







**SCHEMATIC
DIAGRAM**

CRUMAR[®]

Musical Instruments

**mod.
stratus**

	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.**

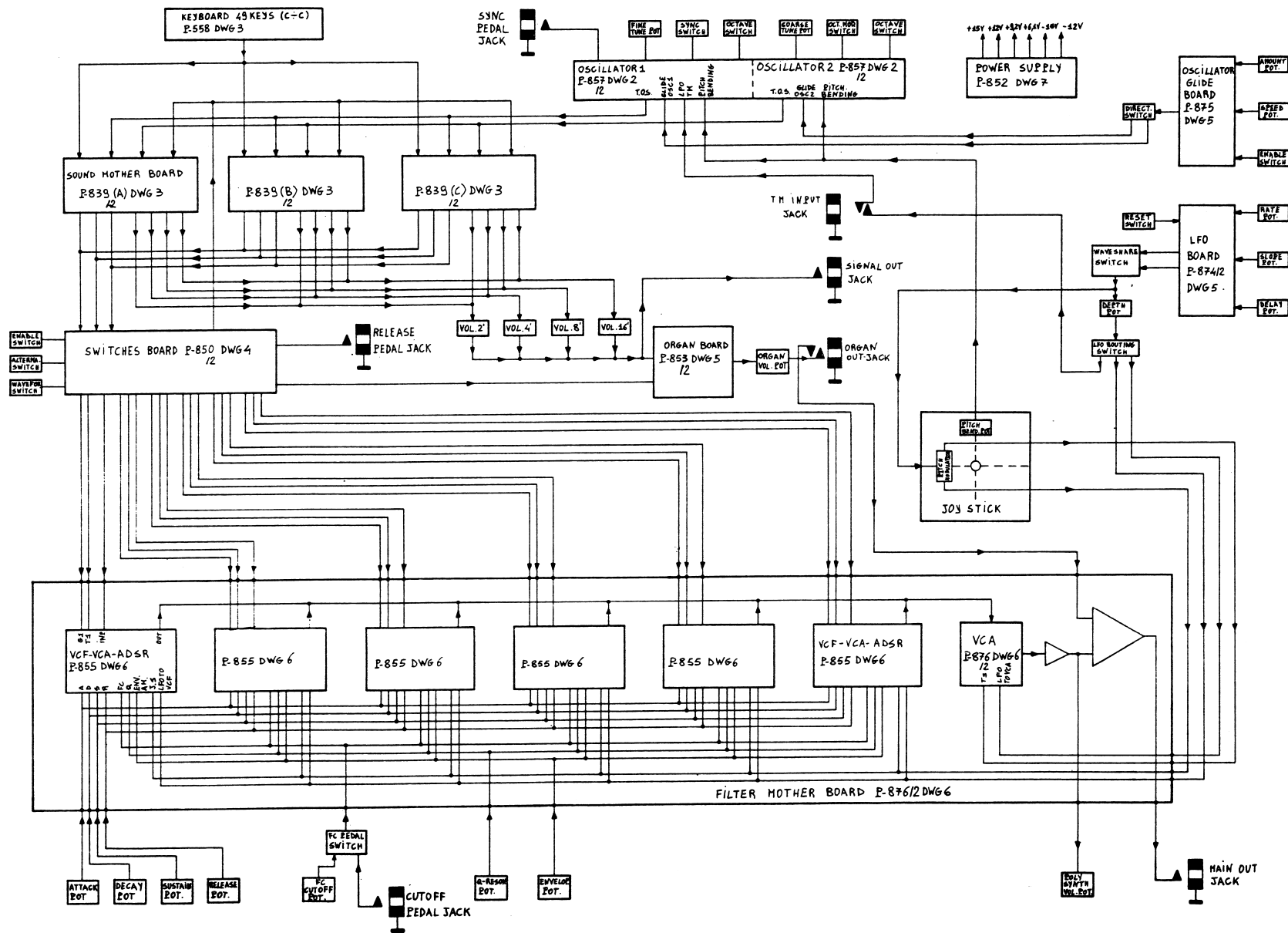
**SCHEMATIC
DIAGRAM**

*mod.
stratus*

INDEX

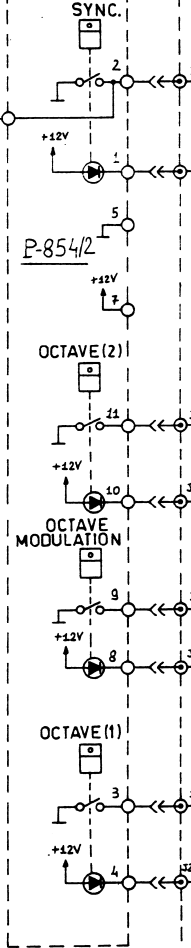
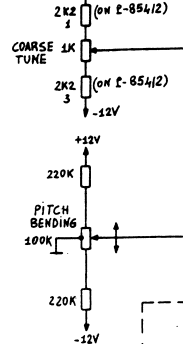
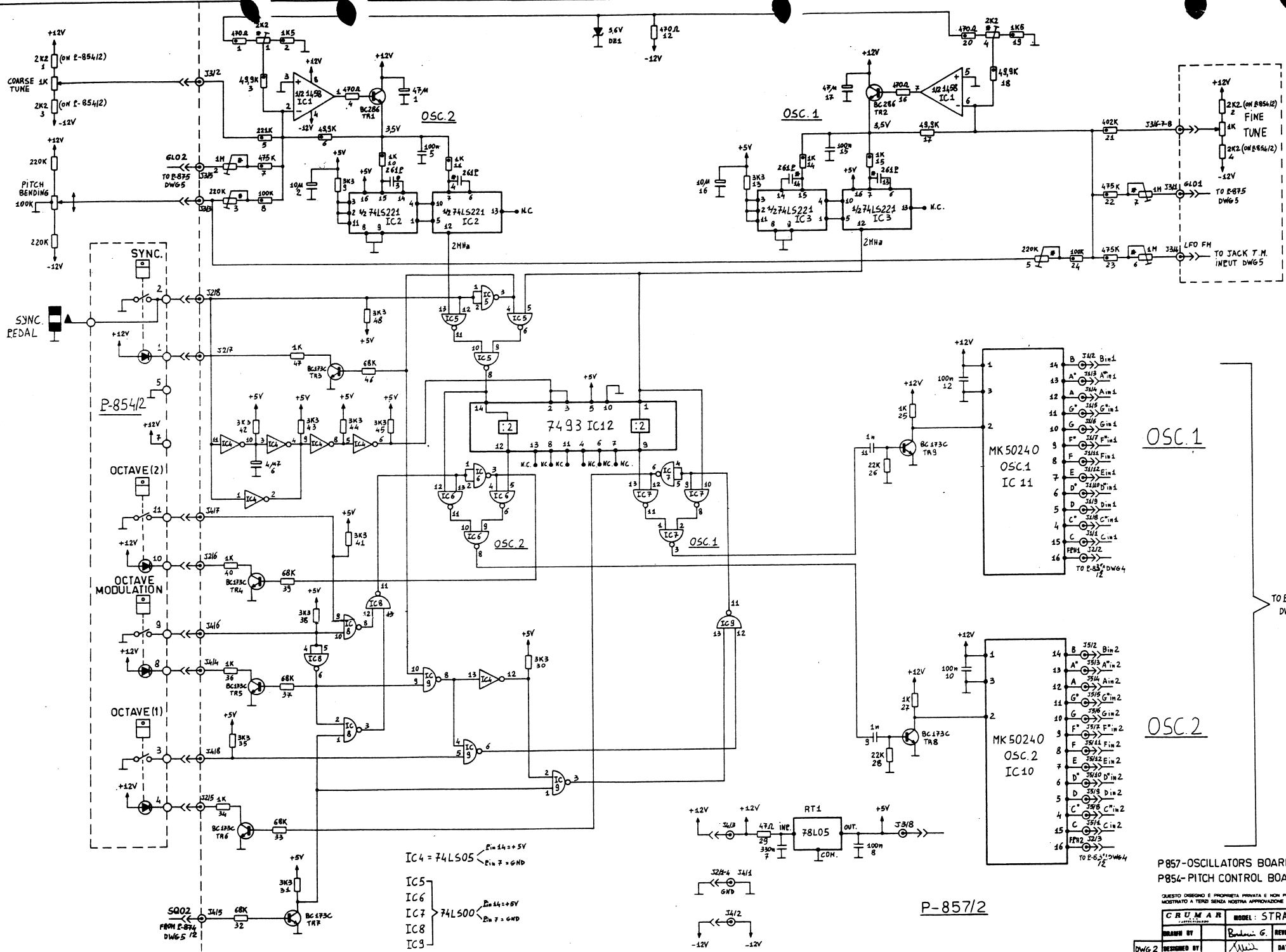
DWG 2 (P-854/2)	= PITCH CONTROL BOARD
DWG 2 (P-857/2)	= OSCILLATOR 1 - OSCILLATOR 2
DWG 3 (P-558)	= KEYSWITCHES BOARD
DWG 3 (P-839/2) (A)	= SOUND MOTHER BOARD
DWG 3 (P-839/2) (B) (C)	= SOUND MOTHER BOARD
DWG 3 (P-840)	= TDA 1008 MODULES
DWG 4 (P-850/2)	= SWITCHES BOARD
DWG 5 (P-853/2)	= ORGAN BOARD
DWG 5 (P-874/2)	= LFO BOARD
DWG 5 (P-875)	= OSCILLATOR GLIDE BOARD
DWG 6 (P-855)	= VCF - VCA - ADSR
DWG 6 (P-876/2)	= FILTER MOTHER BOARD
DWG 7 (P-852)	= POWER SUPPLY

BLOCK AND WIRING DIAGRAM

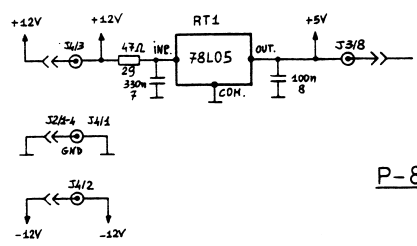


QUESTO DISSEGNO È PROPRIETÀ PRIVATA E NON PUÒ ESSERE COPERTO, RIPRODOTTO, MOSTRATO A TERZI SENZA NOSTRA APPROVAZIONE SCRITTA.

C R U M A R I		MODEL: STRATUS	
DRAWN BY	Bordani G.	REVISION	
DWG-1	DESIGNED BY	DATE	5/3/81



IC 4 = 74LS05 P_{in} 14 = +5V P_{in} 7 = GND
 IC 5
 IC 6
 IC 7
 IC 8
 IC 9 } 74LS00 P_{in} 14 = +5V P_{in} 7 = GND



P-857/2

OSC.1

OSC.2

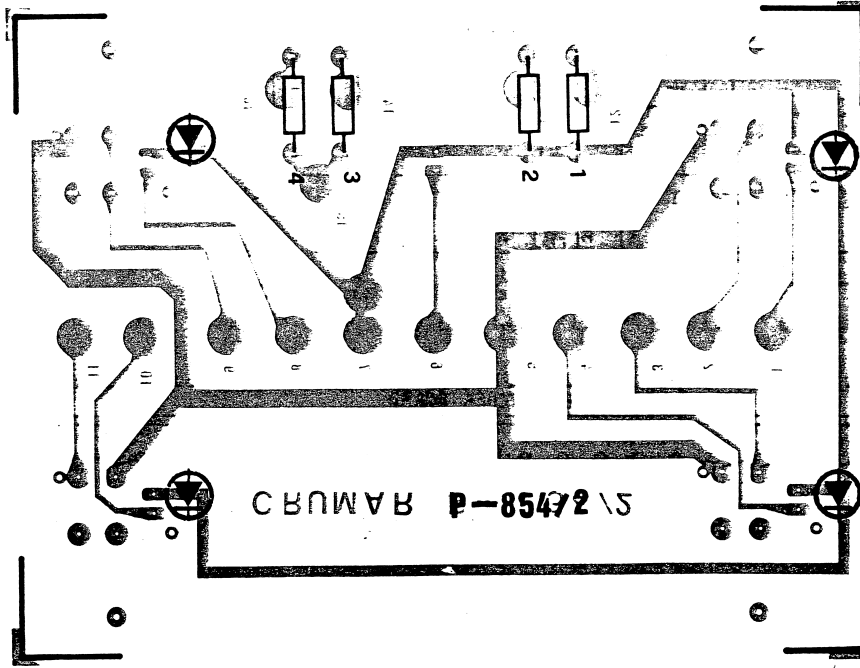
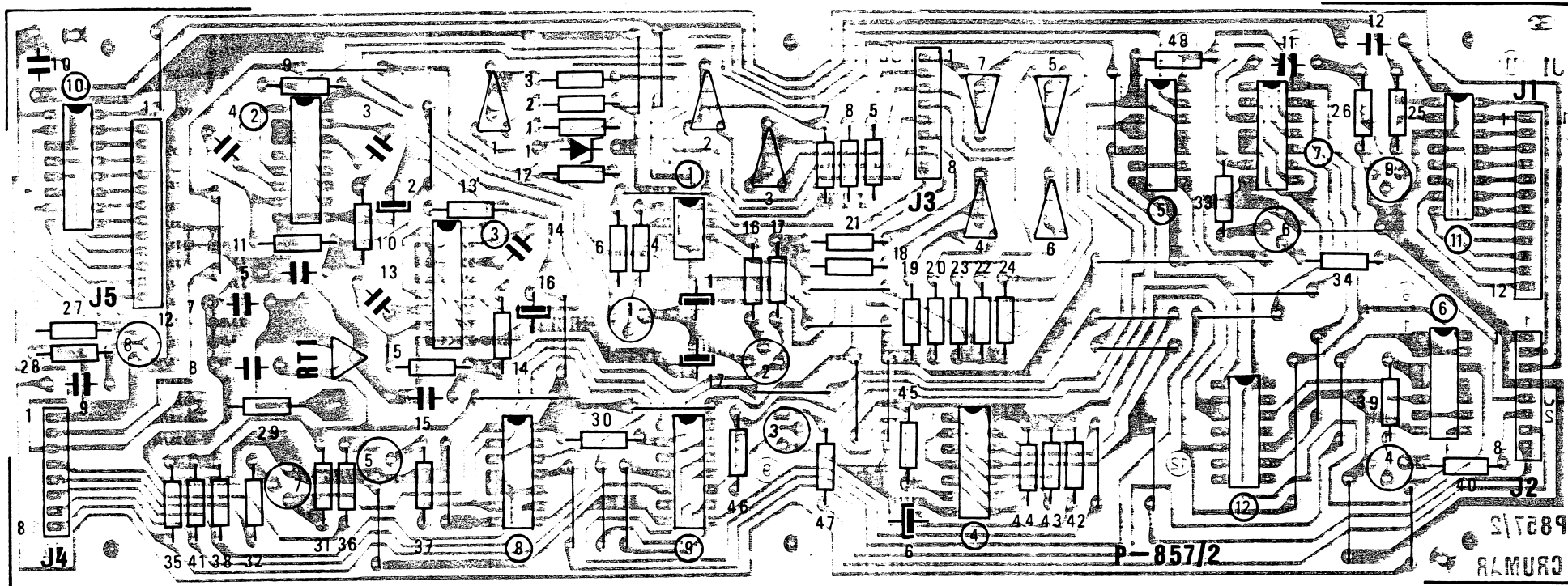
P857-OSCILLATORS BOARD
 P854-PITCH CONTROL BOARD

QUESTO DISEGNO È PROPRIETÀ PRIVATA E NON PUÒ ESSERE MOSTRATO A TERZI SENZA NOSTRA APPROVAZIONE SCRITTA.

CRUMAR	MODEL	STRATU'S
DRAWN BY	REVISION	
DESIGNED BY	DATE	

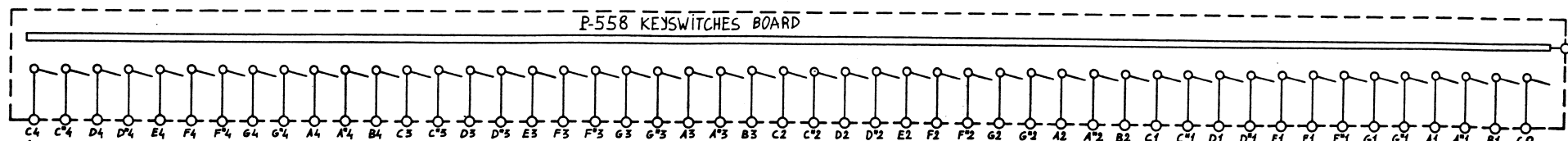
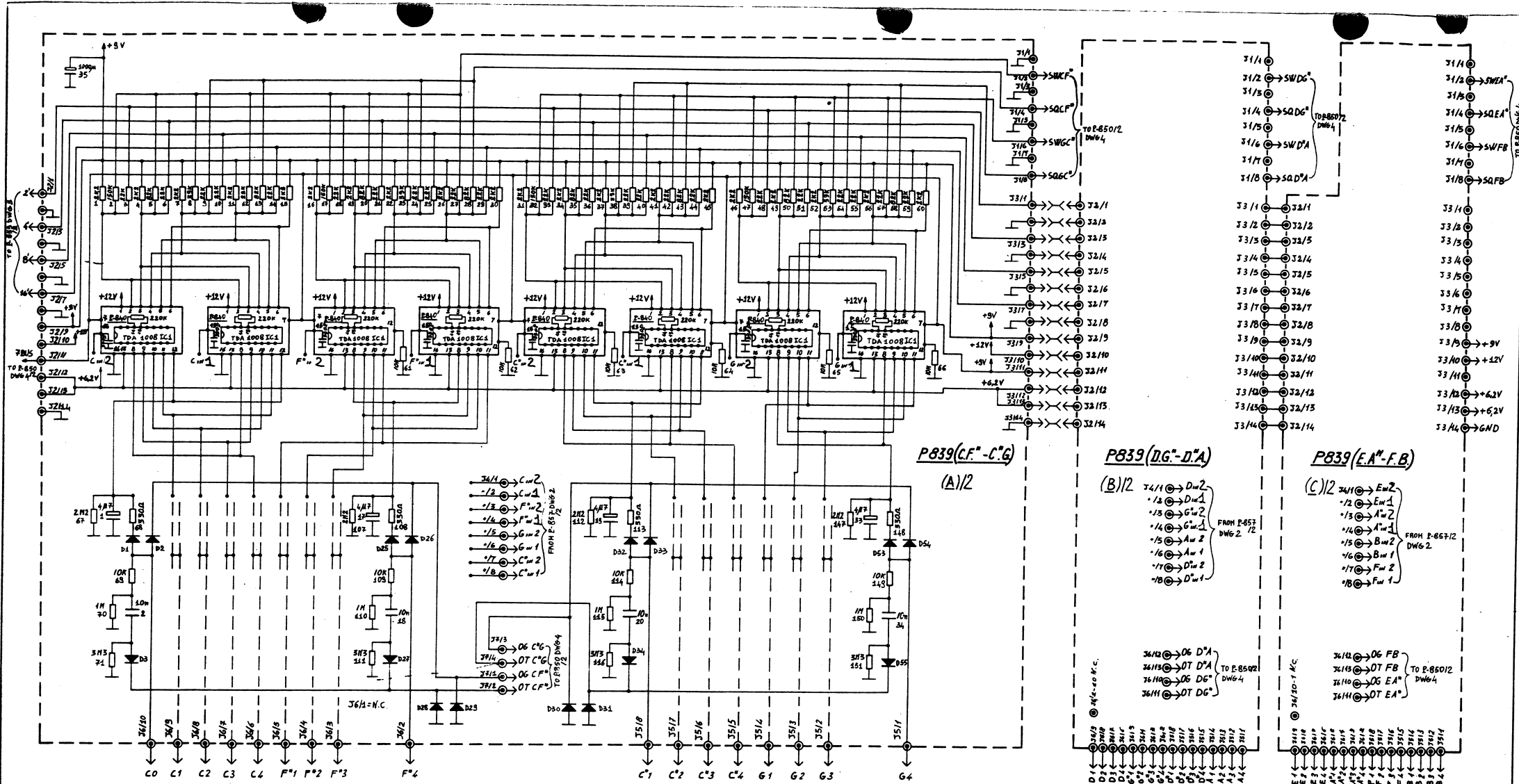
TO P-83.
 DWG 3

DWG 2



QUESTO DISEGNO È PROPRIETÀ PRIVATA E NON PUÒ ESSERE COPiato RIPRODOTTO MOSTRATO A TERZI SENZA NOSTRA APPROVAZIONE SCRITTA.

CRUMAR		MODEL: STRATUS	
DESIGNED BY	<i>[Signature]</i>	REVISION	
DESIGNED BY	<i>[Signature]</i>	DATE	5/3/81

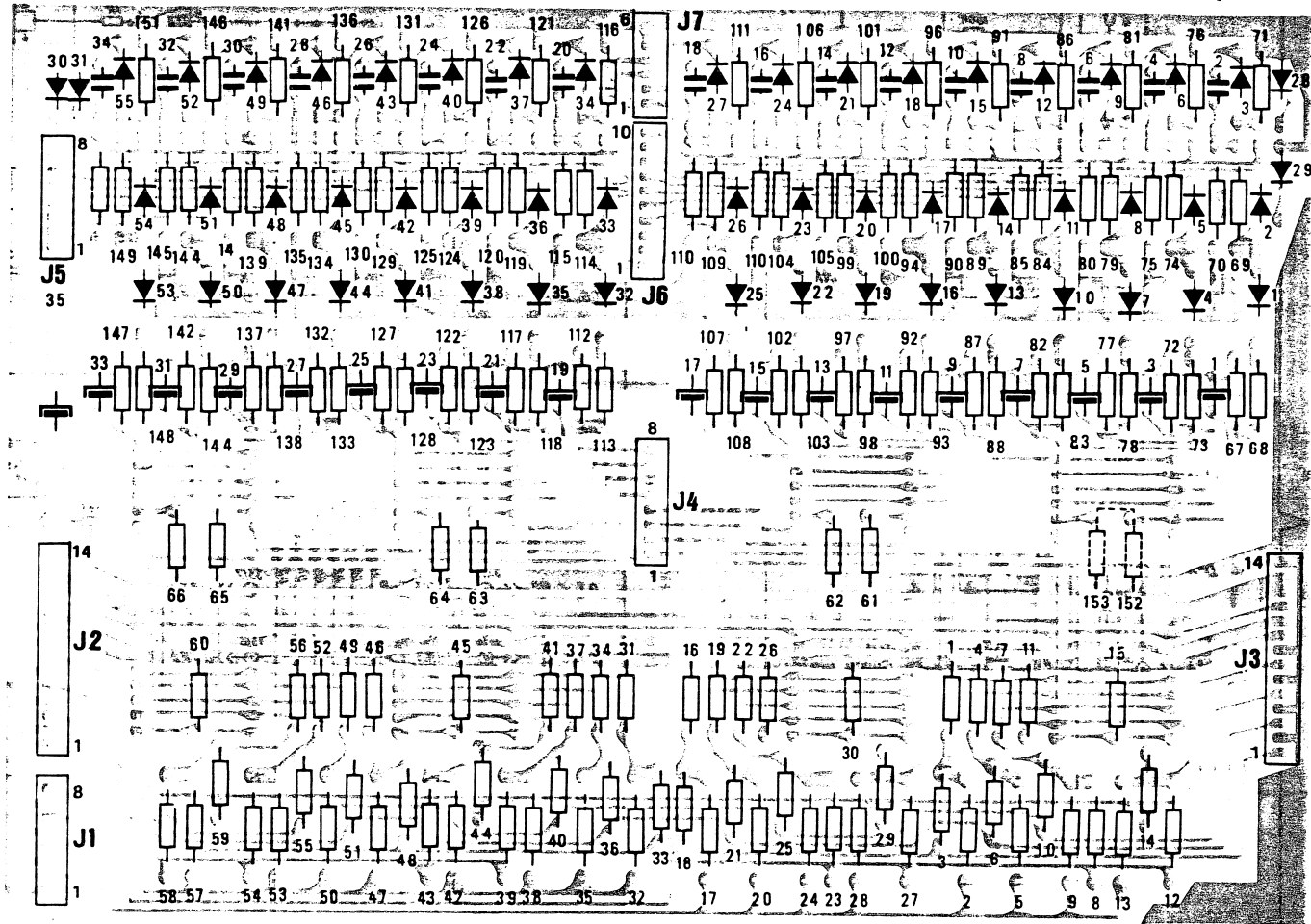
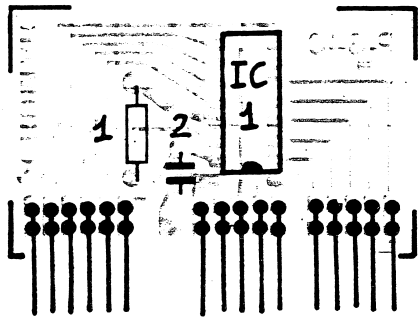


P839-SOUND MOTHER BOARD
P840-TDA1008 MODULE BOARD
 QUESTO CIRCUITO È PROPRIETÀ PRIVATA E NON PUÒ ESSERE RIPRODOTTO
 RISTRUTTO A TERZI SENZA NECESSARIA APPROVAZIONE SCRITTA.

C.R.U.M.A.R.		MODEL: STRATUS	
DESIGNED BY	DESIGNED BY	REVISION	
DWG3	REVISION BY	DATE	5/19/82

P839/2

P. 840

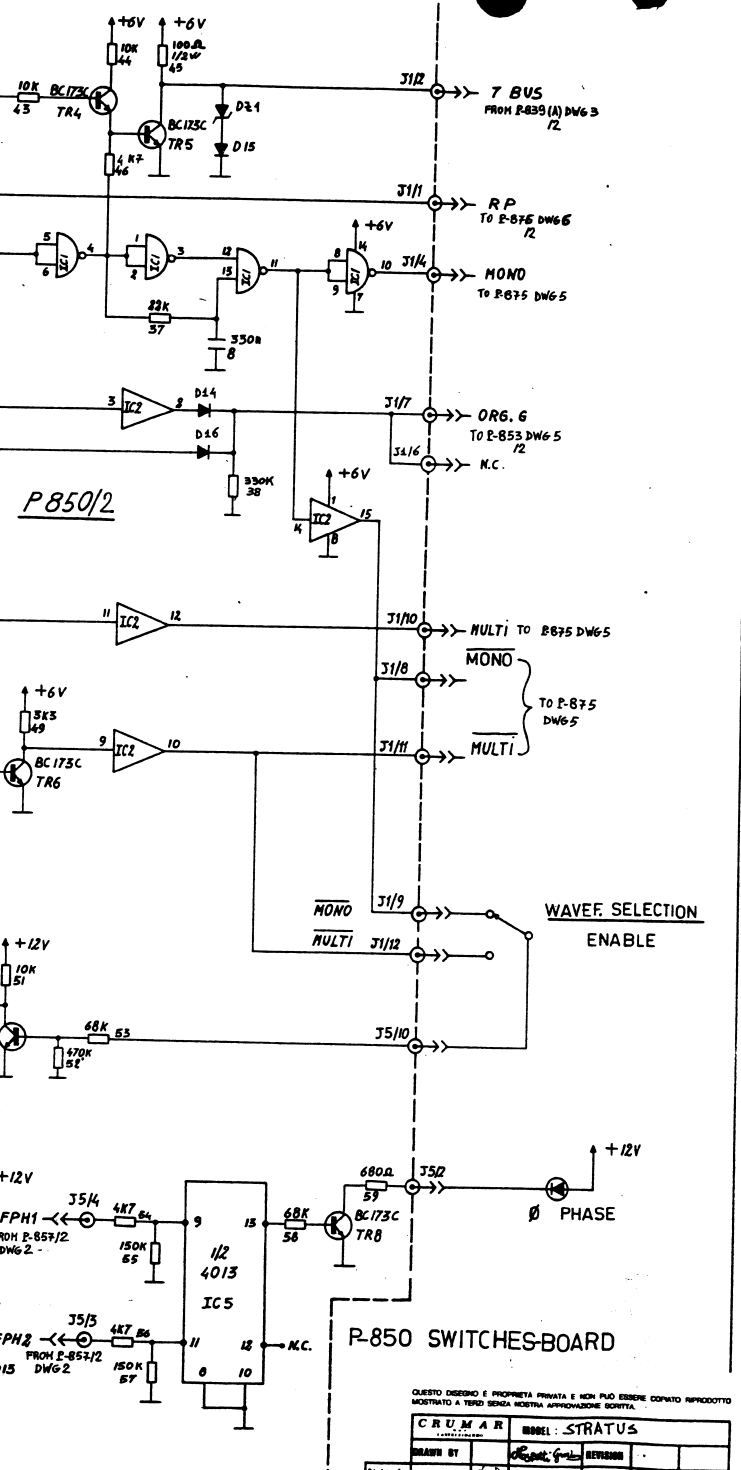
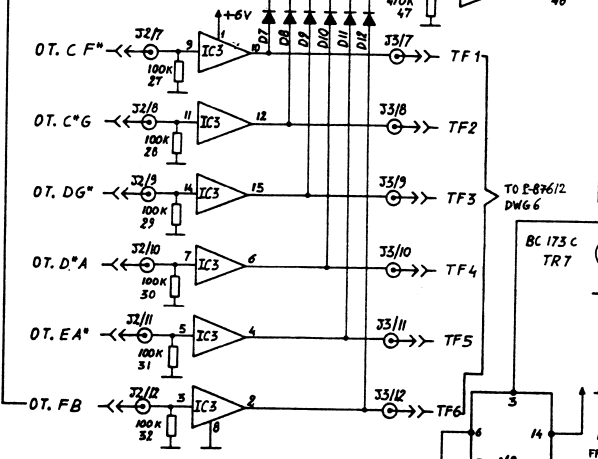
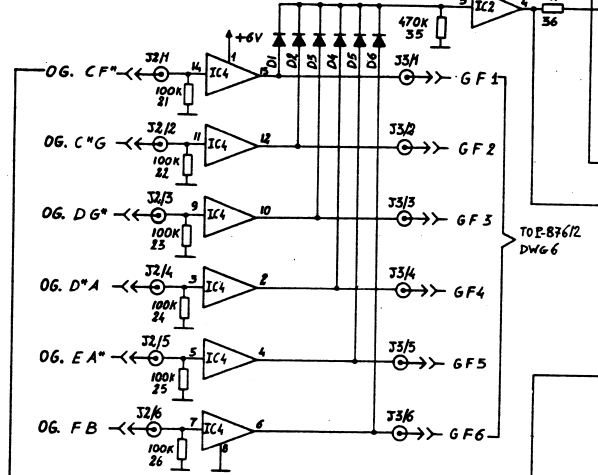
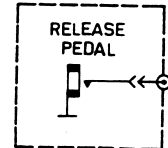
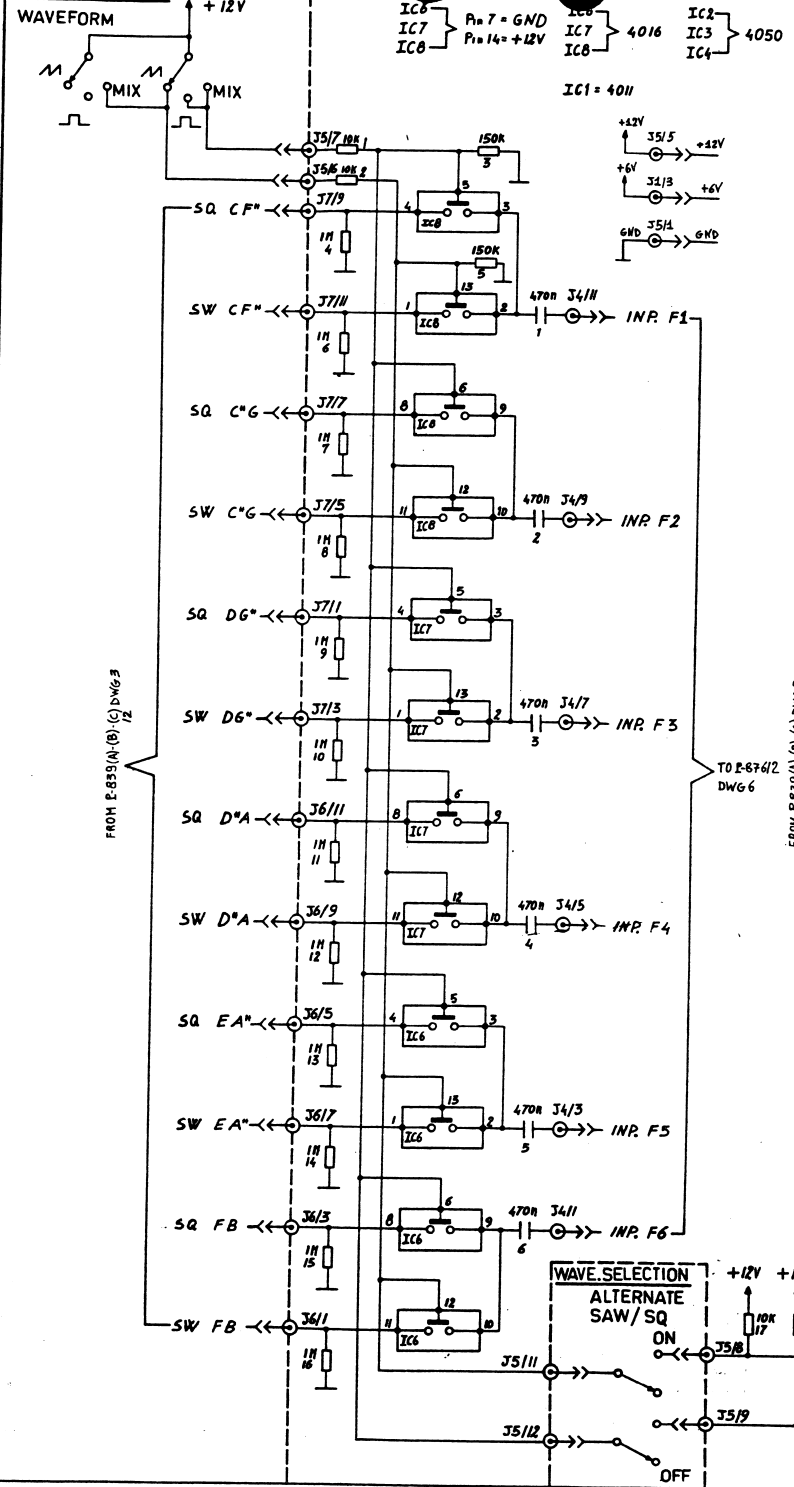


QUESTO DISEGNO È PROPRIETÀ PRIVATA E NON PUÒ ESSERE COPiato RIPRODOTTO MOSTRATO A TERZI SENZA NOSTRA APPROVAZIONE SCRITTA.

CRUMAR		MODEL STRATUS	
DRAWN BY	<i>[Signature]</i>	REVISION	
DESIGNED BY	<i>[Signature]</i>	DATE	5/3/84

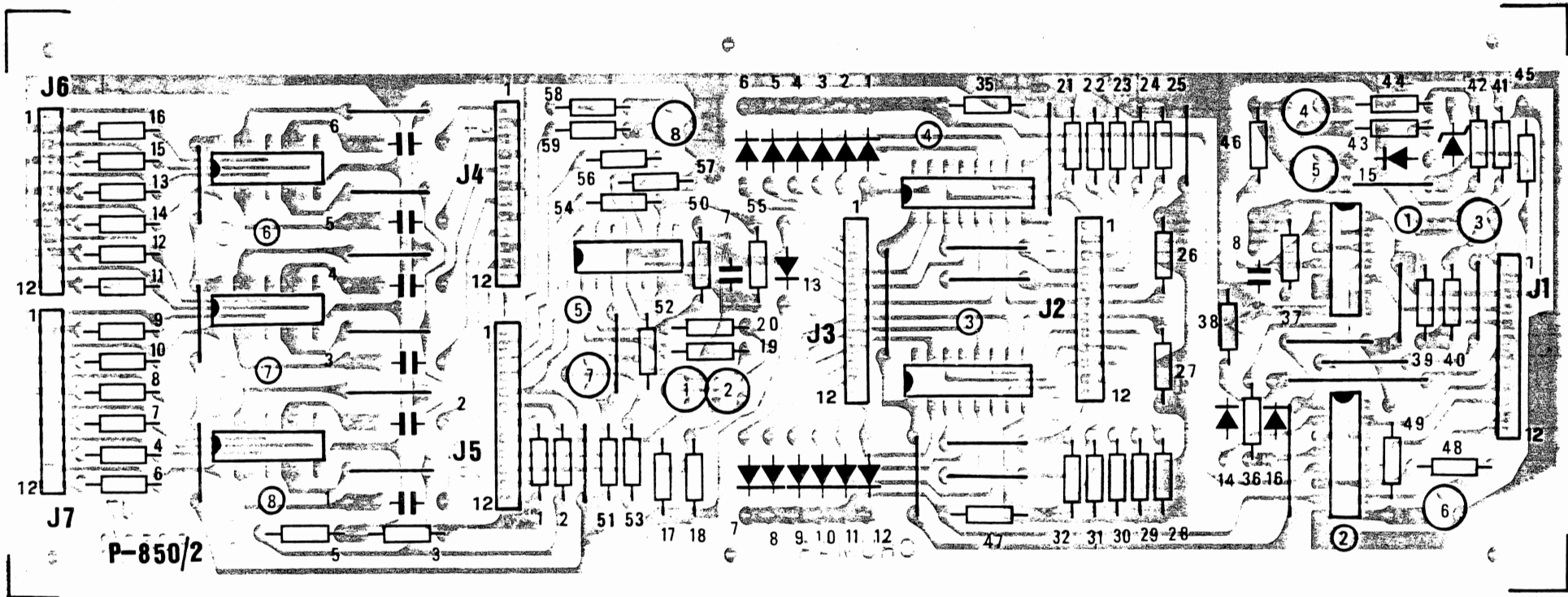
3A

WAVEF. SELECTION

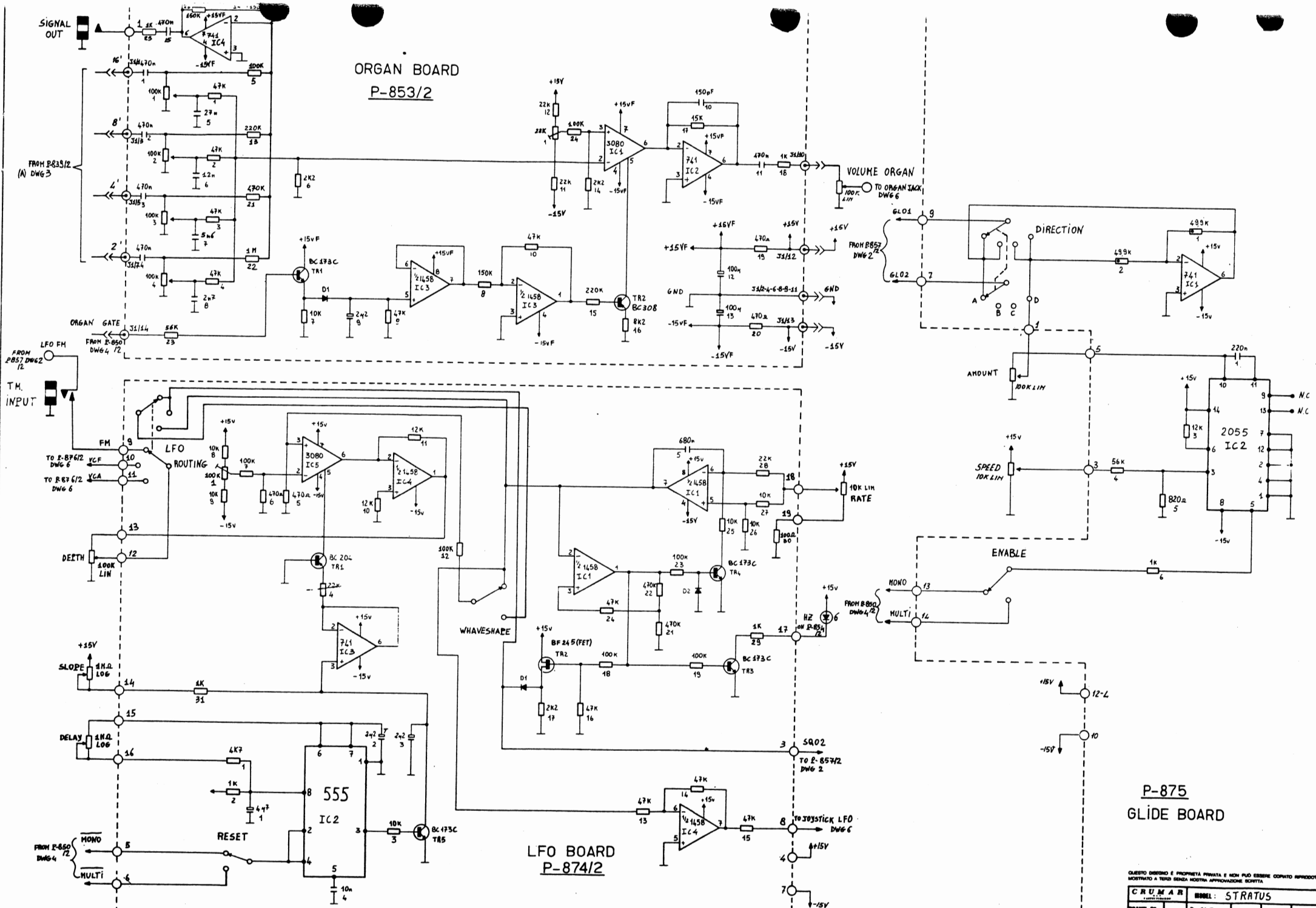


QUESTO DISEGNO È PROPRIETÀ PRIVATA E NON PUÒ ESSERE COPIATO RIPRODOTTO
MOSTRATO A TERZI SENZA NOSTRA APPROVAZIONE SCRITTA.

DRAWN BY		MODEL: STRATUS	
DWG-4	REVISIONED BY	DATE	5/9/84



ORGAN BOARD
P-853/2

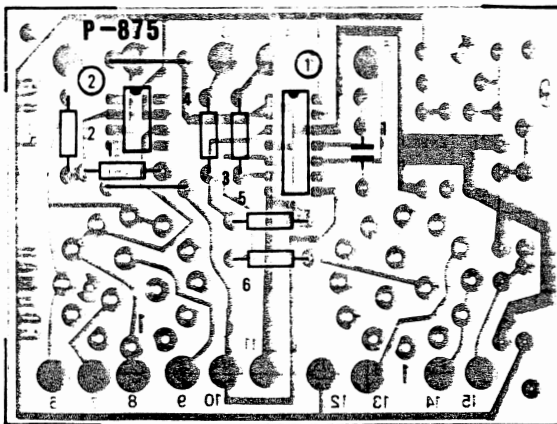
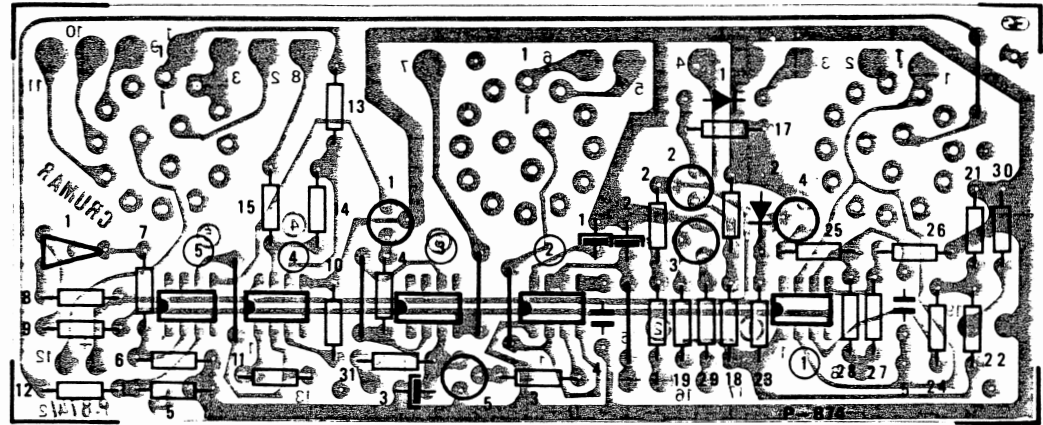
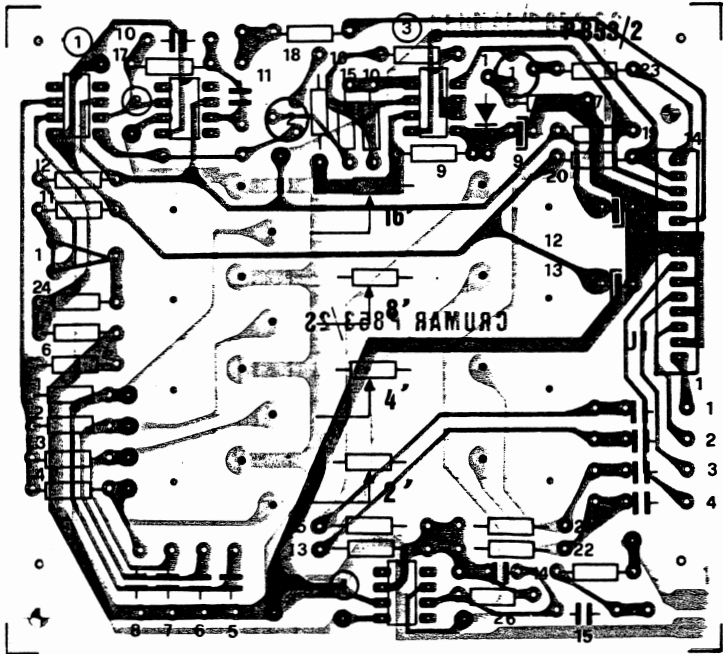


LFO BOARD
P-874/2

P-875
GLIDE BOARD

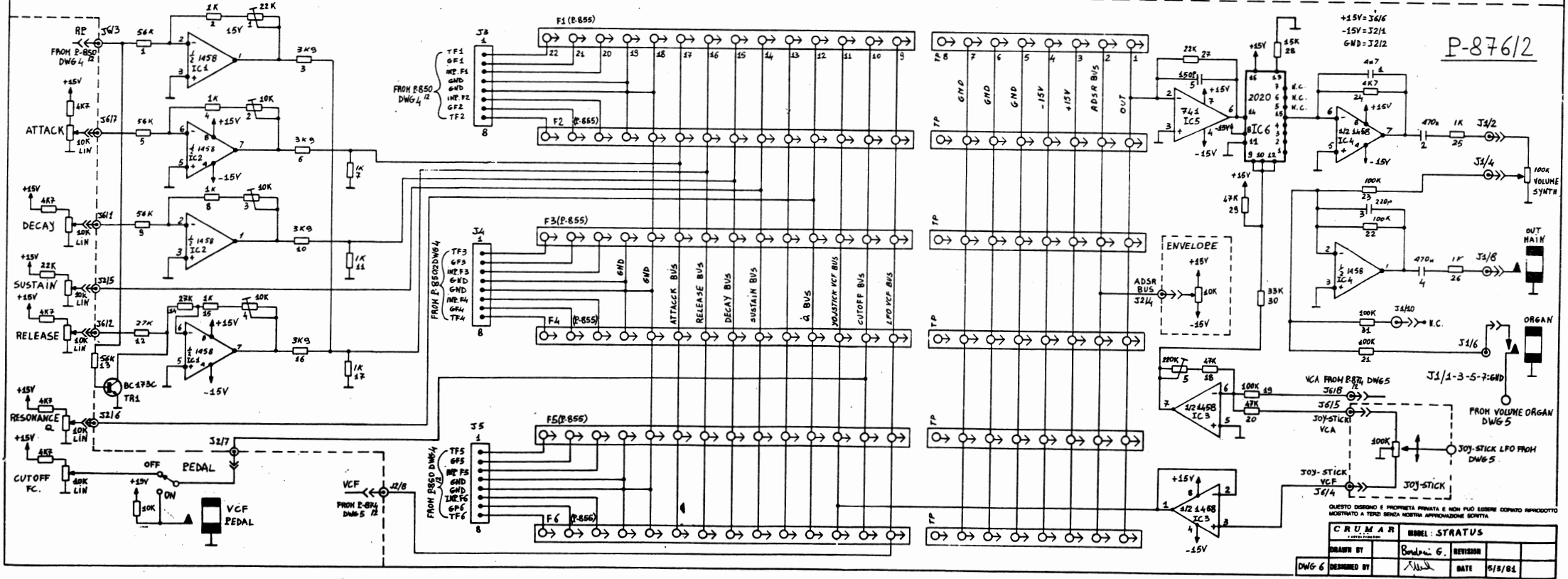
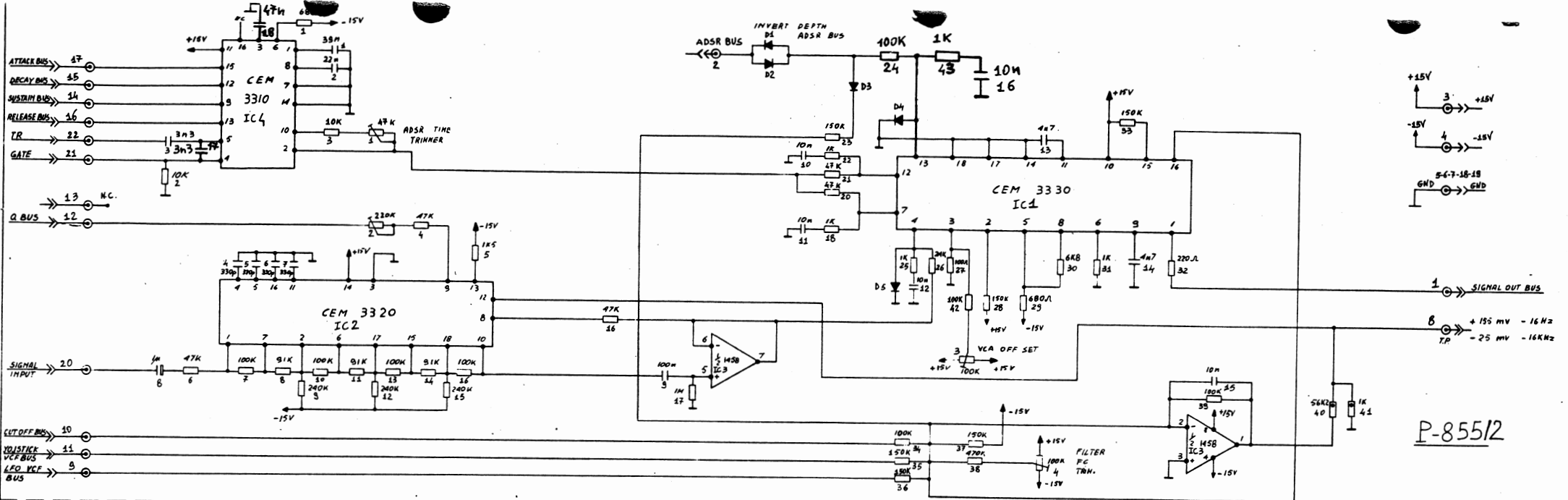
QUESTO CIRCUITO È PROPRIETÀ PRIVATA E NON PUÒ ESSERE COPiato, RIPRODOTTO, MODIFICATO O TRASMESSO IN QUALSIASI MODO SENZA L'APPROVAZIONE SCRITTA.

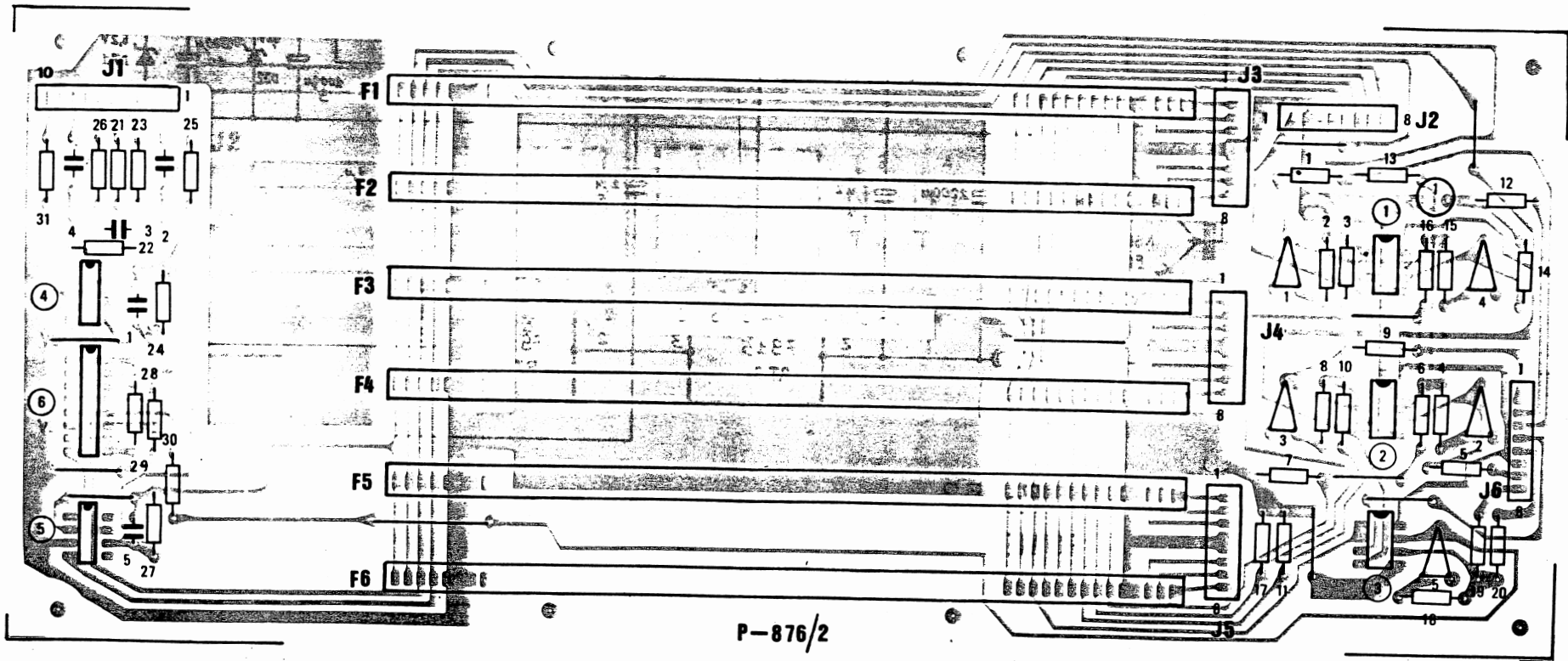
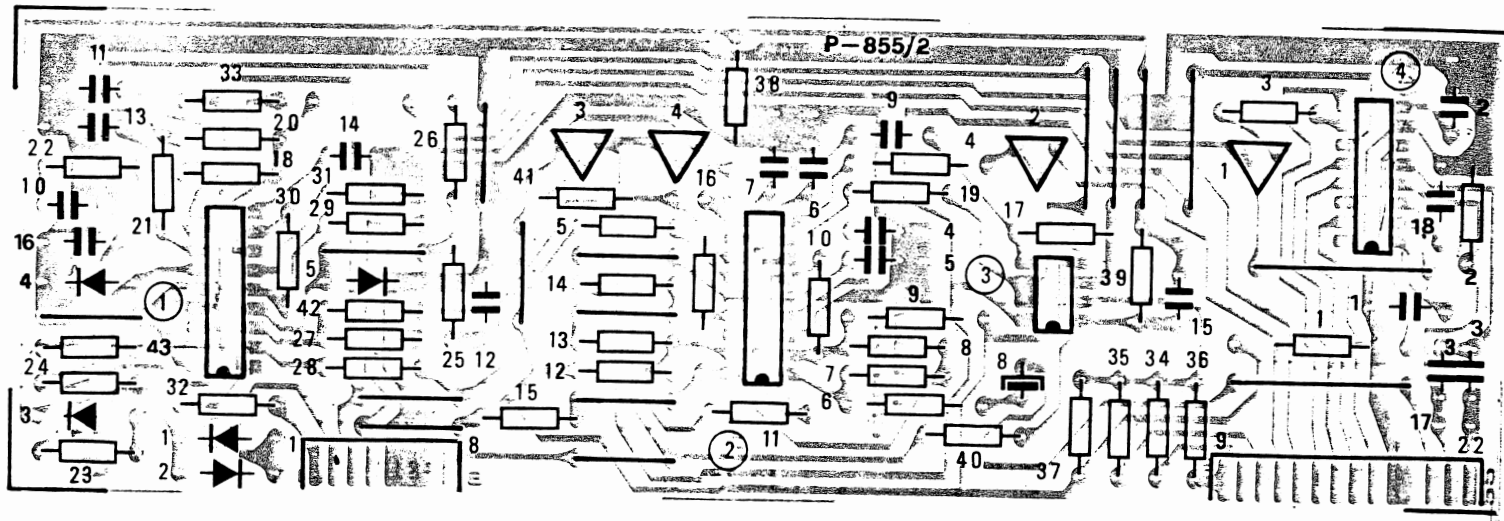
C R U M A R E		MODEL: STRATUS	
DRAWN BY	D. S. G. S. F.	REVISION	
DESIGNED BY	S. G. S.	DATE	5/3/84



QUESTO DISEGNO È PROPRIETÀ PRIVATA E NON PUÒ ESSERE COPiato RIPPRODOTTO
 MOSTRATO A TERZI SENZA NOSTRA APPROVAZIONE SCRITTA.

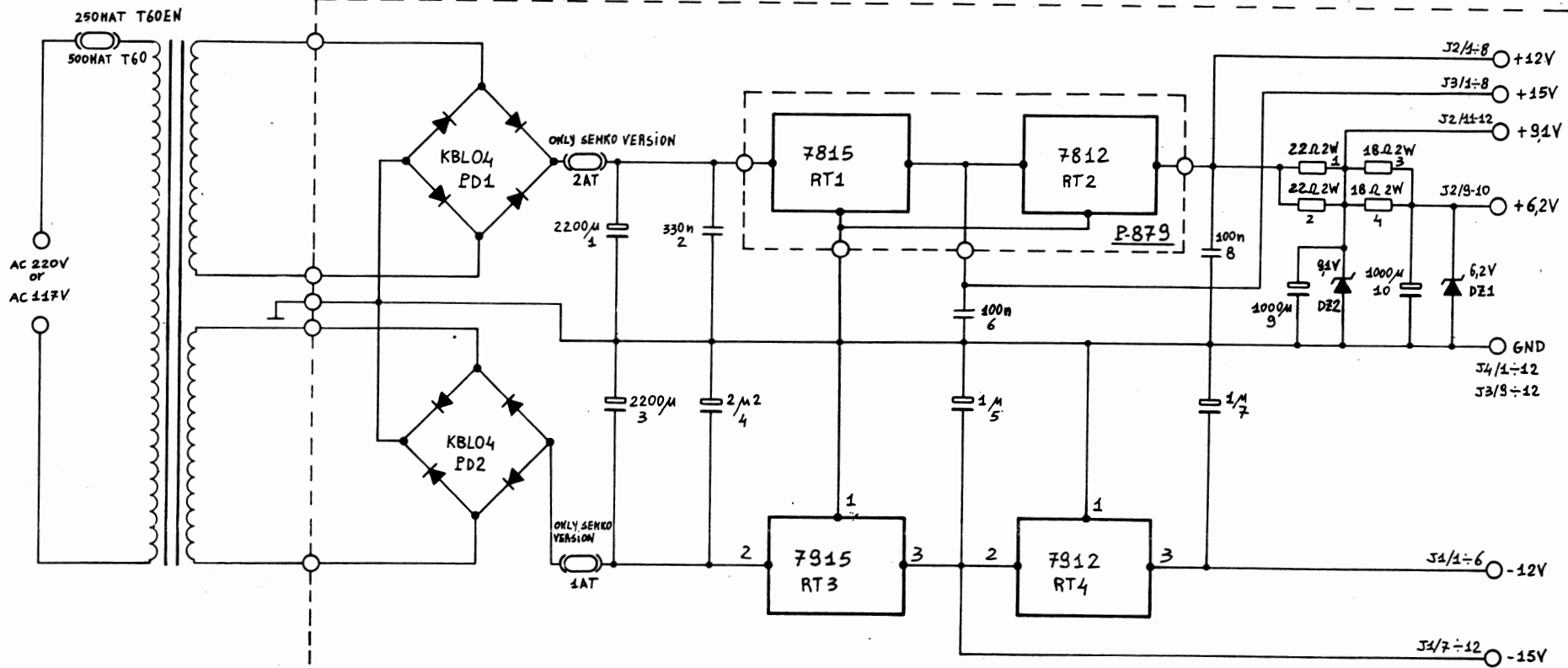
CRUMAR		MODEL: STRATUS	
DESIGNED BY	<i>[Signature]</i>	REVISION	
5A	DESIGNED BY	DATE	5/3/84





QUESTO DISSEGNO È PROPRIETÀ PRIVATA E NON PUÒ ESSERE COPiato RIPRODOTTO
 MODIFICATO A TERZO SENZA NOSTRA APPROVAZIONE SCRITTA.

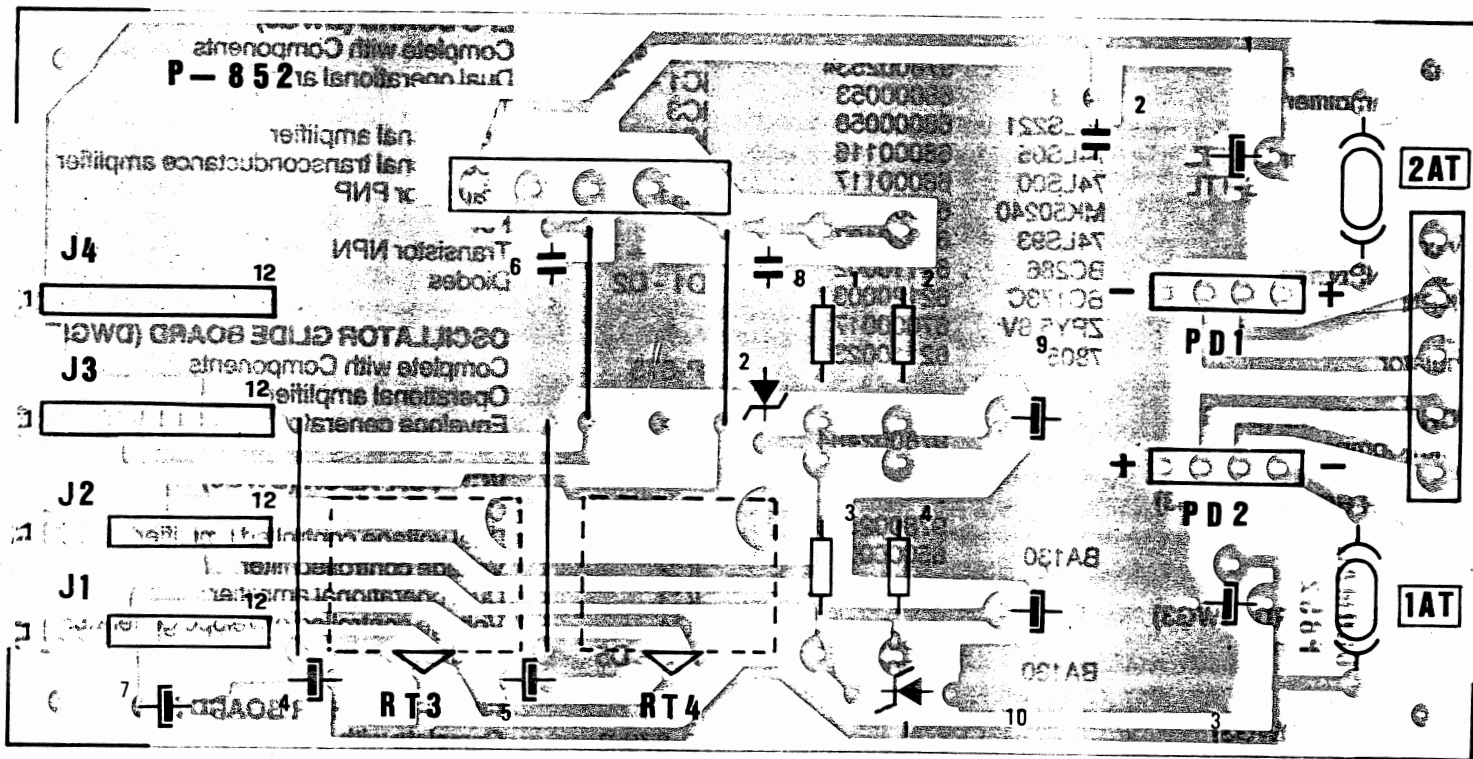
CRUMAR		MODEL: STRATUS	
DESIGNED BY	<i>[Signature]</i>	REVISION	
DATE	5/3/84		



P-852
POWER SUPPLY

QUESTO DISEGNO È PROPRIETÀ PRIVATA E NON PUÒ ESSERE COPiato RIPRODOTTO MOSTRATO A TERZI SENZA NOSTRA APPROVAZIONE SCRITTA.

CRUMAR CANTIERI		MODEL: STRATUS	
DRAWN BY	Bondani G.	REVISION	
DWG 7	DESIGNED BY	DATE	5/3/61



QUESTO DISEGNO È PROPRIETÀ PRIVATA E NON PUÒ ESSERE COPiato RIPRODOTTO
 RICHIESTO A TESI SENZA AUTORIZZAZIONE SCRITTA.

C R U M A R		MODEL: STRATUS	
DRAWN BY	REVISION	DATE	5/3/84
DESIGNED BY			

7A

MODEL STRATUS

ELECTRONIC COMPONENT LIST

Schem. Ref.	Circuit	Type	Part Code
P-854/2	PITCH CONTROL BOARD (DWG2) Complete with Components		978002540
	OSCILLATOR 1 - OSCILLATOR 2 (DWG2)		
P-857/2	Complete with Components		978002534
IC1	Dual operational amplifier	1458	68000053
IC2 - IC3	Master oscillator	74LS221	68000058
IC4	Hex invert open collector LS-TTL	74LS05	68000116
IC5 ÷ IC9	Quad 2-input Nand Gates LS-TTL	74LS00	68000117
IC10-IC11	T.O.S.	MK50240	68000009
IC12	4-Bit binary counter LS-TTL	74LS93	68020127
TR1 - TR2	Power transistor NPN	BC286	62110002
TR3 ÷ TR9	Transistor NPN	BC173C	62120003
DZ1	Diode Zener	ZPY5,6V	67000017
RT1	Voltage regulator	7805	62110023
P-558	KEYSWITCHES BOARD (DWG3) Complete with Components		978002484
P-839/2 (A)	SOUND MOTHER BOARD (DWG3) Complete with Components		978002538
D1 ÷ D55	Diodes	BA130	65000001
P-839/2 (B)-(C)	SOUND MOTHER BOARD (DWG3) Complete with Components		978002537
D1 ÷ D50	Diodes	BA130	65000001
P-840	TDA 1008 MODULES (DWG3) Complete with Components		978002433
IC1	Frequency divider	TDA1008	68000104
P-850/2	SWITCHES BOARD (DWG4) Complete with Components		978002539
IC1	Quad 2-Input Nand Gates CMOS	4011	68000034
I2 ÷ IC4	Hex Non-inverting buffer CMOS	4050	68000085
IC5	Dual D Flip-flop CMOS	4013	68010136
I6 ÷ IC8	Quad bilateral switch	4016	68000072
TR1 ÷ TR8	Transistor NPN	BC173C	62120003
D1 ÷ D14	Diodes	BA130	65000001
DZ1	Diode Zener	ZPY2,1V	67000022
P-853/2	ORGAN BOARD (DWG5) Complete with Components		978002516
IC1	Operational transconductance amplifier	3080	68000066
IC2	Operational amplifier	741	68000059
IC3	Dual operational amplifier	1458	68000054

MODEL STRATUS

ELECTRONIC COMPONENT LIST

Schem. Ref.	Circuit	Type	Part Code
IC4	Operational amplifier	741	68000059
TR1	Transistor NPN	BC173C	62120003
TR2	Transistor PNP	BC308	62210001
D1	Diode	BA130	65000001
	LFO BOARD (DWG5)		
P-874/2	Complete with Components		978002535
IC1 - IC2	Dual operational amplifier	1458	68000053
IC3	Timer	555	68030137
IC4	Operational amplifier	741	68000059
IC5	Operational transconductance amplifier	3080	68000066
TR1	Transistor PNP	BC204	62210001
TR2	Fet	BF245B	62120002
TR3 ÷ TR5	Transistor NPN	BC173C	62120003
D1 - D2	Diodes	BA130	65000001
	OSCILLATOR GLIDE BOARD (DWG5)		
P-875	Complete with Components		978002479
IC1	Operational amplifier	741	68000059
IC2	Envelope generator	SSM2055	68030138
	VCF-VCA-ADSR (DWG6)		
P-855	Complete with Components		978002454
IC1	Dual voltage controlled amplifier	3330	68030144
IC2	Voltage controlled filter	3320	68030143
IC3	Dual operational amplifier	1458	68000054
IC4	Voltage controlled envelope generator	3310	68030142
D1 ÷ D5	Diodes	BA130	65000001
	FILTER MOTHER BOARD (DWG6)		
P-876/2	Complete with Components		978002541
IC1 ÷ IC4	Dual operational amplifier	1458	68000053
IC5	Operational amplifier	741	68000059
IC6	Voltage controlled amplifier	SSM2020	68030139
TR1	Transistor NPN	BC173C	62120003
	POWER SUPPLY (DWG7)		
P-852	Complete with Components		978002451
RT1	Voltage Regulator	7815	62110020
RT2	Voltage Regulator	7812	62110027
RT3	Voltage Regulator	7915	62110022
RT4	Voltage Regulator	7912	62110037
PD1	Rectifier Bridge	KBL04	66000006
PD2	Rectifier Bridge	KBL04	66000006
DZ1	Diode Zener	ZPY6,2V	67000023
DZ2	Diode Zener	ZPY9,1V	67000013
T60	Transformer CSA Version		18010094
T60EN	Transformer SEMKO Version		18010093