## SHAPING FILTER UNIT FL1/513

## Introduction

The FL1/513 is a filter unit designed to shape the vision i.f. characteristic of t.v. rebroadcast and monitoring receivers<sup>1</sup> using i.f. carrier frequencies of 37.5 MHz and 31.5 MHz for vision and sound respectively.

The main features of the unit are:

- (a) A vestigial characteristic (Nyquist Slope), controlled by a passive network, which sets the vision carrier at -6 dB.
- (b) Rejection of the sound signal.
- (c) Rejection of the adjacent channel sound signals above and below the wanted channel.
- (d) Rejection of the adjacent channel vision carrier above the wanted channel. The response of the unit is indicated in Fig. 1.

The unit is constructed in a plug-in copper box, similar in size to a CH1/39A chassis. It has index pegs 17 and 27. The box has 9 compartments, numbered to line-up with the signal path through the unit. Printed circuit boards are used. Signal connections are made via BNC sockets.

## **Brief General Specification**

Maximum Input Vision i.f.
Carrier 60 mV

Input and Output

Impedances 75 ohms

Overall Loss

At vision carrier fre- 6 dB approx.

quency 37.5 MHz

At 35 MHz 0 dB

Power Supply -- 30 volts

Weight 4 lbs

## Circuit Description

The circuit diagram is given in Fig. 2, on page 3, in which the dotted lines indicate the nine box compartments.

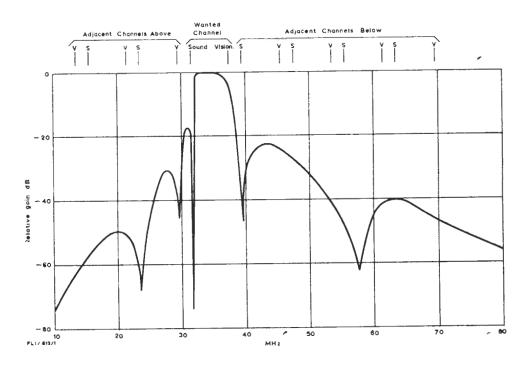
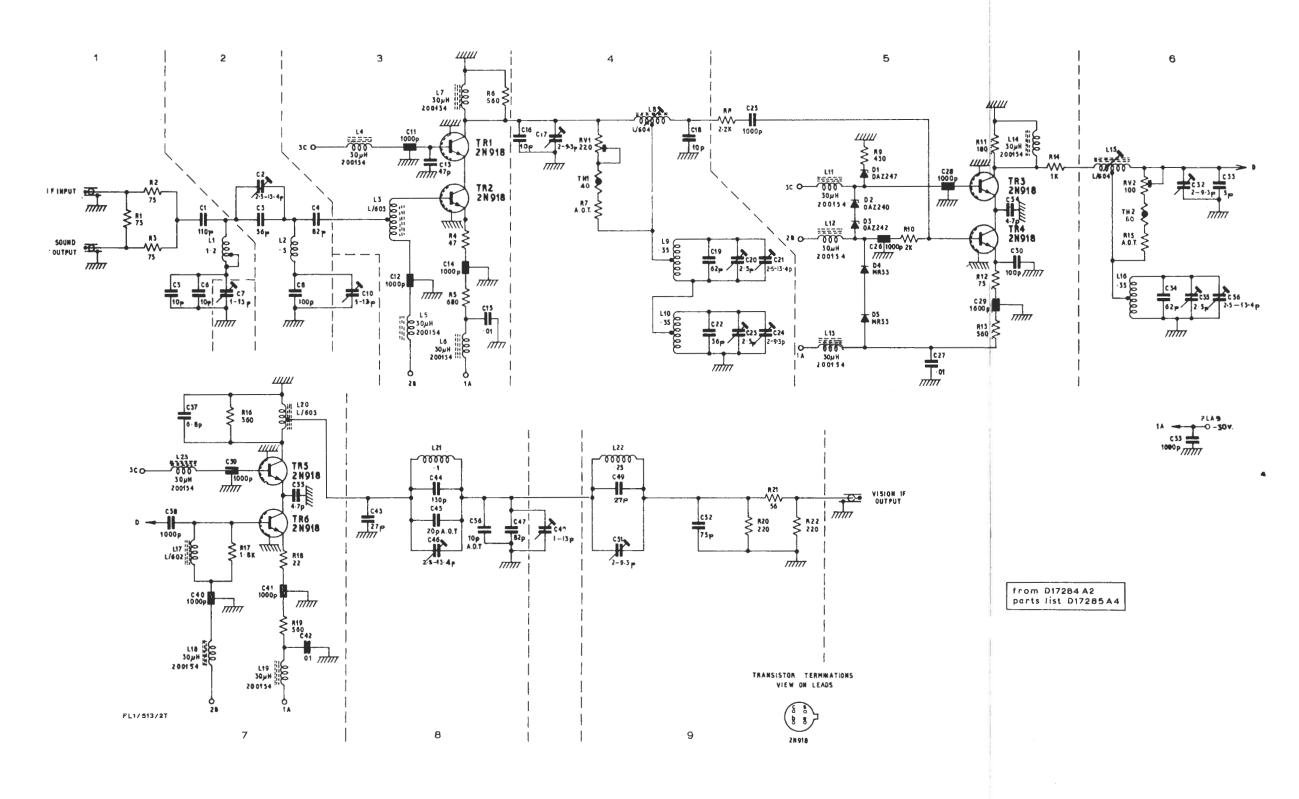


Fig. 1 Amplitude-frequency Response of the FLI/513

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Fig. 2 Circuit of the FLI/513