

# Magical Racing Japanese Spec Full Power Converter for '08- CBR1000RR

Thank you very much for purchasing Magical Racing's product.  
Please read and fully understand this manual before installing  
the parts on your bike.

## This kit include

Description	Qty
Japanese Spec Full Power Converter	1
Bullet Terminal (male) with Insulator sleeve	5
Bullet Terminal (female) with Insulator sleeve	8
Wire Harness Set (Red/ Black / Yellow /)	1
Switch box	1

## Product Description

Japanese Spec Full Power Converter modulates speed sensor pulse on your bike  
and provides following functions.

1. Cancels speed limiter
2. Corrects speed meter indication

## Warning

This product is specifically designed for use in race track. DO NOT ride your bike on the public street with this product installed. Both Magical Racing and Moto-Works.jp are not liable for any accident or damage to this product caused by improper installation of the product.

Installation and set-up must be performed only by qualified mechanic who totally understands all the function of this product.

Please refer to the manufacturer's maintenance manual and special tool, if required, for installing the product.

DO NOT attempt to modify or alter the product.

Make sure to install the module and wire harness away from the components which emit strong radio wave or noise, such as ignition coil, plug cables, to avoid noise interruption to the product.

This product is designed and tested on stock bike without any modification. We cannot guarantee proper operation of the product if it the it is installed on the bike that have been modified or installed with special after market product which produce strong radio wave , such as aftermarket ignition coil, plug cable, racing spark plug, high intensity discharge head light etc..

Wire harness must be installed by referring to both manufacturer's maintenance manual and this installation guide.

DO NOT connect the wire to other places where not specified in this installation guide.

This product is not fully water proofed, especially switch box connectors. Please make sure to install on the Please avoid installing the product where severe vibration might be expected. Sever vibration might cause the product to not function properly or damage to the product. And also avoid installing near the engine or exhaust system to avoid the high temperature.

If any sign of malfunction is noted, stop the engine immediately and contact us.

## Installation

Please read and fully understand the following installation steps before starting the installation.

- \*Make sure to refer also to manufacture's service manual as well as this instruction manual
- \*Remove the Battery from your bike before starting the installation

### 1. Cowling Removal

Remove the following parts from your bike in accordance with manufacturer's service manual.

- Fuel tank cover
- Side cover (Left side)

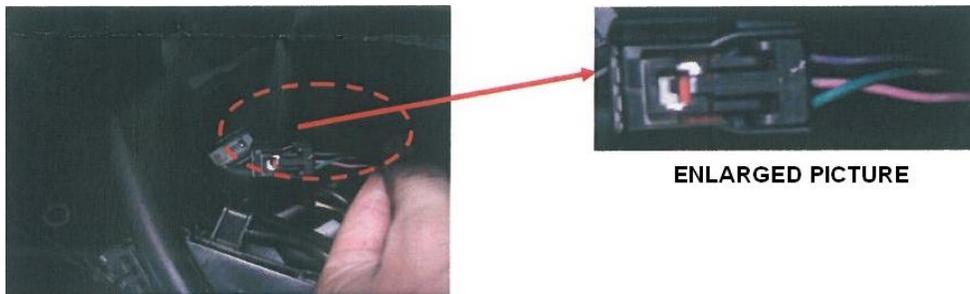
### 2. Electric wire harness installation

#### SPEED SENSOR WIRING

By lifting up the fuel tank identify the speed sensor located under the sponge sheet.

There are 3 wires (pink/green, purple, green/black) connected to the speed sensor housing.

Remove the connector housing from the speed sensor and connect the power converter wires as shown below

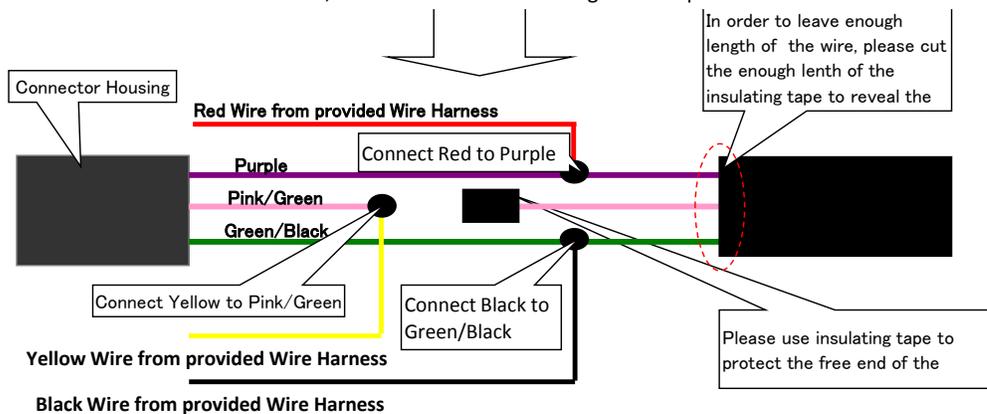


#### Instruction

Cut pink/green wire on connector housing and connect the yellow wire of provided wire harness to the connector housing side of the pink and green wire.

Then connect Red wire of provided wire harness to purple wire, and Black wire provided wire harness to Green/Black wire

When all the wires are connected, install the connector housing back to speed sensor

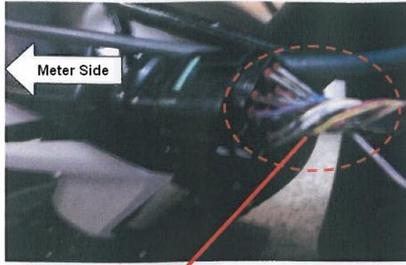


Please solder or use the provided bullet terminals to connect the wires.  
Make sure to use correct crimping tool to crimp the bullet terminals.

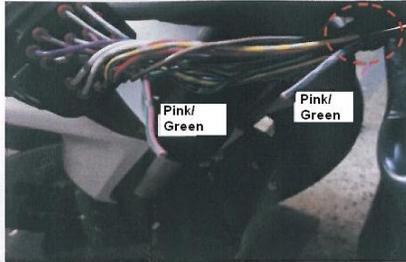
When connecting the wire harness to the speed sensor wiring, make sure to connect them away from the connector housing, in order to make it easier to perform repair, if nessesorry.  
Remove enough length of insulating tape on the speed sensor wires for easier installation.

## COMBINATION METER WIRING

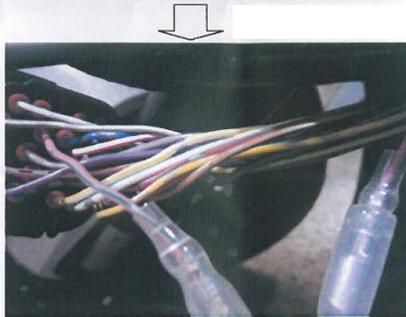
Remove Left Side Cover from your bike  
There is a Black 20P connector housing as show below.  
Disconnect the white 2P connector housing.



In order to leave enough length of the wire, please cut the enough length of insulating tepe to reveal the wires.



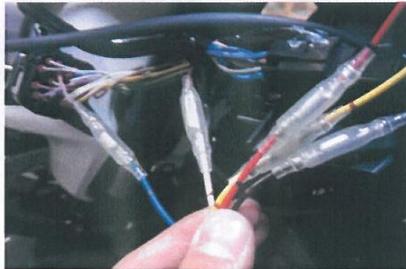
Cut the Pink /Green Wire as shown in the picture



Install Bullet Terminal male and Female on the each end of Pink/Green wires.  
NOTE: There is no Polarity

Please make sure to use press tool with correct size die.

## Power Converter Installaton



Install Red, Black, Yellow wires from the Wire Harness installed on the speed sensor wires to the wires from the Power Converter respectively.

NOTE: Please use provided protective tubing on the wires and route the wires where Power Converter body will be installed.

Install Blue wire on the Power Converter body to the Pink/Green wires (coupler side) by using provided bullet terminal.

Then install White wire on the Power Converter body to the other end of the Pink/Green wires by using provided bullet terminal.

**Install the power converter body on your bike.**

**Make sure any wires and power converter body is not subjected to extreme heat.**

**Avoid installing on around the engine cylinder head and exhaust system.**

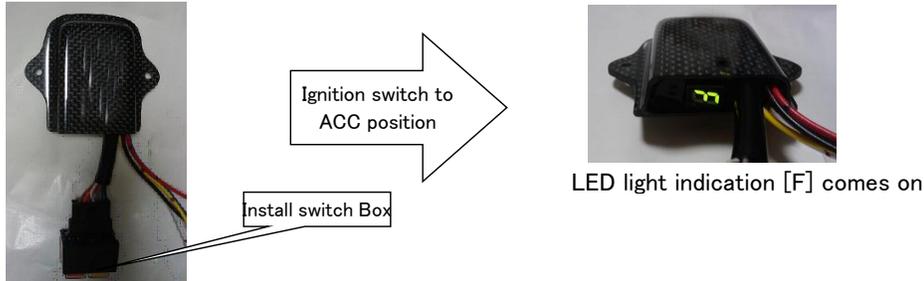
**Use provided protective tubing to cover the electrical wires.**

## OPERATION

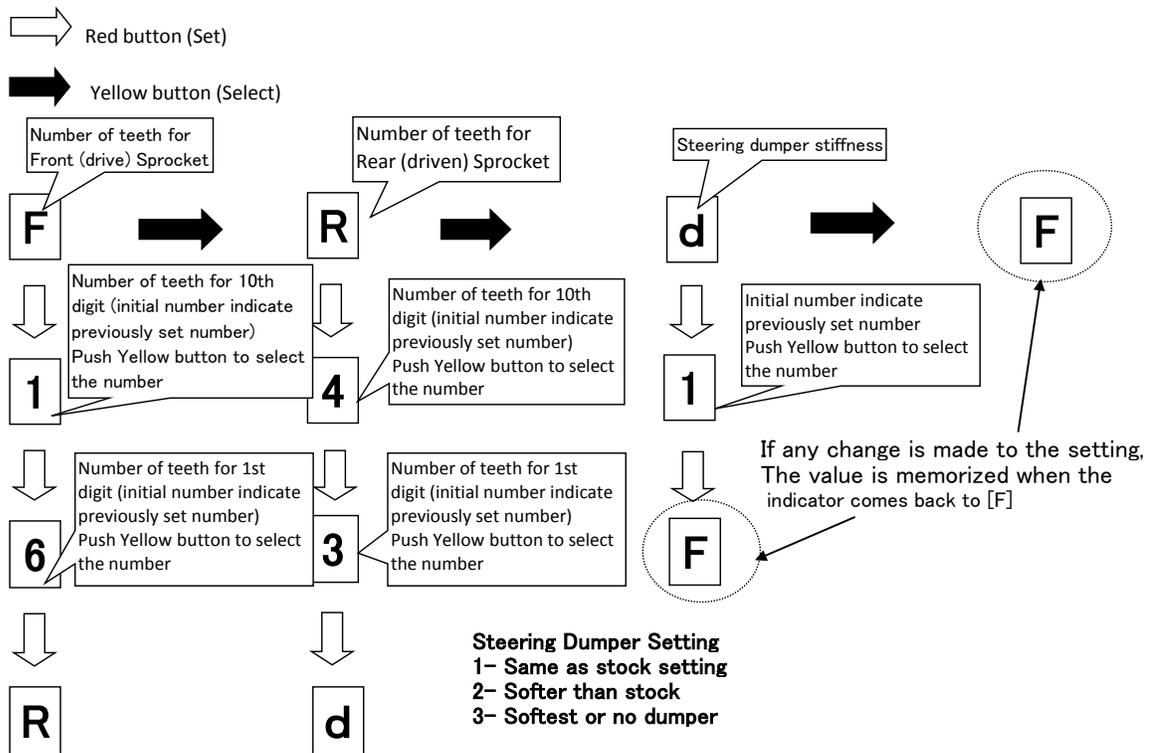
This product allows you to correct the speed meter reading when the number of teeth is changed on driven and drive sprocket. Also it will allow you to change the steering dumper stiffness setting.

## SETTING UP THE POWER CONVERTER

Connect the provided switch box to the power converter, then turn the ignition switch to ACC position. You will see the LED light comes on as shown below



The LED light indicates [F] when the switch is turned on. Setting is memorized on the power converter when any change is made on each setting mode and came back to the [F] indication.



**Drive(front) sprocket setting range 10 to 19 teeth**  
**Driven (rear) sprocket setting range 10 to 59 teeth**  
**Steering Dumper Setting range 1 to 3 stiffness**

After completing the setting, remove the switch box from the power converter. The power converter does not operate correctly when the switch box is left installed.