

Technical Description

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

The EUT is powered by 4 x 1.5V AA batteries. The Front End Loader has 2 modes, the “TRY ME” mode and the on mode. For the “TRY ME” mode, after switching on the EUT, light and sound will be emitted or turned off from the Front End Loader based on the button pressed on the Front End Loader. For the on mode, the Front End Loader has all the functions that the “TRY ME” mode has. In addition, the Front End Loader will be moved forward or backward and turned left and right based on the switches pressed in the controller. Sound and light will be emitted or turned off from the Front End Loader based on the buttons pressed in the controller. The loader at the front will be moved up and down based on the switches pressed in the controller.

Antenna Type: Internal, Integral antenna

Antenna Gain: 0dBi

Nominal rated field strength is 85.7dB μ V/m at 3m (Peak), 73.7dB μ V/m at 3m (Average)

Maximum allowed production tolerance: +/- 3dB

The brief circuit description is listed as follows:

1. U6 acts as MCU
2. Y1 acts as 16MHz Oscillator
3. L1, C2 and C3 act as antenna matching circuit
4. U1 acts as Voice IC
5. U5 and U7 act as voltage regulator
6. U2, U3 and U4 act as motor driver.