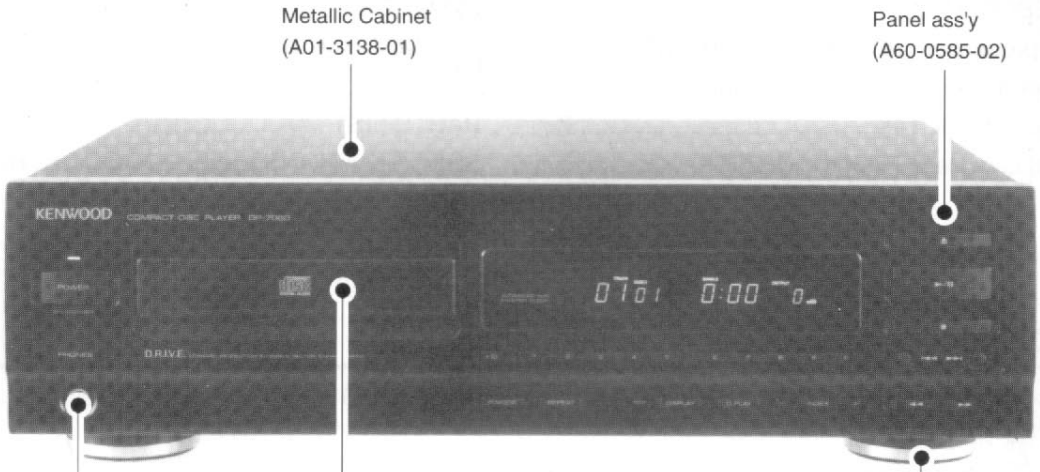
COMPACT DISC PLAYER

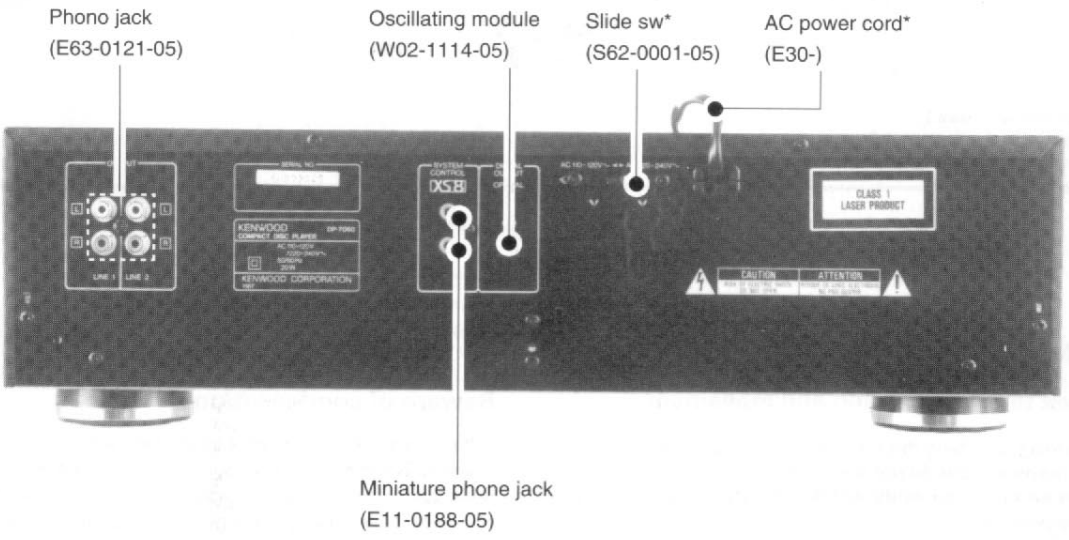
DP-7060

SERVICE MANUAL

KENWOOD

B51-4938-00 (K) 2155





In compliance with Federal Regulations, following are reproductions of labels on, or inside the product relating to laser product safety.

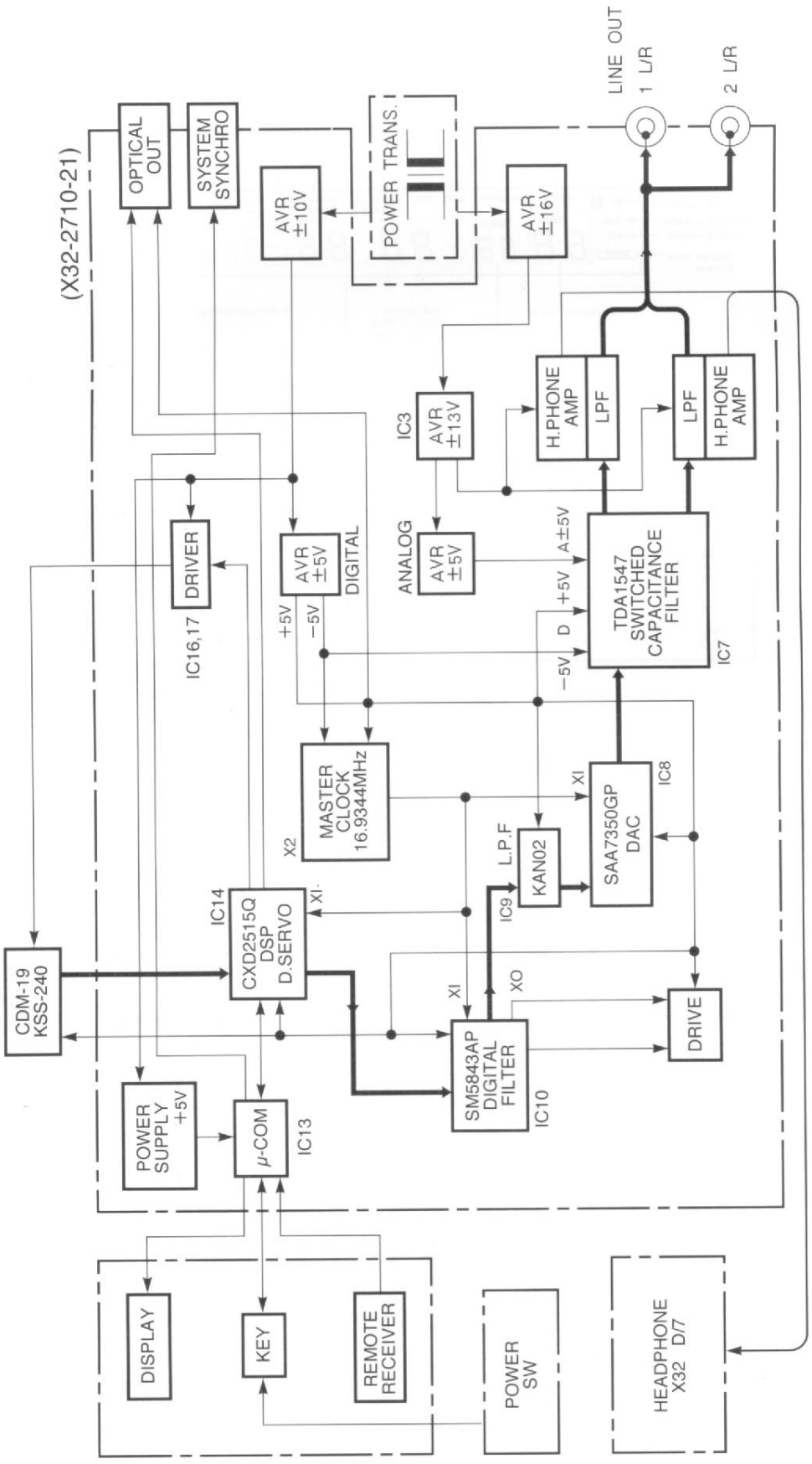
KENWOOD -Corp. certifies this equipment conforms to DHHS Regulations No. 21 CFR 1040. 10, Chapter 1, Subchapter J.

DANGER : Laser radiation when open and interlock defeated. AVOID DIRECT EXPOSURE TO BEAM

***Refer to parts list on page 28**

DP-7060

BLOCK DIAGRAM



DP-7060

ADJUSTMENT

Test Mode

Setting the test mode

This microprocessor built this unit can be put to TEST MODE by just short-circuiting the test pins (#1 and #1) of main unit.

1-2. Key and functions valid in test mode

N0.	Input key	Function	Track No. display
1	PLAY/PAUSE (►/II)	(1)Focusing servo .....ON (2) Tracking servo .....ON (3) Feed servo.....ON	TRACK NO. 05 ↓ Displayed for a few seconds after completion (1), (2) and (3). ↓ Time. (Play mark), and Disc Track No. are displayed.
2	STOP (■)	(1) Focusing servo .....OFF (2) Tracking servo .....OFF (3) Feed servo.....OFF	*See below
3	UP (►►I)	Turns all FL display lamps ON.	TRACK NO. 88
4	DOWN (I◄◄)	Turns all FL display lamps OFF.	TRACK NO. 88 TRACK NO. is lighted.

*TRACK NO.

ADJUSTMENT-FREE

This device(CXD2515) has AVERAGE and AUTO GAIN CONTROL circuitry in its as DP-7060 is adjustment-free.

Please confirm the self-check value on display as follows and dc voltage in schematic diagram before replacing pickup.

SELF-CHECK VALUE TABLE

	DISPLAY VALUE
FOCUS GAIN (FG)	18<FG<57
TRACKING GAIN (TG)	19<TG<68
CENTER VOLTAGE (VC)	25<VC<75
FOCUS ERROR BALANCE (FE)	25<FE<75
RATIO FREQUENCY (RF)	57<RF<66

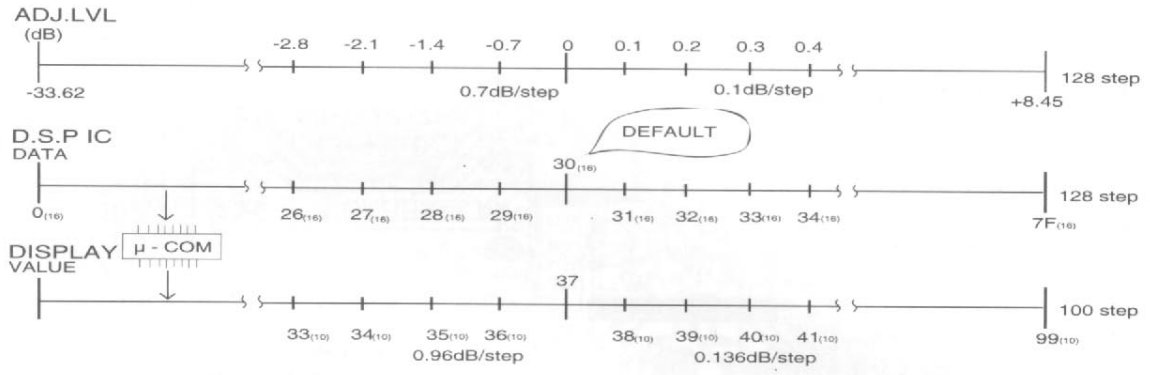
These value is by test disk KTD-02, YEDS-18, and TCD781.

PGM in the display is blink if not adjust. Please check circuit.

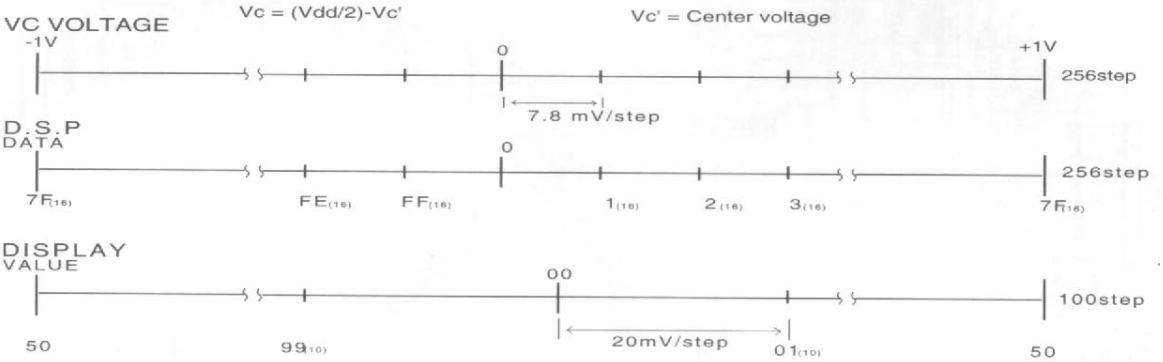
ADJUSTMENT

SELF-CHECK VALUE DISPLAY PROCESS

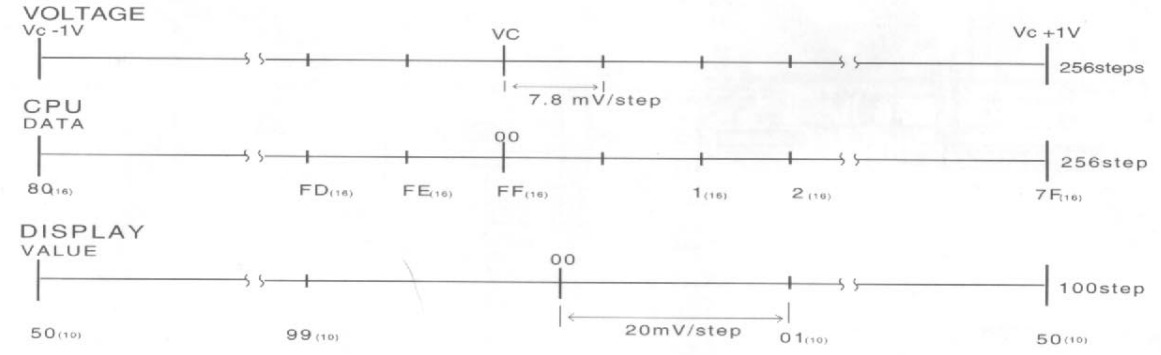
① FG/TG



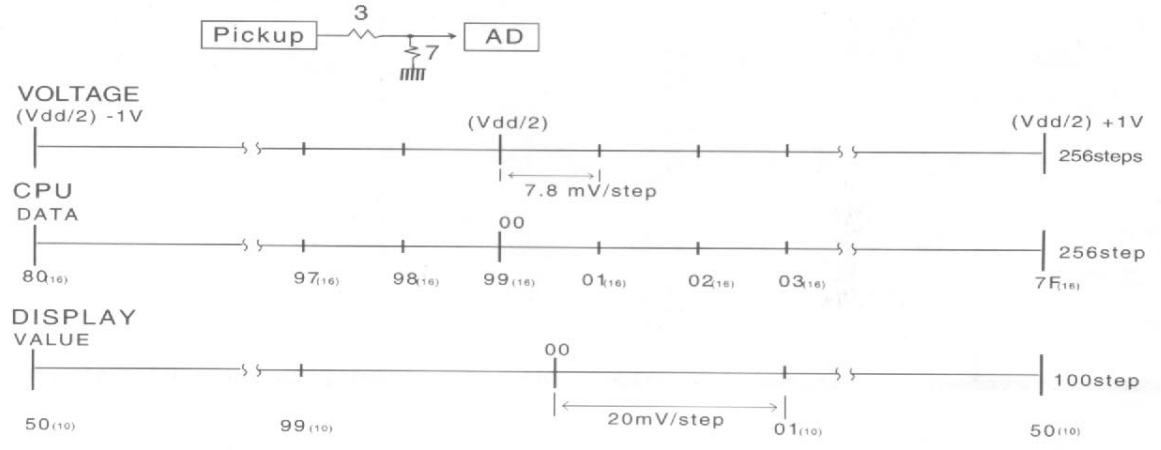
② VC



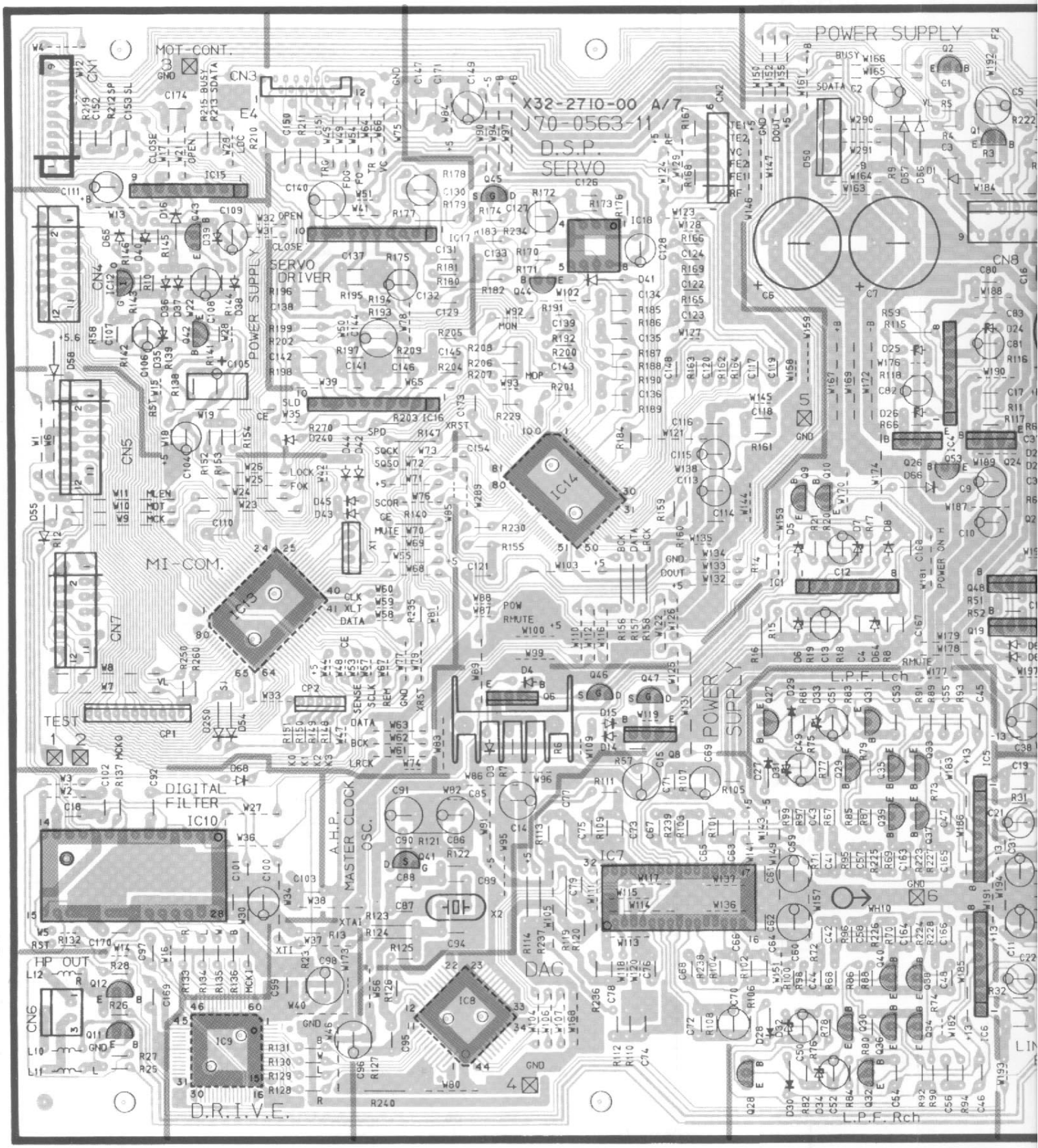
③ FE



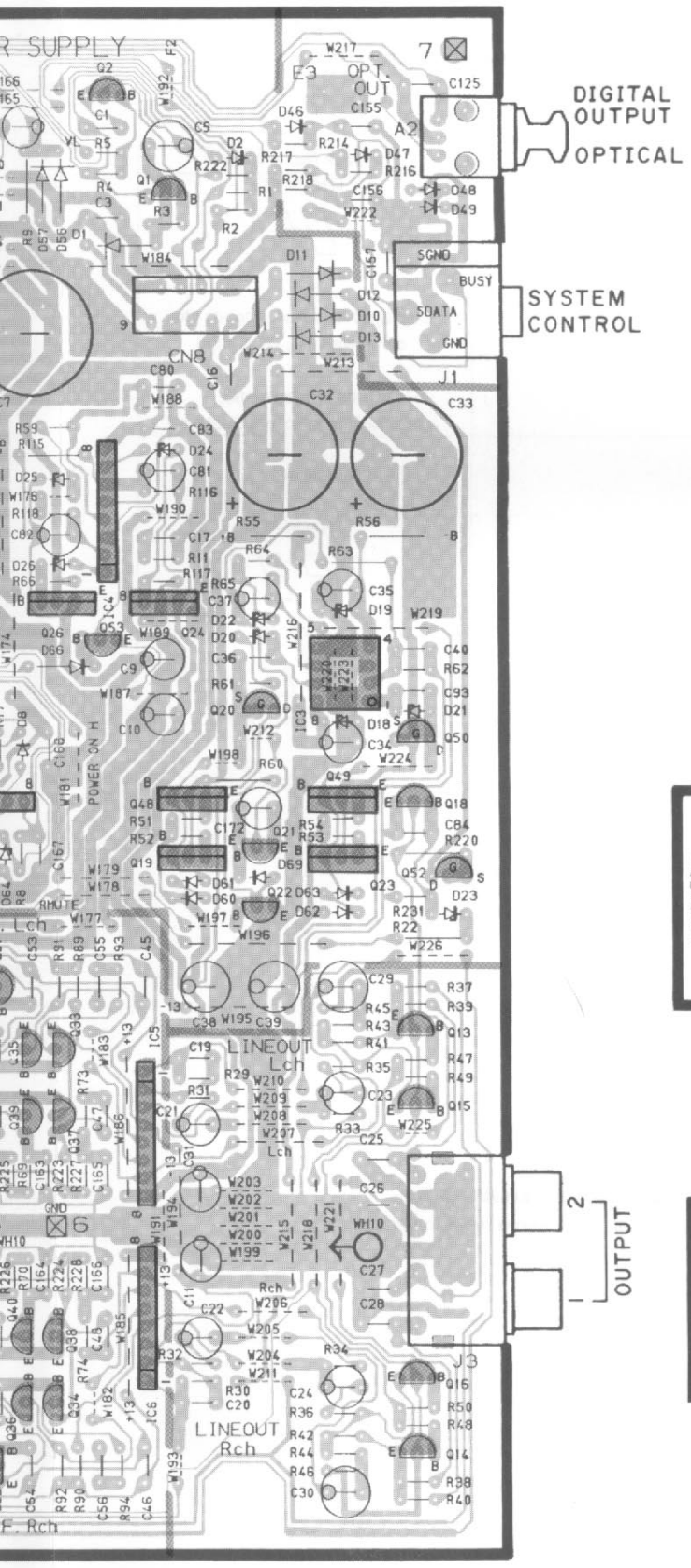
④ RF

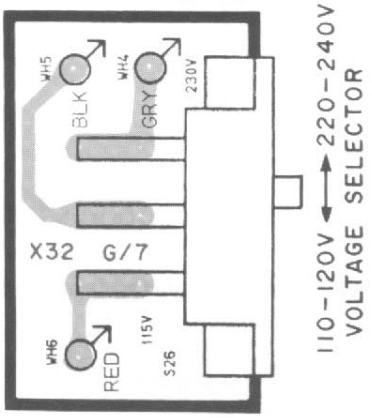


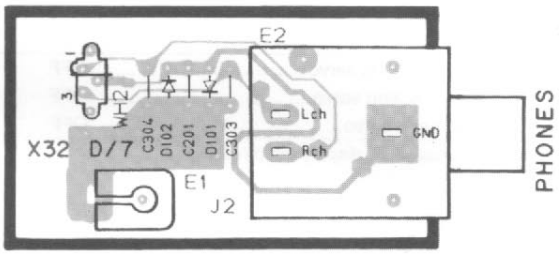
PC BOARD (COMPONENT SIDE VIEW)

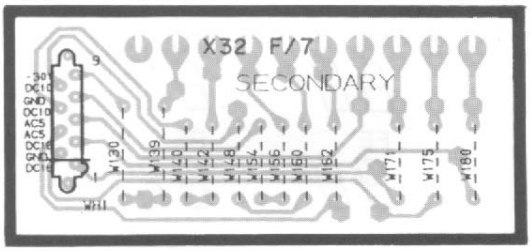


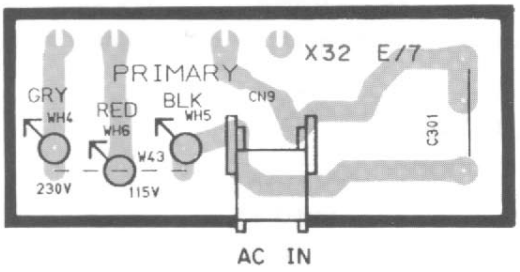
Refer to the schematic diagram for the value of resistors and capacitors.

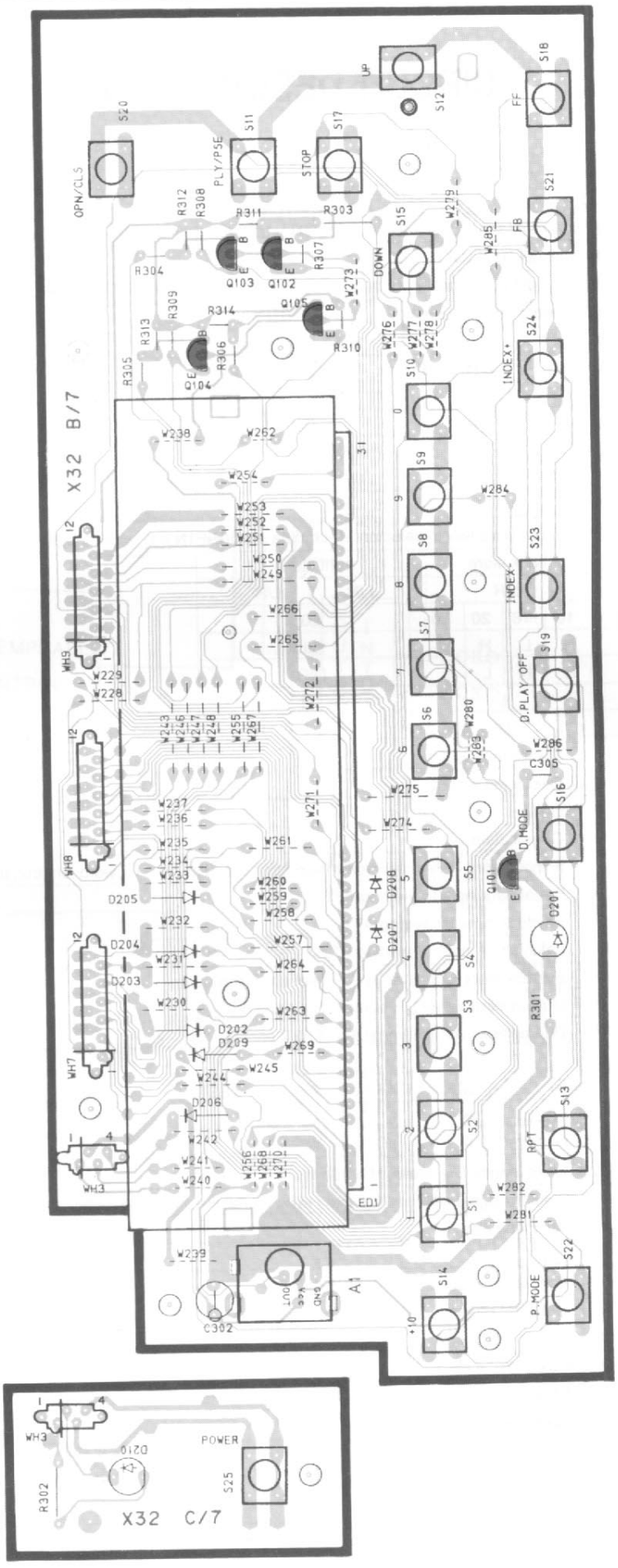

R SUPPLY
DIGITAL OUTPUT
OPTICAL
SYSTEM CONTROL
SGND
BUSY
SDATA
GND
CN8
J1
LINEOUT Lch
LINEOUT Rch
OUTPUT
J3
POWER ON H
RMUTE
F. Rch


X32 G/7
WH5
BLK
WH4
GRY
230V
WH6
RED
115V
S26
110-120V ⟷ 220-240V
VOLTAGE SELECTOR

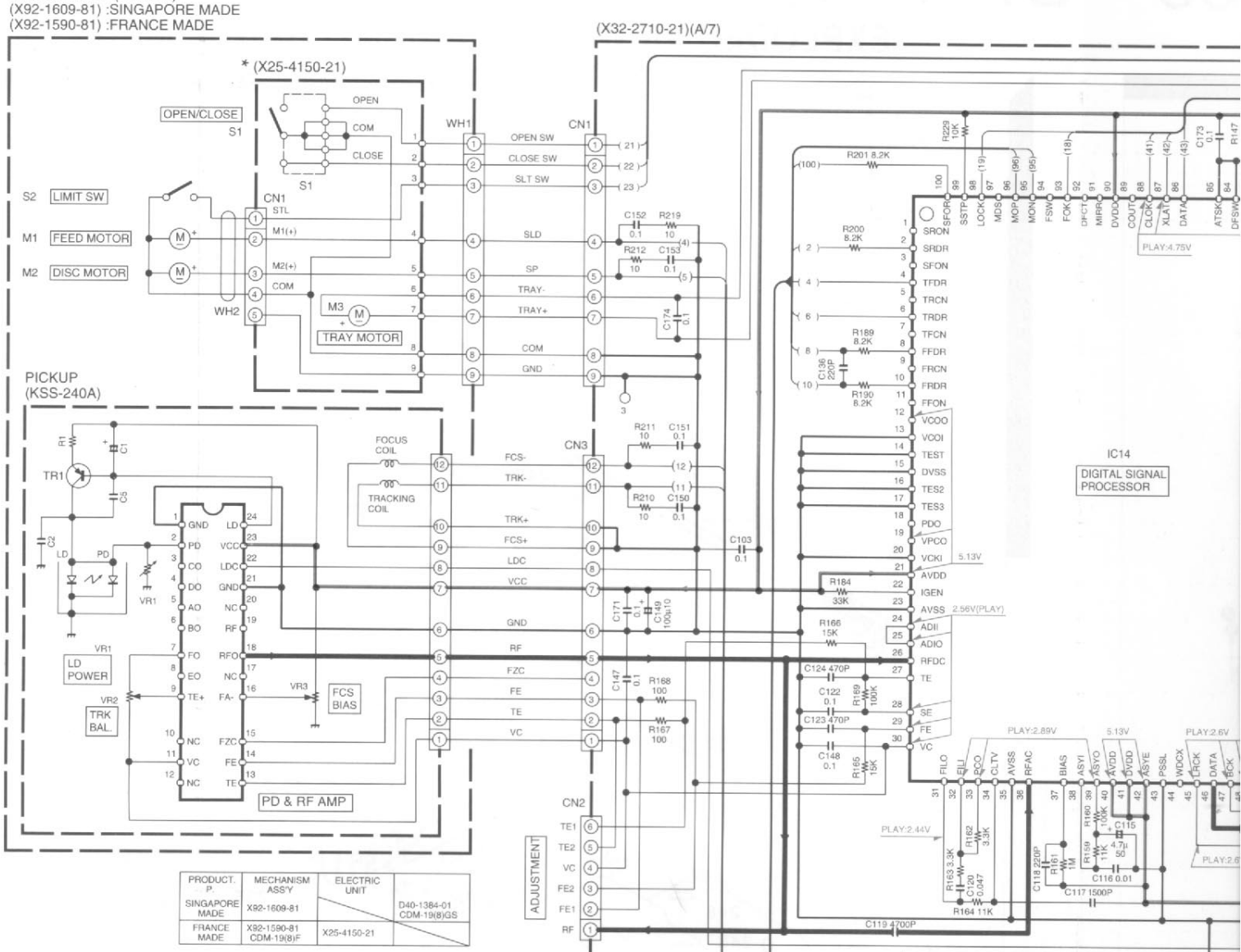

X32 D/7
E2
E1
J2
WH2
C304
D102
C201
D101
C303
Lch
Rch
GND
PHONES


X32 F/7
SECONDARY


X32 E/7
PRIMARY
GRY
WH4
230V
RED
WH6
115V
BLK
WH5
CN9
C301
AC IN


X32 B/7
X32 C/7
OPN/CLS
PLY/PSE
STOP
UP
DOWN
FF
FB
INDEX+
INDEX-
Ø.PLAY-OFF
Ø.MODE
RPT
P.MODE
POWER
LED1
WH3
WH7
WH8
WH9
C302
C305
D201
D202
D203
D204
D205
D206
D207
D208
D209
Q101
Q102
Q103
Q104
Q105
R301
R302
R303
R304
R305
R306
R307
R308
R309
R310
R311
R312
R313
R314
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
S16
S17
S18
S19
S20
S21
S22
S23
S24
S25

MECHA. ASS'Y (CDM-19)
(X92-1609-81) :SINGAPORE MADE
(X92-1590-81) :FRANCE MADE

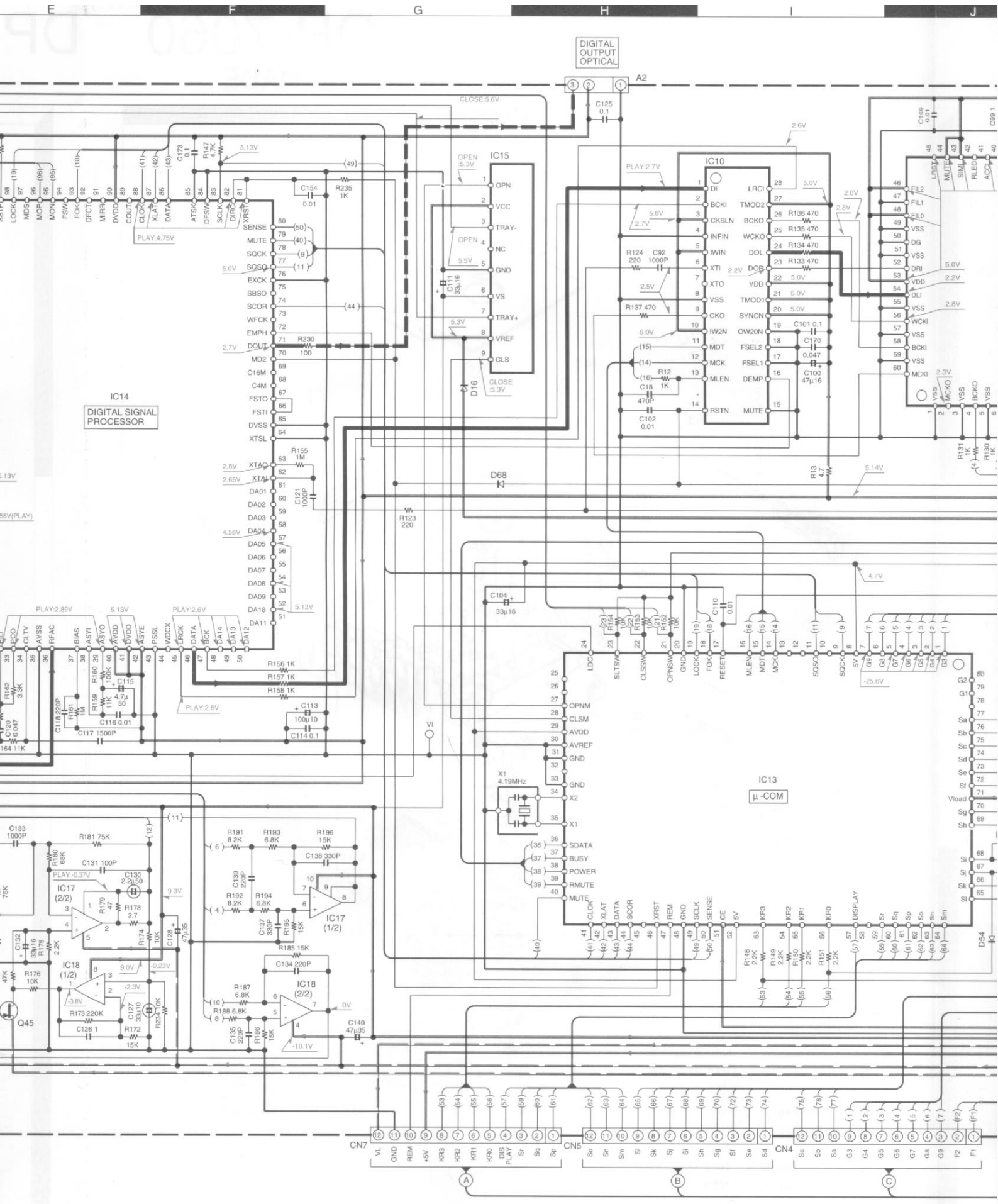


PRODUCT. P.	MECHANISM ASS'Y	ELECTRIC UNIT	
SINGAPORE MADE	X92-1609-81		D40-1384-01 CDM-19(8)GS
FRANCE MADE	X92-1590-81 CDM-19(8)F	X25-4150-21	

IC1,4	:NJM4558L
IC3,18	:NJM4558D
IC5,6	:NJM4580L
IC7	:TDA1547
IC8	:SAA7350GP/M3
IC9	:KAN02
IC10	:SM5843AP
IC12	:MN1381-R(TA)
IC13	:μPD78044AGF-036
IC14	:CXD2515Q
IC15	:TA8409S
IC16,17	:TA8410AK

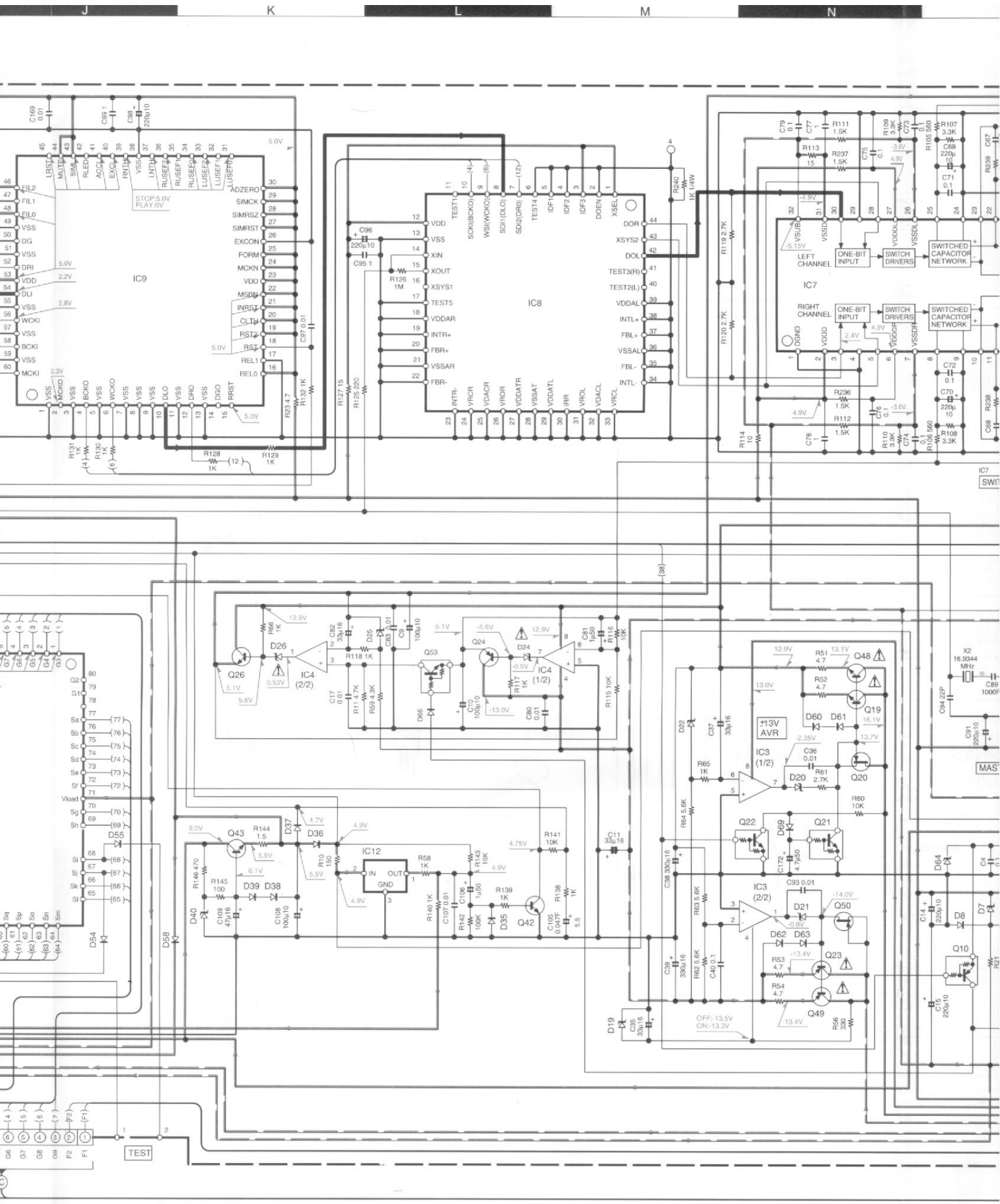
Q1	:2SA1534A
Q2	:2SA1175(F,E) or 2SA933S(Q,R)
Q6	:2SD2396(J,K)
Q8,23,24,49	:2SB1375 or 2SB1370
Q9,21,22,53	:UN4212 or DTC124ES
Q10,44	:UN4112 or DTA124ES
Q11~16	:2SC2878(B)
Q18	:UN4216 or DTC143TS
Q19,26,48	:2SD2012 or 2SD2061
Q20,50	:2SK246(Y)
Q27,28,31,32	:2SA992(F,E)
Q29,30,33~40	:2SC1845(F,E)
Q41	:2SK161(GR)
Q42	:2SC2785(F,E) or 2SC1740S(Q,R)
Q43	:2SC3246
Q45~47	:2SK246(Y,GR)
Q52	:2SK163(L)
D1,10~13,56~58	:1SR139-100 or S5688B
D2	:RD7.5JS(B) or HZS7.5S(B)
D3,4,8,14~16,35~39,41~49,54,55,60~63	:HSS104 or 1SS133
D5~7,24~26	:RD5.1JS(B2) or HZS5.1S(B2)
D18~23	:RD13ES(B2) or MTZJ13(B)
D27,28	:E-352
D29,30	:E-202
D31~34	:RD4.7JS(B2)
D40	:RD6.2ES(B2) or MTZJ6.2(B)
D50	:1B4B41
D64	:RD3.9ES(B2) or MTZJ3.9(B)

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



ecommended parts (refer to parts list). ⚠ indi- esistance measurements shall be carried out to the customer.

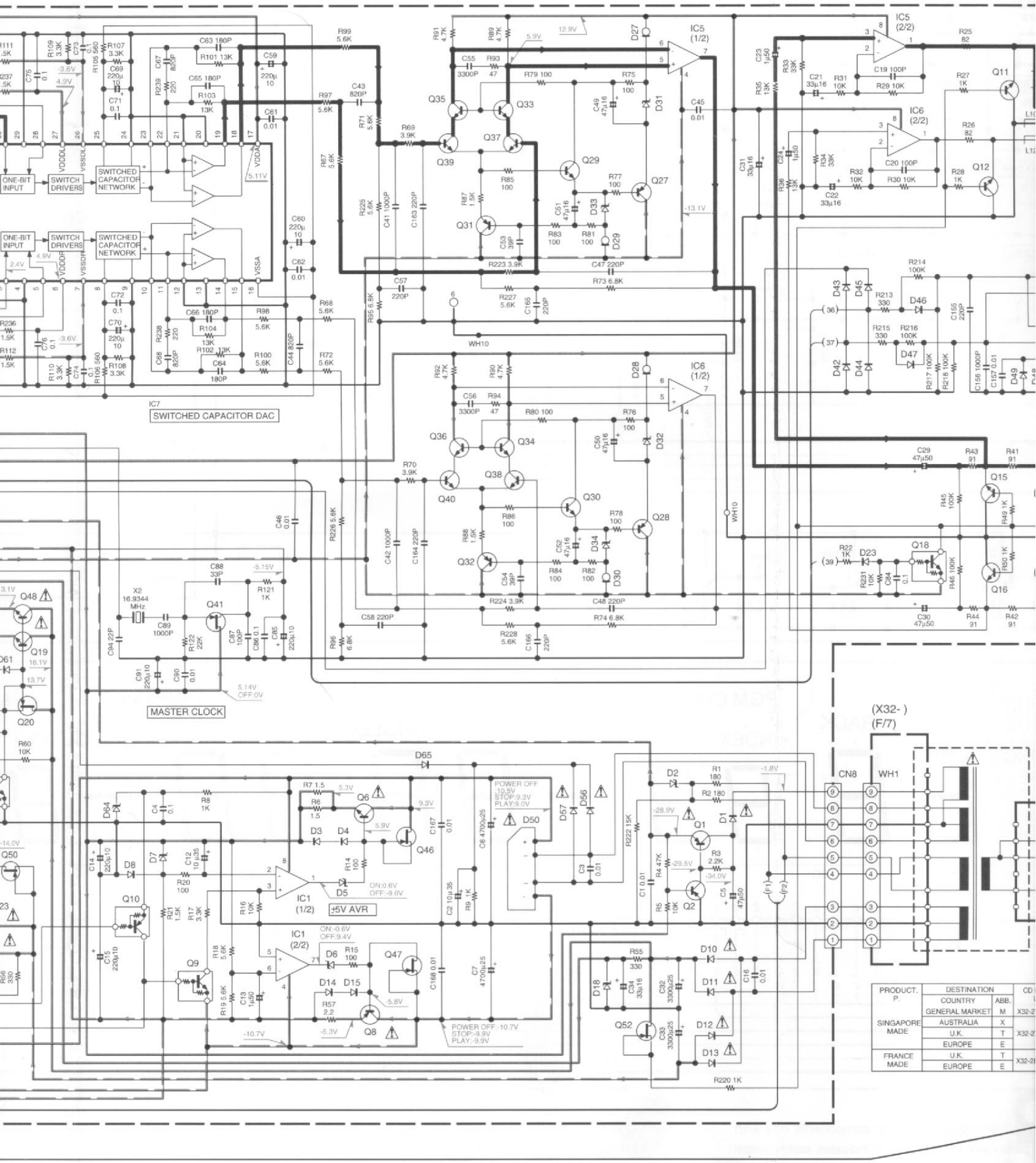
- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.



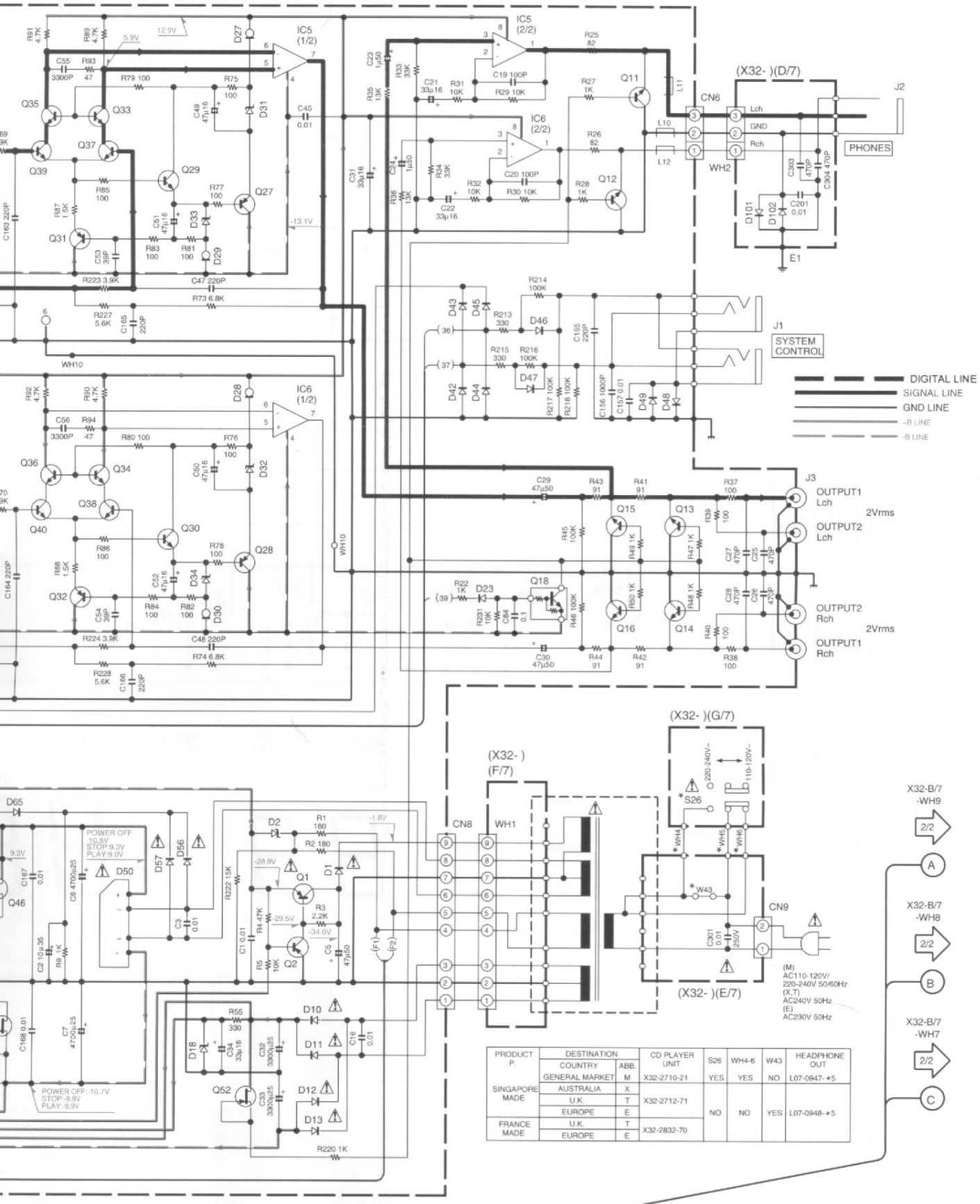
ariations between

• Les tensions c.c. doivent être measurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

• Die angegebenen Gleich
die Meßwerte aufgrund v



• Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Voltmeter gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.



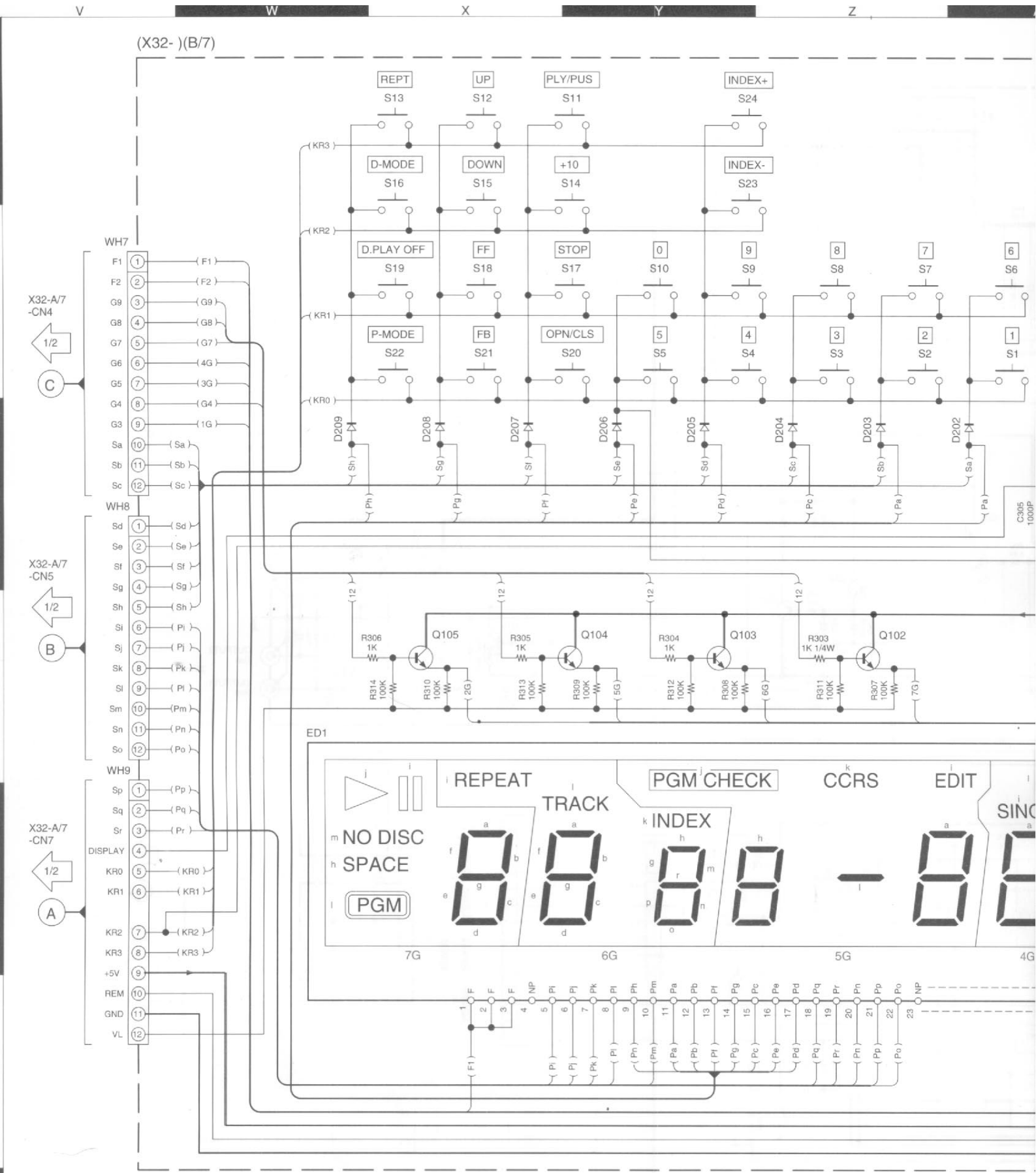
PRODUCT P.	DESTINATION	ABB.	CD PLAYER UNIT	S26	WH4-6	W43	HEADPHONE OUT
	COUNTRY						
	GENERAL MARKET	M	X32-2710-21	YES	YES	NO	L07-0947-*5
SINGAPORE MADE	AUSTRALIA	X	X32-2712-71	NO	NO	YES	L07-0948-*5
	U.K.	T					
	EUROPE	E					
FRANCE MADE	U.K.	T	X32-2832-70				
	EUROPE	E					

chohmigen Voltmeter gemessen. Dabei schwanken
nstrumenten oder Geräten u.U. geringfügig.

Y22-3730-10

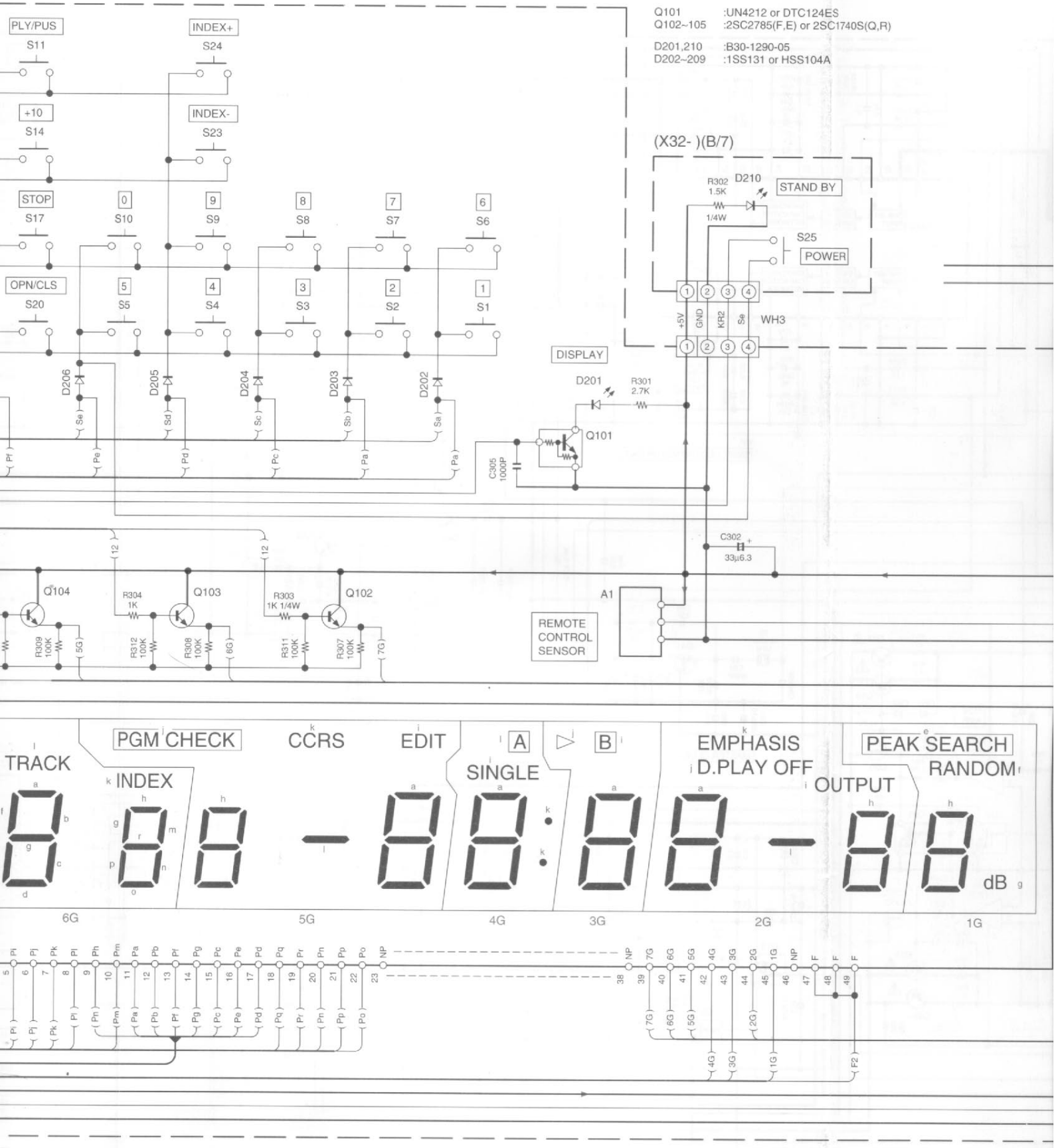
DP-7060

KENWOOD



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 retuned to the customer.

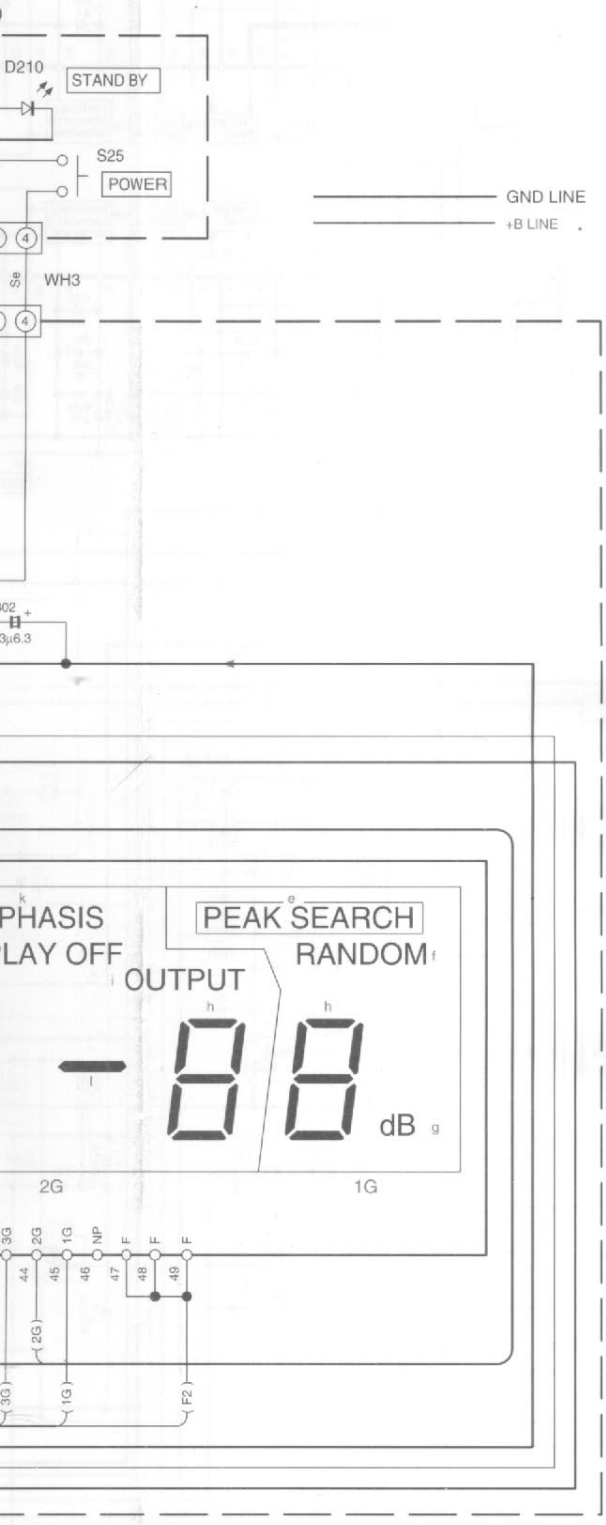
- DC voltages are as measured with a high individual instruments or/and units.
- Les tensions c.c. doivent être measurée légèrement du fait des variations inhérente
- Die angegebenen Gleichspannungswerte die Meßwerte aufgrund von Unterschieden



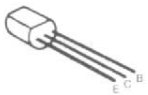
cal components only with
. ⚠ indicates safety critical
kage-current or resistance
are acceptably insulated
to the customer.

- DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.
- Les tensions c.c. doivent être measurées avec un voltmètre à haute impédance. 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 gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen instrumenten oder Geräten u.U. geringfügig.

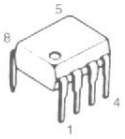
N4212 or DTC124ES
SC2785(F,E) or 2SC1740S(Q,R)
30-1290-05
SS131 or HSS104A



2SA1534A
2SA992
2SC1845
2SC2878
2SC3246

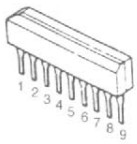


NJM4558D

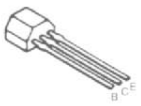


2SA1175
2SC2785

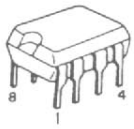
NJM4558L
TA8409S



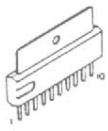
DTA124ES
DTC124ES
DTC143TS
UN4112
2SA933S
2SC1740



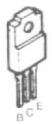
NJM4580L



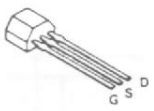
TA8410AK



2SB1370
2SD2061

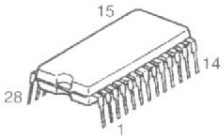


2SK161

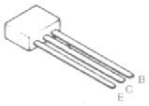


2SB1375
2SD2012

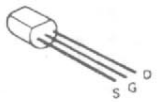
SM5843AP



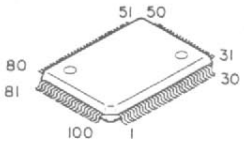
UN4212
UN4216



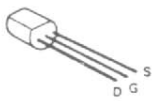
2SK246



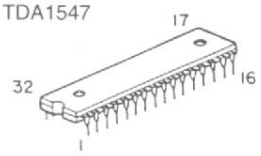
CXD2515Q



2SK163



TDA1547

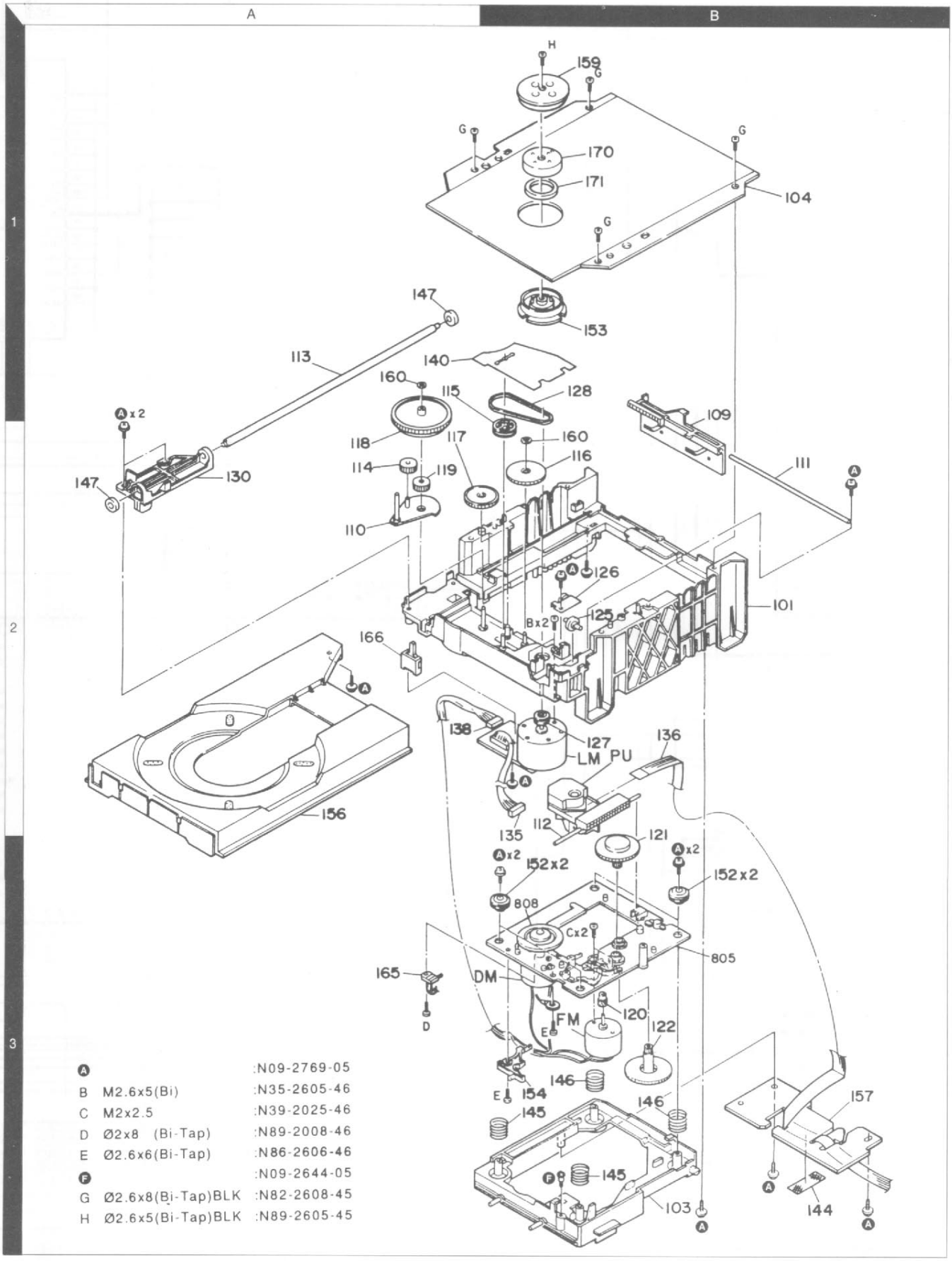


vary slightly due to variations between

edance. Les valeurs peuvent différer
e mesure individuels.

ltmeter gemessen. Dabei schwanken
der Geräten u.U. geringfügig.

EXPLODED VIEW (MECHANISM) SINGAPORE MADE

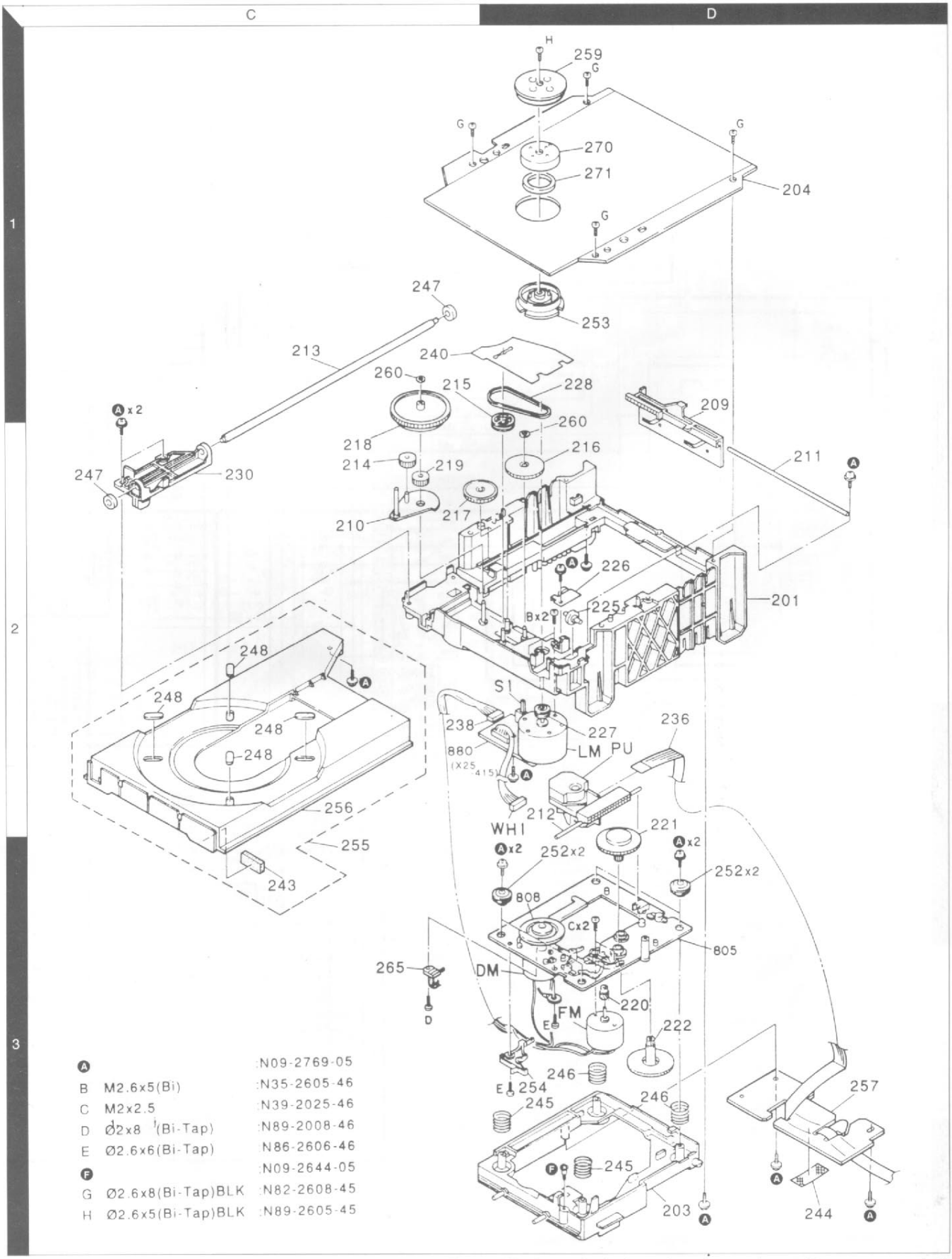


A		:N09-2769-05
B	M2.6x5(Bi)	:N35-2605-46
C	M2x2.5	:N39-2025-46
D	Ø2x8 (Bi-Tap)	:N89-2008-46
E	Ø2.6x6(Bi-Tap)	:N86-2606-46
F		:N09-2644-05
G	Ø2.6x8(Bi-Tap)BLK	:N82-2608-45
H	Ø2.6x5(Bi-Tap)BLK	:N89-2605-45

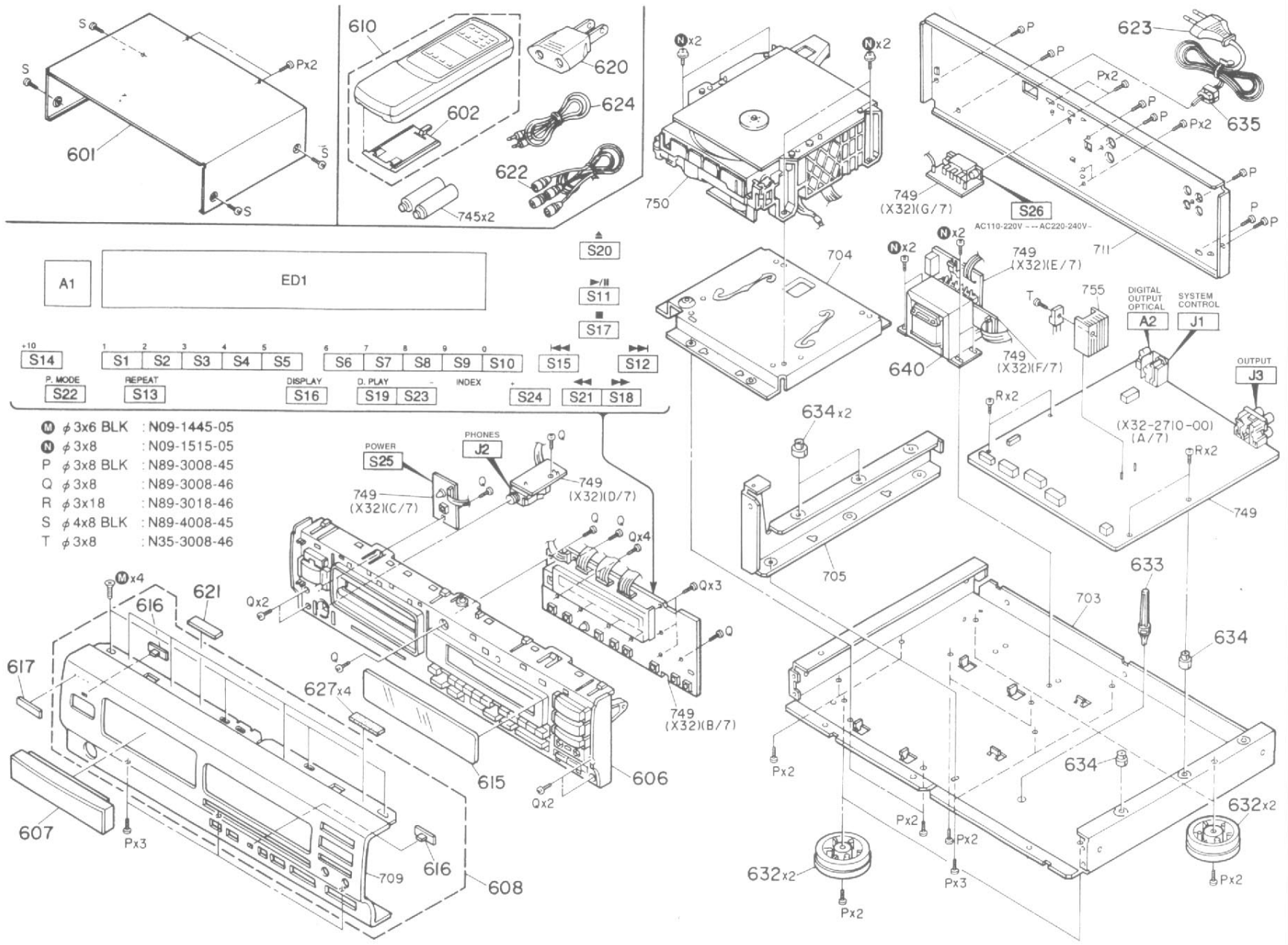
Parts with the exploded numbers larger than 700 are not supplied

DP-7060

EXPLODED VIEW (MECHANISM) FRANCE MADE



Parts with the exploded numbers larger than 700 are not supplied



EXPLODED VIEW(UNIT)

DP-7060

Parts with the exploded numbers larger than 700 are not supplied

DP-7060

SPECIFICATIONS

[Format]

System	Compact disc digital audio system
Laser	Semiconductor laser
Number of channels	2 channels
Playing rotation	200 rpm ~ 500 rpm (CLV)

[D/A Convertors]

D/A conversion	Twin 1 Bit
Oversampling	8 fs (352.8 kHz)

[Audio]

Frequency response	4 Hz ~ 20 kHz, ±0.5 dB
Signal to noise ratio	More than 105 dB
Dynamic range	More than 100 dB
Total harmonic distortion	Less than 0.007 % (1 kHz)
Channel separation	More than 100 dB (1 kHz)
Wow & flutter	Unmeasurable Limit
Output level/impedance	
Variable	0 ~ 2 V/0.3kΩ
Digital output	
Optical	−15 dBm ~ −21 dBm (Wave length 660 nm)
Headphone output	20 mW (32Ω)

[General]

Power consumption	20 W
Dimensions	W: 440 mm (17-5/16")
	H : 127 mm (5")
	D : 319mm (12-1/2")
Weight (Net)	6.5kg

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

Note :
Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S.A.(K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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