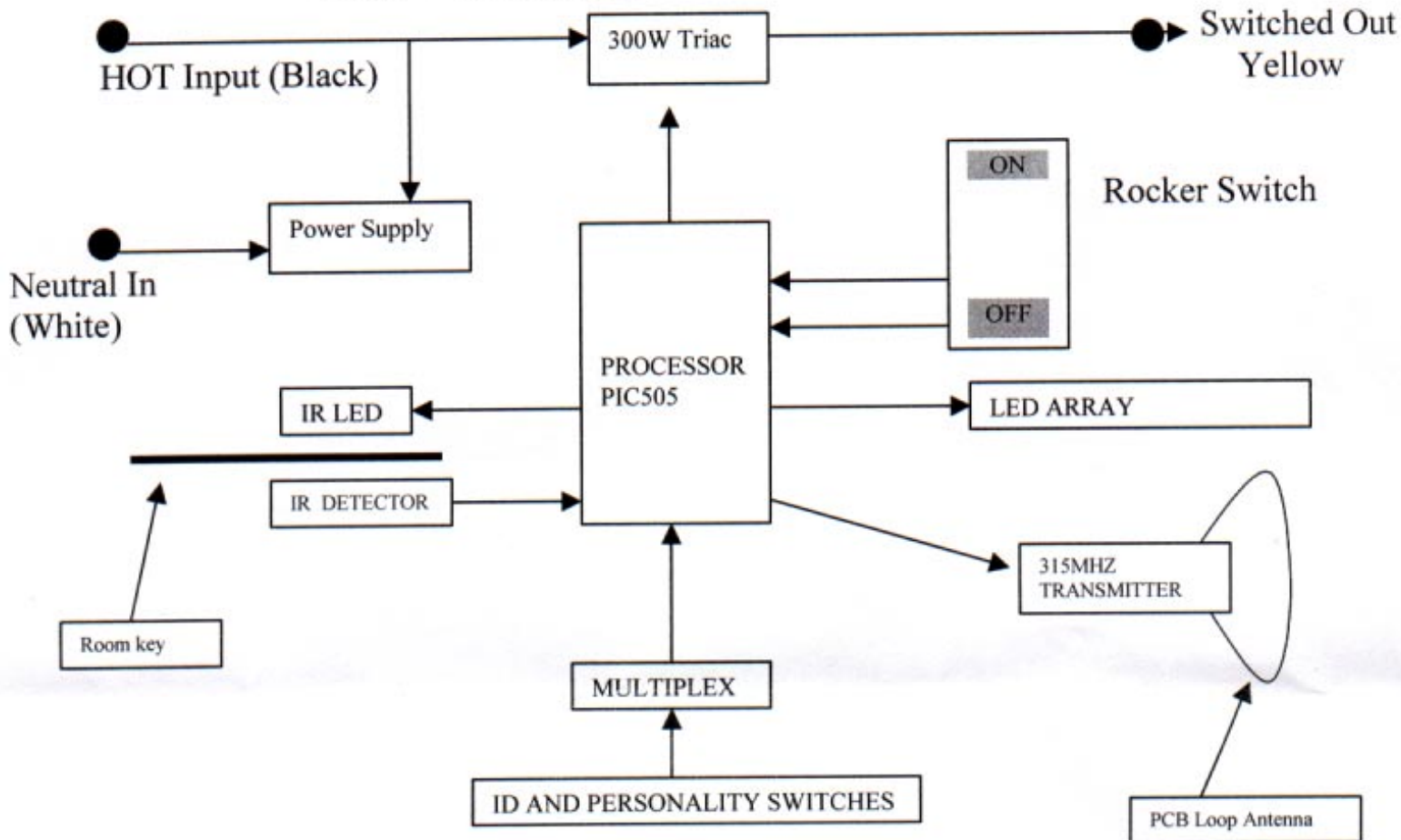


International Electronics, Inc. 3/29/2001

Master Switch Functional Diagram

FCCID PLGMCS001



Functional description:

Transmitter: OOK style, low power.

Single transistor oscillator, loop "L" antenna. Saw device stabilizes transmit frequency at 315 MHZ.

IR Card Detection: A single IR LED is enabled by the processor to detect the presence of a room card.

A single IR Phototransistor is enabled to detect the presence of the IR light generated by the LED. If the card is present, the Phototransistor will not see the LED light.

DIP Switches and Multiplexer: The switches are designed to set the ID# of the unit, which will match the ID#s of all the other units in the room. SW#1-8 set the ID.

Rocker Switches: To control the local lights connected to the LOAD wire (Yellow) of the switch. If sw#10 is set to the ON position, the rocker switch will only function if the card is inserted into the slot. If the switch is set to the OFF position, the rocker will control the local light regardless of the presence of the card.

TRIAC: The triac is designed to control the local load connected to the Yellow wire. It is controlled by the microprocessor.