Operation Description

1. Device concept

This device is radio transmitter that transmit music which comes from multimedia device such as MP3, CD, MD Player and Walk-man using FM radio frequency by Radio transmission method.

This device is designed to enjoy listening the music by Audio speaker of vehicle or Home A/V system without using Ear-microphone.

2. Each section of Device

2-1 ANT

2-2 STERO AUDIO INPUT

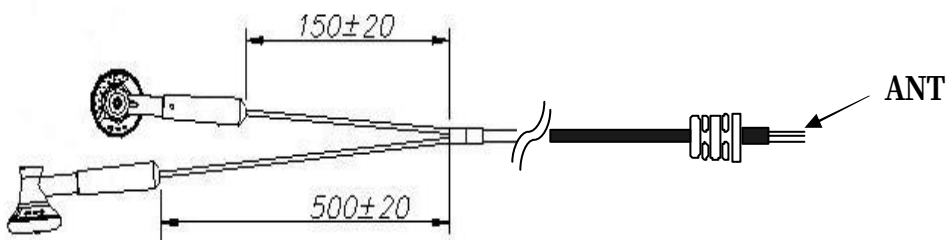
2-3 POWER

2-4 VCO (VOLTAGE CONTROLLED OSCILLATOR)

2-5 FM OSCILLATOR

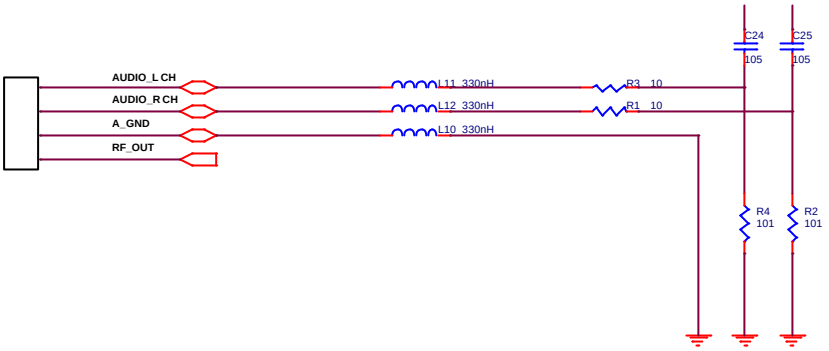
3. Explanation of each section

3-1 ANTENNA (ANT) Section



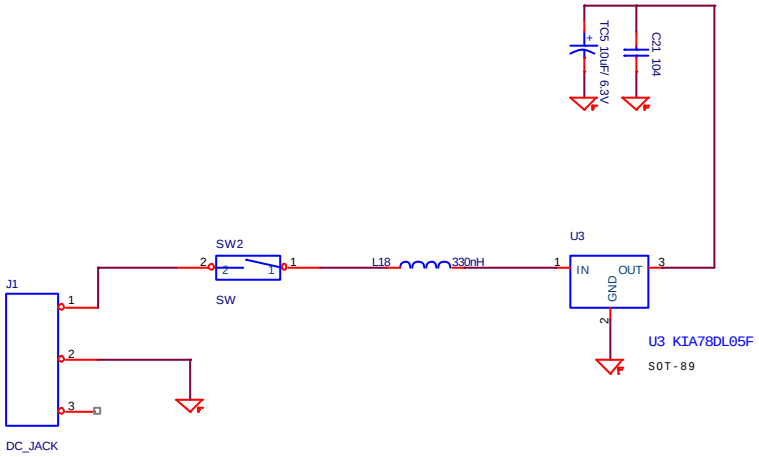
- Antenna is composed with Wire Ear-Jack Call Code type, and radiates radio frequency through the air.

3-2 STERO AUDIO INPUT Section



- Stereo L, R signal comes from MP3 3.5mm Earphone terminal through L11, L122. This signal is regulated by resistor R1, R2, R3, R4. Then this Stereo L,R signal is forwarded to of BH1415 and adjusted, then through C24 and C25 this signal is forwarded to pin 24, 1 of BH1417FV IC.

3-3 Power section

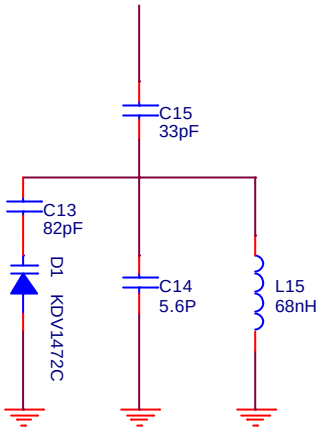


- When using Cigar-Jack power of Vehicle

The 12VDC/24VDC power of Vehicle is forwarded through DC Jack, and the power is regulated with constant 5VDC by regulator, and then the power is forwarded to BH1417FV.

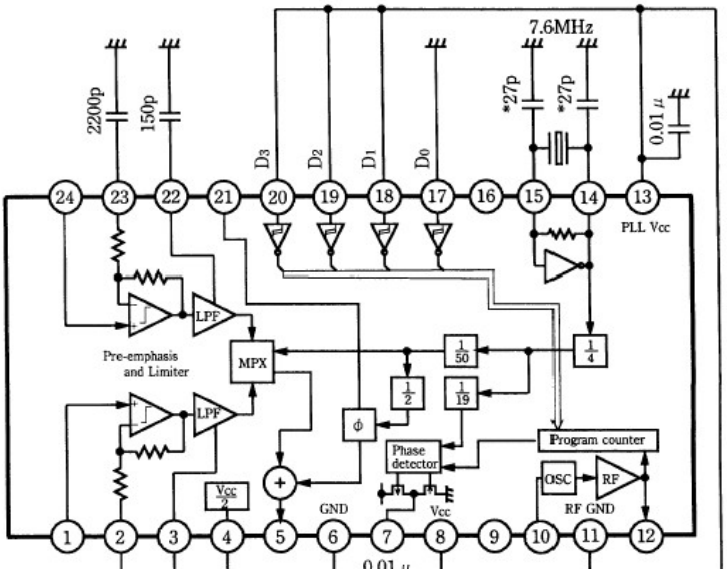
TC5 and C21 eliminates the noise of the power line.

3-4 VCO (VOLTAGE CONTROLLED OSCILLATOR) Section



- This VCO(voltage controlled Oscillator) is Frequency tuning section. VCO tunes the voltage precisely, makes the RF output frequency to the frequency that the user sets, and fixes it.

3-5 FM Oscillation Section



- FM oscillation section oscillates with 7.6 MHz X-tal frequency, by the PLL modulation method, generates 19 kHz and FM bands of frequency which is required for FM frequency transmission.