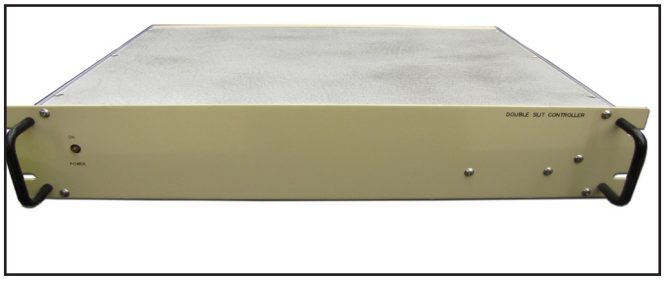
National Electrostatics Corp.
7540 Graber Rd., P.O. Box 620310, Middleton, WI 53562-0310 USA

02/17

Slit Controllers

NEC's slit controllers are inteded to operate a beam defining slit with up to four elements equipped with 24 VDC motor drives. There are two types of controllers available - one for local control and one for remote (computer control).



DESIGN

Local Controller (BDS6 and BDS8)

The local controller includes switches for changing the individual slit element positions and analog meters for displaying the slit positions. The controller also includes provision for monitoring the slit element currents on the same slit position meters using external dual channel logarithmic amplifiers. The amplifiers are sold separately.

Slit position for each element is displayed in 0 to 100% format for versatility. Slit position calibration and travel limits are dependent on the specific slit model.

For BDS6 slits the meter display range is typically 2% to 98% with beam line center displayed as 25%.

For BDS8 slits, the total slit travel is 16.6 mm (0.654"). The meter display range is typically 2% to 78%.

Remote Controller (BDS6 and BDS8)

The remote slit controller provides control to slit motor drives and log amps based on input from a computer-control system utilizing ACT, CAMAC, or other equivalent data aquisition system (herein called computer control system).

A power status control must be provided to the controller to turn it on. Next, desired slit position (+X, -X, +Y, -Y) is input to the controller via the computer control system. A momentary status control is then input to the controller to enable drive motion to the new position. Based on a position read from the slit motor, the controller decides what direction the motor needs to turn. The correct polarity power is then output to the motor, moving the slit in the corresponding direction.

This unit also provides a power status control to the slit log amps. The current reads from the log amps are fed straight through the controller to the computer control system.

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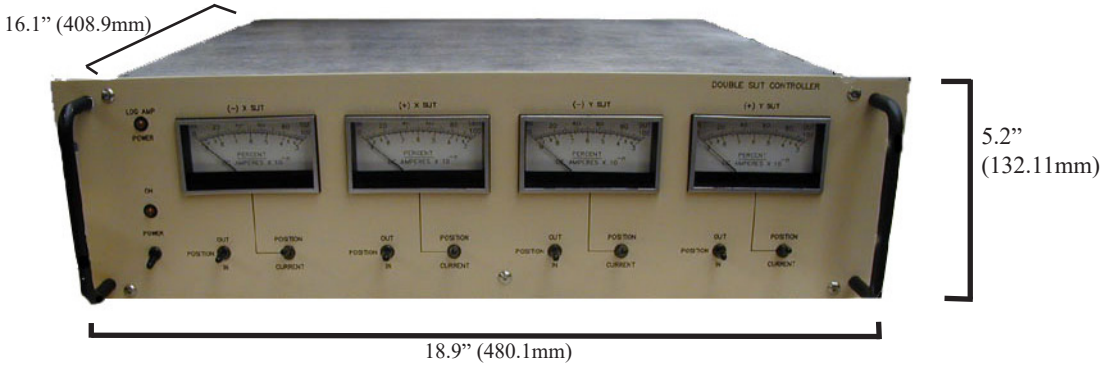
Slit Controllers

SPECIFICATIONS

	Local Slit Controller 2HA048220	Remote Slit Controller 2HA065890
Catalog No.:		
Size:	Standard Rack Mount unit, 19.0” W x 5.25” H x 16.25” D	Standard Rack Mount unit, 19.0” W x 3.5” H x 12.25” D
Power Input:	110-125 VAC or 220-250 VAC, 50/60 Hz, user selectable.	110-125VAC or 220-250 VAC 50/60 Hz, user selectable
AC Power Fusing:	120 VAC: 1 A Slo-Blo 240 VAC: 1/2 A Slo-Blo	120 VAC: 0.5A Slo-Blo 240 VAC: 0.25A Slo-Blo
24 VDC Power Fusing:	1 Ampere normal blow 3AG.	0.75A Slo-Blo
Slit Motor Power:	+/-24 VDC output depending on motor direction. Positive for movement towards the beamline center. Negative for movement away from the beamline center.	+/-24 VDC output depending on motor direction. Positive for movement towards the beamline center. Negative for movement away from the beamline center.
Slit Displacement Reads:	0-10 VDC input to monitor actual slit position. Analog meter display is 0 to 100 percent.	0-10 VDC input to monitor actual slit postition
Log Amp Power Status Control:	24 VDC output to turn 2 log amps on	24VDC output to turn 2 log amps on
Log Amp Power Status Read:	Front panel LED power ON indicator.	Contact closure required when the log amp is on
Log Amp Current Reads:	+9.0 VDC to +3.0 VDC inputs corresponding to 10-9 A to 10-3 A; 1 V per decade. Current input polarity set in external log amplifier.	



[SLIT CONT v1]

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