

TECHNICAL DESCRIPTION

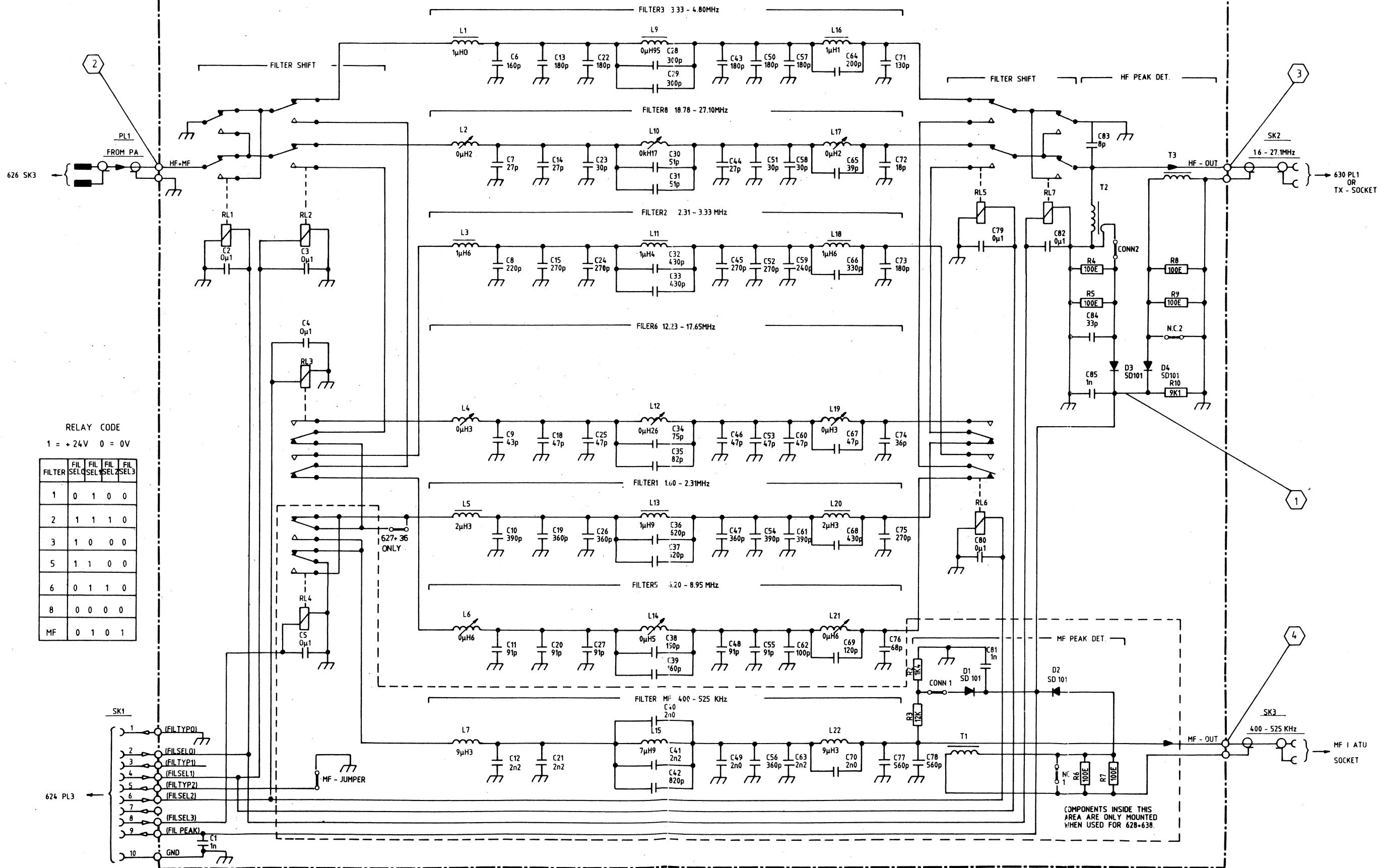
PCB **627** / **628** P.A. FILTERS, Marine Bands

The filter bank contains 6 lowpass filters covering the maritime bands in the frequency range 1.6-27.5 MHz, as shown in the table below.

Filter no.	Passband MHz	Stopband MHz	Relays		
			A	B	C
1	1.60- 2.31	3.19	0	1	0
2	2.31- 3.33	4.61	1	1	1
3	3.33- 4.80	6.64	1	0	0
5	6.20- 8.95	12.40	1	1	0
6	12.23-17.65	24.40	0	1	1
8	18.78-27.10	37.45	0	0	0

0 = off
1 = on

All filters are 5th order elliptic LP-filters (cauer-filters) with a series coil giving an inductive input impedance on the harmonics. When loaded with 50 ohms the input SWR is less than 1:1.1 and the insertion loss less than 0.2 dB in the passbands. In the stopbands the attenuation is better than 25 dB. The filters are inserted by a system of dual-pole dual-throw Relays controlled from the Transceiver Control Board **624** as shown in the table. Other types of filter banks are available, and the microprocessor selects the corresponding switch pattern by sensing the type code information on 4 lines of the connector cable. If the cable is disconnected filter no. 8 is chosen, so that transmission is possible on all frequencies in case of fault in the switching system. The DC voltage from the output peak-detector, which monitors voltage and current in the load, is connected to the ALC-circuit on the Transceiver Control Board **624**. This voltage is used for automatic adjustment of output power and should be 9.0 V for an output of 250 W into 50 ohms.



PCB [627] [628] [636] [638]
P.A. FILTERS BOARD MARINE BANDS
VERSION 1A. MAIN DIAGRAM.

TEST POINTS FOR PCB 627 628 P.A. FILTERS.

Self test #

33

35

36

37

39

41 (628 ONLY)

1

9VDC

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2

~ 320Vpp

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3

~ 320Vpp

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