

Technical Description

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Car Unit) for a RC car. The sample supplied operated on 22 channels, normally at 2420 - 2465MHz. The channels are shown in below table.

2420	2422	2424	2426	2428
2430	2432	2435	2437	2439
2441	2443	2445	2447	2449
2451	2453	2455	2457	2459
2461	2465			

The EUT is powered by 1 x 3.2V Rechargeable battery. After switching on the EUT, the car will be moved forward or backward and turned left and right based on the switches pressed in the controller.

Antenna Type: Internal, Integral antenna

Antenna Gain: 0dBi

Nominal rated field strength is 99.4dB μ V/m at 3m (Peak), 73.1dB μ V/m at 3m (Average)

Maximum allowed production tolerance: +/- 3dB

The brief circuit description is listed as follows:

1. U1 (PAN2416AF SO14) acts as RF Module
2. U3 (PFS123-SOP14/16) acts as MTP MCU
3. Y1 acts as 16MHz Oscillator
4. L1, C2 and C4 act as antenna matching circuit
5. U2, U5 and U7 act as motor driver
6. U6 (DC_DC HX4002B) acts as voltage regulator.