

## Transit MK7 Dash Controller Instructions

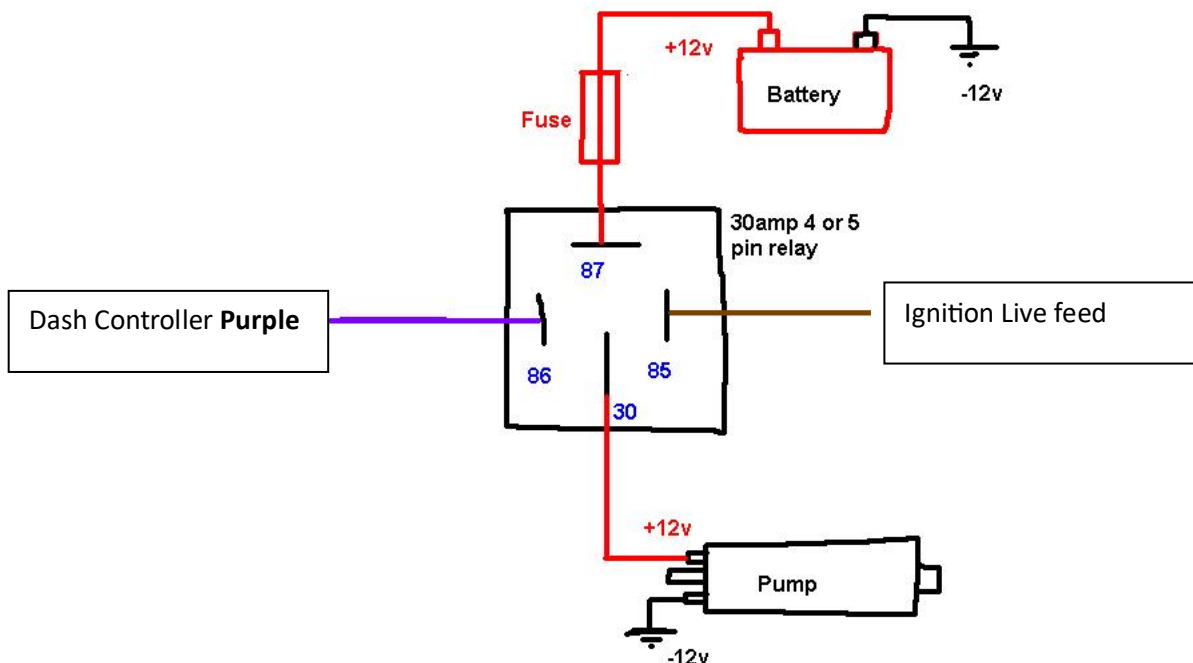
Thank you for purchasing the 2.4 & 2.2 MK7 Dash Controller. To get started, you need to make a few connections to the controller. Once you have removed the Transit's original engine ecu (located in the engine bay, passenger side, next to header tank), the dash controller can be plugged in to one of the plugs. The other connectors are no longer required, and can be left.

The connections for the controller are as follows:

Wire Colour	Function	Connect to
Green	CAN Low	Standalone loom
Yellow	CAN High	Standalone loom
Purple	Fuel Pump relay trigger	Fuel pump relay (see below)
Grey	Fan relay trigger	Electric Fan relay (see below)
Light Green	Ignition Live	
Blue	Brake Signal	Standalone loom
Brown	Brake Signal	Standalone loom

Functions of the dash controller:

Fuel pump relay trigger: Some looms that are currently available for purchase will already have this option (e.g. House of Torque). You can use either output. The switched earth output in the dash controller will run the pump for 10 seconds with the ignition on, then go off. It will restart when you crank the engine over. Below is a diagram showing how you should connect the fuel pump relay:

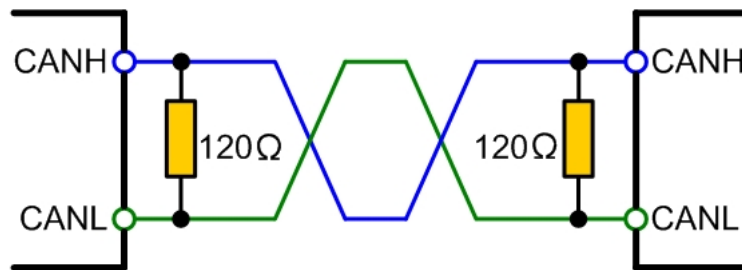


Fan relay trigger: You can use the Dash Controller to drive a relay to activate electric fans. The temperature is preset at 96 degrees on, 93 off (this can be customised to your requirements if necessary). The fan relay must be connected in the same way as the fuel pump relay shown above, instead using the **Grey** wire supplied to drive the relay.

#### CANBUS:

The controller connects directly to the Ford CANBUS through the ECU plug; you do not need to do anything with this. The supplied twisted pair yellow & green CANBUS wires need to be connected to the BMW ECU. If using a House of Torque Standalone loom, there is a connection point for this, the colours are yellow and blue (next to the OBD port). Yellow to yellow, and blue to green.

Once connected, you need to ensure that the CANBUS resistance is correct. This can be achieved by using a multimeter, set to measure resistance, across the pair. The resistance should be somewhere very near to **60 OHMS**. If it is greater, you need to add 1 or 2 120 ohm resistors across the pair, until the resistance equals 60. The diagram below shows how the CANBUS should be terminated:



#### Brake Signals:

Using the brake signals on a MK7 is not a necessity. It is only required when using an automatic gearbox, to allow release of the park shift lock. If you have a House of Torque standalone loom, this is very easy, and the blue and brown wire from the controller will connect directly. If your loom does not have wires for the brake signals, you will need to connect them as follows to the ECU connector:

Blue	Pin 23
Brown	Pin 36