FIRSTECH

MASTER GUIDE

CM7300 Alarm Only **v2.0**

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Please visit www.firstechdata.com for additional installation resources

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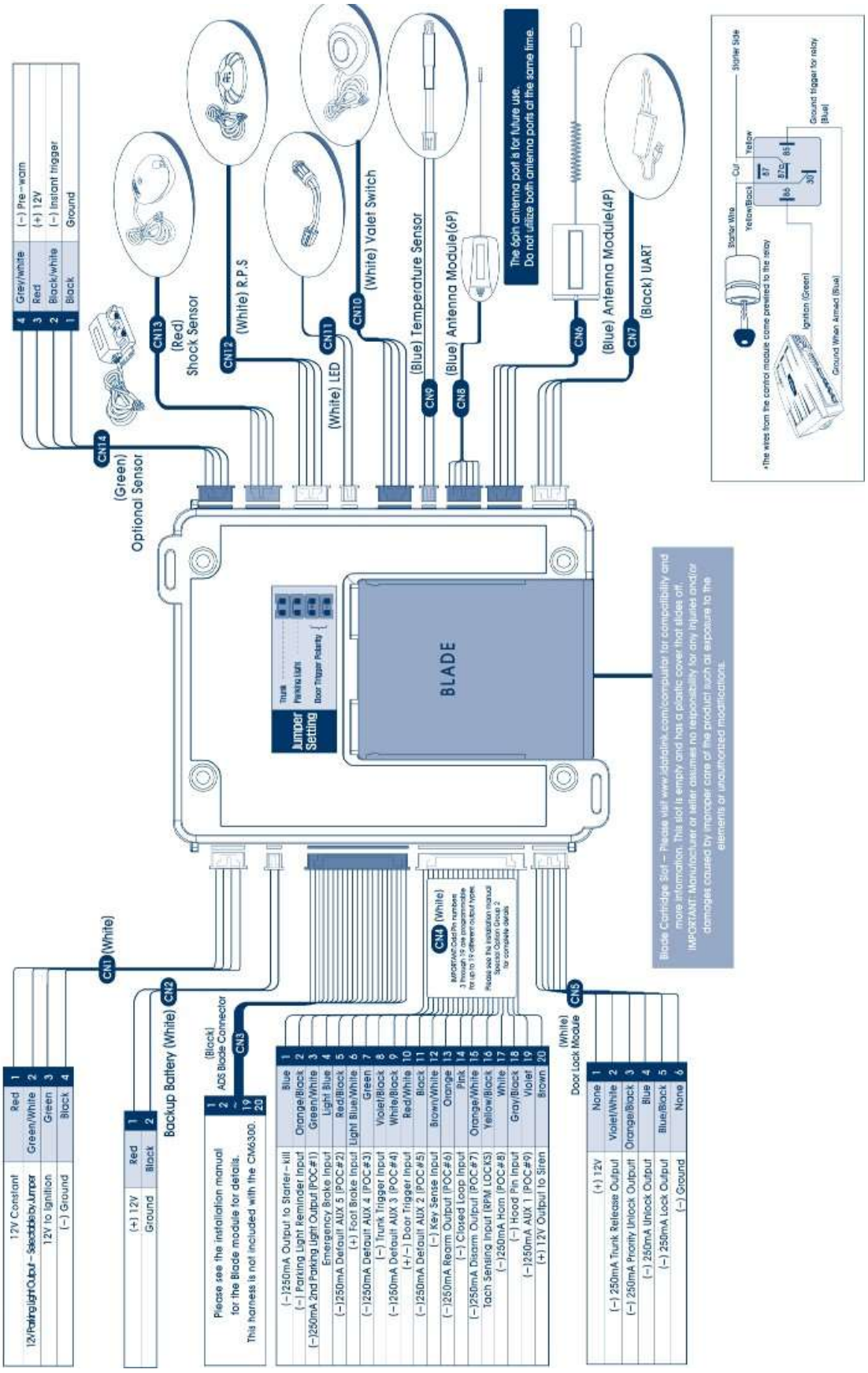

CN14 (Green) Optional Sensor
CN13 (Red) Shock Sensor
CN12 (White) R.P.S
CN11 (White) LED
CN10 (White) Valet Switch
CN9 (Blue) Temperature Sensor
CN8 (Blue) Antenna Module(6P)
CN6
CN7 (Blue) Antenna Module(4P)
(Black) UART
The 6pin antenna port is for future use. Do not utilize both antenna ports at the same time.
4 Grey/White (-) Pre-warn
3 Red (+) 12V
2 Black/White (-) Instant trigger
1 Black Ground
Starter Side
Cut
Yellow
Yellow/Black
Starter Wire
Ground trigger for relay (Blue)
Ignition (Green)
Ground When Armed (Blue)
*The wires from the control module come prewired to the relay
BLADE
Jumper Setting
Trunk
Parking Light
Door Trigger Polarity
Blade Cartridge Slot – Please visit www.idatalink.com/compustar for compatibility and more information. This slot is empty and has a plastic cover that slides off. IMPORTANT: Manufacturer or seller assumes no responsibility for any injuries and/or damages caused by improper care of the product such as exposure to the elements or unauthorized modifications.
CN1 (White)
12V Constant Red 1
12V/Parklight Output - Seatbelt Bypass Green/White 2
12V to Ignition Green 3
(-) Ground Black 4
CN2
(+) 12V Red 1
Ground Black 2
Backup Battery (White)
CN3 (Black) ADS Blade Connector
Please see the installation manual for the Blade module for details.
This harness is not included with the CM6300.
1 Blue (-)250mA Output to Starter-Kill
2 Orange/Black (-) Parking Light Reminder Input
3 Green/White (-)250mA 2nd Parking Light Output (POC#1)
4 Light Blue Emergency Brake Input
5 Red/Black (-)250mA Default AUX 5 (POC#2)
6 Light Blue/White (+) Foot Brake Input
7 Green (-)250mA Default AUX 4 (POC#3)
8 Violet/Black (-) Trunk Trigger Input
9 White/Black (-)250mA Default AUX 3 (POC#4)
10 Red/White (+/-) Door Trigger Input
11 Black (-)250mA Default AUX 2 (POC#5)
12 Brown/White (-) Key Sense Input
13 Orange (-)250mA Rearm Output (POC#6)
14 Pink (-) Closed Loop Input
15 Orange/White (-)250mA Disarm Output (POC#7)
16 Yellow/Black Tach Sensing Input (RPM LOCKS)
17 White (-)250mA Horn (POC#8)
18 Gray/Black (-) Hood Pin Input
19 Violet (-)250mA AUX 1 (POC#9)
20 Brown (+) 12V Output to Siren
CN4 (White)
IMPORTANT: Odd Pin numbers 3 through 19 are programmable for up to 19 different output types.
Please see the installation manual Special Option Group 2 for complete details
CN5 (White) Door Lock Module
1 None (+) 12V
2 Violet/White (-) 250mA Trunk Release Output
3 Orange/Black (-) 250mA Priority Unlock Output
4 Blue (-) 250mA Unlock Output
5 Blue/Black (-) 250mA Lock Output
6 None (-) Ground

Introduction CM7300

Thank you!

For selecting a Firstech security system as your product of choice. The following installation manual is a complete guide to the CM7300A 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 www.firstechdata.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 www.Firstechdata.com for updates.

Kit Contents CM7300

All Firstech FT-7300A CONT controllers include the following:

- CM7300 main control module
- Wiring diagram sheet
- Main wiring harness
- Wiring harnesses
- Hood pin
- Mountable bright blue LED
- Firstech analog dual stage shock sensor (Compushock)

RF Kits with remote(s), Antenna, and Antenna Cable are not included with the FT-7300A CONT.

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

- Auto lock and unlock system (FT-EZGO)
- Remote pager sensor (FT-RPS TOUCH) or (FT-RPS-2)
- Firstech secure valet switch (FT-VALET GREY)
- Thermistor (temp) sensor (FT-TEMP SENSOR)
- DAS sensor (FT-DAS)
- 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 CM7300. This includes all 4 and 6 pin antennas.
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.

Installation Basics CM7300

If you are new to installing Firstech Series Remote Starts 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 7 seconds and **tap** "LOCK" button (half second) on the first remote, and then **tap** "LOCK" button 1 (half second) on any other remote you want to program.

☐ **RPS Touch (Touch Remote Paging Sensor):**
The optional RPS that has four main functions; (1.) Status LED, (2.) Remote notification when triggered, (3.) Auto unlock/alarm disarm when a user specific 4 digit knock code is entered via tapping sensor through the windshield. (4.) You can also relock your vehicle if equipped with an RPS Touch sensor.

☐ **DAS Sensor:**
The DAS sensor monitors forward movement for remote starting manual transmissions, dual stage impact, and auto adjusting tilt sensor. See the DAS Sensor section of this manual for details.

☐ **Supports 4 Pin and 6 Pin Antennas**
The CM7300 supports both Firstech 4 Pin and 6 Pin antennas. This will work with all new RF kits as well as the current ones. ***Do not have antennas plugged into both ports on the CM7300A the remotes will not function properly.***

☐ **Supports Blade**
The CM7300 supports the Blade AL and Blade TB systems as well as 2-way data for Idatalink and Fortin bypass modules. The Gray data port will also support full data connection with Drone Mobile.

☐ **New Option Menus:**
It is important to familiarize yourself with all the options as it will save time in most applications.
Example: Option 1-04 controls the double pulse unlock feature on all CM7 series control modules.

☐ **Programmable Output Channel (POC) (Must have Option Programmer OP500)**
The CM7300 control modules come with 9 programmable outputs that can be configured 17 different ways. It is important to familiarize yourself with the POCs as it will save time in most applications.

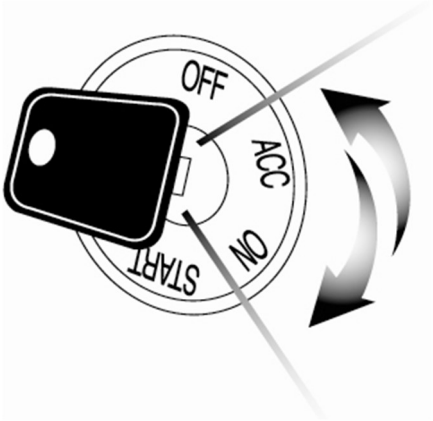
☐ **Internet updatable processors Visit** www.firstechdata.com
All CM7 series units are equipped with some of the most powerful processors available today. This flexibility allows for on-demand internet updating capabilities in the event of a version update or change. This can be done at several websites including http://Compustar.idatalink.com

Remote Programming Routine CM7300

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 7 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 1 (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 Start 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 start)

STEP 4: Step on the foot brake 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 Accessories CM7300

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.

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**

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.

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.

Please program Option 3-16 to Setting 2.

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) using the instructions below:

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. (the door status input must be connected)

STEP 3: Hold your finger over the 'Red Circle' icon for 2.5 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 2.5 seconds.

Alarm disarm and unlock
To disarm hold your finger over the 'Red Circle' for 2.5 seconds. Once the LEDs start their circular pattern, enter your 4 digit code. (Refer to Step 4 above.) Two seconds after entering the 4th digit, your system will disarm.

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.

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 cannot 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 4- 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 rearm and lock

To rearm, knock on your sensor 5 times.

Alarm disarm and unlock

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.

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.

Firstech Shock Sensor

For best results mount the shock sensor by zip tying it to the vehicles main ignition harness. You can also use the supplied mounting hardware to mount your sensor to a plastic heating duct centrally located in the vehicle.

There is a small dial on the sensor that ranges from Off to 10. The higher the number on the dial the greater sensitivity of impact. A small adjustment to the dial can make a significant difference in sensitivity for both 1st and 2nd stages. Recommended dial settings for most vehicles is somewhere between 2 & 4.

Siren

To adjust duration time when the alarm has been triggered, change Option 3-07 – the system default is 30 seconds.

DAS Sensor

The DAS sensor monitors forward movement for remote starting manual transmissions, dual stage impact, and auto adjusting tilt sensor. Follow the steps below to properly setup your DAS sensor.

Installing Your DAS

STEP 1: Set Option 4-12 to Setting 2
STEP 2: Set switch 1 and 2 on the side of the DAS. *See below for explanation or switches.
STEP 3: Connect cable to the red 4 pin port on the CM7 Series module.
STEP 4: Mount DAS securely using zip ties or included hardware. Can be mounted in any orientation. Tilt will set 30 seconds after arming.

Adjusting DAS Shock Sensitivity (CM7 series)

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, tap button 1. (1 Way: Lock) After you get one parking light flash, tap the vehicle. You will get siren chirps 1-most sensitive through 10-least sensitive. 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, tap button 2. (1 Way: Unlock) 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 DAS.

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.

NEW **Optional DAS Shock Sensitivity setting Procedure (CM7)

STEP 1: Turn the ignition to the 'on' position
STEP 2: Hold Foot Brake (make sure the CM sees a valid foot brake input)

STEP 3: Tap Lock 3 times from any Firstech remote (including 1Button remotes)

STEP 4: Release Foot Brake *Parking lights will flash 2 times confirming DAS is in programming mode

STEP 5: The CM will chirp/honk/flash (1-10 times) indicating the current sensitivity level

STEP 6: Using any Firstech remote tap lock or unlock 1 time to increase or decrease 1 level of sensitivity (up to 10 (least sensitive) or down to 1 (most sensitive)) which should be confirmed by chirps/horn honks/ flashes *repeat this process until desired sensitivity level has been reached

a. Example 1. Current sensitivity level is 4, we send 1 lock we should receive 1 chirp or 1 horn honk after 1 second of no incoming commands
b. Example 2. Current level is set at 4, we send lock + lock + lock, after 1 second of no incoming commands we should receive 3 chirps or horn honks
c. Example 3. Current level is now set at 7, we send unlock + unlock, after 1 second of no incoming commands we should receive 2 chirps/horn honks/park light flashes

STEP 7: 5 seconds after the last setting change confirmation the CM will chirp/horn honk/flash the sensitivity level *you will have an additional 5 seconds to make any adjustments

STEP 8: Programming completed.

STEP 9: You are now ready to test the DAS

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.

Thermistor (Temperature Sensor)

Every 2 Way LCD Firstech RF kit includes an optional thermistor, which must be plugged into the 2-pin port of the control module for use. This plug is blue on the CM7300. The use of the thermistor allows the 2 Way remote to display the vehicle's interior temperature on the remote LCD (liquid crystal display)

Hood Pin

The hood pin switch triggers the alarm in the event the hood is opened while the system is armed.

Backup Battery

The backup battery input on the control module / brain is for any optional battery backup unit (FT-BATT BACKUP). The red positive lead (+) acts both as an input and charging output for a 12 Volt battery backup. A backup battery maintains basic alarm functionality when main vehicle power is lost. See the wiring schematic section for complete details. Do not power any other modules or DroneMobile off this port as it will not support a heavy load of current.

Common Procedures CM7300

Jumper Settings

Caution: Jumper settings affect the polarity and use of certain outputs. If these jumpers are used incorrectly, damage to the vehicle and/or control module may occur.

Jumper 1 (Door Trigger Polarity)
Determines the polarity of the door trigger input wire (red/white). In the default position the door trigger registers negative (-) triggers. To change to a positive (+) trigger, move the jumper.

Jumper 2 (Parking Light to Trunk Output)
Determines the output type (not polarity) of the green/white wire on connector one (CN1). In the default position it provides a positive (+) parking light output. To change to a positive (+) trunk output move the jumper. A negative (-) parking light output is found on connector three (CN3) and a negative (-) trunk output is found on connector four (CN4).

Setting Auxiliary Outputs on Connector 4 You Must Have the OP500 Option Programmer
For your convenience certain wires are defaulted to Auxiliaries. However to set specific auxiliary outputs on the control module, you must choose two odd pin wires on the black 18 pin connector that you are not using. For example we will use POC 8 and 9.

STEP 1: Plug in OP500 and use the Right or Left Arrow Button to scroll through the menu to POC 8 and POC 9 on LCD Line 1.
STEP 2: Use the Up or Down Arrow Button to change the lower number on LCD Line 2 to 10 – Auxiliary 1 or 11- Auxiliary 2.
STEP 3: Scroll up the menu to Option 4-01 and 4-02 and set the options. Please see the Option Table for details.
STEP 4: The control modules have a secure auxiliary option 4-05. This requires you to tap button 4 before you tap button 2 for Aux 1 or button 3 for Aux 2. On 1-Way remotes you must hold the Trunk and Key/Start buttons for 2.5 seconds then tap the Trunk button for Aux 1 or the Key/Start button for Aux 2.

STEP 5: If you need to change the time settings of the outputs go to AU1 or AU2 on the OP500. LCD Line 2 is the timed output.
STEP 6: Hold the "W" Write button for 3 seconds to set all the options.

Version Diagnostics

All the new control modules come with the ability to check which firmware is on the module. This is accomplished by turning the ignition on. Then with 2 Way remotes you must hold buttons 1 and 4 together for 2.5 seconds. With the 1 Way remotes, you must hold the Lock and Key/Start buttons together for 2.5 seconds.

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.

The system can be put into valet mode one of 3 ways:

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.

****NEW****

3. With (PTS option) the user may enter valet mode by performing the remote programming procedure and make sure there are no remotes transmitting.

   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 *parking lights will flash 1 time to indicate programming is enabled.

   Step 5: After 10 seconds the parking light will flash 2 times, indicating the system has entered valet mode

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

1. **No Remote:** If there are no remotes or there are no remotes available you can exit Valet Mode by turning the key to the ignition or 'On' position then press and release the foot brake pedal (or apply 12 volts DC to the foot brake input wire Light Blue/White)10 times within 10 seconds. This procedure will only exit Valet Mode it will not enter 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.

Blade Cartridge Slot and Connector

The slot gives you the ability to use the Blade-AL and Blade-TB modules from Firstech and ADS. With these modules you can virtually eliminate all wire connections between your control module and bypass module. You only need to connect the main ignition harness and your required wires on the 20 pin Blade connector. For more information on how to program and wire the Blade please visit www.idatalink.com for the specific wiring diagram for that vehicle.

Blade system includes:

1. Blade-AL or Blade-TB (NOTE: These modules are blank and must be flashed on your computer.)
2. 20 Pin locking wiring harness
3. 3 Pin harness used in some installs

IMPORTANT: Install diagrams are not included and must be downloaded from www.idatalink.com/ Compustar. When flashing the Blade you can use the Y-Cable OP500 end and not CM4 Series end. ADS and Firstech recommends using the 4 pin RS232 cable to avoid confusion. Cartridge must be removed to flash the control module firmware.

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.

Wiring Descriptions

Connector 1 (CN1), 4-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 Green/White – This is a dual-purpose wire that features selectable functionality thru the trunk/light jumper on the control module. It is either a positive (+) parking light output or positive (+) trunk output. This wire carries a 10 amp fuse.

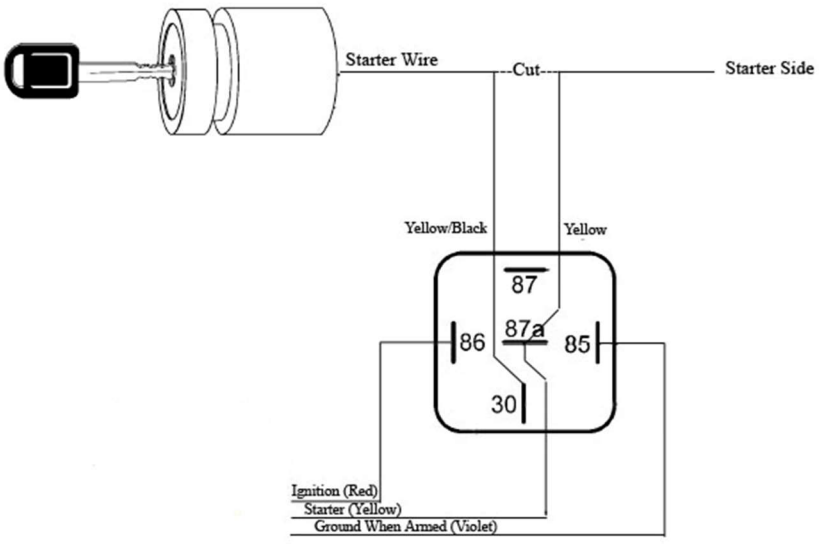
Default - Parking light positive (+) output. The proper vehicle wire will test (+) 12V when the parking light switch is in the on position.

Optional – Trunk release positive (+) output. The proper vehicle wire will test (+) 12V when the trunk release is triggered.

Pin 3 Green – Ignition 12V positive (+) input. This wire must be connected to the vehicles ignition for valet/programming. The proper wire will test 0V with the key in the off position, 12V (+) while the key is in the on position and 12V (+) during crank. This pin also has a thin green wire that is prewired to the starter kill relay. If you are not installing starter kill, you do not need to use the included relay.

There are two wires coming off of the relay; yellow-black and yellow. To utilize the starter-kill feature, the vehicle's starter wire must be cut in half, otherwise, cut the relay out of the harness. The starter kill relay has a thin 24 gauge blue wire. This must be connected to pin 1 (24 gauge blue wire) on Connector 3.

IMPORTANT: For starter-kill applications, the yellow wire goes to the starter side of the vehicle's starter wire and the yellow/black goes to the key side.



* The wires from the Compustar come prewired to the relay

Pin 4 Black - Ground negative (-) input. This wire must be connected to the vehicle's ground.

Connector 2 (CN2), 2-Pin: Optional Battery Back-up

Pin 1 Red - Constant 12 V positive (+) input and (+) charging output.

Pin 2 Black - Ground (-) negative input.

Connector 3 (CN3) , 20 Pin Blade Connector - New Generation

This connector is used only if you are installing a Blade-AL or Blade-TB. The wiring harness for this connector also comes with the Blade cartridge. Please refer to the Blade install guide for wire description.

Connector 4 (CN4), 20-Pin: Programmable Output Connector (POC)

IMPORTANT: Pin numbers labeled PIC/POC are programmable wires; Please refer to Special Option Group 2 or 3 for complete details. **(PIC=>Programmable Input Channel) (POC=>Programmable output channel)**

Pin 1 Blue/White– GWA (ground when armed) 250mA, latched negative (-) output when armed. This wire will provide the proper output for a starter-kill relay.

Pin 2 Orange/Black – Disarm Disable input: If this input sees ground (-) when receiving an analog DIARM input the CM will ignore the DISARM input command and remain armed. ***This is designed to keep the vehicle secure when using the analog ARM/DISARM inputs from the door lock motor wires***

Pin 3 White [**POC 1**] - Horn honk 250mA, 60mS negative (-) output. This is an optional output that will provide a pulsed output when Arming, Disarming, or Alarm notifications based on feature 3-8 and 3-9 settings. **This wire can be programmed to offer different output functions based on the POC setting values in Special Options group 2; using the OP500**

Pin 4 Light Blue [**PIC 1**] – Ignition/Sensor Input bypass: This (-) input will disable or bypass ignition/sensor Input when supplied with ground. This is designed to allow the CM to be added to an existing RS and allow for the vehicle to be remote started without triggering the alarm. **This wire can be programmed to offer other input functions based on the PIC setting value in special options group 3; using the OP500**

Pin 5 Blue/Green [**POC 2**] - LOCK 250mA, 800mS (-) negative output. This output will provide an 800mS (-) pulsed output with ARM/LOCK command. *IMPORTANT: You must reverse polarity for (+) trigger door lock systems. For additional lock output timing and control settings review Option Group* 1. **This wire can be programmed to offer different output functions based on the POC setting values in Special Options group 2; using the OP500**

Pin 6 Light Blue/White - Foot brake (+) input. This is used for option 1-09: Ignition controlled door locks setting 2 which will let the doors lock when brake is pressed. **This connection will be required if VALET mode exit procedure is desired.**

Pin 7 Blue [**POC 3**] - UNLOCK 250mA, 800mS (-) negative output. This output will provide an 800mS (-) pulsed output with DISARM/UNLOCK command. *IMPORTANT: You must reverse polarity for (+) trigger door lock systems. For additional unlock lock output timing and control settings review Option Group 1.* **This wire can be programmed to offer different output functions based on the POC setting values in Special Options group 2; using the OP500**

Pin 8 Violet/Black [**PIC 2**] - TRUNK negative (-) input. This is an input that will monitor the vehicle's trunk zone when armed, and will trigger the alarm when ground (-) is applied (trunk open). **This wire can be programmed to offer other input functions based on the PIC setting value in special options group 3; using the OP500**

Pin 9 Orange/White [**POC 4**] – FAD (FACTORY ALARM DISARM) 250mA, 800mS negative (-) output. This output will provide a 500mS (-) negative pulsed output with DISARM/UNLOCK command and can be used to disarm the factory security. *For a double pulse disarm see feature 1-1.* **This wire can be programmed to offer different output functions based on the POC setting values in Special Options group 2; using the OP500**

Pin 10 Red/White - Door trigger input: This wire monitors negative (-) or positive (+) trigger door-pins based on the door polarity jumper setting. This wire can also be programmed to read **ONE** N/C zone (i.e. 1 door). **(jumper must be set to negative and feature 4-15 must be set to option 2)**

Pin 11 Orange [**POC 5**] – FAA (FACTORY ALARM ARM) 250mA, 800mS negative (-) output. This output will provide a 500mS (-) pulsed output with ARM/LOCK command and can be used to arm the factory security. **This wire can be programmed to offer different output functions based on the POC setting values in Special Options group 2; using the OP500**

Pin 12 Brown/White [**PIC 3**] – Key Sense Input: This wire looks for key sense negative (-) input. The proper wire will show a (-) trigger only when the key is in the ignition. The purpose of the key sense is to prevent the system from passively arming or relocking while the key is still in the ignition. **This wire can be programmed to offer other input functions based on the PIC setting value in special options group 3; using the OP500**

Pin 13 Violet/White [**POC 6**] – TRUNK RELEASE 250mA, 1sec. (default) negative (-) output. This output will provide a 1sec. pulsed output with the trunk release command. The output timing and trunk release functions can be adjusted based on features 1-07 and 1-15. **This wire can be programmed to offer input functions based on the PIC setting value in special options group 3; using the OP500**

Pin 14 Grey/White [**PIC 4**] – Instant Trigger Input: This wire will trigger the security system if ground (-) is applied while armed. This can be used for additional security sensors or zone monitoring. **This wire can be programmed to offer other input functions based on the PIC setting value in special options group 3; using the OP500**

Pin 15 Green/White [**POC 7**] – Parking Light 250mA negative (-) output. This output will provide a (-) pulsed output based on feature 3-01 option settings (during lock, unlock, start, and diagnostics). **This wire can be programmed to offer different output functions based on the POC setting values in Special Options group 2; using the OP500**

Pin 16 Yellow/Black - Tach Sense AC input. This wire can be used to read vehicle RPM data and use to control Drive lock when using the RPM ignition control door lock feature.
1-09 option 3. The doors will lock once the rpms double from what they are programmed at.

Pin 17 Yellow [**POC 8**] – AUX 1 250mA negative (-) output. This output will provide an output based on feature 4-01 option setting. The trigger for activating AUX 1 can be changed using feature 4-03option settings. **This wire can be programmed to offer different output functions based on the POC setting values in Special Options group 2; using the OP500**

Pin 18 Gray/Black [**PIC 5**]– Hood Pin negative (-) input. This an input the will monitor the hood zone when armed, and will trigger the alarm when ground (-) is applied (hood open). *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.* **This wire can be programmed to offer other input functions based on the PIC setting value in special options group 3; using the OP500**

Pin 19 Yellow/White [**POC 9**] - AUX 2 250mA negative (-) output. This output will provide an output based on feature 4-02 option setting. The trigger for activating AUX 2 can be changed using feature 4-04 option settings. **This wire can be programmed to offer different output functions based on the POC setting values in Special Options group 2; using the OP500**

Pin 20 Brown - Siren 12V positive (+) output. This wire will provide a 600mA (+) output based on feature 3-02 and feature 3-09 option settings (ARM, DISARM, Sensor Prewarn, Full alarm, panic, diagnostics). This output can be used to drive a standard 12volt siren (included).

Connector 5 (CN5) 6-Pin

NOTICE: The Wire harness for this connector is sold separately and there are multiple lock accessories available:

-LOCK Harness
-FT-DM600
-FT-DM700

Pin 1 Not used

Pin 2 Violet/White – TRUNK RELEASE 250mA, 1sec. (default) negative (-) output. This output will provide a 500mS pulsed output with the trunk release command. The output timing and trunk release functions can be adjusted based on features 1-07 and 1-15.

Pin 3 Orange/Black - 2nd Unlock 250mA, 800mS negative (-) output. **ONLY when driver's priority door lock feature is enabled (feature 1-03 option 2)** This output will provide an 800mS (-) pulsed output when unlock command is sent a second time within 7 seconds of the first command.

Pin 4 Blue - UNLOCK 250mA, 800mS (-) negative output. This output will provide an 800mS (-) pulsed output with DISARM/UNLOCK command. *IMPORTANT: You must reverse polarity for (+) trigger door lock systems. For additional unlock lock output timing and control settings review Option Group 1*

Pin 5 Blue/Black - LOCK 250mA (-) negative output. This output will provide an 800mS (-) pulsed output with ARM/LOCK command. *IMPORTANT: You must reverse polarity for (+) trigger door lock systems. For additional lock output timing and control settings review Option Group* 1.

Pin 6 Not used

Connector 6 (CN6), 4-Pin (RS 232 Data Port)

This connector is used for updating control modules via http://compustar.idatalink.com You must also use this port to flash Blade bypass modules. This port provides simple connectivity of Fortin and iDatalink bypass modules.

This port is also used to communicate with DroneMobile controllers. Make sure to use the data port from the DroneMobile unit to this RS232 port. NOTICE: When using the RS232 port for DRONE, AND ONLY when there is a BLADE, it MUST be a BLADE AL. (The RS232 port is running is series with the Blade dock and when the Blade is used the loaded it will manage all incoming data from Drone the CM7300. Currently the Blade TB does not ave sufficient memory to manage all the incoming data.)

Connector 7 (CN7), 4-Pin to 4-Pin or 6-Pin (Pre-wired Antenna Cable)

Connect your antenna cable to this port. You can only use 4 to 4 pin or 4 to 6 pin antenna cables. 6 to 6 Pin antenna cables do not work. **Do not use both Connector 7 and Connector 8 at the same time.** 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 – Negative (-) ground.

Connector 8 (CN8), 6-Pin to 6-Pin (Pre-wired Antenna Cable)

Connect your antenna cable to this port. You can only use 6 to 6 pin antenna cables. 4 to 4 or 4 to 6 Pin antenna cables do not work. Do not use both Connector 7and Connector 8at the same time.

Connector 9 (CN9), 2-Pin (Pre-wired Thermistor)

Plug optional thermistor into this connector to monitor the vehicle's temperature. It is used to display temperature on two-way LCD's, and Drone.

Pin 1 Black - Thermistor

Pin 2 Black/White - Thermistor

Connector 10 (CN10), 3-Pin (Pre-wired Valet/Programming Switch)

Pin 1 Gray/Black - Negative (-) ground.

Pin 2 Gray – 3V positive (+) L.E.D. output.

Pin 3 Gray – Negative (-) output.

Connector 11 (CN11), 2-Pin (Pre-wired LED)

Note: Do not mistake for Thermistor port.

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

Pin 2 Black/White- L.E.D. 3V positive (+) output.

Connector 12 (CN12), 4-Pin (Pre-wired RPS)

Pin 1 Black - Negative (-) ground.

Pin 2 White - Negative (-) paging input.

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

Pin 4 Yellow - 9V positive (+) L.E.D. output.

Connector 13 (CN13), 4-Pin (Pre-wired Shock Sensor or DAS Sensor)

Pin 1 Black - Negative (-) ground.

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 14 (CN14), 4-Pin (Optional Sensor Input)

This connector provides optional sensor inputs. Most commonly used with proximity and tilt sensors.
This connector provides optional sensor inputs. Most commonly used with proximity and tilt sensors.

Pin 1 **Black** – Negative (-) ground.

Pin 2 **Black/White** [PIC 7] – AUX input (INSTANT TRIGGER): This wire default setting will trigger to full alarm, the CM7300 security system if ground (-) is applied momentarily. **This wire can be programmed to offer other input functions based on the PIC setting value in special options group 3; using the OP500**

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

Pin 4 **Grey/White** [PIC 6]– AUX Input (PREWARN): This wire default setting will trigger the CM7300 security system prewarning chirps/horn honks if ground (-) is applied momentarily. **This wire can be programmed to offer other input functions based on the PIC setting value in special options group 3; using the OP500**

Option Programming Tables CM7300

Option Group 1					
	Feature	**Default Setting I**	**Optional Setting II**	**Optional Setting III**	**Optional Setting IV**
1-02	Lock / Unlock pulse duration	0.8 sec	2.5 sec	0.125 sec	3.5 sec
1-03	Driver's priority unlock	Off	On		
1-04	Double pulse unlock	Off	Unlock	Lock	Both Lock and Unlock
1-07	Unlock / Disarm With Trunk Release	Unlock, Factory Disarm, and Trunk Release	Factory Disarm, Trunk Release Only	Trunk Release Only	
1-08	Passive Mode	Off	Passive Locking with Passive Arming	No Passive Locking with Passive Arming	
1-09	Ignition controlled door locks	Off	On	RPM Locks (Tach Sensing Mode Only)	
1-10	Auto Relock (If a door is not opened within this amount of time)	Off	30 sec	60 sec	5 min
1-11	Ignition / Accessory Out Upon Unlock (Negative Out)	Off	Ignition Pulse - same timing as disarm pulse	Acc Pulse - same timing as disarm pulse	Ignition and Acc Pulse - same timing as disarm pulse
1-13	Double Pulse Disarm Output	Single Pulse	Double Pulse		
1-14	EZ-GO	Off	FT-EZGO Unlock Every time	FT-EZGO Unlock (after locked)	FT-EZGO Lock and Unlock
1-15	Trunk Output Timing	1 sec	2 sec	3 sec	4 sec
1-16	Siren/Horn Mute Control	Disabled	Enabled	Silent Alarm	

Option Group 2 Not Available in CM7300

Option Group 3					
	Feature	**Default Setting - I**	**Optional Setting II**	**Optional Setting III**	**Optional Setting IV**
3-02	Confirmation Chirps	Medium (30 ms)	Short (15 ms)	Normal (60 ms)	
3-03	Dome Light Delay	Off	5 sec	45 sec	Auto
3-04	Starter-Kill Relay	Anti-Grind + Starter Kill	Anti-Grind	Anti-Grind + Passive Starter Kill	
3-05	Anti-Jacking	Starter-kill (No Anti-Grind)	Ignition-Kill	Auto kill (Auto-door locks Off) International Remotes w/ AUTO Function Only	Auto kill (Auto-door locks On) International Remotes w/ AUTO Function Only
3-06	Factory Alarm Option	On	Off		
3-07	Siren Duration (Upon Alarm Trigger)	30 sec	60 sec	120 sec	Chirps for 20 seconds

Option Group 3 Continued					
	Feature	**Default Setting - I**	**Optional Setting II**	**Optional Setting III**	**Optional Setting IV**
3-08	Horn Output	On Double Lock Only	On Lock and Unlock		
3-09	Siren Output	On Lock, Unlock, and Start	On Double Lock Only		
3-10	Valet	Key 5 times or Remote (Lock + Trunk) while Ignition	Key 5 Times with Foot Brake Trigger or Remote (Lock + Trunk) while Ignition is On	Key 5 times with Foot Brake Trigger or Remote (Lock + Trunk)	
3-11	Auxiliary Settings	Disabled	Enabled		
3-15	Soft Disarm	Off	On	Disarm with 1 Press	
3-16	RPS	RPS 2	RPS Touch		

Option Group 4					
	Feature	**Default Setting - I**	**Optional Setting II**	**Optional Setting III**	**Optional Setting IV**
4-01	Aux 1 output	0.5sec	Latch	0.5 sec Pulse + Program	Program
4-02	Aux 2 output	0.5sec	Latch	0.5 sec Pulse + Program	Program
4-03	Aux 1 output Control	By Remote	Arm	Disarm	Full Alarm
4-04	Aux 2 output Control	By Remote	Arm	Disarm	Pre-Warn
4-05	Secure Aux Output (1 and 2 Only)	On	Off		
4-06	**Feature Removed See PIC's**				
4-07	**Feature Removed See PIC's**				
4-08	Aux 1 and Aux 2 Control for iDatalink Modules	Off	Unlock, Factory Disarm, and Sliding Door Control	Factory Disarm and Sliding Door Control Only	Until Door Open (1 min max)
4-09	**Feature Removed See PIC's**				
4-11	Bypass Through RS232 Port	ADS	Fortin		
4-12	Impact Sensor	Shock Sensor	DAS Sensor	1st Stage Disarm Input | 2nd Stage Double Arm Input	1st Stage Disarm Input | 2nd Stage Arm Input
4-13	Antenna Power Save	Off	1 Day Later	2 Days Later	3 Days Later
4-14	Low Battery Warning	Off	On (at 11.7 volts)		
4-15	Door Status Input (red/White)	(-) ALL DOORS	N/C Circuit Input 1 DOOR ONLY		

Special Option Group 1		
	Feature	Setting Value (Seconds)
2	AUX1 output time	1 ~ 100
3	AUX2 output time	1 ~ 100
4	AUX3 output time	1 ~ 100
5	AUX4 output time	1 ~ 100
6	AUX5 output time	1 ~ 100
7	AUX6 output time	1 ~ 100
8	AUX7 output time	1 ~ 100

Special Option Group 2			
	Feature	**Setting and OP500 Value**	
	Programmable Output Connector	**0 - Default Setting**	**1~18 – Optional Settings**
1	POC #1	(-) Horn Output (White) pin 3	2nd Light - [1] 2nd IG1 - [3] 2nd Acc - [4] Rearm Out - [6] Disarm Out - [7] Horn Out –[8] Dome Light – [9] Aux 1 Out - [10] Aux 2 Out - [11] Aux 3 - [12] Aux 4 Out - [13] Aux 5 Out - [14] Aux 6 Out - [15] Aux 7 Out – [16] GWA - [18] Siren 2 - [20] Aux 3 (EZGO Unlock) - [24] Lock - [25] Unlock - [26] 2nd Unlock (Driver's Priority) - [27] Trunk Release - [28] Starter Kill - [29] Hazard light - [30]
2	POC #2	(-) Lock Output (Blue/Green) pin 5	
3	POC #3	(-) Unlock Output (Blue) pin 7	
4	POC #4	(-) Disarm Output (Orange/White) pin 9	
5	POC #5	(-) Rearm Output (Orange) pin 11	
6	POC #6	(-) Trunk Release (Violet/white) pin 13	
7	POC #7	(-) Parking Light (Green/White) pin 15	
8	POC #8	(-) AUX 1 Output (Yellow) pin 17	
9	POC #9	(-) AUX 2 Output (Yellow/White) pin 19	

	Feature	**Setting and OP500 Value**	
	PIC	**0 - Default Setting**	**1~28 – Optional Settings**
1	PIC #1	(-) E-Brake (Light Blue)	(-) E-Brake Input [1] (-) Trunk Input [2] (-) Key Sense Input [3] (-) Hood Input [4] (-) Door Input [5] (-) Disable Arm/Disarm/Trigger Start [8] (N/C) Trunk Input [9] (N/C) Key Sense Input [10] (N/C) Hood Input [11] (N/C) Door Input [12] (-) Pre warn input [13] (-) Instant Trigger Input [14] (-) Arm input [15] (-) Disarm Input [16] (-) IGN & Sensor Bypass Input [17]
2	PIC #2	(-) Trunk (Violet/Black	
3	PIC #3	(-) Key Sense Brown/White)	
4	PIC #4	(-) Door Input(Red/White)	
5	PIC #5	(-) Hood (Grey/Black)	
6	PIC #6	(-) AUX Input 1 (pre-warn)	
7	PIC #7	(-) AUX Input 2 (Instant Trigger)	

Feature Option Descriptions CM7300

1-02 Door Lock/Unlock Pulse Duration: **This does not affect the behavior of the factory arm output** (orange wire) or **factory alarm disarm output** (orange/white wire).

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.

1-03 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 (POC setting) is used to provide unlock output to unlock all other doors.

1-04 Double Pulse Unlock:

FO1 - Off: (default)

FO2 - Unlock: This option will provide a double pulse output **only for** unlock each time the CM7 executes the unlock command. (Length of output time will be based on feature 1-02 option settings.)

FO3 - Lock: This option will provide a double pulse lock output **only for** lock each time the CM7 executes the lock command. (Length of output time will be based on feature 1-02 option settings.)

FO4 - Lock and unlock: This option will provide a double pulse lock output for both lock and unlock each time the CM7300 executes lock or unlock commands. (Length of output time will be based on feature 1-02 option settings.)

1-07 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.

1-08 Passive Mode: When options 2 or 3 are selected the user has the choice to activate "Passive" feature using a Firstech 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 CM7 30 seconds after the last zone is closed. The CM7 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 CM7 has passively armed itself. The CM7 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.

1-09 Ignition Controlled Locks: ***(Drive Lock)*** When FO 2-4 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 - Off: (default)

FO2 - On: This option (when activated with the Firstech remote or Drone) will provide a door lock output when the foot brake is applied or 12 Volts is applied to the foot brake input on the CM7. The CM7 will also provide a door unlock output as soon as the key is turned off or 12v ignition is removed from the CM7300.

FO3 - RPM locking: ***(Tach input is required for this option to operate properly.)*** This option will provide a door lock output at approximately 20% RPM over the programmed idle tach output. (i.e. program tach at 1000 rpm and doors will lock at a sustained 1200 rpm when moving.) The CM7 will also provide a door unlock output as soon as the key is turned off or 12v ignition is removed from the CM7300.

1-10 Auto Relock:

FO1 - Off: (default)

FO2 - 30 seconds: This option allows the CM7300 to automatically relock/rearm 30 seconds after CM7300 has been disarmed/unlocked. **This will re-lock if no zones have not been opened**.

FO3 - 60 seconds: This option allows the CM7 to automatically relock/rearm 60 seconds after CM7 has been disarmed/unlocked. **This will re-lock if no zones have not been opened**.

FO4 - 5 minutes: This option allows the CM7 to automatically relock/rearm 5 minutes after it has been disarmed/unlocked. **This will re-lock if no zones have not been opened**.

1-11 Ignition / Accessory Upon Unlock:

FO1 - Off: (default)

FO2 - Ignition (-) pulse output with disarm: This option will pulse (-) ignition wires upon unlock/disarm. ***Most new Ford vehicles require ignition pulsed + immobilizer with unlock to disarm the factory alarm.***

FO3 - Accessory (-) pulse output with disarm: This option will pulse (-) accessory wires upon unlock/disarm.

FO4 - Ignition (-) pulse and Accessory (-) pulse output with disarm: This option will pulse (-) ignition and (-) accessory wires upon unlock/disarm. ***Some new Ford vehicles require ignition and accessory pulsed + immobilizer with unlock to disarm the factory alarm.*** Important: Also, used in cases where the vehicle's radio may turn on and stay on until the door is opened when accessory is pulsed.

1-12 OEM Remote Arm/Disarm Update for 2 Way Firstech Remotes: This feature disables the arming, disarming, and remote start confirmation updates to any Firstech 2 Way LCD when using an OEM remote.

FO1 - On: (default)

FO2 - Off: This feature disables the page back update to the 2 Way Firstech remote when your interface module provides OEM remote status updates to the CM7.

1-13 Double pulse disarm: This feature enables the FAD output. It will pulse 2 times with a single disarm command.

FO1 - Off (default): Standard single pulse output on the FAD wire. (orange/white by default)

FO2 - On: This feature will generate a double pulse output on the FAD wire. (orange/white by default)

1-14 EZGO: This feature covers the EZGO options. (Please refer to the EZGO section of this manual for specific operation instructions and antenna mounting locations)

FO1 - Off (default): No EZGO functions are enabled by default.

FO2 - FTX EZGO "always unlock": This option will enable the EZGO proximity unlock feature after activating with the EZ100-R remote. (Refer to the EZGO section of this manual for specific operating instructions) The CM7 will always send the unlock/disarm output when the EZ100-R enters the proximity field regardless of the current state of the CM7. (i.e. armed/locked-disarmed/unlocked). Once the EZ100-R leaves the proximity field, it will be set to send the unlock/disarm output as soon as it re-enters. ***Note: because the EZGO antenna is always searching for the EZ100-R, it will produce more current draw than the standard EZGO unlock option 3.***

FO3 - EZGO "unlock only": (The CM7300 must be in an armed state for this option) This option will enable the EZGO proximity unlock/disarm feature after activating with the EZ100-R remote. (Refer to the EZGO section of this manual for specific operating instructions). The CM7 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). Once the EZGO system is ready and the remote enters the proximity field, it will unlock/disarm.

FO4 - EZGO lock and unlock: This option will enable the EZGO proximity lock/arm and unlock/ disarm features once it's activated using the remote. (Refer to the EZGO section of this manual for specific operation instructions.) The EZGO will arm/lock approx. 12-15 seconds after the RFID remote leaves proximity of the EZ-GO antenna and all zones being monitored (including any key sense or ignition inputs) are closed or off. As soon as the CM7 is armed/locked the proximity unlock is active and will unlock/disarm as the EZGO remote enters the proximity field. ***Note: because the EZGO antenna is always searching for the EZ100-R, it will produce more current draw than the standard EZGO unlock option 3***

1-15 Trunk Output Timing: This feature determines the length of output time for the (+) or (-) analog trunk release wire.

FO1 - 1 Second: (default) Will provide a 250mA (-) negative output for 1 second on any POC that is programmed for trunk release or setting 28.

FO2 - 2 Seconds: FO1- 1 Second: (default) will provide a 250mA (-) negative output for 2 seconds on any POC that is programmed for trunk release or setting 28.

FO3 - 3 Seconds: FO1- 1 Second: (default) will provide a 250mA (-) negative output for 3 seconds on any POC that is programmed for trunk release or setting 28.
FO4 - 4 Seconds: FO1- 1 Second: (default) will provide a 250mA (-) negative output for 4 seconds on any POC that is programmed for trunk release or setting 28.

1-16 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, and start 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.
FO3 – Silent ALARM: This option will allow the user to activate or deactivate the arm/disarm chirps using a Firstech 4/5 button remote or Drone Mobile. In this mode the alarm once sounded will be "silent" with no visible or audible notifications from the vehicle. There will be notifications sent to the DroneMobile or 2Way LCD remotes that may be in range. This will allow the user to be notified of the alarm sounding without alerting anyone around the vehicle.

2-15 **PTS (Push To Start) vehicle Remote Programming: This feature has been integrated with traditional remote programming sequence and is available to be used at any time.**

3-02 Confirmation chirps: This feature will allow the user to select a shorter siren output time to simulate a quieter arm/disarm/start output.
FO1 - 30mS: This is a 30 milliseconds siren output with arm, disarm, and start 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 start 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 start confirmation chirps.

3-03 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 – 45seconds: 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 CM7 to wait for a change in polarity on the door input circuit, after the system has been armed, to monitor for security.

3-04 Starter-Kill: This option determines the operation of the GWA wire (POC 1 CN4 Pin 1 Blue/white)
FO1 – Anti grind + Starter interrupt: this option will allow for POC 1 to provide a negative output when the system is armed or remote started. This will enable a starter interrupt to prevent the vehicle from being started with the key when in an armed state.

FO2 – Anti Grind only: This option will allow POC 1 to provide a negative output when the system is armed. This will enable starter interrupt and prevent the user from grinding the starter during the takeover procedure.

FO3 – Anti Grind and passive starter interrupt: This option will allow for POC 1 to provide a negative output when the system is remote started or the passive starter interrupt is engaged. This will prevent the user from grinding the starter during the takeover procedure and enable starter interrupt 45 seconds after the ignition has been turned off.

3-05 Anti-Jacking: Note: this feature requires the starter-kill relay to be wired to the ignition vs. the starter wire. This feature will allow the CM7 to interrupt the ignition wire if panic mode is activated while the vehicle is running with the key.

FO1 – Off: (default) anti-carjacking feature is not enabled and the starter interrupt will operate based on feature 3-04 option setting.

FO2 – On: this option will enable the anti-carjacking feature. Make sure the starter interrupt relay is wired to interrupt the vehicle's ignition wire so the feature will operate as described. While the vehicle is running with the key and the panic mode is activated using any Firstech 4 button or 2-way LCD remote, the CM7 will enable the ignition interrupt relay so the vehicle cannot be re-started. Note: When using ignition-kill on manual transmission vehicles feature 3-04 must be set to option 2.

3-06 Alarm functions: This feature will enable or disable the security features of the CM7300. 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 start, parking lights.)

FO1 – On: Depending on the Control Module this option will enable or disable its security features

FO2 – Off: Depending on the Control Module this option will enable or disable its security features.

3-07 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 CN5) during full alarm.

FO2 - 60 seconds: this option will provide 60 seconds of output (+) on the siren wire (brown CN5) during full alarm.

FO3 - 120 seconds: this option will provide 120 seconds of output (+) on the siren wire (brown CN5) during full alarm.

FO4 - Chirps for 20 seconds: this option will provide 20 seconds of pulsed output (+) on the siren wire (brown CN5) during full alarm.

3-08 Horn output: This feature controls the horn output behavior during Arm, Disarm, and Remote Start. (POC setting #8)

FO1 - On double lock only: (default) this option is design to simulate a factory keyless entry system by providing a horn output pulse (based on the option selection of feature 3-02) 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 3-02) with each lock or unlock confirmation.

FO3 - On lock, Unlock, and Start: this option will provide a horn output pulse (based on the option selection of feature 3-02) with each lock, unlock, remote start command and remote started confirmation.
FO4 - On double lock and Start: this option is design to simulate a factory keyless entry system by providing a horn output pulse (based on the option selection of feature 3-02) each time the lock command is sent a second time within 8 seconds of the first. In addition, it will provide a horn output pulse with remote start command and remote started confirmation.

3-09 Siren output: This feature controls the siren (+) output behavior during Arm, Disarm, and Remote Start.
FO1 - On lock, Unlock, and Start: (default) this option will provide a (+) siren output pulse (based on the option selection of feature 3-02) with each lock, unlock, remote start command and remote started confirmation.
FO2 - On double lock only: This option is design to simulate a factory keyless entry system by providing a (+) siren output pulse (based on the option selection of feature 3-02) each time the lock command is sent a second time within 8 seconds of the first lock command.

3-10 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.***
FO2 - Key cycle 5 times with Foot Brake Trigger 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.***
FO3 - Key cycle 5 times with Foot Brake Trigger 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.***

3-11 **Auxiliary 3-7 Enable:** (2 Way LCD remote required) this feature enables access to AUX 3 through 7 via any Firstech 2-way LCD remote.
FO1 - Off: (Default) This option will prevent the user form activating AUX 3-7 with the Firstech 2way LCD remote.
FO2 - On: This feature will allow the user to enable AUX 3-7 which can be activated using a Firstech 2-way LCD remote. (Please refer to the remote users guide for specific AUX 3-7 activation process)

3-15 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 on both data and analog connections, 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 CM7 will send the FAA on both data and analog connections 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: **T**his 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.

3-16 RPS**:** (Remote Paging Sensor) this feature sets the RPS hardware being used with the CM7.
FO1 - RPS II: (knock sensor) This option enables the RPS II functions when using the RPS II hardware with the CM7. RPS can be used to arm/lock and disarm/unlock a CM7 or page a Firstech remote or accessory. Please refer the RPS section of this manual or the RPS product manual for installation and operation of the RPS II hardware.
FO2 - RPS Touch: (default) this option enables the RPS touch functions when using the RPS touch hardware with the CM7. RPS can be used to arm/lock and disarm/unlock a CM7 or page a Firstech remote or accessory. Please refer the RPS section of this manual or the RPS product manual for installation and operation of the RPS touch hardware. **NOTICE: when using RPS touch the LED included with the CM7300 kit will no longer function properly.**

4-01 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. and 1-15 min (with OP500 update only) ***(Specific time setting only available when using the OP500)***
FO1 - 500mS: This option will provide a (-) negative output for 500 milliseconds (Half second) output on any POC programmed with setting 10 (AUX 1)
FO2 - Latched: This option will provide a latched (-) negative output on any POC programmed with setting 10 (AUX 1). ***Note: This will stay latched until AUX 1 command is sent again to shut it off.***
FO3 - 500mS pulse + programmable timed output: this option will provide a (-) negative output for 500 milliseconds (0.5 seconds) output on any POC programmed with setting 10 (AUX 1). It will pause for 250 milliseconds then provide a timed output (based off feature 4-01 option 4). Note: to program the timed, output the user must change feature 4-01 to option 4, then adjust AU1 (AUX programmable output time) to desired time. To complete the programming steps, feature 4-01 must be changed to option 3. I.e. 0.5 second pulse…pause…10 second pulse, this option can be used to roll windows up or down on a vehicle that requires a similar action using the driver's door key cylinder.
FO4 - Program: This option allows the AUX output time to be programmed for a duration between 1-99 seconds. Note: with an OP500 update there will be additional time duration between 1-15 minutes available.

4-02 **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. and 1-15 min (with OP500 update only) only available when using the OP500)

FO1 - 500mS: This option will provide a (-) negative output for 500 milliseconds (0.5 seconds) output on any POC programmed with setting 11 (AUX 2)

FO2 - Latched: This option will provide a latched (-) negative output on any POC programmed with setting 11 (AUX 2). ***Note: This latched output will reset when ignition is turned on.***

FO3 - 500mS pulse + programmable timed output: this option will provide a (-) negative output for 500 milliseconds (0.5 seconds) output on any POC programmed with setting 11 (AUX 2). It will pause for 250 milliseconds then provide a timed output (based off of feature 4-02 option 4). Note: in order to program the timed output the user must change feature 4-02 to option 4, then adjust AU2 (AUX programmable output time) to desired time. To complete the programming steps feature 4-01 must be changed to option 3. (i.e. half second pulse…pause…10 second pulse) ***This option can be used to roll windows up or down on a vehicle that requires a similar action using the driver 's door key cylinder.***

FO4 - Program: This option allows the AUX output time to be programmed for a duration between 1-99 seconds. **Note: The OP500 must be updated for additional time duration settings. (1-15 minutes available)**

4-03 **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 4-01) 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 4-01) any time the CM7 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 4-01) any time the CM7 is unlocked/disarmed. ***Note: the system has to be in the armed state when disarming in order 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 – Full Alarm: this option will activate the AUX 2 output (output timing based on feature 4-02) With a full alarm trigger.

4-04 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 4-02) 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 4-02) any time the CM7 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 4-02) any time the CM7 is unlocked/disarmed. Note: the system has to be in the armed state when disarming in order 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 – Full Alarm: this option will activate the AUX 2 output (output timing based on feature 4-02) With a pre warning trigger from a dual stage sensor.

4-05 **Secure Aux Output:** this feature is designed to prevent accidental activation of the AUX outputs by requiring an additional step when using any 4 button or 2 way LCD Firstech remote.
FO1- On: (default) this option will require the user to perform an additional step before activating AUX output using any Firstech 4 button or 2 way LCD remote (2way remotes with Roman numeral buttons will require a 0.5 second tap of button IV before activating any of the AUX outputs.2Way LCD remotes with lock/unlock/trunk/start icons on the buttons use the start button for the same. 1way remotes require the user to hold trunk + start buttons for 2.5 seconds before activating AUX outputs.) **FO2- Off:** this option will disable the additional step required by the user to activate the AUX outputs.
FO3- On while armed: this feature will only require the user to perform the additional override step to activate Aux outputs **ONLY WHEN** the CM7 is **ARMED**. While the system is disarmed or unlocked this step is not required.

4-06 **AUX input 1 (-): This feature has been removed. Please see Special options group 3 AUX sensor Input PIC 6 settings for more options**

4-07 **AUX input 2 (-): This feature has been removed. Please see Special options group 3 AUX sensor Input PIC 7 settings for more options**

4-08 **Sliding door control for datalink:** (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

4-11 **UART port 2 protocol:** This feature will determine the communication protocol of the gray UART port.
FO1 - Drone: (default) This option will allow the grey UART port to communicate using the Drone data protocol.
FO2 – Fortin: This option allows the grey UART port to communicate using the Fortin data protocol. Note: there is no longer an "auto detect" feature with the Fortin protocol it must be changed manually.

4-12 **Impact sensor:** This feature will determine the impact sensor input port function.
FO1 - DAS: (default) This option allows the impact sensor port to communicate with the DAS including sensitivity programming and monitor any sensor output to the CM7. ***Note: This option is required when using with a manual transmission vehicle.***

FO2 - Standard Shock: This option allows the CM7300 to communicate with the FT-Shock analog shock sensor. This impact sensor is manually adjustable on the sensor.

FO3 - Arm/Disarm input: This option allows the impact sensor port (red) to be used as a CM7300 arm/lock and disarm/unlock input. ***Note: the arm input requires 2 pulses to trigger arm/ lock and 1 pulse to disarm/unlock.***
FO4 - Arm/Disarm input: this option allows the impact sensor port (red) to be used as a CM7300 arm/lock and disarm/unlock input. ***Note: the arm input requires 1 pulse to trigger arm/ lock and 1 pulse to disarm/unlock.***

4-13 **Antenna power save:** this will allow the CM7 to reduce overall current draw of the system when armed by powering down the antenna.
FO1 - Off: (default) antenna will operate normally when armed.
FO2 - 24hrs (1 day): this option will allow the antenna to power down 24hrs after being armed. ***Note: once the antenna has powered down, 1 Way operation to the vehicle will stop. 2 Way operation will still function incase any alerts are sent to the remote. In order to wake up the antenna the user must unlock/disarm using a Firstech accessory, power ignition or trigger the alarm.***
FO3 - 48hrs (2 days): This option will allow the antenna to power down 48hrs after being armed. ***Note: once the antenna has powered down, 1 Way operation to the vehicle will stop. 2 Way operation will still function incase any alerts are sent to the remote. In order to wake up the antenna the user must unlock/disarm using a Firstech accessory, power ignition or trigger the alarm.***
FO4 - 72hrs (3 days): This option will allow the antenna to power down 72hrs after being armed. ***Note: once the antenna has powered down, 1 Way operation to the vehicle will stop. 2 Way operation will still function incase any alerts are sent to the remote. In order to wake up the antenna the user must unlock/disarm using a Firstech accessory, power ignition or trigger the alarm.***

4-14 Low **battery:** This feature offers low battery options to help alert the user of a low battery in the vehicle.
FO1 - Off: (default) This option does not provide a low battery indication.
FO2 - On: This option will provide an alert to any Firstech 2 Way LCD remote or Drone when the vehicle's battery voltage (at the CM7300 power connector) drops to 11.7volts. ***Note: the Firstech 2 way LCD remote must be within range of the vehicle to receive the low battery alert and this option must be set in order to receive low battery alerts to Drone.***

4-15 **Door Status Input:** This feature will allow the door input (red/white) to be used to read (-) input or a N/C door trigger input. (N/C circuit will rest at a closed or complete circuit (usually ground) and when the zone is opened it will break or open the circuit changing the state of the input to low current voltage or nothing)
FO1 – (-) Door Input (all doors) This option will use a (-) negative input to consider the door zone open for RS or security operation
FO2 – N/C Circuit Input 1 DOOR ONLY This option will allow for the red/white door input to consider 1 N/C door circuit as being opened or closed for Remote Start or Security based on N/C circuit operation (i.e. circuit rests at ground and goes to voltage when opened or rests at ground and ground is removed when opened)

Special Option Groups 1, 2 & 3 CM7300

IMPORTANT: The OP500 is required to change settings in Special Option Groups 1 and 2. Special Option Group 1

FO2 - Aux 1 Output Timing: (Option 4-01 must first be set to setting 4.) This special option allows a specific output duration for Aux 1 to be programmed 1-99 seconds. ***Note with OP500 update, latched output time 1-15 minutes are available for programming in addition to the standard 1-99 seconds.***
FO3 - Aux 2 Output Timing: (Option 4-02 must first be set to setting 4.) This special option allows a specific output duration for Aux 2 to be programmed 1-99 seconds. ***Note with OP500 update, latched output time 1-15 minutes are available for programming in addition to the standard 1-99 seconds.***
FO4 - FO8- Aux 3-7 Output Timing: (Option 3-11 must first be set to setting 2 and the optional Auxiliary settings module must be used and AUX 3-7 function only available with 2 Way LCD remotes) These special options allow specific output durations to be set for Aux 3-7. ***Note with OP500 update, latched output time 1-15 minutes are available for programming in addition to the standard 1-99 seconds.***

Special Option Group 2

This special option group allows you to determine the output type of the POC wire. For example, if you want to set POC #5 (default setting status out) to Aux 1, you will need change special option 5 to number 10. This must be done with the OP500.

POC 1 - White • Horn: (default setting 0) This channel will provide a 250mA output when Horn is triggered. ***(function also POC setting 8)***

POC 2 – Blue/Green • Lock: (default setting 0) This channel will provide a 250mA output with the lock/arm command. ***(function also POC setting 25)***

POC 3 - Blue • Unlock: (default setting) This channel will provide a 250mA output with the unlock/disarm command. ***(function also POC setting 26)***

POC 4 - Orange/White • Disarm/FAD (Factory Alarm Disarm): (default setting) This channel will provide a 250mA output with the unlock/disarm command. ***Note: the CM7300 will provide this output approx. 100mS before the unlock output. (function also POC setting 7)***

POC 5 - Orange • Rearm/FAA (Factory Alarm Arm): (default setting) This channel will provide a 250mA output with the lock/arm command. Note: the CM7300 will provide this output approx. 100mS before the unlock output. ***(function also POC setting 6)***

POC 6 - Violet/White • Trunk release: (default setting) This channel will provide a 250mA output with the trunk release command. ***(function also POC setting 28)***

POC 8 – Green/White • Parking Light output (-): (default setting) This channel will provide a 250mA output with the remote start activation command and continue to provide output until 100mS after the remote start process has shut own. ***(function also POC setting 5)***

POC setting value description (SV)

SV 1 - **Parking light:** provides a 250mA (-) negative parking light output on any POC programmed with this setting.

SV 3 - **Ignition:** provides a 250mA (-) negative ignition output on any POC programmed with this setting.

SV 4 - **Accessory:** provides a 250mA (-) negative accessory output on any POC programmed with this setting.

SV 6 - **FAA (Factory Alarm Arm):** provides a 250mA (-) negative output with the arm/lock command on any POC programmed with this setting.

SV 7 - **FAD (Factory Alarm Disarm):** provides a 250mA (-) negative output with the disarm/unlock command on any POC programmed with this setting.

SV 8 - **Horn:** provides a 250mA (-) negative output with output control based on feature 3-08 option setting when using any POC programmed with this setting.

SV 9 - **Dome light supervision:** provides a 250mA (-) negative output with the disarm/unlock command, on any POC programmed with this setting, for up to 45 seconds or until ignition is on.

SV 10 - **AUX1:** provides a 250mA (-) negative output when AUX is triggered by Firstech 4 button remote, 2way LCD remote, or Drone, on any POC programmed with this setting.

SV 11 - **AUX2:** provides a 250mA (-) negative output when AUX is triggered by Firstech 4 button remote, 2way LCD remote, or Drone, on any POC programmed with this setting.

SV 12 - **AUX3:** provides a 250mA (-) negative output when AUX3 is triggered, using a Firstech 2-way LCD remote (please refer to remote users guide for activation steps), on any POC programmed with this setting. ***(Feature 3-11 must be set to option 2)***

SV 13 - **AUX4:** provides a 250mA (-) negative output on any POC programmed with this setting, when AUX4 is triggered using a Firstech 2-way LCD remote (please refer to remote users guide for activation steps), ***(Feature 3-11 must be set to option 2)***

SV 14 - **AUX5:** provides a 250mA (-) negative output on any POC programmed with this setting, when AUX5 is triggered, using a Firstech 2-way LCD remote (please refer to remote users guide for activation steps), on any POC programmed with this setting. (Feature 3-11 must be set to option 2)

SV 15 - **AUX6:** provides a 250mA (-) negative output on any POC programmed with this setting, when AUX6 is triggered, using a Firstech 2-way LCD remote (please refer to remote users guide for activation steps), on any POC programmed with this setting. (Feature 3-11 must be set to option 2)

SV 16 - **AUX7:** provides a 250mA (-) negative output on any POC programmed with this setting, using a Firstech 2 way LCD remote (please refer to remote users guide for activation steps ***(Feature 3-11 must be set to option 2)***

SV 18 - **GWA (ground While Armed):** provides a 250mA (-) negative output on any POC programmed with this setting, while the system is armed or locked.

SV 20 - **Siren 2:** provides a 250mA (-) negative output on any POC programmed with this setting, only with the full alarm or panic modes. May be used to power any additional horn or sirens while the CM7 is in full alarm or panic mode.

SV 24 - **AUX3 EZGO:** provides a 250mA (-) negative output on any POC programmed with this setting, (based on timing set for AUX 3) ***only when the CM7 is unlocked using the EZGO proximity unlock feature.***

SV 25 - **Lock:** provides a 250mA (-) negative output on any POC programmed with this setting, with the lock/arm command.

SV 26 - **Unlock:** provides a 250mA (-) negative output on any POC programmed with this setting, with the unlock/disarm command.

SV 27 - **2nd Unlock:** provides a 250mA (-) negative output on any POC programmed with this setting, when using the driver's door priority feature. This wire would be used to unlock the rest of the doors while unlock should be used to unlock the isolated driver's door. ***Note: this output can only be activated within 5 seconds after the first unlock command is sent.***

SV 28 - **Trunk release:** provides a 250mA (-) negative output (output timing based on feature 1-15 on any POC programmed with this setting, with the trunk release command.

SV 29 – **Starter Kill:** provides a 250mA (-) negative output on any POC programmed with this setting, while the system is armed or locked, and during remote start for Anti-Grind.

NEW* SV 30 – **Hazard Light Control:** provides a 250mA (-) negative output on any POC programmed with this setting that will produce a pulsed output allowing the CM to activate and then deactivate a latching hazard switch. This will simulate parking light flashes in single flash pulses.

Special Options Group 3: This special option group allows you to determine the input type of the **PIC (Programmable Input Channel)** 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 - Light Blue: (-) Ignition/Sensor Bypass INPUT (Ignition/Sensor bypass input) (default setting) *(see PIC value setting description section for more details)*

PIC 2 - Violet/Black: (-) Trunk Status INPUT (Trunk input) (default setting) *(see PIC value setting description section for more details)*

PIC 3 - Brown/White: (-) Key Sense INPUT (default setting) *(see PIC value setting description section for more details)*

PIC 4 – Gray/White: (-) Instant trigger (default setting) *(see PIC value setting description section for more details)*

PIC 5 - Gray/Black: (-) Hood Status INPUT (default setting) *(see PIC value setting description section for more details)*

PIC 6 - Gray/White: (-) PRE-WARN (default setting) *(see PIC value setting description section for more details)*

PIC 7 - Black/White: (-) INSTANT TRIGGER (default setting) *(see PIC value setting description section for more details)*

PIC setting value description (SV)

SV 1 - **(-) Ignition/Sensor Bypass INPUT:** This setting allows any PIC wire programmed with value 1 to be used as a (-) ignition input /sensor bypass. This would be used when adding CM7300 to an existing remote start or Factory remote start and allow for the CM7300 to disable a sensor or ignition input during remote start.

SV 2 - **(-) Trunk Status INPUT:** This setting allows any PIC wire programmed with value 2 to be used as a (-) negative Trunk status INPUT. This can be used as a single trunk or multi rear door input for security.

SV 3 - **(-) Key-Sense INPUT:** This setting allows any PIC wire programmed with value 3 to be used as a (-) negative Key-sense INPUT. Keysense is recommended when using "Auto, Passive, or EZGO arming" features so the CM7300 does not unintentionally lock the keys in the vehicle.

SV 4 - **(-) Hood Status INPUT:** This setting allows any PIC programmed with value 4 to be used as a (-) negative Hood Status INPUT. This can be used as a single hood pin input for security.

SV 5 - **(-) Door Status INPUT:** This setting allows any PIC programed with value 5 to be used as (-) negative Door Status. This can be used as a **single door or multi door input** for security.

SV 8 - **(-) Disable ARM/Disarm/Start INPUT:** This setting allows any PIC programmed with value 8 to be used as a (-) negative arm/disarm/start disable INPUT when controlling the CM through analog arm/disarm/start inputs.

SV 9 - **(N/C) Trunk INPUT:** This setting allows any PIC programmed with value 9 to be used as a Normally closed circuit Trunk pin INPUT. The CM will consider the zone open when ground is removed or the circuit status changes from (-) ground to power. This can be used as a single trunk zone input for security.

SV 10 - **(N/C) Key Sense INPUT:** This setting allows any PIC programmed with value 10 to be used as a Normally closed circuit Key Sense Input. The CM will consider the key to be in the key cylinder if when ground is removed or the circuit status changes from (-) ground to power. Keysense is recommended when using "Auto, Passive, or EZGO arming" features so the CM7300 does not unintentionally lock the keys in the vehicle.

SV 11 - **(N/C) Hood Status:** This setting allows any PIC programmed with value 11 to be used as a normally closed circuit hood pin INPUT. The CM will consider the zone open when ground is removed or the circuit status changes from (-) ground to power. This can be used as a single hood zone input for security.

SV 12 - **(N/C) Door INPUT:** This setting allows any PIC programmed with value 12 to be used as a normally closed circuit door pin INPUT. The CM will consider the zone open when ground is removed or the circuit status changes from (-) ground to power. **This can be used as a SINGLE (1) door zone input for security.**

SV 13 - **(-) Pre-Warn INPUT:** This setting allows any PIC wire programmed with value 13 to be used as an input that will trigger the pre-warning chirps when (-) negative/ground is applied.

SV 14 - **(-) Instant Trigger INPUT:** This setting allows any PIC wire programmed with value 14 to be used as an input that will trigger the full alarm when (-) negative/ground is applied.

SV 15 - **(-) ARM INPUT:** This setting allows any PIC wire programmed with value 15 to be used as an input that will arm the CM7300 when (-) negative/ground is applied

SV 16 - **(-) DISARM INPUT:** This setting allows any PIC wire programmed with value 16 to be used as an input that will disarm the CM7300 when (-) negative/ground is applied

SV 17 - **(-) Ignition/Sensor bypass INPUT:** This setting allows any PIC wire programmed with value 17 to be used as an input that bypass the ignition/sensor inputs to the CM7300 when (-) negative/ground is applied. This will allow the CM7300 to be added to an existing remote start factory or aftermarket without triggering the alarm during remote start.

****There are several benefits to using the PIC inputs:**

Example 1: 4 N/C door inputs would be available for complete zone security coverage without requiring a module, wire cutting, resistors, diodes, or relays

Example 2: 4 individual (-) door inputs could be connected (with no diodes) eliminating the need for diodes to isolate the door pins from each other when connecting multiple door pins to 1 door input on the CM

Example 3: Allow for a N/C hood pin or Trunk pin input that doesn't require a module, wire cutting, diodes, resistors, or relays
Example 4: will make the CM an install more efficient by allowing for unused inputs to be reprogrammed for other functional inputs
Example 5: Allow additional sensors to be added as needed

Option Programming CM7300

Option Programming Using the OP500 (programmer)

The OP500 can be used to program any available option. It is required to program options in Special Option Groups 1 and 2.

STEP 1: Make sure system is unlocked/disarmed. Using the blue or black 6 pin connector on the top of the OP500, connect it to the control module via the antenna wire. (Use the included extension cable if necessary.) Once connected, the OP500 will power up as long as the main ignition harness to the controller has been connected properly.

STEP 2: To change the option number you wish to program, use the left and right arrow keys on the OP500. It will scroll through the options available in menu 1 and then move to menu 2, then 3 and 4. Use the up and down arrow buttons on the OP500 to adjust the option settings; "1" is the default setting, and "2", "3", and "4" are the optional settings.

At the end of menu 4, if diesel mode or auxiliary setting functions were enabled – or if any of the auxiliary outputs were set to "Program", the duration of these settings can now be adjusted.

Following the auxiliary and diesel settings (if selected), the POC options will be displayed on the OP500. The POCs can be set between 0 (default) and 19. All are only available on the CM5000.

STEP 3: When finished with the adjustment of the various option settings, press and hold the "W" (write) button until the OP500 chirps, which is approximately 2.5 seconds. This will write the settings to the control module. Wait until the module displays "Success" before disconnecting it from the antenna cable.

To reset the options, hold the "R" (reset) button and the "W" (write) button for 2.5 seconds. Release then write the reset, hold the "W" button until the OP500 chirps, which is approximately 2.5 seconds.

Option Programming Using a Remote

Using a remote is a timed process so read this section in its entirety before beginning. **IMPORTANT:**

Special Option Groups cannot be programmed with a remote – the OP500 must be used.

STEP 1: Select the option menu that contains the desired programming option.

STEP 2: Scroll through menu allowing for 1 parking light flash and/or siren chirp per step.

STEP 3: Once finished scrolling through the menu wait for the parking lights and/or siren chirp to confirm the option number. i.e. option 2-04 will flash 4 times. Then use one of the table selections to select the option corresponding to your desired setting.

Resetting to Factory Defaults: To reset the options in a particular menu group, enter the menu shown in the above tables. To reset options with a 2 Way remote tap button 3 three times. To reset options with a 1 Way remote tap the Key/Start button 3 times. Wait for the siren to chip and parking lights to flash between each tap. After the third tap, the option menu will reset and the siren will chirp three times. This must be done for each option group that needs to be reset.

To program options use the following button combinations:							
	With 2 Way Remotes (Wait for chirp between each tap)	Scroll Through Menu (Wait for chirp between each tap)	Wait for corresponding parking light flash and/ or siren chirp before selecting the option	Select Option 1	Select Option 2	Select Option 3	Select Option 4
Option Menu 1	(F + Trunk) for 2.5 seconds then (F + Trunk) for 2.5 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Tap Trunk Button	Tap Key Button
Option Menu 2	(F + Trunk) for 2.5 seconds then (F + Key) for 2.5 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Tap Trunk Button	Tap Key Button
Option Menu 3	(F + Key) for 2.5 seconds then (F + Trunk) for 2.5 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Tap Trunk Button	Tap Key Button
Option Menu 4	(F + Key) for 2.5 seconds then (F + Key) for 2.5 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							
	With 2 Way Remotes (Wait for chirp between each tap)	Scroll Through Menu (Wait for chirp between each tap)	Wait for corresponding parking light flash and/ or siren chirp before selecting the option	Select Option 1	Select Option 2	Select Option 3	Select Option 4
Option Menu 1	Lock + Unlock for 2.5 seconds then Lock + Unlock for 2.5 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Hold Trunk Button for 2.5 seconds	Tap Key Button
Option Menu 2	Lock + Unlock for 2.5 seconds then Lock + Key for 2.5 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Hold Trunk Button for 2.5 seconds	Tap Key Button
Option Menu 3	Lock + Key for 2.5 seconds then Lock + Unlock for 2.5 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Hold Trunk Button for 2.5 seconds	Tap Key Button
Option Menu 4	Lock + Key for 2.5 seconds then Lock + Key for 2.5 seconds	Tap Key Button		Tap Lock Button	Tap Unlock Button	Hold Trunk Button for 2.5 seconds	Tap Key Button

How to Program Options with 2-Way Remotes with Roman Numerals							
	With 2 Way Remotes (Wait for chirp between each tap)	Scroll Through Menu (Wait for chirp between each tap)	Wait for corresponding parking light flash and/or siren chirp before selecting the option	Select Option 1	Select Option 2	Select Option 3	Select Option 4
Option Menu 1	(1 + 2) for 2.5 seconds then (1 + 2) for 2.5 seconds	Tap Button 4		Tap Button 1	Tap Button 2	Tap Button 3	Tap Button 4
Option Menu 2	(1 + 2) for 2.5 seconds then (1 + 4) for 2.5 seconds	Tap Button 4		Tap Button 1	Tap Button 2	Tap Button 3	Tap Button 4
Option Menu 3	(1 + 4) for 2.5 seconds then (1 + 2) for 2.5 seconds	Tap Button 4		Tap Button 1	Tap Button 2	Tap Button 3	Tap Button 4
Option Menu 4	(1 + 4) for 2.5 seconds then (1 + 4) for 2.5 seconds	Tap Button 4		Tap Button 1	Tap Button 2	Tap Button 3	Tap Button 4

How To Program Options With 1 Way Remotes							
	With 2 Way Remotes (Wait for chirp between each tap)	Scroll Through Menu (Wait for chirp between each tap)	Wait for corresponding parking light flash and/or siren chirp before selecting the option	Select Option 1	Select Option 2	Select Option 3	Select Option 4
Option Menu 1	Lock + Unlock for 2.5 seconds then Lock + Unlock for 2.5 seconds	Hold Trunk + Key for 2.5 seconds		Tap Lock Button	Tap Unlock Button	Tap Key Button	Hold Trunk + Key for 2.5 seconds
Option Menu 2	Lock + Unlock for 2.5 seconds then Lock + Key for 2.5 seconds	Hold Trunk + Key for 2.5 seconds		Tap Lock Button	Tap Unlock Button	Tap Key Button	Hold Trunk + Key for 2.5 seconds
Option Menu 3	Lock + Key for 2.5 seconds then Lock + Unlock for 2.5 seconds	Hold Trunk + Key for 2.5 seconds		Tap Lock Button	Tap Unlock Button	Tap Key Button	Hold Trunk + Key for 2.5 seconds
Option Menu 4	Lock + Key for 2.5 seconds then Lock + Key for 2.5 seconds	Hold Trunk + Key for 2.5 seconds		Tap Lock Button	Tap Unlock Button	Tap Key Button	Hold Trunk + Key for 2.5 seconds

Troubleshooting CM7300

Alarm LED Diagnostics

When the alarm is triggered the LED on the RPS (if installed), Secure Valet (if installed) and the LED (if in- stalled) will flash a certain amount 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 CM7300

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 CN3 that goes to the starter 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 5 are not defaulted on with the CM7300 so you must have an Option Programmer (OP500) to change POC the outputs to provide an output of your choice. Secure auxiliary (option 4-05) 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. Tap buttons (I) + (III) for 0.5 second or Lock and Trunk Release buttons for a half second.

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.

What are Firmware Version Diagnostics?
A: When you turn the Ignition on and hold buttons 1 and 4 or Lock and Key/Start for 2.5 seconds then the parking lights will flash 1 time on the CM7 series showing V.1 and so forth. A current version 3.1 for example should show 3 flashes when triggered.

What is this cartridge slot on the rear of the CM7300?
A: This is the slot for the Blade cartridge system. This slot is for the Idatalink Blade remote start bypass modules. For more information on the compatibility and install information please visit www.compustar.idatalink.com Using this system eliminates many connections between your standard control module and bypass module. **IMPORTANT:** If you are not using the Blade then you will not have or use the 20 pin connector next to the backup battery port.

I'm using the RPS Touch but my LED's and Secure Valet LED does not flash.
A: The CM7300 LED and Secure Valet LEDs will not work when using an RPS Touch. This is a hardware limitation. The RPS 2 will work with LEDs and Secure Valet.

Technical Support Contacts CM7300

Firstech technical support is reserved for authorized dealers only.

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