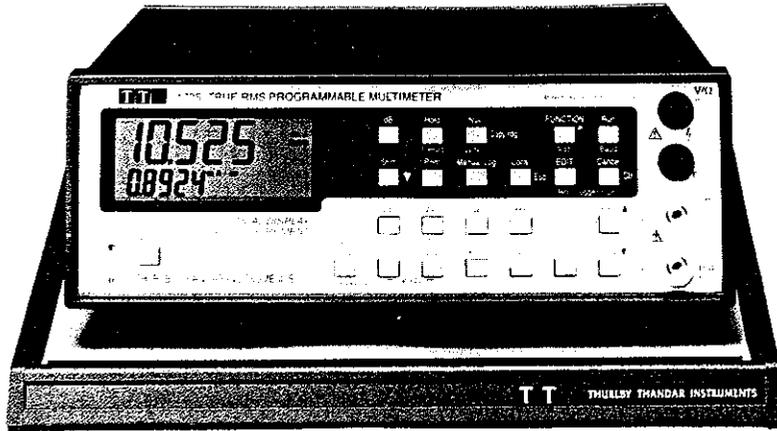


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200MHz spectrum analyser displays to -75dB

Used with an ordinary oscilloscope this circuit forms a spectrum analyser for the 0-200MHz range of frequencies. To simplify examination of the wanted frequency span and centre frequency controls are arranged to make signals in the

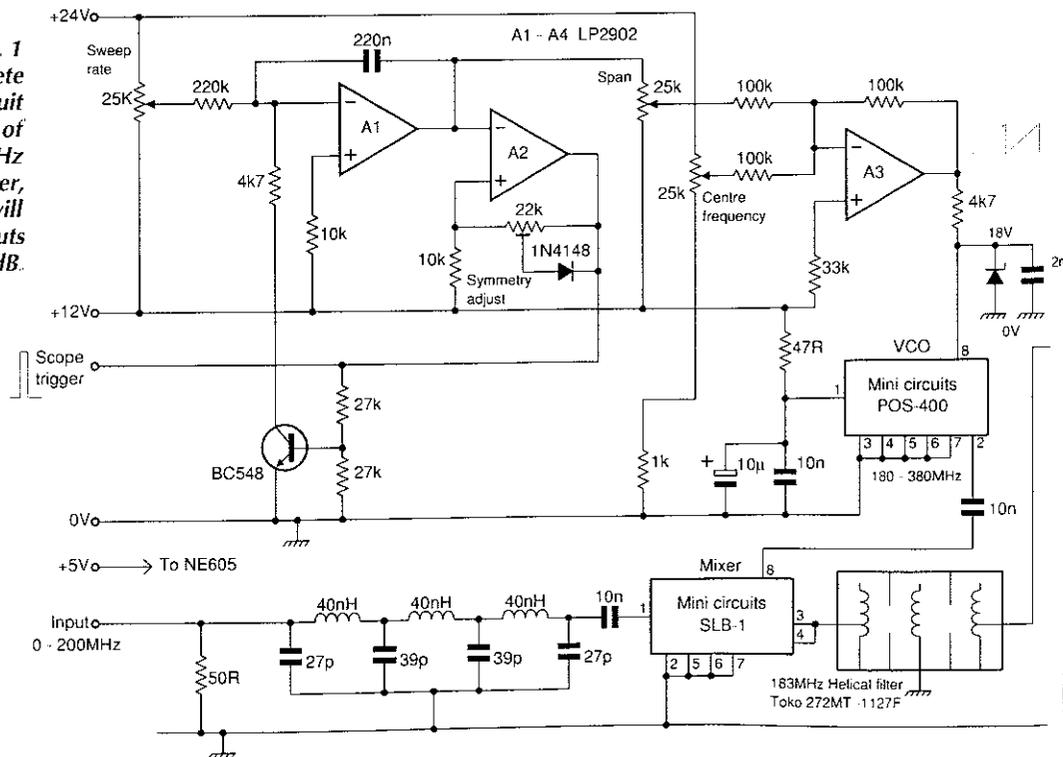
middle of the trace stay there as span decreases.

Amplifiers A₁ and A₂ produce a sawtooth waveform, symmetrical about the 12V rail, which is amplified in A₃ with control of amplitude for span and offset for

centre frequency. The discharge goes to the oscilloscope as a timebase trigger.

Driven by the sawtooth, the Mini Circuits POS-400 voltage-controlled oscillator provides a linear voltage/frequency output over the

Fig. 1 Complete circuit diagram of the 200MHz analyser, which will display inputs at -75dB.



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