

ELECTRON-MUSIC

Willeck & Gaul

*Neuauflagen*

4953 Petershagen 8 (Döhren)

Ruf 0 57 05 / 248



# EILKA

EILKARHAPSODY

610

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schematic diagrams

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A



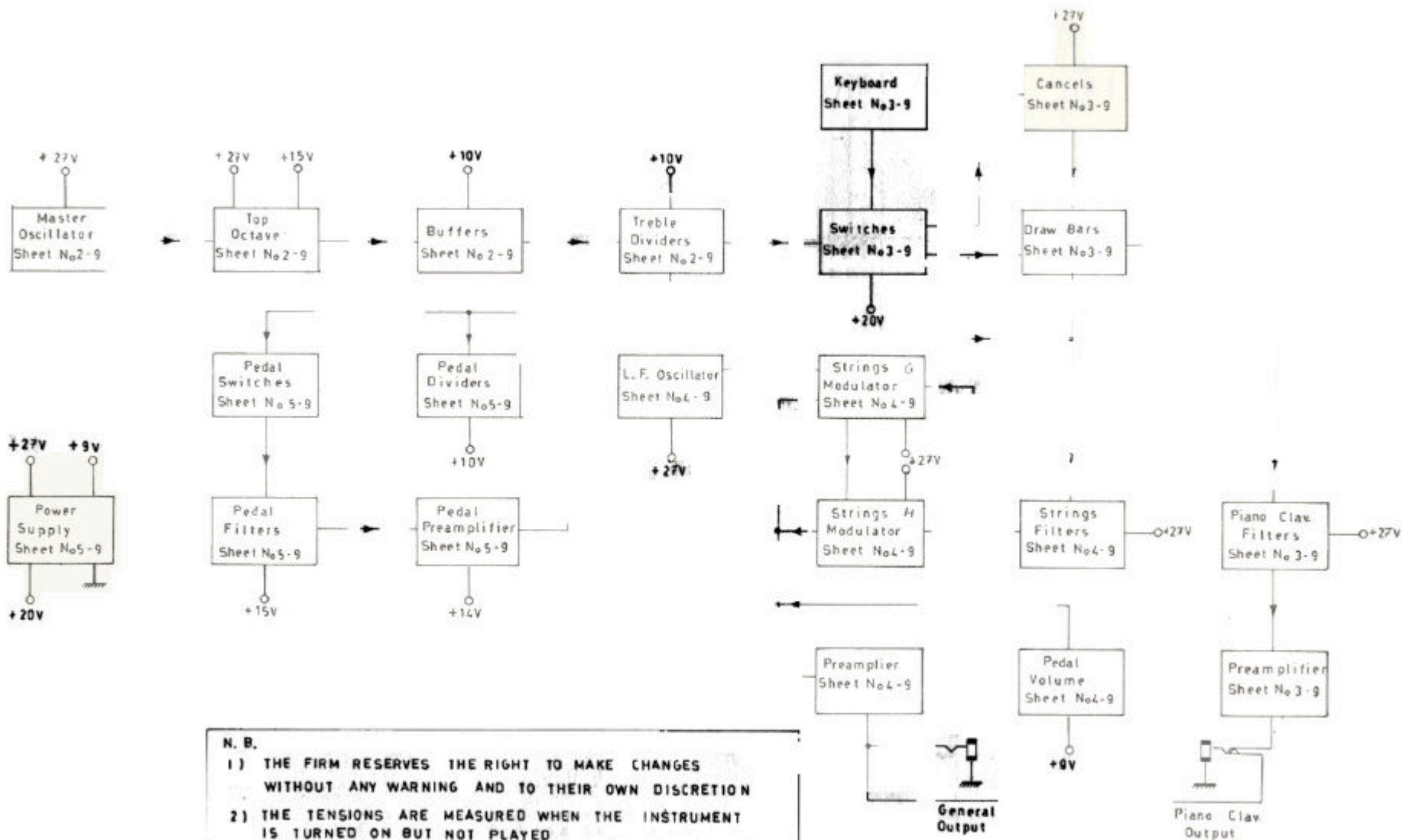
# ELKA

## ERRATA CORRIGE

### Model Elkarhapsody 610

### MODIFICATIONS

Sheet No.	Date	Printed Circuit	Before	Now
4-9	6-4-77	M000642	<p>R11 = 10K</p>	<p>R11 = 1K</p>
2-9	14-4-77	M000641		



N. B.

- 1) THE FIRM RESERVES THE RIGHT TO MAKE CHANGES WITHOUT ANY WARNING AND TO THEIR OWN DISCRETION
- 2) THE TENSIONS ARE MEASURED WHEN THE INSTRUMENT IS TURNED ON BUT NOT PLAYED

Designed by  
*Prof. Eltonni*

Drawn by  
*W. A. L.*

Checked by

*Prof. Eltonni*

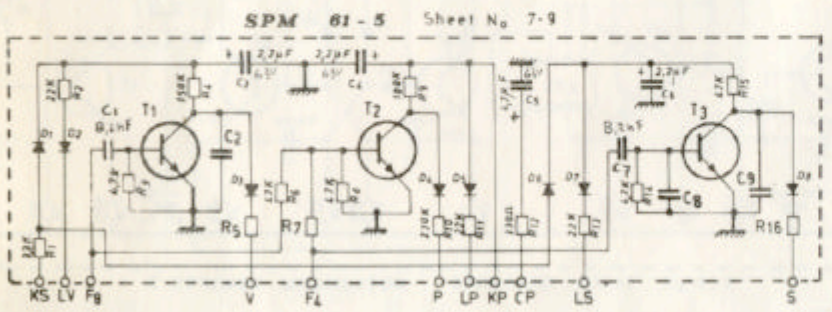
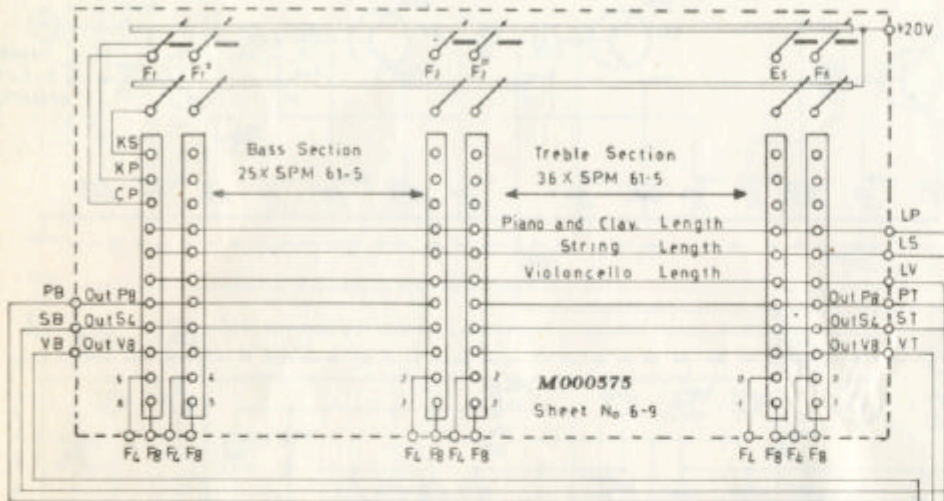


Model  
Elkarhabsady  
610

Object:  
Block Diagram

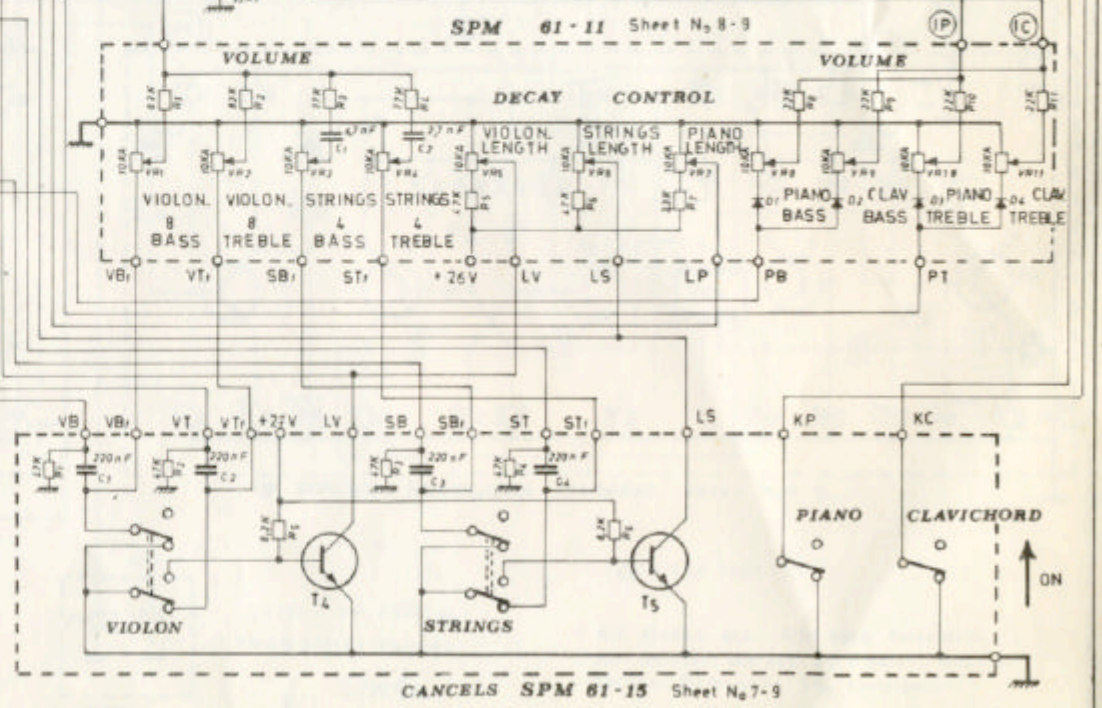
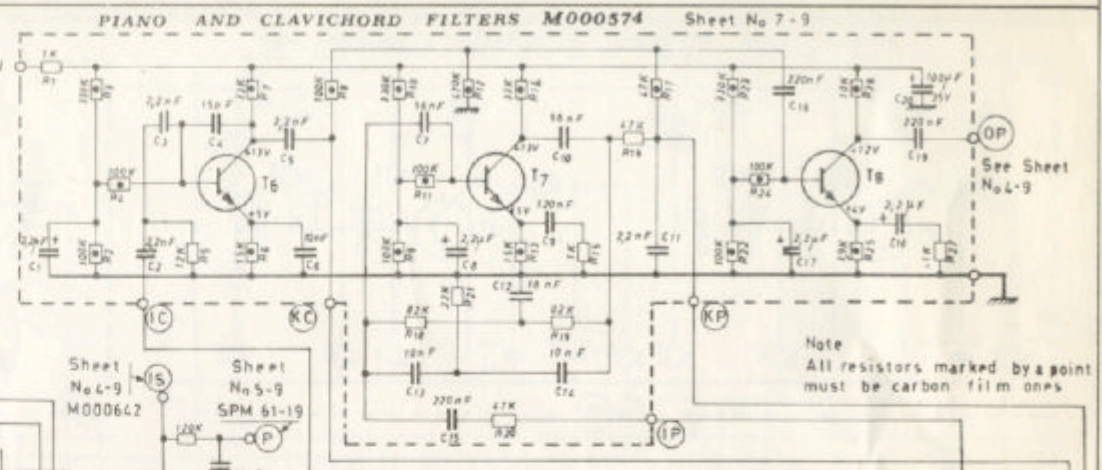
Sheet No 1-9

Date 24-3-76

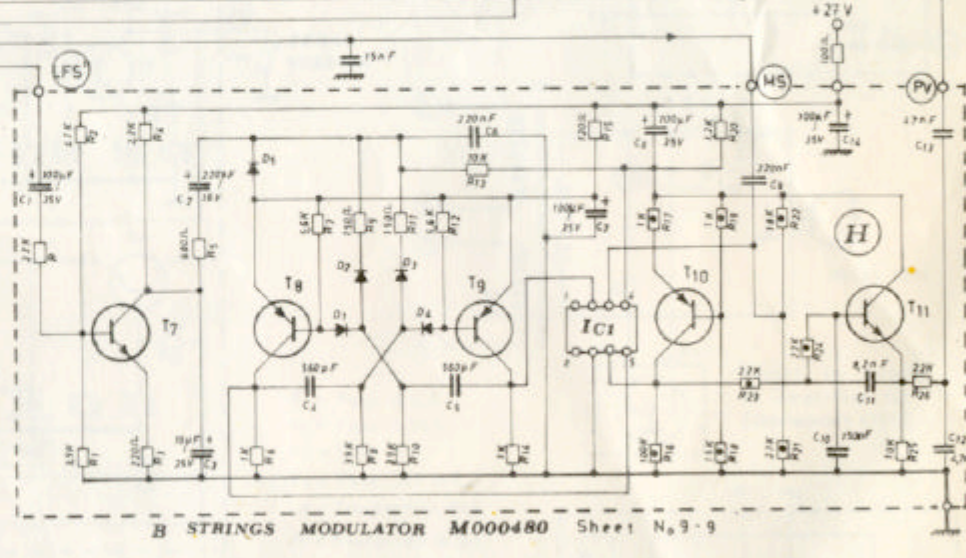
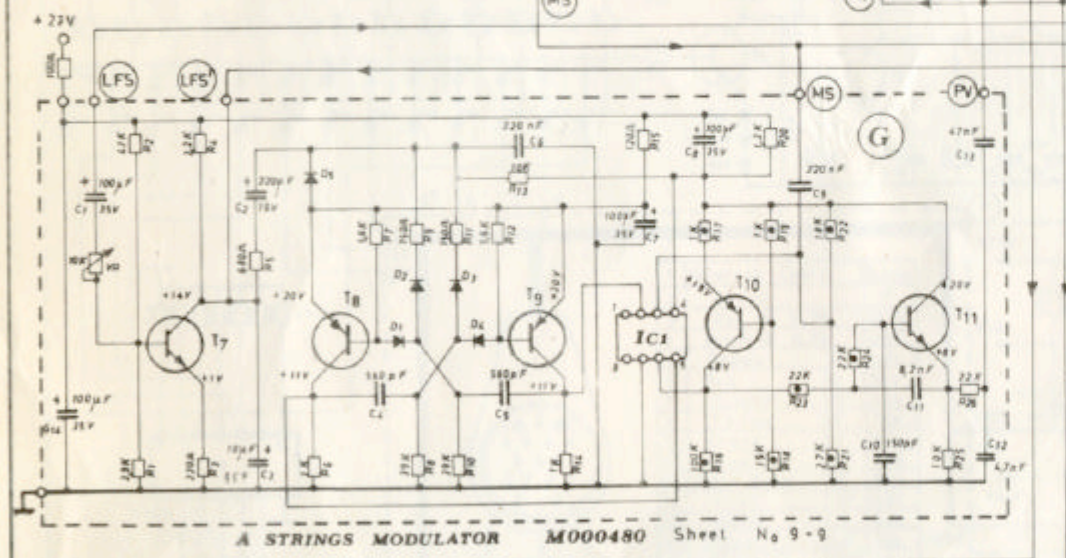
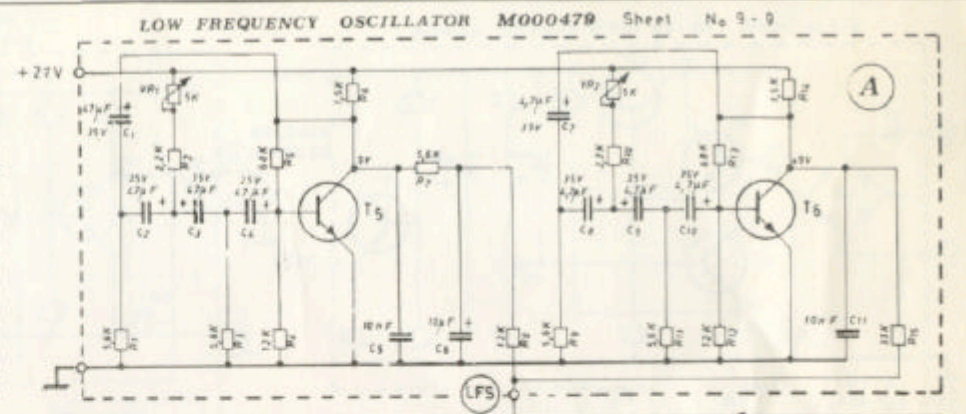
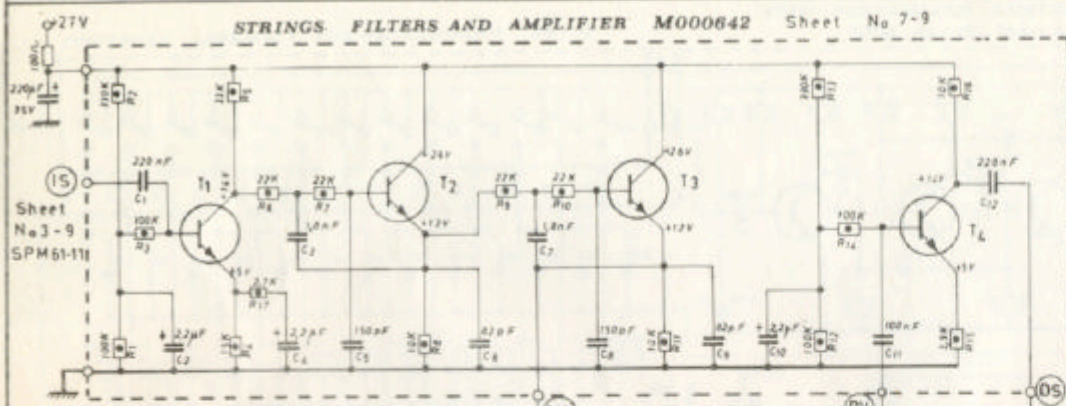


	A	B	L	D	E	F	G	H	L	N	N	O	P	R	S	T	U	W	Y	Z
C <sub>2</sub>	5.6	4.7	3.9	3.3	2.7	2.2	1.8	1.5	1.2	1.0	0.82	0.68	0.57	0.47	0.39	0.33	0.27	0.22	1.0	1.5
C <sub>8</sub>	-	-	-	-	-	-	-	-	-	-	-	-	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
C <sub>9</sub>	8.2	6.8	5.7	4.7	3.9	3.3	2.7	2.2	1.8	1.2	0.820	0.470	0.220	0.120	-	-	-	-	-	-
R <sub>5</sub>	560	560	560	560	560	560	560	560	560	560	470	470	390	390	330	330	270	270	220	220
R <sub>7</sub>	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	47	-	-	-	-
R <sub>16</sub>	560	560	560	560	560	560	560	560	560	560	470	390	330	270	220	180	560	470	390	330

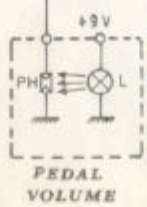
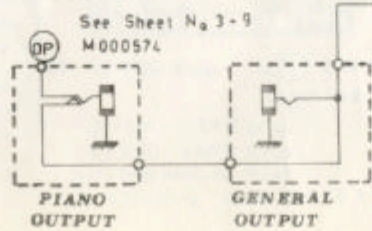
1) All Values are indicated KpF and KA. 2) All diodes are FDM 0666 Fairchild



Code	Type	Transistors	Model	Object:	Sheet No 3-9
T <sub>1</sub> - T <sub>5</sub>	NPN	FS 33805 Fairchild or BC 208	Elkarhaphody 610	Switches and Piano Filters	Date 12-3-75
T <sub>6</sub> - T <sub>8</sub>	NPN	BC 209 B			



Code	Type	Transistors
T1 - T4	NPN	BC 209 B
T5 - T6	NPN	BC 209 B
T7 - T11		
T8 - T9	PNP	BC 205 Mistral
T10	PNP	BC 154 BC 415 Fairchild



rot wep  
Vorne

L=12V - 3W Philips  
PH=B 873103 Philips

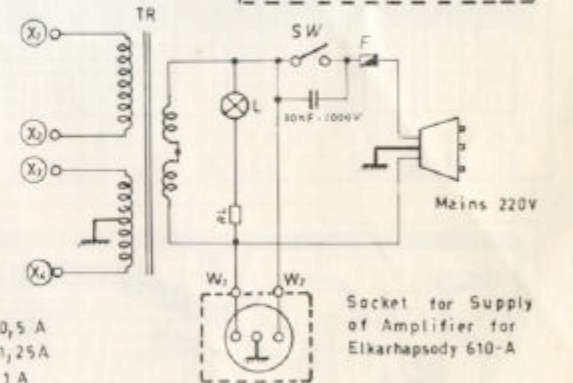
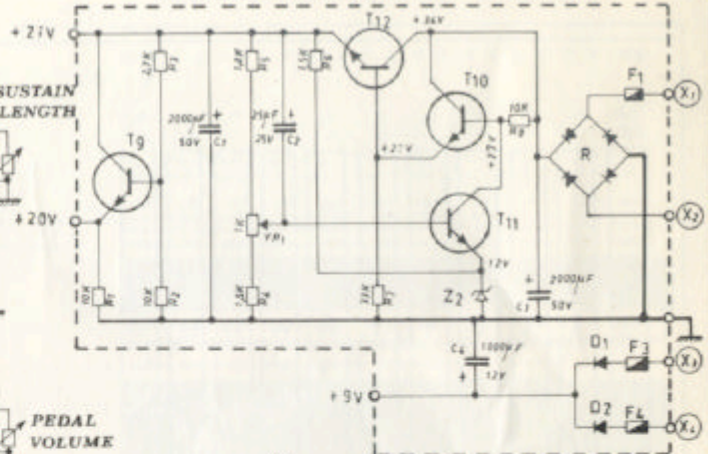
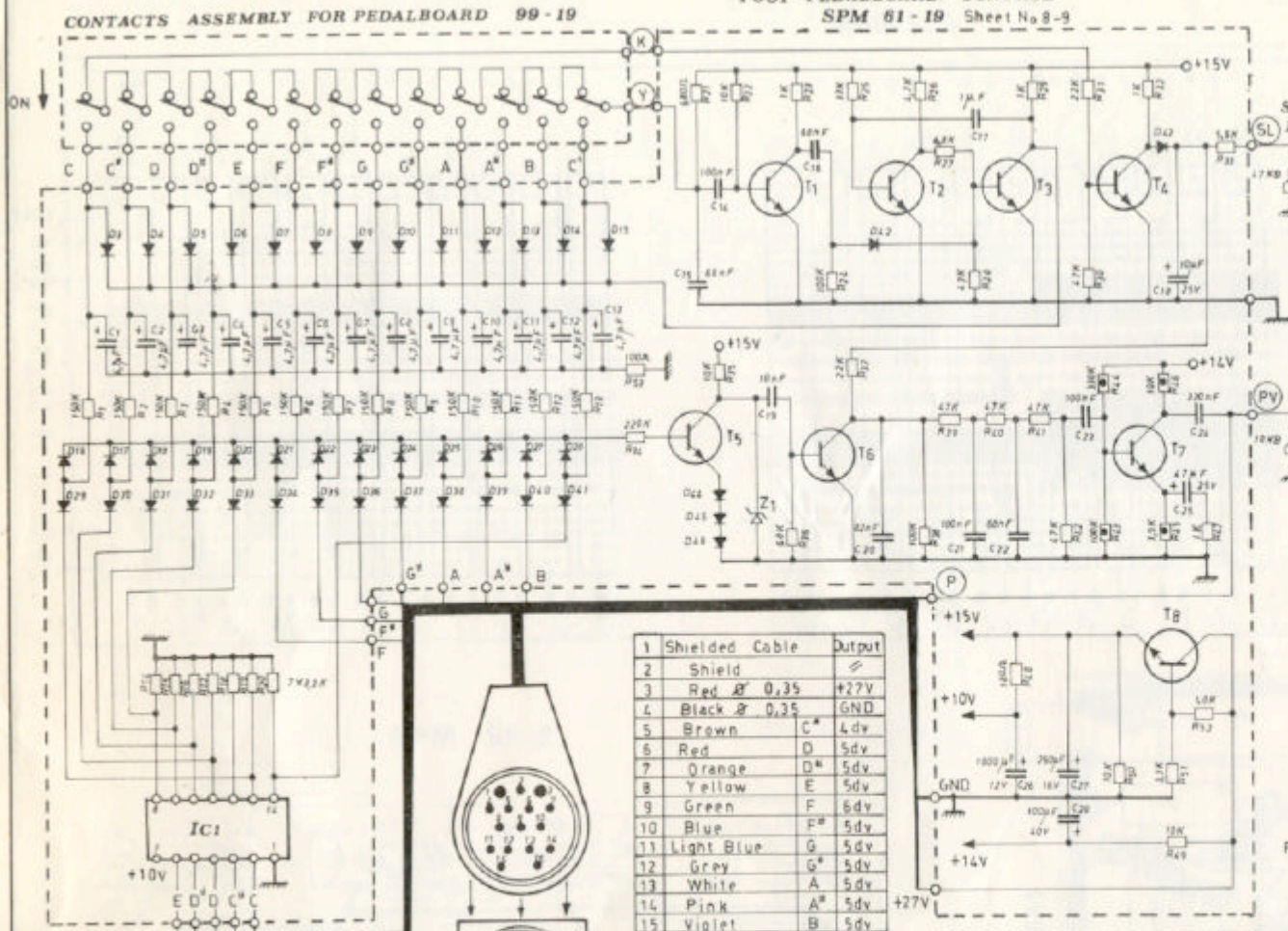
IC1 = TCA 350Y 11T

- 1 All diodes are FDH 0566 Fairchild
- 2 All resistors marked by a point must be Carbon film ones 5% tolerance

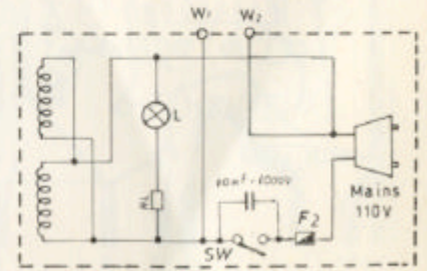
	Model	Object:	Sheet No 4-9
	Eikarhapsakki 610	Strings Filters and Modulator	Date 23-1-76

FOOT PEDALBOARD CONTROL  
SPM 61-19 Sheet No 8-9

POWER SUPPLY SPM 61-13 Sheet No 9-9



- F = Fuse 0,5 A
- F1 = Fuse 1,25A
- F2 = Fuse 1 A
- F3-F4 = Fuse 125 mA
- TR = Transformer 063
- R = Rectifier W 02



Code	Type	Transistors
1	Shielded Cable	Output
2	Shield	∅
3	Red R 0,35	+27V
4	Black B 0,35	GND
5	Brown	C* 4dv
6	Red	D* 5dv
7	Orange	D* 5dv
8	Yellow	E* 5dv
9	Green	F* 6dv
10	Blue	F* 5dv
11	Light Blue	G* 5dv
12	Grey	G* 5dv
13	White	A* 5dv
14	Pink	A* 5dv
15	Violet	B 5dv
16	Black	C 4dv

IC1 = SAY 110 1TT

Code	Type	Transistors
T1 - T6	NPN	FS 33805 Fairchild or BC 208-108
T7	NPN	OA 09 Motorola
T8 - T11	NPN	BC 286 SGS-TIP 29A
T12	NPN	2N 3055 Philips Motorola Ates

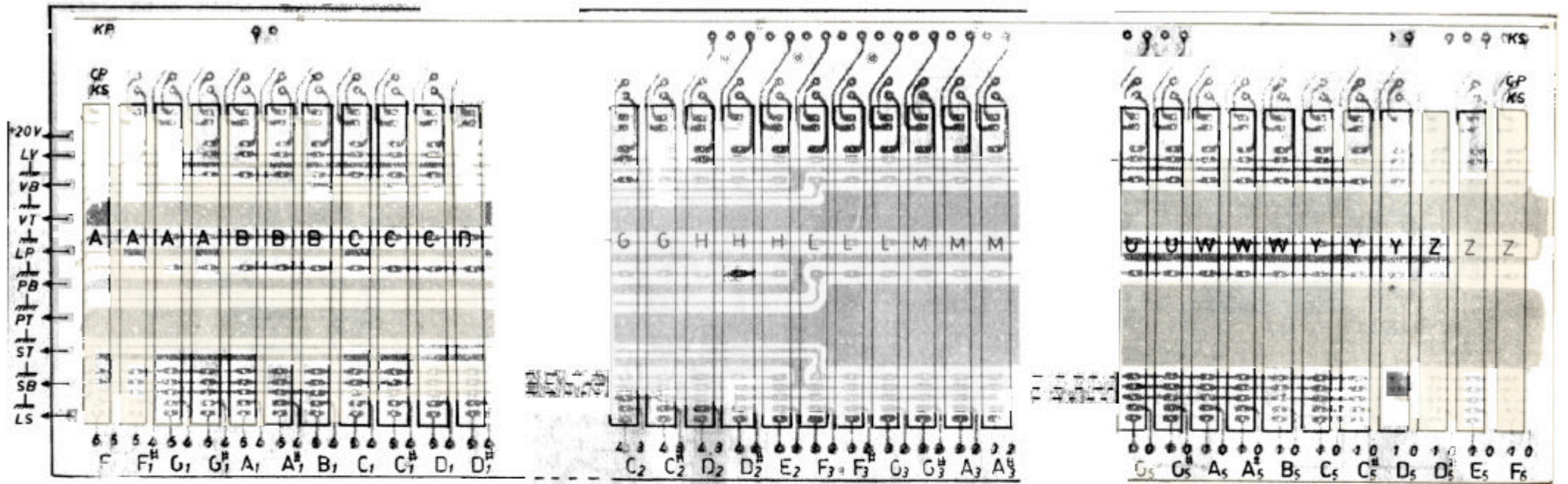
- 1) Pedal Output (To P SPM 61-11) (Sheet No 3-9)
- 3) +27V (SPM 61-13)
- 4) GND (SPM 61-13)
- 5-16) Frequencies Input (Dividers Sheet No 2-9)

- D1 = D2 = 10D2 = 1N40003
- Z1 = T2 109 = 1N4739 1R = 1N4161B = ZY 91 1TT BZX61C 91 Britelec
- Z2 = 1N4163 B = T2 111 = PL117
- SW + L = Single Pole Switch and Pilot Light

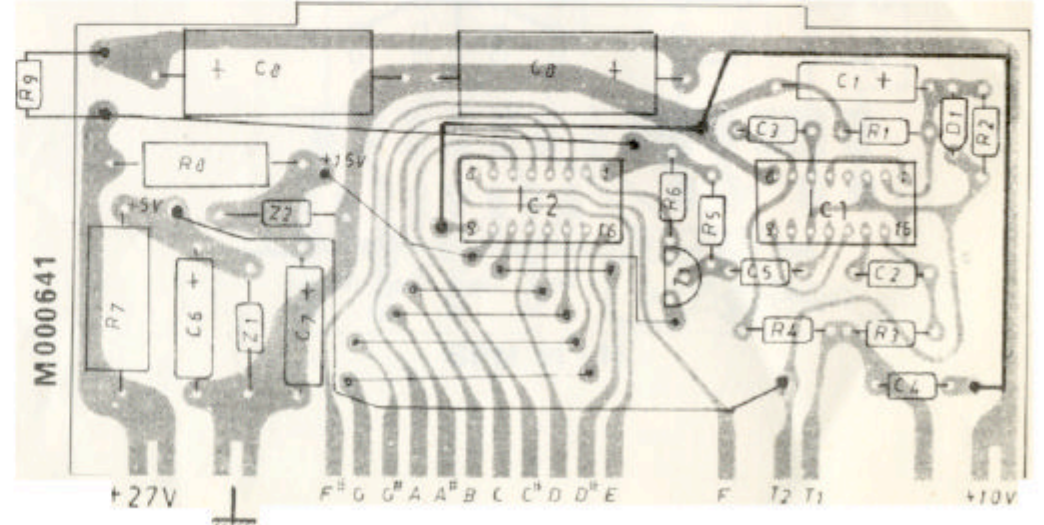
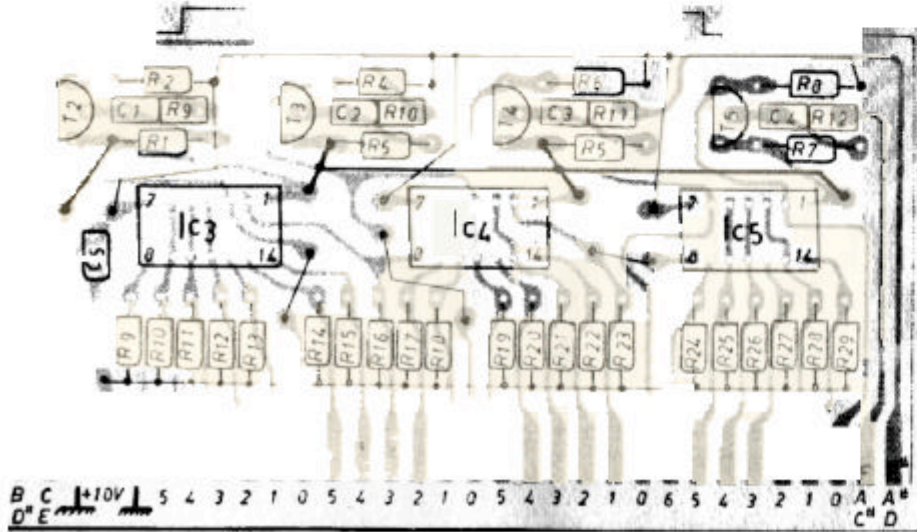
All diodes are FDH 0656 Fairchild or D407 Texas or BA181 Texas

Note: All resistors marked by a point \* must be Carbon film

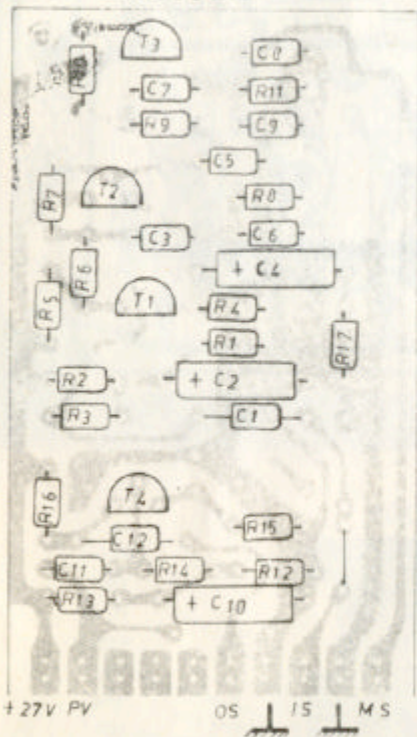
Model Elkarhapsody 610	Object: Bass Foot Pedalboard and Power Supply	Sheet No 5-9 Date 24-3-76
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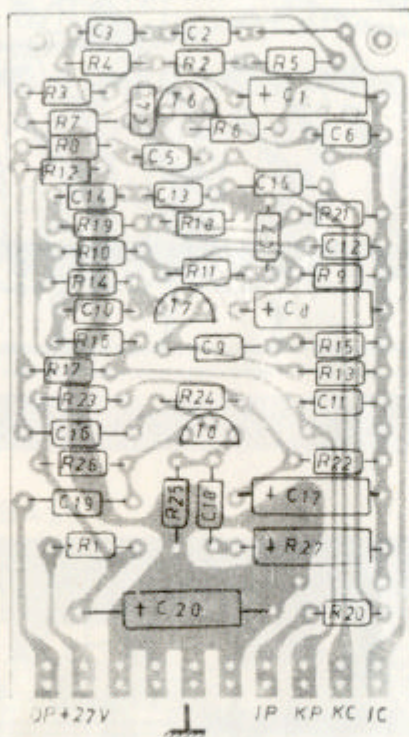
SPM 61-2



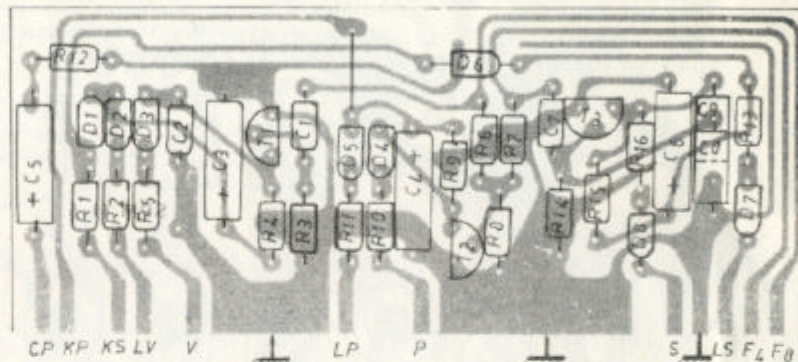
M000642



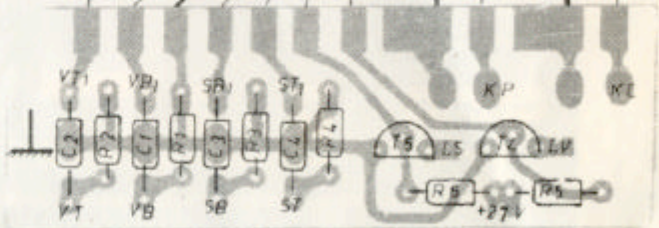
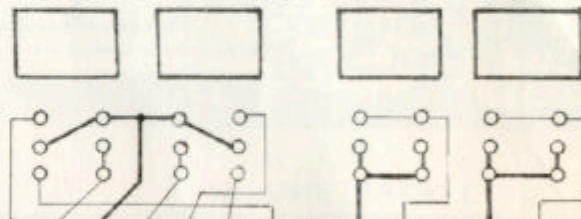
M000574




SPM 61-5



VIOL. STRINGS PIANO CLAV.

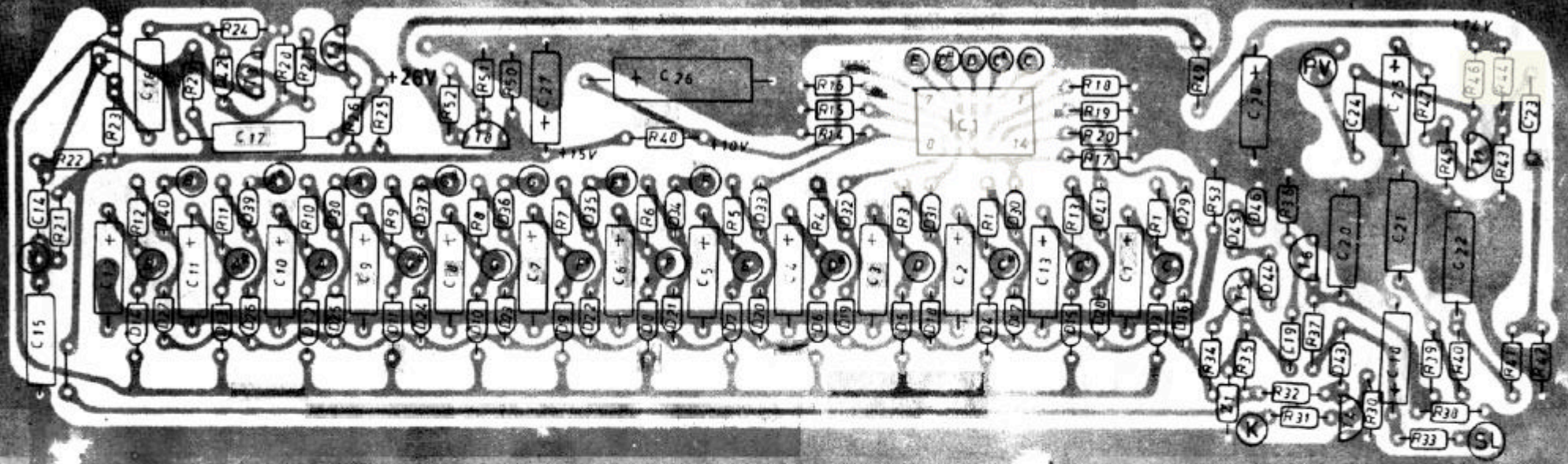


SPM 61 - 15

	Model	Object	Sheet No 7-9
	Elkarhapsody 610	Assembly of Printed Circuit	Date 25-3-76



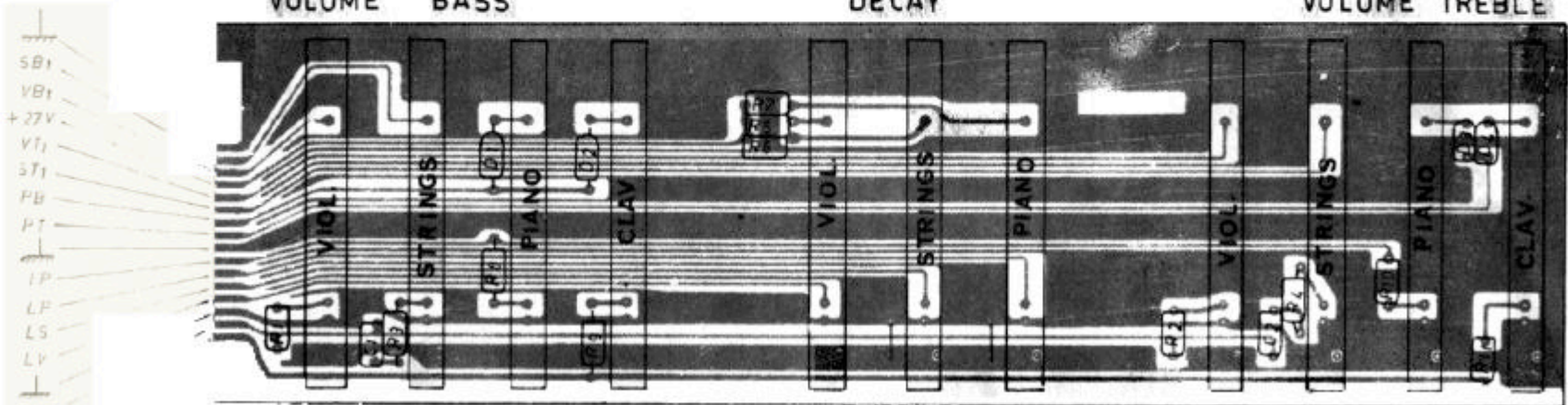
SPM 61-19



VOLUME BASS


DECAY

VOLUME TREBLE



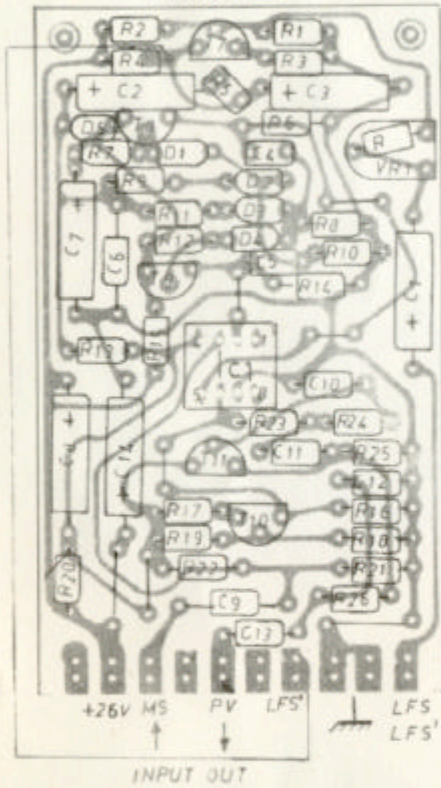
- SB1
- VB1
- +27V
- VT1
- ST1
- PB
- PT
- IP
- LP
- LS
- LV
- IS
- JC

SPM 61-11

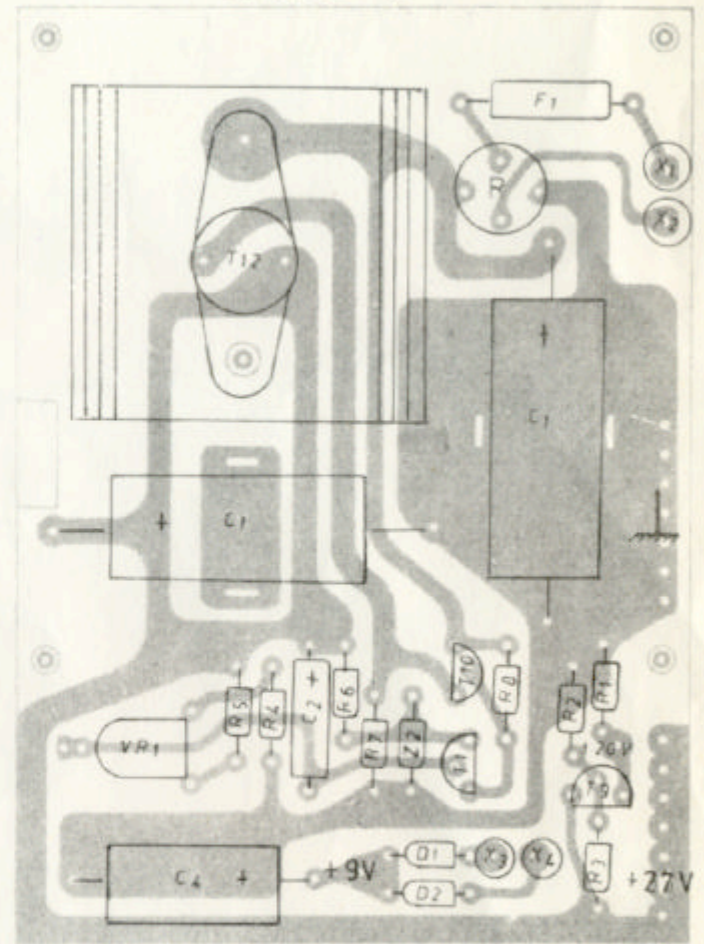
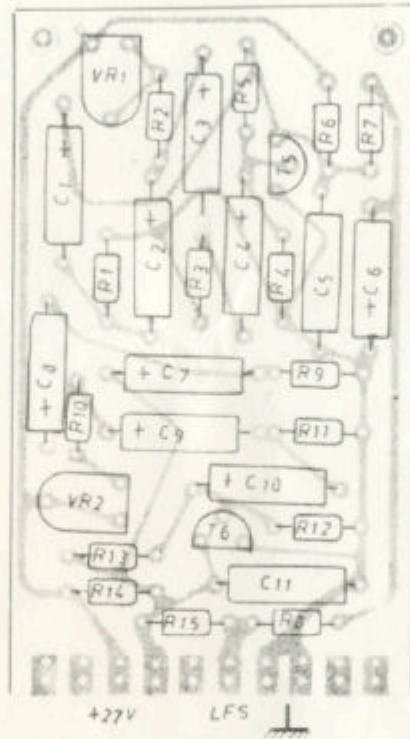
	Model	Subject	Sheet No 0-9
	Ekarhpsody 610	Assembly of Printed Circuit	Date 29-3-76

SPM 61 - 13

M000480



M000479



	Model	Object	Sheet No 9 - 9
	Elkarhappay 610	Assembly of Printed Circuit	Date 29-3-76

**ELECTRON-MUSIC**

Wilcek & Gaul

*Neustadtstrasse 8a*

4703 Paderborn 8 (Döhren)

Aut. 0 57 091343

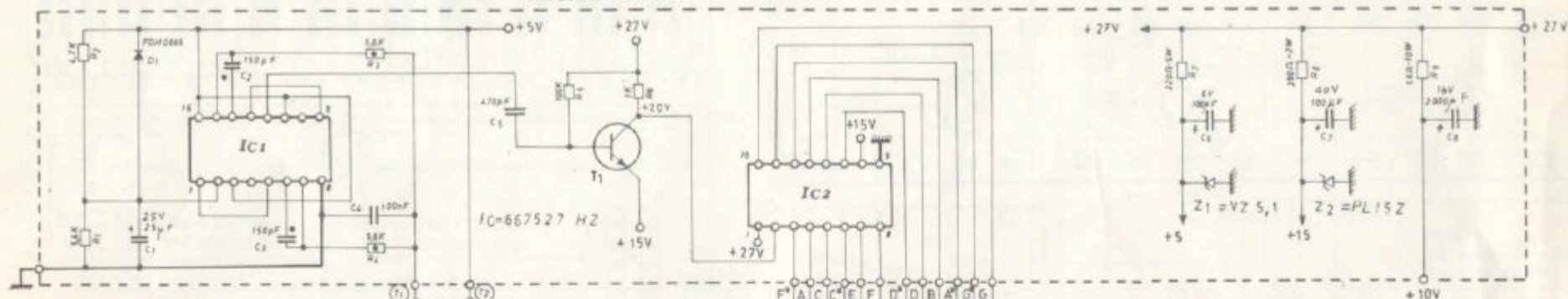
Manufactured by **ELKA**

PD box 1

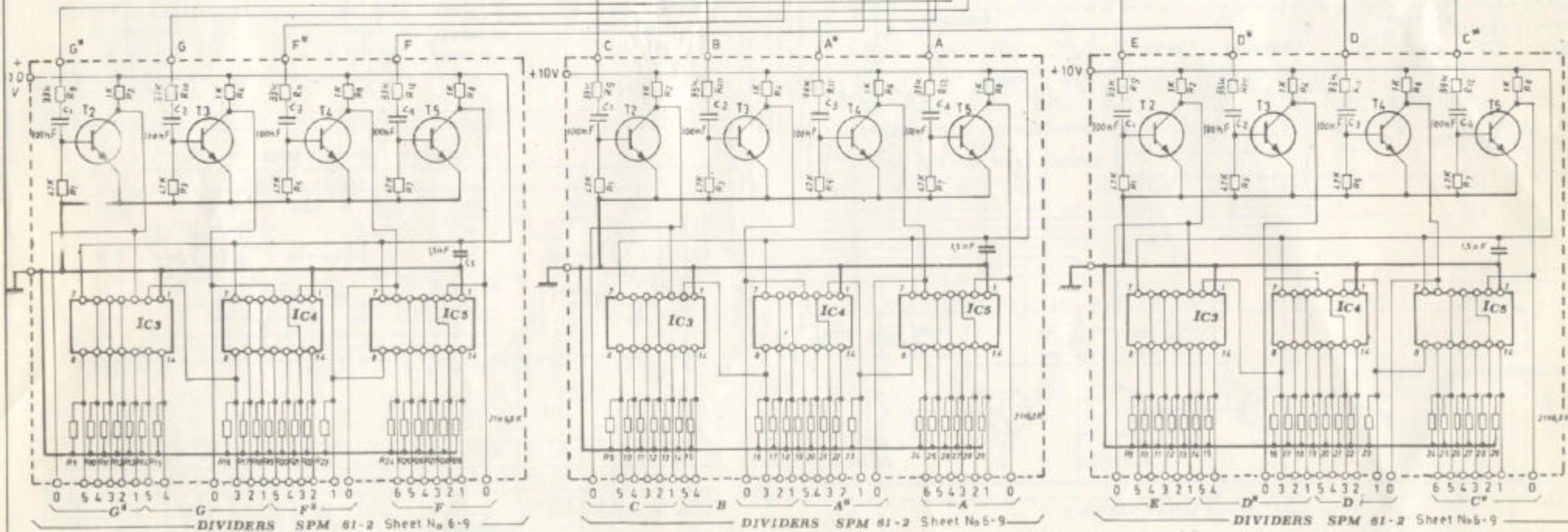
Casteljudazo

Stalby

**ELECTRON-MUSIC**  
Wilcek & Gaul OHG



TUNING  
SPM 61-16



DIVIDERS SPM 61-2 Sheet No 6-9

DIVIDERS SPM 61-2 Sheet No 6-9

DIVIDERS SPM 61-2 Sheet No 6-9

Code	Type	Transistors
T1	NPN	BC 209 Fairchild etc....
T2-T5	NPN	FS 3385 Fairchild or BC 208 Fairchild etc....

IC1 = SN 74221 Texas  
 IC2 = AY 0212 G.I.E.  
 IC3 = IC5 = SAY 110 ITT

Note  
 1) All resistors marked by a point \* must be metal film 2% tolerance  
 2) All capacitors marked by a point \* are polycarbonate 2% tolerance

Model	Object	Sheet No 2-9
Elkarhapody 610	Master Oscillator and Dividers	Date 10-3-76