## **D2 Controller Instructions**

Most of the functions of the dash controller are completely plug and play. There are just a few connections that need to be made, in order for everything to work properly!

Included in the kit is a short harness which plugs into the dash controller, you may need to lengthen this depending on your loom, and ECU location. Below are the wire colours, and what they need to be connected to in your standalone harness.

Dash Controller Wire	Connects:	House of Torque
colour		Loom
Yellow/Black	CAN Low	Blue
Yellow/Red	CAN High	Yellow
Yellow	Brake NO*	Black (DDE 5/6
		only)
Blue	Brake NC**	Brown (DDE 5/6
		only)
Purple	Fan relay control	
Pink	K Line***	
Red	IGN to BMW ECU	Red/Black
Pink/White	Clutch (manual only)	
Green	Alternator (DDE6	*Connect to D2 Alt
	ONLY)	light from dash*
Red/Green	Oil Light (DDE6 ONLY)	*Connect to D2 Oil
		light from dash*

Aside from the above, on the standalone harness, make the following connections to the vehicle www.House-of-Torque.com

Colour	Function
Red	Oil Light – to D2 oil light wire (DDE4 & 5)
Yellow/Black	Permanent live

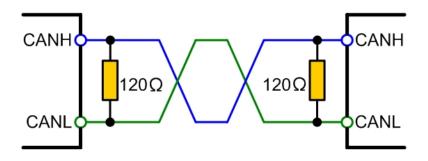
<sup>\*</sup>Brake NO is connected to pin 23 of X2412 on DDE5 & 6, and pin 28 of X2414 on DDE4

\*\*\* K line is connected to pin 8 of X2412 on DDE5 & 6, and pin 32 of X2414 on DDE4. You can connect this if you wish to retain usage of the factory OBD port in the drivers footwell.

Clutch switch is connected to pin 50 of X2412 on DDE5 & 6, and pin 23 of X2414 on DDE4

Ensure that your CANbus network is correctly terminated at both ends as shown below. If you are experiencing any issues, you must check the resistance of the network with every bus participant powered down. With a multimeter across the high and low wires, you should be seeing a resistance of 60 ohms. If it is any more or less, you will be required to add or remove resistors to achieve the correct resistance.

<sup>\*\*</sup>Brake NC is connected to pin 36 of X2412 on DDE5 & 6, and pin 24 of X2414 on DDE4



The ignition live connection from the dash controller is an OUTPUT. Connect it to the standalone harness, or pin 7 of X2412 on DDE5 & 6 engines, and pin 26 of X2414 on DDE4. It comes directly from the ignition barrel on the D2.

## **Fan Connection**

The Dash Controller has facility to control an external cooling fan. The temperature is preset to ON - 93°C, OFF - 89°C. It should be wired up as shown below. The relay coil should be supplied with an ignition live. The Dash Controller creates a path to ground, which energises the relay, and turns on the fan.

