

LIMITER LIM-1

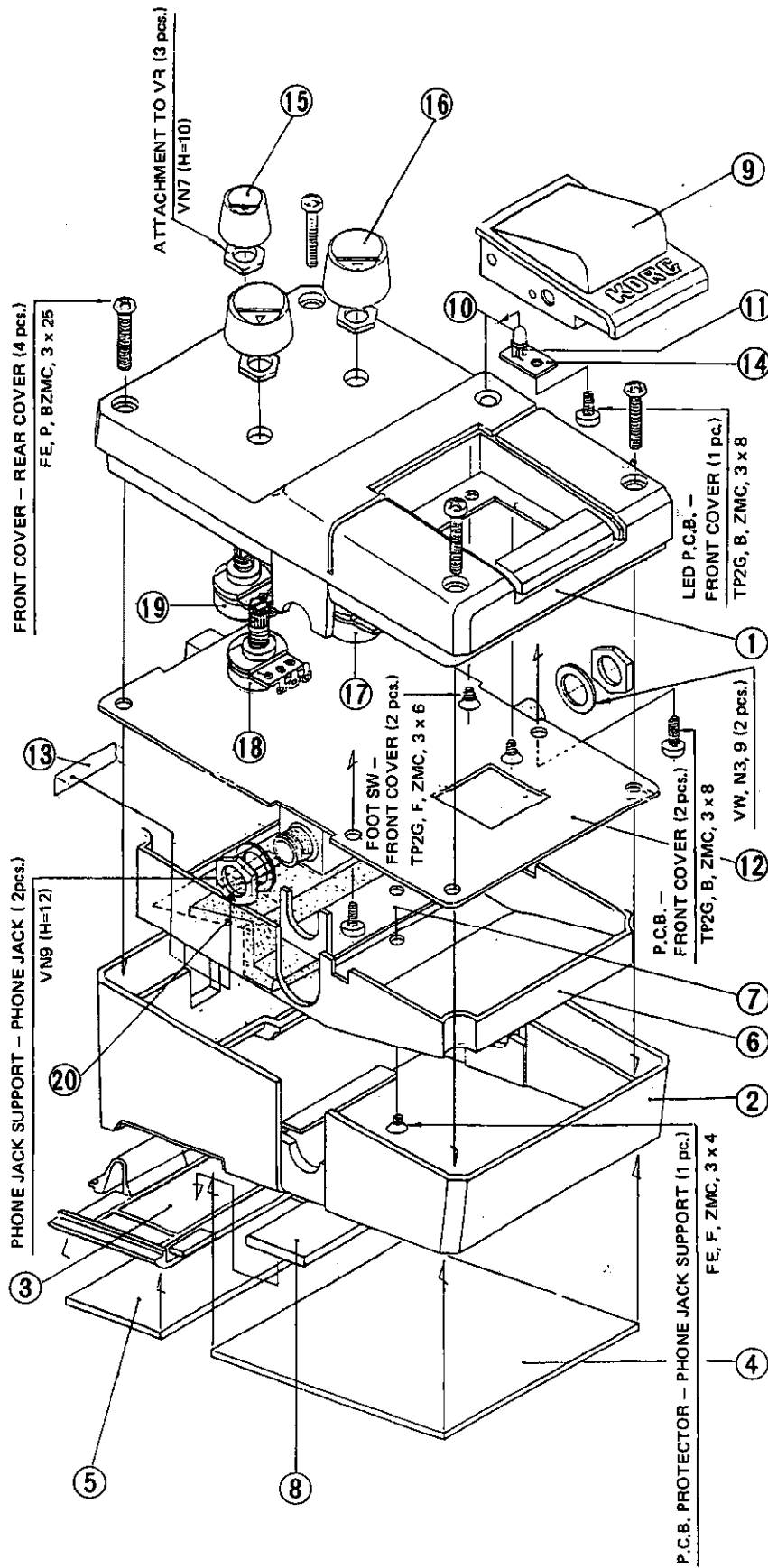
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1. SPECIFICATIONS

● Input impedance	1M Ω	● Noise level	-95dBm (THRESHOLD 0, equivalent input noise, input short-circuited, IHF-A)
● Output impedance	10k Ω	● Operating voltage	10 ~ 7.5V
● Maximum input level	+5dBm (THRESHOLD 0), at 250Hz	● Power consumption	6.5mA
● Maximum output level	+1dBm (THRESHOLD 0), at 250Hz	● Pedal switch life	Over 10,000 times of switching
● Minimum input for compression	-13.5dBm ~ +5dBm (THRESHOLD 10 ~ 0, at 250Hz, 3dB compression)	● Functions	THRESHOLD, RELEASE TIME, OUT LEVEL, EFFECT ON/OFF LED, FOOT SW, INPUT, OUTPUT
● Operation characteristics	-20dBm ~ 0dBm (INPUT), -12dBm ~ -8dBm (OUTPUT) (THRESHOLD 10, at 250Hz)	● Power supply	006P 9V battery/DC jack
● Maximum compression ratio	13dB (maximum input, at 250Hz)	● Dimensions	70(W) x 67(H) x 129(D) mm
● Release time	0.5 ~ 10 sec. (RELEASE TIME 0 ~ 10)	● Weight	450 g (including battery)
● Frequency response [EFFECT OFF]	20Hz ~ 20kHz +0/-1.5dB	(All values are typical.)	
● Frequency response [EFFECT ON]	20Hz ~ 7.5kHz +0/-3dB (THRESHOLD 10, RELEASE TIME 10, -30dBm input)		
● Frequency response [EFFECT ON]	20Hz ~ 7.5kHz +0/-6dB (THRESHOLD 10, RELEASE TIME 10, -10dBm input)		

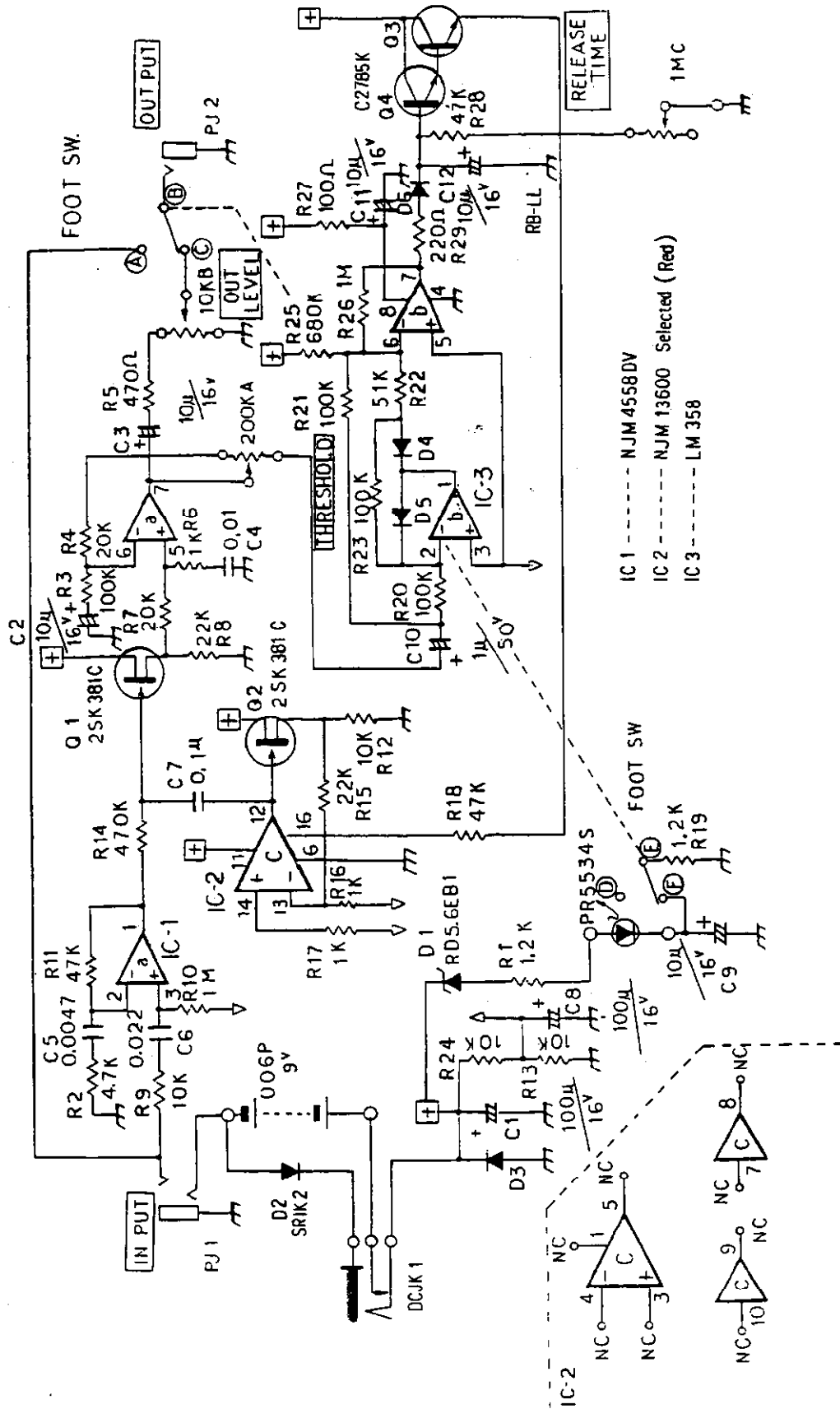
2. STRUCTURAL DIAGRAM



PART NO.	PART NAME	PART CODE
1	FRONT COVER	64704300
2	REAR COVER	64703100
3	BATTERY COVER	64703200
4	RUBBER STOPPER LARGE	50009300
5	RUBBER STOPPER SMALL	50009400
6	P.C.B. PROTECTOR	64807000
7	PHONE JACK SUPPORT	64030500
8	SPONGE	50003400
9	FOOT SW (KFS-2)	37507100
10	LED (PR-5534S)	31200700
11	LED HOLDER X-TYPE No. 4	67504000
12	P.C.B. (KLM-693)	34069300
13	SERIAL NUMBER SEAL	
14	LED P.C.B. (KLM-694)	34069400
15	EFFECTS KNOB SMALL	62014300
16	EFFECTS KNOB LARGE	62014200
17	VR 200KA	36011800
18	VR 10KB	36012000
19	VR 1 MC	36012500
20	BATTERY CUSHION	50004400

3. CIRCUIT DIAGRAM

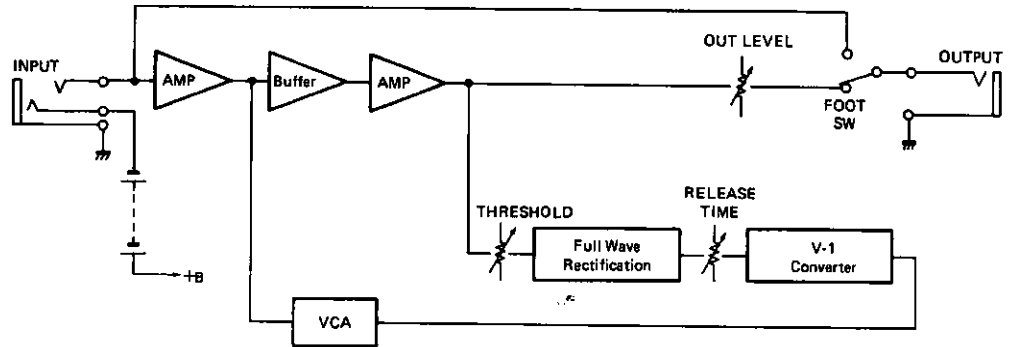
KLM-693



- IC 1 ----- NJM4558DV
- IC 2 ----- NJM 13600 Selected (Red)
- IC 3 ----- LM 358

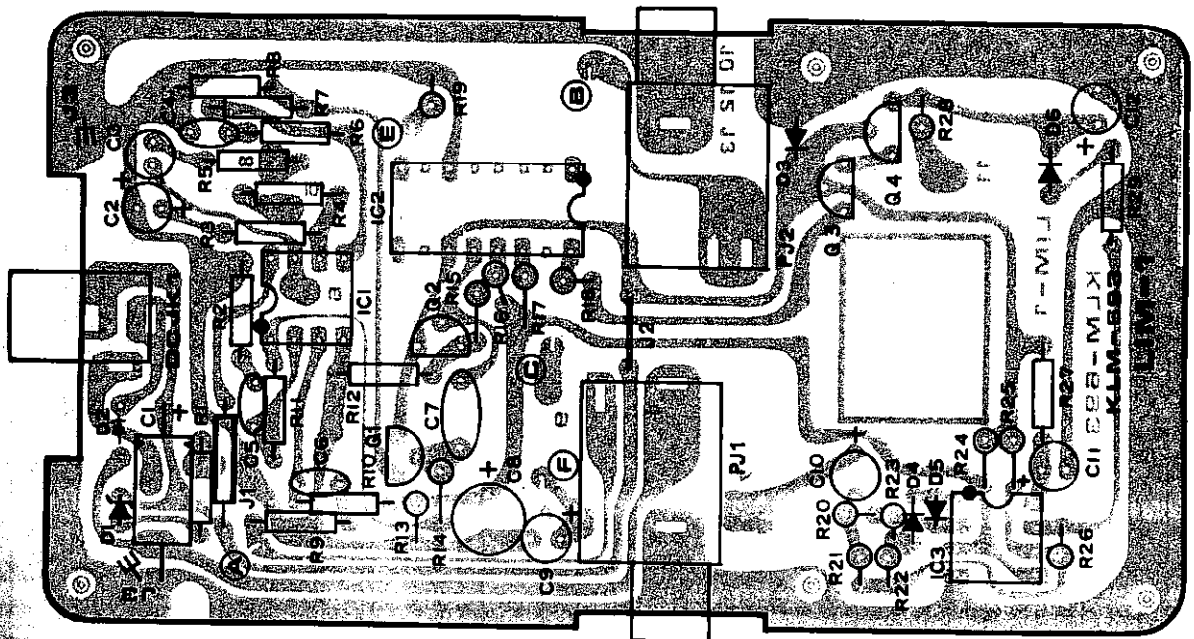
4. BLOCK DIAGRAM

KLM-693



5. P.C. BOARD

KLM-693



6. PARTS LIST

PARTS CODE	PARTS NAME SPECIFICATIONS	BOARD	IDENTIFICATION NO. FUNCTION	QTY
CARBON RESISTORS				
10009000	Y 0 Ω			1
10013310	S1/4JY 100 Ω	KLM-693		1
10013322	S1/4JY 220 Ω			1
10013347	S1/4JY 470 Ω			1
10013410	S1/4JY 1K			1
10013412	S1/4JY 1.2K			1
10013447	S1/4JY 4.7K			1
10013510	S1/4JY 10K			2
10013520	S1/4JY 20K			2
10013522	S1/4JY 22K			1
10013547	S1/4JY 47K			1
10013610	S1/4JY 100K			1
10013710	S1/4JY 1M			1
10113410	S1/4JT 1K			2
10113412	S1/4JT 1.2K			1
10113510	S1/4JT 10K			2
10113522	S1/4JT 22K			1
10113547	S1/4JT 47K			2
10113551	S1/4JT 51K			1
10113610	S1/4JT 100K			3
10113647	S1/4JT 470K			1
10113668	S1/4JT 680K			1
10113710	S1/4JT 1M			1
MYLAR CAPACITORS				
20023447	50V 0.0047μF			1
20023510	50V 0.01μF	KLM-693		1
20023522	50V 0.022μF			1
20023610	50V 0.1μF			1
ELECTROLYTIC CAPACITORS				
23007210	A16V 10μF			1
23007310	A16V 100μF	KLM-693		1
23107310	B16V 100μF			1
23207210	A16V 10μF			4
23215110	A50V 1μF			1
23307210	A16V 10μF			1
TRANSISTOR				
30202211	2SC2785 K			2
P.C. BOARD WITH PARTS				
FET				
30600303	2SK 381-C	KLM-693		2
DIODES				
31000100	1S1555	KLM-693		4
31001500	SR1K-2			1
ZENER DIODE				
31101600	RD 5.6EB1	KLM-693		1
LED				
31200700	PR-5534S			1
ICs				
32009001	NJM-4558D-V	KLM-693		1
32009017	NJM-13600D-A			1
32021025	LM-358			1
P.C. BOARD WITH PARTS				
VRs				
34069300	KLM-693			1
34069400	KLM-694			1
36011900	K161100T6E			1
36012000	200KA VM10A-C29			1
36012500	K161100T6E			1
	10KB VM10A-C29E			1
	K161100T6E			1
	1MC VM10A-C29E			1
FOOT SW				
37507100	KFS-2			1
PHONE JACKS				
45000600	S-G 7622 #06	KLM-693		1
45001100	S-G 7713 #04			1

PARTS CODE	PARTS NAME SPECIFICATIONS	P.C. BOARD	IDENTIFICATION NO. FUNCTION	QTY
POWER JACK				
45400300	HEC-0470-01-230	KLM-693		1
SPONGE				
50003400	4x20x40			1
BATTERY CUSHION				
50004400				1
RUBBER STOPPERS				
50009300	No. 1 LARGE			1
50009400	No. 2 SMALL			1
BATTERY				
52000400	006PUE 9V			1
BATTERY SNAP				
54005100	I-TYPE 80MM			1
LED HOLDER				
57504000	X-TYPE No. 4 5.8MM			1
EFFECTS KNOBS				
62014200	LARGE			2
62014300	SMALL			1
PHONE JACK SUPPORT				
64030500				1
P.C.B PROTECTOR				
64607000				1
REAR COVER				
64703100				1

PARTS CODE	PARTS NAME SPECIFICATIONS	P.C. BOARD	IDENTIFICATION NO. FUNCTION	QTY
BATTERY COVER				
64703200				1
FRONT COVER				
64704300				1
SCREWS				
70060323	FE P BZMC 3x23			4
70160304	FE F BZMC 3x4			1
72130306	TP2G F ZMC 3x6			2
72560308	TP2G B BZMC 3x8			3
NUT				
77310900	VN N-3 9			2
PHONE JACK WASHER				
79040914	N-3 9x14x0.			2