

REMOTE CONTROL ENGINE STARTER

AstroStart

USER'S MANUAL

RS-1060



Designed for
automatic
transmission,
gasoline
fuel-injected
vehicles.



**CONSULT SAFETY PRECAUTION SECTION
BEFORE USING THIS PRODUCT.
NEVER INSTALL THIS PRODUCT ON A
MANUAL TRANSMISSION VEHICLE**

PATENT NOS
USA 4,345,554 - CAN 1,130,426

AND OTHER PATENTS PENDING

Manufactured in Canada by:

Astroflex

Litho'd in Canada
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INTRODUCTION

Thank you for choosing the Astro*Start* Remote Control Engine Starter. Your remote starter is the result of extensive research by a company specializing in the design of high quality electronic equipment for automotive vehicles. Your remote starter is designed to provide years of reliable, trouble-free service. Its advanced microprocessor circuitry incorporates billions of possible access codes to prevent interaction with other remote controlled vehicles. Your remote starter's safe and convenient features will assuredly make your life easier.

Please take the necessary time to read these instructions carefully. Some features may not be installed or applicable to your vehicle.

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SAFETY PRECAUTIONS

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

- Immediately report any malfunction to the *AstroStart* dealer that performed installation.
- Under no circumstance can this product or its use be modified.
- Always turn main switch off when vehicle is parked in an enclosed, unventilated area or is in for servicing.
- Always turn main switch off if you know you will not be using your Remote Starter for an extended period of time.
- Keep remote controls away from children.
- Have your engine tuned-up on a regular basis to ensure optimum performance of your Remote Starter.
- Always turn your windshield wipers off before leaving vehicle.
- Check safety features regularly; they prevent your Remote Starter from starting the engine under certain conditions. (See "SAFETY CHECKS" on page 8.)
- Make sure you comply with all local regulations which may prohibit leaving your engine running when vehicle is unattended in a public place.
- Always advise service personnel that your vehicle is equipped with a Remote Starter.
- Have your Remote Starter checked annually. Contact the dealer in your area.

BEFORE USING YOUR REMOTE STARTER

Before leaving your vehicle, set the various controls in order to use your Remote Starter.

- Set heating/air-conditioning controls to desired position. (When the RS-1060 starts your engine, it will also turn on your climate control system.)
- Turn your windshield wipers to the "OFF" position.
- Make sure gearshift is in "P".

THE REMOTE CONTROL

Your remote control has been designed to fit the natural contours of your hands so that it is easier to use. It works off 3 small, long-life (up to 12 months) lithium batteries. It can control two vehicles separately. With an electronic code learning device, up to three additional remote controls can be assigned to each vehicle. See your dealer for replacement batteries or additional remote controls.

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

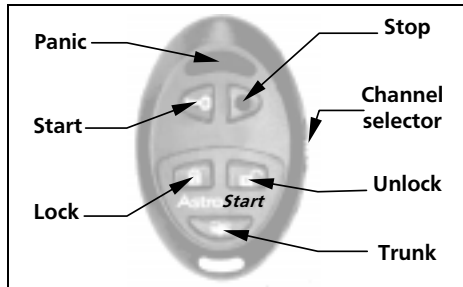
USING YOUR REMOTE CONTROL

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

A command will not be transmitted if you do not press button long enough. Pressing button longer than 2 seconds will not send more than one command, with the exception of the "Panic" button which repeats command as long as button is pressed.

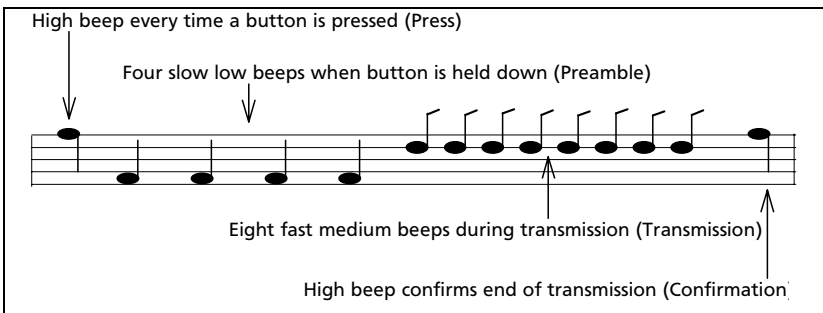
Your remote can transmit on two different channels which allows you to control two vehicles separately.

Use channel selector to select vehicle which will receive commands. Position of channel selector controls all commands, except "Panic" command, which is always transmitted on both channels.



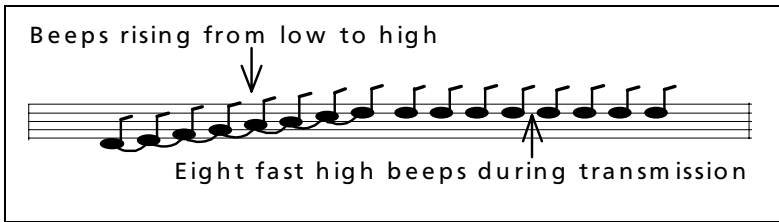
CONFIRMATION

Remote can send an audible confirmation every time a command is sent. This confirmation indicates the different steps in transmitting a command. Diagram below explains the different steps in transmitting a command and the confirmation for each one.



Press	This confirmation indicates if a button has been pressed by mistake or confirms that button has been pressed properly.
Preamble	This confirmation indicates minimum time button has to be pressed for a command to be sent (duration: one second).
Transmission	This confirmation indicates when command is sent to Remote Starter (duration: one second).
Confirmation	This final confirmation indicates that command has been transmitted correctly.

Another confirmation is sent by your remote when you activate "Panic" mode. This confirmation is repeated as long as you hold button down.



LOW BATTERY DETECTOR

Your remote control is equipped with a circuit that constantly monitors battery condition. Should the performance of your remote be affected by a weak battery, the remote control will notify you of the situation during 20 seconds after emitting a command. A series of high-pitched beeps following the emission of a command indicate that it is time to replace batteries before your remote control fails to operate correctly.

BATTERY REPLACEMENT

We strongly recommend that you replace your batteries once a year and keep a replacement set in your glove compartment.

Your remote works off three 3-volt lithium batteries, i.e., two CR-2016 batteries and one CR-2032 battery or equivalent.

To replace the batteries, remove screw on back of remote case, remove old batteries and replace with new ones. Make sure that batteries point the right way; see illustration opposite.



The pictogram on bottom of case will also help you to install the batteries correctly.

RS-1060 COMMANDS

COMMANDS	BUTTONS (PICTOGRAM)	CONFIRMATION	
		HORN	LIGHTS
PANIC		30 SEC.	30 SEC.
START / CONTINUOUS MODE		1 ¹	1
STOP			1
LOCK			1
UNLOCK			2
TRUNK			3 ²
ACTIVATE / DEACTIVATE SENTINEL MODE			4/2/3 ³
1: CONFIRMATION IS SENT ONLY WHEN ENGINE IS ALREADY RUNNING UNDER REMOTE STARTER CONTROL 2: COMMAND IS IGNORED IF KEY IS IN IGNITION POSITION(LIGHTS : 1). 3: 4 = ACTIVATED / 2 = DEACTIVATED / 3 = SYSTEM NOT READY.			

CONFIRMATION

In all cases, your Remote Starter will confirm that command has been received properly. This will be done by either sounding horn or flashing parking lights. In this manual, confirmation signals are written in an abbreviated form; for example:

(horn: 1, lights: 2) Means that horn will sound once and parking lights will flash twice.

Confirmations sent by Remote Starter are not programmable. Parking light confirmations are mandatory. Horn confirmations are optional and require an additional connection and equipment (DL-4 interface module) during installation.

Confirmations are explained in more detail under each command.

START COMMANDS

STARTING YOUR ENGINE

To start your engine, press "Start" button (horn: 0, lights: 1).

System automatically adjusts ignition contact time depending on your vehicle. Parking lights flash once for 4 seconds then stay on all the time engine is running.

If engine has already been started by Remote Starter, parking lights flash once to confirm command has been received and horn (if connected) sounds once to let you know that engine is already running. Repeating this command gives you an audible confirmation that your vehicle has started when you cannot see it.

If engine fails to start

If your system cannot start your 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 which it will shut down automatically and wait for new command.

Upon entering your vehicle...

- Do not apply the brakes upon entering your vehicle (which would stop the engine).
- Place the key in the ignition switch and turn it to the "RUN" position.



DO NOT TURN THE KEY TO THE START POSITION

- Drive as usual.

Engine runtime

Your engine will stop automatically after a preset time. Parking lights will stay on as long as engine is running. Engine runtime is programmable. Manufacturer preset time is

8 minutes but can be changed to 20 minutes to suit your needs.

STOP

When engine is kept running by Remote Starter, you can stop it with this command (lights: 1). This command is also used to cancel "Panic" mode.

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 the "Continuous Mode", carry out the "Start" command while the engine is idling. See "STARTING YOUR ENGINE".

Parking lights, engine and preset accessories will remain on for the duration of the programmed runtime (8 or 20 minutes). Remove key, exit vehicle and lock doors. Steering column will be locked and all safety devices (see next paragraph) 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, the engine will stop and/or will not start under the following conditions.

- The transmitter sends the STOP command
- The hood is opened
- The brake pedal is depressed
- The transmission is shifted out of park/neutral
- The engine over-rev's
- The main switch is OFF
- The engine revs too slowly during cranking

MAIN SWITCH

Main switch is usually installed under the dashboard. It is a toggle ON/OFF switch that is used to cancel start functions only. Other commands remain active.



LOW TEMPERATURE MODE

In Low Temperature mode, also called Sentinel mode, the system can start your engine automatically whenever temperature falls below -15°C (5°F). Engine will run for programmed time, after which system will wait 2½ hours and then start engine again if temperature is still below -15°C (5°F).

To activate/deactivate Low Temperature mode, press "Start" and "Stop" buttons simultaneously.

When mode is activated: Parking lights will flash 4 times, then, if temperature is below -15°C (5°F), engine will start. If temperature is above -15°C (5°F), system waits until it goes below -15°C (5°F) before starting. If system cannot execute command (for example, hood is open), confirmation will be different (lights: 3).

All conditions that normally stop the engine when it is started by remote control (applying brakes, opening hood, etc.) will have the same effect in this mode.

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

DOOR LOCK/UNLOCK COMMANDS

If your vehicle is equipped with electrical door locks, lock, unlock and trunk release functions can be controlled by remote. These features are optional and may require purchasing additional equipment (DL-4 module). Consult your dealer for advice.

LOCK

Press "Lock" button (lights: 1). Doors are locked and parking lights flash once to confirm command has been received.

UNLOCK

Press "Unlock" button (lights: 2). Doors are unlocked and parking lights flash twice to confirm command has been received.

TRUNK RELEASE

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

OTHER COMMANDS

PANIC

Upon pressing "Panic" button, **parking lights** and **horn** (if connected to system) are activated intermittently for 30 seconds.

Panic mode is used to attract attention if you are in difficulties. This command will not be executed if engine is kept running by ignition key. In this case, parking lights will flash once to confirm that command has been received.

SAFETY CHECKS

In order to maintain high safety standards, proceed with the following routine checks every month.

HOOD SWITCH

- Start your vehicle with the Remote Starter.
- Open the hood.

The engine should stop as soon as the hood is opened.

If the engine fails to stop, immediately turn the main switch to the "OFF" position and **leave it "OFF" until the situation is corrected** contact your local service center.

DETECTING "P" or "N" GEARSHIFT POSITION

Your starter is designed to monitor the gearshift position at all times.

If your vehicle is designed in such a way that the key needs to be in the ignition in order to release the gearshift from the "PARK" position, your vehicle is safe as long as the keys are kept away from children.

If the gearshift can be put into gear without the key in the ignition, proceed with the following minor routine checks.

- Place the gearshift lever into gear.
- Be ready to apply brakes.
- Start your vehicle with the Remote Starter.
- Repeat these steps in "Drive" and "Reverse".

If the starter engages within ten (10) seconds of sending the Start command, **immediately** turn the main switch to the "OFF" position and **leave it "OFF" until the situation is corrected** contact your local service center.

REPLACING OR BOOSTING THE VEHICLE BATTERY

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



Reversing polarity during this operation could permanently damage your Remote Starter.

LIFETIME LIMITED WARRANTY

- 1) ASTROFLEX warrants the manufactured product against any defect in workmanship or material for the period specified below.
- 2) This Warranty excludes any other legal warranty, with the exception of the provisions pertaining to public order.
- 3) This Warranty only applies in favor of the original purchaser; it does not apply to subsequent purchasers.
- 4) This Warranty is valid for the life of the vehicle on which the product was originally installed, as long as it remains installed on the said vehicle, with the exception of those components covered by a shorter warranty.
- 5) If the conditions mentioned in paragraphs 3) and 4) are met, the Warranty applies solely to the control module of the remote starter.
- 6) All other accessories and tools (such as the transmitter, switch, antenna, DL-3 or DL-4 module, MultiTest tool, etc.) are warranted for a period of one year from the date of the purchase contract; the batteries are not covered by any warranty.
- 7) ASTROFLEX shall repair or replace any part of the product or the product itself, either (a) in accordance with the provisions in paragraph 5), free of charge during the first two years of the contract, or (b) in accordance with the provisions in paragraph 6), free of charge during the first year of the contract.
- 8) After two years from the date of the contract, ASTROFLEX shall repair any part of the product or the product itself in accordance with the provisions in paragraph 5), for a charge not exceeding \$30.00. This amount must accompany the product to be repaired. The product will be returned, freight collect, to the purchaser.
- 9) If the purchaser cannot provide proof of purchase, the Warranty is limited to two years from the manufacturing date as confirmed by the product's serial number. The purchaser of this ASTROFLEX product shall return the product for warranty service, freight prepaid, to the appropriate address indicated at the end of this document.
- 10) This Warranty only applies to the product itself and does not apply to any material damages other than to the product itself.
- 11) ASTROFLEX does not warranty either the product itself or any damages that may be caused by the product if any of the following conditions apply:
 - a) the installation was not done by the installer-distributor, and in accordance with the instructions from ASTROFLEX;
 - b) the product was damaged after installation;
 - c) the purchaser used the product in an abusive manner or for a purpose other than stipulated in the user's guide;
 - d) the purchaser repaired the product himself or had the product repaired by someone not authorized by ASTROFLEX;
 - e) the product was repaired with parts not authorized by ASTROFLEX.
- 12) ASTROFLEX is not responsible for removal or reinstallation charges.
- 13) This Warranty constitutes the only warranty from ASTROFLEX in regard to the original purchaser; any other warranty is specifically excluded, including legal warranties, with the exception of provisions pertaining to public order.

Note: Operation, specifications and design of our products are subject to change without notice.

NOTICE

This device complies with the requirements of Industry Canada (IC) - Management of Radio frequencies, as specified in document RSS-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.

IC APPROVAL No.: CAN 1854 102 238A
 CAN 1854 102 243



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

FCC APPROVAL No. J5F-TX120
 J5F-RX120



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