RS-251-EDP

Deluxe Keyless Entry & Remote Start

June 10, 2013

Operation Guide

Temporary cover. Color cover is in a separate file.

The Transmitter

Transmitter part number: 113-03

Transmitter battery replacement:
Remove the small screw from the lower back case, and separate the transmitter halves. Replace the 2 **CR2016** batteries and reassemble the transmitter case.

Transmitter Functions

REMOTE START: Press and release the "START" button twice. (see installer feature #1 for other options)

- THE PARKING LIGHTS WILL FLASH AND THE STATUS LIGHTS WILL FLASH RAPIDLY.
- THE IGNITION WILL TURN ON AND THE SYSTEM WILL START THE ENGINE.
- WHEN THE ENGINE IS RUNNING, THE STATUS LIGHTS WILL FLASH SLOW AND THE PARKING LIGHTS WILL STAY ON AS LONG AS REMOTE START MODE IS ACTIVE.

- If the engine stalls, the system will make up to 3 more attempts.
- Each time you park your vehicle, set the climate controls to give you the desired interior temperature when you use the remote start.
- The engine will run for the preset run time (see user feature #1).
- **Run Time Extender**: Press the "START" button one time while in remote start mode to restart the engine run timer.

NOTE: This can only be used once per remote start cycle. If you decide not to drive your vehicle, you can turn off the remote start using the same method to turn it on (keep in mind that the first press is considered the **Run Time Extender**).

- Upon entering the vehicle during remote start mode, turn the ignition key to the "ON/RUN" position (**NOT START!!**). When you press the brake pedal, the remote start will turn off.

Transmitter Functions (cont'd)

UNLOCK: Press and hold the button for 3 seconds.

• THE DOORS WILL UNLOCK, THE PARKING LIGHTS WILL FLASH TWICE THEN ILLUMINATE FOR 30 SECONDS.

Other Remote Start Features

LOW BATTERY AUTOMATIC STARTING

This feature will automatically start the engine should the vehicle battery drop below 11 volts. This feature is very useful when the vehicle is parked for a long period of time in cold climates. You must activate this feature each time you park your car and wish to use it.

• 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.

NOTE: When low voltage start is activated, it will activate once every two hours (maximum) 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 Lights

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(optional) 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

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.

Transmitter Protection & Technology

Code Jumping™ Technology

Code jumping technology uses a complex algorithm to change the transmitter's codes every time a button is pressed to prevent a thief from copying the signal. Only the system in your car has the key to decipher this code and it is not replicable.

Automatic Transmitter Verification™

There the potential threat of someone, who has temporary access to your vehicle, programming their own transmitter to your system. For example, a mechanic, car wash attendant, or valet could do so and gather your personal info from any paper work in your vehicle. Then, they could visit your home and help themselves to the contents of your vehicle without any signs of intrusion. Many crimes go unnoticed and people assume they have misplaced their belongings. ATV™ shows you how many transmitters are programmed to your system by flashing the status light (optional) every time you turn on the ignition key for a 10 second period. Then, you can easily identify if transmitters have been added to your system.

Programming Transmitters

Standard Programming: Before starting, be sure the system is in an "unlocked" state by using a working transmitter or performing a manual override.

Step 1 Have all transmitters which are to operate the system at hand. Then, turn the ignition "on".

Step 2 Within 5 seconds of turning on the ignition, press the Valet Switch 5 times. The status light (optional) and parking lights will illuminate, confirming that for the next 10 seconds the system is ready to learn a transmitter/controller code. To enter a code, simply press and release the transmitter button. When the first code is learned all existing stored codes will be erased.

Step 3 Press the button on each remaining transmitter one at a time. The system will turn the lights off then back on to confirm that each was learned. If a code is not received within a 10 second period, the learning process will automatically terminate, as indicated by the lights turning off.

Step 4 Turn the vehicle's ignition key "off".

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 (optional) 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 (optional) 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 light (optional) 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.
Step 6 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 t**he b**rake pedal 1 time to program) - **DEFAULT**
5 Minutes (press t**he bra**ke pedal 2 times to program)
15 Minutes (press t**he br**ake pedal 3 times to program)
20 Minutes (press t**he br**ake 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 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. 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 #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)

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.

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..

Installer Programmable Features (cont'd)

Feature #8 Unlock Output Functions

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.

0.8 Second Outputs on the unlock output.
3 Second Outputs on the unlock output.
Double 0.8 Sec Unlock Output

Feature #9 Remote Start Unlock Control

Off (press the brake pedal 1 time to program) **- DEFAULT**
Unlock before start (press the brake pedal 3 times to program)

This feature allows for OEM alarm/lock control in relation to remote start operations thus eliminating extra wiring.

Feature #10 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.

Feature #12 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.**

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	5	15	20
2 RS Light Confirmation	Steady	Flashing		
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 (Brake Pedal x5)			
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		
7 Crank Time	0.7 sec	1 sec	1.5 sec	2.25 sec
8 Door unlock output	0.8 sec	3 sec	Double Unlock	
9 Remote Start Unlock Control	Off	N/A	Unlock before start	
10 Turbo Timer	Off	1 min	2 min	3 min
11 N/A				
12 Data Port Protocol	D2D (Trilogix)	ADS (iData)		

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.

The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.