

description of ENA-7000

1. Path to Audio

Audio is input by ear jack (J1) . The FM stereo is modulated by FM IC (U1 GFT-808) and the modulated FM stereo is transmitted by antenna. FM transmitter frequency is 88~108.0MHz. FM IC (U1 GFT-808) works on crystal (XTAL2) 21.25 MHz.

2. Hands Free Path

Microphone is used when users want to use it as hands-free. The microphone transmits Opponent's voice by connecting with mobile phone. This function of operation is not related to FM IC (U1-GFT-808).

3. Charging Path

DC Jack (J2) is supplied by 5V outer electric power and charged by exclusive charger IC (U6 NCP1835B) Li Polymer battery. Generally, it performs to charge 1 hr and is able to charge up to 2 hrs.

4. Micro Controller (U2 3P9228AZZ-QZ88)

- a. The micro controller performs on and off function as well as channel setting of FM IC(U1).
- b. As it takes a role to control of charge, it displays charging status including full charging.
- c. It takes a role to control of LCD display. It displays using frequency, memorized frequency and reminders of battery.
- d. It takes a role to control driver2 (TR2 MMBT2222A). This has been used to gauge phase noise and normal modulation in production line. As this has special mode which is able to change the route of analogue switch U4 (NLAS4599).which enables TR2 (MMBT2222A) to be power- on and off.
- e. It controls key . It performs set-up and memory of frequency on key input.
- f. It controls LED. It is used for back light of LCD.
- g. It saves frequency that end-users can set in EEPROM (U3 AT24C02B-10TU-1.8).
- h. It supervises status of audio input. In case that audio is not input, it turns to power-off status automatically within a min. It enables to convert into DC by TR3(MMBT2222A) and D1(MMDL9 14T1G) after process of amplified audio detection, which distinguishes audio input status by input to the Micro Controller's AD controller.