Power Supply: AC 100-240 V 50-60Hz DC 9V-1.5A

Speaker Impedance: 80hm

DS-843 is a Bluetooth /iphone dock speaker, introductions for the circuits:

AUX signal was sent through the JACK1 (earphone socket) to U6 (SJ2253) switching the volume controller to the amplifier U5 (TDA7266SA), and finally to the speaker. iPod signal was sent through the iPod (iPod socket) to COMMON Code circuit U8(JRC4558) and then switched by the volume controller to the Amplifier U5(TDA7266SA) and to the speaker at the end. Video signal was input directly to Video AV socket and external video play equipment, such as the TV, and now the connection is done. Under BT status, Pls press 'pair 'button at the back of the speaker to pair with the external BT equipment. After paired, it can play the music. The signal is conducted after the Bluetooth receiver module to the COMMON Mode U7 (JRC4558), changed the volume by the U6 (SJ2253) volume controller to amplifier U5 (TDA7266SA), and finally received by the speaker. When play the music, can press PLAY/PAUSE button and there is a phone call, pls press PLAY/PAUSE button to answer and to hang off as well. U2(MC81F4316) is the main controller, MUC, to control the U6 (SJ2253), U1(APPLE 2.0 C). SW3(STANDBY/AUDIO button), SW1(PLAY/PAUSE) \ SW4(Volume down) \ SW2(Volume Up) \ LED1(Status indicator). LED2(Bluetooth working indicator).

## The device is a bluetooth stereo speaker, The working frequency of RF module

F-3089 (crystal is 12MHz) is setted to 2402MHz ~ 2480MHz, the frequency separation is 1MHz and there are 79 channels. with the spread spectrum code sequences to hopping constantly.

To make sure the communication stable, Bluetooth special design the fast acknowledge and frequency hopping plan to ensure that link stability. First link, between Bluetooth devices will build a pseudorandom code, Only the pseudorandom code is same, the information transfer will be accepted. Other interference is not possible in the same sequence of interference. Bluetooth through the spread spectrum technology, Make the influence of interference may become very small.

The working procedures are:

- 1. Power on, the indicator light flashes faster, the DS-843 enter to pair mode. The DS-843 will do the frequency hopping according to a certain sequence, and then send the connection command.
- 2. If there is a Device response, the DS-843 will judge whether it can be permitted to connect. Prompt enter a passkey.
- 3. If the passkey is right, then can be permitted to connect, send the connection command to build up the connection.
- 4. While the connection build up successfully, the data transmission is beginning. At the same time, the DS-843 and device will shift frequencies in synchronization per a same pseudo randomly ordered list of hopping frequencies, the hopping rate is 1600 times per second.
- 5. The bandwidth of the receiver, which is set to a fix width by the software, match the hopping channel bandwidth of their corresponding transmitte