sequence.

Startup Diagnostics: If the vehicle fails to activate the remote start, the module will notify you via your remote control, and will flash the parking lights on the vehicle to notify you of what caused the no-start situation.

Parking Light Flashes	Definition
5	Brake wire is active.
6	Hood pin wire is active.
7	Manual transmission mode is enabled and not initialized.
9	Start Valet is active (remote start is disabled).

Table of Zones

A zone is represented by the number of status LED flashes used by the system to identify a particular type of input.

Zone	Description	Input Description
1	Trunk Pin	H4/19 Blue wire
2	Shock	Optional Combo Sensor
3	Door & Instant Trigger	Any wire programmed as Door or Instant
4	Tilt	Optional Combo Sensor
5	Ignition	H4/2 Pink wire and H2/10 Pink wire
6	Hood	H4/21 Gray wire
7	All Other Sensors	Other optional sensors connected D2D