Service Document
Exchange Set

BEEZZ RRCD 4101

GRUNDIG

Service Manual

Sicherheit
Safety

Materialnr./Part No.
720108000000

⚠ Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Materialnummer 720108000000, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

⚠ The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000000, as well as the respective national deviations.

Dieses Service Dokument ist nur in Datenform verfügbar
This Service Document is only available as data

Änderungen vorbehalten/Subject to alteration

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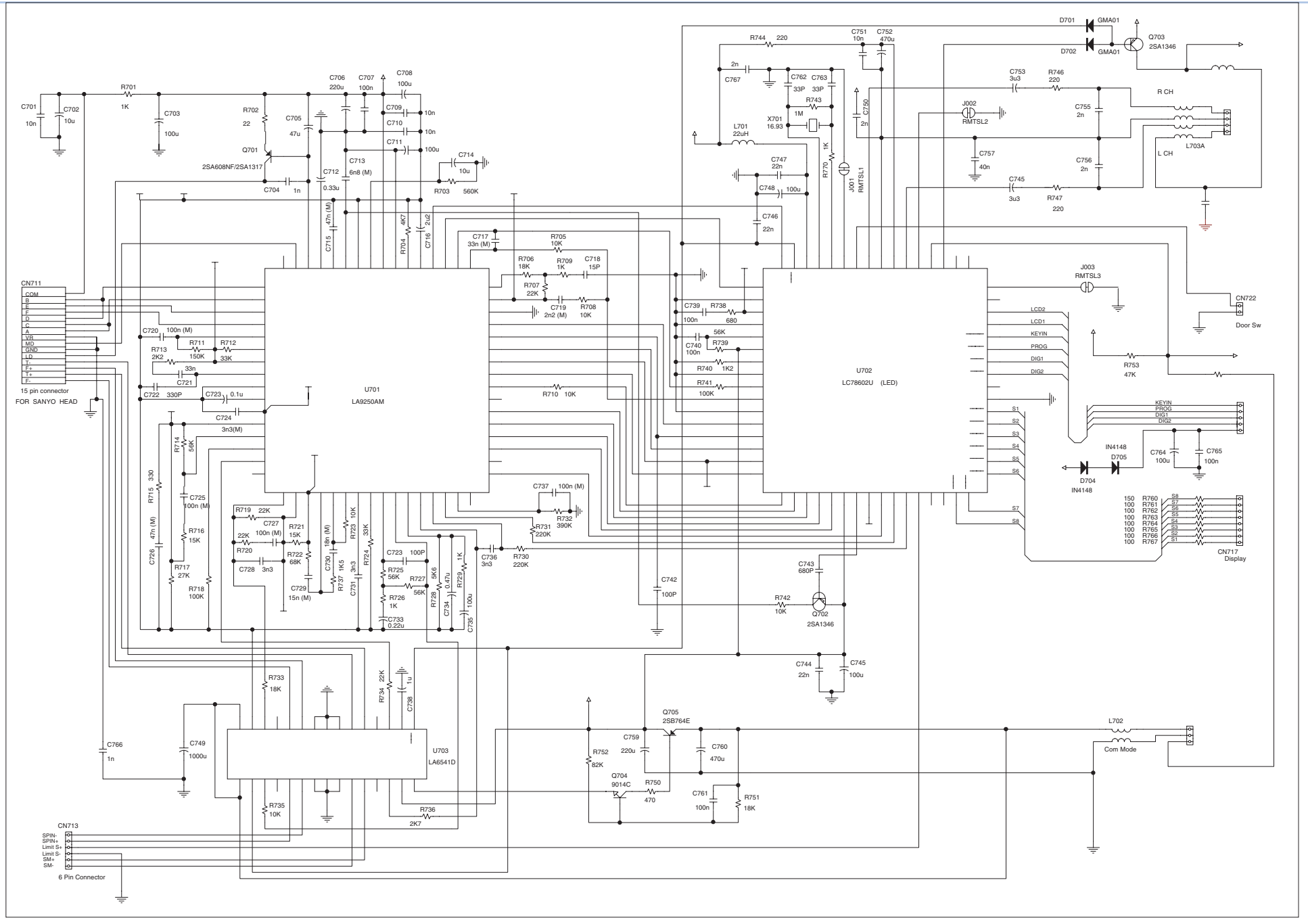
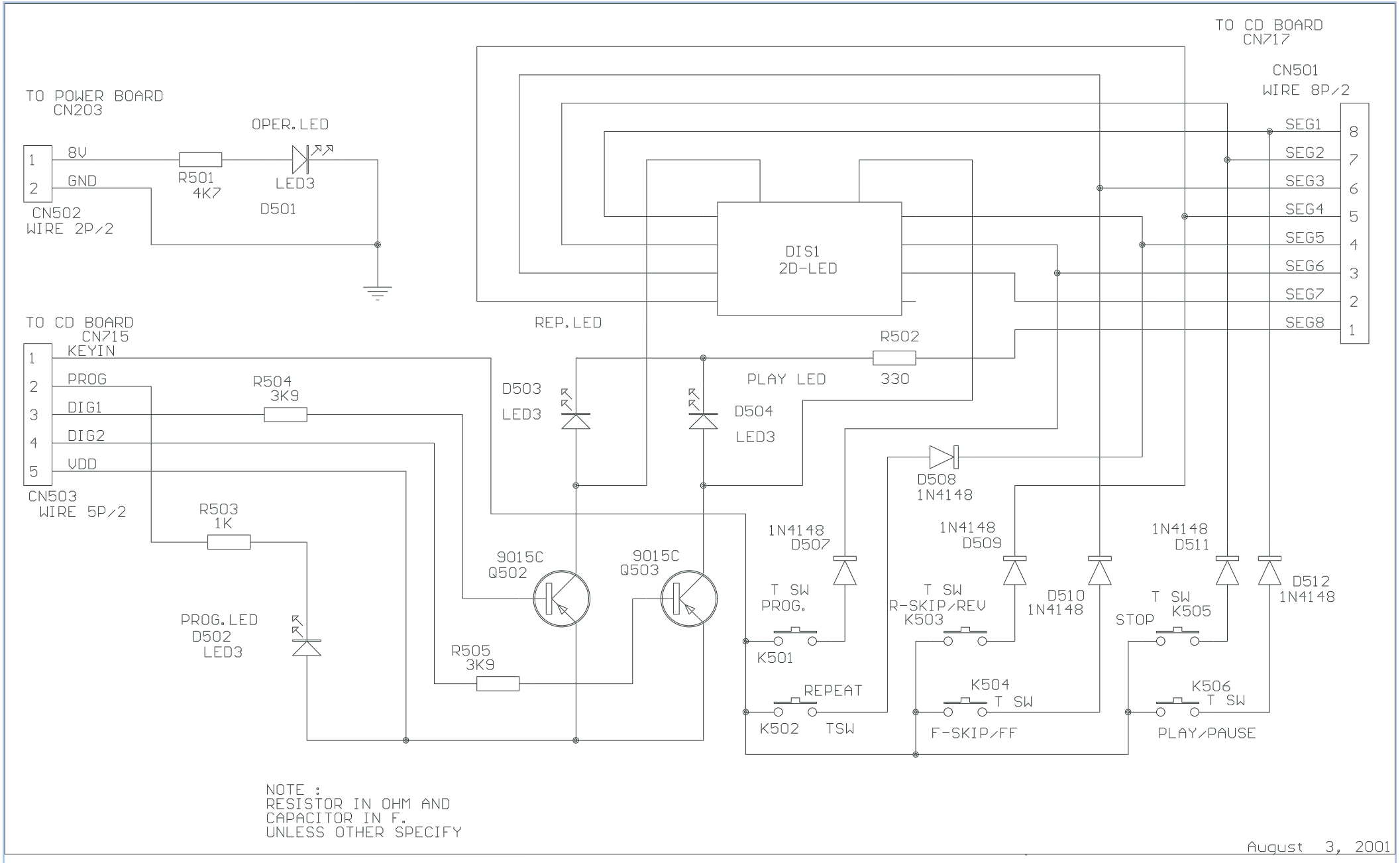
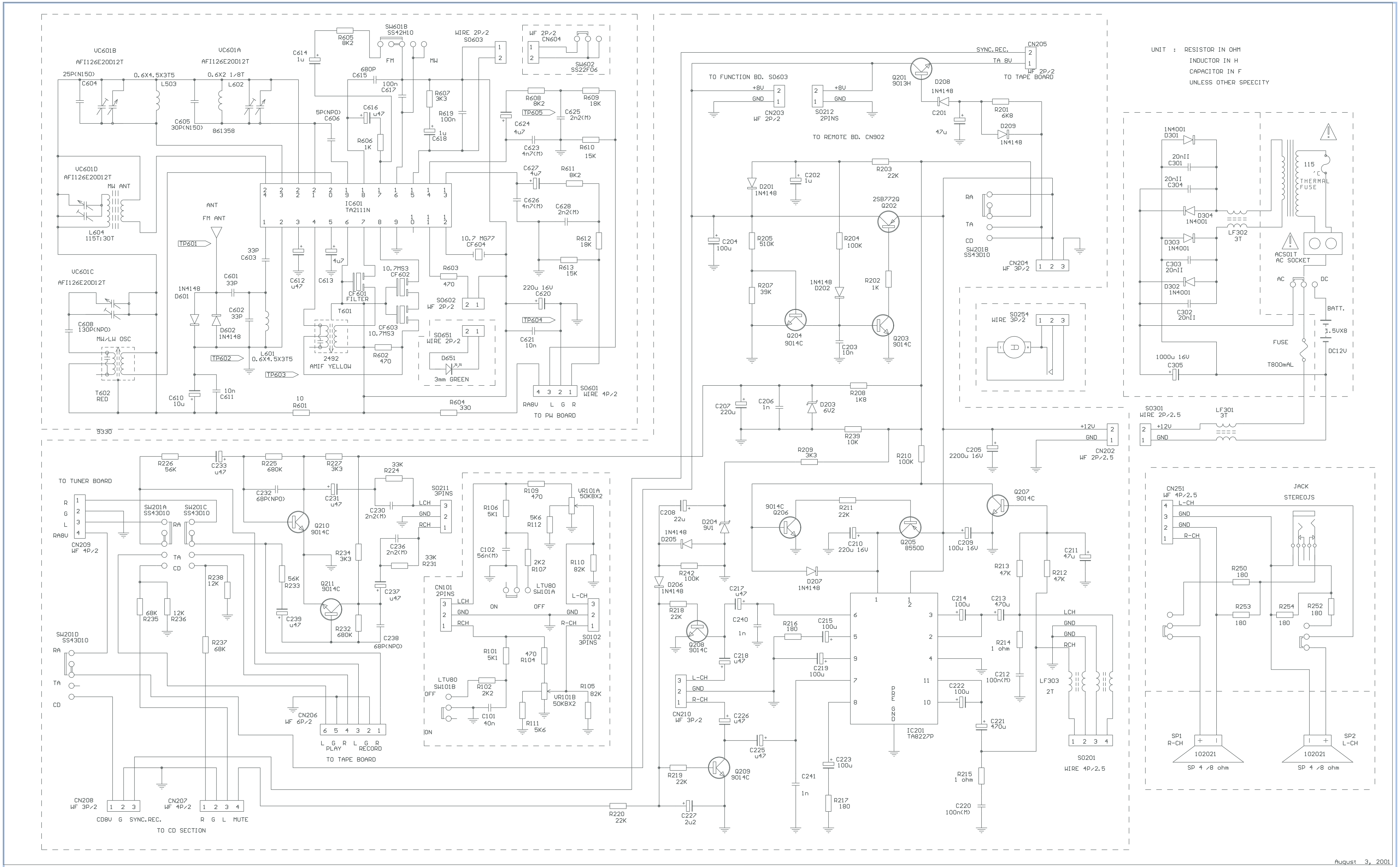
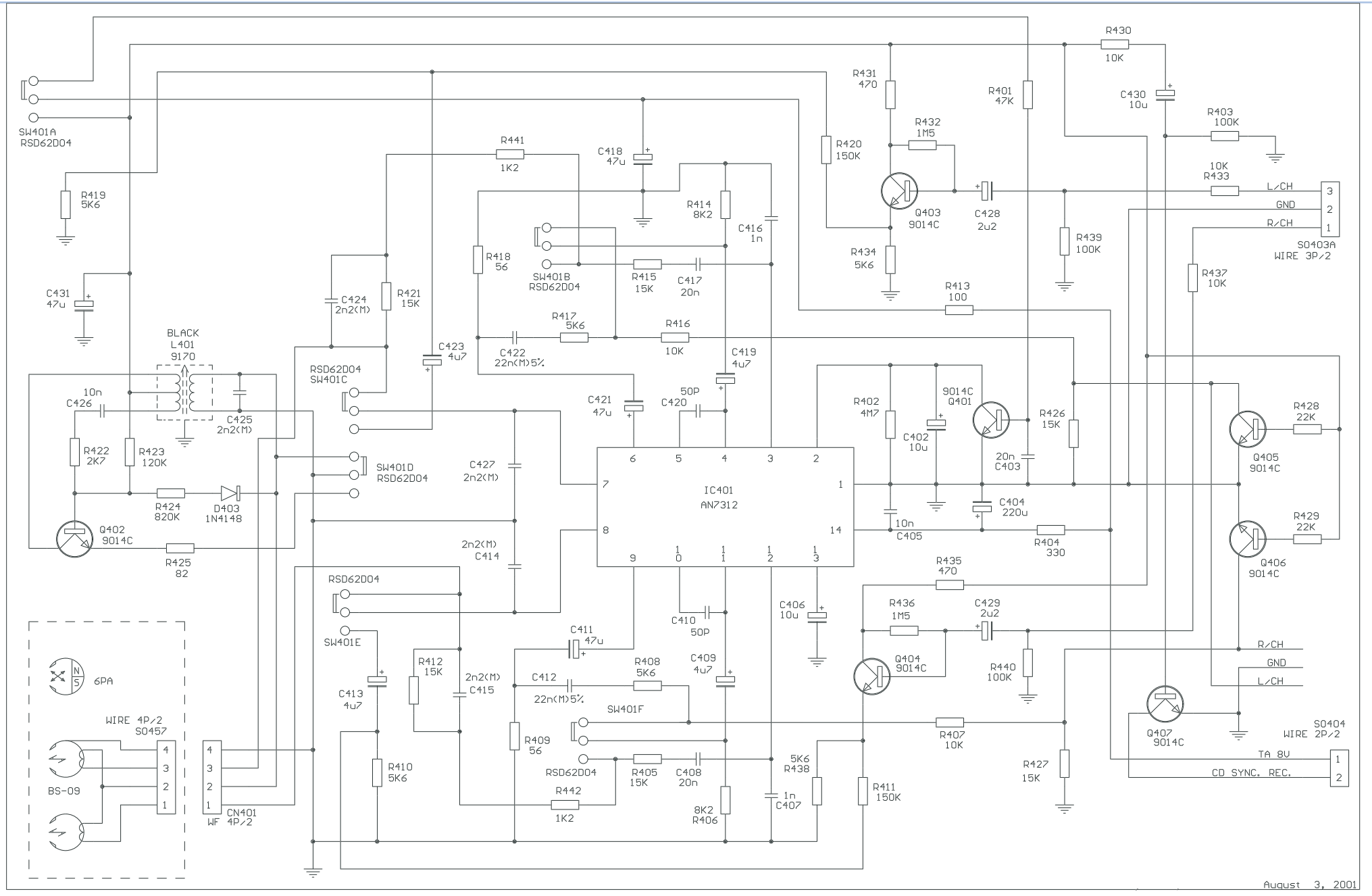

U701
LA9250AM
U702
LC78602U (LED)
U703
LA6541D
CN711
15 pin connector
FOR SANYO HEAD
CN713
6 Pin Connector
CN717
Display
CN722
Door Sw
L703A
R CH
L CH
L702
Com Mode
Q701
2SA608NF/2SA1317
Q702
2SA1346
Q703
2SA1346
Q704
9014C
Q705
2SB764E
D701
GMA01
D702
GMA01
D704
IN4148
D705
IN4148
X701
16.93
J001
RMTSL1
J002
RMTSL2
J003
RMTSL3
L701
22uH

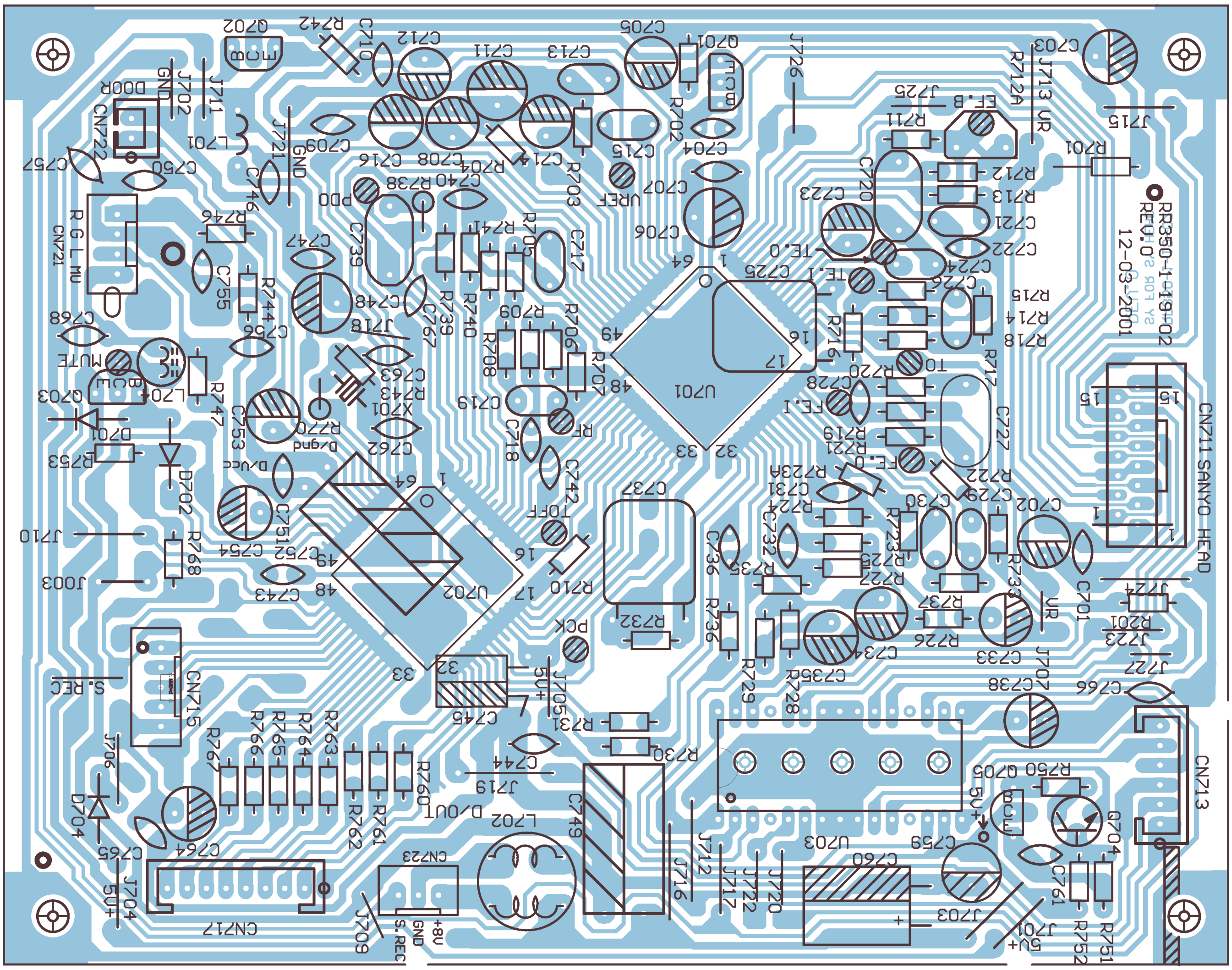

TO CD BOARD
CN717
CN501
WIRE 8P/2
TO POWER BOARD
CN203
OPER.LED
8V
GND
R501
4K7
LED3
D501
CN502
WIRE 2P/2
DIS1
2D-LED
SEG1
SEG2
SEG3
SEG4
SEG5
SEG6
SEG7
SEG8
TO CD BOARD
CN715
KEYIN
PROG
DIG1
DIG2
VDD
CN503
WIRE 5P/2
REP.LED
R502
330
PLAY LED
R504
3K9
D503
LED3
D504
LED3
D508
1N4148
R503
1K
9015C
Q502
9015C
Q503
1N4148
D507
1N4148
D509
1N4148
D511
D512
1N4148
D510
1N4148
T SW
PROG.
K501
T SW
R-SKIP/REV
K503
T SW
K505
STOP
PROG.LED
D502
LED3
R505
3K9
REPEAT
K502
TSW
K504
T SW
F-SKIP/FF
K506
T SW
PLAY/PAUSE
NOTE :
RESISTOR IN OHM AND
CAPACITOR IN F.
UNLESS OTHER SPECIFY
August 3, 2001

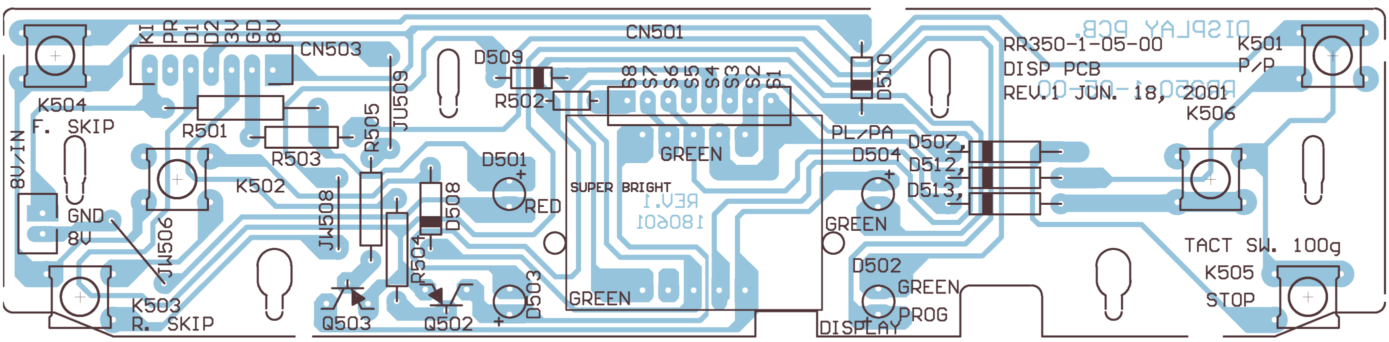


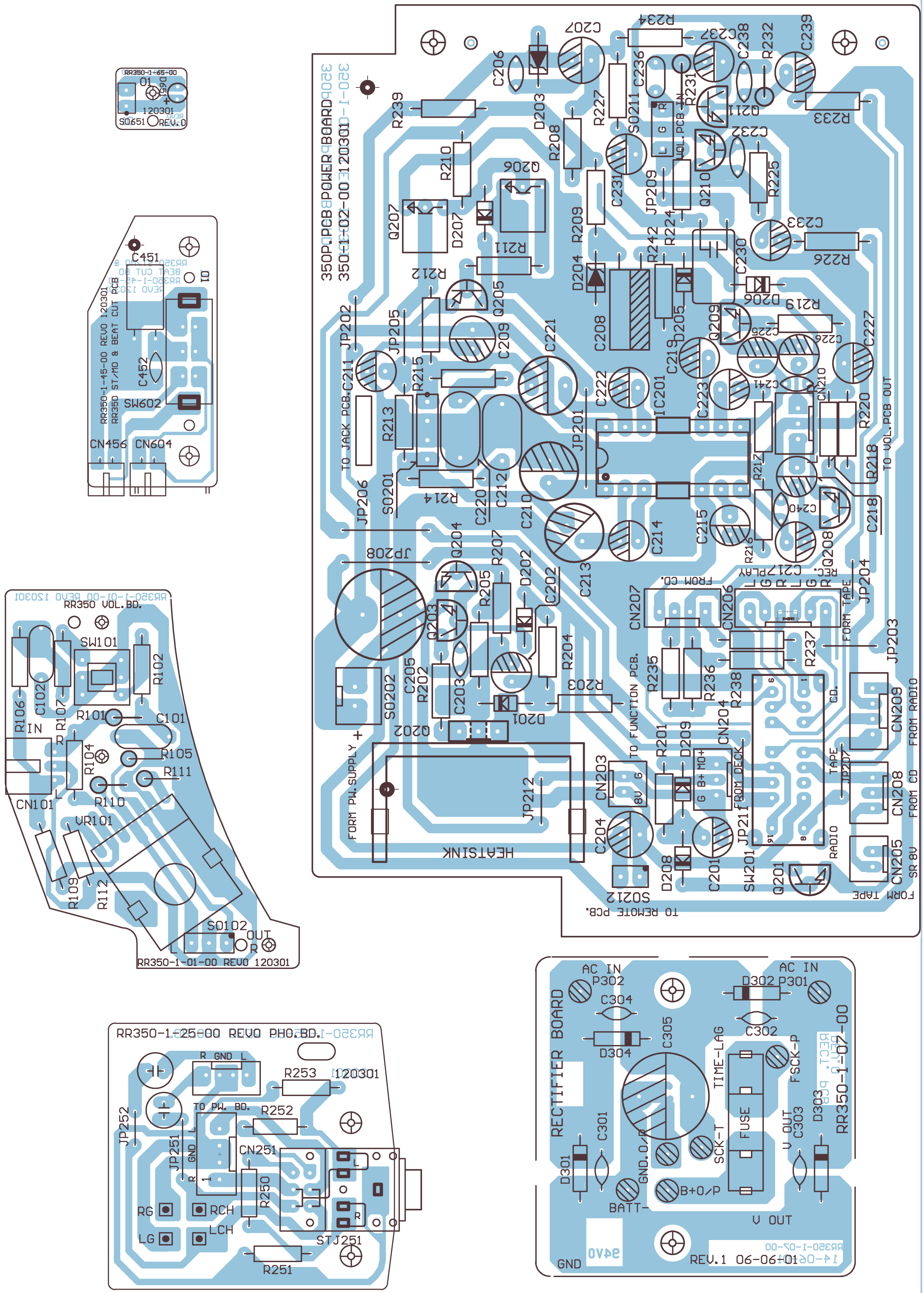
GRUNDIG

BEEZZ RRCD 4101

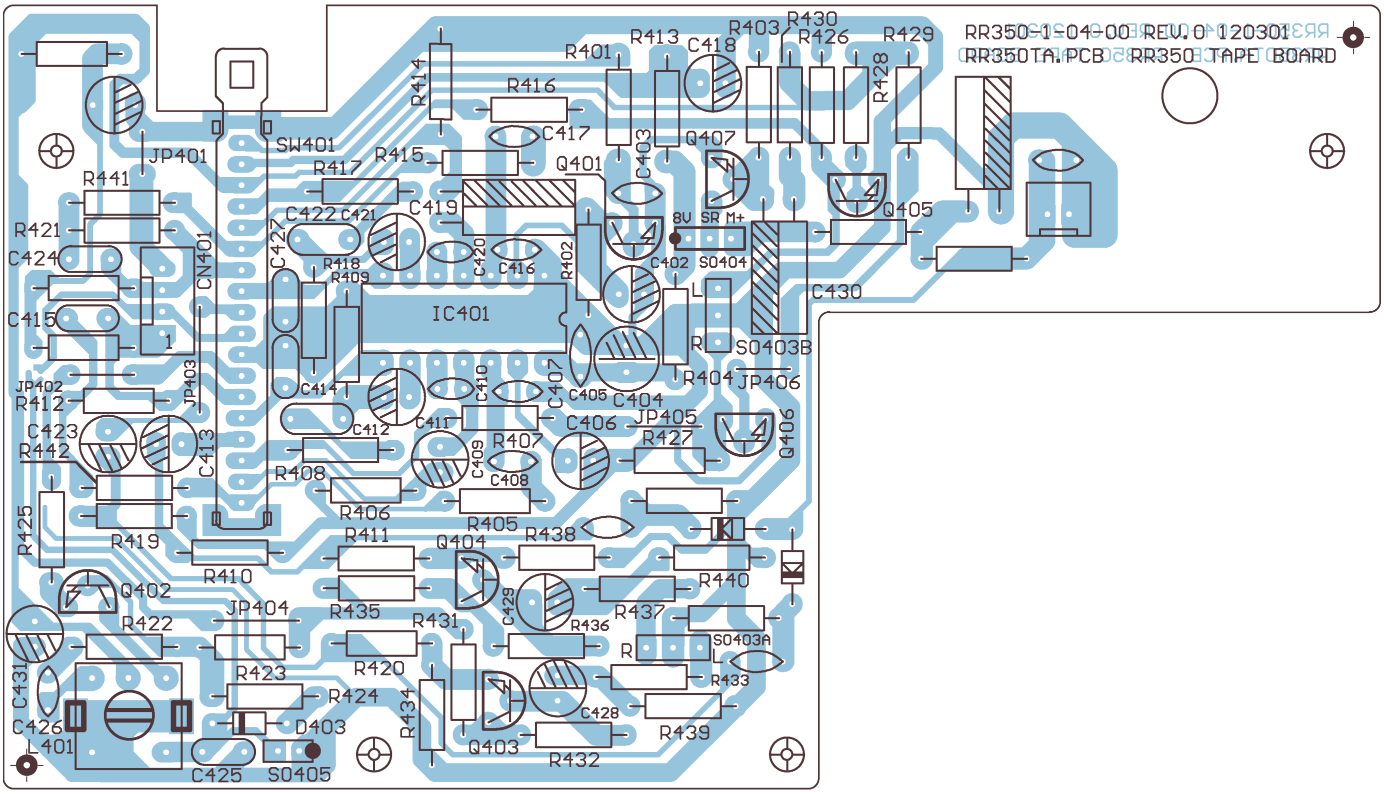

SW401A RSD62D04
R419 5K6
C431 47u
BLACK L401 9170
10n C426
C425 2n2(M)
R422 2K7
R423 120K
R424 820K
D403 1N4148
Q402 9014C
R425 82
RSD62D04 SW401C
SW401D RSD62D04
SW401E
6PA
WIRE 4P/2 S0457
BS-09
CN401 WF 4P/2
C424 2n2(M)
R421 15K
C423 4u7
R441 1K2
C418 47u
R414 8K2
C416 1n
R418 56
SW401B RSD62D04
R415 15K
C417 20n
R417 5K6
C422 22n(M)5%
R416 10K
C419 4u7
C421 47u
C420 50P
C427 2n2(M)
2n2(M) C414
RSD62D04
C411 47u
C412 22n(M)5%
R408 5K6
C409 4u7
SW401F
C410 50P
C406 10u
R412 15K
2n2(M) C415
C413 4u7
R410 5K6
R409 56
RSD62D04
R405 15K
C408 20n
R442 1K2
8K2 R406
1n C407
5K6 R438
R411 150K
IC401 AN7312
R420 150K
R431 470
R432 1M5
Q403 9014C
C428 2u2
R434 5K6
R439 100K
R413 100
R430 10K
R401 47K
C430 10u
R403 100K
10K R433
L/CH
GND
R/CH
S0403A WIRE 3P/2
R437 10K
R402 4M7
9014C Q401
C402 10u
20n C403
R426 15K
C404 220u
10n C405
R404 330
R428 22K
Q405 9014C
R429 22K
Q406 9014C
R435 470
R436 1M5
C429 2u2
Q404 9014C
R440 100K
R407 10K
R427 15K
Q407 9014C
R/CH
GND
L/CH
S0404 WIRE 2P/2
TA 8V
CD SYNC. REC.
August 3, 2001

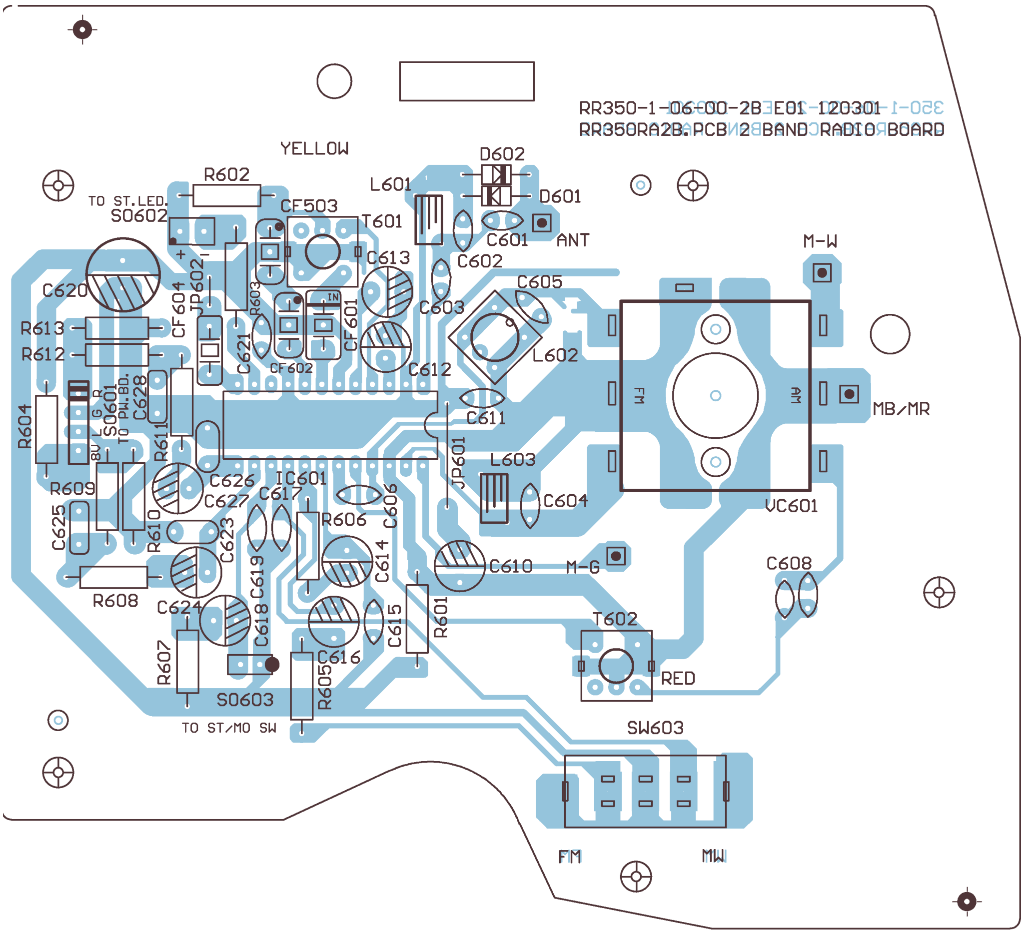


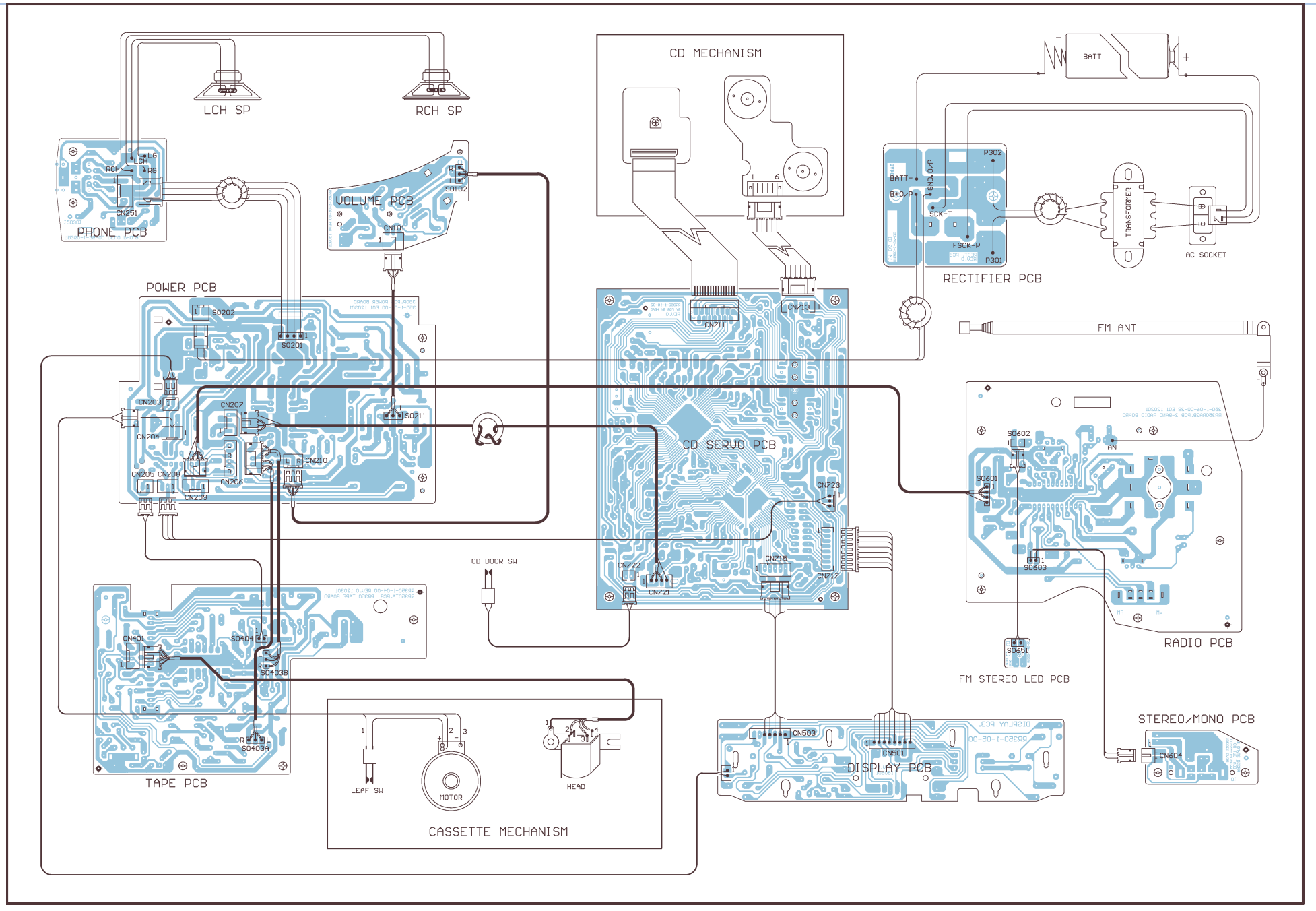

CN501
CN503
KI PR D1 D2 3V GD 8V
K504
F. SKIP
R501
R503
R502
R505
JU509
D509
D510
8V/IN
GND
8V
K502
JW506
JW508
R504
D508
D501
RED
GREEN
SUPER BRIGHT
S8 S7 S6 S5 S4 S3 S2 S1
PL/PA
D504
D507
D512
D513
RR350-1-05-00
DISP PCB
REV.1 JUN. 18, 2001
K501
P/P
K506
TACT SW. 100g
K505
STOP
K503
R. SKIP
Q503
Q502
D503
D502
PROG
DISPLAY

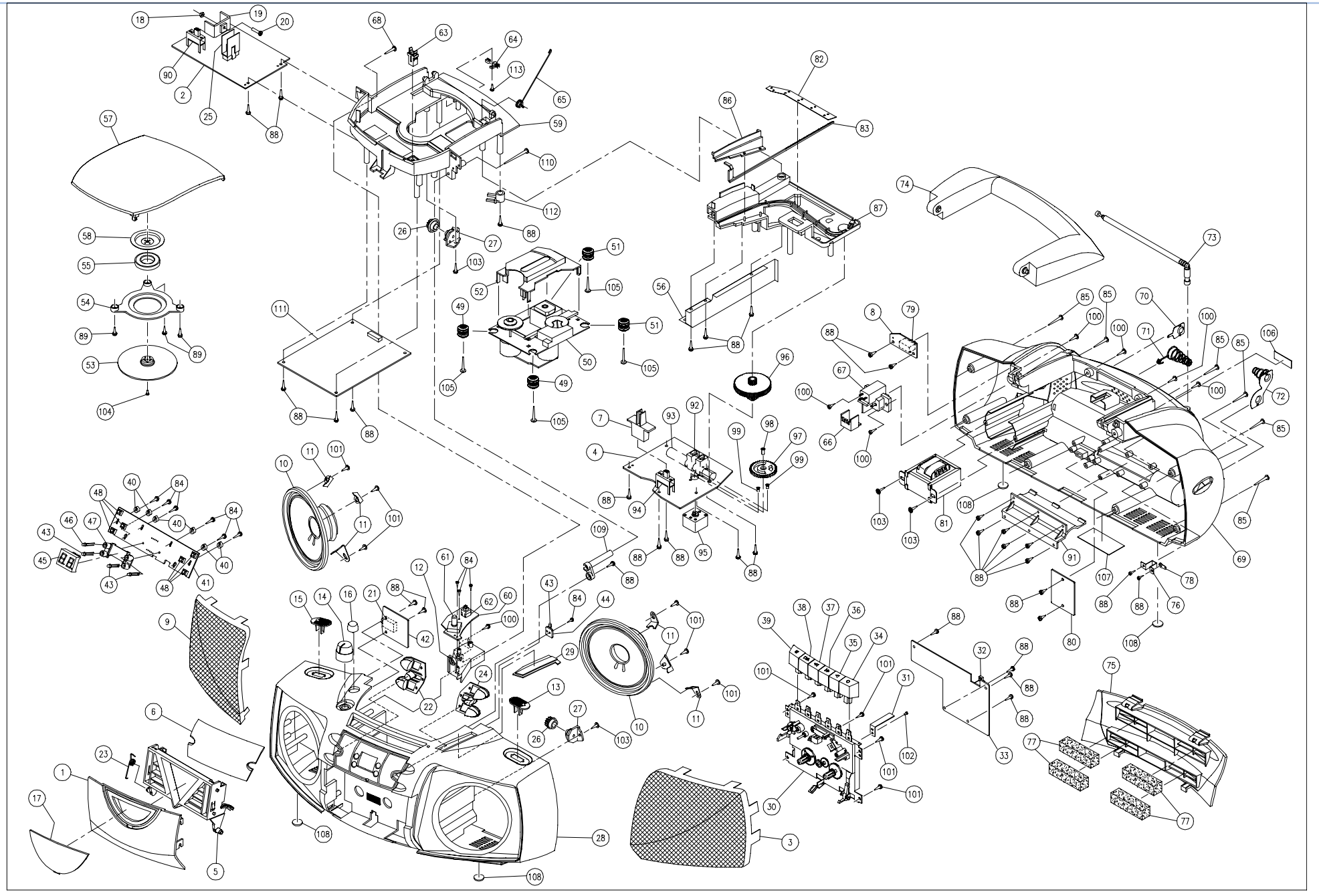


350P.PCB POWER BOARD
350-1-02-00 120301
TO JACK PCB.
FORM PW.SUPPLY +
HEATSINK
TO FUNCTION PCB.
FROM DECK
FROM CD.
TO VOL.PCB OUT
TO REMOTE PCB.
FROM RADIO
FROM CD
FORM TAPE
RR350 VOL. BD.
RR350-1-01-00 REV0 120301
RR350-1-45-00 REV0 120301
RR350 ST/MO & BEAT CUT PCB
RR350-1-65-00
RR350-1-25-00 REV0 PHO.BD.
TO PW. BD.
RECTIFIER BOARD
AC IN
TIME-LAG
FUSE
BATT-
B+O/P
V OUT
GND
RR350-1-07-00
REV.1 06-06-01


RR350-1-04-00 REV.0 120301
RR350TA.PCB RR350 TAPE BOARD


RR350-1-06-00-2B E01 120301
RR350RA2B.PCB 2 BAND RADIO BOARD


LCH SP
RCH SP
CD MECHANISM
BATT
PHONE PCB
VOLUME PCB
POWER PCB
RECTIFIER PCB
TRANSFORMER
AC SOCKET
FM ANT
CD SERVO PCB
RADIO PCB
FM STEREO LED PCB
CD DOOR SW
TAPE PCB
LEAF SW
MOTOR
HEAD
CASSETTE MECHANISM
DISPLAY PCB
STEREO/MONO PCB



INSTRUMENTS REQUIRED

1. Signal Generator
2. FM Signal Generator
3. FM/AM IF Sweep Generator (10.7 MHz for FM)
4. VTVM
5. Oscilloscope
6. Frequency counter
7. Regulated DC power supply

GENERAL PREPARATION

1. Check source voltage, DC or AC according to specificaions
2. Set function switch to band being aligned
3. Signal input should be kept as low as possible to avoid AGC and AFC function
4. Standard modulation : AM 1 KHz 30% mod
   FM 1 KHz 22.5 KHz dev

AM IF ALIGNMENT

STEP	SIGNAL SOURCE (AM RF Gen.) CONNECT TO	SET SIGNAL TO	ALIGNMENT INDICATOR (Oscilloscope, VTVM) CONNECT TO	SET RADIO DIAL TO	ADJUST	ADJUST FOR	REMARKS
1	A standard radiation loop	465KHz	TP (605) Detector output terminal and ground	Quiet Point	T601	Maximum	Volume control at min. position
2	Repeat step 1 for max. output						

FM IF ALIGNMENT

This model requires no FM IF alignment as the IF is fixed by ceramic filter and discriminator CF602 & CF604. Please take note that correct type and same color dot of ceramic filter is used in servicing, diff color dot of ceramic filter may cause worse IF 'S' curve characteristic and distortion.

Connect IF genescope output terminal to TP603 & TP602 (GND) in series with a 100 Pf capacitor, connect scope input terminal to TP(605) & TP604 (GND), then the IF characteristic curve can be observed.

FM RF ALIGNMENT

STEP	SIGNAL SOURCE (FM Signal Gen.) CONNECT TO	SET SIGNAL TO	ALIGNMENT INDICATOR (Oscilloscope, VTVM) CONNECT TO	SET RADIO DIAL TO	ADJUST	ADJUST FOR	REMARKS
1	TP (601 & 602) through matching network if necessary	87.35 MHz (modulated)	Terminals across speaker voice coil	(Lowest end)	L602 (Osc. coil) stretch or squeeze	Maximum	Volume control at max. position
2		108.25 MHz (modulated)		(Highest end)	VC 601 A (Osc. trimmer)		
3		90 MHz (modulated)		88 MHz	L503 (RF coil) stretch or squeeze		
4		106 MHz (modulated)		106 MHz	VC 601 B (RF trimmer)		
5	Repeat steps 3 and 4 as necessary to minimize tracking error and also steps 1 and 2 if necessary						

AM RF ALIGNMENT

STEP	SIGNAL SOURCE (AM Signal Gen.) CONNECT TO	SET SIGNAL TO	ALIGNMENT INDICATOR (Oscilloscope, VTVM) CONNECT TO	SET RADIO DIAL TO	ADJUST	ADJUST FOR	REMARKS
1	A standard radiation loop ant.	515 KHz (modulated)	Across speaker voice coil	515 (Lowest end)	T 602 (Osc. coil)	Maximum	Volume control at max. position
2		1635 KHz (modulated)		1635 (Highest end)	VC 601 C (Osc. trimmer)		
3		600 KHz (modulated)		600 KHz	L 604 (ant. coil)		
4		1400 KHz (modulated)		1440 KHz	VC 601 D (ant. trimmer)		
5	Repeat steps 3 and 4 as necessary to minimize tracking error and also steps 1 and 2 if necessary						

LW RF ALIGNMENT (N/A)

STEP	SIGNAL SOURCE (LW Signal Gen.) CONNECT TO	SET SIGNAL TO	ALIGNMENT INDICATOR (Oscilloscope, VTVM) CONNECT TO	SET RADIO DIAL TO	ADJUST	ADJUST FOR	REMARKS
1	A standard radiation loop ant.	142 KHZ (modulated)	Terminals across speaker voice coil	(Lowest end)	NA	Maximum	Volume control at max. position
2		292 KHz (modulated)		(Highest end)	TC 602 (Osc. trimmer)		
3		153 KHz (modulated)		153 KHz	L 605 (ant. coil)		
4		261 KHz (modulated)		261 KHz	TC 601 (ant. trimmer)		
5	Repeat steps 3 and 4 as necessary to minimize tracking error and also steps 1 and 2 if necessary						

GENERAL PREPARATION - 1) Check source voltage, DC or AC according to specifications . 2) Set function switch to Tape being aligned .

A) MEASURING INSTRUMENTS REQUIRED FOR TAPE SPEED AND HEAD AZIMUTH ADJUSTMENT.

(1) TAPE SPEED ADJUST

MTT-211NA (3150 Hz) TEST

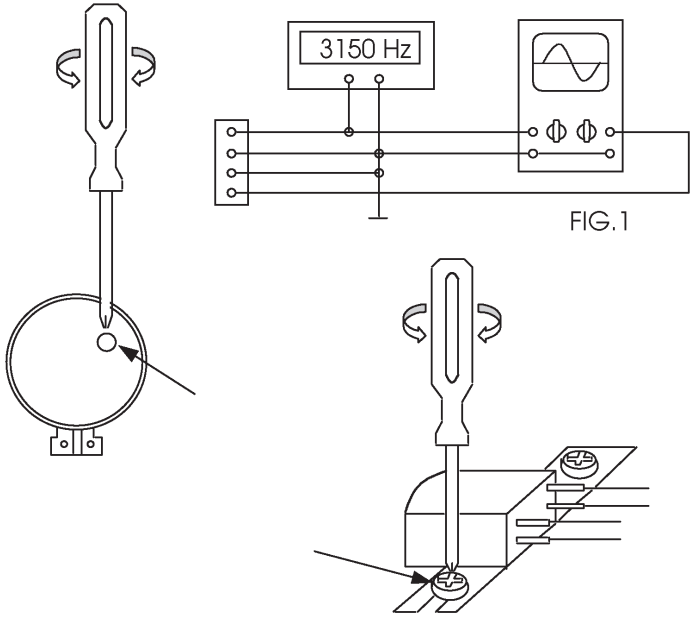


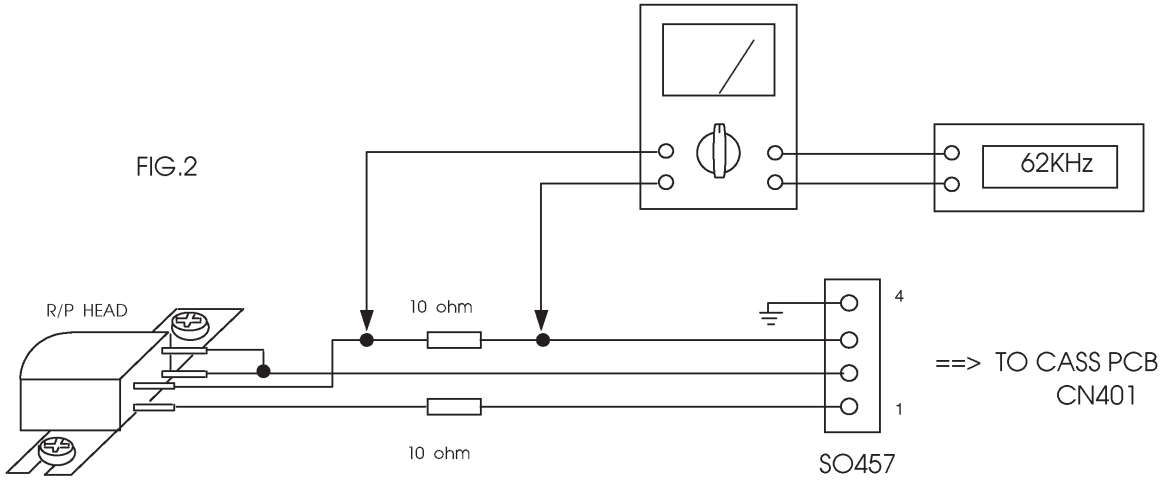
FIG.1

(2) HEAD AZIMUTH ADJUSTMENT .

2.1 - Connect the equipments as shown in the Fig. 1. (The Both Speakers loading Are Required)
2.2 - Insert a test tape (10 KHz : MTT-114) into deck.
2.3 - Press PLAY and set VOLUME at reference output.
2.4 - Adjust the azimuth adjustment screw for the max. & balance ch. output on both ch. of oscilloscope.
2.5 - Secure above screw with glue after adj. completed.

B) EQUIPMENTS REQUESTED FOR AC BIAS FREQUENCY / CURRENT ADJUSTMENT :

FIG.2



AC BIAS FREQUENCY ALIGNMENT :

Note :The test unit should be keep in recording mode and added two resistors Ra & Rb as shown in the Fig. 2 before alignment. be sure to delete the both resistors Ra & Rb after alignment completed.

Test Point	Adjust	Frequency at Beat 0	Frequency Observe at		Observe		
			Beat 1	Beat 2	Beat 0	Beat 1	Beat 2
Resistor Ra or Rb	L401	62 KHz ± 0.3K	53 KHz ± 1K				