

Technical Description

The Equipment Under Test (EUT), is a portable 2.4GHz Transceiver (Shark Unit) for a RC Shark. The sample supplied operated on 24 channels, normally at 2410 – 2475MHz. The channels are shown in below table.

2410	2413	2416	2419	2422
2425	2428	2431	2434	2437
2440	2442	2444	2446	2448
2451	2454	2457	2460	2463
2466	2469	2472	2475	

The EUT is powered by 1 x 3.7V Lithium-ion battery. The shark has 2 modes, the “AUTO” mode and the on mode. For the “AUTO” mode, after switching on the EUT and putting the EUT into water, the shark will be moved in different directions automatically and continuously. For the on mode, after switching on the EUT and putting the EUT into water, the shark will be moved forward or backward and turned left and right based on the switches pressed in the controller. The shark will also be moved in different directions automatically based on the button pressed in the controller.

Antenna Type: Internal, Integral antenna

Antenna Gain: 1dBi

Nominal rated field strength is 89.6dB μ V/m at 3m (Peak), 67.5dB μ V/m at 3m (Average)

Maximum allowed production tolerance: +/- 3dB

The brief circuit description is listed as follows:

1. IC1 acts as MCU
2. X2 acts as 16MHz Oscillator
3. L1, C1, C2 and C3 act as antenna matching circuit
4. Q1 provides LDO function
5. IC2 acts as motor driver.