

BP-10017F : Theory of operation

1. Power Section

The Power section is composed of 1)the external DC power supply 2) battery DC 1.5V source and power up part.

1] The external DC power supply

When the external DC 12V is input, the DC power decreases by DC 5V through the regulated circuit and supplies DC 5V to each part.

2]The battery DC 1.5V source and power up part.

When DC 1.5V is input from a battery, the DC power increases by DC 3V through power up circuit and supplies DC 3V to each part.

2. Signal input section

The signal is input through the stereo audio cable.

3. FM transmission section

FM transmission section includes 1)FM oscillation part and 2)amplifier part.

The functions of each part are :

1] FM oscillation part

FM oscillation part resonates crystal 7.6MHz and generates 19KHz ,FM transmission frequency, by PLL.

2]Amplifier part

Amplifier part amplifies FM transmission frequency generated from FM oscillation part and deliveries it to antenna.

4. Antenna

Antenna radiates FM transmission frequency delivered from the amplifier part and uses wire antenna.

5. Frequency selection part

FM transmission frequency is selected by the frequency selection switch.