




Preliminary & Troubleshooting Guide for SFM7000 GPS Units

- The LEDs should be referred to as a preliminary validation step before calling in the installation.
- This is a complimentary troubleshooting reference document. Please refer to the full installation guide as your primary source of information.

Green 	Solid	The green LED represents cellular communication and should turn solid when a cellular connection has been established.
Yellow 	Flashing	The yellow LED represents GPS acquisition, and will flash to indicate that we have acquired a GPS signal. A yellow LED that is off indicates that we have not acquired a GPS signal.
Red 	Solid	The red LED represents ECM communication and should turn solid when we have established communication with the vehicle's onboard computer. Please note that the ignition must be turned on in order to test the ECM connection.

Troubleshooting Steps

Tips for a flashing green LED (Refer to page 3 of the Installation Guide)

1. Wait between 5 to 10 minutes to give the GPS unit enough time to connect to cell. Various external factors like poor cell coverage, might contribute to a longer connection delay.
2. Ensure that the vehicle is outdoors for better reception. Please wait 2 to 5 minutes to allow the GPS to connect to a cellular network.
3. Ensure that there is at least 1 foot between the cell antenna and the GPS antenna. If any adjustments are made, please wait 2 to 5 minutes to allow the GPS to establish a cellular connection.
4. Ensure there is at least 1 foot between the cell antenna and the vehicle's radio. If any adjustments are made, please wait 2 to 5 minutes to allow the GPS to establish a cellular connection.
5. Move the cellular antenna to an alternate location, wait 2 to 5 minutes to allow the GPS to establish a cellular connection.
6. Try a different cell antenna. Wait 2 to 5 minutes to allow the GPS to establish a cellular connection.

Tips for a yellow LED that is off (Refer to page 3 of the Installation Guide)

1. Ensure that the vehicle is outdoors in an obstructed area. Please wait 2 to 5 minutes to allow the GPS to acquire a GPS signal.
2. Ensure that there is no metallic material directly above the GPS antenna. Metal will interfere with the GPS signal. If any adjustments are made, please wait 2 to 5 minutes to allow the GPS to acquire a GPS signal.
3. Move the GPS antenna to an alternate location. Wait 2 to 5 minutes to allow the GPS to acquire a GPS signal.
4. Try a different GPS antenna. Wait 2 to 5 minutes to allow the GPS to acquire a GPS signal.

Tips for a flashing Red LED (Refer to page 2 of the Installation Guide)

1. Ensure that the vehicle's ignition is on (engine running). The ECM cable will only communicate with the vehicle's onboard computer when the ignition is turned on.
2. Ensure that the ECM cable is securely fastened
3. Ensure that the ECM Dongle and adapter cable are used for J-bus connection/ports. Please note that OBDII connections/ports do not require the ECM Dongle and adapter cable
4. Test the vehicle's ECM port with a volt meter to ensure that it is not defective. 2 volts is a good indication that the ECM port is functional.
5. Try a different ECM cable

Before calling to activate and test the GPS unit, please note the following information:

Vehicle number: _____

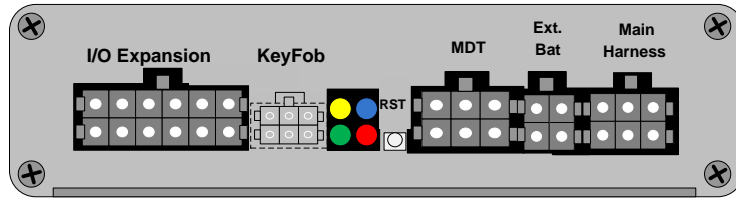
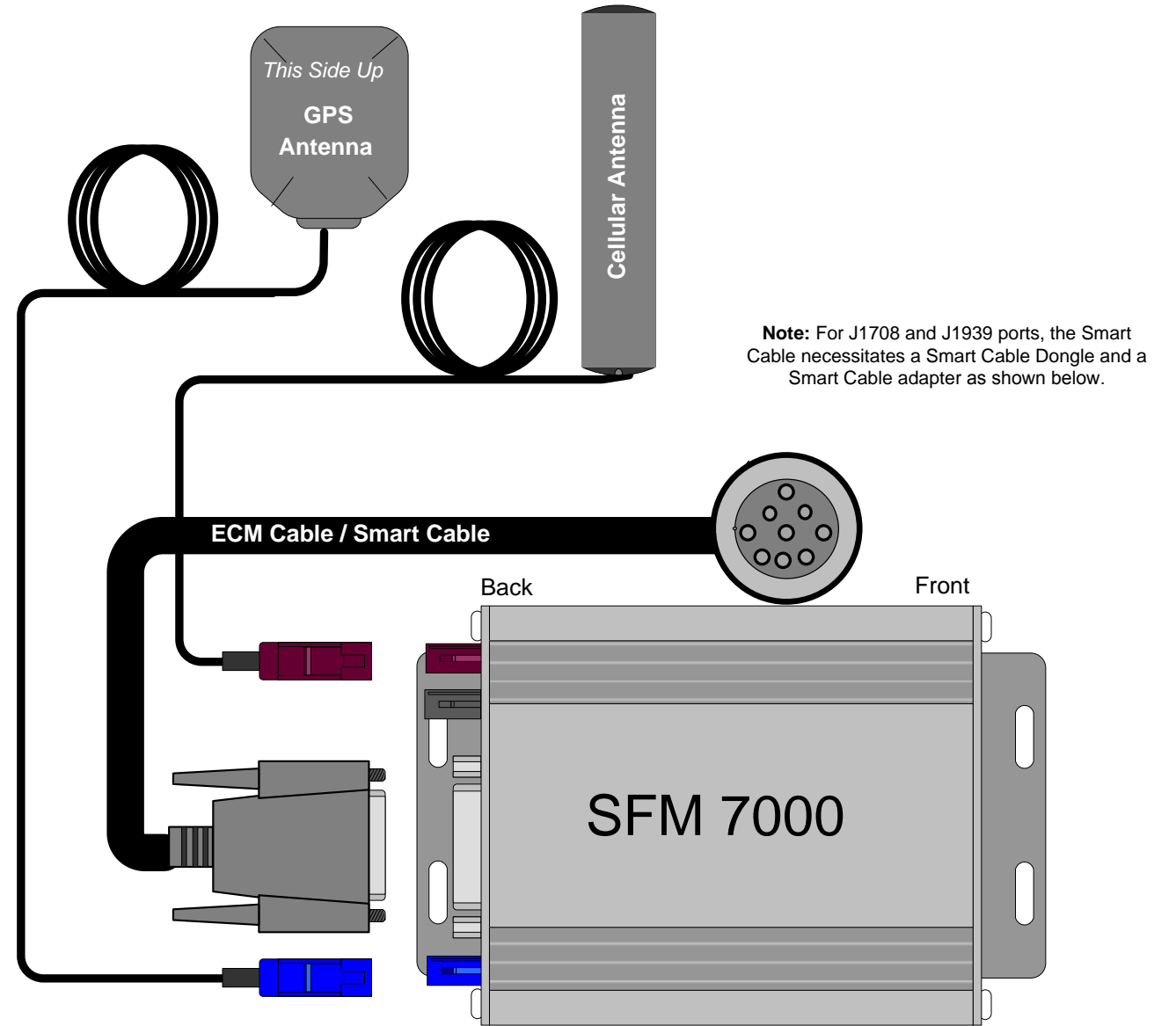
GPS Box Id: _____

SFM 7000

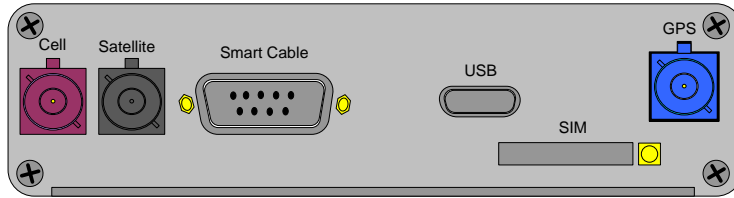
Quick Install Guide with Diagram

This Quick Installation Guide only covers the *basic installation* of our SentinelFm product line. Please contact Customer Care at (866) 578-4315 or e-mail customer care@bsmwireless.com for the GPS check.

Color	Function	Flashing	Solid
Green 	Cellular	In Progress	
Yellow 	GPS		N/A
White 	Satellite	N/A	N/A
Red 	ECM Cable	N/A	

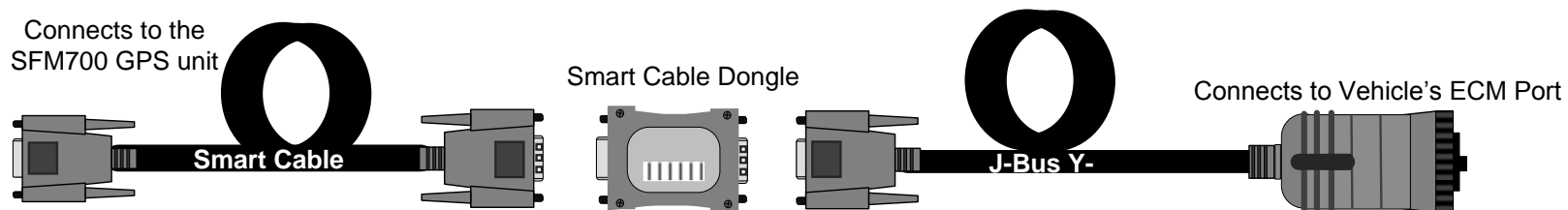


Front

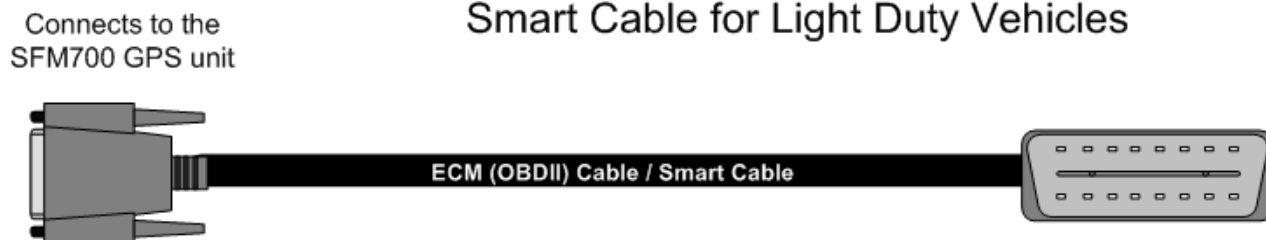


Back SIM Card Holder

Smart Cable for Heavy Duty Vehicles



Smart Cable for Light Duty Vehicles



GPS Unit should be secured in an unexposed and dry place, typically under the vehicle dashboard. **The GPS unit needs to be mounted to a solid part of the vehicle**, either the chassis (frame) or any other solid surface that will not move during normal usage of the vehicle.



ECM Y-Cable should be connected to the vehicle's ECM port. A **red** solid LED indicates that we have established communication with the vehicle's on-board diagnostic system.



Cellular Antenna – must be mounted vertically, at least one inch away from any metal and at least one foot away from the GPS antenna and vehicle's radio. Bundle excessive wiring and secure with zip ties. A solid **green** LED indicates that we have established cellular communication



GPS Antenna – is typically installed underneath the dashboard close to the front windshield with the beveled side pointing towards the sky. The GPS antenna can be placed underneath plastic but **there should be no metallic material directly above it**. Verify that tints on windows above the antenna are not metallic. Also verify that the windows in the vehicle are not lead impregnated (heat shielded). Secure the GPS antenna with double-sided tape or similar, to prevent vibration. Bundle excessive wiring and secure with zip ties. The **yellow** LED will start flashing when we have established a GPS connection.

Updated Costa Kolokithias	DATE 08/07/2015	Quick Installation Diagram	
Design Costa Kolokithias	DATE 01/23/2015	Page 2 of 2	SFM 7000 Quick Installation Guide REV 1