

Wireless 912 Headphone With PLL Transmitter

WHP-175

Induction Charger

The induction charger consists of two parts, one part is induction oscillator is build in Tx, which can generate Amplitude=23Vp-p, Frequency=70KHz sine signal as a power source generator, another part is an induction circuit is integrated into Rx unit that can pick up the oscillatory signal and regulate to DC voltage for charging rechargeable battery. When the Rx unit put into the Tx cave, a detect switch trig the 16hrs MCU timer automatically, the timer will turn on the power source generator to generate the 70KHz sine wave, and the oscillatory signal will be stored in LD2 as stored energy alternately. Due to the Tx and Rx both have a stored energy coil (Tx: LD2, Rx: L201, see the schematic diagram) as coupling transformer while the Rx unit put into the Tx cave, the Rx will pick up the alternately signal and regulate it to 2.6V/30mA DC voltage for charging two AAA size rechargeable battery. A green LED of Rx is as charging indicator will be turn on during charging and will be turn off after the timer stop.

Automatic ON/OFF:

In order avoid needless broadcasting of the carrying frequency, when there is no signal input, the circuit is equipped with an electronic switch. A detector circuit is sensing whether an input signal is available. Depending on the status of the input, the powering for the main circuit part is switched on or off.