EE595
LOW NOISE DIMMER
PROJECT DESCRIPTION

- WALL MOUNTED LIGHT FIXTURE CONTROL
- IMPROVEMENT ON COMMON TRIAC DIMMER DESIGN
- LOW NOISE TO LOCAL AUDIO STABILITY
- SLEEK LOOK FOR MOST ARCHITECTURAL DESIGNS
KEY DESIGN REQUIREMENTS

Requirements:

• Cost
  • Sales Price: $50, Component Cost: $120,000, Assembly & Test Costs: $150,000

• Environment
  • Indoor, Stationary, Structurally Mounted
  • Operating Temp Range: (145F to 190F)
  • Operating Humidity Range: (Min to Max)

• Power Input(s)
  • Residential AC Power: 115 – 125 VAC @ 6 Amps Max
  • Internal DC Power: 5 VDC
  • Power Output: Required

• Major Functions, Quantities Measured, Displayed
  • Light Control Variation: Allows smooth transition between light levels
  • Architecturally Appealing Design: Look of devise should be compatible with most building designs.
  • Power Quantity
    Range: 0 to 80 Watts, Accuracy: +/- 0.1 Watt, Resolution: 1 Watt
NOTES
1) POWER SUPPLY AND USER INTERFACE ARE THE POWER BLOCK.
2) SAFETY IS PART OF POWER SWITCH BLOCK.

CURRENT BLOCK OWNERS - 9.29.18
DC POWER SUPPLY: ALEX GRAMS  ZERO-CROSS DETECTOR: ANDREW STEINERT
TIMER: ALEX SCHAUER  POWER SWITCH: JOSH KIRSCH

TEAM #2

ADVANCED BLOCK DIAGRAM