

VIDEO EQUALISER EQ1/516A-F

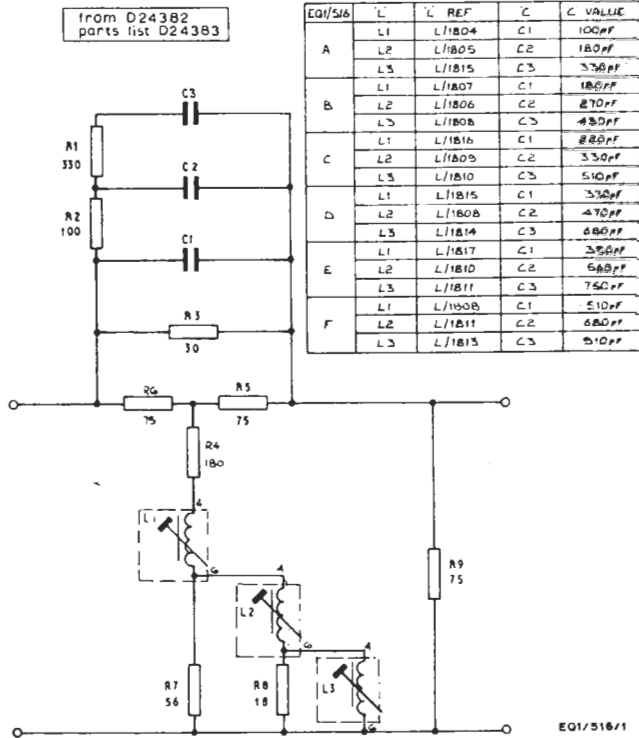


Fig. 1. Circuit of the Video Equaliser EQ1/516

Introduction

The EQ1/516 range of equalisers has been designed for use with the Video Switching Matrices MA2M/501 and MA2M/502. They provide an alternative to the Video Attenuator AT3/510 when correction is required to offset the falling frequency response of PSF1/3 or PSFI/2 coaxial lines feeding the matrix.

The equalisers are of the constant-impedance bridged-T type and have their own 75-ohm terminating resistors. They are built on to printed cards, 3 1/4 in. x 9 1/8 in., and are mounted on the source-input printed circuit of the matrix with five stand-off interconnecting pins. The circuit diagram is given in Fig. 1.

General Specification

- Low Frequency Insertion Loss 3 dB
- Input Impedance 75 ohms
- Input Return Loss greater than 40 dB
- Range of Equalisation see Table

Each equaliser, matched to the appropriate length of cable, gives correction at 4.43 MHz to better than ±0.1 dB and gives a 1T and 2T pulse-to-bar ratio within 1% of unity.

Reference

1. Designs Department Specification No. 8.351(69).

Unit	Cable PSF1/3 (ft.)	Cable PSFI/2 (ft.)	Loss at 4.43MHz (dB)
EQ1/516A	40-60	53-80	0.26-0.4
EQ1/516B	60-80	80-106	0.4 -0.53
EQ1/516C	80-100	106-133	0.53-0.67
EQ1/516D	100-120	133-160	0.67-0.8
EQ1/516E	120-140	160-186	0.8 -0.93
EQ1/516F	140-160	186-212	0.93-1.06