

## **CIRCUIT DESCRIPTIONS**

The wireless microphone uses a transmitter module operation in the VHF band. This modulator is a high performance, nine channel FM transmitters capable of transmitting analog data. To transmit analog information the modulator reverts to FM modulation.

An 60.0MHz FM oscillation serves as the base frequency reference for the Phase Locked Loop (PLL), supporting the one time and two time frequency for give and high frequency.

The PLL combined with a 174-216MHz VCO, forms a stable frequency synthesizer that can programmed to oscillate at a number of present frequencies.

An onboard micro-controller reads the channel-selection lines and programs the PLL to desired channel frequency. A buffer amplifier is used to isolate the VCO from the antenna and to increase the output power of the transmitter. The output of amplifier is connected to a BPF which used to suppress harmonics emissions.