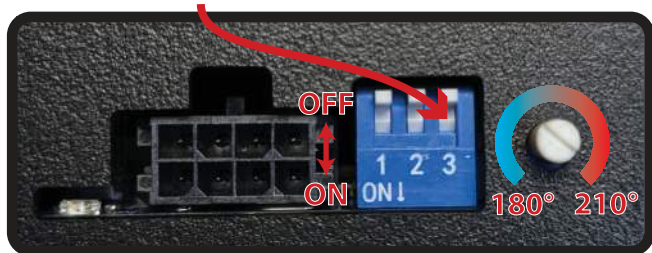




Installation and User Manual

Settings

Locate the the 3 DIP switches on the side of the module.



Switch	OFF	ON
#1	JK Pentastar	JT Gladiator / Commaro SS
#2	12v signal activates fan wires	Ground signal activates fan wires
#3	Fan idle off	Fan idle on

Temperature Knob - Adjust the white knob to your desired fan ON temperature.

- Fully left = 180°F
- Fully right = 210°F

The fan gradually ramps to full speed at 15°F above the selected temperature. (Example: Knob set to 195°F. Fan starts rampin up at 195°F and is full speed by 210°F)

Quick start guide

Determine mounting location

Mount your controller in a dry, protected location, away from exhaust components.

Wire identification - Run wires from your PWM fan controller to the following locations

Red - 12 volt (key on) power source

Black - Ground

Green - Pentastar fan green control wire (fan side)

Yellow and White - Included temp sensor. (do not splice with other temp circuits)

(Optional)

Brown - Pentastar Fan Green control wire (Jeep Side) (prevents CEL and allows the Jeep to control the fan if the E-PWM is powered off.)

For AC fan and/or manual fan control

Orange - LOW speed trigger. When 12V or ground is applied (depending on DIP #2), fan spins at 50%. Usually this wire will connect to your A/C clutch 12v wire. In this case set DIP #2 to OFF.

Blue - High speed trigger. When 12V or ground is applied (depending on DIP #2), fan spins at 100%.

Features

LED feedback

RED = Powered/Standby

BLUE = Automatic Mode (Idle or Temp sensor controlling)

GREEN = Manual Mode (LOW/HIGH fan speed wire controlling)

Low fan idle (Optional) - When active, the fan constantly spins at its lowest setting (once above 165°F if the temp sensor is connected). Having constant air movement through the engine bay is important to keep the engine bay from heat soaking/-saturating. High under hood temperatures can lead to overheating engines, plastics becoming brittle, and engine components and sensors failing prematurely. The fan only uses 1.5 amps when idling.

Slow ramp up - draws a maximum of 30 amps by gradually increasing speed — avoiding the 60–80 amp spike common with standard fans.

LOW and HIGH fan speed control - These Low and High settings are commonly used to turn on fans when the vehicles Air conditioning is running, or for manual operation such as a dash switch or PCM fan outputs. Set your DIP switch to match your input signal.

GM PCM pinout. (not needed if using temp sensor)

GENIII

C1 (BLU connector) PIN 42 is fan 1 control

C2 (RD/GRN connector) PIN 33 is fan 2 control

GENIV

X1 (BLK connector) pin 58 is LOW speed fan control

X1 (BLK connector) pin 17 is High speed fan control

Advanced GM PCM tuning using HP tuners (not needed if using temp sensor)

GM GEN III Example: Below is a screenshot from a 2004 tune. The “Fan Type” drop down box needs to say 2 fans to enable the two fan speeds. The Low fan speed is controlled by fan 1, the High fan speed is controlled by Fan 2.

General		Fans	
Hardware		Fan 1 (First Stage)	
Fan Type	2 Fans	On ECT	210 °F
		Off ECT	200 °F
		Enable Speed	0 mph
		Fan 2 (Second Stage)	
		On ECT	225 °F
		Off ECT	210 °F
		Enable AC Press	500 psi

GM GEN IV Example: Below is a screenshot from a stock 2010 programming that will turn the low speed fan setting on at 200 degrees and the high speed fan setting at 230. Most Stock GENIV tunes will run the fans correctly without reprogramming.

General		Fans	
Hardware		Relay Controls	
Fan Type	Discrete	State vs. Desired %	Control By %
Number of Fans Fitted	2	Output Control vs. State	Desired % vs ECT
Duty Cycle			
Fan PWM Freq	128 Hz		

Fan Output	0	1	2	3	4	5	6	7
Fan Output 1	0	1	1	1	1	1	1	1
Fan Output 2	0	1	1	1	1	1	1	1

Engine Coolant Temp (°F)															
192.2	195.0	199.4	203.0	206.6	210.2	213.8	217.4	221.0	224.6	228.2	231.8	235.4	239.0	242.6	246.2
Fan Desired	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40

If you are experiencing difficulties & need help further troubleshooting your PWM fan control module, you may call our Technical/Sales Staff at (877)602-1500 9am-5pm MST, Monday-Friday.

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