

The Harman Kardon Model Citation 23

Manual 114B

DIGITAL SYNTHESIZED QUARTZ-LOCK TUNER

Technical Manual



SUPPLEMENTARY MANUAL 1

MODIFICATIONS WERE MADE AT SERIAL NUMBER S103-01001, S103-05801 AND S103-06251 TO IMPROVE PERFORMANCE. EXCEPT FOR THE CHANGES AS NOTED IN THIS SUPPLEMENT, REFER TO MANUAL 114A FOR ALL OTHER PARTS AND SERVICE INFORMATION.

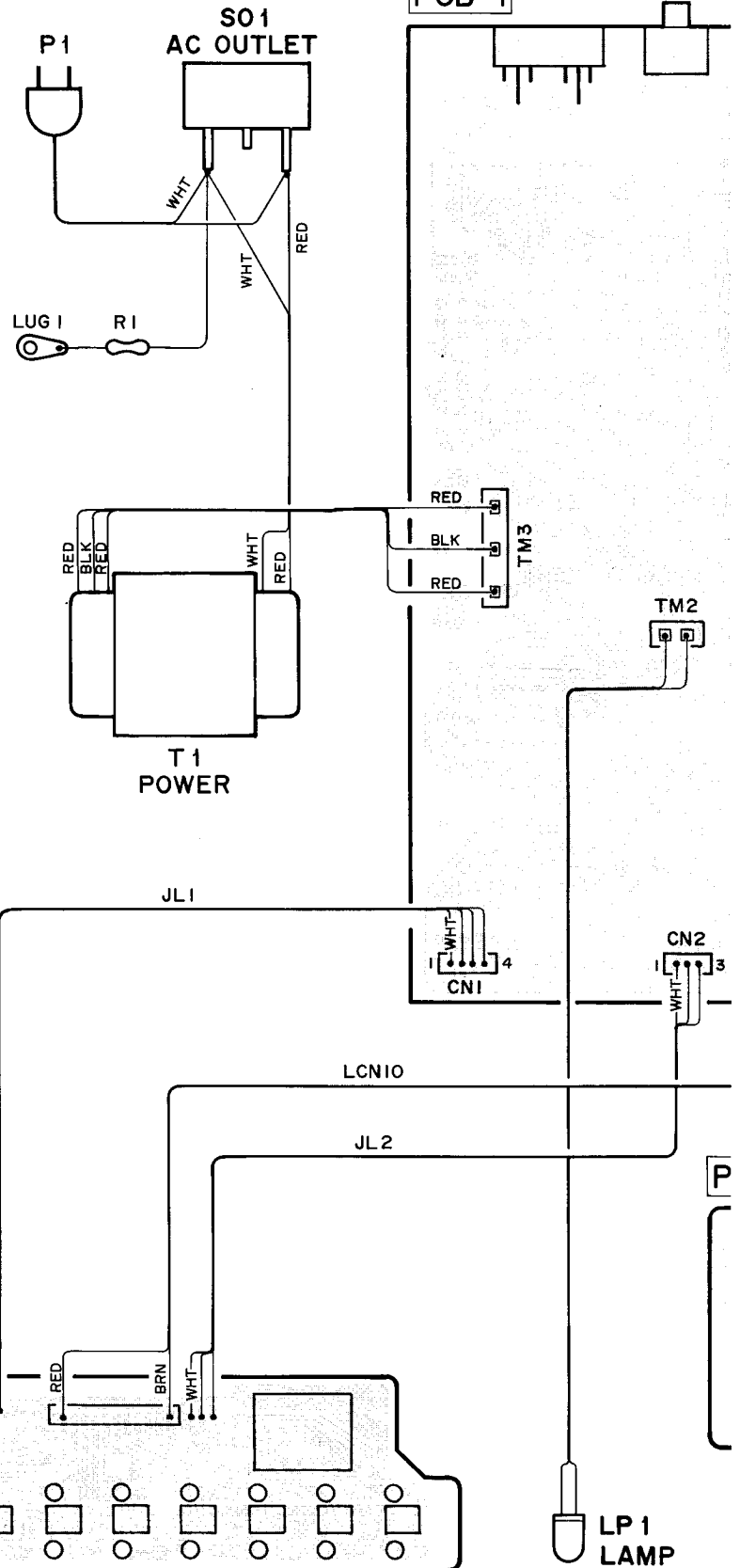
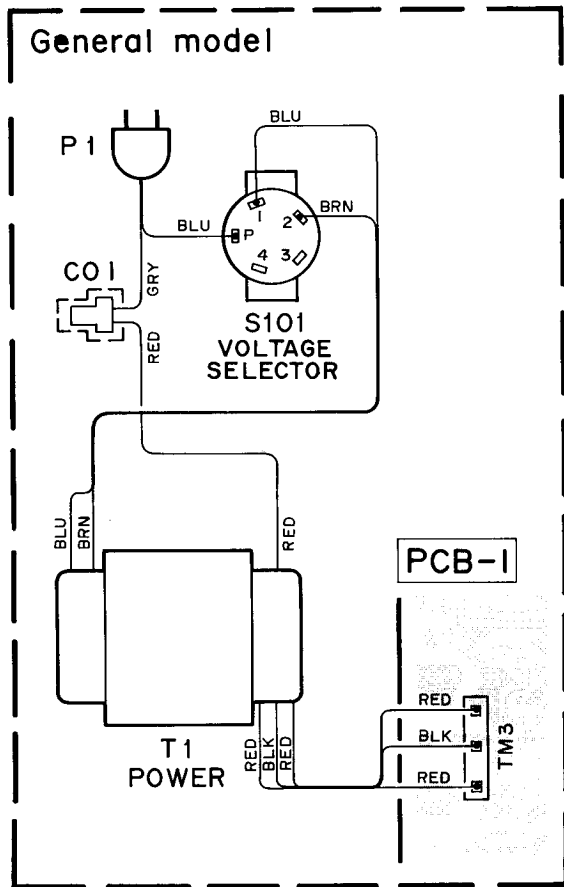
The following marks found in the parts list of this manual identify the models as follows.

- UA : North America area model
- G : General model
- N : Japan model

harman/kardon

240 Crossways Park West, Woodbury, N.Y. 11797
1112-3152114B8 P-089010 1500 Printed in Japan

WIRING DIAGRAM



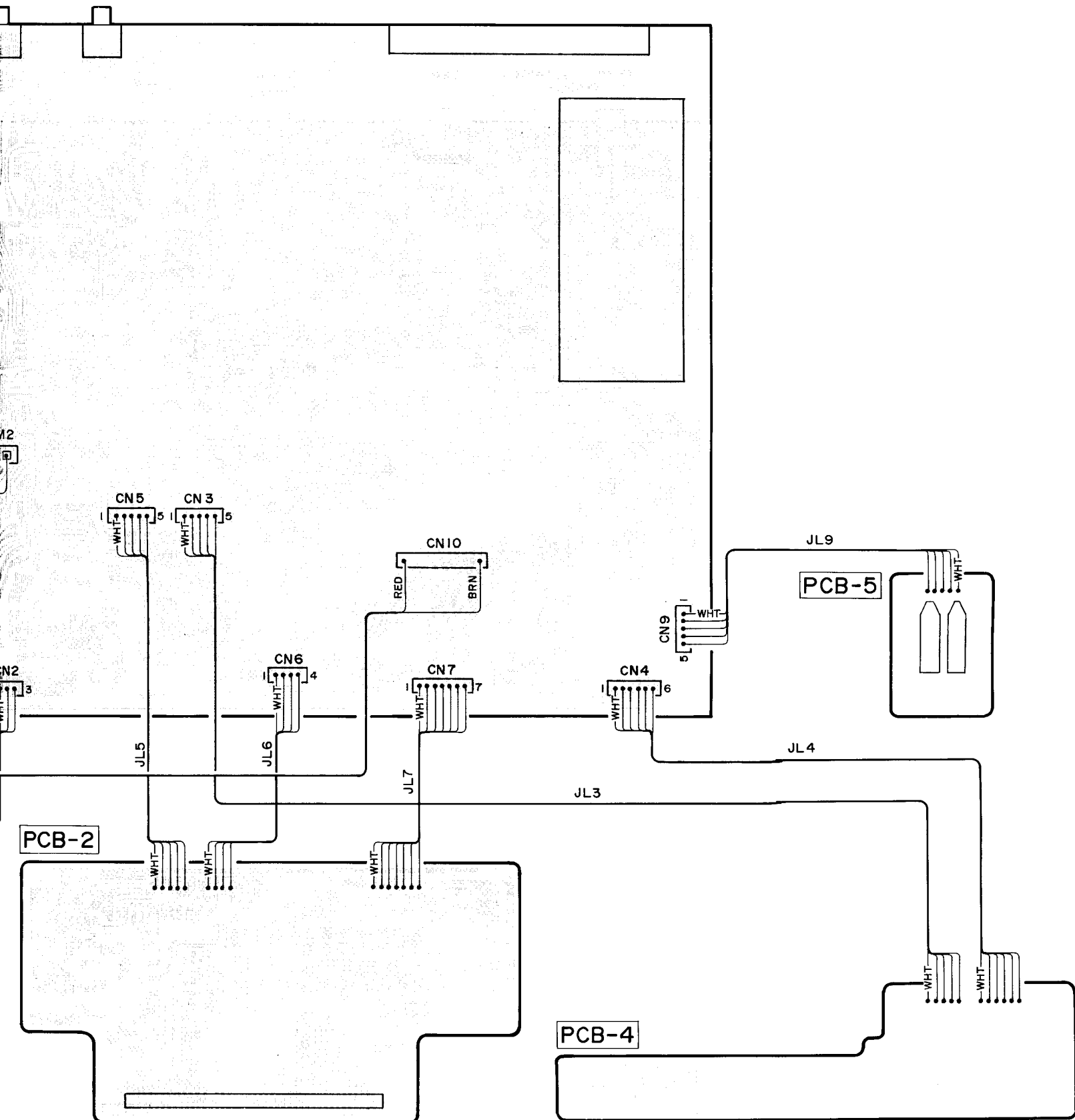
F

G

H

I

J

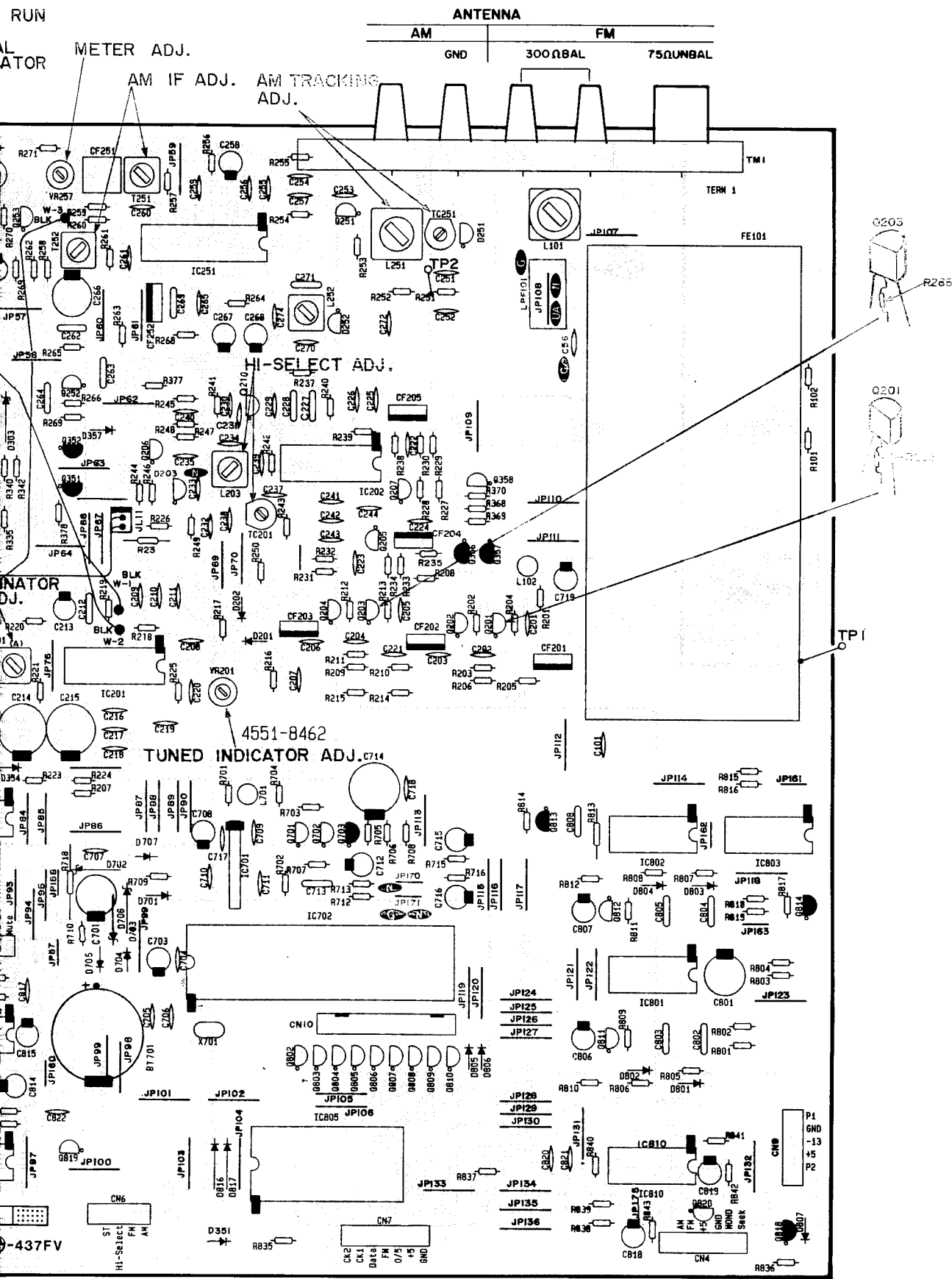


WIRE COLOR ABBREVIATIONS

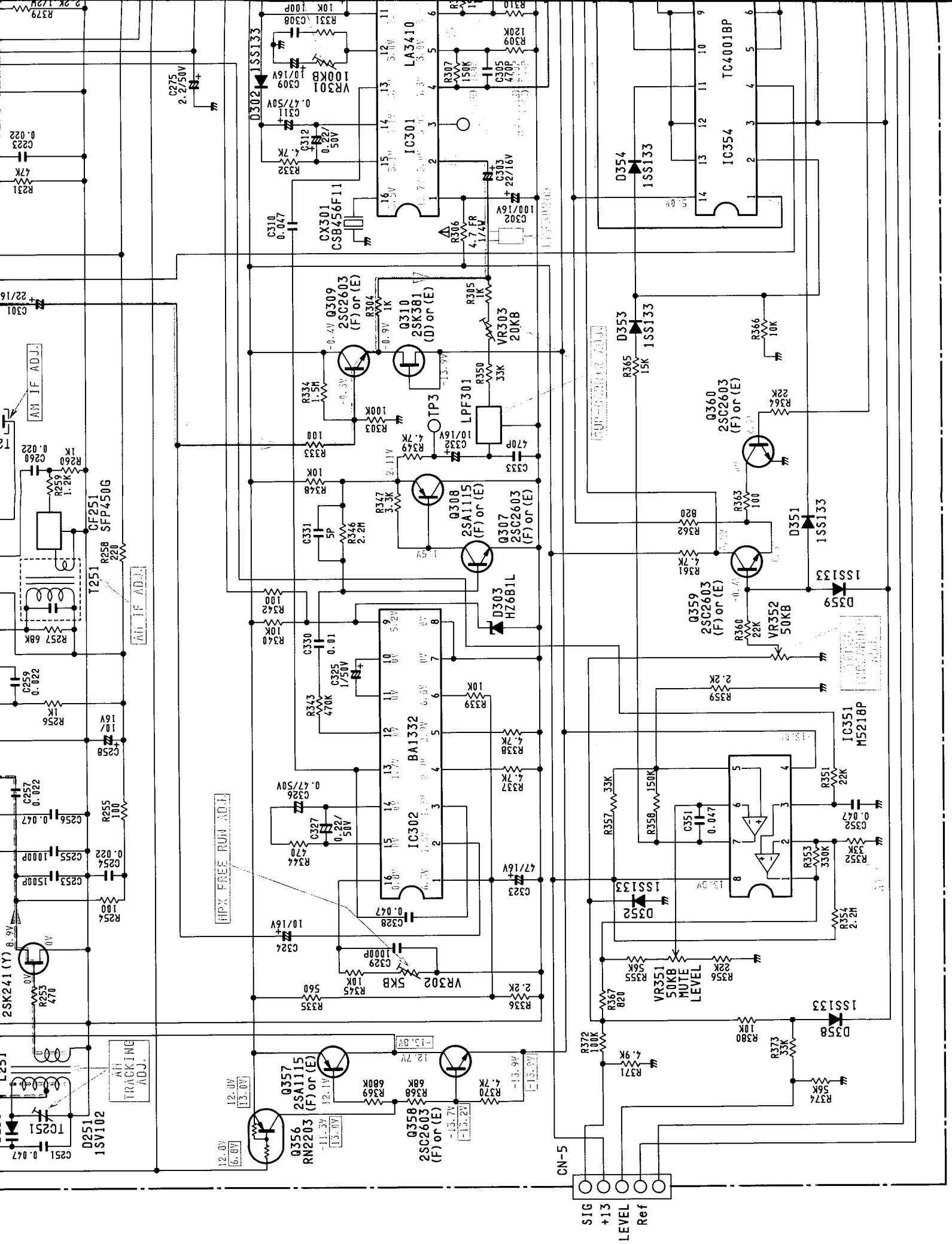
Red	: RED	YEL	: Yellow
ORG	: Orange	PUP	: Purple
BLU	: Blue	PIK	: Pink
WHT	: White	GRY	: Gray
GRN	: Green	BRN	: Brown
BLK	: Black		

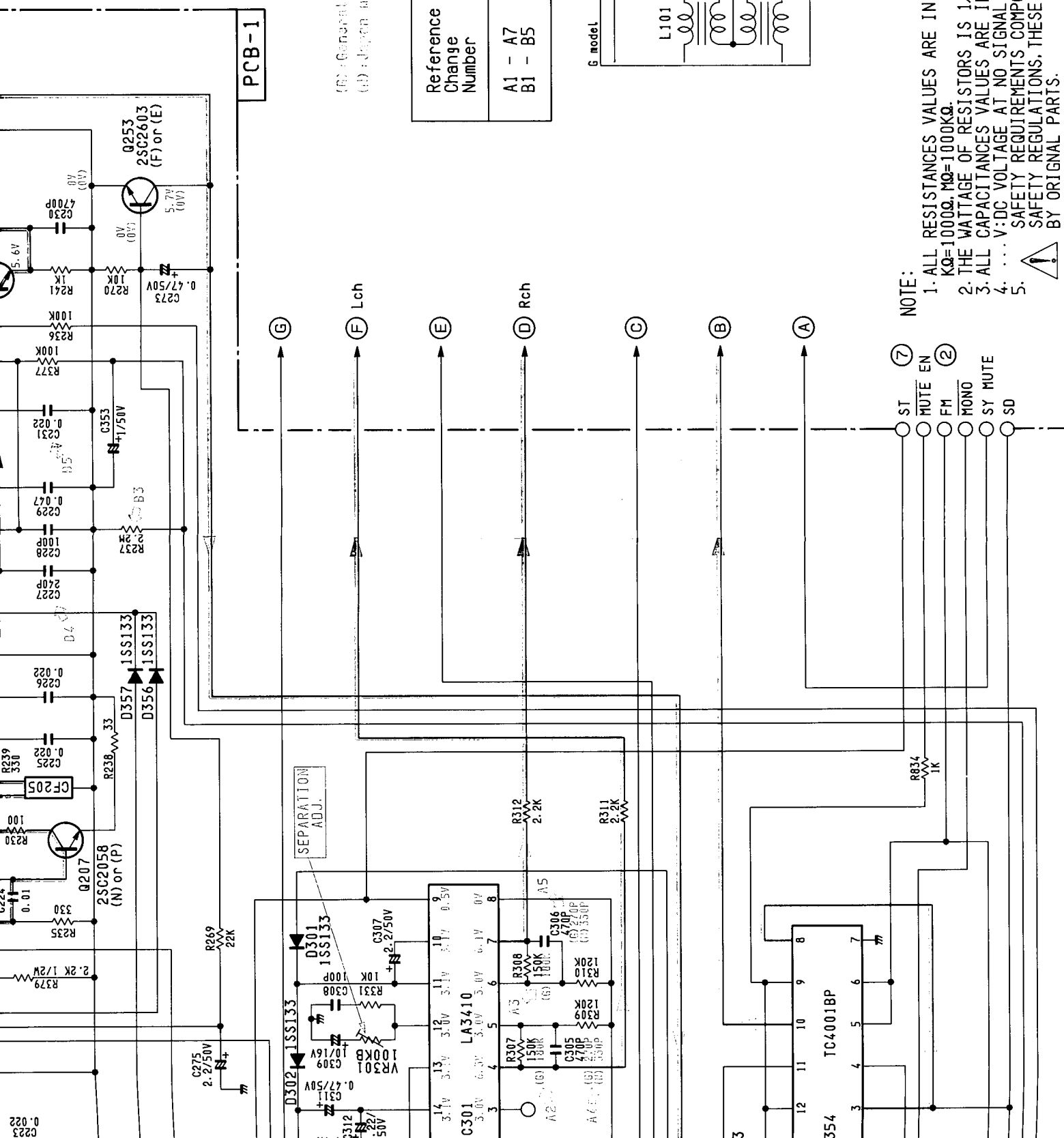
PCB-1 Main P. C. Board





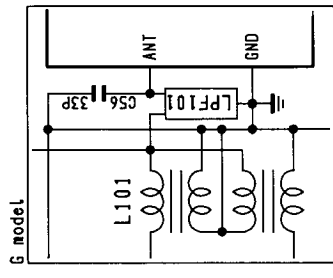
[illegible]





(A) General model
(B) Japan model

Reference Change Number	After Serial No.
A1 - A7	S103-01001
B1 - B5	S103-05801

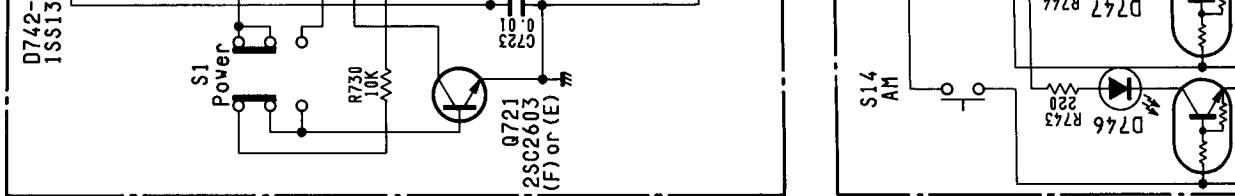


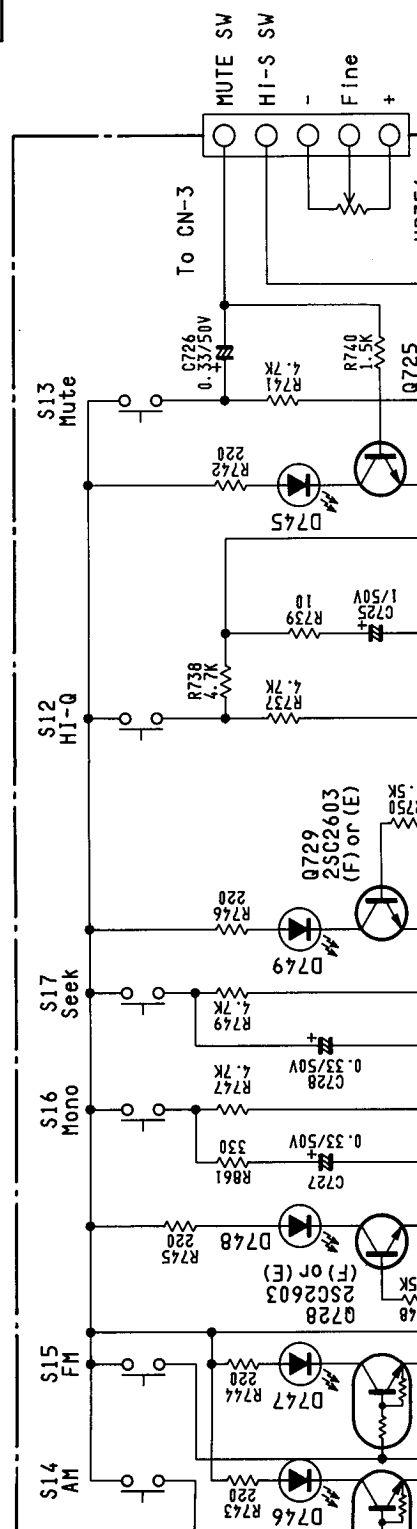
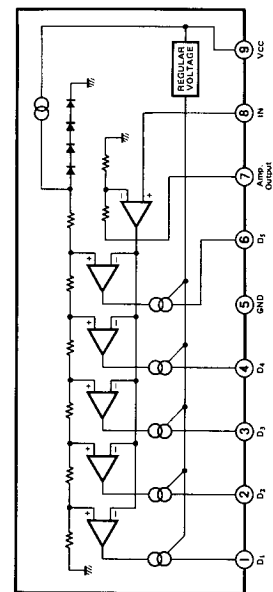
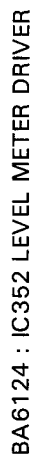
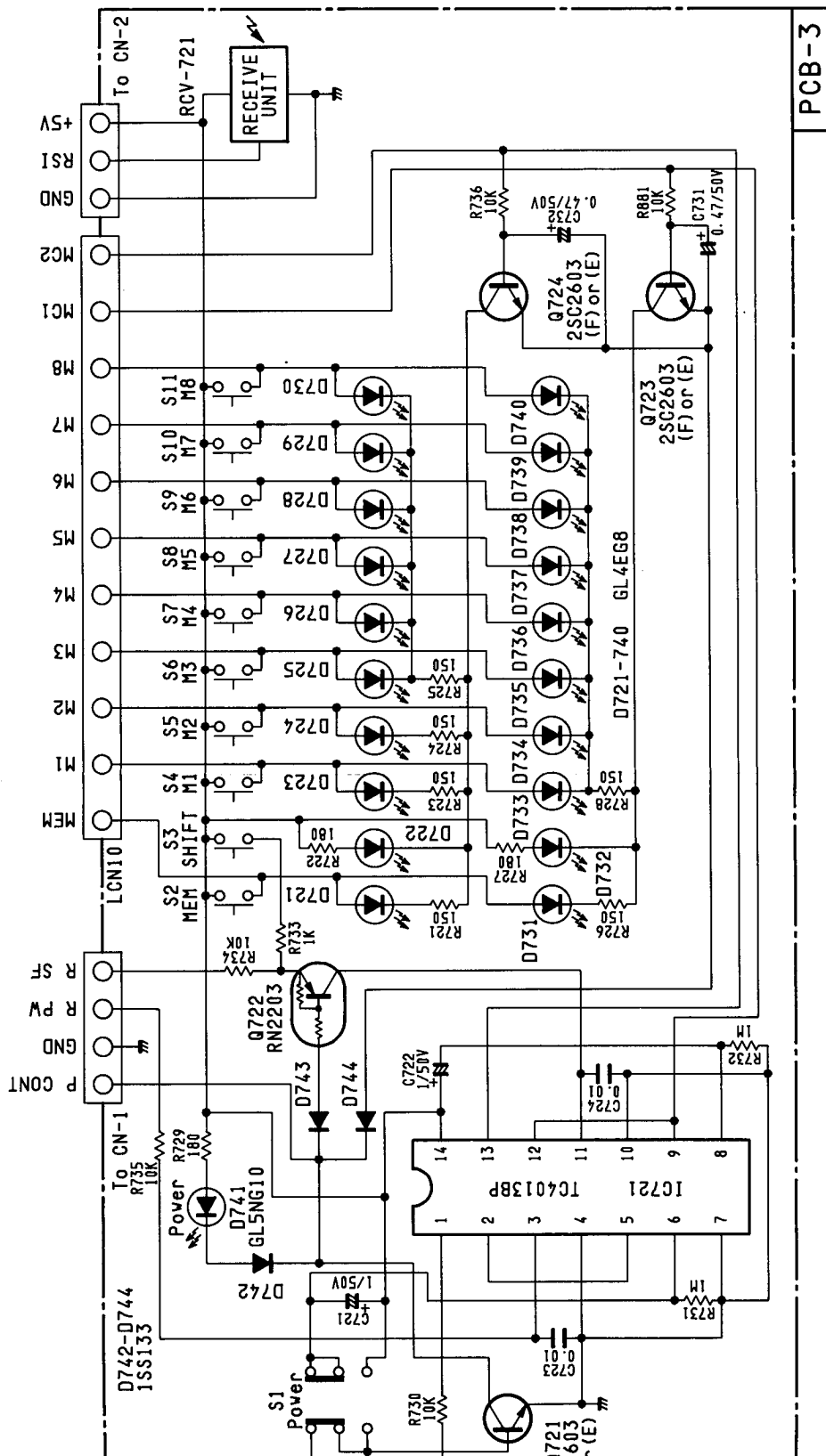
NOTE:

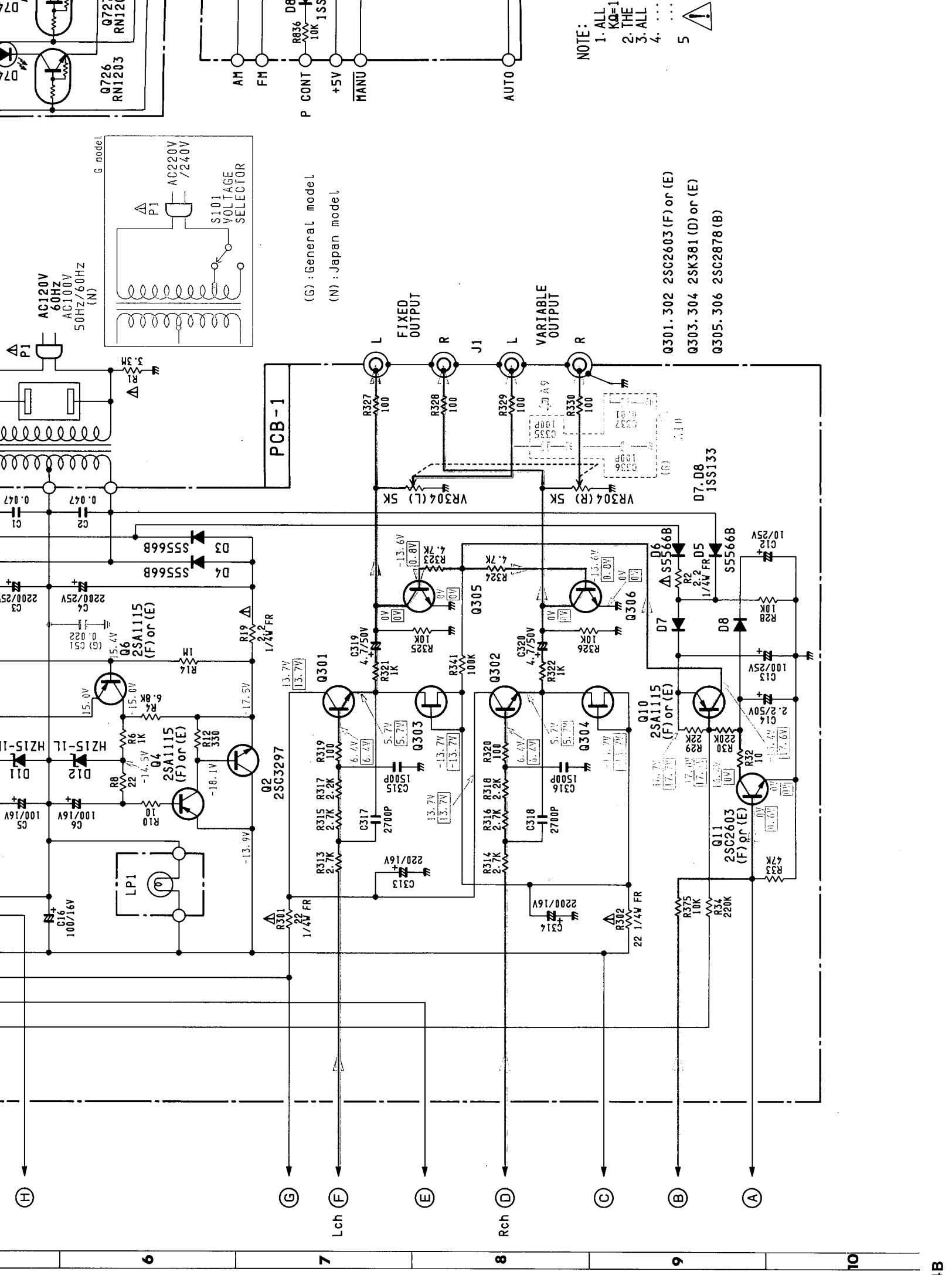
1. ALL RESISTANCE VALUES ARE IN Ω .
 $K\Omega=1000\Omega$, $M\Omega=1000K\Omega$.
2. THE WATTAGE OF RESISTORS IS 1/6W UNLESS OTHERWISE NOTED.
3. ALL CAPACITANCE VALUES ARE IN μF UNLESS OTHERWISE NOTED. $P=\mu F$.
4. ... V:DC VOLTAGE AT NO SIGNAL UNLESS OTHERWISE NOTED.
5. SAFETY REQUIREMENTS COMPONENTS IN ACCORDANCE WITH PRESENT SAFETY REGULATIONS, THESE COMPONENTS MUST ONLY BE REPLACED BY ORIGINAL PARTS.



Reference Change Number	After Serial No.
A8 B6 - B9, B13	S103-01001 S103-05801



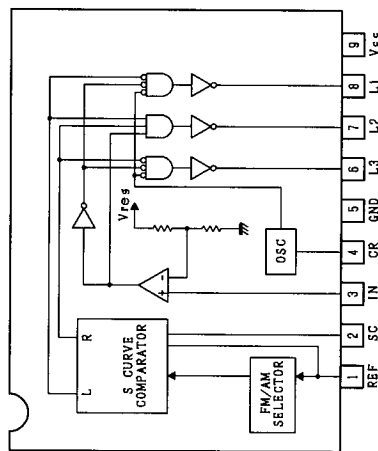
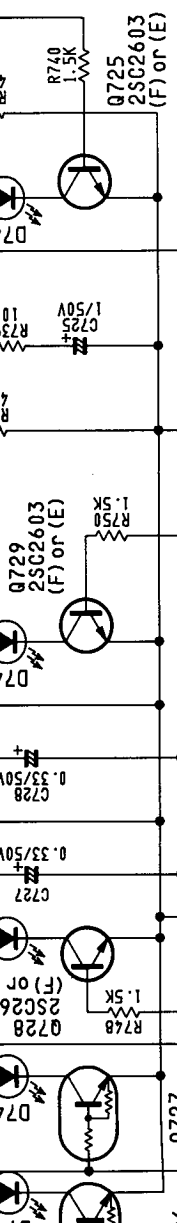




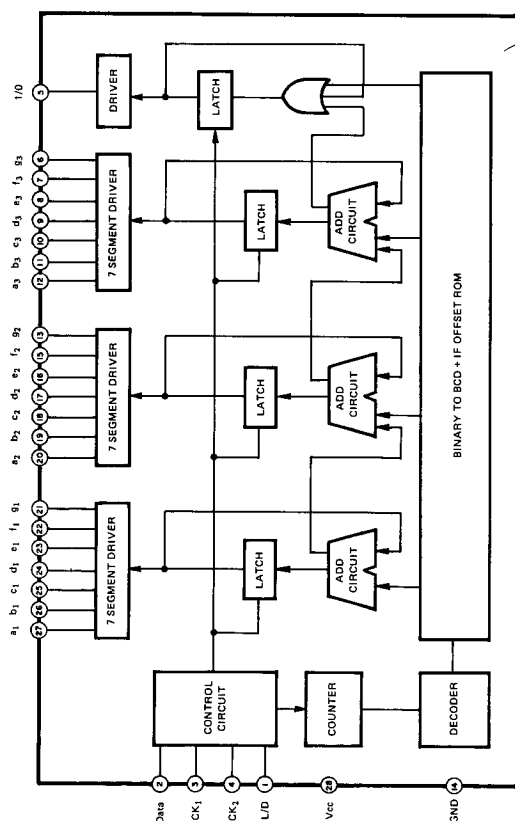
NOTE:
 1. ALL KQ=1
 2. THE
 3. ALL
 4. ...
 5

(G) : General model
 (N) : Japan model

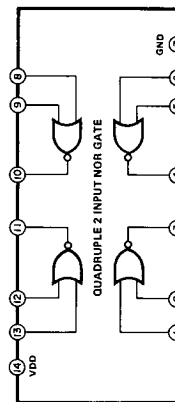
Q301. 302 25C2603 (F) or (E)
 Q303. 304 25K381 (D) or (E)
 Q305. 306 25C2878 (B)



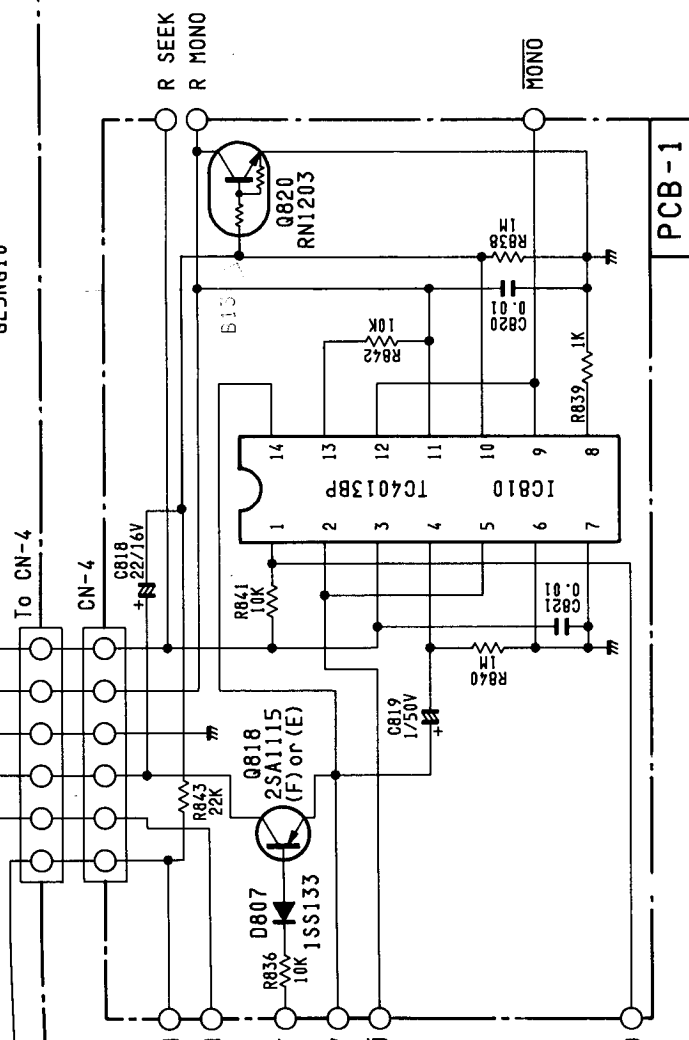
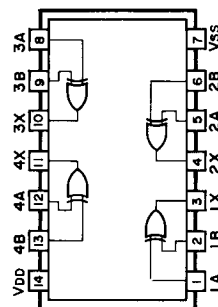
TTD6301AP : IC751 FREQUENCY DISPLAY DRIVER



TC4001BP : IC752 QUAD 2 INPUT
NOR GATE



TTC4030BP : IC753, IC754, IC755, IC756
QUAD EXCLUSIVE OR GATE

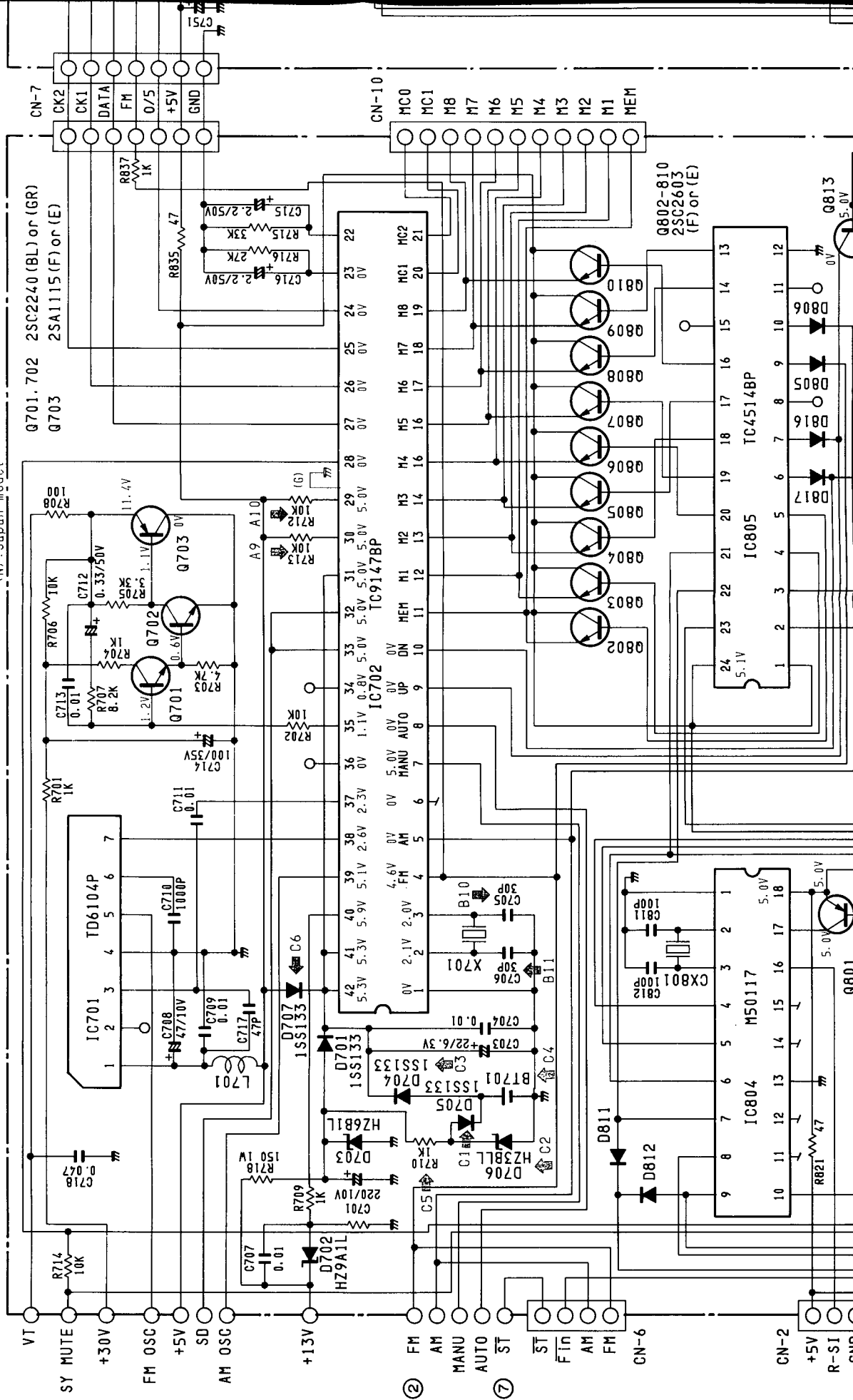


NOTE:

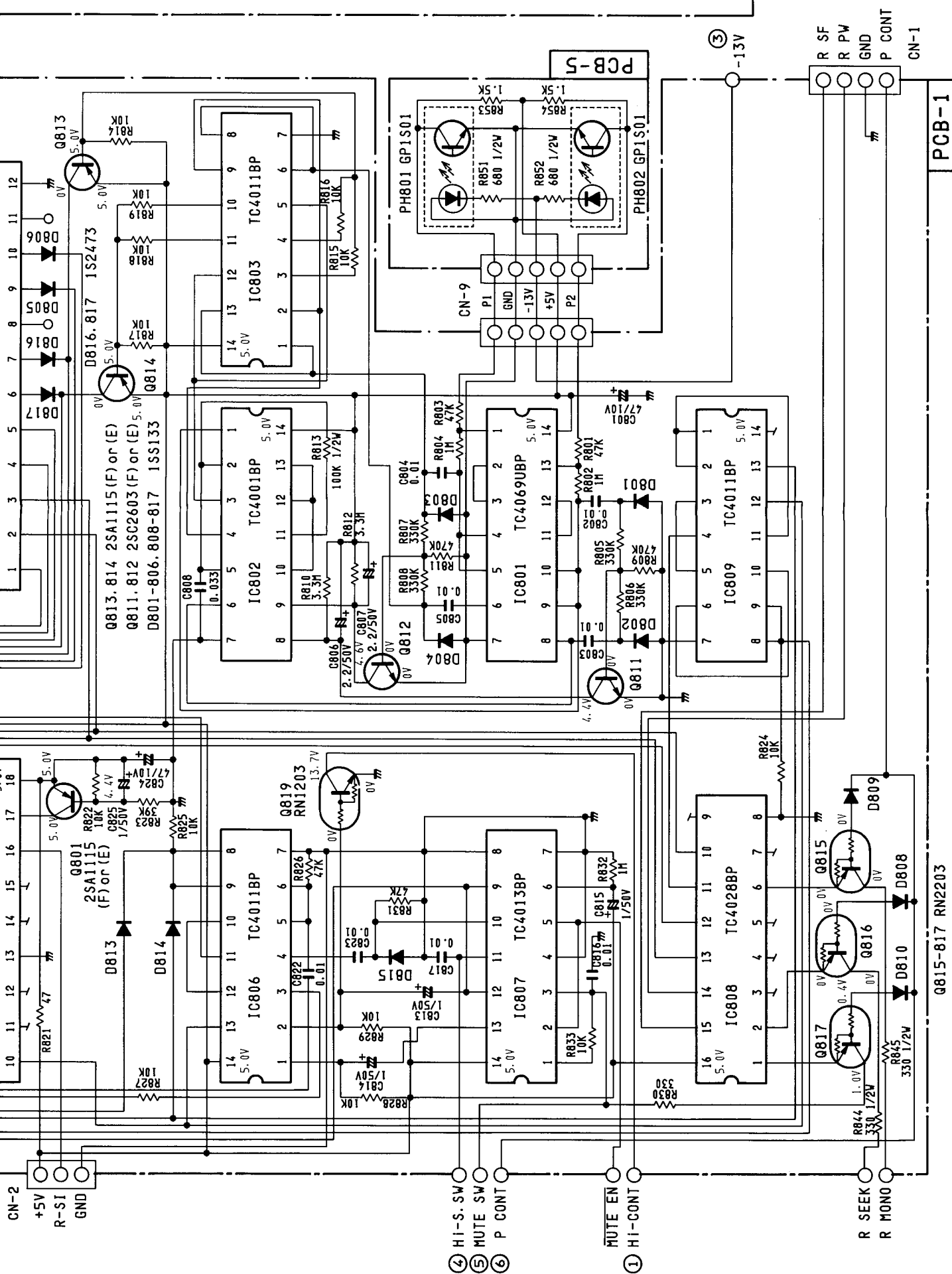
1. ALL RESISTANCES VALUES ARE IN Ω .
2. $K\Omega = 1000\Omega$, $M\Omega = 1000K\Omega$.
3. THE WATTAGE OF RESISTORS IS 1/6W UNLESS OTHERWISE NOTED.
4. ALL CAPACITANCES VALUES ARE IN μF UNLESS OTHERWISE NOTED. P= μF .
5. ... V:DC VOLTAGE AT NO SIGNAL UNLESS OTHERWISE NOTED.
6. ... V:FM POSITION (... V):AM POSITION (... V):HI-Q POSITION
7. SAFETY REQUIREMENTS COMPONENTS IN ACCORDANCE WITH PRESENT SAFETY REGULATIONS, THESE COMPONENTS MUST ONLY BE REPLACED BY ORIGINAL PARTS.

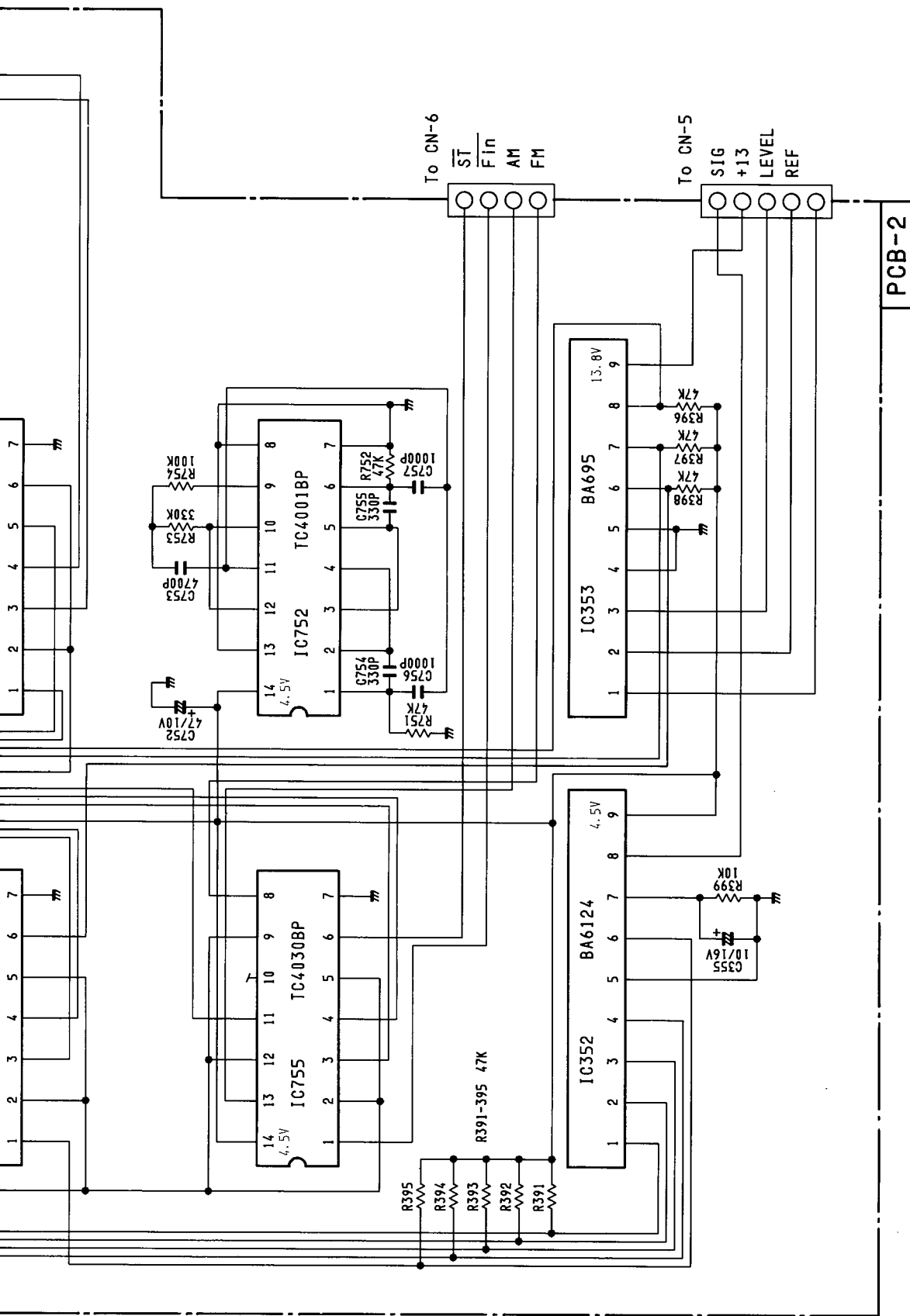
SCHEMATIC DIAGRAM

(G) : General model
(N) : Japan model









NOTE:

1. ALL RESISTANCES VALUES ARE IN Ω .
2. THE WATTAGE OF RESISTORS IS 1/6W UNLESS OTHERWISE NOTED.
3. ALL CAPACITANCES VALUES ARE IN μF UNLESS OTHERWISE NOTED. P= μF .
4. ... V:DC VOLTAGE AT NO SIGNAL UNLESS OTHERWISE NOTED.
5. SAFETY REQUIREMENTS COMPONENTS IN ACCORDANCE WITH PRESENT SAFETY REGULATIONS. THESE COMPONENTS MUST ONLY BE REPLACED BY ORIGINAL PARTS.



Reference Change Number	After Serial No.
A9 - A10	S103-01001
B10 - B11	S103-05801
C1 - C6	S103-06251

