



ADAPTABLE FUNCTIONALITY FOR INTELLIGENT PLOW CONTROL

Effective plow controls require performance, power and precision. Available with fully proportional capabilities and multi-function control in three different configurations, the Uni-Grip™ Series of single joysticks from Cirus Controls offer precision operations for superior winter maintenance. The Uni-Grip™ Series utilizes Cirus Controls' sophisticated Mako™ software, which allows operators to individually program the speed of each direction of motion without changing wiring or making hydraulic modifications.

UNI-GRIP™ SERIES

- Uni-Grip™ 412, 620 and 820 models
- Fully proportional single joystick
- 2- or 3-axis options
- Multi-function control
- Standard safety grip trigger
- Controls up to 7 hydraulic devices
- Control up to 20 proportional channels on one stick
- Configurable for patrol, garbage and leaf collection vehicles
- Easy capability upgrade options with Mako™ electronics platform



Uni-Grip 412



Uni-Grip 620



Uni-Grip 820



Uni-Grip 620 Joystick Shown Mounted on an Armadillo Arm Unit with SpreadSmart Rx™ Color Display



Uni-Grip™ Proportional Plow Control Series

Product Summary

- Single joystick for proportional control of hydraulic devices (e.g., hoist, plow, wing, blade)
- Utilizes Mako Trim™, a Windows compatible program to set the speed of each direction of motion individually without wiring or hydraulic modifications

Product Application

- Multiple vehicle types (patrol trucks for snow/ice, garbage leaf collection, etc.)
- Control of each hydraulic function independently

Device & Signal Capacity

- UG 412 - up to 3 devices; 12 independent PWM channels
- UG 620 - up to 5 devices; 20 independent PWM channels
- UG 820 - up to 7 devices; 20 independent PWM channels
- Frequency settable from 40 – 450 Hz

Joystick Buttons

- UG 412 - 2 programmable buttons
- UG 620 - 4 programmable buttons
- UG 820 - 6 programmable buttons

Axis & Range of Joystick Motion

- UG 412 - 2 axes of joystick motion: X and Y
- UG 620 - 3 axes of joystick motion: X, Y and Z
- UG 820 - 3 axes of joystick motion: X, Y and Z
- 27 degrees of motion available in each axis

Joystick Signal

- True Hall effect (Magnetic) joystick with no mechanical contacts

Joystick Self Test Diagnostics with CAN Bus

- Mako™ uses CAN Bus for a self test of the joystick during each power cycle
- SafeStik™ automatically disables the axis if an axis fails during use joystick diagnostics are visible on LED, LCD or at valve body
- Channel Safe™ detects and protects against open or short circuits in hydraulic drive channels

Combo Up (Panic) Function

- Momentary button trigger for parking of up to 6 devices

Float Functions

- User settable float controls for plow, wing toe, wing heel and blade

Plow Control Interlocked Features

- Hoist lock, hoist limit, plow, wing and blade lock (requires external sensor, key or switch)

Electronic Backpack System Controller

- Mako™ multiplexed on CAN Bus and Cirrus Bus
- Mako Trim™ works on any Windows 2000 (or newer) computer software included
- Field configurable buttons and function names

Display Type

- UG 412 - LED indication mounted in joystick head;
- UG 620 - graphic LCD (white/blue) or optional color TFT
- UG 820 - graphic LCD (white/blue) or optional color TFT

System Mounting

- Seat mounted or pedestal mounted

Warning Indicators

- Up to 8 labeled and colored indicators integrated into the joystick housing

Optional Equipment

- Uni-Grip™ control of plow float and Moray™ system

Operating Temperature Range

- Minimum: -20 degrees Celsius; maximum: 70 degrees Celsius

Power Requirements

- Minimum: 11 Volts DC
- Maximum: 15 Volts DC
- Maximum: 10 Amps
- Internal fuse rated at 10 Amps

