

HCD-EP505

SERVICE MANUAL

Ver 1.2 2003.10

US Model
Canadian Model
AEP Model
UK Model
E Model
Chinese Model



HCD-EP505 is the amplifier, CD player, tape deck and tuner section in CMT-EP505.

CD Section	Model Name Using Similar Mechanism	HCD-EP50
	CD Mechanism Type	CS-21SC-1280
TAPE Section	Model Name Using Similar Mechanism	HCD-EP50
	Tape Transport Mechanism Type	CRL3439

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS:

(US model only)

POWER OUTPUT AND TOTAL

HARMONIC DISTORTION:

with 8 Ω loads both channels driven, from 120 - 10,000 Hz; rates 14 W per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 mW to rated output.

Amplifier section

Canadian model:

Continuous RMS power output (reference)
14 + 14 W
(8 Ω at 1 kHz, 10% THD)

European model:

DIN power output (rated) 11 + 11 W
(8 Ω at 1 kHz, DIN)
Continuous RMS power output (reference)
14 + 14 W
(8 Ω at 1 kHz, 10% THD)

Music power output (reference)
27 + 27 W

Other models:

The following measured at AC 230 V or AC 120 V, 50/60 Hz

DIN power output (rated) 11 + 11 W
(8 Ω at 1 kHz, DIN)

Continuous RMS power output (reference)
14 + 14 W
(8 Ω at 1 kHz, 10% THD)

Outputs

PHONES:

(stereo mini jack)

SPEAKER:

Accepts headphones of 8 Ω or more
Accepts impedance of 8 to 16 Ω

CD player section

System

Compact disc and digital audio system

Laser

Semiconductor laser
($\lambda=780$ nm)
Emission duration:
continuous

Frequency response 20 Hz - 20 kHz (± 0.5 dB)

Tape player section

Recording system 4-track 2-channel stereo
Frequency response 50 - 13 000 Hz (± 3 dB),
using Sony TYPE I cassette
Wow and flutter $\pm 0.15\%$ W.Peak (IEC)
0.1% W.RMS (NAB)
 $\pm 0.2\%$ W.Peak (DIN)

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range 87.5 - 108.0 MHz
Antenna FM lead antenna
Antenna terminal 75 coaxial
Intermediate frequency 10.7 MHz

AM tuner section

Tuning range
Pan-American model: 530 - 1 710 kHz
(with the interval set at 10 kHz)
531 - 1 710 kHz
(with the interval set at 9 kHz)
European models: 531 - 1 602 kHz
(with the interval set at 9 kHz)

Other models: 531 - 1 602 kHz
(with the interval set at 9 kHz)
530 - 1 710 kHz
(with the interval set at 10 kHz)
Antenna Supplied AM loop antenna
Intermediate frequency 450 kHz

General

Power requirements
North American model: 120 V AC, 60 Hz
European model: 230 V AC, 50/60 Hz
Argentine model: 220 - 230 V AC, 50/60 Hz
Hong Kong model: 230 V AC, 50/60 Hz
Other models: 230 V AC, 50/60 Hz
Power consumption
US model: 35 W
Canadian model: 35 W
European models: 40 W
0.5 W (in the standby mode)
Other models: 40 W
Dimensions (w/h/d) Approx. 145 x 240 x 252 mm
Mass Approx. 3.5 kg

Supplied accessories: AM loop antenna (1)
Remote Commander (1)
Batteries (2)
FM lead antenna (1)

Design and specifications are subject to change without notice.

COMPACT DISC DECK RECEIVER

9-873-673-03
2003J05-1
© 2003.10

Sony Corporation
Home Audio Company
Published by Sony Engineering Corporation

SONY®

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

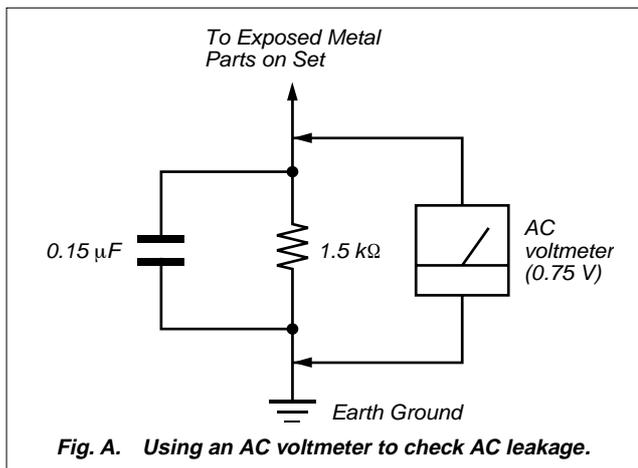
SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer: Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)



CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the bottom.



与安全有关的零部件须知

在原理图上用阴影及 Δ 标记来识别的零部件在安全操作上是具有关键性的。这些零部件要用本手册中所示的部件号对应的索尼零部件进行更换。

在安全操作上具有关键性的电路调整与索尼公司出版的维修手册完全一致。在更换关键零部件时或怀疑动作失常时，请进行这些调整操作。

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK Δ OR DOTTED LINE WITH MARK Δ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE Δ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

TABLE OF CONTENTS

1. SERVICING NOTES	4
2. GENERAL	5
3. DISASSEMBLY	
3-1. Disassembly Flow	7
3-2. Front Panel Section	8
3-3. MAIN Board	8
3-4. CD Cabinet Section	9
3-5. CD Mechanism Deck (CS-21SC-1280)	9
3-6. Tape Mechanism Deck (CRL3439)	10
3-7. Cassette Lid	10
4. MECHANICAL ADJUSTMENTS	11
5. ELECTRICAL ADJUSTMENTS	11
6. DIAGRAMS	
6-1. Block Diagram – TUNER Section –	15
6-2. Block Diagram – TAPE DECK Section –	16
6-3. Block Diagram – MAIN Section –	17
6-4. Block Diagram – DISPLAY/POWER SUPPLY Section –	18
6-5. Note for Printed Wiring Boards and Schematic Diagrams	19
6-6. Printed Wiring Boards – MAIN Section (AEP, UK, Chinese models) –	20
6-7. Schematic Diagram – MAIN Section (AEP, UK, Chinese models) (1/3) – ...	21
6-8. Schematic Diagram – MAIN Section (AEP, UK, Chinese models) (2/3) – ...	22
6-9. Schematic Diagram – MAIN Section (AEP, UK, Chinese models) (3/3) – ...	23
6-10. Printed Wiring Boards – MAIN Section (Except AEP, UK, Chinese models) –	24
6-11. Schematic Diagram – MAIN Section (Except AEP, UK, Chinese models) (1/3) –	25
6-12. Schematic Diagram – MAIN Section (Except AEP, UK, Chinese models) (2/3) –	26
6-13. Schematic Diagram – MAIN Section (Except AEP, UK, Chinese models) (3/3) –	27
6-14. Printed Wiring Board – DISPLAY Section –	28
6-15. Schematic Diagram – DISPLAY Section –	29
6-16. Printed Wiring Board – POWER Section –	30
6-17. Schematic Diagram – POWER Section –	31
6-18. IC Pin Function Description	34
7. EXPLODED VIEWS	
7-1. Cabinet Section	36
7-2. Front Panel Section-1	37
7-3. Front Panel Section-2	38
7-4. CD Cabinet Section	39
8. ELECTRICAL PARTS LIST	40

SECTION 1 SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

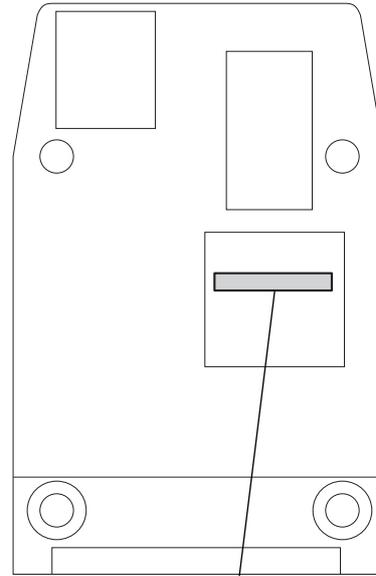
NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

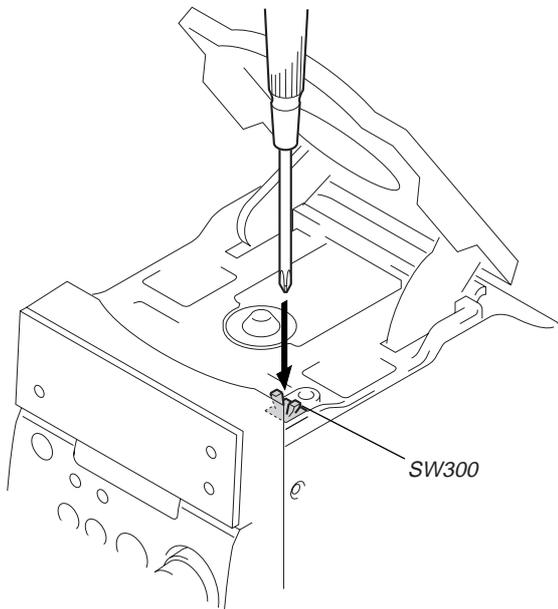
1. Press the  button to the power ON with no disc inserted and press the  button.
2. Open the lid for CD.
3. Turn on SW300 as following figure.
4. Confirm the laser diode emission while observing the objecting lens. When there is no emission, Auto Power Control circuit or Optical Pick-up is broken.
Objective lens moves up and down five times for the focus search.

• MODEL IDENTIFICATION – Bottom View –



Power Voltage Indication

Model	Power Voltage Indication
US and Canadian models	AC: 120 V 60 Hz 35 W
Argentina model	AC: 220 – 230 V ~ 50/60 Hz 40 W
Other models	AC: 230 V ~ 50/60 Hz 40 W



SECTION 2 GENERAL

This section is extracted from instruction manual.

LOCATION OF CONTROLS – Front Panel –

Main unit

ALPHABETICAL ORDER

A – M

Cassette compartment 15
CD 4
DIR 17
DISPLAY 2
Display Window 5
ENTER 16
MEGA BASS 8
MUSIC MENU 9

P – Z

PHONES jack 18
PLAY MODE 17
PRESET +/- 13
RDS (European model only)/DIR 17
Remote sensor 10
TAPE 3
TIMER indicator 1
TUNER 6
TUNER MEM 16
TUNING +/- 11
VOLUME control 12

BUTTON DESCRIPTIONS

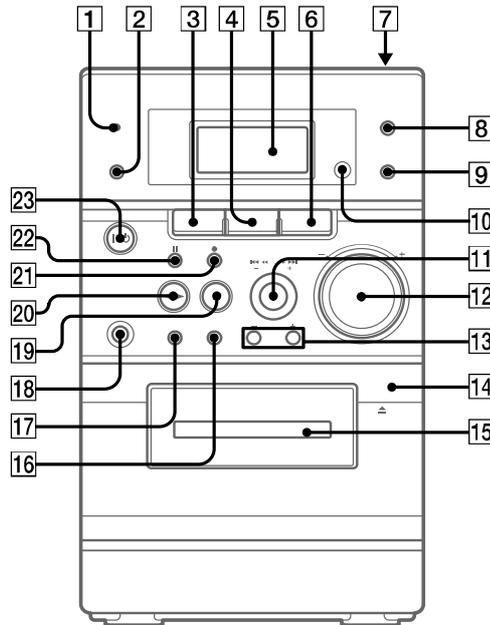
I/O (power) 23

CD

◀◀◀ (go back) 11
▶▶▶ (go forward) 11
◀▶▶ (play) 20
|| (pause) 22
▲ PUSH OPEN/CLOSE 7
■ (stop) 19

TAPE

▶▶▶▶ (fast forward) 11
|| (pause) 22
◀▶▶ (play) 20
● (recording) 21
◀◀◀ (rewind) 11
▲ PUSH OPEN/CLOSE 14
■ (stop) 19



Remote control

ALPHABETICAL ORDER

A - M

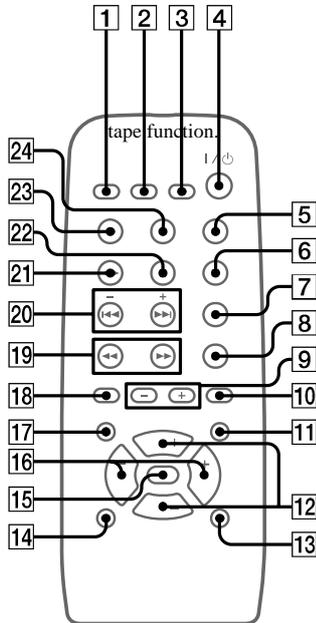
CD 24
CLOCK/TIMER +/- 20
CLOCK/TIMER ON/OFF 2
CLOCK/TIMER SET 3
DISPLAY 11
ENTER 14
MEGA BASS 13
MUSIC MENU +/- 16
MUTING 15

P - Z

PLAY MODE/RDS
(European model only)/DIR 7
PRESET +/- 9
REPEAT 8
SLEEP 1
TAPE 23
TUNER/BAND 5
TUNER MEMORY 17
TUNING + 10
TUNING - 18
VOL. (volume) +/- 12

BUTTON DESCRIPTIONS

◀◀ (rewind) ▶▶
(fast forward) 19
◀◀ (go back) ▶▶
(go forward) 20
⏸ (pause) 22
▶▶▶▶ (play) 21
⏻ (power) 4
■ (stop) 6



Setting the clock

- 1 Turn on the system.
- 2 Press **CLOCK/TIMER SET** on the remote.
- 3 Press **◀◀** or **▶▶** on the remote repeatedly to set the hour.
- 4 Press **ENTER**.
- 5 Press **◀◀** or **▶▶** on the remote repeatedly to set the minute.
- 6 Press **ENTER**.
The clock starts working.

To adjust the clock

- 1 Press **CLOCK/TIMER SET** on the remote.
- 2 Press **◀◀** or **▶▶** on the remote to select "SET CLK", then press **ENTER**.
- 3 Do the same procedures as step 3 to 6 above.

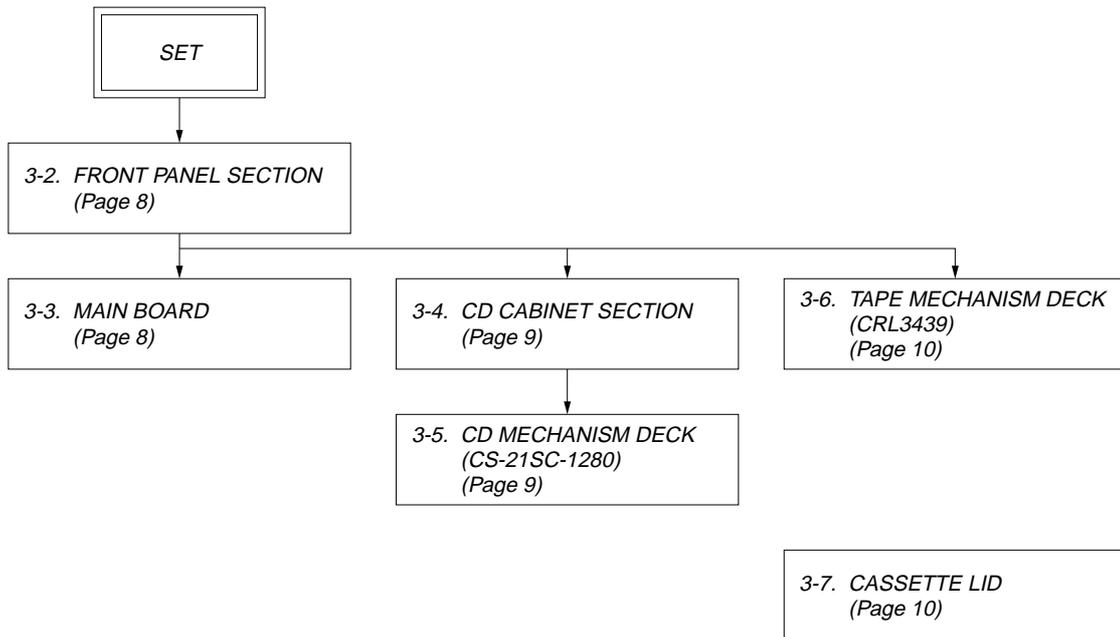
Note

The clock settings are canceled when you disconnect the power cord or if a power failure occurs.

SECTION 3 DISASSEMBLY

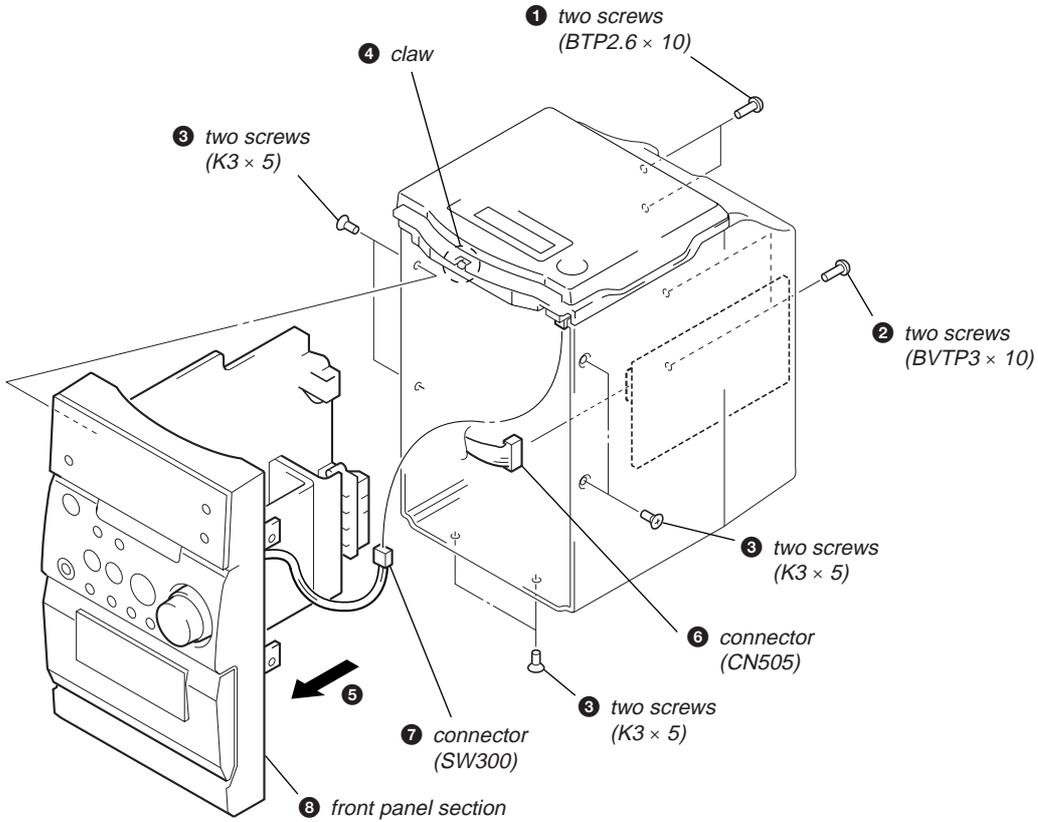
• This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

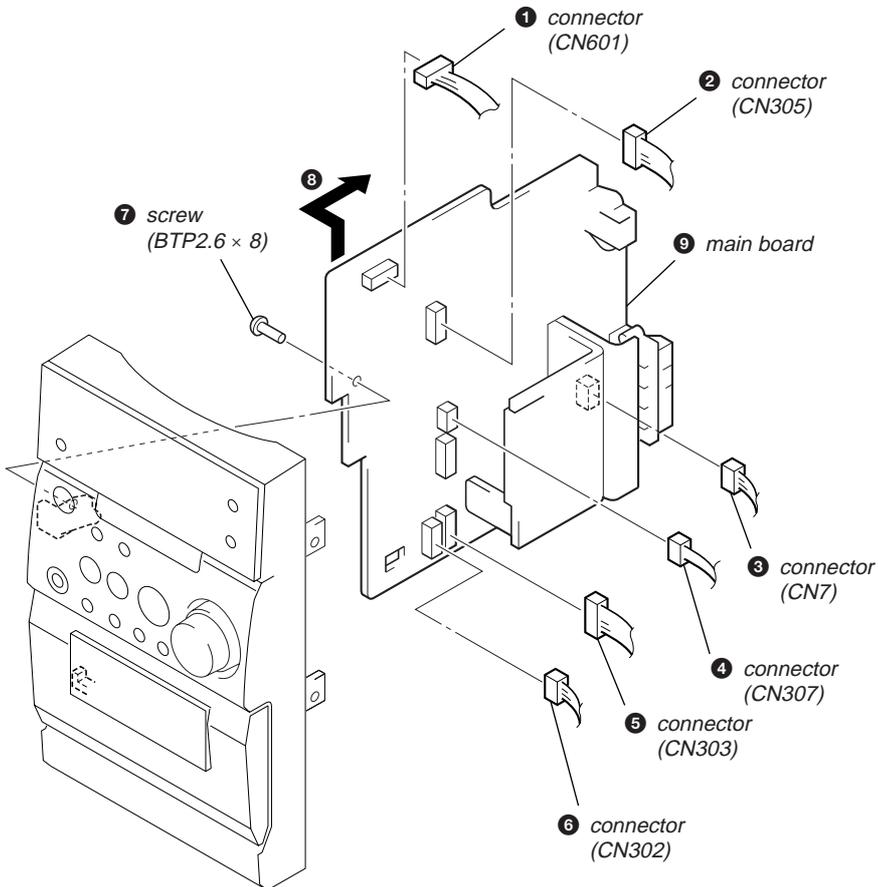


Note: Follow the disassembly procedure in the numerical order given.

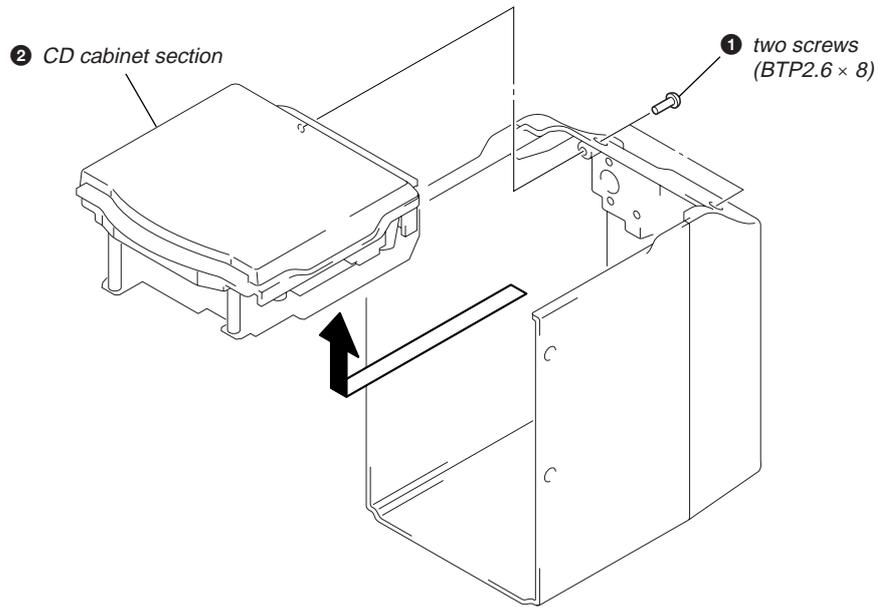
3-2. FRONT PANEL SECTION



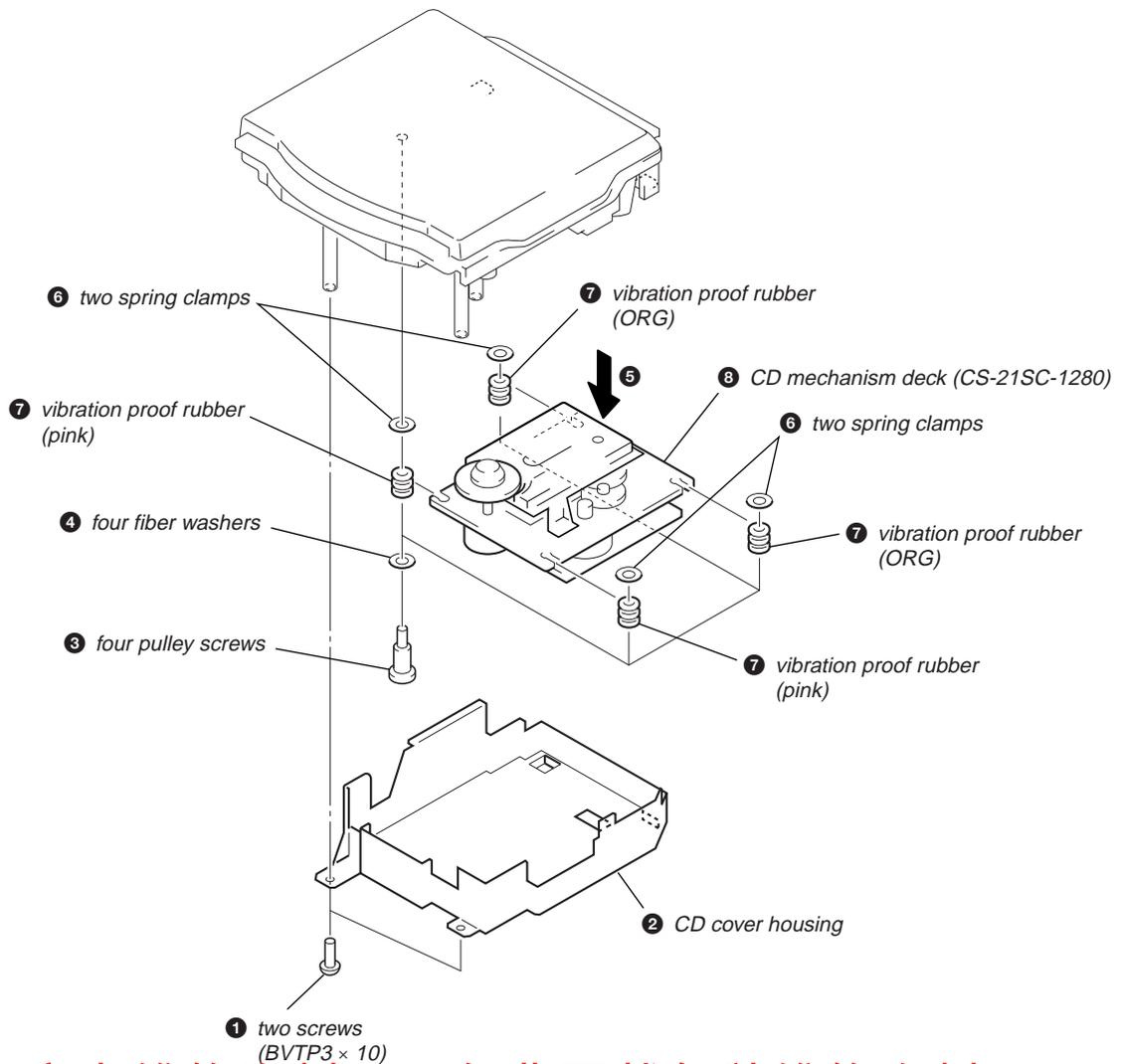
3-3. MAIN BOARD



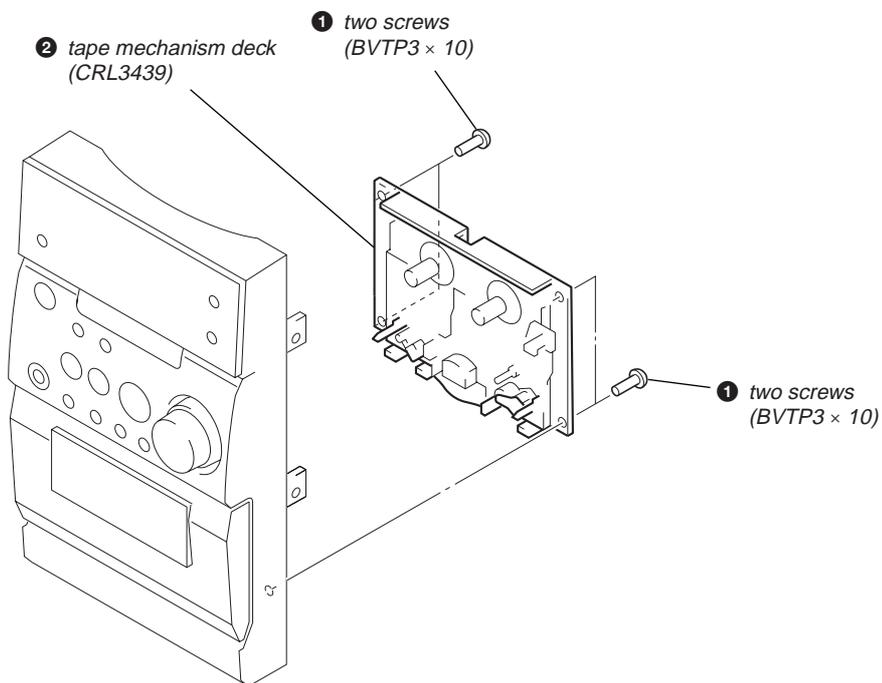
3-4. CD CABINET SECTION



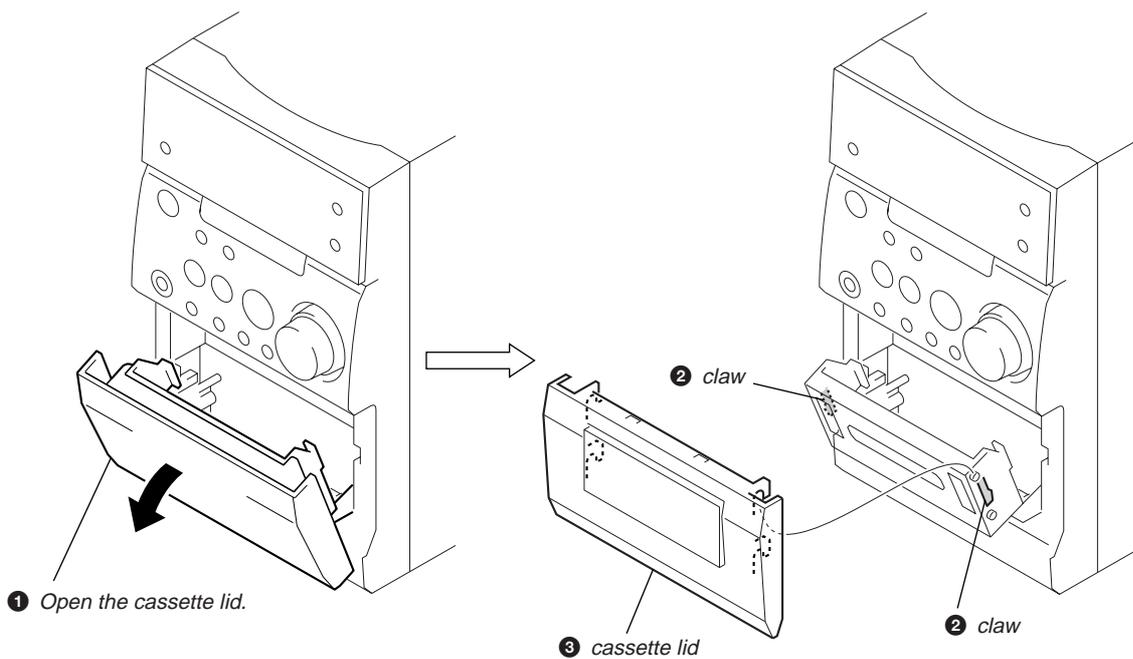
3-5. CD MECHANISM DECK (CS-21SC-1280)



3-6. TAPE MECHANISM DECK (CRL3439)



3-7. CASSETTE LID



SECTION 4 MECHANICAL ADJUSTMENTS

PRECAUTION

- Clean the following parts with a denatured-alcohol-moistened swab :

record/playback head	pinch roller
erase head	rubber belts
capstan	idlers
- Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head magnetizer close to the erase head.)
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

• Torque Measurement

Mode	Torque Meter	Meter Reading
FWD	CQ-102C	2.95 – 6.86 mN•m (30 – 70 g•cm) (0.42 – 0.97 oz•inch)
FWD Back Tension	CQ-102C	0.15 – 5.39 mN•m (1.5 – 5.5 g•cm) (0.021 – 0.076 oz•inch)
FF	CQ-201B	more than 5.89 mN•m (more than 60 g•cm) (more than 0.83 oz•inch)
REW	CQ-201B	more than 5.89 mN•m (more than 60 g•cm) (more than 0.83 oz•inch)

• Tape Tension Measurement

Mode	Tension Meter	Meter Reading
FWD	CQ-403A	more than 100 g (more than 3.53 oz)

SECTION 5 ELECTRICAL ADJUSTMENTS

PRECAUTION

- Setting
MEGA BASS switch : OFF

TAPE DECK SECTION

0 dB=0.775 V

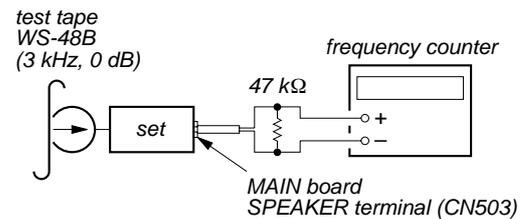
Test tape

Type	Signal	Used for
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment

Tape Speed Adjustment

Setting:

Function: TAPE



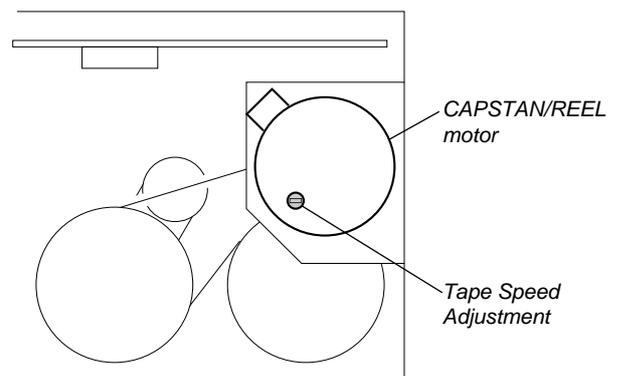
Procedure:

- Playback WS-48B (tape center) in the FWD state.
- Adjust the volume in CAPSTAN/REEL motor so that the frequency counter reading becomes 3,000 Hz.

Specified Value: 2,910 to 3,090 Hz

- Confirm that the frequency at the beginning and that at the end of tape winding are between 2,955 to 3,045 Hz.

Adjustment Location:



Sample Value of Wow and Flutter: 0.3% or less W. RMS (JIS)
(WS-48B)

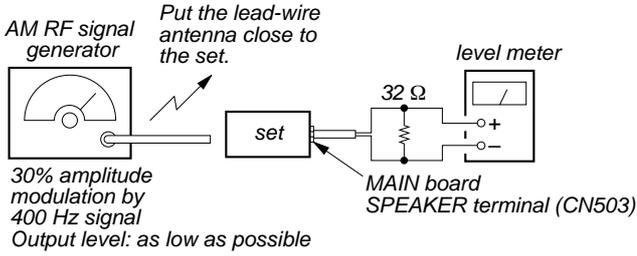
TUNER SECTION

0 dB=1 μV

[AM]

Setting:

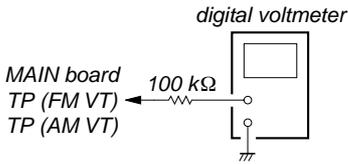
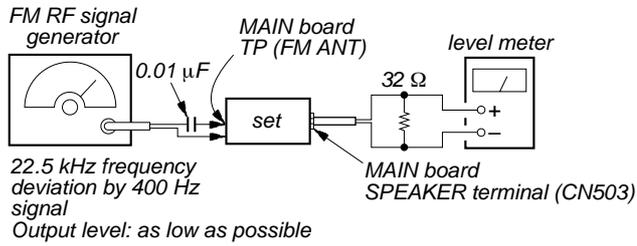
Function : TUNER
Band switch : AM



[FM]

Setting:

Function : TUNER
Band switch : FM



- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

no mark : EXCEPT AEP, UK, Chinese models
< > : AEP, UK, Chinese models

AM IF ADJUSTMENT	
Adjust for a maximum reading on level meter	
T401 <T406>	450 kHz

AM FREQUENCY COVERAGE ADJUSTMENT		
Adjustment Part	Frequency Display	Reading on Digital Voltmeter
L408 <T402>	530 kHz <531 kHz>	1.3 ± 0.1 V
Confirmation	1,710 kHz <1,602 kHz>	7.8 ± 0.5 V <7.1 ± 0.5 V>

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter	
L407 <T401>	603 kHz
TC402 <TC401>	1,404 kHz

FM FREQUENCY COVERAGE CONFIRMATION		
Adjustment Part	Frequency Display	Reading on Digital Voltmeter
Confirmation	87.5 MHz	2.4 ± 0.1 V <1.4 to 1.6 V>
Confirmation	108 MHz	6.8 ± 0.5 V <7.3 to 8.5 V>

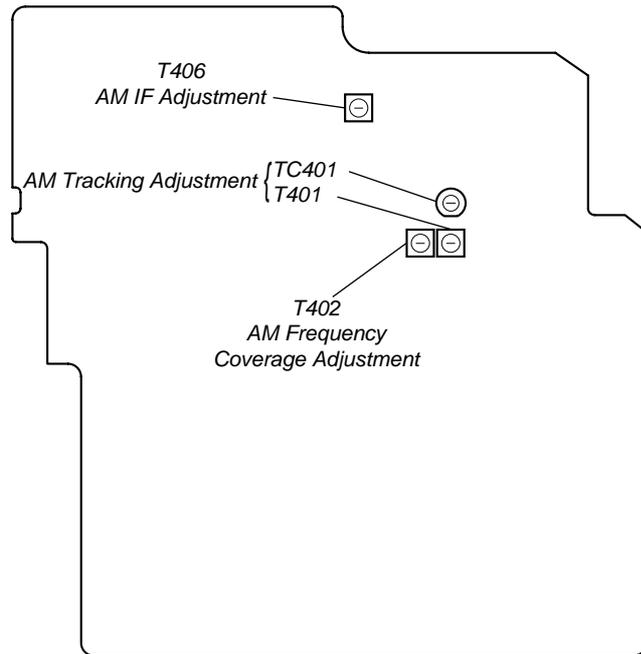
FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter	
TC401	106.1 MHz

(EXCEPT AEP, UK, Chinese models)

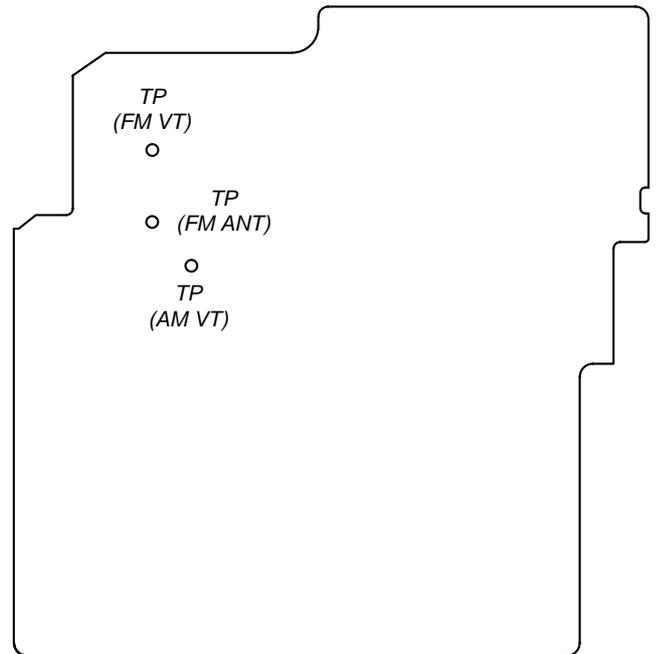
Adjustment Location: MAIN board (See page 14)

Adjustment Location and Connecting Points

- MAIN BOARD (Component Side) -



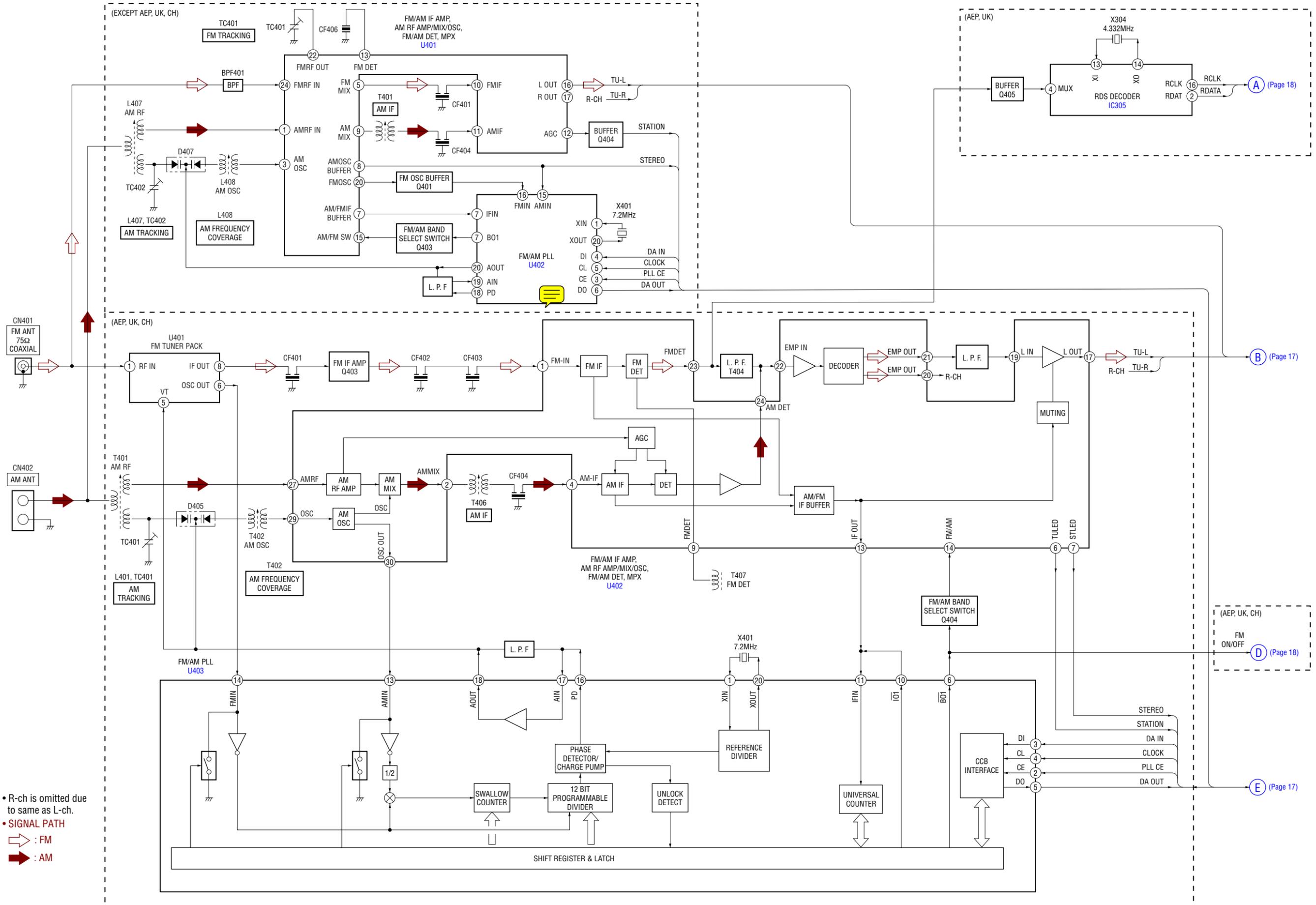
- MAIN BOARD (Conductor Side) -



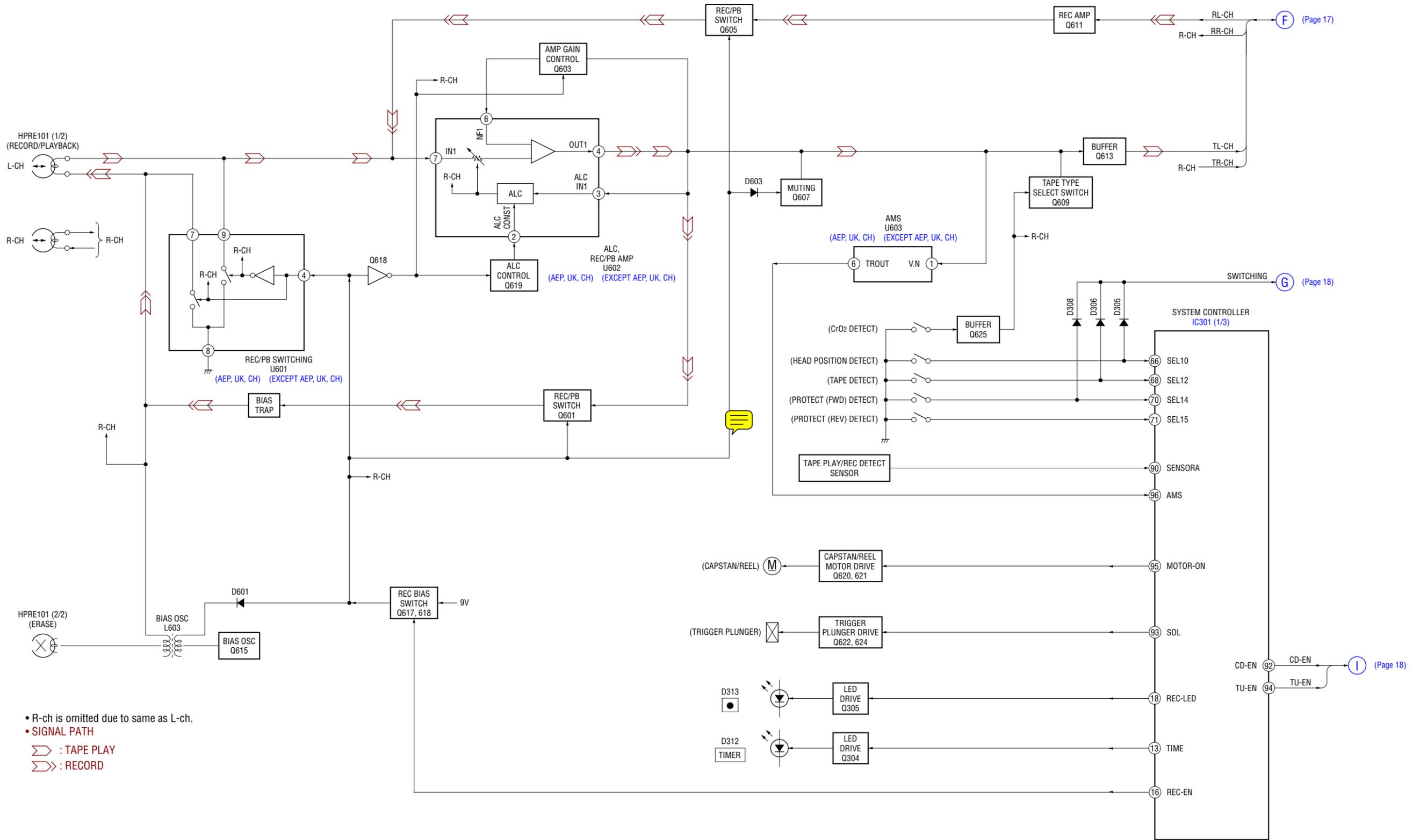
MEMO

SECTION 6
DIAGRAMS

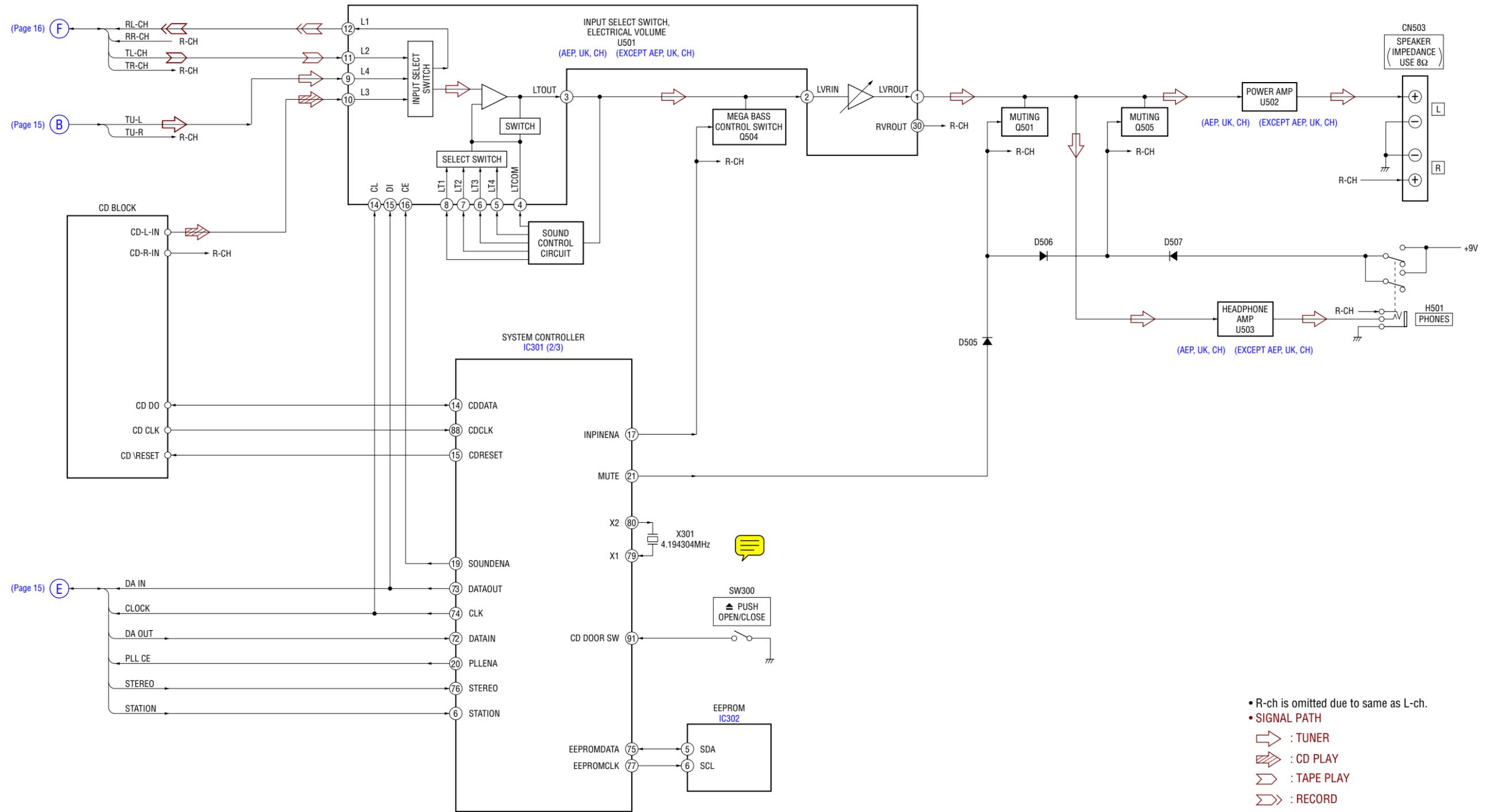
6-1. BLOCK DIAGRAM - TUNER Section -



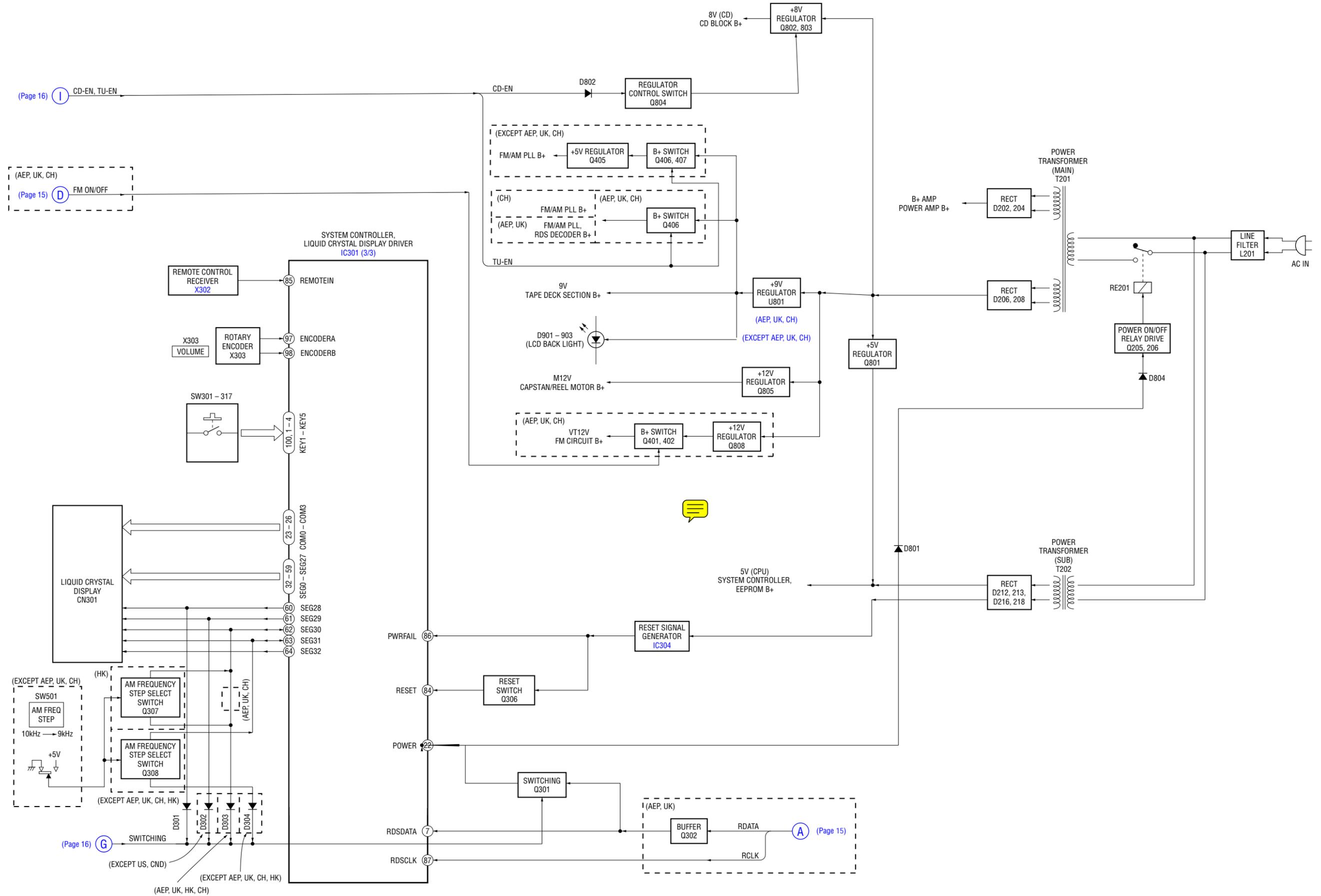
6-2. BLOCK DIAGRAM – TAPE DECK Section –



6-3. BLOCK DIAGRAM – MAIN Section –



6-4. BLOCK DIAGRAM - DISPLAY/POWER SUPPLY Section -



6-5. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Note on Printed Wiring Boards:

- : parts extracted from the component side.
- : indicates side identified with part number.
- △ : internal component.
- : Pattern from the side which enables seeing. (The other layers' patterns are not indicated.)

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: $\mu\mu\text{F}$ 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- △ : internal component.
- : panel designation.

<p>Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.</p>	<p>Note: Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
--	--

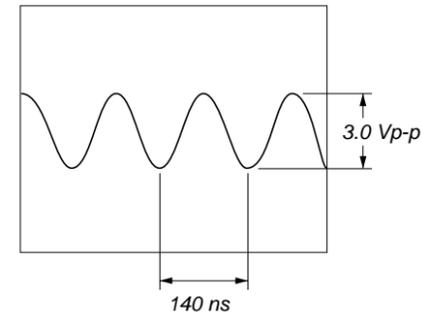
以阴影和 △ 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。

- : B+ Line.
- - - : B- Line.
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 - ⇒ : FM
 - ➔ : AM
 - ⇄ : TAPE PLAY
 - ⇄ : RECORD
 - ⇄ : CD PLAY
- Abbreviation
 - AR : Argentina model
 - CH : Chinese model
 - CND : Canadian model
 - E51 : Chilean and Peruvian models
 - HK : Hong Kong model

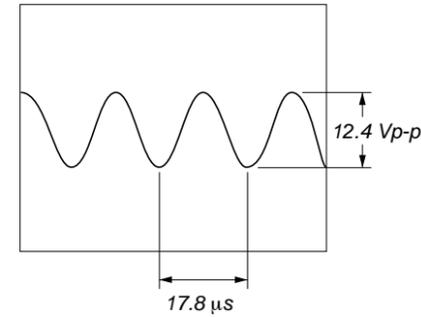
• Waveforms

– MAIN Board (AEP, UK, CH models) –

① U403 ② (XOUT) (TUNER mode)

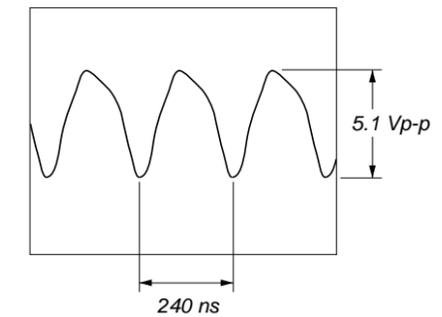


② Q615 (Collector) (REC mode)

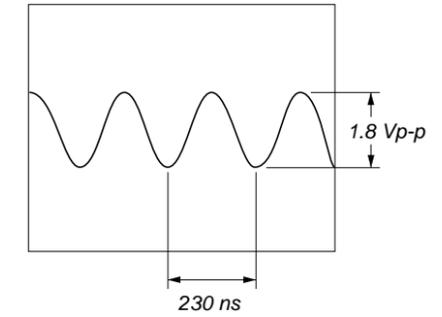


– DISPLAY Board –

③ IC301 ④ (X1)

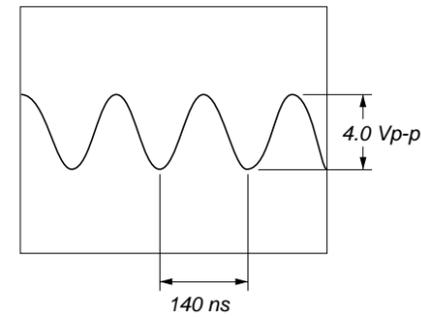


④ IC305 ④ (XO) (AEP, UK model)

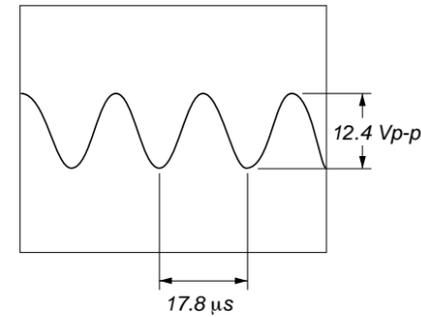


– MAIN Board (Except AEP, UK, CH models) –

① U402 ② (XOUT) (TUNER mode)



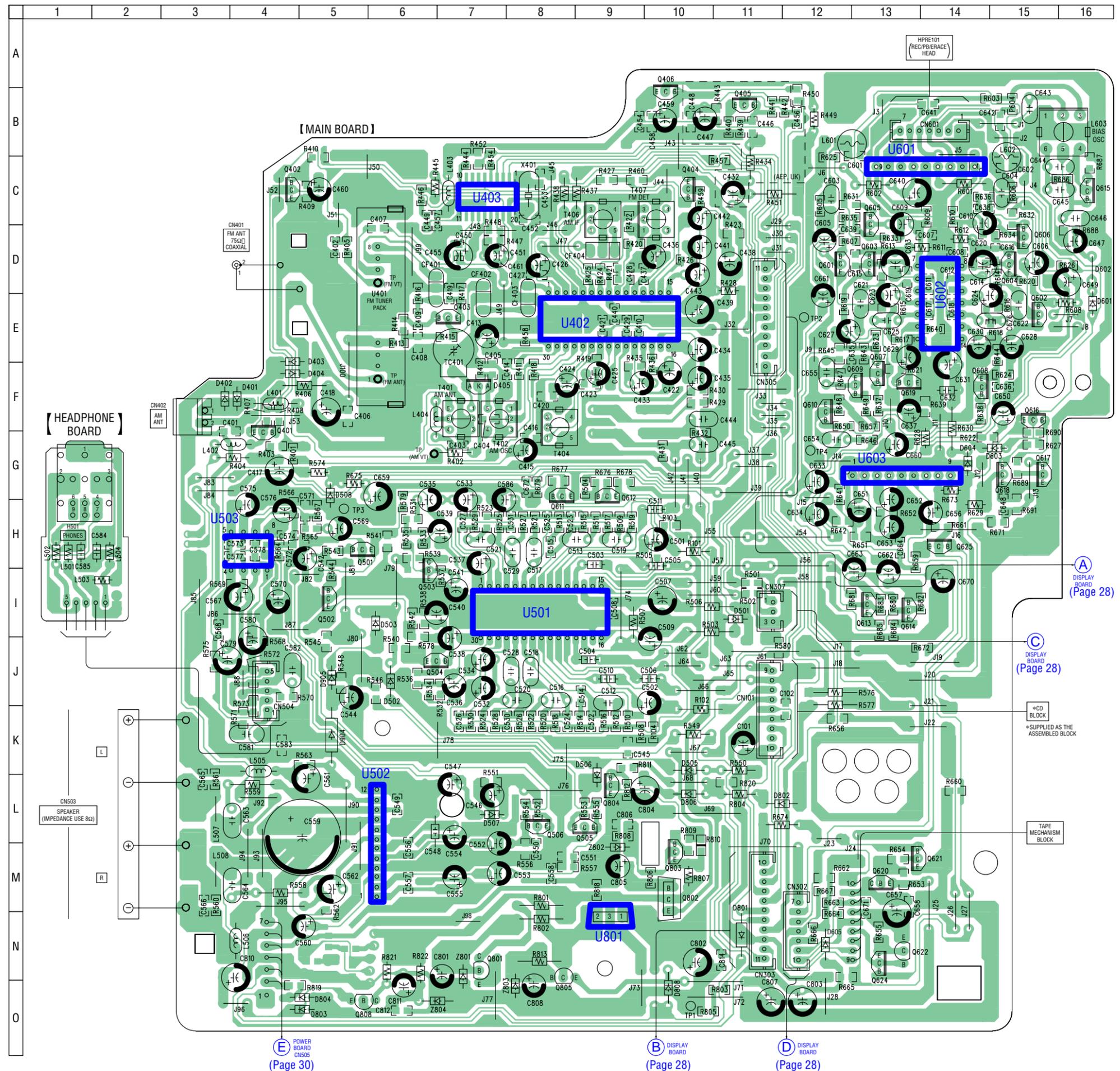
② Q615 (Collector) (REC mode)



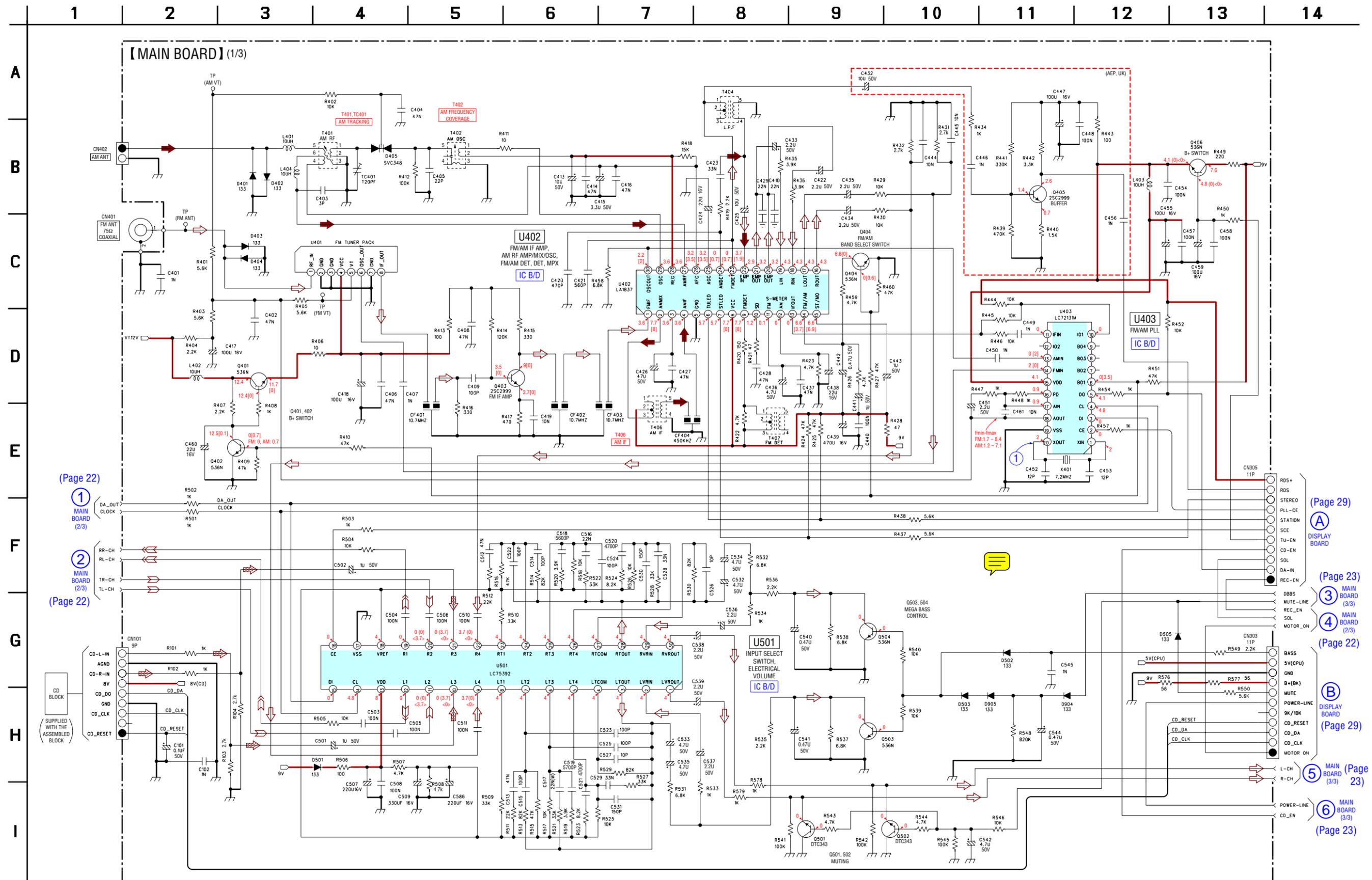
6-6. PRINTED WIRING BOARDS – MAIN Section (AEP, UK, CH models) –

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D401	F-4	Q605	C-13
D402	F-3	Q606	D-15
D403	F-4	Q607	F-13
D404	F-4	Q608	F-14
D405	F-7	Q609	F-13
D501	I-11	Q610	F-12
D502	J-6	Q611	G-8
D503	I-6	Q612	G-9
D505	K-10	Q613	I-13
D506	L-9	Q614	I-13
D507	L-7	Q615	C-15
D508	G-5	Q616	F-15
D601	E-16	Q617	G-15
D603	G-15	Q618	G-15
D604	G-14	Q619	F-13
D605	N-12	Q620	M-13
D801	N-11	Q621	M-13
D802	L-11	Q622	N-13
D803	O-5	Q624	N-13
D804	O-5	Q625	H-14
D806	L-10	Q801	N-7
D808	O-10	Q802	M-10
D904	K-5	Q803	M-10
D905	J-5	Q804	L-9
		Q805	N-8
		Q808	O-5
Q401	G-4		
Q402	C-4		
Q403	E-7	U402	E-9
Q404	C-10	U403	C-7
Q405	B-11	U501	I-8
Q406	B-10	U502	L-6
Q501	H-5	U503	H-4
Q502	I-5	U601	C-14
Q503	I-6	U602	E-14
Q504	J-6	U603	G-13
Q505	L-9	U801	N-9
Q506	L-8		
Q601	D-12	Z801	N-7
Q602	E-15	Z802	M-9
Q603	D-13	Z803	O-8
Q604	D-15	Z804	O-7

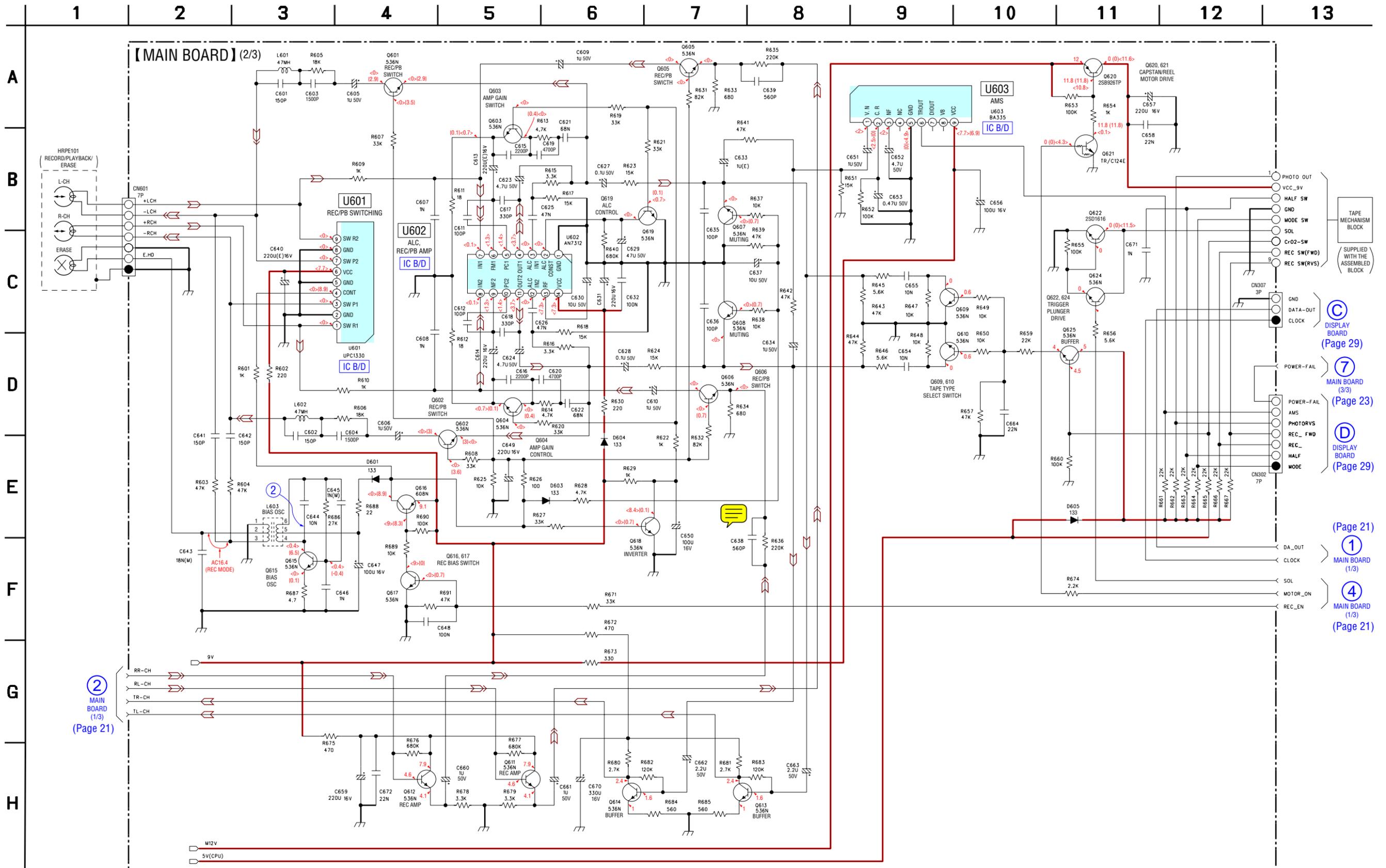


6-7. SCHEMATIC DIAGRAM – MAIN Section (AEP, UK, CH models) (1/3) – See page 19 for Waveform. See page 32 for IC Block Diagrams.



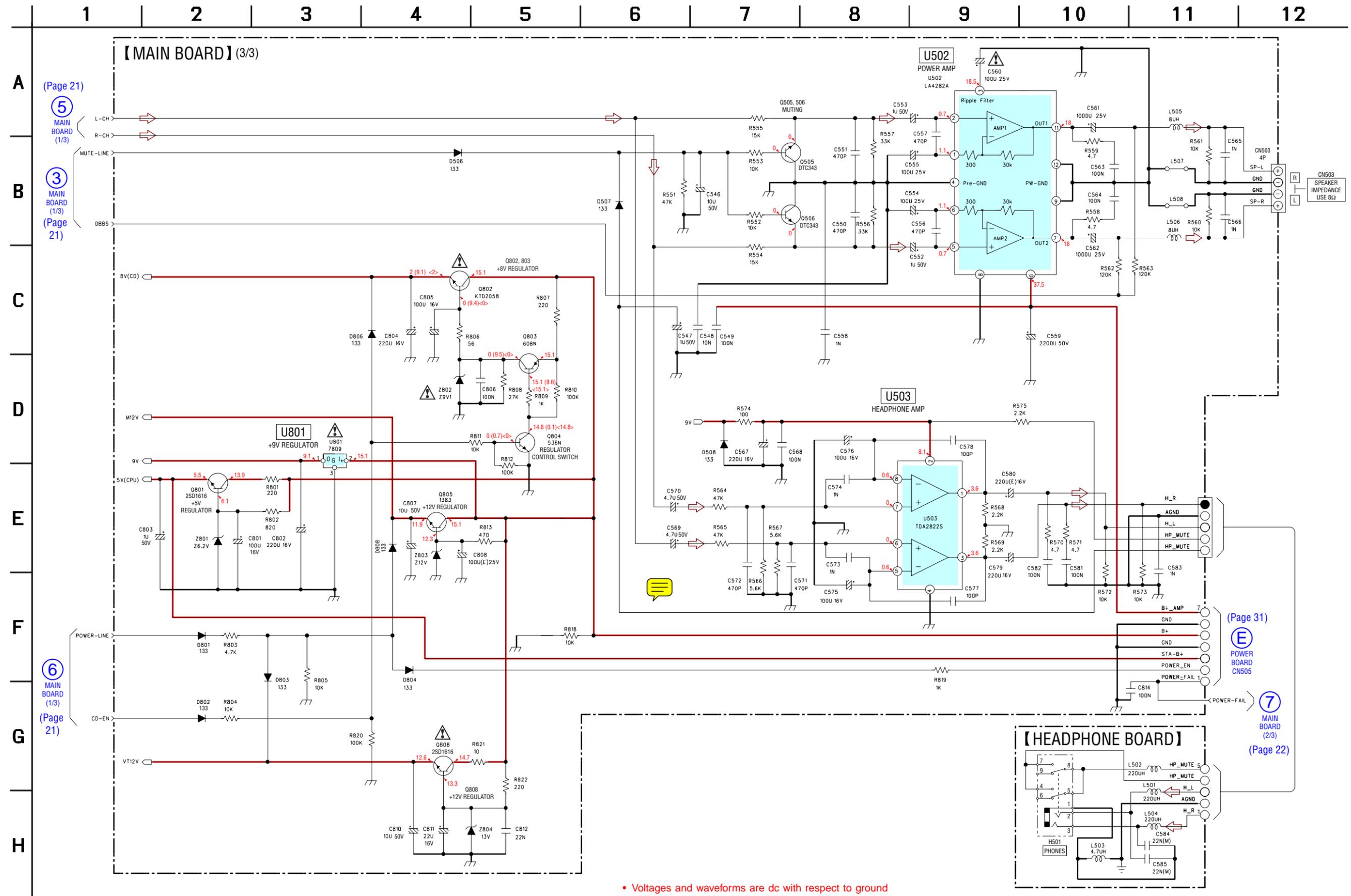
• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
 no mark : FM
 [] : AM
 () : CD PLAY
 < > : TAPE PLAY

6-8. SCHEMATIC DIAGRAM – MAIN Section (AEP, UK, CH models) (2/3) – • See page 19 for Waveforms. • See page 32 for IC Block Diagrams.



• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
 no mark : TUNER
 () : CD PLAY
 < > : TAPE PLAY
 { } : RECORD

6-9. SCHEMATIC DIAGRAM – MAIN (AEP, UK, CH models) (3/3) Section – • See page 19 for Waveforms. • See page 32 for IC Block Diagrams.



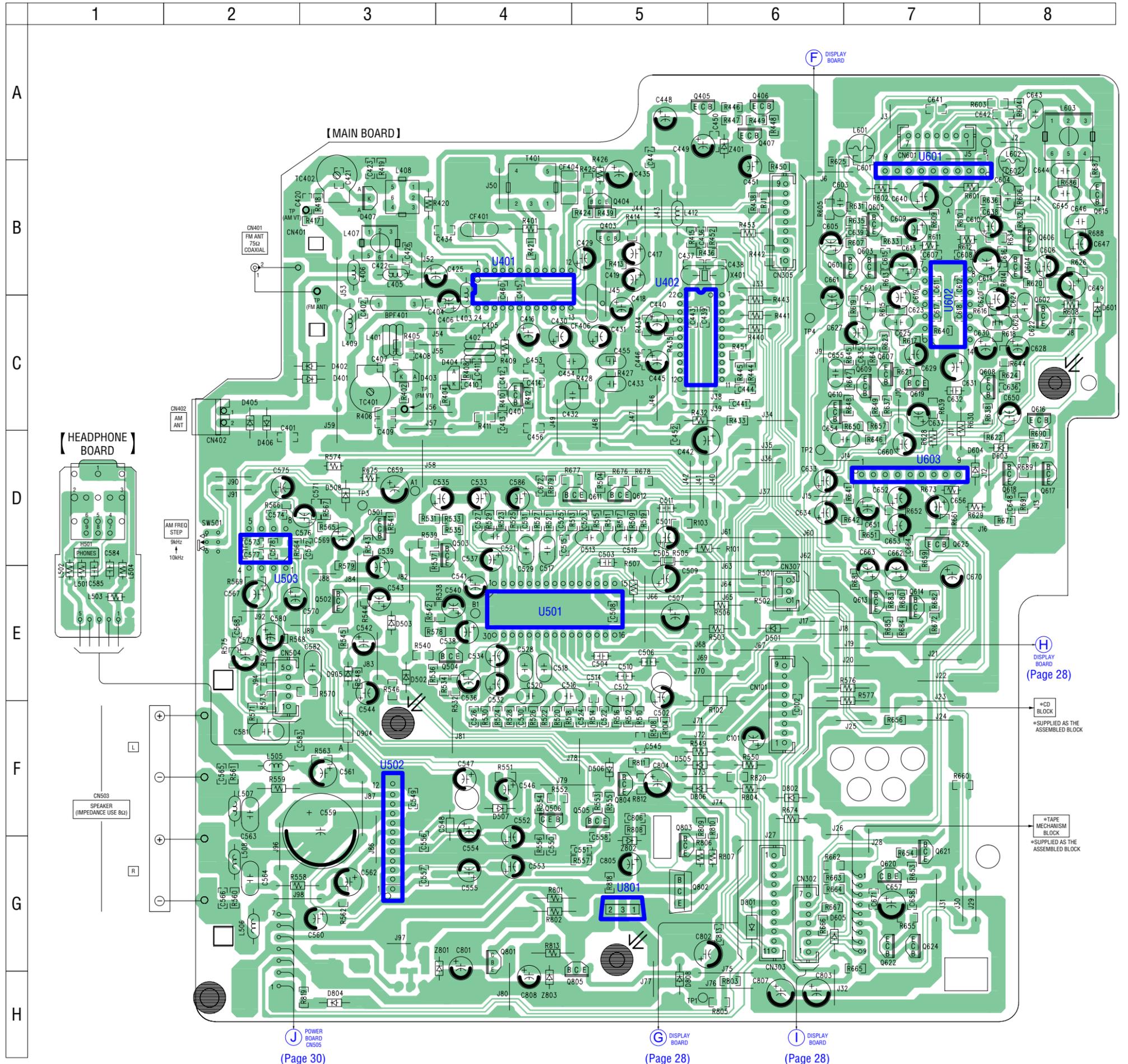
• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
 no mark : TUNER
 () : CD PLAY
 < > : TAPE PLAY

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.
 以阴影和 Δ 标志来识别的零部件在安全方面具有关键性。因此只能以规定号码的零部件来更换。

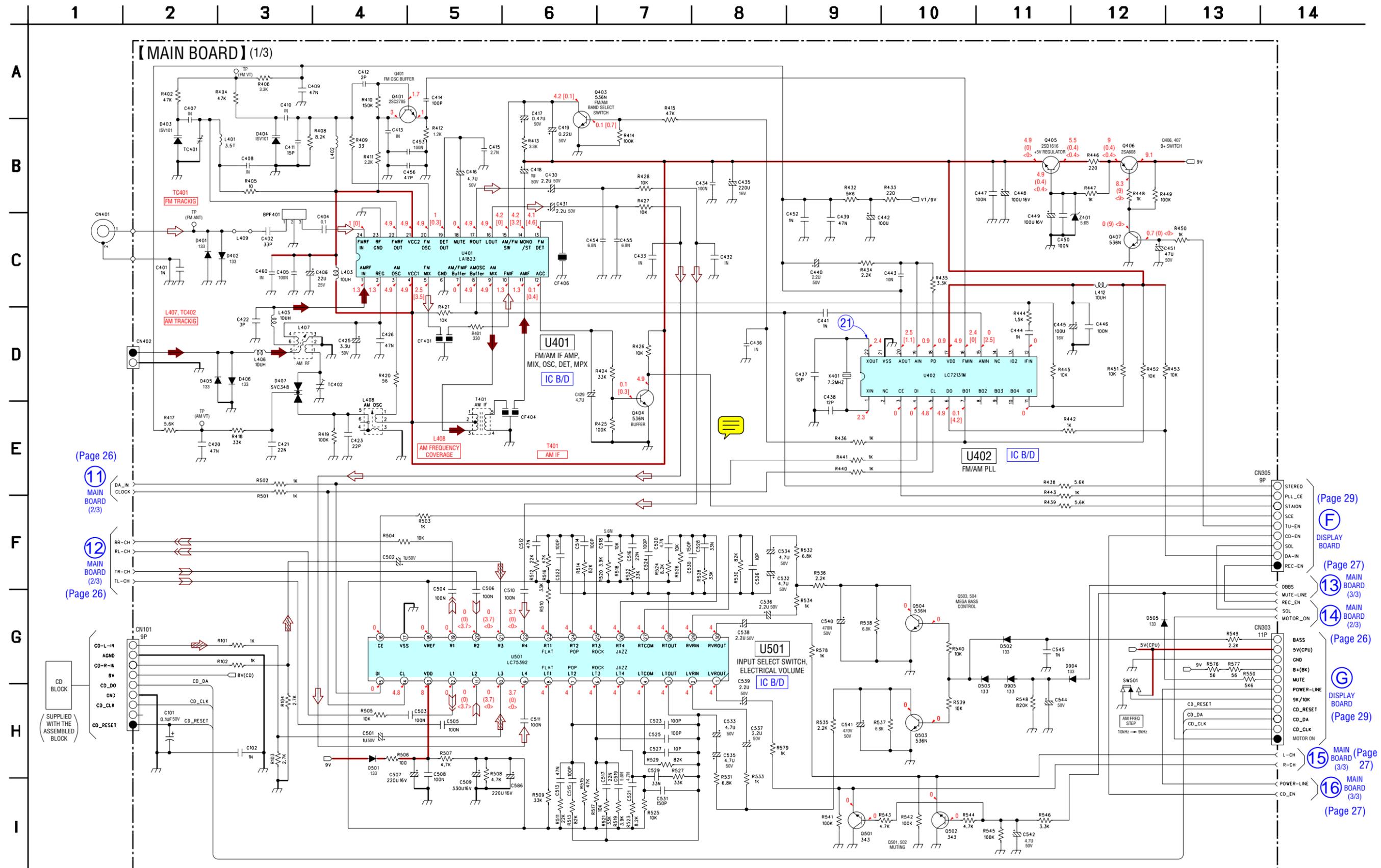
6-10. PRINTED WIRING BOARDS – MAIN Section (Except AEP, UK, CH models) –

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D401	F-4	Q605	C-13
D402	F-3	Q606	D-15
D403	F-4	Q607	F-13
D404	F-4	Q608	F-14
D405	F-7	Q609	F-13
D501	I-11	Q610	F-12
D502	J-6	Q611	G-8
D503	I-6	Q612	G-9
D505	K-10	Q613	I-13
D506	L-9	Q614	I-13
D507	L-7	Q615	C-15
D508	G-5	Q616	F-15
D601	E-16	Q617	G-15
D603	G-15	Q618	G-15
D604	G-14	Q619	F-13
D605	N-12	Q620	M-13
D801	N-11	Q621	M-13
D802	L-11	Q622	N-13
D803	O-5	Q624	N-13
D804	O-5	Q625	H-14
D806	L-10	Q801	N-7
D808	O-10	Q802	M-10
D904	K-5	Q803	M-10
D905	J-5	Q804	L-9
		Q805	N-8
		Q808	O-5
Q401	G-4		
Q402	C-4		
Q403	E-7	U402	E-9
Q404	C-10	U403	C-7
Q405	B-11	U501	I-8
Q406	B-10	U502	L-6
Q501	H-5	U503	H-4
Q502	I-5	U601	C-14
Q503	I-6	U602	E-14
Q504	J-6	U603	G-13
Q505	L-9	U801	N-9
Q506	L-8		
Q601	D-12	Z801	N-7
Q602	E-15	Z802	M-9
Q603	D-13	Z803	O-8
Q604	D-15	Z804	O-7

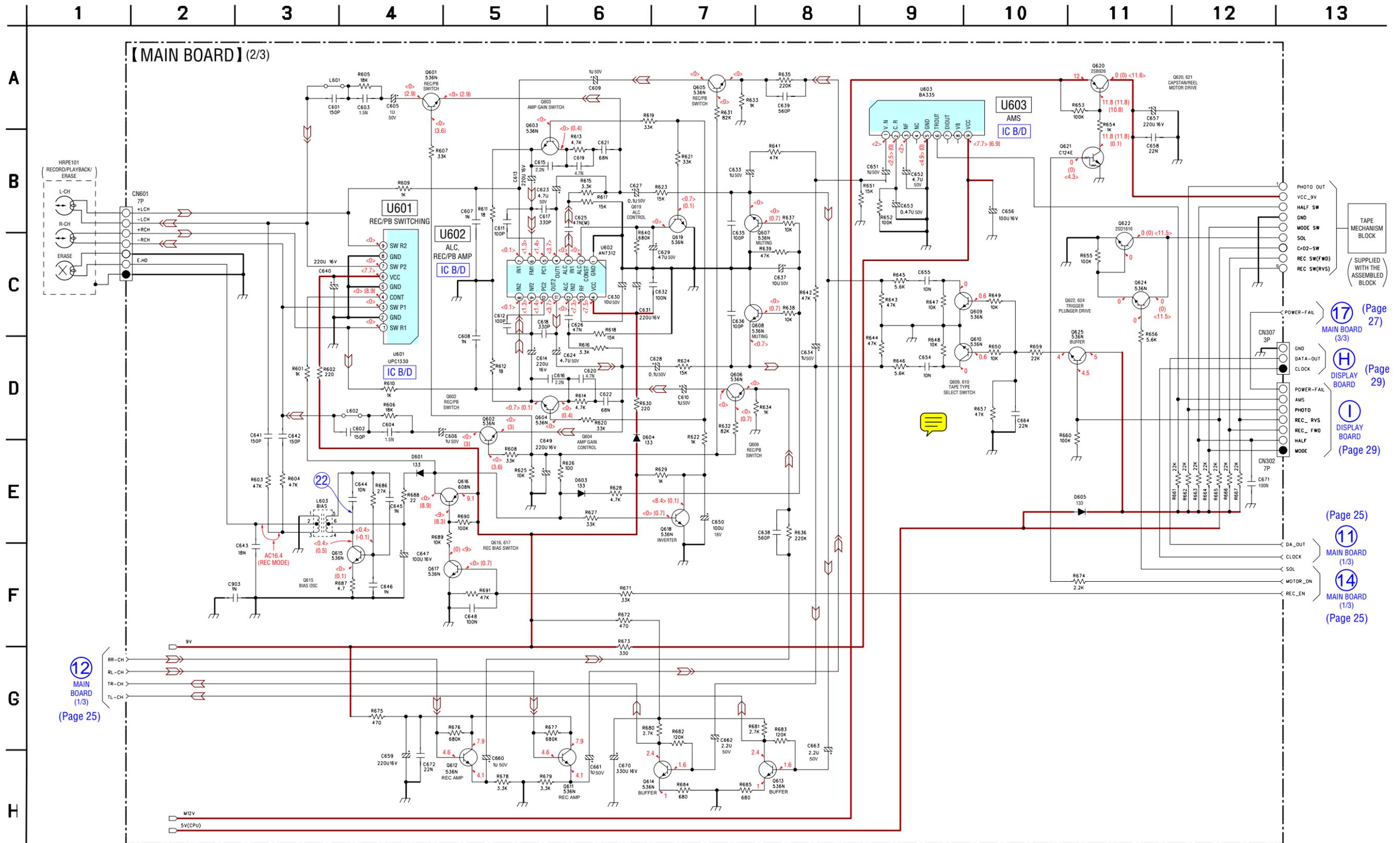


6-11. SCHEMATIC DIAGRAM – MAIN Section (Except AEP, UK, CH models) (1/3) – • See page 19 for Waveform. • See page 32 for IC Block Diagrams.



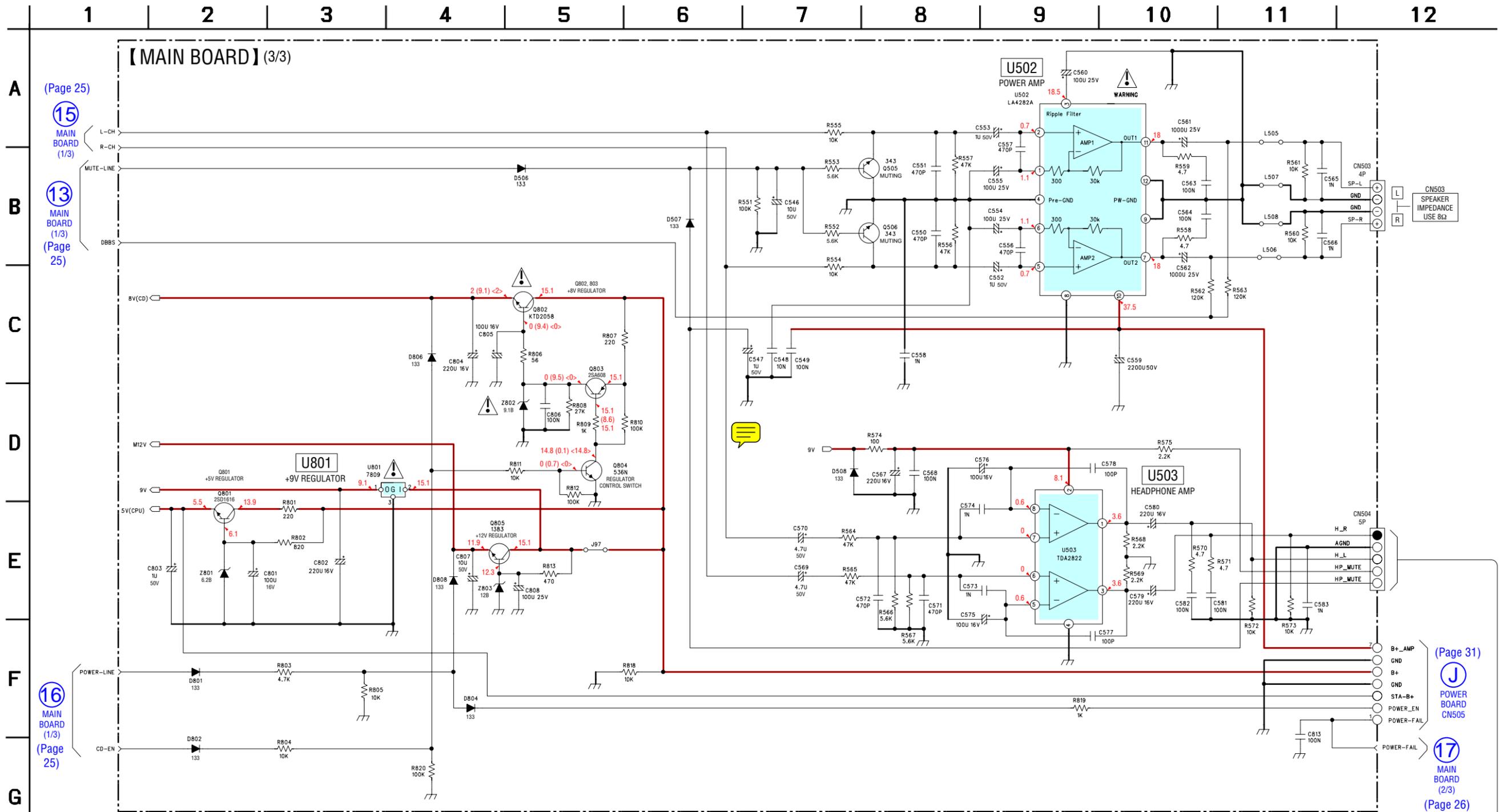
• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
 no mark : FM
 [] : AM
 () : CD PLAY
 < > : TAPE PLAY

6-12. SCHEMATIC DIAGRAM – MAIN Section (Except AEP, UK, CH models) (2/3) – • See page 19 for Waveforms. • See page 32 for IC Block Diagrams.



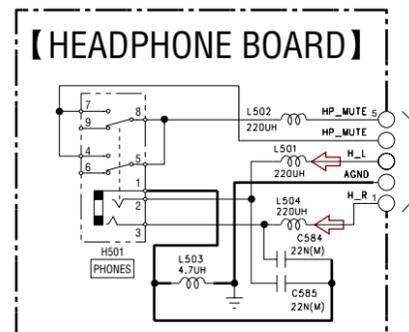
• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER
() : CD PLAY
< > : TAPE PLAY
{ } : RECORD

6-13. SCHEMATIC DIAGRAM – MAIN (Except AEP, UK, CH models) (3/3) Section – • See page 19 for Waveforms. • See page 32 for IC Block Diagrams.



(Page 25)
 15 MAIN BOARD (1/3)
 13 MAIN BOARD (1/3) (Page 25)
 16 MAIN BOARD (1/3) (Page 25)

(Page 31)
 J POWER BOARD CN505
 17 MAIN BOARD (2/3) (Page 26)



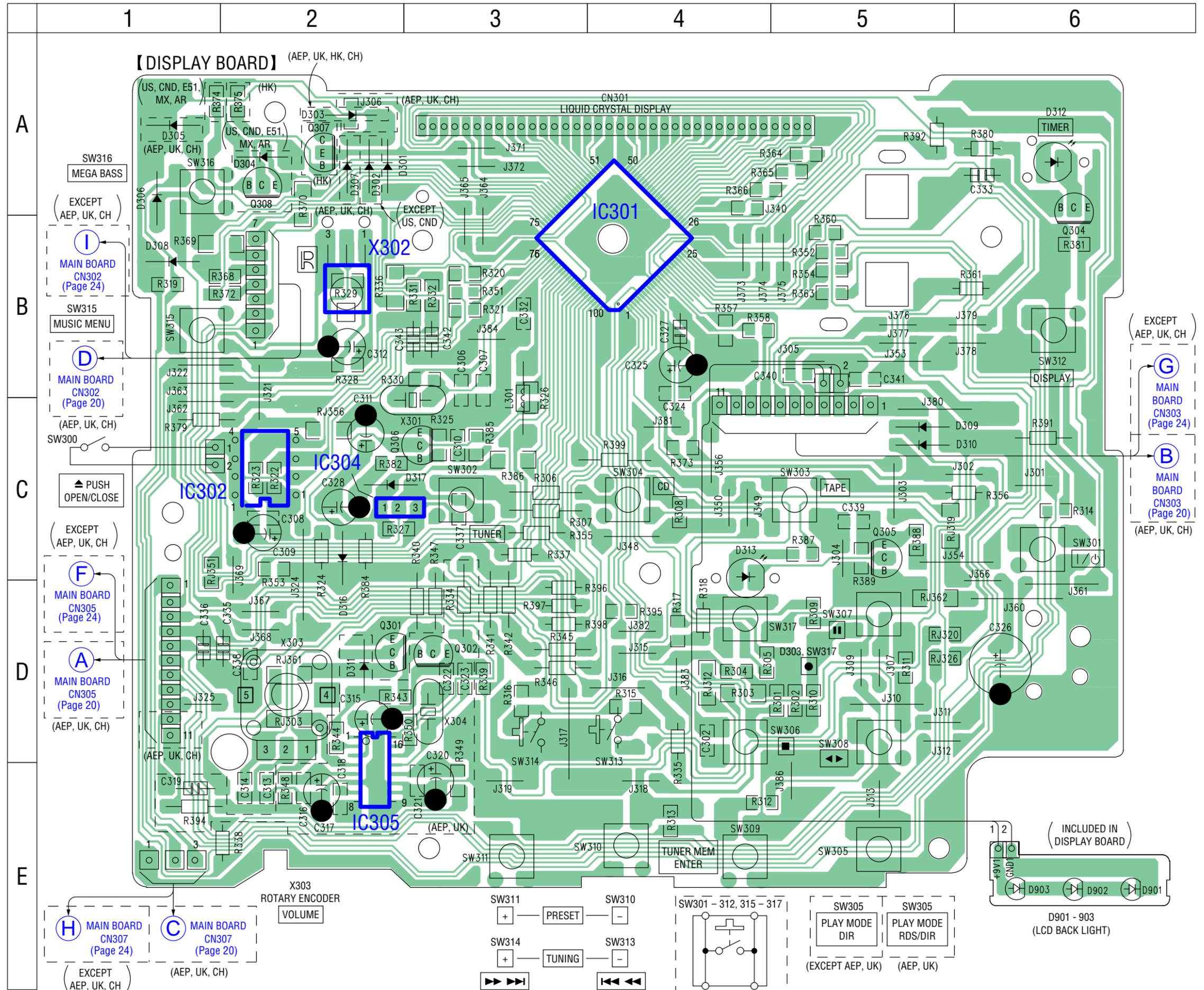
• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
 no mark : TUNER
 () : CD PLAY
 < > : TAPE PLAY

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.
 Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

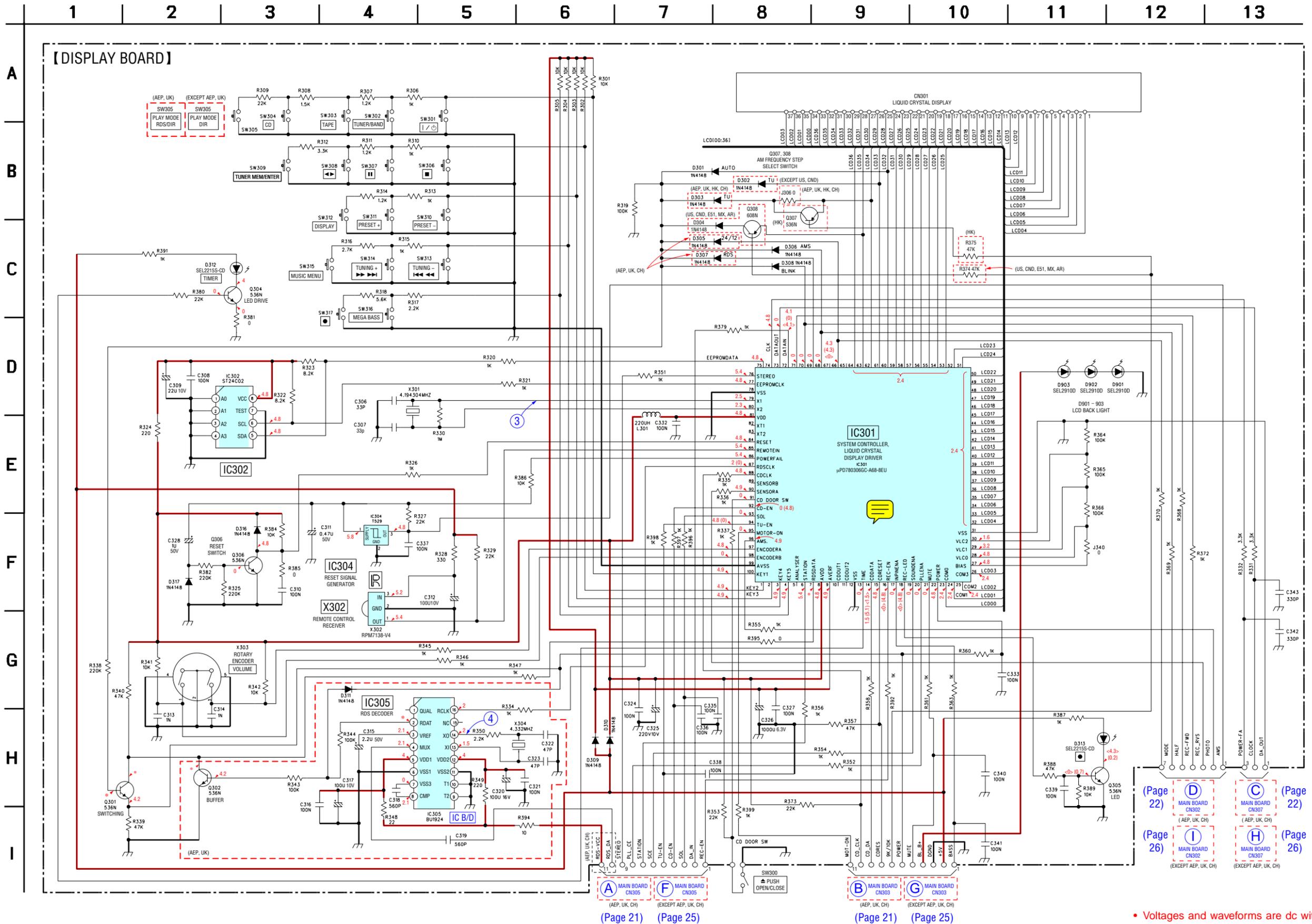
6-14. PRINTED WIRING BOARD - DISPLAY Section -

• Semiconductor Location

Ref. No.	Location
D301	A-2
D302	A-2
D303	A-2
D304	A-2
D305	A-1
D306	A-1
D307	A-2
D308	B-1
D309	C-5
D310	C-5
D311	D-2
D312	A-6
D313	C-4
D316	C-2
D317	C-2
D901	E-6
D902	E-6
D903	E-6
IC301	B-4
IC302	C-2
IC304	C-2
IC305	E-2
Q301	D-2
Q302	D-3
Q304	A-6
Q305	C-5
Q306	C-3
Q307	A-2
Q308	A-2
X302	B-2



6-15. SCHEMATIC DIAGRAM – DISPLAY Section – • See page 19 for Waveforms. • See page 33 for IC Block Diagram.



(Page 22) **D** MAIN BOARD CN302 (AEP, UK, CH)

(Page 22) **C** MAIN BOARD CN307 (AEP, UK, CH)

(Page 26) **I** MAIN BOARD CN302 (EXCEPT AEP, UK, CH)

(Page 26) **H** MAIN BOARD CN307 (EXCEPT AEP, UK, CH)

A MAIN BOARD CN305 (AEP, UK, CH) (Page 21)

F MAIN BOARD CN305 (EXCEPT AEP, UK, CH) (Page 25)

B MAIN BOARD CN303 (AEP, UK, CH) (Page 21)

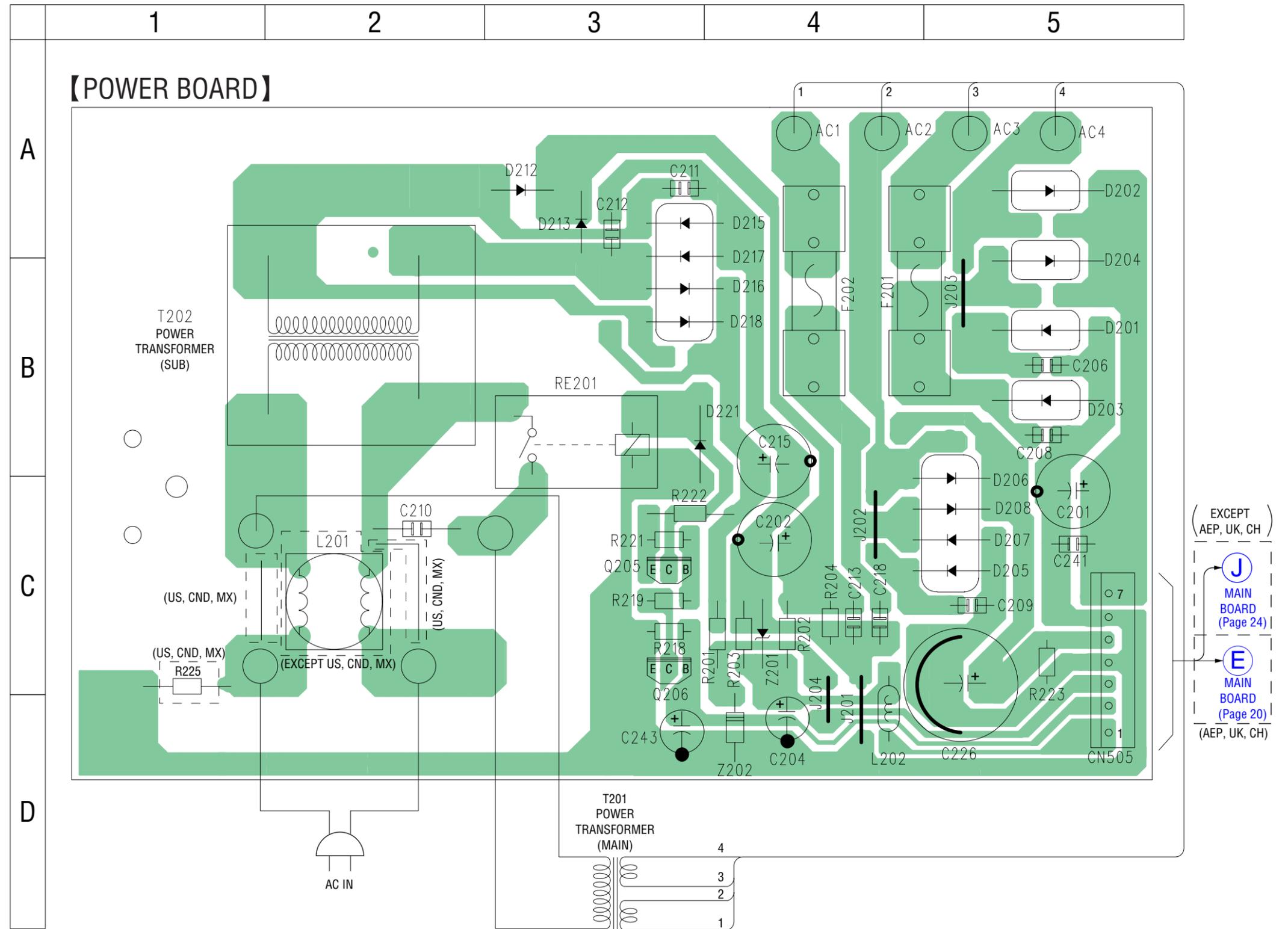
G MAIN BOARD CN303 (EXCEPT AEP, UK, CH) (Page 25)

• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
 no mark : TUNER
 () : CD PLAY
 < > : TAPE PLAY
 * : Impossible to measure

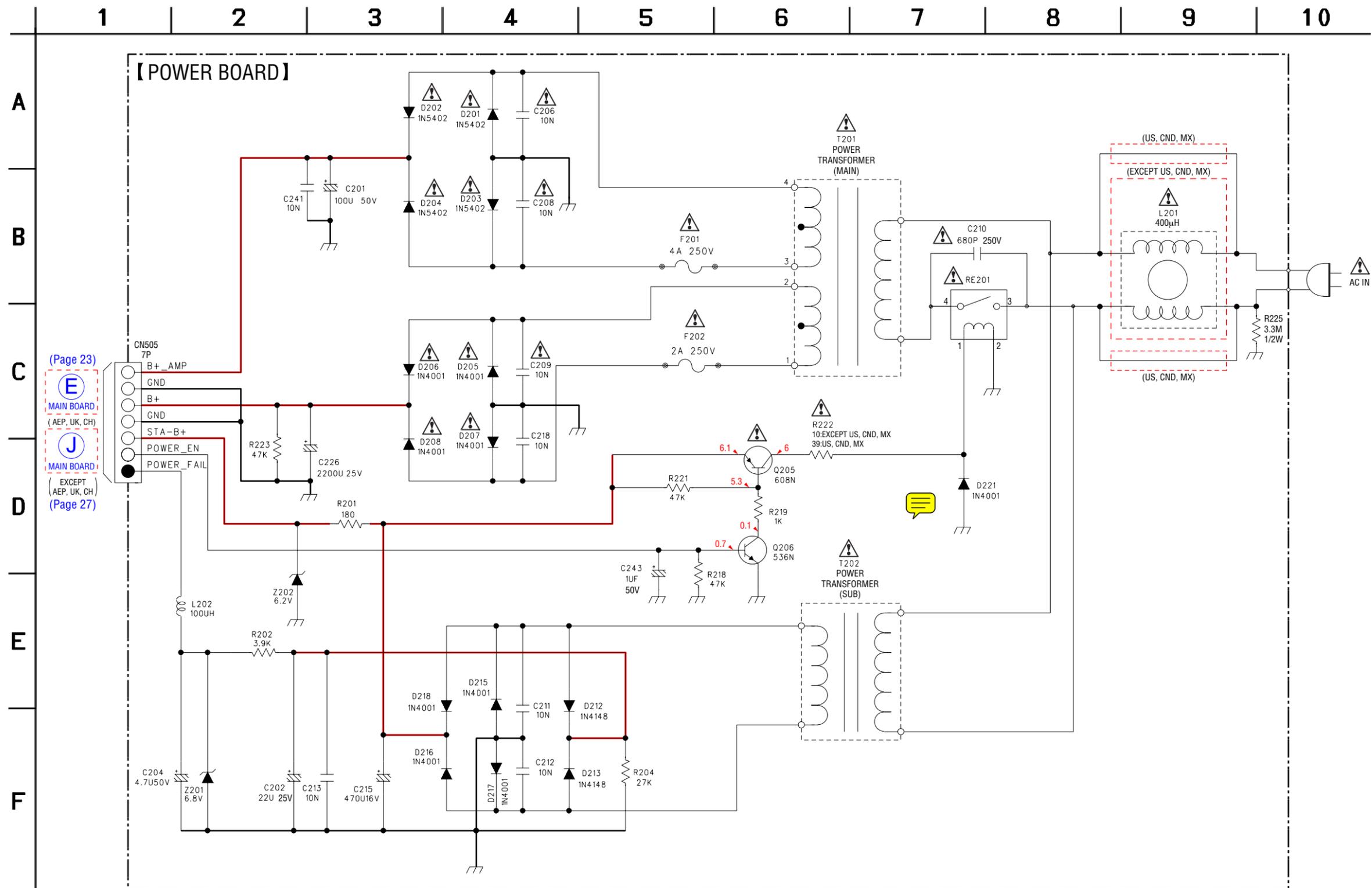
6-16. PRINTED WIRING BOARD – POWER Section –

• Semiconductor Location

Ref. No.	Location
D201	B-5
D202	A-5
D203	B-5
D204	B-5
D205	C-5
D206	C-5
D207	C-5
D208	C-5
D212	A-3
D213	A-3
D215	A-3
D216	B-3
D217	A-3
D218	B-3
D221	B-3
Q205	C-3
Q206	C-3
Z201	C-4



6-17. SCHEMATIC DIAGRAM – POWER Section –



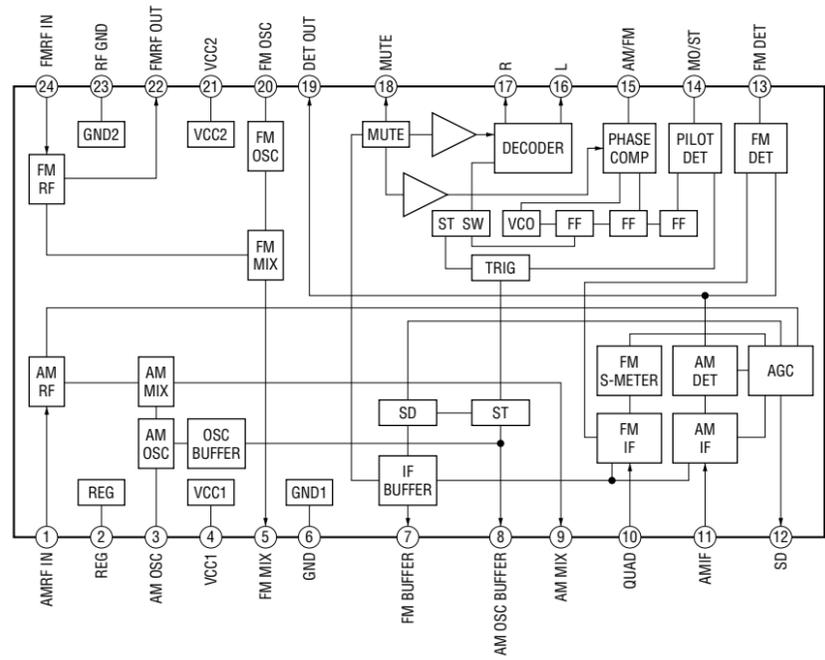
(Page 23)
(E)
 MAIN BOARD
 (AEP, UK, CH)
(J)
 MAIN BOARD
 (EXCEPT
 AEP, UK, CH)
 (Page 27)

• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
 no mark : TUNER

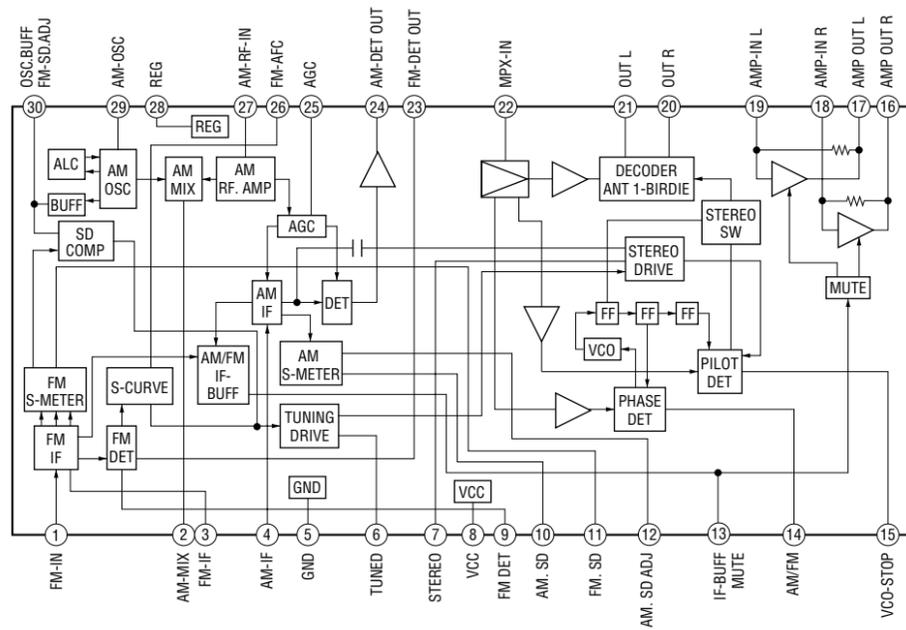
<p>The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>	<p>以阴影和 Δ 标志来识别的零部件在安全方面具有关键性。因此只能以规定号码的零部件来更换。</p>
---	---	---

• IC Block Diagrams
– MAIN Board –

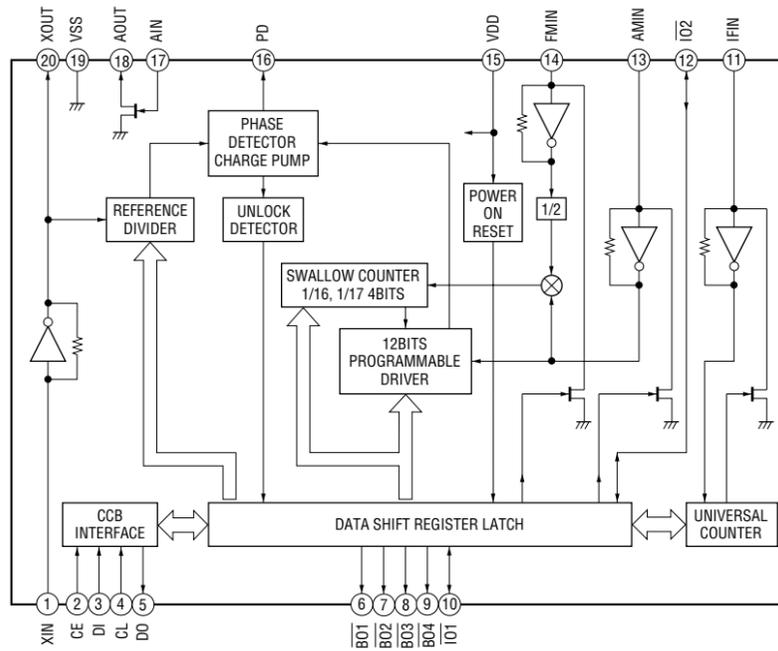
U401 LA1823 (EXCEPT AEP, UK, CH models)



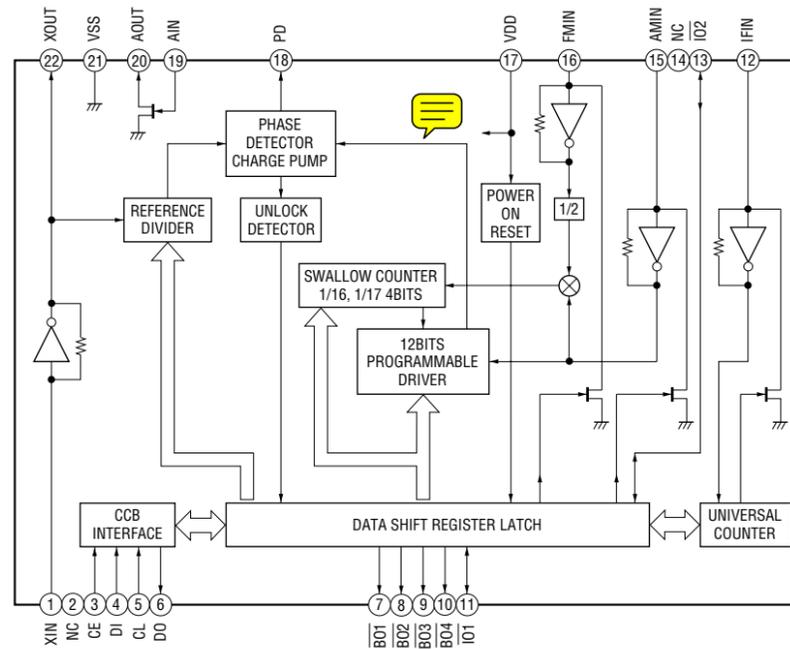
U402 LA1837L (AEP, UK, CH models)



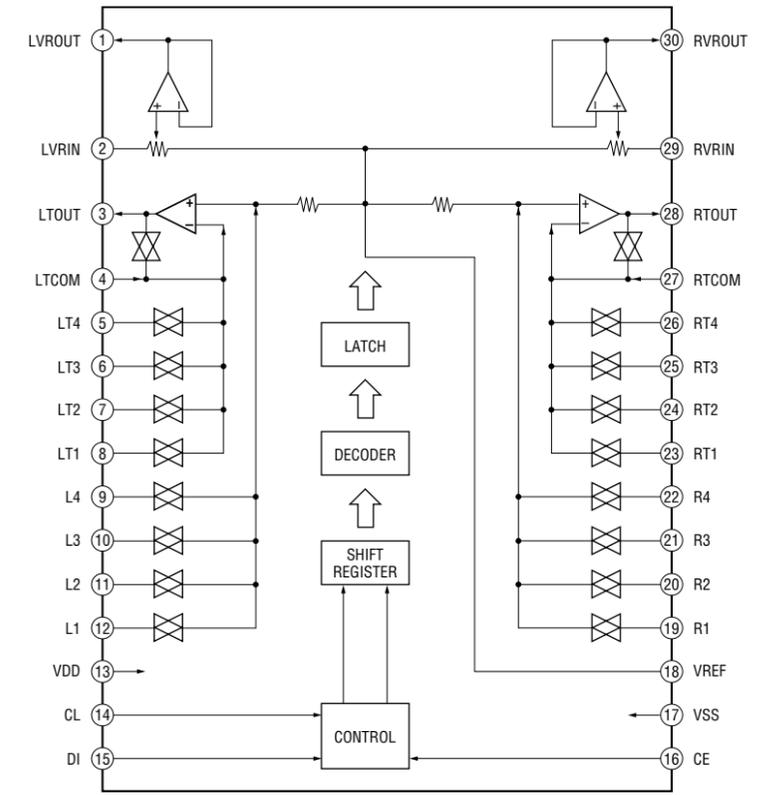
U403 LC7213M-TL-M (AEP, UK, CH models)



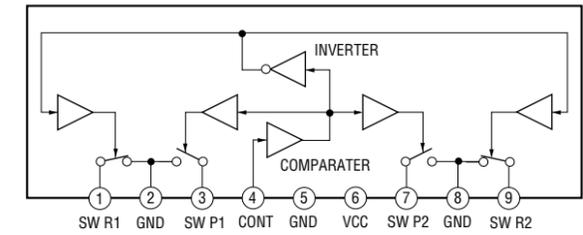
U402 LC72131 (EXCEPT AEP, UK, CH models)



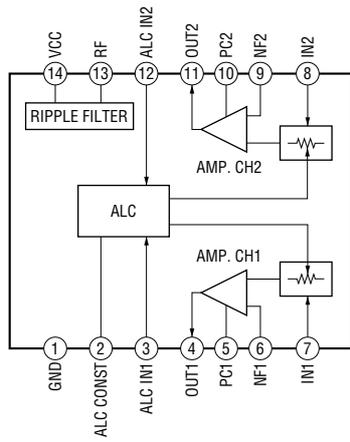
U501 LC75392



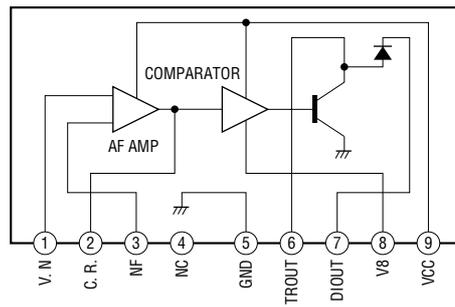
U601 μPC1330HA



U602 AN7312

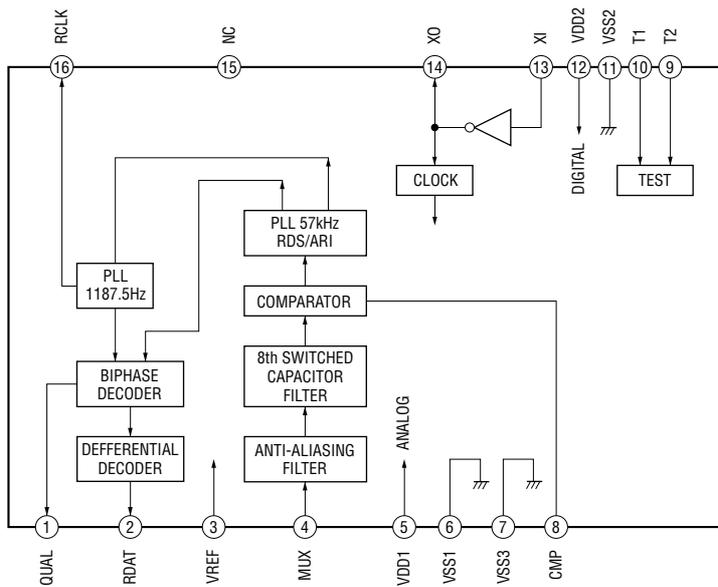


U603 BA335



- DISPLAY Board -

IC305 BU1924F-E2 (AEP, UK models)



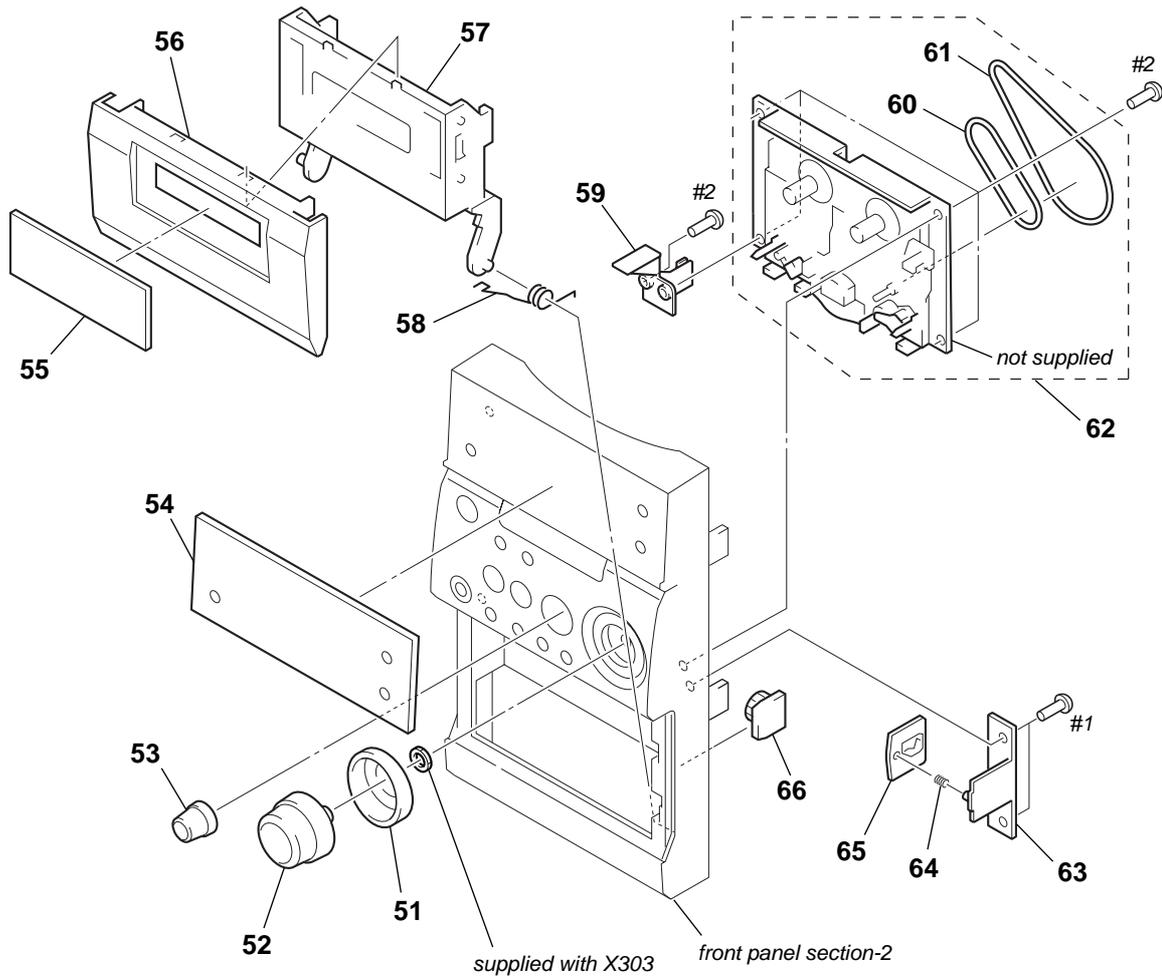
6-18. IC PIN FUNCTION DESCRIPTION

• DISPLAY BOARD IC301 μ PD780306GC-A68-8EU (SYSTEM CONTROLLER, LIQUID CRYSTAL DISPLAY DRIVER)

Pin No.	Pin Name	I/O	Description
1 to 4	KEY2 to KEY5	I	Key input terminal (A/D input)
5	ANALYZER	I	Analyzer level detection signal input terminal (A/D input) Not used
6	STATION	I	Tuning detection signal input terminal
7	RDSDATA	I	Serial data input from the RDS decoder (Used for the AEP, UK models)
8	AVDD	—	Power supply terminal
9	AVREF	I	Reference voltage input terminal
10, 11	CDOUT1, CDOUT2	O	Not used
12	VSS	—	Ground terminal
13	TIME	O	LED drive signal output terminal
14	CDDATA	I/O	Two-way data bus with the CD block
15	CDRESET	O	Reset signal output to the CD block “L”: reset
16	REC-EN	O	REC bias control signal output terminal
17	INPINENA	O	Mega bass on/off selection signal output terminal “H”: mega bass on
18	REC-LED	O	LED drive signal output terminal
19	SOUNDENA	O	chip enable signal output for the LC75392
20	PLLENA	O	PLL chip enable signal output to the FM/AM PLL “H” active
21	MUTE	O	Audio line muting on/off control signal output terminal “H”: muting on
22	POWER	O	System power on/off control signal output terminal “H”: power on
23 to 26	COM0 to COM3	O	Common drive signal output to the liquid crystal display
27	BIAS	O	Bias output for the liquid crystal display drive
28 to 30	VLC0 to VLC2	I	Input terminal for doubler circuit capacitor connection to develop liquid crystal display drive voltage
31	VSS	—	Ground terminal
32 to 61	SEG0 to SEG29	O	Segment drive signal output to the liquid crystal display
62	SEG30	I/O	Segment drive signal output to the liquid crystal display AM frequency select switch input terminal (AM frequency select switch: used for the except AEP, UK, chinese models)
63	SEG31	I/O	Segment drive signal output to the liquid crystal display AM frequency select switch input terminal (AM frequency select switch: used for the except AEP, UK, chinese models)
64	SEG32		Segment drive signal output to the liquid crystal display
65	SEG33	O	Segment drive signal output to the liquid crystal display Not used
66	SEL10	I	Head position detect switch input terminal “L”: reverse direction, “H”: forward direction
67	SEG35	O	Segment drive signal output to the liquid crystal display Not used
68	SEL12	I	Cassette tape detect switch input terminal “L”: no cassette, “H”: cassette in
69	SEG37	O	Segment drive signal output to the liquid crystal display Not used
70	SEL14	I	Rec-proof claw (forward direction) detection signal input from the protect detect switch “L”: recording possible, “H”: protect
71	SEL15	I	Rec-proof claw (reverse direction) detection signal input from the protect detect switch “L”: recording possible, “H”: protect
72	DATAIN	I	Serial data input from the FM/AM PLL
73	DATAOUT	O	Serial data output to the FM/AM PLL and LC75392
74	CLK	O	Serial data transfer clock signal output to the FM/AM PLL and LC75392
75	EEPROMDATA	I/O	Two-way data bus with the EEPROM
76	STEREO	I	FM stereo detection signal input terminal “L”: stereo
77	EEPROMCLK	O	Clock signal output to the EEPROM

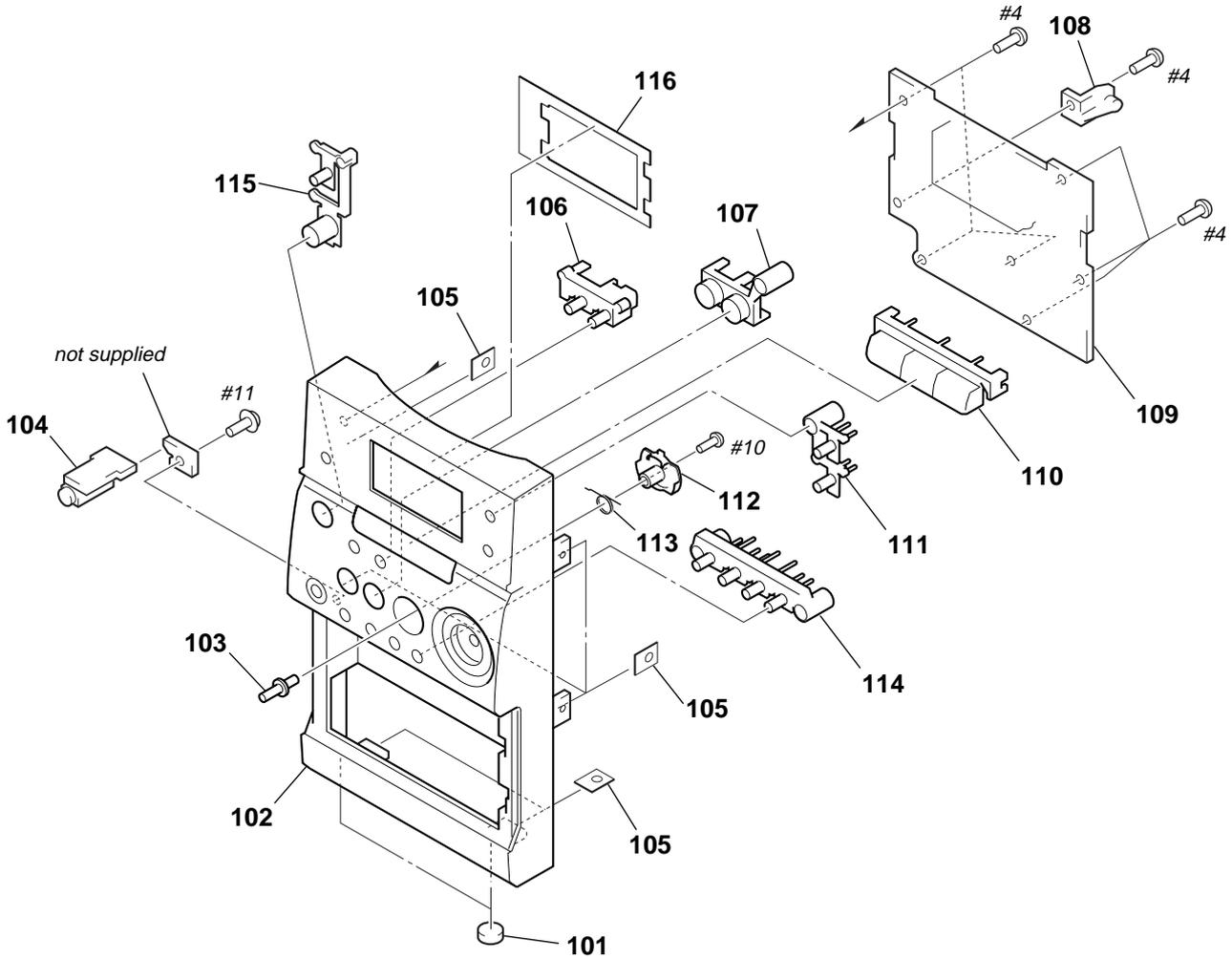
Pin No.	Pin Name	I/O	Description
78	VSS	—	Ground terminal
79	X2	O	Main system clock output terminal (4.194304 MHz)
80	X1	I	Main system clock input terminal (4.194304 MHz)
81	VDD	—	Power supply terminal
82	XT1	I	Sub system clock input terminal (32.768 kHz) Not used
83	XT2	O	Sub system clock output terminal (32.768 kHz) Not used
84	RESET	I	System reset signal input from the reset signal generator “L”: reset For several hundreds msec. after the power supply rises, “L” is input, then it changes to “H”
85	REMOTE	I	Remote control signal input from the remote control receiver
86	PWRFAIL	I	Power failure detection signal input terminal “L”: power failure, “H”: power on
87	RDSCLK	I	Serial data transfer clock signal input from the RDS decoder (Used for the AEP, UK models)
88	CDCLK	I	Serial data transfer clock signal input from the CD block
89	SENSORB	I	Tape sensor input terminal Not used
90	SENSORA	I	Tape play/rec detect sensor input terminal “L” input when the tape play/rec detect
91	CD DOOR SW	I	CD lid open/close detect switch (SW300) input terminal “L”: CD lid is closed
92	CD-EN	O	CD power on/off control signal output terminal
93	SOL	O	Trigger plunger drive signal output terminal “H”: trigger plunger on
94	TU-EN	O	Tuner power on/off control signal output terminal
95	MOTOR-ON	O	Motor control signal output terminal
96	AMS	I	Whether a music is present or not from AMS is detected at auto music sensor “L”: music is not present, “H”: music is present
97	ENCODERA	I	Jog dial pulse input from the rotary encoder (VOLUME) (A phase input)
98	ENCODERB	I	Jog dial pulse input from the rotary encoder (VOLUME) (B phase input)
99	AVSS	—	Ground terminal
100	KEY1	I	Key input terminal (A/D input)

7-2. FRONT PANEL SECTION-1



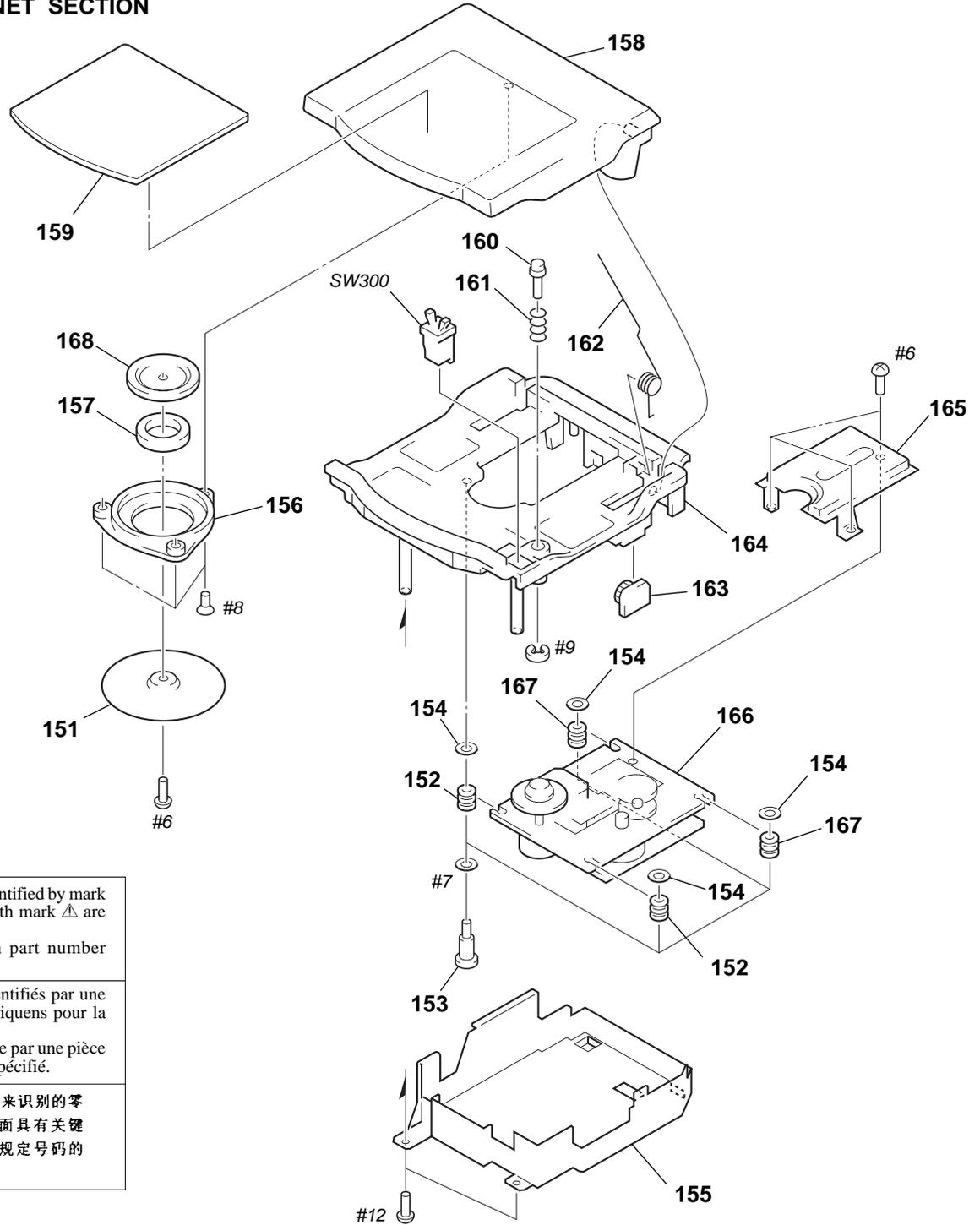
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-241-112-01	VOL.DECORATION RING		60	4-235-777-01	BELT (FR)	
52	4-241-113-01	VOL.ROTARY KNOB		61	3-709-645-01	BELT SR	
53	4-240-261-01	TUNING SWING KNOB		62	1-796-228-11	DECK, MECH (TCM) (CRL3439)	
54	4-241-110-01	DISPLAY WINDOW (AEP, UK, CH)		63	4-236-907-01	CASS LID LATCH HOLDER	
54	4-241-380-01	DISPLAY WINDOW (US, CND, E51, AR, HK)		64	4-236-905-01	CASS LATCH SPRING	
55	4-240-240-01	CASS LID WINDOW		65	4-236-906-01	CASS LID LATCH	
56	4-241-118-01	CASS LID		66	4-236-899-01	DAMPER	
57	4-236-901-01	CASS LID BKT		#1	7-685-534-14	SCREW +BTP 2.6X8 TYPE2 N-S	
58	4-236-904-01	CASS LID SPRING		#2	7-685-647-14	SCREW +BVTP 3X10 TYPE2 SLIT	
59	4-236-915-01	MAIN PWB MOUNTING BKT (A)					

7-3. FRONT PANEL SECTION-2



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	4-235-995-01	RUBBER FOOT		109	A-4730-016-A	DISPLAY BOARD, COMPLETE (E51, AR)	
102	4-241-116-01	FRONT PANEL (AEP, UK, E51, CH, AR)		109	A-4730-017-A	DISPLAY BOARD, COMPLETE (HK)	
102	4-241-716-01	FRONT PANEL (US, CND, HK)		110	4-240-272-01	FUNCTION KNOB	
103	4-240-257-01	TUNING SWING SHAFT		111	4-240-269-01	BASS/MENU KNOB	
104	A-4729-609-A	HEADPHONE BOARD, COMPLETE		112	4-240-258-01	TUNING SWING LEVER	
105	4-235-994-01	PANEL FIXING PLATE		113	4-240-276-01	TUNING KNOB SPRING	
106	4-241-115-01	RECORD/PAUSE KNOB		114	4-240-271-01	PRESET UP/DOWN KNOB	
107	4-241-114-01	PLAY/STOP KNOB		115	4-240-268-01	DISPLAY/POWER KNOB	
108	4-236-916-01	MAIN PWB MOUNTING BKT (B)		116	4-241-291-01	LCD SHIELDING PAPER	
109	A-4729-811-A	DISPLAY BOARD, COMPLETE (CH)		#4	7-685-535-14	SCREW +BTP 2.6X10 TYPE2 N-S	
109	A-4729-607-A	DISPLAY BOARD, COMPLETE (AEP, UK)		#10	7-685-854-04	SCREW +BVTT 2X8 (S)	
109	A-4730-006-A	DISPLAY BOARD, COMPLETE (US, CND)		#11	7-685-135-19	SCREW +P2.6X10 TYPE2 NON-SLIT	

7-4. CD CABINET SECTION



The components identified by mark \triangle or dotted line with mark \triangle are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

以阴影和 \triangle 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	4-235-971-01	PLASTIC COVER		164	4-240-244-01	CD TRAY (AEP, UK, E51, CH, AR, HK)	
152	4-236-280-01	RUBBER, VIBRATION PROOF (PINK)		164	4-241-494-01	CD TRAY (US, CND)	
153	4-235-991-01	PULLEY SCREW		165	4-235-949-01	PU COVER	
* 154	3-509-138-00	CLAMP, SPRING		\triangle 166	1-796-189-11	MECH, CD (CS-21SC-1280)	
155	4-240-255-01	CD COVER HOUSING		167	4-236-281-01	RUBBER, VIBRATION PROOF (ORG)	
156	4-235-948-01	DISC HOLDER BKT		168	4-236-860-01	METAL COVER	
157	1-471-144-11	MAGNET		SW300	1-692-960-21	SWITCH, PUSH (1 KEY) (OPEN/CLOSE)	
158	4-241-109-01	CD LID (T2)		#6	7-685-504-19	SCREW +BTP 2X6 TYPE2 N-S	
159	4-241-108-01	CD LID WINDOW		#7	7-623-916-21	FIBER WASHER 3.3,SMALL	
160	4-235-970-01	NSX1 PUSH ROD		#8	7-685-233-19	SCREW +KTP 2.6X6 TYPE2NON-SLIT	
161	4-235-990-01	CD EJECT SPRING		#9	7-624-106-04	STOP RING 3.0, TYPE-E	
162	4-235-982-01	CD LID SPRING		#12	7-685-646-14	SCREW +BVTP 3X8 TYPE2 SLIT	
163	4-236-899-01	DAMPER					

DISPLAY

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< SHORT >		R340	1-249-437-11	CARBON	47K 5% 1/4W
J306	1-216-864-11	SHORT CHIP	0 (AEP, UK, CH)	R341	1-249-429-11	CARBON	10K 5% 1/4W
J340	1-216-864-11	SHORT CHIP	0	R342	1-249-429-11	CARBON	10K 5% 1/4W
		< COIL >		R343	1-216-845-11	METAL CHIP	100K 5% 1/10W (AEP, UK)
L301	1-410-525-11	INDUCTOR	220uH	R344	1-216-845-11	METAL CHIP	100K 5% 1/10W (AEP, UK)
		< TRANSISTOR >		R345	1-249-417-11	CARBON	1K 5% 1/4W
Q301	8-729-281-53	TRANSISTOR	2SC536NP-F	R346	1-249-417-11	CARBON	1K 5% 1/4W
Q302	8-729-281-53	TRANSISTOR	2SC536NP-F (AEP, UK)	R347	1-249-417-11	CARBON	1K 5% 1/4W
Q304	8-729-281-53	TRANSISTOR	2SC536NP-F	R348	1-216-801-11	METAL CHIP	22 5% 1/10W (AEP, UK)
Q305	8-729-281-53	TRANSISTOR	2SC536NP-F	R349	1-216-813-11	METAL CHIP	220 5% 1/10W (AEP, UK)
Q306	8-729-281-53	TRANSISTOR	2SC536NP-F	R350	1-216-825-11	METAL CHIP	2.2K 5% 1/10W (AEP, UK)
Q307	8-729-281-53	TRANSISTOR	2SC536NP-F (HK)	R351	1-216-821-11	METAL CHIP	1K 5% 1/10W
Q308	8-729-173-38	TRANSISTOR	2SA608SP-G (US, CND, E51, AR)	R352	1-216-821-11	METAL CHIP	1K 5% 1/10W
		< RESISTOR >		R353	1-216-837-11	METAL CHIP	22K 5% 1/10W
R301	1-216-833-11	METAL CHIP	10K 5% 1/10W	R354	1-216-821-11	METAL CHIP	1K 5% 1/10W
R302	1-216-833-11	METAL CHIP	10K 5% 1/10W	R355	1-249-417-11	CARBON	1K 5% 1/4W
R303	1-216-073-91	RES-CHIP	10K 5% 1/10W	R356	1-249-417-11	CARBON	1K 5% 1/4W
R304	1-216-833-11	METAL CHIP	10K 5% 1/10W	R357	1-216-841-11	METAL CHIP	47K 5% 1/10W
R305	1-216-833-11	METAL CHIP	10K 5% 1/10W	R358	1-216-821-11	METAL CHIP	1K 5% 1/10W
R306	1-249-417-11	CARBON	1K 5% 1/4W	R360	1-216-821-11	METAL CHIP	1K 5% 1/10W
R307	1-249-418-11	CARBON	1.2K 5% 1/4W	R361	1-249-417-11	CARBON	1K 5% 1/4W
R308	1-216-823-11	METAL CHIP	1.5K 5% 1/10W	R363	1-216-821-11	METAL CHIP	1K 5% 1/10W
R309	1-216-837-11	METAL CHIP	22K 5% 1/10W	R364	1-216-845-11	METAL CHIP	100K 5% 1/10W
R310	1-216-821-11	METAL CHIP	1K 5% 1/10W	R365	1-216-845-11	METAL CHIP	100K 5% 1/10W
R311	1-216-822-11	METAL CHIP	1.2K 5% 1/10W	R366	1-216-845-11	METAL CHIP	100K 5% 1/10W
R312	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R368	1-216-821-11	METAL CHIP	1K 5% 1/10W
R313	1-216-821-11	METAL CHIP	1K 5% 1/10W	R369	1-216-049-11	RES-CHIP	1K 5% 1/10W
R314	1-216-822-11	METAL CHIP	1.2K 5% 1/10W	R370	1-216-049-11	RES-CHIP	1K 5% 1/10W
R315	1-216-821-11	METAL CHIP	1K 5% 1/10W	R372	1-216-821-11	METAL CHIP	1K 5% 1/10W
R316	1-216-826-11	METAL CHIP	2.7K 5% 1/10W	R373	1-216-837-11	METAL CHIP	22K 5% 1/10W
R317	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R374	1-216-841-11	METAL CHIP	47K 5% 1/10W (US, CND, E51, AR)
R318	1-249-426-11	CARBON	5.6K 5% 1/4W	R375	1-216-841-11	METAL CHIP	47K 5% 1/10W (HK)
R319	1-216-845-11	METAL CHIP	100K 5% 1/10W	R379	1-249-417-11	CARBON	1K 5% 1/4W
R320	1-216-821-11	METAL CHIP	1K 5% 1/10W	R380	1-249-433-11	CARBON	22K 5% 1/4W
R321	1-216-821-11	METAL CHIP	1K 5% 1/10W	R381	1-216-864-11	SHORT CHIP	0
R322	1-216-832-11	METAL CHIP	8.2K 5% 1/10W	R382	1-216-849-11	METAL CHIP	220K 5% 1/10W
R323	1-216-832-11	METAL CHIP	8.2K 5% 1/10W	R384	1-249-429-11	CARBON	10K 5% 1/4W
R324	1-249-409-11	CARBON	220 5% 1/4W	R385	1-216-864-11	SHORT CHIP	0
R325	1-216-849-11	METAL CHIP	220K 5% 1/10W	R386	1-216-073-91	RES-CHIP	10K 5% 1/10W
R326	1-216-821-11	METAL CHIP	1K 5% 1/10W	R387	1-216-821-11	METAL CHIP	1K 5% 1/10W
R327	1-216-837-11	METAL CHIP	22K 5% 1/10W	R388	1-216-841-11	METAL CHIP	47K 5% 1/10W
R328	1-216-815-11	METAL CHIP	330 5% 1/10W	R389	1-216-833-11	METAL CHIP	10K 5% 1/10W
R329	1-216-837-11	METAL CHIP	22K 5% 1/10W	R391	1-249-417-11	CARBON	1K 5% 1/4W
R330	1-216-857-11	METAL CHIP	1M 5% 1/10W	R392	1-249-417-11	CARBON	1K 5% 1/4W
R331	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R394	1-249-393-11	CARBON	10 5% 1/4W (AEP, UK)
R332	1-216-827-11	METAL CHIP	3.3K 5% 1/10W	R395	1-216-864-11	SHORT CHIP	0
R334	1-249-417-11	CARBON	1K 5% 1/4W	R396	1-249-417-11	CARBON	1K 5% 1/4W
R335	1-249-417-11	CARBON	1K 5% 1/4W	R397	1-249-417-11	CARBON	1K 5% 1/4W
R336	1-216-049-11	RES-CHIP	1K 5% 1/10W	R398	1-249-417-11	CARBON	1K 5% 1/4W
R337	1-249-417-11	CARBON	1K 5% 1/4W	R399	1-249-417-11	CARBON	1K 5% 1/4W
R338	1-247-887-00	CARBON	220K 5% 1/4W	RJ303	1-216-295-00	SHORT CHIP	0
R339	1-216-841-11	METAL CHIP	47K 5% 1/10W				

DISPLAY **HEADPHONE** **MAIN**

Ref. No.	Part No.	Description	Remark
RJ312	1-216-295-00	SHORT CHIP	0
RJ319	1-216-295-00	SHORT CHIP	0
RJ320	1-216-864-11	SHORT CHIP	0
RJ326	1-216-864-11	SHORT CHIP	0
RJ351	1-216-864-11	SHORT CHIP	0
RJ356	1-216-295-00	SHORT CHIP	0
RJ361	1-216-295-00	SHORT CHIP	0
RJ362	1-216-295-00	SHORT CHIP	0
< SWITCH >			
SW301	1-570-472-11	SWITCH, KEY BOARD (I/⏏)	
SW302	1-570-472-11	SWITCH, KEY BOARD (TUNER/BAND)	
SW303	1-570-472-11	SWITCH, KEY BOARD (TAPE)	
SW304	1-570-472-11	SWITCH, KEY BOARD (CD)	
SW305	1-570-472-11	SWITCH, KEY BOARD (PLAY MODE, RDS/DIR)	
SW306	1-570-472-11	SWITCH, KEY BOARD (■)	
SW307	1-570-472-11	SWITCH, KEY BOARD (■)	
SW308	1-570-472-11	SWITCH, KEY BOARD (◀▶▶▶)	
SW309	1-570-472-11	SWITCH, KEY BOARD (TUNER MEM/ENTER)	
SW310	1-570-472-11	SWITCH, KEY BOARD (PRESET -)	
SW311	1-570-472-11	SWITCH, KEY BOARD (PRESET +)	
SW312	1-570-472-11	SWITCH, KEY BOARD (DISPLAY)	
SW313	1-554-088-00	SWITCH, KEY BOARD (◀◀◀◀, TUNING -)	
SW314	1-554-088-00	SWITCH, KEY BOARD (▶▶▶▶, TUNING +)	
SW315	1-570-472-11	SWITCH, KEY BOARD (MUSIC MENU)	
SW316	1-570-472-11	SWITCH, KEY BOARD (MEGA BASS)	
SW317	1-570-472-11	SWITCH, KEY BOARD (●)	
< VIBRATOR/ROTARY ENCODER >			
X301	1-795-436-11	VIBRATOR, CRYSTAL (4.194304MHz)	
X302	6-600-092-01	IC RPM7138-V4	
X303	1-476-916-11	ENCODER (VOLUME)	
X304	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz) (AEP, UK)	

A-4729-609-A	HEADPHONE BOARD, COMPLETE		

< CAPACITOR >			
C584	1-161-494-00	CERAMIC	0.022uF 25V
C585	1-161-494-00	CERAMIC	0.022uF 25V
< JACK >			
H501	1-815-813-11	JACK (LARGE TYPE)	
< COIL >			
L501	1-410-525-11	INDUCTOR	220uH
L502	1-410-525-11	INDUCTOR	220uH
L503	1-410-324-11	INDUCTOR	4.7uH
L504	1-410-525-11	INDUCTOR	220uH

Ref. No.	Part No.	Description	Remark
A-4729-608-A	MAIN BOARD, COMPLETE (AEP, UK)		
A-4729-812-A	MAIN BOARD, COMPLETE (CH)		
A-4730-007-A	MAIN BOARD, COMPLETE		(EXCEPT AEP, UK, CH)

< BAND-PASS FILTER >			
BPF401	1-234-704-11	FILTER, BAND PASS (FM)	(EXCEPT AEP, UK, CH)
< CAPACITOR >			
C101	1-126-956-91	ELECT	0.1uF 20% 50V
C102	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
C401	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
C402	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V
(AEP, UK, CH)			
C402	1-162-921-11	CERAMIC CHIP	33PF 5% 50V
(EXCEPT AEP, UK, CH)			
C403	1-163-220-11	CERAMIC CHIP	3PF 0.25PF 50V
(AEP, UK, CH)			
C404	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V
(AEP, UK, CH)			
C404	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
(EXCEPT AEP, UK, CH)			
C405	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V
(EXCEPT AEP, UK, CH)			
C405	1-163-101-00	CERAMIC CHIP	22PF 5% 50V
(AEP, UK, CH)			
C406	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V
(AEP, UK, CH)			
C406	1-128-551-11	ELECT	22uF 20% 25V
(EXCEPT AEP, UK, CH)			
C407	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
C408	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V
(AEP, UK, CH)			
C408	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
(EXCEPT AEP, UK, CH)			
C409	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V
(EXCEPT AEP, UK, CH)			
C409	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
(AEP, UK, CH)			
C410	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
(EXCEPT AEP, UK, CH)			
C410	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V
(AEP, UK, CH)			
C411	1-162-917-11	CERAMIC CHIP	15PF 5% 50V
(EXCEPT AEP, UK, CH)			
C412	1-162-907-11	CERAMIC CHIP	2PF 0.25PF 50V
(EXCEPT AEP, UK, CH)			
C413	1-126-964-11	ELECT	10uF 20% 50V
(AEP, UK, CH)			
C413	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
(EXCEPT AEP, UK, CH)			
C414	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V
(AEP, UK, CH)			
C414	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
(EXCEPT AEP, UK, CH)			
C415	1-126-962-11	ELECT	3.3uF 20% 50V
(AEP, UK, CH)			
C415	1-162-979-11	CERAMIC CHIP	0.0027uF 10% 50V
(EXCEPT AEP, UK, CH)			

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C416	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V (AEP, UK, CH)	C434	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V (EXCEPT AEP, UK, CH)
C416	1-126-963-11	ELECT	4.7uF 20% 50V (EXCEPT AEP, UK, CH)	C434	1-126-961-11	ELECT	2.2uF 20% 50V (AEP, UK, CH)
C417	1-126-933-11	ELECT	100uF 20% 16V (AEP, UK, CH)	C435	1-126-934-11	ELECT	220uF 20% 16V (EXCEPT AEP, UK, CH)
C417	1-126-959-11	ELECT	0.47uF 20% 50V (EXCEPT AEP, UK, CH)	C435	1-126-961-11	ELECT	2.2uF 20% 50V (AEP, UK, CH)
C418	1-126-933-11	ELECT	100uF 20% 16V (AEP, UK, CH)	C436	1-126-794-11	ELECT	4.7uF 20% 50V (AEP, UK, CH)
C418	1-126-960-11	ELECT	1uF 20% 50V (EXCEPT AEP, UK, CH)	C436	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (EXCEPT AEP, UK, CH)
C419	1-126-957-11	ELECT	0.22uF 20% 50V (EXCEPT AEP, UK, CH)	C437	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V (AEP, UK, CH)
C419	1-163-021-11	CERAMIC CHIP	0.01uF 10% 50V (AEP, UK, CH)	C437	1-163-227-11	CERAMIC CHIP	10PF 0.5PF 50V (EXCEPT AEP, UK, CH)
C420	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V (EXCEPT AEP, UK, CH)	C438	1-126-514-11	ELECT	22uF 20% 16V (AEP, UK, CH)
C420	1-163-133-00	CERAMIC CHIP	470PF 5% 50V (AEP, UK, CH)	C438	1-163-229-11	CERAMIC CHIP	12PF 5% 50V (EXCEPT AEP, UK, CH)
C421	1-163-006-11	CERAMIC CHIP	560PF 10% 50V (AEP, UK, CH)	C439	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V (EXCEPT AEP, UK, CH)
C421	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V (EXCEPT AEP, UK, CH)	C439	1-126-935-11	ELECT	470uF 20% 16V (AEP, UK, CH)
C422	1-126-961-11	ELECT	2.2uF 20% 50V (AEP, UK, CH)	C440	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V (AEP, UK, CH)
C422	1-163-220-11	CERAMIC CHIP	3PF 0.25PF 50V (EXCEPT AEP, UK, CH)	C440	1-126-961-11	ELECT	2.2uF 20% 50V (EXCEPT AEP, UK, CH)
C423	1-115-185-11	CERAMIC CHIP	0.033uF 10% 50V (AEP, UK, CH)	C441	1-126-960-11	ELECT	1uF 20% 50V (AEP, UK, CH)
C423	1-163-101-00	CERAMIC CHIP	22PF 5% 50V (EXCEPT AEP, UK, CH)	C441	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (EXCEPT AEP, UK, CH)
C424	1-126-514-11	ELECT	22uF 20% 16V (AEP, UK, CH)	C442	1-115-870-11	ELECT	0.47uF 20% 50V (AEP, UK, CH)
C425	1-126-962-11	ELECT	3.3uF 20% 50V (EXCEPT AEP, UK, CH)	C442	1-126-933-11	ELECT	100uF 20% 16V (EXCEPT AEP, UK, CH)
C425	1-126-964-11	ELECT	10uF 20% 50V (AEP, UK, CH)	C443	1-126-960-11	ELECT	1uF 20% 50V (AEP, UK, CH)
C426	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V (EXCEPT AEP, UK, CH)	C443	1-163-021-11	CERAMIC CHIP	0.01uF 10% 50V (EXCEPT AEP, UK, CH)
C426	1-126-967-11	ELECT	47uF 20% 50V (AEP, UK, CH)	C444	1-130-483-00	MYLAR	0.01uF 5% 50V (AEP, UK, CH)
C427	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V (AEP, UK, CH)	C444	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (EXCEPT AEP, UK, CH)
C428	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V (AEP, UK, CH)	C445	1-126-933-11	ELECT	100uF 20% 16V (EXCEPT AEP, UK, CH)
C429	1-126-963-11	ELECT	4.7uF 20% 50V (EXCEPT AEP, UK, CH)	C445	1-130-483-00	MYLAR	0.01uF 5% 50V (AEP, UK, CH)
C429	1-163-037-11	CERAMIC CHIP	0.022uF 10% 25V (AEP, UK, CH)	C446	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V (EXCEPT AEP, UK, CH)
C430	1-126-961-11	ELECT	2.2uF 20% 50V (EXCEPT AEP, UK, CH)	C446	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (AEP, UK, CH)
C431	1-126-961-11	ELECT	2.2uF 20% 50V (EXCEPT AEP, UK, CH)	C447	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V (EXCEPT AEP, UK, CH)
C432	1-126-964-11	ELECT	10uF 20% 50V (AEP, UK, CH)	C447	1-126-933-11	ELECT	100uF 20% 16V (AEP, UK, CH)
C432	1-130-471-00	MYLAR	0.001uF 5% 50V (EXCEPT AEP, UK, CH)	C448	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V (AEP, UK, CH)
C433	1-126-961-11	ELECT	2.2uF 20% 50V (AEP, UK, CH)	C448	1-126-933-11	ELECT	100uF 20% 16V (EXCEPT AEP, UK, CH)
C433	1-130-471-00	MYLAR	0.001uF 5% 50V (EXCEPT AEP, UK, CH)	C449	1-126-933-11	ELECT	100uF 20% 16V (EXCEPT AEP, UK, CH)

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C449	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (AEP, UK, CH)	C520	1-130-479-00	MYLAR	0.0047uF 5% 50V
C450	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V (EXCEPT AEP, UK, CH)	C521	1-130-479-00	MYLAR	0.0047uF 5% 50V
C450	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (AEP, UK, CH)	C522	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
C451	1-126-961-11	ELECT	2.2uF 20% 50V (AEP, UK, CH)	C523	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
C451	1-126-967-11	ELECT	47uF 20% 50V (EXCEPT AEP, UK, CH)	C524	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
C452	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (EXCEPT AEP, UK, CH)	C525	1-163-117-00	CERAMIC CHIP	100PF 5% 50V
C452	1-163-229-11	CERAMIC CHIP	12PF 5% 50V (AEP, UK, CH)	C526	1-163-227-11	CERAMIC CHIP	10PF 0.5PF 50V
C453	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V (EXCEPT AEP, UK, CH)	C527	1-163-227-11	CERAMIC CHIP	10PF 0.5PF 50V
C453	1-163-229-11	CERAMIC CHIP	12PF 5% 50V (AEP, UK, CH)	C528	1-130-489-00	MYLAR	0.033uF 5% 50V
C454	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V (AEP, UK, CH)	C529	1-130-489-00	MYLAR	0.033uF 5% 50V
C454	1-130-481-00	MYLAR	0.0068uF 5% 50V (EXCEPT AEP, UK, CH)	C530	1-163-121-00	CERAMIC CHIP	150PF 5% 50V
C455	1-126-933-11	ELECT	100uF 20% 16V (AEP, UK, CH)	C531	1-163-121-00	CERAMIC CHIP	150PF 5% 50V
C455	1-130-481-00	MYLAR	0.0068uF 5% 50V (EXCEPT AEP, UK, CH)	C532	1-126-794-11	ELECT	4.7uF 20% 50V (AEP, UK, CH)
C456	1-162-923-11	CERAMIC CHIP	47PF 5% 50V (EXCEPT AEP, UK, CH)	C532	1-126-963-11	ELECT	4.7uF 20% 50V (EXCEPT AEP, UK, CH)
C456	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (AEP, UK)	C533	1-126-794-11	ELECT	4.7uF 20% 50V (AEP, UK, CH)
C457	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V (AEP, UK, CH)	C533	1-126-963-11	ELECT	4.7uF 20% 50V (EXCEPT AEP, UK, CH)
C458	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V (AEP, UK, CH)	C534	1-126-794-11	ELECT	4.7uF 20% 50V (AEP, UK, CH)
C459	1-126-933-11	ELECT	100uF 20% 16V (AEP, UK, CH)	C534	1-126-963-11	ELECT	4.7uF 20% 50V (EXCEPT AEP, UK, CH)
C460	1-126-514-11	ELECT	22uF 20% 16V (AEP, UK, CH)	C535	1-126-794-11	ELECT	4.7uF 20% 50V (AEP, UK, CH)
C460	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (EXCEPT AEP, UK, CH)	C535	1-126-963-11	ELECT	4.7uF 20% 50V (EXCEPT AEP, UK, CH)
C461	1-163-021-11	CERAMIC CHIP	0.01uF 10% 50V (AEP, UK, CH)	C536	1-126-961-11	ELECT	2.2uF 20% 50V
C501	1-126-960-11	ELECT	1uF 20% 50V	C537	1-126-961-11	ELECT	2.2uF 20% 50V
C502	1-126-960-11	ELECT	1uF 20% 50V	C538	1-126-961-11	ELECT	2.2uF 20% 50V
C503	1-164-159-11	CERAMIC	0.1uF 50V	C539	1-126-961-11	ELECT	2.2uF 20% 50V
C504	1-164-159-11	CERAMIC	0.1uF 50V	C540	1-126-959-11	ELECT	0.47uF 20% 50V
C505	1-164-159-11	CERAMIC	0.1uF 50V	C541	1-126-959-11	ELECT	0.47uF 20% 50V
C506	1-164-159-11	CERAMIC	0.1uF 50V	C542	1-126-794-11	ELECT	4.7uF 20% 50V
C507	1-126-934-11	ELECT	220uF 20% 16V	C544	1-115-870-11	ELECT	0.47uF 20% 50V
C508	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V	C545	1-115-870-11	CERAMIC CHIP	0.001uF 10% 50V
C509	1-104-661-91	ELECT	330uF 20% 16V	C546	1-126-964-11	ELECT	10uF 20% 50V
C510	1-164-159-11	CERAMIC	0.1uF 50V	C547	1-126-960-11	ELECT	1uF 20% 50V
C511	1-164-159-11	CERAMIC	0.1uF 50V	C548	1-127-876-21	CERAMIC	0.01uF 10% 50V
C512	1-130-491-00	MYLAR	0.047uF 5% 50V	C549	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V
C513	1-130-491-00	MYLAR	0.047uF 5% 50V	C550	1-163-133-00	CERAMIC CHIP	470PF 5% 50V
C514	1-163-117-00	CERAMIC CHIP	100PF 5% 50V	C551	1-163-133-00	CERAMIC CHIP	470PF 5% 50V
C515	1-163-117-00	CERAMIC CHIP	100PF 5% 50V	C552	1-126-960-11	ELECT	1uF 20% 50V
C516	1-130-487-00	MYLAR	0.022uF 5% 50V	C553	1-126-960-11	ELECT	1uF 20% 50V
C517	1-130-487-00	MYLAR	0.022uF 5% 50V	C554	1-104-665-11	ELECT	100uF 20% 25V
C518	1-130-480-00	MYLAR	0.0056uF 5% 50V	C555	1-104-665-11	ELECT	100uF 20% 25V
C519	1-130-480-00	MYLAR	0.0056uF 5% 50V	C556	1-163-133-00	CERAMIC CHIP	470PF 5% 50V
				C557	1-163-133-00	CERAMIC CHIP	470PF 5% 50V
				C558	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
				C559	1-128-550-11	ELECT	2200uF 20% 50V
				C560	1-104-665-11	ELECT	100uF 20% 25V
				C561	1-126-942-61	ELECT	1000uF 20% 25V
				C562	1-126-942-61	ELECT	1000uF 20% 25V
				C563	1-130-495-00	MYLAR	0.1uF 5% 50V
				C564	1-130-495-00	MYLAR	0.1uF 5% 50V
				C565	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
				C566	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V
				C567	1-126-934-11	ELECT	220uF 20% 16V

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C568	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	C630	1-126-964-11	ELECT	10uF	20%	50V
C569	1-126-794-11	ELECT	4.7uF	20%	50V	C631	1-126-934-11	ELECT	220uF	20%	16V
					(AEP, UK, CH)	C632	1-164-159-11	CERAMIC	0.1uF		50V
C569	1-126-963-11	ELECT	4.7uF	20%	50V	C633	1-126-960-11	ELECT	1uF	20%	50V
					(EXCEPT AEP, UK, CH)	C634	1-126-960-11	ELECT	1uF	20%	50V
C570	1-126-794-11	ELECT	4.7uF	20%	50V	C635	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
					(AEP, UK, CH)	C636	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C570	1-126-963-11	ELECT	4.7uF	20%	50V	C637	1-126-964-11	ELECT	10uF	20%	50V
					(EXCEPT AEP, UK, CH)	C638	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C571	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	C639	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C572	1-163-133-00	CERAMIC CHIP	470PF	5%	50V	C640	1-126-934-11	ELECT	220uF	20%	16V
C573	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	C641	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C574	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	C642	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C575	1-126-933-11	ELECT	100uF	20%	16V	C643	1-130-486-00	MYLAR	0.018uF	10%	50V
C576	1-126-933-11	ELECT	100uF	20%	16V	C644	1-130-483-00	MYLAR	0.01uF	5%	50V
C577	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	C645	1-130-471-00	MYLAR	0.001uF	5%	50V
C578	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	C646	1-130-471-00	MYLAR	0.001uF	5%	50V
C579	1-126-934-11	ELECT	220uF	20%	16V	C647	1-126-933-11	ELECT	100uF	20%	16V
C580	1-126-934-11	ELECT	220uF	20%	16V	C648	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C581	1-130-495-00	MYLAR	0.1uF	5%	50V	C649	1-126-934-11	ELECT	220uF	20%	16V
C582	1-130-495-00	MYLAR	0.1uF	5%	50V	C650	1-126-933-11	ELECT	100uF	20%	16V
C583	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	C651	1-126-960-11	ELECT	1uF	20%	50V
C586	1-126-934-11	ELECT	220uF	20%	16V	C652	1-126-794-11	ELECT	4.7uF	20%	50V
C601	1-163-121-00	CERAMIC CHIP	150PF	5%	50V						(AEP, UK, CH)
C602	1-163-121-00	CERAMIC CHIP	150PF	5%	50V	C652	1-126-963-11	ELECT	4.7uF	20%	50V
C603	1-130-473-00	MYLAR	0.0015uF	5%	50V						(EXCEPT AEP, UK, CH)
C604	1-130-473-00	MYLAR	0.0015uF	5%	50V	C653	1-115-870-11	ELECT	0.47uF	20%	50V
C605	1-126-960-11	ELECT	1uF	20%	50V						(AEP, UK, CH)
C606	1-126-960-11	ELECT	1uF	20%	50V	C653	1-126-959-11	ELECT	0.47uF	20%	50V
C607	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V						(EXCEPT AEP, UK, CH)
C608	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V	C654	1-130-483-00	MYLAR	0.01uF	5%	50V
C609	1-126-960-11	ELECT	1uF	20%	50V	C655	1-130-483-00	MYLAR	0.01uF	5%	50V
C610	1-126-960-11	ELECT	1uF	20%	50V	C656	1-126-933-11	ELECT	100uF	20%	16V
C611	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	C657	1-126-934-11	ELECT	220uF	20%	16V
C612	1-163-117-00	CERAMIC CHIP	100PF	5%	50V	C658	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C613	1-126-934-11	ELECT	220uF	20%	16V	C659	1-126-934-11	ELECT	220uF	20%	16V
C614	1-126-934-11	ELECT	220uF	20%	16V	C660	1-126-960-11	ELECT	1uF	20%	50V
C615	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	C661	1-126-960-11	ELECT	1uF	20%	50V
C616	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	100V	C662	1-126-961-11	ELECT	2.2uF	20%	50V
C617	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	C663	1-126-961-11	ELECT	2.2uF	20%	50V
C618	1-163-003-11	CERAMIC CHIP	330PF	10%	50V	C664	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C619	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V	C670	1-104-661-91	ELECT	330uF	20%	16V
C620	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V	C671	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C621	1-130-493-00	MYLAR	0.068uF	5%	50V						(EXCEPT AEP, UK, CH)
C622	1-130-493-00	MYLAR	0.068uF	5%	50V	C672	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
C623	1-126-794-11	ELECT	4.7uF	20%	50V	C801	1-126-933-11	ELECT	100uF	20%	16V
					(AEP, UK, CH)	C802	1-126-934-11	ELECT	220uF	20%	16V
C623	1-126-963-11	ELECT	4.7uF	20%	50V	C803	1-126-960-11	ELECT	1uF	20%	50V
					(EXCEPT AEP, UK, CH)	C804	1-126-934-11	ELECT	220uF	20%	16V
C624	1-126-794-11	ELECT	4.7uF	20%	50V	C805	1-126-933-11	ELECT	100uF	20%	16V
					(AEP, UK, CH)	C806	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C624	1-126-963-11	ELECT	4.7uF	20%	50V	C807	1-126-964-11	ELECT	10uF	20%	50V
					(EXCEPT AEP, UK, CH)	C808	1-104-665-11	ELECT	100uF	20%	25V
C625	1-130-491-00	MYLAR	0.047uF	5%	50V	C810	1-126-964-11	ELECT	10uF	20%	50V
C626	1-130-491-00	MYLAR	0.047uF	5%	50V						(AEP, UK, CH)
C627	1-126-956-91	ELECT	0.1uF	20%	50V	C811	1-126-514-11	ELECT	22uF	20%	16V
C628	1-126-956-91	ELECT	0.1uF	20%	50V						(AEP, UK, CH)
C629	1-126-967-11	ELECT	47uF	20%	50V	C812	1-163-037-11	CERAMIC CHIP	0.022uF	10%	25V
											(AEP, UK, CH)

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C813	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	(EXCEPT AEP, UK, CH)	D806	8-719-991-33	DIODE 1SS133T-77	
C814	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	(AEP, UK, CH)	D808	8-719-991-33	DIODE 1SS133T-77	
C903	1-162-294-31	CERAMIC 0.001uF 10% 50V	(EXCEPT AEP, UK, CH)	D904	8-719-991-33	DIODE 1SS133T-77	
		< CERAMIC FILTER >		D905	8-719-991-33	DIODE 1SS133T-77	
CF401	1-795-437-11	FILTER, CERAMIC				< COIL >	
CF402	1-795-437-11	FILTER, CERAMIC (AEP, UK, CH)		L401	1-410-509-11	INDUCTOR 10uH (AEP, UK, CH)	
CF403	1-795-437-11	FILTER, CERAMIC (AEP, UK, CH)		L401	1-424-880-11	COIL (FM) (EXCEPT AEP, UK, CH)	
CF404	1-795-397-11	FILTER, CERAMIC		L402	1-410-509-11	INDUCTOR 10uH (AEP, UK, CH)	
CF406	1-795-396-11	DISCRIMINATOR, CERAMIC	(EXCEPT AEP, UK, CH)	L402	1-424-879-11	COIL (FM) (EXCEPT AEP, UK, CH)	
		< CONNECTOR >		L403	1-410-509-11	INDUCTOR 10uH	
* CN101	1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P		L404	1-410-509-11	INDUCTOR 10uH (AEP, UK, CH)	
* CN302	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P		L405	1-410-509-11	INDUCTOR 10uH (EXCEPT AEP, UK, CH)	
* CN303	1-564-713-11	PIN, CONNECTOR (SMALL TYPE) 11P		L406	1-410-509-11	INDUCTOR 10uH (EXCEPT AEP, UK, CH)	
* CN305	1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P	(EXCEPT AEP, UK, CH)	L407	1-424-936-11	COIL (AM ANT) (EXCEPT AEP, UK, CH)	
* CN305	1-564-713-11	PIN, CONNECTOR (SMALL TYPE) 11P	(AEP, UK, CH)	L408	1-424-935-11	COIL (AM OSC) (EXCEPT AEP, UK, CH)	
* CN307	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P		L412	1-410-509-11	INDUCTOR 10uH (EXCEPT AEP, UK, CH)	
CN401	1-694-848-11	TERMINAL BOARD (ANT FM)	(FM ANT 75Ω COAXIAL) (AEP, UK, CH)	L505	1-424-945-11	INDUCTOR 8uH (AEP, UK, CH)	
CN401	1-815-968-11	CONNECTOR (F TYPE) (FM ANT 75Ω COAXIAL)	(EXCEPT AEP, UK, CH)	L506	1-424-945-11	INDUCTOR 8uH (AEP, UK, CH)	
CN402	1-778-310-11	PLUG, CONNECTOR 2P	(SPEAKER IMPEDANCE USE 8Ω) (AM ANT)	L601	1-424-946-11	INDUCTOR 47mH (AEP, UK, CH)	
CN503	1-537-238-11	TERMINAL BOARD		L602	1-424-946-11	INDUCTOR 47mH (AEP, UK, CH)	
CN504	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P		L603	1-424-933-11	COIL (BIAS)	
* CN601	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P				< TRANSISTOR >	
		< DIODE >		Q401	8-729-119-78	TRANSISTOR 2SC2785-HFE	(EXCEPT AEP, UK, CH)
D401	8-719-991-33	DIODE 1SS133T-77		Q401	8-729-281-53	TRANSISTOR 2SC536NP-F (AEP, UK, CH)	
D402	8-719-991-33	DIODE 1SS133T-77		Q402	8-729-281-53	TRANSISTOR 2SC536NP-F (AEP, UK, CH)	
D403	8-719-800-09	DIODE 1SV101 (EXCEPT AEP, UK, CH)		Q403	8-729-281-53	TRANSISTOR 2SC536NP-F	(EXCEPT AEP, UK, CH)
D403	8-719-991-33	DIODE 1SS133T-77 (AEP, UK, CH)		Q403	8-729-823-13	TRANSISTOR 2SC2999D-SPA-AC	(AEP, UK, CH)
D404	8-719-800-09	DIODE 1SV101 (EXCEPT AEP, UK, CH)		Q404	8-729-281-53	TRANSISTOR 2SC536NP-F	
D404	8-719-991-33	DIODE 1SS133T-77 (AEP, UK, CH)		Q405	8-729-116-82	TRANSISTOR 2SD1616-L	(EXCEPT AEP, UK, CH)
D405	8-719-085-35	DIODE SVC348T (AEP, UK, CH)		Q405	8-729-823-13	TRANSISTOR 2SC2999D-SPA-AC	(AEP, UK)
D405	8-719-991-33	DIODE 1SS133T-77 (EXCEPT AEP, UK, CH)		Q406	8-729-173-38	TRANSISTOR 2SA608SP-G	(EXCEPT AEP, UK, CH)
D406	8-719-991-33	DIODE 1SS133T-77 (EXCEPT AEP, UK, CH)		Q406	8-729-281-53	TRANSISTOR 2SC536NP-F (AEP, UK, CH)	
D407	8-719-085-35	DIODE SVC348T (EXCEPT AEP, UK, CH)		Q407	8-729-281-53	TRANSISTOR 2SC536NP-F	(EXCEPT AEP, UK, CH)
D501	8-719-991-33	DIODE 1SS133T-77		Q501	8-729-905-50	TRANSISTOR DTC343TS-TP	
D502	8-719-991-33	DIODE 1SS133T-77		Q502	8-729-905-50	TRANSISTOR DTC343TS-TP	
D503	8-719-991-33	DIODE 1SS133T-77		Q503	8-729-281-53	TRANSISTOR 2SC536NP-F	
D505	8-719-991-33	DIODE 1SS133T-77		Q504	8-729-281-53	TRANSISTOR 2SC536NP-F	
D506	8-719-991-33	DIODE 1SS133T-77		Q505	8-729-905-50	TRANSISTOR DTC343TS-TP	
D507	8-719-991-33	DIODE 1SS133T-77		Q506	8-729-905-50	TRANSISTOR DTC343TS-TP	
D508	8-719-991-33	DIODE 1SS133T-77		Q601	8-729-281-53	TRANSISTOR 2SC536NP-F	
D601	8-719-991-33	DIODE 1SS133T-77		Q602	8-729-281-53	TRANSISTOR 2SC536NP-F	
D603	8-719-991-33	DIODE 1SS133T-77		Q603	8-729-281-53	TRANSISTOR 2SC536NP-F	
D604	8-719-991-33	DIODE 1SS133T-77		Q604	8-729-281-53	TRANSISTOR 2SC536NP-F	
D605	8-719-991-33	DIODE 1SS133T-77		Q605	8-729-281-53	TRANSISTOR 2SC536NP-F	
D801	8-719-991-33	DIODE 1SS133T-77		Q606	8-729-281-53	TRANSISTOR 2SC536NP-F	
D802	8-719-991-33	DIODE 1SS133T-77		Q607	8-729-281-53	TRANSISTOR 2SC536NP-F	
D803	8-719-991-33	DIODE 1SS133T-77 (AEP, UK, CH)		Q608	8-729-281-53	TRANSISTOR 2SC536NP-F	
D804	8-719-991-33	DIODE 1SS133T-77		Q609	8-729-281-53	TRANSISTOR 2SC536NP-F	
				Q610	8-729-281-53	TRANSISTOR 2SC536NP-F	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q611	8-729-281-53	TRANSISTOR	2SC536NP-F	R410	1-216-101-00	METAL CHIP	150K 5% 1/10W (EXCEPT AEP, UK, CH)
Q612	8-729-281-53	TRANSISTOR	2SC536NP-F	R411	1-216-001-00	METAL CHIP	10 5% 1/10W (AEP, UK, CH)
Q613	8-729-281-53	TRANSISTOR	2SC536NP-F	R411	1-216-057-00	METAL CHIP	2.2K 5% 1/10W (EXCEPT AEP, UK, CH)
Q614	8-729-281-53	TRANSISTOR	2SC536NP-F	R412	1-216-051-00	METAL CHIP	1.2K 5% 1/10W (EXCEPT AEP, UK, CH)
Q615	8-729-281-53	TRANSISTOR	2SC536NP-F	R412	1-216-097-11	RES-CHIP	100K 5% 1/10W (AEP, UK, CH)
Q616	8-729-173-38	TRANSISTOR	2SA608SP-G	R413	1-216-025-11	RES-CHIP	100 5% 1/10W (AEP, UK, CH)
Q617	8-729-281-53	TRANSISTOR	2SC536NP-F	R413	1-216-061-00	RES-CHIP	3.3K 5% 1/10W (EXCEPT AEP, UK, CH)
Q618	8-729-281-53	TRANSISTOR	2SC536NP-F	R414	1-216-097-11	RES-CHIP	100K 5% 1/10W (EXCEPT AEP, UK, CH)
Q619	8-729-281-53	TRANSISTOR	2SC536NP-F	R414	1-216-099-00	METAL CHIP	120K 5% 1/10W (AEP, UK, CH)
Q620	8-729-808-22	TRANSISTOR	2SB926TP-T	R415	1-216-037-00	METAL CHIP	330 5% 1/10W (AEP, UK, CH)
Q621	8-729-029-86	TRANSISTOR	DTC124ES-TP	R415	1-216-089-91	RES-CHIP	47K 5% 1/10W (EXCEPT AEP, UK, CH)
Q622	8-729-116-82	TRANSISTOR	2SD1616-L	R416	1-216-037-00	METAL CHIP	330 5% 1/10W (AEP, UK, CH)
Q624	8-729-281-53	TRANSISTOR	2SC536NP-F	R417	1-216-041-00	METAL CHIP	470 5% 1/10W (AEP, UK, CH)
Q625	8-729-281-53	TRANSISTOR	2SC536NP-F	R417	1-216-067-00	METAL CHIP	5.6K 5% 1/10W (EXCEPT AEP, UK, CH)
Q801	8-729-116-82	TRANSISTOR	2SD1616-L	R418	1-216-077-00	RES-CHIP	15K 5% 1/10W (AEP, UK, CH)
△Q802	8-729-037-08	TRANSISTOR	KTD2058Y	R418	1-216-085-91	RES-CHIP	33K 5% 1/10W (EXCEPT AEP, UK, CH)
Q803	8-729-173-38	TRANSISTOR	2SA608SP-G	R419	1-216-057-00	METAL CHIP	2.2K 5% 1/10W (AEP, UK, CH)
Q804	8-729-281-53	TRANSISTOR	2SC536NP-F	R419	1-216-097-11	RES-CHIP	100K 5% 1/10W (EXCEPT AEP, UK, CH)
Q805	8-729-438-33	TRANSISTOR	2SC1383-R	R420	1-216-029-00	METAL CHIP	150 5% 1/10W (AEP, UK, CH)
△Q808	8-729-116-82	TRANSISTOR	2SD1616-L (AEP, UK, CH)	R420	1-249-402-11	CARBON	56 5% 1/4W (EXCEPT AEP, UK, CH)
< RESISTOR >				R421	1-216-017-00	RES-CHIP	47 5% 1/10W (AEP, UK, CH)
R101	1-249-417-11	CARBON	1K 5% 1/4W	R421	1-216-073-91	RES-CHIP	10K 5% 1/10W (EXCEPT AEP, UK, CH)
R102	1-249-417-11	CARBON	1K 5% 1/4W	R422	1-216-065-00	RES-CHIP	4.7K 5% 1/10W (AEP, UK, CH)
R103	1-216-059-00	METAL CHIP	2.7K 5% 1/10W	R423	1-216-065-00	RES-CHIP	4.7K 5% 1/10W (AEP, UK, CH)
R104	1-216-059-00	METAL CHIP	2.7K 5% 1/10W	R424	1-216-085-91	RES-CHIP	33K 5% 1/10W (EXCEPT AEP, UK, CH)
R401	1-216-067-00	METAL CHIP	5.6K 5% 1/10W (AEP, UK, CH)	R424	1-216-089-91	RES-CHIP	47K 5% 1/10W (AEP, UK, CH)
R401	1-249-411-11	CARBON	330 5% 1/4W (EXCEPT AEP, UK, CH)	R425	1-216-089-91	RES-CHIP	47K 5% 1/10W (AEP, UK, CH)
R402	1-216-089-91	RES-CHIP	47K 5% 1/10W (EXCEPT AEP, UK, CH)	R425	1-216-097-11	RES-CHIP	100K 5% 1/10W (EXCEPT AEP, UK, CH)
R402	1-249-429-11	CARBON	10K 5% 1/4W (AEP, UK, CH)	R426	1-216-065-00	RES-CHIP	4.7K 5% 1/10W (AEP, UK, CH)
R403	1-216-067-00	METAL CHIP	5.6K 5% 1/10W (AEP, UK, CH)	R426	1-249-429-11	CARBON	10K 5% 1/4W (EXCEPT AEP, UK, CH)
R404	1-216-089-91	RES-CHIP	47K 5% 1/10W (EXCEPT AEP, UK, CH)	R427	1-216-073-91	RES-CHIP	10K 5% 1/10W (EXCEPT AEP, UK, CH)
R404	1-249-421-11	CARBON	2.2K 5% 1/4W (AEP, UK, CH)				
R405	1-216-001-00	METAL CHIP	10 5% 1/10W (EXCEPT AEP, UK, CH)				
R405	1-216-067-00	METAL CHIP	5.6K 5% 1/10W (AEP, UK, CH)				
R406	1-216-061-00	RES-CHIP	3.3K 5% 1/10W (EXCEPT AEP, UK, CH)				
R406	1-249-393-11	CARBON	10 5% 1/4W (AEP, UK, CH)				
R407	1-216-057-00	METAL CHIP	2.2K 5% 1/10W (AEP, UK, CH)				
R408	1-216-049-11	RES-CHIP	1K 5% 1/10W (AEP, UK, CH)				
R408	1-216-071-00	METAL CHIP	8.2K 5% 1/10W (EXCEPT AEP, UK, CH)				
R409	1-216-089-91	RES-CHIP	47K 5% 1/10W (AEP, UK, CH)				
R409	1-249-399-11	CARBON	33 5% 1/4W (EXCEPT AEP, UK, CH)				
R410	1-216-089-91	RES-CHIP	47K 5% 1/10W (AEP, UK, CH)				

The components identified by mark △ or dotted line with mark ▲ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和 △ 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。
--	--	---

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R427	1-216-089-91	RES-CHIP	47K 5% 1/10W (AEP, UK, CH)	R445	1-249-429-11	CARBON	10K 5% 1/4W (AEP, UK, CH)
R428	1-216-073-91	RES-CHIP	10K 5% 1/10W (EXCEPT AEP, UK, CH)	R446	1-216-033-00	METAL CHIP	220 5% 1/10W (EXCEPT AEP, UK, CH)
R428	1-249-401-11	CARBON	47 5% 1/4W (AEP, UK, CH)	R446	1-216-073-91	RES-CHIP	10K 5% 1/10W (AEP, UK, CH)
R429	1-216-073-91	RES-CHIP	10K 5% 1/10W (AEP, UK, CH)	R447	1-216-049-11	RES-CHIP	1K 5% 1/10W
R430	1-216-073-91	RES-CHIP	10K 5% 1/10W (AEP, UK, CH)	R448	1-216-049-11	RES-CHIP	1K 5% 1/10W
R431	1-216-059-00	METAL CHIP	2.7K 5% 1/10W (AEP, UK, CH)	R449	1-216-097-11	RES-CHIP	100K 5% 1/10W (EXCEPT AEP, UK, CH)
R432	1-216-059-00	METAL CHIP	2.7K 5% 1/10W (AEP, UK, CH)	R449	1-249-409-11	CARBON	220 5% 1/4W (AEP, UK, CH)
R432	1-249-426-11	CARBON	5.6K 5% 1/4W (EXCEPT AEP, UK, CH)	R450	1-216-049-11	RES-CHIP	1K 5% 1/10W
R433	1-216-033-00	METAL CHIP	220 5% 1/10W (EXCEPT AEP, UK, CH)	R451	1-216-073-91	RES-CHIP	10K 5% 1/10W (EXCEPT AEP, UK, CH)
R434	1-216-057-00	METAL CHIP	2.2K 5% 1/10W (EXCEPT AEP, UK, CH)	R451	1-249-437-11	CARBON	47K 5% 1/4W (AEP, UK, CH)
R434	1-249-417-11	CARBON	1K 5% 1/4W (AEP, UK)	R452	1-216-073-91	RES-CHIP	10K 5% 1/10W
R435	1-216-061-00	RES-CHIP	3.3K 5% 1/10W (EXCEPT AEP, UK, CH)	R453	1-249-429-11	CARBON	10K 5% 1/4W (EXCEPT AEP, UK, CH)
R435	1-216-063-00	RES-CHIP	3.9K 5% 1/10W (AEP, UK, CH)	R454	1-216-049-11	RES-CHIP	1K 5% 1/10W (AEP, UK, CH)
R436	1-216-049-11	RES-CHIP	1K 5% 1/10W (EXCEPT AEP, UK, CH)	R457	1-216-049-11	RES-CHIP	1K 5% 1/10W (AEP, UK, CH)
R436	1-216-063-00	RES-CHIP	3.9K 5% 1/10W (AEP, UK, CH)	R458	1-216-069-00	METAL CHIP	6.8K 5% 1/10W (AEP, UK, CH)
R437	1-249-426-11	CARBON	5.6K 5% 1/4W (AEP, UK, CH)	R459	1-216-065-00	RES-CHIP	4.7K 5% 1/10W (AEP, UK, CH)
R438	1-216-067-00	METAL CHIP	5.6K 5% 1/10W (EXCEPT AEP, UK, CH)	R460	1-216-089-91	RES-CHIP	47K 5% 1/10W (AEP, UK, CH)
R438	1-249-426-11	CARBON	5.6K 5% 1/4W (AEP, UK, CH)	R501	1-216-049-11	RES-CHIP	1K 5% 1/10W
R439	1-216-067-00	METAL CHIP	5.6K 5% 1/10W (EXCEPT AEP, UK, CH)	R502	1-216-049-11	RES-CHIP	1K 5% 1/10W
R439	1-216-113-00	METAL CHIP	470K 5% 1/10W (AEP, UK)	R503	1-249-417-11	CARBON	1K 5% 1/4W
R440	1-216-053-00	METAL CHIP	1.5K 5% 1/10W (AEP, UK)	R504	1-216-073-91	RES-CHIP	10K 5% 1/10W
R440	1-249-417-11	CARBON	1K 5% 1/4W (EXCEPT AEP, UK, CH)	R505	1-216-073-91	RES-CHIP	10K 5% 1/10W
R441	1-216-109-00	METAL CHIP	330K 5% 1/10W (AEP, UK)	R506	1-247-807-31	CARBON	100 5% 1/4W
R441	1-249-417-11	CARBON	1K 5% 1/4W (EXCEPT AEP, UK, CH)	R507	1-249-425-11	CARBON	4.7K 5% 1/4W
R442	1-216-049-11	RES-CHIP	1K 5% 1/10W (EXCEPT AEP, UK, CH)	R508	1-216-065-00	RES-CHIP	4.7K 5% 1/10W
R442	1-216-061-00	RES-CHIP	3.3K 5% 1/10W (AEP, UK)	R509	1-216-085-91	RES-CHIP	33K 5% 1/10W
R443	1-216-025-11	RES-CHIP	100 5% 1/10W (AEP, UK)	R510	1-216-085-91	RES-CHIP	33K 5% 1/10W
R443	1-249-417-11	CARBON	1K 5% 1/4W (EXCEPT AEP, UK, CH)	R511	1-216-081-00	METAL CHIP	22K 5% 1/10W
R444	1-216-053-00	METAL CHIP	1.5K 5% 1/10W (EXCEPT AEP, UK, CH)	R512	1-216-081-00	METAL CHIP	22K 5% 1/10W
R444	1-216-073-91	RES-CHIP	10K 5% 1/10W (AEP, UK, CH)	R513	1-216-095-00	METAL CHIP	82K 5% 1/10W
R445	1-216-073-91	RES-CHIP	10K 5% 1/10W (EXCEPT AEP, UK, CH)	R514	1-216-095-00	METAL CHIP	82K 5% 1/10W
				R515	1-216-089-91	RES-CHIP	47K 5% 1/10W
				R516	1-216-089-91	RES-CHIP	47K 5% 1/10W
				R517	1-216-073-91	RES-CHIP	10K 5% 1/10W
				R518	1-216-073-91	RES-CHIP	10K 5% 1/10W
				R519	1-216-063-00	RES-CHIP	3.9K 5% 1/10W
				R520	1-216-063-00	RES-CHIP	3.9K 5% 1/10W
				R521	1-216-085-91	RES-CHIP	33K 5% 1/10W
				R522	1-216-085-91	RES-CHIP	33K 5% 1/10W
				R523	1-216-071-00	METAL CHIP	8.2K 5% 1/10W
				R524	1-216-071-00	METAL CHIP	8.2K 5% 1/10W
				R525	1-216-073-91	RES-CHIP	10K 5% 1/10W
				R526	1-216-073-91	RES-CHIP	10K 5% 1/10W
				R527	1-216-085-91	RES-CHIP	33K 5% 1/10W
				R528	1-216-085-91	RES-CHIP	33K 5% 1/10W
				R529	1-216-095-00	METAL CHIP	82K 5% 1/10W
				R530	1-216-095-00	METAL CHIP	82K 5% 1/10W

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和 Δ 标志来识别的零部件，在安全方面具有关键性。因此只能以规定号码的零件来更换。
--	---	---

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R531	1-216-069-00	METAL CHIP	6.8K 5% 1/10W	R565	1-216-089-91	RES-CHIP	47K 5% 1/10W
R532	1-216-069-00	METAL CHIP	6.8K 5% 1/10W	R566	1-216-067-00	METAL CHIP	5.6K 5% 1/10W
R533	1-216-049-11	RES-CHIP	1K 5% 1/10W	R567	1-216-067-00	METAL CHIP	5.6K 5% 1/10W
R534	1-216-049-11	RES-CHIP	1K 5% 1/10W	R568	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R535	1-216-057-00	METAL CHIP	2.2K 5% 1/10W	R569	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R536	1-216-057-00	METAL CHIP	2.2K 5% 1/10W	R570	1-216-308-00	METAL CHIP	4.7 5% 1/10W
R537	1-216-069-00	METAL CHIP	6.8K 5% 1/10W	R571	1-216-308-00	METAL CHIP	4.7 5% 1/10W
R538	1-216-069-00	METAL CHIP	6.8K 5% 1/10W	R572	1-216-073-91	RES-CHIP	10K 5% 1/10W
R539	1-216-073-91	RES-CHIP	10K 5% 1/10W	R573	1-216-073-91	RES-CHIP	10K 5% 1/10W
R540	1-216-073-91	RES-CHIP	10K 5% 1/10W	R574	1-247-807-31	CARBON	100 5% 1/4W
R541	1-216-097-11	RES-CHIP	100K 5% 1/10W	R575	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R542	1-216-097-11	RES-CHIP	100K 5% 1/10W	R576	1-249-402-11	CARBON	56 5% 1/4W
R543	1-216-065-00	RES-CHIP	4.7K 5% 1/10W	R577	1-249-402-11	CARBON	56 5% 1/4W
R544	1-216-065-00	RES-CHIP	4.7K 5% 1/10W	R578	1-216-049-11	RES-CHIP	1K 5% 1/10W
R545	1-216-097-11	RES-CHIP	100K 5% 1/10W	R579	1-216-049-11	RES-CHIP	1K 5% 1/10W
R546	1-216-061-00	RES-CHIP	3.3K 5% 1/10W (EXCEPT AEP, UK, CH)	R601	1-249-417-11	CARBON	1K 5% 1/4W
R546	1-216-073-91	RES-CHIP	10K 5% 1/10W (AEP, UK, CH)	R602	1-249-409-11	CARBON	220 5% 1/4W
R548	1-216-119-00	METAL CHIP	820K 5% 1/10W (EXCEPT AEP, UK, CH)	R603	1-216-089-91	RES-CHIP	47K 5% 1/10W
R548	1-218-917-11	METAL CHIP	820K 0.5% 1/10W (AEP, UK, CH)	R604	1-216-089-91	RES-CHIP	47K 5% 1/10W
R549	1-249-421-11	CARBON	2.2K 5% 1/4W	R605	1-216-079-00	METAL CHIP	18K 5% 1/10W
R550	1-249-426-11	CARBON	5.6K 5% 1/4W	R606	1-216-079-00	METAL CHIP	18K 5% 1/10W
R551	1-216-089-91	RES-CHIP	47K 5% 1/10W (AEP, UK, CH)	R607	1-216-085-91	RES-CHIP	33K 5% 1/10W
R551	1-216-097-11	RES-CHIP	100K 5% 1/10W (EXCEPT AEP, UK, CH)	R608	1-249-435-11	CARBON	33K 5% 1/4W
R552	1-216-067-00	METAL CHIP	5.6K 5% 1/10W (EXCEPT AEP, UK, CH)	R609	1-216-049-11	RES-CHIP	1K 5% 1/10W
R552	1-216-073-91	RES-CHIP	10K 5% 1/10W (AEP, UK, CH)	R610	1-216-049-11	RES-CHIP	1K 5% 1/10W
R553	1-216-067-00	METAL CHIP	5.6K 5% 1/10W (EXCEPT AEP, UK, CH)	R611	1-249-396-11	CARBON	18 5% 1/4W
R553	1-216-073-91	RES-CHIP	10K 5% 1/10W (AEP, UK, CH)	R612	1-249-396-11	CARBON	18 5% 1/4W
R554	1-216-073-91	RES-CHIP	10K 5% 1/10W (EXCEPT AEP, UK, CH)	R613	1-216-065-00	RES-CHIP	4.7K 5% 1/10W
R554	1-216-077-00	RES-CHIP	15K 5% 1/10W (AEP, UK, CH)	R614	1-216-065-00	RES-CHIP	4.7K 5% 1/10W
R555	1-216-073-91	RES-CHIP	10K 5% 1/10W (EXCEPT AEP, UK, CH)	R615	1-216-061-00	RES-CHIP	3.3K 5% 1/10W
R555	1-216-077-00	RES-CHIP	15K 5% 1/10W (AEP, UK, CH)	R616	1-216-061-00	RES-CHIP	3.3K 5% 1/10W
R556	1-216-085-91	RES-CHIP	33K 5% 1/10W (AEP, UK, CH)	R617	1-216-077-00	RES-CHIP	15K 5% 1/10W
R556	1-216-089-91	RES-CHIP	47K 5% 1/10W (EXCEPT AEP, UK, CH)	R618	1-216-077-00	RES-CHIP	15K 5% 1/10W
R557	1-216-085-91	RES-CHIP	33K 5% 1/10W (AEP, UK, CH)	R619	1-216-085-91	RES-CHIP	33K 5% 1/10W
R557	1-216-089-91	RES-CHIP	47K 5% 1/10W (EXCEPT AEP, UK, CH)	R620	1-216-085-91	RES-CHIP	33K 5% 1/10W
R558	1-249-389-11	CARBON	4.7 5% 1/4W	R621	1-216-085-91	RES-CHIP	33K 5% 1/10W
R559	1-249-389-11	CARBON	4.7 5% 1/4W	R622	1-216-049-11	RES-CHIP	1K 5% 1/10W
R560	1-216-073-91	RES-CHIP	10K 5% 1/10W	R623	1-216-077-00	RES-CHIP	15K 5% 1/10W
R561	1-216-073-91	RES-CHIP	10K 5% 1/10W	R624	1-216-077-00	RES-CHIP	15K 5% 1/10W
R562	1-216-099-00	METAL CHIP	120K 5% 1/10W	R625	1-216-073-91	RES-CHIP	10K 5% 1/10W
R563	1-216-099-00	METAL CHIP	120K 5% 1/10W	R626	1-216-025-11	RES-CHIP	100 5% 1/10W
R564	1-216-089-91	RES-CHIP	47K 5% 1/10W	R627	1-216-085-91	RES-CHIP	33K 5% 1/10W
				R628	1-249-425-11	CARBON	4.7K 5% 1/4W
				R629	1-249-417-11	CARBON	1K 5% 1/4W
				R630	1-249-409-11	CARBON	220 5% 1/4W
				R631	1-216-095-00	METAL CHIP	82K 5% 1/10W
				R632	1-216-095-00	METAL CHIP	82K 5% 1/10W
				R633	1-216-049-11	RES-CHIP	1K 5% 1/10W (EXCEPT AEP, UK, CH)
				R633	1-216-819-11	METAL CHIP	680 5% 1/10W (AEP, UK, CH)
				R634	1-216-049-11	RES-CHIP	1K 5% 1/10W (EXCEPT AEP, UK, CH)
				R634	1-216-819-11	METAL CHIP	680 5% 1/10W (AEP, UK, CH)
				R635	1-216-105-00	RES-CHIP	220K 5% 1/10W
				R636	1-216-105-00	RES-CHIP	220K 5% 1/10W
				R637	1-216-073-91	RES-CHIP	10K 5% 1/10W

MAIN

Ref. No.	Part No.	Description	Remark
R638	1-216-073-91	RES-CHIP 10K 5%	1/10W
R639	1-216-089-91	RES-CHIP 47K 5%	1/10W
R640	1-216-117-00	METAL CHIP 680K 5%	1/10W
R641	1-216-089-91	RES-CHIP 47K 5%	1/10W
R642	1-216-089-91	RES-CHIP 47K 5%	1/10W
R643	1-216-089-91	RES-CHIP 47K 5%	1/10W
R644	1-216-089-91	RES-CHIP 47K 5%	1/10W
R645	1-216-067-00	METAL CHIP 5.6K 5%	1/10W
R646	1-216-067-00	METAL CHIP 5.6K 5%	1/10W
R647	1-216-073-91	RES-CHIP 10K 5%	1/10W
R648	1-216-073-91	RES-CHIP 10K 5%	1/10W
R649	1-216-073-91	RES-CHIP 10K 5%	1/10W
R650	1-216-073-91	RES-CHIP 10K 5%	1/10W
R651	1-216-077-00	RES-CHIP 15K 5%	1/10W
R652	1-216-097-11	RES-CHIP 100K 5%	1/10W
R653	1-216-097-11	RES-CHIP 100K 5%	1/10W
R654	1-216-049-11	RES-CHIP 1K 5%	1/10W
R655	1-216-097-11	RES-CHIP 100K 5%	1/10W
R656	1-216-067-00	METAL CHIP 5.6K 5%	1/10W
R657	1-216-089-91	RES-CHIP 47K 5%	1/10W
R659	1-216-081-00	METAL CHIP 22K 5%	1/10W
R660	1-216-097-11	RES-CHIP 100K 5%	1/10W
R661	1-216-081-00	METAL CHIP 22K 5%	1/10W
R662	1-216-081-00	METAL CHIP 22K 5%	1/10W
R663	1-216-081-00	METAL CHIP 22K 5%	1/10W
R664	1-216-081-00	METAL CHIP 22K 5%	1/10W
R665	1-216-081-00	METAL CHIP 22K 5%	1/10W
R666	1-216-081-00	METAL CHIP 22K 5%	1/10W
R667	1-216-081-00	METAL CHIP 22K 5%	1/10W
R671	1-216-085-91	RES-CHIP 33K 5%	1/10W
R672	1-216-041-00	METAL CHIP 470 5%	1/10W
R673	1-249-411-11	CARBON 330 5%	1/4W
R674	1-249-421-11	CARBON 2.2K 5%	1/4W
R675	1-249-413-11	CARBON 470 5%	1/4W
R676	1-216-117-00	METAL CHIP 680K 5%	1/10W
R677	1-216-117-00	METAL CHIP 680K 5%	1/10W
R678	1-216-061-00	RES-CHIP 3.3K 5%	1/10W
R679	1-216-061-00	RES-CHIP 3.3K 5%	1/10W
R680	1-216-059-00	METAL CHIP 2.7K 5%	1/10W
R681	1-216-059-00	METAL CHIP 2.7K 5%	1/10W
R682	1-216-099-00	METAL CHIP 120K 5%	1/10W
R683	1-216-099-00	METAL CHIP 120K 5%	1/10W
R684	1-216-043-00	RES-CHIP 560 5%	1/10W (AEP, UK, CH)
R684	1-216-819-11	METAL CHIP 680 5%	1/10W (EXCEPT AEP, UK, CH)
R685	1-216-043-00	RES-CHIP 560 5%	1/10W (AEP, UK, CH)
R685	1-216-819-11	METAL CHIP 680 5%	1/10W (EXCEPT AEP, UK, CH)
R686	1-216-083-00	METAL CHIP 27K 5%	1/10W
R687	1-216-308-00	METAL CHIP 4.7 5%	1/10W
R688	1-216-009-00	RES-CHIP 22 5%	1/10W
R689	1-216-073-91	RES-CHIP 10K 5%	1/10W
R690	1-216-097-11	RES-CHIP 100K 5%	1/10W
R691	1-216-089-91	RES-CHIP 47K 5%	1/10W
R801	1-249-409-11	CARBON 220 5%	1/4W
R802	1-249-416-11	CARBON 820 5%	1/4W

Ref. No.	Part No.	Description	Remark
R803	1-216-065-00	RES-CHIP 4.7K 5%	1/10W
R804	1-249-429-11	CARBON 10K 5%	1/4W
R805	1-216-073-91	RES-CHIP 10K 5%	1/10W
R806	1-216-806-11	RES-CHIP 56 5%	1/10W (AEP, UK, CH)
R806	1-249-402-11	CARBON 56 5%	1/4W (EXCEPT AEP, UK, CH)
R807	1-249-409-11	CARBON 220 5%	1/4W
R808	1-216-083-00	METAL CHIP 27K 5%	1/10W
R809	1-216-049-11	RES-CHIP 1K 5%	1/10W
R810	1-216-097-11	RES-CHIP 100K 5%	1/10W
R811	1-216-073-91	RES-CHIP 10K 5%	1/10W
R812	1-216-097-11	RES-CHIP 100K 5%	1/10W
R813	1-249-413-11	CARBON 470 5%	1/4W
R818	1-216-073-91	RES-CHIP 10K 5%	1/10W
R819	1-216-049-11	RES-CHIP 1K 5%	1/10W
R820	1-216-097-11	RES-CHIP 100K 5%	1/10W
R821	1-249-393-11	CARBON 10 5%	1/4W (AEP, UK, CH)
R822	1-249-409-11	CARBON 220 5%	1/4W (AEP, UK, CH)
RJ1	1-216-295-00	SHORT CHIP 0	(EXCEPT AEP, UK, CH)
< SWITCH >			
SW501	1-786-229-11	SWITCH, SLIDE	(EXCEPT AEP, UK, CH)
< COIL >			
T401	1-424-876-11	COIL (AM)	(EXCEPT AEP, UK, CH)
T401	1-424-936-11	COIL (AM ANT)	(AEP, UK, CH)
T402	1-424-935-11	COIL (AM OSC)	(AEP, UK, CH)
T404	1-424-939-11	COIL (FILTER)	(AEP, UK, CH)
T406	1-424-934-11	COIL (AM IFT)	(AEP, UK, CH)
T407	1-424-937-11	COIL (FM DTC)	(AEP, UK, CH)
< VARIABLE CAPACITOR >			
TC401	1-141-304-21	CAP, TRIMMER	(EXCEPT AEP, UK, CH)
TC401	1-141-411-11	CAP, ADJ	(AEP, UK, CH)
TC402	1-141-304-21	CAP, TRIMMER	(EXCEPT AEP, UK, CH)
< IC >			
U401	6-700-580-01	IC LA1823	(EXCEPT AEP, UK, CH)
U402	8-759-584-70	IC LC72131	(EXCEPT AEP, UK, CH)
U402	8-759-656-00	IC LA1837L	(AEP, UK, CH)
U403	8-759-346-57	IC LC72131M-TL-M	(AEP, UK, CH)
U501	8-759-473-59	IC LC75392	
△U502	6-700-957-01	IC LA4282	
U503	8-759-576-76	IC TDA2822D013TR	
U601	8-759-079-42	IC UPC1330HA-NA	
U602	6-700-579-01	IC AN7312	
U603	8-759-933-50	IC BA335	
△U801	8-759-701-59	IC NJM7809FA	
< VIBRATOR >			
X401	1-577-126-11	VIBRATOR, CRYSTAL	(7.2MHz)

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和 △ 标志来识别的零部件，在安全方面具有关键性。因此只能以规定号码的零部件来更换。
--	--	---

MAIN POWER

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< DIODE >		Q206	8-729-281-53	TRANSISTOR 2SC536NP-F	
Z401	8-719-109-89	DIODE MTZJ-T-72-5.6B	(EXCEPT AEP, UK, CH)			< RESISTOR >	
Z801	8-719-109-93	DIODE MTZJ-T-72-6.2B		R201	1-249-408-11	CARBON 180 5%	1/4W
△Z802	8-719-929-15	DIODE MTZJ-T-72-9.1B		R202	1-249-424-11	CARBON 3.9K 5%	1/4W
Z803	8-719-110-31	DIODE MTZJ-T-72-12B		R204	1-249-434-11	CARBON 27K 5%	1/4W
Z804	8-719-110-36	DIODE MTZJ-T-72-13B (AEP, UK, CH)		R218	1-249-437-11	CARBON 47K 5%	1/4W
*****				R219	1-249-417-11	CARBON 1K 5%	1/4W
A-4729-610-A	POWER BOARD, COMPLETE		(EXCEPT US, CND)	R221	1-249-437-11	CARBON 47K 5%	1/4W
A-4730-008-A	POWER BOARD, COMPLETE (US, CND)		*****	△R222	1-249-400-11	CARBON 39 5%	1/4W (US, CND)
1-533-217-31	HOLDER, FUSE			△R222	1-249-393-11	CARBON 10 5%	1/4W (EXCEPT US, CND)
		< CAPACITOR >		R223	1-249-437-11	CARBON 47K 5%	1/4W
C201	1-126-968-11	ELECT 100uF 20%	50V	R225	1-219-237-91	SOLID 3.3M 20%	1/2W (US, CND)
C202	1-128-551-11	ELECT 22uF 20%	25V			< ROTARY ENCODER >	
C204	1-126-963-11	ELECT 4.7uF 20%	50V	△RE201	1-755-448-11	RELAY (US, CND)	
△C206	1-102-129-00	CERAMIC 10000PF 10%	50V	△RE201	1-755-446-11	RELAY (EXCEPT US, CND)	
△C208	1-102-129-00	CERAMIC 10000PF 10%	50V			< TRANSFORMER >	
△C209	1-102-129-00	CERAMIC 10000PF 10%	50V	△T202	1-437-817-11	TRANSFORMER, POWER (US, CND)	
△C210	1-117-698-11	CERAMIC 680PF 10%	250V	△T202	1-437-815-11	TRANSFORMER, POWER (EXCEPT US, CND)	
C211	1-102-129-00	CERAMIC 10000PF 10%	50V			< DIODE >	
C212	1-102-129-00	CERAMIC 10000PF 10%	50V	Z201	8-719-109-97	DIODE MTZJ-T-72-6.8B	
C213	1-102-129-00	CERAMIC 10000PF 10%	50V	Z202	8-719-109-93	DIODE MTZJ-T-72-6.2B	
C215	1-126-935-11	ELECT 470uF 20%	16V	*****			
△C218	1-102-129-00	CERAMIC 10000PF 10%	50V	MISCELLANEOUS			
C226	1-126-943-11	ELECT 2200uF 20%	25V	*****			
C241	1-102-129-00	CERAMIC 10000PF 10%	50V	△4	1-555-750-00	CORD, POWER (AEP)	
C243	1-126-960-11	ELECT 1uF 20%	50V	△4	1-696-535-11	CORD, POWER (UK)	
		< CONNECTOR >		△4	1-782-464-21	CORD, POWER (CH)	
* CN505	1-506-709-11	PLUG, CONNECTOR (2.5MM) 7P		62	1-796-228-11	DECK, MECH (TCM) (CRL3439)	
		< DIODE >		157	1-471-144-11	MAGNET	
△D201	8-719-077-63	DIODE 1N5402		△166	1-796-189-11	MECH, CD (CS-21SC-1280)	
△D202	8-719-077-63	DIODE 1N5402		△F201	1-533-296-11	FUSE, GLASS CYLINDRICAL (DIA.5) (US, CND)	
△D203	8-719-077-63	DIODE 1N5402		△F202	1-533-419-11	FUSE, GLASS CYLINDRICAL (DIA.5) (US, CND)	
△D204	8-719-077-63	DIODE 1N5402		△F202	1-533-468-11	FUSE, GLASS TUBE (DIA.5) (T2AL/250V)	(AEP, UK, E51, CH, AR, HK)
△D205	8-719-200-02	DIODE 1N4001		SW300	1-692-960-21	SWITCH, PUSH (1 KEY) (OPEN/CLOSE)	
△D206	8-719-200-02	DIODE 1N4001		△T201	1-437-513-11	TRANSFORMER, POWER	
△D207	8-719-200-02	DIODE 1N4001		△T202	1-437-815-11	TRANSFORMER, POWER	(AEP, UK, E51, CH, AR, HK)
△D208	8-719-200-02	DIODE 1N4001		△T202	1-437-817-11	TRANSFORMER, POWER (US, CND)	
D212	8-719-991-33	DIODE 1N4148TP		*****			
D213	8-719-991-33	DIODE 1N4148TP		ACCESSORIES			
D215	8-719-200-02	DIODE 1N4001		*****			
D216	8-719-200-02	DIODE 1N4001		△	1-569-008-21	ADAPTOR, CONVERSION (E51)	
D217	8-719-200-02	DIODE 1N4001		△	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (HK)	
D218	8-719-200-02	DIODE 1N4001					
D221	8-719-200-02	DIODE 1N4001					
		< COIL >					
△L201	1-424-944-11	INDUCTOR 400uH (EXCEPT US, CND)					
L202	1-410-521-11	INDUCTOR 100uH					
		< TRANSISTOR >					
△Q205	8-729-173-38	TRANSISTOR 2SA608SP-G					

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant une telle appellation.

以阴影和 △标志来识别的零部件, 在安全方面具有关键性, 因此只能以规定号码的零部件来更换。

