Service Document
Exchange Set

RRCD 3410

Service Manual

Sicherheit Safety

Materialnr./Part No. 720108000001

⚠ Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Materialnummer 720108000001, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

⚠ The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000001, 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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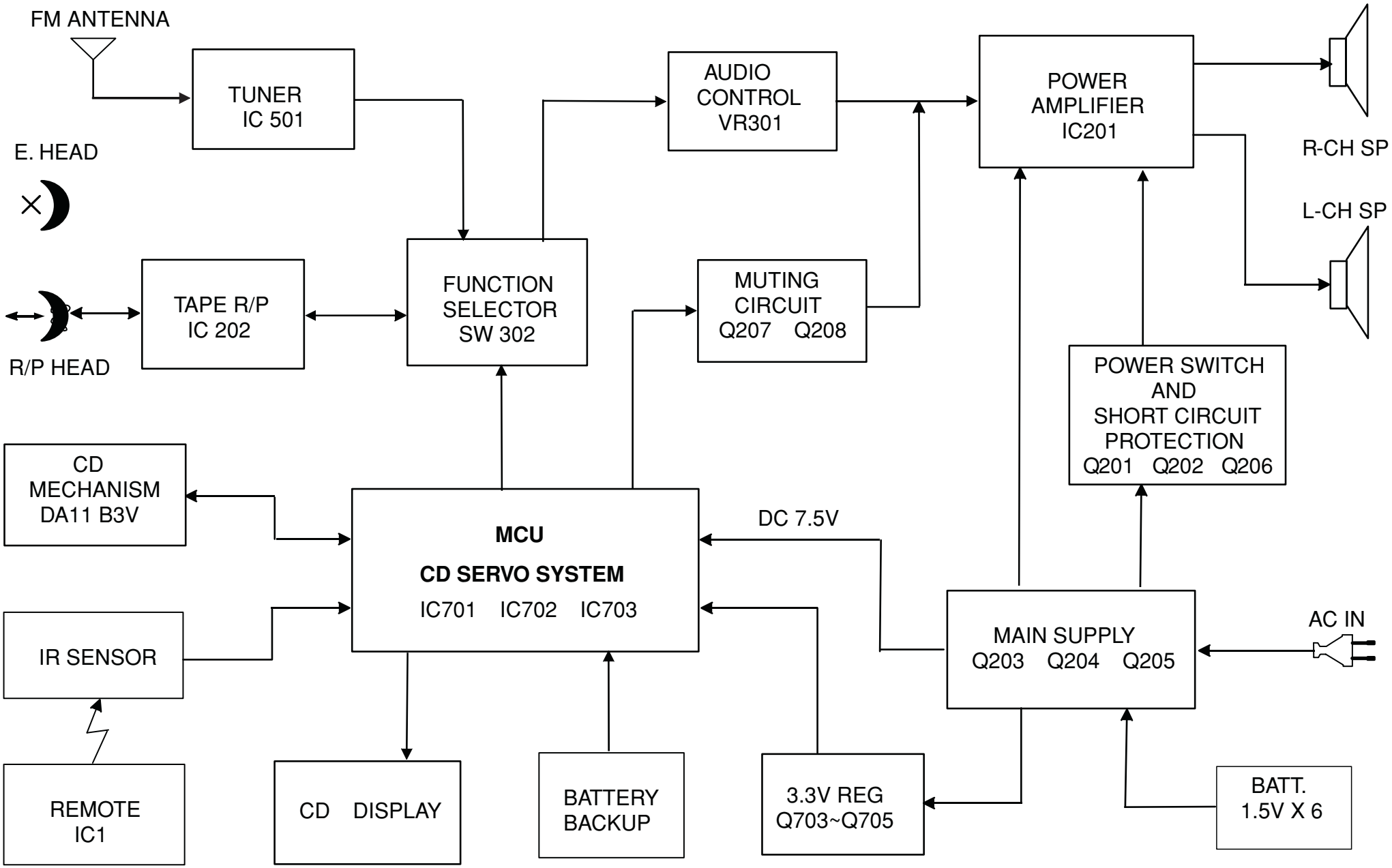
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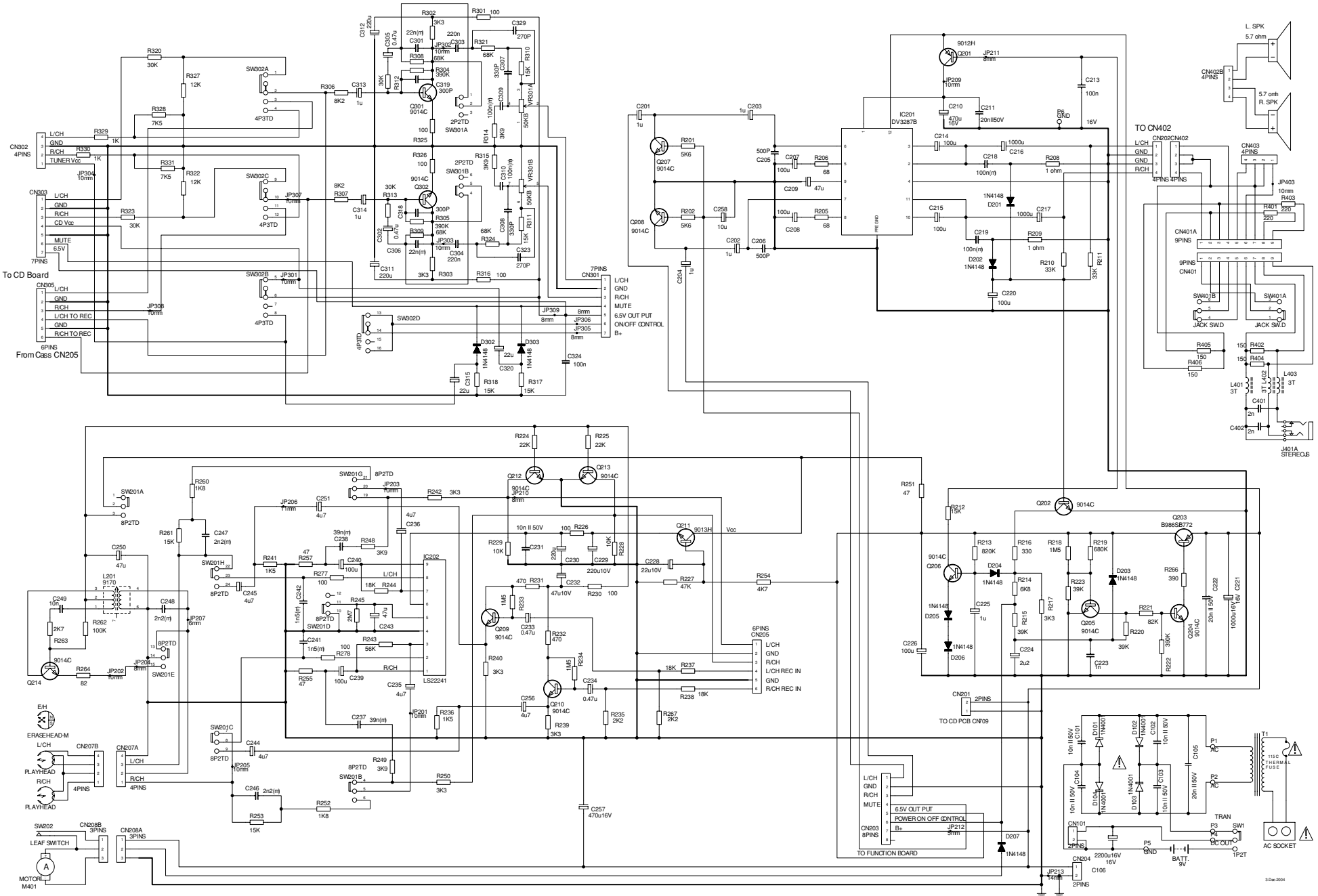
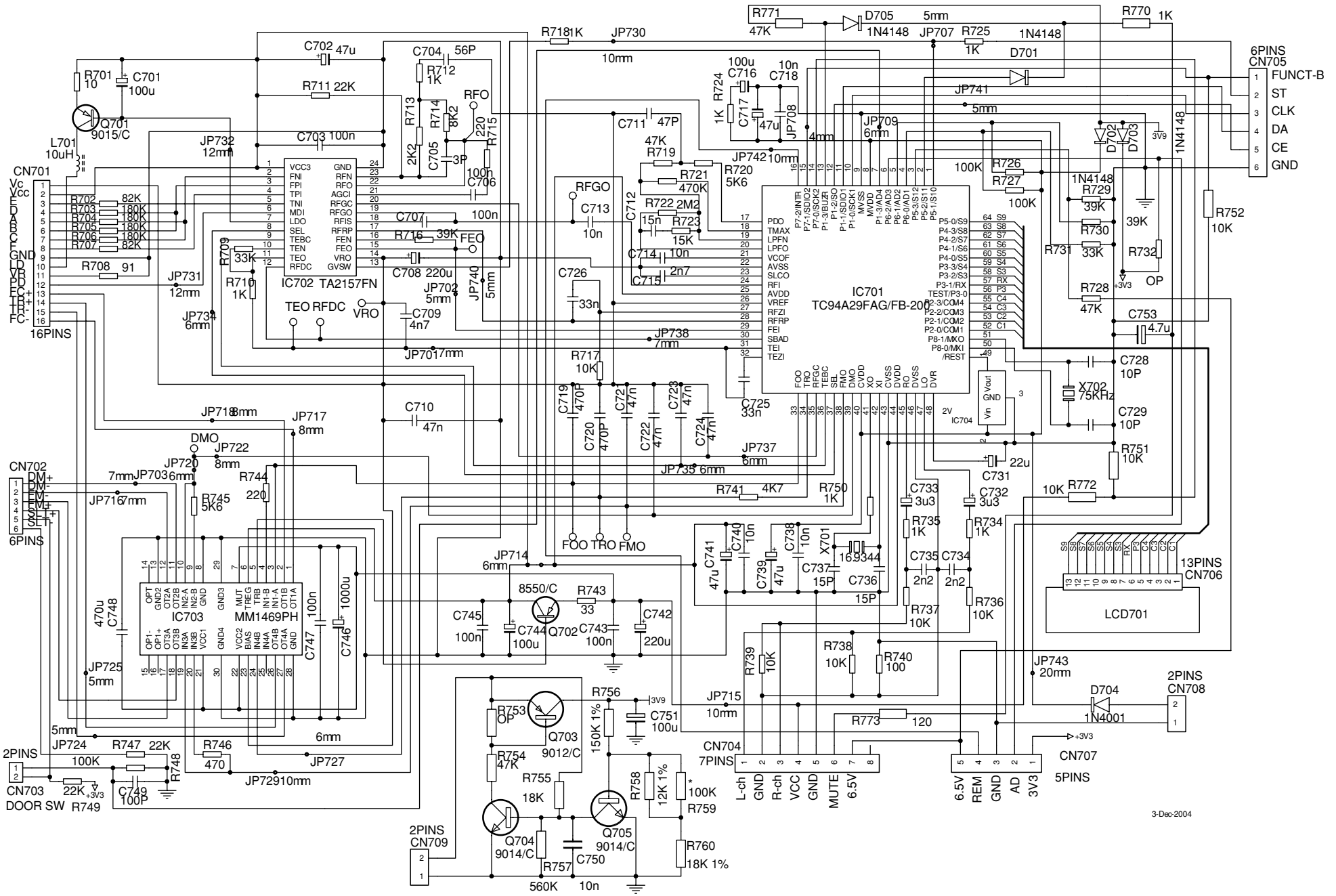
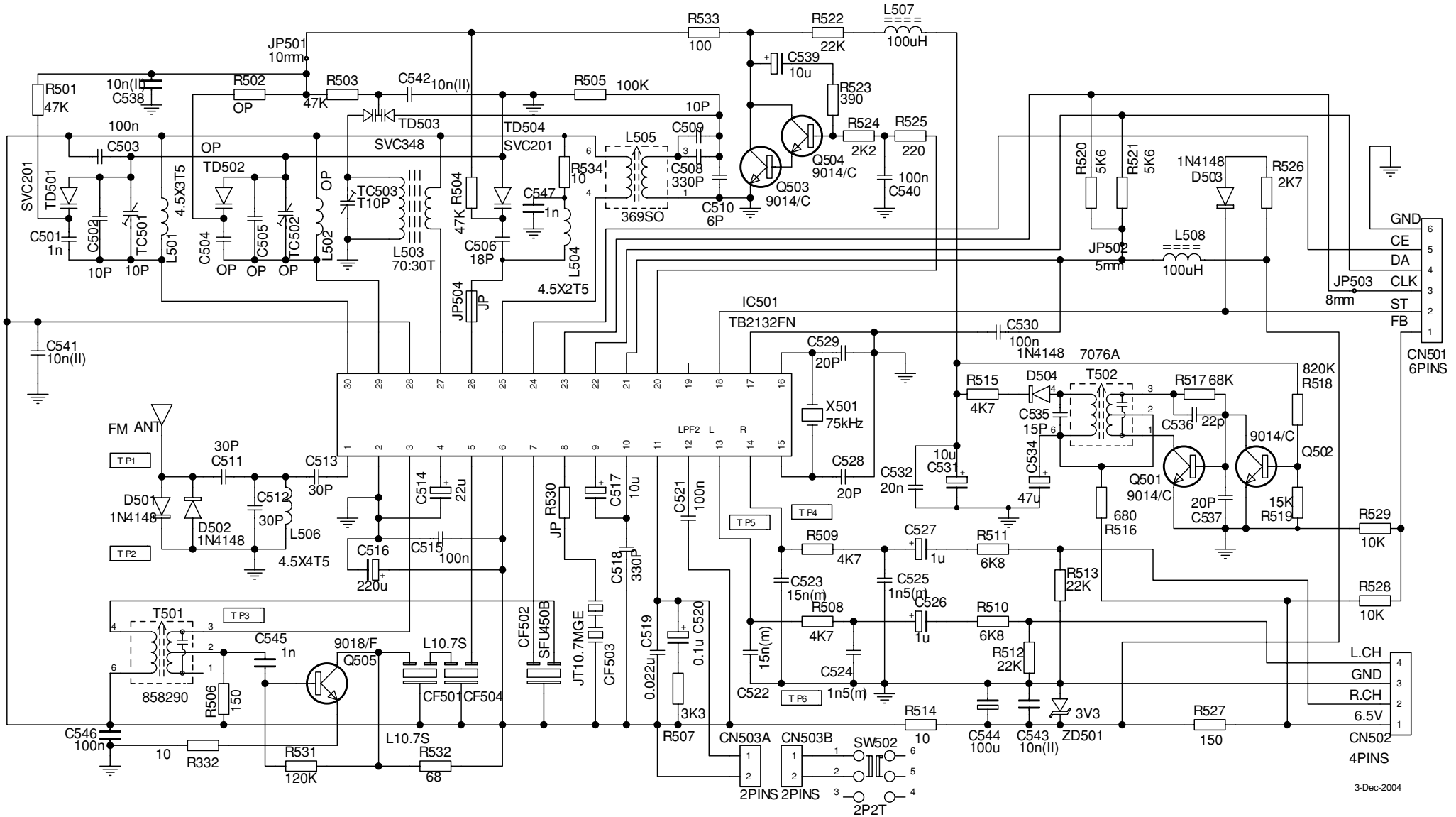
TUNER
IC 501
AUDIO
CONTROL
VR301
POWER
AMPLIFIER
IC201
R-CH SP
L-CH SP
E. HEAD
TAPE R/P
IC 202
R/P HEAD
FUNCTION
SELECTOR
SW 302
MUTING
CIRCUIT
Q207 Q208
POWER SWITCH
AND
SHORT CIRCUIT
PROTECTION
Q201 Q202 Q206
CD
MECHANISM
DA11 B3V
MCU
CD SERVO SYSTEM
IC701 IC702 IC703
DC 7.5V
IR SENSOR
MAIN SUPPLY
Q203 Q204 Q205
AC IN
REMOTE
IC1
CD DISPLAY
BATTERY
BACKUP
3.3V REG
Q703~Q705
BATT.
1.5V X 6


To CD Board
From Cass CN205
TO CN402
TO FUNCTION BOARD
TO CD PCB CN709
ERASEHEAD-M
PLAYHEAD
LEAF SWITCH
MOTOR M401
AC SOCKET
L. SPK 5.7 ohm
R. SPK 5.7 ohm
IC201 DV3287B
LS22241
3-Dec-2004



GRUNDIG

RRCD 3410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10mm
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10n(II)
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OP
R503
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C542
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100
R522
22K
L507
100uH
C539
10u
R523
390
R524
2K2
R525
220
C540
100n
Q504
9014/C
Q503
9014/C
C509
C508
330P
C510
6P
L505
369SO
R534
10
C547
1n
L504
4.5X2T5
TD503
TD504
SVC348
SVC201
TD501
TD502
C503
100n
OP
C501
1n
C502
10P
TC501
10P
L501
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C504
OP
C505
OP
TC502
OP
L502
OP
TC503
T10P
L503
70:30T
R504
47K
C506
18P
JP504
JP
R520
5K6
R521
5K6
1N4148
D503
R526
2K7
JP502
5mm
L508
100uH
JP503
8mm
GND
CE
DA
CLK
ST
FB
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6PINS
IC501
TB2132FN
C530
100n
1N4148
7076A
C529
20P
X501
75kHz
C528
20P
C541
10n(II)
R515
4K7
D504
T502
R517 68K
820K
R518
C535
15P
C536
22p
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Q502
Q501
9014/C
20P
C537
15K
R519
680
R516
C532
20n
10u
C531
47u
C534
FM ANT
T P1
T P2
30P
C511
C513
30P
D501
1N4148
D502
1N4148
C512
30P
L506
4.5X4T5
C514
22u
C516
220u
C515
100n
JP
R530
C517
10u
C518
330P
C521
100n
T P5
T P4
R509
4K7
C527
1u
R511
6K8
R513
22K
C523
15n(m)
C525
1n5(m)
C526
1u
R508
4K7
R510
6K8
R512
22K
C524
1n5(m)
C522
15n(m)
T P6
R514
10
C544
100u
C543
10n(II)
ZD501
3V3
R527
150
R529
10K
R528
10K
L.CH
GND
R.CH
6.5V
CN502
4PINS
T501
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C545
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9018/F
Q505
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L10.7S
CF501
CF504
CF502
SFU450B
JT10.7MGE
CF503
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0.022u
C520
0.1u
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R507
C546
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2PINS
SW502
2P2T
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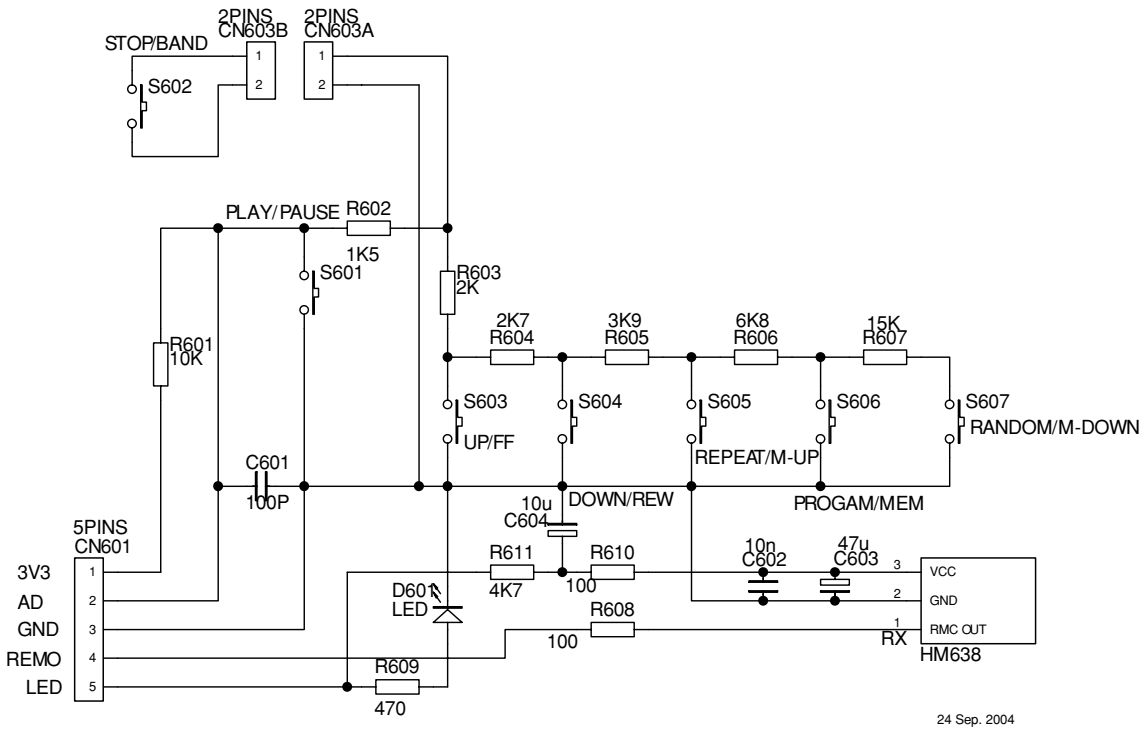
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2PINS
CN603A
STOP/BAND
S602
PLAY/PAUSE
R602
1K5
S601
R603
2K
R601
10K
2K7
R604
3K9
R605
6K8
R606
15K
R607
S603
S604
S605
S606
S607
UP/FF
REPEAT/M-UP
RANDOM/M-DOWN
C601
100P
10u
C604
DOWN/REW
PROGAM/MEM
5PINS
CN601
3V3
AD
GND
REMO
LED
R611
4K7
R610
100
10n
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C603
D601
LED
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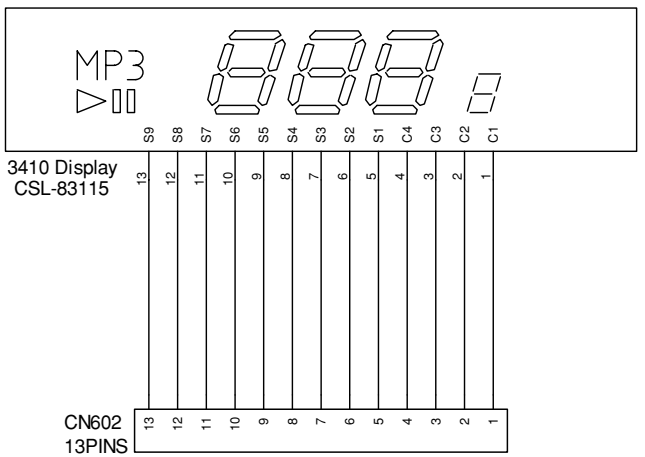
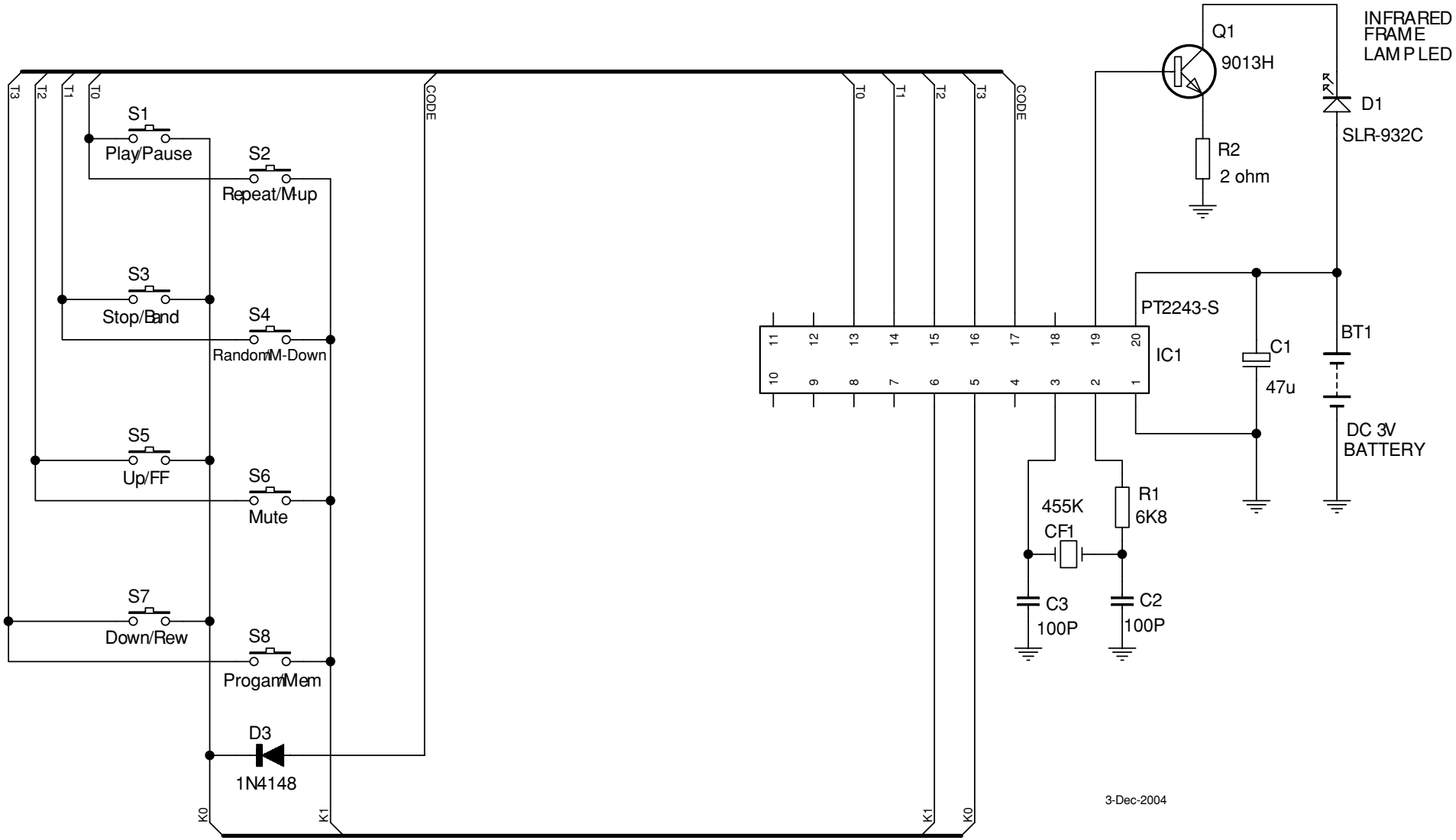
R609
470
VCC
GND
RMC OUT
RX
HM638
24 Sep. 2004


MP3
3410 Display
CSL-83115
S9 S8 S7 S6 S5 S4 S3 S2 S1 C4 C3 C2 C1
13 12 11 10 9 8 7 6 5 4 3 2 1
CN602
13PINS


T3
T2
T1
T0
CODE
S1
Play/Pause
S2
Repeat/M-up
S3
Stop/Band
S4
Random/M-Down
S5
Up/FF
S6
Mute
S7
Down/Rew
S8
Progam/Mem
D3
1N4148
K0
K1
T0
T1
T2
T3
CODE
K1
K0
Q1
9013H
R2
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INFRARED
FRAME
LAMP LED
D1
SLR-932C
PT2243-S
IC1
C1
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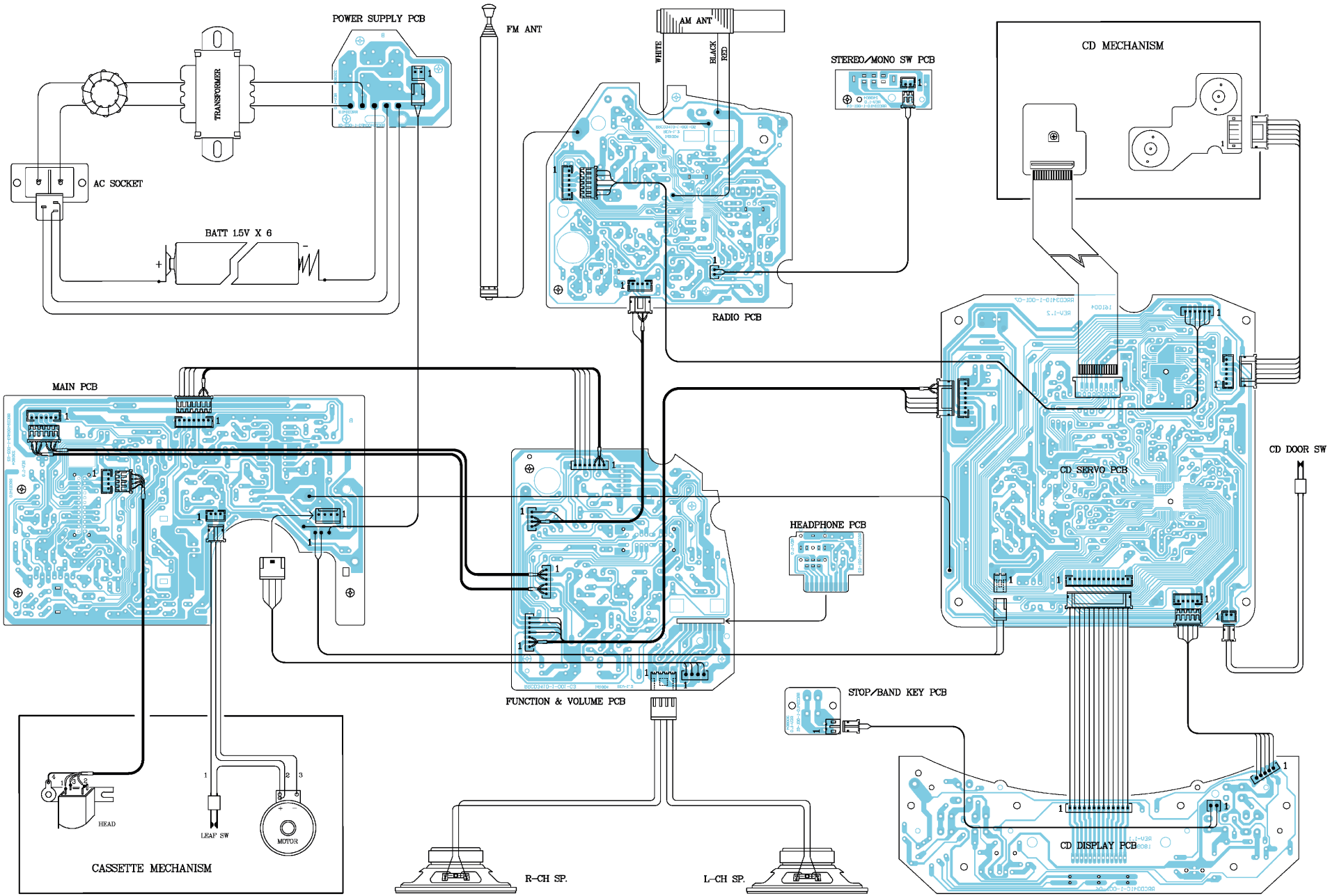
CF1
R1
6K8
C3
100P
C2
100P
3-Dec-2004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TRANSFORMER
AC SOCKET
BATT 1.5V X 6
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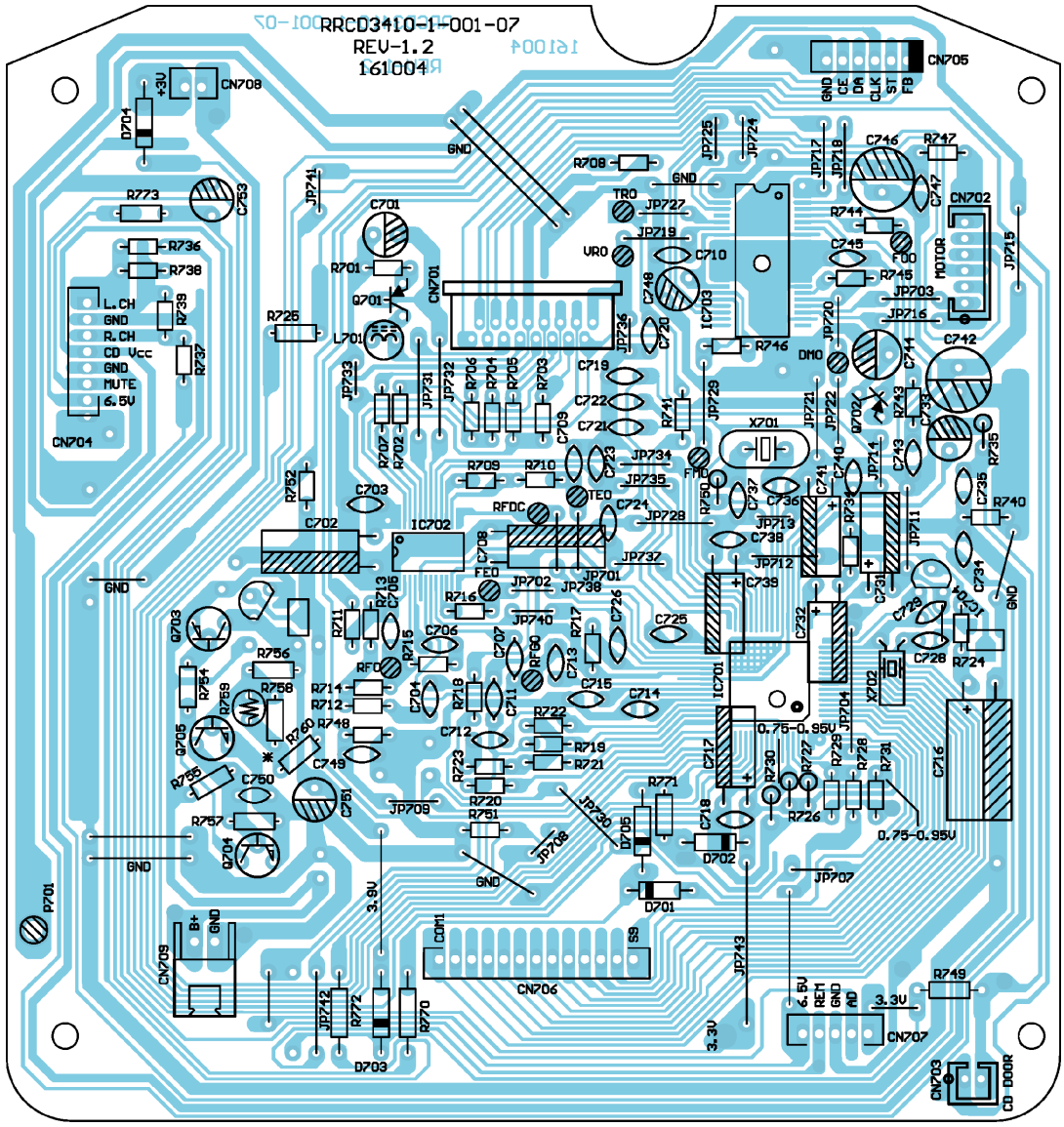
AM ANT
WHITE
BLACK
RED
STEREO/MONO SW PCB
RADIO PCB
CD MECHANISM
MAIN PCB
CD SERVO PCB
CD DOOR SW
HEADPHONE PCB
FUNCTION & VOLUME PCB
STOP/BAND KEY PCB
CD DISPLAY PCB
HEAD
LEAF SW
MOTOR
CASSETTE MECHANISM
R-CH SP.
L-CH SP.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CLK
ST
FB
+3V
D704
R773
C753
R736
R738
L.CH
GND
R.CH
CD Vcc
GND
MUTE
6.5V
CN704
R739
R737
R726
L701
Q701
R701
CN701
C701
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DMO
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X701
JP714
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R710
TEO
RFDC
FEO
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C707
RFO
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C713
C715
C714
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X702
R722
R719
R721
C712
R723
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R771
D705
D702
D701
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C702
IC702
R752
R711
R712
R748
C749
C704
R718
C711
R713
R715
Q703
R754
R756
R758
R759
R760
Q705
R755
C750
C751
R757
Q704
GND
P701
B+
GND
CN709
3.3V
COM1
S9
CN706
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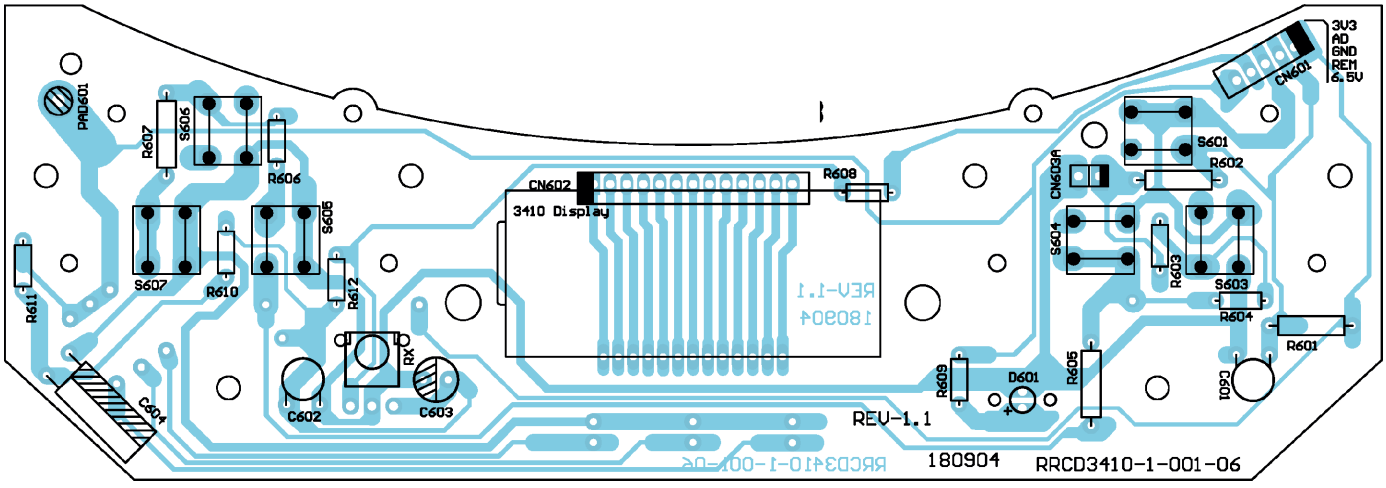
PAD601
R607
S606
R606
S607
R610
S605
R611
R612
C604
C602
C603
RX
CN602
3410 Display
R608
REV-1.1
180904
3V3
AD
GND
REM
6.5V
CN601
S601
R602
CN603A
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R601
C601
R609
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REV-1.1
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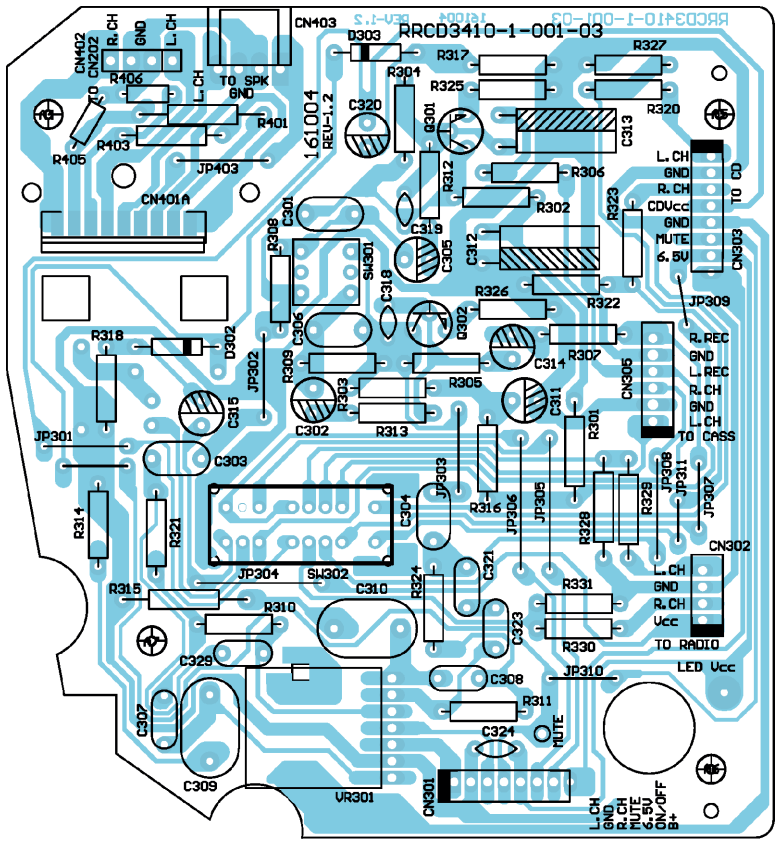
RRCD3410-1-001-06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CN301
CN303
CN305
CN302
CN301
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JP301
JP304
JP310
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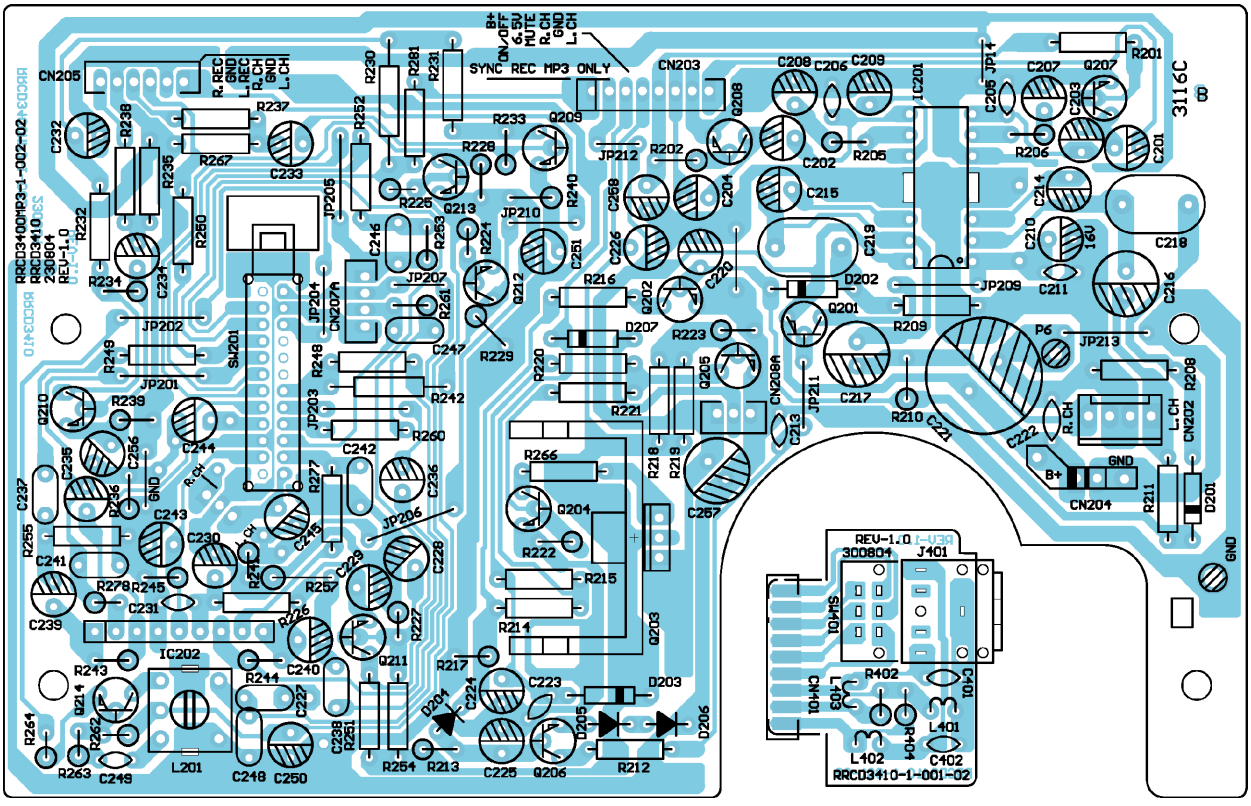
SW302
VR301
TO SPK
TO CD
TO CASS
TO RADIO
LED Vcc
MUTE
161004
REV-1.2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RRCD3410
REV-1.0
CN205
CN203
CN204
CN207A
CN208A
SW201
IC202
L201
J401
L402
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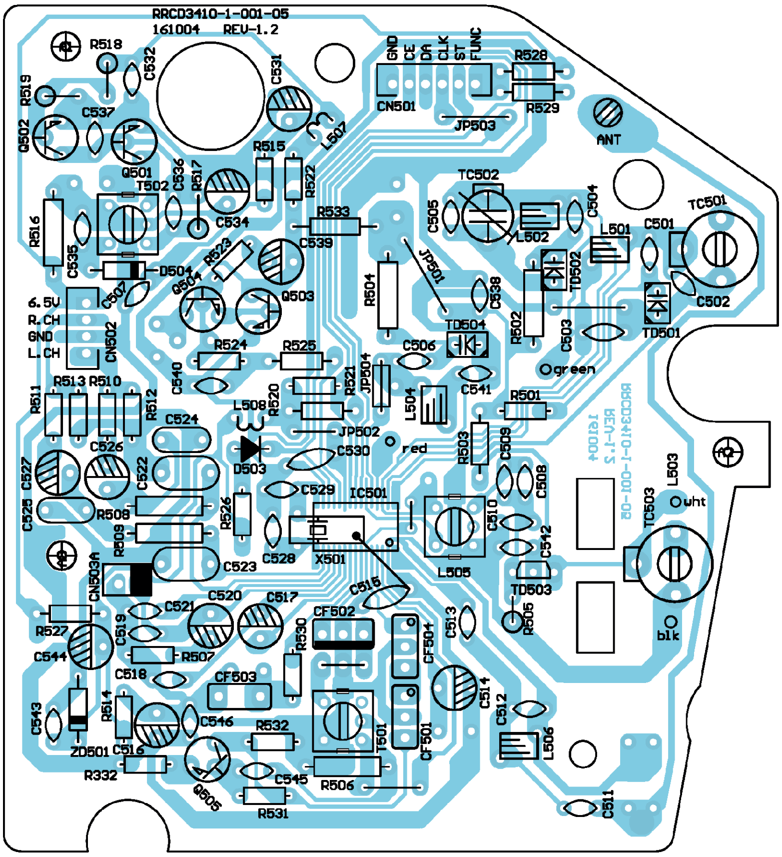
SYNC REC MP3 ONLY
3116C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ANT
R515
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T502
C536
R517
R522
TC502
R516
C534
R533
C505
C504
L502
L501
C501
TC501
C535
D504
R523
C539
JP501
Q502
Q504
Q503
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C538
TD502
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TD501
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R.CH
GND
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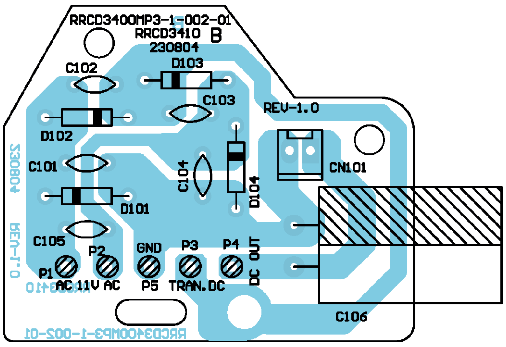
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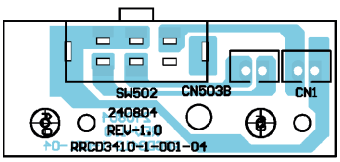
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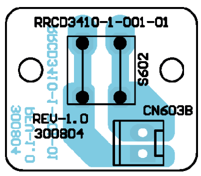

RRCD3410-1-001-01
S602
CN603B
REV-1.0
300804

ALIGNMENT PROCEDURE

GRUNDIG RRCD3410

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	450KHz	TP4 or TP5 Detector output terminal and ground (TP6)	Quiet Point	T501	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 CF502 & CF505. 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 TP4 OR TP5 & TP6 (GND) in series with a 1000Pf capacitor, connect scope input terminal to TP3 & TP6 (GND), then the IF characteristic curve can be observed.

ALIGNMENT PROCEDURE

GRUNDIG RRCD3410

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	TP1 & TP2 through matching network if necessary	87.5 MHz (modulated)	Terminals across speaker voice coil	87.5 MHz (Lowest end)	NA	NA	Digital DC Volt meter is Connected to TP 7 and grg
2		108 MHz (modulated)		108 MHz (Highest end)	L504 (Osc. Coil) stretch or squeeze	DC 8V ±0.3V	
3		88 MHz (modulated)		88 MHz	L501 (RF coil) stretch or squeeze	Maximum	Volume control at max. position
4		106 MHz (modulated)		106 MHz	TC 501 (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.	531 KHz (modulated)	Across speaker voice coil	531 KHz (Lowest end)	NA	NA	Digital DC Volt meter is Connected to TP 7 and grg
2		1622 KHz (modulated)		1622 KHz (Highest end)	T 505 (Osc.Coil)	DC 8V ±0.3V	
3		558 KHz (modulated)		558 KHz	L 503 (ant. coil)	Maximum	Volume control at max. position
4		1440 KHz (modulated)		1440 KHz	TC 503 (ant. trimmer)		
5	Repeat steps 3 and 4 as necessary to minimize tracking error and also steps 1 and 2 if necessary						

ALIGNMENT PROCEDURE

GRUNDIG RRCD3410

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-111 (3000 Hz) TEST ◦

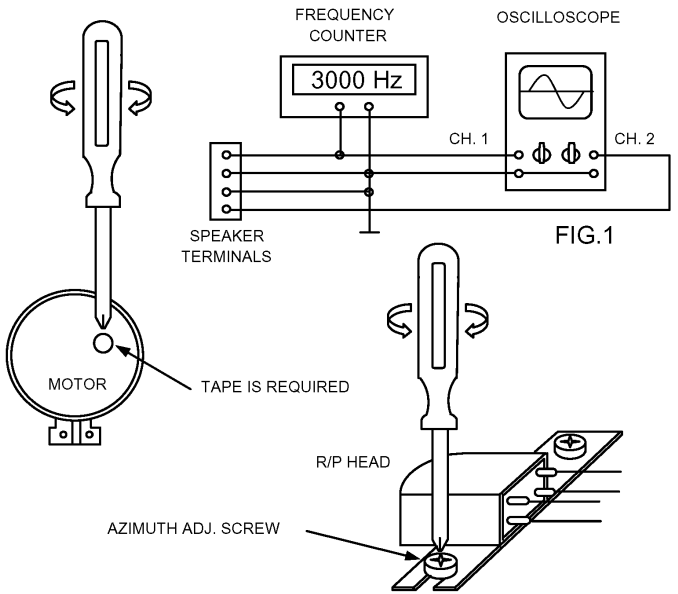


FIG.1

(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.

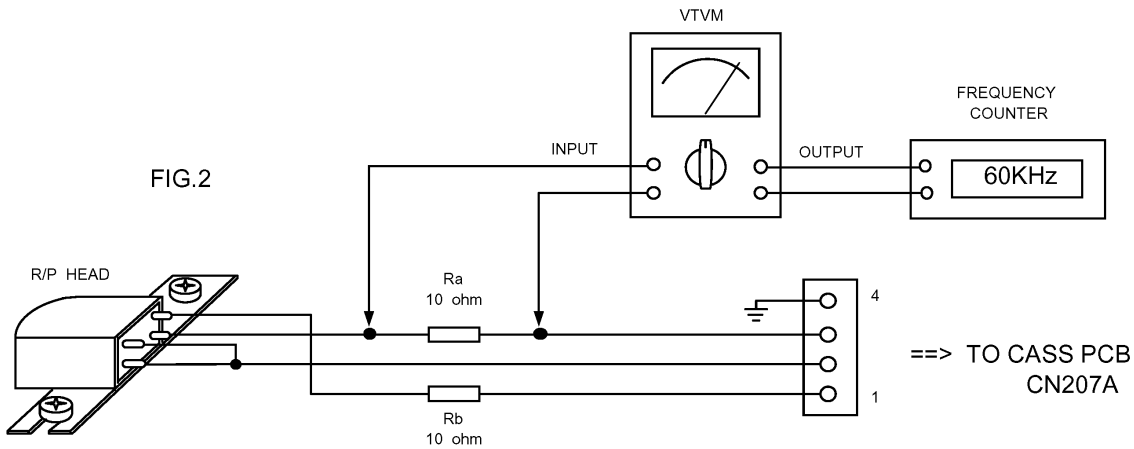
2.3 - Press PLAY and set VOLUME at reference output.

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 :

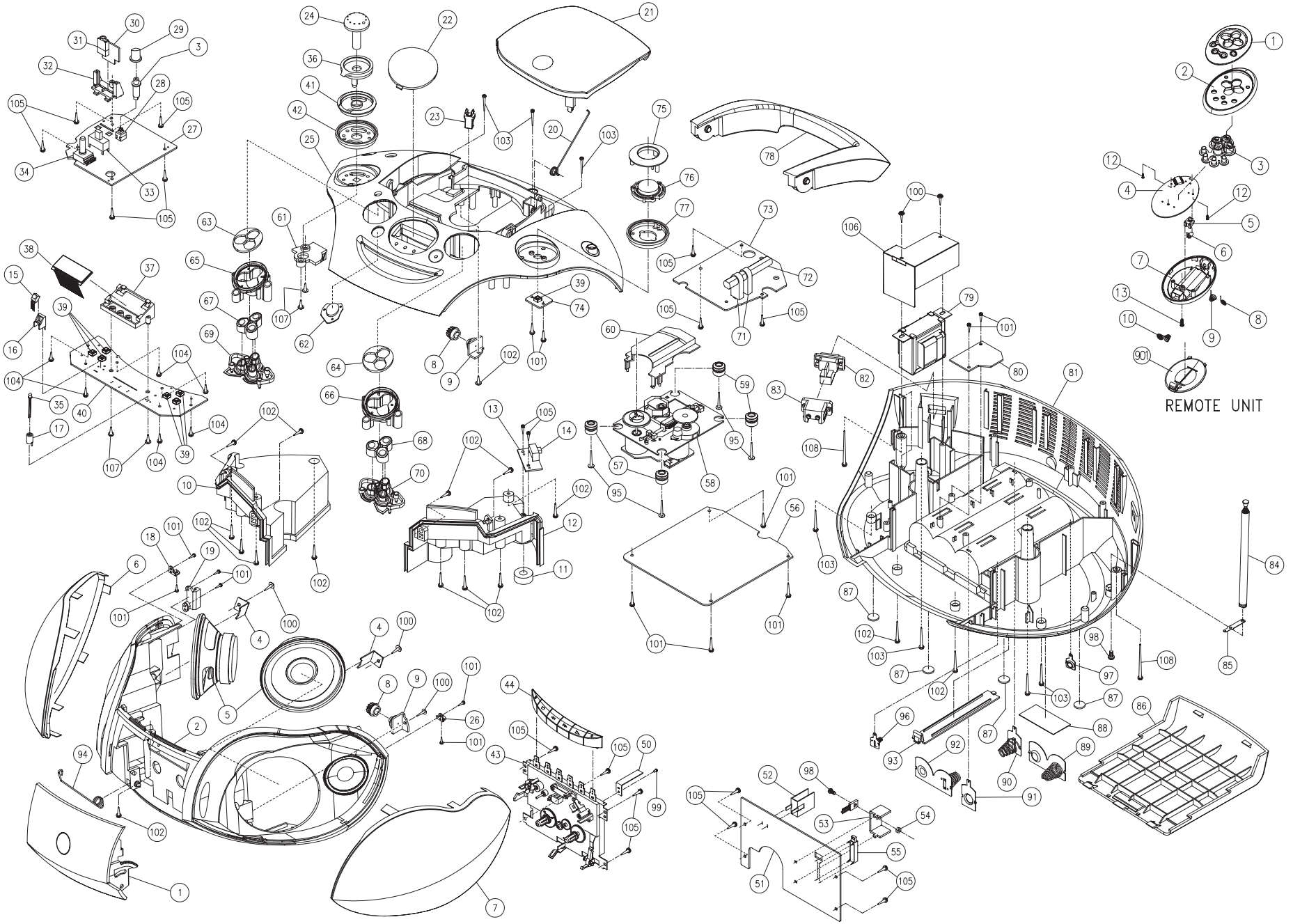
FIG.2



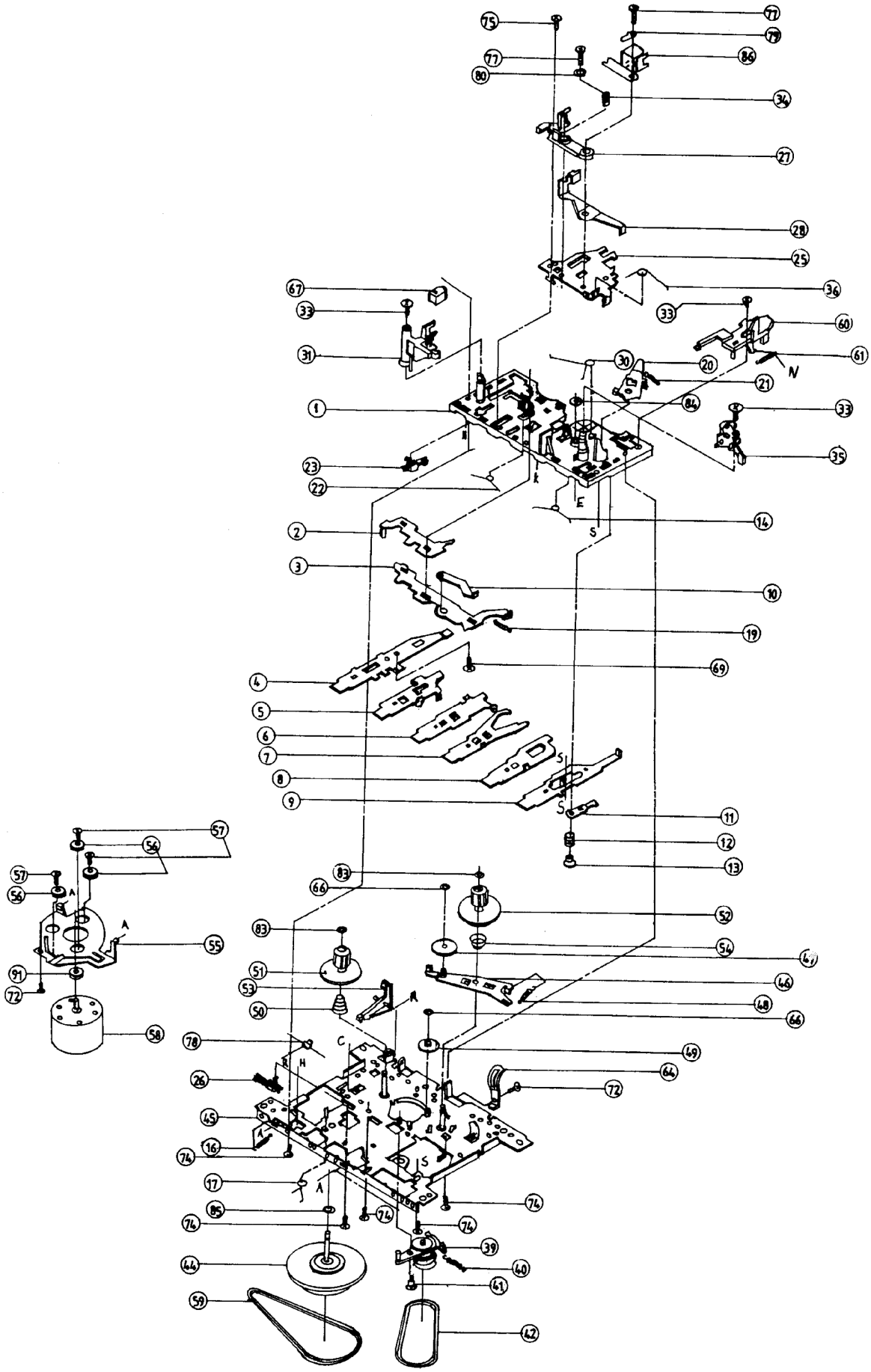
AC BIAS FREQUENCY ALIGNMENT :

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	L201	60KHz ± 0.3KHz					

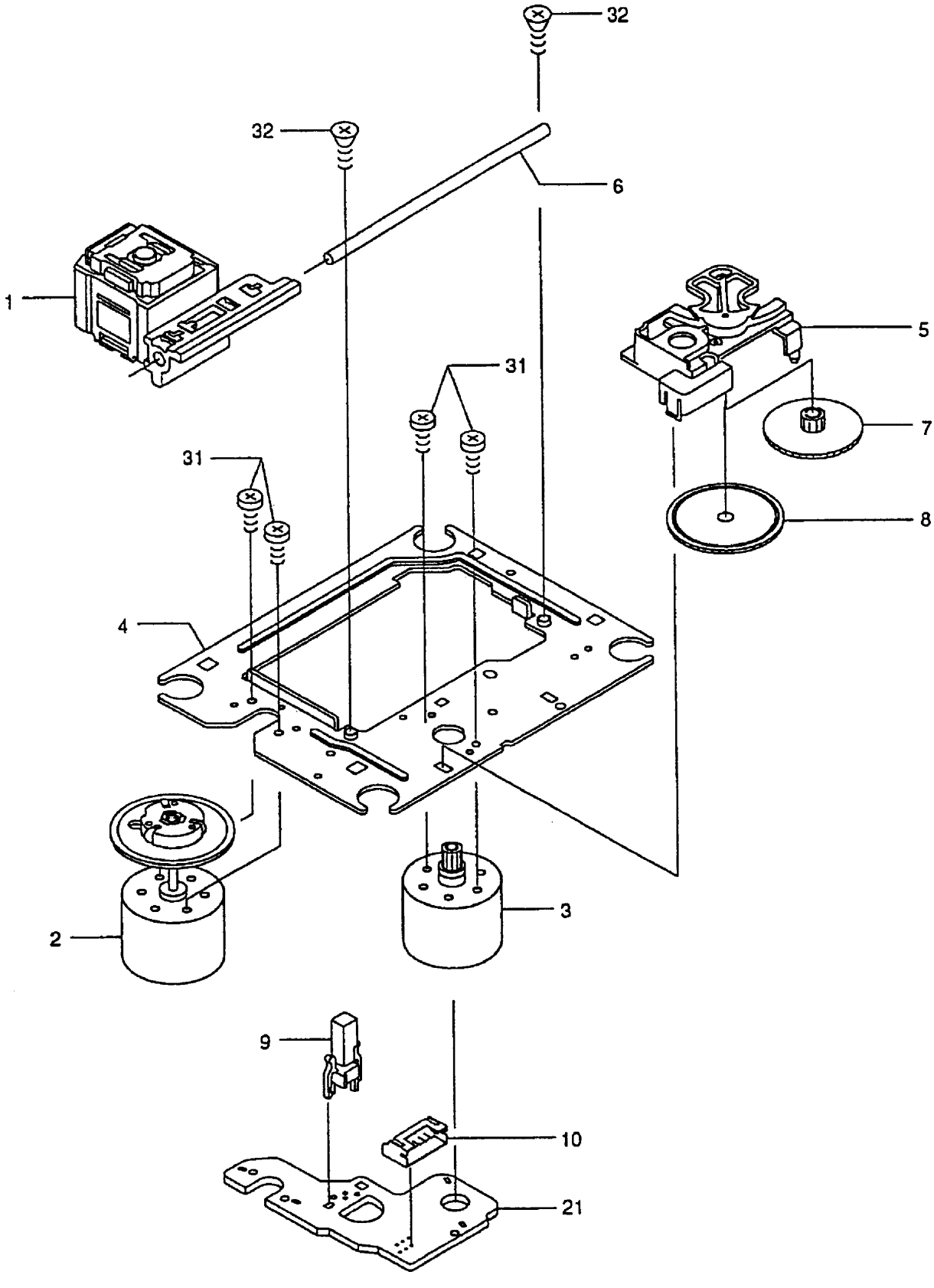

REMOTE UNIT

CS-21V



SANYO DA11B3V

CD PLAYER MECHANISM EXPLODED VIEW



GRUNDIG

Ersatzteilliste
Spare Parts List

NUR FÜR INTERNEN GEBRAUCH
FOR INTERNAL USE ONLY

AUDIO

1 / 2005

RRCD 3410

MATERIAL-NR. / PART NO.: 757123435000
BESTELL-NR. / ORDER NO.: GDP5500 CHROM/CHROME

POS. NR. POS. NO.	ABB. FIG.	MATERIAL-NR. PART NUMBER	ANZ. QTY.	BEZEICHNUNG (D)	DESCRIPTION (GB)
		757123435000		RRCD 3410 CHROM **TAUSCHGERAET**	RRCD 3410 CHROME **EXCHANGE SET**
0001.000		759551089300		DECKEL CASS.	CASS. DOOR
0020.000		759551089200		FEDER CD TUER	CD DOOR SPRING
0021.000		759551101200		DECKEL CD	CD DOOR
0023.000		759550570500		SCHALTER TUER CD DLS02W	SWITCH DOOR CD DLS02W
0043.000		759551088900		LAUFWERK CASS. THL-21VB-1933A	CASS. MECHANISM THL-21VB-1933A
0044.000		759551089800		TASTENSATZ CASS. KPL.	CASSETTE KNOB (SET)
0058.000	⚠	759550615100		LAUFWERK CD DA11-T3CN	CD MECHANISM DA11-T3CN
0078.000		759551089400		TRAGEGRIFF	HANDLE
0084.000		759551089000		TELESKOPANTENNE TA78124	FM ROD ANTENNA TA78124
0086.000		759551089700		TUERE BATTERIEFACH	BATTERY DOOR
0093.000		759551089600		BATTERIEFACHABDECKUNG	BATTERY COVER
0094.000		759551089100		FEDER CASS. TUER	CASS. DOOR SPRING
0100.000	⚠	759525012400		NETZKABEL	POWER CORD
0900.000		720117135800		FERNBEDIENUNG	REMOTE CONTROL
0901.000		759551102000		BATT.FACHDECKEL FB	BATTERY DOOR RC
		720114049500		BEDIENUNGSANLEITUNG D/GB/F/I/P/E/NL/PL/DK/S/FIN	INSTRUCTION MANUAL D/GB/F/I/P/E/NL/PL/DK/S/FIN

Es gelten die Vorschriften und Sicherheitshinweise gemäß dem Service Manual "Sicherheit", Mat.-Nummer 720108000001, sowie zusätzlich die eventuell abweichenden, landesspezifischen Vorschriften!

⚠ (!)

The regulations and safety instructions shall be valid as provided by the "Safety" Service Manual, part number 720108000001, as well as the respective national deviations.

ÄNDERUNGEN VORBEHALTEN / SUBJECT TO ALTERATION