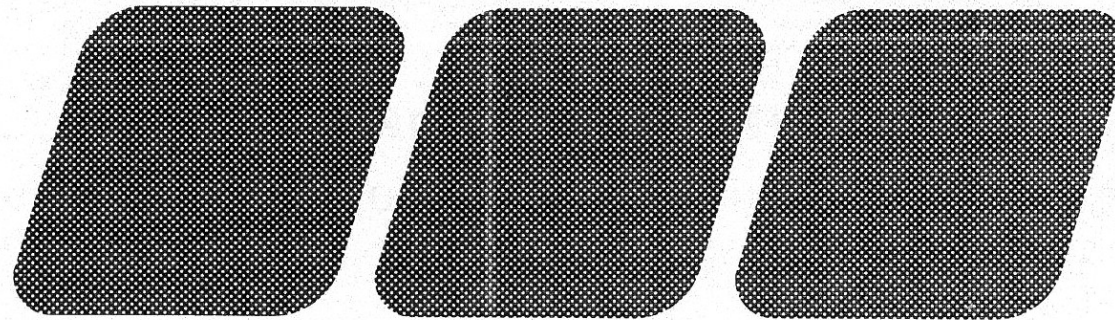








**SCHEMATIC  
DIAGRAM**

**CRUMAR<sup>®</sup>**  
*Musical Instruments*



**mod.  
composer**

	FEMALE CONNECTOR SYMBOL (es. J 2/1)
	PLUG IN CONNECTOR SYMBOL
	WIRE SOLDERING POINT
	TEST POINT ( T P... )
	CONNECTING POINT (ON p.c.b.)
	METALLIC FILM RESISTOR 1%

**ALL resistors 1/4w unless otherwise indicated**

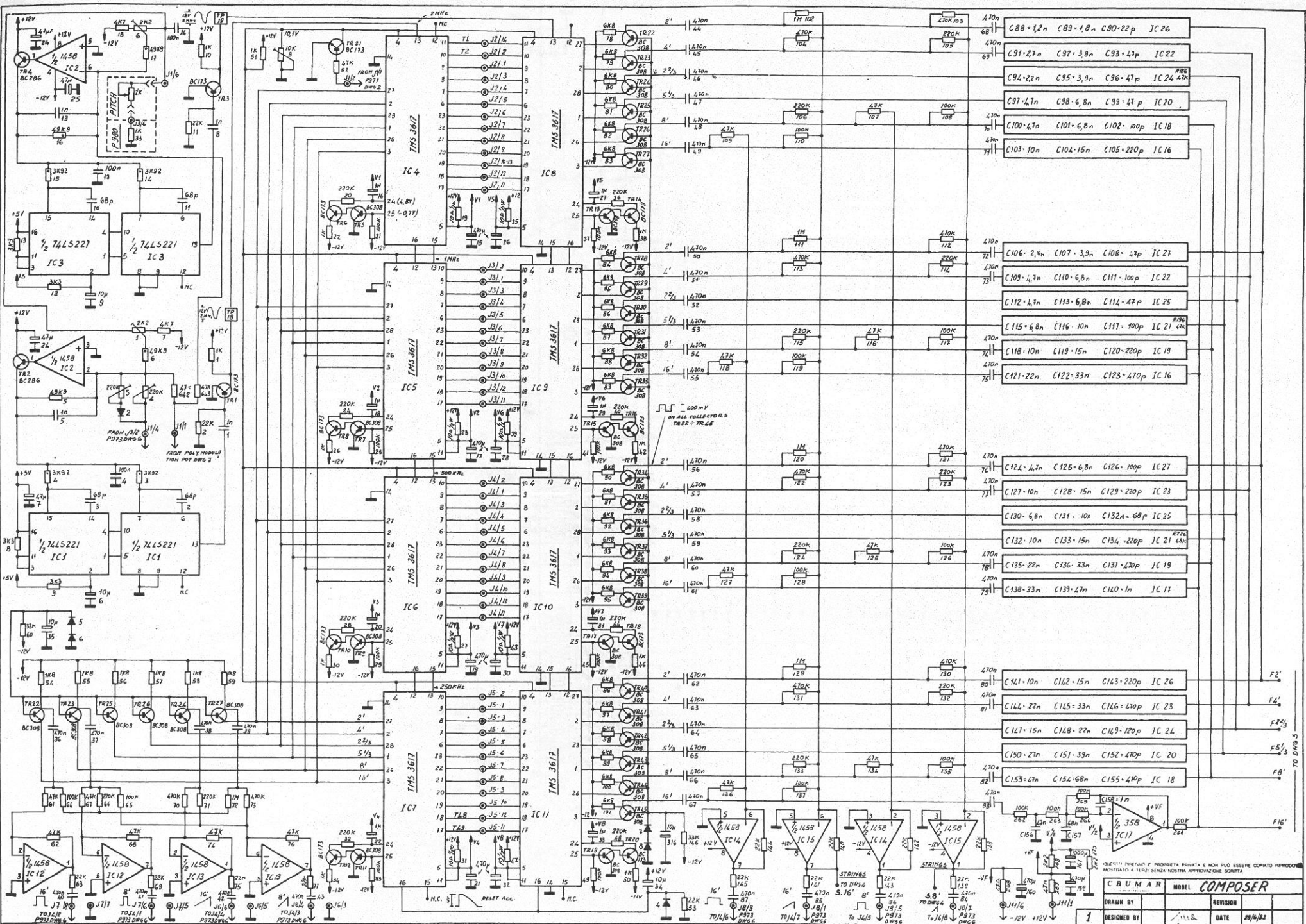
**ALL tab switches shown in OFF position**

**ALL key switches shown in OFF position**

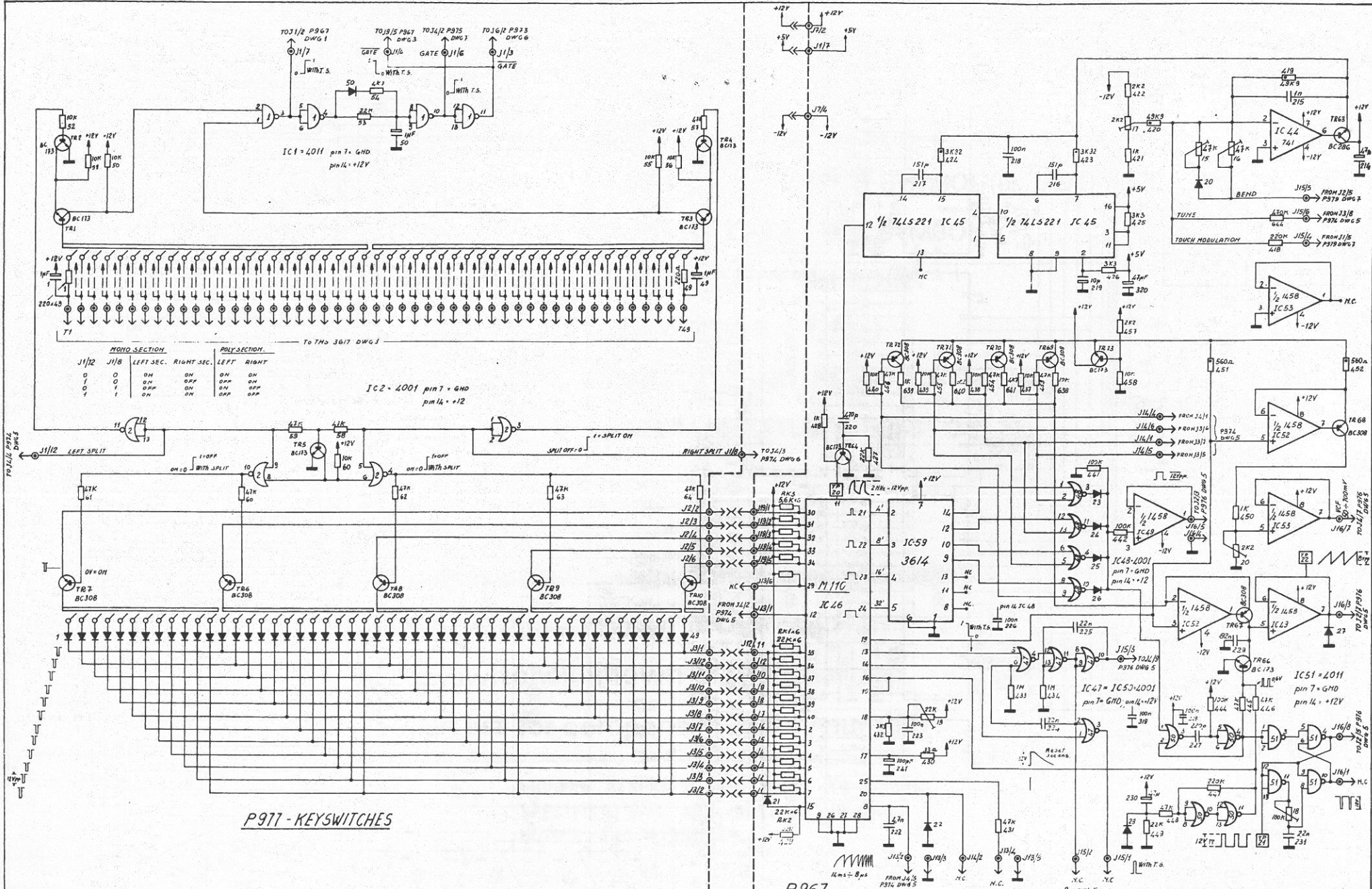
**See part list for component part numbers**

**CRUMAR RESERVES THE RIGHT TO CHANGE  
SPECIFICATIONS AND DESIGNS, WITHOUT  
NOTICE AND LIABILITY.**





C88 = 1,2n	C89 = 1,8n	C90 = 22p	IC 26
C91 = 2,7n	C92 = 3,9n	C93 = 47p	IC 22
C94 = 2,2n	C95 = 3,9n	C96 = 47p	IC 24
C97 = 4,7n	C98 = 6,8n	C99 = 47p	IC 20
C100 = 4,7n	C101 = 6,8n	C102 = 100p	IC 18
C103 = 10n	C104 = 15n	C105 = 220p	IC 16
C106 = 2,4n	C107 = 3,9n	C108 = 47p	IC 27
C109 = 4,7n	C110 = 6,8n	C111 = 100p	IC 22
C112 = 4,7n	C113 = 6,8n	C114 = 47p	IC 25
C115 = 6,8n	C116 = 10n	C117 = 100p	IC 21
C118 = 10n	C119 = 15n	C120 = 220p	IC 19
C121 = 22n	C122 = 33n	C123 = 470p	IC 16
C124 = 4,7n	C125 = 6,8n	C126 = 100p	IC 27
C127 = 10n	C128 = 15n	C129 = 220p	IC 23
C130 = 6,8n	C131 = 10n	C132 = 68p	IC 25
C132 = 10n	C133 = 15n	C134 = 220p	IC 21
C135 = 22n	C136 = 33n	C137 = 470p	IC 19
C138 = 33n	C139 = 47n	C140 = 1n	IC 11
C141 = 10n	C142 = 15n	C143 = 220p	IC 26
C144 = 22n	C145 = 33n	C146 = 470p	IC 23
C147 = 15n	C148 = 22n	C149 = 120p	IC 24
C150 = 21n	C151 = 33n	C152 = 470p	IC 20
C153 = 47n	C154 = 68n	C155 = 470p	IC 18



P977 - KEYSWITCHES

P967

QUESTO DISEGNO È PROPRIETÀ PRIVATA E NON PUÒ ESSERE COPERTO IN TUTTO O IN PARTE SENZA NOSTRA APPROVAZIONE SCRITTA.

CRUMAR MODEL: COMPOSER

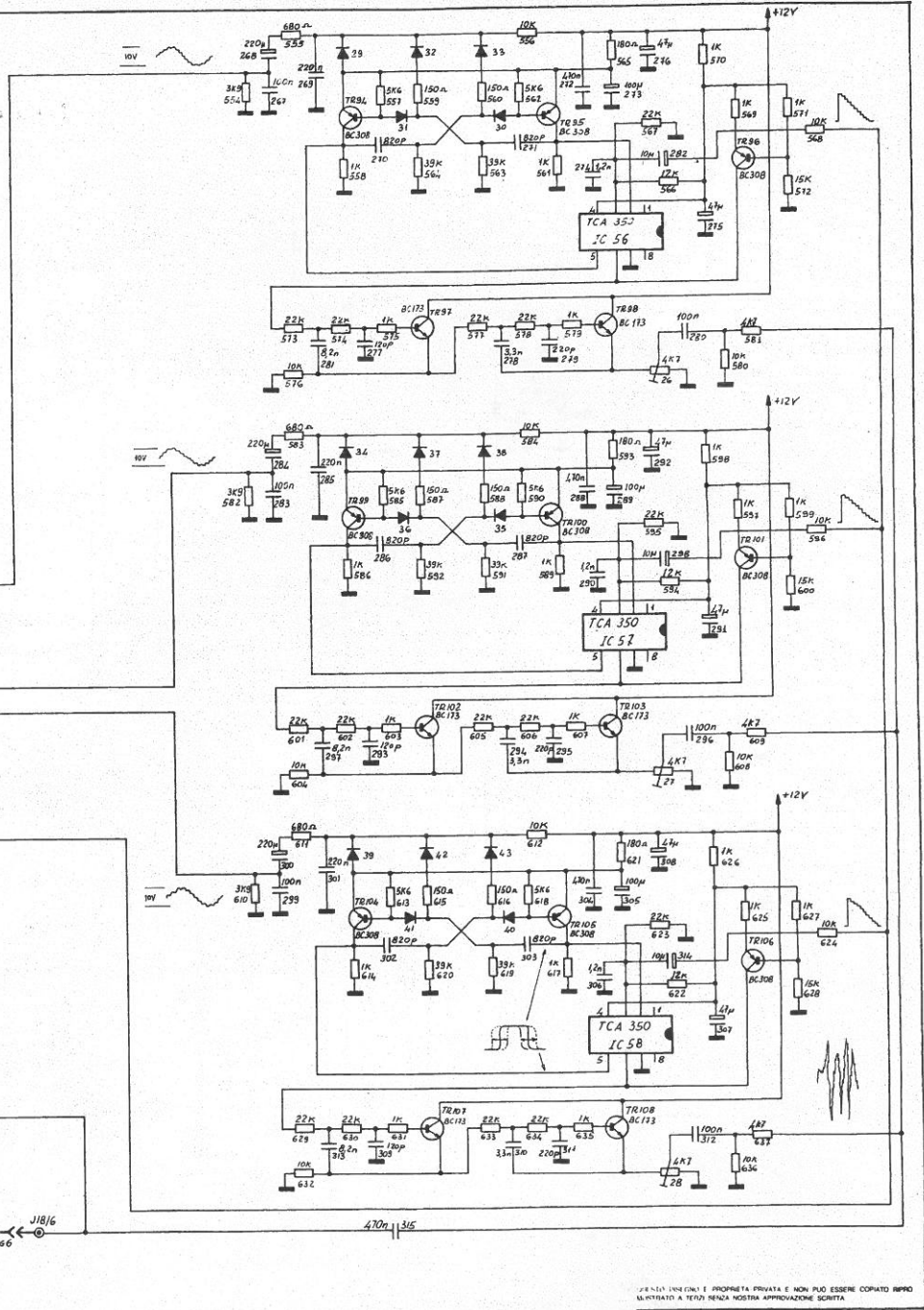
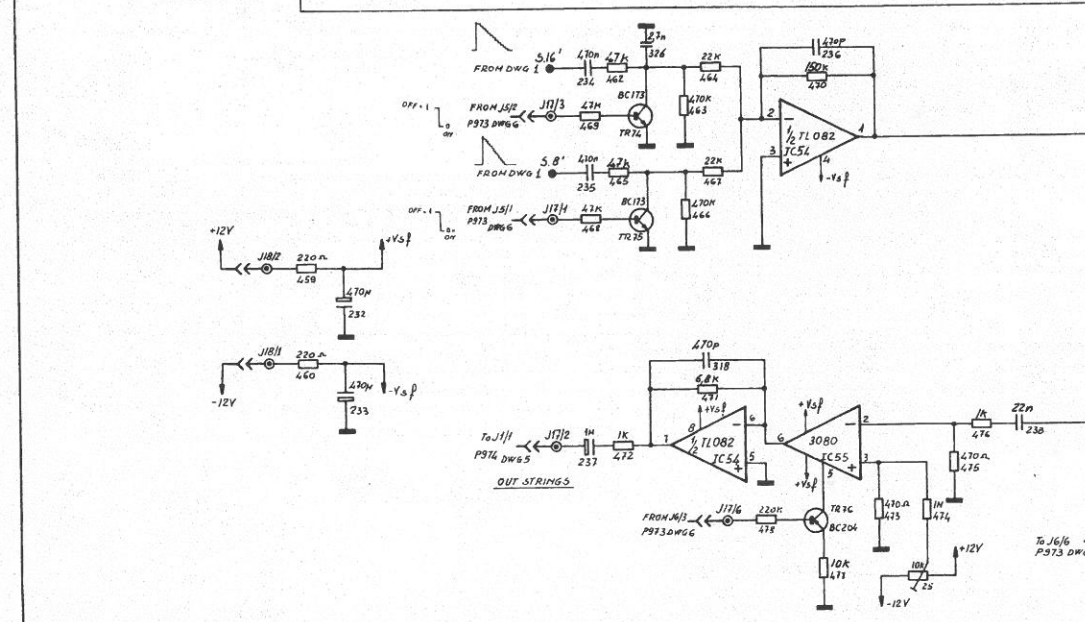
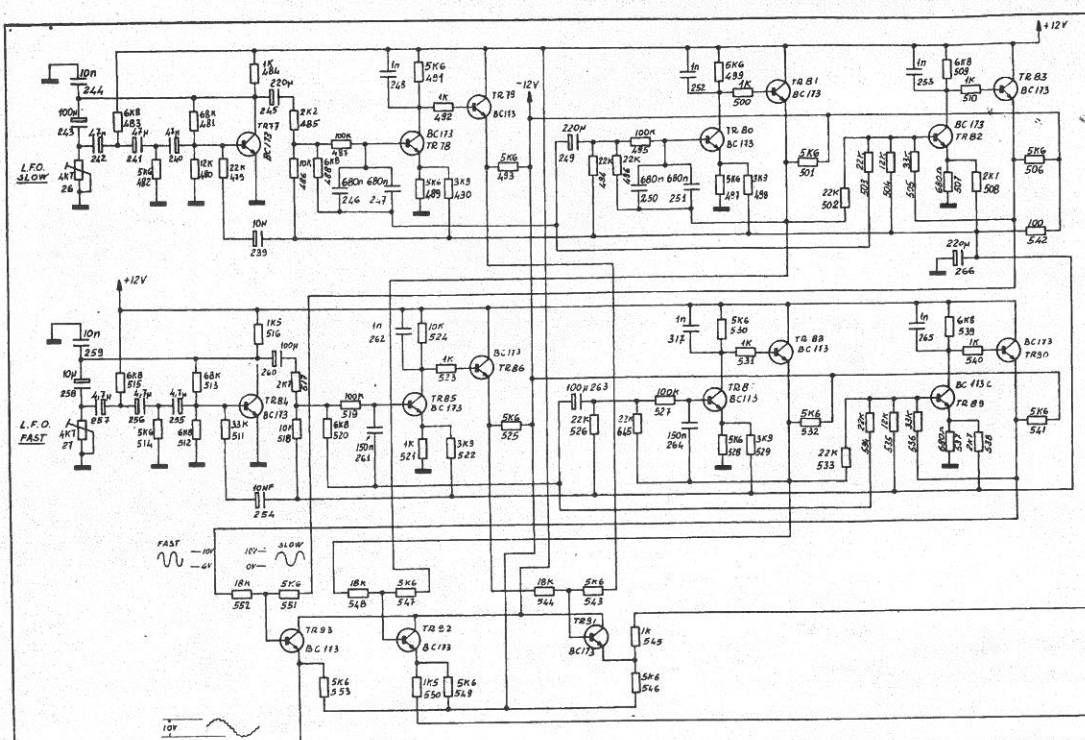
DRAWN BY	REVISION
DESIGNED BY	DATE

2

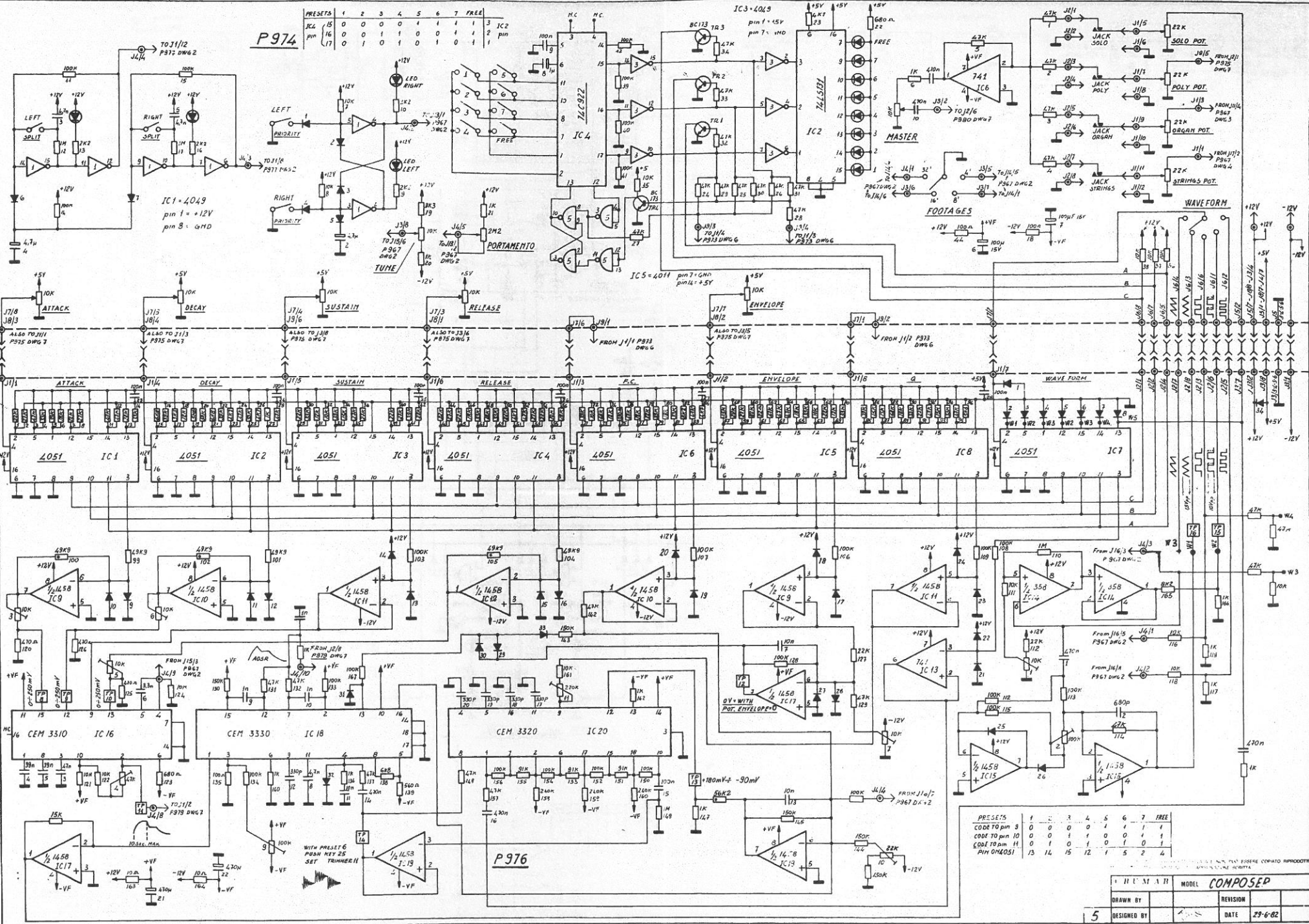
29/4/66











P974

PRESETS	1	2	3	4	5	6	7	FREE
IC1	0	0	0	0	1	1	1	1
IC2	0	0	0	1	0	0	1	1
pin	17	0	1	0	1	0	1	1

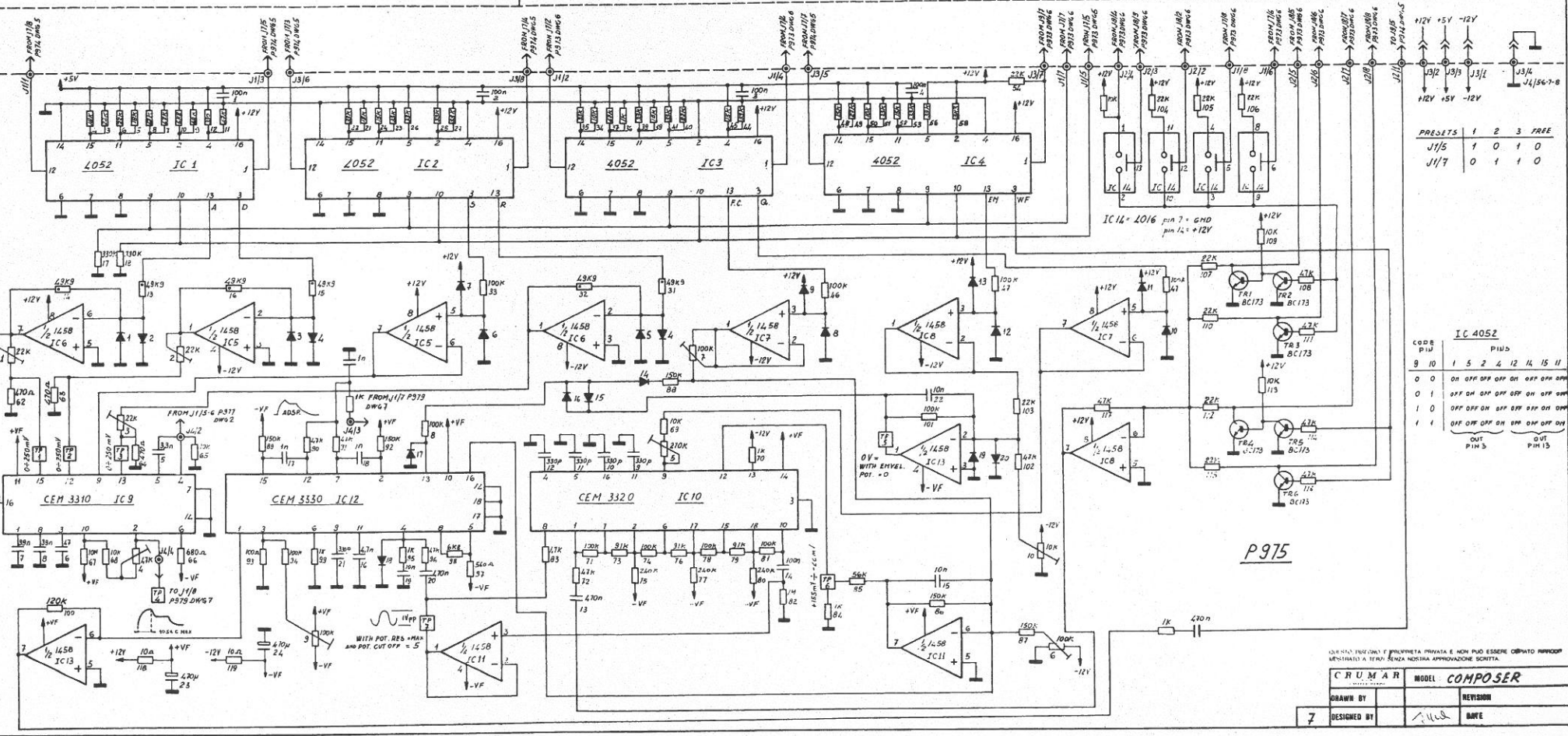
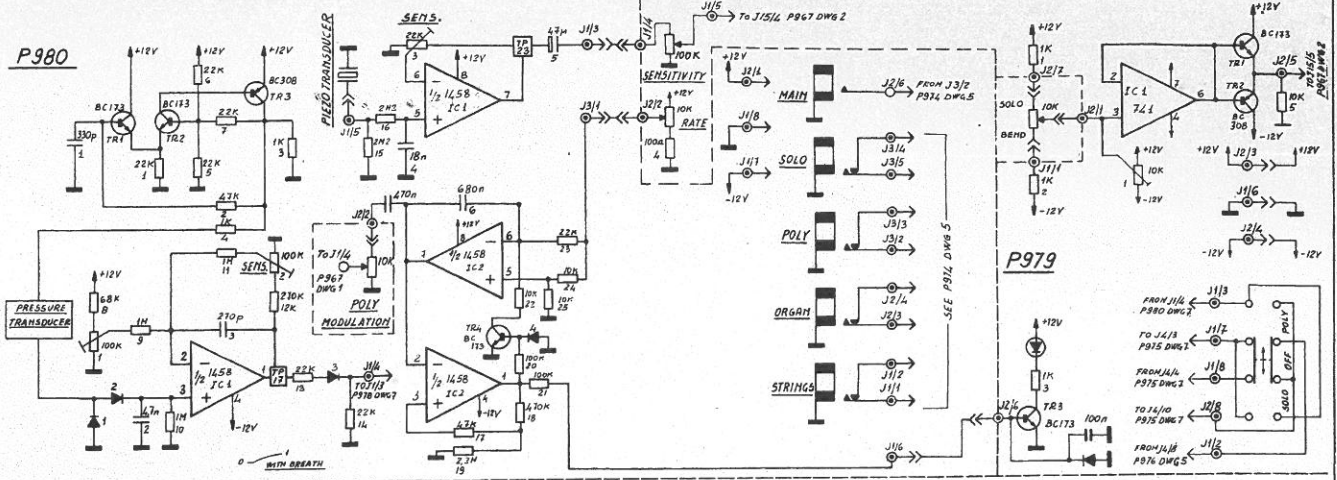
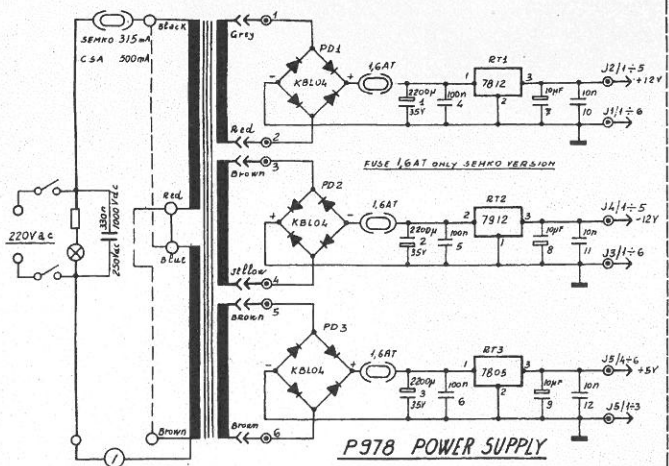
PRESETS	1	2	3	4	5	6	7	FREE
CODE TO pin 3	0	0	0	0	1	1	1	1
CODE TO pin 10	0	0	0	1	0	0	1	1
CODE TO pin 14	0	1	0	1	0	1	0	1
PIN 40MS1	13	14	15	12	1	5	2	4

P976

DRAWN BY	DESIGNED BY	MODEL	COMPOSEP
5		REVISION	DATE
			29-6-82







PRESETS

J1/5	1	0	1	0
J1/7	0	1	1	0

CODE

PIN	PIN5
9	1 5 2 4 12 14 15 11
0	ON OFF OFF OFF ON OFF OFF OFF
0	OFF ON OFF OFF OFF ON OFF OFF
1	OFF OFF ON OFF OFF OFF ON OFF
1	OFF OFF OFF ON OFF OFF OFF OFF

OUT PIN 5      OUT PIN 15

12V, -12V, +5V ELENTO E PULSATA PRIVATA E NON PUO' ESSERE COPIATO SENZA PERMESSA E SENZA LA NOSTRA APPROVAZIONE SCRITTA.

CRUMAR		MODEL COMPOSER	
DRAWN BY		REVISION	
DESIGNED BY	ucl	DATE	

CRUMAR S.p.A.  
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c/p 98  
Tel. (071) 79033 / 34