



Uni-Grip 816™ Proportional Plow Control

Product Summary	<ul style="list-style-type: none"> • Single, 3 axis joystick for proportional control of hydraulic devices (i.e. hoist, plow, wing, etc) • Utilizes Mako Trim™, a Windows® compatible program to set the speed of each direction of motion individually without wiring or hydraulic modifications;
Product Application	<ul style="list-style-type: none"> • Multiple vehicle types (Patrol Trucks for snow/ice, garbage and leaf collection); • Combination of multiple hydraulic and electrical functions controlled from single joystick (requires Hammerhead™ 12 Switch module);
Device & Signal Capacity	<ul style="list-style-type: none"> • Up to 7 devices; control motion up to 16 ways; • 16 independent PWM channels; Expandable to 32 with UG-832 option package; • Frequency settable from 40 – 450 Hz;
Joystick Buttons	<ul style="list-style-type: none"> • Eight programmable buttons: (6) hydraulic and (2) remote blast & pass (spreader function)
Axis and Range of Joystick Motion	<ul style="list-style-type: none"> • Three axes of joystick motion: X, Y, & Z; • 27 degrees of motion available in each axis;
Joystick Signal	<ul style="list-style-type: none"> • True “Hall Effect” (Magnetic) joystick with no mechanical contacts;
Joystick Self Test and Diagnostics	<ul style="list-style-type: none"> • Mako™ completes a self test of the joystick during each power up cycle; • SafeStik™ automatically disables the axis if an axis fails during use; • Joystick diagnostics for each axis of motion is visible to technician on LCD & at valve body; • Channel Safe™ detects and protects against open or short circuits in hydraulic drive channels.
Float Functions	<ul style="list-style-type: none"> • User settable float controls for any 4 output channels (i.e. plow down, toe down, etc).
Combination Functions	<ul style="list-style-type: none"> • Combination of functions assignable to a single button to allow movement of up to 3 devices simultaneously (i.e. plow up, wing heel up, wing toe up); • Use Uni-Grip buttons to actuate HammerHead™ switches using Cirus Bus;
Plow Control Interlocked Features	<ul style="list-style-type: none"> • Hoist lock, Hoist Limit, Plow, Wing & Blade lock (requires external sensor, key or switch);
Electronic Backpack	<ul style="list-style-type: none"> • Mako™ System communicating on Cirus Bus;
System Controller	<ul style="list-style-type: none"> • Mako Trim™ works on any Windows® 2000 or newer computer; software included; • Field configurable buttons and function names;
Display Type	<ul style="list-style-type: none"> • 8 character lines, 40 characters per line on the Graphic LCD; remote mountable;
System Mounting	<ul style="list-style-type: none"> • Seat-mounted or pedestal mounted Flip-Arm Console; • Seat-mounted or pedestal mounted Mongoose Console;
Warning Indicators	<ul style="list-style-type: none"> • Up to 8 labeled and colored indicators integrated into the joystick housing;
Optional Equipment	<ul style="list-style-type: none"> • Electronic Plow Force Control – controls down force on plow edge manually based on truck speed;
Operating Temperature Range	<ul style="list-style-type: none"> • Minimum: -20 degrees Centigrade; Maximum: 70 degrees Centigrade;
Power Requirements	<ul style="list-style-type: none"> • Minimum: 11 Volts DC; Maximum: 15 Volts DC • Maximum: 10 Amps (Internal fuses rated at 10 Amps)