

# EFARFISA

Stereo  
**Syntorchestra**

4<sup>TH</sup> EDITION

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**SCHEMATIC DIAGRAMS**

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**Syntorchestra**

4<sup>TH</sup> EDITION

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**SCHEMATIC DIAGRAMS**

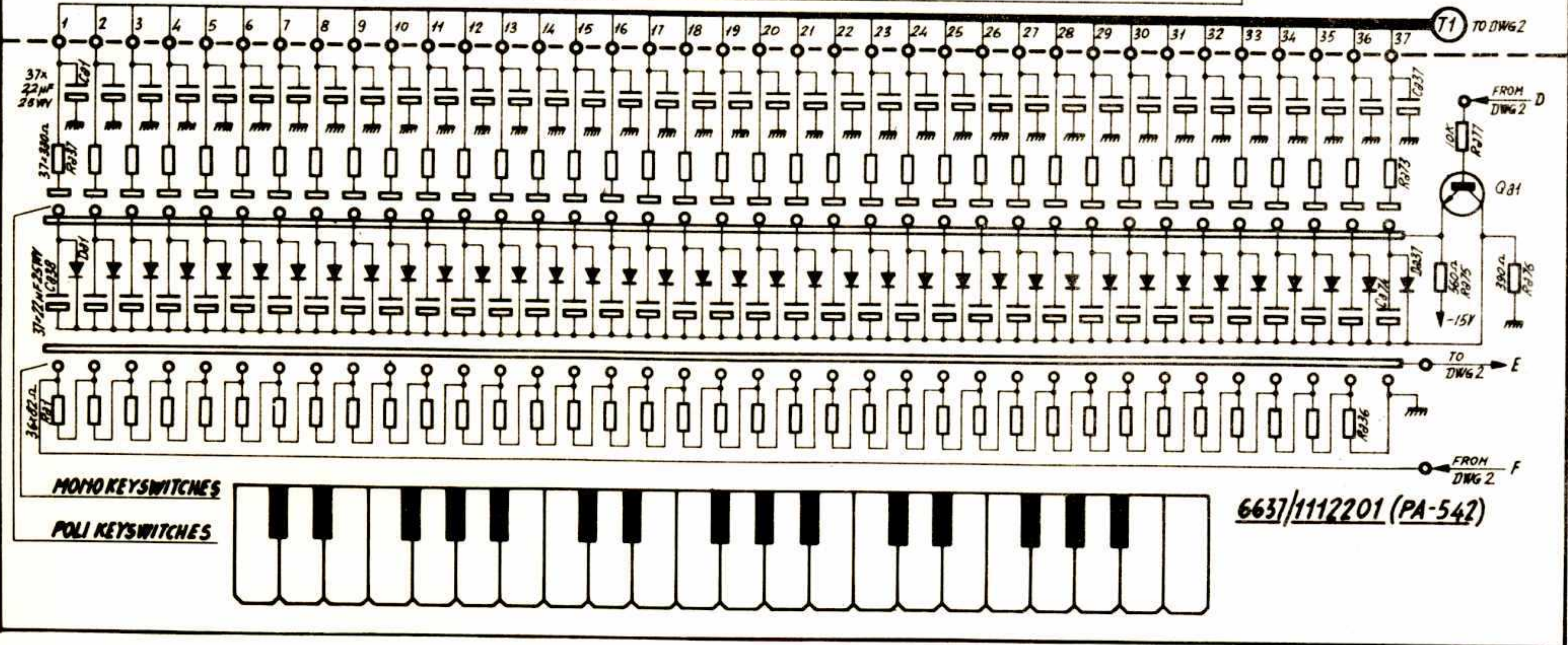
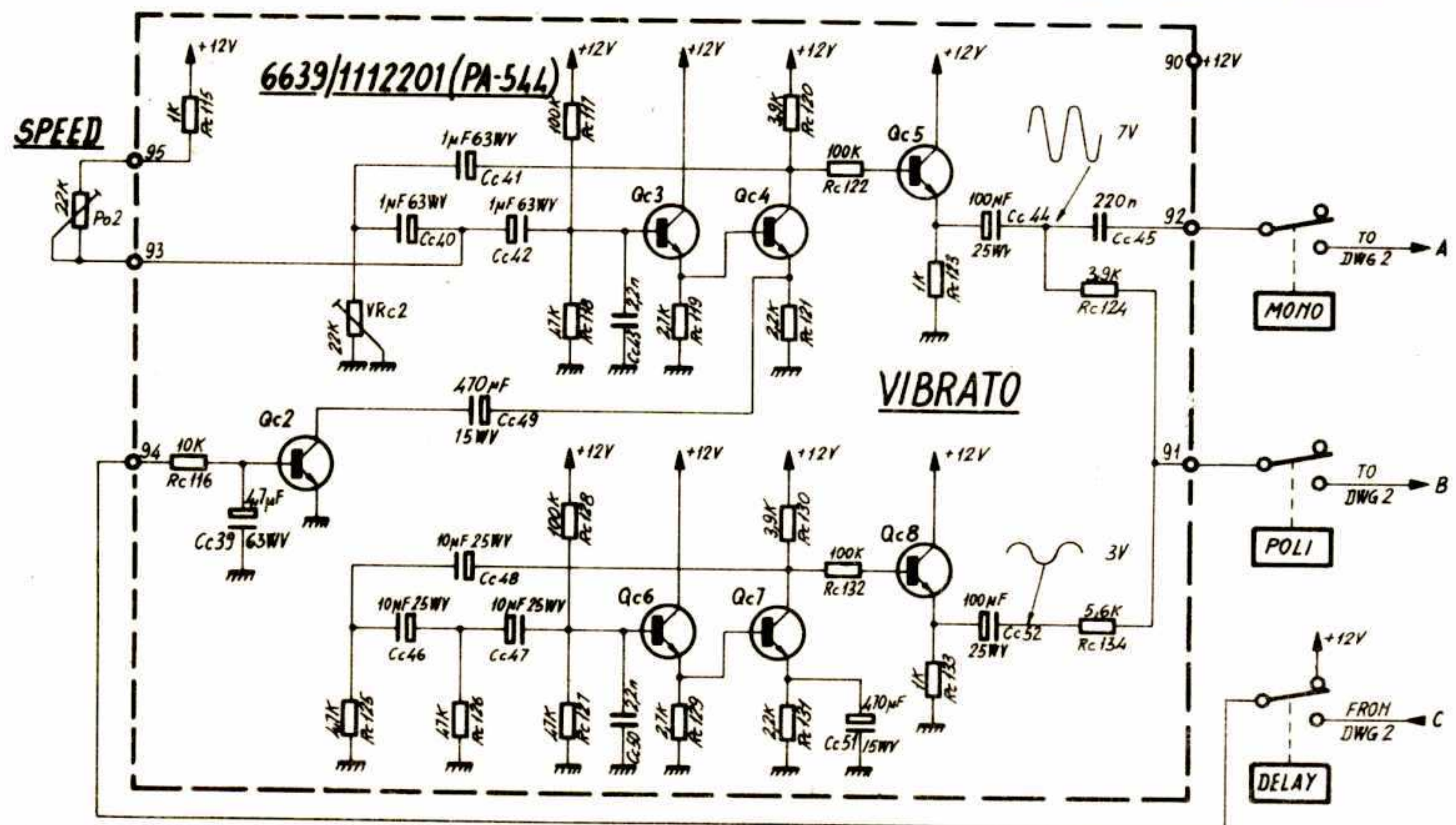
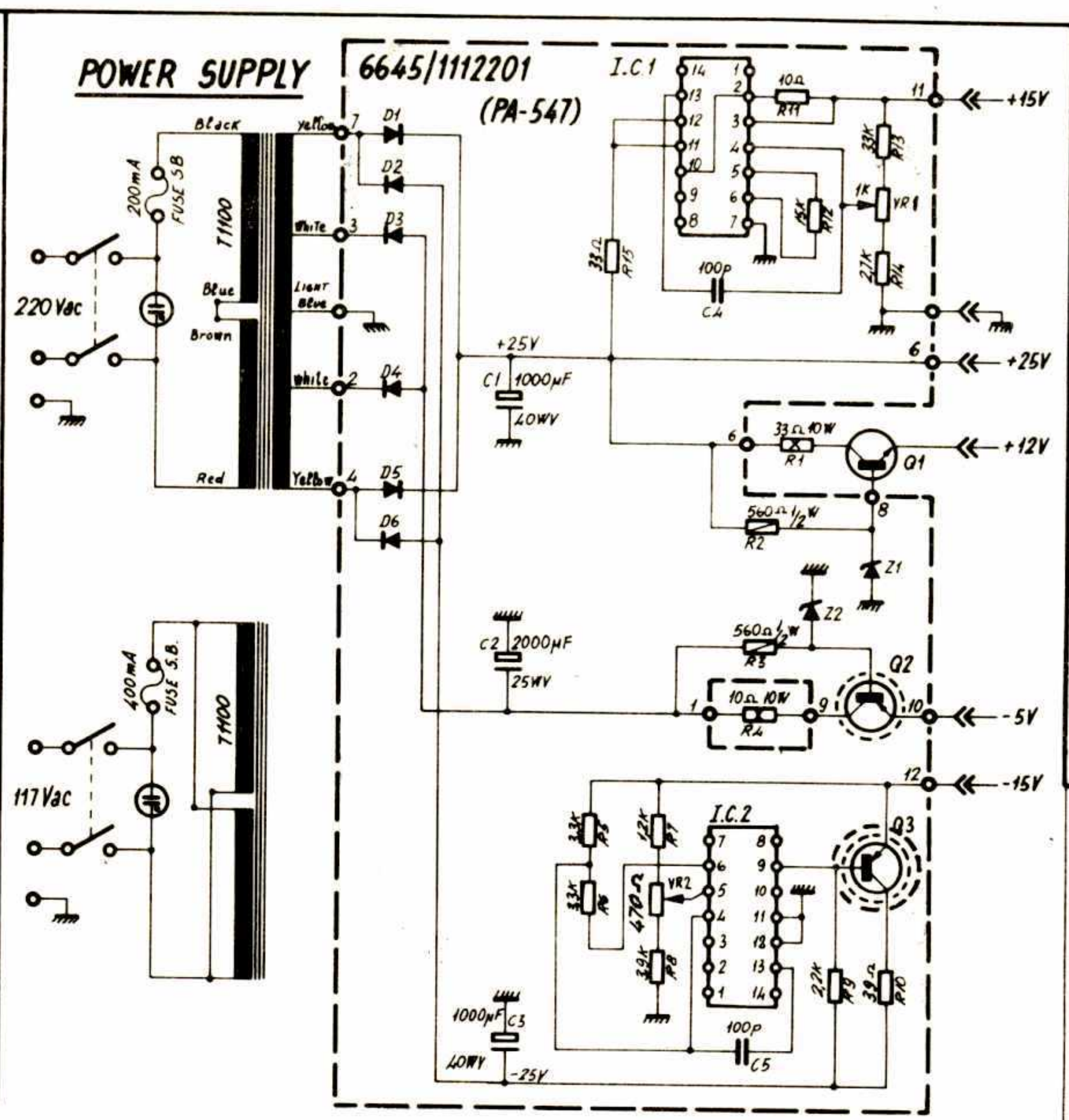
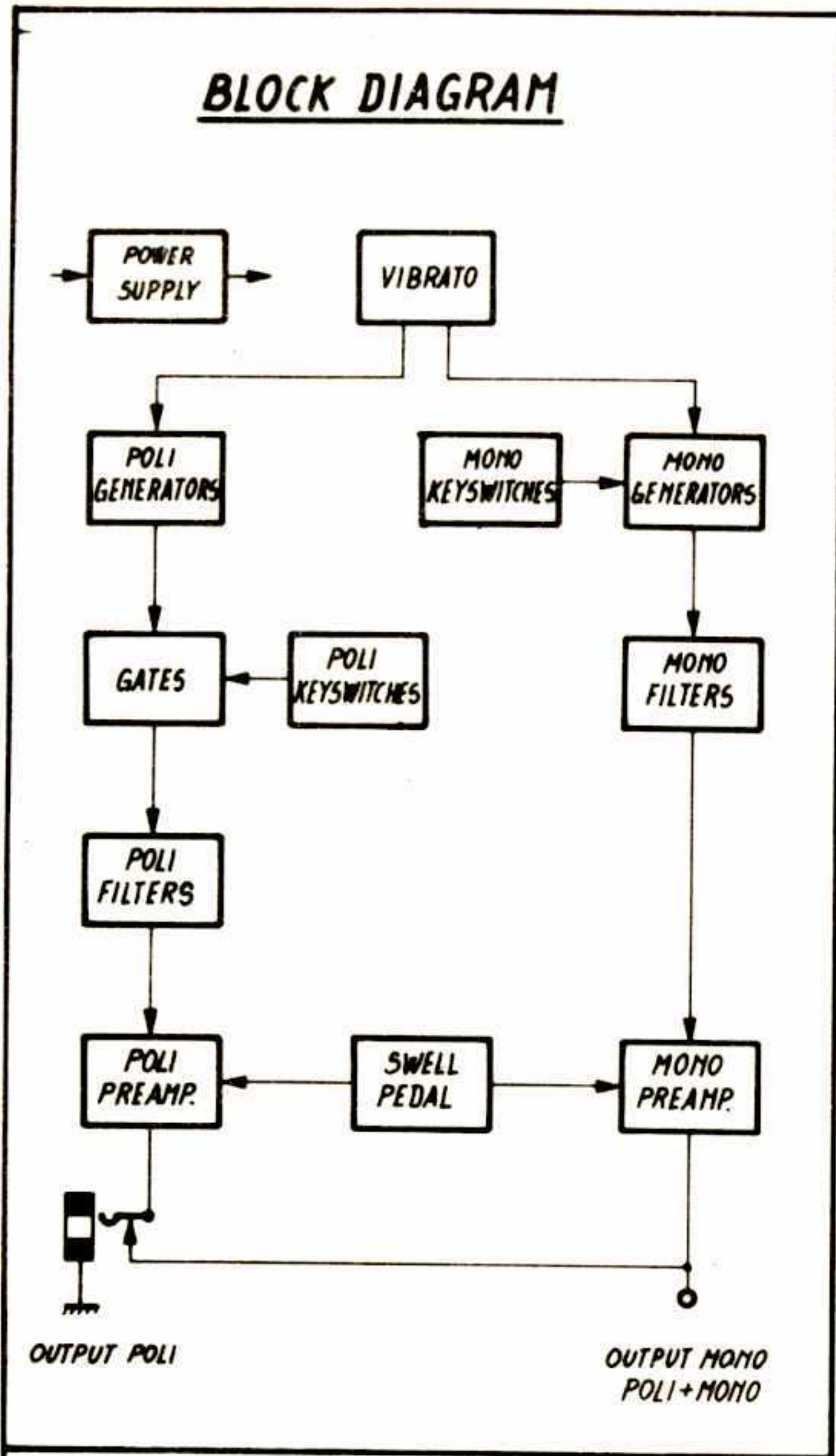
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**IMPORTANT :** IN ANY CORRESPONDENCE CONCERNING THIS INSTRUMENT ALWAYS INCLUDE MODEL AND SERIAL NUMBERS!

**PARTS ORDERING** – When ordering parts be sure to include the following information:

1. Model and serial Number of instrument.
2. Part Code.
3. A description of the Part.
4. Specify how you want the part shipped.

**FARFISA COMPANY - WHOSE POLICY IS CONSTANTLY DIRECTED TO IMPROVEMENTS AND NEW DEVELOPMENTS - RESERVES THE RIGHT TO CHANGE SPECIFICATIONS, DESIGNS, PRICES, MODELS AND TO DISCONTINUE MODELS WITHOUT NOTICE AND LIABILITY.**

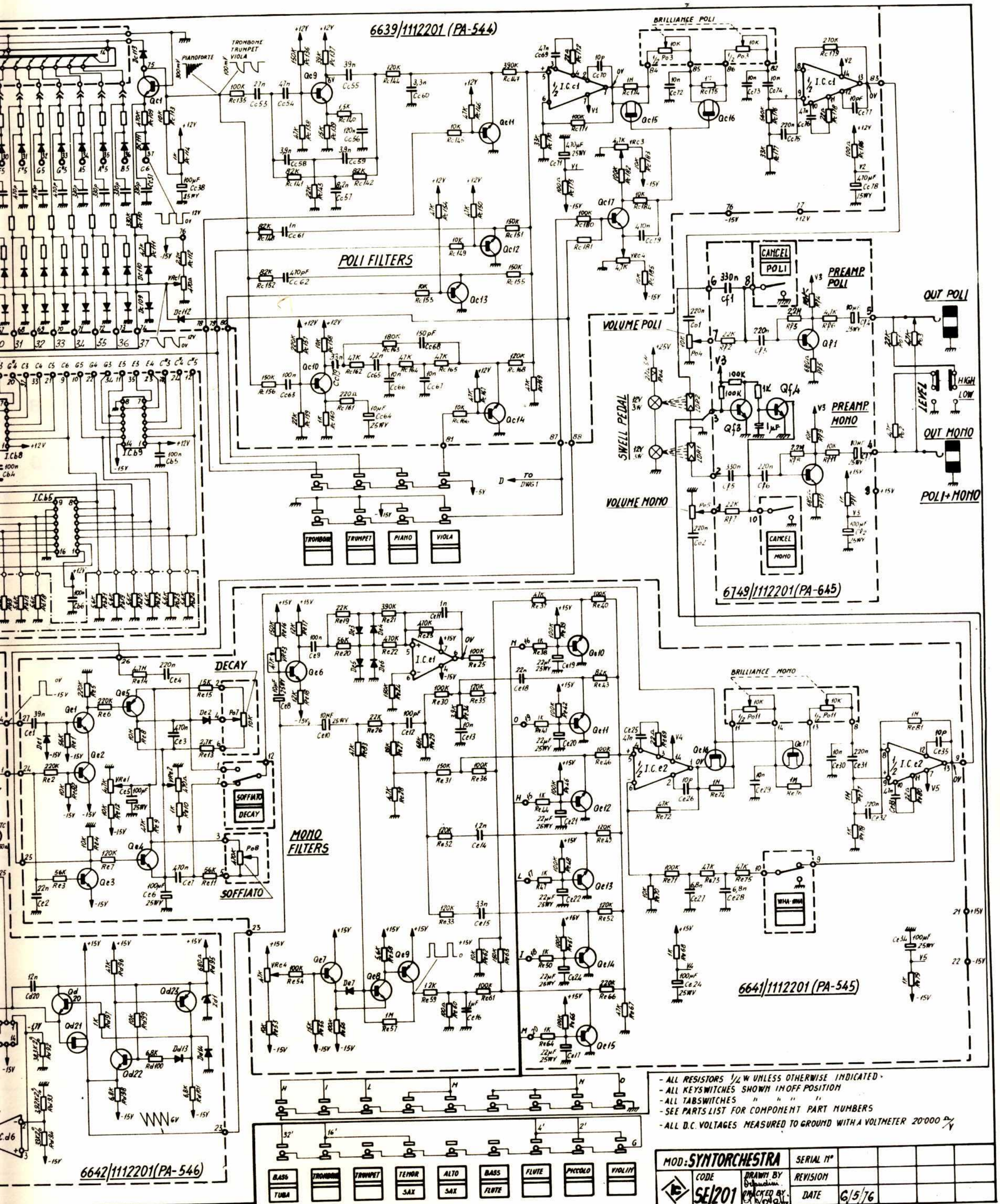


SERIAL N°	REVISION	DATE

MOD: SYNTORCHESTRA  
 CODE: SE/201  
 DRAWN BY: [Signature]  
 CHECKED BY: [Signature]

SEE PARTS LIST FOR COMPONENT PART NUMBERS  
 ALL D.C. VOLTAGES MEASURED TO GROUND WITH A VOLTMETER 20000 Ω/V

ALL RESISTORS 1/4W UNLESS OTHERWISE INDICATED  
 ALL TABSWITCHES SHOWN IN OFF POSITION  
 ALL KEYSWITCHES " " " " " "



6639/1112201 (PA-544)

POLI FILTERS

BRILLIANCE POLI

6749/1112201 (PA-645)

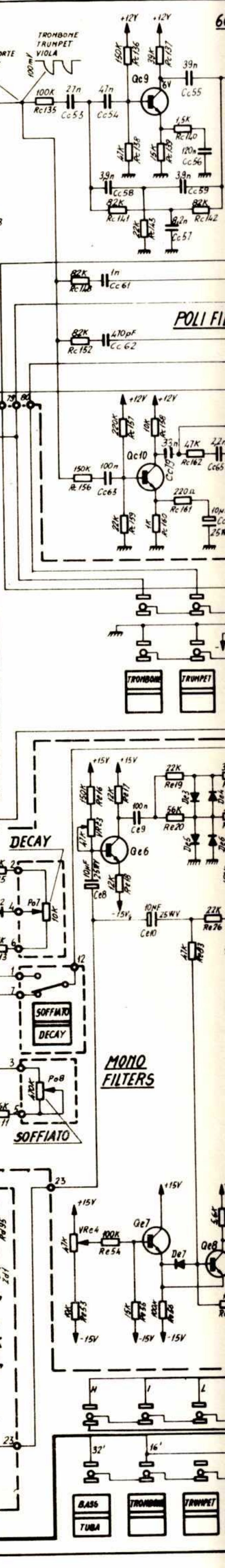
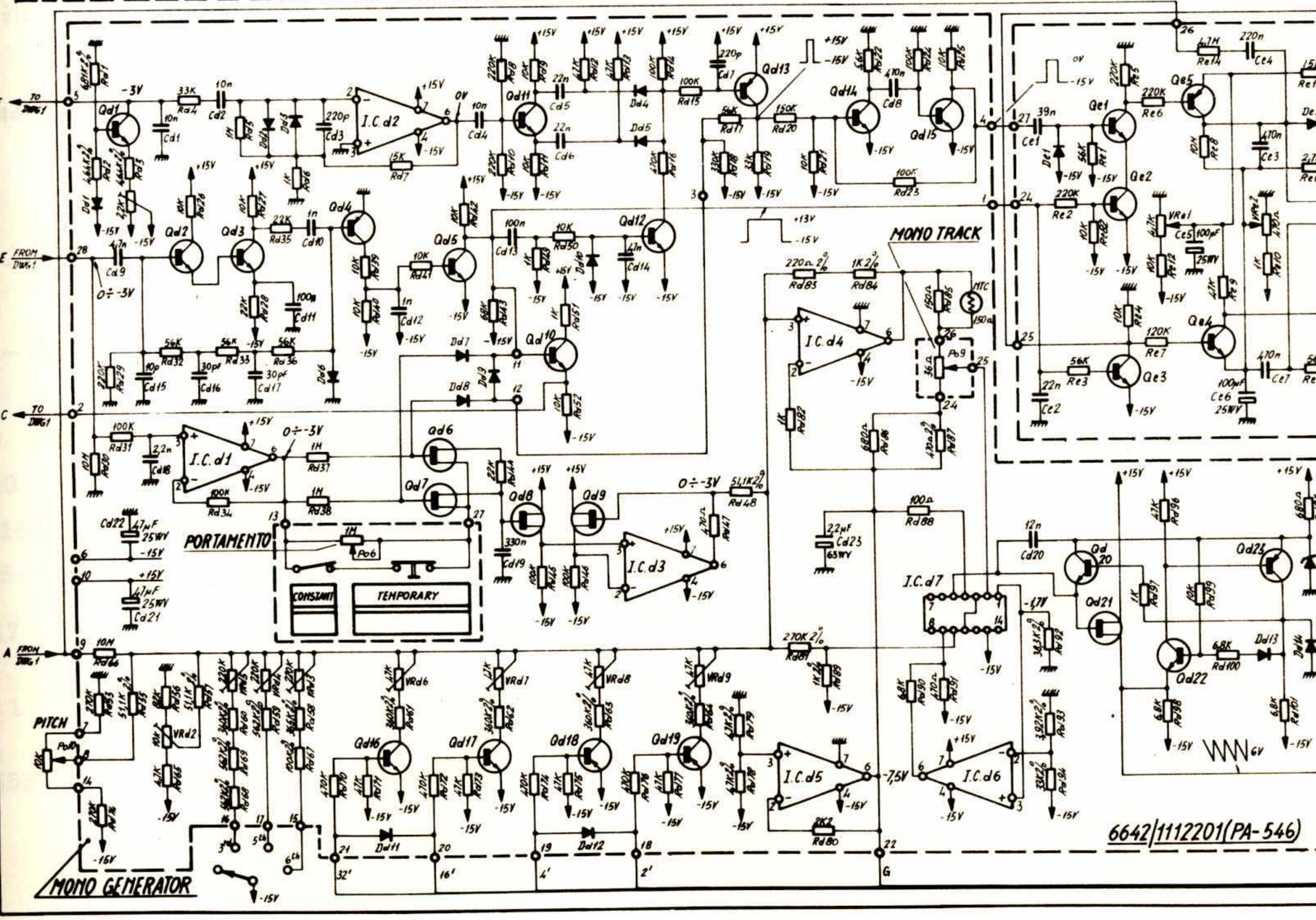
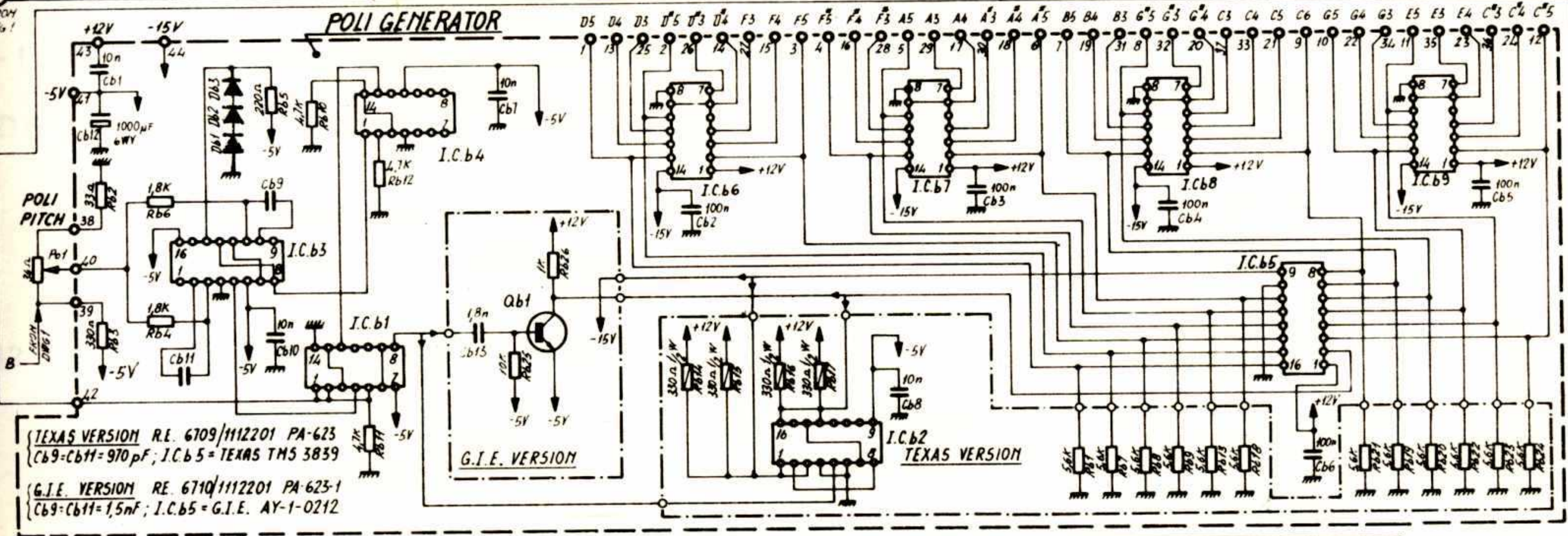
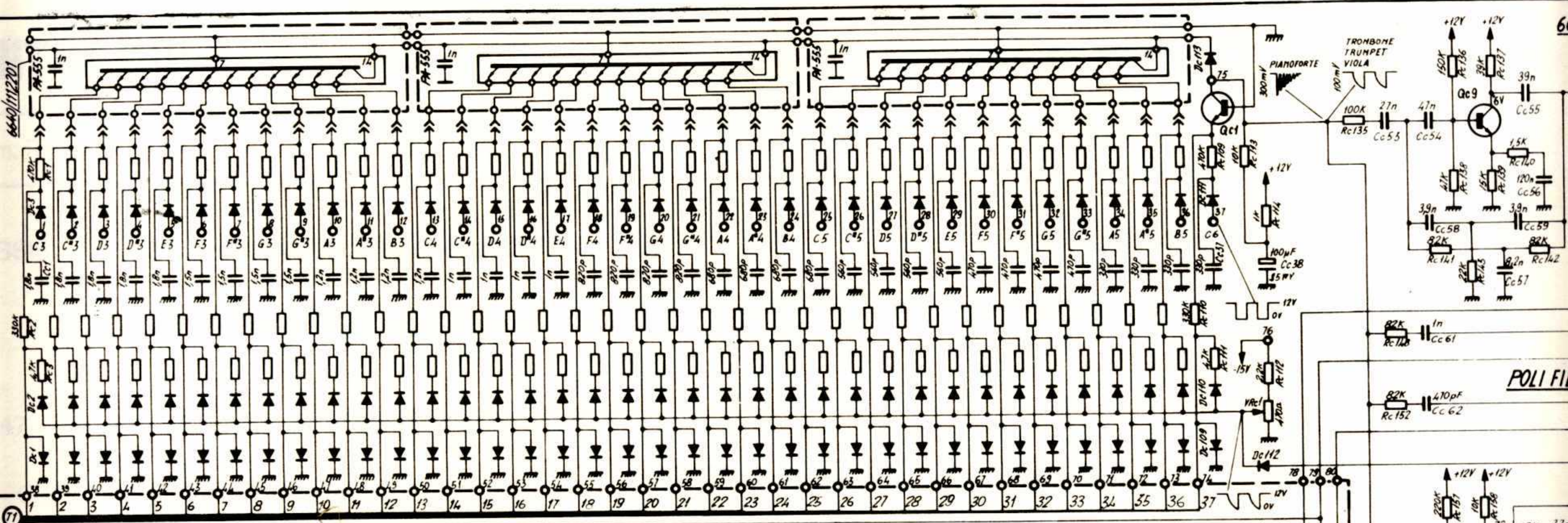
MONO FILTERS

6641/1112201 (PA-545)

6642/1112201 (PA-546)

- ALL RESISTORS 1/2 W UNLESS OTHERWISE INDICATED -
- ALL KEYSWITCHES SHOWN IN OFF POSITION
- ALL TABSWITCHES " " " "
- SEE PARTS LIST FOR COMPONENT PART NUMBERS
- ALL D.C. VOLTAGES MEASURED TO GROUND WITH A VOLTMETER 20'000 Ω

MOD: SYNTORCHESTRA		SERIAL N°	
CODE	DRAWN BY	REVISION	
SE/201	UNHECKED BY	DATE	6/5/76




Schem. Ref.	Circuit	Type	Part Code
<b>CHASSIS</b>	<b>POWER SUPPLY (DWG 1/SE 201)</b>		<b>8000/1112201</b>
Q 1	Series Stabilizer .....	Westinghouse 156 - 043 .....	W/1800 - W/1801
		RCA 2N 3055 .....	
<b>PA 547</b>	<b>VOLTAGE REGULATOR BOARD (DWG 1/SE 201)</b>		<b>6645/1112201</b>
Q 2 - Q 3	Series Stabilizer .....	BC 287 .....	W/1702
		BC 303 - 6 .....	
I.C. 1 - I.C. 2	Voltage Regulator .....	TEXAS - SN 72723N .....	W/1209
D 1 ÷ D 6	Rectifier Diodes .....	10 D 1 .....	B/1100
			B/1101
Z 1	Zener Diode (13V - 1W) .....	ITT - ZY 13 .....	B/1418
Z 2	Zener Diode (5,6V - 400 mW) .....	ITT - ZPD 5,6 .....	B/1309
<b>PA 542</b>	<b>KEYSWITCH (DWG 1/SE 201)</b>		<b>6637/1112201</b>
Q a 1	Switch .....	BC 209 - B .....	W/1407
		BC 239 - B .....	
D a 1 ÷ D a 37	Diodes .....	S.G.S. IX 9809 .....	B/1000
		TEXAS 1N 4148 .....	B/1003
<b>PA 544</b>	<b>ELECTRONIC SWITCHING POLY (DWG 1-2/SE 201)</b>		<b>6639/1112201</b>
Q c 2	Switch .....	BC 209 C-MISTRAL	W/1426
Q c 1	Gate .....		
Q c 3 - Q c 4	Oscillator Vibrato .....		
Q c 5	Buffer .....		
Q c 6 - Q c 7	Oscillator Vibrato .....	BC 209 - B .....	W/1407
Q c 8	Buffer .....		
Q c 9	Active Filter .....	BC 239 - B .....	
Q c 10	Preamplifier .....		
Q c 11 ÷ Q c 14	Mute Switches .....		
Q c 15 - Q c 16	Dual Fet .....	TEXAS - TIS 70 .....	W/2001
Q c 17	Switch .....	BC 209 - B .....	W/1407
		BC 239 - B .....	
I.C. c 1	Preamplifier .....	S.G.S. TBA 231 red dot .....	W/1212 - W/1213
<b>PA 555</b>	<b>GATE BOARD (DWG 2/SE 201)</b>		<b>6640/1112201</b>
I.C.	Gate to 12 emitter .....	ITT - TDA 0470 .....	W/1207

Schem. Ref.	Circuit	Type	Part Code
<b>PA 623/1</b>	<b>POLYPHONIC TONE GENERATOR «GIE VERSION» (DWG 2/SE 201)</b>		<b>6710/1112201</b>
I.C. b 1	Nand Gate .....	SN 7400 .....	W/1000
I.C. b 3	Dual One-Shot .....	SN 29730 N .....	W/1009
I.C. b 4	Dual J-K Flip+Flop .....	SN 7473 .....	W/1002
I.C. b 6 ÷ 9	Frequency Dividers .....	G.I.E. AY-1-5050 .....	W/1100 - W/1101
I.C. b 5	G.I. Synthesizer .....	G.I.E. AY-1-0212 .....	W/1105
Q b 1	Buffer .....	BC 209-B-C .....	W/1407 - W/1410
		BC 109-B-C .....	W/1409 - W/1412
Db 1 ÷ Db 3	Diodes .....	IX 9808 .....	B/1000 - B/1003
		1N 414 .....	
<b>PA 623</b>	<b>POLYPHONIC TONE GENERATOR «TEXAS VERSION» (DWG 2/SE 201)</b>		<b>6709/1112201</b>
I.C. b 1	Nand Gate .....	SN 7400 .....	W/1000
I.C. b 2	Fase Generator .....	TEXAS SN 29858 N .....	W/1011
I.C. b 3	Dual One-Shot .....	SN 29730 N .....	W/1009
I.C. b 4	Dual J-K Flip+Flop .....	SN 7473 .....	W/1002
I.C. b 5	Top Octave Syntetyzer .....	TEXAS TMS 3839 .....	W/1106
I.C. b 6 ÷ 9	Frequency Dividers .....	G.I.E. AY-1-5050 .....	W/1100 - W/1101
Db 1 ÷ Db 3	Diodes .....	IX 9808 .....	B/1000 - B/1003
		1N 914.....	
<b>PA 645</b>	<b>POLY-MONO PREAMPLIFIER (DWG 2/SE 201)</b>		<b>6749/1112201</b>
Qf1-Qf2	Preamplifier.....	BC 209 B red dot....	W/1413
		BC 239 B red dot....	W/1415
Qf3-Qf4	Switch.....	BC 209 B.....	W/1407
		BC 208 B.....	W/1404
<b>PA 546</b>	<b>MONOPHONIC TONE GENERATOR (DWG 2/SE 201)</b>		<b>6642/1112201</b>
Qd 1	Current Reference Generator .....	BC 209-B .....	W/1407
Qd 2 - Qd 3	Oscillator .....	BC 239-B .....	
Qd 4	Integrator .....	BC 154 .....	W/1500
Qd 5	Switch .....	BC 209-B .....	W/1407
		BC 239-B .....	
Qd 6 - Qd 7	Switch Fet .....	SILICONIX E 402 .....	W/2002
Qd 8 - Qd 9	Dual Fet .....	TEXAS TIS 70 .....	W/2001



Schem. Ref.	Circuit	Type	Part Code
Q d 10	Switch .....	BC 209-B .....	W/1407
Q d 11	Preamplifier .....		
Q d 12	Switch .....		
Q d 13	Switch .....	BC 154 .....	W/1500
Q d 14 - Q d 15	One-Shot .....	BC 209-B .....	W/1407
Q d 16 - Q d 17	Switches .....		
Q d 18 - Q d 19	Switches .....	BC 154 .....	W/1500
Q d 20	Switch .....	BC 209-B - BC 239-B .....	W/1407
Q d 21	Fet .....	AMELCO 2N 4304 .....	W/2000
Q d 22 - Q d 23	Switches .....	BC 154 .....	W/1500
I.C. d 1	Buffer .....	TEXAS SN 72741 P .....	W/1210
I.C. d 2	Preamplifier .....		
I.C. d 3	Sample And-Hold .....		
I.C. d 4	Voltage Summer .....		
I.C. d 5 ÷ 6	Reference Voltage Generator .....		
I.C. d 7	Transistor Arrays .....	R.C.A. CA 3046 .....	W/1211
Z d 1	Zener Diode (6,2V - 1W) .....	ITT ZY 6,2 .....	B/1410
D d 1 ÷ D d 14	Diodes .....	S.G.S. IX 9809 .....	B/1000 - B/1003
		FAIRCHILD BA 130 .....	
<b>PA 545</b>	<b>MONOPHONIC FILTERS (DWG 2/SE 201)</b>		<b>6641/1112201</b>
Q e 1 ÷ Q e 4	Switches .....	BC 209-B .....	W/1407
		BC 239-B .....	
Q e 5	Switch .....	BC 154 .....	W/1500
Q e 6	Triangle Wave Shaper .....	BC 209-B .....	W/1407
Q e 7 ÷ Q e 8	Trigger .....		
Q e 9	Trigger .....	BC 154 .....	W/1500
Q e 10 ÷ Q e 15	Mute Switches .....	BC 209 C-MISTRAL	W/1426
Q e 16 - Q e 17	Dual Fet .....	TEXAS - TIS 70 .....	W/2001
I.C. e 1	Sine Wave Shaper .....	SN 72741 P .....	W/1210
I.C. e 2	Preamplifier .....	SN 76131 red dot .....	W/1212 - W/1213
De 1 ÷ De 7	Diodes .....	S.G.S. IX 9809 .....	B/1000 - B/1003
		FAIRCHILD BA 130 .....	

**FARFISA** P. O. BOX 204 - ANCONA (ITALY)

 FARFISA S.p.A.  
IS A SUBSIDIARY  
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