

Operation Principle of TX

1. Oscillator

X101 is a crystal oscillator. It forms a oscillator circuit with the other components L101, Q108 etc. and generate the 3rd overtone for the carried frequency channel A and B or Channel X and Y. Turning L101 for adjusting the TX frequency accuracy.

2. Transmission part

The microphone picks up the baby's sound. The audio signal then pass through U101D, U101C. It amplifies the signal and inputs to the transmitter circuit, the audio signal and the carried frequency then inputs to the RF amplifier. The RF amplifier consists of the transmission amplifier Q108&Q109, and transmission output power adjusted by L102 and L103. The TX frequencies pass through a LC filter. LC filter with the other components L104, L105etc, is for rejecting the harmonic signal radiation, and then radiation signal radiates at the antenna.

3. Power supply

The nursery unit is powered by adaptor with 6VDC 200mA output.

Q110, R133, C131 and Z101 form a regulator circuit. It provides 4.7V power to the circuit.

SW3 adjust Night light LED on.

4. Launching antenna is external antenna (Length=8cm, Gain=1dBi), It's good for receive and launch RF signal.