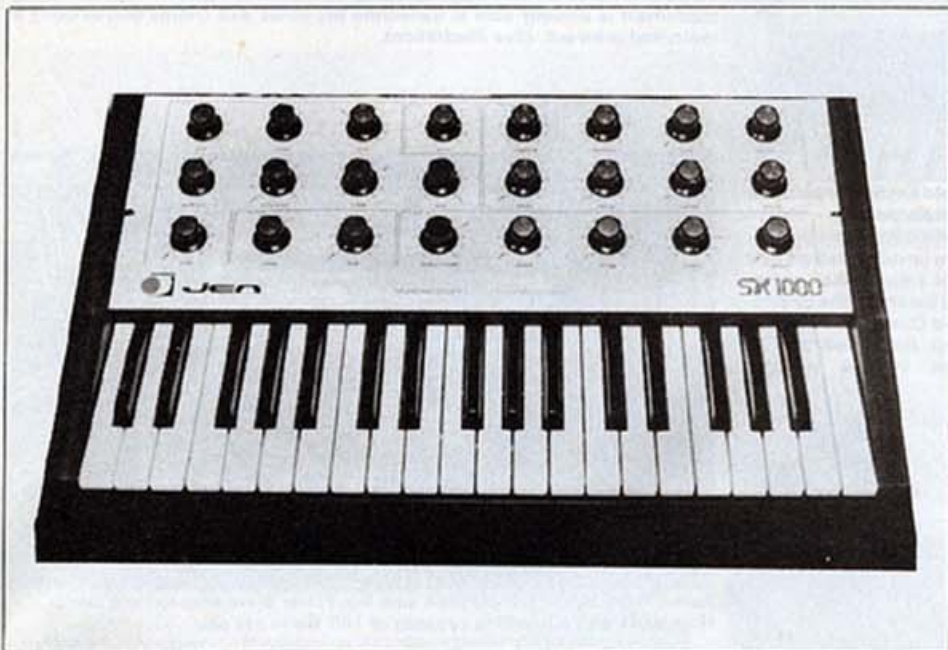


Jen SX1000 Synthetone



Having recently come across the Jen Synthetone, along with the publicity info stating "the greatest synth bargain you've ever laid hands on" it seemed pertinent to try out this instrument — especially as readers had commented on it from time to time.

The Synthetone originates from the Jen organ company in Italy and has in fact been around for over a year using chain stores and mail order companies as its main outlets. At a price of £190 (inc. VAT) it would have done well initially alongside EDP synths and the few other monophonic variable synths in the market price range, but the choice of cheap instruments has escalated rapidly since then so this review may give you one more to consider.

The SX-1000 is mains powered and is cased in veneered and black painted wood with front plastic trim (under the keyboard) and black metal main panel with white legend. It measures 17x56x36cms (HxWxD). The rear panel has holes for a wire music stand and a line out socket next to the mains cable outlet and fuse holder. No CV or trigger in/out sockets are provided.

The knobs are colour coded red for VCO, green for Noise, yellow for modulation controls, blue for ADSR and black for output volume. The synthesis sections VCO, Noise, LFO, VCF and VCA are grouped logically in the main panel and players should have little difficulty in making sounds with the instrument. To start you off, a set of six patch cards are provided with cut out holes to fit on top of the panel controls so that a dozen instrument sounds can be tried, from brass and organ to piano. These worked well considering this is a standard single oscillator instrument — benefitting from two envelope generators and pulse width modulation.

Controls

The VCO pitch can be switched to 32',

16', 8', and 4' octave ranges for the three octave C to C keyboard. A 'tune' control adjusts only very slightly up or down from A=440. Glide (really portamento) makes smooth slides between notes (continuing after release of key) from zero to four seconds over three octaves, although it is not effective aurally until '4' on the dial. The keys have a smooth action but are a little noisy against the base in operation, giving top note priority and 'keyboard follow' from the filter. Waveforms offered are sawtooth, square and pulse with variable pulse width over 5-50%, as well as modulation of the pulse shape at the LFO speed setting. Noise is switchable to white or pink and, like the VCO, has its own level control for mixing these together. The

total output of the noise was noticeably less than the VCO.

The two sound sources are fed to the VCF section which is a low pass filter with (cut off), 'Frequency', 'Resonance' and ADSR controls. Maximum time for attack is 5 seconds with Decay and Release up to 14 seconds and offers a usable range, including short clean envelopes of a few milliseconds. The filter will oscillate at extreme Resonance settings (with an increase in volume) and harmonics can be easily picked out. An 'Envelope Level' controls the amount of effect from the ADSR and allows the filter to cut off the sound completely.

From the VCF, the signal goes to the VCA with its own similar ADSR envelope generator. An LFO (0.2Hz-20Hz) adds Vibrato to the oscillator and cyclic changes to the filter tone, with individual Depth and a common Speed control.

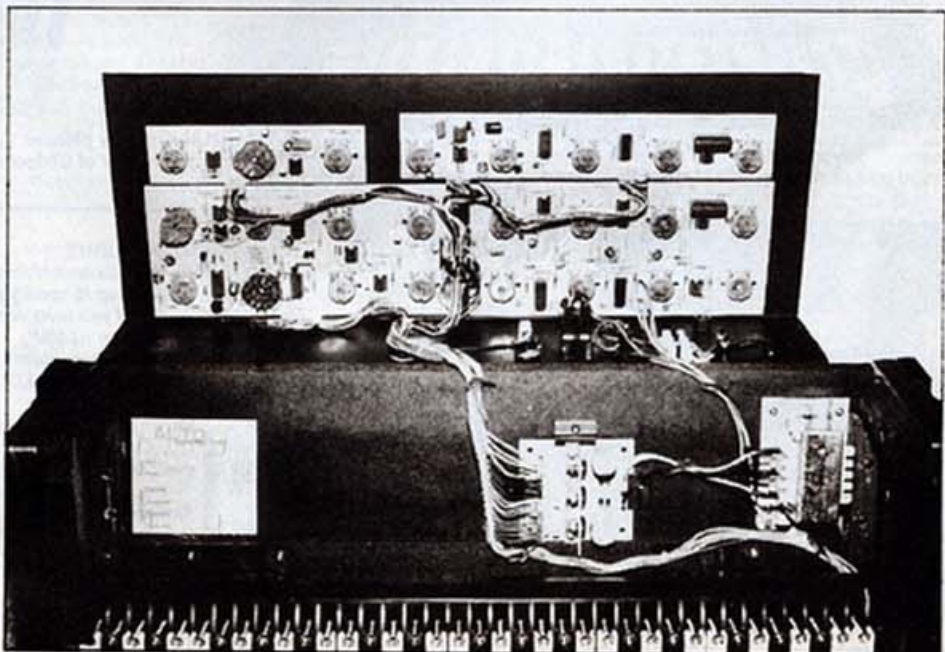
Finally, there is an Output Volume control to set levels to your hi-fi, mixer or amp.

The circuitry employs standard chips such as 741, 351, 353 and 301 opamps for signal and voltage processing, and the tone generation is based on the SGS-Ates M110. Filter control is achieved with 2 LM13600 dual transconductance amps. The EG uses discrete CMOS circuits (CD4001, CD4066) and the VCA is based on the LM3080 transconductance amp.

In conclusion, you'll not find any extras (particularly for interfacing) and there are no special functions like arpeggio or memory storage. Nevertheless, the Synthetone does offer plenty of experiment and good quality sounds for the musician looking for a variable instrument rather than a preset.

E&MM

The Jen Synthetone is distributed in the U.K. by British Music Strings Ltd, Pontywindy Industrial Estate, Caerphilly, Mid Glamorgan, CF8 3HU. Tel: 0222 883904.



Synthetone internal circuitry.