·«(((EXCALIBUR>

RS-150-EDP+

Deluxe Add-on Remote Start

June 18, 2013

Operation Guide

Temporary cover. Color cover is in a separate file.

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Congratulations on your purchase of this convenience system by Omega Research & Development, Inc., a world leader in vehicle security and conveince products since 1975. This system is designed to offer ease of use and it's modular design allows for many features to be customizable to suit your needs.

Please note that this manual is written to reflect the full capability of this system though some features may not be available to you because of vehicle limitations and/or chosen options at the time of installation. It is also written to reflect the operations in their default configurations.

This system has three principal user components that you should familiarize yourself with:

The **Status Lights** (optional) which indicate the current system status and helps in troubleshooting failed remote start attempts as well as in customizing the programmable features. The specific operations of the lights are described on **page 5**.

The **Valet Switch** is used to access transmitter and feature programming. It is also used to place the system in valet mode which temporarily bypasses the remote start feature. See **page 5**.

Remote Starting

To remote start your vehicle, press the button or button combinations on your alarm/keyless entry's transmitter that were configured to activate this feature. If you are unsure, consult with your installer to learn how to activate the system. You can write the activation method in the space below for later reference.

Remote start:_____

Other Remote Start Features

LOW BATTERY/LOW TEMP AUTOMATIC STARTING

This feature will automatically start the engine should the vehicle battery drop below 11 volts or the interior temperature drop to 15 (or 32) degrees fahrenheit. This feature is very useful when the vehicle is parked for a long period of time in cold climates. You must activate these features each time you park your car and wish to use them.

• Turn the ignition switch "on", then "off" (engine not running), and within 7 seconds press the valet switch twice. The system is now in low voltage start mode.

• To activate low temp starting, enter low voltage start mode as described above but, within 5 seconds of entering low voltage mode, press the valet switch 1 time (15 degrees) or 2 times (32 degrees) within 5 seconds.

NOTE: When low temp start mode is activated, low voltage start is also activated. These features will operate once every two hours until the ignition key is turned "ON".

TURBO TIMER FEATURE

It is typically recommended that vehicles equipped with turbocharged engines allow the engine to idle for after driving to cool the turbocharger. When this Installer Programmable Feature is enabled, the system will automatically keep the engine running as follows:

• With the engine running, hold the brake pedal and engage the parking   brake. When the brake pedal is released, the system will keep the engine running for the programmed time (1, 2, or 3 minutes), and then automatically turn it off.

• Turbo Timer can be prevented from engaging, or "bypassed" if desired, by turning the engine off before engaging the parking brake, or if it's already engaged, step on the brake pedal to turn the engine off.

PIT-STOP FEATURE

This feature allows you to leave your engine running for making quick errands. To use this feature, have the engine running normally from the ignition switch and your foot off the brake pedal. Press the Valet Switch twice; the parking lights will flash. Turn the key off and the engine will remain running for the programmed run time.

The Status Light helps to visually confirms the status of the system and provides a high level of visual deterrence. The Status Light is located in the window mount receiver unit.

Normal System Status

1) Off = The remote starter system is off, in standby mode.

2) On Constant = The system is in the Valet Mode, with the remote starter system disabled.

Starting System Status

The Status Light also indicates the remote start status:

3) Flashing Slow (once per second): Remote start is on.

4) Flashing Fast (after activating remote start): The system is in the process of starting the engine.

Remote Starting Diagnostics

Whenever the system is placed into Valet Mode, the Status Light illuminates solid. However, when this first occurs, the Status Light will flash 1 to 6 flashes before resuming solid illumination. This indicates why the engine stopped running from the last previous remote starting attempt.

5) 1 Flash = Programmed run time expired.

6) 2 Flashes = Brake was pressed or hood opened.

7) 3 Flashes = Engine stalled or bad tach signal.

8) 4 Flashes = Received transmitter command to stop.

9) 5 Flashes = Gear selector removed from "park".

10) 6 FLashes = Low voltage.

Using The Valet Switch

The valet switch is a push button located in the dash area of your car. The specific location is chosen by the installer. If you do not know the specific location of your valet switch, contact your installing dealer.

Valet Mode

Valet mode disables the remote start feature. It should be used, for example, when you have your vehicle serviced. **To engage Valet Mode:**

•   With the system "unlocked", press and hold the Valet Switch for 3 seconds; the Status Light(optional) will turn on to indicate Valet Mode. Attempts to remote start will result in no response. Keep this in mind if remote start stops functioning.

•   To turn off Valet Mode, simply press & release the Valet Switch once. The Status Light will turn off.

Manual Override

This puts the system in an "unlocked" state allowing for programming operations.

•   Turn the vehicle's ignition "on".

•   Press and release the valet switch once.

Programming Features

Step 1 Turn the ignition key "ON", then "OFF"

Step 2 Within 5 seconds of step 1, press the valet switch 5 times to access user features (10 times to access installer features).

~ The parking lights and the status light will turn on.

Step 3 Within 10 seconds of step 2, press the valet switch the number of times corresponding with the desired feature's number.

~ The status light and the parking lights will flash equal to the selected feature.

Step 4 Change the feature by pressing the brake pedal the same number of times that corresponds with the desired setting.

~ The status lights and the parking lights will flash equaling the selected setting.

Step 5 If you wish to change more features, repeat steps 3 & 4 at this time.

Step 6 To exit programming, turn the ignition key "ON" then "OFF". Or, you can wait 10 seconds for programming mode to expire.

User Programmable Features

This group of User Programmable Features are all accessed as a group in the first level of features' programming. These features have a direct affect upon the system's operations, so the programming and operation of each are described.
NOTE: Several features like horn honk and chirp confirmations only apply when used with an add on transmitter kit or a CarLink smartphone interface. If there are any questions about these features, please contact your installing dealer or call our support team at 800-554-4053.

Feature #1   Remote Start Run Time

10 Minutes   (press the brake pedal 1 time to program) - **DEFAULT**
5 Minutes   (press the brake pedal 2 times to program)
15 Minutes   (press the brake pedal 3 times to program)
20 Minutes   (press the brake pedal 4 times to program)

This feature sets the period of time that the engine will run after being remotely started. If the engine is not stopped by controller/transmitter command or a safety circuit violation, the engine will automatically stop upon the expiration of the selected time period. **Caution: The remote engine starting feature should NEVER be used when the vehicle is parked in an enclosed structure or garage.**

Feature #2   Steady/Flashing Lights During Remote Start

Steady   (press the brake pedal 1 time to program) **- DEFAULT**
Flashing (press the brake pedal 2 times to program)

This Feature configures the operation of the vehicle's parking lights during the remote start operation. The default setting turns on the parking lights during remote start; the other setting flashes the parking lights on and off during remote start.

Feature #3   Confirmation Chirp Function & Volume

Low   (press the brake pedal 1 time to program) **- DEFAULT**

High   (press the brake pedal 2 times to program)

N/A   (press the brake pedal 3 times to program)

OFF (no chirps) (press the brake pedal 4 times to program)

This feature allows the choice of two different volume levels of the system's confirmation chirps, you can hear and choose the setting with the best chirp volume as you select each option.

Feature #5   Doors Lock With Ignition On

Off   (press brake pedal 2 times to program) **- DEFAULT**

On   (press brake pedal 1 time to program)

This feature configures the system to automatically lock the vehicle's doors every time that the ignition switch is turned on. The following feature #6 controls the automatic unlocking operations.

Feature #6   Doors Unlock With Ignition Off

Off   (press brake pedal 2 times to program) **- DEFAULT**

On   (press brake pedal 1 time to program)

Similar to the previous locking feature, except this feature controls the unlock operation when the ignition is turned off.

Feature #7   Doors Unlock With Trunk Release

Off   (press brake pedal 2 times to program)

On   (press brake pedal 1 time to program) **- DEFAULT**

When trunk release (CH2) is activated, this feature determines whether the doors will unlock or not.

Installer Programmable Features

This group of Installer Programmable Features are all accessed as a group in the second level of features' programming. These features have a direct affect upon the system's operations related to the installation and vehicle type **AND SHOULD ONLY BE CHANGED BY THE INSTALLER!!!**

Feature #1   Remote Start Activation

1 button presses   (press the brake pedal 1 time to program)
2 button presses   (press the brake pedal 2 times to program) **- DEFAULT**
3 button presses   (press the brake pedal 3 times to program)
4 button presses   (press the brake pedal 4 times to program)

This feature allows you to choose the number of button presses AND pulses required on the White/Blue activation wire to activate the remote start feature. All of the settings must occur within a 5 second window of the previous button press.

Feature #2   PINK/WHITE (IGN #2) wire operation

Ignition   (press the brake pedal 1 time to program) **- DEFAULT**
Accessory   (press the brake pedal 2 times to program)
Start   (press the brake pedal 3 times to program)

Ignition - operates with the same timing as the PINK ignition #1 output.
Accessory - operates with the same timing as the ORANGE accessory output.
Start - operates with the same timing as the VIOLET start output

Feature #3   Engine Detection Method

Tachless Hi   (press the brake pedal 1 time to program) **- DEFAULT**
Tachless Lo   (press the brake pedal 2 times to program)
Tach Wire   (press the brake pedal 3 times to program)
Data Tach   (press the brake pedal 4 times to program)
Crank Only   (press the brake pedal 5 times to program)

This feature selects the method in which the remote start monitors the engine's running condition in remote start mode.

"Tachless Hi" sensitivity mode has an associated base starter output time duration (see installer feature #7) and monitors the vehicle's voltage level to determine if the engine is running. This setting looks for a voltage increase of 0.3v after cranking.

"Tachless Lo" sensitivity mode operates like the "Tachless Hi" setting but looks for a voltage increase of 0.5v after cranking.

"Tach Wire" Before this setting is programmed, refer to the "Violet/White wire" section of the installation manual for proper wiring connection and the Tach Learn Procedure. It will crank the engine for up to 3 seconds or until a tach signal is detected.

"Data Tach" mode operates just like the "Tach Wire" setting except it takes its reading from the D2D data port instead of using the Violet/White wire. Before using, make sure this function is supported by the Databus Interface module.

"Crank Only" AKA "blind start" is similar to the "Tachless" settings however, it only makes one start attempt and does not monitor engine running conditions. This is useful for many "push-to-start" vehicles.

Feature #4   Gasoline Or Diesel Engine

Gasoline   (press the brake pedal 1 time to program) **- DEFAULT**
Diesel 15 Sec. Delay (press the brake pedal 2 times to program)
Diesel 20 Sec. Delay (press the brake pedal 3 times to program)
Diesel 30 Sec. Delay (press the brake pedal 4 times to program)

This feature changes the system's timing of the ignition and starter output sequence for gas or diesel engines. <u>Gasoline</u>: the starter output will occur 3 seconds after the ignitions turn on. When in "Tachless" mode, the engine running status is determined 10 seconds after starting. <u>Diesel</u>: the starter output will occur 15, 20, or 30 seconds after the ignitions turn on (allows for glow plug warming). When in "Tachless" mode, the engine running status will be determined 40 seconds after cranking.

Feature #5   Satellite Relay Port Green Wire Function

Starter   (press the brake pedal 1 time to program) **- DEFAULT**
Pulse After Engine Start (press the brake pedal 2 times to program)
Status Output   (press the brake pedal 3 times to program)
Domelight   (press the brake pedal 4 times to program)

This feature changes the operation of the Green wire (negative) on the satellite relay port. This gives you the flexibility to accomodate certain vehicles that require any out-of-the-ordinary pulses or remote start timing.

Starter setting operates as a secondary START output. This will have the same pulse timing as the large Violet wire on the main harness.
Pulse After Start setting will give a 0.8 second pulse immediately after the engine starts and is running.
Status Output setting will behave like the ignition output except it turns on 1.5 seconds earlier than the primary ignition output..
Domelight provides domelight supervision output. It will turn on when the system is unlocked and after turning the ignition "off".

Feature #6   Satellite Relay Port Blue Wire Function

Status   (press the brake pedal 1 time to program) **- DEFAULT**
Ignition   (press the brake pedal 2 times to program)
Defrost Pulse (press the brake pedal 3 times to program)

Status - operates like the PINK ignition output except it turns on 1.5 seconds earlier than the PINK ignition #1 output. This is best for activating bypass kits. **Ignition** - operates with the same timing as the PINK ignition #1 output. **Defrost Pulse** will send a pulse after start only when the cabin temperature is below freezing (32 degrees F)

Feature #7   Extended Starter Cranking Time

0.7 Second   (press the brake pedal 1 time to program) **- DEFAULT**
1.00 Second (press the brake pedal 2 times to program)
1.5 Seconds (press the brake pedal 3 times to program)
2.25 Seconds (press the brake pedal 4 times to program)

This feature determines the crank time of the 1st start attempt when in "Tachless" mode. If the engine doesn't start on the first attempt, it will retry up to 3 more times extending the crank time by an additional 0.2 second with each attempt..

Feature #8   Low Temp Crank Extender

0ms (Off) (press the brake pedal 1 time to program)
200ms (press the brake pedal 2 times to program) **- DEFAULT**
300ms (press the brake pedal 3 times to program)
400ms (press the brake pedal 4 times to program)
When the vehicle's interior temperature is below freezing, this feature adds extra crank time to the base timing (see installer feature #7). It applies to "Tachless" & "Crank Only" modes only (installer feature #3)

Feature #9   Lock/Unlock Outputs

0.8 Second Output (press the brake pedal 1 time to program) **- DEFAULT**
3 Second Output (press the brake pedal 2 times to program)
Double 0.8 Sec Unlock (press the brake pedal 3 times to program)
This single feature gives the installer several needed options, to match the system's doorlocking outputs to suit different vehicle requirements.

Feature #10   Remote Start Lock Control

Off (press the brake pedal 1 time to program) **- DEFAULT**
Lock After Start (press the brake pedal 2 times to program)
Unlock before start (press the brake pedal 3 times to program)
Unlock Before+Lock After Start (press the brake pedal 4 times to program)
This feature allows for OEM alarm/lock control in relation to remote start operations thus eliminating extra wiring.

Feature #11   Turbo Timer

Off (press the brake pedal 1 time to program) **- DEFAULT**
Run 1 Minute (press the brake pedal 2 times to program)
Run 2 Minutes (press the brake pedal 3 times to program)
Run 3 Minutes (press the brake pedal 4 times to program)
This feature when turned on configures the system to automatically keep the engine running briefly after it is turned off. This operation is designed for vehicles with turbocharged engines and should only be programmed by the installer. The operation of this feature depends on the correct connection of the neutral safety wire.

Feature #13   Data Port Protocol

D2D (Trilogix) (press the brake pedal 1 time to program) **- DEFAULT**
ADS (iData) (press the brake pedal 2 times to program)
This feature determines which data protocol is used on the data ports. Choose this based on the interface module being used. **NOTE: OmegaLink modules support both protocols. The ADS protocol is recommended for maximum capabilities.**

User Feature Programming: Ignition on, off, press valet 5 times				
# Feature	Lock Button	Unlock button	Trunk button	"START" button
1 Engine Run Time	10	5	15	20
2 RS Light Confirmation	Steady	Flashing		
3 Horn Honk Volume	Low	Hi	N/A	OFF
4 N/A				
5 Lock w/ IGN on	On	Off		
6 Unlock w/ IGN Off	On	Off		
7 Unlock w/ Trunk release	On	Off		
Installer Feature Programming: Ignition on, off, press valet 10 times				
1 Remote Start Activation	1 press	2 presses	3 presses	4 presses
2 PINK/WHITE Wire Function	Ignition	Accessory	Start	
3 Engine Detection	Tachless Hi	Tachless Lo	Tach Wire	Datatach
	Crank Only (press Lock + Unlock)			
4 Gas or Diesel Engine	Gas	Diesel (15 sec.)	Diesel (20 sec.)	Diesel (30 sec.)
5 Sat. Port Green Wire Function	Start	Pulse after start	Status	Dome Light
6 Sat. Port Blue Wire Function	Status	Ignition	Pulse after start below freezing	
7 Crank Time	0.7 sec	1 sec	1.5 sec	2.25 sec
8 Low Temp Crank Extender	0ms	200ms	300ms	400ms
9 Door lock outputs	0.8 sec	3 sec	Double Unlock	
10 Remote Start Lock Control	Off	Lock after start	Unlock before start	Both
11 Turbo Timer	Off	1 min	2 min	3 min
12 N/A				
13 Data Port Protocol	D2D (Trilogix)	ADS (iData)		

Back Cover

Color cover is in a separate file.