

TM

DE ROST/COOLING

REMOTE AND PROGRAMABLE VEHICLE STARTING SYSTEM

USER MANUAL



MODEL RS 905

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WARNING

This product is designed for automatic transmission vehicles only. Installation of this product in a standard transmission vehicle is dangerous and is contrary to the product's intended use.

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 any interference received, including 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 instructions, 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 reception, which can be determined by turning the equipment off and on, the user is encouraged to try and 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

FCC Regulations state that any unauthorized changes or modifications to this equipment not expressly approved by the manufacturer could void the user's authorization to operate this equipment.

IMPORTANT

It is recommended that this product be installed by a qualified vehicle alarm system technician.



IMPORTANT

The vehicle you are installing the Rapids™ system into must be in proper operating condition to include; fully charged battery, recent tune up and (if installed) serviceable air conditioner.



INTRODUCTION

Rapids™ is both a remote and programmable vehicle starting system. It is a microprocessor-based control system, designed for your comfort and convenience. It measures your vehicle's vital signs, and prepares it for safe and comfortable use. The Rapids™ system incorporates a sensor which enables the engine and interior of your vehicle to be warmed and defrosted automatically. In the summer, you can have Rapids™ start your vehicle and cool it for you by programming it for automatic starting or by using your remote control for instant starting. Programming Rapids™ is easy, simply decide when you want your vehicle ready daily and program the day and time into the Display Module and each day your vehicle will start at the desired time. This ability to preheat your engine before driving your vehicle will reduce harmful emissions, improve fuel efficiency and reduce the wear and tear on your engine's moving parts; ultimately resulting in lower maintenance costs and longer engine life.

OPERATIONAL FEATURES

Remote starting: You can remote start your car up to 400 feet away.

Remote door control: The doors can be locked and unlocked with the remote control.

Programmable starting: Rapids™ can be programmed to start for any time, 7 days a week.

Controls the heater: The heater fan motor will blow warm air on the windshield until the cabin temperature reaches 62° F and below 50° the rear defroster will turn on.

Controls the air conditioner: The air conditioner and fan motor will turn on when the cabin temperature exceeds 86° F.

Senses low battery: If your battery's voltage drops below 11.9 volts Rapids™ will sense the low voltage and automatically start the vehicle and charge the battery for you.

Rapids™ acknowledges your commands: When Rapids™ initiates the starting cycle the signal lights will flash twice, then the doors will lock, the signal lights will then flash three times and the engine will start. While the engine is running the signal lights will flash every 10 seconds. This acknowledgment occurs in remote and programmed operations.

Short run times: Rapids™ will only allow the vehicle to run for a maximum 20 minutes at a time or until the preprogram cabin temperature and desired battery voltage is reached, whichever occurs sooner. The minimum engine run time is 2 minutes.

Battery saver: The Rapids™ system will only attempt to start your vehicle three times in the event there is a malfunction in your vehicle's starting system. This prevents Rapids™ from running down your battery needlessly.

Vehicle drivability: The vehicle can be driven without shutting off the Rapids™ system. Simply open the door with the remote control as you approach your vehicle, get in, put your key in the ignition and turn it to "ON"; then drive away.

Displays information: The Display Module continuously displays the vehicle's cabin temperature, the current day and time and what days you have the system programmed to start. Additionally it will display "Battery Low" whenever the battery is below 11.9 volts.

SAFETY FEATURES

Automatically starts in extremely cold weather: Rapids™ will automatically start your vehicle when the cabin temperature reaches 0°F.

Hood fail-safe: The system will not start or will shut off the engine when the hood is opened. To prevent accidental starting while work is being done on the engine.

Vehicle security: Rapids™ prevents the vehicle from being driven, unless the key is in the ignition and in the "ON" position. Any attempt to drive the vehicle without the key will cause Rapids™ to shut the engine off.

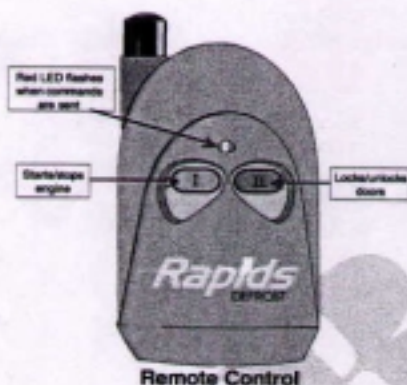
Door security: The doors are automatically locked 10 seconds after Rapids™ starts your vehicle in remote and programed operation.

Personal safety: For those who work late shifts or shop late, it has to be comforting to know that your vehicle will be ready to go when your are. Having your vehicle flash its signal lights at you as it starts, while your crossing a darkened parking lot also has to be comforting. The flashing signal lights may deter unwanted company by giving the impression that someone is waiting for you.

AUTOMATIC STARTING

Rapids™ will automatically start your vehicle if either the cabin temperature drops to 0° F or the battery drops to 11.9 volts.

REMOTE CONTROL



With the Remote Control Rapids™ allows the operator to start their vehicle or lock/unlock the doors within ranges of up to 400 feet away. Simply, point the Remote Control at your vehicle and press one of its two buttons. The "I" (green, right) button controls the doors and the "II" (red, left) button controls engine starting. The red light emitting diode (LED) will flash whenever either button is pressed indicating the Remote Control has sent the command and the internal battery is functioning properly.

Each time you press the Green button the doors will lock or unlock. The vehicle signal lights will flash twice prior to the door locks activating, this indicates that you are in range and Rapids™ has carried out your command.

Pressing the Red button (with the engine off) starts the engine. The vehicle turn signal lights will flash twice, then 10 seconds later the doors will lock, the turn signal lights will then flash three times and the engine will start. Pressing the Red button (with the engine on) turns the engine off.

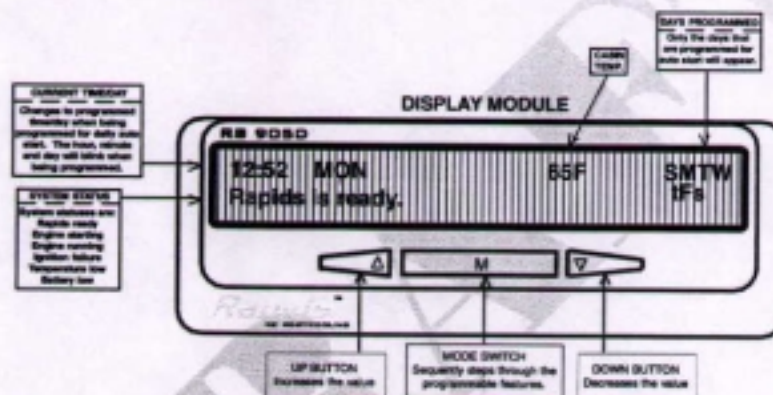
PROGRAMMING INSTRUCTIONS

Rapids™ is a system which allows you to program your vehicle's starting times. You can program the system to start your vehicle every day of the week. Once you have programmed Rapids™, your vehicle will automatically start each day its programmed to, indefinitely, until you change it. The system has several modes which it follows when taking control of your vehicle. The daily program mode enables the user to start their vehicle at any time and day of the week.

The Rapids™ system is programmed from the Display Module. The Display Module has three buttons on it for this purpose. The center button is the "Mode" button and the two outside buttons are for changing the values within the displayed mode. The left button (▲) increases the value and the right

button (▼) decreases the value. Pressing both of the outer buttons at the same time for 5 seconds clears all of the system's programming. Pressing the Mode button sequentially steps you through all of the system's modes. Once the desired mode is displayed, use the outer buttons to set the mode's values. There is no way to reverse (back up) the mode sequence, so if you pass the desired mode accidentally, you must keep pressing the Mode button until it reappears. After programming Rapids™ the Display Module will automatically return to its static state and display the current time and day, cabin temperature, days programmed to start and the system status, normally "Rapids ready" or "Battery low", if the vehicle battery is low.

STEP BY STEP SETUP PROCEDURES



The Mode Button has three basic modes:

Current Day: This mode is for setting the "day" base line for the program to count from.

Current Time: This mode is for setting the "time" base line for the program to count from.

Day: This mode allows you to step through the days of the week to program daily start times.

First press both outside buttons (up and down) at the same time and hold them down for 5 seconds to clear the Rapids™ programming and set all values to zero.

Press the Mode button once, "Current Day" will appear. Use the up or down buttons to step to the current day.

Press the Mode button again, "Current Time" will appear. Use the up or down buttons to set the current hour. Press the Mode button once again and set the current minute. Rapids™ uses the 24 hour clock system of time keeping (i.e. 8:00 AM is 0800 and 8:15 PM is 2015).

Once you have set the current day and time you are ready to program daily starting times. If you do not wish to program any daily start times at this time it is not necessary to do anything else. Since you previously cleared the system you set all of the start times to 00:00 hours (no starts). To program daily start times move on to the next paragraph.

Press the Mode button until you reach "MON" (just after passing Current Day and Current Time). If you do not wish to set a start time for a specific day just press the Mode button and pass by that day. When you reach a day of the week that you want Rapids™ to automatically start your vehicle use the up or down buttons to set an automatic start hour (00 to 24). Remember, "00" would be the hour just after midnight (midnight to 1:00 AM) in the 24 hour time keeping system. After setting the hour, press the Mode button once more and set the desired minute of the previously set hour.

Step through each day of the week setting the hour and minute you wish your vehicle to automatically start. When you have completed programming your automatic start times your scheduled start times should look like the following sample:

MON	07:00	
TUE	07:00	
WED	00:00	(Took the day off, no start)
THU	07:00	
FRI	07:00	
SAT	09:30	(Slept in)
SUN	15:45	(3:45 PM, you really slept in)

The upper right corner of the Display Module would display "SMT tFs" for the example above.

To change a programmed start time, simply press the Mode button and step to the day you want changed and using the up and down buttons, change the time.

It should not be necessary to reset the Current Day or Current Time unless the vehicle's battery is disconnected for some reason. Rapids™ will keep track of the current day and time automatically.

TECHNICAL SUPPORT

Technical support is available Monday through Friday, 8:00 AM to 5:00 PM (PST) and on Saturdays from 9:00 AM to 4:00 PM (PST). For customer service call telephone number (888) 530-7704. For administrative offices call telephone number (253) 752-7704 or FAX (253) 752-7716.

Technical support can also be received by writing to:

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