Installation Manual

By Firstech LLC, Version: 1.0

Applicable to the following alarm system:

CM-2305A – Alarm/Keyless Control Module

Table of Contents

Introduction

Thank you for purchasing a Firstech alarm/keyless system for your vehicle. The following installation manual is intended for experienced and authorized mobile and alarm technicians. This is not a tutorial on how to install. We highly recommend that you contact your local Firstech dealer and seek professional installation.

Call 888-820-3690 or visit our website at www.compustar.com to locate your nearest dealer.

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

Kit(s) Contents

The CM-2305 includes all your basic components for basic install.

- Alarm/Keyless Control Module CM-2305
- 1 x Shock Sensor
- 1 x Siren
- Pack of Wiring Harnesses

Installation Basics

If you are new to installing Firstech alarm units, we highly recommend that you thoroughly review this manual before installing your first unit.

Key Points to Consider Before Installation:

- ***The two remotes are preprogrammed to the unit*** Page 5
  This system is designed for ease of installation and the two included remotes are preprogrammed. In the event you may need to program new remotes cycle the ignition ON / OFF five times within seven seconds and tap the Lock button (half second) on the first remote, and then tap the Lock button (half second) on the second remote.

- ***Remote Valet Procedure*** Page 5
  Previous Firstech designed systems allow you to put the vehicle in Valet Mode by tapping the Lock and Trunk buttons at the same time. This feature requires you to turn the ignition on and then tap the Lock and Trunk buttons to enter Valet.

- ***Option Menus*** Page 11
  The CM-2305 option menu differs completely from other Firstech systems. It is important to familiarize yourself with these as it will save time in most applications.

- ***Option Programmer (FT-OP500-KIT)*** Page 15
  Most options on this unit can be programmed with the remote(s) as well as the Option Programmer (OP500). Please note the system must be disarmed before connecting the OP500. Otherwise, an "ERROR" message will show on the display of your OP500. Connect the OP500 by unplugging the antenna and plugging into the blue 4 pin port at the top of the programmer.

- ***Updatable Firmware***
  The firmware on the CM-2305 can be updated using our USB Updater Cable. Sign up on techfeed.compustar.com for instructions and exclusive dealer access.

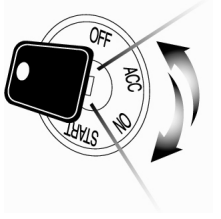
Remote Code Routine(s)

IMPORTANT: The remotes are preprogrammed to the control module. In the event that you need to program the remotes, follow the instructions below.

Programming the Remotes

STEP 1: Activate Programming mode by turning the ignition key *on* and *off* (between the Acc & On positions) five times within 7 seconds. The vehicles parking lights will flash once with the successful completion of this step.

STEP 2: Within a second after cycling the ignition the 5th time, tap the Lock button on the **remote** for a half second. The parking lights will flash once to confirm the transmitter has been coded.



Programming Multiple Remotes: After the confirmation flash given in STEP 2, you can code additional remotes by tapping the Lock button on the **remote(s)**. The parking lights will flash once confirming each additional remote. The CM-2305 can store up to three remotes.

Exiting Programming: Programming is a timed sequence. If you can not get the remote(s) to program then the system enters Valet Mode. The parking lights will flash twice signaling the end of programming mode.

Placement and Use of Components

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

Antenna

The antenna on the CM-2305 is internal and wired directly to the control module. There is no need to run a cable up the A pillar unless you are using a different RF Kit.

Shock Sensor

For best results, mount the shock sensor by zip tying it to the vehicles main ignition harness. 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. The system begins monitoring the shock sensor 30 seconds after the alarm is armed. Also the alarm LED will stay solid after arming until the shock sensor is active.

Siren

Option 1-06 will allow you to change the volume of the siren chirps. To adjust duration time when the alarm has been triggered, change *Option 1-05* – the system default is 30 seconds.

Common Procedures

Valet Mode

When servicing or loaning your vehicle to others, your alarm system should be placed in Valet mode. Valet mode disables all alarm functions as well as parking lights.
IMPORTANT: While in Valet mode your remotes will still lock and unlock the doors.

The system can be put into valet one of two ways:

1. Turn the vehicles key to the ignition “on” position and hold the Lock and Trunk buttons simultaneously for a half second. The parking lights will flash once to confirm the system is in valet mode. Repeat this process to take the system out of valet mode. Your ignition does not have to be "on." Upon tapping the same buttons again the parking lights will flash twice to confirm the system is out of valet mode.

2. You can put the system into valet by turning the ignition key “on” and then “off” five times within 7 seconds. The parking lights will flash once to confirm the system is in valet mode. Shortly after the first flash, the parking lights will flash twice.

Jumper Settings

Caution: Jumper settings affect the polarity and use of certain outputs. If these jumpers are used incorrectly, damage to the vehicle and 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.

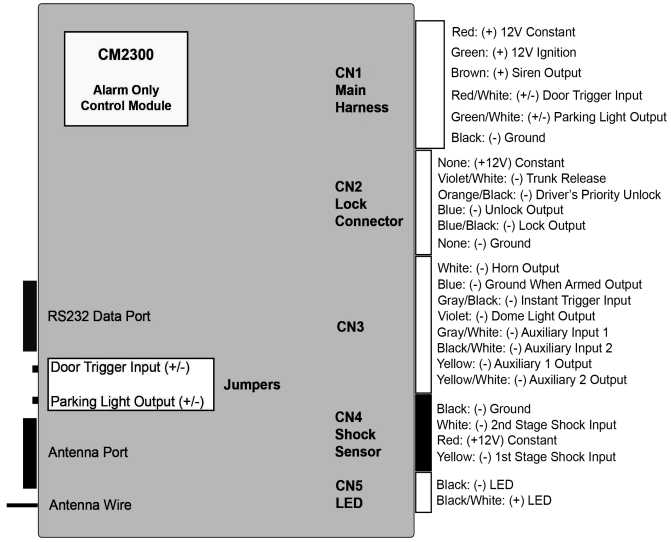
Jumper 2 (Parking Light Polarity Output)

Determines the output 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 negative (-) parking light output move the jumper.

CM-2305 Firmware

The CM-2305 control module is firmware updatable through the internet. In the event Firstech makes any changes or corrections you can update the module using the grey RS232 Data Port on the control module. This requires the USB updater cable.

CM-2305 Wiring Schematic



Antenna Port
Black: (-)
Red: (+12V)
White: (TX)
Yellow: (RX)

RS232 Data Port (Grey) This port can be used for iDatalink modules or DroneMobile hardware.

Starter Kill Relay
The starter kill relay for the CM2300 is prewired to the Ignition (Green CN1) and Ground When Armed (Blue CN3) wires.

The Yellow and Yellow/Black wires go to and interrupt the vehicle’s starter wire.

Make sure to connect the Green wire to the vehicle’s ignition.

CM-2305 Wire Chart

We've added wire color tags to our CM-2305. Please see the table below for wire details.

Function	Tag Color	Polarity	Connector Location	Pin Number	Wire Color
Ignition Input	Yellow	+	CN1	2	Green
Door Trigger Input	Green	+ or -	CN1	4	Red/White
Parking Light Output	White	+ or -	CN1	5	Green/White
Trunk Output	Red/White	-	CN2	2	Violet/White
Lock Output	Green	-	CN2	5	Blue/Black
Horn Honk Output	Brown/Black	-	CN3	1	White
Arm Output	Orange	-	CN3	2	Blue
Instant Trigger Input	Blue	-	CN3	3	Gray/Black
Dome Light Supervision Output	Black/White	-	CN3	4	Violet

Connector 1 (CN1), 6-Pin Main Harness

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

Pin 3 **Brown** - Siren 12V positive (+) output. Connect this wire to the red (+) wire located on the siren. To change siren output settings, review *Option 1-05*.

Pin 4 **Red/White (Wire Tag: Green)** - Door trigger input. This wire requires negative (-) or positive (+) trigger door-pins. The proper wire provides a (-) or a (+) trigger only when the doors are opened. You will need to test the wire for proper polarity and set the jumper on the side of the CM-2305 for the corresponding polarity.

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Pin 5 **Green/White (Wire Tag: White)** – This is the positive (+) and negative (-) parking light wire that triggers when you lock and unlock the doors and alarm goes off. The polarity of this output is selectable via a jumper on the side of the CM-2305.

Pin 6 **Black** - Ground negative (-) input. This wire must be connected to the vehicle's ground.

Connector 2 (CN2), 6-Pin Lock Harness

Pin 1 **Not used**

Pin 2 **Violet/White (Wire Tag: Red/White)** - Trunk release 250mA negative (-) output. This is an optional output that will release the trunk. System will unlock doors and disarm alarm prior to trunk release.

Pin 3 **Orange/Black** – 2nd Pulse Unlock wire. This wire is used to provide the customer with a driver's priority unlock feature with option 1-04. With the option on the unlock (blue) wire will pulse first and then orange/black will pulse if the unlock button is pressed again within 3 seconds.

Pin 4 **Blue** - Unlock 250mA negative (-) output. This is an optional output that will provide a (-) pulse for unlocking doors. System will unlock doors and disarm alarm. **IMPORTANT: You must use relays to reverse polarity for (+) trigger door lock systems.**

Pin 5 **Blue/Black (Wire Tag: Green)** - Lock 250mA (-) negative output. This is an optional output that will provide a (-) pulse for locking doors. System will lock doors and arm alarm. **IMPORTANT: You must use relays to reverse polarity for (+) trigger door lock systems.**

Pin 6 **Not used**

Connector 3 (CN3), 8-Pin Harness

Pin 1 **White (Wire Tag: Brown/Black)** - Horn honk 250mA negative (-) output. This is an optional output that will pulse the factory horn. The proper wire will show ground (-) while the horn is sounding.

Pin 2 **Blue (Wire Tag: Orange)** – Ground when armed output. This wire sends a (-) negative output when the alarm is armed. It triggers the starter kill relay for the CM-2305. It can also be used for other options like window roll-up.

Pin 3 **Gray/Black (Wire Tag: Blue)** – Instant negative (-) trigger input. This input looks for a ground (-) input when the system is armed/locked. Once it detects a (-) negative signal it will trigger the full alarm.

Pin 4 **Violet (Wire Tag: Black/White)** - Dome light 250mA negative (-) output. This is an optional output that provides a 45 second (-) negative output after system is unlocked for dome-light supervision. This can also be used to trigger factory rearm. To change dome light output settings, review *Option 2-04*.

Pin 5 **Gray/White** - Auxiliary Input 1 – This wire functions as a negative (-) pre-warn input. It is selectable based on option 2-12. It can be changed to a negative arm, negative ignition, negative instant trigger, negative shock sensor bypass, or negative closed loop trigger input. Please refer to the option tables for details.

Pin 6 **Black/White** - Auxiliary Input 2 – This wire functions as a negative (-) instant trigger input. It is selectable based on option 2-13. It can be changed to a negative disarm or negative drive lock control. Please refer to the option tables for details. This wire is required for ignition controlled door locks.

Pin 7 **Yellow** - Auxiliary 1 Output – This wire provides a customized timed output for triggering extra sensors and/or features such as power sliding doors or power windows. The settings can be changed via option 2-08. To set a custom timed output you must use option setting 4 as well as an OP500 Option Programmer.

Pin 8 **Yellow/White** - Auxiliary 2 Output – This wire provides a customized timed output for triggering extra sensors and/or features such as power sliding doors or power windows. The settings can be changed via option 2-09. To set a custom timed output you must use option setting 4 as well as an OP500 Option Programmer.

Connector 4 (CN4), 4-Pin (Shock Sensor Port)

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 5 (CN5), 2-Pin (Pre-wired LED)

Note: Do not mistake for Thermister port.

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

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

Connector 6 (CN6), 4-Pin (Antenna Cable)

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 7 (CN7), 4-Pin (RS232 Data Port)

Pin 1 Constant 12V positive (+) output

Pin 2 Negative (-) ground

Pin 3 RX

Pin 4 TX

Option Programming Tables

IMPORTANT: System must be unlocked before you can set options with the OP500 or remotes.

	Feature	Default Setting- I	Optional Setting - II	Optional Setting - III	Optional Setting - IV
1-01	Lock/Unlock Pulse Duration	0.8 sec	2.5 sec	0.125 sec	3.5 sec
1-02	Double Pulse Locks	Off	Unlock	Lock	Both
1-03	Driver's Priority Unlock	Off	On		
1-04	Ignition Locks*	Ignition and 30 Sec After Doors Closed	Drive Lock Control and Wire	Off	
1-05	Siren Duration	30 Seconds	60 Seconds	120 Seconds	Chirp for 20 Seconds
1-06	Confirmation Chirps Length	Medium (30ms)	Short (15ms)	Normal (60ms)	
1-07	Auto Rearm	Off	30 Seconds	60 Seconds	5 Minutes
1-08	Passive Arming*	Off	On	Passive Without Locks	
1-09	Dome Light Delay	Off	5 Seconds	45 Seconds	Auto
1-10	Valet Mode	Key 5 times, or Remote (I+III) while ignition is on	Key 5 times or Remote (I+III)		
1-11	Open Door Notification	On	Off		
1-12	Factory Alarm Option	On	Off		
1-13	Siren/Horn Mute Control With Remote	Disabled	Enabled		

	Feature	Default Setting- I	Optional Setting - II	Optional Setting - III	Optional Setting - IV
2-01	Horn Output	On Double Lock	On Lock and Unlock	Alarm Only	
2-02	Horn Honk	Pulsed	Latched		
2-03	(-) Ground When Armed	Latched when armed	0.5 sec	20 Seconds	Program → Aux 4
2-04	Dome Light Output	Factory Rearm + 45 sec	Factory Rearm	45 Seconds	Off
2-05	Unlock/Disarm with Trunk Release	Unlock, Factory Disarm, and Trunk Release	Factory Disarm, Trunk Release Only	Trunk Release Only	Aux 3
2-06	Trunk Output Timing	1 sec	0.5 sec	2 sec	Program → Aux 3
2-07	Secure Aux Output	On While Armed	On	Off	
2-08	Aux 1 Output	0.5 sec	Latched	20 Seconds	Program
2-09	Aux 2 Output	0.5 sec	Latched	60 Seconds	Program
2-10	Aux 1 Output Control	By Remote	Arm	Disarm	Ignition Off
2-11	Aux 2 Output Control	By Remote	Arm	Disarm	Panic
2-12	Auxiliary Input 1	(-) Pre-Warn	(-) Arm	(-) Closed Loop	(-) Ignition, Instant Trigger & Shock Sensor Bypass
2-13	Auxiliary Input 2**	(-) Trigger	(-) Disarm	(-) Key Sense	(-) Drive Lock Control**
2-14	Shock Sensor Input	1st Input - Prewarn | 2nd Input - Trigger	1st Input - Disable Arm/Disarm | 2nd Input - Trigger	1st Input - Prewarn | 2nd Input - Disable Arm/Disarm	
2-15	Aux 1 and Aux 2 Control for iDatalink Modules* (Sliding Doors)	Off	Unlock, Factory Disarm, and Sliding Door Control	Factory Disarm and Sliding Door Control Only	

Special Option Group

	Feature	Setting Value
1	AUX 1 Output Time	1 - 100 seconds
2	AUX 2 Output Time	1 - 100 seconds
3	AUX 3 Output Time	1 - 100 seconds
4	AUX 4 Output Time	1 - 100 seconds

***Once programmed, this feature requires activation from the remote. Please refer to the remote user manual or the option description below.**

****This input is required for ignition controlled door locks.**

Option Menu Descriptions

1-01 **Lock / Unlock Pulse Duration** – This option changes the length of the lock and unlock ground pulses on the blue and blue/black wires on CN3. The default setting is for 0.8 seconds. Optional setting 2 changes the duration to a 2.5 second pulse. The third setting changes the duration to a short 0.125 second pulse setting. The fourth setting changes the duration to a 3.5 second pulse.

1-02 **Double Pulse Locks** – This option pulses the unlock (blue) wire twice. This will unlock all doors and/or disarm the factory alarm on some vehicles. This option can be changed to **optional setting 2** by the remote. Please see page 16 for details.

1-03 **Driver's Priority Unlock** – This lets you use the CM-2305 to unlock the driver's door before the rest of the doors as in some factory systems. The user has the hit the unlock button on the remote a second time to unlock the rest of the doors. The driver's door must be isolated from the other doors. Use the Orange/Black CN3 as your 2nd Unlock output.

1-04 **Ignition Controlled Locks** – When you turn this option on and have the power door locks connected the doors will lock in 30 seconds when you start the vehicle with the key. Option setting 2 requires the (-) Drive Lock Ctrl (Aux 2 input - please see option 2-13-IV) wire connection. When you turn the key off the doors will unlock if this feature is turned on. This feature also requires activation from the remote. Simultaneously tap the Lock + Remote Start buttons for a half second to activate ignition controlled door locks from the remote. The parking lights will flash once to indicate this feature is ON.

1-05 **Siren Duration** – The default setting for the siren output upon panic or alarm trigger is 30 seconds. You have the ability to extend that with this option. Please see the option tables for other available settings.

1-06 **Confirmation Chirps** – This feature controls the output of the siren wire to increase or decrease the volume of the siren upon lock and unlock.

1-07 **Auto Rearm** – The system will automatically rearm and relock if there is no activity on the (green) ignition wire or (red/white) door trigger wires. See the option table for available settings.

1-08 **Passive Arming** – This option must be set to 2 before you can turn Passive Arming on with the remote. Passive Arming will happen only after the door is opened and closed. Simultaneously tap the Unlock + Trunk buttons on the remote for a half second to activate passive arming from the remote. The parking lights will flash once to indicate this feature is ON.

1-09 **Dome Light Delay** – This option is used when connecting the door trigger input to the vehicles dome light circuit. It delays the door trigger input to prevent the *door open notification.* Please see the option table for available settings.

1-10 **Valet Mode** – This option changes how to enter Valet Mode with the remote.

Default 1: Key on/off five times or remote valet (Lock + Trunk for 0.5 seconds) with key in the on position.

Option 2: Key on/off five times or remote valet (Lock + Trunk for 0.5 seconds) – key does not need to be in the on position.

1-11 **Open Door Notification** – With this option the CM-2305 will notify the user if they try to arm their vehicle while a door or trunk is open. The user will receive 3 or 4 chirps and parking light flashes when they try to arm/lock their vehicle. You may turn this feature off with setting 2.

1-12 **Factory Alarm Option** - This feature controls the alarm features in the CM-2305 and is set by default to on. If you want to use the CM-2305 for keyless only, change the option setting to off.

1-13 **Siren/Horn Mute Control on Remote** – This Feature controls whether the remote can mute the Siren or Horn from the remote and is set by default to disabled. This will not allow you to mute the audible output from the CM-2305 by remote. If you want to control the mute feature from the remote enable this feature.

2-01 **Horn Output** – This option sets the behavior of the horn wire during alarm state, during double lock from the remote or during lock and unlock from the remote. During one of the options the event will send a negative pulse on the white wire on CN3.

2-02 **Horn Honk** – This option sets the duration of the output on the horn (white) wire. At default it will pulse depending on option 2-01. At the optional setting it will latch a ground trigger to use for triggering another siren.

2-03 **Ground When Armed** – Ground When Armed or GWA, at default setting, will send a constant latched negative output when armed on the blue wire on CN3. This is used to trigger your starter kill relay. The optional settings change how long the GWA will send a trigger. Optional setting 4 will make the blue wire an Auxiliary 4 which is programmable by your OP500 Option Programmer.

2-04 **Dome Light Output** - This option sets the timing output of the Dome Light (violet) wire on CN3.

Default 1: This is a combination of 2 and 3.
Option 2: Factory Rearm – This system will pulse the dome light output during lock/arm.
Option 3: 45 second Dome Light Output – activates the dome light for 45 seconds upon unlock/disarm.
Option 4: Off

2-05 **Unlock/Disarm With Trunk Release** – This option has 4 settings. The settings are self explanatory but option 4 turns the trunk release wire (violet/white) on CN2 into an Auxiliary 3 which is also programmable via the OP500.

2-06 **Trunk Output Timing** – This option sets the output duration of the violet/white wire on CN2. The available options are 1, 0.5, and 2 seconds. You must set the fourth option if you have option 2-05 on setting 4.

2-07 **Secure Aux Output** – On the default setting, trunk and star buttons must be held for 2.5 seconds before Aux 1 or Aux 2 can be triggered while the CM-2305 is Armed and Locked. If the CM-2305 is unlocked then just press and release the Aux buttons for normal function. If you want this feature on all the time, change to optional setting 2. This prevents accidental triggering of the outputs if the CM-2305 is Locked or Unlocked. You can turn Secure Aux off by changing to optional setting 3.

2-08 **Aux 1 Output** - This option determines the duration of the Aux 1 output. Setting 4 allows the output duration to be set for a specific length of time.

2-09 **Aux 2 Output** - This option determines the duration of the Aux 2 output. Setting 4 allows the output duration to be set for a specific length of time.

2-10 **Aux 1 Output Control** – This option sets the condition which controls Auxiliary 1 and how it is triggered. Please see the option table for details.

2-11 **Aux 2 Output Control** - This option sets the condition which controls Auxiliary 2 and how it is triggered. Please see the option table for details.

2-12 **Auxiliary Input 1** – This option changes the input condition on the gray/white wire on CN3.

Default 1: Will pre-warn with a negative (-) ground input.
Option 2: Will arm the system with a negative (-) ground input. Used when adding an alarm to a factory keyless entry system.
Option 3: Turns the wire into a closed loop trigger. Can be used to detect if the circuit is broken like for a trailer connected to the truck hitch.
Option 4: Turns the wire into a (-) ignition input that bypasses the instant trigger wire and shock sensor.

2-13 **Auxiliary Input 2** – This option changes the input condition on the black/white wire on CN3.

Default 1:. Will instant trigger with a negative (-) ground input.
Option 2: Will disarm the alarm with a negative (-) ground input. Used when adding an alarm to a factory keyless entry system.
Option 3: Turns the wire into a (-) Key Sense wire. If the wire sees a negative trigger it will not allow the system to arm.
Option 4: Turns the wire into a (-) Drive Lock Ctrl input. If this wire sees a negative trigger and drive lock is turned on, the CM-2305 locks the doors and when ignition is turned off it will unlocks the doors. This setting and Auxiliary 2 input are required for ignition controlled door locks. Connecting this wire to a (-) output from a relay triggered by the vehicle's foot brake is recommended for ignition controlled door lock activation.

2-14 **Shock Sensor Inputs** – This feature gives you control of the inputs of the shock sensor port. We give you different configurations to use the CM-2305 with OEM Remote integration.

2-15 **Aux 1 and Control for Idatalink Modules** – This feature will control the CM-2305 disarm output to the Idatalink modules through data when using Auxiliaries for sliding doors.

Option Programming

How to Program Options

There are three ways to set options on the CM-2305 control module. You can use the Quick Change Sequence, the FT-OP500-KIT, or most Firstech remotes. The remotes include 4 or 5 button 1 and 2 Way remotes.

Quick Change From Remotes

There are two options on the CM-2305 that can change without option programming. These two options are for common settings used in the installation bay. Double Pulse Unlock and the Siren/Horn Mute options can be changed using the feature sequence below.

Option 1-02: Double Pulse Unlock
Used to set Double Pulse Unlock (ONLY)
1) Open the Vehicle Door
2) Turn on Ignition (within 5 seconds)
3) Press and Release the Trunk Button
4) Press and Release the Star Button
5) Press and Release the Trunk Button
6) You will see 2 Parking light flashes to indicate feature change 1- 02 to Unlock.

Option 1-13: Siren/Horn Mute Control From Remote

Used to enable the remote mute function

1) Open the Vehicle Door
2) Turn on Ignition (within 5 seconds)
3) Press and Release Lock Button
4) Press and Release Unlock Button
5) Press and Release the Lock Button
6) You will see 2 Parking light flashes indicating Option 1-13 has been enabled.

Option Programming Using the FT-OP500-KIT

The OP500 can be used to change anything in the Option Tables. It is required to change settings in the Special Option Group.

STEP 1: Make sure system is unlocked/disarmed. Connect the antenna cable to the 4 or 6 pin port on the top of the OP500. Once connected, the OP500 will power up as long as CN1 on the control module is connected properly.

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

Special Option Group 1: Change the timed output of Auxiliary 1 and 2.

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

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

Option Programming Using Compatible Remotes

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

STEP 1: Select the option you wish to program. Use the correct remote table below:

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

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

How to Program Options With 1 Way 4 Button Remotes

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

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

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

Resetting to Factory Defaults: To reset the options in a particular menu, enter the menu using your remote. To reset options with a 2 Way remote tap the Trunk button 3 three times. To reset options with a 1 Way remote tap the Trunk button 3 times. Wait for parking lights to flash and/or siren chirp between each tap. After the third tap, the menu will reset back to default. This must be done for each option menu that must be reset

Troubleshooting

Alarm LED Diagnostics

When the alarm is triggered, the LED (if installed) will flash a certain amount of times as shown in the table below.

Priority	Trigger	LED Flash Diagnostic
1	Door/Hood/Trunk/Ign Triggered	2 flashes, pause, then repeat
2	2nd Shock Triggered	3 flashes, pause, then repeat
3	2nd Auxiliary Input Triggered	4 flashes, pause, then repeat
4	Panic with remote	5 flashes, pause, then repeat

Frequently Asked Questions

Does the CM-2305 have remote start?

A: No, the CM-2305 is an alarm and keyless only system.

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

A: Check all your wires to the control module. Next check your fuses and ground. If the system does not respond after that then try reprogramming the remotes. Please see the "Common Procedure" section of this manual for remote programming instructions.

Can I use any other Compustar remotes on this system?

A: Yes you may use any other RF Kit in the Firstech lineup.

I am trying to program options with the OP500 Option Programmer and it flashes "ER 01" when I plug it in to the antenna cable. What should I do?

A: First, make sure all connections are made to the control module. Second, make sure that the system is not locked. 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."

How do I set the auxiliaries?

A: The CM-2305 has programmable auxiliary outputs. You have four preset timed options to program your auxiliaries for. You must have an Option Programmer (OP500) to set a specific time output for the auxiliaries. Please see the Option Tables in this manual for details.

The vehicle will lock and unlock, but will not flash the parking lights or chirp the siren.

A: The system is in valet mode. Tap the Lock and Trunk Buttons and the same time for a half second to exit Valet Mode. If that does not work try reprogramming the remotes again.

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

A: Check all the trigger input wires for ground.

Do the door locks flip-flop in polarity?

A: No. You can use the FT-DM700 (relay pack) for high current positive (+) locks, or the DM600 harness used for low current 600mA positive (+) locks. If those are not available you must use two SPDT relays to invert the polarity.

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Technical Support Contacts

Firstech technical support is reserved for authorized dealers only.

Monday - Friday 888-820-3690
(8:00 am – 5:00 pm Pacific Standard Time)

Email support@compustar.com

Web techfeed.compustar.com

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Wiring Diagrams

Go to www.firstechonline.com to access Computech3. If you are an authorized dealer and unable to access this site please contact your sales rep or us call 888-820-3690 Monday through Friday, 8 am to 5 pm Pacific Standard Time.

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