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## COVER LETTER.

The system consists of a handheld battery powered remote control unit and a receiver module contained in and powered by a compact florescent lamp, 120 V~.

The system operates at 2.45 GHz only, a Direct Sequence Spread spectrum mode of transmission, PCB Trace antennas. The transmit modulation scheme is O-QPSK.

The radio fully complies with the IEEE® 802.15.4<sup>TM</sup>

The remote and the receiver module unit have a unique MAC address consisting of our IEEE OUI of 24-BA-30 and an individual manufacturers ID code embedded in each microcontroller/transceiver integrated circuit. The address may have addition date or version information in the string.

The remote also utilizes a capacitive touch routine built into the combination microcontroller/transceiver IC. It senses the presence of a finger over any of the buttons on the overlay.

The remote sends an on or off code string modified by one of five possible modes; A, B, C, D, or ALL. The mode being selected by a finger touch over a mode button followed by an on or off button touch. Transmission occurs only on an on or off button touch.

The receiver module controls two MOSFETs on the compact fluorescent ballast that turns the lamp on or off.

  
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