Theory of Operation

1. Power Supply (BATTERY)

- The Power is Supplied to REG1(REGULATOR 5.0V) through SW1 Switch and supplied to Each Part (MCU1,OP1,QVC1,QPW2) by Output 5.0V.

2. Up(TACT1), Down(TACT2), Right(TACT3), Left(LEFT) Key Button

- It activates when it is on Active Low mode and connected to 7~10PIN of MCU1. It recognizes by On (LOW:0V), Off (HIGH:5.0V) mode.

3. Low Battery Function

- When the Connecting Voltage to NO.3 PIN of MCU1 is under 1.625V, it Indicates by Red light on LED1 and with the Voltage over 1.625 by Green Light.

4. Trim Control

- It Trims TRIM_R and affect to Change the rate of Voltage Value. And also Controls the center Position Balance of Right, Left Key Button.

5. Audio (DATA) Filter

- The data signal which produced in MCU1 goes through OP1(OP AMP.) and it filters the data signal by the circuits around.

6. Crystal (X-TAL1)

- Crystal oscillates by QVC1 and Generates Frequency of 72MHz ,also Mixes the data signal Coming Out from OP1 and generates RF Signal.

7. Power AMP

- RF Signal (CARRIER frequency +DATA SIGNAL) get Amplified by QPW2 and QPW1

8. 72MHz BAND Pass Filter

- The Frequency Generated by Crystal also Creates Harmony Frequency So that it only Sends 72MHz by 72MHz B.P.F .

9. Antenna

- RF SIGNAL by 72MHz BPF Radiates through the Antenna.