

Technical Description

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Racer Unit) for a RC Racer. The sample supplied operated on 27 channels, normally at 2407 - 2477MHz. The channels are shown in below table.

2407	2408	2409	2410	2411
2413	2435	2436	2438	2439
2440	2441	2442	2443	2444
2445	2467	2468	2469	2470
2471	2472	2473	2474	2475
2476	2477			

The EUT is powered by 1 x 1.2V Ni-MH battery. After switching on the EUT, the racer 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 92.4dB μ V/m at 3m (Peak), 63.4dB μ V/m at 3m (Average)

Maximum allowed production tolerance: +/- 3dB

The brief circuit description is listed as follows:

1. U1 (GH8290) acts as MCU
2. X1 acts as 16MHz Oscillator
3. C1 and C2 act as antenna matching circuit
4. U2 acts as voltage regulator
5. Q1, Q2, Q3, Q4, Q5, Q6, Q7, Q8, R5, R6, R7, R8, R9, R10, R11, R12 and R13 provide motor driving function.