

# Operational Description

## 1. Power circuit

DC JACK B1.C10.R1.C7.R2.Q3.D4.R17.C16 and BATT1 compose the power supply circuit. You input 12V voltage which transfer 3V and supply to transmitter working, when

ON/OFF switch, the light LED1 is on/off by R6

## 2. Power transmitter circuit

R23.Q1.C1.R20.Q4.C13 compose power transmitter circuit.

Electric current is supplied by battery. (Size: AAA)

Power source

## 3. Power supply by car plug.

Audio signal composed of R11.R12.C3.C5.R3.R22.R21.R7.R35, audio test signal composed of R26.C9.R25.R24.Q6. When 55 seconds no signal input, U2 output signal control transfer power off

## 4. CPU circuit

7.6M crystal oscillator driver for U2. The output of U1 has the matching network consisting of X2.R28.C19. C20 which compose CPU control circuit

## 5. Frequency control circuit

s1.s2.s3.s4.s5.s6.s7r9.r10r27.r19.r32 composing of switch controlling and controlling frequency change;

## 6. Display circuit

R4.R18.R5.LCD8341 compose display which control by U2

## 7. Antenna ground and power source

The antenna is PCB antenna, there is no external ground connection. The ground is only that of the printed circuit board.

## 8. RF vibrate circuit

R34.R37.C28.Q2C23.R25.L2.R36.C35.C14.D5.C6 compose RF vibrate circuit, which output AC signal amplifier

## 9. RF amplifier circuit

C15.C3.C2.R29.Q5.C3 compose RF amplifier circuit which can amplify vibrate signal

## 10. Phase-locked circuit

C4.C3.C18.C21.R13.R16.R14.C22.C23 compose phase-locked circuit which lock frequency.

## 11. Stereo signal modulate

U2 inside coding output signal by R31 to modulate