

Technical Description

The Equipment Under Test (EUT) is a portable 2.4GHz Transceiver (Controller Unit) for a RC car operating at the frequency range of 2410.875-2468.25MHz with 3.375 MHz channel spacing.

The EUT is powered by 4 x 1.5V AA batteries. After switching on the EUT and being paired with car, the car can be controlled to move forward/backward and turn left/ right by the controller.

The controller can also connect to the camera portion of car with the function of photo taking and video recording.

Antenna Type: Internal integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 102.1dB μ V/m at 3m

Average field strength: 65.6dB μ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 3dB

The brief circuit description is listed as below:

Controller portion:

1. U1 (XXX271) and the associated circuit act as MCU.
2. U3 acts as voltage regulator.
3. Q2, Q3 act as power control portion.
4. SW4-SW13 act as control keys.

Goggle portion:

1. U3 (SNRC50AFG) acts as the MCU of Goggle portion.
2. U1 (XXX21) acts as the 2.4GHz RF module.
3. U2 (2402E) acts as 2.4GHz RF Front-end Integrated Circuit.
4. Y1 acts as 18 MHz frequency oscillator.
5. Y3 acts as 12 MHz frequency oscillator.