

Fan Control Module Instructions

This module has dual functions; it provides either a negative trigger for a fan relay or a PWM signal for a factory BMW electric fan, and a high side output for a reverse light rated up to 10 amps. Both functions are compatible with both DDE5 and 6 engines, ZF6HP26/28 gearboxes, and 8HP users that are running on CANTCU.

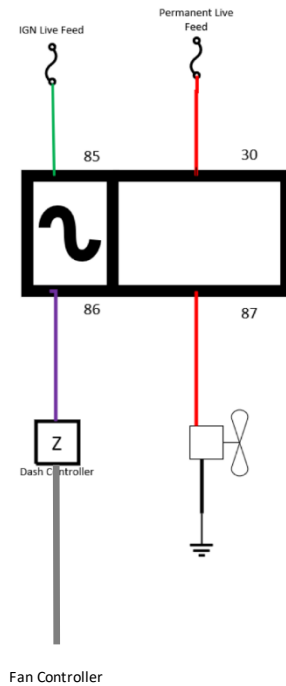
Firstly, the module should be mounted using the mounting holes provided. Be careful not to squash the plastic too tightly! Once mounted, it can be connected, using the diagram shown below:

Colour	Function	Connect to
Red	+12v	Battery positive (fused)
Brown	GND	Battery negative
Light Green	WUP	Ignition 12v supply
Green (twisted)	CAN Low	CANbus network
Yellow (twisted)	CAN High	CANbus network
Red/Green	Reverse light	Reverse light +12v
White	Fan	Relay terminal 85/PWM signal

Important: This module is capable of driving **either** a relay for an electric fan, or outputting a PWM signal to drive a BMW factory electric fan. Other fans can also be used that accept a PWM signal to drive the fan. The advantage of this is being able to run the fan at variable speed, using less power and more effective cooling. PWM fans are usually brushless motors meaning they can also provide more cooling, as they are more powerful.

Fan with relay control:

The relay for the fan should be connected as shown below. The fan is preset to come on at 93 degrees, and go off at 89 degrees. If you would like the fan to come on and go off at different temperatures, please contact us directly and we can cater for your needs.



Fan with PWM control:

Fans with PWM control only have 3 connections:

- Power
- Ground
- PWM signal

Ensure the power and ground supply to the fan are of adequate size (in most cases, it should be 6.0mm² or larger). Also note that most manufacturers fit a large relay to cut the power supply to the fan when not in use (100A rating). This can simply be wired to activate when the ignition is turned on.

The PWM signal should be connected to the white wire from the fan controller. Under normal operation, the fan will not activate until 80 degrees. The fan speed will then increase and decrease based on coolant temperature:

