The AL101 is an electro-hydraulic controller suited for mobile equipment. This design platform is ideal for new applications. The AL101 offers four current controlled pulse width modulated outputs, ideal for driving proportional flow control valves. In addition, are four inputs that can be software configured as either digital or analog input.

One key feature is the Plow Float mode. Operated by a switch on the joystick handle the plow will float on the road surface. The AL101 also accepts a Trigger switch as a dead man switch. No valve coil drive is allowed unless the trigger switch is active.

The AL101 has a see-thru housing for viewing four digits and three magnetic switches for reading and changing various control parameters. From the enclosure face the installer can select program features, enter settings, perform calibrations or diagnostic tests. Using a flash memory based micro-controller with; the AL101 can accommodate field upgrades using a simple handheld terminal. The housing in a environmentally sealed ABS enclosure with an integral 12-pin connector, making it well suited for mobile vehicle applications.

Specifications:

- 10-32 vdc, mobile vehicle power ready, transient and reverse polarity protected
- Operating temperature; -40 to +85 degC
- (4) PWM current controller sourcing outputs, 0-2500 milliamps each, fuseless design
- (4) configurable inputs; 10bit, 0-5vdc analog input or digital input for either sink or source
- Sealed enclosure with integral 12 pin connector, see-thru housing
- User interface, four digit display w/ three magnetic pushbuttons
Electro-Hydraulic Controls

Designed and Manufactured by

AL101 Joystick Controller

Block Diagram

X-Y Joystick

Input 1
- analog input; 0-5vdc

Input 2
- analog input; 0-5vdc

Input 3
- digital input, sinking

Input 4
- digital input, sinking

Vref; 5vdc

Gref; common

Sourcing outputs w/ current feedback

+10-32VDC

(-) Ground

CR

Input 1 Forward

Input 2 Forward

Input 3 Forward

Input 4 Forward

Input 1 Reverse

Input 2 Reverse

Input 3 Reverse

Input 4 Reverse

AL101

X signal

Y signal

Float sw.

Trigger sw.

20g

Connector Pinout

Facing View

ALL DIMENSIONS IN INCHES

ENCLOSURE FEATURES
- Environmentally sealed against moisture
- Non-corrosive, thermoplastic housing
- Shock & vibration resistant
- Connector rekeying option available
- Built-in operator interface
- 4 digit display, magnetic switches