



Touch Controlled Pre-amp

A touch controlled pre-amp with touch plate selection of inputs and volume, bass, treble and balance can be easily constructed with the help of the LM1037 and 1035 audio control ICs. The touch plate sensors rely on the tied inputs of the AND gates (IC1, 11, 21, 31, 41) floating low and being taken high by a touch on the plate.

IC2, 3 form a latching arrangement so that each touch on an input selector plate will set the relevant flip-flops and reset the others.

The four flip-flop outputs are used to switch on a pair of inputs to IC5 through to IC6. This uses the DC voltage from the four identical volume, bass, treble and balance circuits to filter and attenuate the stereo channels.

The DC control voltage is obtained by weighting the 4-bit output from up/down counter IC13 (23, 33 and 43). The counter is clocked by the 555 timer in astable mode and enabled to count up or down by IC11 and IC12.