

Model CX4C Controller Electrical Specifications

General Description: A high performance controller, with high repetition rate capability, to drive the high performance modulation/exposure/gating shutters that need dampening on closure. Also used with many custom shutters. Regulated to provide repeatable magnetic energy to the shutter system even with changes in line frequency, voltage, and with shutter repetition rates. Magnetic damping on closure make it the only choice for large apertures, heavy optics, and fast speeds combined. Gravity affects are nulled out, and companion shutter is labeled for a single mounting orientation.

Intended Use: For some of our fast modulation/exposure/gating shutters, and a few processing shutters requiring quick closure.

Calibration: Labeled for use with a specific model of shutter.

Shutter Compatibility: LS055, LSTXY, EXP5 and custom shutters. LS055S3W8 and LSTXY-S1 process shutters.

OEM Considerations: Primarily a research tool.

Electrical Safety Issues: All metal, earth grounded box.

Input Drive Signal & Connections: Seeking a TTL type positive signal, driving a 3.3 K ohm load through an LED. Signal enters CX4C via a BNC coaxial connector on front panel. Also provides a manual toggle switch that drives the shutter, either latching or momentary.

Output Power and Connections: Power delivered through receptacle on front panel. Shutter plug mates with receptacle. Keyed. Short circuit protected. Waveform is complex, mated to shutter AND shutter mounting orientation w/r to gravity.

Power – Up Considerations: Soft start system built in.

Line Voltage Considerations: Internal taps for 110 or 220 V operation, labeled at AC receptacle. Unit will accept 90-125 VAC when tapped for 110 VAC, and 200-250 VAC when tapped for 220 VAC. Accommodates world-wide frequencies.

Nominal Power Source	AC, via IEC detachable plug.
Fusing	from 1.0-3.0 A, 3 AG Slo-Blo
Auxiliary Voltage Available	None
Physical Mounting	Table top, four rubber feet
Size	4 x 5 x 10 inches, with cable allowances
Weight	4 lbs.

Operational Connections and Procedures:

- 1) Make sure shutter is thermally mounted and in the proper orientation w/r to gravity. If an orientation change is needed on the mounting, the CX4C will require re-calibration for optimum performance. Make sure CX4C has label, stating "For LSxxx" above shutter receptacle. Plug correct shutter only into CX4C receptacle.
- 2) Check label at AC receptacle. Attach power cord.
- 3) Set manual toggle switch to central, neutral position.
- 4) Attach coaxial signal source to BNC connector.
- 5) Turn on AC power switch. LED will be lit.
- 6) Use manual toggle or BNC to operate the shutter.

Danger! Do Not attempt to service the CX4C. There are high voltage points across the board. Contact the factory for service help.