



Fully proportional capabilities with precision multi-function joysticks

The Multi-Stix™ series from Certified Cirus Control Systems brings you precision proportional plow control amplified with function and power. Offering multiple joystick options, Multi-Stix helps provide meticulous operations in three configurations with fully proportional capabilities and multi-function control. Multi-Stix configurations additionally provide the ability to individually program the speed of each direction of motion without changing wiring or making hydraulic modifications by utilizing Certified Cirus Control Systems Mako™ software.

MULTI-STIX™ SERIES

- Multi-Stix 216, 320 and 420 models
- Fully proportional, 1 or 2 axis joysticks
- Multi-function control on any joystick
- Selectable safety triggers
- Hoist, wing or blade lock and limits available
- Controls up to 6 devices
- Control up to 20 proportional channels on multiple joysticks
- Easy capability upgrade options with Mako electronics platform
- Configurable for snow and ice patrol, garbage and leaf collection trucks



Multi-Stix 216



Multi-Stix 320



Multi-Stix 420 joystick shown mounted on an Armadillo Arm Unit with SpreadSmart Rx™ controller



Multi-Stix™ Series

Proportional plow control systems

PRODUCT SUMMARY

- Multiple joysticks for proportional control of hydraulic devices (e.g., hoist, plow, wing)
- 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)
- Control of each hydraulic function on an individual joystick

DEVICE AND SIGNAL CAPACITY

- MS 216 up to 4 devices; 16 independent PWM channels
- MS 320 up to 6 devices; 20 independent PWM channels
- MS 420 up to 8 devices; 20 independent PWM channels
- Frequency settable from 40 – 450 Hz

JOYSTICK BUTTON

- IP 68 top switch for safety interlock (hoist) or second mode actuation

AXIS AND RANGE OF JOYSTICK MOTION

- 1 or 2 axes of joystick motion: X and Y
- 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 power cycle
- SafeStik™ automatically disables the axis if an axis fails during use
- Joystick diagnostics for each axis of motion is visible on LED
- Channel Safe™ detects and protects against open or short circuits in hydraulic drive channels

COMBO-UP (PANIC) BUTTON

- 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

- Mako multiplexed on CAN bus and Certified Cirus Control Systems bus

SYSTEM CONTROLLER

- Mako Trim works on any Windows® 2000 or newer computer
- Software included
- Field-configurable buttons and function names

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



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