# Limited Lifetime Warranty

Products manufactured and sold by Omega Research & Development, Inc. (the Company), are warranted to be free from defects in materials and workmanship under normal use. If a product sold by the Company proves to be defective, the Company will repair or replace it free of charge within the first year and thereafter all parts to be repaired will be free with only a nominal charge for Omega's labor and return shipping, during the lifetime of the car in which it was originally installed.

All products for warranty repair must be sent postage prepaid to Omega Research & Development, Inc., P.O. Box 508, Douglasville, Georgia 30133, with bill of sale or other dated proof of purchase. This warranty is nontransferable and does not apply to any product damaged by accident, physical or electrical misuse or abuse, improper installation, alteration, any use contrary to its intended function, unauthorized service, fire, flood, lightning, or other acts of God.

This warranty limits the Company's liability to the repair or replacement of the product. The Company shall not be responsible for removal and/or reinstallation charges, damage to or theft of the vehicle or its contents, or any incidental or consequential damages caused by any failure or alleged failure of the product to function properly. Under No Circumstances Should This Warranty, Or The Product Covered By It, Be Construed As A Guarantee Or Insurance Policy Against Loss. The Company neither assumes nor authorizes any person or organization to make any Warranties or assume any liability in connection with the sale, installation, or use of this product.

This device complies with FCC Rules part 15. Operation is subject to the following two conditions, (1) This device may not cause harmful interference and, (2) This device must accept any interference that may be received, including interference that may cause undesired operation.

MO\_E2300ATV

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"Convenience And Security For A Mobile Society"

# **OWNER'S MANUAL**

For model:

## Executive 2300<sup>ATV</sup>

Please note that your new Executive Keyless Entry and Security system has Programmable Features which allow the customizing of its operations. The Programmable Features may affect the exact operations as described in this guide, which reflects a typically-installed system with factory-set conditions of the Programmable Features. Please consult the installing dealer for information regarding the custom-programming of these features, which may affect the operations of your Executive system.

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#### Introduction

Congratulations on your purchase of an Executive Keyless Entry and Security system. You have purchased the E-2300<sup>ATV</sup>, a Remote Keyless Entry System with Starter Disable. The Executive series of personal convenience and security products are designed by Omega Research and Development, a leader in vehicle security since 1970. When beginning to use this system, you will be surprised at its user-friendly design, considering the system delivers features and benefits that not only anticipate, but exceed, your expectations.

To learn how to operate your system, this Owner's Operation Manual will begin with Transmitter Functions, then explain the system's other operations as enhanced by the factory-set Programmable Features. As you become more familiar with the basic operations that this model performs, this Manual will further discuss the User Programmable Features, and then explain how change to them to configure the system to suit your personal needs. Finally, this Manual has personal safety tips, and will also briefly explain common technical terms.

## Automatic Transmitter Verification™

You received two remote control transmitters to operate your Executive System. Each time the ignition switch is turned to the "run" position the Red LED Status Light located on or under the dashboard will indicate for 10 seconds the number of transmitters programmed to your system. For example: Two flashes and a pause indicates two transmitters are coded to operate the system.

IMPORTANT: For the first 48 hours after a transmitter is coded to operate the system, every time the ignition switch is turned "on", the built-in piezo buzzer will beep rapidly for two seconds, and the LED Status Light will flash for 90 seconds. If this occurs after the initial 48 hour period, immediately reprogram your transmitters (See Page 10).

This Patented feature alerts you if someone has added an unauthorized transmitter to your system, and is found only in Omega Research and Development products.

#### **Transmitter Features**

Concealed Transmitter Codes: Each Executive system includes two transmitters, and up to two additional transmitters can be stored in the unit's memory for your convenience. Each transmitter has its own unique code. Thus, no other transmitter is coded the same as yours. In fact, no one, including the factory, can program another transmitter exactly like yours because the code is built inside the transmitter's microprocessor and cannot be seen or copied.

**Transmitter Code Jumping™:** Each time you press a transmitter button its signal will advance to the next digital code in sequence. Each time the system receives the correct digitally encoded signal from your transmitter, the receiver will then advance to the next digital code in sequence to match the transmitter. Therefore, you can never transmit the same code twice, thereby preventing a code grabbing device from operating your system.

**Transmitter Battery Saver Feature:** Many times transmitter batteries are prematurely exhausted because the transmitter buttons are inadvertently pressed by objects while in a pocket or purse. The Executive transmitter will turn itself "off" after a short period of continuous transmission, and thus prevent drained transmitter batteries.

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### L E D Status Light

The E-2300<sup>ATV</sup> includes a Red LED Status Light\* to inform you of the system's operational condition. Your system features a Starter Disable circuit, the status of which is also reflected by the Red LED Status Light. These are the conditions of the LED Status Light:

LED Off	Ignition switch is "On". Also, the system is "at rest", indicating that no automatic features (which may have been programmed to operate) will occur.
LED On Solid Red	System is in "Valet Mode".
LED Flashing Rapidly	Starter Disable has been programmed to automatically engage.
LED Flashing Slowly	Starter Disable is engaged. This will occur whenever the transmitter is used to lock the doors. The Starter Disable may also be programmed to operate automatically.
LED Flashes 1 To 4 Times After Ignition "On" Number of transmitters stored in the system.	

\* LED is the abbreviation for Light Emitting Diode - which is defined in the Glossary.

**Transmitter Functions** GREEN LED LIGHT LOCK BUTTON Illuminates whenever any Pressing the transmitter transmitter button is pressed. Lock button will lock all of the doors. UNLOCK BUTTON Pressing the transmitter Unlock button will UNunlock all of the doors. On certain vehicles, pressing the unlock button once unlocks Your Executive system will only the driver's door. Pressing lock your doors upon turning the a second time will unlock all of ignition "On", and unlock them the doors. Executive when the ignition is turned "Off".

Instructions for programming up to 4 transmitters to your Executive system are found on Page 10.

All Executive Keyless Entry and Security Systems can use the same Remote Transmitters. Your system is capable of being operated by up to four Executive transmitters, which are available from the dealership where you purchased your system.

OPTION BUTTON

Pressing the Option button for two seconds can be used to activate remote trunk release (vehicles equipped with power trunk release) or other optional equipment, such as Remote Car Starters.

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# Easy Valet<sup>™</sup> Switch

The Easy Valet<sup>TM</sup> Switch is used to place the system into Valet Mode, which is used to stop or interrupt any optional automatic functions, such as Starter Disable, which may be programmed to operate. The Easy Valet<sup>TM</sup> Switch, in conjunction with your ignition key, also allows you to override the system in the event of a lost or damaged transmitter, leaving the vehicle for servicing, washing, or valet parking.

Easy Valet™ Mode: This feature allows you to activate the Valet Mode at any time by pressing the Easy Valet Switch button for 2 seconds, unless the Starter Disable is engaged (this is indicated by a slow flashing Red LED Status Light). Please note that once the Starter Disable is engaged, the ignition switch must be turned "on" to enter the Valet Mode. When utilizing the Easy Valet™ Mode, upon pressing the Easy Valet™ Switch, the Red LED Status Light will illuminate a steady, solid Red, and the built-in piezo buzzer will beep once. While the system is in the Valet Mode, the Red LED Status Light will remain solid Red (not flashing) at all times, and every time the ignition switch is turned "off", the built-in buzzer will beep once as a reminder of this condition. To remove the system from Valet Mode simply press the Easy Valet™ Switch at any time. The transmitter will operate normally while the system is in Valet Mode, i.e., the doors will lock and unlock, the Option Button will still operate - but the Starter Disable will not operate, and any programmed automatic functions are suspended.

**Overriding The System:** As mentioned in the previous section, once the Starter Disable is engaged, the ignition key is required to allow the Easy Valet<sup>TM</sup> Switch to override the system and allow starting the engine. To obtain a System Override, follow this procedure:

These four indicators are part of the Auto-

matic Transmitter Verification<sup>TM</sup> feature.

- Step 1. Enter the vehicle normally.
- Step 2. Using your key, turn "on" the ignition. Be prepared to perform the following Step before 5 seconds expires.
- Step 3. Within 5 seconds, press and release the Easy Valet<sup>TM</sup> Switch. The system will be immediately overridden.

Once the activated system has been overridden, if Valet Mode is desired, holding the Easy Valet<sup>TM</sup> Switch depressed for two seconds will place the system into Valet Mode.

#### Starter Disable

The E-2300<sup>ATV</sup> provides an active Starter Disable (which engages every time the transmitter is used to lock the doors), and may be configured, if desired, to also provide an automatic (passive) Starter Disable. The optional passive Starter Disable may qualify you for an insurance discount, so please check with your insurance agent.

Active Starter Disable: Whenever the doors are locked via the transmitter, the Starter Disable will instantly engage. Unlocking the doors with the transmitter will deactivate the Starter Disable circuit, allowing the engine to be started. Please note that the Starter Disable may be configured to automatically reengage 90 seconds after the doors are unlocked by the transmitter; or, to engage automatically 90 seconds after the ignition switch is turned "off". These automatic Starter Disable options are explained in more detail in the "User Programmable Features" section of this Owner's Manual.

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## **Programming Transmitters**

**Programming Transmitters To Operate Your Executive System:** To use an additional or replacement transmitter, it's unique digital code must first be added to the Executive System module's memory. The dealership where you purchased your Executive System can provide and program transmitters for you, or you may program the transmitters yourself. If you wish to program a transmitter, please follow these Transmitter Programming Mode procedures carefully:

- 1) Have all the transmitters that you wish to operate your Executive System at hand. Any time a transmitter code is programmed into your Executive System, all existing codes are automatically erased. This, in addition to the Automatic Transmitter Verification™ feature, prevents someone from adding an unauthorized transmitter to your system.
- 2) Within a 5 second period, turn the ignition switch "on" five times: "on", "off", "on", "off", "on", "off", then "on" again; the fifth time leaving it "on". The buzzer will sound briefly to indicate that the system is ready to receive transmitter codes.
- 3) Within 10 seconds press the LOCK button on the first transmitter you wish to encode to the system. The buzzer will beep once to indicate the transmitter's code is learned by the system. It is only necessary to press the LOCK button, as the rest of the transmitter's functions are assigned automatically.
- 4) Repeat Step 3 within 10 seconds for each additional transmitter. The system will leave Transmitter Programming Mode when the ignition switch is turned "off", after 10 seconds of not receiving a transmitter broadcast, or upon learning the fourth transmitter.

#### **Audible Confirmation**

The E-2300<sup>ATV</sup> includes a built-in piezo buzzer for audible confirmation when a transmitter command is received. This confirmation is designed to be heard only while inside the vehicle.

Standard Confirmation Operations	
One Beep	The transmitter has locked the doors and/or
	the Starter Disable has engaged.
Two Beeps	The transmitter has unlocked the doors and
	the Starter Disable is disengaged.
Two Beeps	The system has just been placed into Valet
(With LED Illuminated Steady)	Mode.
Two Beeps When The	
Ignition Switch Is Turned "Off"	, , , , , , , , , , , , , , , , , , , ,
	Valet Mode.

#### Special Confirmation Operations

Beeps For Two Seconds

When The Ignition Switch Is Turned "On"......The Automatic Transmitter Verification
feature system is alerting you that transmitter
programming activity has occurred within the
last 48 hours.

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# User Programmable Features

Your E-2300<sup>ATV</sup> has four User Programmable Features which may be easily configured to your requirements as part on the Transmitter Programming Mode. Once Transmitter Programming Mode has been accessed (described on the previous page), at the point where the first transmitter code is entered and acknowledged, that same transmitter may be used to configure these User Programmable Features as desired. The User Programmable Features, and their factory default settings, are:

- 1) The Doors Automatically Lock 90 Seconds After The Ignition Switch Is Turned "Off". Default: Feature OFF; Program with the transmitter's LOCK button. When this Feature is activated (turned ON), every time the ignition switch is turned "Off", the doors will automatically lock 90 seconds later. You may open a door and exit the vehicle without affecting this operation, and the LED Status Light will have no indication that the automatic locking will occur.
- 2) The Doors Automatically Relock 90 Seconds After Unlocking By The Transmitter. Default: Feature OFF; Program with the transmitter's UNLOCK button. When this Feature is activated (turned ON), every time the transmitter is used to unlock the doors", they will automatically relock 90 seconds later. Opening a door will not affect this operation, although turning "On" the ignition switch will cancel the automatic relocking. The LED Status Light will have no indication that the automatic relocking will occur.
- 3) The Starter Disable Will Automatically Engage 90 Seconds After The Ignition Switch Is Turned "Off" <u>And</u> 90 Seconds After Unlocking By The Transmitter. Default: Feature OFF; Program with the transmitter's OPTION button.

When this Feature is activated, the Starter Disable circuit will automatically engage 90 seconds after the ignition switch is turned "Off" and also 90 seconds after the transmitter is used to unlock the doors. The later may be cancelled by turning the ignition switch "On", but upon turning the switch "Off" the former parameter of the Feature will cause the Starter Disable to engage 90 seconds later. Please note that when this form of automatic Starter Disable is selected, there is no indication of the impending engagement; once the Starter Disable is engaged, however, the LED Status Light will flash as an confirmation indicator.

The Starter Disable Will Automatically Engage 90 Seconds After Unlocking By The Transmitter.

Default: Feature OFF; Program with the transmitter's LOCK and UNLOCK button in unison. When this Feature is activated, the Starter Disable circuit will automatically engage 90 seconds after unlocking the doors by use of the transmitter. The ignition switch must be turned "On" to cancel the automatic engagement. Please note that when this form of automatic Starter Disable is selected, there is no indication of the impending engagement; once the Starter Disable is engaged, however, the LED Status Light will flash as an confirmation indicator.

# Changing The User Programmable Features

As previously mentioned, changing the User Programmable Features is a variation of the procedure used to program transmitter codes to the system. Remember, when the system acknowledges the first transmitter code, at that point you may use that transmitter to change any or all of the five User Programmable Features. To change the User Programmable Features, follow this procedure:

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Every time the appropriate button or button combination is pressed, the system will respond alternately with one beep, then two beeps - every time the button is pressed, the Feature assigned to it is "toggled" on or off. One beep indicates that the Feature is on, or activated; two beeps indicates that the Feature is off, or deactivated.

5) When all of the desired Features have programmed as desired, repeat Step 3 within 10 seconds for each additional transmitter. Remember, 10 seconds of not receiving a transmitter broadcast will cause the system will leave either the Transmitter Programming Mode or the User Features Programming period.

# **Glossary**

**Code** - A digital signal which is assigned to each transmitter to make it unique and different from other transmitters. This is done in all Executive transmitters at the factory and cannot be duplicated.

**Code Grabbing -** A method whereby a thief, using a device that records and then plays back a copy of your transmitter's signal, gains entry to your vehicle.

**Code Jumping**<sup>TM</sup> - The transmitter's ability to change it's code each time it transmits, rendering Code Grabber units ineffective.

**Keyless Entry** - A popular option that allows you to lock and unlock your vehicle's doors by means of a transmitter or key pad, without the use of the normal car key.

**LED** - Commonly used term for Light Emitting Diode, an electrical component that, in addition to illuminating when electricity flows through it, limits the flow of electricity to one direction only. For practical purposes, consider it as an indicator light.

Starter Disable - A device, when engaged, that will prevent starting the vehicle's engine.

Transmitter - The small remote control attached to your key ring that will emit a Radio Frequency

**Transmitter -** The small remote control attached to your key ring that will emit a Radio Frequency Page - 14

- Have all the transmitters that you wish to operate your Executive System at hand. Even though
  you are reprogramming an existing code, any time a transmitter code is programmed into your
  Executive System, all existing codes are automatically erased.
- 2) Within a 5 second period, turn the ignition switch "on" five times: "on", "off", "on", "off", "on", "off", then "on" again; the fifth time leaving it "on". The built-in piezo buzzer will sound briefly to indicate that the system is ready to receive transmitter codes.
- 3) Within 10 seconds press the LOCK button on the first transmitter you wish to encode to the system. The buzzer will beep once to indicate the transmitter's code is learned by the system. At this point, you may use this transmitter to change the User Programmable Features.
- 4) Within 10 seconds, press the transmitter button or button combinations to change the desired Feature. Here is a condensed review of the four Features and the transmitter button(s) to use when programming:

The Doors Automatically Lock 90 Seconds After The Ignition Switch Is Turned "Off". Program with the transmitter's LOCK button.

The Doors Automatically Relock 90 Seconds After Unlocking By The Transmitter. Program with the transmitter's UNLOCK button.

The Starter Disable Will Automatically Engage 90 Seconds After The Ignition Switch Is Turned "Off" And 90 Seconds After Unlocking By The Transmitter.

Program with the transmitter's OPTION button.

The Starter Disable Will Automatically Engage 90 Seconds After Unlocking By The Transmitter.

Program with the transmitter's LOCK and UNLOCK button in unison.

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(RF) signal whenever any of its buttons is pressed. Since the transmitter is limited to a single frequency assigned by the Federal Communications Commission (FCC), it's signal must be encoded so that only your transmitter will operate your vehicle. See "Code" above.

Valet Mode - A condition in which the starter disable will not engage.

# Tips To Help Avoid Becoming A Victim

- 1) Always be aware of your surroundings. An alert and aware person is less likely to become a crime victim than someone who is preoccupied and easily approached.
- 2) While driving in high crime areas, always keep your doors locked and your windows up. Your Executive System can automatically lock your doors when the ignition switch is turned "on".
- 3) Always attempt to park your vehicle in a well lit and visible location with your doors locked.
- 4) While in parking garage structures, always attempt to back in to your parking space. This will provide a less visually encumbered and quicker way to exit your parking space if you are being pursued.
- 5) While driving or stopped at an intersection, if your vehicle is bumped in the rear by another vehicle or the vehicle behind you is flashing it's headlights, consider the occupants of the vehicle hostile and immediately drive to the nearest police or fire station. "Bump and run" thieves and carjackers are becoming an increasingly severe problem.
- 6) Control access of your keys. Never leave your house and other keys with a valet parking attendant mechanic, or any person requiring access to your car keys.
- 7) Control access of your keys. Never leave your house and other keys with a valet parking attendant mechanic, or any person requiring access to your car keys.
- 8) After someone else has had access to your vehicle, always verify that your transmitters still operate your system, and be aware of the Automatic Transmitter Verification<sup>TM</sup> feature.

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