

PERFORMING KEYBOARD SERVICE MANUAL

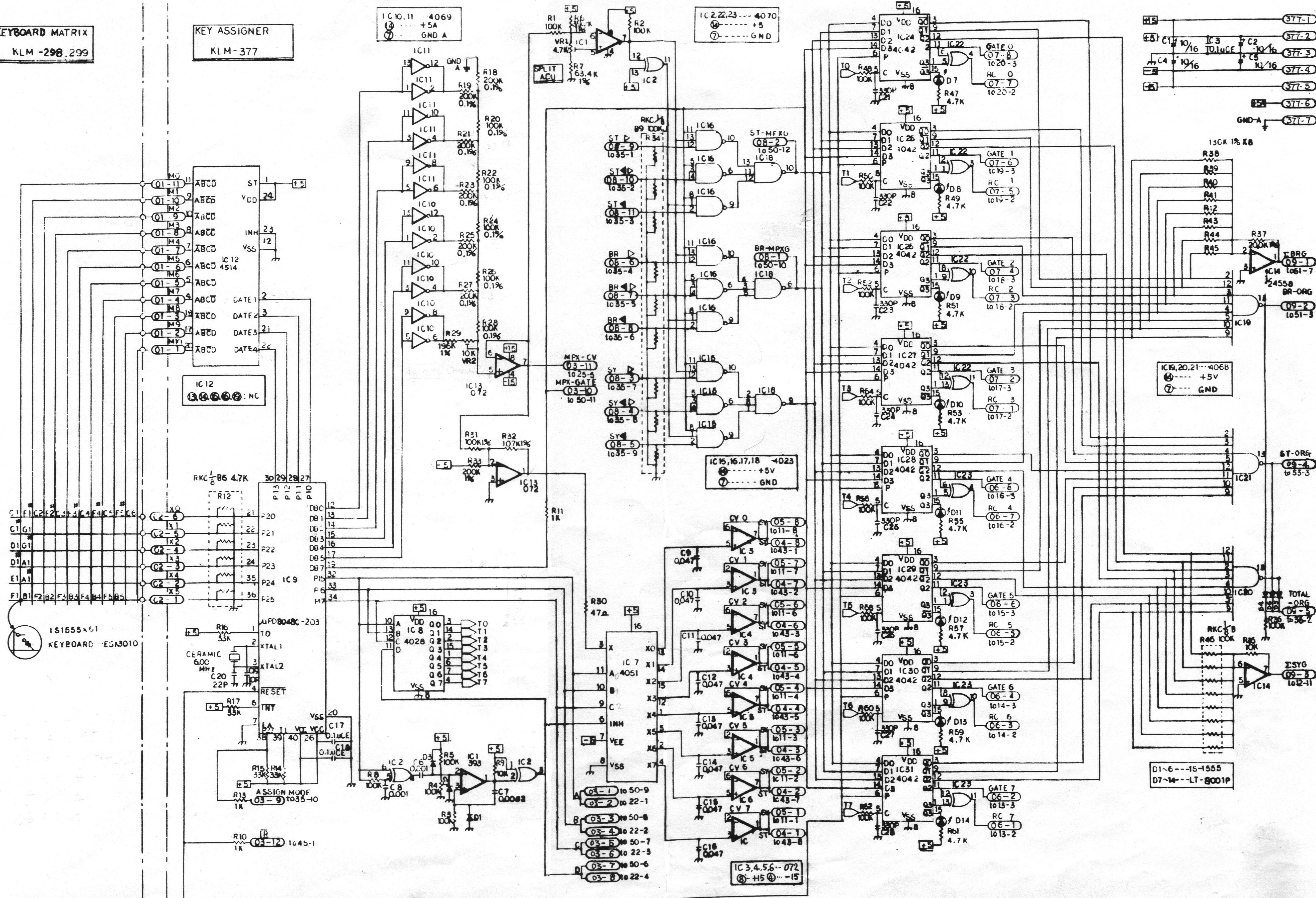
TRIDENT_{mk II}

CONTENTS

1. SPECIFICATIONS	1
2. STRUCTURAL DIAGRAM	2
3. BLOCK DIAGRAM	4
4. CIRCUIT DIAGRAM	5
5. PC BOARD	13
6. SEMI-FIXED RESISTORS POSITION DIAGRAM	22
7. INTER CHANGE LIST OF CONNECTOR TERMINAL NUMBER	23
8. TEST SETTING DIAGRAMS	25
9. CHECK AND ADJUSTMENT PROCEDURE	27
10. PARTS LIST	33

KEYBOARD MATRIX
KLM-298,299

KEY ASSIGNER
KLM-377



IC 10,11 4069
① --- +5A
② --- GND A

IC 2,22,23 4070
① --- +5
② --- GND

IC 3 4068
① --- +5V
② --- GND

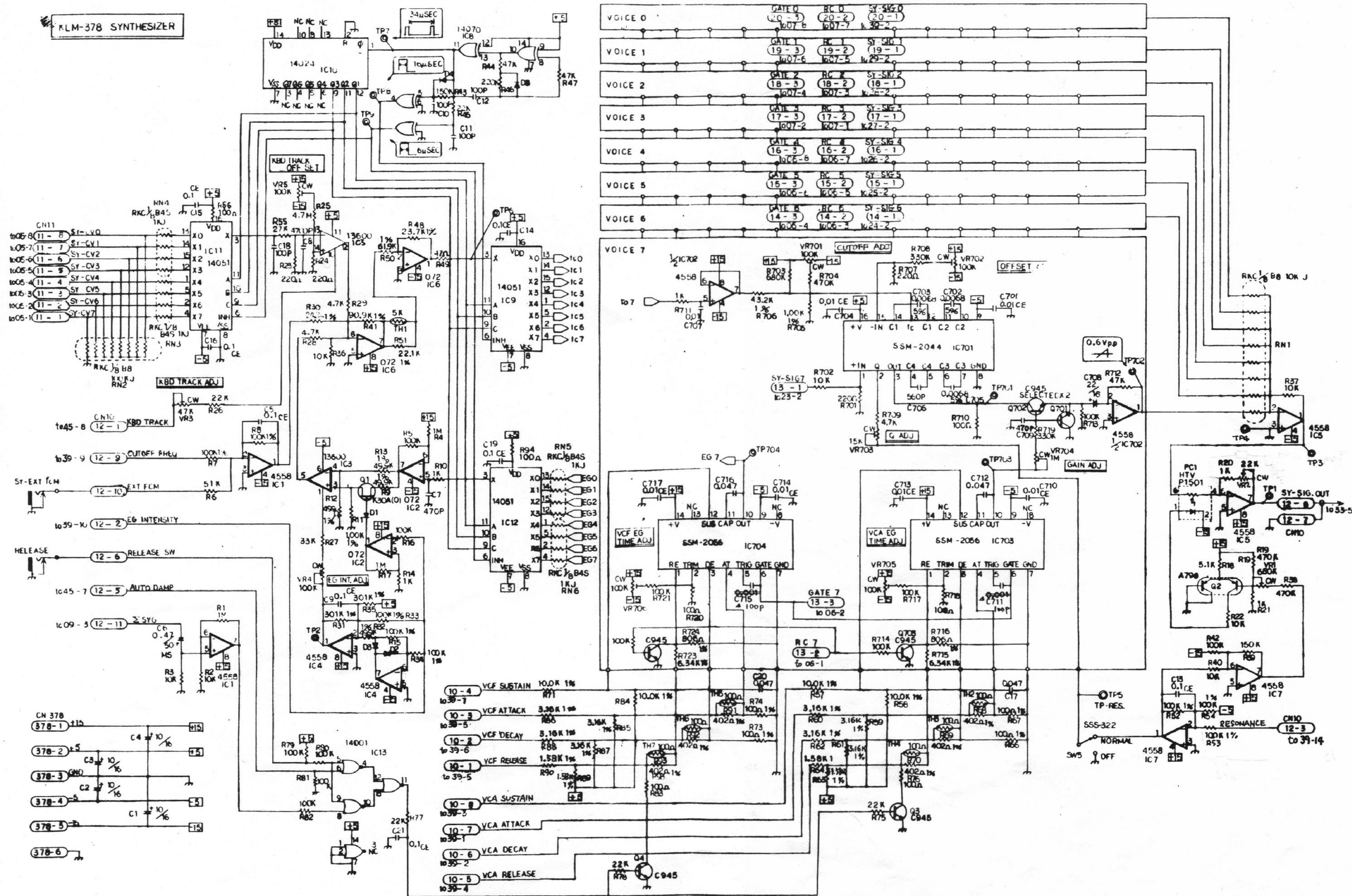
IC 19,20,21 4068
① --- +5V
② --- GND

IC 15,16,17,18 4023
① --- +5V
② --- GND

IC 3,4,5,6 072
① --- H5
② --- 15

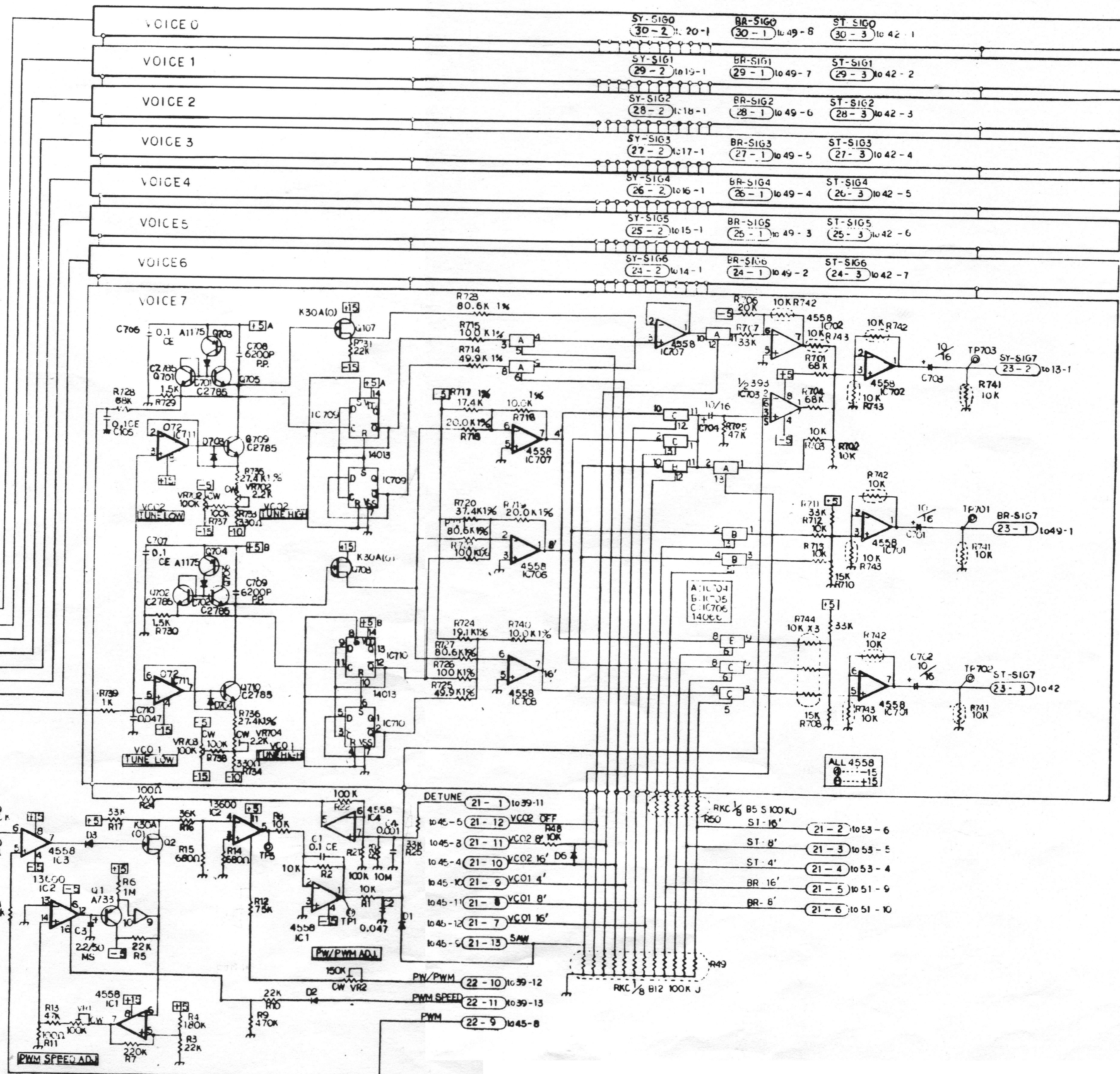
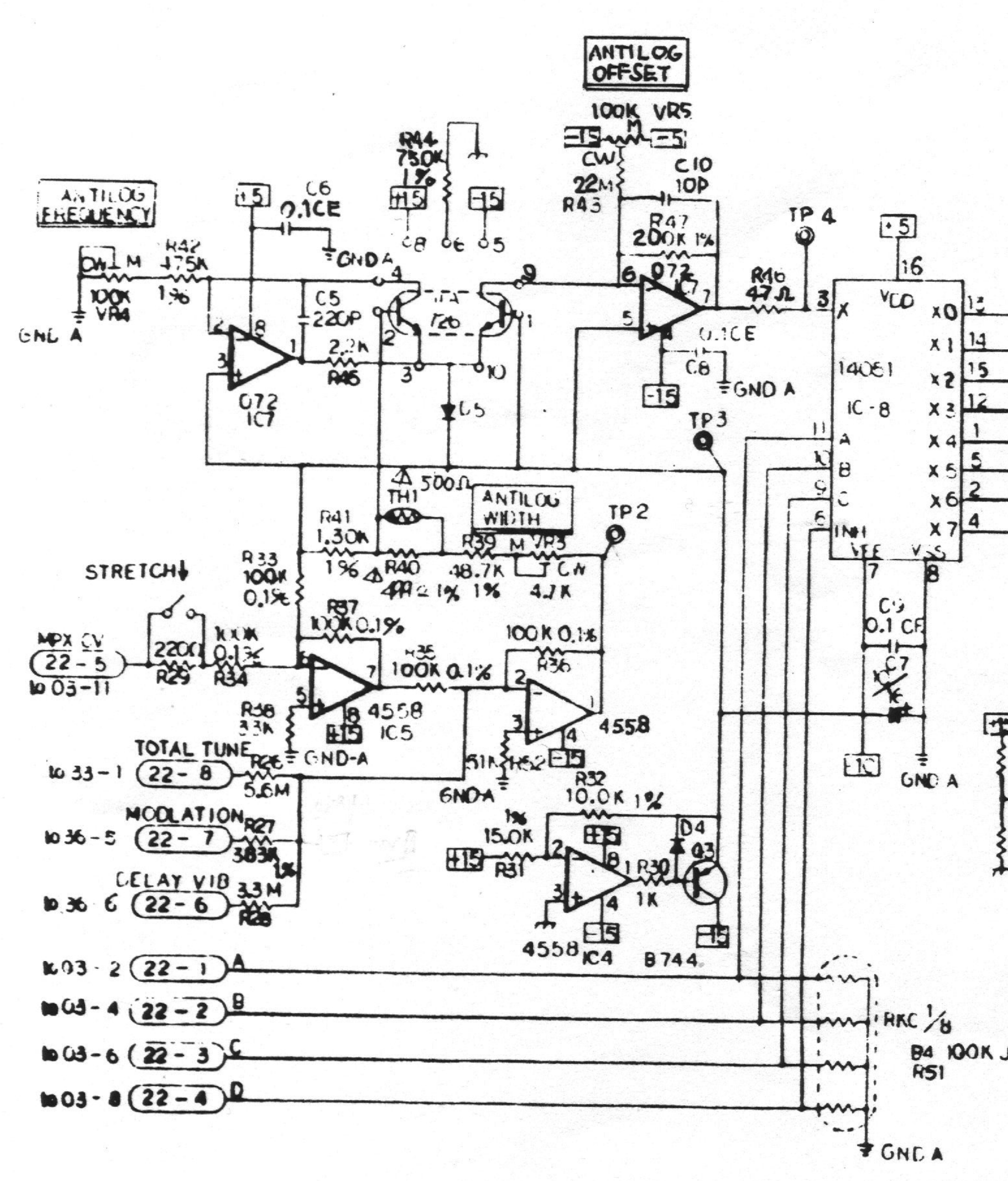
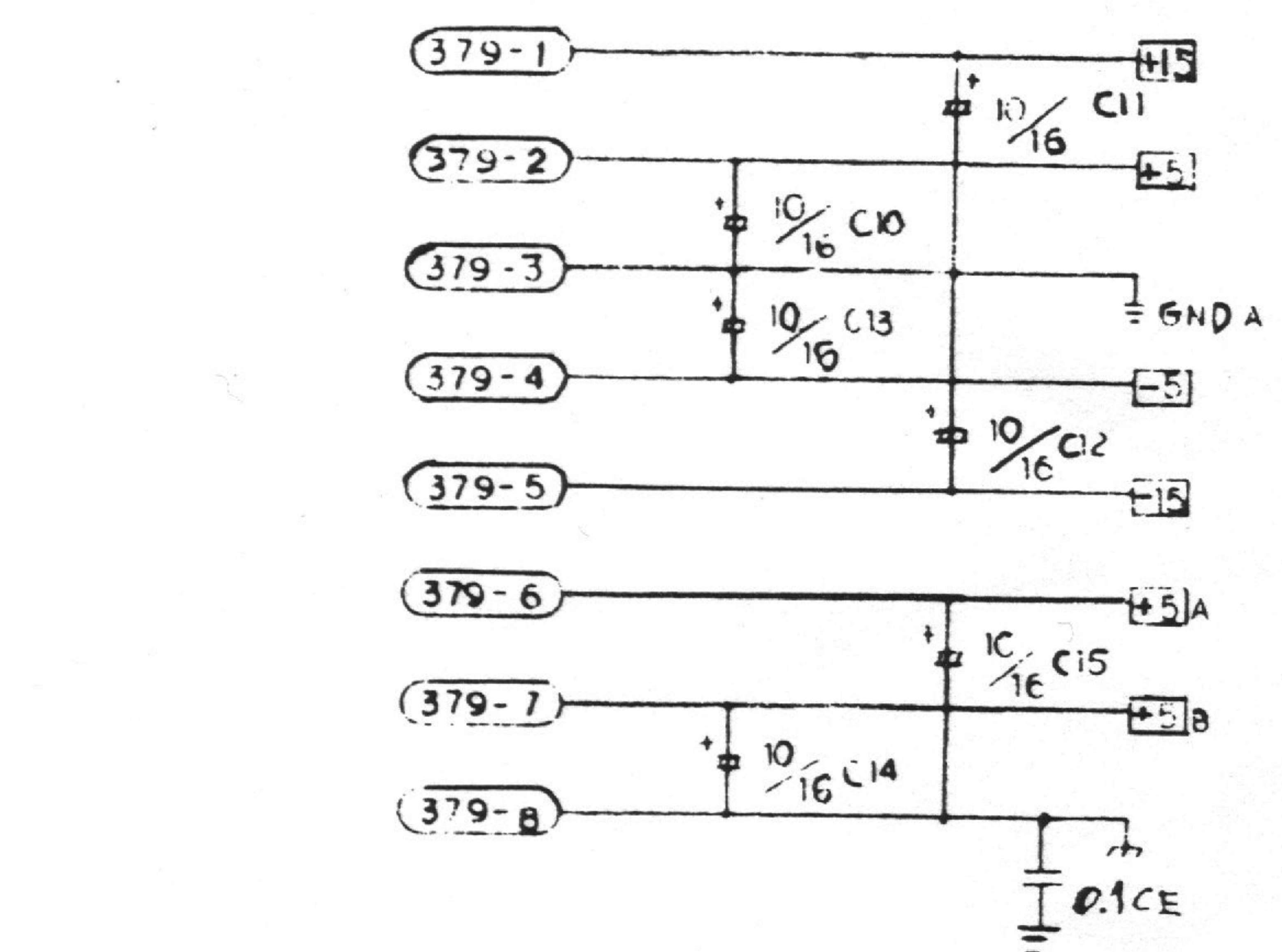
D1-6 --- IS-1555
D7-14 --- LT-8001P

KLM-378 SYNTHESIZER



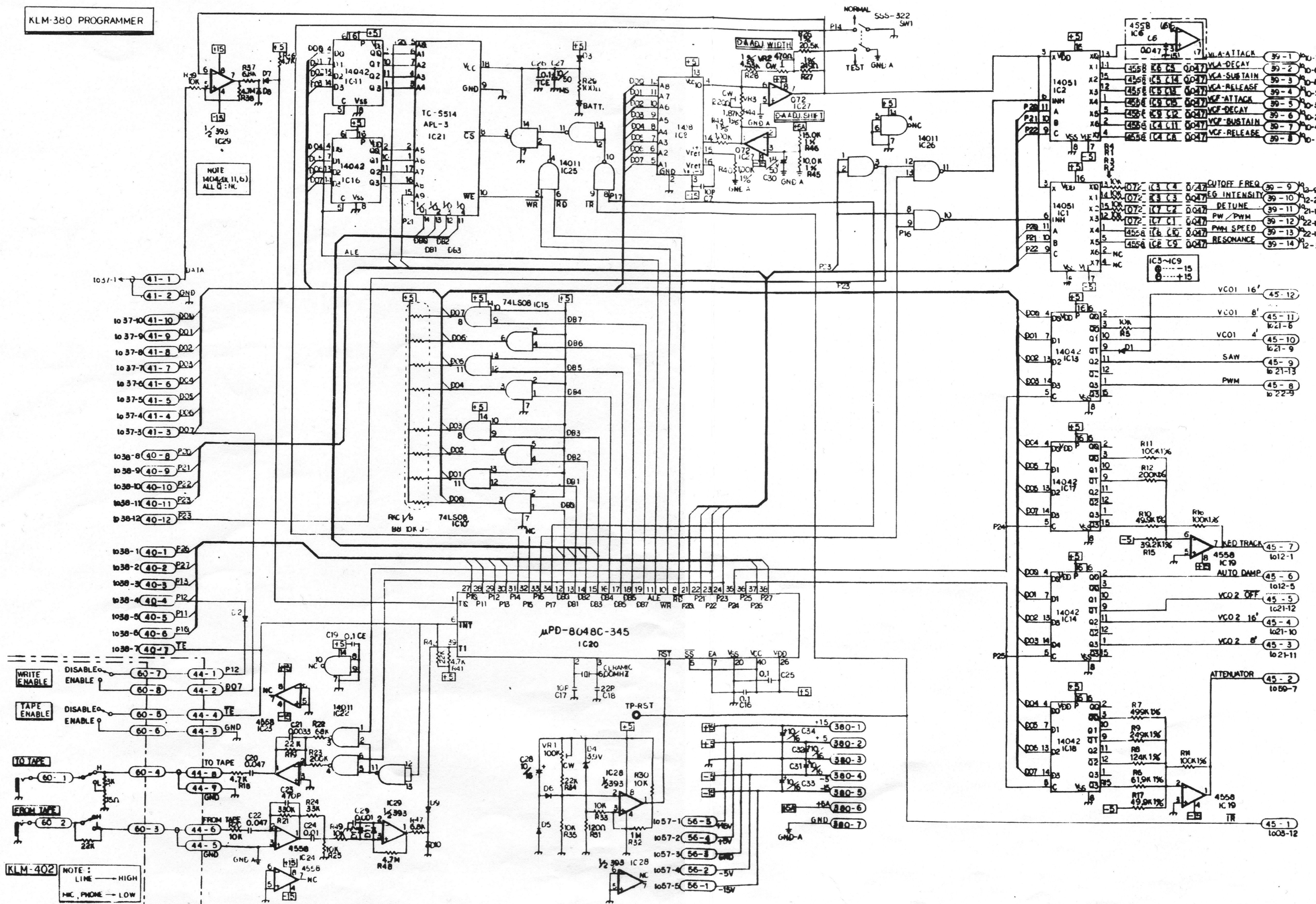
KLM-379 SIGNAL GENERATOR

KLM-379 SIGNAL GENERATOR



ALL 4558
 ○ ---15
 ⊙ ---15

KLM-380 PROGRAMMER



NOTE
14042(11,6)
ALL G:MC

39-1	VLA-ATTACK
39-2	VLA-DECAY
39-3	VCA-SUSTAIN
39-4	VCA-RELEASE
39-5	VCF-ATTACK
39-6	VCF-DECAY
39-7	VCF-SUSTAIN
39-8	VCF-RELEASE
39-9	CUTOFF FREQ
39-10	REG INTENSITY
39-11	RETUNE
39-12	PW/PWM
39-13	PWM SPEED
39-14	RESONANCE

WRITE ENABLE
DISABLE ENABLE 60-7 44-1 P12
ENABLE 60-8 44-2 B07

TAPE ENABLE
DISABLE ENABLE 60-5 44-4 TE
ENABLE 60-6 44-3 GND

TO TAPE
60-1 44-8
60-2 44-9

FROM TAPE
60-3 44-6
60-4 44-5

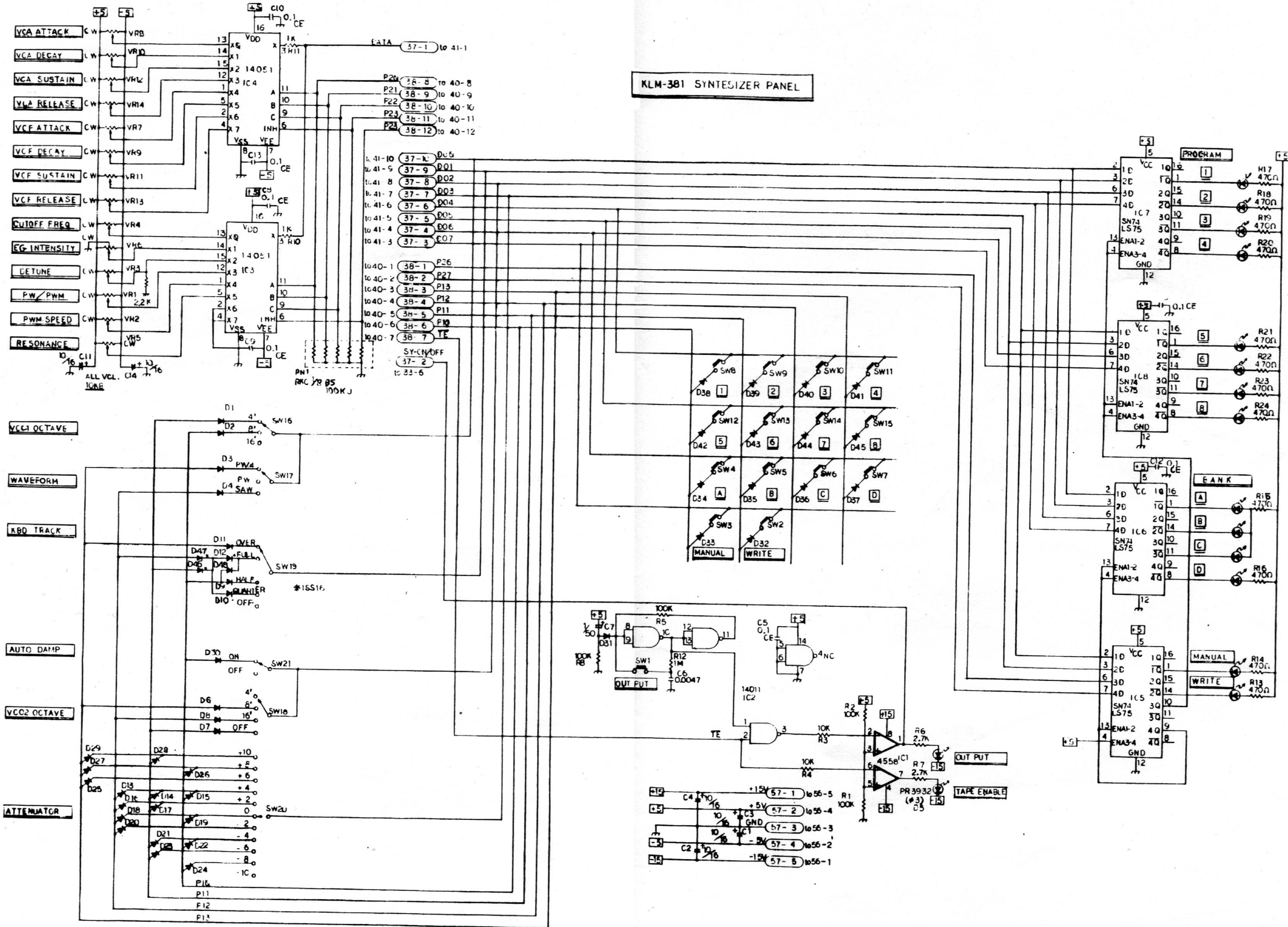
KLM-402
NOTE:
LINE → HIGH
MIC, PHONE → LOW

ATTENUATOR
45-2 1059-7

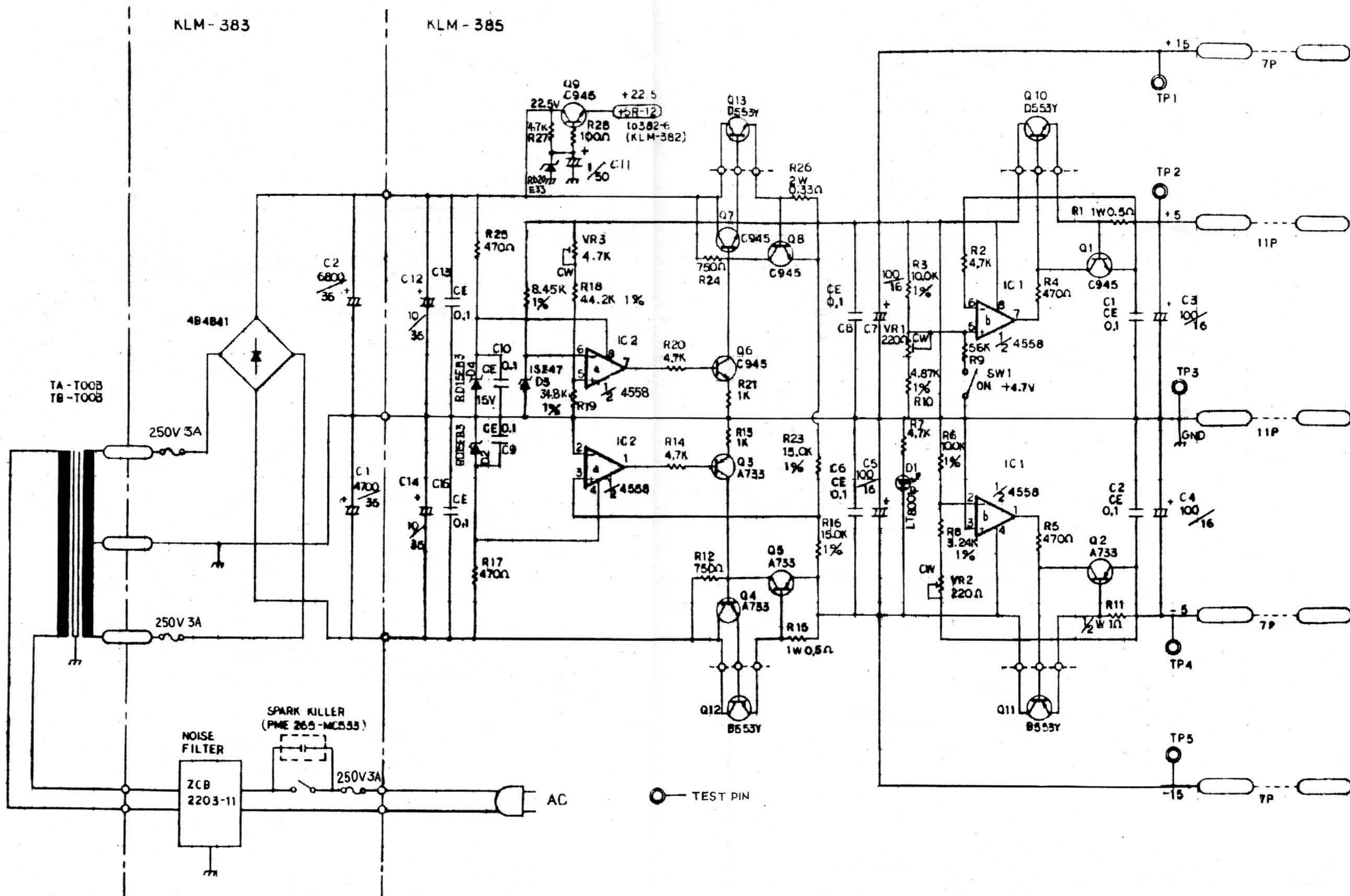
45-1
1005-12

KLM-381 SYNTHESIZER PANEL

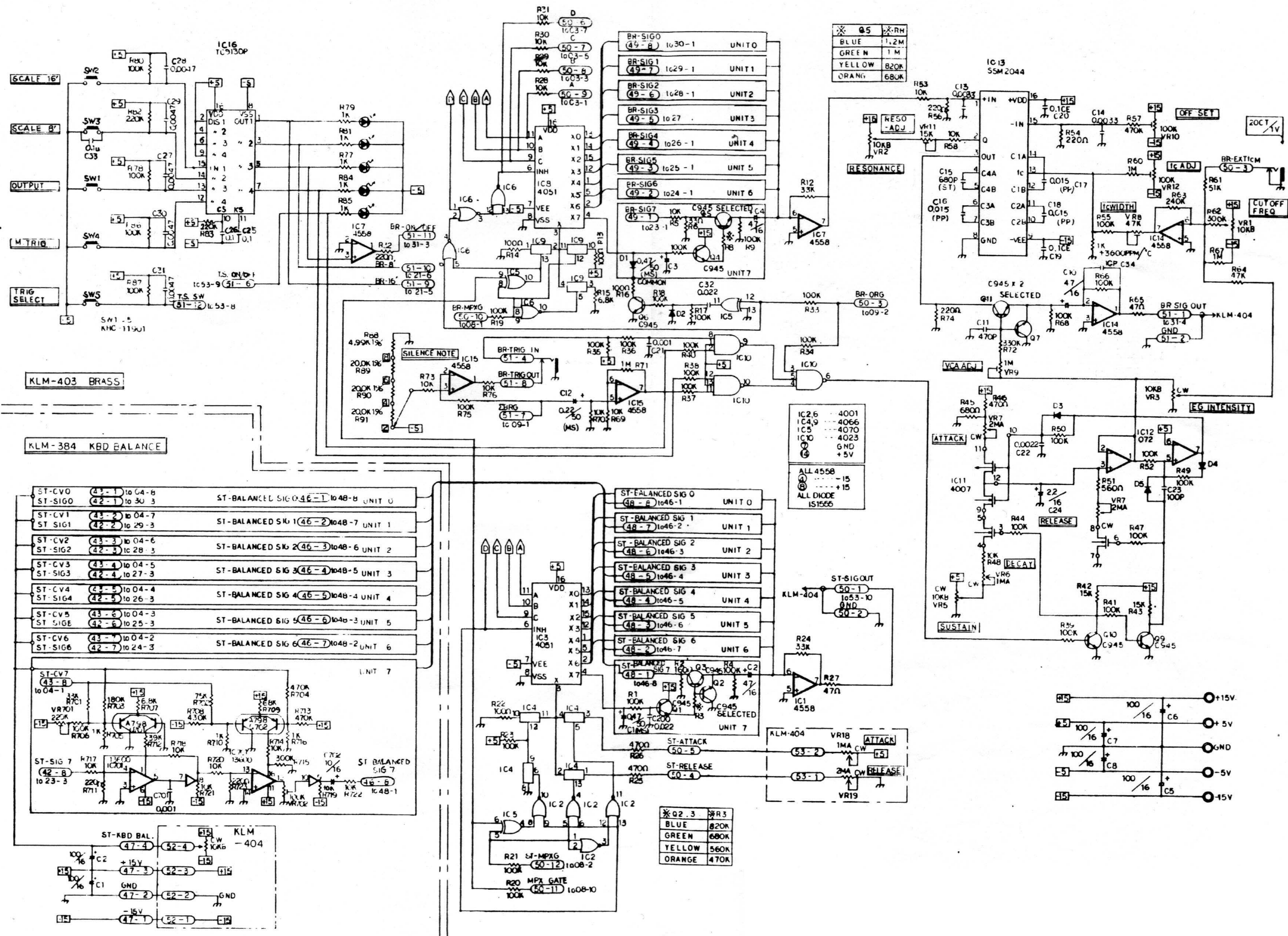
KLM-381 SYNTHESIZER PANEL

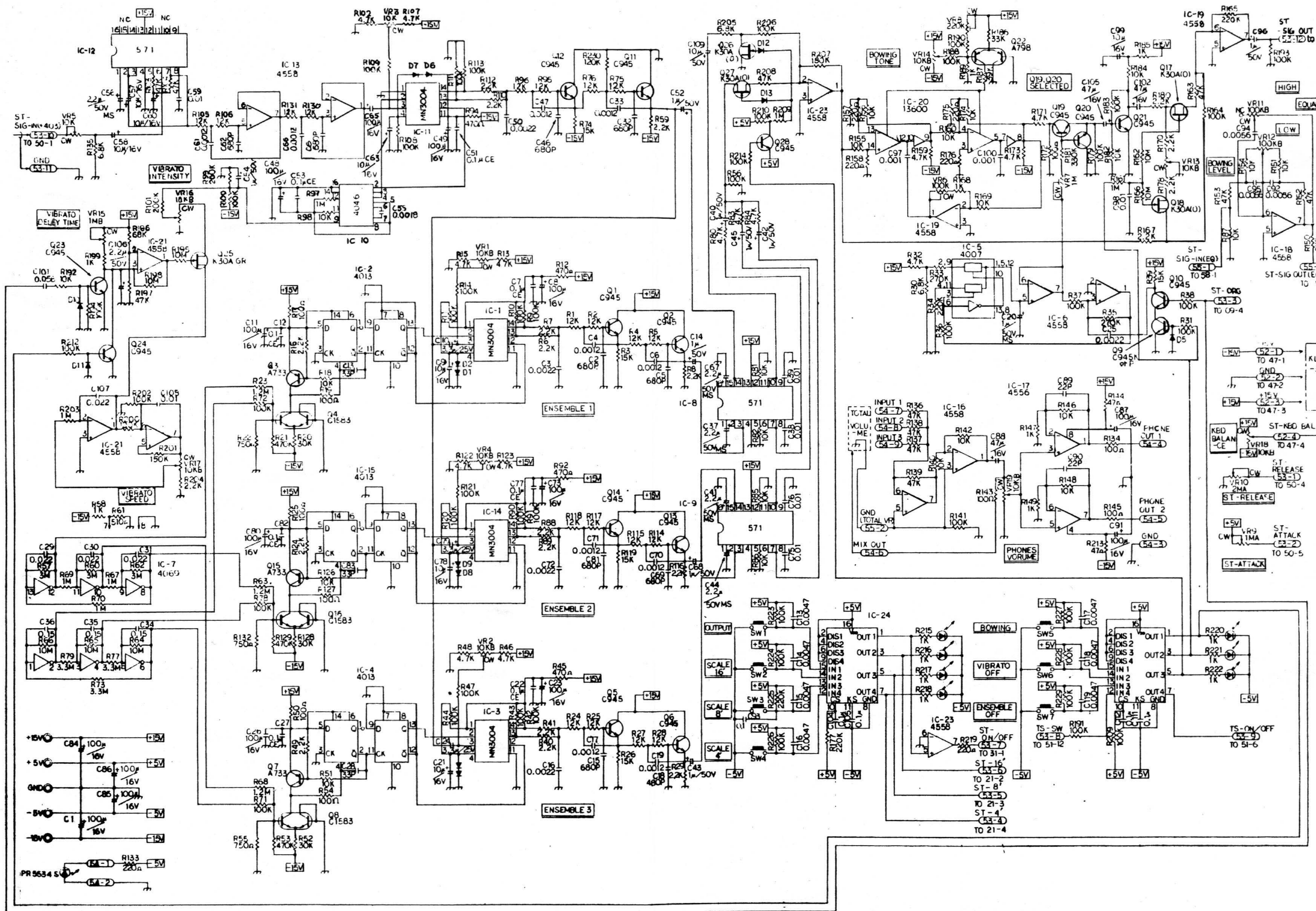


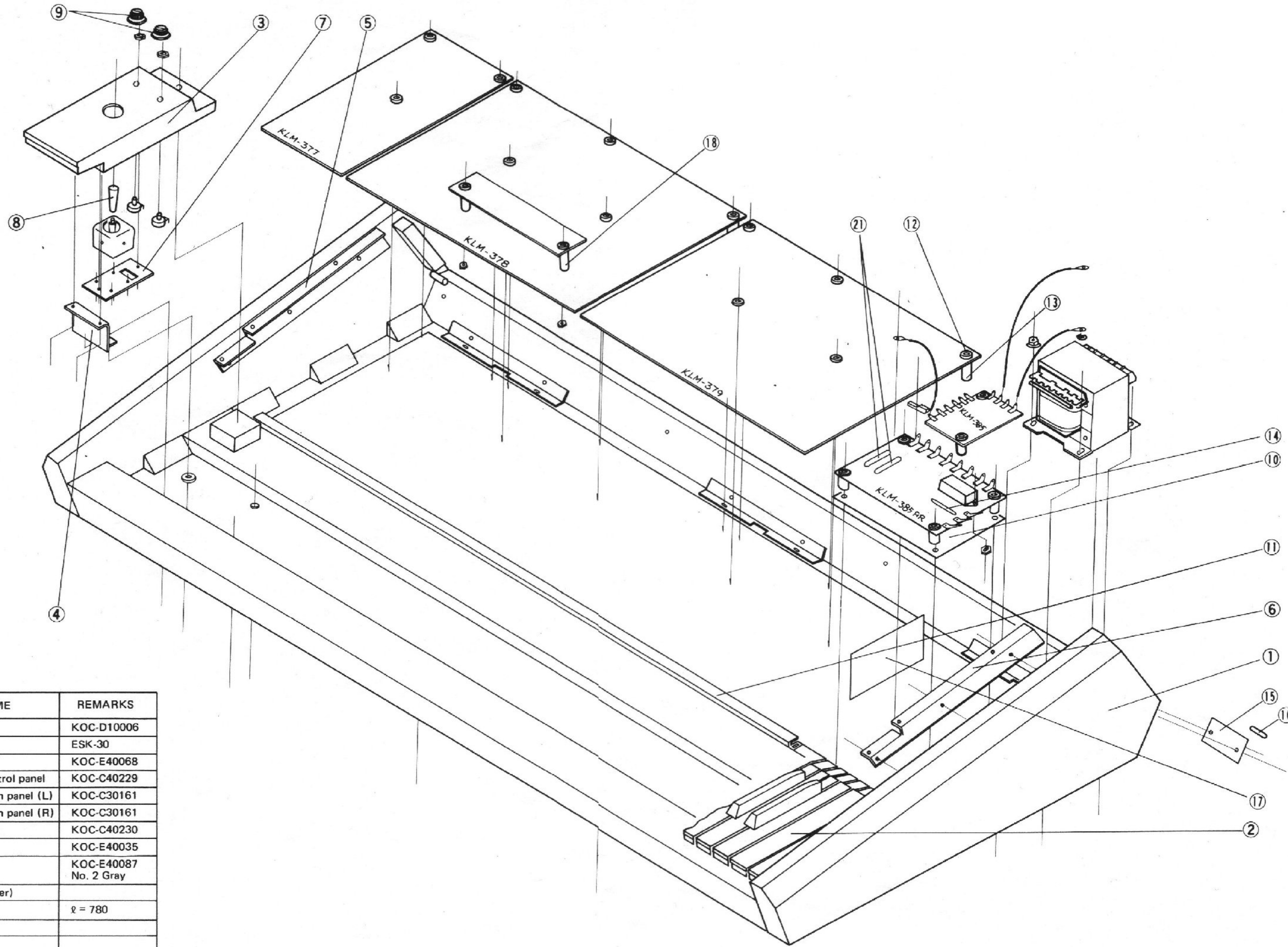
KLM-383, 385



KLM-384, 403

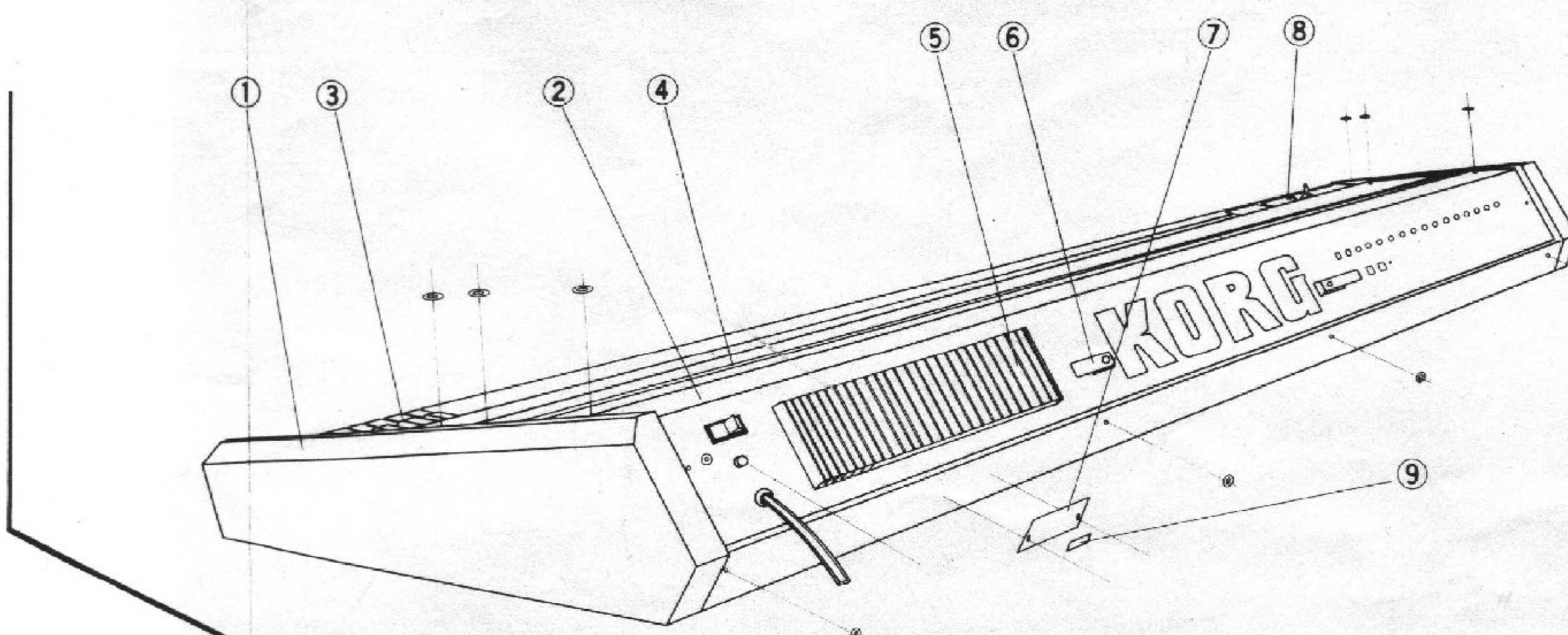
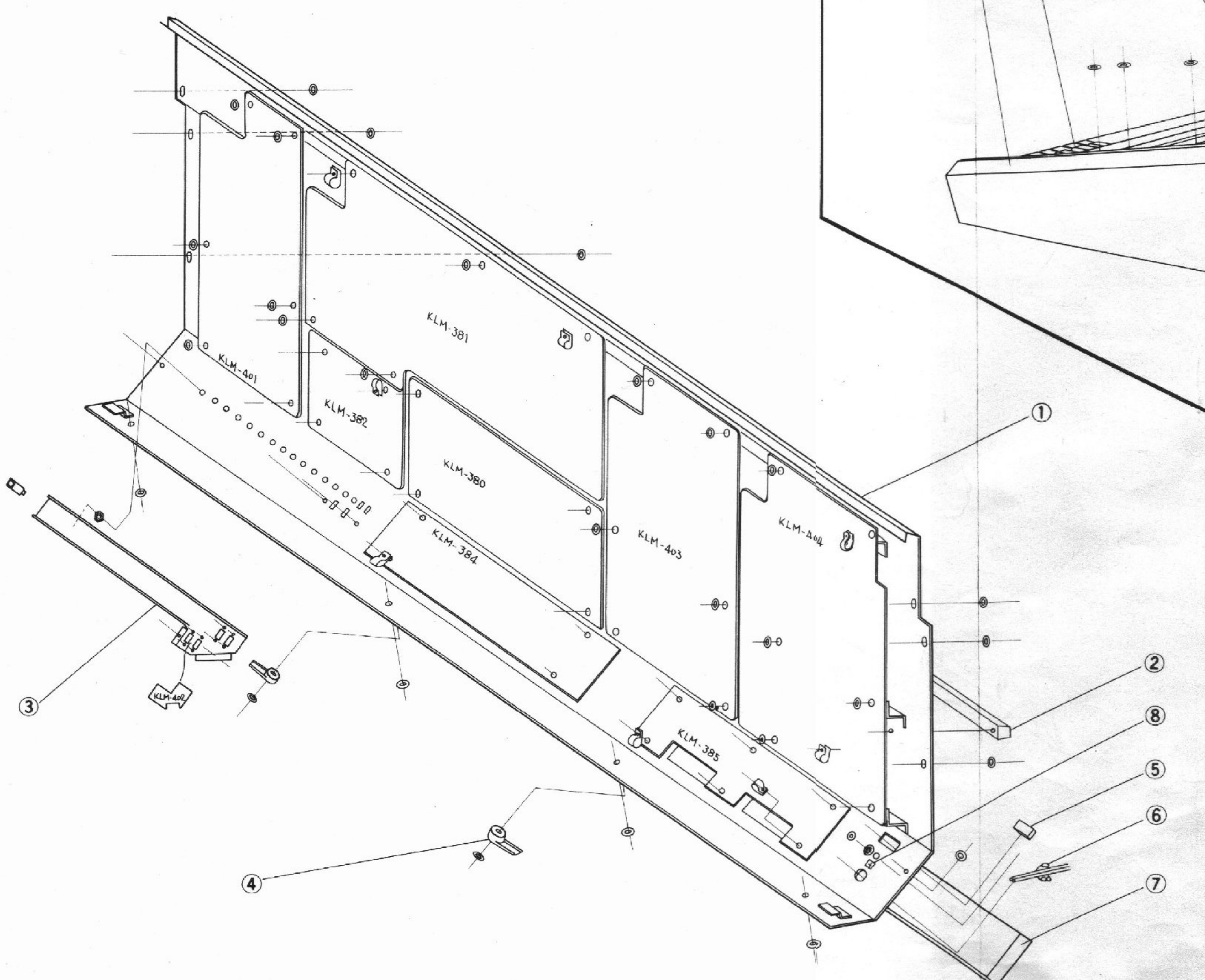






PART NO.	PARTS NAME	REMARKS
1	Wooden case	KOC-D10006
2	Key board	ESK-30
3	Control panel	KOC-E40068
4	Metal fitting of control panel	KOC-C40229
5	Metal fitting of main panel (L)	KOC-C30161
6	Metal fitting of main panel (R)	KOC-C30161
7	Joystic plate	KOC-C40230
8	Joystic VR knob	KOC-E40035
9	Rotary VR knob	KOC-E40087 No. 2 Gray
10	Shielding sheet (Fiber)	
11	PC board rail	ℓ = 780
12	Bushing (TB300)	
13	Bushing (TB301)	
14	Fuse seal	
15	Model number plate	KOC-C40144
16	Serial number seal	
17	Fuse caution seal	KOC-F30013
18	Bushing (TA320)	

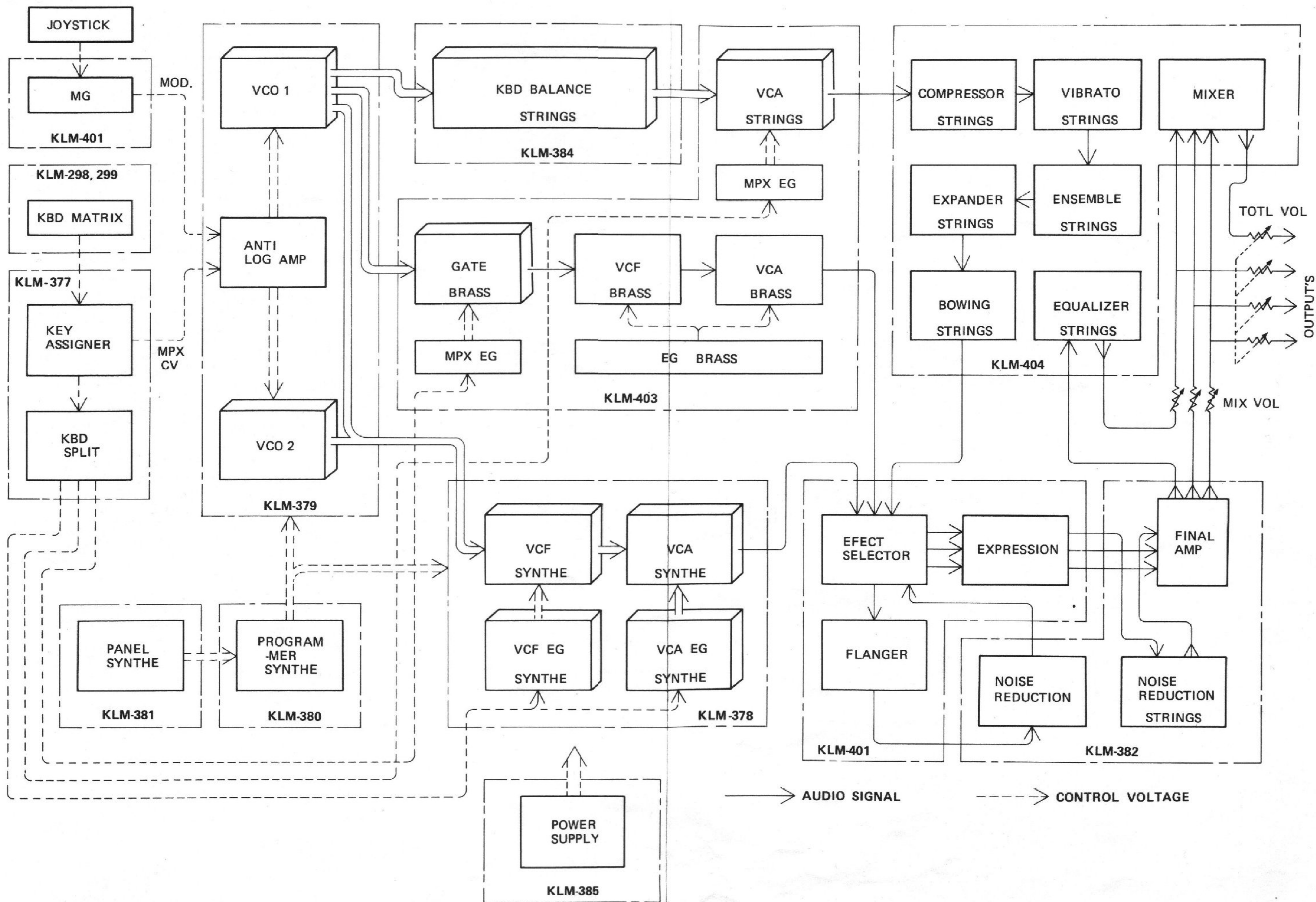
2. STRUCTURAL DIAGRAM



PART NO.	PARTS NAME	REMARKS
1	Wooden case	KOC-D10006
2	Main panel	KOC-C10004
3	Keyboard	ESK-30
4	Music stand	KOC-C30162
5	Radiator	KOC-C30189
6	Cord Stopper	KOC-E40099
7	Model number plate	KOC-C40144
8	Control panel	KOC-E40068
9	Serial number seal	KOC-F40050

PART NO.	PARTS NAME	REMARKS
1	Main panel	KOC-C10004
2	Music stand	KOC-C30162
3	Phone jack plate	KOC-C20113
4	Cord stopper	KOC-E40099
5	Power SW	
6	Bushing	
7	Radiator	KOC-C30189
8	GND seal	

3. BLOCK DIAGRAM

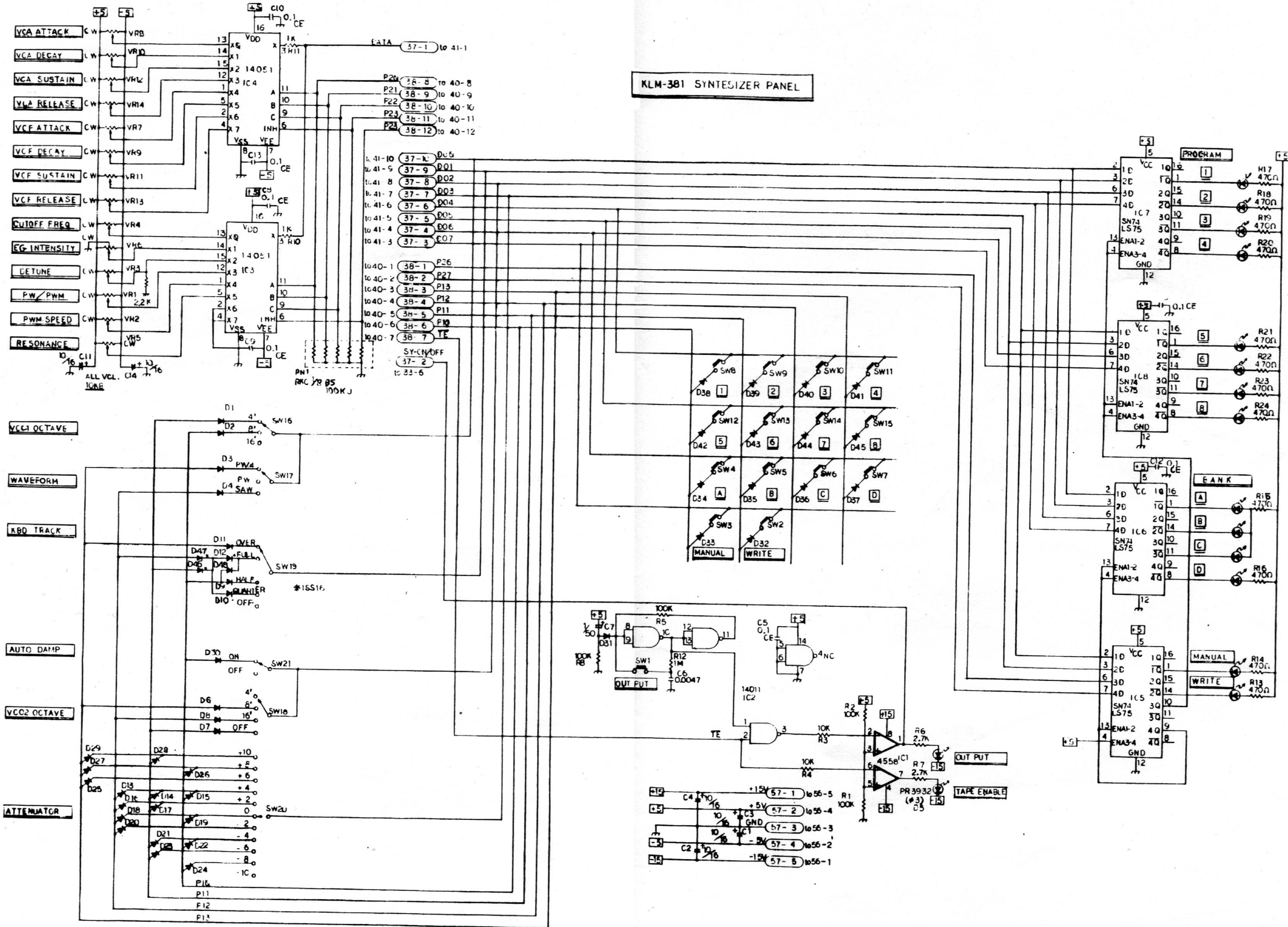


1. SPECIFICATIONS

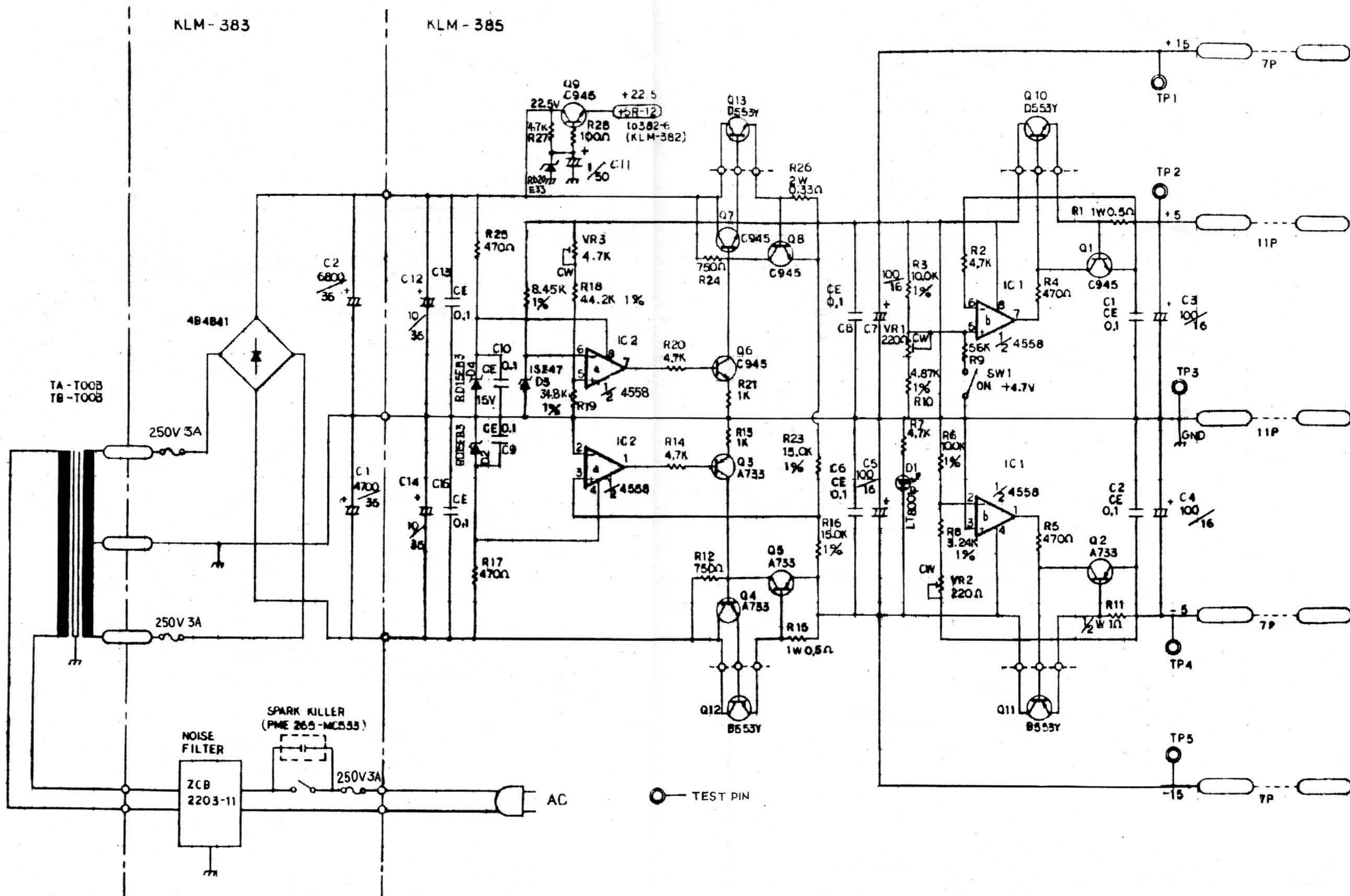
KEYBOARD	● C-C, 61 Keys, 8 voices		
SYNTHESIZER SECTION (Program and edit functions are possible for items marked *)			
VCO-1*	● Octave (16', 8', 4')		
	● Waveform (\wedge , PW, PWM)		
	● PW/PWM Intensity		
	● PWM Speed		
VCO-2*	● Scale (Off, 16', 8', 4')		
	● Waveform (\wedge)		
	● Detune		
VCF*	● Cut-off Frequency		
	● Resonance		
	● EG Intensity		
	● KBD Track (Off 0%, Quarter 25%, Half 50%, Full 100%, Over < 150%)		
VCF EG*	● Attack		
	● Decay		
	● Sustain		
	● Release		
VCA*	● Attenuator (-10dB ~ +10dB)		
VCA EG*	● Attack		
	● Decay		
	● Sustain		
	● Release		
VCA*	● Attenuator (-10dB ~ +10dB)		
AUTO DAMP	● ON/OFF		
PROGRAMMER (x32)	● Program Select (1-8)		
	● Bank Select (A, B, C, D)		
	● Manual		
	● Write		
TAPE INTERFACE	● To Tape		
	● From Tape		
	● Verify		
	● Error/Cancel		
	● Write Enable (Enable/Disable)		
	● Tape Enable (Enable/Disable)		
	● Tape Indicator x2 (Found, Loading)		
MIXER	● Output (On/Off)		
	● Volume		
BRASS SECTION			
OCTAVE (x2)	● 16', 8'		
VCF	● Cut-off Frequency		
	● Resonance		
	● EG Intensity		
ENVELOPE GENERATOR	● Attack		
	● Decay		
	● Sustain		
	● Release		
TRIGGER	● Multiple Trigger (On/Off)		
	● Trigger Select (On/Off)		
	● Silence Note (2, 4, 6, 8)		
MIXER	● Output (On/Off)		
	● Volume		
STRINGS SECTION			
OCTAVE (x3)	● 16', 8', 4'		
ENVELOPE GENERATOR	● Attack		
	● Release		
EQUALIZER	● High		
	● Low		
EFFECT	● Bowing (On/Off, Level, Tone)		
	● Vibrato (On/Off, Delay Time, Intensity, Speed)		
	● Ensemble (On/Off)		
FILTER	● KBD Balance		
MIXER	● Output (On/Off)		
	● Volume		
TOTAL CONTROL SECTION			
KEY ASSIGNOR	● Assign Mode (1, 2)		
KEYBOARD SPLIT	● Synthe (L, L+H, H)		
	● Brass (L, L+H, H)		
	● Strings (L, L+H, H)		
PITCH CONTROL	● Tune (\pm 100 Cents)		
VIBRATO	● Delay Vibrato (On/Off)		
	● Intensity		
JOY STICK	● Pitch Bend (X-Axis)		
	● Vibrato Depth/Trill Depth (Y-Axis)		
	● Intensity		
	● Speed		
FLANGER	● Select (Synthe, Brass, Strings)		
	● Manual		
	● Intensity		
	● Feedback		
	● Speed		
VOLUME CONTROL	● Total Volume		
	● Headphone Volume		
POWER SWITCH	● Power (On/Off)		
INPUTS & OUTPUTS			
INPUTS	● Synthe VCF fcM In (-5V ~ +5V)		
	● Synthe Release ($\overline{\text{L-GND}}$)		
	● Brass VCF fcM In (-5V ~ +5V)		
	● Brass Trigger In ($\overline{\text{L-GND}}$)		
	● Separate Expression x3 (0 ~ +5V)		
	● Total Expression (0 ~ +5V)		
	● From Tape (With High/Low Switch)		
	● Mix Outputs (High, Low)		
	● Separate Outputs (Synthe, Brass, Strings)		
	● Headphone Output (Stereo)		
	● To Tape (With High/Low Switch)		
OUTPUTS	● 1012(W) x 542(D) x 173(H) mm		
	● 23.5 kg		
DIMENSIONS	● Connection Cord		
WEIGHT	● Dust Cover		
ACCESSORIES	● Foot Switch S-1		
	● Memory Cassette		
POWER CONSUMPTION	● Voltage (Local Voltage, 50/60 Hz)		
	● Wattage (53 W)		

KLM-381 SYNTHESIZER PANEL

KLM-381 SYNTHESIZER PANEL



KLM-383, 385



KLM-384, 403

