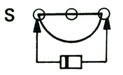
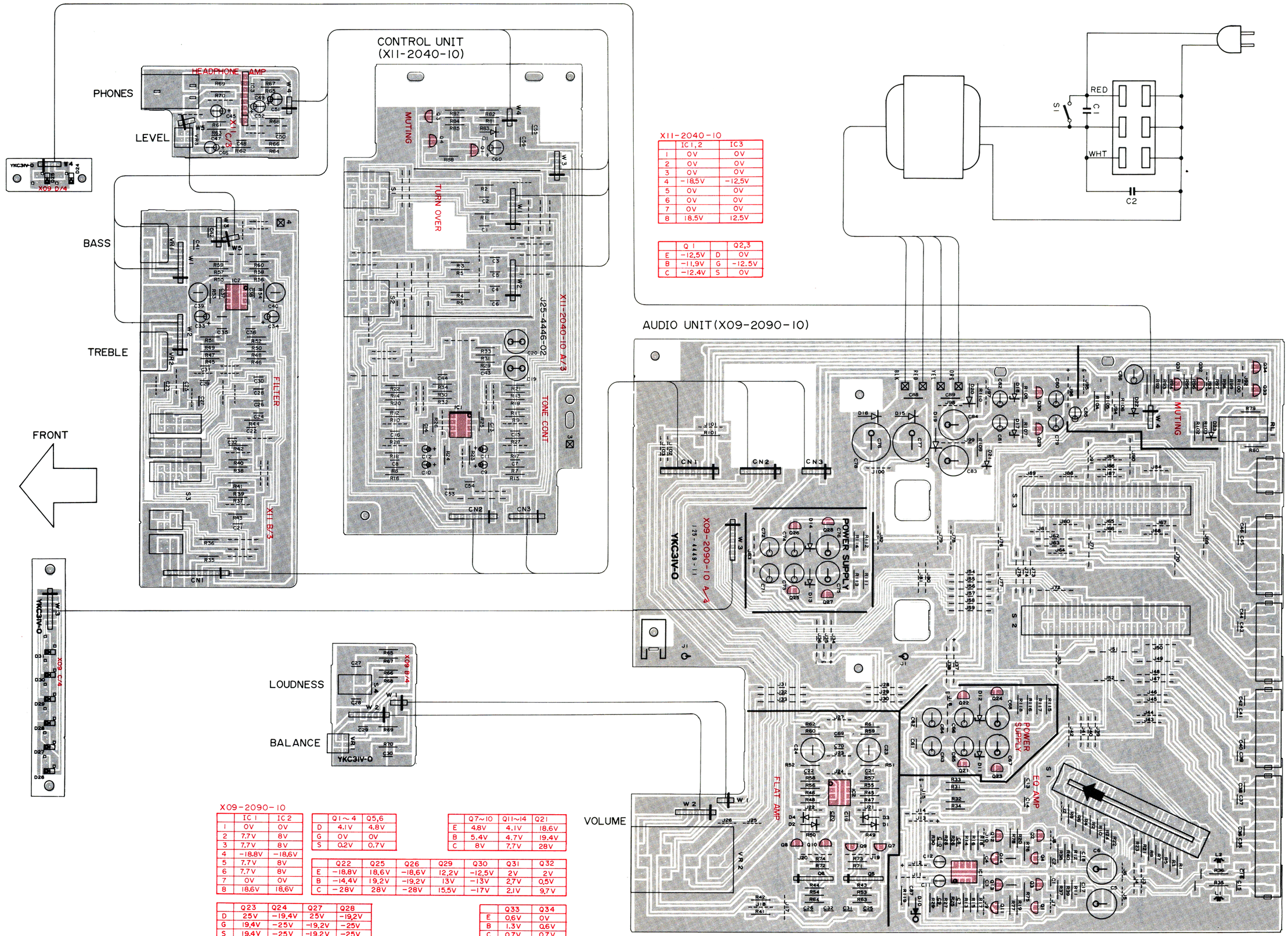
PC BOARD

Caution : Some units employed diode E-272 instead of FET (Q23, 24, 27, 28) on X09-2090-10.
If you mount E-272, insert it as shown at right.



E-272



X11-2040-10

	IC1,2	IC3
1	0V	0V
2	0V	0V
3	0V	0V
4	-18.5V	-12.5V
5	0V	0V
6	0V	0V
7	0V	0V
8	18.5V	12.5V

	Q1		Q2,3
E	-12.5V	D	0V
B	-11.9V	G	-12.5V
C	-12.4V	S	0V

X09-2090-10

	IC1	IC2
1	0V	0V
2	7.7V	8V
3	7.7V	8V
4	-18.8V	-18.6V
5	7.7V	8V
6	7.7V	8V
7	0V	0V
8	18.6V	18.6V

	Q1~4	Q5,6
D	4.1V	4.8V
G	0V	0V
S	0.2V	0.7V

	Q7~10	Q11~14	Q21
E	4.8V	4.1V	18.6V
B	5.4V	4.7V	19.4V
C	8V	7.7V	28V

	Q22	Q25	Q26	Q29	Q30	Q31	Q32
E	-18.8V	18.6V	-18.6V	12.2V	-12.5V	2V	2V
B	-14.4V	19.2V	-19.2V	13V	-13V	2.7V	0.5V
C	-28V	28V	-28V	15.5V	-17V	2.1V	9.7V

	Q23	Q24	Q27	Q28
D	25V	-19.4V	25V	-19.2V
G	19.4V	-25V	-19.2V	-25V
S	19.4V	-25V	-19.2V	-25V

	Q33	Q34
E	0.6V	0V
B	1.3V	0.6V
C	0.7V	0.7V

Refer to the schematic diagram for the values of resistors and capacitors.
The PC board drawing is viewed from the side easy to check.

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KENWOOD

STEREO CONTROL AMPLIFIER

BASIC C2

SPECIFICATIONS

Performance

Input Sensitivity/Impedance/Signal-to-Noise Ratio (IHF A Curve)
- Phono MM ..... 2.5 mV/30 k, 47 k, 100 k ohms/88 dB
- Phono MC ..... 200 μV/100 ohms, 200 ohms/70 dB
- CD, AUX, TUNER, TAPE ..... 150 mV/47 k ohms/110 dB

Signal-to-Noise Ratio Unweighted at 50 mW (DIN)
- Phono MM & MC ..... 73 dB
- CD, AUX, TUNER, TAPE ..... 79 dB

Maximum Input Voltage for Phono MM ..... 200 mV, T.H.D. 0.002%

Maximum Input Voltage for Phono MC ..... 15 mV, T.H.D. 0.002%

Frequency Response
- Phono MM & MC ..... 20 Hz - 20 kHz ±0.3 dB
- CD, AUX, TUNER, TAPE ..... 1 Hz - 350 kHz (−3 dB)

Tone Control
- BASS turnover: 400 Hz ..... 100 Hz ±10 dB
- turnover: 200 Hz ..... 50 Hz ±10 dB
- TREBLE turnover: 3 kHz ..... 10 kHz ±10 dB
- turnover: 6 kHz ..... 20 kHz ±10 dB

Filter
- Subsonic ..... 18 Hz, 12 dB/Octave
- Low ..... 40 Hz, 12 dB/Octave
- Subsonic + Low ..... 58 Hz, 12 dB/Octave
- High ..... 8 kHz, 12 dB/Octave

Transient Response
- Rise Time ..... 1.0 μs

Total Harmonic Distortion
- CD, AUX, TUNER, TAPE
  - 20 Hz ~ 20 kHz ..... 0.001% at 1 V Output
- Phono MM & MC
  - 20 Hz ~ 20 kHz 0.002%

Output Voltage & Impedance
- TAPE REC ..... 150 mV, 220 ohms
- PRE OUT ..... 1,000 mV, 100 ohms

Loudness Control
- (at VOLUME −30 dB) ..... 100 Hz, +6 dB
- (at VOLUME −40 dB) ..... 100 Hz, +9 dB

General

Power Requirement ..... 120 V 60 Hz (U.S.A. & Canada models)
220 V 50 Hz (European model) or
120 V/220 (240) V 50/60 Hz switchable

Power Consumption ..... 12 W

AC Outlet ..... 1 Unswitched, 2 Switched (Except European/Australian countries)

Dimensions ..... W 440 mm (17-5/16")
H 78 mm (3-1/16")
D 320 mm (12-19/32")

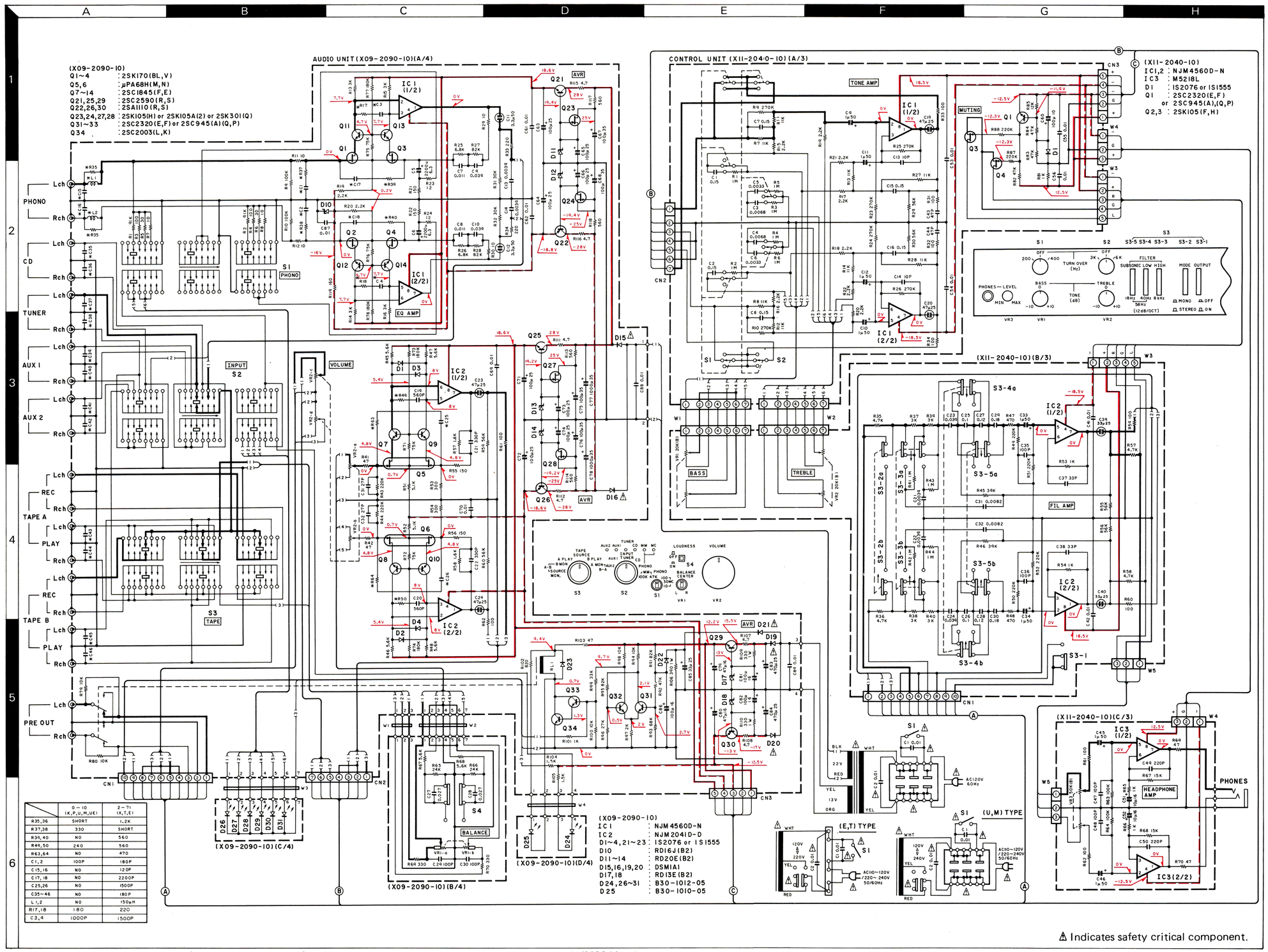
Weight (Net) ..... 4.5 kg (9.9 lb)

Kenwood follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

Kenwood poursuit une politique de progrès constants en ce qui doncerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

Kenwood strebt ständige, Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

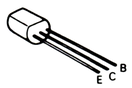
- DC voltages are as measured with a high impedance voltmeter with no signal input. Values may vary slightly due to variations between individual instruments or/and units.
- Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance sans signal d'entrée. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.
- Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen. Voltmeter ohne Eingangssignal gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geraten u.U. geringfügig.



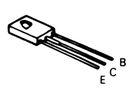
	0 ~ 10 (K,P,U,M,UE)	2 ~ 7 (X,T,E)
R35,36	SHORT	1.2K
R37,38	330	SHORT
R39,40	NO	560
R49,50	240	560
R63,64	NO	470
C1,2	100P	180P
C15,16	NO	120P
C17,18	NO	2200P
C25,26	NO	150P
C35~46	NO	180P
L1,2	NO	150μH
R17,18	180	220
C3,4	1000P	1500P

⚠ Indicates safety critical component.

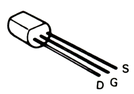
2SC945
2SC1845
2SC2003
2SC2320



2SA1110
2SC2590

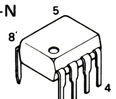


2SK105
2SK105A
2SK170
2SK301



UPA68H

NJM2041D-D
NJM4560D-N



M5218L

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list). ⚠Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.