

Wireless microphone circuit description of H-026

AUDIO CIRCUIT

The audio signal is injected via the microphone sensor into the audio circuit composed of the op amp IC101 JRC3404, & compandor IC102 NE571. The signal is compressed via the compandor circuit at a 2:1 ratio. The level of the output signal is controlled by the resistor VR101 to Modulation part.

MODULATOR CIRCUIT

The modulator circuit is a direct FM type built around the local oscillator controlled by Crystal TX401, IC 401 and VT401. The modulated output from the oscillator is sent to the RF pre-amp consist of VT402.

RF PRE-AMPLIFIER & FINAL AMPLIFIER

4 transistor amplifier stages, using VT402-403, and VT 502-503 transistors, culminating with a normal transmitter output of <1mW. The output filter comprised of C801-809, C508-514, L501-504 suppresses the output harmonics and matches the output to the integrate antenna.

POWER SUPPLY.

Up the input voltage by VT201-204, VD201, and steadied by IC201 XC6371 with filter L201-L206 and capacitors.

Operation frequency range: 614.2-697.8 MHz; Modulation Type: 100kF3E

Antenna type: Whip Antenna