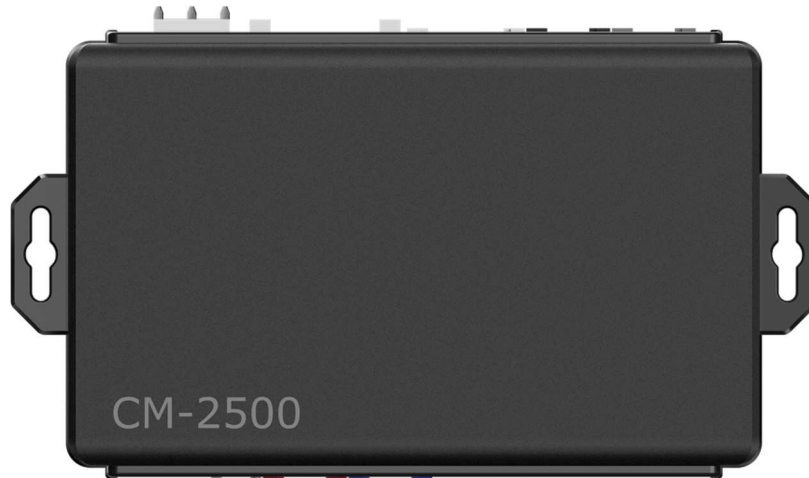


# FIRSTECH CM2500 MASTER MANUAL





Actual size

# MASTER GUIDE

CM2500-2022 v 1.17

Supports Firmware v1.15

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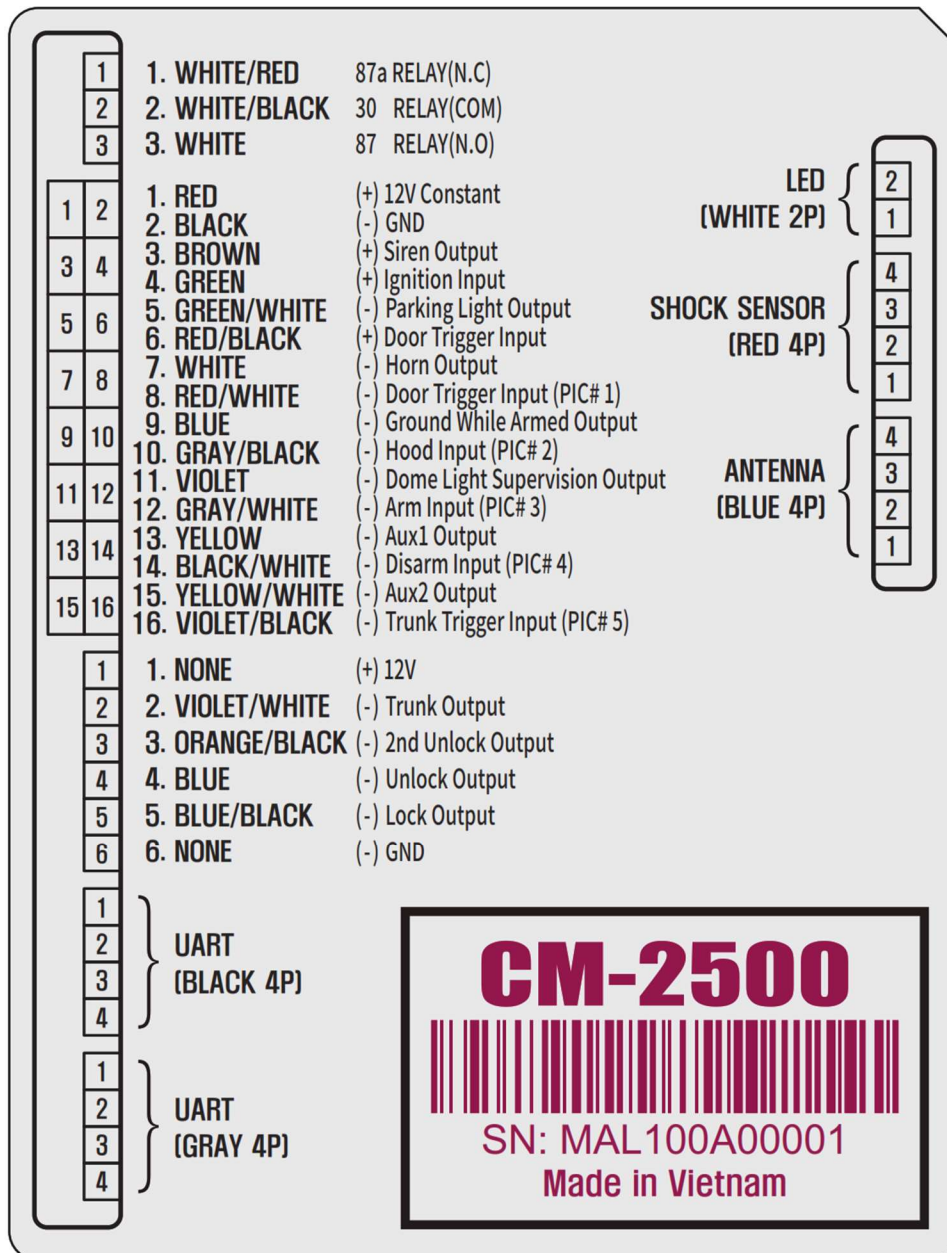
Please visit [install.myfirstech.com](http://install.myfirstech.com) for additional installation resources

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## CM-9A (CM2500)Wiring Schematic (Security Only)



## Introduction

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# Thank you!

*For selecting a Firstech security system as your product of choice. The following installation manual is a complete guide to the CM2500A universal Control Module and is intended for experienced and authorized Firstech technicians only. If you need any further technical support, please call us at 888-820-3690 ext. 203 or visit our website at [install.myfirstech.com](http://install.myfirstech.com)*



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

This manual may change frequently. Please check [install.myfirstech.com](http://install.myfirstech.com) for updates.

## Kit Contents

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All Firstech FT-9A CONT controllers include the following:

- CM2500 Low Current main alarm control module
- Wiring diagram sheet
- Main wiring harness
- Hood pin
- Mountable bright Blue LED
- Firstech analog dual stage shock + Tilt sensor (FT-Shock II)

**RF Kits with remote(s), Antenna, and Antenna Cable are not included with the FT-9A CONT.**

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

- Proximity unlock system (FT-RFID Enhanced remotes)
- Keyless Entry window sensor (FT-KP2)
- 4 in one Digital Adjustable Sensor FT-DAS II
- DroneMobile Smart Phone interface

The remote(s) and antenna are modular and are not specific to the control modules. You can pair almost any Firstech remote(s) and antenna receiver to the CM2500. This includes all 4 pin antenna cables.

Any questions on contents please contact your distributor or us directly at 1.888.820.3690, Monday through Friday, 6 AM to 6 PM Pacific Time.

## Installation Basics

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If you are new to installing Firstech Series Remote .s and / or Alarms, we highly recommended that you thoroughly review this manual to installing your first unit.

**Key Points to Consider Before Installation:**

You must code remotes to this system before anything will function. Program remotes by cycling the ignition ON / OFF 5 times within 10 seconds and **tap** “LOCK” button (half second) on the first remote, and then **tap** “LOCK” button (half second) on any other remote you want to program.

**DAS II Sensor:**

The 3 in one DAS II provides dual stage impact, and auto adjusting tilt and glass break sensors. See the DAS II section of this manual for details.

**CM2500 Onboard AP antenna.**

The CM2500 has a built in AP antenna and supports any Firstech AM and AP remote without and external antenna. The CM2500 will also support all Firstech external RF kits as well.

**Supports data to data interface**

The CM2500 supports the 2-way data for Idatalink ADS-ALCA, ADS-DL, and ADS-TB modules. The Gray data port will also support full data connection with Drone Mobile or KP2 Keyless entry window sensor

**Lock connector support Firstech Door Lock modules**

Lock connector on the front of the CM2500 supports our Door lock modules the 600mA positive output FT-DM600 and the reverse polarity high current FT-DM700

**Internet updatable processors**

All CM2500 units are equipped with some of the most powerful processors available today. This flexibility allows for on-demand internet updating capabilities in the event of a version update or change. This can be done using a Firstech updater program that can be found at [install.myfirstech.com](http://install.myfirstech.com)

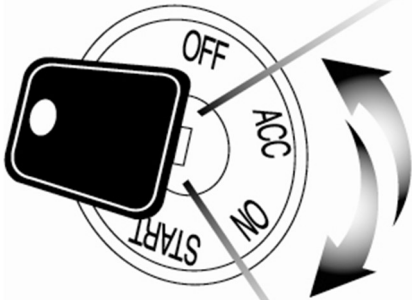
## Remote Programming Routine

**IMPORTANT:** All remotes must be coded to the control module prior to performing any and all operations.

**\*\*This is a time sensitive process\*\***

**STEP 1:** Activate programming mode by manually turning the vehicle's key between the Ign on and Off (or the Acc & On positions) 5 times within 10 seconds. The vehicle's parking lights will flash once with the successful completion of this step. *(Note: this step also places the control module into Valet Mode if there are no remotes coded)*

**STEP 2:** Within a 2 second period after the 5th ignition cycle tap the "LOCK" button on the remotes for 0.5 seconds. The parking lights will flash once to confirm the transmitter has been coded. Then **tap** "LOCK" button (half second) on any other remote you want to program.



**Exiting Programming:** Programming is a timed sequence. After 2 seconds the parking lights will flash twice signaling the end of programming mode.

**Programming Multiple Remotes:** After the confirmation flash given in STEP

2, code additional remotes by tapping Button I on two way remotes or the Lock button on one way remotes. The parking lights will flash once confirming each additional remote. All systems can recognize up to three remotes.

**Note: If you do not program any remotes and enter this sequence it will put the system into Valet Mode.** Only the keyless entry will work in Valet Mode. To exit Valet Mode just program remote(s).

### Remote programming procedure: PTS (Push to . vehicles) 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 .)

**STEP 4:** Step on the foot brake (**MUST HAVE CN4 PIN 6 connected to foot brake with feature 1-14 set to option 2**) 3 times within 5 seconds \*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 the remote code has been accepted

**STEP 7:** After 10 seconds of no valid remote codes being transmitted the CM will automatically exit programming mode *Note: If no valid remotes are programmed the CM will enter valet mode.*

## Placement and Use of Components

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

### Antenna and Cable

If you are adding one to this system, please note 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.

### FT-Shock II

This is an analog dual stage impact + a fixed 2.5 degree tilt sensor included with the CM900AS kit. The CM2500A is default to accept the FT-shock II and provides warn away and full trigger outputs for both Shock and Tilt. There is a dial located at the end of the FT-shock II with settings from “off” then 1-10 sensitivity level, 1 being the least sensitive and 10 being the most sensitive (10 will pick up the wind blowing 😊). We recommend mounting the sensor with the plastic mounting strap included preferably as centered to the vehicle as possible. Due to its extreme sensitivity the vehicle plastic heater ducting makes for a good mounting surface. The Tilt portion is auto calibrating so once its mounted, then armed it will look for a 2.5 degree tilt from that location.

### LED (external)

There will be an external mountable Blue LED for theft deterrent included. It is important to discuss mounting locations with the end user, trying to make it visible and bright when recommending locations. The LED will light up solid blue when armed for approx. 25 seconds allowing the impact sensor to set up. Once the LED is flashing the sensors are ready. The LED will also provide security diagnostics:

2 Flash	Door Input
3 Flash	Shock stage 1
4 Flash	Shock stage 2
5 Flash	Tilt
6 Flash	Ignition on
7 Flash	Hood Input
8 Flash	Trunk Input
9 Flash	AUX sensor stage 1
10 Flash	AUX sensor stage 2

### 1. KP2 Keyless Entry window sensor: Unlock/Disarm

Arm/Lock functions do not require programming, however, to unlock/disarm your vehicle you must program a 4-6 digit passcode (numbers 1 through 6 only) using the instructions below: **Note: check feature 3-16 to make sure it is set to the desired function**

**STEP 1:** Connect KP2 sensor using the KP to Data Adapter included with KP2 sensor to the GRAY data port on the CM900AS

**STEP 2:** Make sure feature 4-10 is set to option 3 for “KP2 support” **NOTE: If there is also a Drone module being used, set option 3-07 to option 2 for Drone compatibility using the Black UART port, and connect Drone module there.**

**STEP 3:** Disarm/unlock the alarm (remote must be programmed first) and choose a 4-6 digit code. You cannot have zeros.

**STEP 4:** Turn ignition to the ‘ON’ position and leave driver’s door open. (**Door Input must be connected**)

**STEP 5:** Hold your finger over the “Lock” icon for 3 seconds.

**STEP 6:** When the siren chirps and LED flash, momentarily place your finger over the first number of your 4-6 digit code. The siren should chirp quickly indicating the number has been accepted.

**STEP 7:** Repeat Step 6 until all four - six digits are set. You will get 1 siren chirp and 1 parking light flash.

Repeat Steps 3 - 6 if you get 3 chirps and light flashes. Your KP2 is now programmed.

### Arm/Lock

Hold the Lock Icon for 2.5 seconds to lock/arm the system.

### Disarm/Unlock

To disarm enter the 4-6 digit code previously programmed, if entered correctly the system will disarm. If the code entered is incorrect the LED's will flash 3 times and an alert will be sent to any Firstech 2way LCD remote or Drone that may be connected to the CM **NOTE: If you enter the wrong code more than 5 times within 30 minutes the RPS touch function will be disabled for 1 HOUR**

### Car Call Notification

Your 2 Way LCD, compatible 2 way LED remote, or Drone will receive a car call notification if the wrong PIN code is used.

### Touch Panel Sensitivity

The CM2500 will have a touch sensitivity setting options in the feature settings. **(Feature 3-03)**

### Siren

To adjust duration time when the alarm has been triggered, change feature 1-05 - the system default is 30 seconds.

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

The DAS-II 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 <https://www.youtube.com/c/myFirstech>

### DAS-II Programming Procedure

#### Installing Your DAS-II

**NOTE 1:** Make sure Option 4-12 is set to the DAS option.

**NOTE 2:** Connect cable to the red 4 pin port on the CM2500A.

**NOTE 3:** Mount DAS securely using zip ties or included hardware

*Sensor can be mounted in any orientation; tilt will set 30 seconds after arming.*

**STEP 1:** Turn the ignition to the 'on' position

**STEP 2:** Send Unlock command 2 times (unlock => unlock) using any Firstech remote or OEM remote (**capable of Controlling the CM2500 through data module**) At this time the DAS-II display will initialize and stay powered up for at least 5 minutes or until ignition is off.

**STEP 3:** 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 4:** 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 5:** 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 6:** 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 7:** Turn ignition off to exit programming

**STEP 8:** You are now ready to test the DAS-II

## **Adjusting DASII Shock Sensitivity alternative procedure option 1**

**STEP 1:** Turn the ignition to the 'on' position.

**STEP 2:** 2 Way remotes-hold buttons 1 and 2 (Lock and Unlock) for 2.5 seconds. You will get two parking light flashes. 1 Way remotes-hold Lock and Unlock for 2.5 seconds. You will get two parking light flashes.

**STEP 3:** To set the Warn Away Zone 1, (2way LCD) tap lock or button I. (1 Way) tap Lock. After you get one parking light flash, proceed with impact testing on the vehicle. **Note: please be careful as not to damage the vehicle during the sensitivity adjustments.** You will get siren chirps **1-most sensitive** (lightest impact to the vehicle requiring the least amount of force to trigger warn away) through **10-least sensitive** (heaviest impact to the vehicle requiring more force to trigger warn away). This sets the impact sensitivity of Warn Away Zone 1. **Setting Zone 1 will automatically set Zone 2. If you would like to manually set Zone 2 proceed:**

### **To set Instant Trigger Zone 2**

- a. Repeat Steps 1 and 2
- b. Tap the Unlock button on your Firstech remote, the parking lights will flash 2 times.
- c. After you get two parking light flashes, tap the vehicle. You will get siren chirps 1-most sensitive through 10-least sensitive. This sets the impact sensitivity of Instant Trigger Zone 2.

**STEP 4:** Once you get two parking light flashes, you are ready to test your DASII.

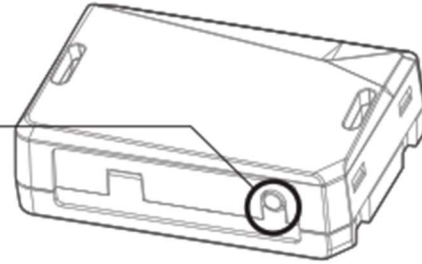
# DAS II Manual

FIRSTECH, LLC.

## DAS II Programming Button Menu

### Programming button

1. Shock
2. Window Break Sensing Condition
3. Window Break Sound Sensitivity
4. Tilt
5. Movement



	Feature	Press Button	Mode Display	Sensitivity Adjust			
1	<b>Shock Level (Prewarn)</b> 10 Levels	1 time					
			Red LED ON	OFF	High sensitivity	Default	Low sensitivity
2	<b>Window Break Sensing Condition</b> 2 Levels	2 times					
			Red & Green LED ON	-	Sound Only	Default	Sound and Vibration
3	<b>Window Break Sound Sensitivity</b> 6 Levels	3 times					
			Green LED ON	OFF	Low sensitivity	Default	High sensitivity
4	<b>Tilt</b> 4 Levels	4 times					
			Red LED Flash	OFF	3.0°	Default	High sensitivity
5	<b>Movement</b> 3 Levels	5 times					
			Green LED Flash	-	5 inch	Default	3 inch

## FT-RFID

The CM2500 will support the FT-RFID function, now included with a few of the latest remotes from Firstech, will unlock/disarm the vehicle when in range of the antenna. ***In case where a proximity kit is being added to an existing system (other than AM/AP) please see 2. install prep for RFID using the Gray data port below.***

### 1. Install prep for FT-RFID using RF port

**STEP 1:** Set Option 1-15 to Setting 1 or 2, or option 3 is “OFF”

**STEP 2:** Connect the antenna using supplied 4 pin to 6 pin antenna cable.

**STEP 3:** Antenna 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.

### Testing The FT-RFID

**STEP 1:** Make sure your FT remotes are programmed. AM/AP remotes will program to the 1W-AF proximity antenna.

**STEP 2:** Enable the proximity unlock feature on your FT remote using the remote menu (when applicable).

**STEP 3:** Proximity unlock/disarm - Once the CM has been locked/armed allow 15 seconds for the RFID remote to unlock/disarm the system once its within proximity (approximately 3ft-6ft) of the antenna. ***I.e. Arm the system wait 15 seconds walk up to the vehicle and it will automatically unlock/disarm.***

### 2. Install prep for FT-RFID using GRAY DATA port (remote programming sequence is the same)

**STEP 1:** Set Option 1-15 to Setting 1 or 2, or option 3 is “OFF”

**STEP 2:** Set feature 3 – 01 to option 3 (changes **Gray port** to support **RFID antenna**)

**STEP 3:** Set feature 3 – 07 to option 2 (changes the **Black port** to support **Drone**)

**STEP 4:** Connect the antenna using supplied 4 pin to 6 pin antenna cable, along with the short RF to DATA adapter included with the RF kit, to the **GRAY DATA PORT**

**STEP 5:** IF there is a Drone, connect it to the Black DATA PORT. *In the case of Drone and data interface module, the interface module will need to be connected to the CM2500 wire to wire.*

**STEP 6:** Antenna 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.

### Testing The FT-RFID

**STEP 1:** Make sure your FT remotes are programmed (programming procedure will be the same). AM/AP remotes will program to the 1W-AF proximity antenna.

**STEP 2 :** Proximity unlock/disarm - Once the CM has been locked/armed allow 15 seconds for the RFID remote to unlock/disarm the system once its within proximity (approximately 3ft-6ft) of the antenna. *I.e. Arm the system wait 15 seconds walk up to the vehicle and it will automatically unlock/disarm.*

**NOTE:** For Passive Arming/Locking + RFID information please see feature 1-08 option 4

### Hood Pin

The CM2500 kit does include a hood pin which can trigger the alarm in the event the hood is opened while the system is armed.

## 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 diagnostic flash when remote starting in Valet Mode. (3 flashes followed by 10 flashes). Also, when in Valet Mode, the keyless entry feature will still operate.

**The system can be put INTO valet mode one of 5 ways:**

**\*\*NOTE: CM2500 does have a FOOT BRAKE input using the (+) door input (red/black wire pin 6) changing feature 1-14 to option 2**

1. **While holding the foot brake** (12V+ brake input), cycle the key to the Ignition or **‘On’ position and then back to the ‘Off’ position 5 times within 10 seconds**. The parking lights will flash once indicating that the system has entered Valet Mode.
2. Turn the key to the Ignition or ‘On’ position then using a 4-button remote press and release the lock and trunk buttons together simultaneously for a half second. The vehicle parking lights will flash 1 time to indicate the system has successfully entered valet mode. When using 3 or 5-button remote there will be remote specific steps to enter valet, please see remote user’s manual for further instructions.
3. The user may enter valet mode by performing the PTS vehicle remote programming procedure and make sure there are no remotes transmitting.
4. Drone Mobile app will allow a user to enable/disable VALET mode within the vehicle settings section.
  1. Open the Drone Mobile app
  2. Open settings
  3. Open “Vehicles”
  4. Select Vehicle
  5. Open “System”
  6. Toggle Valet on or off
  7. Tap “Save” top right corner of the app.

### **\*\*NEW**

5. (-) Wired Valet mode input that can be connected to a latching or momentary toggle switch (NOT INCLUDED). ENTER and EXIT valet mode will use the same procedure. **NOTE: When the system has been set to wired valet mode input, procedure 1 WILL NO LONGER FUNCTION!**
  1. Hold the (-) Valet input to ground for minimum of 5 seconds
  2. After 5 seconds to ground, tap the (-) Valet Input to ground 5 times
  3. The park lights will flash
    - 1 time for enter Valet mode
    - 2 times for exit Valet mode

**NOTE: When using this feature with security features please make sure the switch is mounted discretely and the user knows where to find the switch in case of emergency.**

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

1. **No Remote:** If there are no remotes programmed or there are no remotes available you can exit Valet Mode by turning the key to the ignition on or 'Run' position then press and release the foot brake pedal 10 times within 10 seconds **\*\*SEE NOTE**. This procedure will only deactivate Valet Mode it will not activate Valet Mode. The vehicles parking lights should flash 2 times to indicate the system has exited valet mode
2. **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 3 or 5-button remote there will be remote specific steps to exit valet, please see remote user's manual for further instructions.
3. **Using Drone mobile app** as stated above.
4. **Using the wired Valet input** as described above.

## Wiring Descriptions

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**Connector 1 (CN1), 3 wire onboard relay connector.** This relay can be programmed to be activated using the POC setting options in special options group 2. There are currently 11 options with the parking light function as default. **Example for (+) parking light option:**

- connect PIN 3 (White) to constant (B+)
- connect PIN 2 (White/Black) to the vehicles (B+) parking light circuit.
- No connection for PIN 1

Pin 1 **White/Red** - Relay pin 87a (N/C)

Pin 2 **White/Black** - Relay pin 30 (COM)

Pin 3 **White** - Relay pin 87 (N/O)

### Connector 2 (CN2), 16-Pin

Pin 1 **Red - Constant 12V positive (+) power input.** **This wire must be connected.** 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 2 **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 first.** IF you're having trouble locating a good (-)ground source you can use PIN # 4 at the Standard OBD II connection

Pin 3 **Brown - Siren: 600mA (+) output** can be connected to the positive lead of an aftermarket siren. This will produce output with arm/disarm, full alarm, and panic as a default setting. This can be changed based on feature 3-09 option settings. The length of output for the arm/disarm chirps can be changed using feature 3-02 settings.

Pin 4 **Green - Ignition 12V positive (+) input. This wire must be connected** to the vehicle's ignition for remote . 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 5 **Green/White - Parking light 250mA negative (-) output.** This will provide output whenever the parking lights are activated for lock, unlock, alarm diagnostics, and programming the proper wire in the vehicle will test (-) when the parking light switch is in the on position.

Pin 6 **Red/Black - (+) positive Door input:** This wire monitors negative (+) trigger door-pins for security and purposes the proper wire in the vehicle, will provide a negative (+) trigger only when the doors are opened. You will need to test the wire for correct polarity.**(CAN BE PROGRAMMED TO BE USED AS FOOT BRAKE INPUT feature 1-14 option 2)**

Pin 7 **White - Horn 250mA negative (-) output.** This is an optional output that will provide a fixed 30mS negative output when triggered by the remote(s). The output control is based on feature 3-08 option setting.

Pin 8 **Red/White - Door Zone input (-) PIC1:** This input is used to monitor the (-)negative door zone status and will trigger the alarm if (-)ground is applied while the system is armed. **This wire is also programmable for several other input options listed in special options group 4 using an OP500.**

Pin 9 **Blue - GWA (-)ground while armed output:(.er Kill):** 250mA latched negative (-) output when armed that can be used with an FT E-LOCK to interrupt a .er wire protecting from theft This wire output function can be configured for multiple starter disabling functions. Please see feature 3-06 for additional options. *Caution: If this wire is being used to activate multiple accessories it must be diode isolated for each one.*

Pin 10 **Gray/Black - Hood Zone Input (-) PIC2:** This input is used to monitor the hood zone status and will trigger the alarm if (-)(-)ground is applied while the system is armed. You can connect this wire to the hood pin supplied with this kit, to a wire in the vehicle that shows (-) only while the hood is open, or to any zone that shows (-)ground when it is considered open. **This wire is also programmable for several other input options listed in special options group 4 using an OP500.**

Pin 11 **Violet - Dome light supervision output:** 250mA (-) output. This wire can be used to energize a relay that can power the vehicle interior lights when the system is disarmed. The output will stay active for the selected time based on feature 2-04 option settings, until ignition is on.

Pin 12 **Grey/White - Warn away (zone 1) Input (-) PIC3;** (-) input: This wire will activate the security system warn away (3 chirps) if (-)ground (-) is applied while armed. This wire can be used with an auxiliary sensor. **This wire is also programmable for several other input options listed in special options group 4 using an OP500.**

Pin 13 **Yellow - AUX 1 Output;** 250mA negative (-) output. This AUX will provide a (-) output based on feature 2-08 option settings, and the activation control can be changed using feature 2-10 option settings. **This AUX output can also be activated using Drone Mobile.**

Pin 14 **Black/White - Instant trigger (zone 2) Input (-) PIC4;** (-) input: This wire will trigger the alarm if (-)ground (-) is applied while armed. This input can be used with an Auxiliary sensor. **This wire is also programmable for several other input options listed in special options group 4 using an OP500.**

Pin 15 **Yellow/White - AUX 2 Output;** 250mA negative (-) output. This AUX will provide a (-) output based on feature 2-09 option settings, and the activation control can be changed using feature 2-11 option settings. **This AUX output can also be activated using Drone Mobile.**

Pin 16 **Violet/Black - Trunk Zone input (-) PIC5:** This Input is used to monitor the trunk zone of the vehicle and will trigger the alarm if (-)(-)ground is applied while the system is armed. **This wire is also programmable for several other input options listed in special options group 4 using an OP500.**

### **Connector 3 (CN3), 6-Pin Lock Accessory port**

**Note: This connector will still be available for any Firstech lock harness. (FT-DM600 or FT-DM700)**

Pin 1 **None** (empty) - 12v B+ constant output: available when using a Firstech door lock Module DM600, DM700

Pin 2 **Violet/White** - Trunk release 250mA, 800mS negative (-) output: This is an optional output that will release the trunk. Use CN1, Pin 2 if the vehicle is equipped with a (+) trunk release. System will unlock doors and disarm alarm prior to trunk release.

Pin 3 **Orange/Black** - 2nd Unlock 250mA, 800mS negative (-) output: This is an optional output that will provide a (-) pulse for driver's priority door lock. **IMPORTANT:** You must isolate the driver's door and set feature 1-03 to option 2 (on).

Pin 4 **Blue** - Unlock 250mA, 800mS negative (-) output: This is an optional output that will provide a (-) pulse for unlocking doors. System will unlock doors and disarm alarm. **IMPORTANT:** You must reverse polarity for (+) trigger door lock systems. For additional lock settings review Option Group 1.

Pin 5 **Blue/Black** - Lock 250mA, 800mS (-) negative output: This is an optional output that will provide a (-) pulse for locking doors. System will lock doors and arm alarm. **IMPORTANT:** You must reverse polarity for (+) trigger door lock systems. For additional lock settings review Option Group 1.

Pin 6 **None** (empty)- B- (-)ground output: available when using a Firstech door lock Module FT-DM600, FT-DM700

#### **Connector 4 (CN4), Black 4-Pin (RS 232 Data Port) ADS/Drone data to data**

This port provides simple data to data connectivity of outboard iDatalink bypass modules. Those iDatalink modules can provide vehicle zone status and OEM keyless entry control when applicable. This connector can also be used for updating control modules via [www.install.myfirstech.com](http://www.install.myfirstech.com).

Pin 1 (**B+**) - Constant 12V positive (+) output

Pin 2 (**B-**) - (-)ground (-) output

Pin 3 (**RX**) - Input, this wire receives data

Pin 4 (**TX**) - Output, this wire transmits data

#### **Connector 5 (CN5), Grey 4 Pin (UART data port) Drone data to data or KP2 only**

Pin 1 (**B+**) - Constant 12V positive (+) output

Pin 2 (**B-**) - (-)ground (-) output

Pin 3 (**RX**) - Input, this wire receives data

Pin 4 (**TX**) - Output, this wire transmits data

**Connector 6 (CN6), 4-Pin to 4-Pin or 4-pin 6-Pin (Pre-wired Antenna Cable)**

Connect your antenna cable to this port. You can only use 4 to 4 pins or 4 to 6 pin antenna cables. 6 to 6 Pin antenna cables do not work.

Pin 1 Yellow - RX input. This wire receives the signal from remote.

Pin 2 White - TX output. This wire transmits the signal to remote.

Pin 3 Red - Constant 12V positive (+) output.

Pin 4 Black - (-)ground

**Connector 7 (CN7), 4-Pin (Pre-wired Impact Sensor)**

Pin 1 **Black** - Negative (-) (-)ground when armed (GWA).

Pin 2 **White** - 2nd stage negative (-) input. (Instant trigger)

Pin 3 **Red** - 12V positive (+) output.

Pin 4 **Yellow** - 1st stage negative (-) input. (Warn away)

**Connector 8 (CN8), 2-Pin (Pre-wired LED) The LED will stay solid blue when armed for the duration of the sensor set up time. (Approx. 25 seconds)**

Pin 1 **Black** - L.E.D negative (-) (-)ground.

Pin 2 **Black/White**- L.E.D. 2.5V positive (+) output.

## CM2500 Feature tables

#1	Feature group 1	Option Setting			
		Default(I)	Option (II)	Option (III)	Option (IV)
1-01	Door Pulse Duration	0.8 sec	2.5 sec	0.125 sec	3.5 sec
1-02	Double Pulse Locks	Off	Unlock	Lock	Both
1-03	Drivers Priority	Off	On		
1-04	Ignition Locks	Ignition + Foot Brake after Doors Closed	Ignition + 30 sec after Doors Closed	OFF	
1-05	Siren Duration	30 Seconds	60 Seconds	120 Seconds	Chirp for 20 Seconds
1-06	Confirmation Chirps	Medium (30ms)	Short (15ms)	Normal (60ms)	
1-07	Auto Rearm	Off	30 Seconds	60 Seconds	5 Minutes
1-08	Passive Arming	Off	On	Passive Without Locks	<b>Passive Locking/Arming with RFID</b>
1-09	Dome Light Delay	Off	5 Seconds	45 Seconds	Auto
1-10	Valet	Key 5 times, or Remote while Ignition is on	Key 5 times or Remote (I+III)	<b>(PIC) NEG. trigger Valet Input</b>	
1-11	Door Open Notify	On	Off		
1-12	Security features	On	Off		
1-13	Siren/Horn Mute Control on Remote	Disabled	Enabled		
1-14	CN4 Pin 6 (+) Input Usage	(+) Door Input	(+) Foot Brake Input		
1-15	RFID Unlock	Unlock	FTX	Off	

#2	Feature group 2	Option settings			
		Default(I)	Option (II)	Option (III)	Option (IV)
2-01	Horn Output	On double lock	On Lock and Unlock	Alarm Only	
2-02	Horn Honk	Pulsed	Latched		
2-03	(-) GWA (-)ground While Armed	Latched while armed	0.5 sec	20 Seconds	Program → Aux 4
2-04	Dome Light Output	Off Factory Rearm + 45 sec	Factory Rearm	45 Seconds	Off
2-05	Unlock/ Disarm with trunk release	Unlock, Factory Disarm, and Trunk Release	Factory Disarm, Trunk Release Only	Trunk Release Only	Aux 3
2-06	Trunk Output Timing	1 sec	0.5 sec	2 sec	Program → Aux 3
2-07	Secure Aux Output	On While armed	On	Off	
2-08	Aux 1 Output	.5 Seconds	Latched	20 Seconds	Program
2-09	Aux 2 Output	.5 Seconds	Latched	60 Seconds	Program
2-10	Aux 1 Output Control	By Remote	Arm	Disarm	Ignition Off
2-11	Aux 2 Output Control	By Remote	Arm	Disarm	With full alarm
2-12	Shock Sensor Input	Shock/Tilt	1st input : Disable Arm/ Disarm 2nd input : Trigger	1st input : Prewarn 2nd input : Trigger	DAS Sensor
2-13	Sliding door Control for iDataLink Modules	Off	Unlock, Factory Disarm, and Sliding Door Control	Factory Disarm and Sliding Door Control Only	2-13
2-14	Soft Disarm	OFF	ON	Disarm alarm 1 press	

#3	Feature group 3	Option settings			
		Default(I)	Option (II)	Option (III)	Option (IV)
3-01	Gray port	Drone	FT-KP2	<b>1-Way RFID ANT</b>	
3-02	FT-KP2 LED Flash	While armed	OFF while armed		
3-03	FT-KP2 Sensitivity	Normal Sensitivity	High Sensitivity	Low Sensitivity	Lowest Sensitivity
<b>3-04</b>	<b>Secure Start N/O Timer</b>	<b>Off</b>	<b>2 min</b>	<b>4 min</b>	<b>Prog. 1-10 min (10 min default)</b>
<b>3-05</b>	<b>Secure Start N/C Timer</b>	<b>Off</b>	<b>1 min</b>	<b>2 min</b>	<b>4 min</b>
<b>3-06</b>	<b>Starter-kill output</b>	<b>Starter-kill / GWA</b>	<b>Secure start N/C</b>	<b>Secure Start N/O</b>	
<b>3-07</b>	<b>BLACK DATA PORT</b>	<b>IDATALINK 2-WAY</b>	<b>DRONE</b>		

S-#1	Special option group 1	Settings
1	AUX1 output time	1 ~ 99 [seconds], LA(Latch)
2	AUX2 output time	1 ~ 99 [seconds], LA(Latch)
3	AUX3 output time	1 ~ 99 [seconds], LA(Latch)
4	AUX4 output Time	1 ~ 99 [seconds], LA(Latch)
<b>5</b>	<b>Secure Start Time</b>	<b>1-10 Minutes, with OP500 update v.36+</b>

S-#4	Special Option group 2	Setting Value			
	Programmable Relay Control	Options			
1	PRC #1 (Default: Parking light)	Parking Light [ 1 ]	Priority Unlock [ 5 ]	<b>Aux2 [ 9 ]</b>	
2		Horn [2]	Trunk Release [6]	Rearm [10]	
3		Lock [ 3 ]	Dome Light [ 7 ]	Disarm [11]	
4		Unlock [ 4 ]	<b>Aux1 [ 8 ]</b>		

S-#4	Special Option group 3	Setting Value			
	Programmable Input channel	Options			
1	PIC #1 (Default: (-) Door Input	(-) Door Input [1]	(N/C) Door Input [6]	(-) Closed Loop Input [11]	
2	PIC #2 (Default: (-) Hood Input	(-) Hood Input [2]	(N/C) Hood Input [7]	(-) Key Sense Input [12]	
3	PIC #3 (Default: (-) Pre-Warn Input	(-) Pre-Warn Input [3]	(N/C) Trunk Input [8]	(-) Ign, Trunk, Shock, Bypass Input [13]	
4	PIC #4 (Default: (-) Trigger Input	(-) Instant Trigger Input [4]	(-) Arm Input [9]	(-) 2nd Closed Loop Input [14]	
5	PIC #5: (-) Trunk Input	(-) Trunk Input [5]	(-) Disarm Input [10]	(-) Valet Input [ 15 ]	

## Feature Option Descriptions

### FO = Feature Option

#### 1-01 Door Lock/Unlock output Pulse Duration:

**FO1 - 0.8 seconds:** (-) Negative lock and unlock output time.

**FO2 - 2.5 seconds:** (-) Negative lock and unlock output time.

**FO3 - 0.125 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.

**FO4- 3.5 seconds:** (-) Negative lock and unlock output time.

#### 1-02 Double Pulse Unlock:

**FO1 - Off:** (default)

**FO2 - Unlock:** This option will provide a double pulse output **only** for unlock each time the CM2500 executes the unlock command. (Length of output time will be based on feature 1-01 option settings.)

**FO3 - Lock:** This option will provide a double pulse lock output **only** for lock each time the CM2500 executes the lock command. (Length of output time will be based on feature 1-01 option settings.)

**FO4 - Lock and unlock:** This option will provide a double pulse lock output for both lock and unlock each time the CM2500 executes lock or unlock commands. (Length of output time will be based on feature 1-01 option settings.)

1-03 Driver's Priority Unlock:

**FO1 - Off:** (default)

**FO2 - On:** This feature will allow the user to unlock the driver's door first. If the unlock button is pressed again within 4 seconds, the other doors will unlock. The driver's door unlock must be isolated from the other doors and use the blue (-) unlock. The Orange/Black (-) 2nd unlock is used to provide unlock output to unlock all other doors.

1-04 Ignition Controlled Locks (**DRIVE LOCK**): When FO 1 or 2 are selected, the user can activate the "drive lock" or ignition-controlled door locking feature using a Firstech remote or Drone. *(Please check specific remote user 's manual for steps to activate Drive lock.)*

**FO1 - On w/ Foot brake:** This option *(when activated with the Firstech remote or Drone)* will provide a door lock output when the ignition is turned on and (+) 12 volts is applied to the foot brake input wire CN4 PIN 6, or over data (**feature 1-14 MUST BE SET TO OPTION 2 "Foot brake input"**). There will be an unlock output as soon as ignition is turned off.

**FO2 - On:** This option *(when activated with the Firstech remote or Drone)* will provide a door lock output 30seconds after the ignition is turned on. There will be an unlock output as soon as ignition is turned off.

**FO3 - OFF:** This option will disable the drive lock feature.

1-05 Siren Duration: this feature changes the duration of the siren during full alarm.

**FO1 - 30 seconds:** this option will provide 30 seconds of output (+) on the siren wire (brown CN4) during full alarm.

**FO2 - 60 seconds:** this option will provide 60 seconds of output (+) on the siren wire (brown CN4) during full alarm.

**FO3 - 120 seconds:** this option will provide 120 seconds of output (+) on the siren wire (brown CN4) during full alarm.

**FO4 - Chirps for 20 seconds:** this option will provide 20 seconds of pulsed output (+) on the siren wire (brown CN4) during full alarm.

1-06 Confirmation chirps: This feature will allow the user to select a shorter **siren or horn** output time to simulate a quieter arm/disarm/. output.

**FO1 - 30mS:** This is a 30 milliseconds siren output with arm, disarm, and . confirmation chirps. It will produce a "medium" volume sound. (Softer than the standard 60mS output)

**FO2 - 15mS:** This is a 15-millisecond siren output with arm, disarm, and . confirmation chirps. It will produce a "short" or quiet volume of sound. (Significantly softer than the standard 60mS output)

**FO3 - 60mS:** This is a standard 60 millisecond siren output with arm, disarm, and confirmation chirps.

1-07 Auto Relock:

**FO1 - Off:** (default)

**FO2 - 30 seconds:** This option allows the CM2500 to automatically relock/rearm 30 seconds after

CM2500 has been disarmed/unlocked and **ONLY IF no zones have not been opened.**

**FO3 - 60 seconds:** This option allows the CM2500 to automatically relock/rearm 60 seconds after

CM7 has been disarmed/unlocked and **ONLY IF no zones have not been opened.**

**FO4 - 5 minutes:** This option allows the CM2500 to automatically relock/rearm 5 minutes after it has been disarmed/unlocked and **ONLY IF no zones have not been opened.**

1-08 Passive Arming: When options 2 or 3 are selected the user has the choice to activate “Passive” feature using a Firsttech remote or Drone (*please check specific remote user ’s manual for steps to activate passive*)

**FO1 - Off:** (default)

**FO2 - Passive locking with passive arming:** This option when passive is activated, will send lock/arm outputs to lock/arm the CM2500 30 seconds after the last zone is closed. The CM2500 will flash the parking lights and chirp the siren 1 time every 10 seconds 3 times total as a warning that it is going to Arm/lock itself.

**FO3 - No lock output with Passive arm:** This option, when passive arm feature is activated, will **NOT** send the **lock** command one the CM2500 has passively armed itself. The CM2500 will flash the parking lights and chirp the siren 1 time every 10 seconds 3 times total as a warning that it is going to arm itself.

**FO4 - “Passive Locking/Arming with RFID”:** This option will allow the Passive locking with Passive arming 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, CM WILL STOP THE PASSIVE ARMING SEQUENCE. ANY ACTION FROM A FIRSTECH REMOTE, DRONE, KP SENSOR, IGNITION ON, OR ZONE OPEN WILL AUTOMATICALLY RE-START THE PASSIVE ARMING SEQUENCE.**

1-09 Dome Light Delay: This option is used when connecting the door trigger input to the vehicles dome light circuit. It delays the door trigger input to prevent the door open icon displaying on 2 Way remotes upon lock/arm.

**FO1 - Off:** (default)

**FO2 - 5 seconds:** This option will delay the door trigger input for 5 seconds when arming the system to account for any vehicle dome light output delay.

**FO3 - 45 seconds:** This option will delay the door trigger input for 45 seconds when arming the system to account for any vehicle dome light output delay.

**FO4 - Auto:** This option will allow the CM2500 to wait for a change in polarity on the door input circuit, after the system has been armed, to monitor for security.

1-10 Valet **Mode:** This feature will change the enter/exit valet mode procedure based on the option selected.

**FO1 - Key cycle 5 times or Remote (Lock + Trunk) while Ignition is on:** This option allows the user to enter valet mode using either method described. *Note: the user may exit valet mode with their Firstech remote (please check users guide for each remote for valet mode exit procedure), or with the key to ignition or "on" position and press the foot brake 10 times within 10 seconds (MUST HAVE CN4 PIN 6 connected to foot brake with feature 1-14 set to option 2).*

**FO2 - Key cycle 5 times or Remote (Lock + Trunk):** This option allows the user to enter valet mode using either method described. *Note: the user may exit valet mode with their Firstech remote (please check users guide for each remote for valet mode exit procedure), or with the key to ignition or "on" position and press the foot brake 10 times within 10 seconds (MUST HAVE CN4 PIN 6 connected to foot brake with feature 1-14 set to option 2).*

**FO3 – (-)NEG Valet Input:** This option will allow a (-)PIC set to 22 "Valet Input" to be used as a wired Valet mode enter/exit option. When this option is selected the previous Valet enter/exit options will no longer work, except when using Drone Mobile.

**This input will require (-)NEG input for 5 seconds minimum, followed by 5 (-)NEG input pulses to enter/exit Valet mode.**

Any PIC set to Valet Input can be connected to a momentary or latching toggle switch mounted somewhere in the vehicle. **NOTE: When using this option for security purposes, make sure the switch is mounted in a discreet location, but it also must be accessible to the user.**

1-11 Open door warning: With this feature enabled the system will notify the user if a zone is opened when arming. The system will provide 3-4 chirps and parking light flashes when attempting to arm the system with a zone open

**FO1 - On:** This option enables the door/zone open warning action

**FO2 - OFF:** This option disables the door/zone open warning action

1-12 Security features: This feature will enable or disable the security features of the CM2500. Security features include sensor inputs, zone inputs (unless using with manual transmission), horn, and siren output. Basic features will function normally (lock, unlock, trunk release, remote ., parking lights.)

**FO1 - On:** This option his option will enable security features

**FO2 - Off:** This option will disable security features, leaving only keyless entry and trunk release functions operational.

1-13 Siren/Horn mute control: this feature allows the installer to enable or disable the siren/horn mute control. The mute feature will silence the siren or horn during arm, disarm, from the Firstech remote.

**FO1 - Disabled:** (default) will not allow for the Firstech remote to mute the siren or horn output.

**FO2 - Enabled:** this option will allow the end user to activate or deactivate the arm/disarm chirps using a Firstech 4/5 button remote or DroneMobile.

1-14 (+) INPUT CN4 PIN 6: This feature will change the behavior of PIN 6 RED/BLACK (+) INPUT.

**FO1 - (+) Door zone input:** this option will identify PIN 6 RED/BLACK wire as a (+) door zone input for security purposes.

**FO2 - (+) Foot Brake input:** This option will identify PIN 6 RED/BLACK wire as a (+) Foot brake input for drive lock and valet mode purposes

1-15 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)

**FO1 - Unlock “unlock once armed” (default): (The CM 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). Approximately 12 seconds after armed, the ANT-2WSF will activate the proximity field and once the RFID enhanced remote enters the field the system will disarm/unlock automatically

**FO2 - FTX Unlock “always unlock”:** This option will enable the FT-RFID proximity unlock feature once activated with a Firstech RFID enhanced remote. The CM will always send the unlock/disarm output when the remote enters/re-enters the proximity field regardless of the current state of the CM. (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.**

**FO3 - Off:** Disables the RFID function.

2-01 Horn output: This feature controls the horn output behavior during Arm, Disarm, and Alarm trigger

**FO1 - On double lock only:** (default) this option is designed to simulate a factory keyless entry system by providing a horn output pulse (based on the option selection of feature 1-06) each time the lock command is sent a second time within 8 seconds of the first lock command.

**FO2 - On lock and Unlock only:** this option will provide a horn output pulse (based on the option selection of feature 1-06) with each lock or unlock confirmation.

**FO3 - With Alarm trigger only:** this option will provide a horn output pulse (based on the option selection of feature 1-06) with a full alarm trigger only.

2-02 Horn Honk: This feature controls the output behavior when activating the Horn

**FO1 - Pulsed:** this option provides a pulsed output pulse (based on the option selection of feature 1-06)

**FO2 - Latched:** this option will provide a latched output when an alarm event is triggered. This option can be used to activate accessories that may be installed for security purposed such and strobe lights or air horn kits.

2-03 (-)Ground while armed (GWA)(-)250mA Output: This feature controls behavior of the Blue wire PIN 9 on CN4.

**FO1 - Latched:** this option will provide a constant or "latched" output on the Blue wire once the system is in the armed state. This can be used to control a door interrupt relay, an LED panel, or AUX.

**FO2 - 0.5 second pulse:** This option will provide a ½ second pulsed output on the Blue wire when the system is armed

**FO3 - 20 second pulse:** This option will provide a 20 second pulsed output on the Blue wire when the system is armed

**FO4 - AUX 4 PROGRAM:** This option will allow the Blue wire to be used as AUX 4 (triggered with arm command) and set to a specific timed output using an OP500 programmer. SEE Special options group for timing options 1-100 seconds.

2-04 Dome Light Supervision output: This feature will control the output which is designed to power the interior lighting of a vehicle. The options will determine when the output is triggered and how long it can stay on.

**FO1- Arm & 45 seconds after disarm:** This option enables the Dome light supervision output to activate with the arm command, and it will activate with disarm command staying on for up to 45 seconds or ignition on

**FO2 - Arm:** This option enables the Dome light supervision output to activate with the arm command.

**FO3 - 45 seconds:** This option enables the Dome light supervision output to activate with the disarm command staying on for up to 45 seconds or ignition on

**FO4 - OFF:** This option will disable the dome light supervision output.

2-05 Unlock / Disarm with Trunk Release:

**FO1 - Unlock, Factory Alarm Disarm (FAD) trunk release:** This option will send unlock and FAD outputs prior to sending the Trunk release output. This applies to analog and data to data situations.

**FO2 - Factory Alarm Disarm (FAD) with trunk release:** This option will send the FAD output prior to sending the trunk release output. This applies to analog and data to data situations.

**FO3 - Trunk release only:** This option will only send the trunk release output when triggered. This applies to analog and data to data situations.

**FO4 - AUX 3:** This option allows the trunk release wire to be set to AUX 3 and have a programmable timed output when using the trunk release command. See feature 2-06 option 4 and special options group for 1-100 second timing options.

2-06 Trunk Release Output Timing: This feature determines the length of output time for the (-) analog trunk release wire.

**FO1 - 1 Second:** (default) Will provide a 250mA (-) negative output for 1 second

**FO2 - 2 Seconds:** Will provide a 250mA (-) negative output for 2 seconds

**FO3 - 3 Seconds:** Will provide a 250mA (-) negative output for 3 seconds

**FO4 - AUX 3 programmable:** Will provide a 250mA (-) negative output for a programmable timed output based on special options group AUX 3 settings 1-100 seconds. SEE feature 2-05 for trunk release output wire options

2-07 **Secure Aux Output:** this feature is designed to prevent accidental activation of the AUX outputs by requiring an additional step when using any 4 buttons or 2-way LCD Firsttech remote.

**FO1 - On while armed:** this feature will only require the user to perform the additional override step to activate Aux outputs **ONLY WHEN** the CM2500 is **ARMED**. While the system is disarmed or unlocked this step is not required.

**FO2 - On:** (default) this option will require the user to perform an additional step before activating AUX output using any Firsttech 4 button or 2-way LCD remote. 2Way LCD remotes with lock/unlock/trunk/. icons on the buttons use the . button for the same. 1way remotes require the user to hold trunk + . buttons for 2.5 seconds before activating AUX outputs.)

**FO3 - Off:** this option will disable the additional step required by the user to activate the AUX outputs.

2-08 **Aux 1 Output:** This feature determines the duration of the auxiliary 1 output. (Option 4 allows the output duration to be set for a specific length of time 1-99 sec. *(Specific time setting only available when using the OP500)*)

**FO1 - 500mS:** This option will provide a (-) negative output for 500 milliseconds (Half second) output using Yellow AUX 1 output PIN 13 CN4

**FO2 - Latched:** This option will provide a latched (-) negative output using Yellow AUX 1 output PIN 13 CN4. *Note: This will stay latched until AUX 1 command is sent again to shut it off.*

**FO3 - 20 second pulsed output:** this option will provide a (-) negative output for 20 seconds using Yellow AUX 1 output PIN 13 CN4

**FO4 - Program:** This option allows the AUX 1 output time to be programmed for a duration between 1-99 seconds.

2-09 **Aux 2 Output:** This feature determines the duration of the auxiliary 2 output. (Option 4 allows the output duration to be set for a specific length of time 1-99 sec. *(Specific time setting only available when using the OP500)*)

**FO1 - 500mS:** This option will provide a (-) negative output for 500 milliseconds (Half second) output using Yellow/White AUX 2 output PIN 15 CN4

**FO2 - Latched:** This option will provide a latched (-) negative output using Yellow/White AUX 2 output PIN 15 CN4. *Note: This will stay latched until AUX 1 command is sent again to shut it off.*

**FO3 - 20 second pulsed output:** this option will provide a (-) negative output for 20 seconds using Yellow/White AUX 2 output PIN 15 CN4

**FO4 - Program:** This option allows the AUX 2 output time to be programmed for a duration between 1-99 seconds.

**2-10 Aux 1 Output Control:** This feature allows the user to configure the method of which Auxiliary 1 can be activated.

**FO1 - Remote:** (default) This option allows AUX 1 (output time based on feature 2-08) to be triggered by any 4 button Firstech remote or drone.

**FO2 - With Arm:** this option will trigger AUX 1 (output time based on feature 2-08) any time the CM2500 is locked/armed the first time (I.e., if you send a second lock/arm command it will not trigger again)

**FO3 - With Disarm:** this option will trigger AUX 1 (output time based on feature 2-08) any time the CM2500 is unlocked/disarmed. *Note: the system must be in the armed state when disarming to trigger AUX 1. (I.e., if the vehicle is already in the unlocked/ disarmed state and you send a second unlock/disarm command it will not trigger the output)*

**FO4 - Ignition off:** this option will trigger AUX 1 (output time based on feature 2-08/AU1 setting) any time the Ignition is removed or shut down.

**2-11 Aux 2 Output Control:** This feature allows the user to configure the method of which Auxiliary 2 can be activated.

**FO1 - Remote:** (default) This option allows AUX 2 (output time based on feature 2-09) to be triggered by any 4 button Firstech remote or drone.

**FO2 - With Arm:** this option will trigger AUX 2 (output time based on feature 2-09) any time the CM2500 is locked/armed the first time (I.e., if you send a second lock/arm command it will not trigger again)

**FO3 - With Disarm:** this option will trigger AUX 2 (output time based on feature 2-09) any time the CM2500 is unlocked/disarmed. *Note: the system must be in the armed state when disarming to trigger AUX 1. (I.e., if the vehicle is already in the unlocked/ disarmed state and you send a second unlock/disarm command it will not trigger the output)*

**FO4 - Panic:** this option will trigger AUX 2 (output time based on feature 2-09/AU2 setting) any time the panic feature is activated by the user

**2-12 Shock Sensor port (red 4 PIN port):** This feature will determine the impact sensor port INPUT function, using PIN 2 (zone 1) and PIN 4 (zone 2)

**FO1 – FT SHOCK II:** This option will allow the CM2500 to support the new FT SHOCK II which is comprised of the standard analog 21 stage impact sensor combined with a digital tilt sensor. The FT SHOCK II impact sensitivity will be adjusted using the dial on the front of it, the dial can be set from OFF to 1-10, with 1 being the LEAST sensitive and 10 being MAXIMUM sensitivity. **The digital tilt will be fixed at 2.5 degrees to trigger.**

**FO2 - Zone 1 Arm/Disarm disable input - Zone 2 instant trigger:** This option allows the impact sensor port (red) input zone 1 to be used to disable the arm/disarm commands when (-)(-)ground is applied at the same time as an analog arm/disarm input command. This can be used to prevent the system from being disarmed by interior door lock switches, when connected to OEM door lock motors for use with older OEM remotes. Zone 2 can be used as an instant trigger activation which will trigger the full alarm when (-) is applied while the system is armed.

**FO3 - Standard Analog Shock:** This option allows the CM2500 to communicate with the FT-Shock analog shock sensor. This impact sensor is manually adjustable on the sensor and is capable of reporting zone 1 and zone 2 impacts.

**FO4 - DAS 2:** this options enables the 4 in one DAS 2 support on the CM2500.

**2-13 Sliding door control for iDatalink:** (must be enabled to allow data to data sliding door control)

This feature will provide an Unlock or Factory Alarm Disarm (FAD) output when triggering the AUX control using iDatalink Modules (Sliding Doors)

**FO1 - Off:** (default) This option does not provide an unlock or a FAD output when activating AUX

output control using the iDatalink modules.

**FO2 - Unlock and FAD:** This option will provide unlock and a FAD output when activating AUX

output control using iDatalink modules.

**FO3 - FAD only:** This option will only provide a FAD (factory alarm disarm) output when activating

AUX output control using iDatalink modules

**2-14 Soft Disarm:** this feature will enable Factory Alarm Arm (FAA) and Factory Alarm Disarm (FAD) outputs to trigger when silencing the Compustar siren when sounding with full alarm.

**FO1 - Off:** (Default) this will keep the standard Compustar soft disarm operation. Soft disarm feature allows the user to silence the Compustar siren as its sounding with full alarm without fully disarming the system which may unlock the doors and leave the vehicle unsecure.

**FO2 - On:** this option will provide a FAD output when the user taps the unlock/disarm once to silence the Compustar system while it's sounding, so it will disarm any factory alarm that may be sounding as well. In case the FAD function unlocks the doors the CM will send the FAA, 5 seconds later to make sure the vehicle is re-locked and secure. (This feature works well with GM, Chrysler, Dodge, Jeep, Toyota, Lexus vehicles that may have factory security.)

**FO3 - Disarm with 1 press:** This option will allow the user to completely disarm the system once it is sounding on the first unlock command. When set to this option the CM will unlock and send the FAD commands on the first disarm/unlock press from a Firstech remote.

**3-01 Gray Port:** This feature will determine the function support of the Gray Port.

**FO1 - Drone:** (default) This option will allow the gray UART port to support the Drone function.

**FO2 - KP2:** This option will allow the gray UART port to support KP2 (keyless window sensor) function. In case of KP2 and Drone, the black UART data port may be used for DRONE.

**FO3 – 1WAY RFID EZGO II:** This option will allow the gray UART port to be used with the EZGO II RFID antenna. IT will require the RF to DATA adapter connected to a standard antenna cable, Remote programming sequence is the same as using the RF port.

**3-02 KP2 LED Flash:** (Keyless entry window Sensor) this feature allows to disable the KP2 LED flash when armed.

**FO1 - While Armed:** This option enables the KP2 LED flash while armed.

**FO2 - OFF While Armed:** This option disables the KP2 LED flashing while armed.

**3-03 KP2 Sensitivity:** This feature will allow the sensitivity for the KP2 keyless entry window sensor to be adjusted to suit the conditions.

**FO1 - Normal (default):** This will be the standard sensitivity setting.

**FO2 - High:** This option is the most sensitive sensor setting.

**FO3 - Low:** This option will be lower sensitivity than the default standard setting.

**FO4 - Lowest:** This option will decrease the sensor sensitivity to its lowest setting.

**3-04 Normally Open (N/O) Secure Start Output Timer:** Secure Start feature will provide an output from the **Blue wire (PIN 9)** set to Secure Start N/O (**feature 3-06 option 3**). This output will be active for the time selected by one of the options below. It is designed to be used with our FTI SPTS (secure Push To Start) vehicle disable T harnesses. ***IT CAN ALSO BE USED AS A N/O STARTER DISABLE with an FT-ELOCK***

When used with the vehicle disable harness it 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 CM 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 CM 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 a Firstech remote, Drone, or KP sensor/**

**-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 CM 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 (-)NEG Valet Mode Input 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: WE strongly recommend disabling the “OEM control of aftermarket security” function when using an IdataLink interface with CM. This will significantly increase the security of the vehicle.*

**FO1 – OFF**

**FO2 – 2 min:** once the system is disarmed/unlocked the PTS button will be fully functional for 2 minutes. **IF the timer runs out the user must disarm/unlock again.**

**FO3 – 4 min:** once the system is disarmed/unlocked the PTS button will be fully functional for 4 minutes. **IF the timer runs out the user must disarm/unlock again.**

**FO4 – 10 min (PROG 1-10 min):** once the system is disarmed/unlocked the PTS button will be fully functional for 10 minutes. **IF the timer runs out the user must disarm/unlock again. When set to option 4 you may use an OP500 updated with OP500 v .36 (available for download at Firstechdata.com) to change the timer between 1 and 10 minutes using 1-minute increments.**

**3-05 Normally Closed (N/C) Secure Start output Timer:** The N/C Secure Start feature will provide an output from **Blue wire (PIN 9)** set to Secure Start N/O (**feature 3-06 option 2**). This output will be active for the period of time selected by one of the options below, once the alarm is triggered. It is designed to be used with our FTI-SPTS (secure Push To Start) vehicle disable T harnesses

***IT CAN ALSO BE USED AS A N/O STARTER DISABLE with an FT-ELOCK***

When used with the vehicle disable harness, it will disable the PTS button **ONLY WHEN THE ALARM IS TRIGGERED**, all other times there will be no output, 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 output times out. Once the CM is unlocked/disarmed the N/C output will no longer function making the PTS button operate normally. *IF the user needs to disable the N/C Secure Start Output completely they will need to enter valet mode.*

**FO1 – OFF**

**FO2 – 1 min:** This will activate the N/C Secure Start output, disabling the PTS button the exact time of an alarm event and continue to provide output for up to 1 minute or until system is disarmed.

**FO3 – 2 min:** This will activate the N/C Secure Start output, disabling the PTS button the exact time of an alarm event and continue to provide output for up to 2 minutes or until system is disarmed.

**FO4 – 4 min:** This will activate the N/C Secure Start output, disabling the PTS button at the exact time of an alarm event and continue to provide output for up to 4 minutes or until system is disarmed.

**3-06 Starter Kill Output (Blue wire PIN 9):** The Ground While Armed (GWA) is also the starter kill output which will provide a (-)250mA output once the CM has been armed (see options 2 and 3 for alternate output functions). It can be wired to a standard relay or FT-ELOCK to activate a starter kill when the alarm is triggered. ***Please see features 3-04 and 3-05 for options 2 and 3 function descriptions.***

**FO1 – GWA (Starter Kill):** (-)250mA output while armed

**FO2 – Secure Start (N/C) Normally Closed:** (-)250mA output on when alarm event has been triggered. (see feature 3-05 for description and timing options)

**FO3 – Secure Start (N/O) Normally Open:** (-)250mA output upon disarm for the predetermined time based on feature 3-04 option settings. (see feature 3-04 for output description and timing options)

**3-07 Black UART data port:** Provides additional data communication protocol options.

**FO1 – IdataLink 2-WAY support:** This option allows the CM2500A to communicate with an ADS ALCA module with full 2way communication. It can also be used to update the CM2500 firmware.

**FO2 – Drone:** This option allows the CM2500 support a Drone mobile device using full 2-way Drone protocol.

## Special Option Group 1

**AUX 1 Output Timing:** This feature will be displayed as AU1 on an OP500 programmer and can be set between 1 - 99 seconds for AUX 1 output timing.

**AUX 2 Output Timing:** This feature will be displayed as AU2 on an OP500 programmer and can be set between 1 - 99 seconds for AUX 2 output timing.

**AUX 3 Output Timing:** This feature will be displayed as AU3 on an OP500 programmer and can be set between 1 - 99 seconds for AUX 3 output timing.

**AUX 4 Output Timing:** This feature will be displayed as AU4 on an OP500 programmer and can be set between 1 - 99 seconds for AUX 4 output timing.

## Special Option Group 2

This option group allows the onboard relay to be activated with a function that can be selected from the setting values listed below. Once the setting value is set, the relay will operate as a normal single pole double throw relay connecting PIN 87(white wire) to the common PIN 30(white/black wire) which is also separating the common wire PIN 30(white/black wire) from PIN 87a(white/red).

**PRC 1 - (default setting) Parking light activation.** This setting will energize the on-board relay each time the parking light output is generated. In order to provide a (+) park light output you must connect PIN 87(white wire) to B(+) constant, and then connect PIN 30(white/black) to the vehicle parking light circuit. *Please see the list of additional setting values that can be used to activate the relay.*

SV0 - default setting

SV1 - **Parking light:** will activate relay with each parking light flash

SV2 - **Horn:** will activate the relay each time the horn honk output is used

SV3 - **Lock:** will activate the relay with each lock command

SV4 - **Unlock:** will activate the relay with each unlock command

SV5 - **Priority Unlock:** will activate the relay with the priority unlock (2<sup>nd</sup> unlock command)

- SV6 - **Trunk release:** will activate the relay with each trunk release command.
- SV7 - **Dome light Supervision:** will activate the relay and operate in the same manner as the dome light supervision output.
- SV8 - **AUX 1:** will activate the relay each time AUX 1 is triggered.
- SV9 - **AUX 2:** will activate the relay each time AUX 2 is triggered.
- SV10 - **Rearm:** will activate the relay each time the system is armed.
- SV11 - **Disarm:** will activate the relay each time the system is disarmed.

**Special Options Group 3:** This special option group allows you to select the input settings of the **Programmable Input Channel (PIC)** wire. i.e., If you want to set PIC #5 (default setting (-) hood status INPUT) to (N/C) hood pin INPUT, you will need change special option 4 from 0 to number 11 using your OP500 or flashing website.

- PIC 1 - Red/White: (-) Door zone INPUT** (default setting)
- PIC 2 - Gray/Black: (-) Hood zone INPUT** (default setting)
- PIC 3 - Gray/White: (-) Warn away (zone 1) INPUT** (default setting)
- PIC 4 - Black/White: (-) Instant trigger (zone 2) INPUT** (default setting)
- PIC 5 - Violet/Black: (-) Trunk zone INPUT** (default setting)

#### **PIC setting value description (SV)**

- SV 1 - (-) Door zone INPUT:** This setting allows any PIC programmed with value 1 to be connected to a (-) negative Door zone, which can be used to monitor door status for security purposes. If (-)ground is applied to any wire programmed for SV1 the system will consider the door open. This can be used as a **single door or multi door input**.
- SV 2 - (-) Hood Status INPUT:** This setting allows any PIC programmed with value 2 to be connected to a (-) negative Hood zone, which can be used to monitor Hood status for security purposes. If (-)ground is applied to any wire programmed with SV2 the system will consider the Hood open.
- SV 3 - (-) Warn Away INPUT:** This setting allows any PIC programmed with value 3 to be used as an Auxiliary sensor prewarn Input. Once Armed the CM will activate the 3 warn away chirps if (-)ground is applied.
- SV 4 - (-) Instant Trigger INPUT:** This setting allows any PIC programmed with value 4 to be used as an Auxiliary Sensor Instant Trigger Input. Once Armed the CM will trigger the alarm if (-)ground is applied to any wire programmed for SV 4.
- SV 5 - (-) Trunk Status INPUT:** This setting allows any PIC programmed with value 5 to be used as a (-) negative Trunk zone, which can be monitored for security purposes. If ground is applied to any wire programmed for SV5 the system will consider the trunk open. This can be used as a single trunk or multi rear door input.

- SV 6 - N/C Door zone INPUT:** This setting allows any PIC programed with value 6 to be connected to a Normally Closed circuit Door zone, which can be used to monitor door status for security purposes. If (-)ground is REMOVED from any wire programmed for SV6 the system will consider the door open. This can ONLY BE USED FOR A SINGLE DOOR.
- SV 7 - N/C Hood zone INPUT:** This setting allows any PIC programed with value 7 to be connected to a Normally Closed circuit Hood zone, which can be used to monitor Hood status for security purposes. If (-)ground is REMOVED from any wire programmed for SV7 the system will consider the Hood open.
- SV 8 - N/C Trunk zone INPUT:** This setting allows any PIC programed with value 8 to be connected to a Normally Closed circuit Trunk zone, which can be used to monitor Trunk status for security purposes. If (-)ground is REMOVED from any wire programmed for SV8 the system will consider the Trunk open. This can ONLY BE USED FOR A SINGLE Trunk or rear hatch.
- SV 9 - (-) CM ARM INPUT:** This setting allows any PIC programmed with value 9 to be used as a Control Module ARM input which will arm the system when ground is applied to any wire programmed for SV9. When arming the system will activating lock/arm outputs if necessary.
- SV10 - (-) CM DISARM INPUT:** This setting allows any PIC programmed with value 10 to be used as a Control Module DISARM input which will disarm the system when ground is applied to any wire programmed for SV10. When disarming, the system will activate unlock/disarm outputs if necessary. This input can also be used to disarm the system when it has been triggered.
- SV11 - Closed Ground Loop Input:** This setting allows any PIC programmed with value 11 to be used to monitor a closed ground loop circuit for security purposes. Proper closed ground loop circuit will show ground while connected (closed) and will show nothing or B+ when disconnected (opened).
- SV12 - (-) Key-Sense INPUT:** This setting allows any PIC programmed with value 12 to be used as a (-) negative Key-sense INPUT. Key sense will alert the system that a key is still present and restrict any passive, or auto locking functions until the key is removed.
- SV13 - IGN & Sensor Bypass INPUT:** This setting allows any PIC programmed with value 13 to be used to bypass the system ignition input and the alarm sensor inputs while armed if it is being used with a factory Remote . or added to another device. This input needs to see (-)ground on any wire programmed for SV13 to properly function.
- SV14 - 2<sup>nd</sup> Closed Ground Loop Input:** This setting allows any PIC programmed with value 14 to be used to monitor an additional closed ground loop circuit for security purposes. Proper closed ground loop circuit will show ground while connected (closed) and will show nothing or B+ when disconnected (opened).
- SV15 - (-) NEG. Valet Input:** This setting allows any PIC programmed with value 22 to be used as an enter/exit Valet mode input. To enter/exit Valet mode using this input, it must see ground for a minimum of 5 seconds, then ground pulse input 5 times. This PIC wire can be used with a momentary or latching toggle switch to enter/exit valet mode. When using valet mode for security purposes, make sure the switch is mounted discreetly but is still accessible by the user.

## Option Programming procedures

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### How to Program Options

There are two ways to set options on the CM2500 control modules. You can use the FT-OP500-KIT or most

Firstech remotes. The remotes include 4 or 5 buttons 1- and 2-Way remotes.

### Option Programming Using the FT-OP500-KIT

PLEASE MAKE SURE YOUR OP500 IS UPDATED, VISIT <https://firstechdata.com> for updates. The OP500 can be used to change anything in the Option Tables. It is required to change settings in Special Option Groups 1 and 2.

**STEP 1: Make sure system is unlocked/disarmed.** Connect the antenna cable (at the antenna end) to the 4 or 6 pin ports on the top of the OP500. Once connected, the OP500 will power up if CN1 or CN3 on the control module is connected properly.

**STEP 2:** Use the left or right arrow keys on the OP500 to select option. Use the up or down arrow buttons to select the option setting. “1” is the default setting, “2”, “3”, and “4” are the optional settings.

Special Option Group 1: Change the timed output of the Diesel Timer or Auxiliaries 1 through 7.

Special Option Group 2: Change the Programmable Output Connections on the grey 20 pin harness.

**STEP 3:** Hold the “W” (Write) button for 3 seconds. This finalize option changes to the control module. Wait until OP500 displays “Success” before disconnecting.

To reset the options, hold the “R” (Reset) button and “W” (Write) buttons for 3 seconds. Then hold the “W” button for 3 seconds.

### Option Programming with FT-OP100 (valet button) *(Limited feature group access 1-4)*

**STEP 1:** Make sure the Control Module is in a disarmed/unlocked state

**STEP 2:** Connect FT Valet OP-100 button to the CM’s 4 pin blue antenna port

**STEP 3:** Go to Ignition on (without starting) + Foot brake input applied

**STEP 4:** Push the valet button 5 times holding it on the 5<sup>th</sup> time for the following time lengths to reach the desired feature group:

- 1) **2 seconds** → **Option Group #1** (w/ light flash 1 time and siren/horn 1 chirp)
- 2) **4 seconds** → **Option Group #2** (w/ light flash 2 times and siren/horn 2 chirps)
- 3) **6 seconds** → **Option Group #3** (w/ light flash 3 times and siren/horn 3 chirps)
- 4) **8 seconds** → **Option Group #4** (w/ light flash 4 times and siren/horn 4 chirps)

*If you would like to reset all features to their default option setting push the valet button 10 times and hold on the 10<sup>th</sup> time. Once complete, the parking lights will flash, and siren/horn will sound 5 times to confirm reset.*

**STEP 5:** Once the Option group has been selected release the programming button. Then push and release the programming button again to select the feature number you wish to change. Once selected, wait for the parking light flash, and siren/horn to sound confirming the feature number you have selected.

**STEP 6:** Once you have confirmed the feature you've selected push and release the valet button to select the desired option. Once selected wait for the parking lights to flash and the siren/horn to sound confirming the option you have selected.

**STEP 7:** Once finished turn ignition off, please test function to verify successful feature option change

### Option Programming Using a Remote

Using a remote is a timed process so review this section before beginning. Options cannot be programmed with 1 button remotes. **IMPORTANT: Special Option Groups cannot be programmed with remotes - OP500 must be used.**

**STEP 1:** Select the option you wish to program. (Use the corresponding table shown on the following page)

**STEP 2:** Scroll through menu waiting for 1 parking light flash and/or siren chirp per line.

**STEP 3:** Once finished scrolling through menu, wait for the parking lights and/or siren chirp to confirm the option number. i.e., option 2-04 will flash and/or chirp 4 times. Select your option using the Lock, Unlock, Trunk, or . buttons.

**How to Program Options with 5 Button 2-Way Remotes**

	Wait for chirp between each tap	Scroll Through Menu (Wait for flash between each tap)	Wait for corresponding parking light flash and/or siren chirp before selecting option	Select Option 1	Select Option 2	Select Option 3	Select Option 4
Option Menu 1	(F + Trunk) for 3 seconds then (F + Trunk) for 3 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Tap Trunk Button	Tap Key Button
Option Menu 2	(F + Trunk) for 3 seconds then (F + Key) for 3 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Tap Trunk Button	Tap Key Button
Option Menu 3	(F + Key) for 3 seconds then (F + Trunk) for 3 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Tap Trunk Button	Tap Key Button
Option Menu 4	(F + Key) for 3 seconds then (F + Key) for 3 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Tap Trunk Button	Tap Key Button

**How to Program Options on 2 Way Remotes with Separate Lock and Unlock Buttons**

	Wait for chirp between each tap	Scroll Through Menu (Wait for flash between each tap)	Wait for corresponding parking light flash and/or siren chirps before selecting option.	Select Option 1	Select Option 2	Select Option 3	Select Option 4
Option Menu 1	Lock + Unlock for 3 seconds then Lock + Unlock for 3 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Hold Trunk Button for 3 seconds	Tap Key Button
Option Menu 2	Lock + Unlock for 3 seconds then Lock + Key for 3 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Hold Trunk Button for 3 seconds	Tap Key Button
Option Menu 3	Lock + Key for 3 seconds then Lock + Unlock for 3 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Hold Trunk Button for 3 seconds	Tap Key Button
Option Menu 4	Lock + Key for 3 seconds then Lock + Key for 3 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Hold Trunk Button for 3 seconds	Tap Key Button

**How to Program Options With 1 Way Remotes**

	Wait for chirp between each button hold	Scroll Through (Wait for flash tap)	Wait for corresponding parking light flash and/or siren chirps before selecting option	Select Option 1	Select Option 2	Select Option 3	Select Option 4
Option Menu 1	Lock + Unlock for 3 seconds then Lock + Unlock for 3 seconds	Hold Trunk + Key for 3 seconds		Tap Lock Button	Tap Unlock Button	Tap Key Button	Hold Trunk + Key for 3 seconds
Option Menu 2	Lock + Unlock for 3 seconds then Lock + Key for 3 seconds	Hold Trunk + Key for 3 seconds		Tap Lock Button	Tap Unlock Button	Tap Key Button	Hold Trunk + Key for 3 seconds
Option Menu 3	Lock + Key for 3 seconds then Lock + Unlock for 3 seconds	Hold Trunk + Key for 3 seconds		Tap Lock Button	Tap Unlock Button	Tap Key Button	Hold Trunk + Key for 3 seconds
Option Menu 4	Lock + Key for 3 seconds then Lock + Key for 3 seconds	Hold Trunk + Key for 3 seconds		Tap Lock Button	Tap Unlock Button	Tap Key Button	Hold Trunk + Key for 3 seconds

**Troubleshooting**

**Alarm LED Diagnostics**

When the alarm is triggered the standalone LED or the LED in the FMX antenna (if present) will flash a certain number of times as shown in the table below. This is intended for users with 1 Way remotes.

2 Flash	Door Input
3 Flash	Shock stage 1
4 Flash	Shock stage 2
5 Flash	Tilt
6 Flash	Ignition on
7 Flash	Hood Input
8 Flash	Trunk Input
9 Flash	AUX sensor stage 1
10 Flash	AUX sensor stage 2

## Frequently Asked Questions

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**I have everything hooked up and the system will not respond.**

A: The remotes need to be programmed. Review the “Common Procedure” section of this manual.

**I am trying to program the control module with the OP500 Option Programmer, and it flashes “ER 01” when I plug it in to the antenna cable. What should I do?**

A: Make sure that the system is not locked/armed. The last thing to check is the antenna cable or antenna extension cable - make sure this is not damaged. If you need to, try another cable. When the OP500 is working properly, it will read “success good.” You no longer need to program the remotes before the OP500 will sync.

**I need a (-)ground when armed wire, does the control module have one?**

A: You can use the (-)ground when armed wire on CN4 that goes to the .er kill relay. You must cut this wire and place a diode in line so that when the ignition on the other side of the relay goes to (-)ground, it won't back feed to your accessory. Install the stripe side of the diode facing the control module.

**On the brain, how do I set the auxiliaries?**

A: Auxiliary 1 through 4 are not defaulted on with the CM2500 so you must have an Option Programmer (OP500) to change the outputs to provide an output of your choice. Secure auxiliary (option 2-07) will prevent these outputs from triggering without doing query first. Please review the “Special Option Group” programming section of this manual for more details.

**The vehicle will lock and unlock but not flash the parking lights.**

A: The system is in valet mode. See Valet mode section of this manual or the remote users guide.

**Whenever I try to arm the vehicle, it chirps the siren 3 times and will not arm.**

A: Check the hood and trunk trigger inputs.

**Do the door locks flip flop in polarity?**

A: No. You can use the DM700 for high current positive (+) locks, or the DM600 harness used for low current 600mA positive (+) locks.

**WARNING:** Manufacturer or seller assumes no responsibility for any injuries and/or damages caused by improper care of the product such as decomposition, conversion, and transform done by a user voluntarily.

**WARNING:** There should be no wiring routed around any pedals which can cause a driving hazard

## Technical Support Contacts

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Firstech technical support is reserved for authorized dealers **ONLY consumers must contact client services for assistance.**

Monday - Friday: 888-820-3690

(6:00 am - 6:00 pm Pacific Standard Time)

**AUTHORIZED FIRSTECH DEALERS ONLY**

Web: [install.myfirstech.com](http://install.myfirstech.com)

### Wiring Diagrams

Go to [install.myfirstech.com](http://install.myfirstech.com) to access wiring info. If you are an authorized dealer and unable to access this site, please contact your sales rep or we call 888-820-3690 Monday through Friday, 8 am to 5 pm Pacific Standard Time.

## **Consumer site:**

<https://www.compustar.com/>

<http://www.dronemobile.com/>

<https://accounts.dronemobile.com/userlogin>

## **Product, Support, and Vehicle info:**

Product manuals, tech tips, training aids:

<http://install.myfirstech.com>

Drone activation and testing:

<http://Install.myfirstech.com/>

Tech Support page Facebook access:

<https://www.facebook.com/groups/Firstechtechsupportgroup/?fref=nf>

Operation and training videos

<https://www.youtube.com/channel/UCvLp0NC-DQnoPJVly7do5Kg>

## **Dealer activation/flashing sites:**

Drone activation account:

<https://install.myfirstech.com>

Idatalink and Firstech flashing site:

<http://myfirstech.idatalink.com>

# NOTES: