

WIND TYPE TONE SYNTHESIZER
ABSTRACT

An acoustic wind instrument having a conical tube is simulated by two cylindrical tubes communicated to each other at each one end. A parallel connection of electrical signal transmission lines, each simulating a cylindrical tube constitute a synthesizer synthesizing the sound of the conical acoustic wind instrument. Each signal transmission line includes a shift register for giving a delay to the input signal, a multiplier for simulating sound reflection, and a filter for affording a tone color. An exciting signal is injected at the interconnection of the parallel connection through a junction circuit. (Figure 1).