FILE NO.

SERVICE MANUAL

FISHER

TAD S3

(DE)

Super Mini Component System

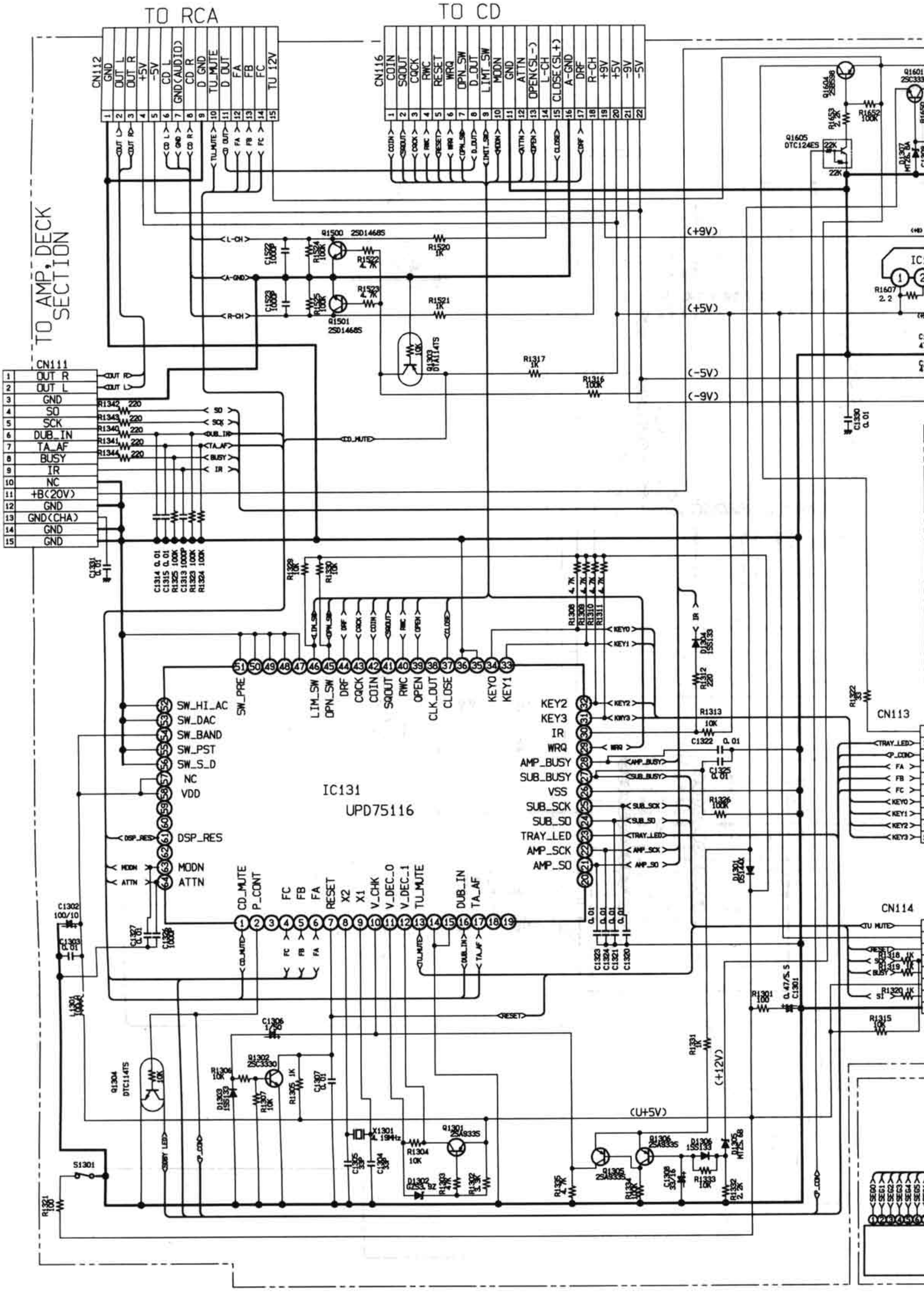
PRODUCT CODE No.
129 365 03

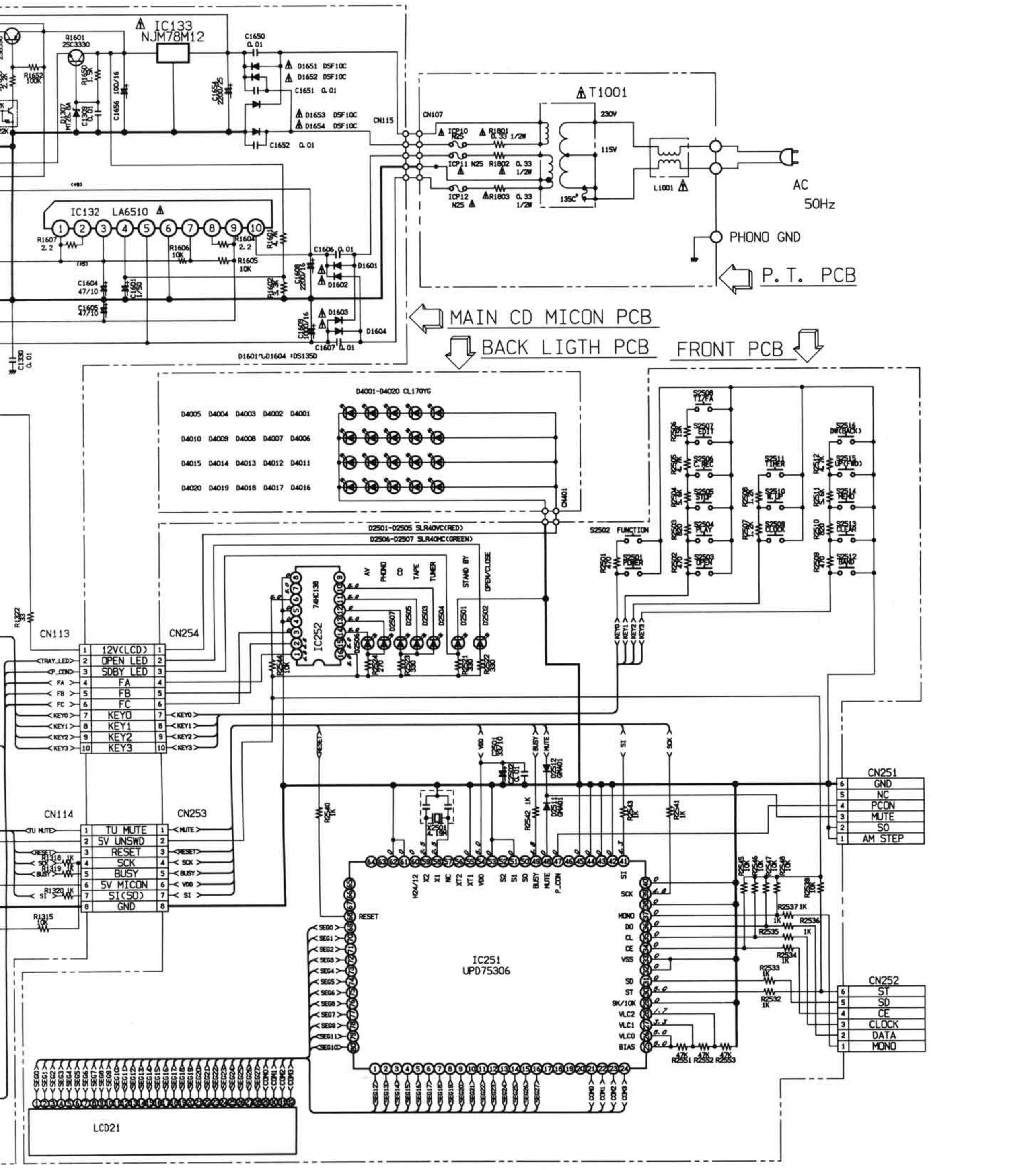
Contents

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

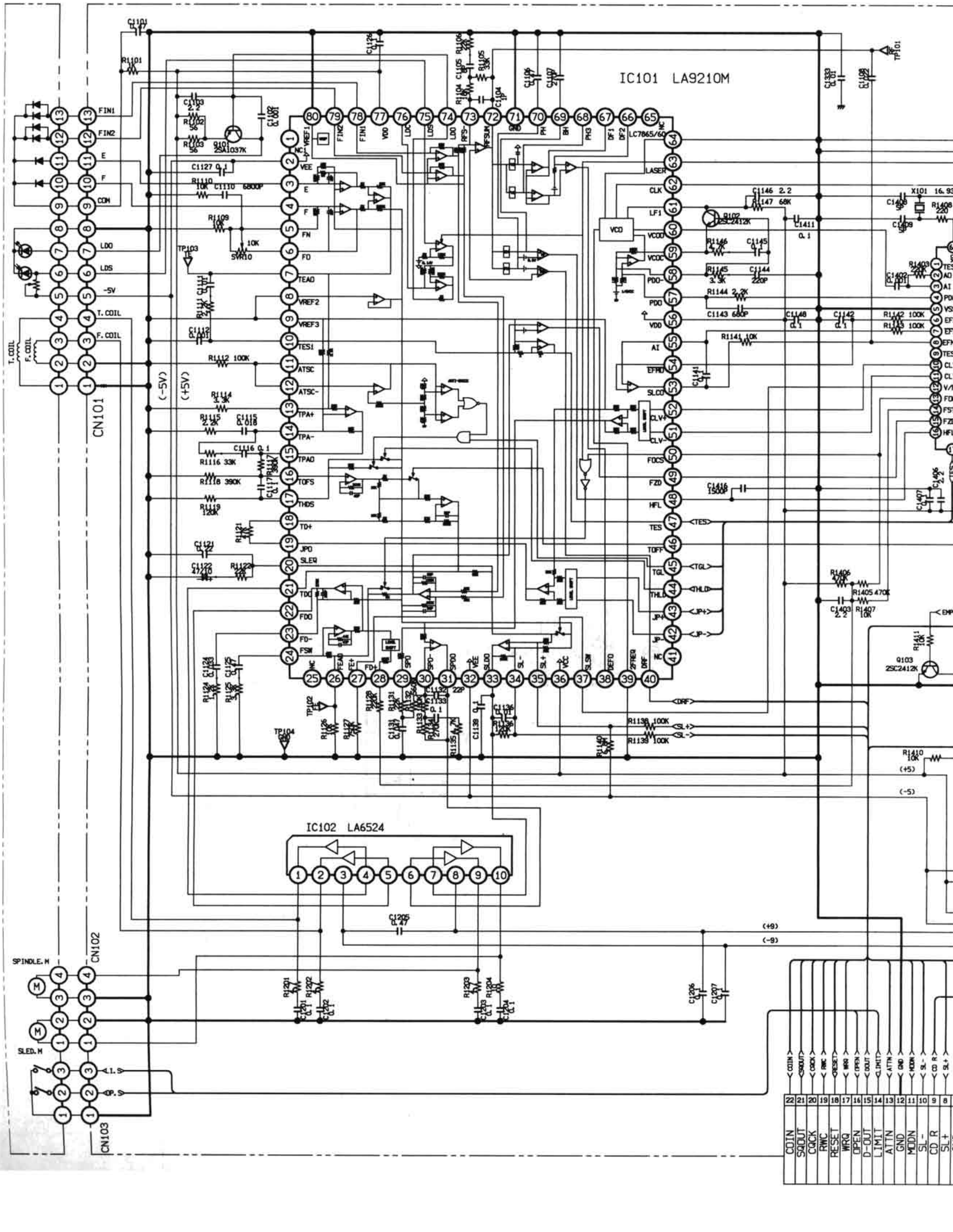
REFERENCE No. SM580049

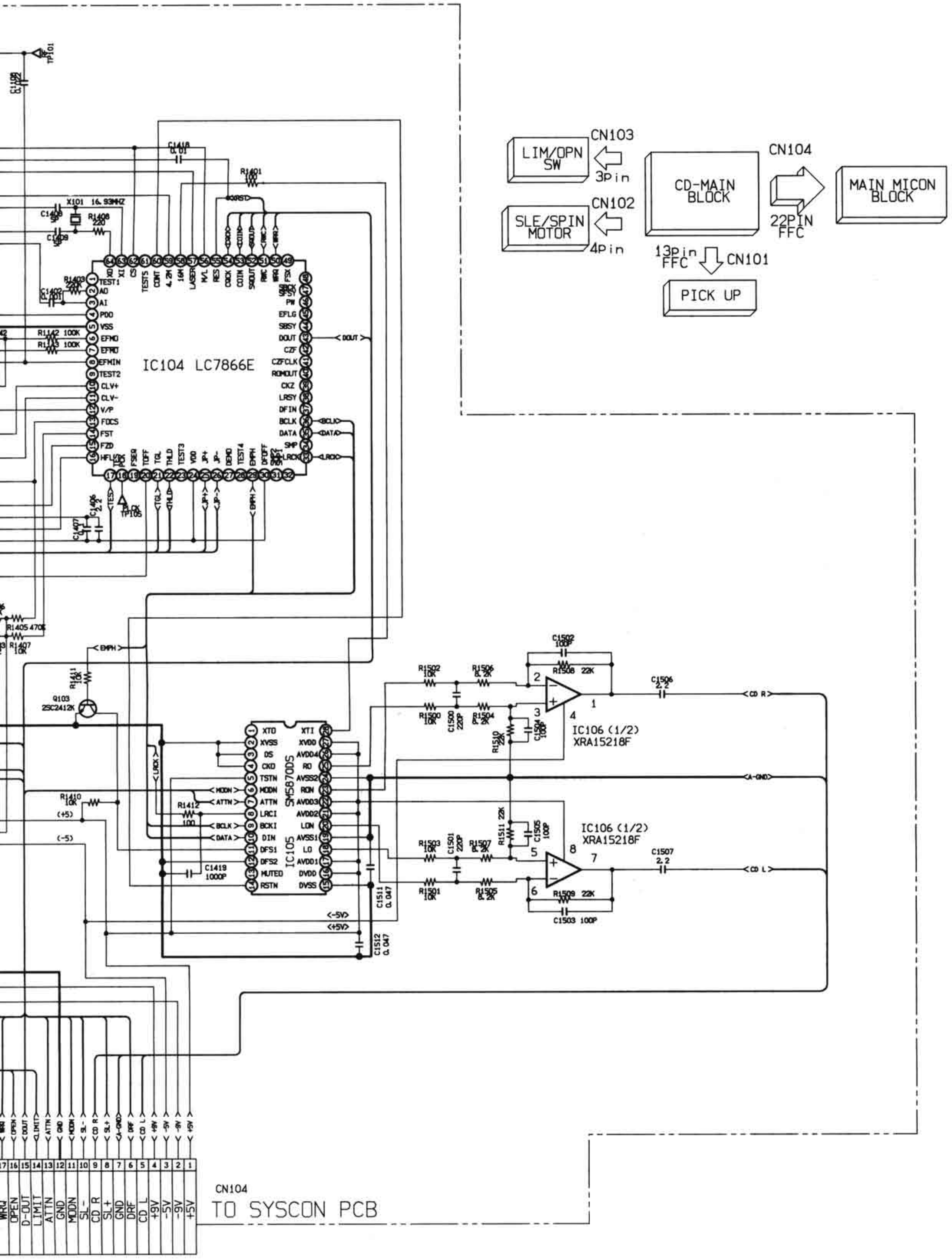
SCHEMATIC DIAGRAM (SYSCON & FRONT)



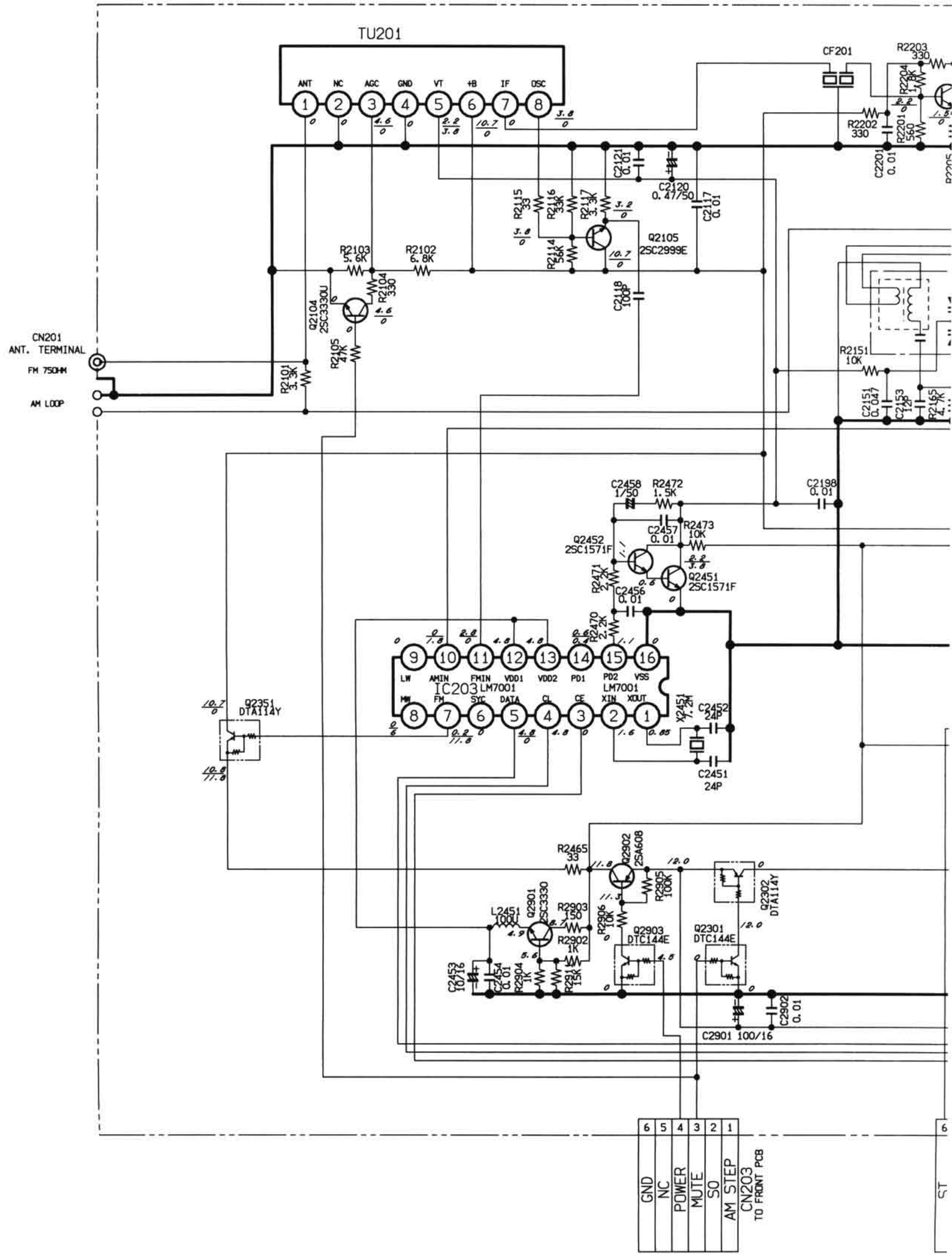

IC133
NJM78M12
Q1601
2SC3330
C1650
0.01
D1651 DSF10C
D1652 DSF10C
C1651 0.01
D1653 DSF10C
D1654 DSF10C
C1652 0.01
CN115
T1001
CN107
230V
115V
135C°
L1001
AC
50Hz
PHONO GND
P. T. PCB
IC132 LA6510
C1606 0.01
D1601
D1602
D1603
D1604
C1607 0.01
D1601~D1604 :DS1350
MAIN CD MICON PCB
BACK LIGTH PCB
FRONT PCB
D4001-D4020 CL170YG
CN401
D2501-D2505 SLR40VC(RED)
D2506-D2507 SLR40MC(GREEN)
S2502 FUNCTION
CN113
CN254
12V(LCD)
OPEN LED
SDBY LED
FA
FB
FC
KEY0
KEY1
KEY2
KEY3
IC252
74HC138
AV
PHONO
CD
TAPE
TUNER
STAND BY
OPEN/CLOSE
CN114
CN253
TU MUTE
5V UNSWD
RESET
SCK
BUSY
5V MICON
SI(SO)
GND
IC251
UPD75306
LCD21
CN251
GND
NC
PCON
MUTE
SO
AM STEP
CN252
ST
SD
CE
CLOCK
DATA
MONO

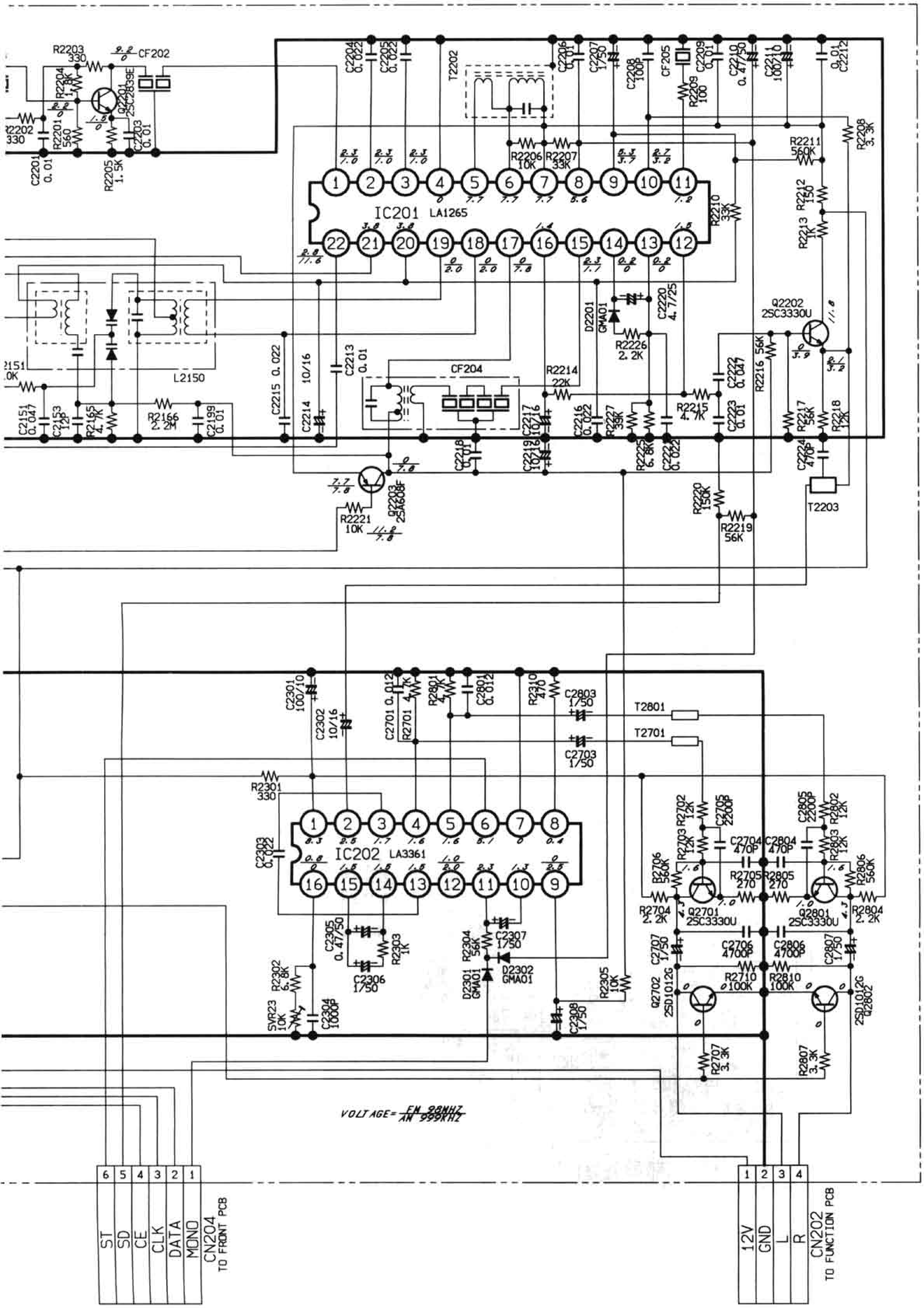
SCHEMATIC DIAGRAM (CD MAIN)



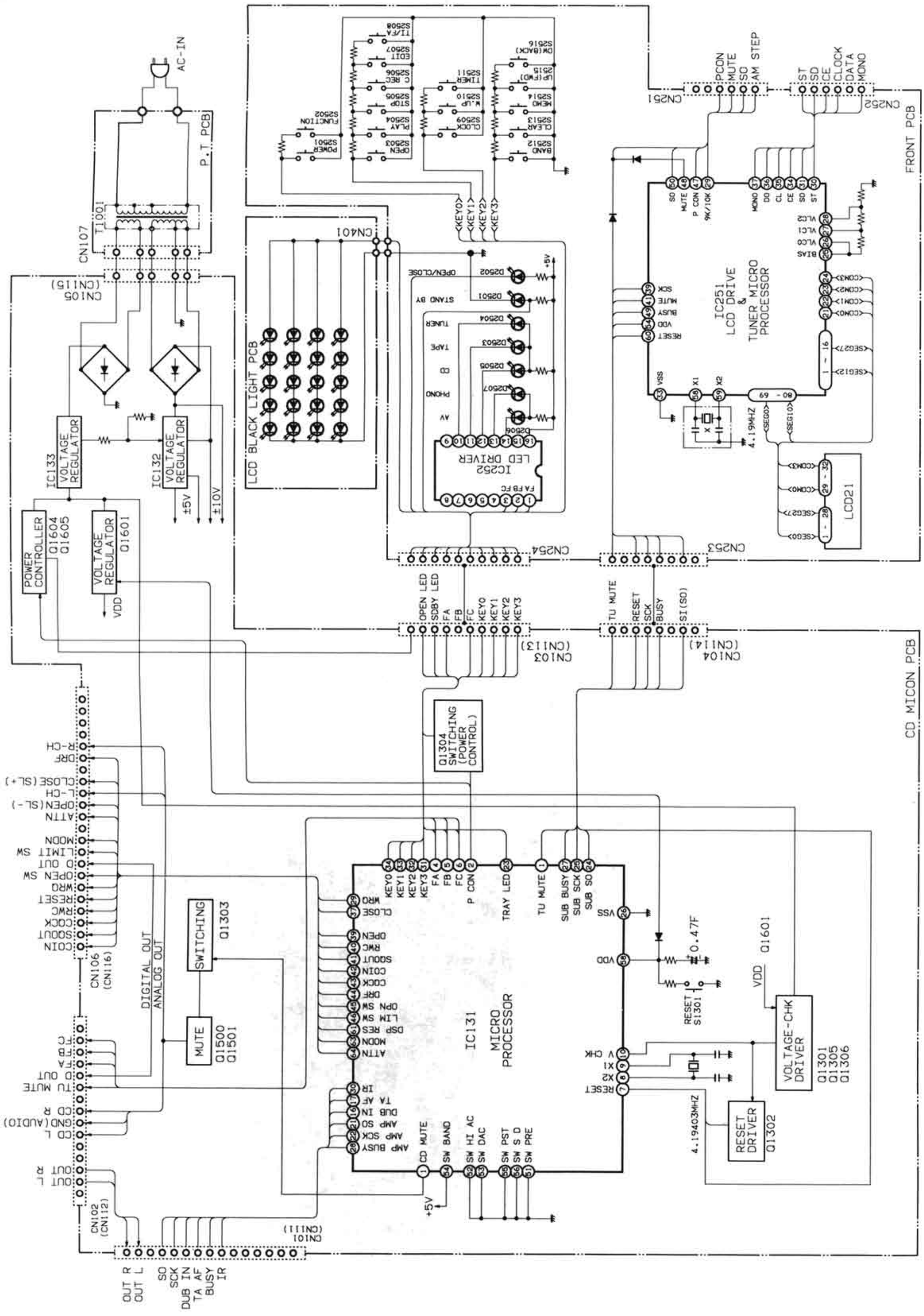

LIM/OPN SW
CN103
3Pin
SLE/SPIN MOTOR
CN102
4Pin
CD-MAIN BLOCK
CN104
22PIN FFC
MAIN MICON BLOCK
13Pin FFC
CN101
PICK UP
IC104 LC7866E
X101 16.93MHZ
IC105 SM5870DS
IC106 (1/2) XRA15218F
IC106 (1/2) XRA15218F
Q103 2SC2412K
CN104
TO SYSCON PCB

SCHEMATIC DIAGRAM (TUNER)

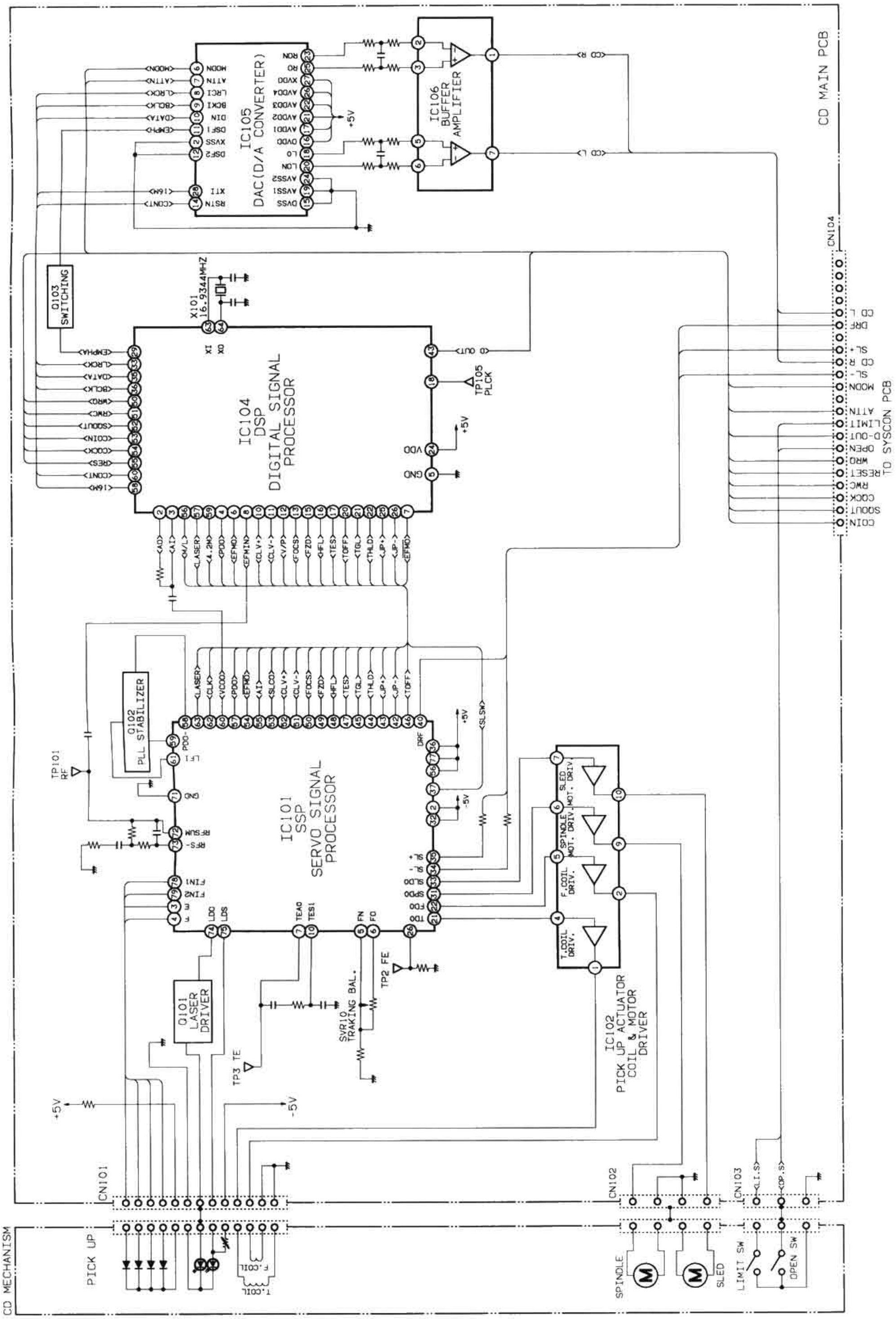



IC201 LA1265
IC202 LA3361
CF202
CF204
CF205
T2202
T2203
T2701
T2801
L2150
Q2201 2SC2839E
Q2202 2SC3330U
Q2203 2SA608F
Q2701 2SC3330U
Q2801 2SC3330U
Q2702 2SD1012G
Q2802 2SD1012G
D2201 GMA01
D2301 GMA01
D2302 GMA01
SVR23 10K
R2203 330
R2204 1.8K
R2202 330
R2201 560
R2205 1.5K
R2206 10K
R2207 33K
R2209 100
R2208 3.3K
R2211 560K
R2212 150
R2213 1K
R2210 33K
R2214 22K
R2226 2.2K
R2215 4.7K
R2216 56K
R2217 56K
R2218 12K
R2227 39K
R2225 6.8K
R2220 150K
R2219 56K
R2221 10K
R2165 4.7K
R2166 2.2M
R2301 330
R2302 6.8K
R2303 1K
R2304 56K
R2305 10K
R2310 470
R2701 4.7K
R2801 4.7K
R2702 12K
R2703 12K
R2704 2.2K
R2705 270
R2706 560K
R2707 3.3K
R2710 100K
R2802 12K
R2803 12K
R2804 2.2K
R2805 270
R2806 560K
R2807 3.3K
R2810 100K
C2201 0.01
C2203 0.01
C2204 0.022
C2205 0.022
C2206 0.01
C2207 1/50
C2208 100P
C2209 0.01
C2210 0.47/50
C2211 100/16
C2212 0.01
C2213 0.01
C2214 10/16
C2215 0.022
C2216 0.022
C2217 10/16
C2218 0.01
C2219 10/16
C2220 4.7/25
C2221 0.022
C2222 0.047
C2223 0.01
C2224 470P
C2151 0.047
C2153 12P
C2199 0.01
C2301 100/10
C2302 10/16
C2303 0.022
C2304 1000P
C2305 0.47/50
C2306 1/50
C2307 1/50
C2308 1/50
C2701 0.012
C2703 1/50
C2704 470P
C2705 2200P
C2706 4700P
C2707 1/50
C2801 0.012
C2803 1/50
C2804 470P
C2805 2200P
C2806 4700P
C2807 1/50
VOLTAGE = FM 98MHZ / AM 999KHZ
6 5 4 3 2 1
ST
SD
CE
CLK
DATA
MONO
CN204
TO FRONT PCB
1 2 3 4
12V
GND
L
R
CN202
TO FUNCTION PCB

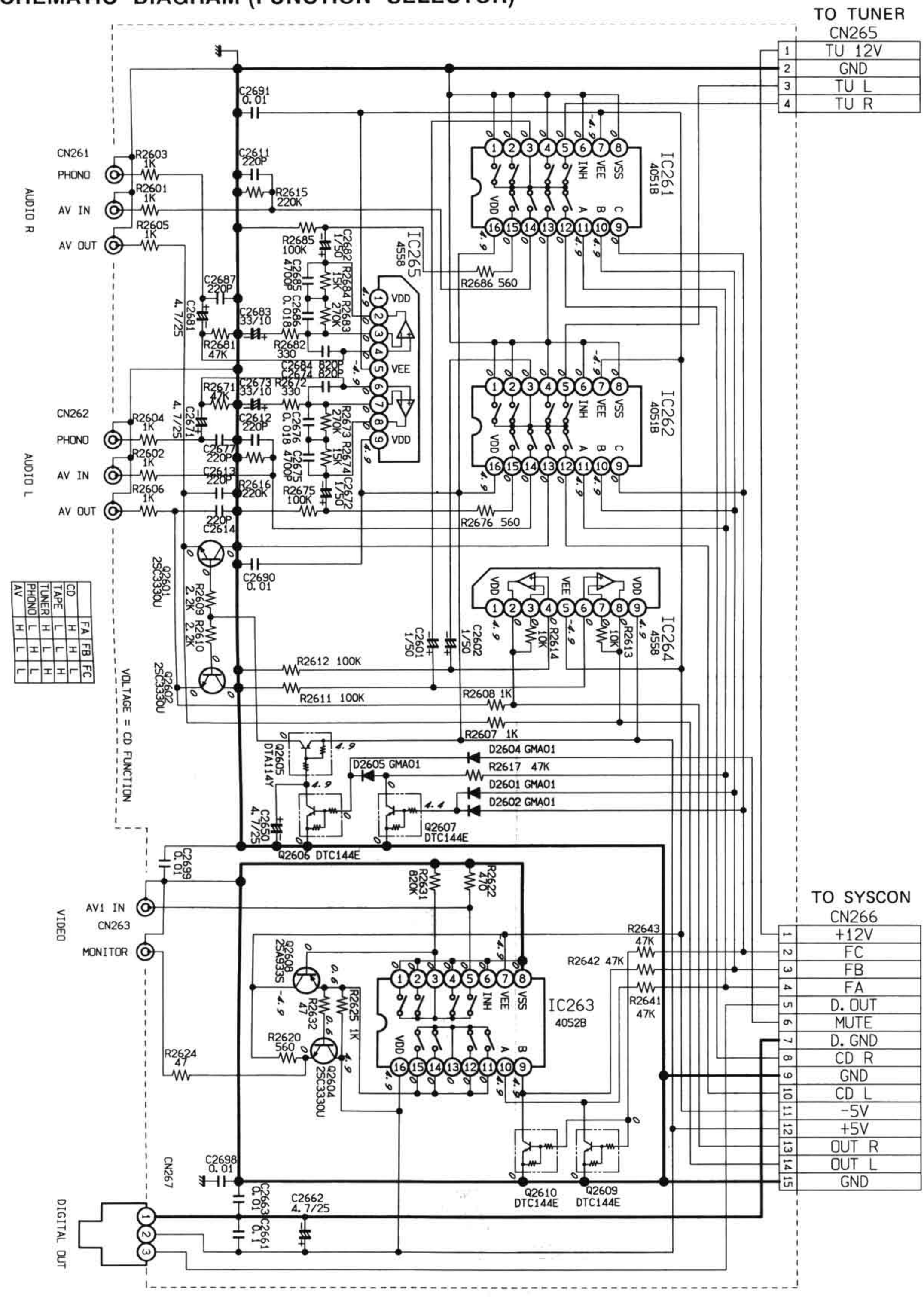
BLOCK DIAGRAM (SYSCON & FRONT)



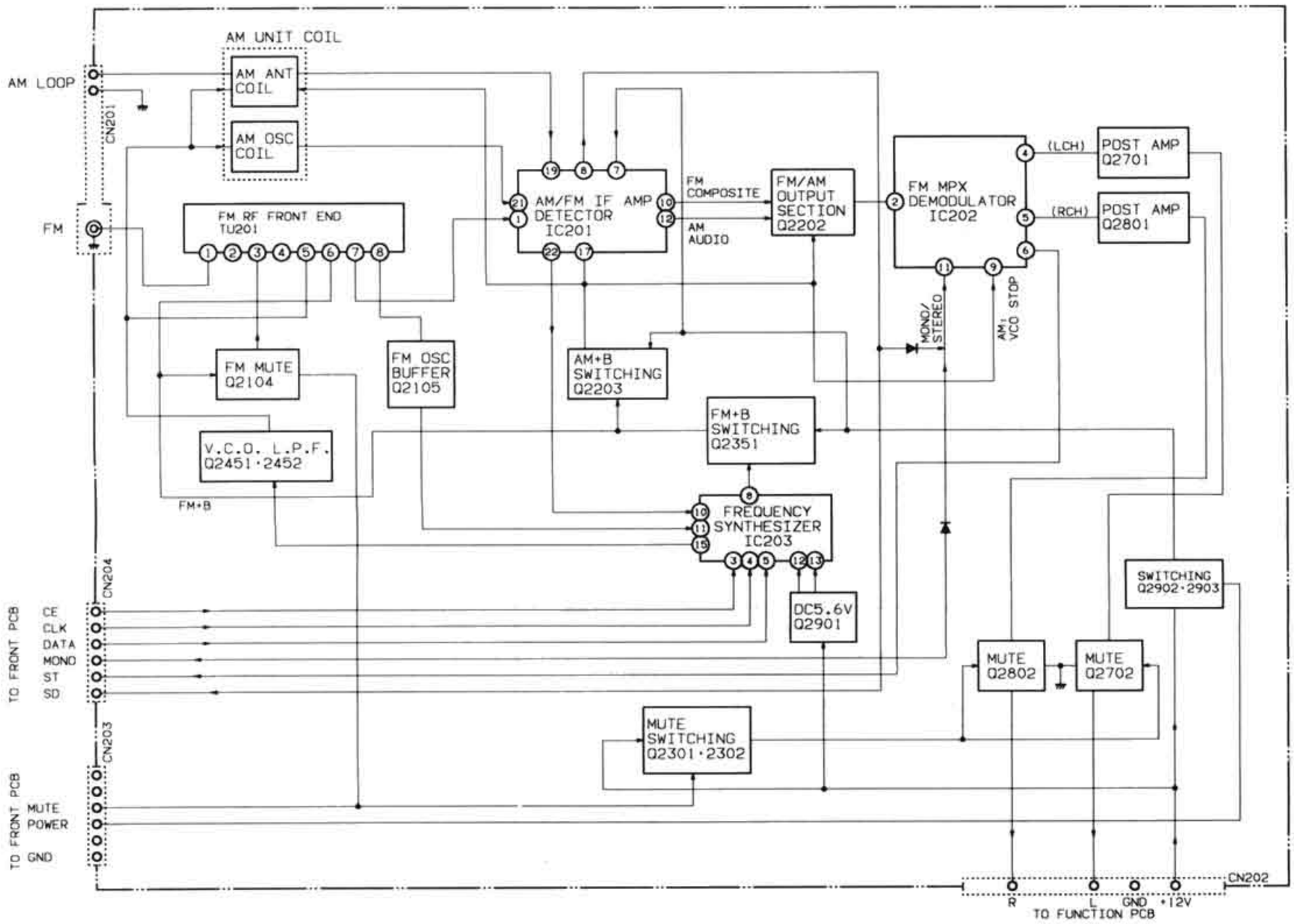
BLOCK DIAGRAM (CD MAIN)



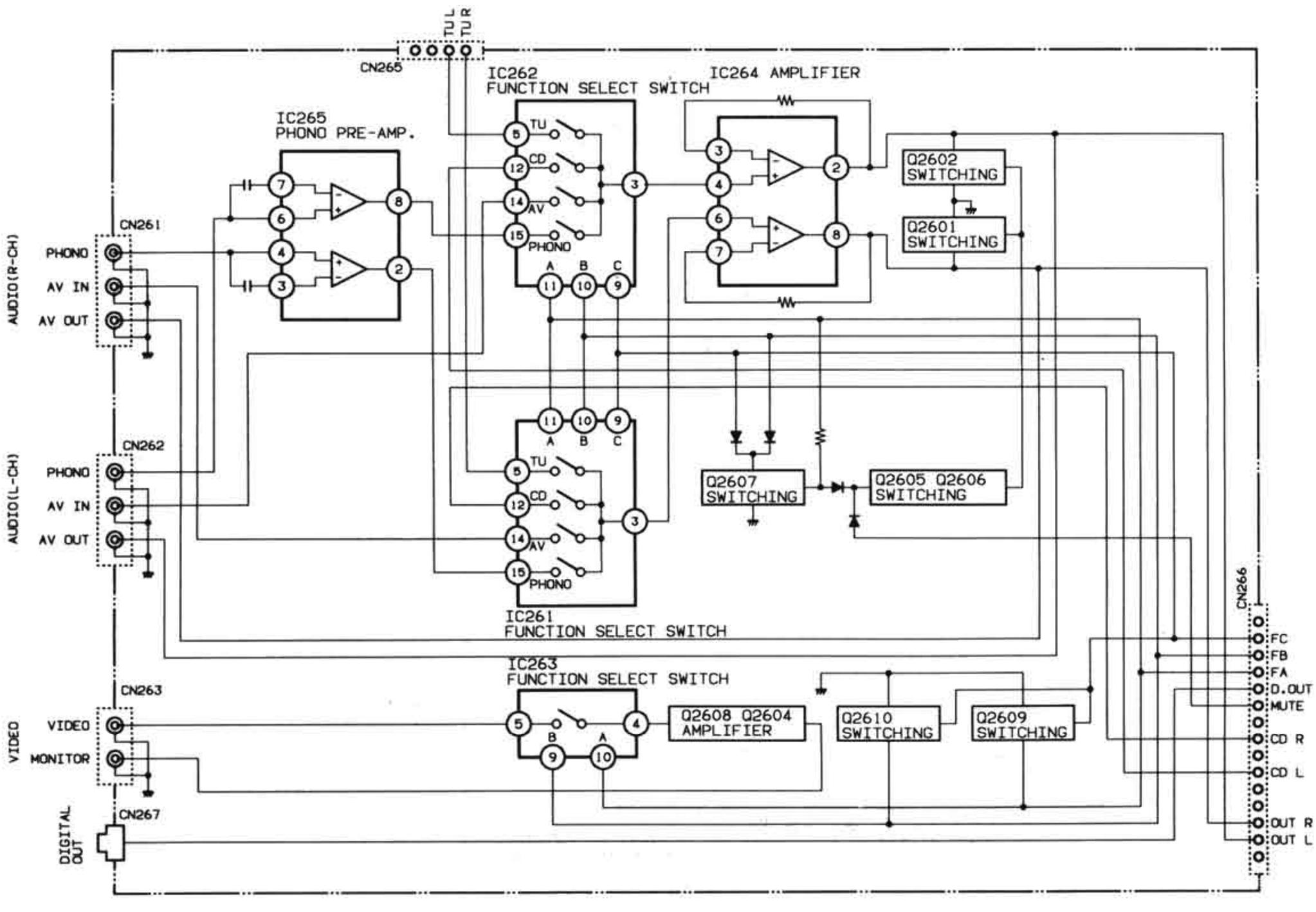
SCHEMATIC DIAGRAM (FUNCTION SELECTOR)



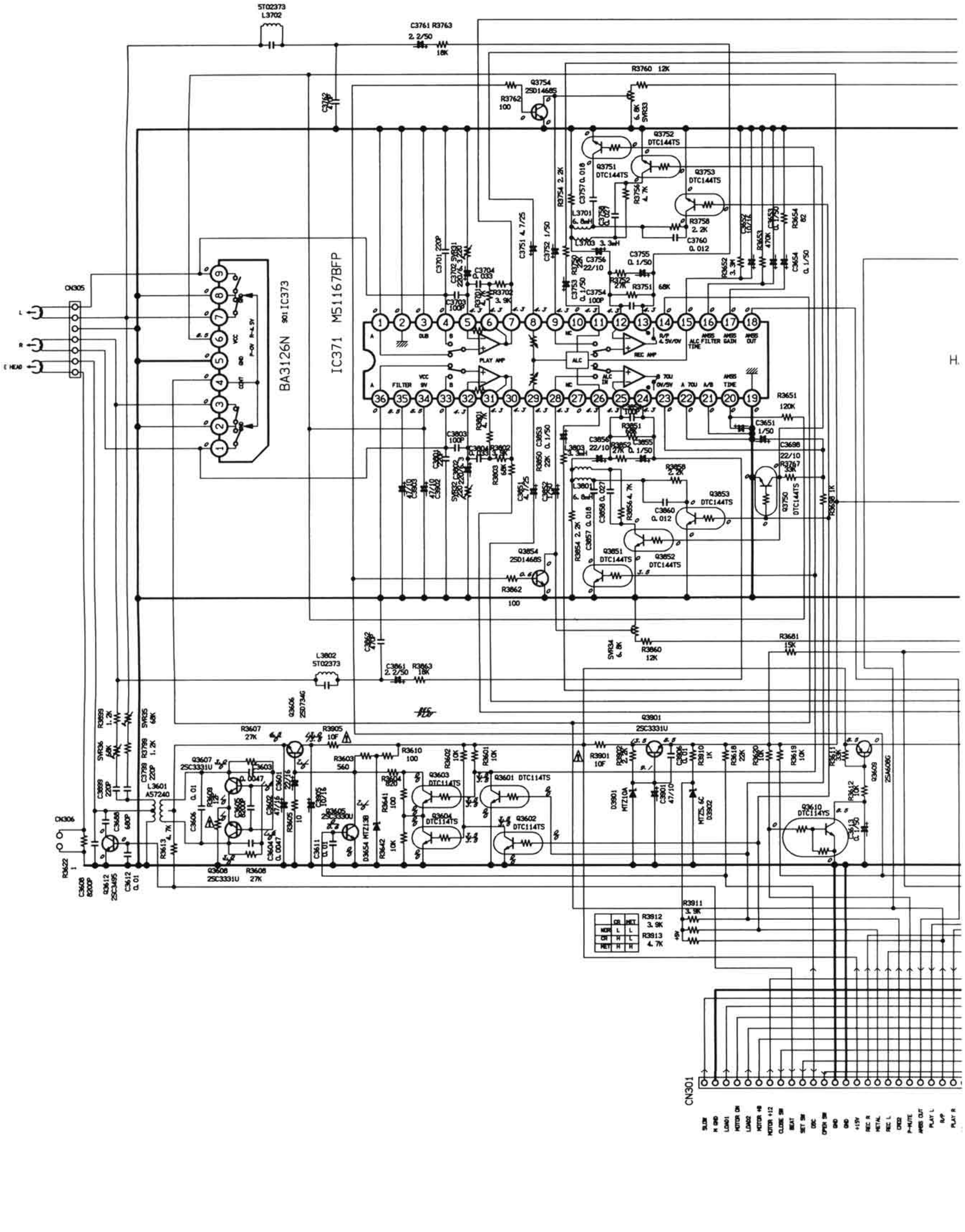
BLOCK DIAGRAM (TUNER)

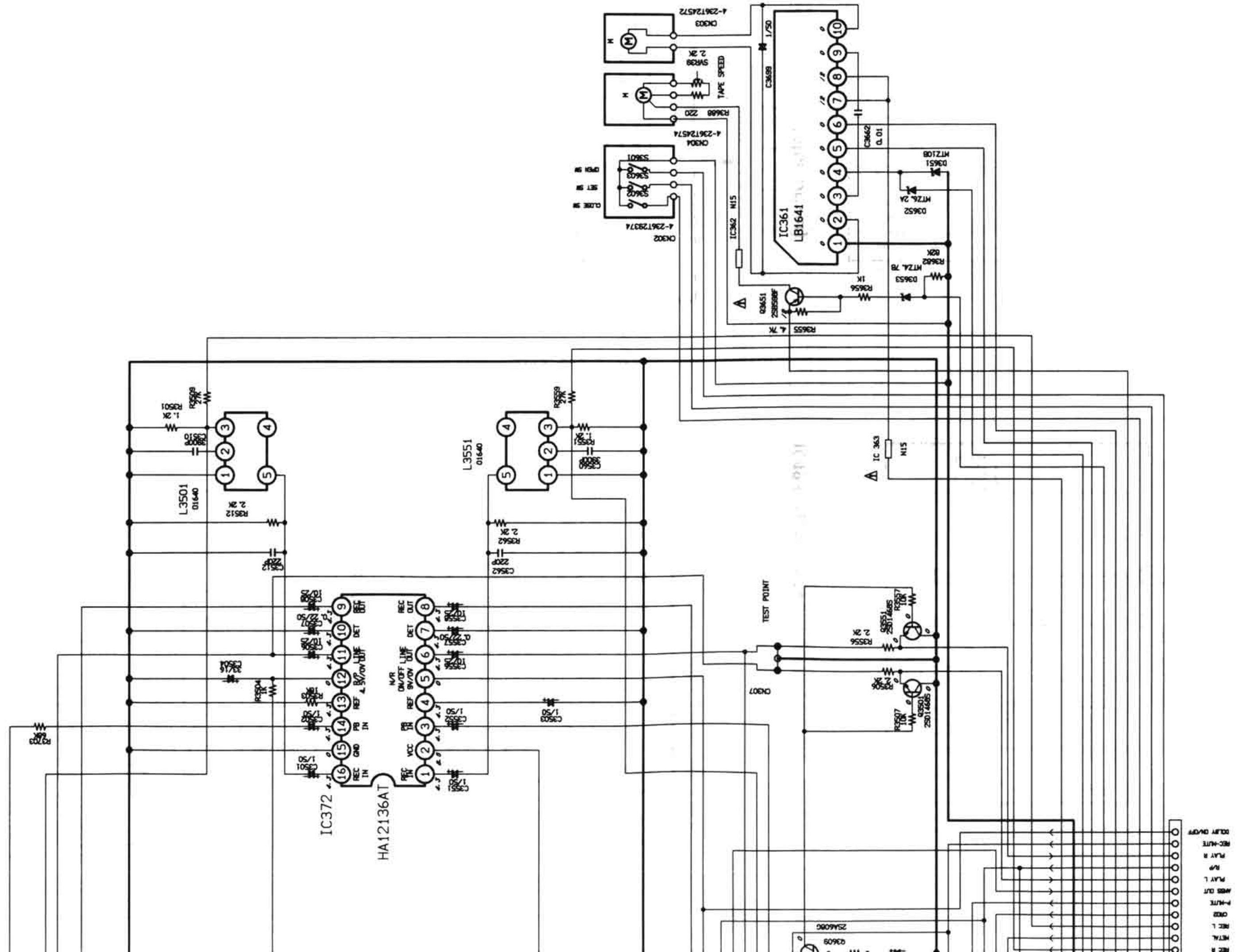


BLOCK DIAGRAM (FUNCTION SELECTOR)



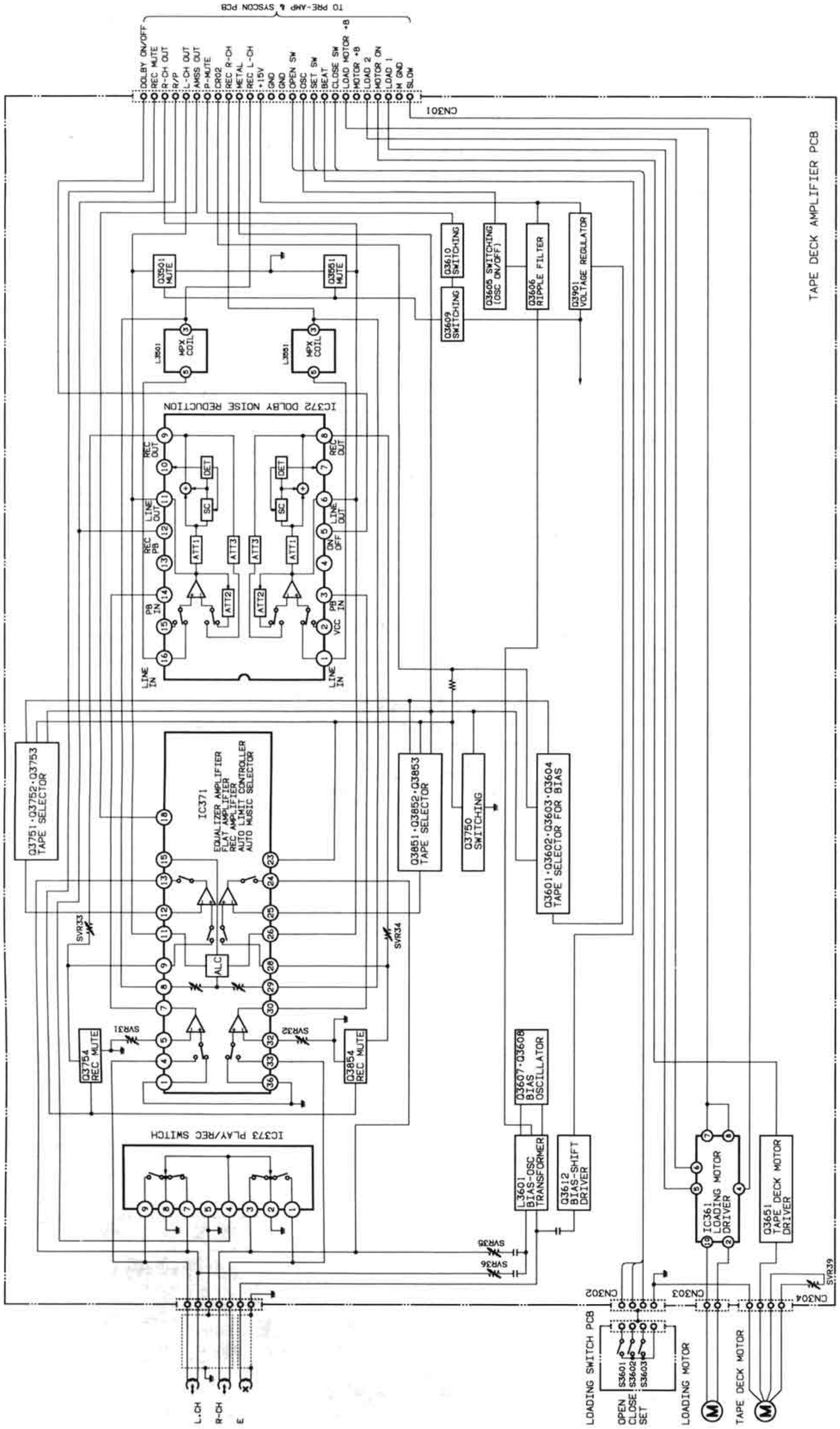
SCHEMATIC DIAGRAM (TAPE DECK AMPLIFIER)



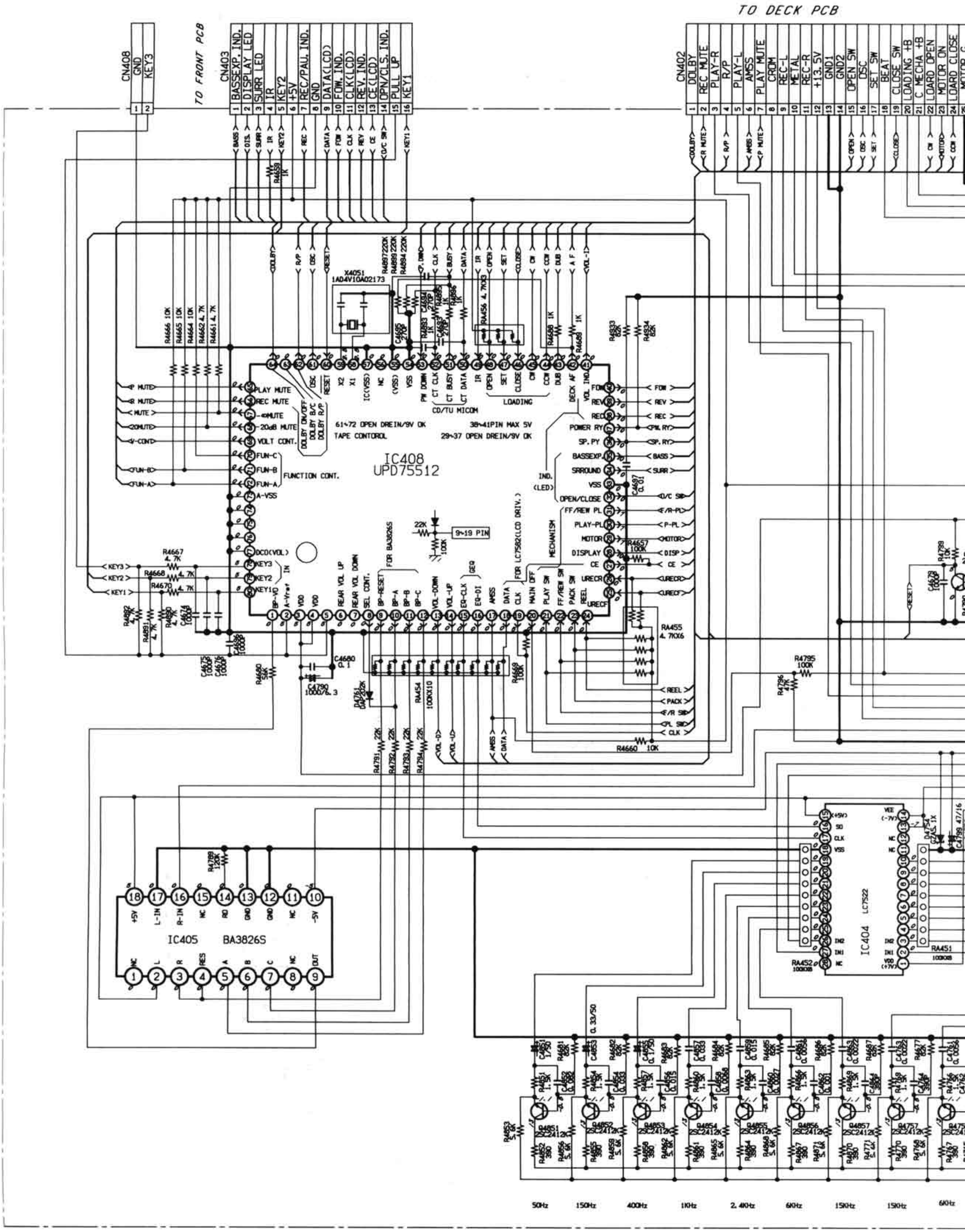


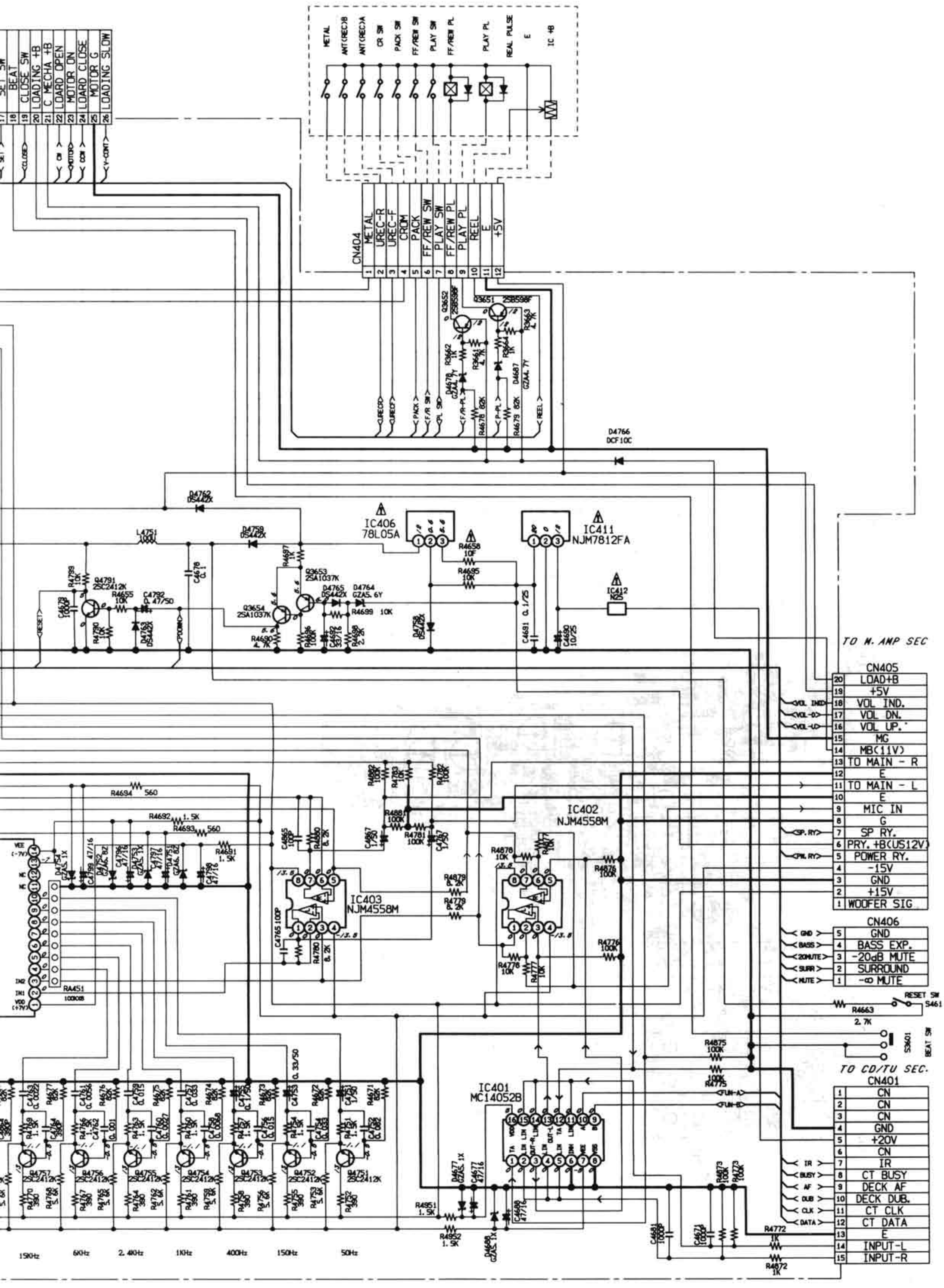
R3703
68K
L3501
01640
C3510
390P
1.2K
R3501
R3509
27K
R3512
2.2K
C3512
220P
33/16
C3504
R3504
1K
C3501
1/50
C3502
1/50
R3503
10K
C3506
10/50
C3507
22/50
C3508
10/50
IC372
HA12136AT
REC IN
GND
PB IN
REF
B/P 5V/0V
LINE OUT
DET
REC OUT
REC IN
VCC
PB IN
REF
N/R ON/OFF 9V/0V
LINE OUT
DET
REC OUT
C3551
1/50
C3552
1/50
C3556
10/50
C3557
22/50
C3558
10/50
L3551
01640
C3562
220P
R3562
2.2K
R3559
27K
C3560
390P
R3551
1.2K
C3503
1/50
CN307
TEST POINT
Q3609
2SA608G
R3507
10K
R3506
2.2K
Q3501
2SD1468S
R3556
2.2K
Q3551
2SD1468S
R3557
10K
IC 363
N15
CLOSE SW
SET SW
OPEN SW
S3402
S3403
S3601
CN302
4-236T2837 4
M
CN304
4-236T24574
R3688
220
SVR39
2.2K
TAPE SPEED
M
CN303
4-236T24572
IC362 N15
Q3651
2SB598F
R3655
4.7K
C3699
1/50
IC361
LB1641
R3656
1K
C3662
0.01
D3653
MTZ4.7B
R3682
82K
D3652
MTZ4.2A
D3651
MTZ10B
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)

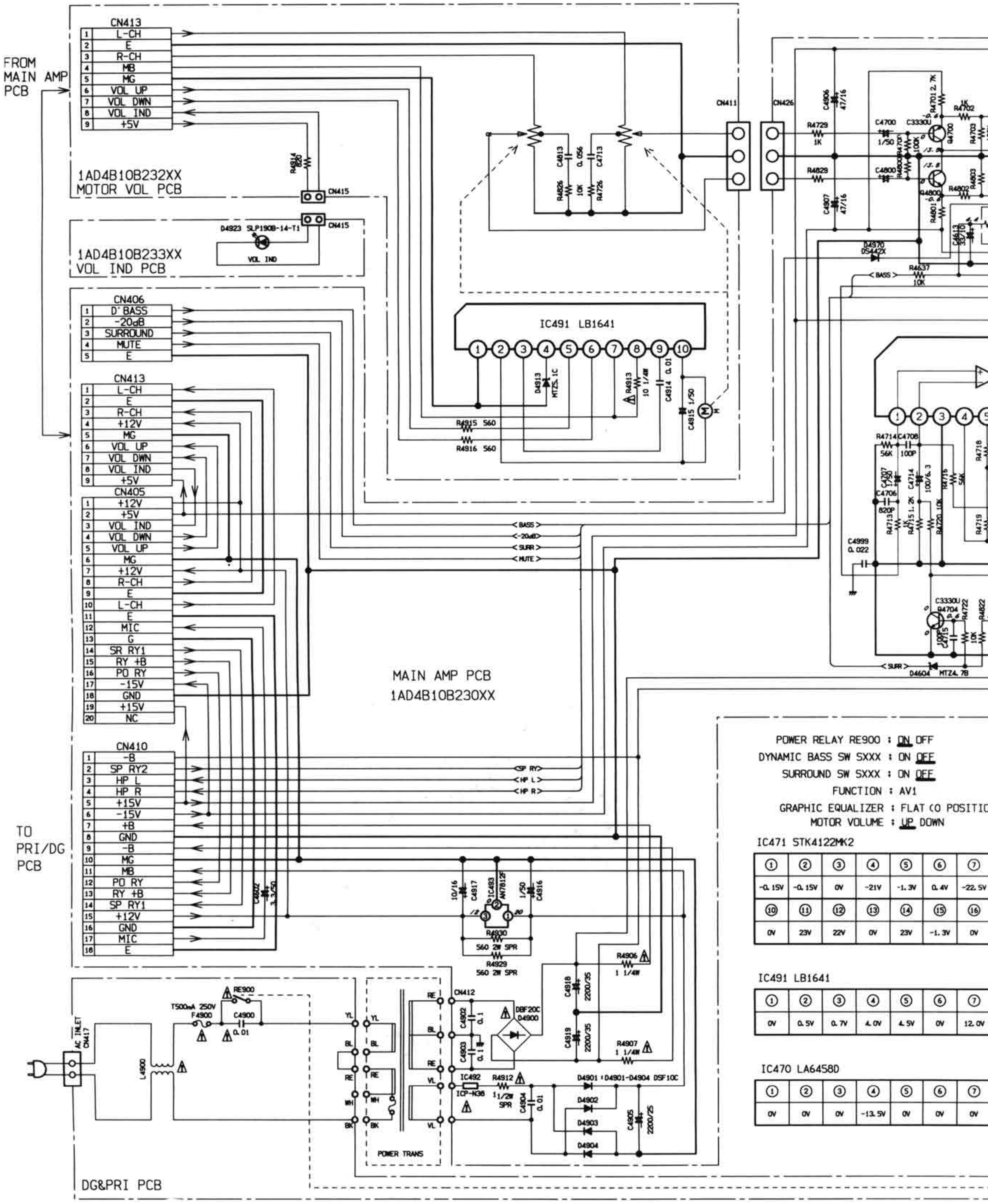


SCHEMATIC DIAGRAM (SYSCON)




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)
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)



IC471 STK4122MK2

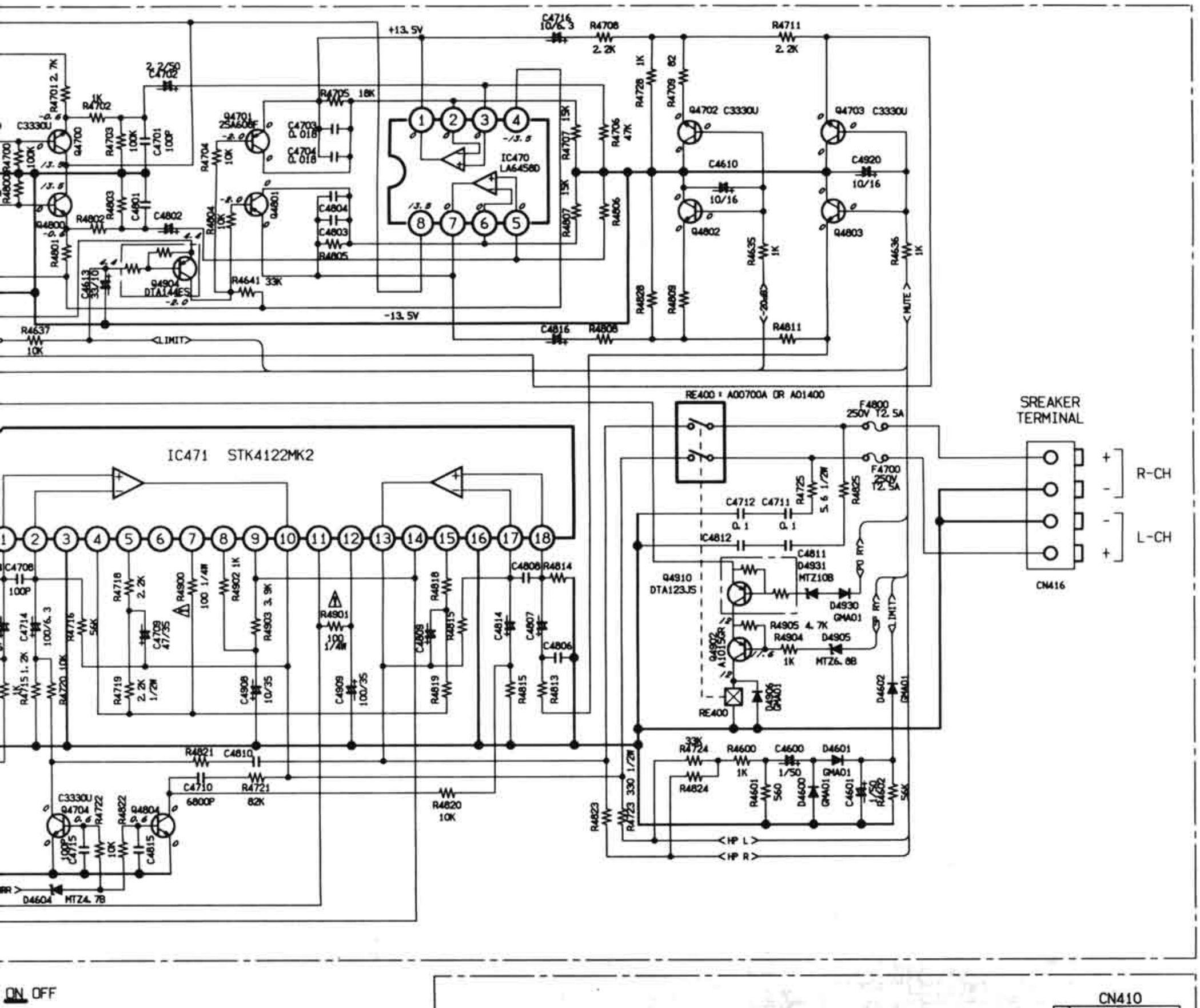
①	②	③	④	⑤	⑥	⑦
-0.15V	-0.15V	0V	-21V	-1.3V	0.4V	-22.5V
⑩	⑪	⑫	⑬	⑭	⑮	⑯
0V	23V	22V	0V	23V	-1.3V	0V

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

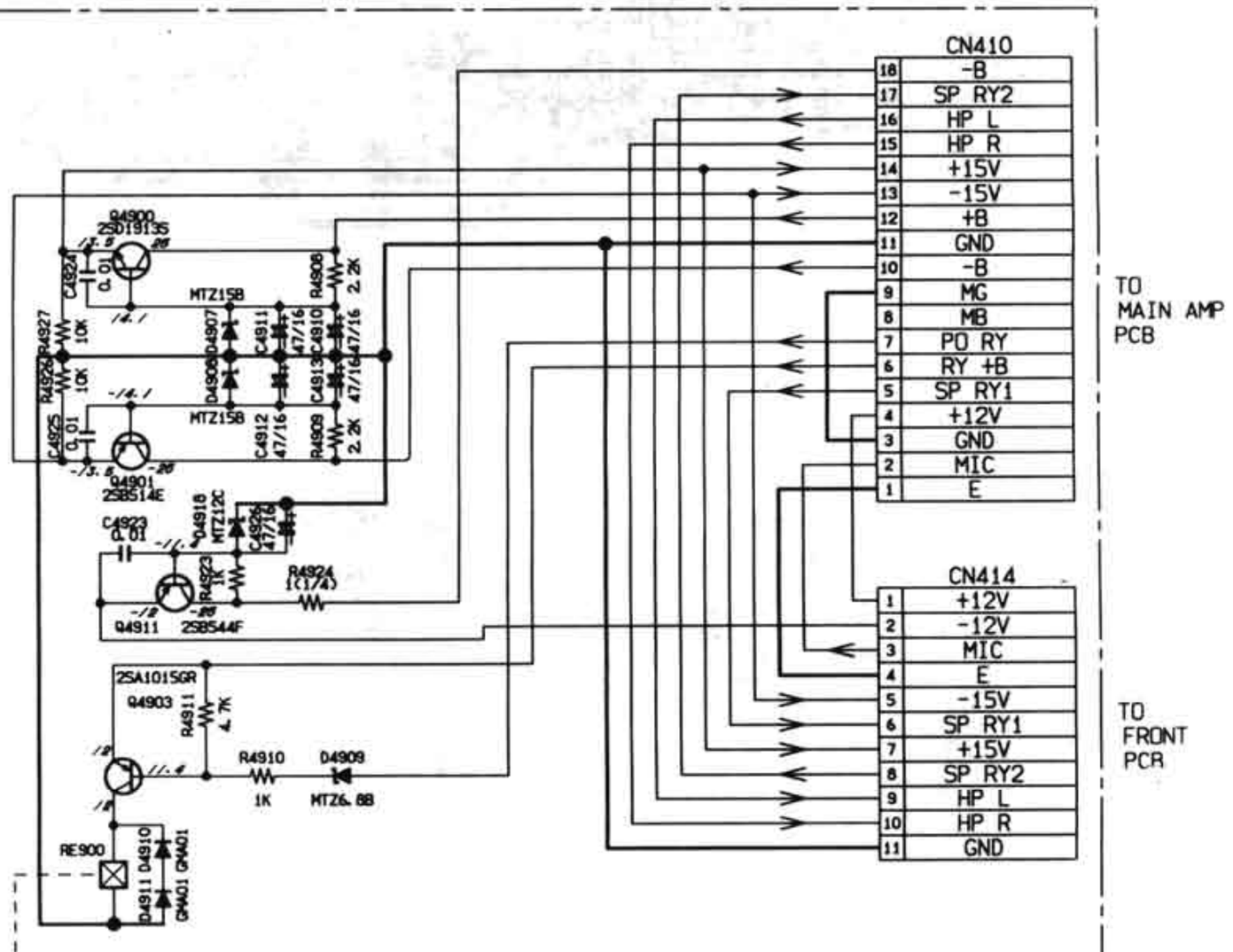


ON OFF
ON OFF
ON OFF
AV1
FLAT (O POSITION)
UP DOWN

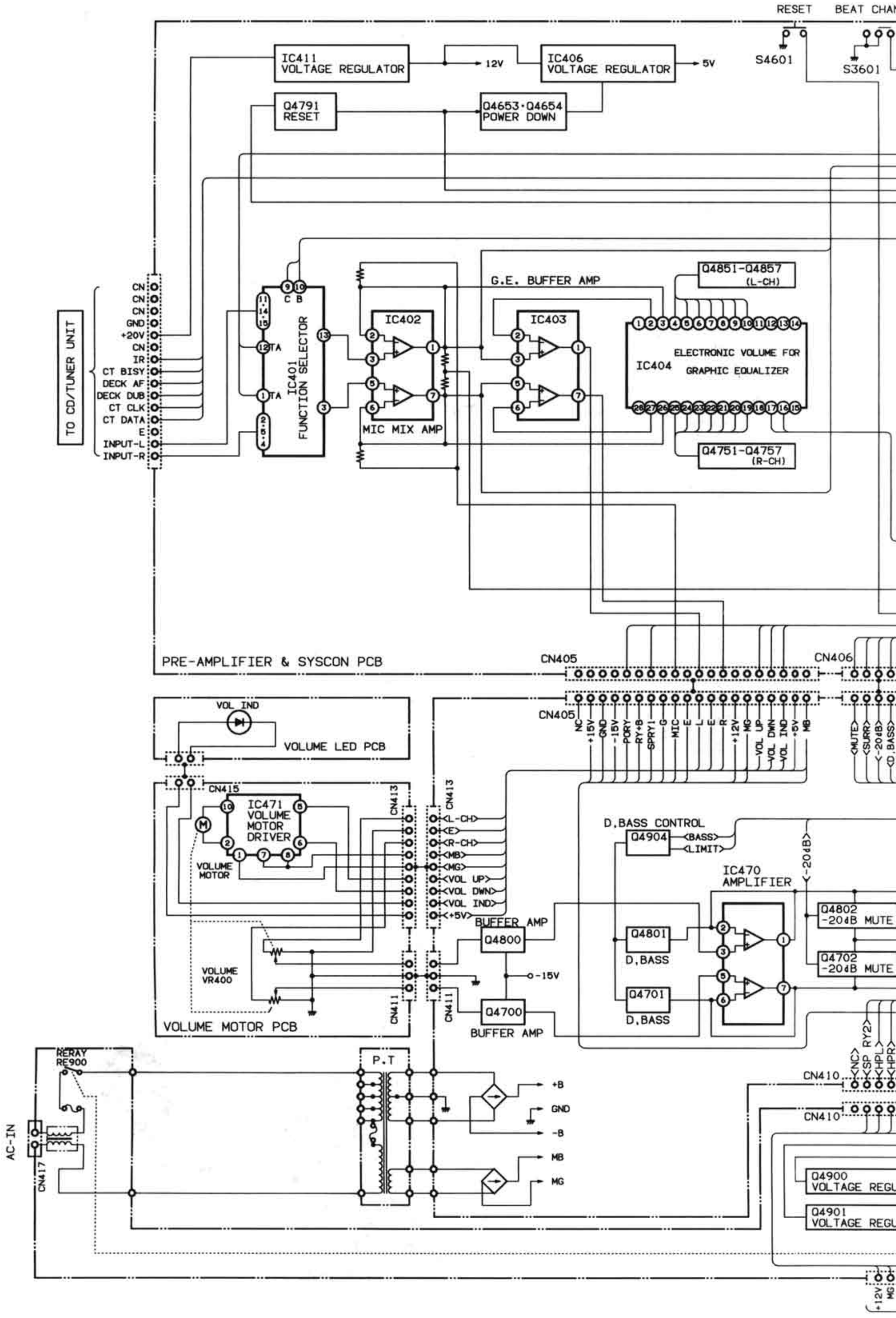
⑤	⑥	⑦	⑧	⑨
-1.3V	0.4V	-22.5V	-23V	-23V
⑭	⑮	⑯	⑰	⑱
23V	-1.3V	0V	-0.15V	-0.15V

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

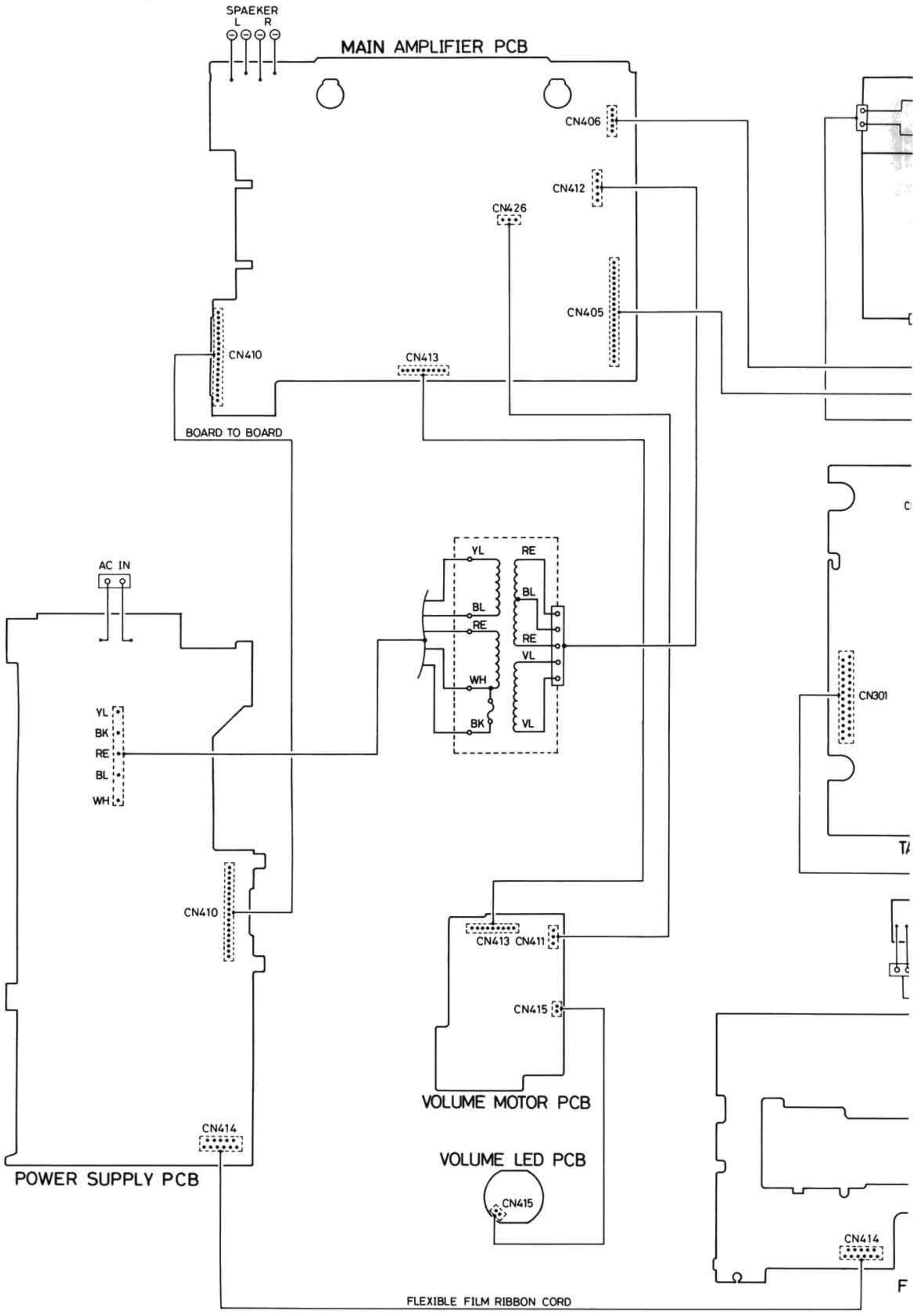


BLOCK DIAGRAM (SYSCON & AMPLIFIER)

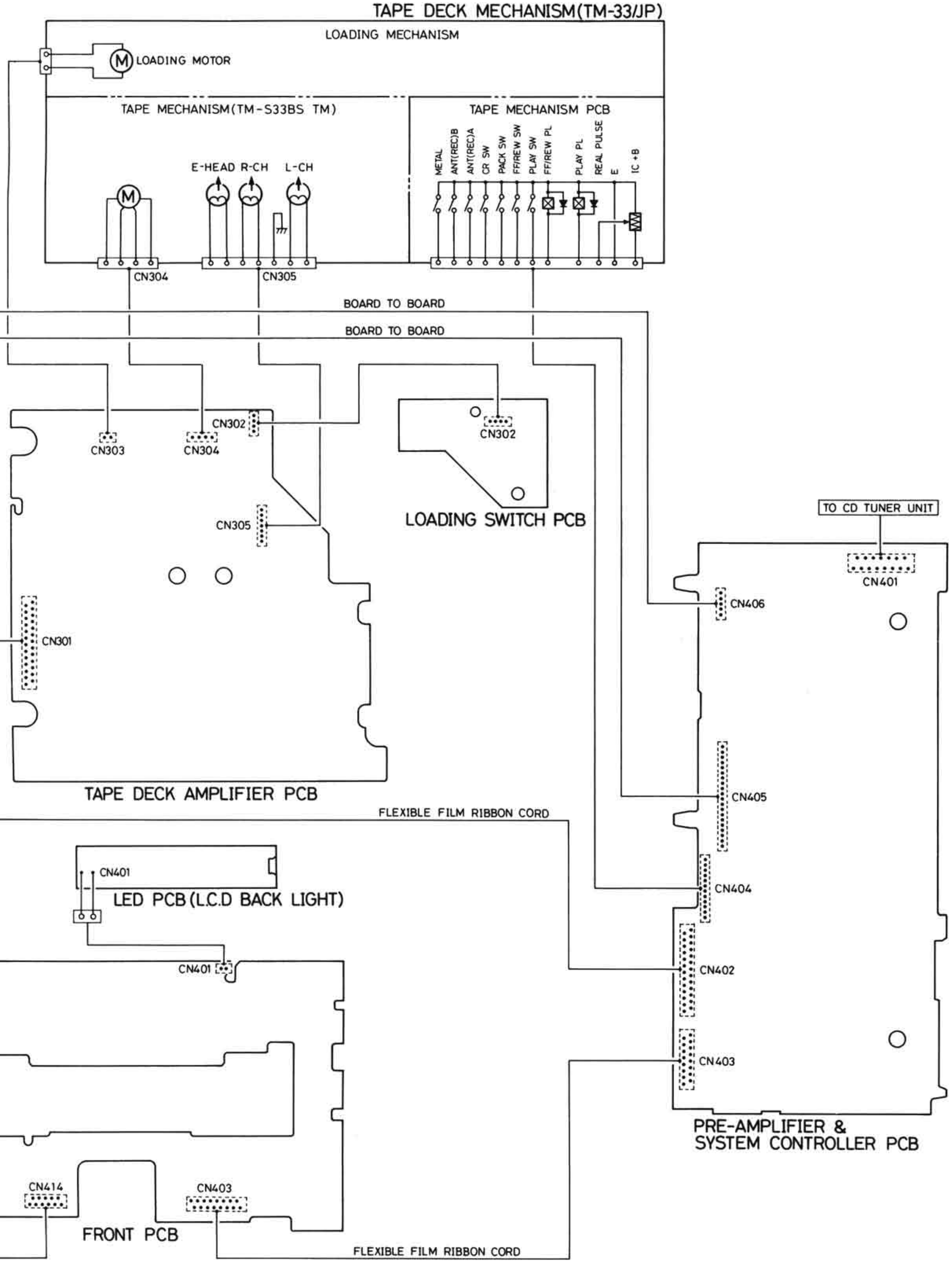


TO MECHANISM PCB
BEAT CHANNEL
CN404
S3601
Q3652 FF/REW PLUNGER DRIVER
Q3651 PLAY PLUNGER DRIVER
IC408
MICRO PROCESSOR
VSS
IC405
BAND PASS FILTER FOR SPECTRUM ANALIZER
DOLBY
REC MUTE
PLAY-R
R/P
PLAY-L
AMSS
PLY MUTE
CRO2
REC-L
METAL
REC-R
+13.5V
GND1
GND2
OPEN SW
OSC
SET SW
BEAT
CLOSE SW
L+B
M+B
LOAD CLS
MOTOR ON
LOAD OPN
MG
LOAD SLW
CN402
TO DECK AMP. PCB
BASS IND
DISP IND
RURR IND
IR
KEY2
+5V
REC IND
GND
DATA
FOW IND
CLK
REV IND
CE
OPEN IND
PULL UP
KEY1
CN403
TO FRONT PCB
CN406
CN408
POWER AMPLIFIER PCB
<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)