Geartronics GPI-5(B)
Programmable Gear Position Indicator
For Bara Motorsport 6/7 speed.

The gear position indicator is designed for use with the Bara Motorsports 6 & 7 speed gearboxes with a 9 position selector barrel. The display firmware is designed to cater for the 6-speed version which has two neutral positions (gear order RNN123456)

Wiring

Power loom:	**Red:**	+12v ignition supply
	Black:	Chassis ground
	Yellow:	Reverse relay output (switches to ground when reverse is selected)
Sensor loom:	**Red:**	+5v sensor supply
	Black:	Signal ground
	White:	Signal

The wiring harness and potentiometer are terminated with miniature Sureseal connectors with the following pinout:

1 – Ground
2 – 5V supply
3 – Signal

Programming

In order to show the selected gear, the position of the potentiometer and hence the selector barrel must be learned for each gear. This is achieved by entering programme mode by use of the red button, adjacent to the connector on the bottom of the unit.

Gently press and hold the button for 3 seconds. The display will flash the repeating sequence 'P 4 5 6 7'. Momentarily press the button when the display is showing the number of *forward* gears, ***not*** including neutral & reverse. Continue as follows:

6-speed box with two neutral positions

When the display shows 'R', select reverse gear and press the button momentarily. The display will then show 'N'. Select the first neutral position (1 up from reverse) and press the button. The display will then show '0'. Select the second neutral position and press the button again. The display will then show '1'. Select first gear and press the button. Continue in this fashion until all gears have been selected. The display will then flash a repeating sequence of 'P R N B'. This allows the function of the relay output to be programmed. This can be configured to give a switched ground output for Reverse, Neutral or Both neutral and reverse. Press the button for the desired function. The display with then go blank momentarily and then briefly show a '-' before programming is complete.

7-speed box

The programming sequence is the same as for the 6-speed box, but the routine does not request the '0' position, and there is the addition of gear 7.