

String machine

ByteNoise

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What it is

A type of polyphonic musical synthesizer popular in the seventies. It was dedicated solely to sounding a bit like several people playing acoustic string instruments in harmony. Although they didn't sound anywhere near realistic enough to fool anybody (that's what Mellotrons were for), their pleasant timbres are now sought after by musicians (or at least analogue synthesizer geeks) in their own right.

How it works

Nuances aside, most string synthesizers generate sawtooth waveforms which are slightly detuned from one another. These can be made richer sounding by ever so slightly modulating the pitch and/or duty cycle of one of the [waveforms](#) with an LFO. They are then passed through a trapezoid envelope (an ADSR envelope can make this shape by turning the decay down to zero and the sustain up to the maximum setting). This creates a slowly rising and falling lush sound that is vaguely comparable to the effect of several musicians playing acoustic string instruments.

Popular examples

- **Solina String Ensemble** (later bought by Arp.) Currently

worth about £200. Users include Air, The Cure and Tangerine Dream.

- **Korg PS-3300** Currently worth approximately £5000. Users include Karl Bartos, Jean-Michel Jarre and Vangelis.
- **Roland RS-202** Currently worth around £100. Users include Camel and Tomita.

References

- <http://www.soundonsound.com/sos/Feb03/articles/synthsecrets46.asp>
- <http://www.vintagesynth.org/>
- [The A-Z of Analogue Synthesisers](#)