

CONERSOR (F2) TRANSMITTER

USA FREQUENCY BAND

(216 MHz BAND)

CIRCUIT DESCRIPTION:

This description should be read in conjunction with the circuit diagram (.....) from Sense-Sonic ltd.

TS1 is a switch for selecting between highly directional and omni-directional microphones and TS4 is a socket on the base of the transmitter unit that can be used for direct audio input.

IC1 and its associated circuitry form an audio amplifier and the filtering circuit. The R24 set the audio output level from the IC1 and hence set the frequency of deviation of the transmitter. D1A and D1B are limiting diodes.

TR2 and its associated circuitry form a high stabile 9th overtone crystal oscillator. The crystal in the circuit is XL1 and C3 is variable capacitor to adjust the oscillator's frequency.

TR3 and associated circuitry is 1st stage amplifier with variable T1 as a tuning circuit. TR5 is a 2nd stage amplifier with variable T2 and T3 creating band pass filter. TR6 is the final stage amplifier with a matching and band pass filter circuit. This circuit is tuned using variable capacitor C22 and C24.

T1, T2, T3, C22, C24 and VC_ant are variable components used to ensure that transmitter meets the specification requirements.

IC2 and its associated circuitry is a DC-DC converter with a battery (1.2V) and charger input connector. The output from the DC-DC converter is 3.3V.

S1 is a switch to turn ON/OFF the transmitter power. D2 is an LED and when light is glow's green, it indicates that the transmitter is ON and the battery level is sufficient.