

Wireless Guitar circuit description 电路说明

AUDIO CIRCUIT 音频部分

The audio signal is injected via the microphone sensor into the electronic switch (U5 CD4066). Then the audio signal is amplified (U3 4558) and via pre-weight circuit composed of R79, R99, C77, C78, C68 with a compress circuit (U4 NE571). The level of the output signal is controlled by the resistor VR2($10k\Omega$) to modulation part.

MODULATOR CIRCUIT 调制部分

The modulator circuit is direct FM type built around the local oscillator (VCO) composed of T33, BD149, VL(15T) with 16MHz Crystal as its clock to generate a set carrier needed. the output signal from T33 & IFT(35) is sent to RF pre-amp.

RF PRE-AMPLIFIER & FINAL AMPLIFIER 放大部分

Five transistor amplifier stages, using transistor T33 x 3, R24 as preamplifier, 415 to culminating with a normal transmitter output of $<1mW$. The output filter comprised of 3 caps (1.5pf, 2pF, 2pF), 3 conductor (1T, 1T, 15NH) and 2 VC (2-8pF) suppresses the output harmonics and matches the output to the integrate antenna.

Operation and Display (操作和显示部分)

Two LED display the power status.

POWER CIRCUIT 电源部分

The power is controlled by IC (6367) and 7805, transistor 113 and 3 x L6 for power control.

Operation frequency range: 614.2-697.8 MHz; **Modulation Type:** 80kF3E

Antenna type: Whip Antenna