AKAI SERVICE MANUAL

STEREO GRAPHIC EQUALIZER

EA-G30
MODEL EA-G90

THIS MANUAL IS ALSO APPLICABLE TO BOTH SILVER AND BLACK PANEL MODELS

I. SPECIFICATIONS

1. MODEL EA-G30

CENTER FREQUENCY	100 Hz/330 Hz/1 kHz/3.3 kHz/10 kHz
FREQUENCY CONTROL RANGE	±12 dB
RATED OUTPUT LEVEL	1 V
GAIN (FLAT POSITION)	0 dB
INPUT IMPEDANCE	47 kohms
OUTPUT IMPEDANCE	500 ohms
T.H.D. (FLAT POSITION)	0.02%
FREQUENCY RESPONSE	20 Hz to 50 kHz ±1 dB
S/N (IHF-A) (FLAT POSITION/ROUNDING INPUT)	95 dB
MAX. INPUT VOLTAGE	7 V
CHANNEL CROSSTALK (1 kHz, GROUNDING INPUT)	70 dB
POWER REQUIREMENT	100V, 50/60 Hz for Japan 120V, 60 Hz for USA and Canada 220V, 50 Hz for Europe except UK 240V, 50 Hz for UK and Australia 110V–120V/220V–240V, 50/60 Hz switchable for other countries.
DIMENSIONS	440 x 80 x 225 mm (17.3 x 3.1 x 4.4 inches)
WEIGHT	3.2 kg (7.0 lbs)

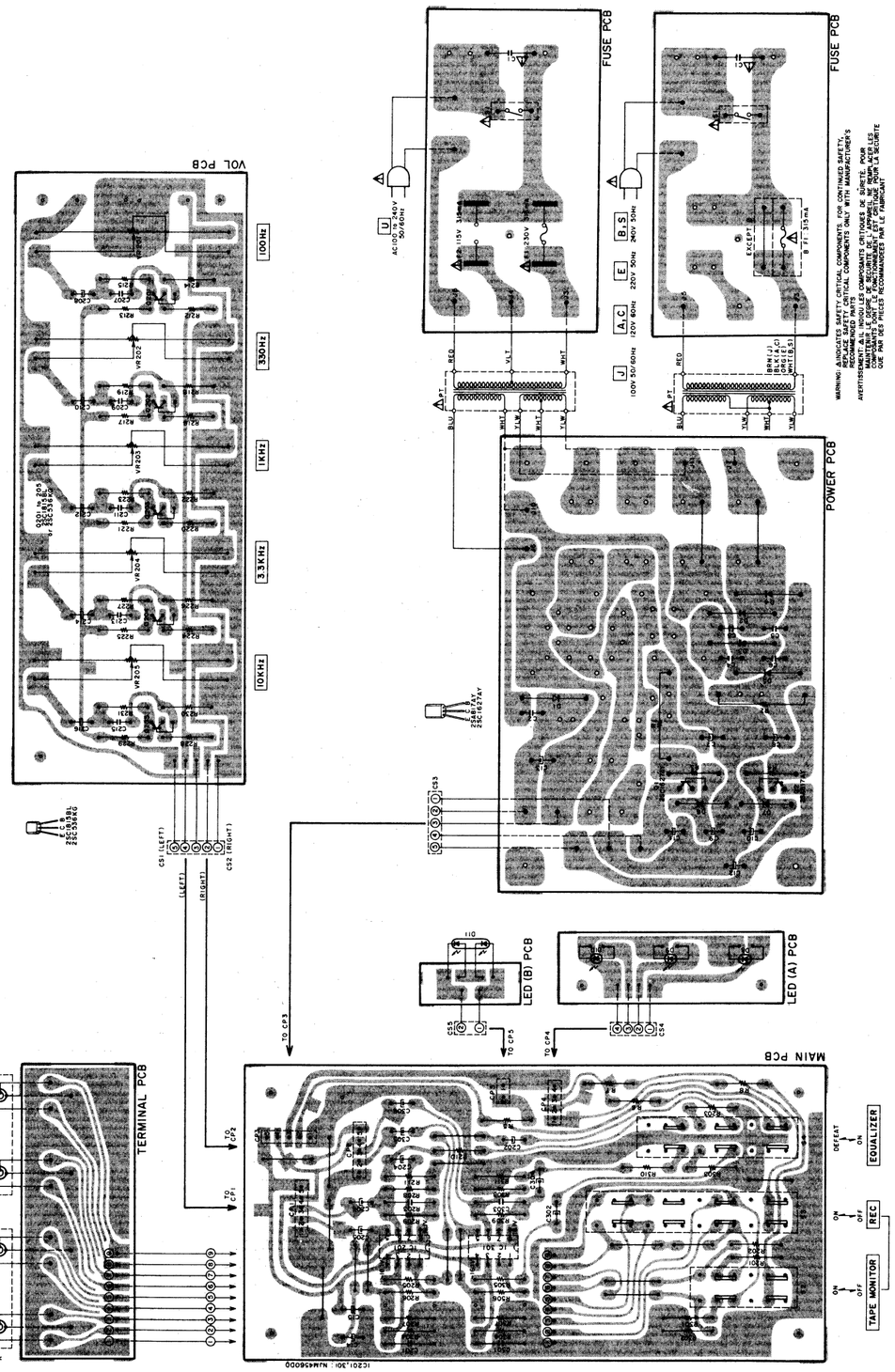
2. MODEL EA-G90

CENTER FREQUENCY	16 Hz/31.5 Hz/63 Hz/125 Hz/250 Hz/500 Hz/ 1 kHz/2 kHz/4 kHz/8 kHz/16 kHz/32 kHz
FREQUENCY CONTROL RANGE	±12 dB/± 6 dB (switchable)
RATED OUTPUT LEVEL	1 V
GAIN (FLAT POSITION)	0 dB
INPUT IMPEDANCE	47 kohms
OUTPUT IMPEDANCE	330 ohms
T.H.D. (FLAT POSITION)	0.005%
FREQUENCY RESPONSE	10 Hz to 20 kHz ±0.5 dB 20 kHz to 100 kHz ±1.5 dB
S/N (IHF-A) (FLAT POSITION/ROUNDING INPUT)	105 dB
MAX. INPUT VOLTAGE	8 V
CHANNEL CROSSTALK (1 kHz, GROUNDING INPUT)	70 dB
POWER REQUIREMENT	100V, 50/60 Hz for Japan 120V, 60 Hz for USA and Canada 220V, 50 Hz for Europe except UK 240V, 50 Hz for UK and Australia 110V/120V/220–240V, 50/60 Hz internally switchable for other countries.
DIMENSIONS	440 x 120 x 303 mm (17.3 x 4.7 x 11.9 inches)
WEIGHT	3.5 kg (7.7 lbs)

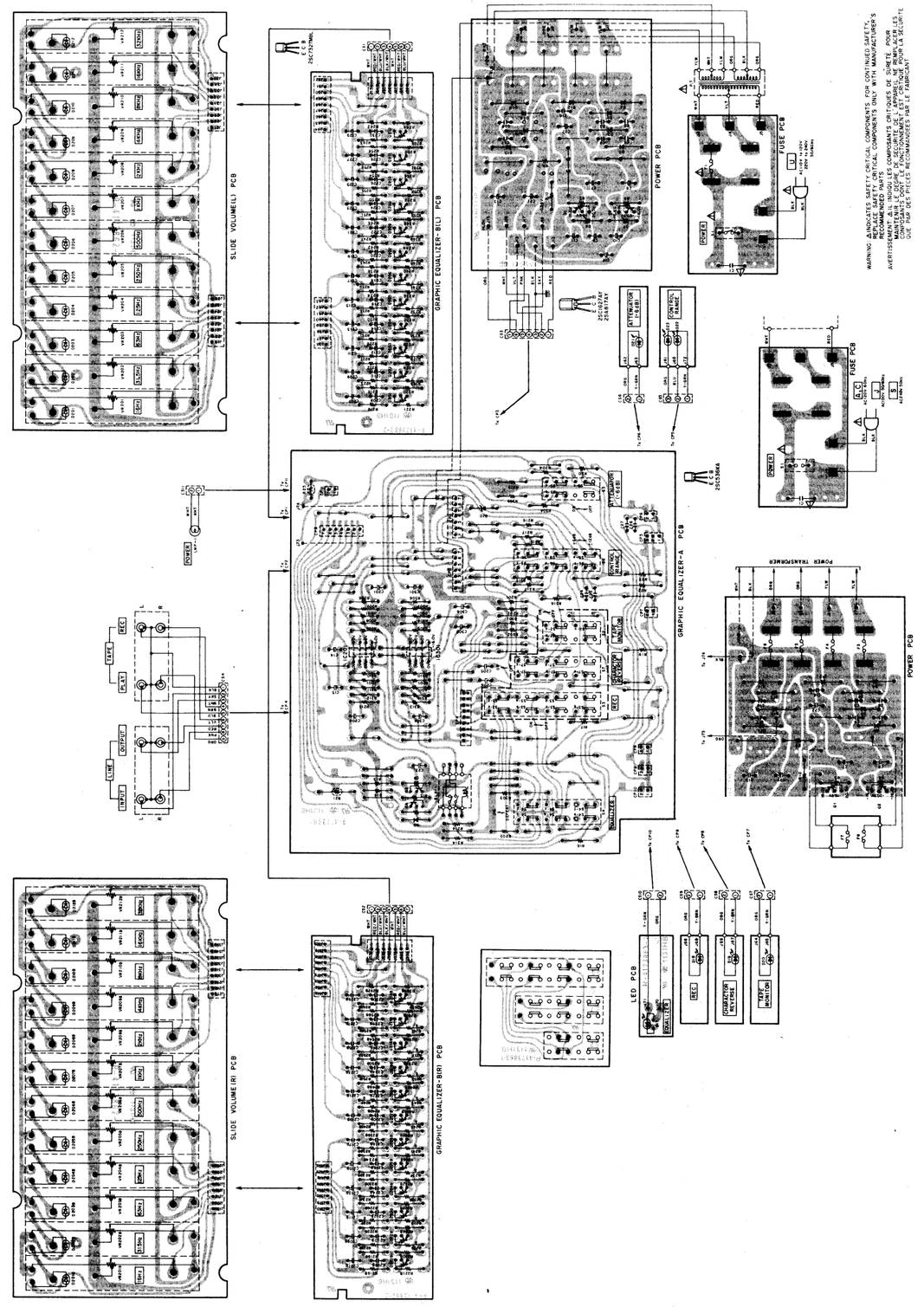
* For improvement purposes, specifications and design are subject to change without notice.

II. COMPOSITION OF VARIOUS P.C BOARDS

1. MODEL EA-G30

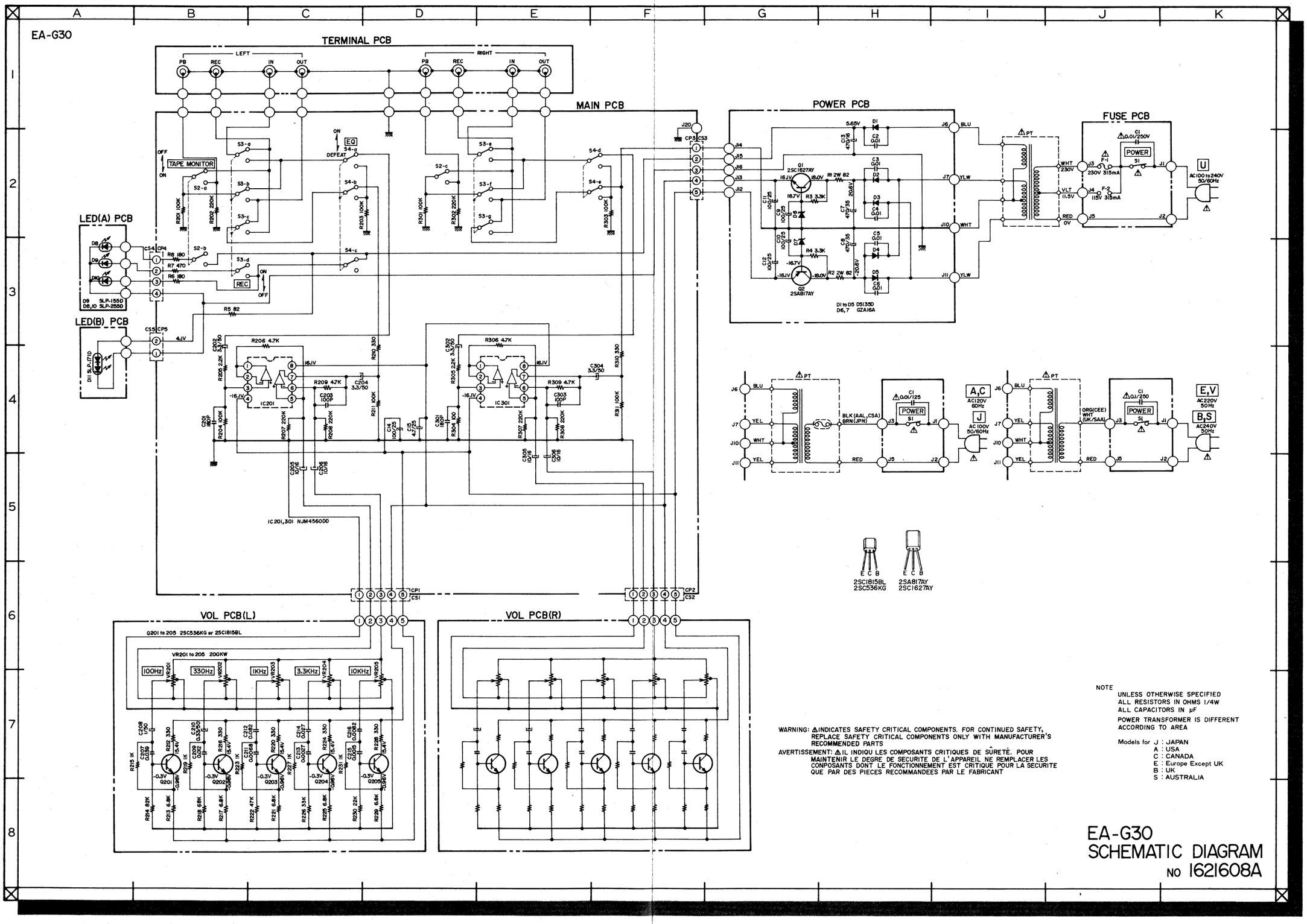


2. MODEL EA-G90



III. SCHEMATIC DIAGRAM

1. MODEL EA-G30



WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQU LES COMPOSANTS CRITIQUES DE SÛRETÉ. POUR MAINTENIR LE DEGRE DE SECURITE DE L'APPAREIL NE REMPLACER LES CONPOSANTS DONT LE FONCTIONNEMENT EST CRITIQUE POUR LA SECURITE QUE PAR DES PIECES RECOMMANDEES PAR LE FABRICANT

NOTE

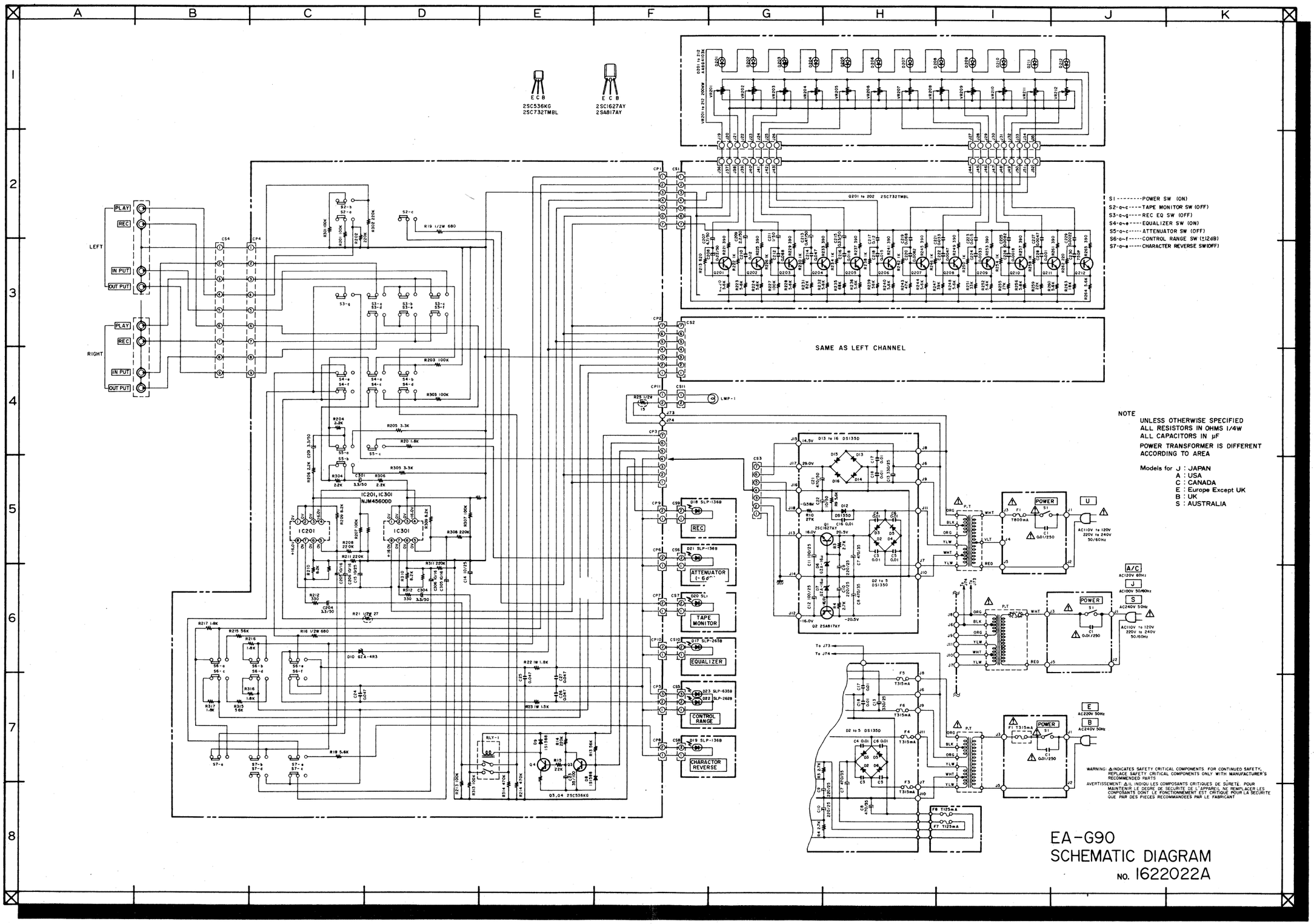
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/4W
ALL CAPACITORS IN μF

POWER TRANSFORMER IS DIFFERENT ACCORDING TO AREA

Models for J : JAPAN
A : USA
C : CANADA
E : Europe Except UK
B : UK
S : AUSTRALIA

EA-G30
SCHEMATIC DIAGRAM
NO 1621608A

2. MODEL EA-G90



IV. PARTS LIST

Registor and Capacitor which is not listed in this parts list, please refer to COMMON LIST FOR SERVICE PARTS.

1.MODEL EA-G30

1) MAIN P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
1-1	BA706218	PC MAIN BLK EA-G30
1-IC201	EI706220	IC MJM4560DD
1-IC301	EI706220	IC MJM4560DD
1-S2-4	ES706219	SW PUSH

2) VOLUME P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
2-1	BA706221	PC VR BLK EA-G30
2-Q201to205	ET330225	TR 2SC1815 BL
2-VR201to205	EV706222	VR SLIDE W204

3) POWER P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
3-Q1	ET706214	TR 2SC1627AY
3-Q2	ET706215	TR 2SA817AY
3-D1to5	ED706216	D SILICON DS135D
3-D6,7	ED324936	D ZENER H 05Z16 Z
3-R1,2	ER382173	R OMF H 2W 820K

4) FUSE P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
4-S1	ES706213	⚠ SW PUSH (U,E,B,S,V)
4-S1	ES706305	⚠ SW PUSH (J)
4-S1	ES706306	⚠ SW PUSH (C,A)
4-F1,2	EF706437	⚠ FUSE T315MA (U)
4-F1	EF706417	⚠ FUSE T160MA (B)
4-C1	EC320548	⚠ C CE V F 103Z 250AC (U)
4-C1	EC706419	⚠ C CE 103 125AC (J)
4-C1	EC706422	⚠ C CE 103 250AC (C,A)
4-C1	EC706416	⚠ C CE 103 250AC (E,B,S,V)

5) FINAL ASSEMBLY BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
5-1	ED322773	D LED SLP-255D-01 GRN (D8,10)
5-2	ED322772	D LED SLP-155D-01 RED (D9)
5-3	ED332243	D LED SLP-171D RED (D11)
5-4	EJ706212	TERMINAL PLATE 4P
5-5	BT706211	⚠ TRANS POWER EA-G30 (U)
5-6	BT706308	⚠ TRANS POWER EA-G30 (J)
5-7	BT706309	⚠ TRANS POWER EA-G30 (C)
5-8	BT706310	⚠ TRANS POWER EA-G30 (A)
5-9	BT706311	⚠ TRANS POWER EA-G30 (E,V)
5-10	BT706312	⚠ TRANS POWER EA-G30 (B)
5-11	BT706313	⚠ TRANS POWER EA-G30 (S)
5-12	BD706199	PANEL FRONT BLK EA-G30
5-13	BD706198	PANEL FRONT BLK EA-G30-BL
5-14	BD706197	PANEL FRONT BLK EA-G30-S
5-15	SK327134	KNOB (B) (VOLUME)
5-16	SK327135	KNOB (B-BL) (VOLUME)
5-17	SK706202	KNOB (A) (POWER)
5-18	SK706203	KNOB (A-BL) (POWER)
5-19	SK706204	KNOB (B) (FUNCTION)
5-20	SK706205	KNOB (B-BL) (FUNCTION)
5-21	ML706207	LEVER SW (FOR POWER SW)
5-22	SP706200	UPPER CASE
5-23	SP706201	UPPER CASE (BL)
5-24	SP706209	PANEL REAR EA-G30 (U)
5-25	SP706314	PANEL REAR EA-G30 (J)
5-26	SP706315	PANEL REAR EA-G30 (C,A)
5-27	SP706316	PANEL REAR EA-G30 (E,V)
5-28	SP706317	PANEL REAR EA-G30 (B,S)
5-29	SA706208	FOOT
5-30	EZ706210	STRAIN RELIEF 2P-4 (U,J,C,A)
5-31	EZ706319	STRAIN RELIEF (E,B,S,V)
5-32	EW306428	⚠ AC CORD CORES KP-205A, VFF UCJ (U)
5-33	EW706418	⚠ AC CORD (J)
5-34	EW706420	⚠ AC CORD (C,A)
5-35	EW706423	⚠ AC CORD (E)
5-36	EW706415	⚠ AC CORD (B)
5-37	EW706424	⚠ AC CORD (S)

2.MODEL EA-G90

1) MAIN P.C BOARD BLOCK

REF. NO.	PARTS NO.	DESCRIPTION
1-1	BA705569	PC MAIN BLK EA-G90
1-IC201	EI706220	IC MJM4560DD
1-IC301	EI706220	IC MJM4560DD
1-Q3,4	ET316643	TR 2SC536K-NP F,G
1-D8,9	ED557447	D SILICON H 1S1588
1-D10	ED705567	D ZENER GZA4R3
1-S2-7	ES705568	SW PUSH
1-RLY1	EP705580	RELAY
1-R21	ER705583	⚠ R FUSE 1/2W 270J
1-R22	ER327172	R OMF H SNP FS 1W 182J
1-R23	ER313515	R OMF H SNP FS 1W 152J
1-R25	ER705584	⚠ R FUSE 1/2W 150J

2) VOLUME P.C BOARD BLOCK

2-1	BA705570	PC VR BLK EA-G90
2-D201to212	ED705585	D LED AABG4103K
2-VR201to212	EV705571	VR SLIDE W/LED

3) B.P.F P.C BOARD BLOCK

3-1	BA705572	PC BPF BLK EA-G90
3-Q201to212	ET705586	TR 2SC732TMBL
3-C230	EC306420	C STY V F05 500 751J 50DC

4) POWER P.C BOARD BLOCK

4-1	BA705574	PC POWER BLK EA-G90(U)
4-Q1	ET706214	TR 2SC1627AY
4-Q2	ET706215	TR2SA817AY
4-D2to5	ED706216	D SILICON DS135D
4-D6,7	ED705590	D ZENER GZA16U
4-D12to16	ED706216	D SILICON DS135D
4-F3,4	EF706436	⚠ FUSE T250MA (E,B)
4-F5,6	EF706437	⚠ FUSE T315MA (E,B)
4-F3to6	EF706437	⚠ FUSE T315MA (V)
4-F7,8	EF706438	⚠ FUSE T125MA (E,B,V)

5) FUSE P.C BOARD BLOCK

5-S1	ES706213	⚠ SW PUSH (U,E,B,S,V)
5-S1	ES706305	⚠ SW PUSH (J)
5-S1	ES706306	⚠ SW PUSH (C,A)
5-F1	EF705573	⚠ FUSE (U)
5-F1	EF706437	⚠ FUSE T315MA (B)
5-C1	EC320548	⚠ C CE V F 103Z 250AC (U)
5-C1	EC706419	⚠ C CE 103 125AC (J)
5-C1	EC706422	⚠ C CE 103 250AC (C,A)
5-C1	EC706416	⚠ C CE 103 250AC (E,B,S,V)

6) FINAL ASSEMBLY BLOCK

6-1	ED705561	D LED SLP-265B (D17)
6-2	ED705562	D LED SLP-136B (D18,19)
6-3	ED705563	D LED SLP-236B (D20)
6-4	ED705562	D LED SLP-136B (D21)
6-5	ED705564	D LED SLP-262B (D22)
6-6	ED705566	D LED SLP-635B (D23)
6-7	EJ705560	TERMINAL PLATE 4P EA-G90
6-8	EJ705592	TERMINAL
6-9	EL705591	LAMP
6-10	BT705558	⚠ TRANS POWER EA-G90 (U)
6-11	BT706434	⚠ TRANS POWER EA-G90(J)
6-12	BT706431	⚠ TRANS POWER EA-G90 (C)
6-13	BT706430	⚠ TRANS POWER EA-G90 (A)
6-14	BT706433	⚠ TRANS POWER EA-G90 (E,V)
6-15	BT707023	⚠ TRANS POWER EA-G90 (B)
6-16	BT707024	⚠ TRANS POWER EA-G90 (S)
6-17	BC705546	UPPER CASE
6-18	BC705547	UPPER CASE (BL)
6-19	BD705548	PANEL BLK EA-G90
6-20	BD705549	PANEL BLK EA-G90-BL
6-21	SK705551	KNOB BLK EA-G90 (EQ)
6-22	SK705552	KNOB BLK EA-G90-BL (EQ)
6-23	ZG705577	SP KNOB (A)
6-24	SK705553	KNOB (B) (POWER)
6-25	ZG705578	SP KNOB (B)
6-26	SK705555	KNOB (A) (VOLUME)
6-27	SA706208	FOOT
6-28	SK705557	KNOB (C) (FUNCTION)
6-29	ML706425	LEVER KNOB (B) (FOR FUNCTION)
6-30	ML705579	LEVER KNOB (FOR EQ)
6-31	ML706207	LEVER SW (FOR POWER)
6-32	SP705559	PANEL REAR EA-G90 (U)
6-33	SP706429	PANEL REAR EA-G90 (J)
6-34	SP706426	PANEL REAR EA-G90 (C,A)
6-35	SP706428	PANEL REAR EA-G90 (E,V)
6-36	SP706427	PANEL REAR EA-G90 (B,S)
6-37	EZ706210	STRAIN RELIEF 2P-4 (U,J,C,A)
6-38	EZ706319	STRAIN RELIEF (E,B,S,V)
6-39	EW306428	⚠ AC CORD 2 CORES KP-205A, VFF UCJ (U,S)
6-40	EW706418	⚠ AC CORD (J)
6-41	EW706420	⚠ AC CORD (C,A)
6-42	EW706423	⚠ AC CORD (E,V)
6-43	EW706415	⚠ AC CORD (B)

EA-G30 EA-G90

AKAI ELECTRIC CO., LTD. 12-14, 2-Chome, Higashi-Kojiya, Ohta-Ku, Tokyo, Japan
TEL Tokyo(742)5111 CABLE: HIFIAKAI TOKYO TELEX: J26261
Printed No. 1622032-4616K1
Printed Date October 30, 1981 Printed in Japan