CHARACTER OF CIRCUIT

Transmitter Portion

Transmitter's circuit portion consists of sources power, audio simulation, Digital Converter portion, MCU operation portion and RF transmitter.

- 1. Power source circuit portion: Power source portion including 5V power supply portion and 2.7V power supply portion. 5V power supply portion consists of power source voltage-stabilizing IC(U6) and matching filtering capacitance(C25,C27,C29,C31),etc 2.7V power supply portion was reduced voltage by diode and consists of filtering capacitance(C32,C33,C34).
- 2. Audio simulation and Digital Converter portion consists of (U3)audio input network of IC (R8,R9,C12,C10,C11),IC(U3) and exterior organ(R7,R6,R5,R4,C14,C15,C6,C17,C18). And input digital signal which have been converted to MCU to operate.
- 3. MCU circuit portion consists of U9, exterior crystal circuit(Y1,C7,C8,R18),EEROM circuit portion(U1,R31,R32,R33),reset circuit portion(R38,C9) and exterior organ of U9(R11,LED2,R2,R3,D4,C19,C20,C21,C1,C4,C5,C6).
- 4. RF transmit circuit portion consist of RF transmit chip (U5), RF transmit power magnify audion Q1, output filtering network, transmit antenna. transmitter consist of U5 and its exterior organ(R27,R28,R26,C22,C23,C36,C37,Q2,C41,C42,C39,C43,C44,C45,C46,C47,R21,C48,C40,L1),RF output signal was sent by output matching network(L2,C50,L3,C51) to magnify audion circuit(Q1,R23,R24,R22,L7) which after magnified, to send transmit antenna for radiate in sky by low-pass filtering network.

Receiver Portion

Receiver circuit portion consist of power source, antenna of receiver, RF input which is matching network portion, RF receiving circuit portion, MCU operation circuit portion, audio with simulation convert circuit portion.

- 1. Wireless signal was sent to chip of receiver(U7) with circumjacent organ(C90,C67,C68,C70,C71,C73,Q3,C74,C75,R40,C78,C79,C80,C81,C82,C83,R41) by antenna of receiver and RF input which is matching network portion(L10,C87,84L9,C86,L8,C65),then chip of receiver send signal to MCU operation portion. MCU operation portion consist of (U4) with Circumjacent organ (C60,C59,C63,C62,R29,D6,R30,R37), EEROM circuit portion (U13,R34,R35,R36),crystal circuit(Y2,C3,C58,R13),reset circuit portion(R1,C61).
- 2. MCU operation portion send signal which has been operated to digital audio with simulation convert compatible audio magnify portion(U12), circumjacent organ(C64,C65,C66), simulation audio which was outputed by output electrolyte capacitive, to be consist of course of complete signal receive, operate, convert and magnify.