

5 1.01 SCRimmer Stik™ Dimmer Pack

A. The dimmer pack shall consist of, but not be limited to the following:

- 10 1. The unit shall be constructed of code gauge aluminium in a type one enclosure, finished with black or white epoxy paint. All nomenclature shall be permanently silk-screened in white (black models) or grey (white models). The unit shall measure 2.6" high x 1.75" wide x 36" long.
- 15 2. All load wiring shall be stranded, tinned, copper wire with silicon rubber insulation covered with coated glass braid, rated at 200°C. and sized in accordance with the National Electric Code.
3. The dimming system shall be convection cooled. Each SCRimmer Stik™ shall include a thermal sensor to shut down the dimmer when ambient temperature exceeds 185°F (85°C.). Dimmer without thermal protection are not acceptable.
- 20 4. The dimmer shall operate from single phase, two-wire, 120 VAC, 50/60Hz; single-phase, three-wire 120/240 VAC, 50/60Hz. The dimmer shall properly operate over an input voltage range of 90-140VAC. The unit shall come standard with a 36" 12/3SO input power cord with a PBG,GSP or GTL 20 amp connector.
- 25 5. The unit shall provide isolated DMX input/output control connectors for connection to a remote control unit . Standard specification grade commercial output connectors shall be two (2) duplex NEMA #5-15R PBG or four (4) gsp/f panel mount connector. The maximum wattage output of each receptacle shall be permanently silk-screened below each output connector. User outputs which are not permanently labeled with the maximum output wattage for each receptacle are not acceptable.
- 30 6. The solid-state switch devices shall be mounted in a substrate material for maximum heat dissipation. The substrate shall be encapsulated in an epoxy filled high-impact plastic case along with an optical isolator, a snubbing network and all required gating circuitry on the high voltage side of an integral opto-coupled control voltage isolator providing a minimum of 4000V RMS isolation between line and control in the switch device. A 600W module shall have a minimum capacity of 10 Amps, with a rating of 250 Amp peak single cycle surge current and 600V transient capacity. Dimmers using Triacs shall not be acceptable.
- 35 7. The dimmer shall be protected against overcurrents and shall withstand in-rush currents, hot patches, and short circuits of 0.02 Ohms or less without damage. Dimmers shall employ a UL approved ceramic fuse rated at 6.25 amps for circuit protection.
- 40 8. The unit shall be thermally protected and shut down the dimmer pack when internal ambient temperature exceeds 185ø F. Dimmers shall restart automatically when the temperature returns to safe levels. An indicator on the front panel shall light when the dimmer is in an overheat condition.
- 45 9. The front panel shall have indicators for input power, overtemp, individual dimmer output/test , DMX termination and DMX control.
- 50 10. The dimmer control voltage shall be USITT DMX 512 operating at a rate of 56.0K. Each dimmers pack shall be addressed via a three digit setting mounted on the front of the pack. In the event of a loss of control voltage, the dimmer shall hold the last indicated levels for a minimum of 7.5 minutes Electrical isolation between the power circuit and the control circuit shall be complete.
- 55 11. The dimmer pack shall include individual dimmer output test buttons. The dimmer test button shall provide the following functions:
  12. When a DMX single is detected the test button shall provide a mean's of turning each individual dimmer on and off. If the test button is not switched off, it will automatically switch off in 2.5 minutes.
  13. If control signal is not detected, the dimmer output button shall function as a "Dim up/ Dim down" level setting device.
- 60 14. The unit shall be listed by Underwriters Laboratories, bear the U.L. label and shall have a U.L. AIC rating of 5,000 AIC . Dimmer packs which do not bear the U.L. label and an AIC rating shall not acceptable.
15. The dimmer pack shall be the SCRimmer Stik as manufactured by Electronics Diversified, Inc.

