

Technical Description

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Car Unit) for a RC Speed Bumper Car. The sample supplied operated on 71 channels, normally at 2405 - 2475MHz. The channels are separated with 1MHz spacing.

The EUT is powered by 3 x 1.5V AAA batteries. After switching on the EUT, the car will be moved forward or backward, turned left and right, rotated clockwise or anti-clockwise or undergo a series of auto movement based on the switches pressed in the controller.

Antenna Type: Internal, Integral antenna

Antenna Gain: 0dBi

Nominal rated field strength is 79.9dB μ V/m at 3m (Peak), 57.5dB μ V/m at 3m (Average)

Maximum allowed production tolerance: +/- 3dB

The brief circuit description is listed as follows:

1. U1 (ZX22104) acts as MCU
2. Y1 acts as 16MHz Oscillator
3. L1, C2 and C3 act as antenna matching circuit
4. U2 and U3 act as motor driver
5. U5 provides LDO function.