

Circuit Description of 3826 Transmitting Unit

Transmitting

Power Supply

Power from AC adaptor or battery is regulated by the regulator circuit formed by Q1 and Z1. The regulator can provide a stable voltage to other circuits.

Mic Amplifier

Signal from microphone is amplified by Q4. The mic signal is further amplified by Q5 and then fed to U2.

RF Frequency Oscillator

The crystal oscillator circuit consists of X1 (or X2), C30,C31 and C29,C28. The audio signal from R18 to U2.

Mixer Circuit

The mixer circuit is built inside U2. The RF frequency from crystal oscillator is mixed with the audio signal from microphone. This RF signal will then feed to RF Power Amplifier.

RF Power Amplifier

The RF signal is amplified by the amplifier inside U2 before it is transmitted by antenna.

Antenna Matching Circuit

Signal from RF Power Amplifier is transmitted by antenna through the matching circuit, L1, L2, and C27 to reduce the unwanted harmonic.