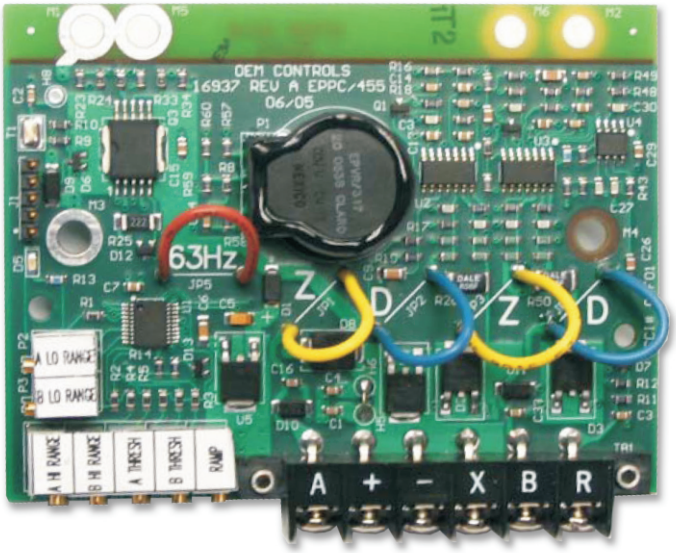
OEM CONTROLS INC.
CERTIFIED ISO 9001
CERT# US-1892a

Dual Valve Driver Board



In an effort to provide our distributor customers who carry not only the Pulsar valve product line but also any other proportional PWM valve products, ***OEM Controls*** *has created the* ***DUAL Valve– DUAL Adjust Valve Driver Board****. Our primary design goal was to produce a PWM board that could be easily converted by our customers from their dual coil Proportional Duty Cycle (PDC) applications to their Proportional Current (PC) applications. The board features both types of outputs running simultaneously. Large wire jumpers with silkscreen identification lettering allow the customer to easily configure the board to operate either the Parker Pulsar (Apitech – 33 or 63Hz) PDC valve or most diode clamped PWM valves. This allows the customer to inventory one PCB for most dual coil applications.*

Technical Specifications:

Power Supply: *9V - 32V*

Command Input: *Either Potentiometer (10k non-CT) or Voltage (0.5V to 4.5V)*

Max Output Current: *PWM : 4 Amps each; PDC : 3 Amps each*

Frequency (hardware configured): *PWM : 33 HZ - 250 Hz; PDC : 33 Hz or 63 Hz - jumper selectable (75Hz standard also available)*

Current Regulation: *≤ 5% error*

Trimpot Adjustments: *Individual adjustments of A & B directions for Threshold, Hi Range (Maxout), and Lo Range. Ramp adjustments are made with 1 trimpot for both directions*

Auxiliary Output (X): *The Aux output is active when the power switch is closed. It outputs raw Vbat minus one diode drop (about 0.5V).*

LED: *Illuminated when pcb is active also used for assisted potentiometer centering*

Mounting: *Direct : EMS4, EJS3, RS; Remote for all other controllers*

Protection: *Reversed power supply, Output blocking diode, Short circuit, Thermal*

Environmental: *Operating temperature: -40C to +70C; Full Moisture protection = silicone based conformal coating; EMC protection = CE rating*

Note: *This board was not designed to include single coil or flow control electro-hydraulic valves. Such valves require boards configured specifically for the application.*

⚠ ***WARNING:*** *It is the purchaser's responsibility to determine the suitability of any OEM Controls product for an intended application, and to insure that it is installed and guarded in accordance with all federal, state, local and private safety and health regulations, codes and standards.*

Due to the unlimited variety of machines, vehicles and equipment on which our controls are used, and the numerous standards which are frequently the subject of varying interpretation, it is impossible for OEM Controls personnel to provide expert advice regarding the suitability of a given controller for a specific application. The flexibility of our products allows us to offer thousands of custom configurations. We can advise you of the various features that are available and you can examine models to see what meets your needs. We believe our customers' engineering departments should be the qualified experts in their own product field. If the product will be used in a safety critical application, the customer must undertake appropriate testing and evaluation to prevent injury to the ultimate user.

Should you have any questions or if any of the above warning is unclear, please contact OEM Controls at 10 Controls Drive, Shelton, CT 06484, FAX: 203.929.3867, TEL: 203.929.8431.

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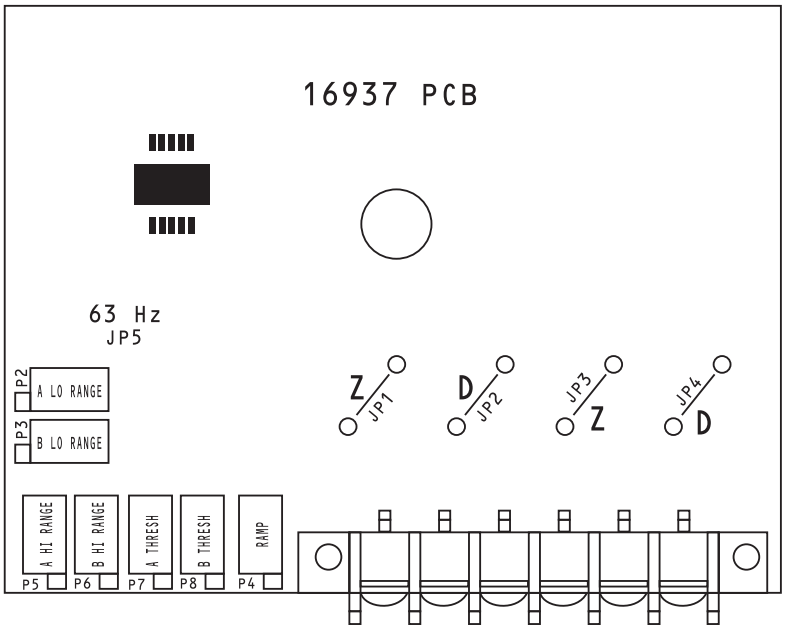

Note: *Trimpots are adjusted to Zener Clamp settings.*

Jumper configuration for Diode Clamp, Zener Clamp and Zener Clamp (33Hz).

DIODE CLAMP *(Proportional Current)*
Cut the following jumpers:
1. YEL wire labeled Z on PCB (JP1)
2. YEL wire labeled Z on PCB (JP3)

ZENER CLAMP *and 63 Hz*
(Proportional Duty Cycle)
Cut the following jumpers:
1. BLU wire labeled D on PCB (JP2)
2. BLU wire labeled D on PCB (JP4)

ZENER CLAMP *and 33 Hz*
(Proportional Duty Cycle)
Cut the following jumpers:
1. BLU wire labeled D on PCB (JP2)
2. BLU wire labeled D on PCB (JP4)
3. BRN wire labeled 63 Hz on PCB (JP5)

OEM CONTROLS INC. *10 Controls Drive, Shelton, CT 06484 • Tel: 203.929.8431 • Fax: 203.929.3867 • www.oemcontrols.com*