

# **RS-130-DP**

**Deluxe Keyless Entry & Remote Start** 

July 28, 2010

# **Operation Guide**

Temporary cover. Color cover is in a separate file.

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#### Introduction

Congratulations on your purchase of this convenience system by Omega Research & Development, Inc., a world leader in vehicle security and convenience 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 two principal user components that you should familiarize yourself with:

The **Status Lights** 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 4**.

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 "Using the Valet Switch" on **page 3**.

## **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 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 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.
- The system may be locked while the engine is running. 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.

## **Using The Valet Switch**

## **Valet Mode**

Valet mode prevents the remote start feature from being activated. It also disables horn honks when unlocking the doors. Valet Mode should be used when you do not wish for remote starting to be operated, such as 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 will turn on and stay on to indicate Valet Mode. The lights will flash twice. Once in Valet Mode, an attempt 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

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 & remote start is 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 on activation input to stop.
- 9) 5 Flashes = Gear selector removed from "park".
- 10) 6 FLashes = Low voltage.

## **Programming Features**

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

<u>Step 2</u> 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.

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

~ The status lights 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 equal to the selected setting.

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

<u>Step 6</u> To exit programming, turn the ignition key "ON" then "OFF". Or, you can wait 10 seconds for programming mode to expire. The lights will turn off.

## **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.

#### 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.

## 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 pulses** (press the brake pedal 1 time to program)

2 button pulses (press the brake pedal 2 times to program) - DEFAULT

3 button pulses (press the brake pedal 3 times to program) 4 button pulses (press the brake pedal 4 times to program)

This feature allows you to choose the number of 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 pulse.

#### Feature #2 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 #5) 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

## Installer Programmable Features (cont'd)

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 #3 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. Gasoline: 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. Diesel: 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 #4 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) (press the brake pedal 3 times to program) Status Domeliaht (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 accommodate 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 gives a 0.8 second pulse after the engine starts and is running. Status will behave like the PINK 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 #5 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...

## Installer Programmable Features (cont'd)

#### Feature #6 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 #5). It applies to tachless modes only (installer feature #2)

#### Feature #9 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 specifically for vehicles having turbocharged engines. This feature should only be programmed by the installer, and the operation of this feature depends on the correct connection of the neutral safety wire to the vehicle's parking brake. Please refer to the "Black/White wire" in the installation manual for the proper connection of this important wire.

## **Programmable Features Matrix**

User Feature Programming: Ignition on, off, press valet 5 times						
# Feature	Brake Pedal x 1	Brake Pedal x 2	Brake Pedal x 3	Brake Pedal x 4		
1 Engine Run Time	10 min	5 min	15 min	20 min		
2 Steady/Flashing lights for RS	Steady	Flashing				
Installer Feature Programming: Ignition on, off, press valet 10 times						
1 RS Activation	1 pulse	2 pulses	3 pulses	4 pulses		
2 Engine Detection	Tachless Hi	Tachless Lo	Tach Wire	Datatach		
	Crank Only (Brake Pedal x 5)					
3 Gas or Diesel Engine	Gas	Diesel (15 sec delay)	Diesel (20 sec delay)	Diesel (30 sec delay)		
4 Sat. Port Green Wire	Starter	Pulse After Start	Status	Domelight		
5 Crank Time	0.7 Sec	1.00 Sec	1.5 Sec	2.25 Sec		
6 Low Temp Crank Extender	0ms	200ms	300ms	400ms		
7 N/A						
8 N/A						
9 Turbo Timer	OFF	1 min	2 min	3 min		

## **Back Cover**

# Color cover is in a separate file.