

BOSS DM-100 SERVICE NOTES

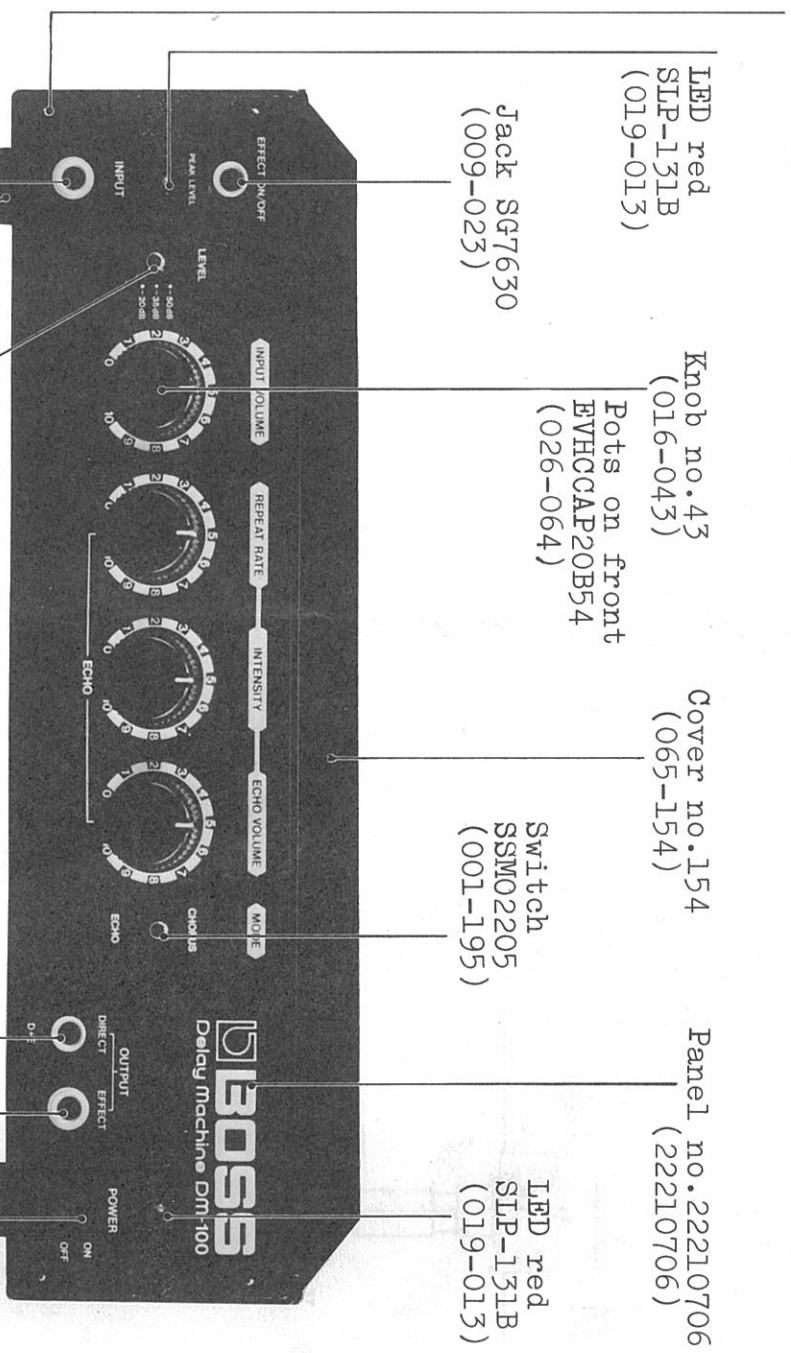
First Edition

SPECIFICATIONS

Delay Machine ■ DM-100	Power Consumption 6W
Input Level/Impedance	Dimension 340(W) x 96(H) x 165(D) mm
-50dB (3.16mV)/4.7kΩ	13.4"(W) x 3.7"(H) x 6.5"(D)
-35dB (17.8mV)/470kΩ	Weight 2.6kg, 5.8lbs.
-20dB (100mV)/470kΩ	S/N more than 60dB
Output Level/Load Impedance	Delay Time
-20dB* (100mV)/over 200Ω	Echo 20ms (10kHz) ~ 400ms (1.5kHz)
*At effect off	Chorus 20ms

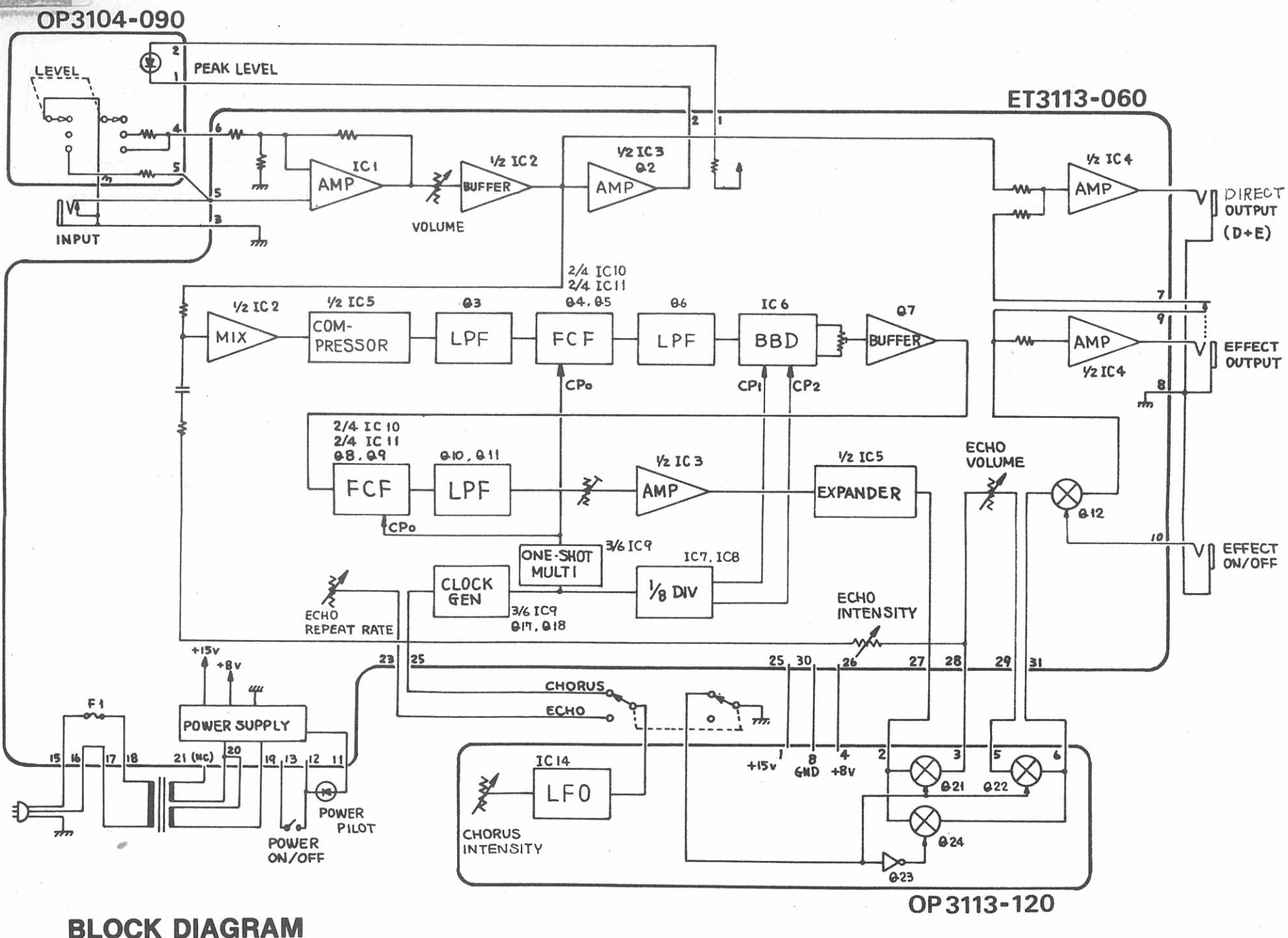
COVER REMOVAL SCREWS: Four 4 x 8mm binder on the bottom (Washers - 4mm lock)

Screws (3 x 10mm oval Br) -- No relation to cover removal



Jack SG7630 (009-031)
 Switch SSM-02308 (001-196)
 Base no. 20 (111-020)
 Screw 3 x 6mm binder (Washer 3x10x0.8)

* Cover (rear panel) no. 22020803



BLOCK DIAGRAM

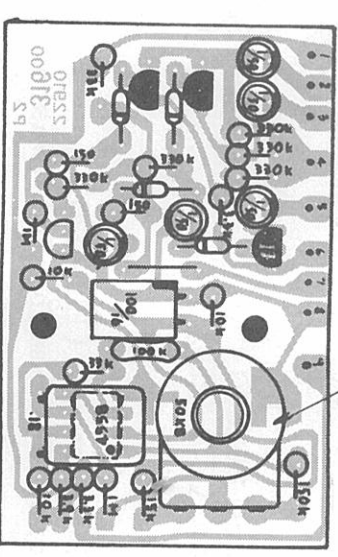
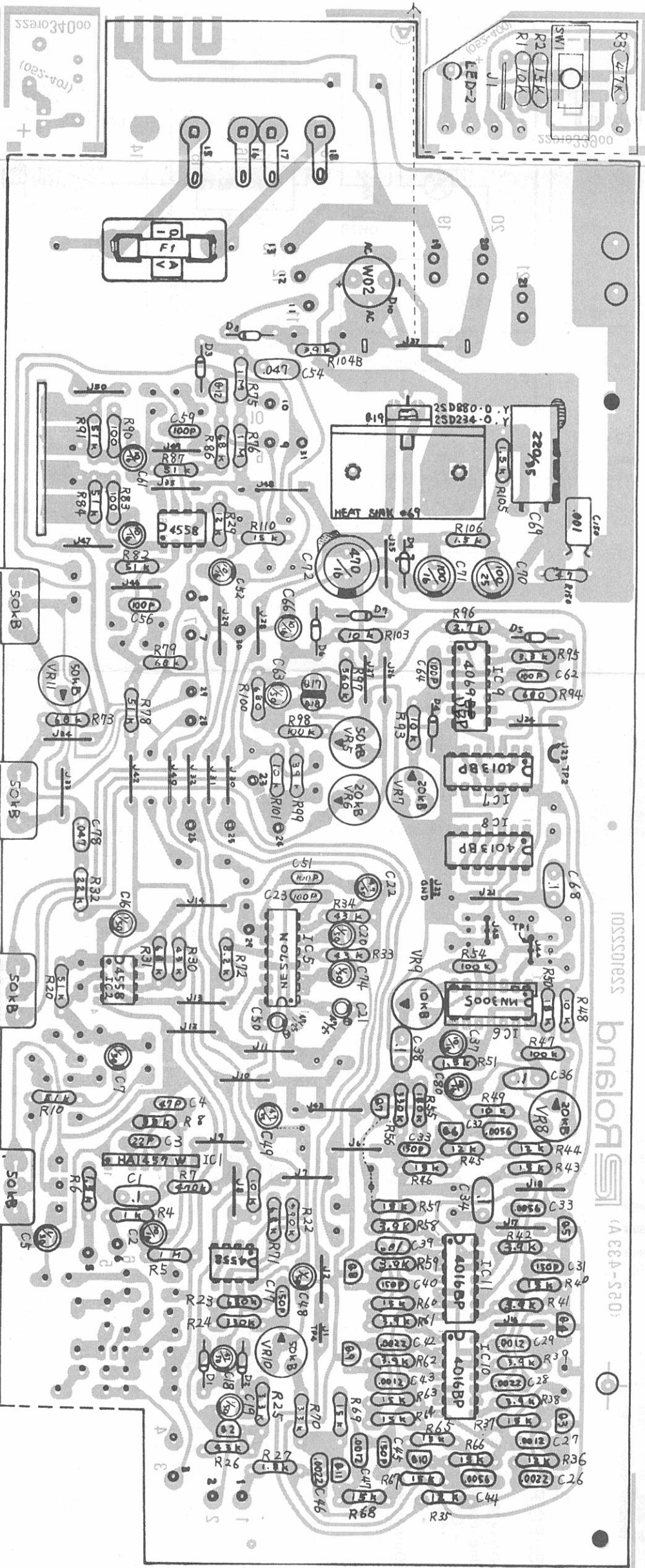
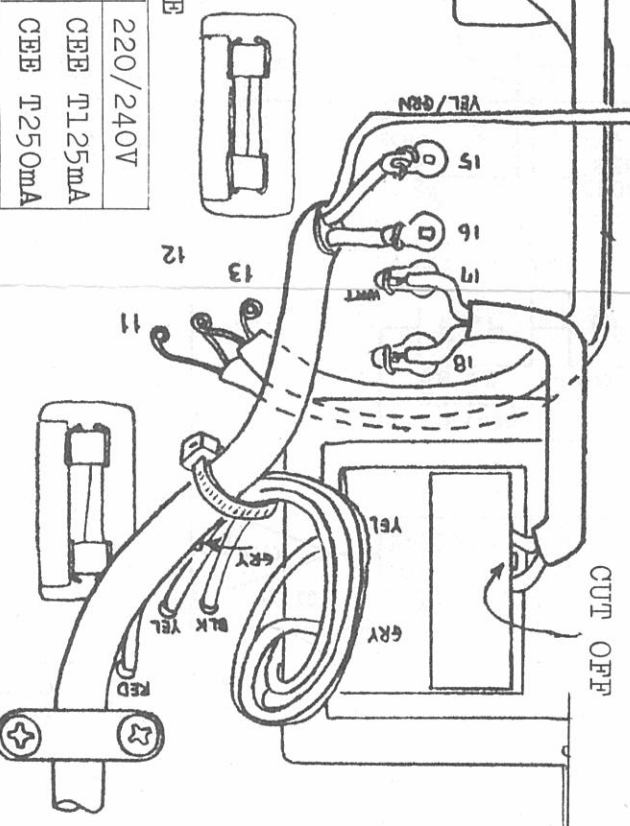
OP101 (149-101)
(pcb 052-400,
22910339)

ET3113-060
(73113060)
(pcb 052-433A,
2291022201)

OP3113-120 (73113120)
(pcb 22910316)

When dismantling pc board,
unscrew on the rear panel.

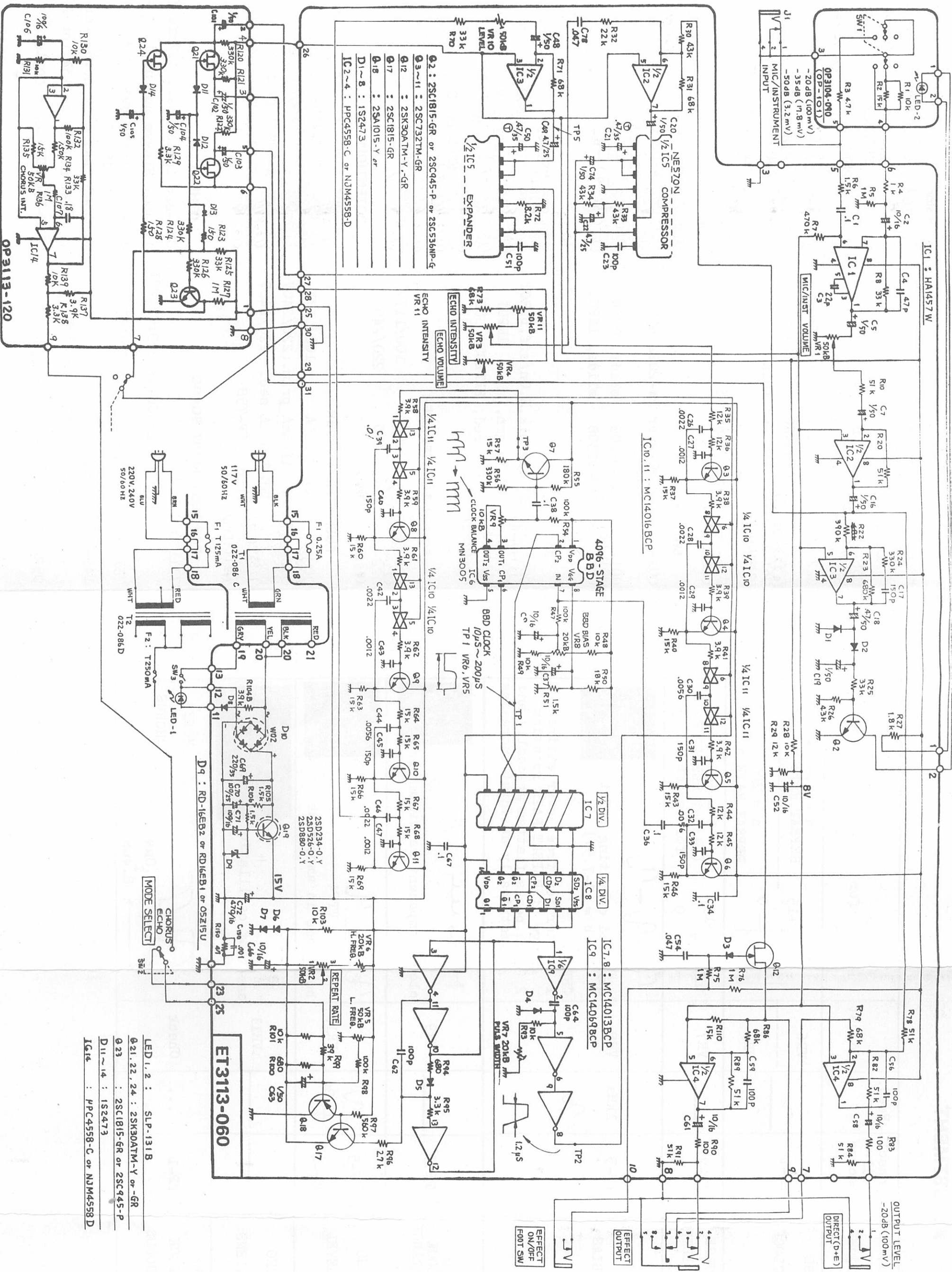
FUSE	100/11TV	220/240V
F1	SGA .25A	CEE T125mA
F2	...	CEE T1250mA



- 021, 22, 24 : 2SK30ATM-Y.-GR
- 023 : 2SC1815-GR or 2SC945-P or 2SC536NP-G
- D11~14 : 1S2413 or 1S1588
- IC : PPC6558C or NUM4558D

A B C D E F G H I J K L M N O P Q R S T U V

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

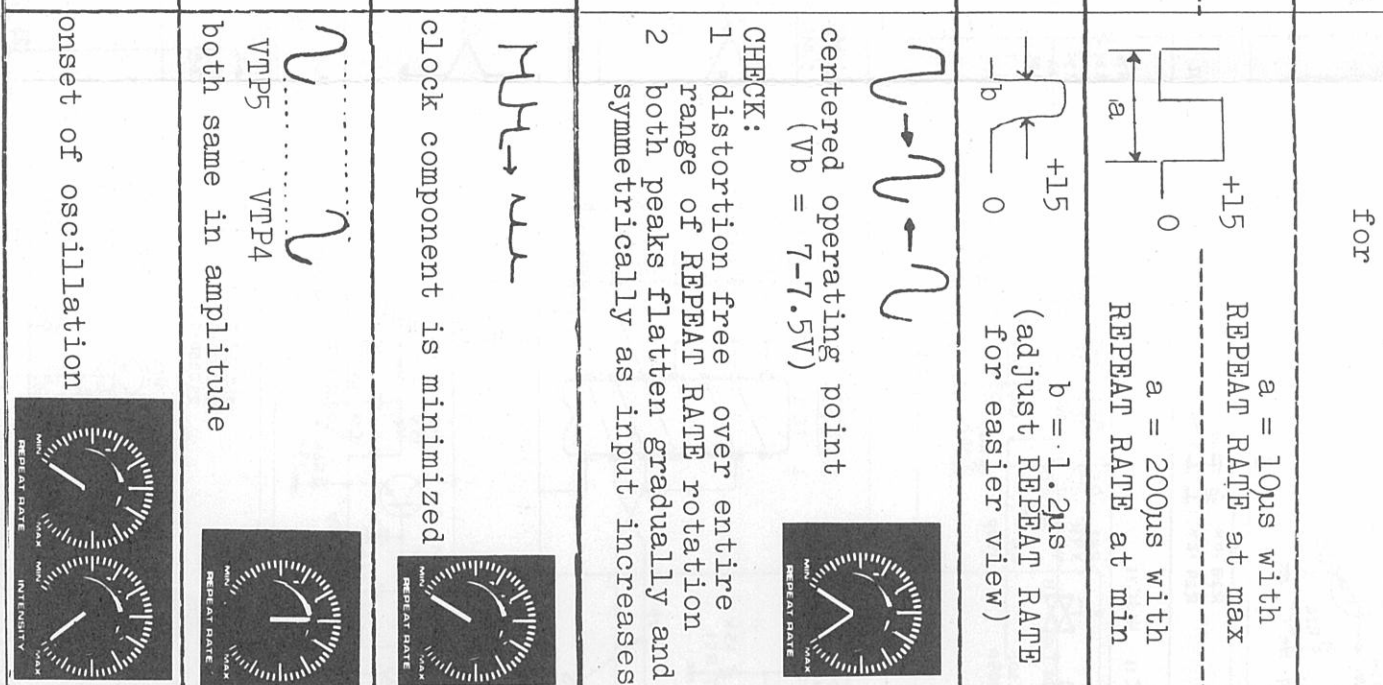


- LED 1, 2 : SLP-131B
- Q21, 22, 24 : 2SK30ATM-Y or -GR
- Q23 : 2SC1815-GR or 2SC945-P
- D11~14 : 1S2473
- IC14 : PPC4558-C or NJM4558-D

ET3113-060

ADJUSTMENT

No	Connect oscilloscope to	Feed	Adjust	for
BBD	TP-1	—	VR6	a = 10us with REPEAT RATE at max a = 200us with REPEAT RATE at min
CLOCK	TP-1	—	VR5	
PULSE WIDTH	TP-2	—	VR7	b = 1.2us (adjust REPEAT RATE for easier view)
BBD BIAS	TP-3	1kHz	VR8	centered operating point (Vb = 7-7.5V)
BBD CLOCK BALANCE	TP-3	—	VR9	clock component is minimized
ECHO LEVEL	TP-5 TP-4	~ 1kHz	VR10	both same in amplitude
ECHO INTENS	—	—	VR11	onset of oscillation
BBD CLOCK CHORUS	TP-1	...	Check	6.8us 8.4us



PARTS LIST

*Some parts in new numbering

CASE	065-154 Cover no.154 case (270/012005) 22020803 Cover no.22020803 rear 22210706 Panel no.22210706 front 111-020 Base no.20 (foot) (22352/01002) 061-182A Chassis no.182A (2281016901)	017-103 2SC732TM-GR or equiv. (15129104) 2SC1222-E, 10-noise) 2SC1000-GR, 2SD234-0 or 2SD880-0/Y (15129316) 017-105 2SA1015-Y or 2SA733-Q or 4S1191123 2SA933-Q 017-106 2SC1815-GR or 2SC1740-Q or (151291142) 2SC536-F 017-014 2SK30ATM- G or Y FET (15137101)
JACK	009-023 SG7630 blk,E.On/off,DIRCT (13139121) 009-031 SG7630 grn, INPUT (13449108) 009-032 SG7640 red, EFFECTS OUT (13449202)	Diode 018-059 1S1588 or 1S2473 (15019120) 018-082 W-02 or 1M152/152R rect. (15019236) 019-013 SLP-131B red, LED (15029116) 15019558 RDL6E- B1 or B2 zener (15019654) ← B2
POWER TRANSFORMER	022-086C PT no.86C 100/117V (224501230) 022-086D PT no.86D 220/240V (224501240)	IC 020-085 MN3005 BBD (15219204) 020-176 MC14069BCP or TC4069BP (151571670) 020-179 MC14013BCP or TC4013BP (1515410520) 020-080 HA1457W (15189502) 020-171 MC14016BCP or TC4016BP (1515910630) 020-097 PPC4558 or NJM4558D (15189105) 020-098 NE570N (15219108)
FUSE, FUSE HOLDER	008-023 SGA 0.25A 100/117V (12559105) 008-027 CEE T125mA prim. 220/240V (12559508) 008-060 CEE T250mA sec. 220/240V (12559108) 012-003 Clip TF-758 (42199519)	POTENTIOMETER 026-064 EVHCAP20B54 50KB CHR (13219228) 026-065 EVHLWAD25B54(L) CHORS. INT 13219305 (13219305) 028-005 EVTR4AA00(SR19R) 20k trimmer (13299163) 028-006 EVTR4AA00(SR19R) 50k trimmer (13299167) 028-004 EVTR4AA00(SR19R) 10k trimmer (13299161)
PRINTED CIRCUIT BOARD	73113060 ET3113-060 4 (pcb 052-400 or 2291022201) 73113120 OP3113-120 (pcb 22910316) 149-101 OP101 (pcb 052-400/22910339) 052-401 Power on LED mount	OTHERS 032-228 Tantal.cap. 4.7mf 35V K 123-001 Sleeve nut no.1 3 x 10mm 123-002 Sleeve nut no.2 3 x 16.4mm spacer 048-069 Heat sink no.69 (or no.32) 064-134 Holder no.134 (or 22190234) 012-030 IC socket C03-014-350T