FILE NO.

SERVICE MANUAL

FISHER

TAD S3

(DE)

Super Mini Component System

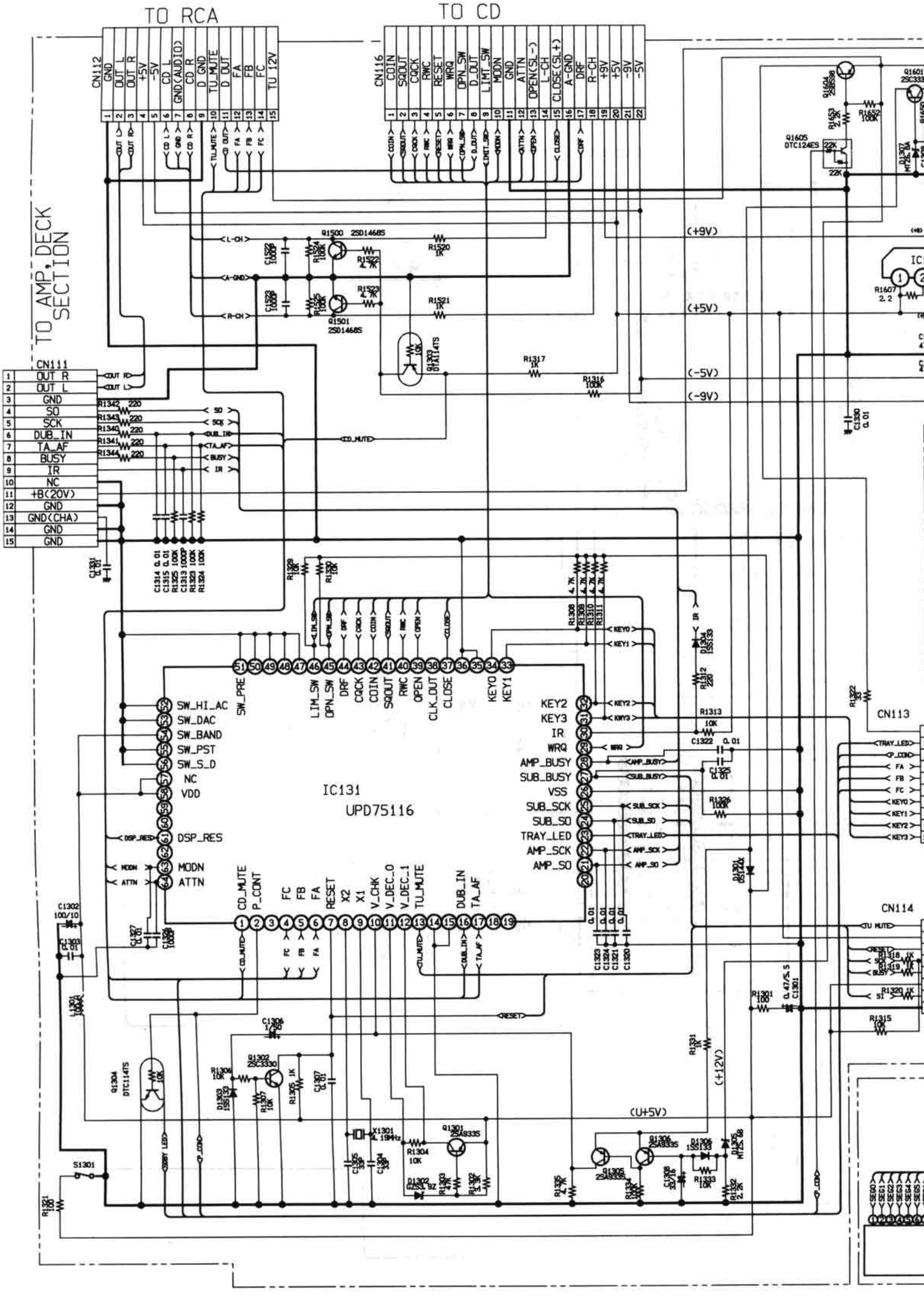
PRODUCT CODE No.
129 365 03

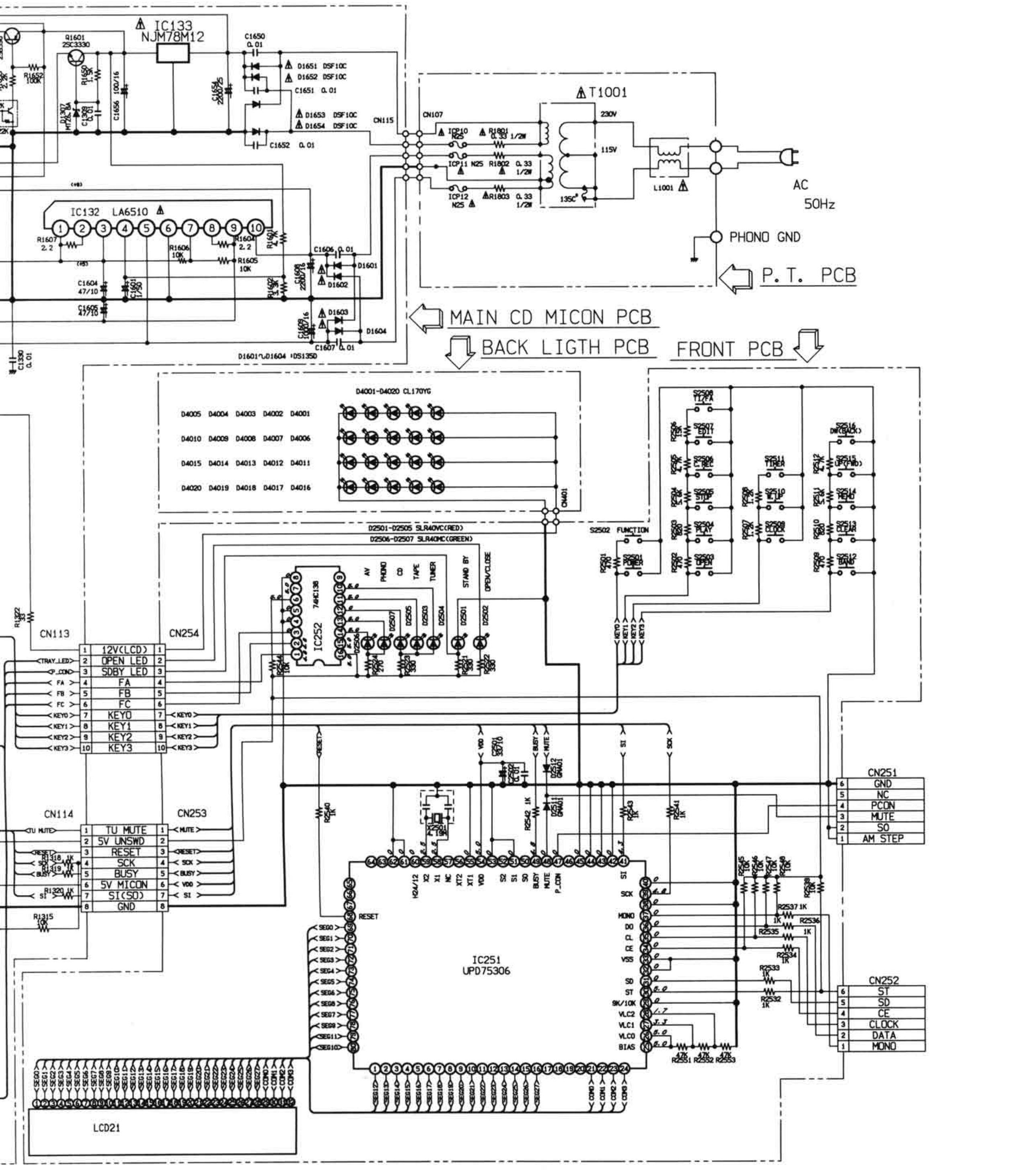
Contents

This Service manual is consist of "REM S3", "TUP S3", "CAC S3".

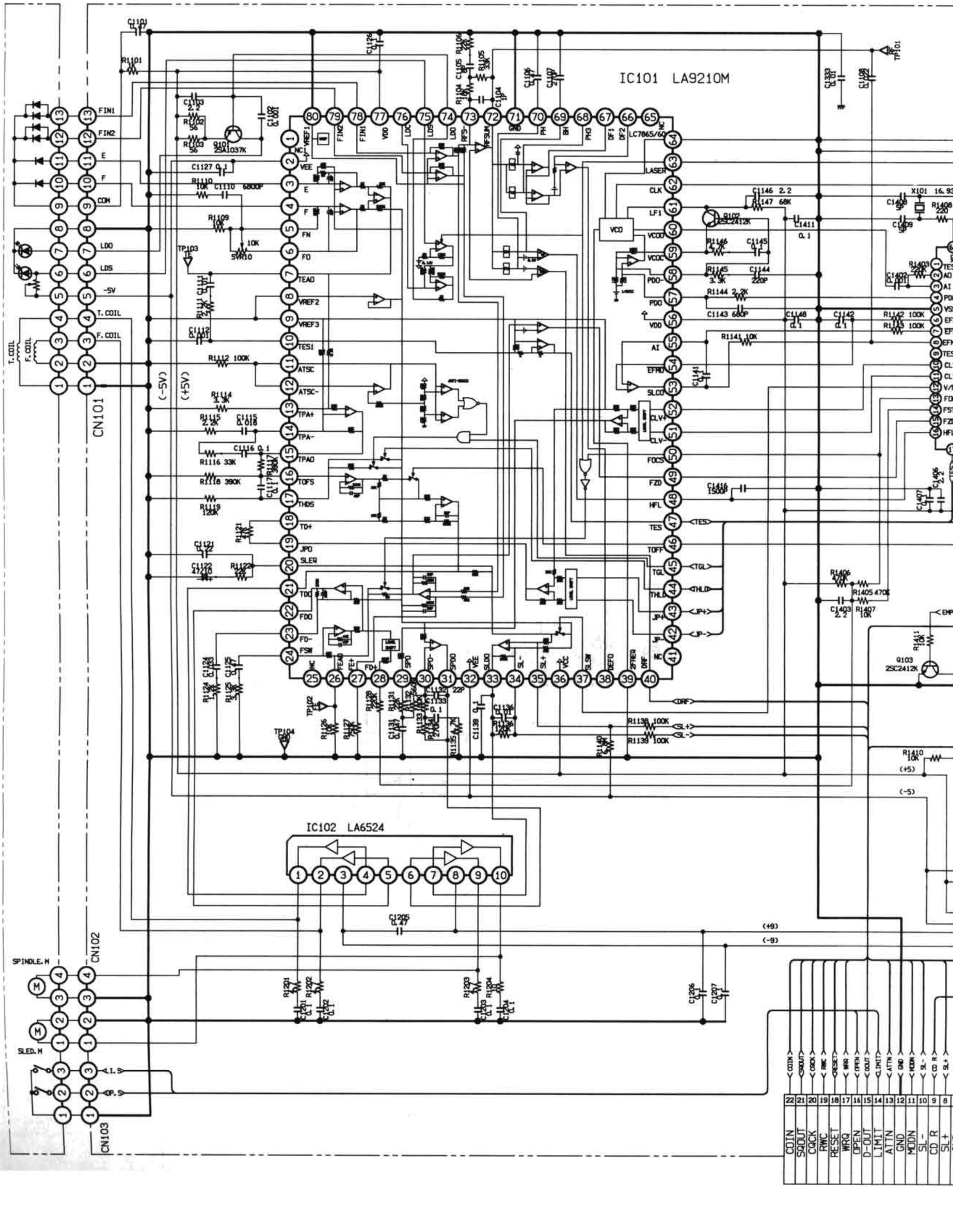
REFERENCE No. SM580049

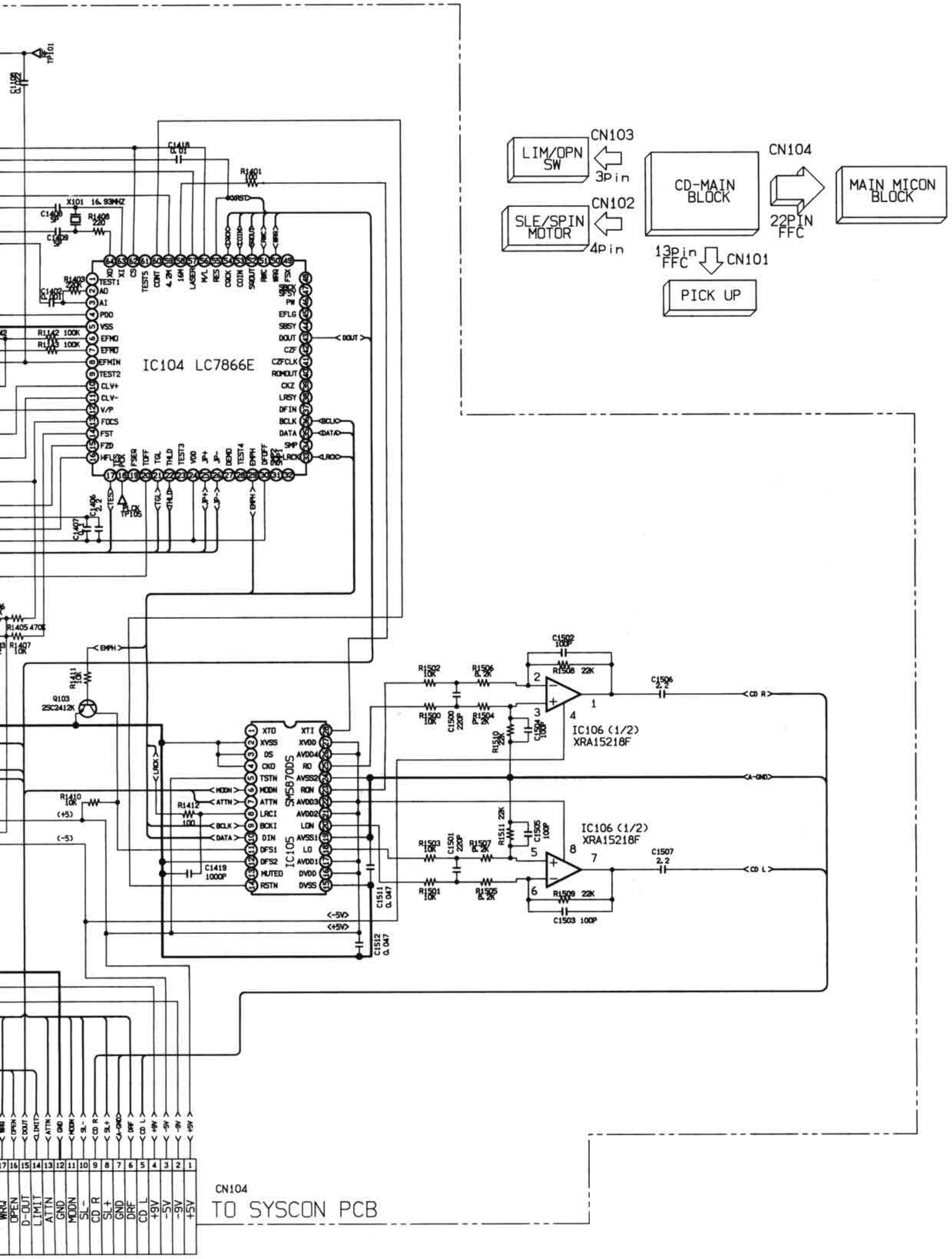
SCHEMATIC DIAGRAM (SYSCON & FRONT)



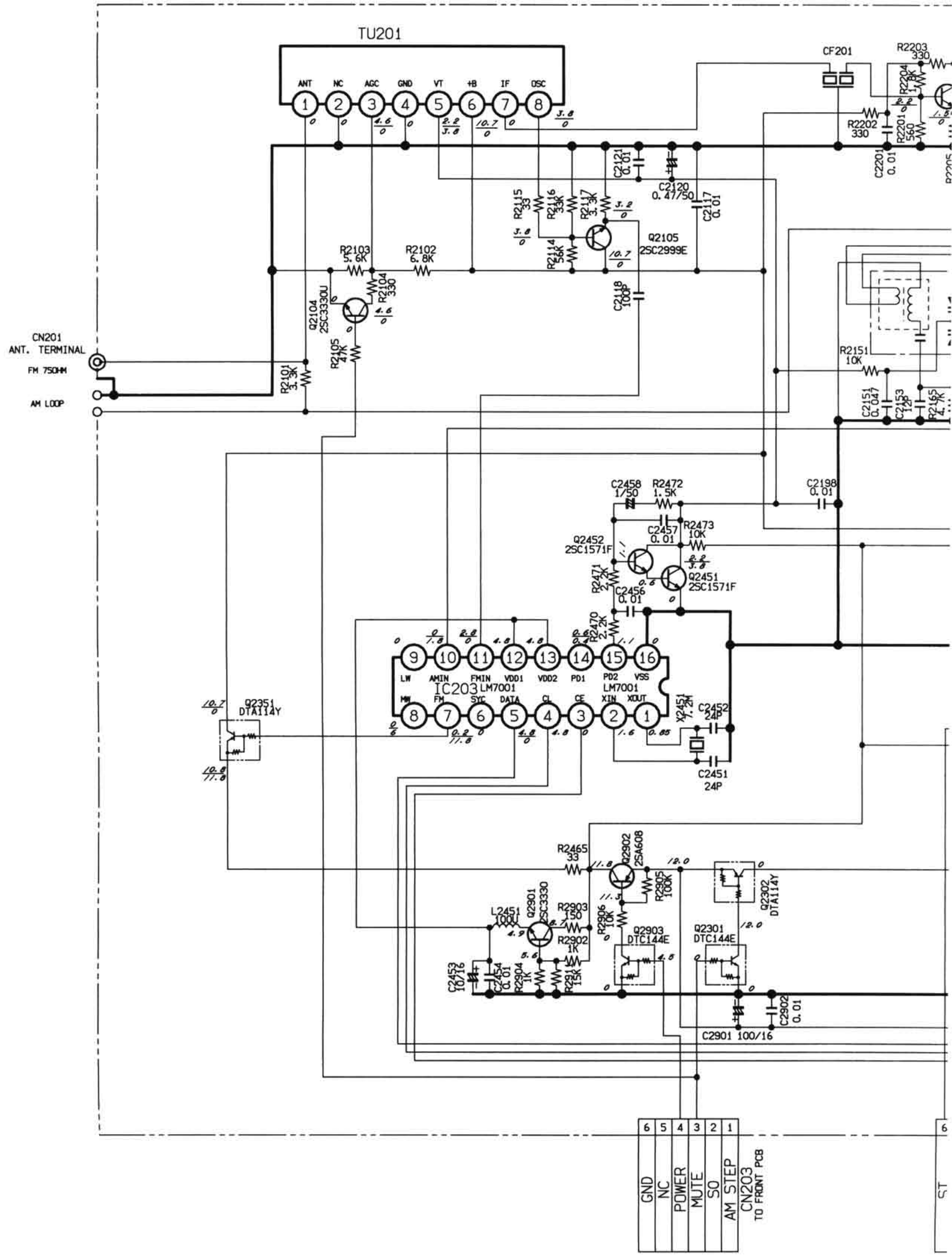

IC133
NJM78M12
Q1601
2SC3330
C1650
0.01
D1651 DSF10C
D1652 DSF10C
C1651 0.01
D1653 DSF10C
D1654 DSF10C
C1652 0.01
CN115
T1001
CN107
230V
115V
135C°
L1001
AC
50Hz
PHONO GND
P. T. PCB
IC132 LA6510
R1607
2.2
R1606
10K
R1605
10K
R1604
2.2
C1606 0.01
D1601
D1602
D1603
D1604
C1607 0.01
MAIN CD MICON PCB
BACK LIGTH PCB
FRONT PCB
D4001-D4020 CL170YG
D4005 D4004 D4003 D4002 D4001
D4010 D4009 D4008 D4007 D4006
D4015 D4014 D4013 D4012 D4011
D4020 D4019 D4018 D4017 D4016
CN401
D2501-D2505 SLR40VC(RED)
D2506-D2507 SLR40MC(GREEN)
S2502 FUNCTION
IC252 74HC138
AV
PHONO
CD
TAPE
TUNER
STAND BY
OPEN/CLOSE
CN113
CN254
12V(LCD)
OPEN LED
SDBY LED
FA
FB
FC
KEY0
KEY1
KEY2
KEY3
CN114
CN253
TU MUTE
5V UNSWD
RESET
SCK
BUSY
5V MICON
SI(SO)
GND
R1315
10K
CN251
GND
NC
PCON
MUTE
SO
AM STEP
CN252
ST
SD
CE
CLOCK
DATA
MONO
IC251
UPD75306
LCD21

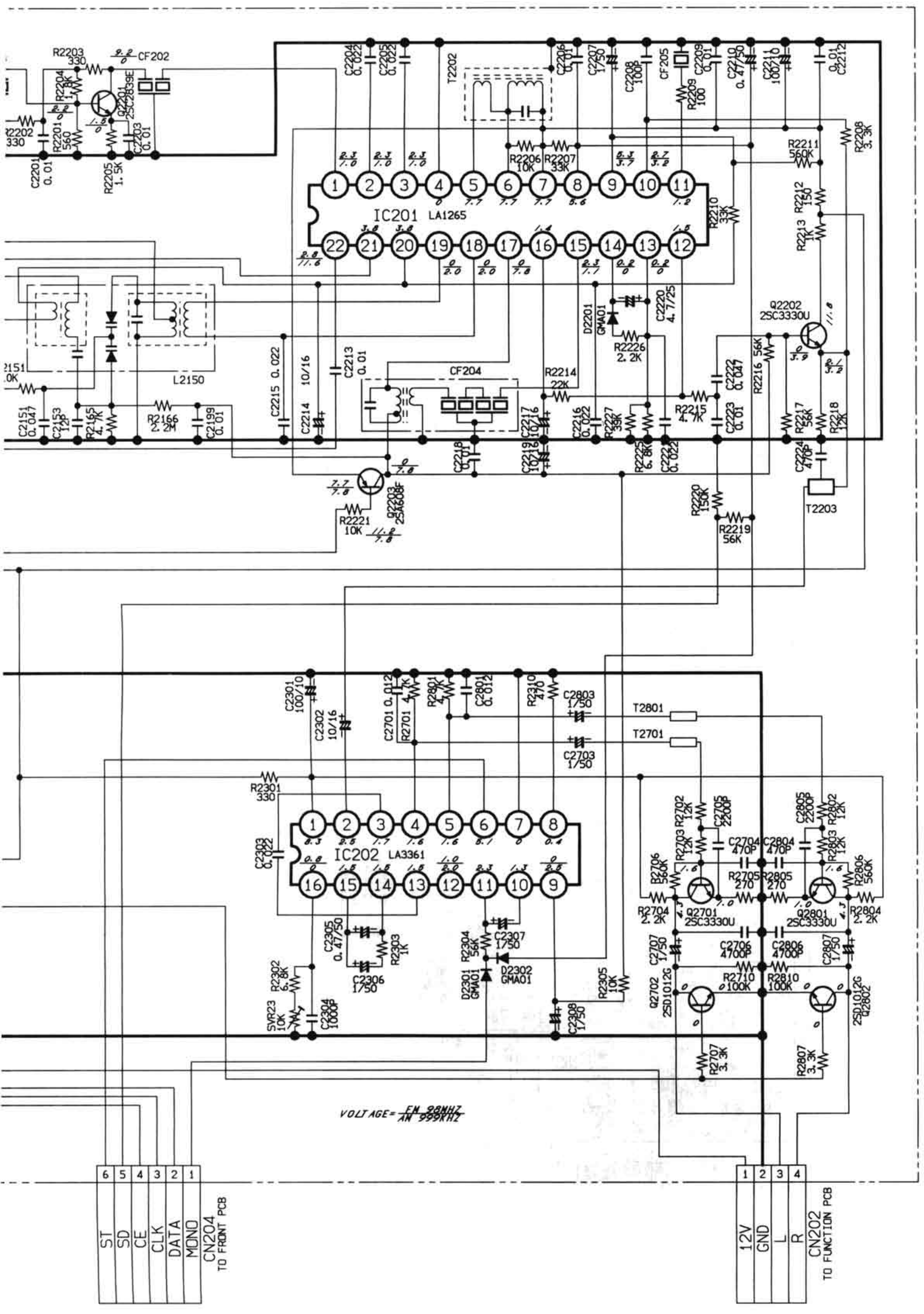
SCHEMATIC DIAGRAM (CD MAIN)



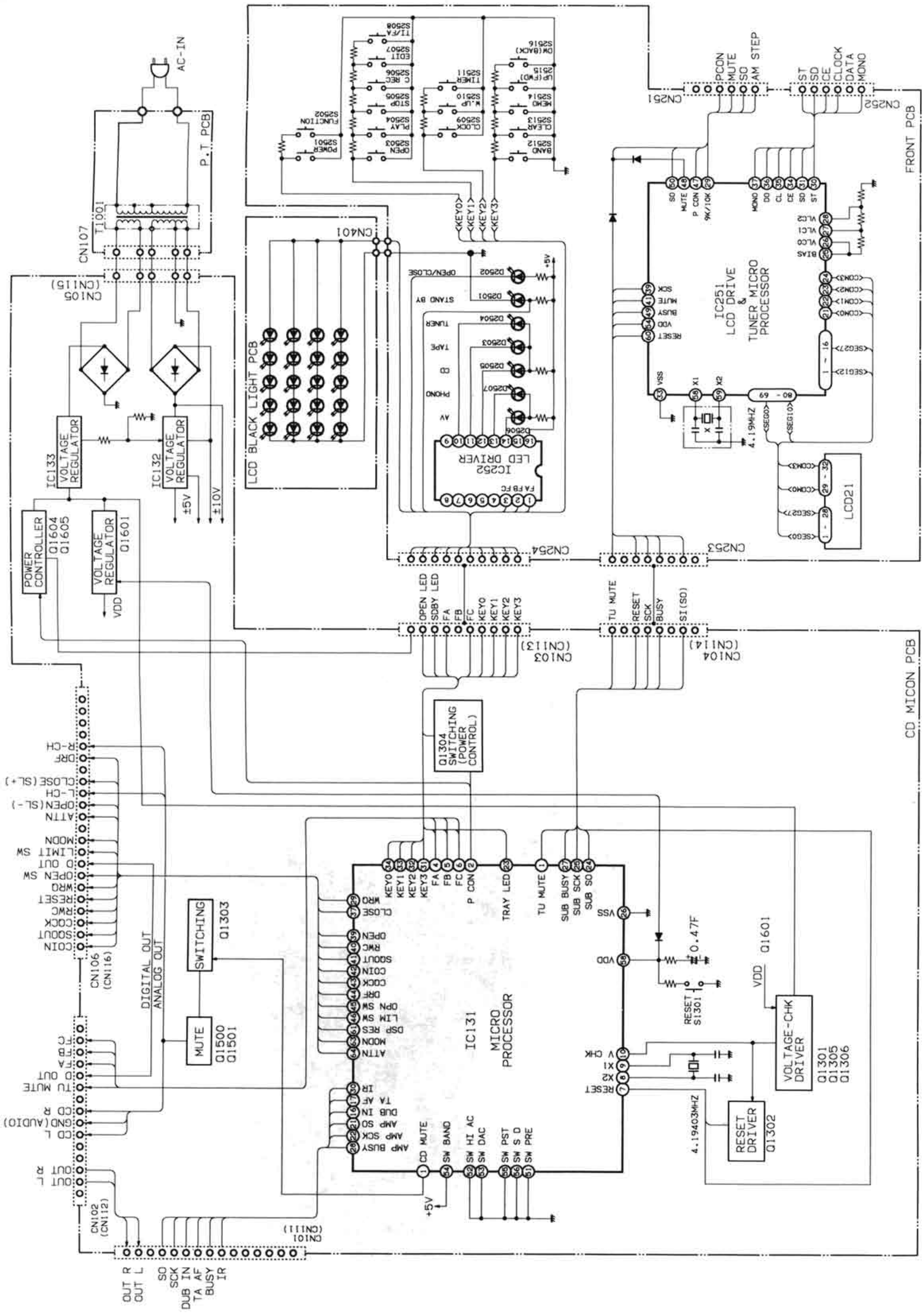

IC104 LC7866E
IC105 SM5870DS
IC106 (1/2) XRA15218F
IC106 (1/2) XRA15218F
Q103 2SC2412K
X101 16.93MHZ
LIM/OPN SW
CN103
3Pin
SLE/SPIN MOTOR
CN102
4Pin
CD-MAIN BLOCK
CN104
22PIN FFC
MAIN MICON BLOCK
13Pin FFC
CN101
PICK UP
CN104
TO SYSCON PCB

SCHEMATIC DIAGRAM (TUNER)

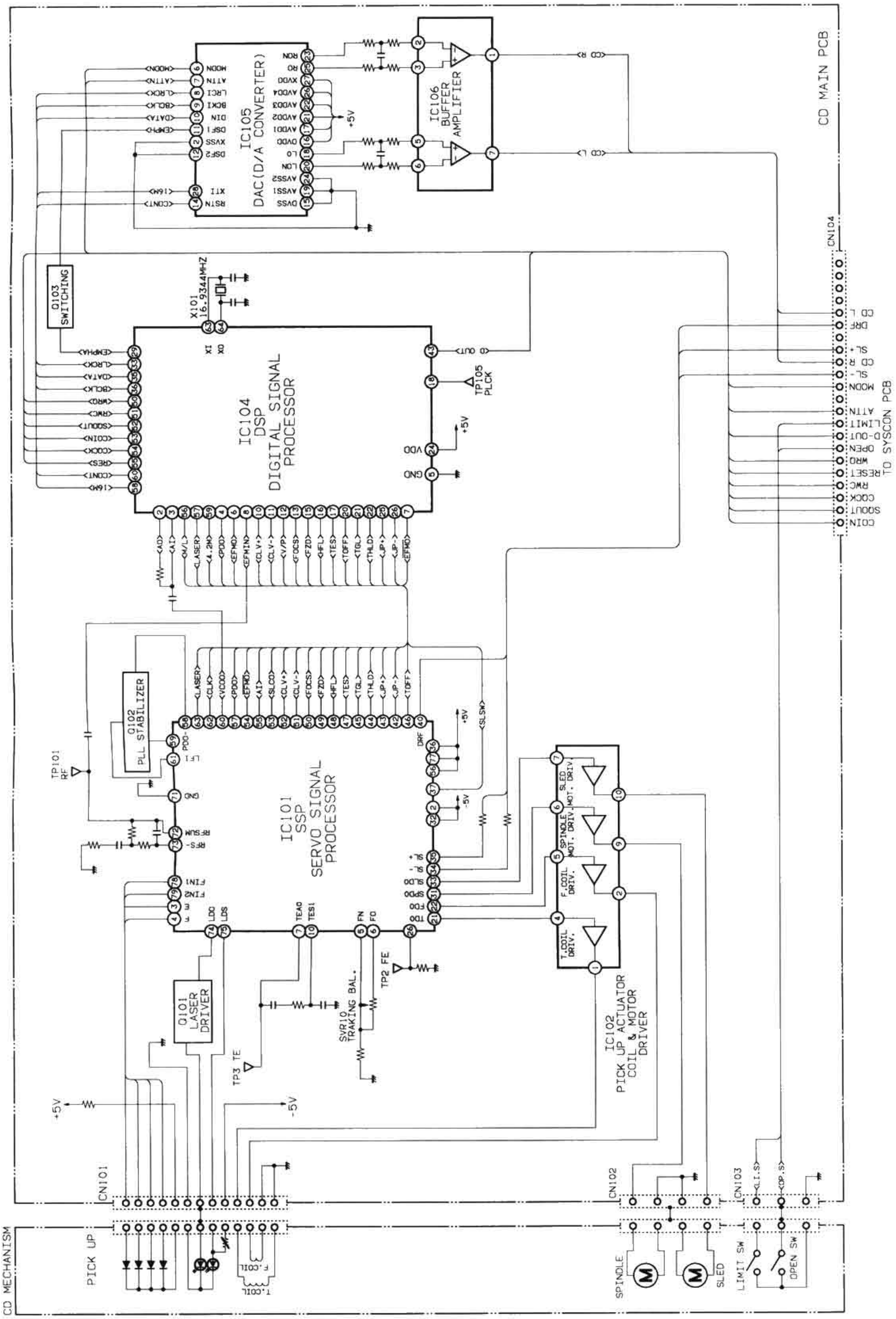



IC201 LA1265
IC202 LA3361
L2150
CF202
CF204
T2202
T2203
T2801
T2701
Q2202 2SC3330U
Q2701 2SC3330U
Q2801 2SC3330U
Q2203 2SA608F
Q2702 2SD1012G
Q2802 2SD1012G
D2201 GMA01
D2301 GMA01
D2302 GMA01
VOLTAGE= FM 98MHZ / AM 999KHZ
CN204 TO FRONT PCB
ST
SD
CE
CLK
DATA
MONO
CN202 TO FUNCTION PCB
12V
GND
L
R

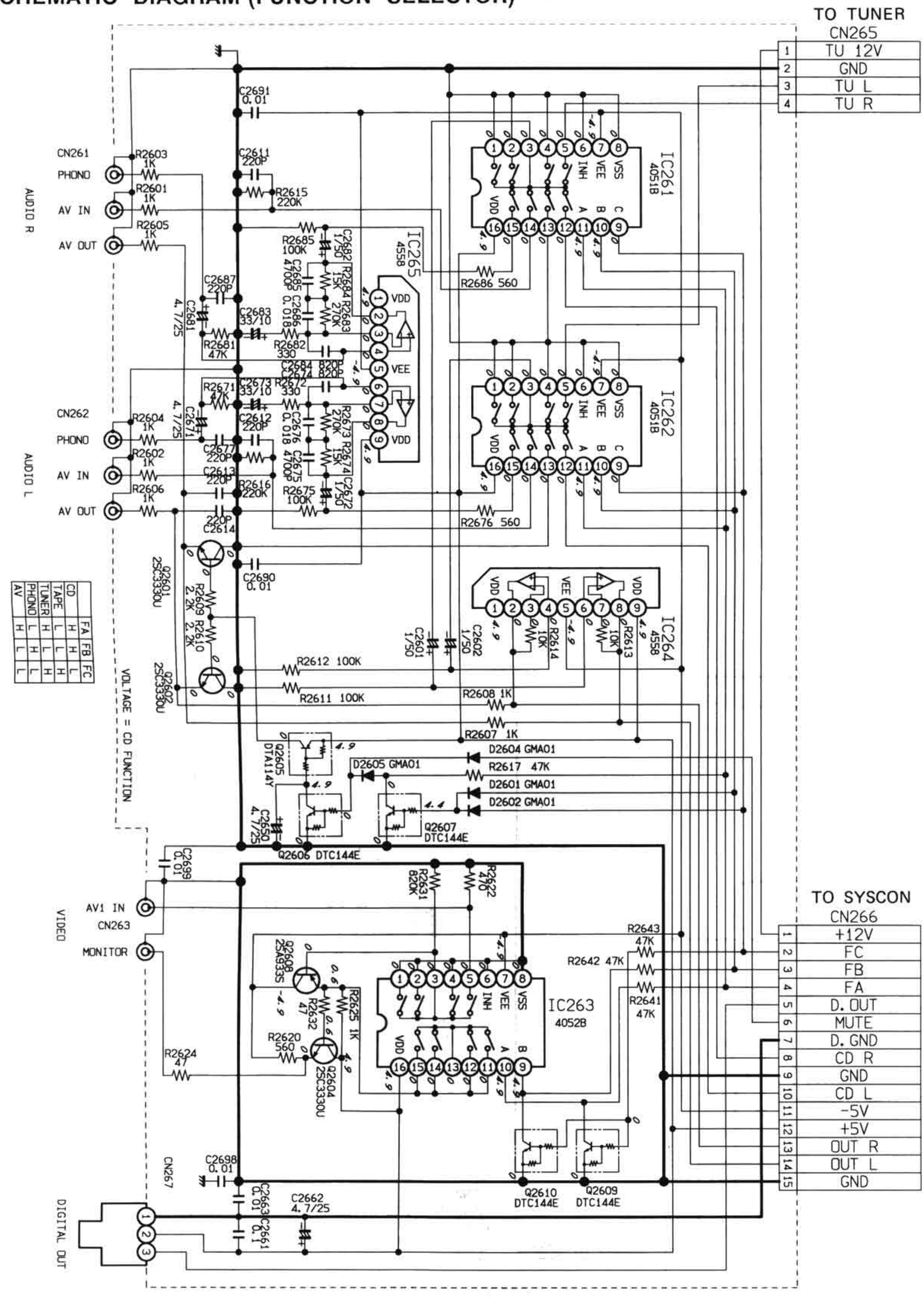
BLOCK DIAGRAM (SYSCON & FRONT)



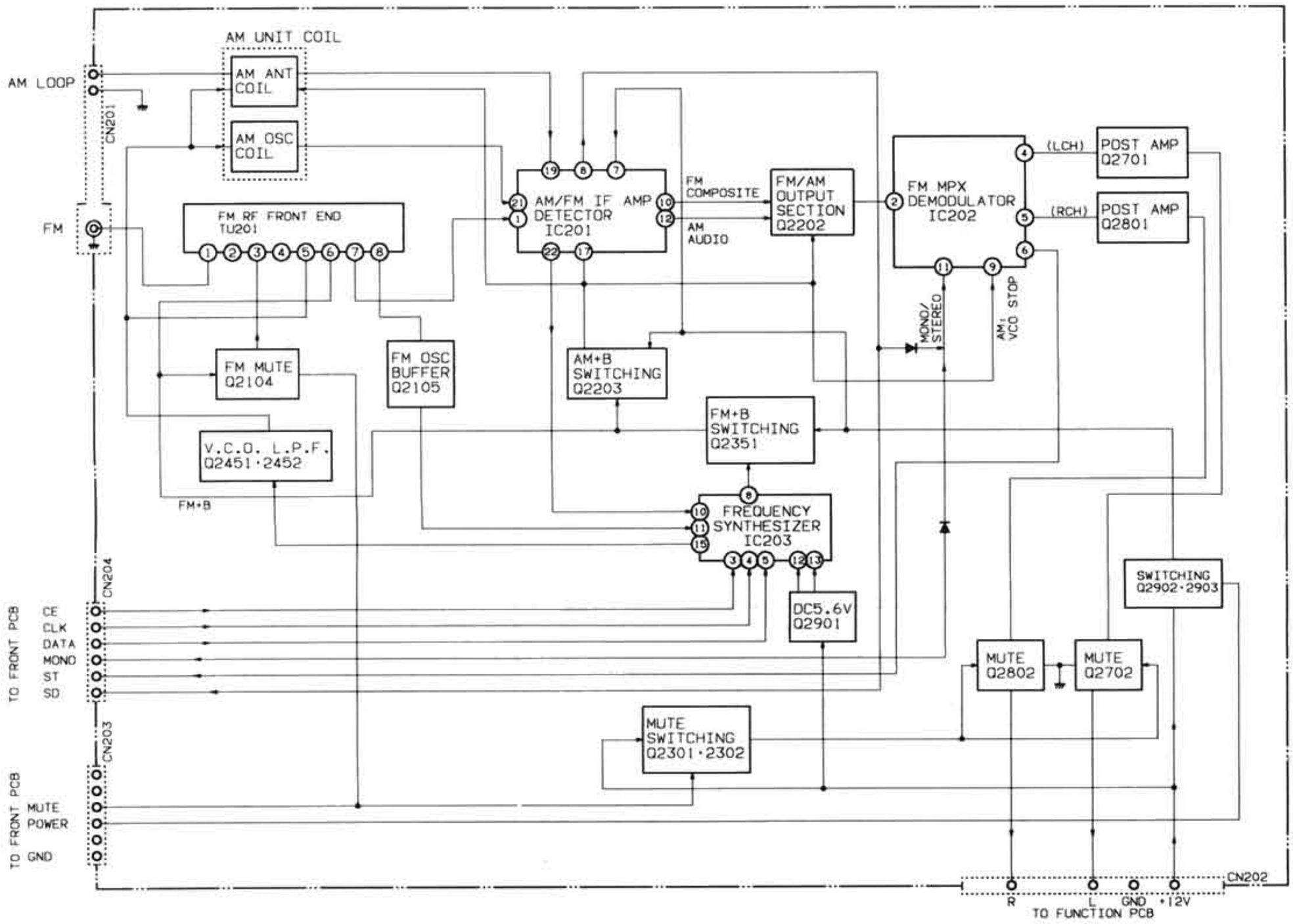
BLOCK DIAGRAM (CD MAIN)



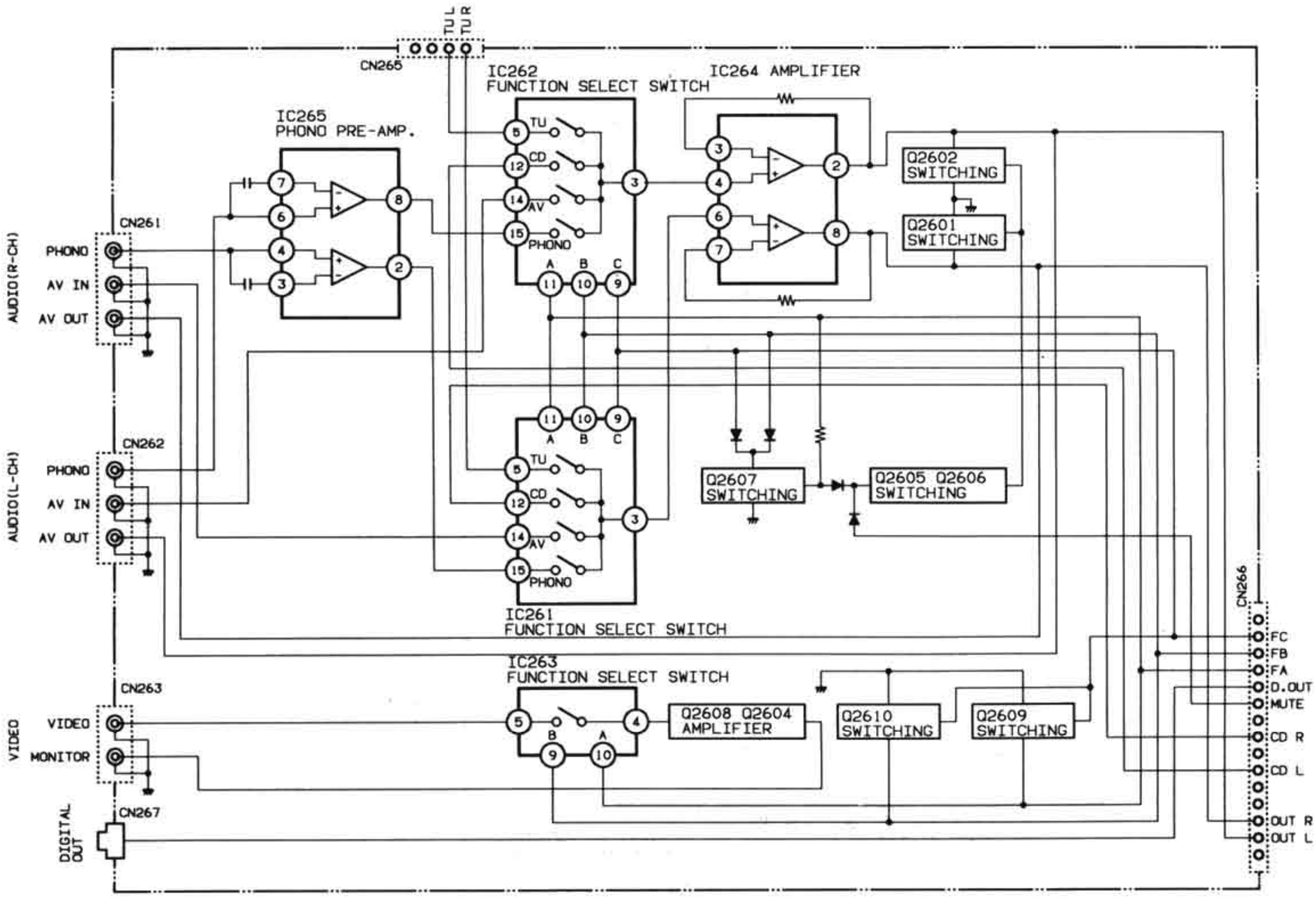
SCHEMATIC DIAGRAM (FUNCTION SELECTOR)



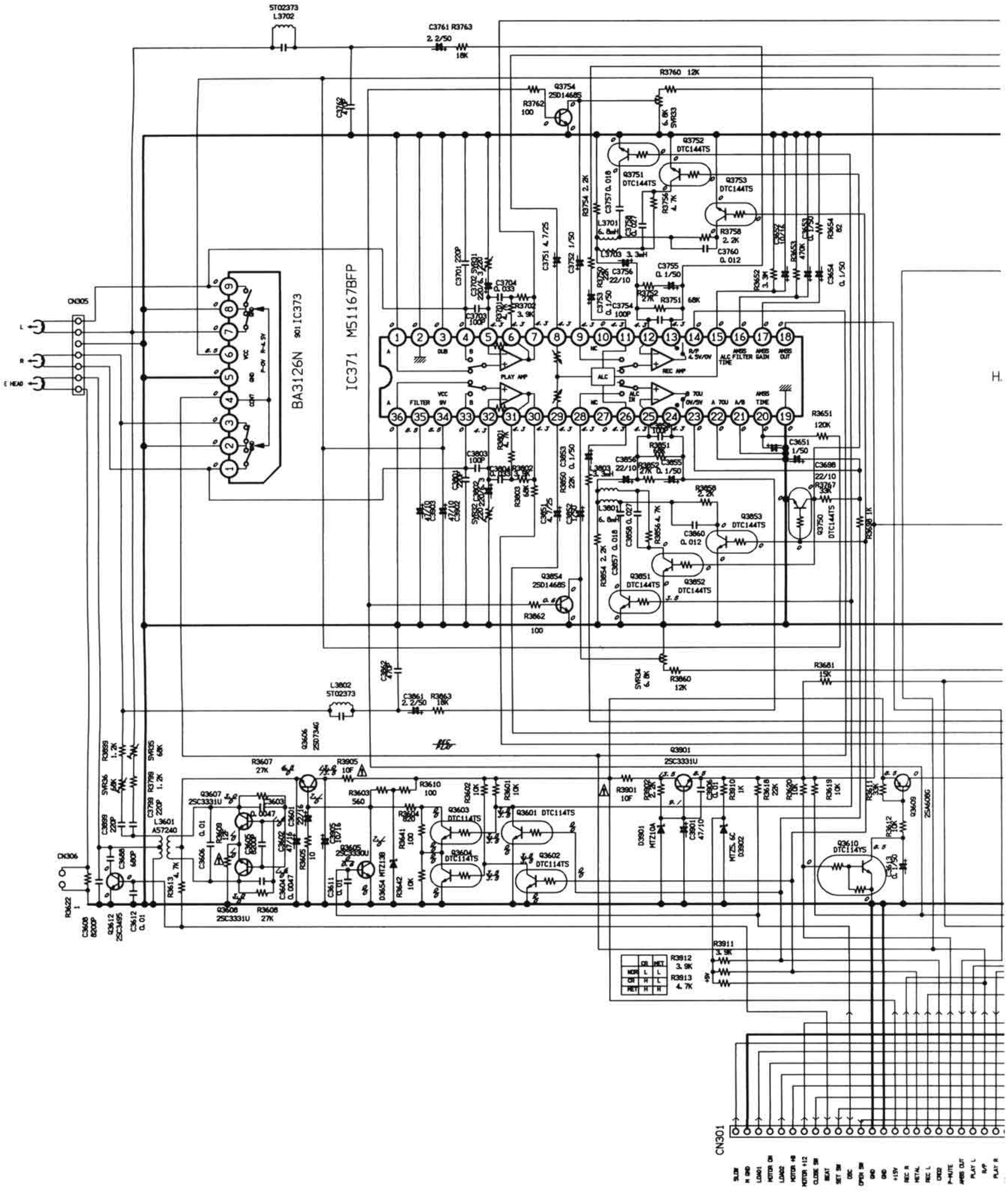
BLOCK DIAGRAM (TUNER)

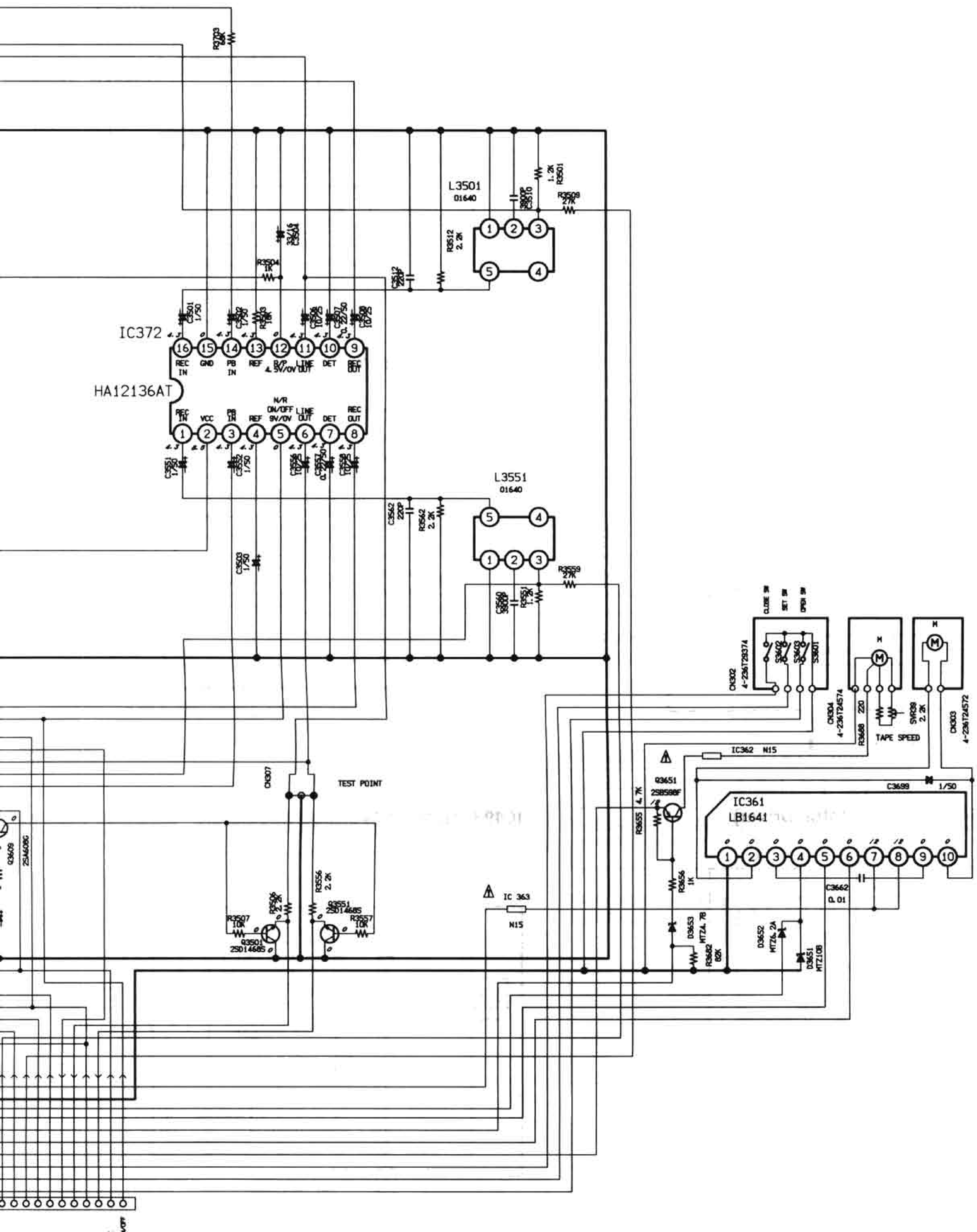


BLOCK DIAGRAM (FUNCTION SELECTOR)



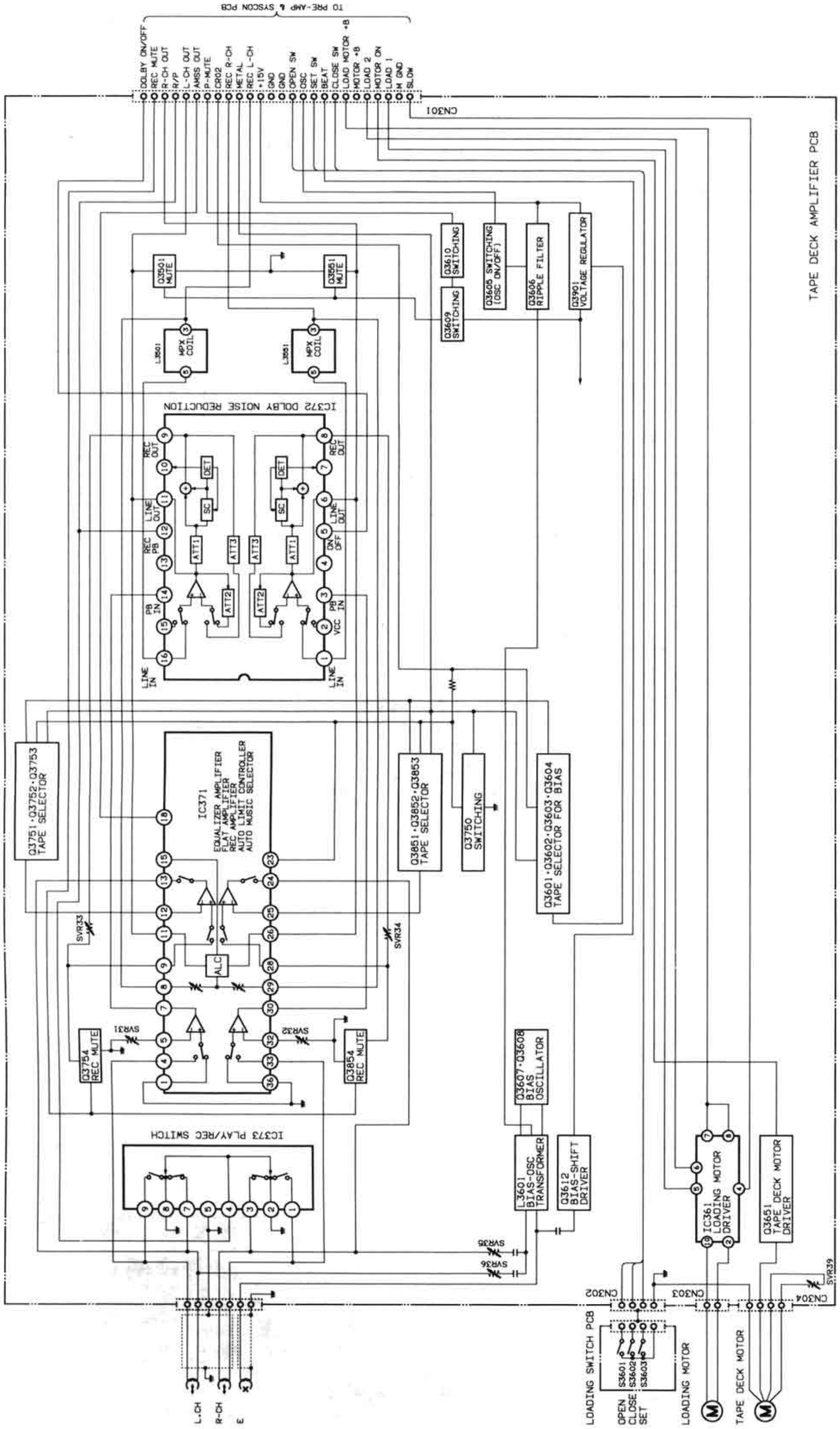
SCHEMATIC DIAGRAM (TAPE DECK AMPLIFIER)



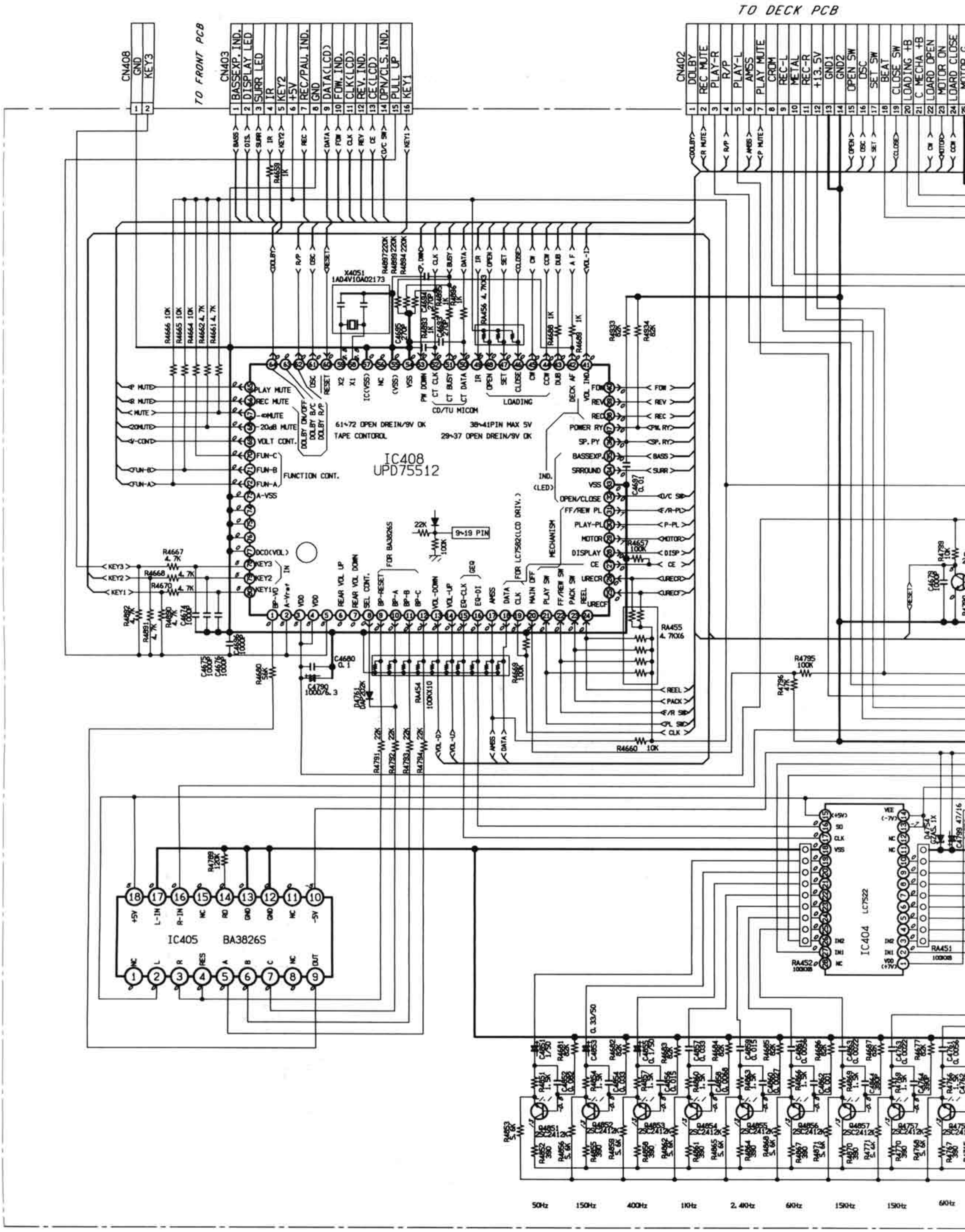


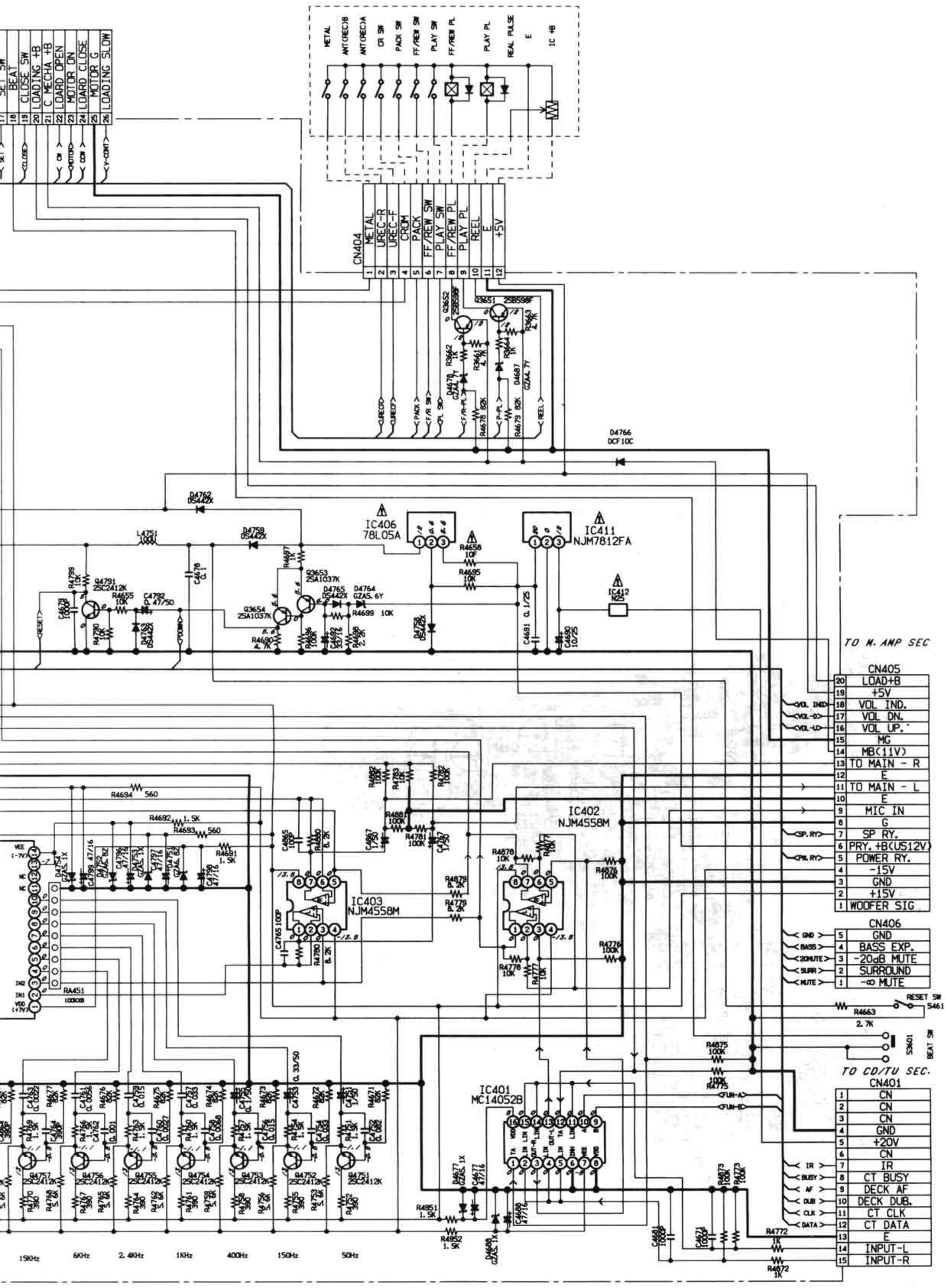
IC372
HA12136AT
REC IN
GND
PB IN
REF
B/P 5V/OV
LINE OUT
DET
REC OUT
VCC
N/R ON/OFF 9V/OV
L3501
01640
L3551
01640
R3501 1.2K
C3510 390P
R3509 27K
R3512 2.2K
C3512 22P
R3504 1K
C3504 33/16
C3501 1/50
C3502 1/50
C3503 1/50
C3551 1/50
C3552 1/50
C3562 22P
R3562 2.2K
R3559 27K
R3551 1.2K
C3560 390P
R3703 68K
CN307
TEST POINT
Q3501 2SD1468S
Q3551 2SD1468S
R3507 10K
R3506 2.2K
R3556 2.2K
R3557 10K
Q3609
2SA608G
IC 363
N15
IC362 N15
Q3651
2SB588F
R3655 4.7K
R3656 1K
D3653 MTZ4.7B
R3652 82K
D3652 MTZ4.2A
D3651 MTZ10B
IC361
LB1641
C3699 1/50
C3662 0.01
CLOSE SW
SET SW
OPEN SW
S3602
S3603
S3601
CN302 4-236T28374
CN304 4-236T24574
R3688 220
SVR39 2.2K
TAPE SPEED
CN303 4-236T24572
M
REC R
METAL
REC L
CrO2
P-MUTE
AMSS OUT
PLAY L
B/P
PLAY R
REC-MUTE
DOLBY ON/OFF

BLOCK DIAGRAM (TAPE DECK AMPLIFIER)

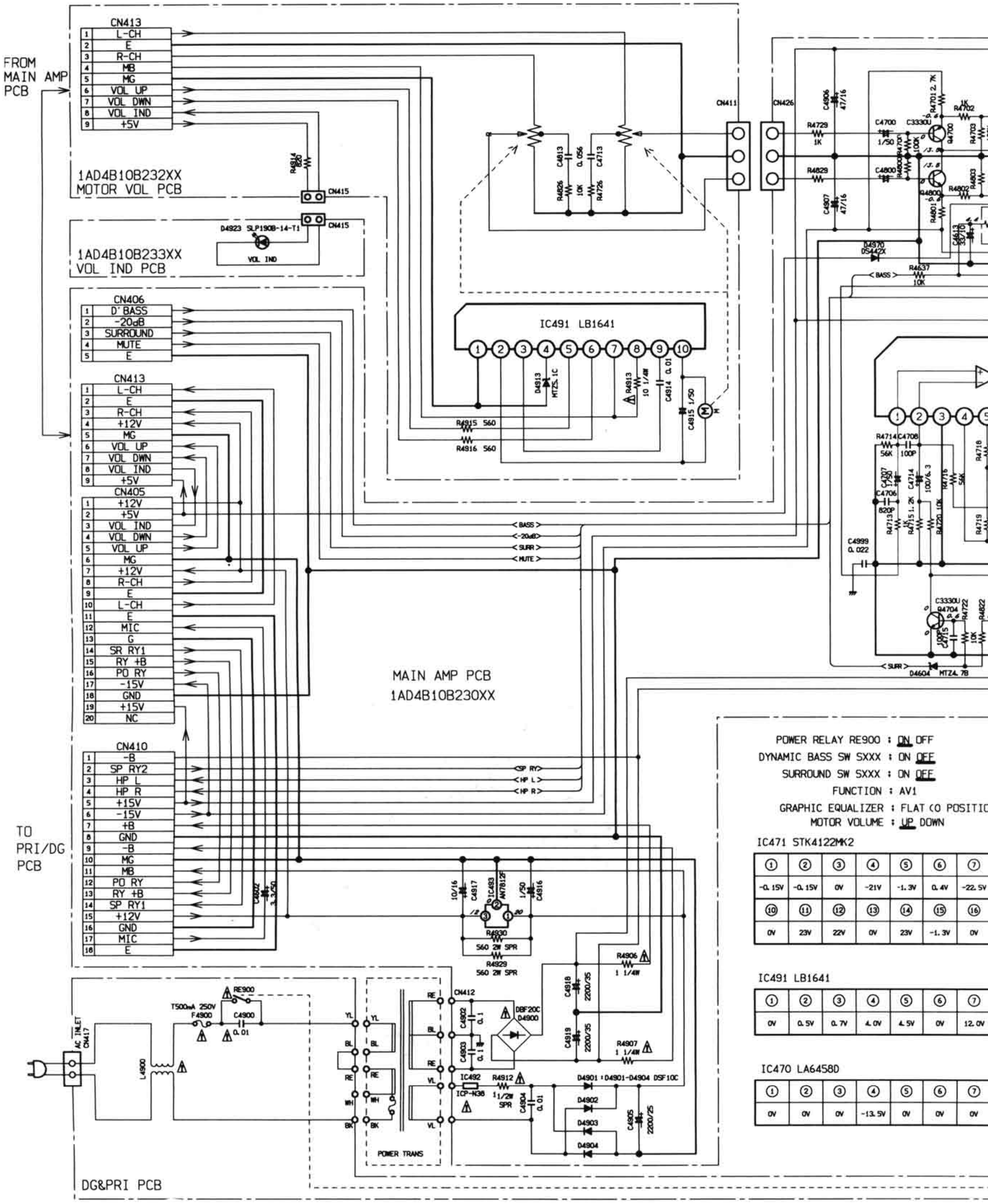


SCHEMATIC DIAGRAM (SYSCON)




SET SW
BEAT
CLOSE SW
LOADING +B
C MECHA +B
LOARD OPEN
MOTOR ON
LOARD CLOSE
MOTOR G
LOADING SLOW
METAL
ANT(REC)B
ANT(REC)A
CR SW
PACK SW
FF/REW SW
PLAY SW
FF/REW PL
PLAY PL
REAL PULSE
E
IC +B
CN404
METAL
UREC-R
UREC-F
CROM
PACK
FF/REW SW
PLAY SW
FF/REW PL
PLAY PL
REEL
E
+5V
D4766
DCF10C
IC406
78L05A
IC411
NJM7812FA
IC412
IC402
NJM4558M
IC403
NJM4558M
IC401
MC14052B
RA451
TO M. AMP SEC
CN405
LOAD+B
+5V
VOL IND.
VOL DN.
VOL UP.
MG
MB(11V)
TO MAIN - R
E
TO MAIN - L
E
MIC IN
G
SP. RY.
PRY. +B(US12V)
PWL RY.
POWER RY.
-15V
GND
+15V
WOOFER SIG
CN406
GND
BASS EXP.
-20dB MUTE
SURROUND
-∞ MUTE
RESET SW
S461
BEAT SW
S3601
TO CD/TU SEC.
CN401
CN
CN
CN
GND
+20V
CN
IR
CT BUSY
DECK AF
DECK DUB.
CT CLK
CT DATA
E
INPUT-L
INPUT-R
15KHz
6KHz
2.4KHz
1KHz
400Hz
150Hz
50Hz

SCHEMATIC DIAGRAM (POWER AMPLIFIER)



POWER RELAY RE900 : ON OFF
DYNAMIC BASS SW SXXX : ON OFF
SURROUND SW SXXX : ON OFF
FUNCTION : AV1
GRAPHIC EQUALIZER : FLAT (O POSITIO
MOTOR VOLUME : UP DOWN

IC471 STK4122MK2

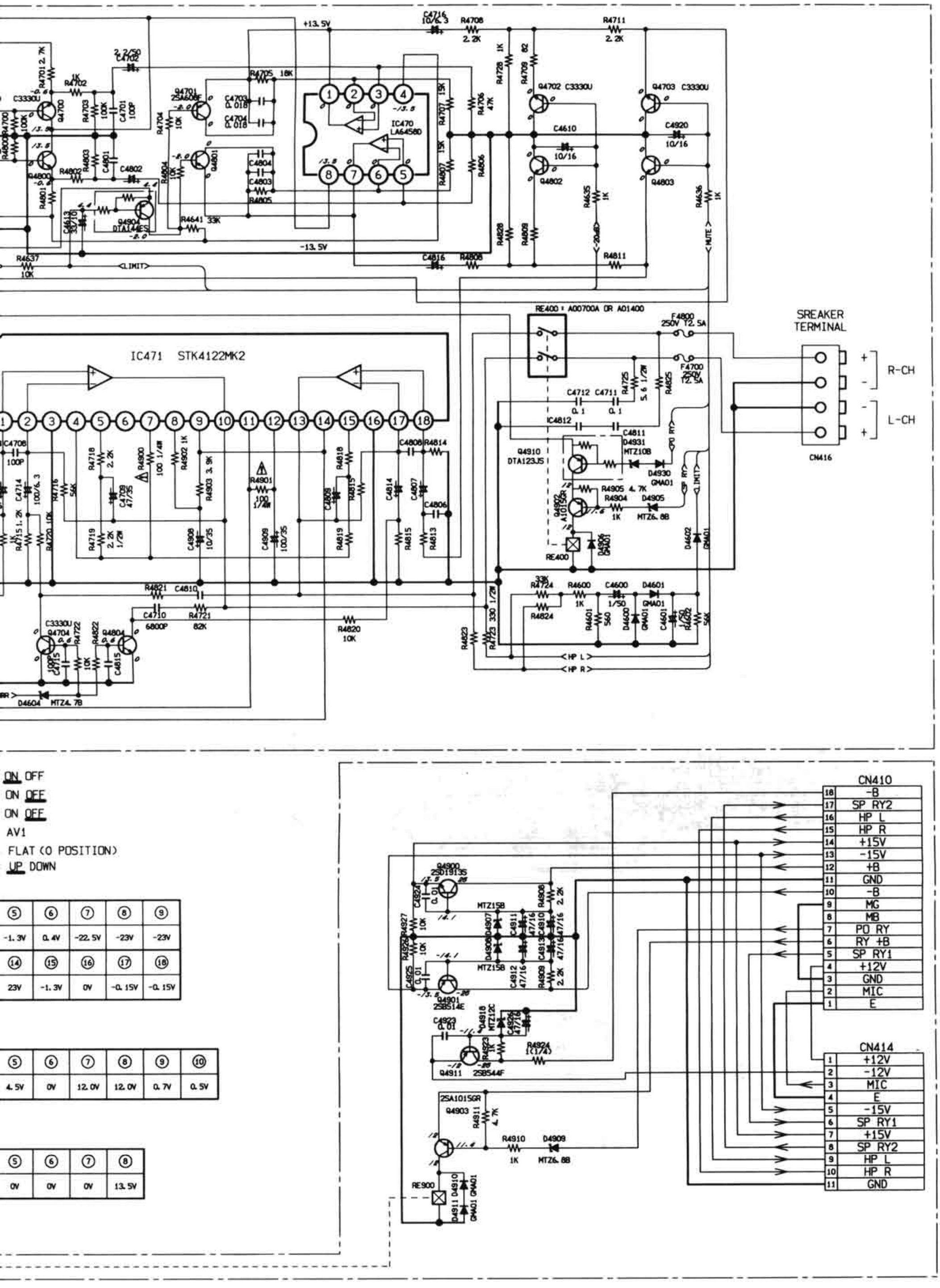
①	②	③	④	⑤	⑥	⑦
-0.15V	-0.15V	0V	-21V	-1.3V	0.4V	-22.5V
⑩	⑪	⑫	⑬	⑭	⑮	⑯
0V	23V	22V	0V	23V	-1.3V	0V

IC491 LB1641

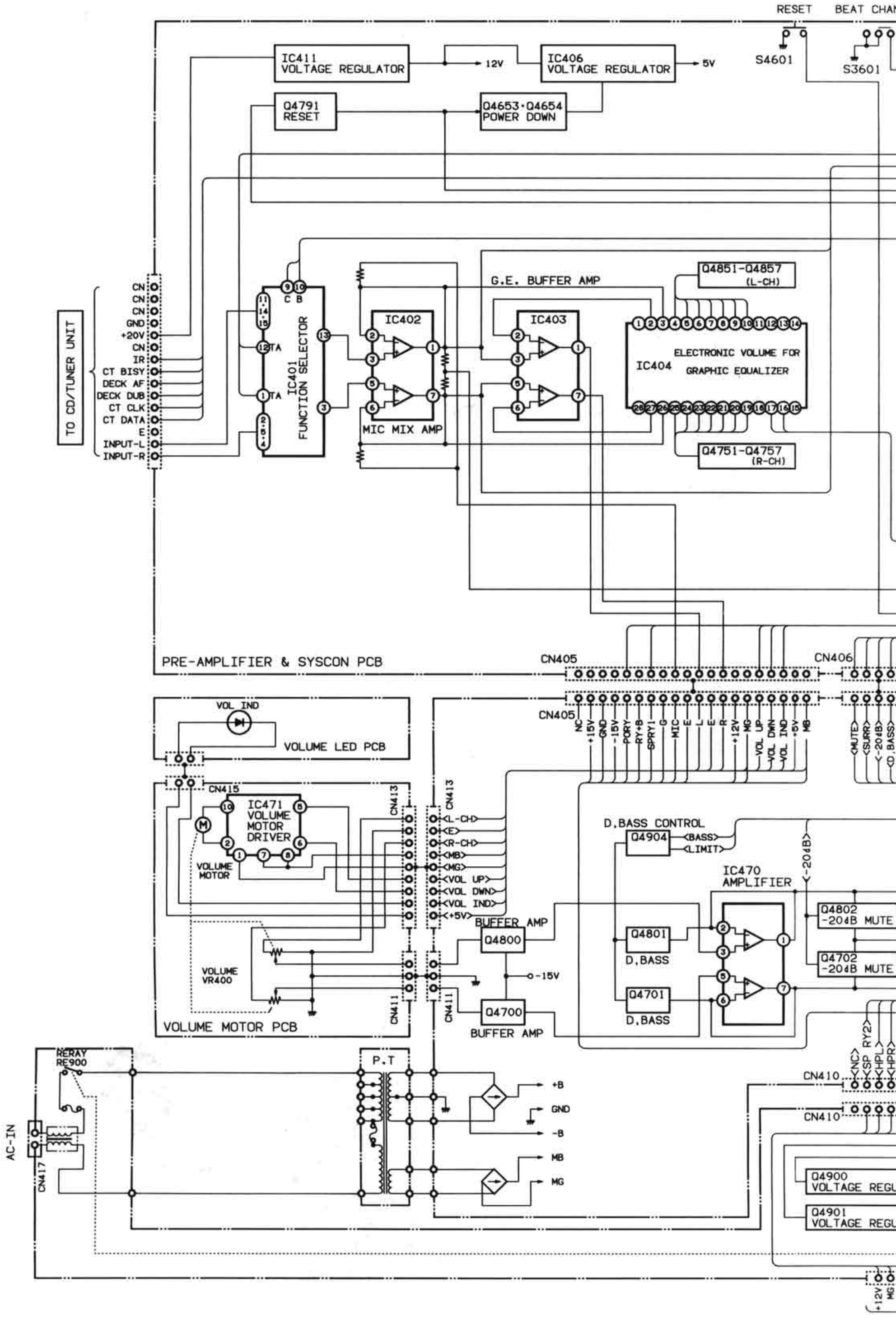
①	②	③	④	⑤	⑥	⑦
0V	0.5V	0.7V	4.0V	4.5V	0V	12.0V

IC470 LA6458D

①	②	③	④	⑤	⑥	⑦
0V	0V	0V	-13.5V	0V	0V	0V


+13.5V
-13.5V
C4716 10/6.3
R4708 2.2K
R4711 2.2K
R4705 18K
R4728 1K
R4709 82
R4706 47K
R4707 15K
R4806 15K
R4808 15K
Q4702 C3330U
Q4703 C3330U
C4610 10/16
C4920 10/16
Q4802
Q4803
R4635 1K
R4636 1K
<-20dB>
<MUTE>
R4811
C4816
R4637 10K
<LIMIT>
R4641 33K
Q4904 DTA144ES
C4613 33/10
C4701 100P
C4702 2.2/50
C4703 0.018
C4704 0.018
C4705
C4801
C4802
C4803
C4804
R4805
R4828
R4809
IC470 LA6458D
IC471 STK4122MK2
RE400 : A00700A OR A01400
F4800 250V T2.5A
F4700 250V T2.5A
SREAKER TERMINAL
R-CH
L-CH
CN416
C4712 C4711 0.1 0.1
R4725 5.6 1/2W
R4825
IC4812
C4811
D4931 MTZ10B
D4930 GMA01
Q4910 DTA123JS
R4905 4.7K
R4904 1K
D4905 MTZ6.8B
Q4902 A1015GR
RE400
D4602 GMA01
R4724 33K
R4600 1K
C4600 1/50
D4601 GMA01
R4824
R4601 560
D4600 GMA01
C4601 1/50
R4602 56K
R4823 330 1/2W
<HP L>
<HP R>
R4821 C4810
C4710 6800P
R4721 82K
R4820 10K
C3330U Q4704
R4722
R4822 10K
R4804
C4715 180P
C4815
D4604 MTZ4.7B
IC4708 100P
R4716 56K
R4718 2.2K
R4900 100 1/4W
R4902 1K
R4903 3.9K
R4901 100 1/4W
R4719 2.2K 1/2W
C4709 47/35
C4908 10/35
C4909 100/35
R4818
R4815
R4819
C4808
R4814
C4814
C4807
C4806
R4813
R4815
R4817 1.2K
R4720 10K
C4714 100/6.3
C4712 0.1
C4711 0.1
IC4812
C4811
D4931 MTZ10B
D4930 GMA01
Q4910 DTA123JS
R4905 4.7K
R4904 1K
D4905 MTZ6.8B
Q4902 A1015GR
RE400
D4602 GMA01
R4724 33K
R4600 1K
C4600 1/50
D4601 GMA01
R4824
R4601 560
D4600 GMA01
C4601 1/50
R4602 56K
R4823 330 1/2W
<HP L>
<HP R>
R4821 C4810
C4710 6800P
R4721 82K
R4820 10K
C3330U Q4704
R4722
R4822 10K
R4804
C4715 180P
C4815
D4604 MTZ4.7B
ON OFF
ON OFF
ON OFF
AV1
FLAT (O POSITION)
UP DOWN
⑤ ⑥ ⑦ ⑧ ⑨
-1.3V 0.4V -22.5V -23V -23V
⑭ ⑮ ⑯ ⑰ ⑱
23V -1.3V 0V -0.15V -0.15V
⑤ ⑥ ⑦ ⑧ ⑨ ⑩
4.5V 0V 12.0V 12.0V 0.7V 0.5V
⑤ ⑥ ⑦ ⑧
0V 0V 0V 13.5V
Q4900 2SD1913S
C4822 0.01
R4906 2.2K
MTZ15B
R4907
D4907
D4906
C4911 47/16
C4910 47/16
C4913
R4909 2.2K
C4912 47/16
R4926 10K
R4927 10K
C4925 0.01
Q4901 2SB514E
C4923 0.01
Q4918 MTZ12C
C4926 47/16
Q4911 2SB544F
R4923 1K
R4924 1K(1/4)
Q4903 2SA1015GR
R4911 4.7K
R4910 1K
D4909 MTZ6.8B
RE900
D4910
D4911
CN410
16 -B
17 SP RY2
16 HP L
15 HP R
14 +15V
13 -15V
12 +B
11 GND
10 -B
9 MG
8 MB
7 PO RY
6 RY +B
5 SP RY1
4 +12V
3 GND
2 MIC
1 E
TO MAIN AMP PCB
CN414
1 +12V
2 -12V
3 MIC
4 E
5 -15V
6 SP RY1
7 +15V
8 SP RY2
9 HP L
10 HP R
11 GND
TO FRONT PCB

BLOCK DIAGRAM (SYSCON & AMPLIFIER)



TO MECHANISM PCB

ESET BEAT CHANNEL

CN404

S3601

Q3652 FF/REW PLUNGER DRIVER

Q3651 PLAY PLUNGER DRIVER

IC408

MICRO PROCESSOR

VSS

IC405

BAND PASS FILTER FOR SPECTRUM ANALIZER

CN402

DOLBY
REC MUTE
PLAY-R
R/P
PLAY-L
AMSS
PLY MUTE
CRO2
REC-L
METAL
REC-R
+13.5V
GND1
GND2
OPEN SW
OSC
SET SW
BEAT
CLOSE SW
L+B
M+B
LOAD CLS
MOTOR ON
LOAD OPN
MG
LOAD SLW

TO DECK AMP. PCB

CN403

BASS IND
DISP IND
RURR IND
IR
KEY2
+5V
REC IND
GND
DATA
FOW IND
CLK
REV IND
CE
OPEN IND
PULL UP
KEY1

TO FRONT PCB

CN406

CN408

CN406

POWER AMPLIFIER PCB

+5V MB <MUTE> <SURR> <-20dB> <D.BASS> <GND>

<-20dB> <MUTE> <SURR>

IC471
AF POWER AMPLIFIER

Q4802 -20dB MUTE

Q4803 MUTE

Q4804 SURROUND

Q4702 -20dB MUTE

Q4703 MUTE

Q4704 SURROUND

<HPL> <HPR>

RELAY RE400

F4800

F4700

L-CH

R-CH

SPEAKER TERMINAL

<NC> <SP RY2> <HPL> <HPR> <+15V> <-15V> <+B> <GND> <-B> <MG> <MB> <PO RY> <RY+B> <SP RY1> <+12V> <GND> <MIC> <E>

<LIMIT> LIMIT CIRCUIT

<SP RY> Q4902 RELAY DRIVER

CN410

CN410

Q4900 VOLTAGE REGULATOR

Q4901 VOLTAGE REGULATOR

IC490 VOLTAGE REGULATOR

Q4903 POWER RELAY DRIVER

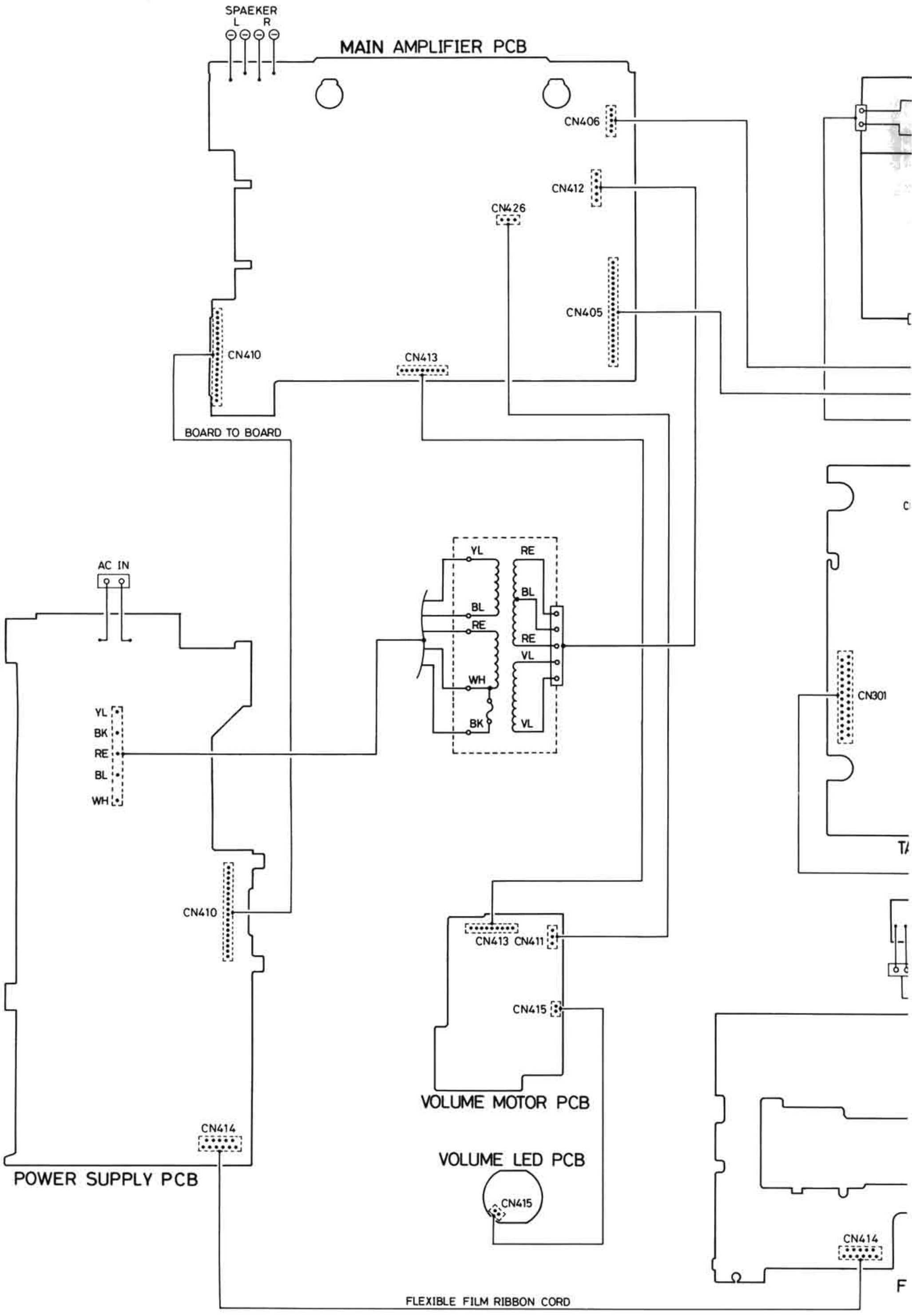
POWER SUPPLY PCB

CN414

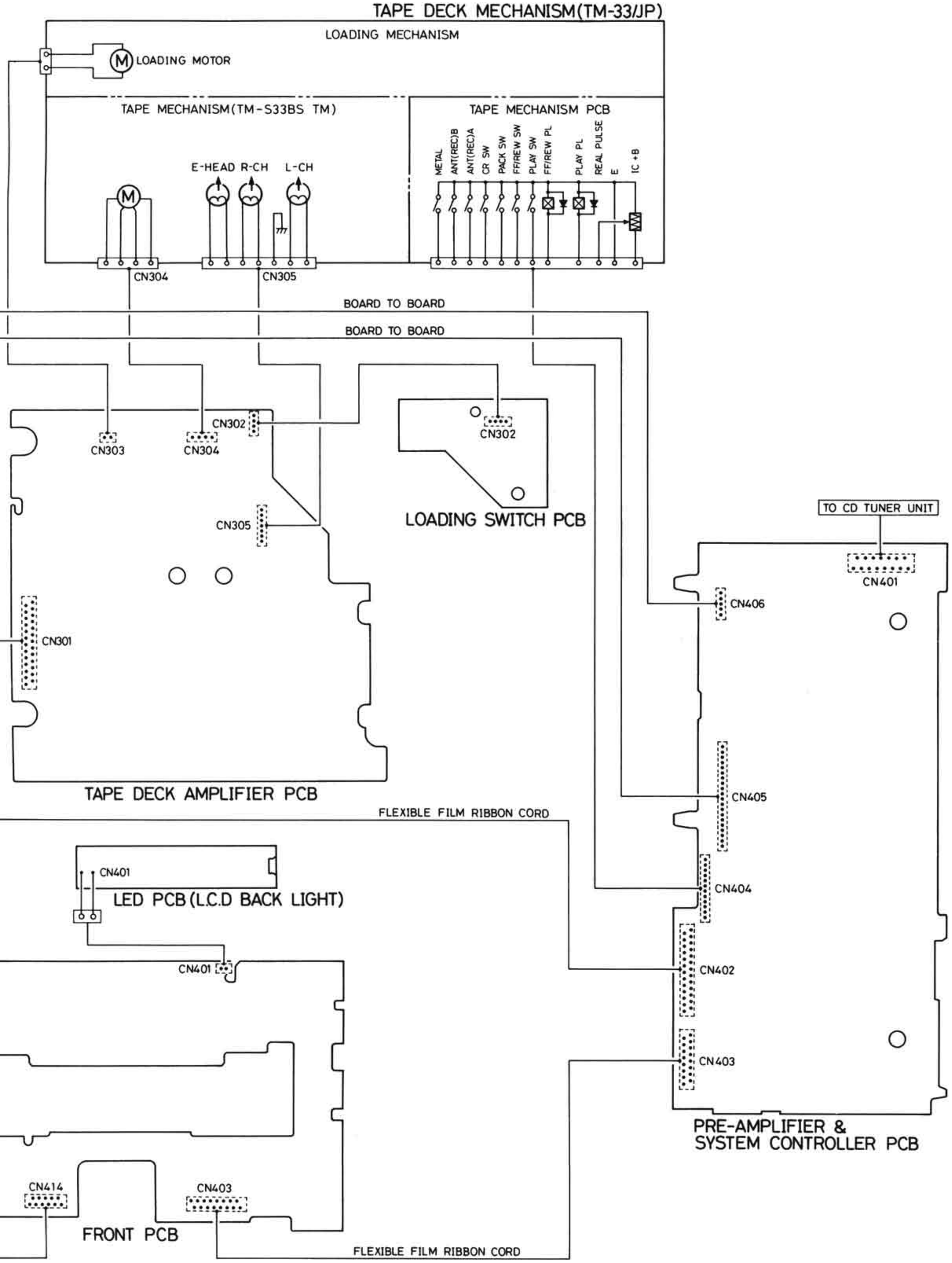
+12V MG MIC E -15V RY1 +15V RY2 HPR HPL GND

TO FRONT PCB

WIRING CONNECTION (TAPE DECK / AMPLIFIER UNIT)



TAPE DECK MECHANISM(TM-33/JP)



SCHEMATIC DIAGRAM (FRONT)