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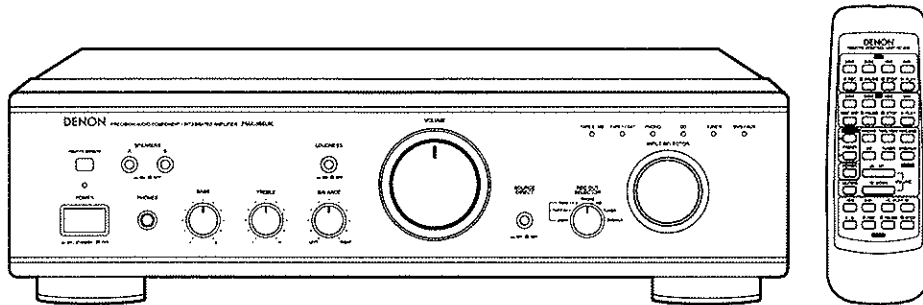
Hi-Fi Integrated Stereo Amplifier

SERVICE MANUAL

**SUPPLEMENT for
U.K. Model**

MODEL PMA-355UK

INTEGRATED STEREO AMPLIFIER



This service manual only includes those pages whose contents are different from those in the model PMA-655R. (The number of those pages are shown on upper left or right of the page.)
For servicing, refer to the service manual of PMA-655R already issued at the same time.

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• Some illustrations using in this service manual are slightly different from the actual set.

NIPPON COLUMBIA CO., LTD.

SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Before returning the unit to the customer, make sure you make either (1) a leakage current check or (2) a line to chassis resistance check. If the leakage current exceeds 0.5 milliamps, or if the resistance from chassis to either side of the power cord is less than 460 kohms, the unit is defective.

Page 2

SPECIFICATIONS

Power Amplifier Section

Rated Output Power:

Both channel driven

8 Ω /ohms Load (20 Hz to 20 kHz, T.H.D. 0.7 %)

50 W + 50 W

4 Ω /ohms Load (DIN, 1 kHz, T.H.D. 0.7 %)

85 W + 85 W

Total Harmonic Distortion:

(-3 dB at rated output, 8 Ω /ohms) (1 kHz)

0.05%

PRE AMPLIFIER SECTION

Rated Output:

150 mV

(Recout Terminal)

Input Sensitivity / Input Impedance:

PHONO:

2.5 mV / 47 k Ω /kohms

CD, TUNER, DVD/AUX, TAPE-1/DAT, TAPE-2/MD:

150 mV / 47 k Ω /kohms

RIAA Deviation:

PHONO:

20 Hz to 20 kHz \pm 0.5 dB

OVERALL CHARACTERISTICS

SN Ratio (IHF A Network):

PHONO: 78 dB (at 5 mV input)

(Input terminals short-circuited)

SOURCE DIRECT: ON

CD, TUNER, DVD/AUX, TAPE-1/DAT, TAPE-2/MD: 98 dB

Tone Control Adjustable Range:

BASS:

100 Hz \pm 8 dB

TREBLE:

10 kHz \pm 8 dB

LOUDNESS:

100 Hz \pm 6 dB

10 kHz \pm 6 dB

OTHERS

Power Supply:

AC 230 V, 50 Hz

Power Consumption:

185 W (IEC)

2 W max. (STANDBY)

Dimensions:

434 (W) \times 121 (H) \times 338 (D) mm

Net Mass:

7.0 kg

REMOTE CONTROL UNIT (RC-843)

Remote control system:

Infrared pulse system

Power supply:

3 V DC, Two size R6P ("AA") dry cell batteries

External dimensions:

54 (W) \times 155 (H) \times 29 (D) mm

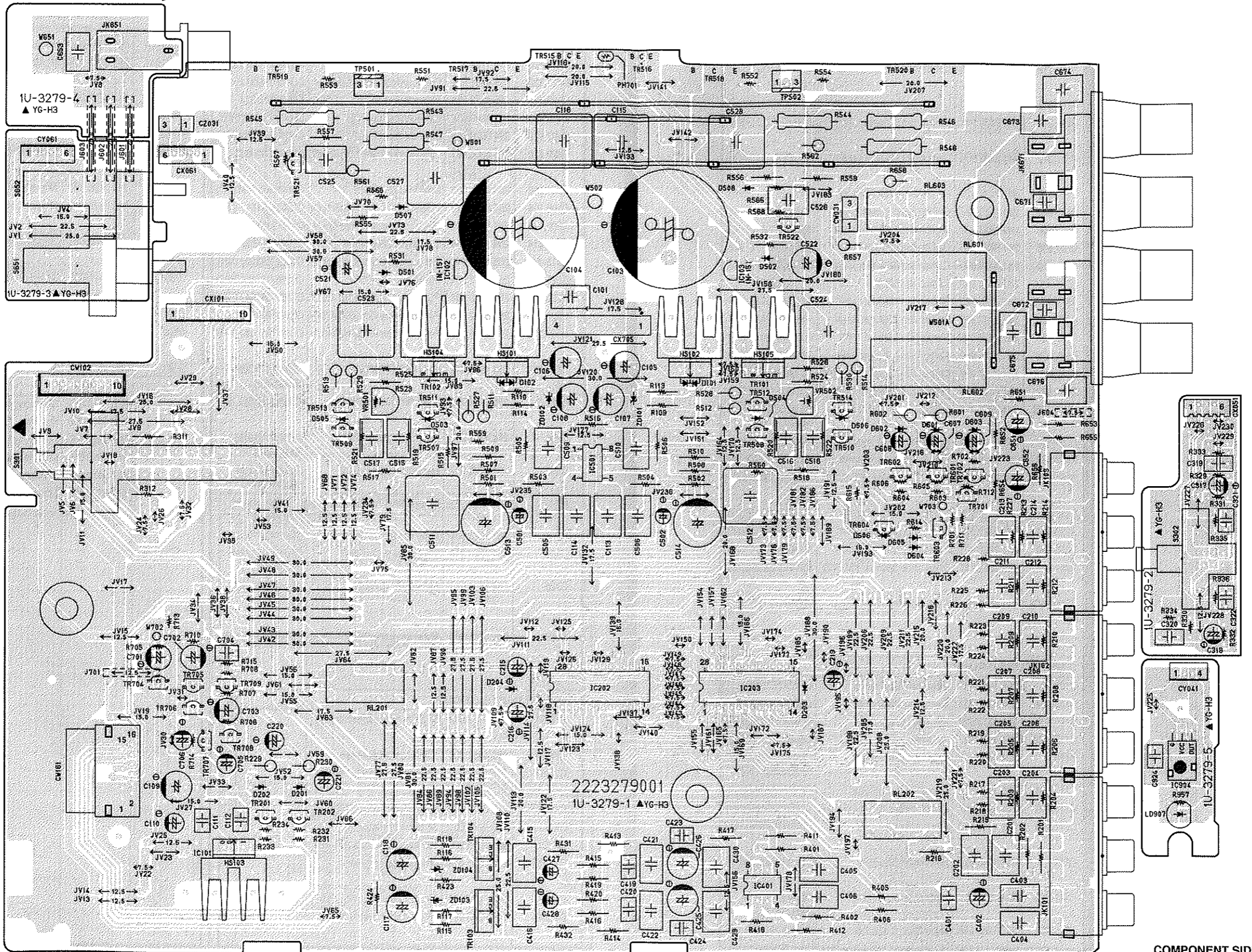
Mass:

100 g (including batteries)

1U-3279 MAIN P.W.B. UNIT Ass'y

1 2 3 4 5 6 7 8

A
B
C
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E



2223279001
1U-3279-1 ▲ YG-H3

COMPONENT SIDE

PARTS LIST OF P.W.B. UNIT
1U-3279 MAIN P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUCTORS GROUP			
IC101	263 0801 004	IC NJM7812FA (S)	
IC102,103	268 0073 905	IC ICP-N15	
IC202	262 2487 009	IC TC9163AN	
IC203	262 2488 008	IC TC9164AN	
IC401	263 0680 005	IC NJM5532DD	
IC501	263 0680 005	IC NJM5532DD	
IC904	499 0290 007	Remocon sensor GP1U271X	
TR101	274 0136 012	Transistor 2SD1913 (R/S)	
TR102	272 0093 010	Transistor 2SB1274 (R/S)	
TR103	274 0136 012	Transistor 2SD1913 (R/S)	
TR104	272 0093 010	Transistor 2SB1274 (R/S)	
TR201,202	273 0303 910	Transistor 2SC1740S (S)	
TR507,508	273 0235 923	Transistor 2SC1841 (E/F)	
TR509-512	271 0131 924	Transistor 2SA988 (E/F)	
TR513,514	273 0235 923	Transistor 2SC1841 (E/F)	
TR521,522	273 0235 923	Transistor 2SC1841 (E/F)	
TR601,602	273 0303 910	Transistor 2SC1740S (S)	
TR603,604	269 0067 901	Transistor RN1205 (2.2K-47K)	
TR701,702	273 0303 910	Transistor 2SC1740S (S)	
TR704-706	273 0303 910	Transistor 2SC1740S (S)	
TR707	271 0192 905	Transistor 2SA933S (S)	
TR708	273 0303 910	Transistor 2SC1740S (S)	
TR709	271 0131 924	Transistor 2SA988 (E/F)	
D101	276 0681 000	Diode FMG-22S	
D102	276 0682 009	Diode FMG-22R	
D201-204	276 0432 903	Diode 1SS270A	
D501-508	276 0432 903	Diode 1SS270A	
D601-606	276 0432 903	Diode 1SS270A	
ZD101,102	276 0645 907	Zener diode MTZJ18A	
ZD103,104	276 0644 982	Zener diode MTZJ15A	
LD907	393 9539 908	LED SLR-342VRTF7LM	

Ref. No.	Part No.	Part Name	Remarks
RESISTORS GROUP			
R109,110	241 2425 967	Carbon film 22kohm 1/4W	RD14B2E223J (PSNB)
R113-116	241 2422 944	Carbon film 1kohm 1/4W	RD14B2E102J (PSNB)
R117,118	241 2423 927	Carbon film 2.2kohm 1/4W	RD14B2E222J (PSNB)
R201,202	241 2428 980	Carbon film 470kohm 1/4W	RD14B2E474J (PSNB)
R215,216	241 2420 988	Carbon film 220ohm 1/4W	RD14B2E221J (PSNB)
R311,312	241 2425 909	Carbon film 12kohm 1/4W	RD14B2E123J (PSNB)
R501,502	241 2427 923	Carbon film 100kohm 1/4W	RD14B2E104J (PSNB)
R503,504	241 2423 927	Carbon film 2.2kohm 1/4W	RD14B2E222J (PSNB)
R505,506	241 2427 923	Carbon film 100kohm 1/4W	RD14B2E104J (PSNB)
R507,508	241 2421 990	Carbon film 620ohm 1/4W	RD14B2E621J (PSNB)
R509,510	241 2428 980	Carbon film 470kohm 1/4W	RD14B2E474J (PSNB)
R511-514	241 2316 908	Carbon film 620ohm 1/4W (FR)	RD14B2E621GFRS
R515-518	241 2425 925	Carbon film 15kohm 1/4W	RD14B2E153J (PSNB)
R519-522	241 2427 965	Carbon film 150kohm 1/4W	RD14B2E154J (PSNB)
R523,524	241 2425 912	Carbon film 13kohm 1/4W	RD14B2E133J (PSNB)
R525,526	241 2424 900	Carbon film 4.7kohm 1/4W	RD14B2E472J (PSNB)
R527-530	241 2377 989	Carbon film 150ohm 1/4W (NB)	RD14B2E151JNBS
R531,532	241 2427 923	Carbon film 100kohm 1/4W	RD14B2E104J (PSNB)
R543-548	244 2067 010	Metal oxide 0.1ohm 2W (NB)	RS14B3D0R1JNBF (RSFKL)
R555,556	241 2425 941	Carbon film 18kohm 1/4W	RD14B2E183J (PSNB)
R557,558	241 2425 967	Carbon film 22kohm 1/4W	RD14B2E223J (PSNB)
R561,562	244 2043 937	Metal oxide 10ohm 1W (NB)	RS14B3A100JNBS (S)
R651,652	241 2425 909	Carbon film 12kohm 1/4W	RD14B2E123J (PSNB)
R653,654	241 2422 928	Carbon film 820ohm 1/4W	RD14B2E821J (PSNB)
R655,656	241 2427 923	Carbon film 100kohm 1/4W	RD14B2E104J (PSNB)
R657,658	244 2052 931	Metal oxide 390ohm 1W (NB)	RS14B3A391JNBS (S)
VR501,502	211 6075 024	Semi fixed resistor 4.7kohm	V06PB472 (CERMET)
CAPACITORS GROUP			
C101	256 1042 903	Metallized 0.1μF/250V	CF93A2E104K
C103,104	254 4519 709	Electrolytic 8200μF/56V	CE04W==822M (DL)
C105,106	254 4313 918	Electrolytic 10μF/50V	CE04W1H100M (ASF)
C107-109	254 4569 937	Electrolytic 220μF/25V	CE04W1E221M (RE3)
C110	254 4524 943	Electrolytic 1μF/50V	CE04W1H010M (SMG/RE3)
C113,114	256 1059 954	Metallized 0.47μF/50V	CF93A1H474J (JL)
C115,116	255 4235 057	Polypropylene film 0.1μF/100V	CQ93P2A104J (NH)
C117,118	254 4313 918	Electrolytic 10μF/50V	CE04W1H100M (ASF)
C219	254 4313 921	Electrolytic 22μF/50V	CE04W1H220M (ASF)
C317,318	254 4524 901	Electrolytic 0.1μF/50V	CE04W1H0R1M (SMG/RE3)
C319,320	255 1265 978	Mylar film 0.022μF/50V	CQ93M1H223J (B)

Ref. No.	Part No.	Part Name	Remarks	Q'ty
C321,322	255 1265 936	Mylar film 0.01μF/50V	CQ93M1H103J (B)	
C403-406	255 4235 918	Polypropylene film 100pF/100V	CQ93P2A101J (NH)	
C415,416	255 4235 918	Polypropylene film 100pF/100V	CQ93P2A101J (NH)	
C419,420	255 1264 966	Mylar film 3300pF/50V	CQ93M1H332J (B)	
C421,422	255 4201 926	Polypropylene film 330pF/50V	CQ93P1H331J	
C423,424	255 4202 941	Polypropylene film 1000pF/50V	CQ93P1H102J	
C425,426	254 4569 937	Electrolytic 220μF/25V	CE04W1E221M (RE3)	
C427,428	254 5028 008	Solid electrolytic 1μF/30V	CA04H==010M (SC)	
C429,430	255 4204 981	Polypropylene film 0.01μF/50V	CQ93P1H103J	
C501,502	254 5028 008	Solid electrolytic 1μF/30V	CA04H==010M (SC)	
C505,506	255 4235 918	Polypropylene film 100pF/100V	CQ93P2A101J (NH)	
C509,510	255 4244 909	Polypropylene film 10pF/630V	CQ93P2J100K (DAMG)	
C513,514	254 4580 709	Electrolytic 220μF/50V	CE04W1H221M (ROB)	
C515-518	255 4242 943	Polypropylene film 33pF/100V	CQ93P2A330J (NH)	
C521,522	254 4557 936	Electrolytic 10μF/50V	CE04W1H100M (RFS)	
C523,524	255 4235 057	Polypropylene film 0.1μF/100V	CQ93P2A104J (NH)	
C525,526	255 4202 941	Polypropylene film 1000pF/50V	CQ93P1H102J	
C527,528	255 4235 057	Polypropylene film 0.1μF/100V	CQ93P2A104J (NH)	
C651,652	254 4525 913	Electrolytic 47μF/50V	CE04W1H470M (SMG/RE3)	
C653	255 1264 908	Mylar film 1000pF/50V	CQ93M1H102J (B)	
C701	254 4541 942	Electrolytic 100μF/25V	CE04W1E101M (SMG/RE3)	
C702	254 4533 947	Electrolytic 330μF/6.3V	CE04W0J331M (SMG/RE3)	
C703	254 4524 972	Electrolytic 4.7μF/50V	CE04W1H4R7M (SMG/RE3)	
C704	255 1265 936	Mylar film 0.01μF/50V	CQ93M1H103J (B)	
C705	254 4524 914	Electrolytic 0.22μF/50V	CE04W1HR22M (SMG/RE3)	
C706	254 4524 943	Electrolytic 1μF/50V	CE04W1H010M (SMG/RE3)	
C924	255 1265 936	Mylar film 0.01μF/50V	CQ93M1H103J (B)	
OTHER PARTS GROUP				Q'ty
CW031	203 5114 008	3P SCN-SCN connector cord		1
CW102	205 1081 005	10P FJ connector base		1
CW161	205 1056 027	16P connector socket (TKC-V)		1
CX051	205 0885 008	5P connector socket (TUC-P)		1
CX061	205 0343 061	6P connector base (KR-PH)		1
CX101	205 0375 000	10P connector base (KR-PH)		1
CX705	205 0087 042	4P wrapping terminal		1
CY041	205 0343 045	4P connector base (KR-PH)		1
CY061	205 0343 061	6P connector base (KR-PH)		1

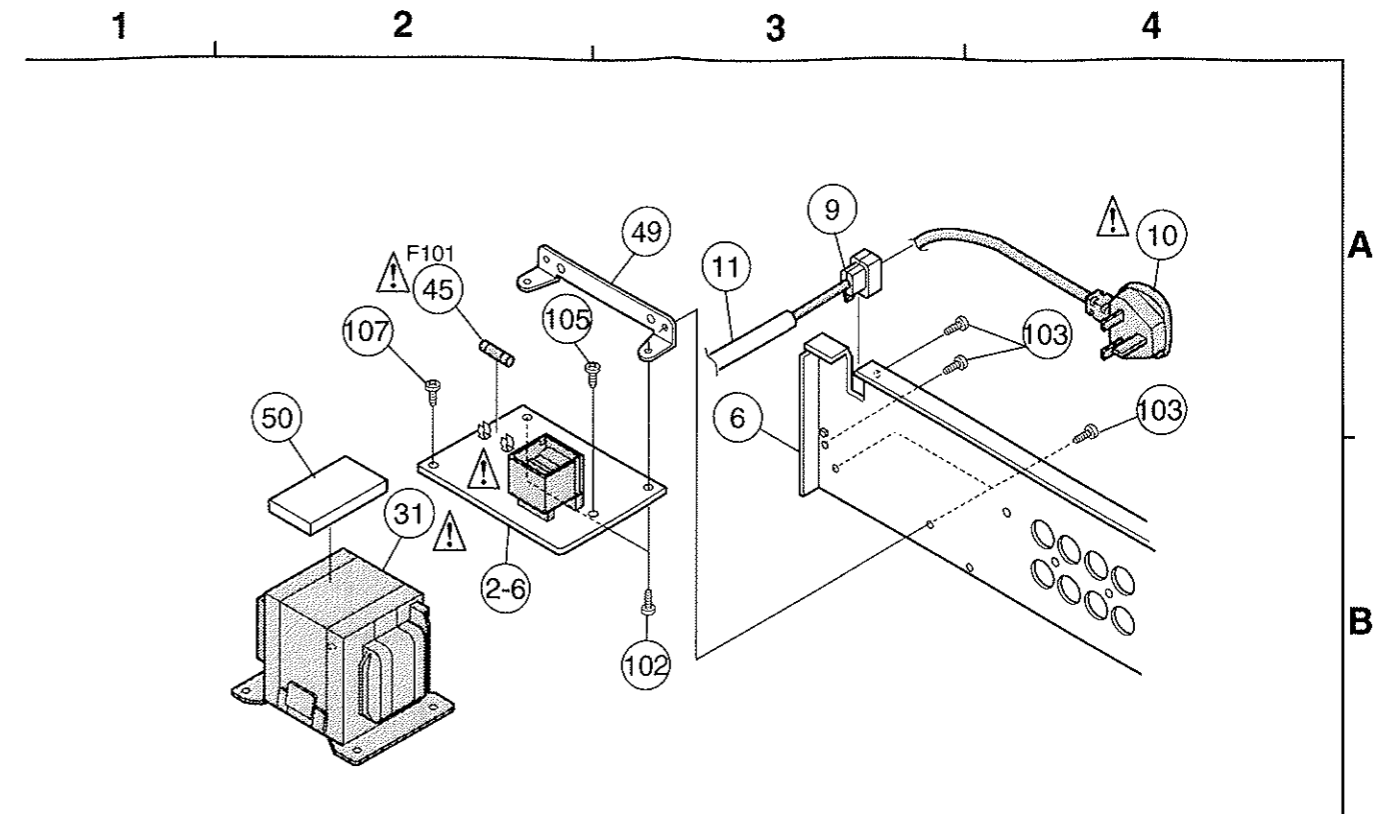
Ref. No.	Part No.	Part Name	Remarks	Q'ty
JK101-103	204 8543 006	6P pin jack		3
JK651	204 8341 004	Headphone jack		1
JK671	205 0472 013	8P SP terminal (EAEK)		1
RL201,202	214 0127 003	Relay (RY-12W)		2
RL601,602	214 0195 006	Relay (FTR-F1)		2
RL603	214 0127 003	Relay (RY-12W)		1
S301	212 1130 006	1P push switch		1
S302	212 1175 003	1P push switch		1
S651	212 4690 006	2P push switch		1
TP501,502	205 0190 036	3P NH connector base		2
W501	203 0601 024	1P SIN cord Ass'y		1
W502	203 0501 027	1P SIN contact Ass'y		1
W651	203 0501 027	1P SIN contact Ass'y		1
	412 4191 024	Common plate (22-2)		1
	412 4605 002	Bus bar		1
	412 4606 030	Common plate (30-3)		1
	412 4606 056	Common plate (30-5)		1
	417 0476 007	Radiator		3
	471 3304 028	Screw 3 × 8 CBS-B		3

PARTS LIST OF P.W.B. UNIT
1U-3248A F. SW. P.W.B. UNIT ASS'Y

Ref. No.	Part No.	Part Name	Remarks
RESISTORS GROUP			
VR301	211 0915 009	Variable resistor 100kohm	Chg. VOLUME
VR303	211 0834 025	Variable resistor 100kohm	Chg. BASS
VR304	211 0834 009	Variable resistor 30kohm	Chg. TREBLE
CAPACITORS GROUP			
C309,310	256 1058 926	Metallized 0.039μF/50V	CF93A1H393J (JL) Chg.
C311,312	254 4524 914	Electrolytic 0.22μF/50V	CE04W1HR22M (SMG/RE3) Chg.
C313,314	255 1265 936	Mylar film 0.01μF/50V	CQ93M1H103J (B) Chg.
C315,316	256 1058 939	Metallized 0.047μF/50V	CF93A1H473J (JL) Chg.
C323,324	253 4537 982	Ceramic 56pF/50V	CC45SL1H560J Chg.
OTHER PARTS GROUP			
F108	206 1075 043	Fuse 2.5A	Del.
FF108	202 0040 909	Fuse clip	Del.
FH108	202 0040 909	Fuse clip	Del.
W301	203 0501 027	1P SIN connector Ass'y	Del.
	513 2784 053	Fuse label	Del. for F108

Note: Chg. = changed, Del. = deleted

EXPLODED VIEW Page 18~19, 23



PARTS LIST OF EXPLODED VIEW

Ref. No.	Part No.	Part Name	Remarks	Q'ty
1	1U-3279	Main P.W.B. unit Ass'y	Chg.	1
1-1		Main unit		
1-2		Loud. unit		
1-3		SP. SW. unit		
1-4		H/P unit		
1-5		LED UNIT		
2	1U-3248A	F. SW. P.W.B. unit Ass'y	Chg.	1
2-1		F. SW. unit		
2-2		REC. SEL. SW. unit		
2-3		U-COM. unit		
2-4		Tone unit		
2-5		VOL. unit		
2-6		AC unit		
2-7		P. SW. unit		
6	105 1337 116	Back panel	Chg.	1
Δ 10	206 2132 008	AC cord with plug	Chg.	1
17	274 0190 003	Transistor 2SD2083(P/Y)	Chg. TR517,518	2
18	272 0152 003	Transistor 2SB1383(P/Y)	Chg. TR519,520	2
25	144 2693 061	Front panel Ass'y	Chg.	1
Δ 42	203 3975 003	AC outlet (3P)	Del. CX704	1
Δ 46	206 1075 043	Fuse 2.5A	Del. F108	1
49	412 4436 006	P.W.B. bracket	Add.	1
50	461 1012 014	Rubber foam	Add.	1

Ref. No.	Part No.	Part Name	Remarks	Q'ty
SCREWS & NUTS				
102	473 7005 002	Screw 3 × 10 CBTS (S)-Z	Chg.	15
103	473 7015 018	Screw 3 × 8 CBTS (S)-B	Chg.	11
107	473 8007 038	Cup screw 3 × 14	Chg.	5
108	477 0064 107	Fixing screw	Chg.	8

Note: Chg. = changed, Del. = deleted, Add. = added

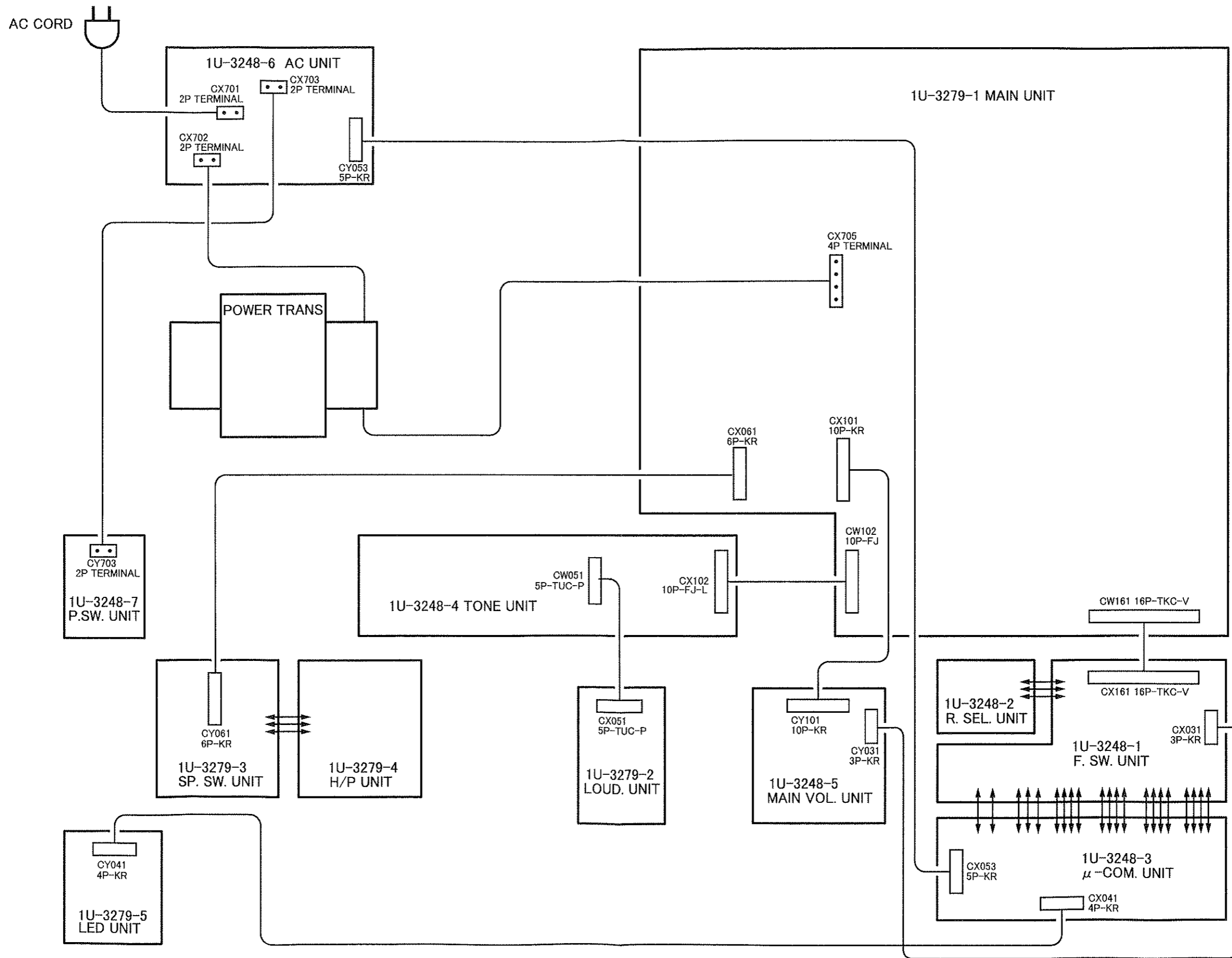
PARTS LIST OF PACKING & ACCESSORIES

Ref. No.	Part No.	Part Name	Remarks	Q'ty
202	511 3568 007	Instruction manual (EK)	Chg.	1
209	501 2059 015	Carton case	Chg.	1
212	517 1416 007	EK POS label	Chg.	2
★ 216	509 9120 006	Spacer carton	Add.	1
★ 217	502 0898 035	Pad	Add.	1

Note: Chg. = changed, Add. = added

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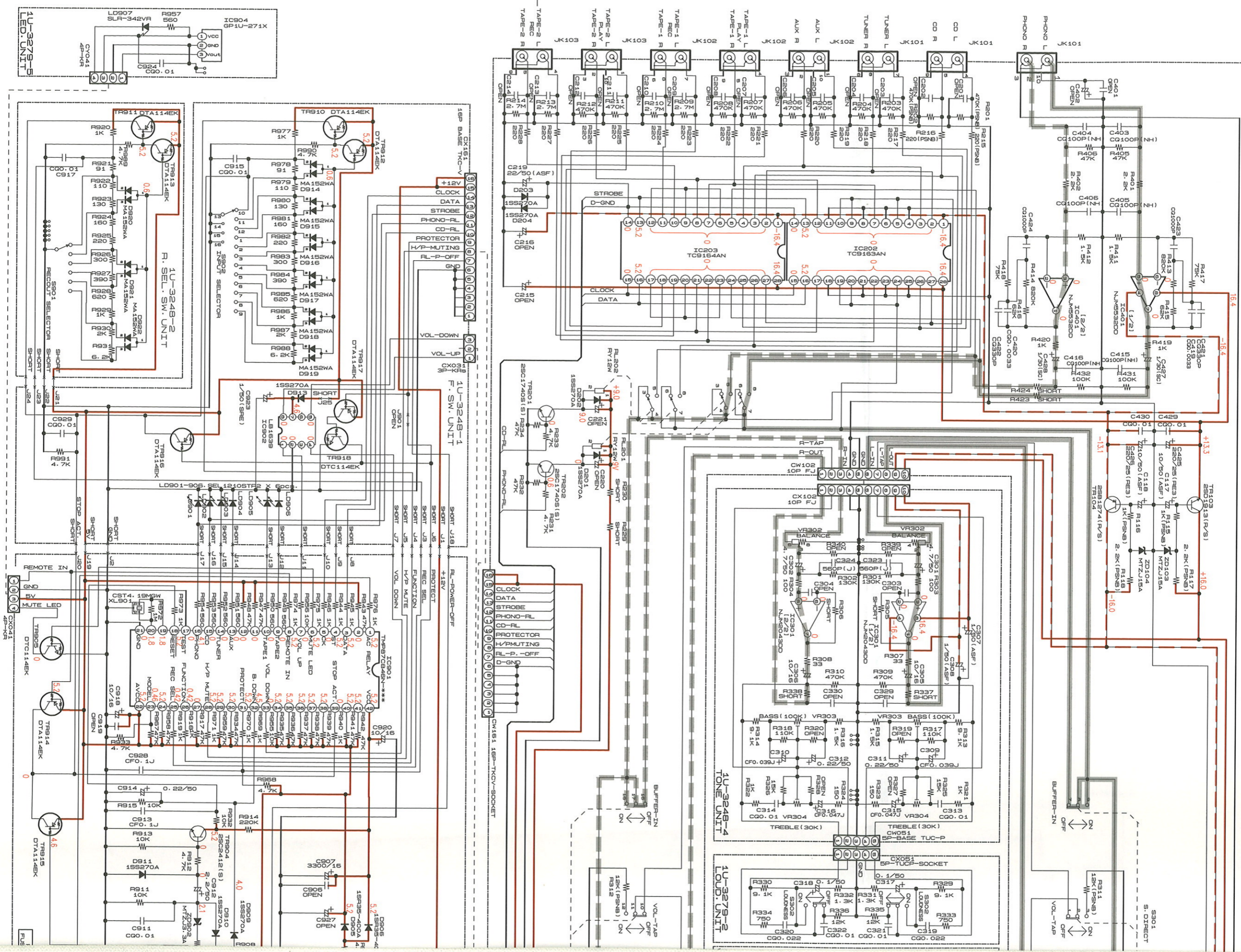
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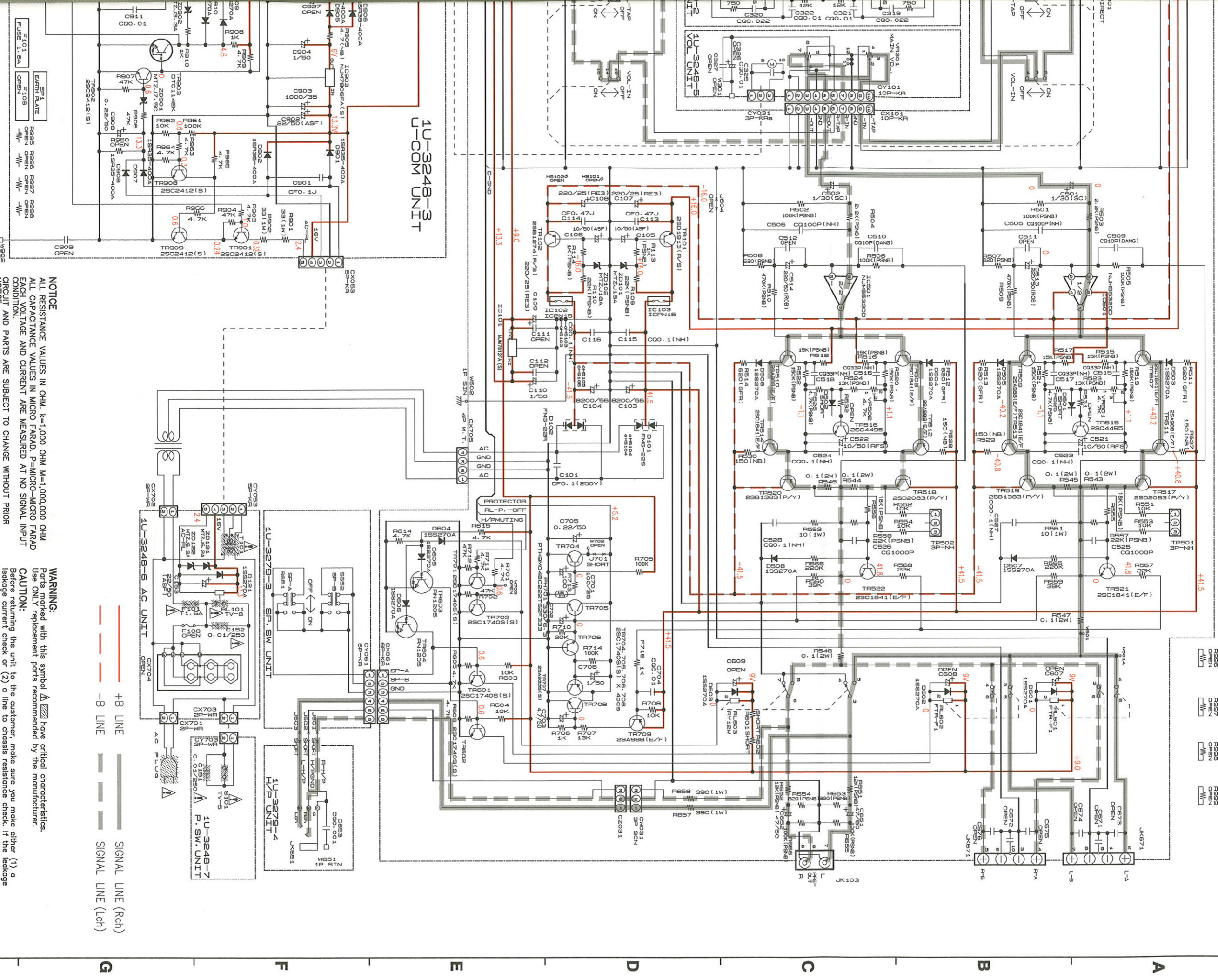
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6

1U-3279-1 MAIN UNIT





NOTICE
 ALL RESISTANCE VALUES IN OHM, k=1,000 OHM M=1,000,000 OHM
 ALL CAPACITANCE VALUES IN MICRO FARAD, P=MICRO-MICRO FARAD
 EACH VOLTAGE AND CURRENT ARE MEASURED AT NO SIGNAL INPUT
 CONDITION.
 CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR
 NOTICE.

WARNING:
 Parts marked with this symbol Δ have critical characteristics.
 Use ONLY replacement parts recommended by the manufacturer.
CAUTION:
 Before returning the unit to the customer, make sure you make either (1) a
 leakage current check or (2) a line to chassis resistance check. If the leakage
 current exceeds 0.5 milliamps, or if the resistance from chassis to either side
 of the power cord is less than 460 kohms, the unit is defective.
WARNING:
 DO NOT return the unit to the customer until the problem is located and
 corrected.

SCHEMATIC DIAGRAM
 1U-3279 MAIN UNIT
 1U-3248 U-COM UNIT