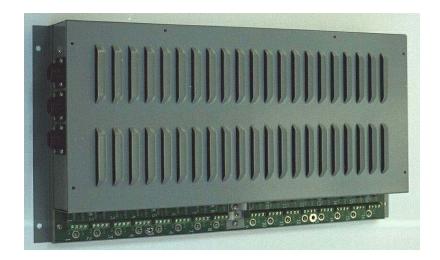
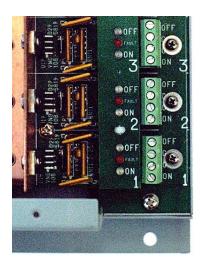
# Classic Organ Works

2800 John Street, Unit 4, Markham, Ontario CANADA L3R 0E2 www.organworks.com 905-475-1275 or 1-888-812-9717 info@organworks.com

## **SMC-2: Slider Motor Controller**





### **Description**

The Classic Organ Works Slider Motor Controller is used to operate up to 16 slider motors on slider-chest or tracker organs. These typically require separate on and off currents which are of short duration (1/4-second) and may be as great as 10 Amps for low-resistance solenoid motors.

The unit can handle short-term currents of 150 Amps (when all motors are driven by a General Cancel) via overload-protected devices with built-in back-emf diodes.

Outputs provide a short pulse at full power to overcome motor "Stiction" and then give a longer pulse of adjustable power for a quarter second. This is longer than necessary for the motors to travel fully so that they will not bounce off the end stops. Thus, the speed of travel for each motor can be set so that operation is as quiet as possible while allowing for motors that become sluggish after years of operation.

The SMC-2 is split into two halves of 8 sections so that independent inexpensive power supplies can be used – they are not paralleled. Alternatively, the unregulated chamber supply may be used.

Inputs may be Classic serial or parallel when polarity is sensed automatically. The parallel common may be provided by the unit or sent from the stop source. The SMC-2 is provided as a serial-only or a parallel-only configuration.

At power-up, the unit senses the stop positions (serial-only) and moves the motors to correspond.

#### **Features**

- o Stand-alone unit with comprehensive manual.
- o Drives up to 16 slider motors.
- o Up to 10 Amps per output.
- o Each output protected by a resettable fuse.
- o Outputs initially at full power to overcome "Stiction" on older motors.
- o All outputs have adjustable power.
- o Output power stays on for a short time after the end of travel to prevent bounce.
- o All inputs optically isolated.
- o Classic serial or parallel inputs (simultaneously).
- o Serially-controlled units can be cascaded.
- o Parallel input polarity automatically selected.
- o Input common from unit or console.
- o At switch-on motors move to stop positions.
- All outputs have red/green LEDs for diagnostics as well as a Fault-condition LED. Other LEDs inside also for diagnostics.
- o Power can be from the normal unregulated chamber supply (+9V to +28V).
- $\circ\,$  6-foot power-input wiring included.
- o No special cooling necessary.
- o Dimensions: 9.5" x 19.5" x 3" (W x H x D).

#### **Applications**

To control up to 16 slider motors on slider-chest organ retrofits, or on tracker instruments. Optically-isolated inputs to prevent motor currents from upsetting console equipment. Serial or parallel control (at the same time if necessary).