

# Independent Hub Control



Independent Hub Control (IHC) is a new **OPTIONAL EXTRA FEATURE** that allows each hub to perform it's own unique control, seperate from any other hub. Previously, Dynapack controllers had to perform the **same control** on both hubs of each axle. This feature is suitable for electric vehicle with individual motors for each wheel.

Independent Hub Controller's can perform the standard 'axle' type of control too - this is software selectable in the "Gearbox Setup" screen. Vehicles with seperate motors in each hub didn't work well with the standard 'axle' control. IHC is suitable for these types of vehicles, while also maintaining the ability to run standard vehicles with mechanical differentials.

To enable this feature it requires an upgrade of the Dynapack's existing hardware, firmware & software. The hardware is an easy DIY fitout and then a remote session via TeamViewer is required to install and setup the software.

\* The control system can run standard independent axle control so there is no loss of function. Vehicles with differentials are therefore still supported.

\* In 4WD each axle is separately controlled so one axle may be standard control (i.e. it has a mechanical differential) and the other axle independent mode (i.e. it has independent electric motors). Any combination of standard axle and independent control can be accommodated.

\* All existing Dynapack 4WD dynamometers have independent axle control.... Independent Hub Control is the **NEXT LEVEL!**

**2WD Upgrade to IHC - US\$6,900**

**4WD Upgrade to IHC - US\$13,800**

The screenshot shows the 'Gearbox' software interface. The left pane is titled 'DIFF SETUP' and shows 'Dyno Operating in F3 Speed Mode Control'. It has a 'Set Control Speed' field set to 2000. Below it is a diagram of a 4WD chassis with 'FRONT DIFF' and 'REAR DIFF' labels. The 'FRONT DIFF' has a 'C' (Capture) and an 'X' (Clear) button. The 'REAR DIFF' has a 'C' (Capture) and an 'X' (Clear) button. The 'REAR DIFF' is currently set to '3.727273 : 1'. The right pane is titled 'GEARBOX SETUP' and shows a table of gear ratios. The table has columns for 'Show Gearbox Ratios', 'Numeric', 'Start Gear', and 'Clear'. The table contains 6 rows of gear ratios. The 4th row is highlighted in blue and shows a ratio of 1.000000 : 1. The 'Start Gear' column has 'C' (Capture) and 'X' (Clear) buttons for each row. The 'Clear' column has 'X' (Clear) buttons for each row. At the bottom of the right pane are buttons for 'Load Gearbox', 'Save Gearbox', 'Copy to Gearbox What If', 'Cancel', and 'Done'.

Show Gearbox Ratios	Numeric	Start Gear	Clear
1		C	X
2		C	X
3		C	X
4	1.000000 : 1	C	X
5		C	X
6		C	X