MASTER GUIDE
CA2HC-B

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Automotive Data Solutions Inc. ("ADS") products are strictly intended for installation by Certified Technicians who are employed by a registered business specialized in the installation of automotive aftermarket electronics products. Prior to beginning installation of an ADS product in a vehicle, it is the Certified Technician's responsibility to review the most current Product Guide, Install Guide and vehicle-specific notes available in Weblink®. ADS is not responsible for any damages whatsoever, including but not limited to any consequential damages, incidental damages, damages for loss of time, loss of earnings, loss of profit, commercial loss, loss of economic opportunity and the like that may or may not have resulted from the use, misuse, improper installation or operation of its products. ADS reserves itself the right to suspend any Weblink® account without notice and decline to offer technical support to non-Certified Technicians, non-compliant Certified Technicians or end users.

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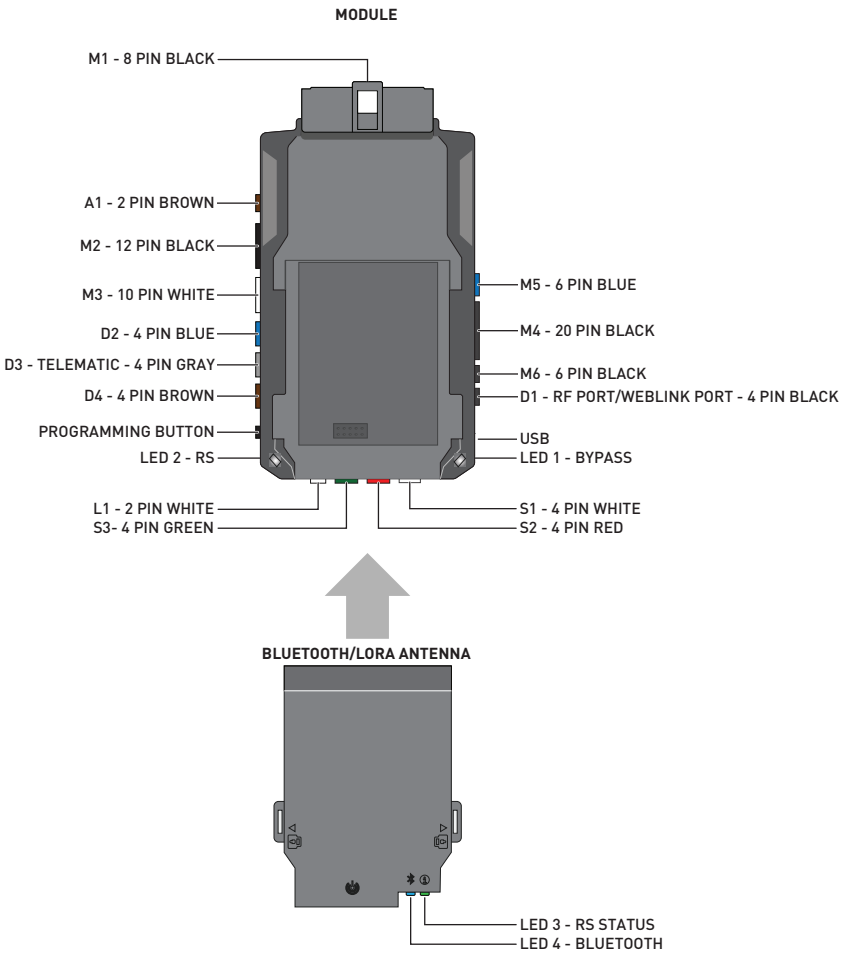
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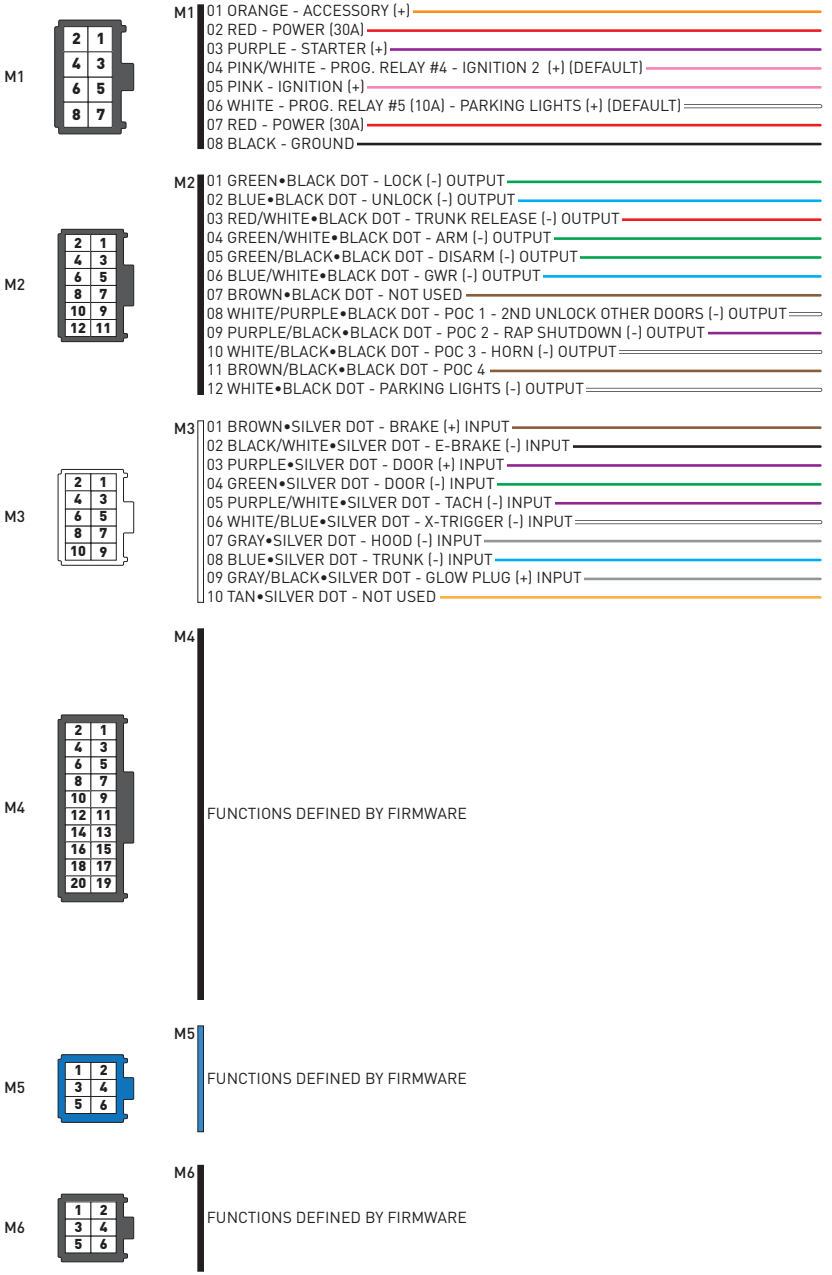
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Module Layout

MODULE CONNECTORS



CONNECTOR PINOUT



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Thank you for purchasing this iDatastart system for your vehicle. The following installation manual is intended for experienced and authorized iDatastart technicians. We highly recommend that you contact your local iDatastart dealer and seek professional installation. Call 866-427-2999 or visit our website at www.idatastart.com to locate your nearest dealer. If you need additional or replacement remotes and/or online support, please visit www.idatastart.com.

Caution: The Manufacturer's warranty will be void if this product is installed by anyone other than an authorized iDatastart dealer. iDatastart provides installation support services to authorized dealers only.

Before you can use your module, it must be connected to the internet and flashed with firmware tailored to the vehicle you are installing on. To connect to the module to your computer, you will need the Weblink USB PC programmer (available from your distributor). Then visit http://www.idatalink.com to flash your module. You will need to create an account if you don't already have one. You can also program the HC using the Weblink Mobile adapter for iOS or Android. The Weblink Mobile RS app is available through iTunes or Google Play. PLEASE NOTE: The module is shipped without any firmware loaded at the factory.

This manual may change frequently. Please check www.idatalink.com for updates.

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Valet Mode

Valet Mode disables all system features except keyless entry. Use Valet Mode when servicing the vehicle or lending it to another person to help prevent unintended system operation or inconvenience.

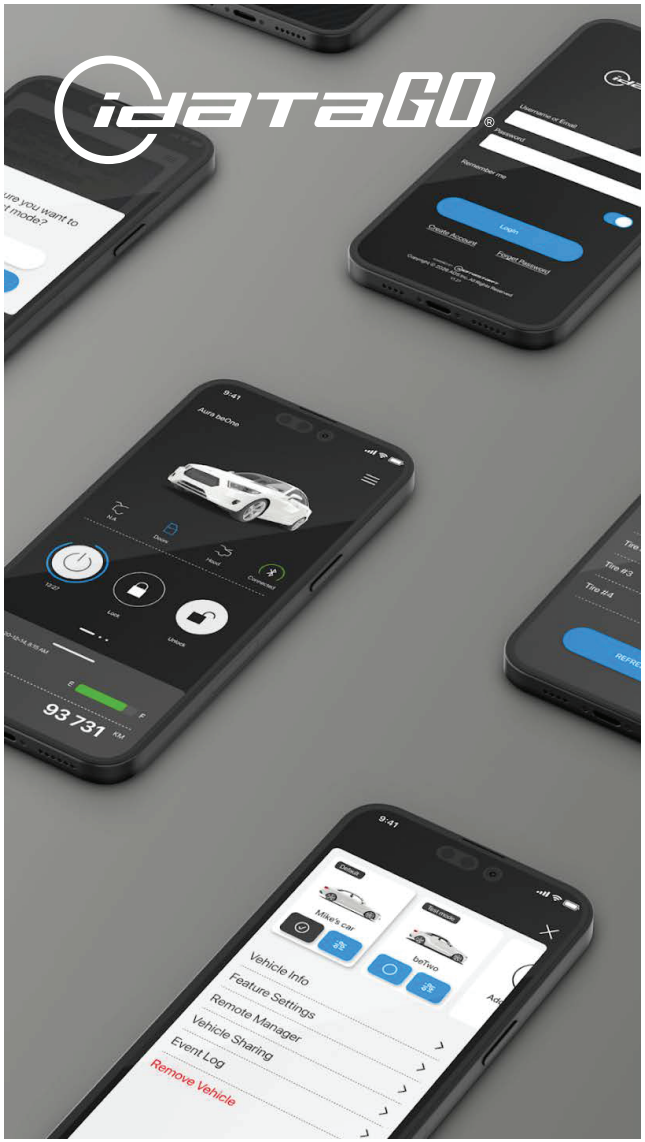
When the system is in Valet Mode, there are no visual indicators to indicate that Valet Mode is active. However, when remote start is attempted while in Valet Mode, the parking lights provide an indication consisting of 3 flashes followed by 10 flashes.

There are two available methods for enabling Valet Mode (see Menu Option 1-17):

(1) iDataGO app and iDatastart remote
(2) iDataGO app only

For instructions on enabling or disabling Valet Mode, refer to the RF Kit User Manual or visit https://www.idataguides.com.

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GETTING STARTED WITH IDATAGO

All CARKIT systems incorporate an integrated Bluetooth® interface and support communication with the iDataGO app. Once connected, the app provides access to a variety of system management and diagnostic functions, including:

- Managing paired and programmed remotes
- Configuring programmable system features
- Viewing supported vehicle telemetry, including fuel level, odometer, and Tire Pressure Monitoring System (TPMS) data*

To verify proper Bluetooth operation, download the iDataGO app and follow the on-screen instructions to perform a Bluetooth system test. Successful completion of the test confirms proper Bluetooth communication between the CARKIT module and the mobile device.

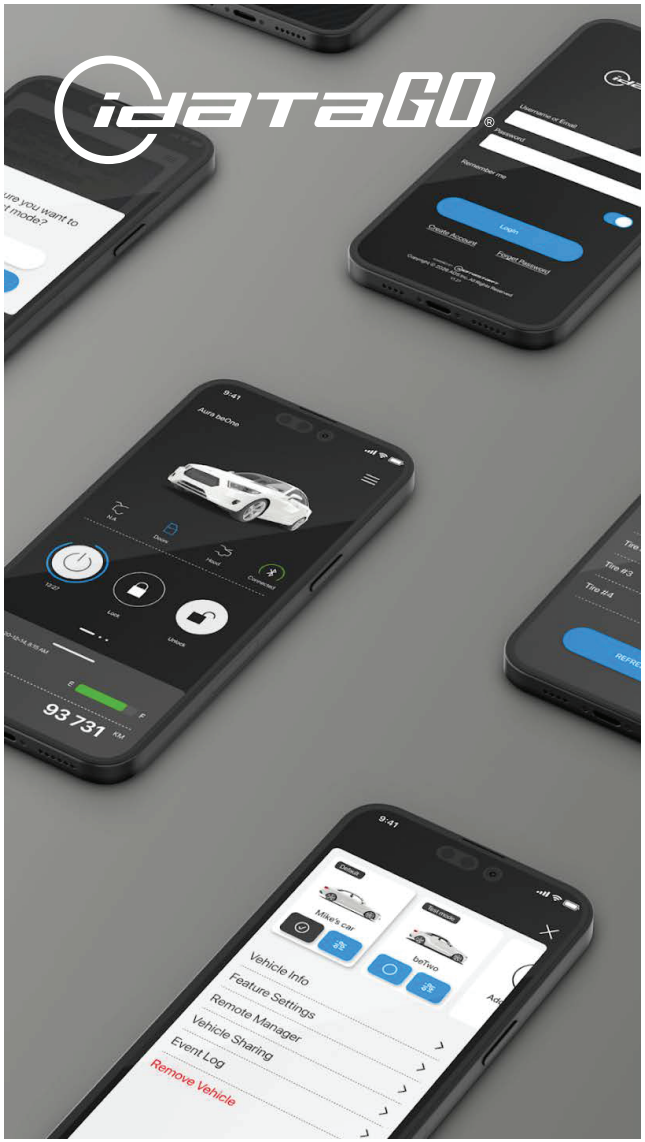
After verification, the vehicle owner can pair the CARKIT system using the same iDataGO app to establish a permanent Bluetooth connection and access all supported features.

Please note the following:

- Aftermarket remotes can only be programmed using Weblink Desktop or the iDataGO app.
- By default, valet mode can only be enabled or disabled using an aftermarket remote or the iDataGO app.

*Vehicle data availability varies by vehicle and firmware support.

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INSTALLER TESTING & BLUETOOTH PAIRING

1. Flash and program the CARKIT system to the vehicle, then verify keyless entry and remote start functionality using the aftermarket remote before proceeding.
2. If needed, scan the QR code to download the iDataGO mobile app.
3. Sign in with an existing Weblink account or create a new account.
4. Select GET STARTED, then TEST INSTALLATION.
5. Scan the vehicle VIN and select VALIDATE VIN.
6. Scan the Bluetooth pairing code on the mirror hanger or inside the remote gift box, then select CONTINUE.
7. Turn the vehicle ignition ON. Within 60 seconds, select CONTINUE to complete Bluetooth pairing.
8. Use TEST MODE to verify system functionality with the available app commands, program/modify transmitters or change basic system features in the vehicle menus.
9. When testing is complete, select EXIT TEST MODE. The vehicle will be removed from the iDataGO app and is ready for permanent pairing to the vehicle owner's account.
10. Affix the supplied Bluetooth pairing code sticker to the vehicle's door jamb for customer reference.
11. Leave the mirror hanger and remote gift box with the vehicle owner. Both include the iDataGO app download QR code and Bluetooth code required for owner pairing.

Download on the App Store

GET IT ON Google Play

ADDITIONAL RESOURCES & TUTORIALS

For more information about the iDataGO app, customer pairing, and features,

visit https://www.idataguides.com/idatago

or scan the QR code.

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Tach Programming

Tach Sensing
The default engine sensing mode is tach. In cold weather climates we recommend using an injector wire verses a computer "data" signal, or a coil wire for tachometer sense. iDatastart recommends using a digital multimeter when testing for tach.

Learn tach: Start the vehicle, press and hold the foot brake. Press and release the module's programming button. (OR if the remotes are already programmed to the vehicle, press and hold the start button of the remote for 2.5 seconds.) Wait, LED 2 will flash GREEN. (See the Module Diagnostics page)

Number of Parking Light Flashes	Tach learning diagnostic
1	Tach signal programmed in Analog
2	Tach signal programmed in Data
3	No tach signal detected
4	System is in Valet mode
5	N/A
6	Tach set for 'assumed start'. No tach programming required

Assumed Timed Crank
Assumed Time Crank is intended for vehicles with built-in anti-grind feature or vehicles that do not have a 12V positive starter wire at the ignition harness. This option will send a crank signal to the vehicle for the length of time selected in menu option 1-2. This option can be used on vehicles with built in anti-grind systems or Push To Start (PTS) systems.

01 

START vehicle for 15 seconds.
Proceed to step 2 within 60 seconds

02 
Press and hold the brake pedal.

03 
Press and release the module's programming button. (OR if the remotes are already programmed to the vehicle, press and hold the start button of the remote for 2.5 seconds.)

04 
Wait, LED 2 will flash GREEN. (See the Module Diagnostics page)

05 
Release the brake pedal.

06 
Module Programming Procedure completed.

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Reset Procedure

A system reset will clear any programming performed in the vehicle including tach learn. Following a reset, the module will need to be programmed to the vehicle again, and you will need to complete the tach learn procedure.

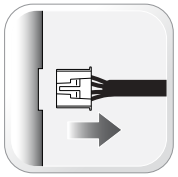
SYSTEM RESET DOES NOT ERASE A FIRMWARE PROGRAMMED TO THE MODULE, OR ALTER ANY SETTINGS IN THE OPTION MENUS.
ANY FIRMWARE OR OPTION CHANGES REQUIRE YOU TO CONNECT THE MODULE TO THE WEB OR A MOBILE DEVICE USING A WEBLINK PROGRAMMER.

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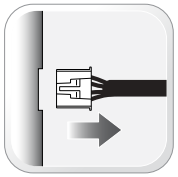
The following procedure resets the module programming to the vehicle. It does not reset any settings configured online.

01



Disconnect all connectors from module except the M1 BLACK 8-pin connector and the M4 BLACK 20-pin connector.

02



Disconnect the M1 BLACK 8-pin connector and the M4 BLACK 20-pin connector.

03



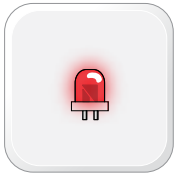
PRESS AND HOLD the module's programming button while connecting the M1 BLACK 8-pin connector and the M4 BLACK 20-pin connector.

04



Wait, LED 1 will flash RED. RELEASE programming button.

05



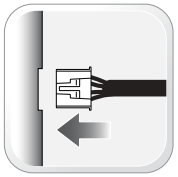
LED 1 will turn RED for 2 seconds.

06



Module RESET completed.

07



Reconnect all connectors.

08



Repeat programming procedure.

>>



Failure to follow procedure may result with a DTC or a CHECK ENGINE error message.

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Connector M1, 8-Pin Black

Pin 1 **ORANGE** - Accessory 12V positive (+) output. This wire must be connected to the vehicle accessory / HVAC blower motor wire. The proper wire will test 0V with the key in the off position, (+) 12V while key is in the on position, 0V while cranking and back to (+) 12V when the key is returned to the on position.

Pin 2 **RED** - Constant 12V positive (+) power input. This wire must be connected as it provides power for the starter (PURPLE), Accessory (ORANGE), and the module's microprocessor. The proper wire will test (+) 12V at all times, even when the key is in the off position, on position, and during crank.

Pin 3 **PURPLE -** Starter 12V positive (+) output. This wire must be connected for remote start. The proper wire will test 0V with the key in the off position, 0V while the key is in the on position and (+) 12V during crank.

Pin 4 **PINK/WHITE (Programmable Output) -** Positive 12V (+) output that powers up during remote start. The default setting for this wire is (+) 2nd ignition. To change this setting, go to menu option 1-4

Pin 5 **PINK -** Ignition 12V positive (+) output and input. This wire must be connected to the vehicle's ignition for remote start and valet / remote programming. The proper wire will test 0V with the key in the off position, 12 V (+) while the key is in the on position and 12V (+) during crank.

Pin 6 **WHITE (Programmable Output) -** This positive (+) parking light wire triggers when you lock, unlock, remote start, or during troubleshooting diagnostics. To change this setting, go to menu option 1-5.

Pin 7 **RED** - Constant 12V positive (+) power input. This wire must be connected as it provides power for the ignition (PINK) and 2nd ignition (PINK/WHITE) outputs. The proper vehicle wire will test (+) 12V at all times - while the key is in the off position, the on position and during crank.

Pin 8 **BLACK -** Ground negative (-) input. This wire must be connected to the vehicle's chassis ground. Make sure no paint or rust is on the mounting surface. We recommend connecting this wire before the others.

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Connector M2, 12-Pin Black

Pin 1 **GREEN•BLACK DOT** - Lock 250mA (-) negative output: This is an output that will provide a (-) pulse for locking doors.

Pin 2 **BLUE•BLACK DOT** - Unlock 250mA negative (-) output: This is an output that will provide a (-) pulse for unlocking doors.

Pin 3 **RED/WHITE•BLACK DOT** - Trunk release 250mA negative (-) output: This is an optional output that will release the trunk. Use M1, Pin 4 if the vehicle is equipped with a (+) trunk release.

Pin 4 **GREEN/WHITE•BLACK DOT** - Factory Alarm Arm (FAA) 250mA negative (-) output: This is an optional output that will provide a (-) pulse during lock, after crank and again after the ignition shuts down. The FAA output can be configured using menu option 2-15

Pin 5 **GREEN/BLACK•BLACK DOT** - Factory Alarm Disarm (FAD) 250mA negative (-) output: This output
will provide a (-) pulse during unlock and every time prior to the GWR (ground when running) turning on during the remote start sequence. It is typically used to disarm factory security systems.

Pin 6 **BLUE/WHITE•BLACK DOT** - Ground while running (GWR) 250mA negative (-) output: This is an optional output that will provide a negative (-) output 250mS before the ignition turns on, stays on throughout the remote start duration and will be the last to shut off.

Pin 7 **BROWN•BLACK DOT**- Not used.

Pin 8 **WHITE/PURPLE•BLACK DOT** - (POC1) Programmable output. Default setting is 'Unlock other doors' 250mA negative (-) output. The output control is based on feature 5-01 option setting.
Note: There are 21 additional POC setting options for this POC.

Pin 9 **PURPLE/BLACK•BLACK DOT** - (POC2) Programmable output. Default setting is 'RAP shutdown' 250mA negative (-) output. The output control is based on feature 5-02 option setting.
Note: There are 21 additional POC setting options for this POC.

Pin 10 **WHITE/BLACK•BLACK DOT** - (POC3) Programmable output. Default setting is 'HORN' 250mA negative (-) output. The output control is based on feature 5-03 option setting.
Note: There are 21 additional POC setting options for this POC.

Pin 11 **BROWN/BLACK•BLACK DOT** - (POC4) Programmable output. Default setting is off. The output control is based on feature 5-04 option setting.
Note: There are 21 additional POC setting options for this POC.

Pin 12 **WHITE•BLACK DOT** - Parking light 250mA negative (-) output. This will provide output whenever the parking lights are activated for lock, unlock, remote start, diagnostics, and programming. The proper wire in the vehicle will test (-) when the parking light switch is in the on.

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Connector M3, 10-Pin White

Pin 1 **BROWN•SILVER DOT** - Brake 12V positive (+) input: This wire must be connected as it provides a shut down for the remote start. It is also required for various programming options. The proper wire will test (+) 12V while the foot brake is pressed.

Pin 2 **BLACK/WHITE•SILVER DOT** - Parking / Emergency brake negative (-) input: This input is required for manual transmission/reservation and Turbo Timer mode. The proper e-brake wire will provide a (-) trigger when parking / emergency brake is set and the key is in the ignition or "on" position. This wire or input is required for manual transmission and turbo timer mode.

Pin 3 **PURPLE•SILVER DOT** - Door zone input (+). This wire monitors positive (+) trigger door-pins. The proper wire will provide a (+) trigger only when the doors are opened. You will need to test the wire for proper polarity. **IMPORTANT: A doorpin connection is required for manual transmission remote starts.**

Pin 4 **GREEN•SILVER DOT** - Door zone input (-). This wire monitors negative (-) trigger door-pins. The proper wire will provide a (-) trigger only when the doors are opened. You will need to test the wire for proper polarity. **IMPORTANT: A doorpin connection is required for manual transmission remote starts.**

Pin 5 **PURPLE/WHITE•SILVER DOT** - Engine sensing input (A/C): This wire is connected to the vehicle's Tach wire and is required when using the tach sense setting.
IMPORTANT: To change engine-sensing modes, you must change Option 1-02; Default option is set for tach input.

Pin 6 **WHITE/BLUE•SILVER DOT** - External RS trigger input (-) programmable input. This is an input (-) that can be used to activate the start sequence when triggered 1, 2, or 3 times based on option selected on feature 1-16. This can be done with a door lock motor output being operated by a factory keyless entry or another external source; Default option is 'disabled'.

Pin 7 **GRAY•SILVER DOT** - Hood Pin negative (-) input: This input is a safety shut down. It prevents the vehicle from remote starting while the hood is open. You can connect this wire to a hood pin switch (not included), or to a wire in the vehicle that shows (-) only while the hood is open.

Pin 8 **BLUE•SILVER DOT** - Trunk zone input (-): This is an optional input that will monitor when the vehicle's trunk has been opened. The proper wire will provide a (-) trigger while the trunk is open.

Pin 9 **GRAY/BLACK•SILVER DOT** - Glow plug input (+): Reads any positive input as a glow plug or wait to start input. This is recommended for diesel vehicles that may have a positive analog glow plug output available.

Pin 10 **TAN•SILVER DOT** - Not used.

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To access and configure options, you will need to be connected to the web using a Weblink USB interface or using the Weblink Mobile RS app for iOS or Android. The **BOLD** text marks the default settings for each menu item. See the 'OPTION MENU DESCRIPTIONS' section for a breakdown of each option.

Menu 1 - Remote Starter Options											
#	Feature	option 1	option 2	option 3	option 4	option 5	option 6	option 7	option 8	option 9	option 10
1	Engine/Wait to start	**Gas**	Diesel (Glow plug)	3 sec	5 sec	10 sec	15 sec	25 sec	45 sec		
2	Engine sensing	**Tach**	N/A	assume start (2 sec)	assume start (2.5 sec)	assume start (3 sec)	assume start (4 sec)	assume start (5 sec)			
3	Run time	3 min	5 min	10 min	**15 min**	25 min	30 min	35			
4	Programmable Relay 1 (4th relay)	**Ignition**	Accessories	Starter	Trunk	Parking Lights					
5	Programmable Relay 2 (5th relay)	Ignition	Accessories	Starter	Trunk	**Parking Lights**					
8	Weather mode	**Disable**	every 2 hours	every 3 hours	every 4 hours	with temp sensor					
8B	Weather mode runtime	**Same as RS Runtime**	3 min	5 min	10 min						
9	Temp sensor for cold weather star	**Disable**	-20C/-4F	-15C/5F	-10C/14F	-5C/23F	-25C/-13F	-30C/-22F	-35C/-31F		
10	Temp sensor for hot weather start	**Disable**	25C/77F	30C/86F	35C/85F	40C/104F					
11	idle mode	Disable	**Enable**								
12	Turbo timer	**Disable**	30 sec	1 min	2 min	4 min					
13	Take over behavior	**Enable**	Shutdown on door oper	Shutdown with unlock							
14	Secure take over delay	**45 sec**	90 sec	3 min	4 min						
16	External RS input trigger (X-trig input)	**Disable**	single pulse (-)	double pulse (-)(-)	triple pulse (-)(-)(-)	Analog Factory Keyless X-*Trigger = lock input Door(+) = unlock input*					
17	Valet mode									**From iDataGO app and Remotes only**	iDataGO app only
18	Heated ACC control	AUX trigger only	Always on	-10C/14F	-5C/23F	0C/32F	4C/40F	8C/46F	**12C/54F**		
19	Cooled seats control	AUX trigger only	Always on	20C/68F	**24C/76F**	28C/82F	32C/90F	36C/96F			
20	RS Parking lights confirmation	Disable	**Constant ON**	Flashing 5sec	Flashing 10 sec						
21	Crank time adjustment (tach)	**Disable**	+0.2 Second to crank	+0.6 Second to crank	-0.2 Second to crank						
22	Remote Starter	Disable	**Enable**								
23	Defrost Trigger	Aux trigger only	Always on	**5C/41F**	-5C/43F						
24	Defrost control	**1 sec**	5 min	10 min	15 min						
25	Shutdown on Trunk	**Disable**	Enable								

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Menu 2 - Doorlock Options					
#	Feature	option 1	option 2	option 3	option 4
1	Doorlock analog output Duration	0.4 sec	**0.8 sec**	2 sec	4 sec
2	Trunk analog output Duration	0.4 sec	**0.8 sec**	2 sec	4 sec
3	Priority Unlock	**Disable**	Enable		
4	Double pulse Lock	**Disable**	Enable		
5	Double pulse unlock	**Disable**	Enable		
6	Auto re-lock	**Disable**	Enable		
7	Unlock before start	**Disable**	Enable		
8	Re-Lock after start	**Disable**	Enable	Smart re-lock	
9	Re-Lock after RS shutdown	**Disable**	Enable	Smart re-lock	
11	Lock after turbo mode	**Disable**	Enable		
12	Ignition controlled doorlock	**Disable**	Enable	Enable 2000 RPM	
13	Ignition controlled doorlock setting	**Lock + unlock**	Lock only	Unlock only	
14	Trunk sequence	**Disarm, unlock and trunk**	disarm and trunk	trunk only	Disarm, unlock all and trunk
15	Analog Rearm Trigger	after start, shutdown and first lock	**After shutdown and first lock**	after start only	after shutdown only
16	Analog Disarm Sequence	**Disarm only**	Disarm with ignition cycle		
17	Doorlock parking lights confirmation	Disable	**Enable**	Enable with ignition ON Only	Enable with ignition OFF only
18	Headlight output (POC)	**Lock and Unlock**	Lock only	Unlock only	
19	Secure Trunk	**Secure Trunk OFF**	Secure Trunk ON	Enable while locked/armed	

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Menu 4 - AUX Function Assignment									
#	Feature	option 1	option 2	option 3	option 4	option 5	option 6	option 7	option 8
1	Transmitter AUX 1	Left slide door	**Right slide door**	PTO 1	PTO 2	PTO 3	PTO 4	Car Finder	Gas cap
2	Transmitter AUX 2	**Left slide door**	Right slide door	PTO 1	PTO 2	PTO 3	PTO 4	Car Finder	Gas cap
3	Transmitter AUX 3	Left slide door	Right slide door	**PTO 1**	PTO 2	PTO 3	PTO 4	Car Finder	Gas cap
4	Transmitter AUX 4	Left slide door	Right slide door	PTO 1	**PTO 2**	PTO 3	PTO 4	Car Finder	Gas cap
5	Transmitter AUX 5	Left slide door	Right slide door	PTO 1	PTO 2	PTO 3	PTO 4	**Car Finder**	Gas cap
6	Secure Auxilliaries	**Disable**	Enable	Enable while armed					

#	Feature	option 9	option 10	option 11	option 12	option 13
1	Transmitter AUX 1	Rear glass	Heated Seats	Cooled Seats	Panic	Defrost
2	Transmitter AUX 2	Rear glass	Heated Seats	Cooled Seats	Panic	Defrost
3	Transmitter AUX 3	Rear glass	Heated Seats	Cooled Seats	Panic	Defrost
4	Transmitter AUX 4	Rear glass	Heated Seats	Cooled Seats	Panic	Defrost
5	Transmitter AUX 5	Rear glass	Heated Seats	Cooled Seats	Panic	Defrost

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Menu 5 - Programmable Outputs (POCs)									
#	Feature	option 0	option 1	option 2	option 3	option 4	option 5	option 6	option 7
1	POC 1	Off	**Unlock other doors**	Defrost	Horn	IGN	ACC	Start	Parking Lights
2	POC 2	Off	Unlock other doors	Defrost	Horn	IGN	ACC	Start	Parking Lights
3	POC 3	Off	Unlock other doors	Defrost	**Horn**	IGN	ACC	Start	Parking Lights
4	POC 4 (Low current when active)	**Off**	Unlock other doors	Defrost	Horn	IGN	ACC	Start	Parking Lights

#	Feature	option 9	option 10	option 11	option 12	option 13A	option 13B	option 13C	option 14
1	POC 1	PTO1	PTO2	PTO3	PTO4	N/A	Starter Kill (Type B : NC)	Starter Kill (Type C : NO)	Arm
2	POC 2	PTO1	PTO2	PTO3	PTO4	N/A	Starter Kill (Type B : NC)	Starter Kill (Type C : NO)	Arm
3	POC 3	PTO1	PTO2	PTO3	PTO4	N/A	Starter Kill (Type B : NC)	Starter Kill (Type C : NO)	Arm
4	POC 4 (Low current when active)	PTO1	PTO2	PTO3	PTO4	**Starter Kill (Type A)**	Starter Kill (Type B : NC)	Starter Kill (Type C : NO)	Arm

#	Feature	option 15	option 16	option 17	option 18	option 19	option 20	option 21	option 22
1	POC 1	Disarm	Lock	Unlock	Trunk	GWR	Left Sliding Door	Right Sliding Door	Rap Shutdown
2	POC 2	Disarm	Lock	Unlock	Trunk	GWR	Left Sliding Door	Right Sliding Door	**Rap Shutdown**
3	POC 3	Disarm	Lock	Unlock	Trunk	GWR	Left Sliding Door	Right Sliding Door	Rap Shutdown
4	POC 4 (Low current when active)	Disarm	Lock	Unlock	Trunk	GWR	Left Sliding Door	Right Sliding Door	Rap Shutdown

#	Feature	option 24	option 26	option 27	option 31
1	POC 1	GND when Engine running	Domelight	GND Headlight output	GND with vehicle ignition
2	POC 2	GND when Engine running	Domelight	GND Headlight output	GND with vehicle ignition
3	POC 3	GND when Engine running	Domelight	GND Headlight output	GND with vehicle ignition
4	POC 4 (Low current when active)	GND when Engine running	Domelight	GND Headlight output	GND with vehicle ignition

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Configured on the web or with Weblink Mobile RS

To access and configure options, you will need to be connected to the web using a Weblink USB interface or using the Weblink Mobile RS app for iOS or Android. The **BOLD** text marks the default settings for each menu item. See the 'OPTION MENU DESCRIPTIONS' section for a breakdown of each option.

Menu 6 - Pulse Timer Output Options (PTOs)									
#	Feature	option 1	option 2	option 3	option 4	option 5	option 6	option 7	option 8
1	PTO 1 duration	**1 sec pulse**	10 sec pulse	15 sec pulse	20 sec pulse	30 sec pulse	5 min pulse	10 min pulse	Latched during run time
2	PTO 2 duration	**1 sec pulse**	10 sec pulse	15 sec pulse	20 sec pulse	30 sec pulse	5 min pulse	10 min pulse	Latched during run time
3	PTO 3 duration	**1 sec pulse**	10 sec pulse	15 sec pulse	20 sec pulse	30 sec pulse	5 min pulse	10 min pulse	Latched during run time
4	PTO 4 duration	**1 sec pulse**	10 sec pulse	15 sec pulse	20 sec pulse	30 sec pulse	5 min pulse	10 min pulse	Latched during run time

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Configured on the web or with Weblink Mobile RS

To access and configure options, you will need to be connected to the web using a Weblink USB interface or using the Weblink Mobile RS app for iOS or Android. The **BOLD** text marks the default settings for each menu item. See the 'OPTION MENU DESCRIPTIONS' section for a breakdown of each option.

Menu 7 - Input Source Configuration					
#	**Feature**	**option 1**	**option 2**	**option 3**	**option 4**
1	Brake	Analog	Data	**AUTO**	
2	Door	Analog	Data	**AUTO**	Analog inverted (normally closed)
3	Tach	Analog	Data	**AUTO**	
4	Hood	Analog	Data	**AUTO**	Analog inverted (normally closed)
5	Trunk	Analog	Data	**AUTO**	Analog inverted (normally closed)
6	Glow plug	Analog	Data	**AUTO**	
7	E-brake	Analog	Data	**AUTO**	
9	VSS	Disable	**Data (Auto)**		
20	Temperature sensor adjustment	Select value on weblink/Diagnostic tool : (-15 to 15 deg C), Default 0 Deg.C			

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Configured on the web or with Weblink Mobile RS

To access and configure options, you will need to be connected to the web using a Weblink USB interface or using the Weblink Mobile RS app for iOS or Android. The **BOLD** text marks the default settings for each menu item. See the 'OPTION MENU DESCRIPTIONS' section for a breakdown of each option.

Menu 8 - Output Source Configuration			
#	**Feature**	**Output Type**	
1	Arm	Analog	**Analog/Data**
2	Disarm	Analog	**Analog/Data**
3	Lock	Analog	**Analog/Data**
4	Unlock all	Analog	**Analog/Data**
5	Unlock driver door	Analog	**Analog/Data**
6	Trunk	Analog	**Analog/Data**
7	Left sliding door	Analog	**Analog/Data**
8	Right sliding door	Analog	**Analog/Data**
9	Parking lights	Analog	**Analog/Data**
10	Rap shut down	Analog	**Analog/Data**
11	Panic and alarm	Analog	**Analog/Data**
12	Car finder	Analog	**Analog/Data**
13	Defrost	Analog	**Analog/Data**
14	Horn chirp (notification)	Analog	**Analog/Data**
15	Sleep status on LED	**Disable**	Enable
19	Anti-Grind	Disable	**Enable**

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F0 = Default Feature Option

1-01 Engine type: Tach sensing is our default engine sense option.

F01 - Gas: Suitable for all gas powered vehicles. This option relies on the input specified in 1-02.

F02 - Diesel (with glow plug signal): This option uses the hardwired glow plug input (gray/black M3 white connector) to read the (+) glow plug status from the vehicle. This is usually connected to the signal going to the light in the dash. Once the light goes out and the signal is lost, the vehicle will crank. This option relies on the input specified in 1-02.

F03 to F08 - Wait to start delay: Any of these settings will force the remote starter to wait (with ignition on) for the selected time before cranking the engine. Determine the maximum time required to insure the vehicle's glowplug are ready, and set the delay accordingly. This option relies on the input specified in 1-02.

1-02 Engine tach detection: Method used to determine when we need to release start signal.

F01 - Tach input/data: This option uses a hard wired input (purple/white on the M3 white connector) to read the vehicles RPM's in order to release the starter during the remote start process and determine that the engine is running. In some vehicle specific solutions, this signal may be obtained through the vehicle's databus (no connection required).

F03 to F07 - Assumed start (for hybrid): The vehicle will crank for the time specified by your selection. The remote starter will then 'run' for the selected runtime. It does not require a connection to the vehicle other than the main ignition harness.

1-03 Runtime: This feature consists of four different settings for the remote start run time.

F01 - Runtime of 3min: The remote starter will run for a period of 3 minutes.
F02 - Runtime of 5min: The remote starter will run for a period of 5 minutes.
F03 - Runtime of 10min: The remote starter will run for a period of 10 minutes.
F04 - Runtime of 15min: The remote starter will run for a period of 15 minutes.
F05 - Runtime of 25min: The remote starter will run for a period of 25 minutes.
F06 - Runtime of 30min: The remote starter will run for a period of 30 minutes.
F07 - Runtime of 35min: The remote starter will run for a period of 35 minutes.

1-04 Programmable high power relay #4 (M1 - Pink/White): Controls the function of this wire.

F01 - Ignition: Follows the behavior of the primary (+) Ignition wire.
F02 - Accessory: Follows the behavior of the primary (+) Accessory wire.
F03 - Starter: Follows the behavior of the primary (+) Starter wire.
F04 - Trunk: Provides a high-current (+) output for trunk release.
F05 - Parking Lights: Provides a high-current (+) output for parking lights.

1-05 Programmable high power relay #5 (M1 - White): Controls the function of this wire.

F01 - Ignition: Follows the behavior of the primary (+) Ignition wire.
F02 - Accessory: Follows the behavior of the primary (+) Accessory wire.
F03 - Starter: Follows the behavior of the primary (+) Starter wire.
F04 - Trunk: Provides a high-current (+) output for trunk release.
F05 - Parking Lights: Provides a high-current (+) output for parking lights.

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F0 = Default Feature Option

1-08 Weather mode: This feature is designed to allow the user to have the HC automatically remote start at the end of a selected timed cycle. It also be controlled by the thermistor so it will start at a specified temperature at the end of the timed cycle. Weather mode must also be activated each time between vehicle uses.
The system must not be in valet and for added security a lock command needs to be sent before activating (max 10 seconds before). Once it's activated, the vehicle will remain in weather mode for a maximum of 24 hours or until the ignition is turned on.

- **F01 - Disable:** Weather mode is disabled.
- **F02 - Every 2 hours:** Will activate every 2 hours and run for the programmed runtime.
- **F03 - Every 3 hours:** Will activate every 3 hours and run for the programmed runtime.
- **F04 - Every 4 hours:** Will activate every 4 hours and run for the programmed runtime.
- **F05 - With temp sensor:** Will activate based on the selected temp settings in menu 1-09, 1-10 and run for the programmed runtime.

1-08B Weather mode runtime: This feature consists of four different settings for the weather mode run time.

- **F01 - Same as remote start runtime:** Weather mode will start and run for the time set by option 1-03.
- **F02 - 3 minutes:** Weather mode will start and run for 3 minutes.
- **F03 - 5 minutes:** Weather mode will start and run for 5 minutes.
- **F04 - 10 minutes:** Weather mode will start and run for 10 minutes.

1-09 Temperature option for cold weather start: Use this option to set the temperature to automatically start the vehicle in cold weather. This option uses the internal temperature sensor, or an external sensor if one is connected. Requires that menu option 1-08 be set for 'Enable with temp sensor'.
Weather mode is cancelled automatically after 24 hours or if the vehicle is started by key or RS.

- **F01 - Disable**
- **F02 - Below -20C / -4F**
- **F03 - Below -15C / 5F**
- **F04 - Below -10C / 14F**
- **F05 - Below -5C / 23F**

1-10 Temperature option for hot weather start: Use this option to set the temperature to automatically start the vehicle in hot weather. This option uses the internal temperature sensor, or an external sensor if one is connected. Requires that menu option 1-08 be set for 'Enable with temp sensor'.
Weather mode is cancelled automatically after 24 hours or if the vehicle is started by key or RS.

- **F01 - Disable**
- **F02 - Above 26C / 77F**
- **F03 - Above 30C / 86F**
- **F04 - Above 35C / 95F**
- **F05 - Above 40C / 104F**

1-11 Idle mode (also known as pit stop mode): Allows the remote starter to be activated while the vehicle is running under key. When activated, the user can exit the vehicle with the key or fob and the vehicle will continue to run for the programmed runtime. NOTE: This option is not available on all vehicles.

- **F01 - Disable**
- **F02 - Enable**

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F0 = Default Feature Option

1-12 Turbo Timer: (This feature requires door and e-brake input) This feature allows the user to activate Turbo Timer Mode with their iDatastart remote or accessory. This will keep the engine running after removing the key for the specified time selected below. (Please check specific remote or accessory user's manual for steps to activate Turbo Timer Mode).

F01 - Disable: Weather mode is disabled.
F02 - Enable for 30sec: Vehicle with continue to run for 30 seconds.
F03 - Enable for 1min: Vehicle with continue to run for 1 minute.
F04 - Enable for 2min: Vehicle with continue to run for 2 minutes.
F05 - Enable for 4min: Vehicle with continue to run for 4 minutes.

1-13 Takeover: Controls what happens when the user enters the vehicle which is running under remote start. NOTE Not all options are available for all vehicles.

F01 - Enable: Vehicle will stay running as the user takes control of the vehicle during remote start.
F02 - Disable and shut down on door open: Vehicle will shutdown as soon as a door is opened. Vehicle must be restarted manually.
F03 - Disable and shutdown on unlock: Vehicle will shutdown as soon as an unlock command is received. Vehicle must be restarted manually.

1-14 Secure take over delay: This feature only applies to specific PTS vehicle solutions. Consult the vehicle specific info on our website. This menu controls the amount of time the user has to complete takeover once they have entered a remote started vehicle. If the user has not completed all the steps for takeover in the given time, the process will be cancelled and the vehicle will shut down when the brake is pressed.

F01 - Timeout of 45 seconds
F02 - Timeout of 1.5 minutes
F03 - Timeout of 3 minutes
F04 - Timeout of 4 minutes

1-16 External RS trigger input: Allows the remote starter to be triggered using an external negative signal connected to M3-06 WHITE/BLUE. Choose from these different options to control how this input works;

F01 - Disable: Input is disabled
F02 - Single pulse: A single pulse to the wire will activate remote start.
F03 - Double pulse: A double pulse to the wire will activate remote start.
F04 - Triple pulse: A triple pulse to the wire will activate remote start.
F05 - Analog factory keyless (lock input): This option is only required if you are setting menu option 1-15 for option F02 (lock/unlock/lock). M3-06 will act as a (-) lock input. Use M3-03 PURPLE/silver dot as a (+) unlock input.

1-17 Valet: In Valet mode, the remote starter is disabled. Only keyless entry is functional. This option is used when an emergency disarm is required (lost remote) or the vehicle is brought in for service. NOTE: For a comprehensive explanation of each option, see the VALET section of this guide.

F09 - From iDataGO app and Remotes only
F10 - iDataGO app only

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F0 = Default Feature Option

1-18 Heated accessory control: This feature controls the activation of heated accessories. This option is NOT associated with an analog output, and is available only when a vehicle specific firmware supports it. For an analog output to control defrost or heated seats, use menu options 1-23 and 1-24 in conjunction with an POC output set for 'Defrost'.

- **F01 - Aux trigger only:** Will only activate when an auxiliary programmed to 'heated seats' is activated.
- **F02 - Always on:** Activates on each remote start.
- **F03 - Activate at -10C/14F:** Activates at the preset temperature.
- **F04 - Activate at -5C/24F:** Activates at the preset temperature.
- **F05 - Activate at 0C/32F:** Activates at the preset temperature.
- **F06 - Activate at 4C/40F:** Activates at the preset temperature.
- **F07 - Activate at 8C/46F:** Activates at the preset temperature.
- **F08 - Activate at 12C/54F:** Activates at the preset temperature.

1-19 Cooled seats control: This feature controls the activation of cooled seats feature. This option is NOT associated with an analog output, and is available only when a vehicle specific firmware supports it. For an analog output to control this type of feature, use menu options 1-23 and 1-24 in conjunction with an POC output set for 'Defrost'.

- **F01 - Aux trigger only:** Will only activate for an auxiliary programmed to 'cooled seats' is activated.
- **F02 - Always on:** Activates on each remote start.
- **F03 - Activate at 20C/68F:** Activates at the preset temperature.
- **F04 - Activate at 24C/76F:** Activates at the preset temperature.
- **F05 - Activate at 28C/82F:** Activates at the preset temperature.
- **F06 - Activate at 32C/90F:** Activates at the preset temperature.
- **F07 - Activate at 36C/96F:** Activates at the preset temperature.

1-20 Parking light confirmation: Controls the behavior of the parking lights feature during remote start.

- **F01 - Disable:** All parking light outputs are disabled during remote start.
- **F02 - Constant ON:** Parklights will output steady the entire duration of runtime.
- **F03 - Flashing 5 sec:** Parklights will flash once every 5 seconds for the duration of the runtime.
- **F04 - Flashing 10 sec:** Parklights will flash once every 10 seconds for the duration of the runtime.

1-21 Crank time adjustment: Allows fine adjustments to the default crank time for remote start. NOTE: Only use this feature to correct start issues related to crank time.

- **F01 - Disable:** The remote starter will crank for the default crank time.
- **F02 - Add 200ms to crank:** The remote starter will crank for 200ms longer than the default.
- **F03 - Add 600ms to crank:** The remote starter will crank for 200ms longer than the default.
- **F04 - Subtract 200ms from crank:** The remote starter will crank for 200ms less than the default.

1-22 Remote Starter: This feature turns the remote starter function on/off.

- **F01 - Disable**
- **F02 - Enable**

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F0 = Default Feature Option

1-23 Defrost trigger: This option controls the activation of the defrost feature. A POC must be programmed associated with an analog output (menu 5). The duration of the output is controlled in menu 1-24.

- **F01 - Aux trigger only:** Activates only when an aux is activated. Requires you to configure an aux for one of the POC's in menu 4.
- **F02 - Always on:** Activates automatically on remote start. A POC must be programmed associated with an analog output (menu 5)
- **F03 - Activate at 5C/41F:** Activates at the preset temperature. A POC must be programmed associated with an analog output (menu 5)
- **F04 - Activate at -5C/23F:** Activates at the preset temperature. A POC must be programmed associated with an analog output (menu 5)

1-24 Defrost control: Controls the duration of the defrost output when engaged. A POC must be programmed associated with an analog output (menu 5)

- **F01 - 1 second:** Output will pulse for 1 second upon activation based on setting in menu 1-23.
- **F02 - 5 minutes:** Output will latch for 5 min. upon activation based on setting in menu 1-23.
- **F03 - 10 minutes:** Output will latch for 10 min. upon activation based on setting in menu 1-23.
- **F04 - 15 minutes:** Output will latch for 15 min. upon activation based on setting in menu 1-23.

1-25 Shutdown on trunk: Controls if the remote starter shuts down when the trunk is opened during runtime.

- **F01 - Disable**
- **F02 - Enable**

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F0 = Default Feature Option

2-1 Lock & Unlock analog pulse length: This does not affect the behavior of the factory arm output (green/white/silver dot) or factory alarm disarm output (green/black/silver dot) wires.

F01 - 0.4 seconds: (-) Negative lock and unlock output time. This option may be helpful when using lock/unlock to arm/disarm vehicles that may roll windows down with factory Arm/Disarm wires when the standard output is too long.
F02 - 0.8 seconds: (-) Negative lock and unlock output time.
F03 - 2 seconds: (-) Negative lock and unlock output time.
F04 - 4 seconds: (-) Negative lock and unlock output time.

2-2 Trunk analog pulse length: Controls the length of the analog trunk release output.

F01 - 0.4 seconds: Trunk release output time.
F02 - 0.8 seconds: Trunk release output time.
F03 - 2 seconds: Trunk release output time.
F04 - 4 seconds: Trunk release output time.

2-3 Priority unlock: When enabled, provides a dual stage unlock for driver's door priority. For analog doorlocks you must program a POC for 'Unlock others' in menu 5. For vehicle specific firmware solutions, this option may not be available.

F01 - Disable
F02 - Enable

2-4 Double pulse lock: This option will provide a double pulse when the lock command is executed by the CM. The length of output time will be determined by menu option 2-1

F01 - Disable
F02 - Enable

2-5 Double pulse unlock: This option will provide a double pulse when the unlock command is executed by the CM. The length of output time will be determined by menu option 2-1

F01 - Disable
F02 - Enable

2-6 Auto relock: This option will relock the doors 30 seconds after they have been unlocked by the CM, if no doors have been opened. The length of output time will be determined by menu option 2-1

F01 - Disable
F02 - Enable

2-7 Unlock before remote start: Sends an unlock command when the remote start sequence is triggered.

F01 - Disable
F02 - Enable

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F0 = Default Feature Option

2-8 Re-lock after start: Sends a lock command as soon as the CM has confirmed remote start success.

- **F01 - Disable**
- **F02 - Enable**
- **F03 - Enable with smart re-lock:** Doors will only re-lock if they were locked by the CM before remote start.

2-9 Re-lock after remote start shutdown: Sends a lock command after the remote start shuts down.

- **F01 - Disable**
- **F02 - Enable**
- **F03 - Enable with smart re-lock:** Doors will only re-lock if they were NOT unlocked by the CM during remote start.

2-10 Lock after manual transmission shutdown sequence: Upon successful completion of reservation mode (vehicle shuts down), the CM will send a lock command.

- **F01 - Disable**
- **F02 - Enable**
- **F03 - Enable with smart re-lock:** Doors will only re-lock if they were NOT unlocked by the CM during the reservation sequence.

2-11 Lock after turbo timer shutdown: If Turbo mode is engaged in menu 1-12, the CM will send a lock command after the vehicle shuts down.

- **F01 - Disable**
- **F02 - Enable**

2-12 Ignition controlled doorlock: This option will provide a door lock output when the vehicle's ignition is turned on by the user, or once the vehicle's RPM reaches a pre-determined value while driving. This setting also depends on menu option 2-13. NOTE: When F02/F03 are selected, the user must also activate the "drive lock" or ignition controlled door locking feature using a iDatastart remote or Drone. (Please check specific remote user's manual for steps to activate Drive lock.)

- **F01 - Disable**
- **F02 - Enable**
- **F03 - Enable at 2000 RPM (only is tach input is selected in menu 1-2)**

2-13 Ignition controlled doorlock setting: Determines if the ignition on/off controls lock, unlock, or both. For lock, the CM will provide a door lock output when the vehicle's ignition is turned on. For unlock, CM will provide a door unlock output as soon as the key is turned off or 12V ignition is removed.

- **F01 - Lock & Unlock**
- **F02 - Lock only**
- **F03 - Unlock only**

2-14 Trunk activation sequence: Controls what occurs when a trunk release command is sent to the CM.

- **F01 - Disarm, then unlock, then trunk release**
- **F02 - Disarm, then trunk release**
- **F03 - Trunk release only**
- **F04 - Disarm, then unlock all, then trunk release**

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F0 = Default Feature Option

2-15 Analog rearm trigger output: Sets the behavior for the analog arm wire (M2-04 GREEN/WHITE/BLACK DOT).

F01 - After start & after shutdown & on first lock press
F02 - After shutdown & on first lock press
F03 - After start only
F04 - After shutdown only

2-16 Analog disarm sequence: Controls how disarm occurs when the CM receives an unlock command or remote start command.

F01 - Disarm only: The CM will send an pulse output to the analog disarm (M2-05 GREEN/BLACK/BLACK DOT).
F02 - Disarm with ignition cycle: The CM will send an pulse output to the analog disarm (M2-05 GREEN/BLACK/BLACK DOT) AND pulse the ignition (+) output wire simultaneously.

2-17 Doorlock parking lights confirmation : Controls the behavior of the parking light output as doolock commands are executed. These settings are generally reserved for vehicle specific applications and will be set by the firmware. For general purposes, the default is always 'enable'.

F01 - Disable
F02 - Enable
F03 - Enable with ignition ON only
F04 - Enable with ignition OFF only

2-18 Headlight output: This feature can serve to turn on the headlights for courtesy illumination when the keyless entry is used. This option works in conjunction with a POC programmed as 'GND headlight output' in menu 5.

F01 - Lock and unlock
F02 - Lock only
F03 - Unlock only

2-19 Secure trunk: This feature is designed to prevent accidental activation of the Trunk output by requiring an additional step when using an aftermarket remote.

F01 - Disable
F02 - Enable: Unlock must be pressed before activating trunk release.
F03 - Enable while locked/armed: Unlock must be pressed before activating trunk release if the system is in a locked/armed state.

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F0 = Default Feature Option

Menu #4 : AUX function assignment

Auxiliary functions can be assigned to button combinations on iDatastart RF transmitters, or to command buttons in the Drone Mobile app. Not all transmitters can support the same numbers of auxiliaries - see the transmitter's guide for more information.

4-1 Transmitter AUX 1: Sets the action when activating AUX 1 from an RF transmitter
4-2 Transmitter AUX 2: Sets the action when activating AUX 2 from an RF transmitter
4-3 Transmitter AUX 3: Sets the action when activating AUX 3 from an RF transmitter
4-4 Transmitter AUX 4: Sets the action when activating AUX 4 from an RF transmitter
4-5 Transmitter AUX 5: Sets the action when activating AUX 5 from an RF transmitter
4-6 Secure auxiliaries: This feature is designed to prevent accidental activation of the AUX outputs by requiring an additional step.

F01 - Disable
F02 - Enable: Unlock must be pressed before activating any AUX commands.
F03 - Enable while armed: Unlock must be pressed before activating any AUX command if the system is in a locked/armed state.

Auxiliaries 1 through 5 can be configured for any of the following functions:

F01 - Left sliding door: If supported in vehicle specific firmware, you can assign this feature to any auxiliary to trigger the left sliding door. In analog, assign this feature to an auxiliary, and configure one of the POC's in menu 5 to activate the matching feature.
F02 - Right sliding door: If supported in vehicle specific firmware, you can assign this feature to any auxiliary to trigger the Right sliding door. In analog, assign this feature to an auxiliary, and configure one of the POC's in menu 5 to activate the matching feature.
F03 - Pulse Timer Output (PT01): A PTO can be set to come on for as little as 1 seconds, or up to 10 minutes. It can also stay on for the entire duration of a remote start cycle. Assign this feature to an auxiliary, and configure one of the POC's in menu 5 to activate the matching feature.
F04 - Pulse Timer Output (PT02): A PTO can be set to come on for as little as 1 seconds, or up to 10 minutes. It can also stay on for the entire duration of a remote start cycle. Assign this feature to an auxiliary, and configure one of the POC's in menu 5 to activate the matching feature.
F05 - Pulse Timer Output (PT03): A PTO can be set to come on for as little as 1 seconds, or up to 10 minutes. It can also stay on for the entire duration of a remote start cycle. Assign this feature to an auxiliary, and configure one of the POC's in menu 5 to activate the matching feature.
F06 - Pulse Timer Output (PT04): A PTO can be set to come on for as little as 1 seconds, or up to 10 minutes. It can also stay on for the eitire duration of a remote start cycle. Assign this feature to an auxiliary, and configure one of the POC's in menu 5 to activate the matching feature.
F07 - Car finder: Activates the car finder feature of the system. Car finder settings are controlled in menu 3-18.
F08 - Gas cap: If supported in vehicle specific firmware, you can assign this feature to any auxiliary to trigger the gas cap release. In analog, assign this feature to an auxiliary, and configure one of the POC's in menu 5 to activate the matching feature.
F09 - Rear glass release: If supported in vehicle specific firmware, you can assign this feature to any auxiliary to trigger the rear glass release. To trigger a similar feature in analog, use a PTO (3-3 to 3-6).
F010 - Heated seats: If supported in vehicle specific firmware, you can assign this feature to any auxiliary to trigger the heated seats. To trigger a similar feature in analog, use a PTO (3-3 to 3-6).
F011 - Cooled seats: If supported in vehicle specific firmware, you can assign this feature to any auxiliary to trigger the heated seats. To trigger a similar feature in analog, use a PTO (3-3 to 3-6).
F012 - Panic: Activates the panic feature of the system. Panic settings are controlled in menu 3-23.
F013 - Defrost: If supported in vehicle specific firmware, you can assign this feature to any auxiliary to trigger the defrost. In analog, assign this feature to an auxiliary, and configure one of the POC's in menu 5 to activate the matching feature.

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F0 = Default Feature Option

Menu #5 : Programmable Outputs (POC)

These programmable outputs can be configured to trigger from an Auxiliary as set in menu 4, or can follow a variety of other commands and events.

5-1 POC 1 negative output (M2 - WHITE/PURPLE/BLACK DOT)
5-2 POC 2 negative output (M2 - PURPLE/BLACK/BLACK DOT)
5-3 POC 3 negative output (M2 - WHITE/BLACK/BLACK DOT)
5-4 POC 4 negative output (M2 - BROWN/BLACK/BLACK DOT)

POC 1 through 4 can be configured for any of the following functions:

F0 - Off
F01 - Unlock other doors: Follows the unlock command - This output will trigger on a second unlock press within 10 seconds of the first. Use this to achieve 2 stage unlock when driver's door priority is desired.
F02 - Defrost: This feature is dependent on menu settings 1-23, 1-24. This output will trigger on a successful remote start for the time selected in menu 1-24.
F03 - Horn: Follows the horn output settings in menu settings 3-9, 3-12.
F04 - Ignition: Follows the primary ignition wire (M1-05 PINK) output behavior.
F05 - Accessory: Follows the primary accessory wire (M1-01 ORANGE) output behavior.
F06 - Starter: Follows the primary starter wire (M1-03 PURPLE) output behavior.
F07 - Parking lights: Follows the parking light output behavior. Also dependant on the settings in menu 1-20.
F09 - Pulse timer output 1 (PTO): An auxiliary must be assigned to PTO1. The time adjustment for this out is controlled in menu 6-1.
F10 - Pulse timer output 2 (PTO): An auxiliary must be assigned to PTO2. The time adjustment for this out is controlled in menu 6-2.
F11 - Pulse timer output 3 (PTO): An auxiliary must be assigned to PTO3. The time adjustment for this out is controlled in menu 6-3.
F12 - Pulse timer output 4 (PTO): An auxiliary must be assigned to PTO4. The time adjustment for this out is controlled in menu 6-4.
F14 - Arm: Follows the primary arm wire (M2-04 GREEN/WHITE/BLACK DOT) output behavior. Also dependant on the settings in menu 1-15.
F15 - Disarm: Follows the primary disarm wire (M2-05 GREEN/BLACK/BLACK DOT) output behavior. Also dependant on the settings in menu 1-16.
F16 - Lock: Follows the primary lock wire output behavior. Also dependant on the settings in menu 2-1 and 2-4.
F17 - Unlock: Follows the primary unlock wire output behavior. Also dependant on the settings in menu 2-1, 2-3 and 2-5.
F18 - Trunk release: Follows the primary trunk release wire (M2-03 RED/WHITE/BLACK DOT) output behavior. Also dependant on the settings in menu 2-2.
F19 - Ground when running (GWR): Follows the primary GWR wire (M2-06 BLUE/WHITE/BLACK DOT) output behavior.
F20 - Left sliding door: An auxiliary must be assigned to this option in menu 4. The output will pulse 1 sec upon activation of the auxiliary.
F21 - Right sliding door: An auxiliary must be assigned to this option in menu 4. The output will pulse 1 sec upon activation of the auxiliary.
F22 - RAP shutdown: provides a 1 second pulse after remote start shutdown which is often used to shutdown the radio or autolights.
F24 - GND when engine running: The output will come on after the crank cycle on a successful remote start, and stay on until the runtime expires.
F26 - Domelight: The output will come on when the system is disarmed/unlocked and shut off after 30 seconds, or if the doors are re-locked or ignition is turned ON.
F27 - GND Headlight output: This option can be used to activate the headlights for up to 30 seconds following a command from an RF transmitter or Telematic device (Drone). To control what activates this option see menu 2-18. NOTE: This option will NOT activate from the vehicle's OEM keyless.
F31 - GND with vehicle ignition: This output will come on when the vehicle's ignition is switched on with the key.

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F0 = Default Feature Option

Menu #6 : Pulse timer output configuration (PTO)

If any of the POCs in menu 5 are set to Pulse Timer output (PTO) or Secure Start, you can set the output time using the options below.

6-1 PTO 1 duration (M2 - WHITE/PURPLE/BLACK DOT)
6-2 PTO 2 duration (M2 - PURPLE/BLACK/BLACK DOT)
6-3 PTO 3 duration (M2 - WHITE/BLACK/BLACK DOT)
6-4 PTO 4 duration (M2 - BROWN/BLACK/BLACK DOT)

PTO 1 through 4 can be configured for any of the following durations:

F01 - 1 second pulse: The output will come on for 1 second when activated, regardless if the vehicle is running or not.
F02 - 10 second pulse: The output will come on for 1 second when activated, regardless if the vehicle is running or not.
F03 - 15 second pulse
F04 - 20 second pulse
F05 - 30 second pulse
F06 - 5 minute pulse
F07 - 10 minute pulse
F08 - Latched for runtime: The output will come on when activated ONLY if the vehicle is running under remote start, and stay on until the runtime expires.

Menu #7 : Inputs configuration

These settings specify the source the system uses for various inputs. The vehicle databus is only used in vehicle specific firmware. When using analog firmware, only analog inputs are used. The default setting for each input is 'Auto' which will automatically take the analog input when no databus input is detected.

7-1 Brake input source

F01 - Analog: Only the analog input will be used.
F02 - Vehicle databus: The vehicle databus will provide the input when available. Only applies to digital firmware solutions (vehicle specific).
F03 - Auto by firmware The system will look for an input on the vehicle's databus. If the input is not available, or there is no databus connection, the analog input will be used.

7-2 Door input source

F01 - Analog: Only the analog input will be used.
F02 - Vehicle databus: The vehicle databus will provide the input when available. Only applies to digital firmware solutions (vehicle specific).
F03 - Auto by firmware The system will look for an input on the vehicle's databus. If the input is not available, or there is no databus connection, the analog input will be used.
F04 - Analog inverted (normally closed): This setting allows the analog input to operate as a normally closed circuit. The module considers the zone open when the ground connection is removed or when the circuit state changes from (-) ground to power.

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F0 = Default Feature Option

7-3 Tach input source

F01 - Analog: Only the analog input will be used.
F02 - Vehicle databus: The vehicle databus will provide the input when available. Only applies to digital firmware solutions (vehicle specific).
F03 - Auto by firmware The system will look for an input on the vehicle's databus. If the input is not available, or there is no databus connection, the analog input will be used.

7-4 Hood input source

F01 - Analog: Only the analog input will be used.
F02 - Vehicle databus: The vehicle databus will provide the input when available. Only applies to digital firmware solutions (vehicle specific).
F03 - Auto by firmware The system will look for an input on the vehicle's databus. If the input is not available, or there is no databus connection, the analog input will be used.
F04 - Analog inverted (normally closed): This setting allows the analog input to operate as a normally closed circuit. The module considers the zone open when the ground connection is removed or when the circuit state changes from (-) ground to power.

7-5 Trunk input source

F01 - Analog: Only the analog input will be used.
F02 - Vehicle databus: The vehicle databus will provide the input when available. Only applies to digital firmware solutions (vehicle specific).
F03 - Auto by firmware The system will look for an input on the vehicle's databus. If the input is not available, or there is no databus connection, the analog input will be used.
F04 - Analog inverted (normally closed): This setting allows the analog input to operate as a normally closed circuit. The module considers the zone open when the ground connection is removed or when the circuit state changes from (-) ground to power.

7-6 Glo-plug input source

F01 - Analog: Only the analog input will be used.
F02 - Vehicle databus: The vehicle databus will provide the input when available. Only applies to digital firmware solutions (vehicle specific).
F03 - Auto by firmware The system will look for an input on the vehicle's databus. If the input is not available, or there is no databus connection, the analog input will be used.

7-7 Emergency brake input source

F01 - Analog: Only the analog input will be used.
F02 - Vehicle databus: The vehicle databus will provide the input when available. Only applies to digital firmware solutions (vehicle specific).
F03 - Auto by firmware The system will look for an input on the vehicle's databus. If the input is not available, or there is no databus connection, the analog input will be used.

7-8 Temp sensor input source

F01 - Analog: Only the analog input will be used.
F02 - Vehicle databus: The vehicle databus will provide the input when available. Only applies to digital firmware solutions (vehicle specific).
F03 - Auto by firmware The system will look for an input on the vehicle's databus. If the input is not available, or there is no databus connection, the analog input will be used.

7-9 Speed sensor (VSS) input source

F01 - Analog: Only the analog input will be used.
F02 - Vehicle databus: The vehicle databus will provide the input when available. Only applies to digital firmware solutions (vehicle specific).
F03 - Auto by firmware The system will look for an input on the vehicle's databus. If the input is not available, or there is no databus connection, the analog input will be used.

7-20 Temperature sensor adjustment

Select value in Weblink: (-15 to 15 deg C), Default 0 Deg.C

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F0 = Default Feature Option

Menu #8 : Outputs configuration

These settings specify how the system treats various outputs. The vehicle databus is only used in vehicle specific firmware. When using analog firmware, only analog outputs are used. The default setting for each output is 'Auto' which will automatically use the analog output when no databus interface is available.

8-1 Arm output source

F01 - Analog output only: Only the analog output will be used.
F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

8-2 Disarm output source

F01 - Analog output only: Only the analog output will be used.
F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

8-3 Lock output source

F01 - Analog output only: Only the analog output will be used.
F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

8-4 Unlock driver's door output source

F01 - Analog output only: Only the analog output will be used.
F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

8-5 Unlock others output source

F01 - Analog output only: Only the analog output will be used.
F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

8-6 Trunk release output source

F01 - Analog output only: Only the analog output will be used.
F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

8-7 Left sliding door output source

F01 - Analog output only: Only the analog output will be used.
F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

8-8 Right sliding door output source

F01 - Analog output only: Only the analog output will be used.
F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

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F0 = Feature Option

8-9 Parking light output source

F01 - Analog output only: Only the analog output will be used.

F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

8-10 RAP shutdown output source

F01 - Analog output only: Only the analog output will be used.

F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

8-11 Panic and alarm output source

F01 - Analog output only: Only the analog output will be used.

F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

8-12 Car finder output source

F01 - Analog output only: Only the analog output will be used.

F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

8-13 Defrost output source

F01 - Analog output only: Only the analog output will be used.

F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

8-14 Horn chirp output source

F01 - Analog output only: Only the analog output will be used.

F02 - Analog output and on Databus when available: If using a digital firmware solutions (vehicle specific) the output may be sent in data. The output is always sent in analog as well.

8-15 Sleep status on module LED

F01 - Disable

F02 - Enable

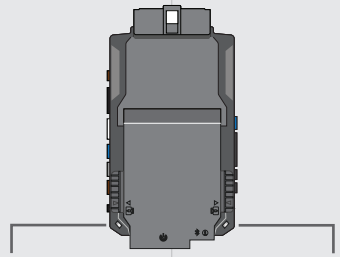
8-19 Anti-Grind

F01 - Disable

F02 - Enable

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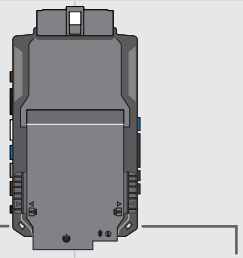
Module Diagnostics

MODULE STATUS DURING:	 LED 2*	LED 1**	LED STATUS	DIAGNOSTIC
MODULE PROGRAMMING		🔴	Flashing RED	Missing/wrong information from firmware or vehicle. See firmware specific diagnostics, or contact technical support.
		🔴	Solid RED	Module waiting for more vehicle information. Programming incomplete.
		🟢	Flashing GREEN	Additional steps required to complete programming. Refer to install guide.
		🟢	Solid GREEN then OFF	Module programming completed successfully.
		o	OFF	No activity or module already programmed.
	🔴		1 RED flash	No firmware on module. Connect to Weblink and flash device.
	🟠		2 ORANGE flashes	Contact technical support.
	🟠		3 ORANGE flashes	Module programming not completed.
	🟠		4 ORANGE flashes	Contact technical support.
	🟠		7 ORANGE flashes	Contact technical support.
	🟠		8 ORANGE flashes	Contact technical support.
	🟠		9 ORANGE flashes	Contact technical support.
	🟠		10 ORANGE flashes	Boot loader update failed. Contact technical support.
	🟠		11 ORANGE flashes	T-harness detection does not match install type selection in Weblink.
TACH PROGRAMMING	🔴		Solid RED	Tach learn in progress.
	🟢		1 GREEN flash	Tach signal programmed in analog.
	🟢		2 GREEN flashes	Tach signal programmed in data.
	🔴		3 RED flashes	No tach signal detected
	🔴		4 RED flashes	System is in valet mode. Turn off valet mode to program tach.
	🔴		6 RED flashes	Engine sensing set for 'assumed start'. No tach programming required.
	🟠		7 ORANGE flashes	Engine sensing not configured properly. Contact technical support.

* LED 2 (RS) displays generic diagnostic codes specific to the remote start module. Orange LED flashes may appear red.
** LED 1 (Bypass) displays diagnostic codes specific to the firmware loaded on the module.
Visit the programming diagnostics page for more information.

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Module Diagnostics

MODULE STATUS DURING:	 LED 2*	LED 1**	LED STATUS	DIAGNOSTIC
REMOTE START SEQUENCE	●		Flashing rapid RED	Remote start shutdown sequence.
	●		Flashing slow RED	Remote start shutdown error code. Contact technical support.
	●		Solid RED	Remote start crank delay.
	●		Flashing rapid GREEN	Remote start cycle in progress. Working correctly.
	●		1 GREEN flash	Remote start initiated successfully.
	●		3 GREEN flashes	Idle mode cycle in progress.
	●		4 GREEN flashes	Turbo mode cycle in progress.
		●	Flashing GREEN	Remote start cycle in progress. Displays vehicle platform during runtime.
		●	Rapid GREEN flashing	Secure takeover initiated. Waiting to complete takeover after brake press.
TRANSMITTER PROGRAMMING	●		Solid RED	Remote programming in progress, waiting for remote pairing.
	●		1 GREEN flash	Remote programmed.
	●		4 RED flashes	Shutdown remote starter before attempting remote programming.
	●		5 RED flashes	Engine must be off before attempting remote programming.
	●		6 RED flashes	System must be unlocked/disarmed before attempting remote programming.
	●		7 RED flashes	Module must be learned to the vehicle before attempting remote programming.

* LED 2 (RS) displays generic diagnostic codes specific to the remote start module. Orange LED flashes may appear red.
** LED 1 (Bypass) displays diagnostic codes specific to the firmware loaded on the module.
Visit the programming diagnostics page for more information.

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Remote Starter Error Codes

REMOTE STARTER ERROR CODES: NOTES	PARKING LIGHT FLASHES	DIAGNOSTIC
I WARNING: The following applies only when the parking lights are connected and supported by the system. II After a remote starter failure, the parking lights will flash three [3x] times followed by the error code. See table.	3 + 1	Tach is not programmed OR engine is already running.
	3 + 2	Key is in ignition ON position.
	3 + 3	Door is open.
	3 + 4	Trunk is open.
	3 + 5	Foot brake is ON.
	3 + 6	Hood is open.
	3 + 7	Loop is not cut.
	3 + 8	Vehicle failed to remote start.
	3 + 9	Vehicle movement detected (VSS).
	3 + 10	System is in Valet Mode.
	3 + 11	CAN communication failure
	3 + 12	RS not synchronized. Start vehicle with OEM key for 15 sec before trying a new RS sequence.
	3 + 13	Bypass problem.
	3 + 14	Idle mode or takeover is not available on this vehicle.
	3 + 15	Overheat protection.

REMOTE STARTER SHUTDOWN ERROR CODES: NOTES	PARKING LIGHT FLASHES	DIAGNOSTIC
I WARNING: The following applies only when the parking lights are connected and supported by the system. II If the engine shuts down after a remote starter sequence use the query command from a compatible aftermarket remote to display the shutdown error code. The parking lights will flash four [4x] times followed by the error code. See table.	4 + 1	Engine tach signal was lost.
	4 + 2	Emergency brake signal was lost.
	4 + 3	Foot brake ON detected.
	4 + 4	Hood open detected.
	4 + 5	Tach over rev detected.
	4 + 6	Glow plug timeout error.
	4 + 7	Vehicle movement detected (VSS).
	4 + 8	Check engine light ON.
	4 + 9	Low fuel level.
	4 + 10	Open door detected.
	4 + 11	CAN communication failure during RS sequence.
	4 + 12	RS not synchronized. Start vehicle with OEM key for 15 sec before trying a new RS sequence.
	4 + 13	Bypass problem.
	4 + 14	Idle mode or takeover is not available on this vehicle.
	4 + 15	Overheat protection.

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I have everything hooked up and the system will not respond.
A: The module must first be flashed on the web before it can be used in a vehicle. If you have already flashed and programmed your control module, you must also program any transmitters to the system before they can be used. See 'Installation Basics'.

When remote starting, the parking lights flash 3 times, followed by 1 time (4 total).
A: You must program tach before remote starting. This requires that the foot brake and ignition inputs connected and working properly. See the 'Tach sensing & learning' section.

When remote starting, the parking lights flash 3 times, followed by 7 times (10 total).
A: The system is in Manual Transmission mode. If installing on an automatic vehicle, you must cut the BLACK loop on the control module. If you have already completed programming, you must cut the loop, then perform a system reset and repeat the programming and tach learn.

When remote starting, the parking lights flash 3 times, followed by 8 times (11 total).
A: The remote start did not complete successfully. Determine when/where the process is failing and troubleshoot accordingly: Is ignition coming on? Is it cranking? Is the immobilizer bypass or key wrap preventing a successful start? Can the vehicle still be key started? Contact technical support for troubleshooting help.

Does the HC series have Hybrid mode?
A: YES. For details, review the "Tach sensing and learning" section of this manual.

The vehicle starts and shuts down 3 times in a row.
A: This usually means that the engine sensing mode is not working correctly. If you are using a coil, change to an injector.
B: Does you vehicle have an immobilizer system which will need to be bypassed for remote start? If using analog firmware, you will be required to take extra steps to complete your installation. Please contact technical support.

The vehicle cranks but will not start (armed or disarmed).
A: Check ignition switch wiring including starter-kill relay (if installed).
B: Does you vehicle have an immobilizer system which will need to be bypassed for remote start? If using analog firmware, you will be required to take extra steps to complete your installation. Please contact technical support.

How do I program the auxiliary outputs?
A: You must connect the HC to Weblink via your PC or Weblink Mobile app. Go to menus 4, 5, 6 in the options settings. You can program up to 4 outputs for a variety of applications. See the "menu Option Descriptions' section for details.

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Can I use the wires in the blue 6 pin M5 connector? Is it user programmable?
A: The wires in M6 are controlled in firmware for vehicle specific applications. In full analog, these outputs are disabled.

I don't have access to the module, how do I learn tach?
A: If you have a transmitter programmed to the system, it can be used to perform a tach learn. Start the vehicle with the key, apply the foot brake, then initiate a start sequence from the transmitter. The parklights will flash 1 or 2 times to confirm learn. See the 'Tach sensing and learning' section for more information.

Why are the ignition controlled doorlocks not working?
A: Once ignition locks have been activated in menu 2-12, then should work automatically. If they don't, verify that they have not been toggled off using the transmitter (see transmitter guide). Their may also be a limitation due to the vehicle architecture. Contact technical support for more information.

How do I activate turbo mode?
A: Set menu option 1-12 to enable Turbo mode. Refer to your transmitter's manual for user instructions on toggling this feature ON/OFF. Apply the Ebrake while vehicle is running, remove the key from the ignition. The vehicle will stay running for the programmed turbo time. This feature may not be supported on all vehicles. Contact technical support for more details.

Technical Support Contacts

iDatastart technical support is reserved for authorized dealers only.

Monday - Friday:	866-427-2999 (8:30 am – 8:30 pm Eastern Standard Time)
Email:	support@idatalink.com
Web:	www.idatalink.com **Wiring Diagrams** Diagrams for most vehicles are available when you flash your module at www.idatalink.com. If you are an authorized dealer and unable to access this site please contact your sales rep or us call 866-427-2999 Monday through Friday, 8:30 am – 8:30 pm Eastern Standard Time.

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