

**SCHEMATIC DIAGRAMS  
MOD.**

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**H-200D**

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**ELECTRONIC ORGAN**

 **GEM**<sup>®</sup> A PRODUCT OF

**general  
electro**  **music**

27.058 JUL85

MONDAINO · FO · ITALY

MIDICODER  
MUSICODER

MASTER CK

RHYTHM CK

LED BAR

CPU

P2 SYNC P3 P4 P1

MUSICOD  
INTERF

KBD'S STATUS

SWELL

PEDAL

LM KBD

UM KBD

SCANNER

LM GEN

UM GEN

BASS

ACC & ARP

RHYTHM

SOLO

PRESET

MONOTRON

MIXER

PHASER  
CONTROL

PHASER

REVERB

PWR SUPPLY

L PWR AMP

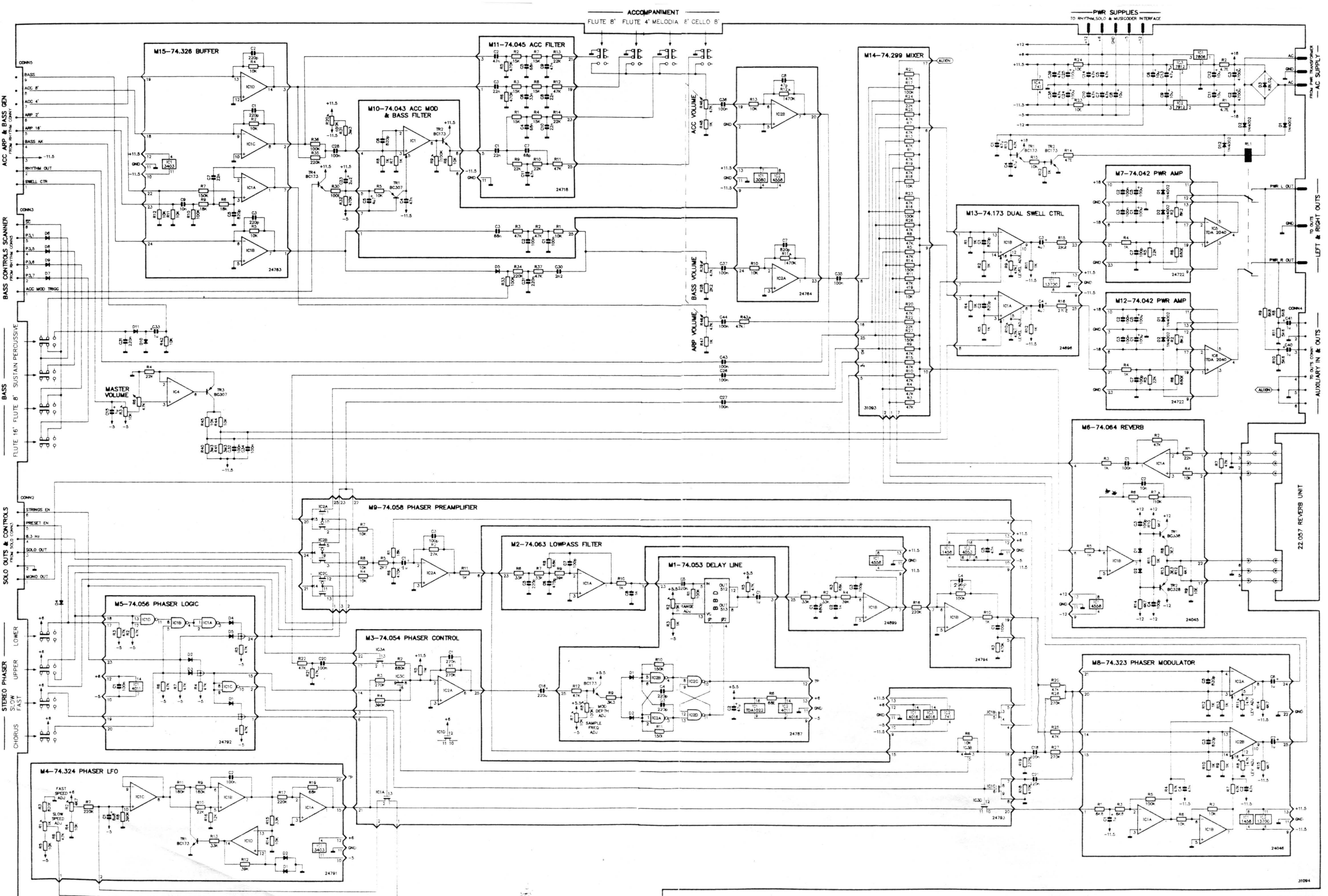
R PWR AMP

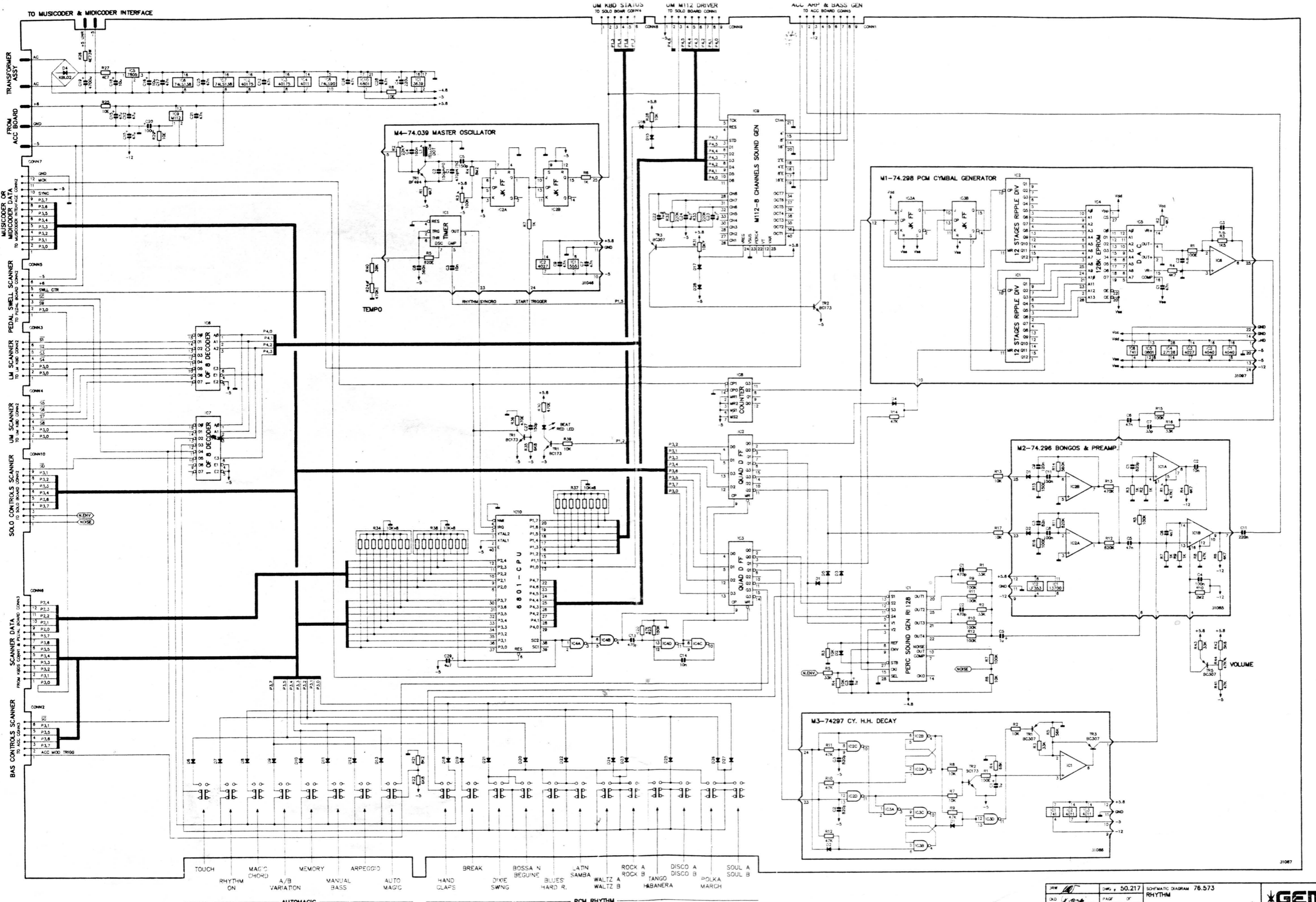
HEAD  
PHONES

AUX IN

L OUT

R OUT

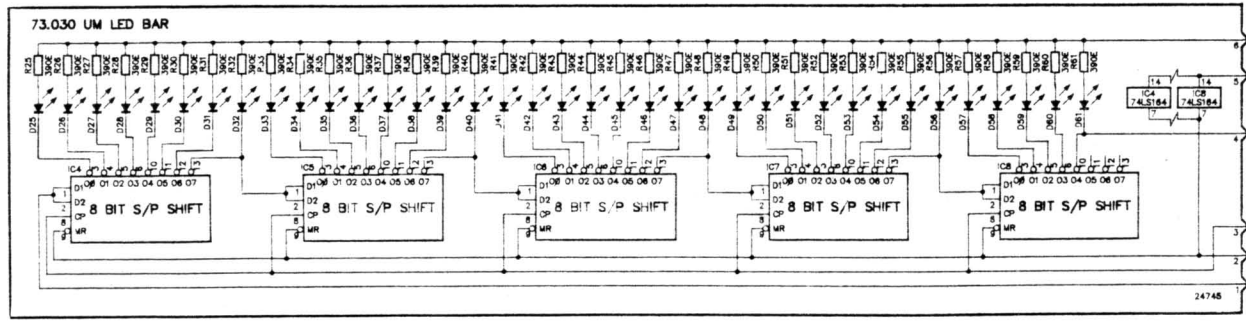
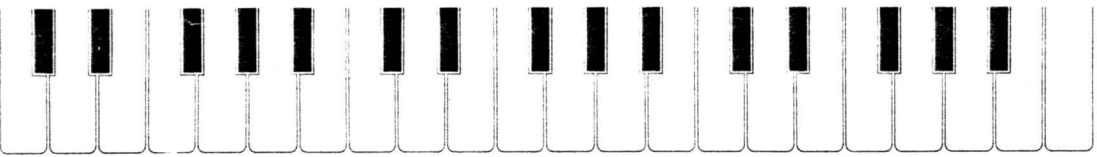
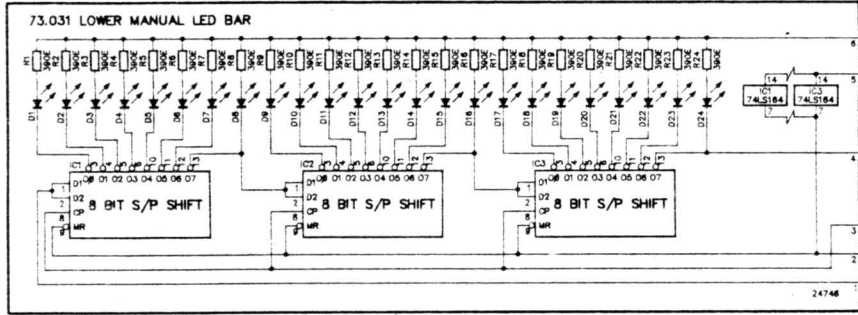
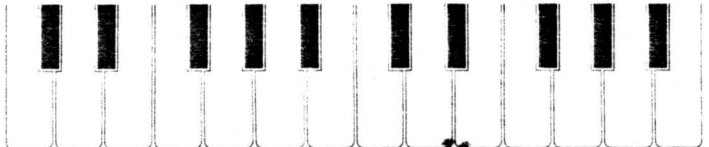
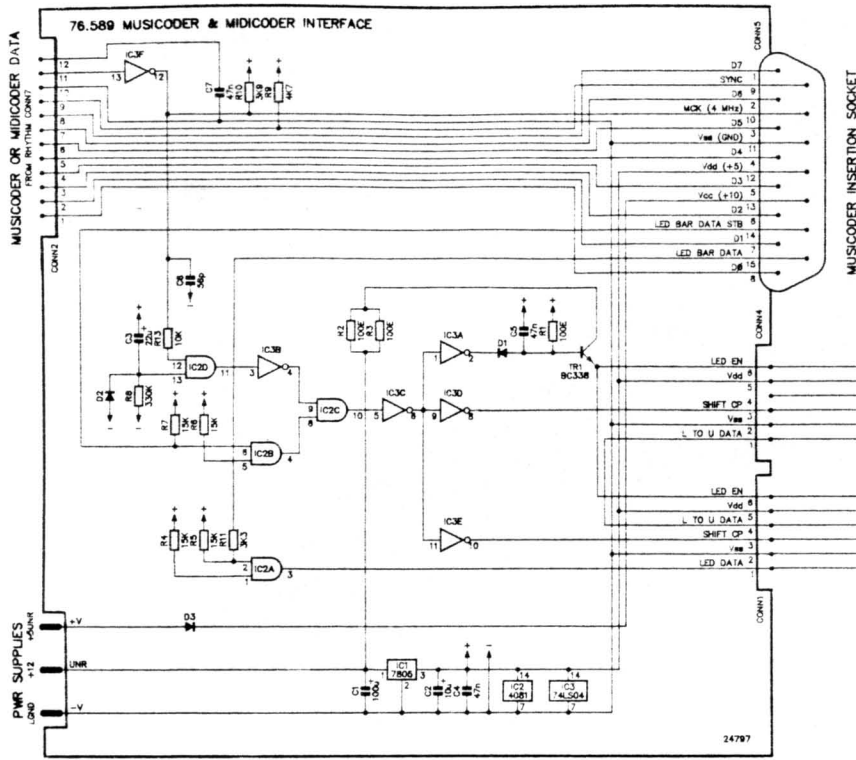




TOUCH RHYTHM ON MAGIC CHORD A/B VARIATION MEMORY MANUAL BASS ARPEGGIO AUTO MAGIC  
 BREAK HAND CLAPS DIXIE SWING BOSSA N BEGUINE BLUES HARD R. LATIN SAMBA WALTZ A WALTZ B TANGO HABANERA DISCO A DISCO B POLKA MARCH SOUL A SOUL B

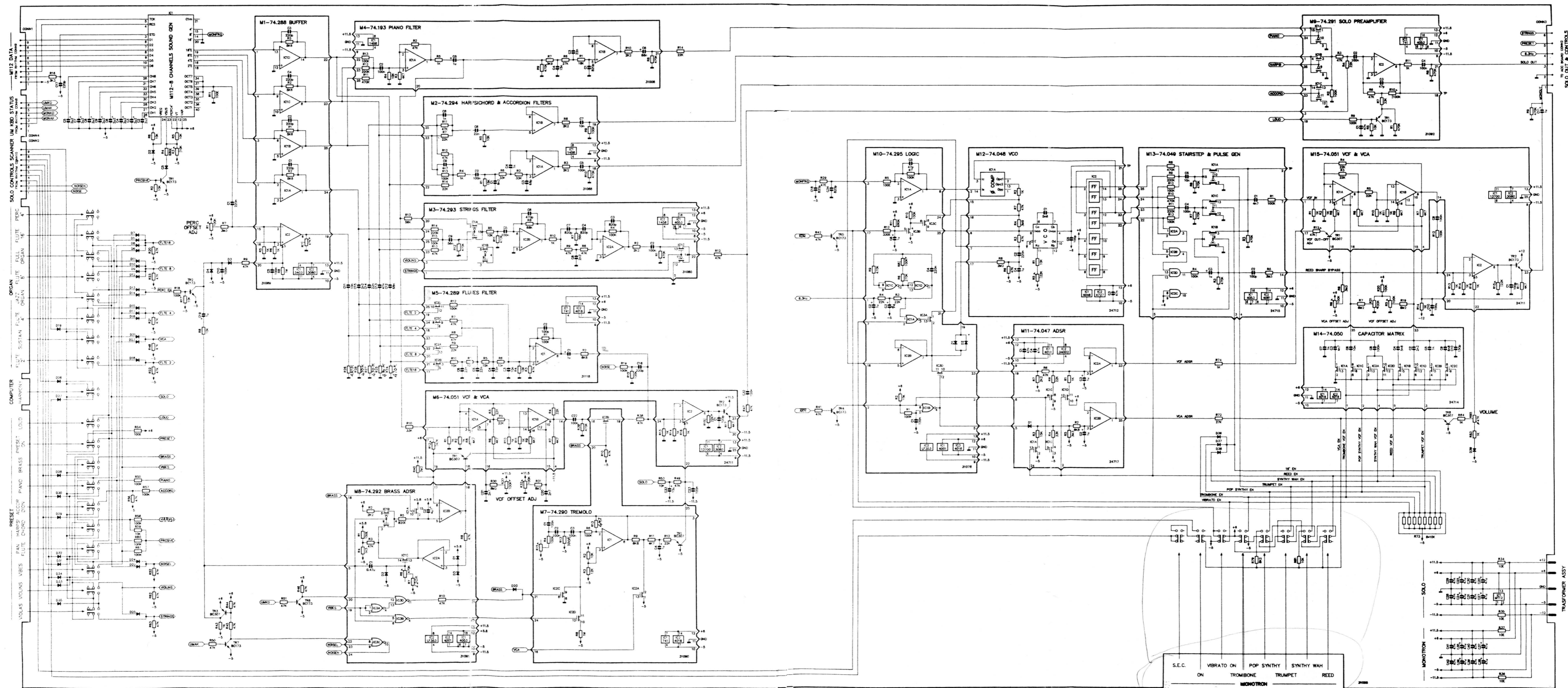
AUTOMATIC PCM RHYTHM





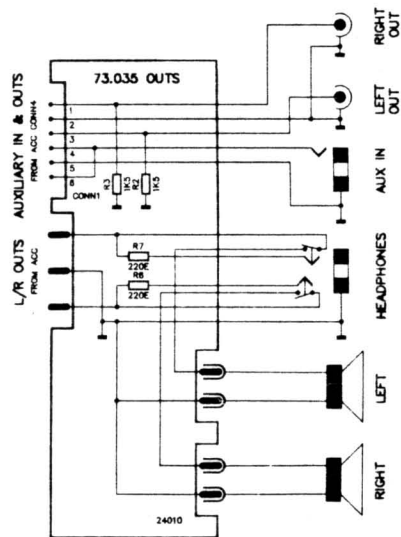
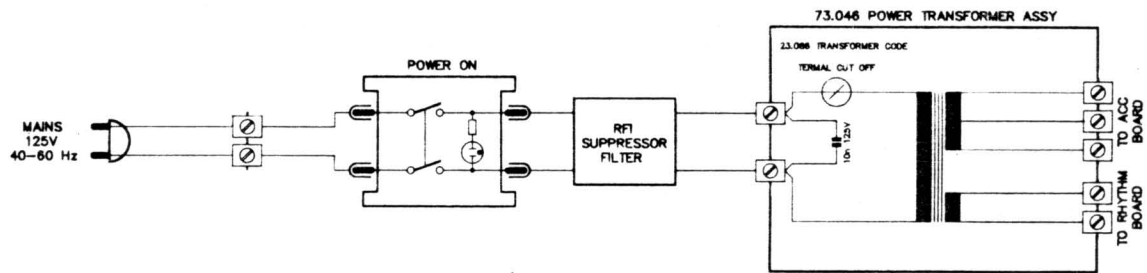
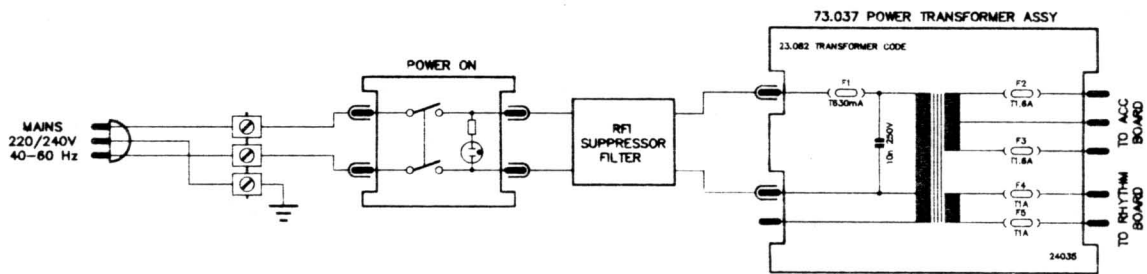
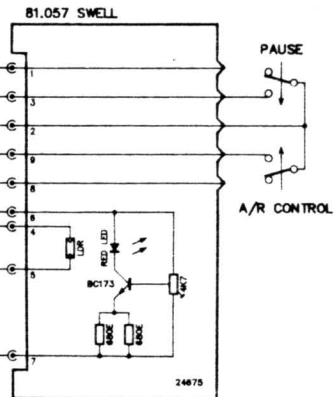
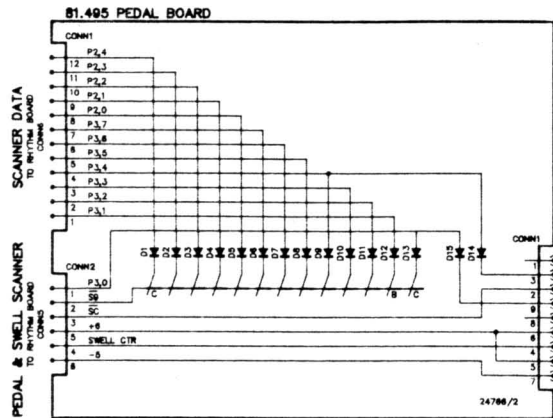
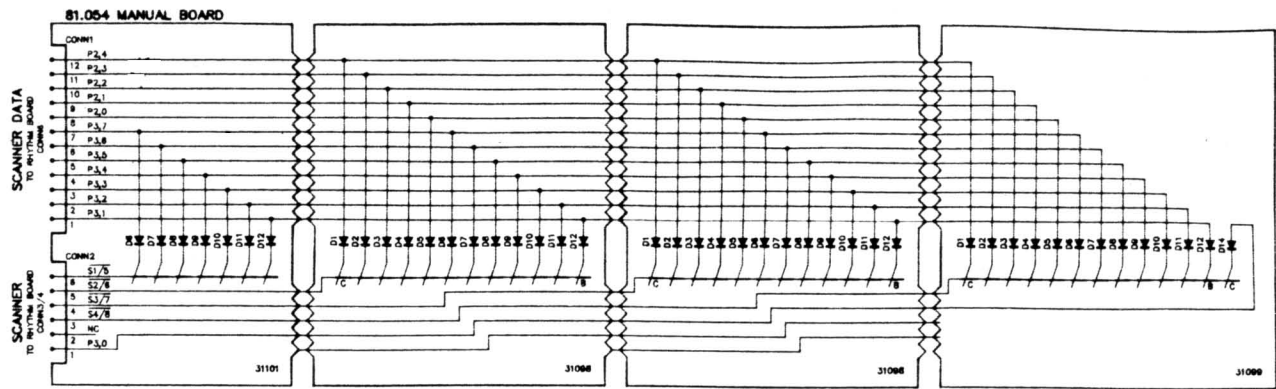
DRW	DWG # 50.215	SCHEMATIC DIAGRAM
CKD	PAGE 0F	MUSICODER & MIDICOER
APP	REV. 04/07/85	INTERFACE
		UPPER & LOWER LED BARS





NOT ON K200 D

ADJUSTMENT TYPE	TEST POINT	TAB ON	KEYS PRESSED	OPERATION POINT	READING VALUES	NOTES
1	ORGAN PITCH	SPEAKER	FLUTE 16"	ONE	OSCILLATOR COIL	USE THE STROBOTUNER
2	MASTER CLOCK THRESHOLD	PIN 1 IC2 OF M4 (RHYTHM BRD.)			R3 OF M6 (RHYTHM BOARD)	DUTY CICLE 50%
3	SOLO M112 V. SUST.	R17 SIDE PIN 25 OF M6 (SOLO BRD.)	FLUTE 16"	CENTR. C (U.M.)	R3 ON SOLO BOARD	CONSTANT
4	FLUTE LEVEL	• •	FLUTE 16"	•	R15 OF M6 (SOLO BOARD)	350 MVPP
5	PERC. 4" LEVEL	• •	PERC. 4"	•	R7 OF M1 (SOLO BOARD)	350 MVPP
6	PERC. 4" OFFSET		PERC. 4"	LAST C (U.M.)	R1 SOLO BOARD	ADJUST OFFSET UNTIL TO CANCEL ACOUSTIC CLICK
7	PRESET FLUTES LEV.	R11 SIDE IC1 OF M9 (SOLO BRD.)	FLUTE 16"	CENTR. C (U.M.)	R10 OF M9 (SOLO BOARD)	350 MVPP
8	PRESET LEVEL	• •	PRESET ON PIANO	•	R2 OF M9 (SOLO BOARD)	400 MVPP
9	RIGHT AMP. LEVEL	RIGHT SPEAKER	FLUTE 16"	•	R10 OF M13 (ACCOMP. BOARD)	3 VPP
10	LEFT AMP. LEVEL	LEFT SPEAKER	FLUTE 16"	•	R9 OF M13 (ACCOMP. BOARD)	3 VPP
11	RIGHT CH. OUT LEVEL CONTROL	"RIGHT OUT" PLUG	FLUTE 16"	•		400 MVPP
12	LEFT CH. OUT LEVEL CONTROL	"LEFT OUT" PLUG	FLUTE 16"	•		400 MVPP
13	BRASS ATTACK TIME	C2 SIDE IC3 OF M8	PRESET ON BRASS	•	R6 OF M8 (SOLO BOARD)	100 MS
14	BRASS OFFSET	• •	• •	LAST C (U.M.)	R32-R33 (SOLO BOARD)	REPEATING THE KEY ACTION ADJUST OFFSET UNTIL TO CANCEL ACOUSTIC CLICK
15	VIB. OSCILLATOR	R6 SIDE IC1 OF M10 (SOLO BRD.)	MUDULATION		R8 OF M10 (SOLO BOARD)	155 MS
16	VIBRAPH. •	R9 SIDE IC1 OF M7 (ACC. BRD.)	PRESET ON VIBRAPH.		R7 OF M7 (SOLO BOARD)	200 MS
17	FAST LESLIE	TR1 BASE OF M4 (ACC. BRD.)	FAST		R2 OF M4 (ACCOMP. BOARD)	160 MS
18	SLOW LESLIE	• •	SLOW		R1 OF M4 (ACCOMP. BOARD)	1.6 S
19	DELAY LINE	R11 OF M1 (ACC. BRD.)	CHORUS		R7 OF M1 (ACCOMP. BOARD)	16 US
20	• •	• •	•		R8 OF M1 (ACCOMP. BOARD)	10US-22.5US
21	SLOW LESLIE CONTR.	• •	SLOW			14US-18 US
22	FAST LESLIE CONTR.	• •	FAST			15.5US-17US
23	LESLIE V. C. A. (RIGHT CH.)	RIGHT SPEAKER	FLUTE 16"	1ST C (U.M.)	R11 OF M8 (ACCOMP. BOARD)	3 VPP
24	LESLIE V. C. A. (LEFT CH.)	LEFT SPEAKER	• •	• •	R8 OF M8 (ACCOMP. BOARD)	3 VPP
25	M112 ACC. V. SUSTAIN	TR2 COLLECTOR (RHYTHM BRD.)	BASS FLUTE 8"	1ST C PEDALKBARD	R31 RHYTHM BOARD	CONSTANT
26	BASS LEVEL	RIGHT SPEAKER	• •	• •	R11 OF M10 (ACCOMP. BOARD)	5.5 VPP
27	FLUTES ACC. LEVEL	LEFT SPEAKER	ACC. FLUTE 8"	CENTR. C (U.M.)	R12 OF M10 (ACCOMP. BOARD)	3 VPP
28	"MELODIA" "CELLO"	• •	ACC. MELODIA 8"	• •	R9 OF M10 (ACCOMP. BOARD)	2.5 VPP
29	RHYTHM LEVEL	R4 SIDE IC1 OF M2 (RHYTHM BRD.)	DRUM TOUCH SWING	• •	R11 OF M2 (ACCOMP. BOARD)	2 VPP
30	ARPEGGIO •	LEFT SPEAKER	ARPEGGIO TOUCH SWING	• •	R43 ACCOMP. BOARD	2.8 VPP
31	MONOTRON •	TR2 EMITTER OF M15 (SOLO BRD.)	MONOTRON ON TRUMPET	CENTR. C (U.M.)	R15 OF M15 (SOLO BOARD)	1.3 VPP
32	• •	LEFT SPEAKER	• •	• •	R15 OF M15 (SOLO BOARD)	4 VPP
33	MONOTRON V. C. O. ADJUST.	PIN 23 OF M10	MONOTRON ON	• •	R5 OF M12 (SOLO BOARD)	-2.5 V
34	MONOTRON V. C. F. ADJUST.	TR2 EMITTER OF M15	MONOTRON ON REED	LAST C (U.M.)	R12 OF M15 (SOLO BOARD)	MAX.
35	MONOTRON V. C. A. OFFSET		MONOTRON ON TRUMPET	CENTR. C (U.M.)	R67 SOLO BOARD	REPEATING THE KEY ACTION ADJUST UNTIL MIN. OFFSET
36	MONOTRON V. C. F. OFFSET		• •	• •	R64-R65 SOLO BOARD	ADJUST UNTIL MIN. OFFSET. THE TWO TRIMMER ARE INTERACTIVE. THIS ADJUSTMENT MUST BE MADE AFTER V. C. A. OFFSET ADJUSTMENT
37	REVERB	R13 SIDE BOTTOM OF M6	FLUTE 16" (ORGAN)	• •	R7 OF M6 (ACCOMP. BOARD)	1 VPP





DESCRIPTION	VERS.	CODE	DESCRIPTION	VERS.	CODE
MAINS SWITCH	125V	11.237	DEEP GREEN PUSH BUTTON CAPS		15.813
"	220V	11.239	LAND BROWN " " "		15.814
MAINS CORD ASSY	125V	73.091	OLD IVORY " " "		15.815
"	220V	73.077	YELLOW " " "		15.816
POWER CORD	125V	13.289	SAGE GREEN " " "		15.817
"	220V	13.294	OXIDE RED DOUBLE " " "		15.804
CORD LOCK	125V	15.028	LIGHT BROWN ROTARY POT. KNOB		15.570
"	220V	15.021	DEEP GREEN " " "		15.571
POWER TRANSFORMER ASSY	125V	73.046	LAND BROWN " " "		15.572
"	220V	73.037	OXIDE RED " " "		15.574
TRANSFORMER	125V	23.086	OLD IVORY " " "		15.575
"	220V	23.082	SAGE GREEN " " "		15.573
KEYBOARD ASSY		50.001	KNOB LOCK-WASHER		15.538
C KEY		15.771	POTENTIOMETER ADAPTER		15.661
D "		15.772	ADAPTER LOCK SPRING		16.084
E "		15.773	ACTUATOR FOR SWITCH		15.532
F "		15.774	RED LED		08.705
G "		15.775	UPPER MANUAL LED BAR		73.030
A "		15.776			
B "		15.777	SWELL PEDAL ASSY		79.051
LAST C "		15.778			
SHARP "		15.613	PEDAL BOARD ASSY		72.127
RETURN SPRING FOR NATURAL KEY		16.106	PEDAL SPRING CONTACT		16.055
" SHARP KEY		16.107			
RUBBER CONTACT ARRAY C THROUGH E		15.506	IN/OUT ASSY		73.033
" F THROUGH B		15.507	HEADPHONE JACK SOCKET		14.205
" LAST C		15.622	AUX IN " "		14.204
UPPER LEFT CHEEK BLOCK	WALNUT	15.833	OUTPUT RCA SOCKET		11.502
" RIGHT "	MAHOGANY	15.793			
" "	WALNUT	15.835	LOUDSPEAKER		22.071
" "	MAHOGANY	15.795	REVERB UNIT		22.057
LOWER LEFT "	WALNUT	15.832			
" RIGHT "	MAHOGANY	15.792	CABINET	WALNUT	71.081
		15.798	"	MAHOGANY	71.080
MUSICODER HOUSING COVER	MAHOGANY	15.799	SLIDING FOR CABINET	WALNUT	15.555
KEYBOARDS SEPARATOR	WALNUT	15.830	" " "	MAHOGANY	15.829
"	MAHOGANY	15.796	MUSIC STAND	WALNUT	15.648
CONTACT BOARD		81.054	" "	MAHOGANY	15.738
LOWER MANUAL LED BAR		73.031	MUSIC STAND HOLDER	WALNUT	15.552
MUSICODER INTERFACE		76.589	MUSIC RACK STRIP	MAHOGANY	15.737
			CABINET PLASTIC HANDLE		15.443
BASS ACCOMPANIMENT BOARD		76.574	FRAME FULCRUM SUPPORT		15.438
STEREO PHASER SWITCH ASSY		14.472	NAME PLATE "GEM"		18.233
BASS " "		14.472	A/R CONTROL PLATE	WALNUT	18.312
ACCOMPANIMENT " "		14.472	RHYTHM SWITCH PLATE	WALNUT	18.376
AUTOMAGIC PCM RHYTHM BOARD		76.573			
AUTOMAGIC SWITCH ASSY		14.473	6 WIRES - 25 CM FLAT CABLE		84.157
PCM RHYTHM " "		14.506	6 " - 40 CM " "		84.160
ORGAN PRESET MONOTRON BOARD		76.572	6 " - 50 CM " "		84.162
ORGAN SWITCH ASSY		14.473	6 " - 70 CM " "		84.166
HARMONY " "		14.475	6 " - 75 CM " "		84.167
PRESET " "		14.474	6 " - 120 CM " "		84.174
MONOTRON " "		14.478	9 " - 15 CM " "		84.204
FRONT PANEL	WALNUT	15.836	9 " - 45 CM " "		84.211
"	MAHOGANY	15.800	12 " - 75 CM " "		84.267
OXIDE RED PUSH BUTTON CAPS		15.802	6 " - 70 CM SHIELDED FLAT CABLE		84.366
LIGHT BROWN " " "		15.812	REVERB SHIELDED FLATE CABLE		84.500
			12 WIRES INPUT MATRIX FLAT CABLE		84.501

FOR REPLACEMENTS CONCERNING: 1) PRINTED BOARD ASSY(S) REFER TO SCHEMATIC(S) FOR ASSY(S) CODE

ANY REQUEST NOT ABOVE MENTIONED PART MUST ENCOMPASS SPECIFIC DESCRIPTION INCLUDING:

1) MODEL NAME, 2) SECTION, 3) EVENTUAL MODULE CODE, 4) SCHEMATIC DIAG. REFERENCE