

INPUT SHAFT RPM SENSOR INSTRUCTIONS

Overview:

The input shaft RPM will tell you how many revolutions per minute your input shaft is spinning.

Part Numbers:

#8021 Universal Input Shaft RPM Monitor Kit

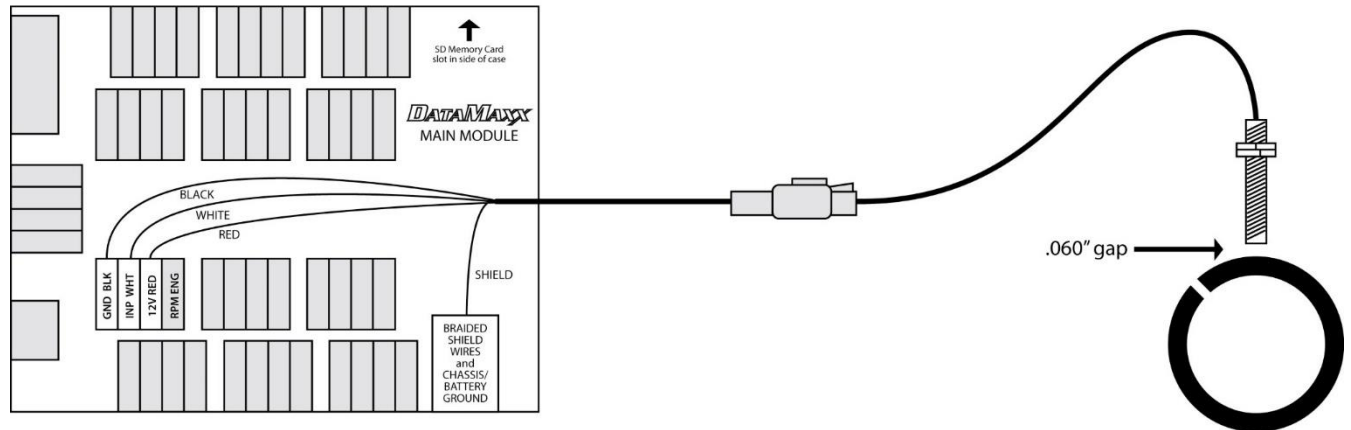
Installation:

For the input shaft sensor and trigger installation, please get specific details from your transmission supplier. The typical sensor gap required for most input shaft installations is approximately .060". The use of the Computech supplied pick-up magnet and alignment of the magnet and sensor are critical for proper operation.

If you are using the 3 wire input shaft sensor that has metal threads, you will need to make sure that the north side (painted side) of your magnet is facing toward your sensor. You can check this easily by placing a compass to the magnet. If the North side points away from the magnet then you are correct. If South points away from the magnet then the magnet needs to be reversed.

Connect the white wire to the Main module "INP WHT" terminal (id #30), the black wire to "GND BLK" terminal (id #29), and the red wire to "12V RED" terminal (id #31).

**Make sure that the dip switches "InpPuP" and "InpGnd" are in the ON position. These are number 1 and 2 on the block of 4 dip switches.



Calibration:

The *DATAMAXX* input shaft RPM channel is pre-configured for use with 1 magnet. You have the option of a 1, 2, and 4 magnet configuration.

To Calibrate:

- Follow the Initial Calibration instructions in the Software section, OR:
- Record a short 5 second test log file, and download the log file correctly using the SD button.
- Select Edit, then Properties. You are now in the Channel Properties area.
- Find the "Inputshaft RPM" line, follow it to the right, and click on the finger pushing a red button.
- Change the "Type of Sensor" and the "Channel Name" to what you want.
 - Note that changing the channel name anything besides "Inpshf" will disable your calculated channels.
- When you are done, select OK, and then "Send Config to DataMaxx".

Dip Switch Setting:

C – ON

D – ON

Testing:

Crank the engine while the transmission is in neutral so that the input shaft safely turns.

Troubleshooting:

- Adjust The Gap: If you are not getting any signal after going down the track, the first step is to adjust the gap between your driveshaft sensor and the collar. It's recommended to first move the sensor closer, incrementally, until you cannot move it any closer. If that does not work, then start backing it out. Once you find a spot where it works well, you should be good to go. If adjusting the gap does not change anything you need to perform the "Tap Test".
- Tap Test: If adjusting the gap does not work, the next step is to perform a Tap Test. Please refer to "Testing RPM Channels" in the Troubleshooting section on instructions on how to do the Tap test properly. If the tap test fails, please call Computech Tech Support for more information. If you get a signal from the Tap test then that tells us that the Module and sensor channel are working correctly and the issue is either the wiring, extension cable, the sensor itself or the gap and you need to perform the "Magnet Test".
- Magnet Test: The next step after confirming the Tap test works is to remove the sensor from where it is mounted, leaving it wired up to the entire system. We now want to record a log file while waving a magnet in front of the tip of the sensor. To do this properly, you want to get the magnet as close to the tip as possible, and move it back and forth, rather quickly and steadily. Doing so should result in at least some random spikes on the graph and if done consistently will result in a steady RPM. If the magnet waving test works and you see an RPM signal on your graph, then you now know that the wiring, extension cable and sensor itself are working correctly and the issue must be your gap. At this point, go back to the .60" gap and incrementally move closer. If you still cannot get it after adjusting the gap again, call Computech Tech Support. If the magnet test fails, then we need to "Check the Extension Cable".
- Check the Extension Cable: The first step is to make sure your extension cable is making a good connection at the Module. To do this, it's recommended to physically remove the wires from the terminal, visually inspect them to make sure the insulation was not being crimped down on and then re-install the wires back into the terminals. Do the "Magnet Test" again. If the "Magnet Test" fails again, the final step is to check continuity between the end of the extension cable and the terminals the wire is connected to. You may have to remove the orange cover off of the extension cable plug—take a pair of needle nose pliers and pull it out. Then check the continuity between the plug and the terminal it is connected to. If you have continuity, your extension cable is fine and the issue is your driveshaft sensor itself. Contact Computech Tech Support. If the continuity test fails, the issue is your extension cable, and you need to replace it with a new one.