

# Technical Description

The equipment under test (EUT) is a Bluetooth transceiver for a car player device which is operating at 2402 – 2480MHz with 1MHz channel spacing. The EUT is powered by 12.0V rechargeable battery pack from vehicle. For Bluetooth mode, the user can use the mobile phone to pair with the EUT for music playing while the Bluetooth link is established.

Main features of the EUT include:

- AM/FM US/EURO Tuner with 30 Presets (12 AM, 18 FM)
- Bluetooth
- USB Playback of MP3/WMA files with iPod/iPhone Interface
- Pre-set Equalizer - 5 settings (USER > FLAT > POP > CLASSIC > ROCK)
- Electronic Bass, Treble, Balance and Fader Controls
- Output Power 40W x 4
- 2-Channel Pre-amp Line Level Outputs
- Auxiliary Audio Input (Rear RCA)

Operating Frequency Band: 2402 MHz ~ 2480 MHz

Channel Spacing: 1MHz

Sensitive: down to -90dBm

Spread Spectrum: FHSS

Modulation Method: GFSK,  $\pi/4$  PSK and 8 DPSK

The functions of main ICs are mentioned as below.

The brief circuit description is listed as follows:

U1 and associated circuit act as 2.4GHz RF Bluetooth transceiver.

U4 and associated circuit act as Filter.

U5 and associated circuit act as Multi-Purpose Flash.

U6 and associated circuit act as external 26MHz oscillator.

## Antenna Used:

An internal, integral antenna has been used.