

Technical Description



The SS-FD23-04 is a highly reliable and versatile control module that provides a clean Start/Stop interface for the Ford 2023 F250-F600. It is designed to integrate seamlessly with the Ford SEIC Signal Inputs and Outputs, eliminating common wiring errors and providing a fully integrated solution for remote Start/Stop functionality.

Key Features

- Provides Decoded Park Brake and Park Signals
- Integrated PTO Relay
- Two Preset RPMs (RPM-STBY and RPM1) available for high idle command
- RPM-STBY selected by enabling the unit and RPM1 by one of two interfaces (GND and +12V)
- User re-programmable preset RPM settings
- Compact size with panel-mount case for easy installation near the steering column

The SS-FD23-04 is a Super Duty control module that goes beyond Start/Stop functions to provide high idle and PTO when and how you need it. Each module has two user programmable RPM settings (RPM-STBY and RPM1) in addition to Start and Stop capabilities. The RPM1 has two different polarity control interfaces. In addition it provides decoded PARK and PARK BRAKE signals (GND TRUE).

The module ships with two cables. The first cable harness connects to the SEIC Blunt Cut Wires (Group 3), the Ignition Switch Interface (Group 1) Blunt Cut Wires, and the control and power interfaces blunt cut wires (Group 2) for the SS-FD23-04. The second cable T-Harness connects to the Data Bus at the Trailer Brake Controller Module in order to decode the PARK and PARK BRAKE signals.

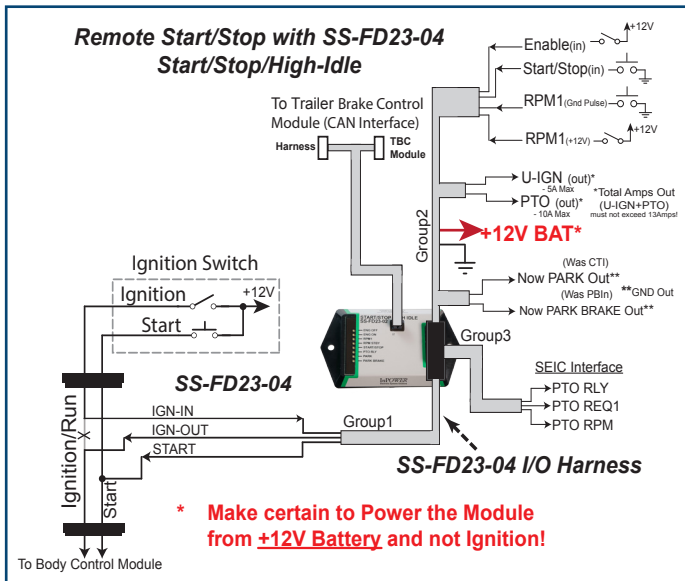
The SS-FD23-04 also features 8 diagnostic LEDs that aid in troubleshooting, while the lightweight and low profile design makes installation easy. In addition, the two High-Idle settings (RPM-STBY and RPM1) are user programmable from the initial factory settings and the SS-FD23-04 provides decoded PARK and PARK BRAKE discrete signals.

Integrated Solution: The SS-FD23-04 is a highly integrated solution for remote Start/Stop functionality for your Ford chassis. It eliminates the need for multiple relays for (in addition to decoding the nonavailable PB signal), provides the following Relay functions:

- **Remote Stop**
- **Remote Start**
- **Time Delay**
- **PTO REQ**
- **PTO Interlock**
- **RPM Selection**

Overall, the SS-FD23-04 is a reliable and versatile control module that provides a clean Start/Stop interface, high idle, and PTO when and how you need it. Its compact size and integrated solution make it a great choice for anyone looking to implement a fully integrated and reliable system for their Ford chassis engine.

System Integration



Ordering Information

Model	Description	Outputs
SS-FD23-04-C	Customizable (See PDS-257 DataSheet)	Ignition, PTO, PARK, PARK BRAKE
SS-FD23-03	Blunt Cut Harness Short Blunt Cut wires. (See PDS-257 DataSheet)	Ignition, PTO, PARK, PARK BRAKE
SS-FD23-04	Full kit with Ign. T-Harness	Ignition, PTO, PARK, PARK BRAKE

Note: Custom Modules available, if you need custom outputs or signals from the databus not available in our standard configuration.

SS-FD23-04

2023 F250-F600 Ford Start/Stop/High-Idle Control Module

Operational Notes

- StndBy Amps:** • BAT (Red) with IGN OFF, less than 10uA at 12.8Vdc
- Ground:** • GND (Black) Connects to Battery Ground
- ENABLE:** • Pink Wire, Steady +12V Wakes up, Unit Enters RPM STBY
- PARK:** • Dark Blue Wire, Sinks 1 Amp
- PARK BRAKE:** • White/Blk Wire, Sinks 1 Amp
- RPM1 GND:** • Tan Wire, Gnd Pulse,
• 1st Pulse Selects RPM1, 2nd Pulse selects RPM STBY
- RPM1 +12:** • Violet Wire, +12V level (locks out Gnd Pulse)
• Removal of +12V selects RPM STBY
- PTO-OUT:** • Provides up to 10Amps for PTO Relay
- U-IGN:** • Uninterrupted Ignition up to 5Amps for upfitter components needing power during remote STOP
- Start/Stop:** • Gnd Pulse Starts/Stops the Engine if Chassis Ready Conditions are met, (Monitors RPM to Verify Engine On/Off)

LED Status Indicators:

- ENGINE OFF:** Engine Off (Blinking if RUN is ON and ENABLE is OFF)
- ENGINE ON:** Stdby RPM setting
- RPM1:** RPM1 Selected
- RPM STBY:** RPM STBY selected (Default RPM)
- START/STOP:** LED ON when Input Active
- PTO RLY:** PTO Relay Engaged/Not Engaged(Flash)
- PARK:** Shifter in PARK
- PARK BRAKE:** Park Brake Engaged

Default RPM Settings

+/- 5% Tolerance (Ford Interface Dependent)

- RPM-STBY:** - 870 RPM Gas, 950 RPM Diesel
- RPM1:** - 1200 RPM Gas, 1500 RPM Diesel

Mechanical

Dimensions: • 4.4 L x 2.62 W x 0.8 H inches

Chassis Ready Conditions:

1. Engine running at idle speed below 1,000 RPM.
2. No vehicle speed.
3. Automatic transmission in Park.
4. Service brake not depressed.
5. Accelerator pedal not depressed.
6. Parking brake set.
7. No Diagnostic Trouble Code (DTC).
Check Engine light must be off.

Installation

1. We recommend that the module be installed by a person trained and skilled in vehicle electrical systems. The installation should comply with SAE (Society of Automotive Engineers) and the vehicle manufacturer's electrical wiring procedures (e.g. Ford).
2. The module should be installed on the inside of the vehicle in a dry, protected environment near the Steering Column (OBDII Connector and Trailer Brake Controller) for access to the Ignition Wiring.
3. The 12 volt power input must be from a properly fused +12 volt from the battery.
4. Wiring must be of the proper gage and type to handle the intended load currents.
5. If you are experiencing problems with the installation or need troubleshooting assistance, contact InPower Customer Service at 740-548-0965.

Mechanical Drawing

