MCRCB TECHNICAL AND SPORTING BULLETIN TSB25-10 **Issued 06.08.25**

Safety Notice – 2025 Bennetts BSB Class – MoTeC Technical Bulletin (Tilt Switch Operation)

Following accidents where the Tilt ("kill") switch has not activated and engines remain running which poses a safety risk to marshals, the following notice is issued and must be implemented.

ENDS.

2025 Bennetts British Superbike Championship **Issued 06.08.2025**

MoTeC Europe LTD – Control ECU Supplier to BSB

Tilt Switch Behaviour in the Event of Dash Disconnection

This bulletin provides clarification on how the BSB MoTeC ECU firmware handles the Tilt Switch signal in the event of a dash disconnection.

When the **Tilt Switch** is assigned to a **Driver Switch Input**, the ECU will retain the last received value if communication with the dash is lost in the event of a fault or crash. If the Tilt Switch was in the **'OFF'** state at the time of disconnection, **the ECU will continue to assume this state**. This means the engine will **NOT** be shut down automatically if the dash is disconnected during a session.

If the tilt switch is instead configured via a **Driver Rotary Switch Input**, the ECU will **revert to a user-defined default value** if the dash becomes disconnected. The default value can be set to **'ON',** so in the event of a dash disconnection, the **ECU will interpret the Tilt Switch as 'ON'** and **shut down the fuelling and ignition outputs accordingly.**

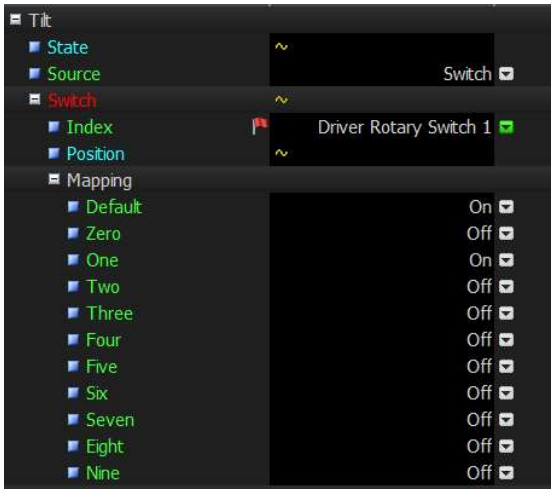
To ensure safe and consistent operation in the event of a disconnection or crash, MoTeC recommends configuring the Tilt Switch input using a **Driver Rotary Switch Input** method with the default value set to **'ON.'** This will stop ignition and fuelling outputs under dash fault or crash conditions. **Please see overleaf for directions on Driver Rotary Switch allocation for Tilt Switch setup.**

MoTeC Europe LTD

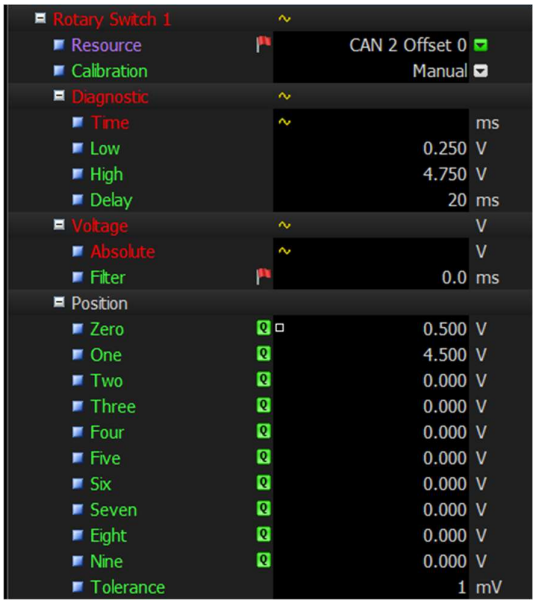
Tilt Switch Driver Rotary Switch Allocation:

In **M1 Tune**, navigate to the **'Setup – Inputs'** worksheet**.** In the **'Tip Over Detection'** window, note the '**Driver Switch'** resource initially set as **'Tilt Switch Index'**, then set **'Tilt Switch Index'** to **'Driver Rotary Switch 1'.**

Under **'Mapping'**, assign the following to the parameters below:



On the same worksheet, in the **'Main Switches'** window, unassign the **'Resource'** of the '**Driver Switch'** that was initially used as **'Tilt Switch'**, this will be listed in the format **'CAN x Offset y'**. Reassign this same resource to **'Driver Rotary Switch 1'** in the same window. Set up the **'Driver Rotary Switch'** as follows (note: this example uses **'CAN 2, Offset 0'** as the resource):



Disconnecting the dash will now cause the Tilt Switch to return to its default position, which has now been set up as **'ON'**. This will therefore cease fuelling and ignition outputs.