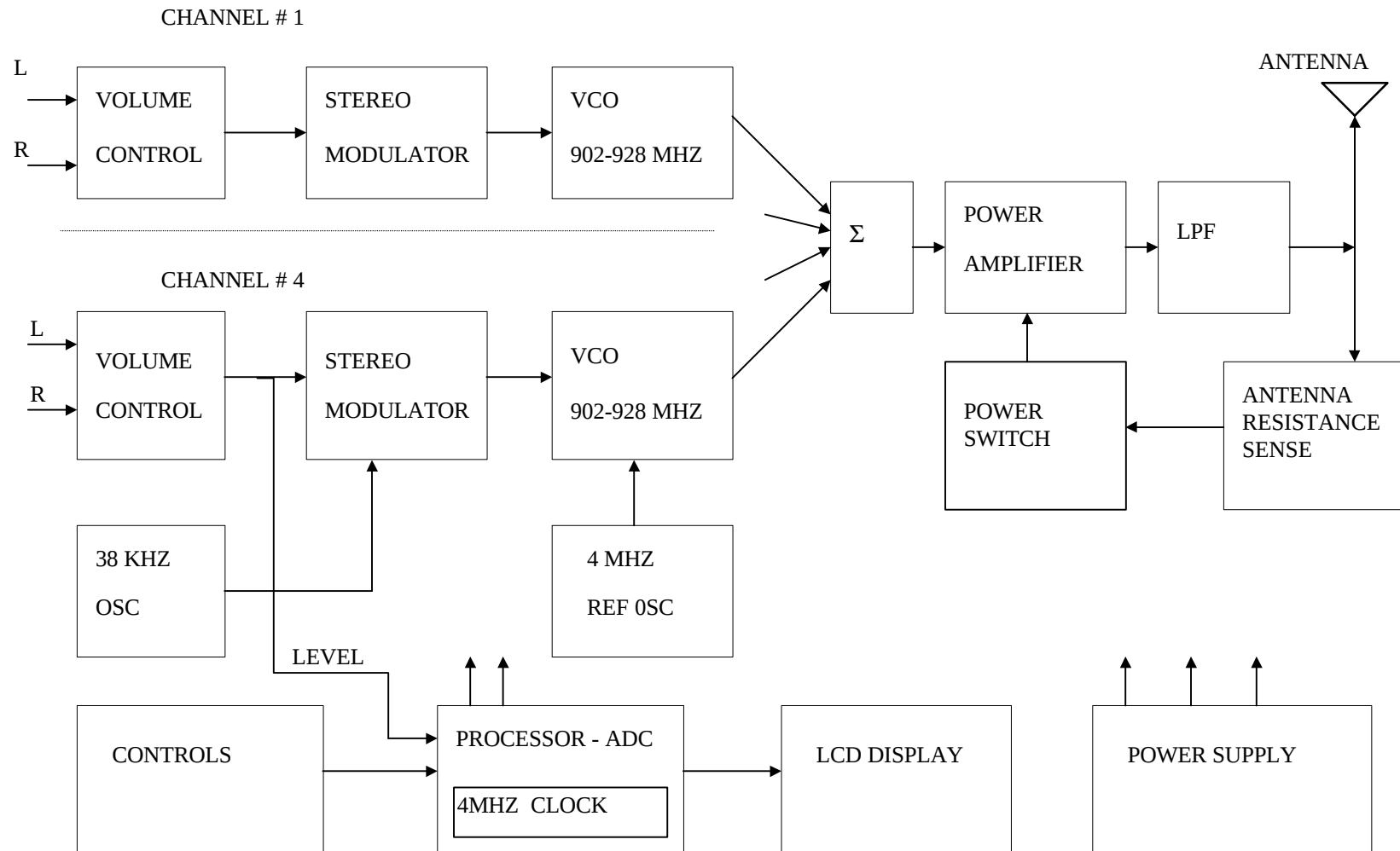


LCS FOUR CHANNEL TRANSMITTER BLOCK DIAGRAM



LCS TRANSMITTER DESCRIPTION

The transmitter is a four channel stereo FM transmitter operating in 902 - 928 Mhz frequency band. Microcontroller controls all the functions - reading the keypad, setting the volume (modulation depth), loading the synthesizers and displaying the channel number, volume settings and audio signal levels. Stereo audio signal from the audio source after the volume control circuitry goes to stereo modulator and then to synthesized VCO. Four modulated RF signals from VCO's combined together and amplified by the power amplifier. Following the amplifier is the low pass filter which suppress high order harmonics of the transmitted signal. Antenna is the modification of a resonant quarter-wavelength monopole with coax cable. The transmitter is powered by 120 VAC and is grounded by the standard three conductor power cord.