# MASTER GUIDE
## DCX



**DOCUMENT NUMBER**

**REVISION DATE**
20250115

### TERMS OF USE
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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# Table of Contents



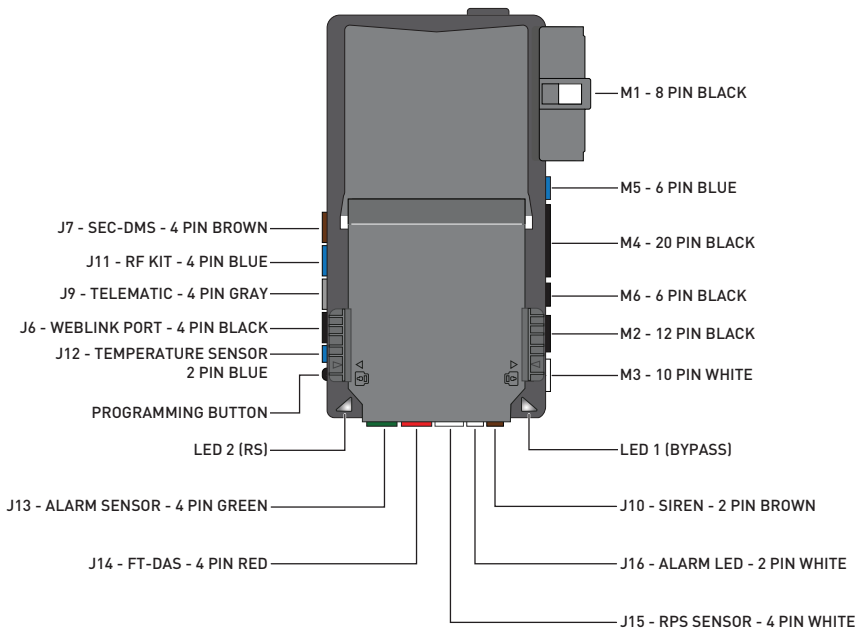
| | |
|---|---|
| Module Layout | 3 |
| Introduction | 4 |
| Remote Programming Procedure | 5 |
| Valet Mode | 6 |
| Placement and Use of Components | 7 |
| Tach sensing & learning | 14 |
| System reset | 15 |
| Wiring Descriptions | 16 |
| Option Programming Tables | 19 |
| Option Menu Descriptions | 28 |
| Module Diagnostics | 51 |
| Remote Starter Error Codes | 53 |
| Alarm Error Codes | 54 |
| Frequently Asked Questions | 55 |
| Technical Support Contacts | 56 |

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

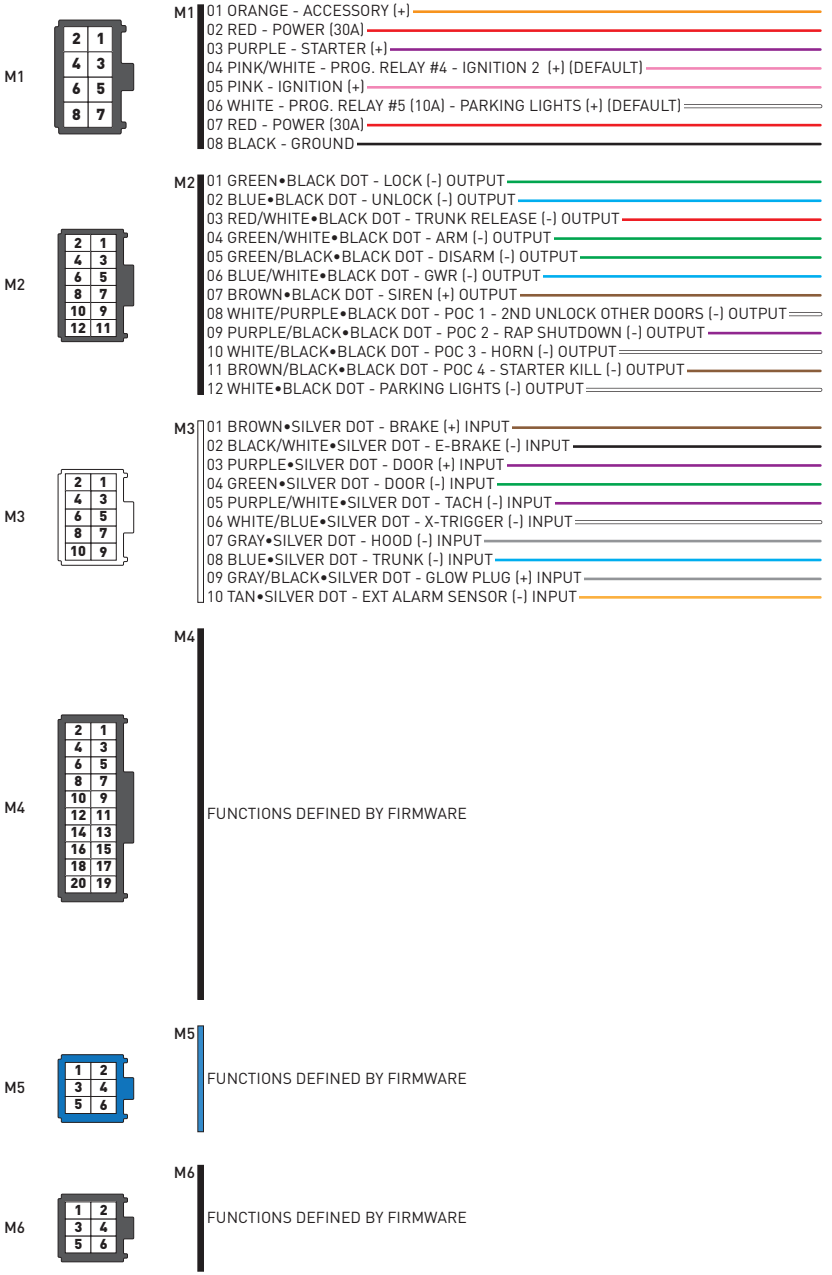
# Module Layout



## MODULE CONNECTORS




## CONNECTOR PINOUT




U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# Introduction

Thank you for purchasing this Firstech system for your vehicle. The following installation manual is intended for experienced and authorized Firstech technicians. We highly recommend that you contact your local Firstech dealer and seek professional installation. Call 888-820-3690 or visit our website at www.firstechonline.com to locate your nearest dealer. If you need additional or replacement remotes and/or online support please visit www.myfirstech.com.

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

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

# Kit Contents

RF Kits with remote(s), Antenna, and Antenna Cable are not included with the FT-DCX CONT.

The following sensors are available but **not included** with every system:

- Remote pager sensor (FT-RPS TOUCH) or (FT-RPS-2)
- Temperature sensor (FT-TEMP SENSOR) (Drone and 2 Way remote LCD systems)
- Shock sensor (FT-DAS) or (FT-DAS2)

The remote(s) and antenna are modular and are not specific to the control modules. You have the ability to pair almost any Firstech remote(s) and 4-pin antenna receiver to the DCX. The 6 pin antennas are not supported.

Any questions on contents please contact your distributor or us directly at 1.888.820.3690, Monday through Friday, 8 AM to 5 PM Pacific Time.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# Remote Programming Procedure



**NOTE:**
- The module must be flashed, successfully programmed and in an unlocked/disarmed state to enter remote programming.

- Programming will only work with a LOCK command. If using a 1-button remote, make sure not to double-tap (unlock) or hold (remote start) the button, or it will NOT learn.

**ALTERNATE REMOTE PROGRAMMING PROCEDURE 2**
**PTS (Push to Start) application**

**STEP 1:** Set the vehicle to the ignition or "ON" position

**STEP 2:** Within 5 seconds push to the "OFF" position

**STEP 3:** Within 5 seconds set the vehicle to the ignition or "ON" position (do not start)

**STEP 4:** Step on the foot brake 3 times within 5 seconds. The parking lights will flash 1 time to indicate remote programming is enabled

**STEP 5:** Tap (a quick 0.5 second press and release) the lock button on the remote. The parking lights will flash 1 time indicating remote code has been accepted

**STEP 7:** After 5 seconds of no valid remote codes being transmitted the HC will automatically exit programming mode

>>



WARNING: Program aftermarket remotes before usage. A maximum of four [4x] aftermarket remotes per system.

01



Time restriction. Complete next step within 7 seconds.

02




Cycle ignition ON five times [5x OFF/ON] rapidly.

03



Parking Light will flash once [1x].

04



Time restriction. Complete next step within 5 seconds from previous step.

05



Press once [1x] on LOCK button of aftermarket remote.

06



Parking Light will flash once [1x].

>>



To program additional remotes: repeat steps 4 to 6 using each additional remote.

07



Wait, Parking Light will flash twice [2x].

08




Turn ignition to OFF position.

09



Aftermarket Remote Programming Procedure completed.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# Valet Mode



Valet Mode disables all system features except for the keyless entry. Use Valet when servicing or loaning your vehicle to others to avoid any inconvenience or mishap when operating the vehicle.

There are no visual indicators when the security system is in Valet Mode. There is a parking light indication when remote starting in Valet Mode. (3 flashes followed by 10 flashes).

Also when in Valet Mode, the keyless entry feature will still operate. There are multiple options available for setting valet mode (see menu option 1-17).

**Setting Valet mode using Drone Mobile:**
Valet Mode can also be enabled using DroneMobile from the users account at www.dronemobile.com. Once logged in to the user account select the settings tab. Then select the controller settings, check Valet Mode and click Save. (If Valet Mode is already checked, uncheck it and then click save once you have saved it then go back to controller settings, then check valet mode and click save it should enter valet mode).

**The System can be taken out of Valet mode by one of the following procedures:**

**With Remote:** While within remote range of the vehicle, using a 4 button remote, press and release the lock and trunk button together simultaneously for a half second. The vehicle's parking lights will flash 2 times to indicate the system has exited Valet Mode.

**When using a 1 button remote:** To exit valet turn the key to the ignition or 'On' position. Press and release the remote button for a half second. Wait for the remote LED to stop flashing and repeat for a total of 5 times within 10 seconds. Once you have tapped the remote button 5 times the vehicles parking lights will flash 2 times to indicate the system has exited Valet Mode.

>> 

NOTE: In Valet Mode, the Remote starter is not functional. Keyless entry, Lock and Unlock will remain functional. See RF kit user manual for alternate valet mode programming.

01 

Time restriction. Complete next step within 7 seconds.

02 


Cycle ignition ON twice [2x OFF/ON] rapidly.

03 

Press and release the BRAKE pedal three times [3x].

04 

Parking Light will flash once [1x] then will flash twice [2x].

05 


Set ignition to OFF position.

06 

Valet Mode Programming Procedure completed.

>> 

To exit valet mode: repeat steps 1 to 5.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# Component Use & Placement



**IMPORTANT:** The placement and use of components are critical to the performance of this system.

## Antenna and Cable

Firstech antennas are calibrated for horizontal installation at the top of the windshield. The cable that connects the antenna to the control module must be free from any pinches or kinks. Installing the antenna in areas other than the windshield may adversely affect the effective transmitting distance of the remotes.

## RPS Touch and RPS (Remote Paging Sensor)

The RPS is an optional feature. The car call/RPS feature uses a small sensor that is mounted on the inside of your windshield.

### 1. RPS Touch (Remote Paging Sensor)

The new RPS touch has multiple features including: remote paging, 4 digit pin unlock/disarm, and arm/lock. All features are operated with a simple touch of the sensor.

RPS Touch and car call functions do not require programming, however in order to unlock/disarm your vehicle you must program a 4 digit passcode (numbers 1 through 10 only) you can view our video library for programming instructions at: www.myfirstech.com

## RPS (Remote Paging Sensor) Programming Your Code

**STEP 1:** Choose your RPS Touch 4 digit code. '0' is not available.
**STEP 2:** Turn ignition to the 'ON' position and leave driver's door open.
**STEP 3:** Hold your finger over the 'Red Circle' icon for 3 seconds.
**STEP 4:** When the siren chirps and LEDs flash in a circular pattern, tap on your first number. (Hold the number for 2.5 seconds to choose 6 through 10.) After choosing your first number you will get one siren chirp and LEDs will flash in a circular pattern.
**STEP 5:** Repeat Step 4 until all four digits are set. You will get 1 siren chirp and 1 parking light flash. Repeat Steps 2 - 5 if you get 3 chirps and light flashes. Your RPS Touch is now programmed.

## Alarm rearm and lock

To rearm hold your finger on the 'Red Circle' for 3 seconds.

## Alarm disarm and unlock

To disarm hold your finger over the 'Red Circle' for 3 seconds. Once the LEDs start their circular pattern, enter your 4 digit code by touching the window with the flat part of the tip of any finger over the number for each digit of your code. (Refer to Step 4 above or training video at www.myfirstech.com) Two seconds after entering the 4th digit, your system will first re-arm/lock. In two seconds, it will disarm/unlock.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

## RPS (Remote Paging Sensor) Programming Your Code (continued)

### 2 Way LCD remote paging

To page a 2 Way LCD remote just tap the 'Red Circle' twice.

### Touch Panel Sensitivity

To change touch sensitivity open the driver's door, hold the button on the back of the RPS Touch until the LEDs go out. Release button and tap again. The number of solid LEDs represent sensitivity of touch, 1 being the lowest, 5 the highest.

### RPS Touch On or Off

You can turn the RPS Touch off from your remote. Just follow the instructions below:

**STEP 1:** Enter remote programming mode by holding down buttons 2+3 (Trunk and Key/Start buttons on 2W901R-SS) simultaneously for 2.5 seconds. The remote will beep once and the LCD or read "REMOTE MENU" indicating that you have entered programming mode.

**STEP 2:** Scroll through the remote options by taping button 3 or 4 (Function button 2W901R-SS). Once the LCD RPS icon flashes reads "RPS-ON" tap button 1 or (Lock button 2W901R-SS) to turn this feature on. The LCD will read "RPS-OFF"

**STEP 3:** Exit remote programming by holding down buttons 2+3 (Trunk and Key/Start 2W901R-SS) buttons simultaneously for 2.5 seconds. The remote will beep indicating that you have successfully exited programming.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

## RPS (Remote Paging Sensor) Unlock/Disarm

RPS and car call functions do not require programming, however in order to unlock/disarm your vehicle you must program a 4 digit passcode (numbers 1 through 10 only) using the instructions below:

**STEP 1:** Disarm/unlock the alarm (remote must be programmed first) and choose a 4 digit code. You can not have zeros.
**STEP 2:** Turn ignition key to the "on" position and leave the driver's door open.
**STEP 3:** Knock on the windshield in front of the RPS a total of 5 times (each time you knock the LED on the RPS will flash RED). The LED will begin to flash rapidly in BLUE with successful completion of this step.
**STEP 4:** Enter the first digit of the desired four digit pass code by knocking on the windshield in front of the RPS the desired number of times. For example, to enter 3, knock on the sensor 3 times (each time you knock the LED will flash RED) then wait.
**STEP 5:** The LED on the RPS will confirm your first number by flashing BLUE slowly. Once the LED begins to flash rapidly in BLUE, enter your second number by repeating step 4.
**STEP 6:** Repeat steps 4 & 5 to enter all four numbers.
**STEP 7:** Turn the ignition OFF - the RPS disarm/unlock passcode is now programmed. Follow steps 3 – 5 to enter your disarm/unlock code.

## Alarm disarm and unlock / rearm and lock

To disarm, knock on your sensor 5 times. Wait for the Blue LEDs to flash rapidly. Follow STEP 4 and 5 above to enter your 4 digit passcode.
To rearm, knock on your sensor 5 times.

## 2 Way LCD remote paging

To page a 2 Way LCD remote just knock on the RPS twice.

## Knock Panel Sensitivity

To change knock sensitivity, disarm the system and adjust the switch on the rear of the RPS. The larger the circle, the more sensitive the knock sensor is.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

## KP2-Keyless Entry Sensor (sold separately)

The new KP2 has multiple features including remote paging, 4 digit pin unlock/disarm, and arm/ lock. All features are operated with a simple touch of the window mounted sensor.
KP2 and keyless functions do not require feature programming, however in order to unlock/disarm your vehicle you must program a 4 digit passcode (numbers 1 through 7 only) you can view our video library for programming instructions at: https://www.myfirstech.com

## Programming Your Code

**STEP 1:** Choose your RPS Touch 4 digit code. '0' is not available.

**STEP 2:** Turn ignition to the 'ON' position and leave a door open.

**STEP 3:** Hold your finger over the "Lock Icon" for 3 seconds.

**STEP 4:** When the siren chirps and the Red LED flashes rapidly, tap on your first number. After choosing your first number you will get one siren chirp and the Green LED will flash once to confirm.

**STEP 5:** Repeat Step 4 until all four digits are set. You will get 1 siren chirp and 1 parking light flash. Repeat Steps 2 - 5 if you get 3 chirps and light flashes. Your KP2 PIN is now programmed.

## Alarm rearm and lock

To rearm hold your finger on the 'Lock Icon" for 3 seconds.

## Alarm disarm and unlock

To disarm hold your finger over the "Lock Icon" for 3 seconds. Once the RED LED starts flashing, enter your 4 digit code by touching the window with the flat part of the tip of any finger over the number for each digit of your code. The Green LED will flash, and siren chirp (if included) with each digit (Refer to Step 4 above or training video at https://www.myfirstech.com) Two seconds after entering the 4th digit, your system will first re-arm/lock. In two seconds, it will disarm/ unlock.

## 2 Way LCD remote

If the incorrect PIN is entered the DCX will notify the 2 way LCD remote with "car call" message.

## Touch Panel Sensitivity

Use menu option 7-24 to adjust the sensitivity.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

## FT-DAS (Digital Adjustable Sensor - 1st GEN -- Not Programmable with OEM Remotes)

This is a dual stage impact sensor, and auto adjusting tilt sensor. Follow the steps below to properly setup your DAS sensor.

### Installing Your DAS

**STEP 1:** Set switch 1 and 2 on the side of the DAS. *See below for explanation of switches.

**STEP 2:** Connect cable to the red 4 pin port on the DCX Series module.

**STEP 3:** Mount DAS securely using zip ties or included hardware. Can be mounted in any orientation. Tilt will set 30 seconds after arming.

| | | | |
|---|---|---|---|
| Switch 1: | ON - 3 Degree Tilt | Switch 2: | ON - 4 Inch Movement |
| | OFF - 1.5 Degree Tilt | | OFF - 3 Inch Movement |

### Adjusting DAS Shock Sensitivity (FT-DCX series)

Use the sensitivity adjustment dial located on the side of the FT-DCX. A higher number indicates a higher sensitivity to impacts and/or vibration.

### Testing The DAS Sensor

**STEP 1:** Turn the ignition off and Arm/Lock the system.

**STEP 2:** Wait 30 seconds then test the impact sensitivity.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

## FT-DASII (Digital Adjustable Sensor gen II)

The DAS II also includes a dual stage impact sensor, and auto adjusting tilt sensor, and glass break sensor all in one. Follow the steps below to properly setup your DAS II sensor levels. You can view our programming/demonstration video located in our video library at www.myfirstech.com.

### Programming and adjustment

**STEP 1:** Connect cable to the red 4 pin port on the DCX Series module.
**STEP 2:** Turn the ignition to the 'on' position
**STEP 3:** Send Unlock command 2 times (unlock => unlock) using any Firstech remote or OEM remote (not supported on all vehicles) At this time the DAS-II display will initialize and stay powered up for at least 5 minutes or until ignition is off.
**STEP 4:** Push the programming button repeatedly until the desired sensor has been selected 1-5 shown in the table below. (The programming button will be used to navigate the sensor adjustments and sensitivity once a sensor has been selected.)
**STEP 5:** Once the sensor has been selected hold the programming button for 2 seconds to confirm selection and enter sensitivity adjustment. The adjustment options will now be accessible with default setting displayed. (sensitivity options will be shown in table below.)
**STEP 6:** Push the programming button repeatedly until desired sensitivity level is reached (setting 0 will indicate sensor is OFF => except option 2 window break sensor conditions)
**STEP 7:** Hold programming button for 2 seconds to save sensitivity setting. After the setting is saved the sensor will start over at sensor 1 again. (if the programming button is not pressed within 5 seconds after setting the LED will flash 2 times save the setting and exit that sensor programming)
**STEP 8:** Turn ignition off to exit programming

| | Feature | Press Button | Mode Display | Sensitivity Adjust | | | |
|---|---|---|---|---|---|---|---|
| 1 | Shock Level (Prewarn) | 1 time | "1." | "0" | "H" | "3" | "L" |
| | | | Red LED ON | OFF | High sensitivity | Default | Low sensitivity |
| 2 | Window Break Sensing Condition | 2 times | "2." | | "0" | "0" | "1" |
| | | | Red & Green LED ON | - | Sound Only | Default | High Sensitivity |
| 3 | Window Break Sound Sensitivity | 3 times | "3." | "0" | "L" | "3" | "H" |
| | | | Green LED ON | OFF | Low sensitivity | Default | High sensitivity |
| 4 | Tilt | 4 times | "4." | "0" | "L" | "L" | "H" |
| | | | Red LED flash | OFF | 3.0 degrees | Default | High sensitivity |
| 5 | Movement | 5 times | "5." | | "L" | "L" | "H" |
| | | | Green LED flash | - | 4 inch | Default | 3 inch |

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

## FT-RFID (sold separately as an RF-kit)

The FT-RFID function, now included with 2 of the latest 2-way remotes from Firstech, will unlock/disarm the vehicle when in range of the antenna (ANT-2WSF).

### Install prep for FT-RFID

**STEP 1:** Set option 2-6B to Setting 1,2 or 4.

**STEP 2:** Connect ANT-2WSF using supplied 4 pin to 6 pin antenna cable.

**STEP 3:** ANT-2WSF mounting requirements will vary with the vehicle type. The proximity unlocking range is approximately 3-6 ft from the antenna based on its mounting location. The proximity feature will perform much better out of direct sunlight and above freezing temperatures so consider mounting the ANT-2WSHF behind an "A" or "B" pillar or under the dash.

### Testing The FT-RFID

**STEP 1:** Make sure your FT remotes are programmed
**STEP 2:** Enable the proximity unlock feature on one of your FT remote using the remote menu. NOTE: Once the feature is enabled for 1 remote it is enabled for both remotes.
**STEP 3:** Proximity unlock/disarm - Once the DCX has been locked/armed allow 15 seconds for the RFID remote to unlock/disarm the system once its within proximity (approximately 3ft-7ft) of the ANT-2WSF antenna. i.e. Arm the system wait 15 seconds walk up to the vehicle and it will automatically unlock/disarm.

## Hood Pin

The hood pin switch triggers the alarm in the event the hood is opened while the alarm is armed. The hood pin doubles as an important safety feature that prevents the remote start from engaging while the hood is open.

## Siren

We include the standard 6 tone mini siren with every remote start security (AS) kit. We also offer 2 additional siren options 1. Mini Piezo (pain generator) 2. Battery backup siren with key. We have a variety of siren feature options including length of output time, chirp output timing (i.e. when locking, unlocking, or starting) so please make sure to set features 3-02 and 3-09 to desired options.

## Thermistor (Temperature Sensor)

Every 2 Way LCD Firstech RF kit includes an optional thermistor, which must be plugged into the blue 2 pin port of the DCX in order to use properly. The use of the thermistor allows the 2 Way LCD remote to display the vehicle's interior temperature on screen or the status page of your Drone mobile phone App. (only when premium service is active). The thermistor will also allow for the vehicle to start with timed hot or Cold starting; see features menus for the different options. **IMPORTANT:** The 2 pin connector on the end of the thermistor may be white or blue.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# 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 - (Automatic Transmission Vehicles Only)**
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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# 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.

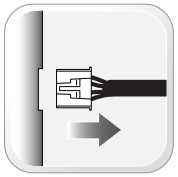
SYSTEM RESET DOES NOT ERASE A FIRMWARE PROGRAMMED TO THE MODULE, OR ALTER ANY SETTINGS IN THE OPTION MENUS.
ANY FIRMWARE OR OPTION CHANGES REQUIRE YOU TO CONNECT THE MODULE TO THE WEB OR A MOBILE DEVICE USING A WEBLINK PROGRAMMER.

>>



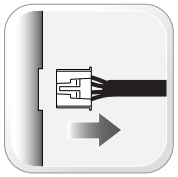
The following procedure resets the module programming to the vehicle. It does not reset any settings configured online.

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



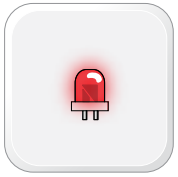
PRESS AND HOLD the module's programming button while connecting the M1 BLACK 8-pin connector and the M4 BLACK 20-pin connector.

04



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

05



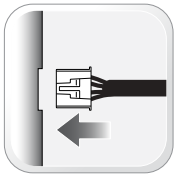
LED 1 will turn RED for 2 seconds.

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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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. System will lock doors and arm alarm.

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

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 **EMPTY**

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 'Starter-Kill' 250mA negative (-) output. 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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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 and alarm trigger. It prevents the vehicle from remote starting while the hood is open and triggers the alarm if the hood is opened while the alarm is armed. You can connect this wire to the hood pin supplied with this kit, 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 **EMPTY**

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# Option Menu



**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 1 - Remote Starter Options | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| # | Feature | option 1 | option 2 | option 3 | option 4 | option 5 | option 6 | option 7 | option 8 |
| 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 start | **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 with Door | Shutdown with Unlock | | | | | |
| 14 | Secure take over delay | **45 sec** | 90 sec | 3 min | 4 min | | | | |
| 15 | Factory keyless RS sequence | **Disable** | Hold lock 3 sec | Lock, Unlock, Lock | Lock, Lock, Lock | | | | |
| 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 | Remote or 5 x ignition ON or 2 x ign. ON + 3 brake | Remote or Antenna button only | Remote or Antenna or 5 x ignition ON or 2 x ign. ON + 3 brake | Remote or 5 x ignition ON | **Antenna or Remote or 2 x ign. ON + 3 brake** | 5 x ignition ON or 2 x ign. ON + 3 brake | Antenna button only | Antenna or 5 x ignition ON or 2 x ign. ON + 3 brake |
| 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** | 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 | | | | | | |
| 26 | Virtual Key | **Disable** | Enable | | | | | | |
| 27 | Virtual Key Delay | **3 mins** | 5 mins | 10 mins | Infinite | | | | |

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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 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 | | |
| **6B** | FT-RFID Function | **Unlock once armed** | FTX/Always Unlock | Off | FTX/Passive Lock/Arm |
| **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 shut down and first lock** | after start only | after shutdown only |
| **16** | Analog Disarm Sequence | **Disarm only** | Disarm with Ign cycle | | |
| **17** | DL Parking lights confirmation | Disable | **Enable** | Enable with Ignition Only | Enable without ignition |
| **18** | Headlight output (POC) | **Lock and Unlock** | Lock only | Unlock only | |
| **19** | Secure Trunk | **Disable** | Enable | Enable while locked/armed | |

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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 3 - Security Options | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| # | Feature | option 1 | option 2 | option 3 | option 4 | option 5 | option 6 | option 7 | option 8 |
| 1 | Alarm | **Disable** | Enable | | | | | | |
| 2 | Alarm duration | 30 sec | **60 sec** | 120 sec | | | | | |
| 3 | Alarm Triggered behavior | No Delay | Delay with parking lights | **Delay with parking lights and chirps** | | | | | |
| 4 | Passive alarm/locks | **OFF** | Alarm & Locks | Alarm only | Locks only | | | | |
| 5 | Passive alarm/auto-relock notification | **Disable** | Alarm & Locks | Alarm only | Locks only | | | | |
| 6 | Passive alarm/auto-relock timing | **30 sec** | 60 sec | 5 min | 10 min | | | | |
| 7 | Passive open zone bypass (Force rearm) | **Disable** | Enable | | | | | | |
| 8 | Open zone notification | Disable | **Enable** | 15 sec delay | 20 sec delay | 25 sec delay | 30 sec delay | 35 sec delay | |
| 9 | Confirmation chirp (Horn Output) | Disable | Lock only | **Double lock only** | Lock and unlock | unlock only | Lock, Unlock, Start | Double Lock, Start | |
| 10 | Confirmation chirp (Siren Output) | Disable | Lock only | Double lock only | **Lock and unlock** | unlock only | Lock, Unlock, Start | Double Lock, Start | |
| 11 | Siren notification from OEM keyless | Disable | **Enable** | | | | | | |
| 12 | Horn chirp pulse duration | 20 ms | **30 ms** | 40 ms | 45 ms | 50 ms | 60 ms | 100 ms | |
| 13 | Shock Sensor port behaviour | Disable | **Enable** | Warn away only | Shock only | | | | |
| 14 | Analog trigger (-) input behaviour | Disable | Warn away only (-) | **Shock only (-)** | Normaly Closed Alarm (+) | Zone 2 passive 15 (-) | Zone 2 passive 30 (-) | | |
| 15 | Alarm control from OEM keyless | Disable | **Enable with notification on aftermarket remotes** | Enable without notification on aftermarket remotes | | | | | |
| 16 | Antenna / External LED flashing | Disable | **Both, Follow alarm status** | External follow alarm status | Antenna Follow alarm status | | | | |
| 17 | Alarm/panic with Parking lights | Disable | **Enable** | | | | | | |
| 18 | Car finder duration | **5 sec** | 10 sec | 15 sec | 60 sec | | | | |
| 19A | Starter kill (Type A) / anti-grind | **Anti-grind + active SK** | Anti-grind only | Anti-grind+ passive SK 30 seconds | Anti-grind+ passive SK 60 seconds | | | | |
| 19B | Starter kill (Type B) / Secure Start NC duration | 1 minute | **2 minutes** | 3 minutes | 4 minutes | 5 minutes | 6 minutes | 7 minutes | 8 minutes |
| 19C | Starter kill (Type C) / Secure Start NO duration | 1 minute | 2 minutes | 3 minutes | **4 minutes** | 5 minutes | 6 minutes | 7 minutes | 8 minutes |
| 21 | Alarm first unlock press behavior | Disarm, Unlock, Silence | **Silence only** | | | | | | |
| 23 | Real Panic Sound (Random pulse length) | **Disable** | Enable | | | | | | |
| 24 | Siren Chirp pulse duration | 20 ms | **30 ms** | 40 ms | 45 ms | 50 ms | 60 ms | 100 ms | |

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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 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 |
| 6 | Secure Auxilliaries (For AUX 1/2) | 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 |

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

## 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 5 - Programmable Outputs (POCs) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| # | Feature | option 1 | option 2 | option 3 | option 4 | option 5 | option 6 | option 7 | option 8 |
| 1 | POC 1 | **Unlock other doors** | Defrost | Horn | IGN | ACC | Start | Parking Lights | Pulse Timer Output 1 |
| 2 | POC 2 | Unlock other doors | Defrost | Horn | IGN | ACC | Start | Parking Lights | Pulse Timer Output 2 |
| 3 | POC 3 | Unlock other doors | Defrost | **Horn** | IGN | ACC | Start | Parking Lights | Pulse Timer Output 3 |
| 4 | POC 4 (Low current when active) | Unlock other doors | Defrost | Horn | IGN | ACC | Start | Parking Lights | Pulse Timer Output 4 |

| # | Feature | option 9 | option 10 | option 11 | option 12 | option 13A | option 14 | option 15 | option 16 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | POC 1 | PTO1 | PTO2 | PTO3 | PTO4 | | Arm | Disarm | Lock |
| 2 | POC 2 | PTO1 | PTO2 | PTO3 | PTO4 | | Arm | Disarm | Lock |
| 3 | POC 3 | PTO1 | PTO2 | PTO3 | PTO4 | | Arm | Disarm | Lock |
| 4 | POC 4 (Low current when active) | PTO1 | PTO2 | PTO3 | PTO4 | **Starter Kill (Type A)** | Arm | Disarm | Lock |

| # | Feature | option 17 | option 18 | option 18 | option 20 | option 21 | option 22 | option 23 | option 24 |
|---|---|---|---|---|---|---|---|---|---|
| 1 | POC 1 | Unlock | Trunk | GWR | Left sliding door | Right sliding door | Rap Shutdown | Siren | GND when Engine running |
| 2 | POC 2 | Unlock | Trunk | GWR | Left sliding door | Right sliding door | **Rap Shutdown** | Siren | GND when Engine running |
| 3 | POC 3 | Unlock | Trunk | GWR | Left sliding door | Right sliding door | Rap Shutdown | Siren | GND when Engine running |
| 4 | POC 4 (Low current when active) | Unlock | Trunk | GWR | Left sliding door | Right sliding door | Rap Shutdown | Siren | GND when Engine running |

| # | Feature | option 25 | option 26 | option 27 | option 28 | option 29 | option 30 | option 31 | option 13B |
|---|---|---|---|---|---|---|---|---|---|
| 1 | POC 1 | Ground when disarm | Domelight | GND Headlight output | RS LED | VIRTUALKEY | GWR or VIRTUALKEY | GND with vehicle ignition | Starter Kill (Type B : NC) |
| 2 | POC 2 | Ground when disarm | Domelight | GND Headlight output | RS LED | VIRTUALKEY | GWR or VIRTUALKEY | GND with vehicle ignition | Starter Kill (Type B : NC) |
| 3 | POC 3 | Ground when disarm | Domelight | GND Headlight output | RS LED | VIRTUALKEY | GWR or VIRTUALKEY | GND with vehicle ignition | Starter Kill (Type B : NC) |
| 4 | POC 4 (Low current when active) | Ground when disarm | Domelight | GND Headlight output | RS LED | VIRTUALKEY | GWR or VIRTUALKEY | GND with vehicle ignition | Starter Kill (Type B : NC) |

| # | Feature | option 13C |
|---|---|---|
| 1 | POC 1 | Starter Kill (Type C : NO) |
| 2 | POC 2 | Starter Kill (Type C : NO) |
| 3 | POC 3 | Starter Kill (Type C : NO) |
| 4 | POC 4 (Low current when active) | Starter Kill (Type C : NO) |

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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 second pulse** | latched 10 sec | latched 15 sec | latched 20 sec | latched 30 sec | latched 5 min | latched 10 min | Run time latch |
| 2 | PTO 2 duration | **1 second pulse** | latched 10 sec | latched 15 sec | latched 20 sec | latched 30 sec | latched 5 min | latched 10 min | Run time latch |
| 3 | PTO 3 duration | **1 second pulse** | latched 10 sec | latched 15 sec | latched 20 sec | latched 30 sec | latched 5 min | latched 10 min | Run time latch |
| 4 | PTO 4 duration | **1 second pulse** | latched 10 sec | latched 15 sec | latched 20 sec | latched 30 sec | latched5 min | latched 10 min | Run time latch |

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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** | **Select Source** | | | |
| **1** | Brake | Analog | Data | **AUTO** | |
| **2** | Door | Analog | Data | **AUTO** | |
| **3** | Tach | Analog | Data | **AUTO** | |
| **4** | Hood | Analog | Data | **AUTO** | Analog Inverted |
| **5** | Trunk | Analog | Data | **AUTO** | Analog Inverted |
| **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 | | | |
| **24** | FT-KP2 sensitivity | Lowest | Low | Normal | **High** |

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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 |
| **16** | Siren chirp (notification) | Analog | **Analog/Data** |
| **17** | Allow siren mute | Disable | **Enable** |
| **19** | Anti-Grind | Disable | **Enable** |

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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 9 - Input Configurations | | | |
|---|---|---|---|
| **#** | **Feature** | **option 1** | **option 2** |
| **1** | PIC 1 negative input (M3 - TAN•SILVER DOT) | External Alarm Sensor | Valet input switch |

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**F0 = Default Feature Option**

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.

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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**F0 = Default Feature Option**

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**

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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**F0 = Default Feature Option**

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**

1-15 Factory keyless remote start activation: Allows the remote starter to be engaged using the vehicles OEM remote or keyfob. NOTE: This feature is not available on all vehicles. Consult our website for more information.

**F01 - Disable**
**F02 - Hold Lock for 3 sec:** Activates remote start 3sec hold on Lock from OEM remote. (Not available with all firmware).
**F03 - Lock, Unlock, Lock:** Activates remote start when a sequence of lock/unlock/lock is received from the OEM remote.
**F04 - Lock, Lock, Lock:** Activates remote start when a sequence of lock/lock/lock is received from the OEM remote.

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 and alarm(if activated) are 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.*

**F01 - Remote / 5x Ignition / 2x Ignition + 3x Brake**
**F02 - Remote / Antenna**
**F03 - Remote / Antenna / 5x Ignition / 2x Ignition + 3x Brake**
**F04 - Remote / 5x Ignition**
**F05 - Remote / Antenna / 2x Ignition + 3x Brake**
**F06 - 5x Ignition / 2x Ignition + 3x Brake**
**F07 - Antenna button only**
**F08 - Remote / Antenna / 5x Ignition / 2x Ignition + 3x Brake**

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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.
- **F03 - 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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**F0 = Default Feature Option**

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

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

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**

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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**

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**F0 = Default Feature Option**

2-6B FT-RFID function: This feature covers the RFID unlock options. (Please refer to the FT-RFID section of this manual for specific operation instructions and antenna mounting locations)

**F01 - Unlock Once Armed: (The DCX must be in an armed state for this option to function).** This option will enable the FT-RFID proximity unlock/disarm feature after activating with a Firstech RFID enhanced remote. (Refer to the FT-RFID section of this manual for specific operating instructions). The DCX will be ready to send the disarm/unlock command 12-15 seconds after the system has been armed using a Firstech remote or accessory (RPS, Drone, OEM remote input). Approximately 12 seconds after armed, the system will look for the RFID enhanced remote and disarm/unlock once the remote enters the proximity field.

**F02 - FTX / Always Unlock:** This option will enable the FT-RFID proximity unlock feature after activating with a Firstech RFID enhanced remote. The DCX will always send the unlock/disarm output when the remote enters/re-enters the proximity field regardless of the current state of the DCX. (i.e. armed/locked-disarmed/unlocked). Once the remote leaves the proximity field, it will be set to send the unlock/disarm output as soon as it enters/re-enters. Note: Because the ANT-2WSF antenna is always searching for the remote, it will produce more current draw than the standard RFID unlock option 3.

**F03 - OFF**

**F04 - FTX / Passive Arming:** This option will allow the DCX to LOCK/ARM the system 15 seconds after an RFID capable remote has left proximity of the antenna. **IF THE REMOTE IS WITHIN RANGE OF THE ANTENNA FOR 5 MINUTES OR MORE, THE DCX WILL STOP THE ARMING SEQUENCE. ANY ACTION FROM A FIRSTECH REMOTE, DRONE, KP SENSOR, IGNITION ON, OR ZONE OPEN WILL AUTOMATICALLY RE-START THE PASSIVE ARMING SEQUENCE.** NOTE: This function can be toggled on/off by enabling/disabling the "Passive arming" function using a Firstech remote or Drone.

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

**F01 - Disable**

**F02 - Enable**

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**

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**F0 = Default Feature Option**

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 can 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**

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**

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**F0 = Default Feature Option**

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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# Option Menu Descriptions



**F0 = Default Feature Option**

3-1 Alarm: Activates or deactivates the ALARM features of the HC.

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

3-2 Alarm duration: Sets the length of time the alarm will sound if triggered.

**F01 - 30 seconds**
**F02 - 60 seconds**
**F03 - 120 seconds**

3-3 Alarm triggered behavior: Controls the delay between an alarm infraction and the system triggering the lights/horn/siren.

**F01 - Alarm will sound right after the trigger:** The alarm system will activate lights and siren/horn instantly when a trigger is detected.
**F02 - Delay with parking lights, then alarm:** When the alarm is triggered, the CM will flash the parking lights for 5 seconds before sounding the alarm.
**F03 - Delay with parking lights and chirps, then alarm:** When the alarm is triggered, the CM will chirp the siren and flash the parking lights for 5 seconds before sounding the alarm.

3-4 Passive alarm / Passive lock : This feature is used to control automatic (passive) arming or locking of the system. When ignition is turned off, and a door is opened then closed, it will activate the passive delay. If activated, the timing for this feature is controlled in menu option 3-6

**F01 - Off:** Only commands from the user will arm and/or lock the system.
**F02 - Passive arming with passive locking:** The alarm will arm and the doors will lock automatically based on the timing in menu option 3-6.
**F03 - Passive arming only:** The alarm will arm automatically based on the timing in menu option 3-6. The doors will NOT lock.
**F04 - Passive locking only:** The doors will lock automatically based on the timing in menu option 3-6. The alarm will NOT arm.

3-5 Passive alarm and/or doorlock notification : When alarm or doorlocks are set for passive arming, you can control the notifications that occur.

**F01 - Disable**
**F02 - Notification of passive arming & locking:** The siren/horn will chirp when the system locks the doors and arms the alarm passively.
**F03 - Notification of passive arming only:** The siren/horn will chirp only when the system arms passively.
**F04 - Notification of passive locking only:** The siren/horn will chirp only when the system locks the doors passively.

3-6 Passive alarm and/or doorlock timing: Controls the delay before the passive arm and/or lock features are activated.

**F01 - Delay of 30 seconds:** The passive features will activate after the selected time.
**F02 - Delay of 60 seconds:** The passive features will activate after the selected time.
**F03 - Delay of 5 minutes:** The passive features will activate after the selected time.
**F04 - Delay of 10 minutes:** The passive features will activate after the selected time.

3-7 Passive open zone bypass (Force rearm): When enabled, passive arming will still occur even if a protected zone such as a door or trunk is still open. Passive arming/locking will still respect the delay selected in menu 3-6.

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

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**F0 = Default Feature Option**

3-8 Open zone notification: If a protected zone such as a door or trunk is detected during the arming of the alarm, you can control if there is any notification. You can also delay the notifications which can be useful when you want to allow time for a zone to close.

**F01 - Disable:** There will be no audible/visual notifications.
**F02 - Enable (no delay):** 3 chirps/flashes immediately.
**F03 - Enable with 15 sec delay:** 3 chirps/flashes 15 seconds after arming if a zone is still open.
**F04 - Enable with 20 sec delay:** 3 chirps/flashes 20 seconds after arming if a zone is still open.
**F05 - Enable with 25 sec delay:** 3 chirps/flashes 25 seconds after arming if a zone is still open.
**F06 - Enable with 30 sec delay:** 3 chirps/flashes 30 seconds after arming if a zone is still open.
**F07 - Enable with 35 sec delay:** 3 chirps/flashes 55 seconds after arming if a zone is still open.

3-9 Confirmation chirp (Horn output): Controls the output for the horn when commands are executed. This does not effect the sounding of the horn when the alarm is triggered. These options do NOT effect the siren output either.

**F01 - Disable:** No command confirmations to the horn output.
**F02 - Lock only:** The horn will sound with a lock command only.
**F03 - Second lock only:** The horn will sound if a second lock command is received within 10 seconds of the first lock command.
**F04 - Lock and unlock:** The horn will sound with a lock and unlock commands.
**F05 - Unlock only:** The horn will sound with a unlock command only.
**F06 - Lock, unlock, start:** The horn will sound with a lock, unlock, and start commands.
**F07 - Second lock and start:** The horn will sound if a second lock command is received within 10 seconds of the first lock command, as well a start.

3-10 Confirmation chirp (Siren output): Controls the output for the siren when commands are executed. This does not affect the sounding of the siren when the alarm is triggered. These options do NOT affect the horn output either.

**F01 - Disable:** No command confirmations to the siren output.
**F02 - Lock only:** The siren will sound with a lock command only.
**F03 - Second lock only:** The siren will sound if a second lock command is received within 10 seconds of the first lock command.
**F04 - Lock and unlock:** The siren will sound with a lock and unlock commands.
**F05 - Unlock only:** The siren will sound with a unlock command only.
**F06 - Lock, unlock, start:** The siren will sound with a lock, unlock, and start commands.
**F07 - Second lock and start:** The siren will sound if a second lock command is received within 10 seconds of the first lock command, as well a start.

3-11 Siren notification from OEM keyless: Controls if the siren will chirp to confirm arming if the OEM remote is used to lock/unlock. This option requires that OEM keyless detection is supported in the vehicle specific firmware. This feature is NOT available on analog firmware.

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

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**F0 = Default Feature Option**

3-12 Confirmation horn chirp pulse duration: Used to control the length of the pulse sent to the horn for command confirmations. This is useful if the horn chirps are either too long or too short.

**F01 - Pulse of 20ms**
**F02 - Pulse of 30ms**
**F03 - Pulse of 40ms**
**F04 - Pulse of 45ms**
**F05 - Pulse of 50ms**
**F06 - Pulse of 60ms**
**F07 - Pulse of 100ms**

3-13 Shock sensor input behavior: Controls the shock sensor input behavior for both the DAS port (4-pin red) and sensor 2 port (4-pin green).

**F01 - Disable:** Both ports are disabled
**F02 - Enabled:** Both ports are enabled for warn-away and full shock.
**F03 - Warn away only:** Only the warn-away triggers will be enabled.
**F04 - Full shock only:** Only the full shock triggers will be enabled.

3-14 Analog sensor (-) input behavior: Controls M3 pin-10 (Tan/silver dot) wire. This input can be configured for a variety of different special applications. Read the different option descriptions carefully before making your selection.

**F01 - Disable**
**F02 - Warn-away only:** A (-) input will trigger a warn-away notification similar to that of the shock sensor.
**F03 - Full shock only:** A (-) input will trigger a full alarm similar to that of the shock sensor.
**F04 - Normally closed alarm:** The input will expect to see (-) constant while the system is armed. If the (-) signal is lost, the alarm will trigger.
**F05 - Zone 2 passive 15:** This input will always passively arm 15 seconds after zone 2 is closed if the vehicle is not running under key start or in valet mode. Zone 2 will disarm with the system but will ALWAYS passively arm itself regardless if the alarm is in active arming mode. A (-) input is needed to trigger Zone 2.
**F06 - Zone 2 passive 30:** This input will always passively arm 30 seconds after zone 2 is closed if the vehicle is not running under key start or in valet mode. Zone 2 will disarm with the system but will ALWAYS passively arm itself regardless if the alarm is in active arming mode. A (-) input is needed to trigger Zone 2.

3-15 Alarm & Starter kill control from OEM keyless: When enabled, lock and unlock commands sent from the vehicle's OEM fob will also arm/disarm the HC alarm and/or starter-kill (if enabled).

**F01 - Disable**
**F02 - Enable with remote notification:** OEM commands will control CM alarm and arm/disarm and notifications will be sent to iDatastart 2-way transmitters (if installed).
**F03 - Enable without remote notification:** OEM commands will control CM alarm and arm/disarm but notifications will NOT be sent to iDatastart 2-way transmitters (if installed).

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**F0 = Default Feature Option**

3-16 Antenna/External LED: Controls the behavior of the external LED and/or LED built in to an RF antenna. If enabled, the LED will follow the alarm status.

**F01 - Disable**
**F02 - Both follow alarm status:** The external LED and RF antenna LED both follow the system's alarm status.
**F03 - External LED follow alarm status:** The external LED will follow the system's alarm status.
**F04 - Antenna follows alarm status:** The RF antenna's LED will follow the system's alarm status.

3-17 Alarm and panic with parking lights: Controls if the parklights flash during alarm and panic states.

**F01 - Disable:** No parking lights
**F02 - Enable:** Parking light during alarm and panic states

3-18 Car finder duration: Activating the car finder feature will flash the parklights and sound the horn or siren for the selected time. This feature is activated from an RF transmitter (see transmitter instructions for using this feature. You may need to set an auxiliary output in menu 4).

**F01 - Duration of 5 seconds**
**F02 - Duration of 10 seconds**
**F03 - Duration of 15 seconds**
**F04 - Duration of 60 seconds**

3-19A Starter-kill (Type A) / Anti-grind: Controls the behavior of M3 pin-11 BROWN/BLACK (POC4) when configured for starter-kill in menu 5-4.

**F01 - Anti-Grind + Active Starter-kill:** The output will be active during Remote start and when the system has been armed/locked manually.
**F02 - Anti-Grind only:** The output will be active during Remote start only.
**F03 - Anti-Grind + Passive Starter-kill 30 sec:** The output will be active during Remote start and 30 seconds after ignition OFF, or if system has been armed/locked manually.
**F04 - Anti-Grind + Passive Starter-kill 60 sec:** The output will be active during Remote start and 60 seconds after ignition OFF, or if system has been armed/locked manually.

3-19B Starter-kill (Type B) / Secure Start NC Duration: An output (POC) that can control a relay wired for a normally closed circuit, allowing the driver to start the vehicle while the relay is NOT active.

**F01 - 1 minute**
**F02 - 2 minutes**
**F03 - 3 minutes**
**F04 - 4 minutes**
**F05 - 5 minutes**
**F06 - 6 minutes**
**F07 - 7 minutes**
**F08 - 8 minutes**

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# Option Menu Descriptions



**F0 = Default Feature Option**

3-19C Starter-kill (Type C) / Secure Start NO Duration: An output (POC) that can control a relay wired for a normally open circuit, allowing the driver to start the vehicle while the relay is active.

- **F01 - 1 minute**
- **F02 - 2 minutes**
- **F03 - 3 minutes**
- **F04 - 4 minutes**
- **F05 - 5 minutes**
- **F06 - 6 minutes**
- **F07 - 7 minutes**
- **F08 - 8 minutes**

3-21 Alarm first disarm behavior: Controls what happens when you send unlock during an alarm trigger.

- **F01 - Disarm, unlock, silence:** On first unlock command, the system will stops ringing, disarm, unlock the doors.
- **F02 - Silence only:** On first unlock command, the system will stops ringing (silence) but remain armed with the door locked. A second unlock command will disarm and unlock.

3-23 Real panic sound: When enabled, the horn pulses sent during a panic trigger will vary in length (unlike an OEM panic feature) to better draw attention.

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

3-24 Confirmation siren chirp pulse duration: Controls the pulse duration for the siren on confirmations chirps.

- **F01 - Pulse of 20ms**
- **F02 - Pulse of 30ms**
- **F03 - Pulse of 40ms**
- **F04 - Pulse of 45ms**
- **F05 - Pulse of 50ms**
- **F06 - Pulse of 60ms**
- **F07 - Pulse of 100ms**

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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

4-6 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 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.

**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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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:

**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.
**F23 - Siren:** Follows the primary siren wire (M2-07 BROWN/BLACK/BLACK DOT) output behavior. Also dependant on the settings in menu 3-10, 3-11 and 3-24.
**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.
**F25 - GND when disarmed:** The output will follow the status of the alarm (when activated in menu 3-1) or the doorlocks if the alarm is disabled. The output is on anytime the alarm is in the disarmed state and stays on until the alarm is armed again. If the alarm is disabled, the output is on when the doorlock state us 'unlocked'.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**F0 = Default Feature Option**

**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.
**F28 - RS/Alarm LED:** This option can be used to provide ground (-) to an external LED for RS and alarm status. If using a LED rated for less than 12v, a resistor may be required.
**F31 - GND with vehicle ignition:** This output will come on when the vehicle's ignition is switched on with the key.
**F32 - Secure Start N/C:** This output will send ground (-) for the duration set by option 3-19C. It is designed to be used with Firstech's FTI-SPTS (secure Push To Start) vehicle disable T harnesses. In its active state the N/C option used with the vehicle disable harness will disable the PTS button ONLY WHEN THE ALARM IS TRIGGERED, all other times there will be no output from the N/C Secure Start PTO, and the PTS button will function normally.
-During an alarm event the N/C will disable the PTS button for the selected time to make sure any additional attempts to "hack" or force start the vehicle will not work even after the siren/horn output times out. Once the HCX is unlocked/disarmed the N/C output will no longer function making the PTS button operate normally.
-NOT RECOMMENDED WHEN USING N/O SECURE START FEATURE.
-IF the user needs to disable the N/C Secure Start Output completely they will need to enter valet mode.
**F33 - Secure Start N/O:** This output will send ground (-) for the duration set by option 3-19C It is designed to be used with Firstech's FTI SPTS (secure Push To Start) vehicle disable T harnesses. In its rest state the vehicle disable harness will disable the PTS button until the driver is ready to use it.
NOTE: The Vehicle will not be able to go to ignition on until the system is disarmed/unlocked. Once the HCX is unlocked/disarmed the N/O output will energize the SPTS harness making the PTS button available for use for the preselected time, or until the HCX is armed/locked. Once ignition on is detected the output will remain latched until ignition has been turned off and the preselected time has expired or the system has been armed/lock using the aftermarket remote, telematics, OEM remote (when supported), or passive arming.
-NOTE: When using the N/O option be sure to select a timed output that will be most convenient for your customer. IF the timer runs out, they MUST disarm/unlock again to re-activate the Secure Start Output.
-IF the user needs to disable the N/O secure start output for some reason, you can put the HCX into Valet Mode. While in Valet mode the Secure Start Output will activate any time a door is opened, (or when disarmed/unlocked) allowing the PTS button to function normally.
-The (-) Valet Mode Input (PIC 1, M3 - TAN•SILVER DOT) will need to be enabled to enter/exit Valet mode when using the N/O Secure Start function. The open PTS button will not allow the vehicle to go to ignition on position.
-NOTE: It is strongly recommend to disable option 3-15: "Alarm & Starter kill control from OEM keyless function". This will significantly increase the security of the vehicle.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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 - Latched 10 seconds:** The output will come on for 1 second when activated, regardless if the vehicle is running or not.
- **F03 - Latched 15 seconds**
- **F04 - Latched 20 seconds**
- **F05 - Latched 30 seconds**
- **F06 - Latched 5 minutes**
- **F07 - Latched 10 minutes**
- **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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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.

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.

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.

7-9 Speed 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.

7-20 Temperature sensor adjustment

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

7-24 FT-KP2 Sensitivity

**F01 - Lowest**
**F02 - Low**
**F03 - Normal**
**F04 - High**

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**F0 = Feature Option**

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.

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**

8-16 Siren 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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**F0 = Feature Option**

8-17 Allow siren mute
- **F01 - Disable**
- **F02 - Enable**

8-19 Anti-Grind
- **F01 - Disable**
- **F02 - Enable**

## Menu #9: Programmable Input Channel (PIC) configuration

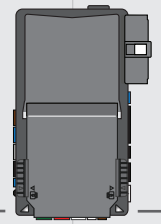
**This programmable input can be configured to trigger from a PIC as set in menu 4, or can follow a variety of other commands and events.**

9-1 PIC 1 (-) input (M3 - TAN•SILVER DOTS)
- **F01 - External Alarm Sensor:** This will trigger the alarm with any negative (-) input while the system is armed. There are different options for the behavior of this input in menu 3-14.
- **F02 - Valet Input Switch:** This will put the module in valet mode by grounding the input for a minimum of 5 seconds, followed by 5 (-) pulses.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# Module Diagnostics



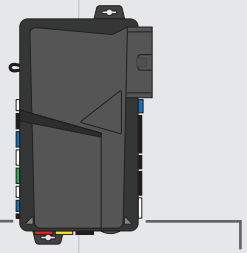
| MODULE STATUS DURING: |  LED 2* | LED 1** | LED STATUS | DIAGNOSTIC |
|---|---|---|---|---|
| MODULE PROGRAMMING | | ● | Flashing RED | Missing/wrong information from firmware or vehicle. See firmware specific diagnostics, or contact technical support. |
| | | ● | Solid RED | Module waiting for more vehicle information. Programming incomplete. |
| | | ● | Flashing GREEN | Additional steps required to complete programming. Refer to install guide. |
| | | ● | Solid GREEN then OFF | Module programming completed successfully. |
| | | | 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 | Loop not cut. Ensure loop is cut for automatic transmission. Reset and re-learn. |
| | ● | | 9 ORANGE flashes | Loop not cut. Ensure loop is cut for automatic transmission. Reset and re-learn. |
| | ● | | 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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# 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.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# 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.<br><br>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.<br><br>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. |

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

# Alarm Error Codes



| ALARM ERROR CODES: NOTES | PARKING LIGHT FLASHES | ANTENNA LED FLASHES | DIAGNOSTIC |
|---|---|---|---|
| I WARNING: The following applies only when the parking lights are connected and supported by the system. | 5 + 1 | 1 | Shock sensor triggered |
| | 5 + 2 | 2 | Door open |
| | 5 + 3 | 3 | Trunk open |
| II If the alarm has been triggered, the parking lights will flash five [5x] times followed by the alarm activation event. | 5 + 4 | 4 | Hood open |
| | 5 + 5 | 5 | Zone 2 input triggered |
| | 5 + 6 | 6 | Foot brake ON |
| III The alarm event code is also displayed in a repeating pattern on the antenna's LED when the alarm is triggered, until unlock is received. | 5 + 7 | 7 | Ignition ON |
| | 5 + 8 | 8 | Motion detected |
| | 5 + 9 | 9 | Tilt detected |
| | 5 + 10 | 10 | Warn away input triggered |

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**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 module 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 DCX 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.

**How do I make the alarm work?**
A: The DCX's alarm must be turned on and configured using configuration menu 3-1. See the 'Option programming tables' section for details.

**I have activated the alarm feature, and whenever I try to arm the vehicle, it chirps the horn 3 times instead of just once.**
A: Open zone detected. Check the hood and trunk, and door trigger inputs.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023

**I have activated the alarm feature. The vehicle remote starts when disarmed, but not when armed.**
A: Did you install a starter kill relay? If so, check to make sure the M1 Violet wire is connected wire is going to the engine side of your vehicles starter wire.

**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

Firstech technical support is reserved for authorized dealers only.

| | |
|---|---|
| Monday - Friday: | 888-820-3690<br>(8:00 am – 5:00 pm Pacific Standard Time) |
| Email: | techfeed@compustar.com |
| Web: | www.myfirstech.com or myfirstech.idatalink.com |

**Wiring Diagrams**
Diagrams for most vehicles are available when you flash your module at myfirstech.idatalink.com. If you are an authorized dealer and unable to access this site please contact your sales rep or us call 888-820-3690
Monday through Friday, 8 am to 5 pm Pacific Standard Time.

U.S. Patent No. 8,856,780 CA 2759622
Automotive Data Solutions Inc. © 2023