

Electro-Hydraulic Controls

JS101 four axis joystick controller



- **Compact design** ... easy to install, one enclosure. no external circuit cards or wiring
- Field programmable ... wide range of field selectable options
- **Direct PWM drive** ... no external valve driver cards required
- No maintenance ... fuseless design, no internal serviceable parts

The JS101 is a four axis programmable joystick controller with integral electro-hydraulic valve drivers. The joystick mechanism utilizes a non-contacting, non-inductive, solid state, fixed field magnetic flux sensor technology. The JS101 can drive up to four of electro-proportional 4-way valves. These can be pulse width modulated coils or solenoid coils, with momentary or latching control.

The joystick is an easy grip lever which travels in a full circular pattern creating a standard X and Y control. The lever position in combination with two (thumb) push buttons allow the user to independently select each of the four axes. A small handheld programming tool attaches to the joystick via a connector on the hand lever giving the installer a quick and easy method to make all valve drive settings. The installer can select different coil types, adjust PWM frequency, ramping, increase or decrease the hand lever deadband, pre-set an axis for safe or live action, separate or combine lever positions to act with exclusive or crossing logic, inhibit over travel with external limit switches and many other options.

The hand lever and electronic drive circuitry are fully enclosed into a single compact metal box with no internal adjustments or fuses. The JS101 automatically alerts the operator to open or short circuits in the valve circuitry. The JS101 mounts through a 2" diameter clearance hole and can be readily adapted to any cab configuration. The wiring interface is accomplished with a sixteen-pin twist lock connector mounting out the bottom of the controller. Cable assemblies and mounting brackets are available through your dealer.

General Specification:

- Operating voltage: ٠
 - 10-32 VDC mobile vehicle electrical systems
- Coil drive Outputs: 100 ma to 2500 ma, PWM (current controlled) or solenoid (full voltage) Full range circular, spring return to center, T-handle w/ (2) push-buttons, right thumb
- Hand lever: ٠ ٠
 - Lever force: The hand lever is actuated with 1 lb. and the maximum over force is 50 lbs.

AMP CPC twist-lock connector, (16) pin, gold pins

- External inputs: Two digital inputs for reading current sourcing proximity sensors, relays, psi sw., etc. Audible alarm (beeper), confirms functions and announces faults to the operator
- Alarm: ٠

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- Wiring interface: ٠
- Enclosure: ٠
 - 3.5" x 5" x 3" anodized aluminum enclosure, stainless fasteners Calibration: RD203 handheld programmer via DIN connector access through the T-handle
- Options: Four low power outputs; for controlling relays, spreader control interface,
 - axis expansion interface, remote displays, etc.

JS101

MECHANICAL

