## **RF** Transmitter Operational Description

## SY-IPFM-07

SY-IPFM-07 is low power stereo FM transmitter for iPod with 30pin ipod dock connector, that works across the FM broadcast band, allow iPod users to broadcast audio wirelessly from theirs iPod to FM radio, the transmission frequency is set from 88.3 to 107.7MHZ modulation type.

Antenna, Ground and power source.

There is no external antenna, there is no external ground connection, The ground is only that of the printed circuit board, electric current is Supplied by a 12~24 Volt DC. This product mainly consists by 12 portions:

- 1. IC U3 is DC power output.
- 2. IC U1 PIN1 and PIN22 are audio R/L-CK INPUT.
- 3. IC U1 PIN2 and PIN21 are PRE-EMPHASIS TIME CONSTANT.
- 4. IC U1 PIN3 and PIN20 are LPT TIME CONSTANT.
- 5. IC U1 PIN5 is COMPOSITE SIGNAL OUTPUT.
- 6. IC U1 PIN7 is PLL PHASE DETECTOR OUTPUT.
- 7. IC U1 PIN14 and PIN13 are X' TAL OSCILLATOR
- 8. IC U1 PIN11 and PIN10 are RFOUTPUT or RFGND.
- 9. IC U4 is MCU.

- 10. IC U4 PIN1, 2, 3 give U4 PIN15, 16 provide Chip Enable CLOCK DATA.
- 11.JP1 is LCD.
- 12. IC U2 is memory IC, and memory the broadcasting Frequency last time.