

THE WORK FLOW OF Z-1300i

The Z-1300i FM PORTABLE FM STEREO TRANSMITTER is mainly connect of five parts:

- 1:CPU control part
- 2: Programmable Flash Memory
- 3: stereo modulator circuit.
- 4:the frequency modulator part.
- 5:the power supply circuit.

Part1:

CES1415 is programmable IC,It control the transmission frequency、LCD display、volume adjustment.It output DA、CK、CE data signal control frequency.

Part2:

AT24C02 is Programmable Flash Memory IC, The AT24C02A provides 2048bits of serial electrically erasable and programmable read only memory (EEPROM) organized as 256wordsof 8 bits each.It connect CES1418.

Part3:

MW1418 is stereo modulator,It consists of audio signal amplifier and a stereo modulator for generating stereo composite signals. The stereo modulator generates a composite signal which consists of the MAIN, SUB, and pilot signal from a 38kHz oscillator.It ouput a main signal of 19KHZ oscillator and a composite signal of 38KHZ oscillator to RF modulator.

Part4:

MW2822 is PLL phase detector, DA、CK、CE data signal of CES1415 output control a modulator voltage of MW2822 output. modulator voltage of **MW2822 output** 、 a main signal of 19KHZ oscillator and a composite signal of 38KHZ oscillator add to RF modulator.

RF modulator export the FM modulated stereo radio signal, then this signal be amplified after be send to space by antenna.

Modulation Type: FM

Transmit Frequency range is from 88.1 to 107.9 MHz, the interval is 0.1MHz.

Part5:

The power supply circuit is mainly consist of DC/DC converter 78L05,12V DC voltage from car cigarette lighter can be convert to 5V by the 78L05.this part can supply 5V voltage to all other IC.