

VIDEO TIMING NETWORKS NE4/512, NE4/512A

Introduction

The NE4/512 and NE4/512A Video Timing Networks provide fine adjustment of video path lengths for permanently-wired areas such as television studios. The circuits are given in Fig. 1.

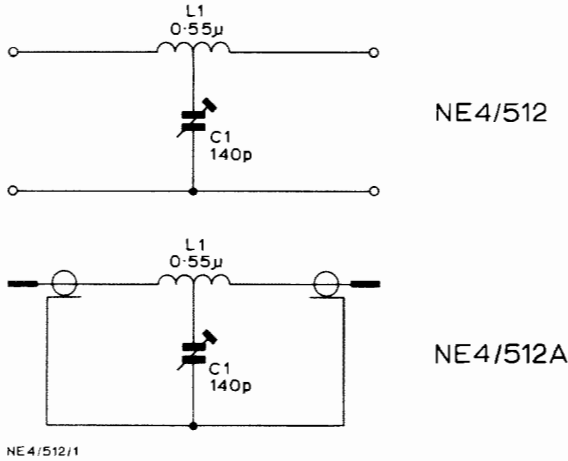


Fig.1 Circuit of NE4/512 and NE4/512A

Both networks are mounted in silver-plated cases, similar to the cover of a Musa type 303 plug. Input and output connectors are: cable adaptors type 421, 422 or 423 for the NE1/512; musa plugs for the NE1/512A. The delay can be adjusted by inserting a screwdriver through a hole in the case.

General Specification

<i>Mean Delay</i>	7 ns (i.e. 11° at 4.43 MHz)
<i>Adjustment Range</i>	±2.5 ns (i.e. ±4° at 4.43 MHz)
<i>Impedance</i>	75 ohms
<i>Return Loss at Optimum Setting</i>	55 dB at 4.43 MHz 55 dB for 2T pulse
<i>Return Loss at Min. Delay</i>	26 dB at 4.43 MHz 32 dB for 2T pulse
<i>Return Loss at Max. Delay</i>	24 dB at 4.43 MHz 28 dB for 2T pulse

Performance Measurements for 12 Networks in Series (At Optimum Setting)

1T pulse-to-bar ratio	98.5%
H.F. loss	less than 0.2 dB at 4.43 MHz
Return Loss	less than 50 dB at 16 kHz less than 33 dB for 2T pulse less than 31 dB at 4.43 MHz

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