2009-2014 Yamaha R1

Installation Instructions

PARTS LIST

- 1 Ignition Module
- 1 Installation Guide
- 2 Velcro strips
- 1 Alcohol swab
- 1 CAN link cable
- 1 USB cable
- 1 Posi-tap



THE VEHICLE'S IGNITION MUST BE TURNED OFF DURING THIS INSTALLATION! BEFORE THIS MODULE CAN BE USED THE POWER COMMANDER 5 MAY NEED TO BE UPDATED. (SEE INCLUDED INSTRUCTIONS.)

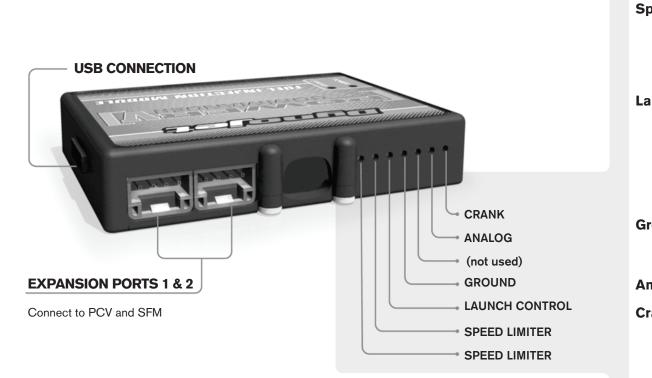
USE WITH

PLEASE READ ALL DIRECTIONS BEFORE STARTING INSTALLATION

2191 Mendenhall Drive North Las Vegas, NV 89081 (800) 992-4993 www.powercommander.com

FOR

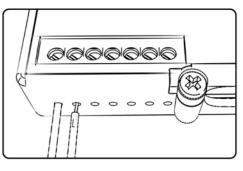
IGNITION MODULE V INPUT ACCESSORY GUIDE



Wire connections:

To input wires into the IM first remove the rubber plug on the backside of the unit and loosen the screw for the corresponding input. Using a 22-24 gauge wire strip about 10mm from its end. Push the wire into the hole of the IM until is stops and then tighten the screw. Make sure to reinstall the rubber plug.

NOTE: If you tin the wires with solder it will make inserting them easier.



ACCESSORY INPUTS

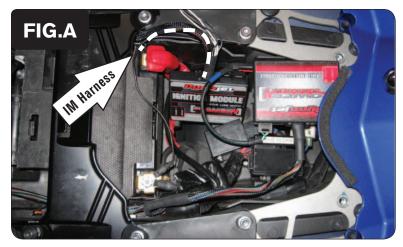
Speed This input has the ability to activate a limiter based on speed. This is intended to be used as a pit lane speed limiter. You can use any OPEN / CLOSED type switch to activate this feature.

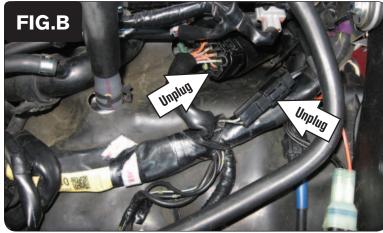
Launch This input is intended to be used as a launch control. You can set a target RPM to limit the bike to when the clutch lever is activated. Once the clutch lever is released full RPM can be achieved. This requires a wire be connected to the grounding side of the clutch switch and the other end into this input.

Ground This is a digital ground. You can connect the BLACK/WHITE crank wire of the SFM to this location if necessary.

Analog- Not currently used - updates to follow

Crank- Connect the WHITE crank wire from the SFM (if installed) to this input. This is only needed if you are going to use the Rev Xtend feature.







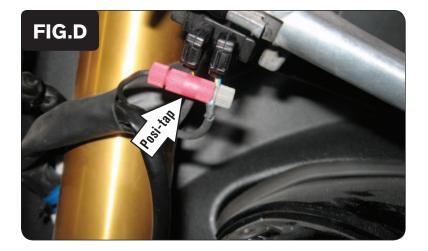
- 1 Remove the seat. Loosen, lift, and prop the front of the fuel tank up.
- 2 Lay the Ignition Module near the battery and route the harness down the right side of the bike. Route the harness beneath the battery bracket (Fig. A).
- 3 Attach the ground wire of the Ignition Module to the negative (-) side of the bike's battery.
- 4 Plug the CAN link cable into one of the expansion ports of the Ignition Module and the other end into one of the expansion ports of the PCV module.

It doesn't matter which ports you use.

Older Ignition Modules with a serial number beginning with 14 or less might also require a CAN termination plug to be installed in an empty port. Newer Ignition Modules with a serial number starting with 15 or higher do NOT require CAN termination plugs.

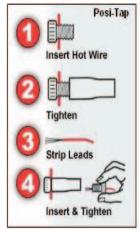
- 5 Unplug the stock 12-pin connector pair next to the crank case breather.
- 6 Unplug the stock BLACK 2-pin connector pair from the Crank Position Sensor (Fig. B).

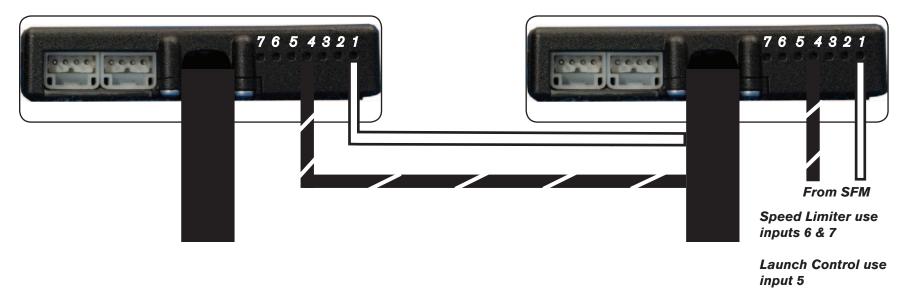
- 7 Plug the Ignition Module wiring harness in-line of these stock wiring harness connectors (Fig. C).
- 8 Reinstall the fuel tank and the seat.



Connecting to the clutch wire for launch control (optional):

Connect a 22-24 gauge wire to input #5 of the Ignition Module and the other end of the wire to the BLUE/ YELLOW wire of the stock wiring harness at the clutch switch (Fig. D).





Connecting the Ignition Module to the PCV:

- The WHITE and the BLACK/WHITE wires from the Ignition Module are used ONLY if you want to use the Rev Xtend feature of the PCV. If you do NOT plan on using this feature, than just tape the wires out of the way.
- If you DO plan on using the Rev Xtend feature, than connect the WHITE wire from the Ignition Module to the #1 input position of the PCV. Connect the BLACK/WHITE wire to the #4 input position of the PCV. The BLACK/WHITE wire can also be connected to the #6 input position of the PCV, if necessary. If both inputs on the PCV are already occupied, you can splice the BLACK/WHITE wire to either wire currently occupying the #6 or #4 PCV inputs.
- If you are also using the SFM (Secondary Fuel Module), than you will need to connect the WHITE and BLACK/WHITE wires from the SFM into the Ignition Module. Connect the WHITE wire from the SFM to the #1 input position of the Ignition Module. Connect the BLACK/WHITE wire to the #4 input position of the Ignition Module. The BLACK/WHITE wire can also be connected to the #6 input position of the Ignition Module, if necessary.

Adding the Ignition Module to the PCV network:

- First download and install the latest version of the PCV Control Center Software (which is version 1.0.6.4.) from the PCV Downloads page of www.powercommander.com.
- To use the Ignition Module you may need to update your firmware in the PCV (and SFM if being used). Make sure the PCV, SFM, and Ignition Module are all updated to PCV firmware version 0.1.10.6 or newer. Go to View -> Device Information in the software to see the current versions. If you need to update the firmware, go to Power Commander Tools -> Update Firmware. The latest version of the PCV firmware and software can be found on the PCV Downloads page of www.powercommander.com.
- Connect a USB cable to the PCV and another USB cable to the Ignition Module. The software will ask you to add the Ignition Module to the network.
 Click OK. Go to Power Commander Tools -> Manage Network and click on Sync Devices Utility. Follow the on screen instructions.

PCV