

FREQUENCY CONVERTER CO2/510

General

The CO2/510 consists of two separate binary divider chains having division ratios of 3 and 144 respectively. It normally forms part of the MD1/502 Wide Band Sound and Vision Modulator. It accepts inputs of line drive (15.625 MHz) and 6 MHz f.m. sound and produces outputs of 5.208 kHz and 41.66 kHz.

The dividers have AM1/522 input amplifiers followed by 2 UN1/535 bistable units for the 5.208 kHz signal and 8 UN1/535 units for the 41.66 kHz signal. Both dividers use feedback to produce the required ratios. The arrangement is indicated in Fig. 1.

The CO2/510 is built into CH1/26 chassis with index pegs 11 and 27.

Maintenance

Routine maintenance is not required but the following checks may be made occasionally.

1. Feed in a 6 MHz ± 20 kHz signal of 1 V p-p amplitude to pin 4 then, at pin 8, the output signal should be a fair square wave with a frequency of 41.66 kHz at an amplitude of 5 V p-p.
2. Feed in a 15.625 kHz signal of 1 V p-p to pin 6, then, at pin 12, the output signal should be a fair square wave with a frequency of 5.208 kHz at an amplitude of 5 V p-p.

Reference

Designs Department Specification No. 4.25(65)

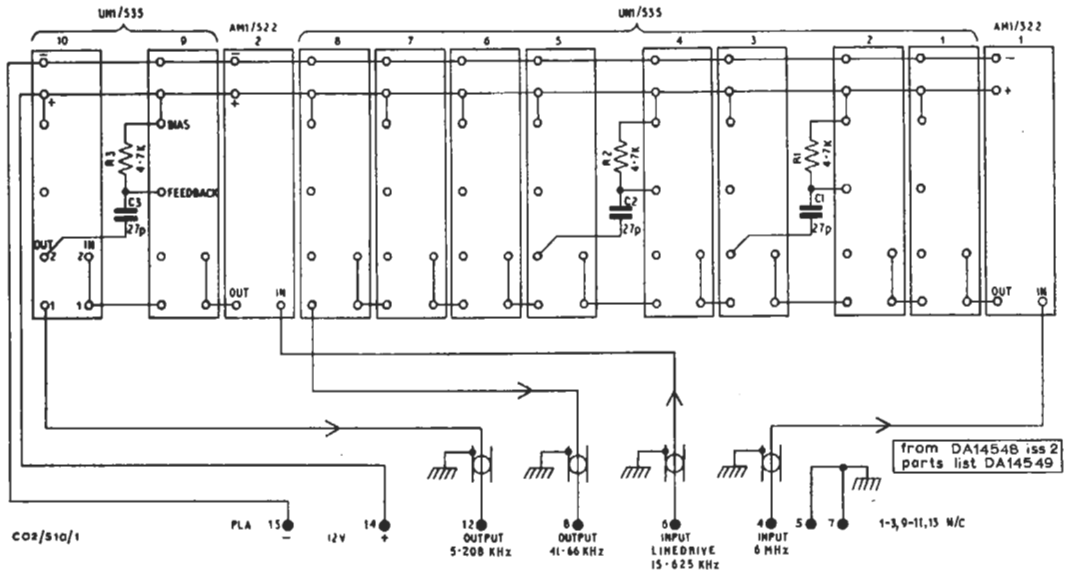


Fig. 1. Diagram of the Frequency Converter CO2/510