

AVISTART 4501

Keyless Entry and
Remote Engine Starter System

Owner's Manual



AVITAL

A DIVISION OF  CLIFFORD ELECTRONICS

 **WARNING** 

- ! Always exercise caution and common sense when operating your AviStart system.**
- ! This product is intended for vehicles with fuel-injection and automatic transmissions only. NEVER attempt to remote start a vehicle with a manual (stick shift) transmission. Serious injury may occur with improper use.**
- ! NEVER attempt to remote start the engine while anyone (including pets) is in the vehicle.**
- ! NEVER attempt to remote start the engine while the vehicle is in an enclosed area without sufficient ventilation.**
- ! NEVER attempt to remote start the engine while the keys are in the ignition.**
- ! Always be sure the gearshift selector is in "Park" and the emergency brake is on before attempting to remote start the vehicle.**
- ! Keep your AviStart remote controls out of the reach of children.**
- ! Whenever the vehicle is being serviced or valet parked, place the system in Protected Valet Mode to prevent accidental or unauthorized remote starting. See "Protected Valet Mode" on page 9.**

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AviStart 4501

Congratulations! You have just purchased the **AviStart 4501**, a keyless entry and remote engine starter system manufactured by Avital Technologies, Inc. You are about to experience the convenience and luxury of being able to start your vehicle engine from the comfort of your home, office, department store or other remote location.

To benefit fully from the capabilities of your AviStart system, we encourage you to read the Owner's Manual thoroughly **before** using the system. If you should have any problems or questions regarding your AviStart system, consult the dealer from whom you purchased this product. To locate an authorized Avital dealer, contact Customer Service directly at 1-800-824-3208 (toll-free within the U.S.) or 1-818-709-7551.

Lifetime Warranty

Avital guarantees the operation of your AviStart control unit and remote controls for as long as you own your car. (Please refer to back of this manual for complete information.)

Remote Controls

Included with your AviStart system are two AviGlo™ 4-button/9-channel remote controls. Once exposed to light, the AviGlo™ remote control buttons will glow, making the buttons visible in the dark.

The remote control (remote) is a miniature transmitter powered by a small +12 volt battery. The RangeMaster™ super-heterodyne receiver (installed in your vehicle) allows your remote to command your system from up to ¼ mile away. Obstructions, electrical or radio interference, weather conditions, window tint or a weak battery can reduce this range. Your remote is the key to your AviStart system and can be used lock and unlock your doors, "pop" your trunk, start your engine and control optional accessories.

The AviStart system can accept up to four Avital remote controls. Additional remote controls and remote control batteries can be purchased from any authorized Avital dealer, or by calling Customer Service at 1-800-824-3208 (toll-free within the U.S.) or 1-818-709-7551.

Stealth Coding™ Technology

Stealth Coding™ technology offers the most advanced protection available against "code-grabbing" devices which thieves may use to record the digital code transmitted by your remote control. When you leave the area, thieves can then play back the code to unlock the doors and deactivate your system. But Avital's remote controls with Stealth Coding™ randomly change the code every time you use them, and your system will not respond if any code is retransmitted. This technology makes code-grabbing devices useless.

Electronic Scan Prevention (ESP)

Your AviStart system also includes ESP, which blocks electronic scanner codes to prevent unauthorized operation of your system.

Instant Remote Control Code Deletion

In the event of a lost or stolen remote control, all remote controls can be erased from the system's memory to prevent unauthorized system operation. (See the "Programming Table for Remote Controls" on page 11).

One-Step Remote Control Code Learning

The AviStart system allows you to add new remote controls in one step. (See the "Programming Table for Remote Controls" on page 11).

Valet Switch

The valet switch is a small hidden toggle switch which allows you to control all of the system's programmable features. (See the "User-Programmable Features" on page 10). This switch can **only** be controlled with the use of your ignition key.

NOTE: Be sure to have your dealer show you where the valet switch is located.

Operating Your AviStart

Remote-Controlled Door Lock/Unlock

To Lock the Doors:

Press the remote control  button for 1-2 seconds. The doors will lock, the parking lights will flash twice and the dash mounted LED will flash slowly. If the Remote Lock Starter Disable feature was programmed ON, the vehicle starter motor will be disabled. (See the "Programming Table for System Features" on page 11.)

To Unlock the Doors:

Press the remote control  button for 1-2 seconds. The doors will unlock. The interior lights will turn on for 30 seconds or until the ignition key is turned on. The parking lights will flash once and the dash mounted LED will turn off. If the Remote Lock Starter Disable feature was programmed ON, it will disengage allowing you to start the vehicle engine.

Two-Stage Unlock Capability

If the optional Two-Stage Unlock feature was installed, press the  button for 1-2 seconds and only the driver door will unlock. Within 3 seconds, press the  button again and the passenger doors will unlock (may require an optional relay).

User-Programmable Ignition-Controlled Door Lock/Unlock

For the ultimate in security and convenience, the AviStart can be programmed to automatically lock your doors when the ignition key is turned on or the engine is started, and will unlock when the ignition key is turned off. This feature can be programmed ON or OFF. (See the "Programming Table for System Features" on page 11.)

User-Programmable RPM Door Lock

The system can be programmed to automatically lock the doors when the engine reaches the factory preset RPM level. (See the "Programming Table for System Features" on page 11).

When you begin driving, your vehicle doors will automatically lock. When you turn the ignition key off, the doors will automatically unlock.

NOTE: Ignition-Controlled Door Lock feature must be programmed OFF.

Remote Panic with Safety Locks™ (capability)

In a threatening situation, you can activate Remote Panic with Safety Locks™. When activated, the siren/horn will sound and the parking lights will flash. If you are inside your vehicle and the ignition key is "ON," the doors will lock. If you are outside the vehicle with the ignition key "OFF," the doors will unlock allowing you to move to safety. (Requires the addition of a siren or interfacing with your vehicle horn.)

To Activate:

1. Press the remote control  button for 3-4 seconds.
2. The siren/horn will sound and the parking lights will flash.
3. If the ignition key is "OFF," the doors will unlock. If the ignition key is "ON," the doors will lock.

To Deactivate:

1. Press the remote control  button for 1-2 seconds.
2. The siren/horn will shut off and the parking lights will stop flashing.

User-Programmable Starter Disable

The AviStart can be programmed to electronically disable the vehicle starter every time the doors are remote locked. (See the "Programming Table for System Features" on page 11).

User-Programmable Passive Starter Disable

Your AviStart system can be programmed to automatically disable the vehicle starter whenever you exit the vehicle. (See the "Programming Table for System Features" on page 11.)

To Activate:

1. Turn the ignition key "OFF." The LED will begin to flash rapidly.
2. After 30 seconds, the LED will flash slowly and the starter will be disabled.

To Deactivate:

1. Press the remote  button for 1-2 seconds.

Interior Light Illumination

When you remote unlock the doors, AviStart will turn on the vehicle interior light(s) for 30 seconds or until the ignition key is turned on.

Remote-Controlled Trunk Release Capability

If you have the optional Trunk Release installed, simply press the remote control  button for 1-2 seconds to activate your vehicle electronic trunk release. The trunk will "pop" open (may require an optional relay).

Remote-Controlled Accessory Output

This output allows you to add a remote-controlled optional accessory such as a window roll-up or fuel door release. To activate your optional accessory, see the "Programming Table for Remote Controls" on page 11.

Remote Engine Start - Safety and Counter-Theft



CAUTION: Be sure to read the "WARNING" bulletin on the inside cover of this manual **before** attempting to operate remote start.

Automatic Safety and Counter-Theft Features

Before remote starting your engine, the AviStart system will automatically perform a safety check to ensure the following conditions have been met:

- Brake pedal is not depressed.
- Engine and ignition are turned off.
- Hood is closed.

After remote starting your engine, the AviStart system will shut off the engine immediately if the ignition is OFF and any of the following occurs:

- The hood is opened.
- The brake pedal is pressed.
- The remote control  button is pressed.
- The 20 or 30 minute programmable run time expired.

Visual Fault Indication

The AviStart has a built-in fault detection system that automatically scans all of the safety zones, prevents the system from remote starting and provides a visual indication if a fault is detected. The parking lights will flash 1 time if the hood is opened or 3 times if the brake pedal is depressed and will not allow the engine to start. If this occurs, bring your vehicle to your authorized Avital dealer for service.

Remote Engine Start - Operation

Your AviStart system will start your vehicle engine with a touch of a button on your AviGlo™ remote control. To also cool or warm the interior of your vehicle before you enter, set the climate control to your preference (heater, defrost or air conditioning) **before remote starting**. Set the fan to a medium speed (**not maximum**). Ensure the vehicle is in "Park" and the key is **not** in the ignition.

To Remote Start the Engine:

1. Press the remote control  button for 1-2 seconds, 10-15 minutes before you enter the vehicle (this will allow the climate control time to heat or cool the vehicle.) The parking lights will flash 2 times, the engine will start and the parking lights will remain on as a visual indication that the engine is running. AviStart will automatically lock the doors when the engine is remote started. If you have a diesel engine, the AviStart will be programmed to start 15 seconds after the parking lights flash 2 times or immediately after the vehicle glow plug light has turned off. This will allow time for the glow plugs to heat up.
2. If the engine does not remote start, the AviStart system will attempt to start the engine two additional times.
3. If the vehicle is left unattended, the engine will run for 20 minutes and then shut off automatically. You can also program the system to run the engine for 30 minutes. (See the "Programming Table for System Features" on page 11.)

To Operate the Vehicle While Remote Started:

1. Press the remote control  button for 1-2 seconds. The doors will unlock.
2. Enter the vehicle (do not touch the brake pedal), turn the ignition key to the "ON" position and then press the brake pedal. Pressing the brake pedal will shut off the remote start and parking lights but the engine will remain running.
3. You can now drive the vehicle.

To Shut Off Remote Start:

At any time while the engine is remote started, you can shut the engine off with the remote control by pressing the remote control  button for 1-2 seconds. The engine and parking lights will shut off.

User-Programmable Temperature-Controlled Starting



CAUTION: Do not activate Temperature-Controlled Starting while the vehicle is in an enclosed area.

The AviStart system can be programmed to automatically start the vehicle engine whenever the temperature inside the vehicle reaches or drops below the preprogrammed temperature level. The AviStart will monitor the air temperature every 2½ hours and will only start the engine during extreme cold temperatures. There are three temperature levels to choose from. (This feature is programmed OFF from the factory and must be programmed ON to operate. (See the "Programming Table for System Features" on page 11).

To Activate:

Press the remote control  and  buttons at the same time. The parking lights will turn on for 3 seconds, shut off for 1 second and turn on for 3 seconds. This will be your visual indication that you have activated the Temperature-Controlled Starting feature.

When the temperature inside the vehicle reaches the preprogrammed temperature level, the parking lights will flash 2 times, the vehicle will start and the parking lights will turn on. The vehicle will run for 10 minutes and then shut off. This will allow the engine to warm up and charge the battery.

To Deactivate:

Press the remote control  and  buttons at the same time for 1-2 seconds. The parking lights will turn on for 3 seconds and then turn off. This will be your visual indication that you have deactivated the Temperature-Controlled Starting feature.

NOTE: At any time, if the ignition key is turned on or the vehicle is remote started, the Temperature-Controlled Starting feature will deactivate.

Pit Stop Mode



CAUTION: Do not leave passengers or pets in the vehicle while the system is in Pit Stop Mode.

The Pit Stop Mode allows you to park the vehicle for short-term stops, remove the ignition key and leave the engine running.

To Activate:

1. While the vehicle engine is running with the ignition key turned on, press the remote control  button for 1-2 seconds. The parking lights will flash 2 times and then stay on. (Make sure the vehicle is in "Park" and set the emergency parking brake.)
2. Turn the ignition key off and the engine will stay running.
3. Remove the ignition key and remote control and exit the vehicle. Remember to keep the ignition key and remote control in your possession.
4. Press the remote control  button for 1-2 seconds to secure your vehicle.

To Deactivate:

1. When you return to the vehicle, press the remote control  button for 1-2 seconds. The doors will unlock.
2. Enter the vehicle (do not touch the brake pedal), turn the ignition key to the "ON" position and then press the brake pedal. The parking lights will shut off and you will now be able to drive the vehicle.

Protected Valet Mode

You should place your system in Protected Valet Mode whenever your vehicle is being serviced by mechanics, car wash personnel or driven by valet parking attendants. While in the Protected Valet Mode, all remote starter functions are bypassed to prevent unauthorized or accidental operation. If a remote start is attempted, the parking lights will flash 4 times and the vehicle will not start. Remote controlled door lock/unlock and trunk release will still operate.

To Turn on Protected Valet Mode:

1. Turn the ignition key to the "ON" position or start the engine.
2. Flick the valet switch to the "ON" position.
3. The LED will turn on solid red to indicate the system is in the Protected Valet Mode.
4. Turn the ignition key to the "OFF" position.

To Turn off Protected Valet Mode:

1. Turn the ignition key to the "ON" position or start the engine.
2. Flick the valet switch to the "OFF" position.
3. The LED will turn off to indicate the system is no longer in the Protected Valet Mode.
4. Turn the ignition key to the "OFF" position.

User-Programmable Features

All AviStart system and remote control programmable features are accomplished by turning the ignition key on (or starting the engine) and flicking the valet switch on and off a preset number of times.

The AviStart also allows you to add new remote controls in one step, delete lost or stolen remote controls or rearrange the factory preset remote control functions.

1. Remove the system from Protected Valet Mode. Programming cannot be accessed while the system is in Protected Valet Mode indicated by the LED on solid red.
2. Select the feature you wish to program from the "Programming Table for System Features" or the "Programming Table for Remote Controls" on page 11. Note the number of beeps associated with that feature.
3. Turn the ignition key to the "ON" position.
4. Within 10 seconds, begin flicking the valet switch on and off. The built-in piezo beeper will beep once each time you flick the switch on then off.
5. Continue flicking the switch on and off, counting the number of beeps.

NOTE: Stop when you reach the number of beeps associated with your chosen feature.

6. Follow the "Secondary Action." You will hear a number of beeps to confirm that you have changed the setting of that feature.
7. Turn the ignition key to the "OFF" position.
8. Repeat steps 1-7 for any other feature you wish to program.

Programming Table for System Features

| Feature | Factory Setting | # of Beeps | Secondary Action |
|--|-----------------|------------|---|
| Ignition-Controlled Lock/Unlock | ON | 7 | Wait 3 seconds, the piezo beeper will beep once for OFF, twice for ON |
| RPM Door Lock | OFF | 9 | Wait 3 seconds, the piezo beeper will beep once for OFF, twice for ON |
| Passive Starter Disable | OFF | 10 | Wait 3 seconds, the piezo beeper will beep once for OFF, twice for ON |
| Remote Lock Starter Disable | ON | 11 | Wait 3 seconds, the piezo beeper will beep once for OFF, twice for ON |
| Remote Start Run Time 20 or 30 Minutes | 20 Minutes | 14 | Wait 3 seconds, the piezo beeper will beep once for 30 minutes, twice for 20 minutes |
| Temperature-Controlled Starting Off or 5°F (-15°C) | OFF | 16 | Wait 3 seconds, the piezo beeper will beep once for OFF, twice for 5°F (-15°C) |
| Temperature-Controlled Starting -7°F (-20°C) or -22°F (-30°C) | | 17 | Wait 3 seconds, the piezo beeper will beep once for -7°F (-20°C), twice for -22°F (-30°C) |

Programming Table for Remote Controls

| Feature | Factory Setting | # of Beeps | Secondary Action |
|--|-----------------|------------|--|
| Remote Door Lock/Panic | 🔒 Button | 18 | Press the 🔒 Button, the piezo beeper will beep 1 time |
| Remote Door Unlock | 🔓 Button | 19 | Press the 🔓 Button, the piezo beeper will beep 2 times |
| Remote Engine Start | 🔑 Button | 20 | Press the 🔑 Button, the piezo beeper will beep 3 times |
| Remote Trunk Release | 🔓🔑 Button | 21 | Press the 🔓🔑 Button, the piezo beeper will beep 4 times |
| Temperature Controlled Start Active/Inactive | 🔒 + 🔑 Buttons | 22 | Press the 🔒 + 🔑 Button, the piezo beeper will beep 5 times |
| Remote Accessory Output (-) | 🔒 + 🔓 Buttons | 23 | Press the 🔒 + 🔓 Button, the piezo beeper will beep 6 times |
| All Learn | 🔒 Button | 24 | Press the 🔒 Button, the piezo beeper will beep 1 time |
| Delete All | | 25 | Wait 3 seconds, the piezo beeper will beep twice, all codes are erased out of memory |

Life time Limited Factory Warranty - Terms and Conditions

Avital vehicle security systems and accessories require professional installation by an Authorized Avital Dealer. Unless the system is sold and installed by an Authorized Avital Dealer, all product warranties are void. As the manufacturer, Avital Technologies warrants to the original consumer purchaser, the system control unit and remote controls to be free from defects in material and workmanship for as long as you own the vehicle in which the system was originally installed. All other parts of the system and accessories to the system are warranted to be free from defects in material and workmanship for one (1) year from the date of purchase. Avital Technologies will repair or replace, at its option and free of charge during the warranty period, any system component that proves defective in material or workmanship under normal installation, use, and service, provided the product is returned to our factory by an Authorized Avital Dealer, transportation charges prepaid. Products returned to our factory must be accompanied by a photo copy of the purchase receipt. In the absence of such purchase receipt, the warranty period shall be one (1) year from the date of manufacture. Any damage to the product(s) as a result of misuse, abuse, neglect, accident, incorrect wiring, improper installation, destruction or alteration of the serial number, repair or alteration outside our factory, or any use violative of instructions furnished by us will void the warranty. This warranty is limited to defective parts and specifically excludes any incidental or consequential damages connected therewith. This warranty is not transferable. Avital Technologies makes no warranty against theft. This warranty is not to be construed as an insurance policy against loss. Warranty on installation labor, removal and reinstallation charges are not the responsibility of Avital Technologies, Inc.

ONLINE REGISTRATION: For your convenience, we now provide online registration for your Avital purchase. Within 10 days of purchase, register at www.clifford.com/register. By registering online, you will have access to a copy of your Owner's Manual, as well as information on product updates or special promotions.

Your system serial number is:

Place serial number sticker here

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