

## PANEL MOUNTED BI-DIRECTIONAL VARIABLE SPEED REGULATOR

### Part No. 919D2PR

- \* Forward & Reverse PWM Speed Regulator.
- \* Easy installation - Unit panel mounted through 9.5mm hole. (Electrical connection via screw terminals).
- \* 6 - 15v operation d.c. (from smooth non digital d.c. input).
- \* Output 0 - 100% of input voltage.
- \* Compact construction - board size 66 x 58mm

These are regulators with variable outputs designed to be used with miniature and sub miniature motors. Allows the motor to be powered from a d.c. source either battery or transformer rectifier (transformer rectifier must have a non digital output).

Unit employs PWM circuitry which varies the output pulse width to vary the motor speed while maintaining a constant output voltage. PWM also assists in maintaining motor torque. Output may not zero motor speed in NO load conditions.

#### Specifications:-

Edge to edge frequency 2KHz

Linear output response

Input 6 - 15 volts d.c. (non digital)

Full 'H' bridge output drive

Rating 3 Amps continuous, 5 Amps peak.

Circuit provides approx 1/5th second breaking pause between directional changes.

## INSTRUCTIONS

- (1) Drill 9.5mm hole in panel face to accommodate potentiometer shaft. Prepare suitable input and output leads with the appropriate connectors, noting that both input and output leads should be trimmed to 21cm to comply with EMC regulations.
- (2) Connect input and output leads as indicated on the rear of the unit (noting polarity) Ensure that connections are secure. Remove knob, nut and metal washer, leaving the nylon spacer to act as an insulator. Insert spindle through the hole in the panel and re-assemble shaft components in reverse order. Turn speed control knob to off position. (see below).
- (3) Connect output leads to the appliance observing polarity. Connect the input leads to the power supply observing correct polarity, (either battery or full wave rectified transformer unit), and operate speed control forward/reverse as desired. Power supply must not be digital.
- (4) It is designed to run at max 3 amps with a 5 amp peak current. In order to avoid overloading the unit, it is recommended that the positive input lead is fitted with a 3 amp fuse.

**N.B. FAILURE TO ENSURE CORRECT INPUT POLARITY WILL DAMAGE THIS EQUIPMENT.**

