

Technical Description

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Receiver Unit) for a RC sound effect toy. The sample supplied operated on 21 channels, normally at 2418 - 2462MHz. The frequency channels are as follows.

2418	2420	2422	2424	2426	2428	2430
2434	2436	2438	2440	2442	2444	2446
2450	2452	2454	2456	2458	2460	2462

The EUT is powered by 3 x 1.5V LR44 button cell batteries. After switching on the EUT, which can be generated different sound effects based on the switches pressed in corresponding the controller.

Antenna Type: Internal, Integral antenna

Antenna Gain: 0dBi

Nominal rated field strength is 89.4dB μ V/m at 3m (Peak), 70.3dB μ V/m at 3m (Average)

Maximum allowed production tolerance: +/- 5dB

The brief circuit description is listed as follows:

1. U1 acts as 2.4GHz RF MCU
2. Y1 acts as 16MHz Oscillator
3. C9 and L1 act as antenna matching circuit
4. U3 acts as voltage regulator
5. U2 acts as sound effect MCU