

AstroStart

REMOTE CONTROL
ENGINE STARTER

USER MANUAL

Model 803M



For all
manual transmission
gas- and diesel-powered
vehicles.

(FRANÇAIS AU VERSO)



**CONSULT SAFETY PRECAUTIONS SECTION
BEFORE USING THIS PRODUCT.**

**NEVER INSTALL THIS PRODUCT ON A VEHICLE
EQUIPPED WITH AN AUTOMATIC TRANSMISSION.**

**SOME FEATURES MAY REQUIRE
ADDITIONAL MATERIAL (NOT INCLUDED).**

PATENT NOS

CAN 1.130.426

USA 4.345.554 - 5.614.883

- 5.617.819 - 5.673.017

AND OTHER PATENTS PENDING

Manufactured in Canada by:

Astroflex

GOVERNMENT REGULATIONS



This device complies with the requirements of Industry Canada (IC) - Management of Radiofrequencies, as specified in document CNR-210. Its use is authorized only on a no-interference, no-protection basis; in other words, this device must not be used if it is determined that it causes harmful interference to services authorized by IC. In addition, the user of this device must accept any radio interference that may be received, even if this interference could affect the operation of the device.



This device complies with Part 15 of the FCC rules.

Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference and
- (2) this device must accept interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

Warning:

Changes or modifications not expressly approved by <manufacturer> could void the user's authority to operate the equipment.


Astroflex Inc.
1164, Route 220
St-Élie d'Orford (Québec) Canada
JOB 250


Astroflex
ELECTRONIC CORP.
516A Elm Street
Manchester, NH 03101
USA

www.astroflex.com

THANK YOU FOR CHOOSING AN AstroStart REMOTE CAR STARTER!

Like you, Astroflex is concerned with the environment. This is why we are suggesting you to use the two-minute runtime when you remote-start your vehicle to warm up engine fluids.

We take this opportunity to remind you to properly defrost your windows and remove all the snow on your vehicle before driving on public roads.

Rolling igloos are extremely dangerous!

We wish you an excellent journey with your remote engine starter!

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SAFETY PRECAUTIONS

Before using this product, carefully read the following safety precautions.

- Make sure the parking brake is operational, i.e. it has the capability of **immobilizing** the vehicle.
- The gearshift lever must not be accessible without the remote starter system being able to detect the opening of a door (and the rear hatch, if applicable).
- In the case of convertible vehicles, it is strongly recommended that a motion detector be integrated to the system.
- **Never perform a remote start** when a person or animal is inside the vehicle.
- **Do not allow** any person or animal to remain inside the vehicle when the engine is running under remote starter control (continuous mode).
- Keep remote controls **away from children at all time**.
- Immediately report any malfunction to the AstroStart dealer that performed installation.
- **Under no circumstance can this product or its use be modified.**
- Always turn off main switch when vehicle is parked in an enclosed, unventilated area or is in for servicing.
- Always turn off main switch when not using your Remote Starter for extended periods of time.
- Have your engine tuned regularly to ensure optimum performance of your Remote Starter.
- Make sure that the windshield wipers and the headlights are turned off before leaving vehicle.
- Regularly check the system's safety features (see "Safety Checks" on page 10.)
- Always advise service personnel that your vehicle is equipped with a Remote Starter and a starter cut function (when applicable).
- Make sure you comply with all local regulations which may prohibit leaving your engine running when vehicle is unattended in a public place.
- To ensure continued safe operation of your remote starter, ask your AstroStart dealer to periodically check and/or tune the remote starting system.
- **All users of the vehicle should be aware** of the safety precautions and operation procedures.
- Make sure that the warning sticker is present on the driver's window.

USING YOUR REMOTE STARTER

SAFETY SEQUENCE

Your remote starter was designed to force you to perform a series of actions that will ensure that the gearshift lever is in neutral position when you exit the vehicle.

This series of actions is called a "Safety sequence" and is aimed at preventing any remote start in situations where remote starting the engine would not be safe.

Should the liftgate or any door be opened at any time, the intrusion will be detected and the safety sequence will be cancelled by the system, thus preventing a remote start. In such cases, the sequence must be repeated to allow for an eventual remote start.

The system offers two execution modes for the sequence. These options must be set at time of installation. The first mode is initiated by the parking brake and the other by the remote control.

The safety sequence must be performed as follows.

SEQUENCE ACTIVATED BY THE PARKING BRAKE

1. While engine is running (key in ignition switch), apply the brakes and hold the pedal down.
2. Move gearshift lever to neutral.
3. Apply the parking brake Once Twice
Note: The system can be set - at time of installation - to require that the parking brake be applied once or twice. If set for two actuations, pause one second between the two.
4. Remove key from ignition (the system keeps the engine running).
5. Exit the vehicle.
6. Within 60 seconds, close **all** doors.
7. The system will stop the engine and blink the parking brakes once to confirm the sequence is valid (vehicle is ready for a remote start command).

SEQUENCE ACTIVATED BY THE REMOTE CONTROL

1. While engine is running (key in ignition switch), apply the brakes and hold the pedal down.
2. Move gearshift lever to neutral.
3. Apply parking brake.
4. Press  button on your remote control.
5. Remove key from ignition (the system keeps the engine running).
6. Exit the vehicle and close **all** doors.
7. Stop the engine using the remote control (see the table of commands on page 5).
The system will stop the engine and parking lights will blink once to confirm the sequence is valid (vehicle is ready for a remote start command).

NOTES : If you release the brake pedal and depress it once more during or after the execution of the safety sequence, the safety sequence will be invalidated and any remote start will be impossible.

If the engine stops when the key is removed from the ignition, the safety sequence is invalid.
Perform a new safety sequence. If problem persists, consult your installer.

SYSTEM SET-UP

When leaving your vehicle, **you should prepare it** for a future remote start.

- Set heating/air-conditioning controls to desired position. (When the remote starter starts your engine, it will also turn on your climate control system.)
- Turn your windshield wipers to the "OFF" position to prevent the wiper mechanism from being damaged should the wipers be frozen or stalled under snow.
- Make sure that the remote starter has detected a valid safety sequence.
- Make sure the headlights are turned off.
- Make sure not to leave your keys in the vehicle, since some rearming functions automatically lock the doors.

THE REMOTE CONTROL

Your remote control works off a small, long-life 12-volt alkaline battery (27A).

The range of your remote control can be affected by a weak battery, interference from nearby metal structures, hydro poles, or crowded parking lots.

With its electronic CODE LEARNING feature, up to three additional remote controls can be programmed for your vehicle.

We strongly recommend that you keep a replacement battery in your glove compartment.

See your dealer for replacement batteries or additional remote controls.

USING YOUR REMOTE CONTROL

To ensure that commands are transmitted properly, press desired button for 2 seconds.

Indicator light illuminates while transmitting the command (4 blinks).

Your system can be configured (during installation) in such a way that the remote control will only access the starting function of your vehicle or it can access both the starting and door locking functions of the vehicle.

You can replace the buttons (rubber keypad) of your remote control by an alternate keypad (ask your dealer).

The keypad shows pictograms to help you remember the commands; use the keypad that corresponds to your system options.

Remote included in kit may differ from the ones illustrated.



TABLE OF COMMANDS

COMMANDS SELECTED OPTION ⇒	BUTTONS		CONFIRMATION	
	OPTION 1	OPTION 2	LIGHTS	HORN
STOP			1	
START / CONTINUOUS MODE			1	1 
ACTIVATE / DEACTIVATE SENTINEL MODE			4 / 2 / 3 	
TRUNK			3	
UNLOCK			2	
LOCK			1	1 
1	THIS CONFIRMATION IS SENT ONLY WHEN ENGINE IS ALREADY RUNNING UNDER REMOTE CONTROL.		2	4 = ACTIVATION 2 = DEACTIVATION 3 = SYSTEM NOT READY
3	PROGRAMMABLE DURING INSTALLATION – 2 nd LOCK			

Note : Make sure that the remote control has the appropriate keypad, i.e. pictograms that correspond with the command options programmed to your system (See " Using your remote control").

CONFIRMATION

In all cases, your Remote Starter will confirm that a command has been received properly by flashing parking lights.

The horn provides certain confirmations when connected to system (requires optional wiring and material).

In this manual, confirmation signals are written in an abbreviated form; for example: (lights: 2) means that parking lights will flash twice.

Confirmations are explained in more detail under each command.

START COMMANDS

STARTING THE ENGINE

To start the engine, press the  button (lights: 1).

The system automatically adjusts ignition duration for your type of vehicle; parking lights flash once (duration: four seconds) then stay on all the time engine is running.

If more than one command is emitted, each successive start command resets runtime to the beginning, parking lights flash once to confirm command has been received and horn sounds once to let you know engine is already running.

Repeating this command will produce an audible confirmation that engine has started, which can be useful if vehicle is not in sight.

IF ENGINE FAILS TO START

If your system cannot start the engine at first attempt, it will wait for a few seconds and then try again (it could try again twice depending on reason for failure to start).

After three attempts, it will shut down automatically and wait for a new command.

UPON ENTERING YOUR VEHICLE...

- To prevent engine from turning off when you enter your vehicle, do not depress brake pedal or release parking brake before having placed key in ignition and turned it to "ON" position.



DO NOT TURN IGNITION KEY TO "START" POSITION.

- Drive as usual.

ENGINE RUNTIME

Your engine will stop automatically after a preset time of 2 min. , 4 min. , 8 min. or 18 min. depending on settings during installation. Runtime doubles for diesel engine vehicles.

Parking lights will remain on for the whole running time period.

TRIGGER INPUT

Your remote starter is equipped with a negative trigger (pulse) input.

This input can be connected to another remote control device or to an AstroStart RTS-2 timer output (optional). Part No. 310-903-502.

If this input is connected, consult this device's manual or ask your technician which command controls the Start/Stop function.

The Start/Stop commands received on this input are ignored while the engine is running on a remote start.

All Start/Stop functions controlled by this input behave in the same way as functions controlled by remote.



CONTINUOUS MODE

The "Continuous Mode" function allows to remove the key from the ignition while leaving the engine running. This convenient feature allows you to leave the vehicle for short periods of time while the climate controls remain on.

To access Continuous Mode, carry out the Start command before removing the key from ignition when performing the safety sequence described on page 3. See "STARTING THE ENGINE" on page 6.

Note: Do not carry out the "Stop" command if you perform sequence activated by remote control (Step 7).

Parking lights, engine and preset accessories will remain on for the duration of the programmed runtime.

Remove key, exit vehicle and lock doors. All safety devices will remain active.

If you return to your vehicle before runtime has elapsed, just turn the key to the "ON" position and depress brake pedal.

WHAT STOPS THE ENGINE

For your safety, engine will not start or will stop if:

- Ignition switch is in the "ON" position (prevents starting).
- Remote control sends the stop command.
- Hood is open.
- Brakes are applied.
- Engine is over-revving (if engine over-revving monitoring is active).
- Main switch is **OFF**.
- Safety sequence not valid (parking brake not applied, opening of door detected while remote starter was not keeping engine running).

MAIN SWITCH

The main switch is usually mounted under the dashboard.

It is a toggle **ON/OFF** switch that is used to cancel start functions.

When it is placed in the OFF position, it disables the starting functions.

It does not disable other commands which remain active.



STOP

When engine is kept running by Remote Starter, you can stop it by pressing,

Option 1 •  button (lights: 1).

Option 2 •  and  simultaneously (lights: 1).

Engine and parking lights will shut down.

LOW TEMPERATURE MODE

In Low Temperature (Sentinel) mode, system starts your engine automatically when passenger's compartment temperature falls below a preset level (programmable during installation), see table.

Threshold temperature is set for ✓			
-5 °C (23 °F)		-20 °C (-7 °F)	
-15 °C (5 °F)		-30 °C (-22 °F)	

Engine will run for programmed runtime, after which system will wait 2½ hours and then start engine again if temperature is still below preset level.

To activate/deactivate Low Temperature mode,

Option 1 • press the  button.

Option 2 • press  and  buttons simultaneously.

When mode is activated:

Parking lights will flash 4 times, then, if temperature is below preset level, engine will start.

If temperature is above preset level, system waits until it goes below preset level before starting.

For the engine to be able to start, a valid safety sequence has to be detected by the system (see "Safety Sequence" on page 3).

If system cannot execute command (for example, safety sequence is not valid, hood is open, etc.), confirmation will be different (lights: 3).

When mode is deactivated:

Parking lights will flash twice to confirm that mode is deactivated. Applying brakes also deactivates Low Temperature mode.

LOCK/UNLOCK COMMANDS

(Option 2 only)

If your vehicle is equipped with electric door locks, several functions can be operated by remote control.

These features are optional and may require purchasing additional equipment. Consult your dealer for advice.

Following systems can be controlled:

- Door locks.
- Trunk or hatchback release.
- Interior lights.

LOCK

Press the  button, doors are locked and parking light flashes once to confirm command has been received.

Parking light confirmation is sent as many times as command is repeated so you are sure that system has received the command.

When command is repeated, horn sounds once if option "Confirmation on 2nd lock" was set (during installation) and horn is connected to system.

UNLOCK

Press the  button, doors are unlocked and parking light flashes twice to confirm command has been received.

The "Unlock" function can be configured in such a way that the first Unlock command only unlocks the driver's door, while a following Unlock command unlocks the other door(s).

DOMELIGHT SUPERVISION

This function is : Active Inactive (programmable during installation).

Dome light will turn on for 30 seconds every time "Unlock" command is sent.

This 30-second period is cancelled when "Lock" or "Trunk release" command is sent or brakes are applied.

TRUNK RELEASE

This function is : Active Inactive (programmable during installation).

Press the  and  buttons simultaneously (lights: 3). Trunk is released and parking lights flash three times to confirm command has been received.

The trunk cannot be released if ignition key is in "ON" position. In this case, parking lights flash once to confirm that command has been received but trunk could not be released.

If you are not sure you have received confirmation, repeat command. System will repeat confirmation as often as you wish.

AUTOMATIC LOCK/UNLOCK

This function is : **Active** **Inactive** (programmable during installation).

This function locks the doors when ignition key is in "ON" position, engine is running and brakes are applied. Doors are unlocked when key is turned from "ON" to "OFF" or when Continuous Mode is activated.

If "Unlock" function is set to unlock only driver's door on the first command, the "Automatic Unlock" function will unlock driver's door only. If dome light is connected to system, it is activated when an automatic unlock occurs.

ANTITHEFT (CIRCUIT DISABLER)

(Option 2 only)

Programmable as **Active** or **Inactive** during installation.

Your Remote Starter is equipped with an Antitheft system. This system consists of an output that controls a relay that cuts the circuit required to operate your vehicle (optional connection).

"PASSIVE ARMING" TYPE ANTITHEFT

This type of Antitheft system arms automatically when ignition key is turned from "ON" to "OFF" and remains "OFF" for one minute. It can also be armed manually by sending a "Lock" command (unless ignition key is in "ON" position).

DISARMING

Antitheft system is disarmed for one minute when you send "Unlock" command.

If the ignition key is not turned to "ON" position within one minute, system automatically rearms, thus preventing any intruder from starting your vehicle, even with the key in the ignition switch.

It can be connected so that horn sounds if an intruder tries to start your vehicle when it is in the active state.

"ACTIVE" TYPE ANTITHEFT

This type of Antitheft system arms by sending the "Lock" command (unless ignition key is in "ON" position) and disarms by sending the "Unlock" command.

CODE LEARNING OF ADDITIONAL TRANSMITTER(S)

Four different remote controls can be programmed for a given vehicle. If a fifth remote is added, the first remote is deleted.

Note: When the first code learning command is sent, all the old codes are cleared out. therefore if you want to add a new remote, all the old ones must be reprogrammed as well.

One or more remote transmitters can be added. To do this, the programming is accessed as follows:

- Open hood
- Place key in the ignition and turn to the "RUN" position
- Apply the brakes once
- You now have 10 seconds to turn the key from "RUN" to the "STOP" position 3 times.
- If this sequence is correctly carried out, the control module flashes parking lights (4 flashes). You may then proceed to the next step.
- Press any button on the new remote control. When access code of new remote control is memorized, the control module will confirm with flashing parking lights (1 flash).
- Repeat the above procedures for each remote control that has to be programmed (up to 4 remotes).
- Apply the brakes.

New remote(s) is (are) now added to the system.

SAFETY CHECKS



In order to maintain a high safety standard, proceed with the following checks every month.

SAFETY FEATURES

Make sure the parking brake is operational, i.e. it has the capability of **immobilizing** the vehicle.

If the parking brake cannot stop the wheels from turning, which is not safe, place the main switch in "**OFF**" position until the situation is rectified.

DETECTION OF PARKING BRAKE STATUS

1. Carry out the safety sequence, then remote start the engine to confirm the safety sequence is valid. Make sure not to apply the brakes.
2. Release the parking brake.

The engine must stop immediately upon releasing the parking brake. If the engine does not stop, which is not safe, place the main switch in "**OFF**" position until the situation is rectified. Consult your service center.

DETECTION OF DOOR OPENING

Make sure that the opening of **each** door (open one by one) will break safety sequence.

1. Carry out the safety sequence, then remote start the engine to confirm the safety sequence is valid.
2. Stop the engine using the remote control. Make sure you do not apply the brakes and that the parking brake remains applied until step 4.
3. Open then close **only one door** once the engine has stopped.
4. Try to start the engine using the remote control.

The engine should not be able to be remote started. Repeat this test for **every door** of the vehicle (including hatchback if applicable). If the vehicle is equipped with fold-down rear seat backrests, the trunk has to be considered as a door since it is an opening that can give access to the passenger compartment. It **must** therefore be included in the safety sequence.

If the engine starts, which is not safe, place the main switch in "**OFF**" position until the situation is rectified. Consult your service center.

HOOD SWITCH

Remote start your vehicle then open the hood.

Engine should stop as soon as hood is opened. If engine does not stop immediately, turn main switch to **OFF** position **and leave it off until situation is rectified**. Contact your service center.

REPLACING OR BOOSTING VEHICLE BATTERY

If you have to replace or boost your battery for any reason, turn main switch to **OFF** position **and leave it OFF until battery is replaced or fully charged**.

**REVERSING POLARITY WHEN BOOSTING YOUR BATTERY
COULD PERMANENTLY DAMAGE YOUR REMOTE STARTER.**