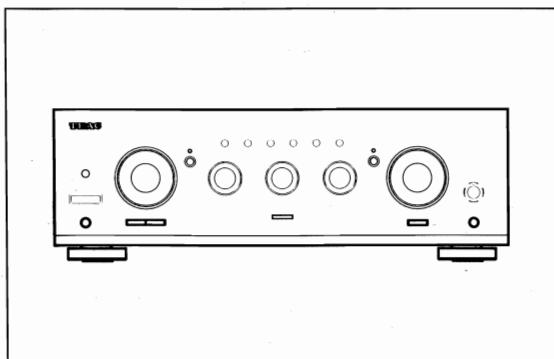


TEAC



SERVICE MANUAL

A-R600

Integrated Stereo Amplifier

NOTES

- PC boards shown are viewed from parts side.
- The parts with no reference number or parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- \triangle Parts marked with this sign are 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] : U.S.A. [C] : CANADA
[E] : EUROPE [UK] : U.K. [GE] : GENERAL EXPORT

9A07472200

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SPECIFICATIONS

Power Output (0.5% THD, 1 kHz, 4Ω):
120 W + 120 W

Total Harmonic Distortion :
0.02% (1kHz, 8Ω, 60 W)

S/N (Input shorted) :
PHONO : 65 dB (IHF-A)
CD, TUNER, AUX, TAPE, VCR : 90 dB (IHF-A)

Input Sensitivity/ Impedance :
PHONO : 2.8mV/47 kΩ
AV 1, AV 2, CD, TAPE, TUNER : 180mV/47 kΩ

Tone Control :
BASS : ±10 dB (100 Hz)
TREBLE : ±10 dB (10 kHz)

Channel Separation (Input shorted) :
65 dB (1 kHz)

Frequency Response : 5 Hz - 80 kHz
(SOURCE DIRECT, 1W)

■ General

Power Consumption : 280 W
(at 1/8 output, 6% Over Voltage)

Power Supply : AC 230 V , 50 Hz [E/B/S]
AC 230 V/120 V , 50-60 Hz [U]
AC 120 V , 60 Hz [U.S.A/CANADA]

Dimensions (W x H x D) : 430 x 142 x 355 mm

Weight (net) : 9.7 kg (net)

■ Standard Accessories :

Remote Control Unit x 1
Operator's Manual x 1

- Improvements may result in specifications and features changing without notice.
- Illustrations may differ slightly from production models.

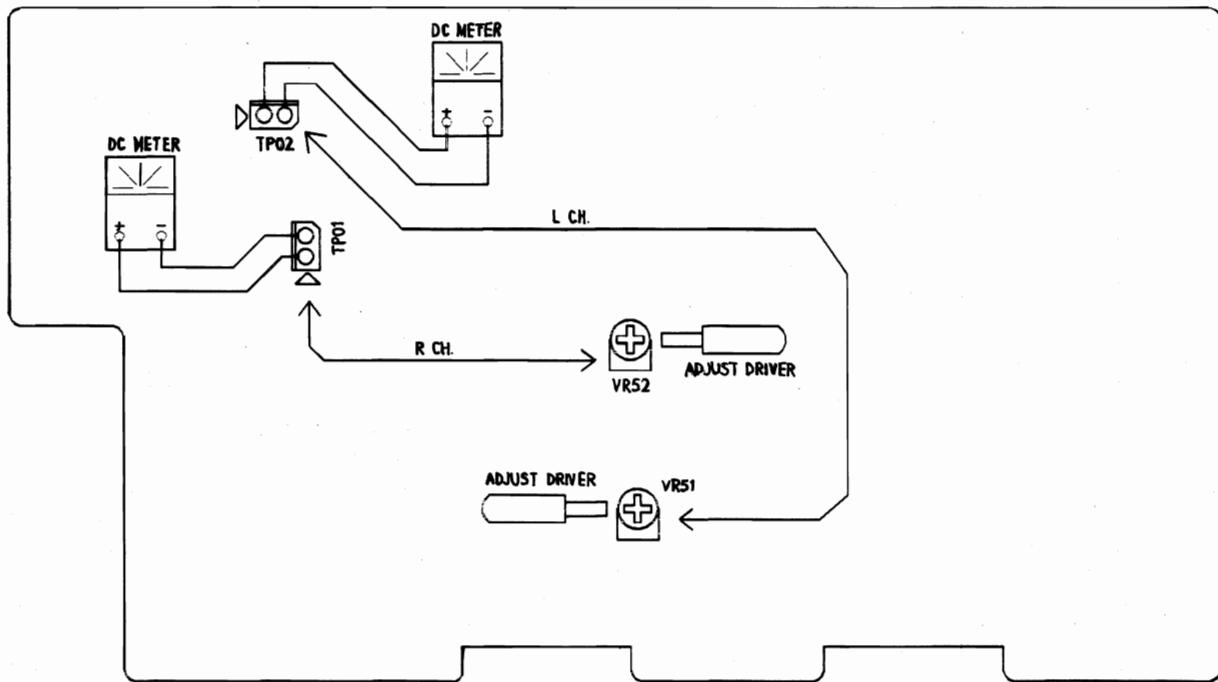
ADJUSTMENT POINT

IDLING CURRENT ADJUSTMENT

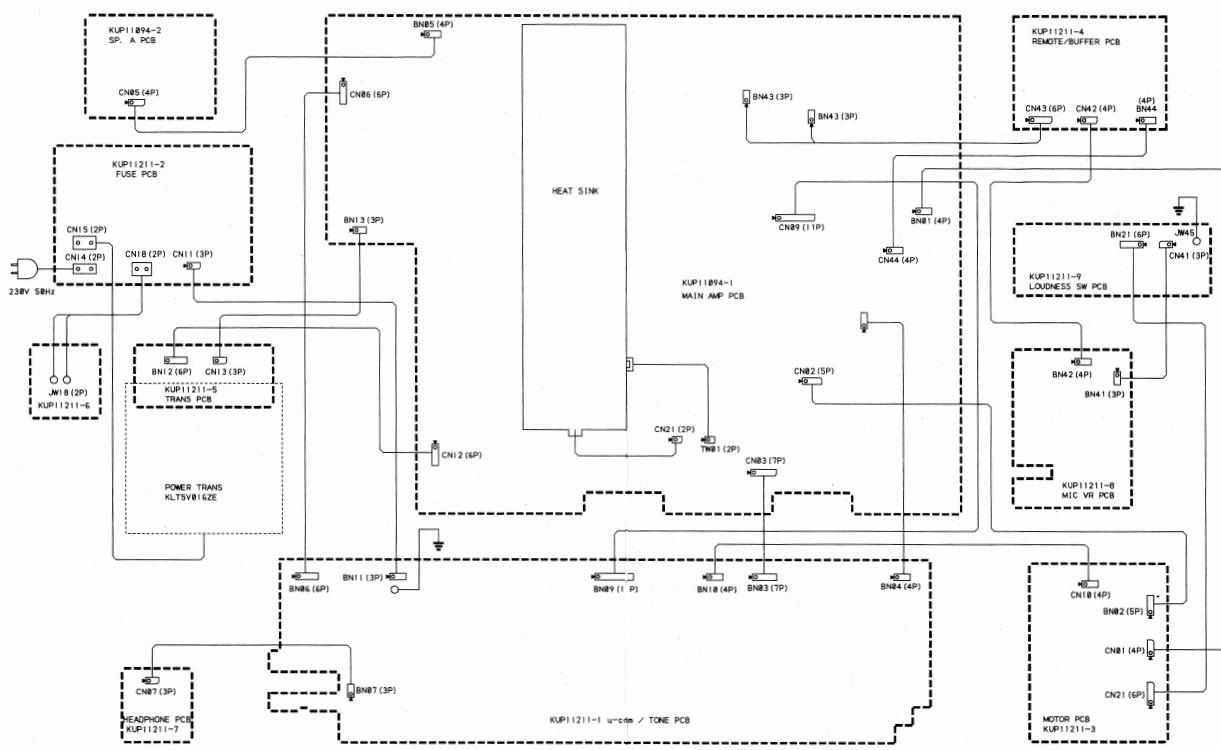
CONTROLS SETTING : TONE(BASS & TREBLE), BALANCE: MID POSITION
VOLUME: MINIMUM POSITION
LOUDNESS, SOURCE DIRECT: OFF POSITION

ADJUST	MEASURED ACROSS	VOLTMETER READING
VR51	TP02	5mV
VR52	TP01	5mV

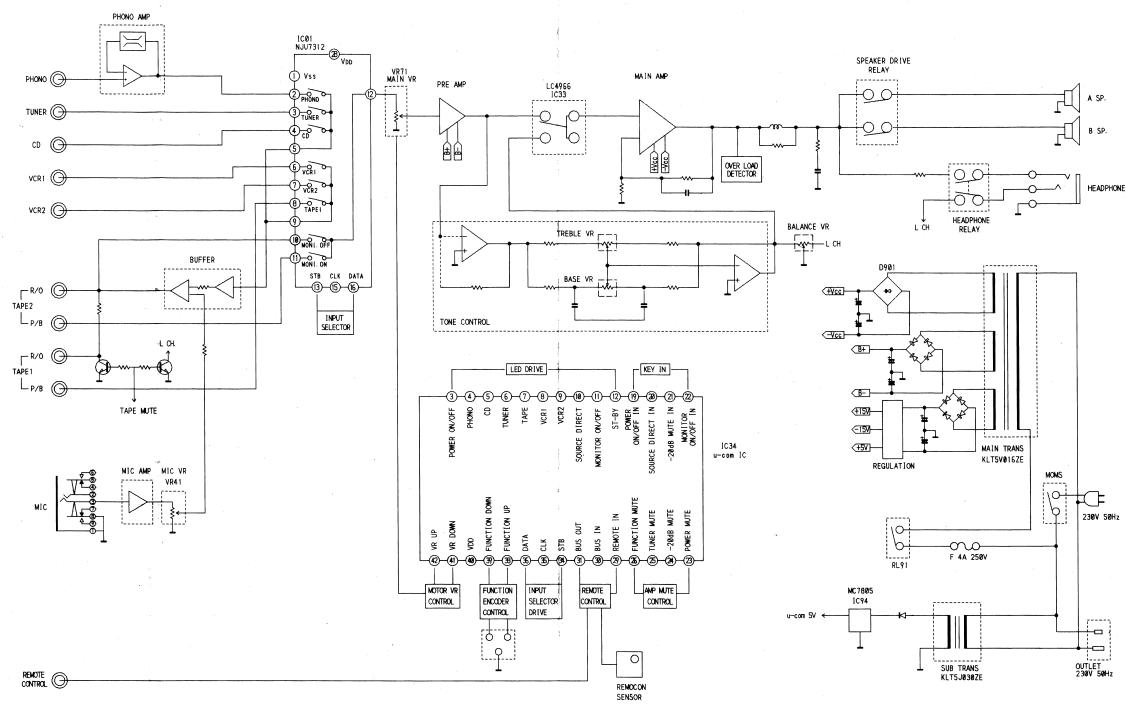
* Adjustment should be done after switch on the set for 5 minutes.



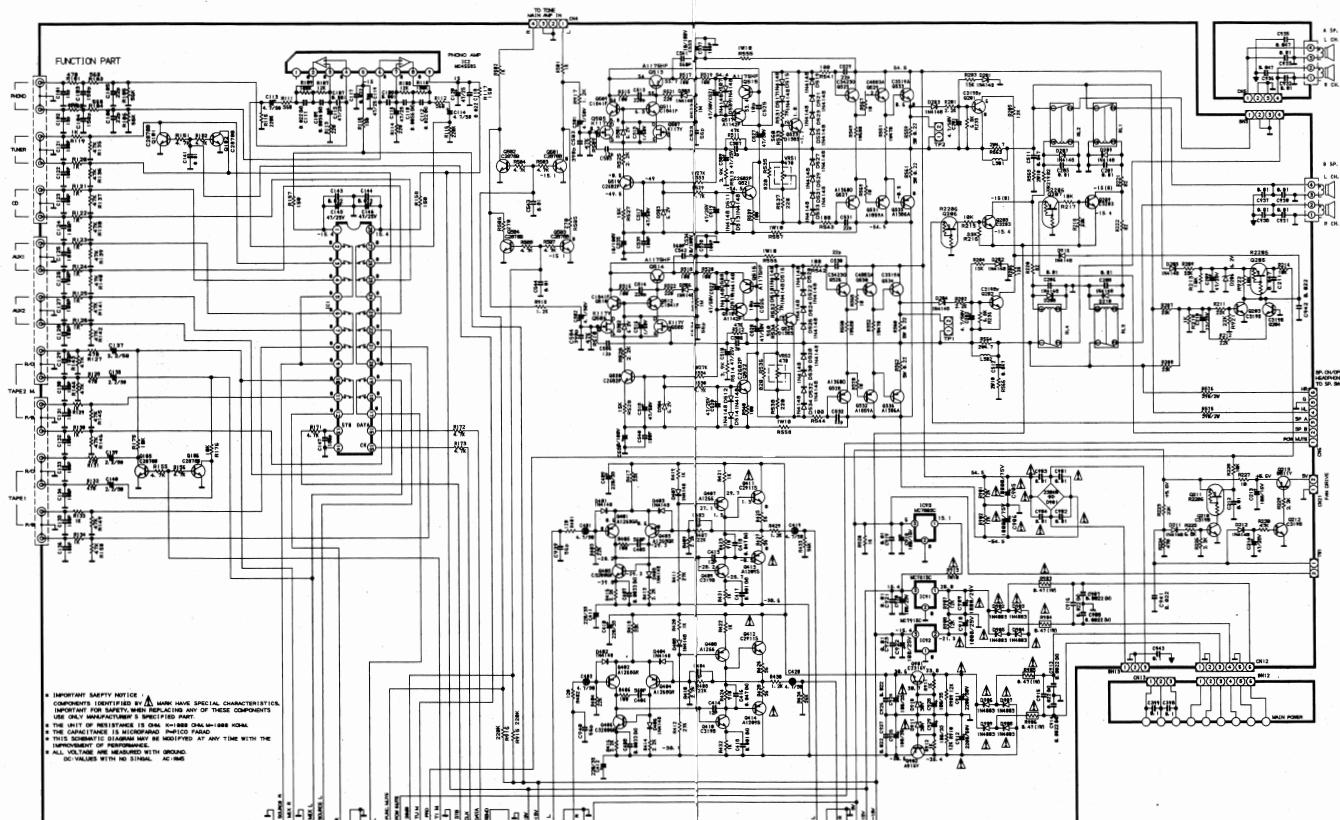
WIRING DIAGRAM

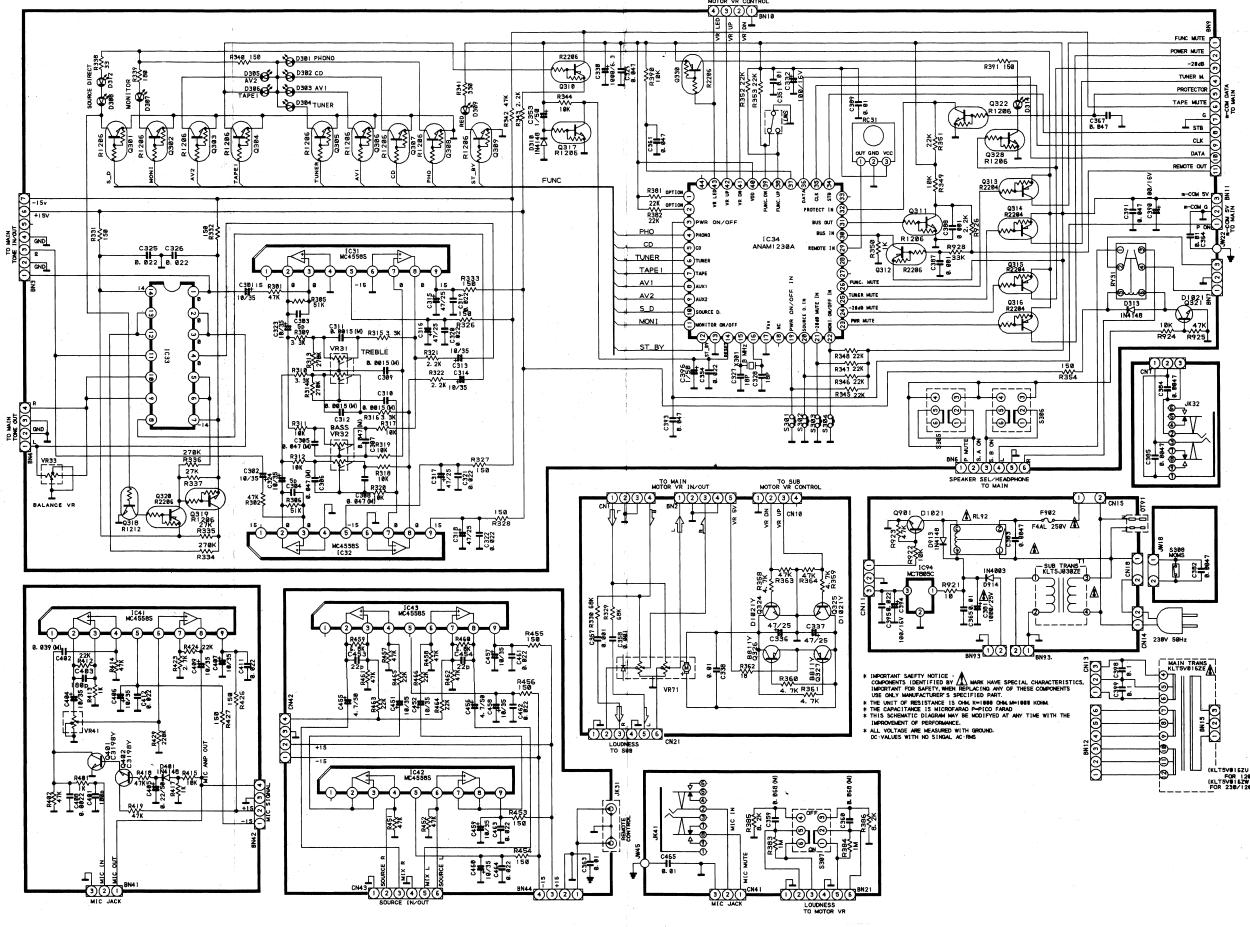


BLOCK DIAGRAM

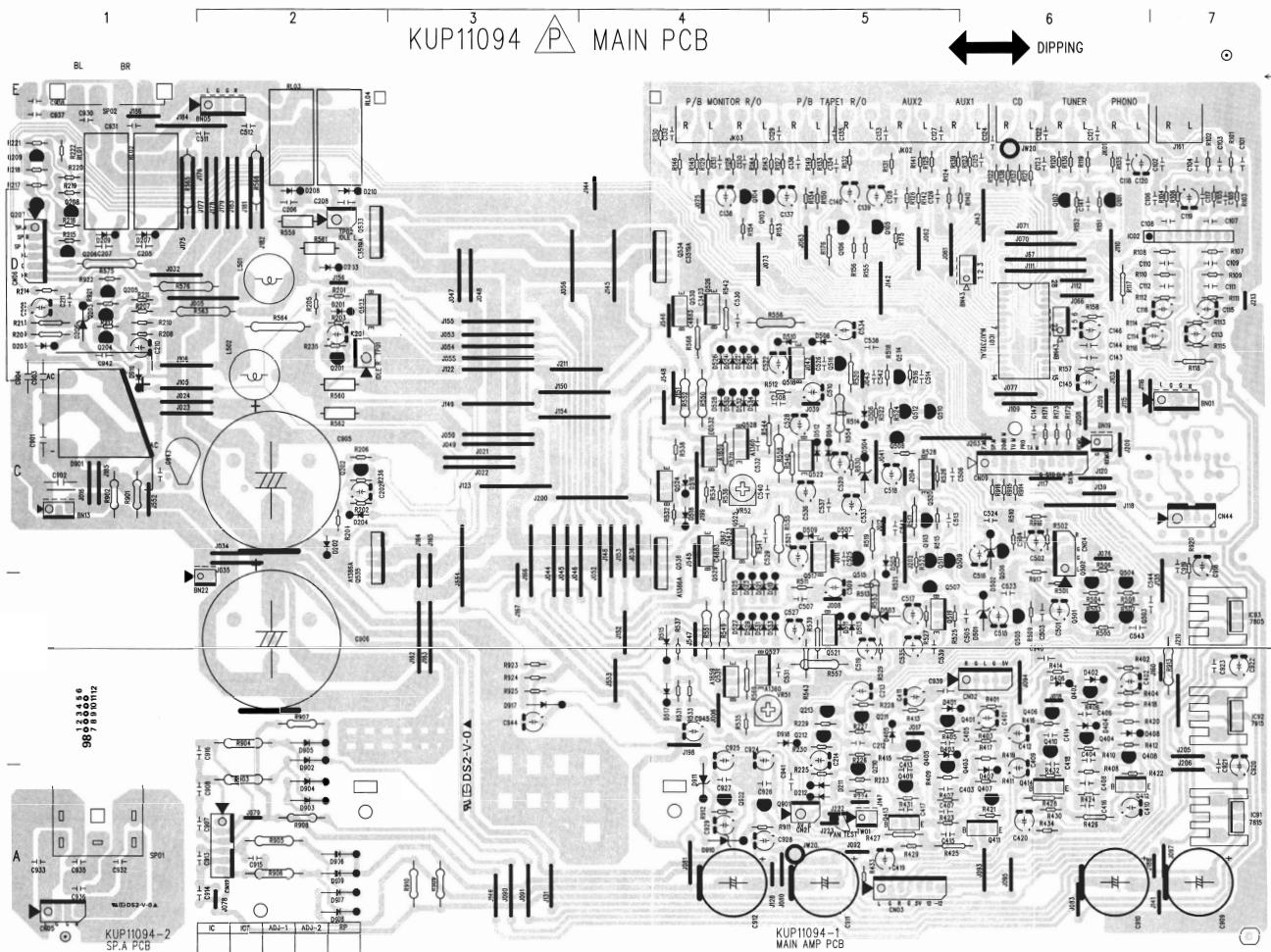


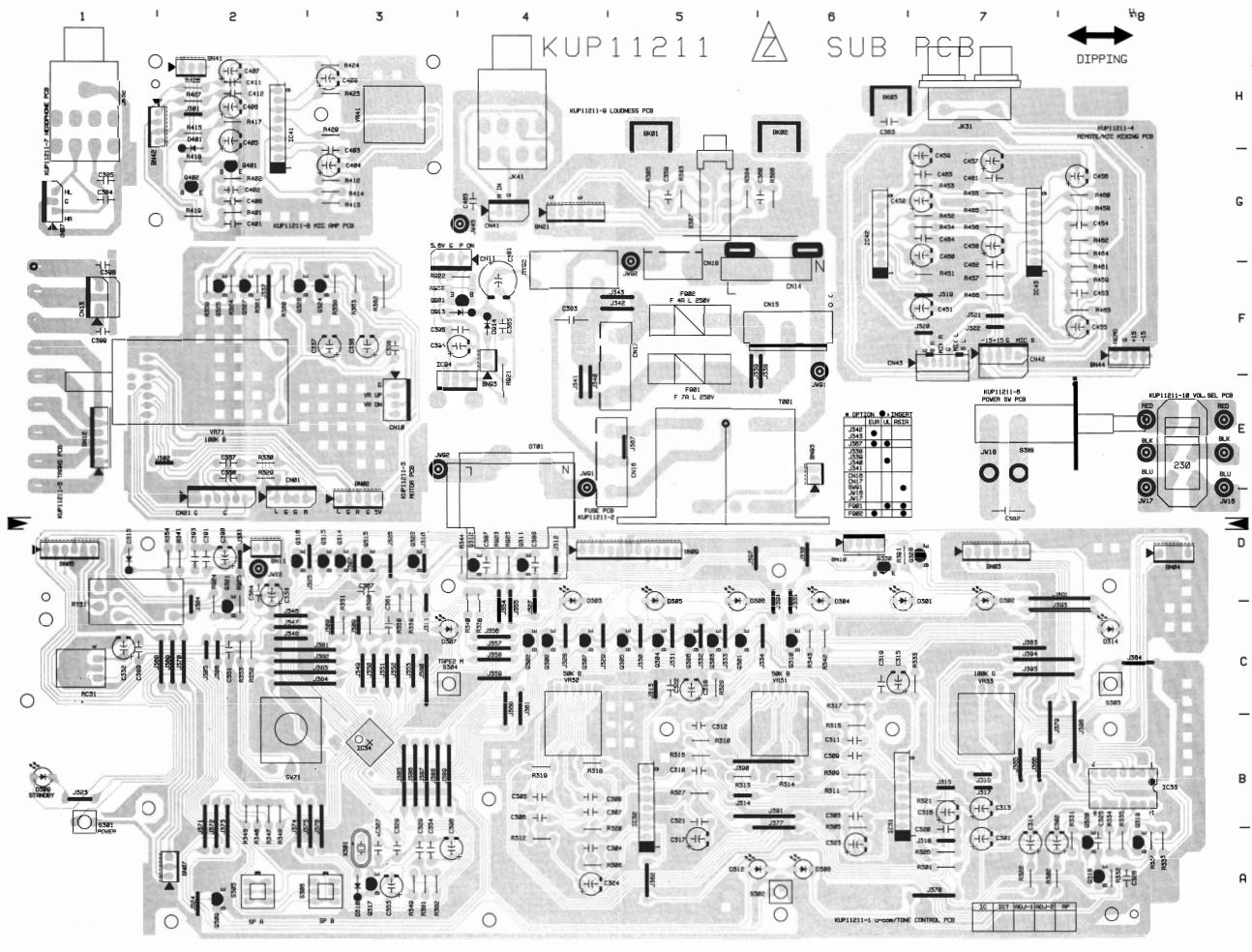
SCHEMATIC DIAGRAM



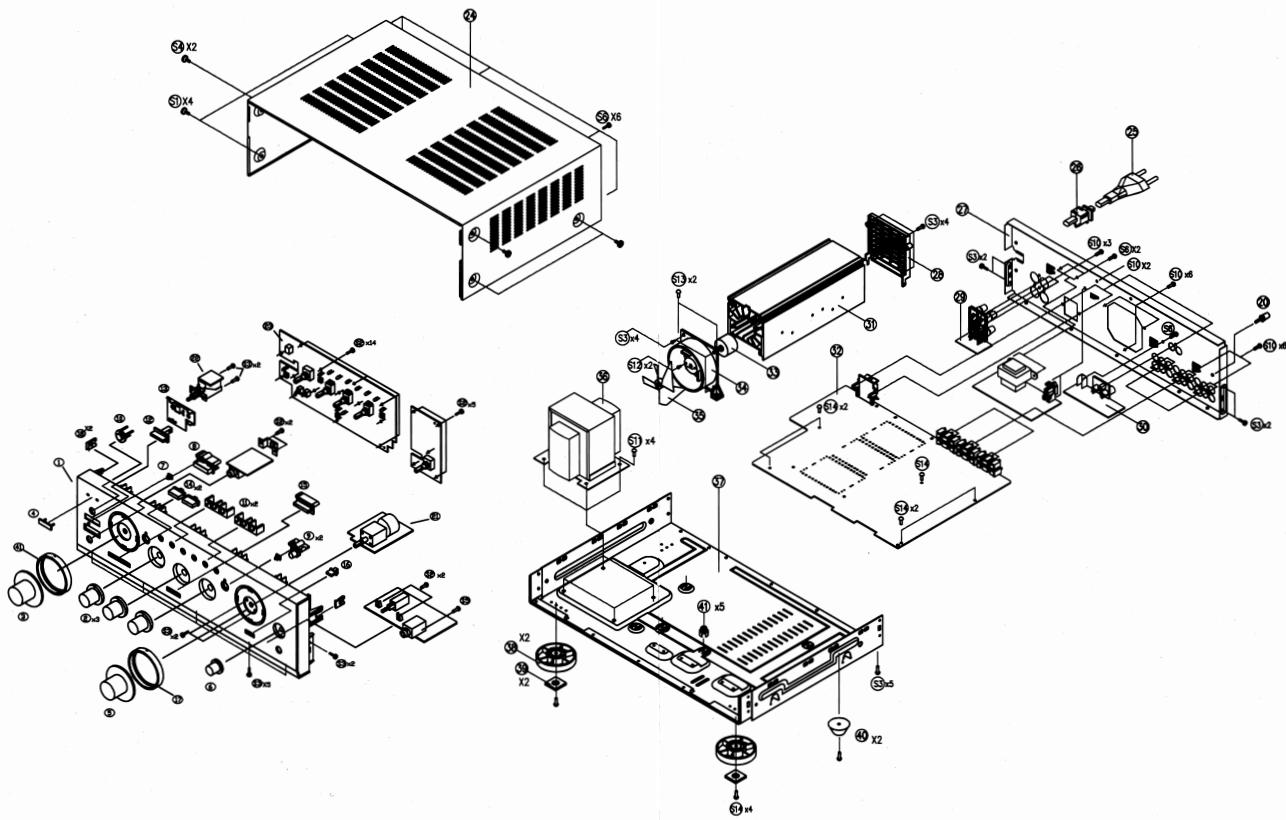


PRINTED CIRCUIT BOARDS





EXPLODED VIEW



EXPLODED VIEW

REF. NO.	PARTS NO.	REMARKS
1	9A07307100	PANEL , FRONT
2	9A07306100	KNOB , ROTARY
3	9A07307400	VOLUME CAP ASS'Y(A)
4	9A07047400	BADGE
5	9A07307300	VOLUME CAP ASS'Y(A)
6	9A07305900	KNOB , ROTARY
7	9A05887000	INDICATOR,FUNCTION
8	9A07306300	KNOB , POWER
9	9A07306200	KNOB , TACT.
10	9A07306900	ORNAMENT , REMOTE
11	9A07306800	INDICATOR , FUNCTION
12	9A06783600	POWER(PUSH)
13	9A07067800	BRACKET,POWER
14	9A07305700	KNOB , SPEAKER
15	9A07306400	KNOB , DIRECT
16	9A07305800	KNOB , LOUDNESS(PUSH)
17	9A06228900	HOUSING , VOLUME
18	9A03741300	U-NUT
19	9A05963300	BRACKET,VOLUME
20	9A05917200	GROUND TERMINAL
21		VOLUME PCB
22		POWER PVB(MOMS)
23		SUB PCB ASS'Y
24	9A07308300	CABINET , TOP
25	9A07305000	CORD , POWER
26	9A06783800	BUSHING,AC POWER CORD
27	9A07308400	PANEL , REAR
28	9A06679300	H/S COVER
29		SPEAKER PCB
30		REMOTE PCB
31	9A07308800	HEAT SINK
32		MAIN PCB
33	9A06679000	MOTOR
34	9A06678900	FRAME FAN
35	9A06678800	FAN
36	9A07308600	TRANS , POWER
37	9A07310200	CHASSIS , BOTTOM
38	9A05891400	FOOT,FRONT
39	9A06754800	RUBBER,CUSHION
40	9A06755300	FOOT,RUBBER (BLACK)
41	9A01375500	PCB HOLDER
42	9A07307700	HOUSING , VOLUME
S1	9A05328800	SCREW KTB4+6F
S2	9A01377400	SCREW KTB3+10G
S3	9A01535800	SCREW KTB3+8J
S4	9A01477900	SCREW KTB4+12JFZ
S5	9A01377600	SCREW KTW3+10G
S6	9A01377200	SCREW KTB3+8JFZ
S10	9A01377300	SCREW KTB3+10GFZ
S11	9A01477800	SCREW KTB4+8F
S12	9A06699900	SCREW
S13	9A06679700	SCREW KTB3+14J
S14	9A01535800	SCREW KTB3+8J
S15	9A05339100	SCREW KTW3+12J
△	9A058949-00	FUSE, F4A
		KBA20400NRE

INCLUDED ACCESSORIES

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
9A07125100	OWNER'S MANUAL, E/F/G/I/S A-R600		KOXA1494Z
9A07305600	REMOCON XMTR ASSY(U-592)		KARTAR000

■ PARTS LIST

ATTENTION
1. When placing an order for parts, be sure to list the Part No., Model No, and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.
2. Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.
3. Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
3. How to rear the Parts List.

■ RESISTORS AND CAPACITORS

Notes :- Part numbers are indicated for most mechanical parts.

Please use this part number for parts order.

• IMPORTANT SAFETY NOTICE.

Components identified by △ mark have special characteristics important for safety.

When replacing any of these components, use only manufacturer's specified parts.

• The unit of resistance is OHM(Ω)

K=1000(Ω), M=1000(KΩ)

• The unit of capacitance is MICROFARAD(μF)

P=10 μ F

■ Numbering System of Resistor

Example

KRD	25	F	J	101
Type	Wattage	Shape	Tolerance	Value

Resistor Type	Wattage	Tolerance
KRD: Carbon	20±5W	F:= ±1%
KRG: Metal Oxide	25±1/4W	J:= ±5%
	50±1/2W	K:= ±10%
	1W	
KRF: Metal Cement	2.2W	
	3.3W	

■ Numbering System of Capacitor

Example

KCKR	1H	101	K	B
Type	Voltage	Value	Tolerance	Peculiarity

Capacitor Type	Voltage		Tolerance
	ECEA Type	Other	
KCB:Ceramic	0.1-6.3V	1H:50V DC	C: ±0.25pF
KCC:Ceramic	1A:10V	1:125V DC	G: ±2%
KCK:Ceramic	1C:16V	KC:400V AC	J: ±5%
KCQI:Polyester	1E:25V		K: ±10%
KCOP:Polypropylene	1H:50V		Z: +80%, -20%
KCQS:Polystyrol	1V:35V		

WARNING

△(*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

△(*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE remplacer que des PIÈCES recommandées par le fabricant.

MAIN PCB ASS'Y

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
	9A07309000	MAIN PCB ASS'Y	KOP11094D
	9A07310300	MAIN , PCB	KUP11094P
	9A06678800	FAN	KDD1A013
	9A06679000	MOTOR	BDMMDN4RB4MRC
C905.906	△ 9A06167100	CAP,ELECT TDL75V103N	KCETDL75V103N
C909.910	△ 9A06226700	CE, 1000UF H 25V DC	KCEA1EH102E
C911.912	△ 9A07306600	CAP , ELECT	KCEA1HH222E
D201-205	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D206	△ 9A05902300	DIODE,ZENER,6.2Z	KVDUZ6.2BMT
D207-212	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D401-408	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D501-506	△ 9A05902300	DIODE,ZENER,6.2Z	KVDUZ6.2BMT
D505-514	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D515	9A01390600	DIODE,1N4148T	KVD1N4148T
D516-534	9A01390500	DIODE,1N4148MT	KVD1N4148MT
D901	△ 9A05987900	DIODE,BRIDGE,BPC2504WF	BVDKBP2504WF
D902-909	△ 9A05194700	DIODE,1N4003ST	KVD1N4003ST
D910.911	△ 9A05902200	DIODE,ZENER,30V	KVDUZ30BMT
D916	9A01390500	DIODE,1N4148MT	KVD1N4148MT
IC01	9A06674500	IC NJU7312L	BVINJU7312L
IC02	9A05195800	IC,MC4558S	KVIMC4558S
IC91	△ 9A05895100	IC MC7815C	KVIMC7815C
IC92	△ 9A05895200	IC MC7915C	KVIMC7915C
IC93	△ 9A05341500	IC, KA7805-ABTU	KVIMC7805C
JK01-03	9A06761800	TERMINAL,IN/OUT	KJJ4R012Z
L501.502	9A05895800	COIL,SPEAKER	KLR9Y003Z
Q101.102	9A05896000	TR,KTC2878B	KVTKTC2878BT
Q105.106	9A05896000	TR,KTC2878B	KVTKTC2878BT
Q201-204	9A05892800	TR,KTC3198YT	KVTKTC3198YT
Q205-207	9A03745200	TR,KSR2206TA	KVTKSR2206T
Q208.209	9A05197400	TR,KTC3203YT	KVTKTC3203YT
Q210	9A05892800	TR,KTC3198YT	KVTKTC3198YT
Q211	9A03745200	TR,KSR2206TA	KVTKSR2206T
Q212	9A05892800	TR,KTC3198YT	KVTKTC3198YT
Q213	9A03747300	TR,KSB811-YTA	KVTKSB811YT
Q401-404	9A06236600	TR,KTA1268GRT	KVTKTA1268GRT
Q405.406	9A06236700	TR,KTC3200GRT	KVTKTC3200GRT
Q407.408	9A05895900	TR,KTA1266YT	KVTKTA1266YT
Q409.410	9A05892800	TR,KTC3198YT	KVTKTC3198YT
Q411.412	9A06225500	T.R 2SC2911S	BVT2SC2911S
Q501-503	9A05896000	TR,KTC2878B	KVTKTC2878BT
Q505-508	9A06236800	F.E.T KTK117Y	KVTKTK117YT
Q509-512	9A05976900	TR,2SC1841	BVT2SC1841F
Q513-516	9A05977000	TR,2SA1175	BVT2SA1175HF
Q517.518	9A05977900	TR,2SA1142	BVT2SA1142P
Q519-522	9A05977100	TR,2SC2682	BVT2SC2682P
Q523.524	9A05977200	TR,2SD1585	BVT2SD1585L
Q525.526	9A07305300	T.R 2SC3423O	BVT2SC3423O
Q527.528	9A07305200	T.R 2SA1360O	BVT2SA1360O
Q529.530	9A05977600	TR,2SC4883A	BVT2SC4883A
Q531.532	9A05977500	TR,2SA1859A	BVT2SA1859A
Q533.534	9A05987800	TR, 2SC3519A	BVT2SC3519A
Q535.536	9A05977700	TR,2SA1386A	BVT2SA1386A
Q901	9A05196800	TR,KSC2316-Y-SHTA	KVTKSC2316YT
Q902	9A05196700	TR,KSA916-Y-SHTA	KVTKSA916YT
R549.550	△ 9A07309800	RES , METAL OXIDE FILM	KRG1ANJ681H
R551.552	△ 9A07309700	RES , METAL OXIDE FILM	KRG1ANJ471H
R553.554	△ 9A05978400	R,27K-OHM,1W	KRG1ANJ273H
R555-558	△ 9A05338000	R,METAL OXIDE FILM 1W 10	KRG1ANJ100H
R559-562	△ 9A05896300	R,.022-OHM,5W	KRF5EKR22H
R563.564	△ 9A05979000	R,.47-OHM,2W	KRG2ANJ4R7H
R565.566	△ 9A05978900	R,.10-OHM,2W	KRG2ANJ100H
R567-570	△ 9A05978700	R,.10-OHM	KRD25FJ100T
R575.576	△ 9A05896500	R,.390-OHM,2W	KRG2ANJ391H
R901.902	△ 9A05896900	R,CARBON 1/2W 12K	KRD50FJ123T
R903-906	△ 9A06760900	R,FUSE 0.47 J 1W	KRQ1AJR47H
R907-910	△ 9A05896900	R,CARBON 1/2W 12K	KRD50FJ123T
R913	△ 9A07309900	RES , FUSE	KRQ1AJ100H
RL01-04	9A05987100	RELAY HR-CR7-DC12V	KSL1A007ZE
SP01	9A06677000	TERMINAL SP	KJJ5P011Z
SP02	9A07308000	TERMINAL , SPEAKER	KJJ5P014Z
TW01	9A06675400	TERMISTER	KRTNTC5D103
VR51.52	9A07305100	RES , SEMI FIXED	BVNCA471B01G

SUB PCB ASS'Y

REF. NO.	PARTS NO.	DESCRIPTION	REMARKS
C381	△ 9A06226700	SUB PCB ASS'Y	KOP11211B
	9A06758000	JACK,HEAD PHONE	BJJ2E020Z
	9A07310400	SUB , PCB	KUP11211Z
D301-307	9A05890300	CE, 1000UF H 25V DC	KCEA1EH102E
D308	9A07310600	LED,YELLOW SLR342YCF02	KVD342YCF02T085
D309	9A05195000	L.E.D , GREEN SLR325MCA47	KVDSLRL325MCA47
D310	9A01390500	LED,RED SLR342VCF02	KVD342VCF02T085
D312	9A07310600	DIODE,1N4148MT	KVD1N4148MT
D313	9A01390500	L.E.D , GREEN SLR325MCA47	KVDSLRL325MCA47
D314	9A05890300	DIODE,1N4148MT	KVD1N4148MT
D401.913	9A01390500	LED,YELLOW SLR342YCF02	KVD342YCF02T085
D914	△ 9A05194600	DIODE,1N4003SRT	KVD1N4003SRT
F902	9A05328200	HOLDER,FUSE KJCFC5S	KJCFC5S
IC31.32	9A05195800	IC,MC4558S	KVIMC4558S
IC33	9A05971200	IC.,LC4966	BVILC4966
IC34	9A07044400	I.C , O.T.P	BVITMP87PH47U
IC41.42	9A05195800	IC,MC4558S	KVIMC4558S
IC43	9A05195800	IC,MC4558S	KVIMC4558S
IC94	9A05341500	IC, KA7805-ABTU	KVIMC7805C
JK31	9A05916800	JACK, BOARD	KJJ4N010Z
OT91	△ 9A06861900	OUTLET , AC (1P)	BJJ7A006Z
Q301-309	9A05196900	TR,KSR1206TA	KVTKSR1206T
Q310-312	9A03745200	TR,KSR2206TA	KVTKSR2206T
Q313-317	9A05198800	TR,KSR2204TA	KVTKSR2204T
Q318	9A07310800	T.R KSR1212T	KVTKSR1212T
Q319	9A05196900	TR,KSR1206TA	KVTKSR1206T
Q320	9A03745200	TR,KSR2206TA	KVTKSR2206T
Q321	9A03811700	TR,KSD1021-YTA	KVTKSD1021YT
Q322	9A05196900	TR,KSR1206TA	KVTKSR1206T
Q324.325	9A03811700	TR,KSD1021-YTA	KVTKSD1021YT
Q326.327	9A03747300	TR,KS811-YTA	KVTKS811YT
Q328	9A05196900	TR,KSR1206TA	KVTKSR1206T
Q330	9A03745200	TR,KSR2206TA	KVTKSR2206T
Q401.402	9A05892800	TR,KTC3198YT	KVTKTC3198YT
Q901	9A03811700	TR,KSD1021-YTA	KVTKSD1021YT
RC31	9A06757900	IC,PNA4612M00HB	BRVPNA4612M00HB
RL31	9A06224600	RELAY G5Z-2A-DC12V	BSL4A008ZE
RL92	△ 9A05987100	RELAY HR-CR7-DC12V	KSL1A007ZE
S301-304	9A06671200	SW,TACT EVQ21505R	BST1A014ZT
S305.306	9A05385600	SW,PUSH(VERTICAL)	KSH2B003Z
S307	9A07310000	SW , PUSH	KSH2B017Z
S308	△ 9A06784700	SW, PUSH (MOMS)	KSH1A001ZV
SW71	9A06224700	VR , ENCODOR EC16B1210	BSR2A006Z
T001	△ 9A07308500	TRANS , SUB	KLT5J030ZE
VR31.32	9A07044500	RES , VR	BVV2X04B503Z
VR33	9A06758500	RES,VARIABLE	BVV1U01W104Y
VR41	9A07305400	RES , VARIABLE	BVV1U01B503Y
VR71	9A07305500	RES , MOTOR	BVV9Y08B104Z
X301	9A05193000	CRYSTAL, 08000E160C	KOX08000E160C

TEAC

TEAC CORPORATION

3-7-3, Nakacho, Musashino-shi, Tokyo 180-8550, Japan Phone: (0422) 52-5081

TEAC AMERICA, INC.

7733 Telegraph Road, Montebello, California 90640 Phone: (213) 726-0303

TEAC CANADA LTD.

5939 Wallace Street, Mississauga, Ontario L4Z 1Z8, Canada Phone: 905-890-8008

TEAC MEXICO, S.A. De C.V

Privada De Corina, No.18, Colonia Del Carrmen Coyoacan, Mexico DF 04100 Phone: 5-658-1943

TEAC UK LIMITED

5 Marlin House, Marlins Meadow, The Croxley Centre, Watford, Herts. WD1 8YA, U.K. Phone: 01923-819699

TEAC DEUTSCHLAND GmbH

Bahnstrasse 12, 65205 Wiesbaden-Erbenheim, Germany Phone: 0611-71580

TEAC FRANCE S. A.

17 Rue Alexis-de-Tocqueville, CE 005 92182 Antony Cedex, France Phone: 01.42.37.01.02

TEAC BELGIUM NV/SA

P.A. TEAC Nederland BV, Perkinsbaan 11a, 3439 ND Nieuwegein, Netherlands Phone: 0031-30-6048115

TEAC NEDERLAND BV

Perkinsbaan 11a, 3439 ND Nieuwegein, Netherlands Phone: 030-6030229

TEAC AUSTRALIA PTY., LTD.
A.C.N. 005 408 462

106 Bay Street, Port Melbourne, Victoria 3207, Australia Phone: (03) 9644-2442

TEAC ITALIANA S.p.A.

Via C. Cantù 11, 20092 Cinisello Balsamo, Milano, Italy Phone: 02-66010500

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PRINTED IN KOREA