



SHIFT LIGHT CONTROLLER RPM ADJUSTABLE SWITCH

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This module is connected to a tachometer / engine RPM signal, and provides a 2-amp low side switching output that can be configured to activate from 100 to 10,000 RPM, ideal for triggering an aftermarket shift light.

WIRING CONNECTIONS

RED	BLACK
12v Power	Ground
BROWN	YELLOW
Input	Output

Red + Black should be connected to a fused switched ignition source and ground.

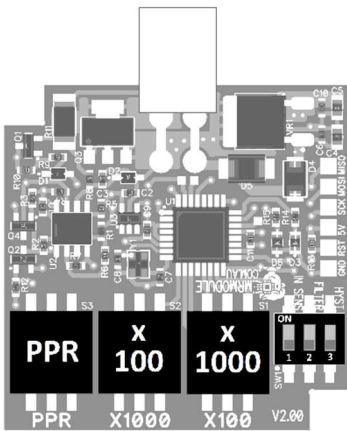
The input signal should be connected to the brown wire. This could be a DC voltage square wave signal from an ECU / ignition module or hall effect sensor, ignition coil negative, or an AC voltage from an inductive type sensor.

IMPORTANT: If using CDI type ignition (Capacitive Discharge Ignition, eg. MSD), use the tacho signal output supplied from the CDI module. Do not connect directly to the ignition coil.

If using a 2-wire inductive sensor as input, ground the opposite wire of the sensor directly at the module.

The yellow output wire will be switched to ground when the detected RPM exceeds the configured switch point. The output is rated for 2 amps, and has built in overload / short circuit protection.

CONFIGURATION



Remove the 2 Phillips screws to open the module. Inside you will find:

- 1x Rotary switch for input Pulse Per Rev (PPR) selection
- 2x Rotary switches for output switch point (RPM) selection
- 3x DIP switches for configuration, with the following functions:

		OFF	ON
1	Input Sensitivity	High	Low
2	Input Filter	Disabled	Enabled
3	Input Hysteresis	Disabled	Enabled

There are also LEDs that will illuminate:

- Yellow: When the module is receiving a valid input signal.
- Red: When the input is above the set point and the output is active.

PPR (Pulse Per Rev) refers to the number of pulses of the signal for each engine revolution. Common values are 0.5 or 2, but will depend on application (and where you are sourcing the input signal from). When '0' is selected, a PPR of 0.5 is used. For all other whole numbers, the number on the rotary switch applies.

The switch point (RPM when the output will become active) is selected in 100 RPM increments using the **X1000** and **X100** switches. When both switches are set to '0', the set point is 10,000 RPM. Otherwise, it is the values indicated by the switches. Example: X1000 switch on 5, X100 switch on 7 = 5700 RPM.

Input Sensitivity should generally be OFF for DC inputs (hall effect) and ON for AC inputs (inductive sensors). In the OFF state, inputs of DC 3.0V or AC 2.0v RMS or greater will be received. In the ON state, inputs of DC 0.5v or AC 0.35v RMS or greater will be received.

The input signal is averaged over 3 cycles to help prevent noise interfering with the output. When using an input signal below 2 PPR, a 'multi-fire filter' will ignore input pulses faster than 2.5ms / 400 Hz. This is useful for getting an RPM signal from engines that fire the coils multiple times per cycle at idle. These can be disabled with switch 2.

The output has hysteresis to prevent rapid switching around the set point. Once on, the output will remain on until RPM drops to the set point minus 2% (eg. ON at 6000 RPM, OFF at 5880 RPM). This can be disabled with switch 3.