

VS 2400

4-CHANNEL REMOTE ENGINE STARTER AND CAR ALARM SECURITY SYSTEM

Operation Manual



MEGATRONIX CALIFORNIA, U.S.A.

WARNINGS:

As with any product that performs automatic functions, there are certain safety precautions that you must practice and be aware of before using device.

- 1. Keep the transmitter out of reach of children.
- 2. Do not leave anyone in the vehicle while running on remote start.
- 3. Alert servicing personnel that the vehicle is equipped with a remote start system.
- 4. Do not start the vehicle by remote while it is in an enclosed area or garage.
- 5. Always apply the parking brake and lock the vehicle as you exit the vehicle.
- 6. Vehicle windows should be rolled up before vehicle is remote started.
- 7. If the unit malfunctions, disconnect the remote start fuse until the problem is resolved.
- 8. Use and operation of this system is the sole responsibility of the vehicle owner or operator.
- 9. Some areas may have local ordinances that prohibit leaving a vehicle running on public streets.

OPERATION:

A. REMOTE TRANSMITTER OPERATION:

Transmitter Button	System Function	Remark		
	Lock Doors & Arm System			
- -	Arm and Delete The 2 Stage Shock Sensor	Press twice within 3 seconds		
≈ - □	Arm System and Hidden Alarm Function	Press within 3 seconds		
	Car Locator	Upon armed		
(3-second)	Panic function	Press and Hold for 3 seconds		
₽+ ₽	Silent Arming / Disarming	Ignition in "off" position		
↑ + (2-second)	Active Anti Car-Jacking Mode	Ignition in "on" position press and hold for 2 seconds		
a	Unlock Doors & Disarm System			
<u> </u>	Two Steps Door Unlock & Disarm System	Press twice within 3 seconds		
(2-second)	Trunk Release (Channel 3)	Press and Hold for 2 seconds		
% - %	Passive Arming By-pass	While the system Disarmed		
* - *	Activate or Turn Off The Remote Start	Press twice within 3 seconds		
1 + *	Turbo Time Mode			
△ + 8€	Channel # 4 Timer Output			
•	Switching code For 2nd Car Operation or Garage Door Opener			

B. LED display:

LED	Function			
Off	Disarmed			
Slow Flash	Armed			
Fast Flash	Passive Arming			
On (Solid)	Valet Mode			

LED	Function
2 flashes pause	Zone 2 / Trigger on Trunk/Hood
3 flashes pause	Zone 3 / Trigger on Door Switch
4 flashes pause	Zone 4 / Trigger on Shock Sensor
5 flashes pause	Zone 5 / Trigger on Ignition Switch

C. CHIRP INDICATORS:

Chirp	Function			
1 chirp	Arm			
2 chirps	Disarm			
3 chirps	Ajar Warning			
4 object	Disarm /			
4 chirps	Triggered			
6 chirps	Car Locator			

D. PARKING LIGHT:

Parking light	Function		
1 flash	Arm		
2 flashes	Disarm		
3 flashes	Disarm / Triggered		
12 flashes	Car Locator		
Constant On	Under Remote Start		

E. ALARM OPERATING CONDITION:

	Siren / Horn	Parking Light	LED	Doors	Starter	Dome Light
1. Arming	1 or 3 Chirps	1 Flash	Slow Flash	Locking	Disable	
Disarming	2 or 4 Chirps	2 or 3 Flashes		Unlocking		Turns on 30 sec
Trigger	Alarming	Flashes	Slow Flash		Disable	Flashes
4. Panic	Alarming	Flashes				Flashes
5. Car-Jacking	Alarming	Flashes			Disable	Flashes
6. Car Locator	6 Chirps	12 Flashes		Locking		

F. ACTIVE ARMING - LOCK & ARM

- 1. Press button on the transmitter.
- 2. The siren will chirp once and parking light will flash once indicating that the system is now armed. The vehicle door will lock and dome light turns on for 10 seconds upon arming when interfaced with the security system.

SILENT ARMING / DISARMING: Press the transmitter and buttons at the same time will arm or disarm your security system, No chirp sound will be heard, arm / disarm confirmation will be through the vehicles parking lights only.

SHOCK SENSOR BY-PASS: Press the button on the transmitter two times within 3 seconds will arm the security system and by-pass the shock sensor. The system will chirp one additional time to confirm the sensor bypass mode was activated. The sensor bypass feature is programmed to activate for one arming cycle only. The security system will return to normal operation during the next arming cycle.

HIDDEN ALARM FUNCTION: Press the button first; within 3 seconds press the button to activate the hidden alarm function. The security system will arm and with "Hidden Alarm Function". The siren / horn will be silenced even if the sensor is triggered in the armed status.

G. PASSIVE ARMING

Active arming / disarming is controlling your security system via the remote transmitter. This security system is equipped with an optional Passive Arming feature, which allows the security system to arm 30 seconds after the last door is closed. Operation is as follows.

- 1. Turn the ignition to the "OFF" position and exit the vehicle.
- 2. After all entrances are closed, the security system LED will flash fast for 30 seconds. If you reopen any door / hood / trunk, the security system LED will stop flashing. It will begin flashing again once the vehicle all entrances are closed.
- 3. After 30-second timer has elapsed, the security system will automatically "ARM". The siren will chirp [1] time and the parking lights will flash [1] time.

PASSIVE ARMING WITH PASSIVE DOOR LOCKING (See Alarm Feature "I - 2" Programming):

The vehicle doors will automatically lock after passive arming cycle has been completed.

PASSIVE ARMING BY-PASS: While the system disarmed, Press the **b** button twice, the security will respond with [1] chirp and LED will turn "ON". The security system will remain in this temporally state for as long as you wish. To exit passive by-pass, press the transmitter **a** or **a** button and the system will return to normal status.

H. ACTIVE DISARMING - UNLOCK & DISARM

- 1. Press **a** button on the transmitter.
- 2. The siren will chirp once and parking light flash once to indicating that the security system is now disarmed. The vehicle's door will unlock and dome light turns on for 30 seconds upon disarming when interfaced with the security system.

TAMPER DISARMING: If alarm triggered, upon disarm the system, siren chirp 4 times, parking light flash 3 times.

PATHWAY ILLUMINATION (See Alarm Feature "II - 4" Programming): This feature turns the parking light "ON" for 30 seconds upon a unlock signal and for 10 seconds upon the lock signal.

TWO STEPS DOOR UNLOCK (See Alarm Feature "II - 1" Programming): This feature will independently unlock the driver's door only when disarming the security system. Pushing the button a second time within 3 seconds will unlock the other doors.

AUTOMATIC RE-ARM (See Alarm Feature "**I - 3**" Programming): If this feature is selected, the security system will automatically re-arm itself in 60 seconds after disarming with remote transmitter. Automatic rearm will cancel if any door is opened before the 60 seconds timer has elapsed.

I. DISARMING WITHOUT A TRANSMITTER (Alarm Feature II - 6 Programming)

OVERRIDES THE ALARM WITHOUT PASSWORD PIN CODE: (Factory Default Setting)

The override function may be used if the remote transmitter is lost or inoperative.

- 1. Enter the vehicle and turn the ignition switch to 'ON' position. Alarm will sound.
- 2. Within 10 seconds push and release the valet switch. The alarm will stop sounding and enter disarm mode. You can now start and operate the vehicle normally.

OVERRIDE THE ALARM WITH PASSWORD PIN CODE: (Alarm Feature II - 6 Programming)

Unlike valet switch easily found, and defeated, this security system allows the consumer to program a password pin code. Offering a higher level of security.

- 1. Enter the vehicle and turn the ignition switch to 'ON' position. Alarm will sound.
 - 2. Within 5 seconds, enter your chosen the first digit code by press and release the Valet Switch. When finished above procedures, system's siren stop alarming, parking light stop flashing, but the vehicle cannot be start and drive away.
- 3. Within 15 seconds of the last digit code enter (the 1st code), turn the Ignition Switch "OFF" and then "ON".
- Within 15 seconds, enter your chosen of the second digit code by press and release the Valet Switch.
- 5. Turn the ignition switch "OFF" position. [4] Chirps form siren/horn, [3] flash from parking light to indicate the system was disarmed.

Note: You must override the alarm within 60 seconds. If not, the system will automatically re-arm.

EXAMPLE: To Override The System With The Password Code 83, you would;

- 1. Enter the vehicle and turn the ignition switch to 'ON' position. Alarm will sound.
- 2. Within 5 seconds, Press and Release the Valet Switch 8 times. When finished above procedure, system's siren stops alarming, parking light stop flashing, other sensors stop trigger, but the vehicle cannot be start and driven away.
- 3. Within 15 seconds of the last digit code enter (the first code), turn the Ignition Switch "Off" and then "ON".
- 4. Within 15 seconds, Press and Release the Valet Switch 3 times
- 5. Turn the Ignition Switch to "Off" position. [4] Chirps form siren/horn, [3] flash from parking light to indicate the system was disarmed.

J. VALET MODE (System in Disarm or Valet mode)

The valet switch allows you to temporarily bypass all alarm function, eliminating the need to hand your transmitter to parking attendants or garage mechanics. When the system is in valet mode, all alarm functions and remote start functions are bypassed, however the remote panic feature and remote door locks will remain operational. To use the valet mode, the system must first be disarmed either by using you remote transmitter, or by operating the Manual override sequence.

Enter Valet Mode

- 1. From the disarmed condition, turn the ignition to "ON" position.
- 2. Push and hold valet switch for 2 seconds until the LED turns on. The LED wills remain on as long as the system is in 'valet mode'.

Exit Valet Mode:

- 1. Return to normal operation, turn ignition 'on'.
- 2. Push and hold valet switch for 2 seconds, The LED wills turns off indicate the system are exiting the valet mode.

K. CAR LOCATOR

Under armed mode, press the button to active car locator function. The siren will chirp 6 times. The parking light will flash 12 times, for you to easily locate your car.

L. PANIC FUNCTION

The transmitter can be used as a remote panic switch to manually trigger the alarm in case emergency.

- 1. Press and hold the button for 3 second. The alarm will immediately sound.
- 2. During panic mode, the normal function of this transmitter button will be suspended. The transmitter and abuttons can be used to lock and unlock the door (if the option is installed), however once the button is pressed, the vehicle's starter disable device, (where installed) will be enable allowing the vehicle to start.
- 3. To stop the alarm, press and hold the transmitter or button on the transmitter again for 3 seconds. Also if any transmitter buttons other than or button is pressed and released, the panic mode will be turned off immediately.

4. If the button is not pressed, the alarm will automatically stop after 30 seconds.

M. TRIGGER THE SYSTEM

When armed, your vehicle is protected as follows:

- 1. Light impact will trigger the warn-away signal.
- 2. Heavy impacts / Doors open / Hood open / Trunk open / Turn on the ignition key will trigger the programmed sequence.

The starter disable relay (if installed) prevents the vehicle's starter from cranking. The siren, horn, parking lights, and dome light will turn on to alerting of an intrusion for 30 seconds. Then it will stop and automatic reset and re-arm. If the one of sensors or detectors still active, the alarm system will sound a maximum of 6 times of 30 seconds cycles.

N. ANTI CAR- JACKING

Warning: If you don't need the carjacking function in this alarm system, be sure to set carjacking feature "OFF". This system is default setting all carjacking "OFF" (See Alarm Feature I - 5 Programming).

ACTIVE ANTI CAR JACKING:

- 1. Press and hold the transmitter and buttons at the same time for 2 seconds while the vehicle's ignition is ON. The parking lights will turns on for 1.5 seconds to indicate the system enters the car-jacking mode.
- 2. Once the system in car-jacking mode, If you are forced from the vehicle, the system will be trigger when the door is opened and closed while the ignition is "ON".

PASSIVE ANTI CAR- JACKING:

- 1. Turn the ignition switch to "ON" position; the system enters the car-jacking mode.
- 2. Once the system in car-jacking mode, If you are forced from the vehicle, the system will trigger when the door is opened and closed while the ignition is "ON".

TRIGGER THE ANTI CAR -JACKING MODE:

- a). 50 seconds after the system has been triggered. The siren will start chirping for 15 seconds.
- b). During this 15 seconds period of chirping, you will be alerting to push the valet switch once to turn off the car-jacking feature. If not, it will enter second timer carjacking.
- c). 65 seconds after the system has beer triggered. The siren starts alarming and the parking light starts flashing.
- d). 90 seconds after the system has been triggered
 - 1. The siren still alarming and the parking light flashing, and
 - 2. The starter disable will activate to prevent the vehicle from starting.
 - 3. It will remain active until the vehicle's battery power exhausted.

OVERRIDE THE SYSTEM TO TURN OFF ANTI CAR- JACKING:

Turn the ignition switch from OFF to ON, and within 10 seconds push valet switch, the siren will stop and the system disarmed.

Note: If you use password pin code to protect the vehicle security, you will need to use it to disarm the system completely.

O. DOME LIGHT CONVENIENCE DELAY & SUPERVISION

The alarm with a unique feature that will turn on your vehicle dome light as following:

- 1. Upon disarming, the interior light will remain on for 30 seconds.
- 2. If the vehicle is intruded, the interior light will flash for the same duration as the siren.

Note: Turn on the ignition switch or arm the alarm will turn off the dome light.

P. IGNITION CONTROL DOOR LOCK/UNLOCK (See Alarm Feature II – 2 Programming) If the vehicles door locks have been interfaced to the security system, the system will automatically

lock the vehicle's doors when the ignition is turned "ON" and /or unlock the vehicle's doors when the ignition is turned "OFF".

Q. TRUNK RELEASE (CHANNEL 3) OUTPUT

Press and hold **b** button on the transmitter for two seconds to remote control the trunk release or other electric devices.

R. CHANNEL 4 TIMER CONTROL OUTPUT (See Alarm Feature III - 4 Programming)

Press the transmitter and buttons at the same time to active Channel 4 function. Channel 4 is user-programmable timer output. You may program the built-in timer to send a ground signal for any time duration from 1 second to 120 seconds. For instance, this timer output may be used to turn on the headlight, power window or sunroof. (Factory defaults setting at momentary output.)

S. POWER ON MEMONRY

This security system is equipped with circuitry that will allow the unit to remember its alarm state if the power is lost and then reconnected.

T. SECOND VEHICLE OPERATION

Your 5-button remote transmitter can be utilized to control a 2nd vehicle keyless entry system. To program the remote control transmitter to a 2nd vehicle, follow the instruction for Transmitter programming. All programming parameters be the same except for the following:

- 1. Prior to pushing any buttons on the transmitter. Press the button 1st on the transmitter.
- 2. Once the is pressed the LED on the transmitter will illuminate for 3.5 sec. to indicate the 2nd transmitter pin code has built in.
- While the LED is illuminated, press any button on the remote control transmitter to control a 2nd vehicle keyless entry system.

U. 2-WAY UPGRADE

This unit is capable of 2-way communication to notify the owner if anyone is trying to tamper with the vehicle or to confirm remote start operation. If you would like to upgrade this unit to a 2-way system by purchasing a 2-way LCD transceiver, please contact your authorized reseller.

REMOTE START OPERATION:

A. REMOTE START THE VEHICLE:

- 1. Press * button twice on the transmitter.
- 2. The parking light will activate to indicate the remote start received the signal.
- 3. The engine will start approximately 5 seconds.
- 4. Once the engine is running, after couple seconds the parking light will turn on again and climate controls will activate and adjust the vehicles interior temperature to your preset setting.
- 5. The vehicle will run for 5 to 30 minute cycle and automatically shut down.

Note: The Remote Start Unit will not start the vehicle if any one of the following conditions exists:

- 1. The hood is opened.
- 2. The brake pedal is pressed.
- 3. Move the optional remote start enable toggle switch to OFF position. (If installed)
- 4. The gear selector is in any gear other then "PARK" or "NEUTRAL"

SAFE START (Child safety mode) (See Start Feature I – 5 Programming)

Factory defaults setting to press the * button twice on the transmitter to start the vehicle. Programming this feature to eliminate an accidental remote start, when kids enter this transmitter, it requires the user press the transmitter • and * buttons at the same time to start the vehicle.

B. OPERATE THE VEHICLE WHILE RUNNING ON THE REMOTE START:

To operate the vehicle while engine running on the remote start:

- 1. Insert the ignition key and turn it to "ON" (not the start) position.
- 2. Press the brake pedal.

Note: If the brake pedal is pressed before the key is in the ON position, the engine will shut down.

C. TEMPORARY STOP FEATURE:

This feature allows the vehicle to remain running after the key has been removed from the ignition. This feature is useful for occasions when you wish to exit and lock the vehicle for short periods, but would like to leave the motor running and the climate control on.

- 1. Before turning off the engine, press the * button twice on the transmitter and the LED indicator will flash 3 times to confirm enter.
- 2. Turn the ignition key to OFF position. The engine will stay running.
- 3. The engine will run until the pre-programmed time elapsed or shutdown input is received.

E. TURBO TIMER MODE: (See Start Feature "I - 6" Programming)

Turbo timer mode keeps the engine running after arriving at you destination for a programmable period of 1/3 or 5 minutes, This allows the system's time to conveniently cool down the turbo after you have left the vehicle. To activate:

- 1. While engine is running, place the transmission gear in the park position and pull up the hand brake.
- 2. Before turning off the engine, press and release and * buttons at the same time.
 - -- The parking light wills turn on to indicate the remote start has entered turbo charge mode. --
- 3. Pull off the "Ignition Key" from the key cylinder.
 - -- Engine keeps running. --
- 4. Exit and secure the vehicle.
 - -- Engine continues running until the pre-programmed time elapsed. --

F. TIMER START: (See Start Feature "I - 7" Programming)

This unit can be programmed to start and run the engine every 3 (2) hours. The engine will run for the programmed running time and then shut down.

IMPORTANT: Timer Start should be used only in open areas, never start and run the vehicle in on enclosed space as a garage or carport.

This feature is design for an extreme cold climate usage. The system will auto start the vehicle every 3 (2) hours, to prevent engine freezing and hard to start.

A MAXIMUM OF SIX CYCLES CAN OCCUR.

ENTER:

- 1. Press the * button twice to remote start the vehicle. As soon as the vehicle is running and the parking light have turned on or flashing.
- 2. Immediately, depress the 6 button once, within 2 seconds
- 3. Rapidly depresses the *button. The parking light will flash (3) times. The siren or horn chirps (3) times. The vehicle is now programmed to start every 3 (2) hours.
- 4. Press the brake pedal to stop the vehicle running.

Exit the timer start:

Timer start can be exited manually as follows:

- 1. Make sure the remote start system is not operating the engine.
- 2. Turn the ignition on. The LED and parking light will flash (4) times. The horn chirps (4) times. Or
- 1. Press the * button twice to remote start the vehicle. As soon as the vehicle is running and the parking light have turned on or flashing.
- 2. Immediately depress the button then press and hold the button for 2 seconds. The parking light will flash (4) times. The siren or horn chirps (4) times. The vehicle is no longer programmed to start automatically.

G. TO TURN OFF THE REMOTE START:

When the engine is running (by remote start), if you want to stop it,

- 1. Press * button twice on the remote transmitter under remote start mode.
- 2. Move the optional remote start enable toggle switch to OFF position. (If installed)
- 3. Press the brake pedal

The vehicle will shut down and turn off the parking light to indicate engine stopped.

H. SHUT-DOWN INPUT FOR REMOTE STARTER:

If any of the following conditions exist while the system is operating, the engine will not start or will shut down immediately:

- 1. The hood is opened.
- 2. The brake pedal is pressed.
- 3. Engine is over-revved. {"Tachometer checking type" only}
- 4. The pre-programmed run time (5 /10 / 20 / 30 minutes) has elapsed.
- 5. Press * button twice on the remote transmitter under remote start mode.
- 6. Move the optional remote start enable toggle switch to OFF position. (If installed)
- 7. The vehicle refused to start running after {3} unsuccessful attempts.

I. DISABLING THE REMOTE START SYSTEM: (If installed)

This feature allows your system's remote start unit to be temporarily disabled to prevent the vehicle from being remote started accidentally. This feature is useful if the vehicle is being serviced or stored in an enclosed area. To disable the remote start, move the optional remote start enable toggle switch to the OFF position.

This device complies with part 15 of the FCC rules. Operation is subject to the following two

- (1) This device may not cause harmful interference, and(2) This device must accept any interference received, including interference that may cause undesired operation.