

**DESCRIPTION FOR THE MODEL 08046T (for Baby unit), 08046R (for Parent unit)**

**1. RX UNIT AND CHARGER BASE (Receiver): 08046R (for Parent unit)**

**(1). RX SECTION:**

- **RF Match & RF-Amp.** are achieved by using the matching components of C32,C73 and C86, which are used to match the front end to antenna for better reception. Q4 and Q3 perform the RF-AMP for amplifying the weak signal.
- **OSC, Phase Lock Loop & Local Oscillator circuit** are provided by the parts of X1, U2 and U1,X2 to generate different the local oscillator frequency for Mixing purpose. The output of the oscillator signal is used and injected into the Mixer circuit for creating IF signal. The Phase Lock Loop is control.
- **Phase tack loop data** by the CPU (U2) control signal.
- **IF Circuit** is constructed by a combination of parts, like U1 and Around resisters. capacitor s in order to provide the IF demodulated signal , the audio path includes RC filter circuit (R, C), audio amplifier (U4). LED indication control circuit (U3 and LED1-4).
- **Low-Batt Detector** uses U6 to detect the VCC voltage and provides a detected signal to CPU for low battery indication.
- **CPU (U2)** provides a system control on several parts, like low batt voltage, sensing the channel A & B selector setting, providing the PLL (Phase Lock Loop) control. System check indication, and Low Batt dual LED . Link dual LED indication etc.
- **Regulator (U5), Charger (Q1 & Z1) and Batt** are used to provide a constant supply voltage for the circuit.
- **Power Switch of SW4** is the whole unit on/off power control and volume control.
- **Charging Base** includes Q1 & Z1 connecting to the DC jack of adaptor .Switch S1, Q5 ,Q2,U3 and M1 complete vibration function.

**2. TX UNIT (Transmitter ): 08046T (for Baby unit)**

- **Tx Match Filter** is a filtering and matching circuit, which includes the capacitors C1-C4, C63, C64 and filter of CF1.
- **RF Amp** is achieved by using a transistor Q1. The RF signal is applied to the base of this transistor of Q1 for amplification only. The signal will be sent to the antenna via TX Match Filter.
- **The Local Oscillator and Modulator** is a combination of circuit components of Q2, DVC1 & DR1 which are constructed to form a modulator circuit.
- **OSC. & Phase Lock Loop** are formed by X2 U1 & X1 U5.
- **Tracking filter circuit** is formed by C24, R11, C25, R9, C23.
- **Audio Amp** is achieved by U3-A, B to provide amplified audio signal to the modulator

circuit. The AGC is controlled by Q5, Q6 for automatic level control.

- CPU (U1) provides a system control on several parts, like providing sensing the channel A & B selector setting, providing the PLL (Phase Lock Loop) control.
- Regulator Circuit includes the transistor Q8 and zener diode Z1. They are acted to provide constant voltage to the circuit.
- Power ON/OFF Switch of SW3 is used to switch the whole unit power on/off control.