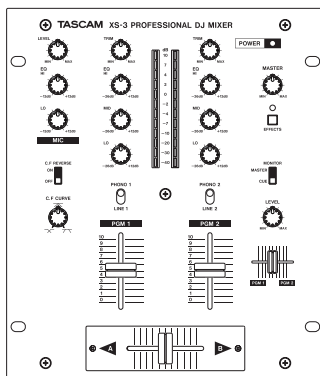


TASCAM

TEAC Professional Division



SERVICE MANUAL

XS-3

Professional DJ Mixer

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INSTRUCTIONS FOR SERVICE PERSONNEL

BEFORE RETURNING APPLIANCE TO THE CUSTOMER, MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT.

1. SPECIFICATIONS

仕様

LINE INPUT (PGM1-2): RCA, unbalanced
 Input Level: -10 dBV
 Input impedance: 10k ohm
 PHONO INPUT (PGM1-2) RCA, unbalanced
 Input Level: -54 dBV
 Input impedance: 47k ohm
 MIC INPUT: TRS, balanced
 Input Level: -50 dBV
 Input impedance: 2.8k ohm
 MASTER OUTPUTS (balanced): TRS, balanced
 Nominal Output Level: +4 dBu
 Output impedance: 75 ohm
 MASTER OUTPUTS (unbalanced): RCA, unbalanced
 Nominal Output Level: 0 dBV
 Output Impedance: 100 ohm
 REC OUTPUT: RCA, unbalanced
 Nominal Output Level: -10 dBV
 Output Impedance: 1k ohm
 EFFECT (send): TRS, unbalanced
 Nominal Output Level: -4 dBV
 Output Impedance: 100 ohm
 EFFECT (return): TRS, unbalanced
 Input Level: -4 dBV
 Input Impedance: 10k ohm
 PHONES:
 100mW+100mW, (at 33ohm)

 Frequency Response:
 LINE IN: 20 Hz to 20KHz, +/-1.0 dB
 PHONO IN: 30 Hz to 15KHz, +/-2.0 dB (RIAA)
 MIC IN: 30 Hz to 18KHz, +/-3.0 dB
 Signal to Ratio:
 LINE IN: 78 dB (IHF A WTD)
 PHONO IN: 70 dB (IHF A WTD)
 MIC IN: 60 dB (IHF A WTD)
 Total Harmonic Distortion:
 LINE IN: <0.1 %
 PHONO IN: <0.2 %
 MIC IN: <0.2 %
 Crosstalk: >60 dB (@ 1KHz)
 PGM EQ
 HIGH: +12 dB ~ -26 dB
 MID: +12 dB ~ -26 dB
 LOW: +12 dB ~ -26 dB
 Filter (Cut Frequency at -6dB, slope 12dB/oct in all the cases)
 HIGH: 6 kHz
 MID: 6 kHz & 200 Hz
 LOW: 200 Hz
 MIC EQ
 HIGH: 5.5 kHz, +12 dB ~ -12 dB
 LOW: 125 Hz, +12 dB ~ -12 dB

LINE INPUT (PGM1-2): RCA、アンバランス
 入力レベル：－10dBV
 入力インピーダンス：10k Ω
 PHONO INPUT (PGM1-2): RCA、アンバランス
 入力レベル：－54dBV
 入力インピーダンス：47k Ω
 MIC INPUT: TRS、バランス
 入力レベル：－50dBV
 入力インピーダンス：2.8k Ω
 MASTER OUTPUTS (balanced): TRS、バランス
 規定出力レベル：+4dBu
 出力インピーダンス：75 Ω
 MASTER OUTPUTS (unbalanced): RCA、アンバランス
 規定出力レベル：0dBV
 出力インピーダンス：100 Ω
 REC OUTPUT: RCA、アンバランス
 規定出力レベル：－10dBV
 出力インピーダンス：1k Ω
 EFFECT (send): TRS、アンバランス
 規定出力レベル：－4dBV
 出力インピーダンス：100 Ω
 EFFECT (return): TRS、アンバランス
 入力レベル：－4dBV
 入力インピーダンス：10k Ω
 PHONES：
 100mW+100mW（33 Ω負荷時）

周波数特性
 LINE IN：20Hz～20kHz、±1.0dB
 PHONO IN：30Hz～15kHz、±2.0dB (RIAA)
 MIC IN：30Hz～18kHz、±3.0dB

SN比
 LINE IN：78dB (IHF A WTD)
 PHONO IN：70dB (IHF A WTD)
 MIC IN：60dB (IHF A WTD)

歪率
 LINE IN：0.1%以下
 PHONO IN：0.2%以下
 MIC IN：0.2%以下

クロストーク：
 60dB以上（1KHz）

PGM EQ
 HIGH：+12dB～－26dB
 MID：+12dB～－26dB
 LOW：+12dB～－26dB

フィルター（Cut Frequency at －6dB, slope 12dB/oct in all the cases）
 HIGH：6kHz
 MID：6kHz & 200Hz
 LOW：200Hz

MIC EQ
 HIGH：5.5kHz、+12dB～－12dB
 LOW：125Hz、+12dB～－12dB

Power Requirement: 120 V (60Hz), 230 V (50Hz)

Power Consumption: 13 W

Dimension (mm): 228 (W) x 106 (H) x 267 (D)

Weight: 2.6 kg (main unit), 0.6 kg (AC Adaptor)

Applicable electromagnetic environment: E4

Peak inrush current: 5 A

電源：100V、50-60Hz

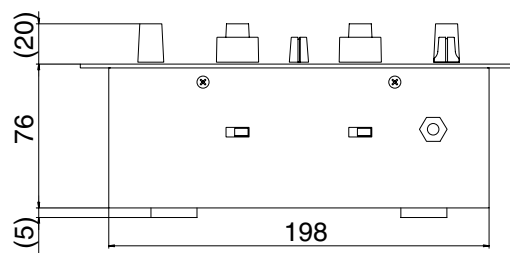
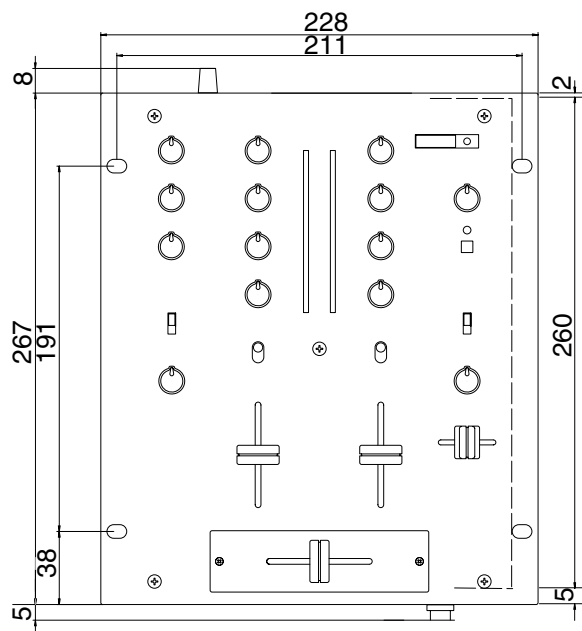
消費電力：13W

外形寸法：228（幅）× 87（高さ）× 267（奥行き）mm

質量：2.6kg（本体）、0.6kg（ACアダプター）

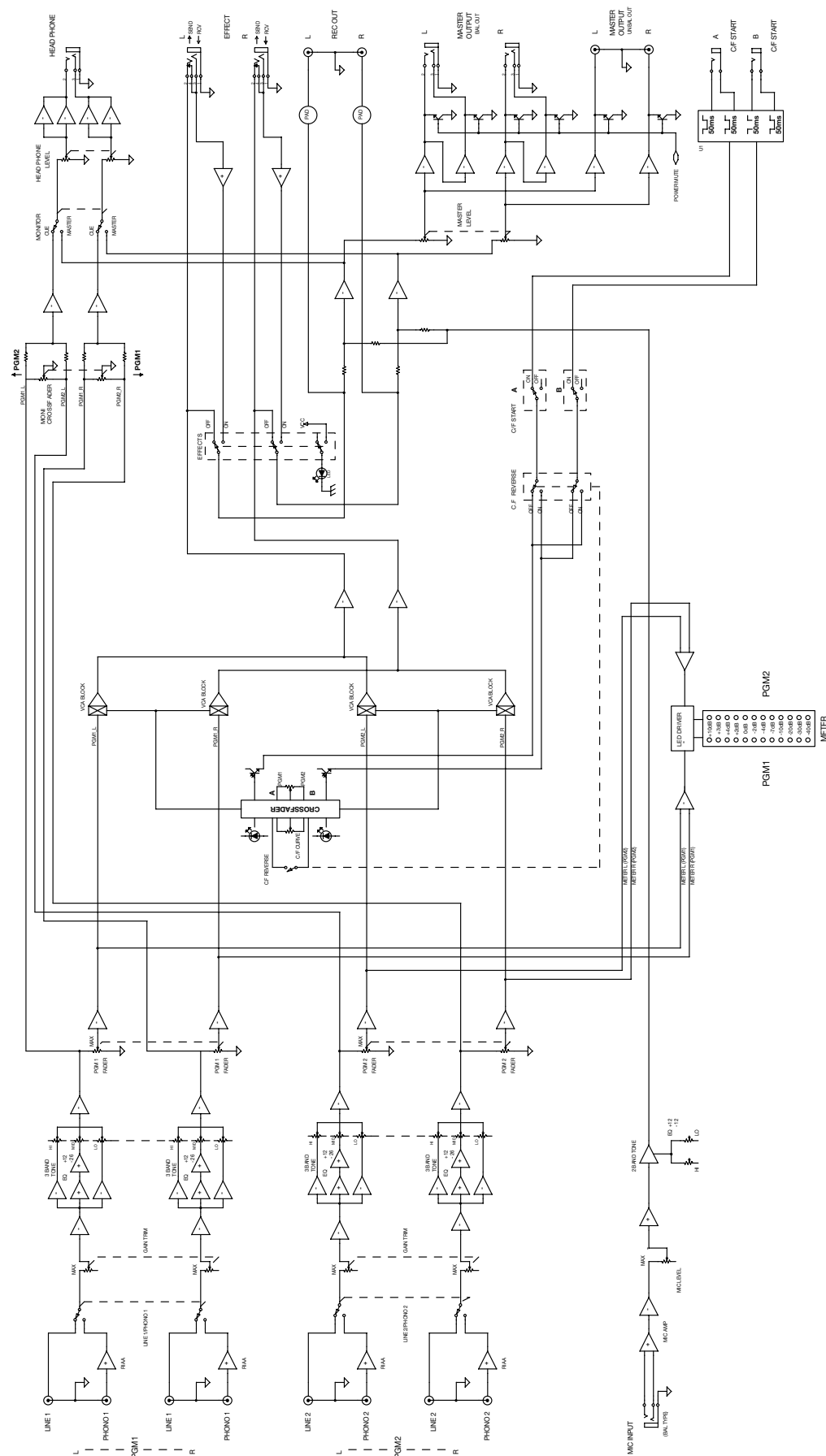
● All specifications subject to change without notice.

● 仕様は、製品の改善のため予告なく変更することがあります。



2. BLOCK DIAGRAM

ブロックダイアグラム



PARTS LIST SECTION

NOTES

- PC boards shown are viewed from parts side.
- Parts marked with * require longer delivery time.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in the manual.
- △ Parts marked with this sign are safety critical components. They must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.
- Parts of [] mark can be used only with the version designated.
[J]: JAPAN [US/C]: U.S.A./CANADA [K]: KOREA [E]: EUROPE
[UK]: U.K. [A]: AUSTRALIA

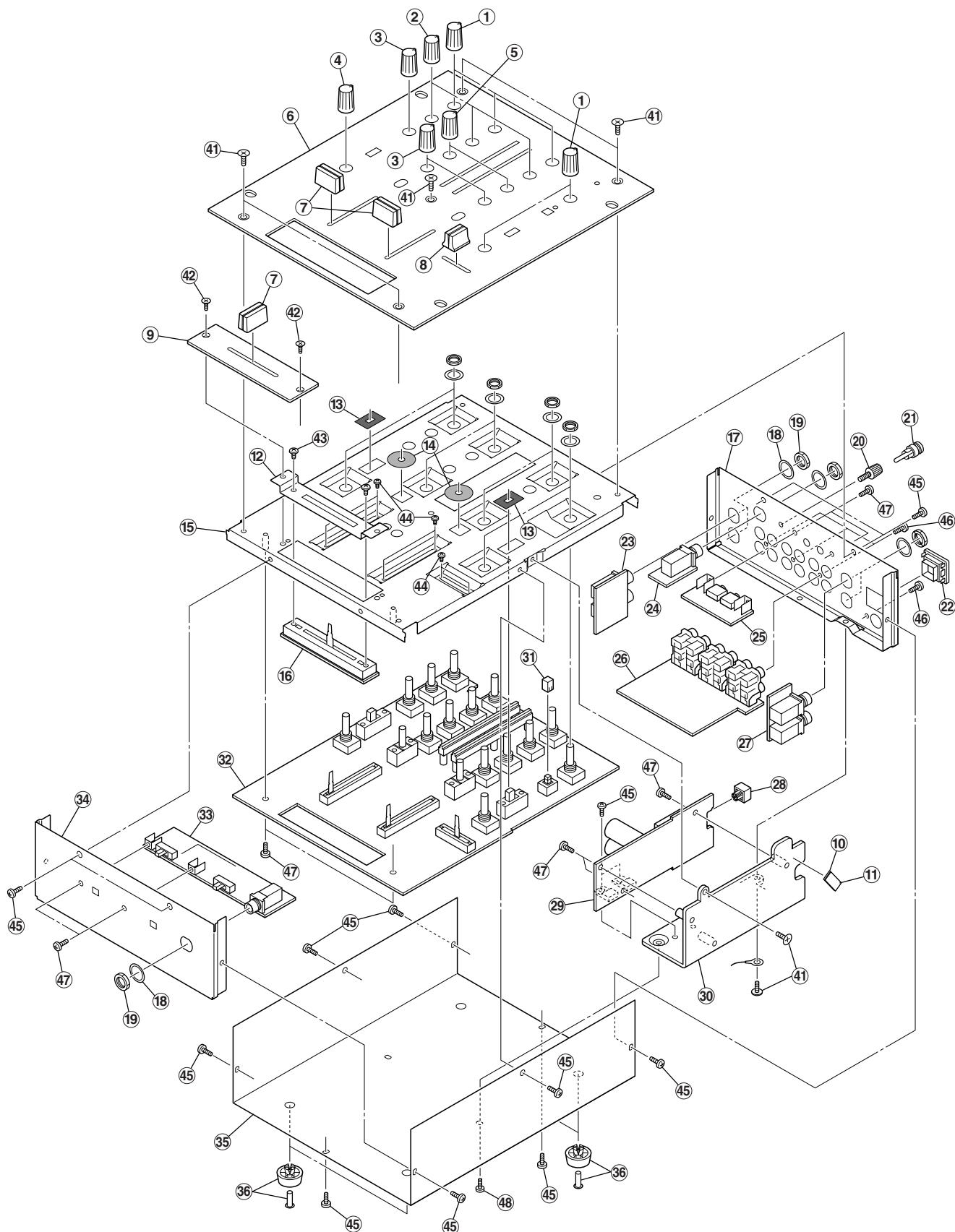
注 意

- プリント基板は部品面が示されています。
- *印の部品は納期が若干かかります。
あらかじめご了承ください。
- 分解図に部番のない部品及び品番のない部品は供給しません。
- 標準の抵抗、コンデンサーは省略してあります。
回路図を参照してください。
- △は安全重要部品です。
交換する時は必ずティアック指定の部品を使用してください。
- 仕向先
[J]: JAPAN [US/C]: U.S.A./CANADA [K]: KOREA [E]: EUROPE
[UK]: U.K. [A]: AUSTRALIA

3. EXPLODED VIEW AND PARTS LIST

分解図とパーツリスト

EXPLODED VIEW-1



EXPLODED VIEW-1

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
1- 1	M01443103A	KNOB, 12. 5 (RED)	
1- 2	M01443102A	KNOB, 12. 5 (BLUE)	
1- 3	M01443100A	KNOB, 12. 5 (GREEN)	
1- 4	M01443104A	KNOB, 12. 5 (WHITE)	
1- 5	M01443101A	KNOB, 12. 5 (ORANGE)	
1- 6	*M01441500B	PANEL, TOP	
1- 7	M01503500A	KNOB, SLIDE	
1- 8	M01441800A	KNOB SLIDER-20	
1- 9	*M01442600B	PANEL, CROSS FADER	
1-10	*3M0143900A	SPACER, PASTE 8X20X1	
1-11	3M0144000A	SPACER, 20X8X0. 2	
1-12	M01443000A	BRACKET, CROSS FADER	
1-13	M01443900A	SHEET, SLIDE	
1-14	M01443800B	SHEET, LEVEL	
1-15	*M01441700B	CHASSIS, TOP	
1-16		PCB ASSY, CROSSFADER	GATHER A PCB ASSY (Refer to page 8)
1-17	*M01441400A	PANEL, REAR	
1-18	*3M0131100A	PLAIN WASHER, M12 (BLK)	
1-19	3M0131000A	NUT, M12	
1-20	3E018700	GND TERMINAL, BT-01	
1-21	9144526210	RCA PLUG, SHORT	
1-22	M01510000A	ESCUTCHEON, POWER	
1-23		PCB ASSY, EFFECT	GATHER A PCB ASSY (Refer to page 9)
1-24		PCB ASSY, MIC	GATHER A PCB ASSY (Refer to page 8)
1-25		PCB ASSY, C/F START	GATHER A PCB ASSY (Refer to page 8)
1-26		PCB ASSY, IN/OUT	GATHER A PCB ASSY (Refer to page 8)
1-27		PCB ASSY, BALANCE	GATHER A PCB ASSY (Refer to page 8)
1-28	M01509800A	BUTTON, POWER	
1-29		PCB ASSY, POWER SW	GATHER A PCB ASSY (Refer to page 9)
1-30	*M01441900A	HEATSINK	
1-31	M01443201A	BUTTON, 6X6 (P-N63-A)	
1-32		PCB ASSY, MAIN	GATHER A PCB ASSY (Refer to page 8)
1-33		PCB ASSY, FRONT	GATHER A PCB ASSY (Refer to page 8)
1-34	*M01441600A	PANEL, FRONT	
1-35	*M01441300B	CASE, BOTTOM	
1-36	M01495900A	FOOT, 18XT10	
1-41	*3B0005100A	SCREW, DIFFERENCE 3X6. 9 (BLK)	
1-42	*3B0009106A	SCREW, FP M2. 6X6 (BLK)	
1-43	*3B0009004A	SCREW, BP M3X4 (BLK)	
1-44	*3B0009003A	SCREW, BP M2X3 (BLK)	
1-45	*3B0005760A	SCREW, BPB M3X6 (BLK)	
1-46	*3B0005708B	SCREW, BPB M3X8 (BLK)	
1-47	*3B0009006A	SCREW, BP M3X6 (BLK)	
1-48	*3B0009008A	SCREW, BP M2. 6X8 (BLK)	

4. PC BOARDS AND PARTS LIST

基板図とパーツリスト

GATHER A PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
	* 3E9539800A	PCB ASSY, GATHER A
J104, 105 J109	9143491001 E00732800A	PCB ASSY, BALANCE JACK, 064M WITH EARTHMETAL WIRE ASSY, 6P BAL
P110 VR602	3E007850 3R009580	PCB ASSY, CROSSFADER CONNECTOR, B 3B-PH-SM3-TB VR, SLIDE RS45N1 200KB
P503 J501, 502	M01510100A 3E001300 3E018350	PCB ASSY, C/F START BRACKET, PCB-A PLUG, S 4B-PH-K-S JACK, JY-3524L-01-020
C905 J106, 107 J108	3C002350 3E018330 E00732700A	PCB ASSY, EFFECT CC, YF 50V 0.10UF Z CERAM JACK, 064M-4 WITH EARTH WIRE ASSY, 6P EFF
D1, D2 J1 J500	M01510100A 3S002984 E00732900A 9143491001	PCB ASSY, FRONT BRACKET, PCB-A DIODE, 1SS355 WIRE ASSY, 9P C/F START JACK, 064M WITH EARTHMETAL
J504 Q1 Q2-Q5 S501, 502 U1	* E00732500A 3S000000 3S005844 3E018670 S00501400A	WIRE ASSY, 3P PHONE TR, 2SC1815GR TR, DTC143EUA SW, SLIDE SSSU121700 IC, WP2K020-V5
D101, 201 J101 J102 J103	3S002984 * E00731900A * E00732000A * E00732100A	PCB ASSY, IN/OUT DIODE, 1SS355 WIRE ASSY, 6P-4P IN1 WIRE ASSY, 6P-4P IN2 WIRE ASSY, 4P OUT
J111-113 J701 Q109, Q209 U101, U301	9144525700 * E00732200A 3S001540 3S004630	RCA JACK, WSP-244V1-01 WIRE ASSY, 4P POWER1 TR, 2SC2878B IC, NJM2041D

GATHER A PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
J801 J802	9143491001 E00732400A	PCB ASSY, MIC JACK 064M WITH EARTHMETAL WIRE ASSY, 3P MIC
D102, 103 D125 D125, 900 D202, 203	3S002984 3S005500 3M0130600A 3S002984	PCB ASSY, MAIN DIODE, 1SS355 LED, YEL (3D1A) SLR-342YY-3F HOLDER, LED LEDS-12 DIODE, 1SS355
D605-608 D900 D901-902 D901-902 J110	3S002984 3E016360 3S005850 3M0130400A E00732600A	DIODE, 1SS355 LED, SLR-342VR-3F (RED) LED, ARRAY LA12B-1/8G41-S1 HOLDER, LED LEDH-8 WIRE ASSY, 3P FADER
LD1, 2 LD3, 4 LD1-4 P101 P102	3E018720 3E018730 * 3M0130500A * 3E007860 * 3E018790	SENSOR, IR LIR55283 SENSOR, PT LPT55283 HOLDER, LED LEDS-6.5 CONNECTOR, B 4B-PH-SM3-TB CONNECTOR, B4B-PH-SM3 RED
P103 P108 P109 P502 P504	* 3E018800 * 3E007880 3E018500 * 3E007870 3E018480	CONNECTOR, B4B-PH-SM3 BLK CONNECTOR, B 6B-PH-SM3-TB PLUG, B6BPH-SM3RED CONNECTOR, B 5B-PH-SM3-TB PLUG, B3BPH-SM3RED
P702 P802 Q101-104 Q105-108 R10, 30	* 3E007890 3E018490 3S000701 3S001540 3R004600	CONNECTOR, B 7B-PH-SM3-TB PLUG, B3BPH-SM3BLK TR, 2SA854R TP TR, 2SC2878B VR SEMI-FIXED RH0615-22K
R525, 526 R533, 534 SW101, 102 SW103 SW501	 3R009520  3R009520 9135041900 3E018610 3E018650	RD, NON-F 1/4W 47 OHM P=10 RD, NON-F 1/4W 47 OHM P=10 LEVER SW, LBC22B-17K SW, PUSH SPEA122800 SW, SLIDE SSSB022200
SW601 U103-107 U111 U112 U113, 114	3E018660 3S005354 3S005354 3S005320 3S005354	SW, SLIDE SSSB041600 IC, NJM4558M-TE3 (8P) IC, NJM4558M-TE3 (8P) IC, BA6822S IC, NJM4558M-TE3 (8P)
U116, 117 U118 U204, 205 U303- 307 U404, 405	3S005354 3S005354 3S005354 3S005354 3S005354	IC, NJM4558M-TE3 (8P) IC, NJM4558M-TE3 (8P) IC, NJM4558M-TE3 (8P) IC, NJM4558M-TE3 (8P) IC, NJM4558M-TE3 (8P)

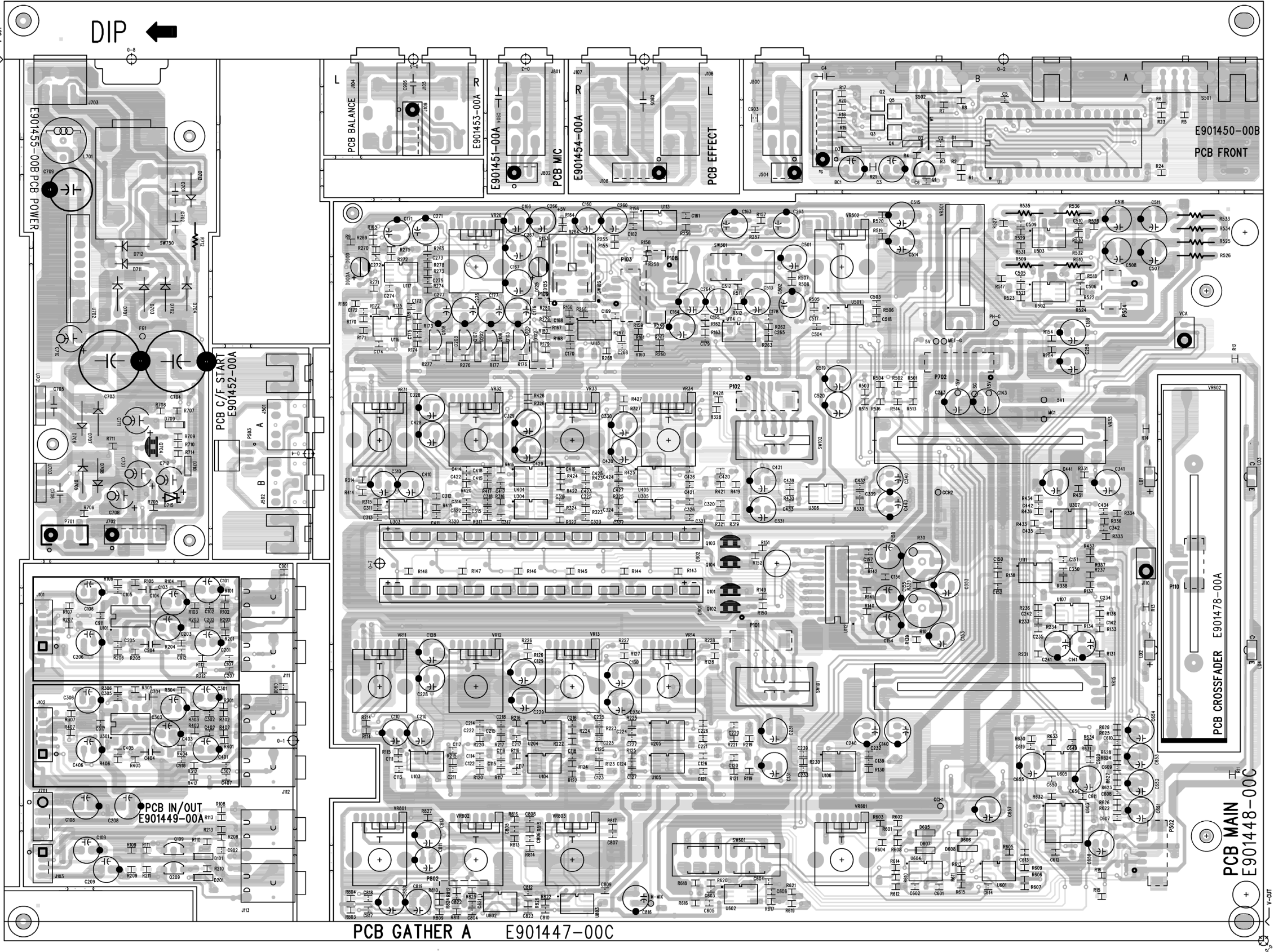
GATHER A PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
		PCB ASSY, MAIN
U501	3S005354	IC, NJM4558M-TE3 (8P)
U502, 503	3S005364	IC, NJM4580M
U601, 602	3S005344	IC, NJM072BM
U603	3S005384	IC, SSM2164S
U604, 605	3S005344	IC, NJM072BM
U802, 803	3S005354	IC, NJM4558M-TE3 (8P)
VR11, 31	3R009610	VR, ROTAR RK14K1240219-TK
VR12-14	3R009540	VR, ROTARY RK14K124A219-TK
VR15, 35	3R009670	VR, SLIDE RS4511D14 20KB*2
VR26	3R009610	VR, ROTAR RK14K1240219-TK
VR32-34	3R009540	VR, ROTARY RK14K124A219-TK
VR501	3R009660	VR, SLIDE RF20112K4104-TK
VR502	3R009620	VR, ROTAR RK14K1240019-TK
VR601	3R009530	VR, ROTARY RK14K1240233-TK
VR801	3R009620	VR, ROTAR RK14K1240019-TK
VR802, 803	3R009540	VR, ROTARY RK14K124A219-TK

GATHER A PCB ASSY

REF. NO.	PARTS NO.	DESCRIPTION
		PCB ASSY, POWER SW
C703, 704	△ 3C001160	CE, 35V 2200UF M
C709	△ 3C000780	CE, 35V 220UF M
D701-706	△ 3S000031	DIODE, 1N4003-TR
D707, 708	△ 3S002611	DIODE, BARRIER RB-100A T31
D709	3S002984	DIODE, 1SS355
D710	3S002984	DIODE, 1SS355
D711, 712	△ 3S000031	DIODE, 1N4003-TR
D713	△ 3S000241	DIODE, 1SS133 T-77
D715	3S004291	ZDI, MTZ J 15B T-77
FG1	E00733000A	WIRE ASSY, GND
J702	E00732300A	WIRE, 7P POWER 2
J703	△ 3E018470	CONNECTOR, MNI-DIN 6P MD-S
P701	3E001160	PLUG, 4P B4B-EH-A
Q704	3S000020	TR, 2SA1015GR
SW750	△ 3E009140	SW, PUSHU SDKE3
U701	△ 3S005540	IC, NJM7815FA
U702	△ 3S005530	IC, BP5221
U703	△ 3S005550	IC, NJM7915FA

GATHER A PCB (MAIN PCB, IN/OUT PCB, CROSSFADER PCB, FRONT PCB, MIC PCB, C/F START PCB, BALANCE PCB, EFFECT PCB, POWER PCB)

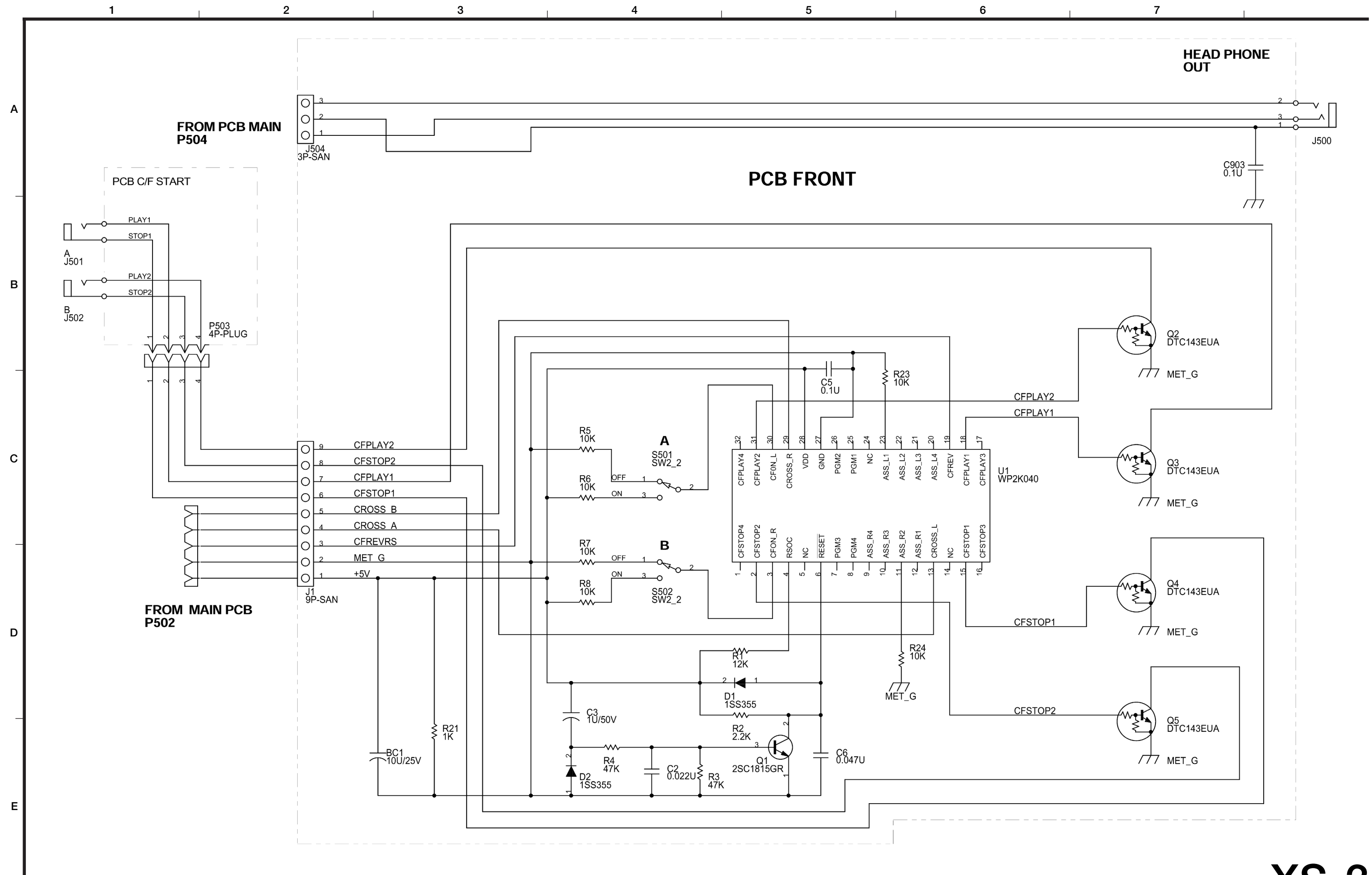


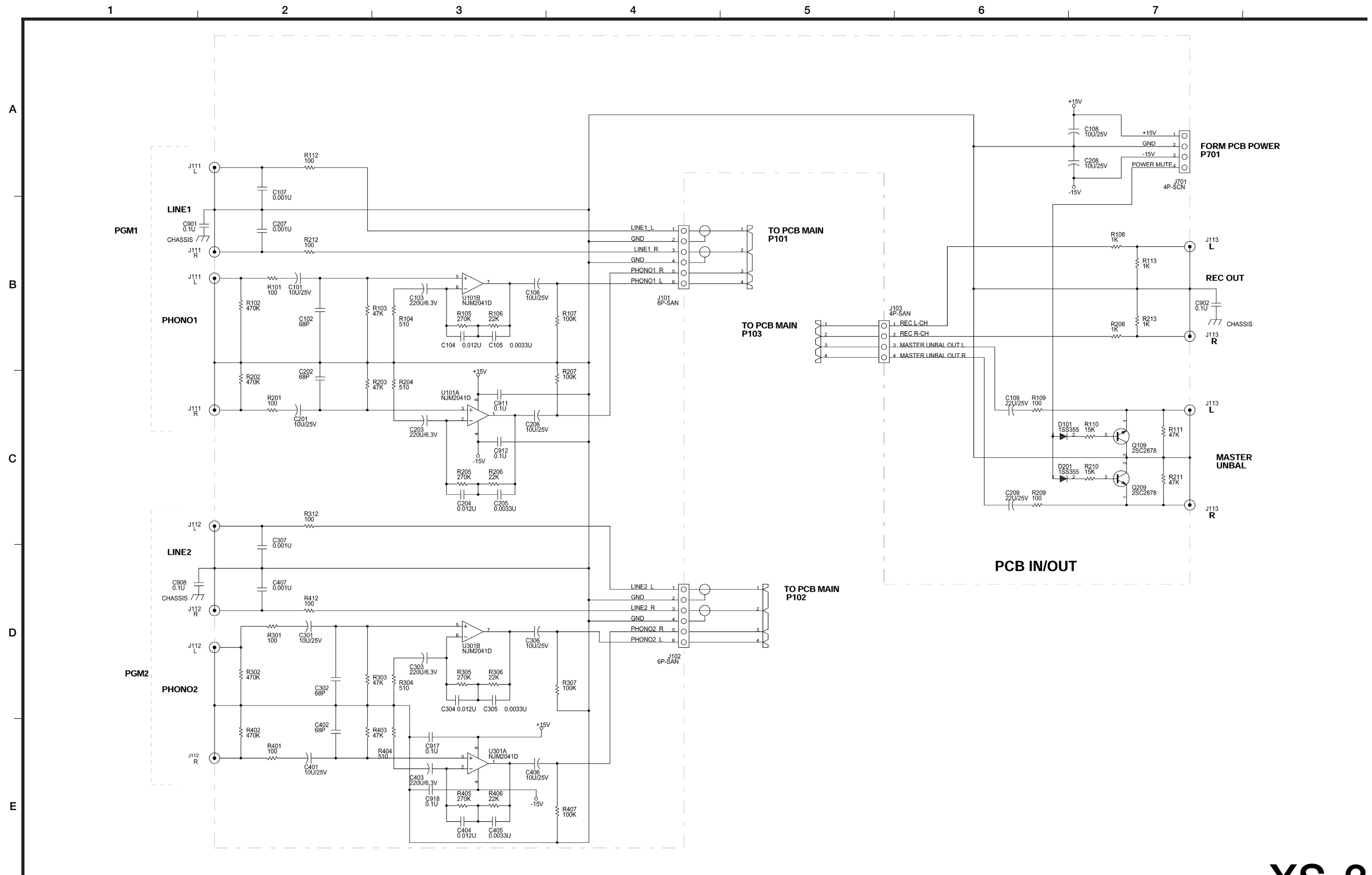
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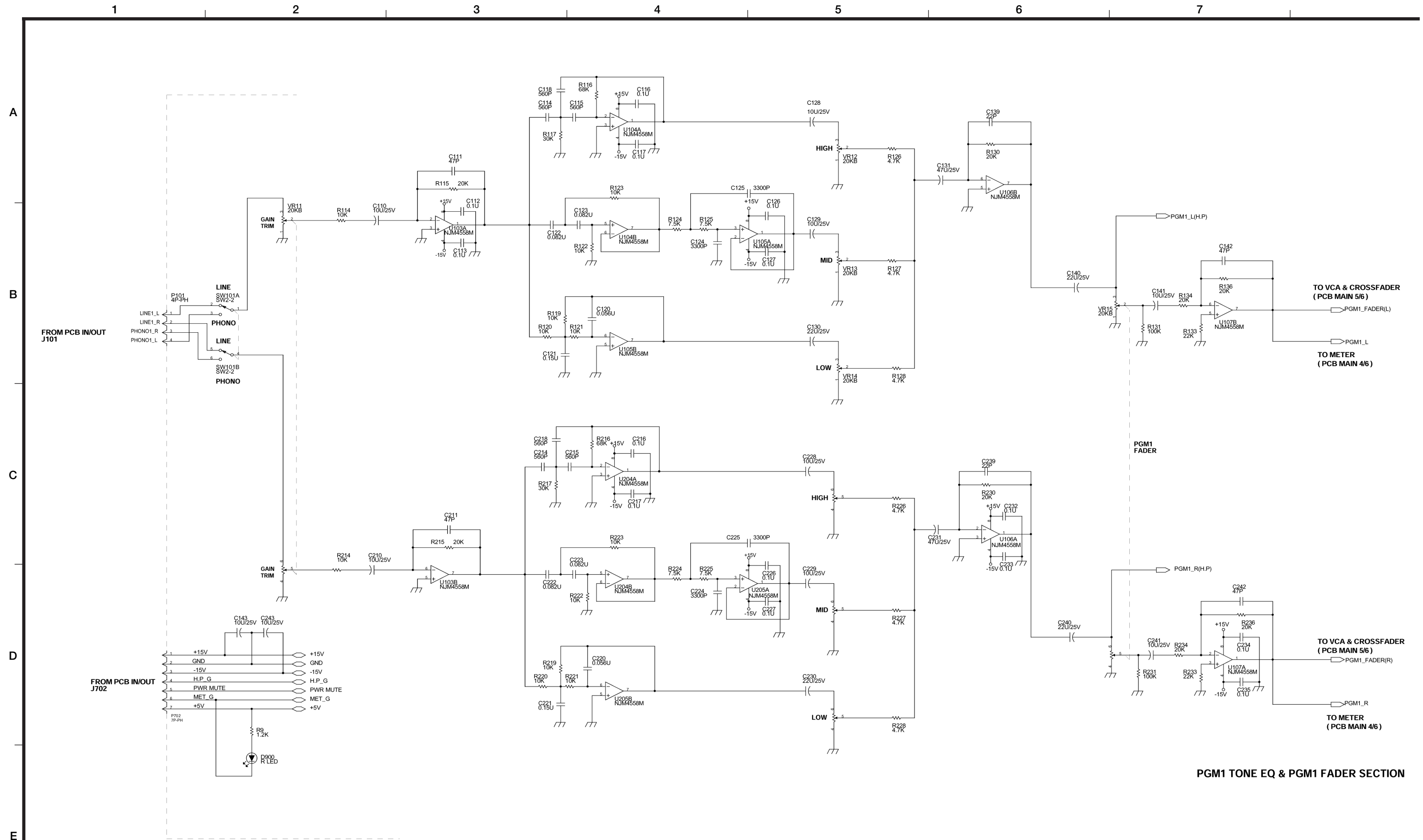
付属品

INCLUDED ACCESSORIES

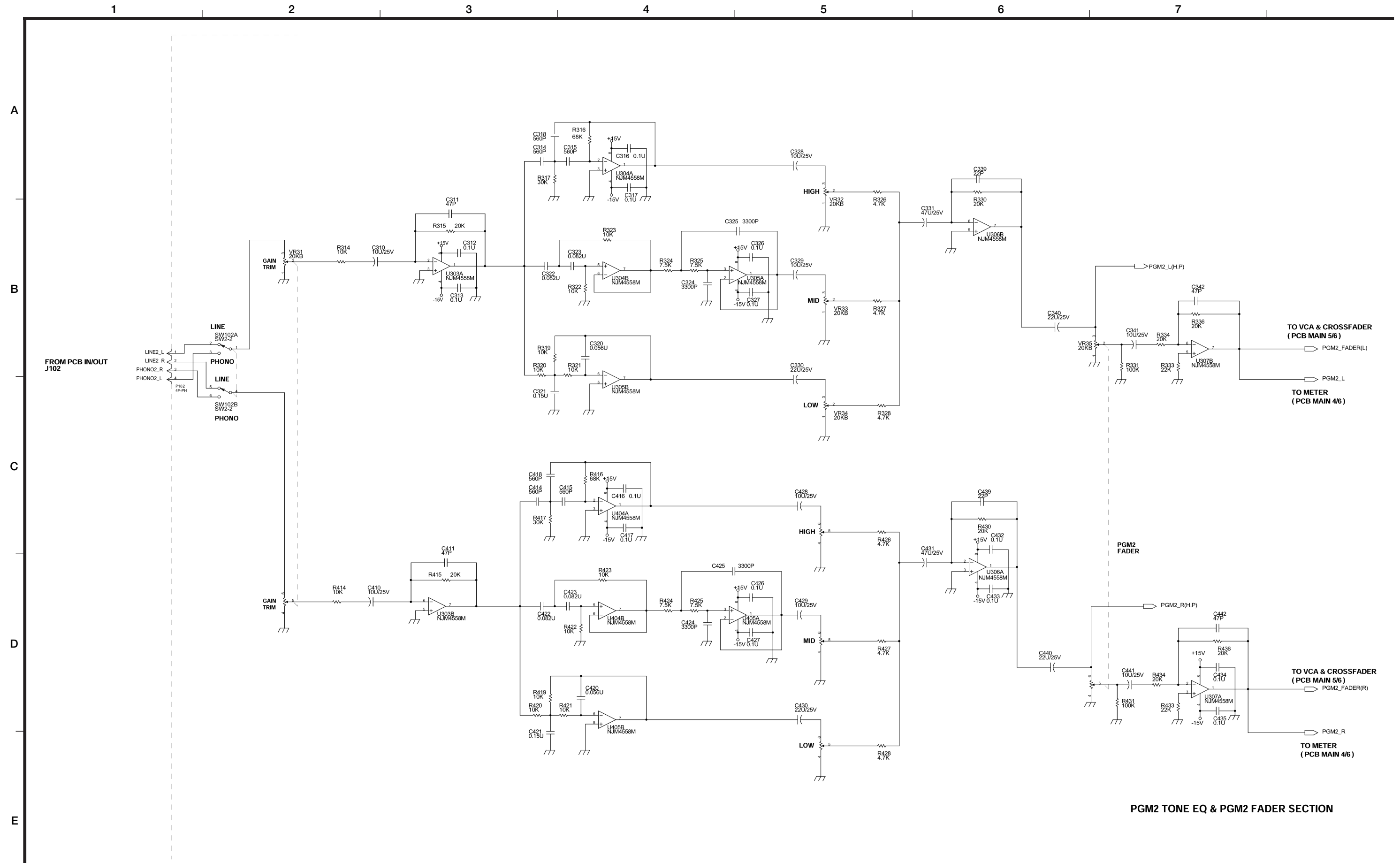
REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	D00675000B	OWNER'S MANUAL, JAPANESE [J]	
	D00675100B	OWNER'S MANUAL, ENGLISH [EXCEPT J]	
△	E00728501A	AC ADAPTOR, PS-P3X [J]	
△	E00728504A	AC ADAPTOR, PS-P3X [K]	
△	E00728520A	AC ADAPTOR, PS-P3X [US/C]	
△	E00728540A	AC ADAPTOR, PS-P3X [A]	
△	E00728550A	AC ADAPTOR, PS-P3X [E]	
△	E00728560A	AC ADAPTOR, PS-P3X [UK]	



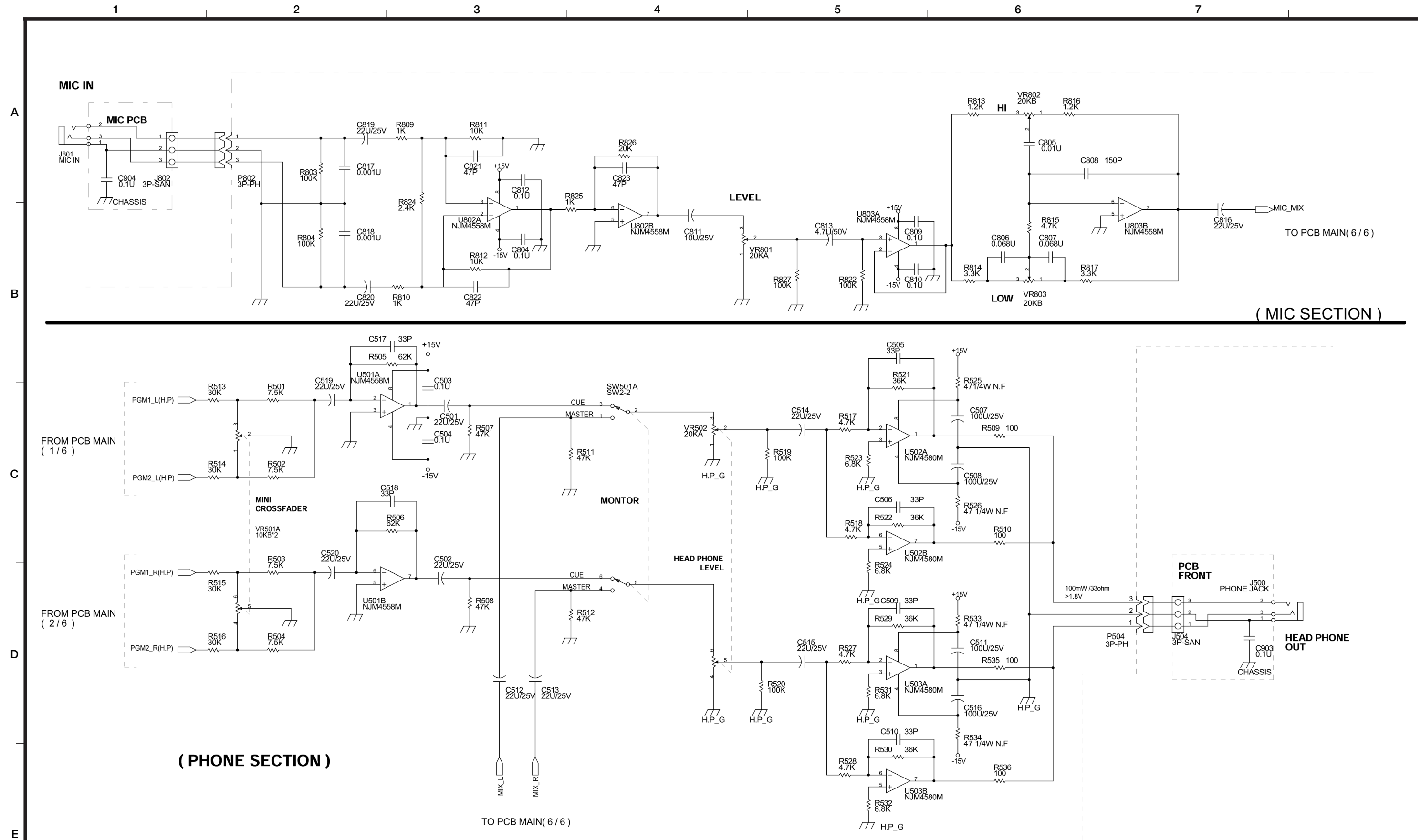


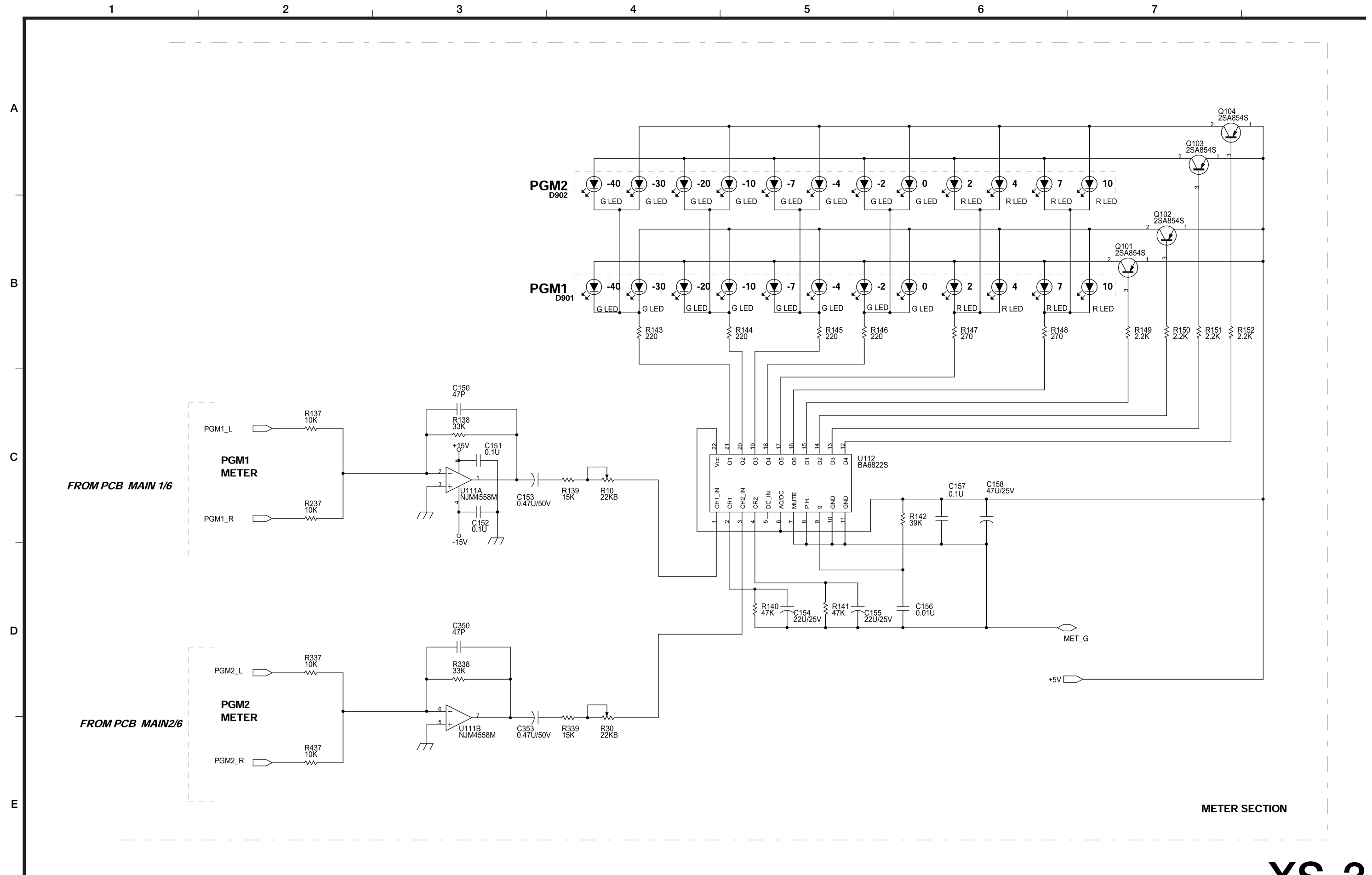


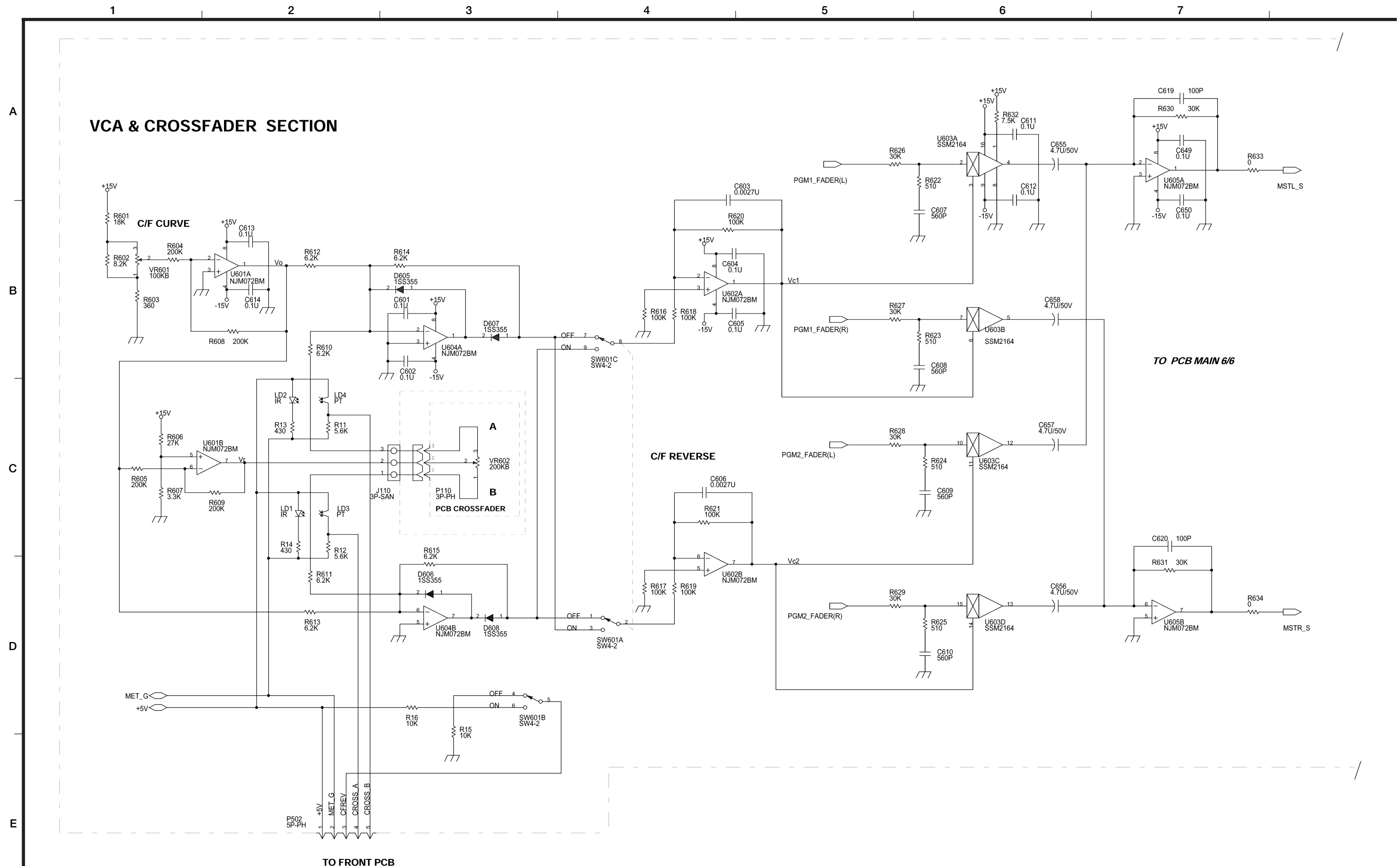
PGM1 TONE EQ & PGM1 FADER SECTION

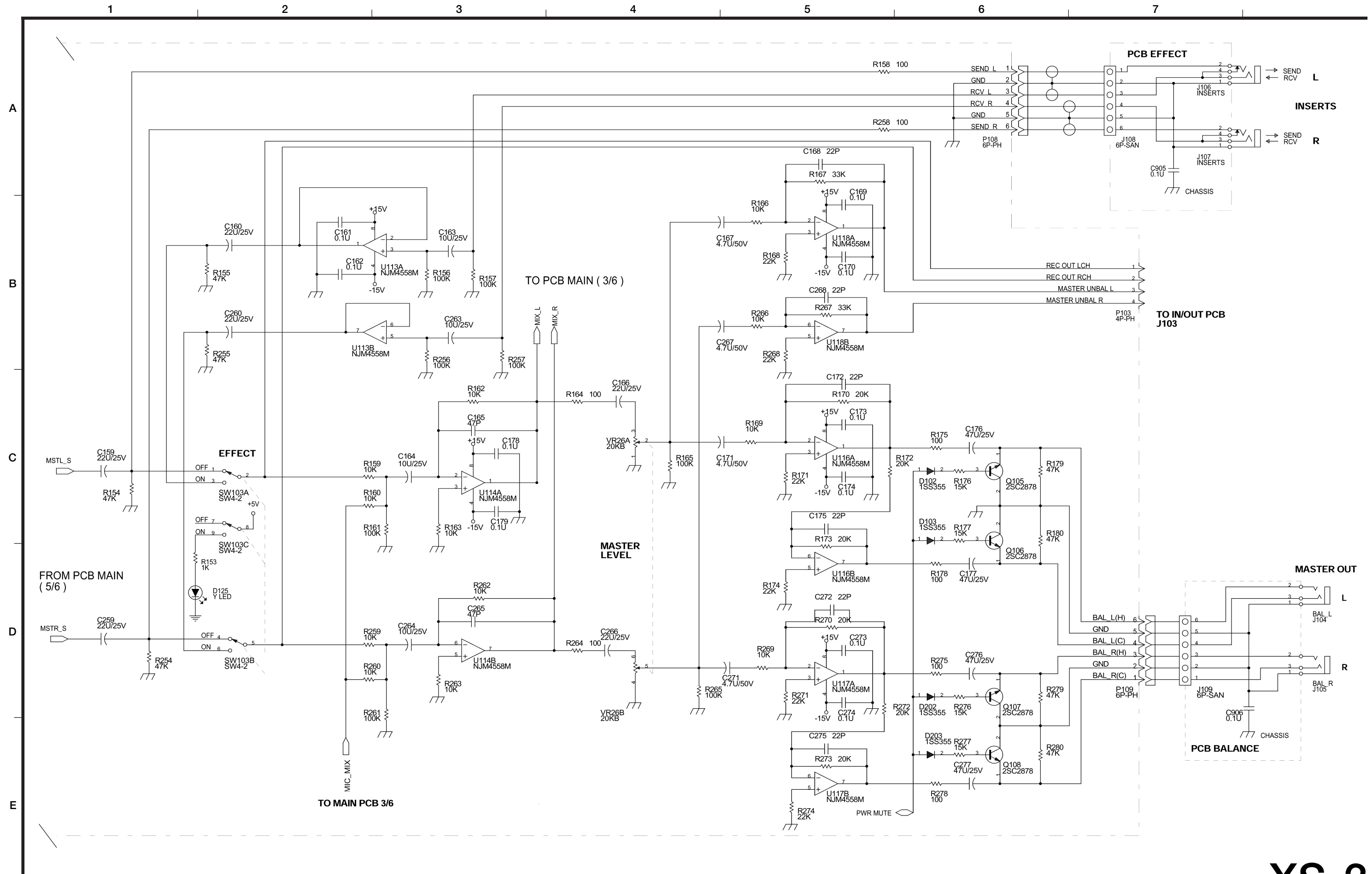


PGM2 TONE EQ & PGM2 FADER SECTION











B

C

D

E

TEAC**TECHNICAL INFORMATION****TASCAM XS-3, Cross Fader Noise**

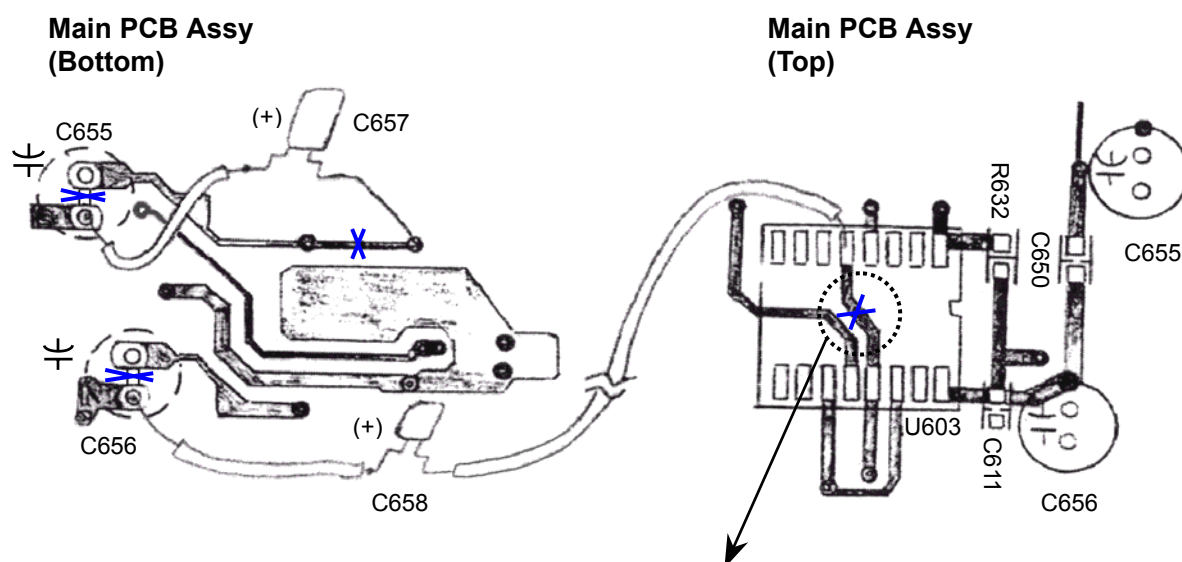
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DATE 20th June 2003

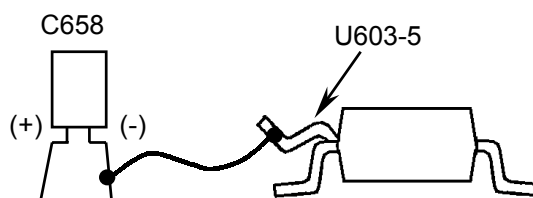
In very rare occasions, a small noise can be heard when operating the cross fader.
To eliminate the noise, 4 pcs of electrolytic capacitor have been added (VCA OUT) on the products with S/No. 0040001 and higher.

C655-C658 P/No. 3C018280 4.7 μ F/50V

- Cut foil pattern at 4 spots.
- Mount C655, C656, C657 and C658. (There are patterns for C655/C656 originally.)



Foil pattern is running under U603. When servicing, no need to cut this pattern but connect C658 (-) to U603-5 that is lifted up.



On the products with S/No. 0100030 and higher, Main PCB Assy has been changed to incorporate above changes in the PCB. (Main PCB Assy is included in the Gather PCB Assy.)

Gather PCB Assy P/No. E901447-00B → P/No. E901447-00C