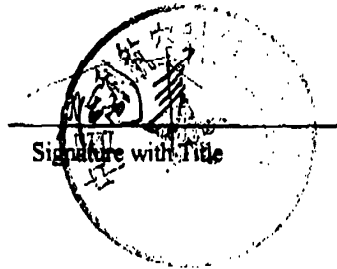Date:DEC-10-2001

Dear Sirs:

The transmitter(EK-2000) mainly contains a crystal-controlled tansistor oscillator circuit. In the circuit, It mainly includes the components of X1,Q1,Q2,L3,C6 etc.(See the schematic diagram).The crystal unit X1(17.734476Mhz)is used as inductance. And because the series frequence(fs) of X1 is 17.730025Mhz , the parallel frequence(fp) of X1 is 17.73446Mhz, when the oscillator circuit works, the basic fosc must be between the fs,fp, $\Delta f=fp-fs=4Khz$. And because the transmitting frequence of the transmitter is 5 times of the basic fosc, so $5\Delta f=20Khz$, the max bandwith is 20Khz. If the volume of the input is changed, the bandwith is out of 20Khz, the X1 is used as capacitance, so the oscillator circuit can not work. As above,when the transimitter works, the bandwith must not exceed 20Khz ,i.e.below 200Khz.

Signature with Title