

Technical Description

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

The EUT is powered by 6 x 1.5V AA batteries. The truck has 2 modes, the "TRY ME" and the on mode. For the "TRY ME" mode, after switching on the EUT, light and sound will be emitted from the truck based on the button pressed on the truck. For the on mode, it has all the functions that the "TRY ME" mode has. In addition, the truck will be moved forward or backward and turned left and right based on the switches pressed in the controller. Light and sound will be emitted from the truck based on the button pressed in the controller. The platform at the back of the truck will be moved upward or downward based on the button pressed in the controller.

Antenna Type: Internal, Integral antenna

Antenna Gain: 0dBi

Nominal rated field strength is 60.2dB μ V/m at 3m (Peak), 48.6dB μ V/m at 3m (Average)

Maximum allowed production tolerance: +/- 3dB

The brief circuit description is listed as follows:

1. U1 (ZX221147) acts as MCU
2. U2 acts as voice IC
3. Y1 acts as 16MHz Oscillator
4. L1, C2 and C3 act as antenna matching circuit
5. U3 and U4 acts as voltage regulator
6. U7 acts as motor driver for M1
7. U6 acts as motor driver for M3
8. U5 acts as motor driver for M2.