

# Specific for FM transmitter

## Features

Digital Stereo modulator	
Operation Frequency	88.0 Mhz ~ 108.0 Mhz( 200 channels)
Pre-emphasis	75us
Output Power	0.01 microwatts.
Audio SNR Mono	63dB
Audio THD Mono	0.5%
Audio Stereo Separation	35dB
Sub Carrier Rejection Ratio	50dB
Auto Receive Power Scan	3 channels
Complies with:	FCC part 15 and CE
Operation OS:	Windows XP/ Windows 7 / MAC
Complies with:	USB 1.1 and 2.0 standards
Languages:	Chinese traditional/ English/Germany/France/Portuguese

## Purpose

The FM-transmitter will be used for sending personal or laptop computer's audio signal from USB to traditional FM radio.

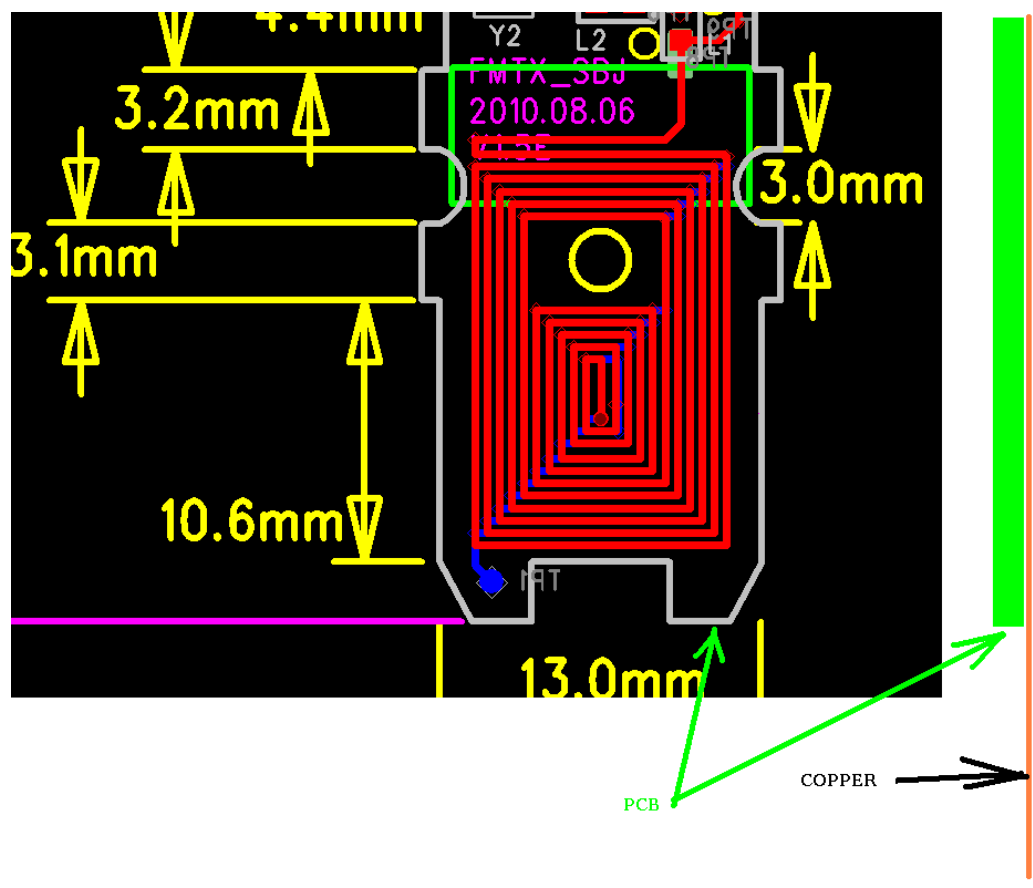
The device can plug into a USB port of a computer; tune in to a clear frequency channel to converts the stereo audio signal into an FM radio signal, which can then be picked up by appliances such as car or portable radios. User can use it as a wireless sound box to listen the music from PC in indoor, inside of a car, an office, a kitchen and so on.

## Complies With

The device meets the FCC Part 15 regulation [Unlicensed broadcasts](#) on the [FM broadcast band](#) (88 to 108 MHz) are limited to a [field strength](#) of 250  $\mu\text{V/m}$  at a distance of 3 meters from the [antenna](#). This is equivalent to 0.01 microwatts.<sup>[1]</sup> Emissions must be kept within the 88.0 to 108.0 MHz band under Part 15 rules.

# The Antenna

We use PCB flat helical with copper slice Antenna show in figure 1 to extend the operation bandwidth and stability.



The figure 1: the PCB flat helical with copper slice Antenna

## The Specification of the Antenna is

Antenna Type	PCB flat helical with copper slice Antenna
Frequency	88 Mhz ~ 108 Mhz
Impedance	50 ohm
Polarization	Linear
Pattern	Omni-Directional
Gain	1dB