

FCC ID: H2WCASA8T
IC:3558-CASA8T

Fan & Light Remote Control Transmitter Operational Description

Description:

This low powered transmitter operates by sending a pulse modulated signal to a corresponding receiver to control a ceiling fan power (off/low/med/high/direction) and lamp (off/low/med/high). The carrier frequency of 303.5 MHz is pulse modulated with a repeating sequence of short or long pulses that represents the desired function and the user-selectable security code. Transmission ceases upon release of the button.

The transmitter contains an integrated antenna that is not detachable or adjustable by the user. The transmit frequency is also fixed and not adjustable by the user.

Transmit sequence:

The transmit sequence begins when a button is depressed. The encoder chip is powered and the depressed button and security code is inputted to the chip. The encoder chip outputs the timed sequence of pulses to a SAW resonator circuit which turns the RF carrier on and off in the required timing pattern. The SAW resonator circuit maintains a very stable operating frequency.

Pulse timing:

The pulse timing pattern and duty cycle was measured and is detailed in the accompanying EMC test report.