## **Operation Description**

By way of small power switching power (U5), Car cigarette connector output voltage reduce from DC 12V to 5.0V (Maxi. Output current 500mA), and power supply to Master control parts, charge for Apple iPhone or iPod.

U4 is a MCU, most of the functions are controlled by this chip. For example, digital tube display, button inspection, RF setup and control and etc. The circuit is mainly composed of U1, U2, U3 and U4. U3 is a power management chip and provides host with 3.3V power. U2 is an EEPROM memory, and stores the previous frequency when the power is disconnected. Once the host is powered, Mcu (U4) will first read the previous frequency stored in U2, and then MCU will set up PLL stereo FM modulation U1, which contains a 7.6 MHz crystal oscillator, After the above-mentioned setup, Mcu(U4) will mobile scan digital tube and display current frequency. When detecting any operation of +/- button, Mcu (U4) will update PLL chip U1 parameter and display current frequency. When detecting any other operation than +/- button, Mcu (U4) will transmit relevant data to Apple device.

Antenna is formed by a short copper wire soldered on the PCB, Common grounding on PCB is not connected to real external ground. Power supply is DC 12V by Car cigarette connector.