

Service Service Service



Service Manual

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3141 785 32282

1.0 TECHNICAL SPECIFICATION

General

Dimensions (W x H x D): 204 x 168 x 33 mm
 Weight: 1.9kg
 Power supply: DC 12V 2.2A
 Power consumption: 20W
 Operating temp. & RH: 0 - 50 degC / 30 – 90% RH
 Laser wavelength: 650nm
 Video system: NTSC / PAL / AUTO

Dynamic range: >=80dB
 Signal/Noise ratio: >=85dB
 Frequency response: 20Hz-20kHz +/-1dB
 Channel Separation 1kHz: >=85dB
 Channel Balance 1kHz: 1dB

Audio out (analog audio) Output level: 2V +/- 10%
 Load impedance: 10Kohm
 Video out Output level: 1Vp – p +/- 20%
 Load impedance: 75ohm

Playback disc type: DVD, Picture-CD, SVCD, Video CD, MP3-CD, CD-R/CD-RW, WMA-CD, DVD-R, DVD-RW, DVD+R, DVD+RW

Video Playback Format: DVD / VCD / JPEG

Audio Playback Format: CD/MP3, MP3-DVD, WMA

Disc Diameter: 12cm

Pixel specification on 2nd screen (for PET711 only)

1 bright-dot & max. 3 dark-dots

Current consumption

DC-IN SUPPLY (9V)	
Battery Charging Current	1.2A typical
BATT. SUPPLY (7.2V)	
Power Off	0A
Playback with TFT on	<1.2A typical
Playback without TFT on	<600mA
Battery time (playback)	>2.5 hours

Headphone out (headphone output load 2x16 ohm)

Maximum output power: >10mW
 Frequency response: 20Hz – 20kHz
 SNR (A-wght): 80dB typical
 THD (0.2-20kHz): <1%
 Left-Right Channel Separation: 32dB
 Left-Right Channel Balance: 1dB

Supported disc type

Video Playback Formats:



Audio Playback Formats:



1.0 TECHNICAL SPECIFICATION

Factory Service Mode (FSM) – for PET711 only

Procedure to check the software version of your portable DVD Player (for PET711 only)

1. Press [SETUP] to enter the setup Menu
2. Press [RETURN] and then press "1" -> "2" -> "3" by remote control
3. The display will show the software version as the date of which the software was built on the bottom of the screen.

Procedure to upgrade the software of your portable DVD Portable (for PET711 only)

For the best performance of your DVD Portable. Check www.philips.com/support for latest software upgrades available.

1. Download the latest software from the Philips support site
2. Unzip the files and then burn it into a CD-ROM to make a disc for upgrade
3. Power on the Portable DVD Player with AC/DC adaptor
4. Play CD-ROM for firmware upgrade

Warning: Do not unplug the AC adaptor during firmware upgrade to prevent flash corrupt of the set!!

5. Once upgrade is completed, the player is reset automatically
6. Open the DVD door to remove the disc

2.0 SAFETY INSTRUCTIONS

GB WARNING

All ICs and many other semi-conductors are susceptible to electrostatic discharges (ESD). Careless handling during repair can reduce life drastically. When repairing, make sure that you are connected with the same potential as the mass of the set via a wrist wrap with resistance. Keep components and tools also at this potential.

F ATTENTION

Tous les IC et beaucoup d'autres semi-conducteurs sont sensibles aux décharges statiques (ESD). Leur longévité pourrait être considérablement écourtée par le fait qu'aucune précaution n'est prise à leur manipulation. Lors de réparations, s'assurer de bien être relié au même potentiel que la masse de l'appareil et enfilez le bracelet serti d'une résistance de sécurité. Veiller à ce que les composants ainsi que les outils que l'on utilise soient également à ce potentiel.

D WARNUNG

Alle ICs und viele andere Halbleiter sind empfindlich gegenüber elektrostatischen Entladungen (ESD). Unsorgfältige Behandlung im Reparaturfall kann die Lebensdauer drastisch reduzieren. Veranlassen Sie, dass Sie im Reparaturfall über ein Pulsarmband mit Widerstand verbunden sind mit dem gleichen Potential wie die Masse des Gerätes. Bauteile und Hilfsmittel auch auf dieses gleiche Potential halten.

ESD



NL WAARSCHUWING

Alle IC's en vele andere halfgeleiders zijn gevoelig voor electrostatische ontladingen (ESD). Onzorgvuldig behandelen tijdens reparatie kan de levensduur drastisch doen verminderen. Zorg ervoor dat u tijdens reparatie via een polsband met weerstand verbonden bent met hetzelfde potentiaal als de massa van het apparaat. Houd componenten en hulpmiddelen ook op ditzelfde potentiaal.

I AVVERTIMENTO

Tutti IC e parecchi semi-conduttori sono sensibili alle scariche statiche (ESD). La loro longevità potrebbe essere fortemente ridotta in caso di non osservazione della più grande cauzione alla loro manipolazione. Durante le riparazioni occorre quindi essere collegato allo stesso potenziale che quello della massa dell'apparecchio tramite un braccialetto a resistenza. Assicurarsi che i componenti e anche gli utensili con quali si lavora siano anche a questo potenziale.

GB

Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used.

"Pour votre sécurité, ces documents doivent être utilisés par des spécialistes agréés, seuls habilités à réparer votre appareil en panne".

NL

Veiligheidsbepalingen vereisen, dat het apparaat bij reparatie in zijn oorspronkelijke toestand wordt teruggebracht en dat onderdelen, identiek aan de gespecificeerde, worden toegepast.

F

Les normes de sécurité exigent que l'appareil soit remis à l'état d'origine et que soient utilisés les pièces de rechange identiques à celles spécifiées.

D

Bei jeder Reparatur sind die geltenden Sicherheitsvorschriften zu beachten. Der Originalzustand des Geräts darf nicht verändert werden; für Reparaturen sind Original-Ersatzteile zu verwenden.

I

Le norme di sicurezza esigono che l'apparecchio venga rimesso nelle condizioni originali e che siano utilizzati i pezzi di ricambio identici a quelli specificati.

"After servicing and before returning set to customer perform a leakage current measurement test from all exposed metal parts to earth ground to assure no shock hazard exist. The leakage current must not exceed 0.5mA."



GB Warning !

Invisible laser radiation when open.
Avoid direct exposure to beam.

S Varning !

Osynlig laserstrålning när apparaten är öppnad och spärrar är urkopplad. Beträkta ej strålen.

SF Varoitus !

Avatussa laitteessa ja suojalukituksen ohitettaessa olet alltiina näkymättömälle laserisäteilylle. Älä katso säteeseen!

DK Advarse !

Usynlig laserstråling ved åbning når sikkerhedsafbrydere er ude af funktion. Undgå udsættelse for stråling.

2.1 ESD PROTECTION

- レンズには絶対に触れないでください。
- DO NOT TOUCH THE LENS.
- LINSE NICHT BRÜHREN.
- NE PAS TOUCHER LA LENTILLE.

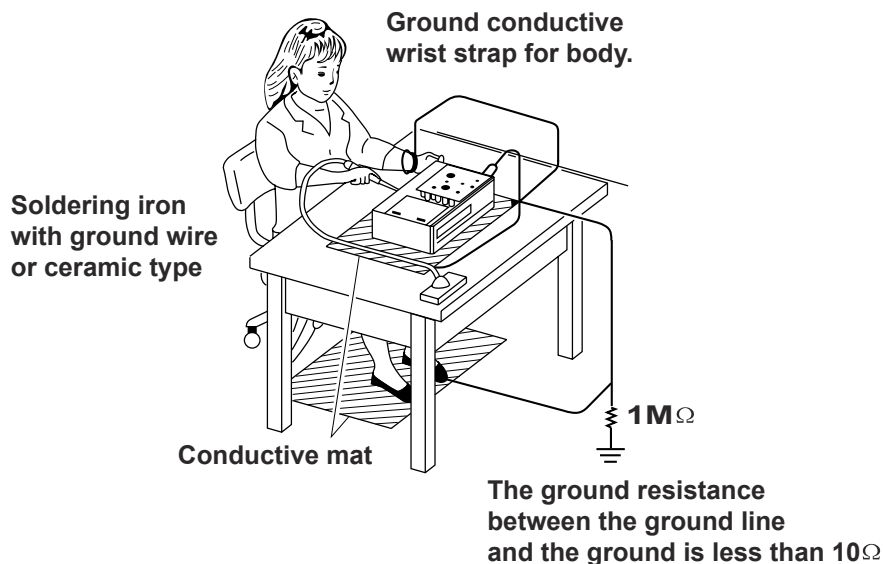
When the power supply is being turned on, you may not remove this laser cautions label. If it removes, radiation of laser may be received.

PREPARATION OF SERVICING

Pickup Head consists of a laser diode that is very susceptible to external static electricity.

Although it operates properly after replacement, if it was subject to electrostatic discharge during replacement, its life might be shortened. When replacing, use a conductive mat, soldering iron with ground wire, etc. to protect the laser diode from damage by static electricity.

And also, the LSI and IC are same as above.



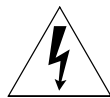
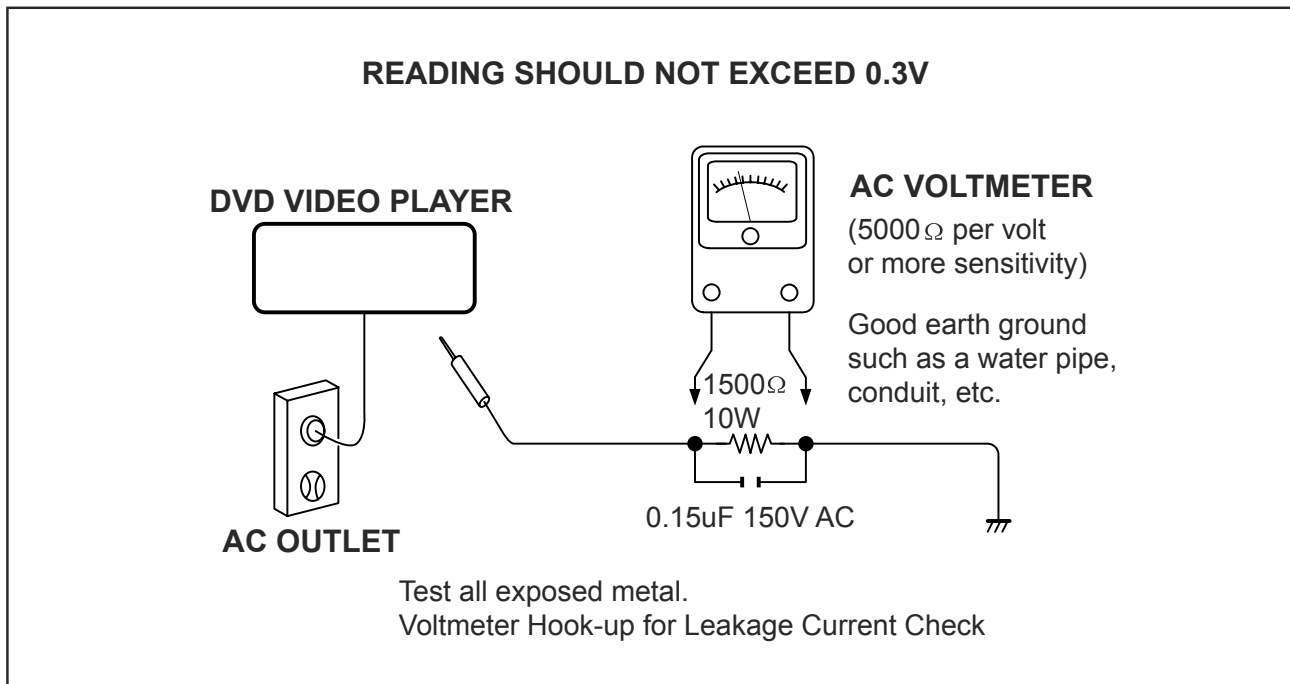
SAFTY NOTICE

SAFTY PRECAUTIONS

LEAKAGE CURRENT CHECK

Plug the AC line cord directly into a 120V AC outlet (do not use an isolation transformer for this check). Use an AC voltmeter, having 5000Ω per volt or more sensitivity. Connect a 1500Ω 10W resistor, paralleled by a $0.15\mu\text{F}$ 150V AC capacitor between a known good earth ground (water pipe, conduit, etc.) and all exposed metal parts of cabinet (antennas, handle bracket, metal cabinet screwheads, metal overlays, control shafts, etc.).

Measure the AC voltage across the 1500Ω resistor. The test must be conducted with the AC switch on and then repeated with the AC switch off. The AC voltage indicated by the meter may not exceed 0.3V. A reading exceeding 0.3V indicates that a dangerous potential exists, the fault must be located and corrected. Repeat the above test with the DVD VIDEO PLAYER power plug reversed. NEVER RETURN A DVD VIDEO PLAYER TO THE CUSTOMER WITHOUT TAKING NECESSARY CORRECTIVE ACTION.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

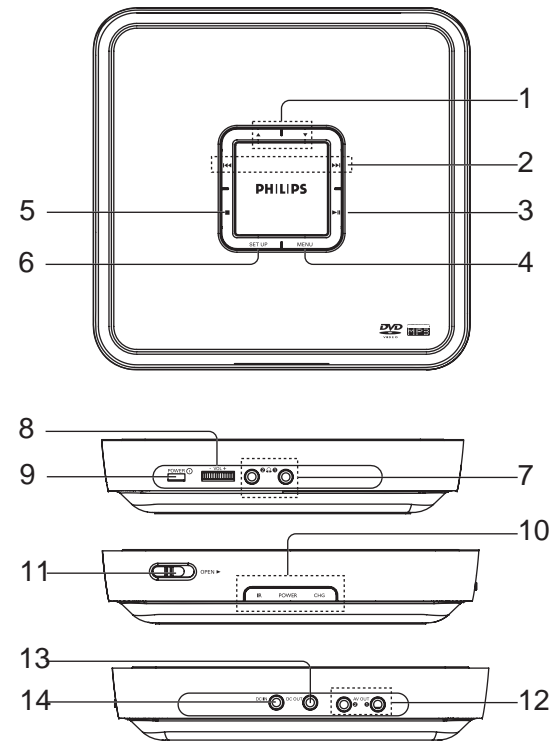


The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

3.0 INSTRUCTIONS FOR USE

- | | |
|---|---|
| ① ▲, ▼
Up / down cursor. | ⑧ - VOL +
Volume control. |
| ② ⏮ / ⏭
Skip to the previous/next chapter, track or title. | ⑨ POWER
Switch the power on/off. |
| ③ ⏸
Start or interrupt playback. | ⑩ POWER/IR/CHR
Power /remote sensor /charging indicator. |
| ④ MENU
Enter or exit the disc contents menu. | ⑪ OPEN
Open the disc door to insert or remove disc. |
| ⑤ ■
Stop playback or erase a program. | ⑫ AVOUT
Audio/Video output. |
| ⑥ SETUP
Enter or exit the system menu. | ⑬ DC OUT
DC output. |
| ⑦ PHONES 1 & 2
Headphone jacks. | ⑭ DC IN
Power supply socket. |

MAIN UNIT CONTROL



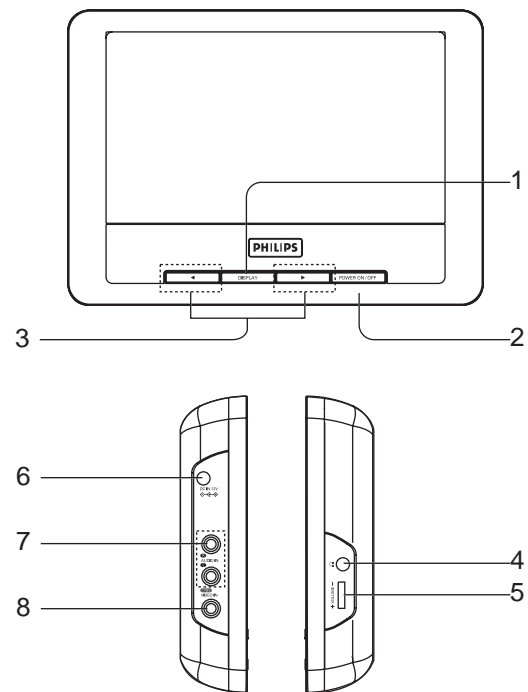
CAUTION

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

3.0 INSTRUCTIONS FOR USE

- ① **DISPLAY**
Adjust the display value of the system.
- ② **POWER ON/OFF**
Switch the player on / off.
- ③ ◀ ▶
left / right cursor.
- ④ 🎧
Headphone jack.
- ⑤ - VOL +
Volume control.
- ⑥ DC IN 12V
Power supply socket.
- ⑦ AV IN
Audio/video input.
- ⑧ VIDEO IN
Video input.

DISPLAY CONTROLS



CAUTION

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

4.0 MECHNICAL INSTRUCTIONS

THE MAIN SET (for PET711 & PET100)

1. Back View as shown in Fig.1
Remove screws on back cabinet
and disconnect the wire on function board



Fig.1

2. Disconnect wires on the DVD loader
as shown in Fig.2.



Fig.2

3. Remove screws to take out the main PCB
as shown in Fig.3.



Fig.3

4. Disassembly the door and function
button discreteness and the middle cabinet
discreteness, remove screws to take out
the function PCB from the door and function
button discreteness as shown in Fig.4.

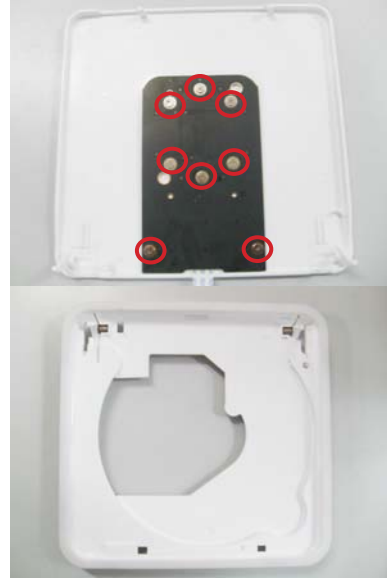


Fig.4

4.0 MECHANICAL INSTRUCTIONS

THE 2nd SCREEN (for PET711 only)

1. Back View as shown in Fig.1
Remove screws to take out base cover



Fig.1

2. Disconnect wires of speaker and main PCB
and also function PCB and LCD as shown in Fig.2

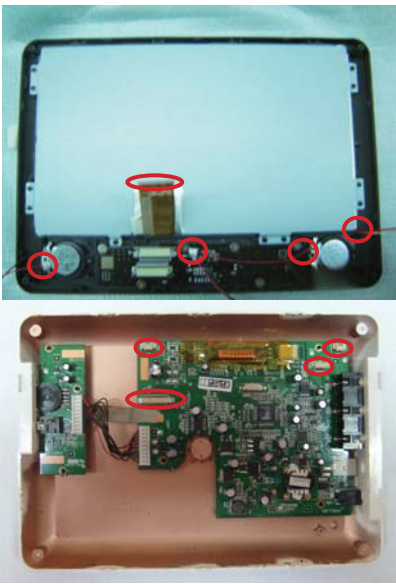


Fig.2

3. Remove main PCB as shown in Fig.3
Remove screws to take out main PCB.

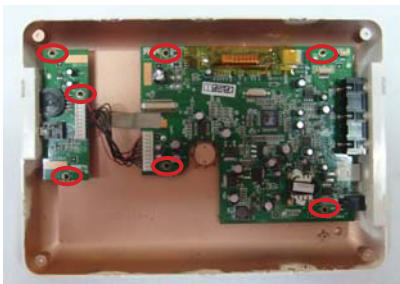


Fig.3

4. Remove speakers and remove screws
to take out TFT board shield and function
PCB and TFT LCD as shown in Fig.4

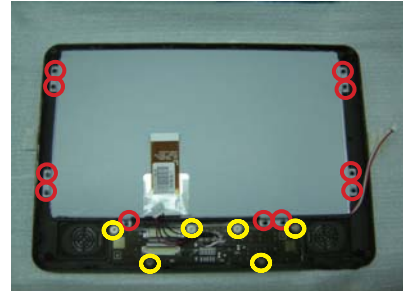
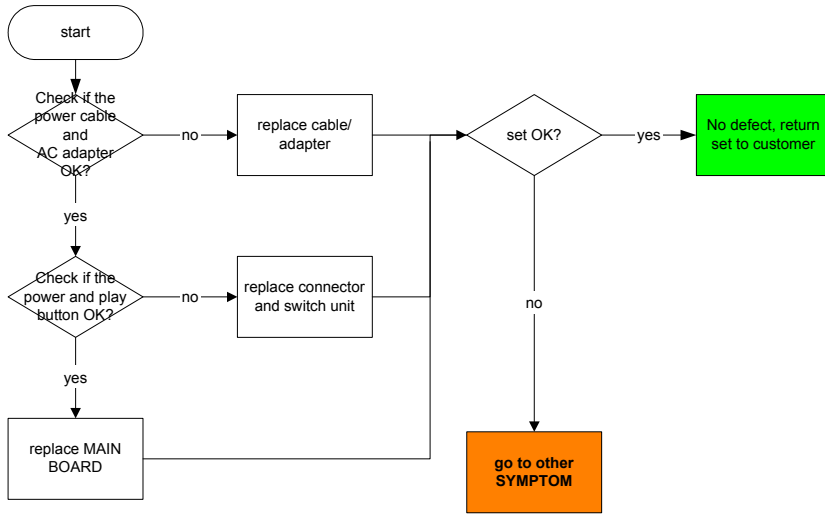


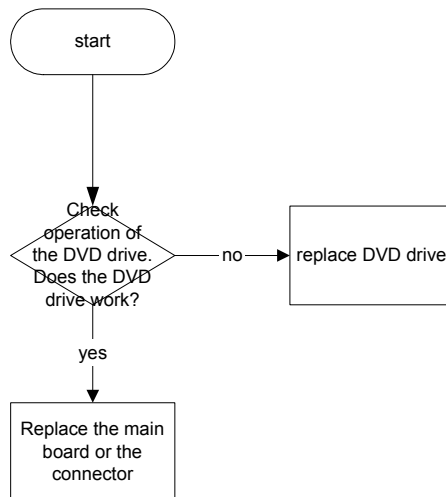
Fig.4

5.0 TROUBLESHOOTING & SERVICE TIPS

SYMPTOM: NO POWER, NO GREEN LED

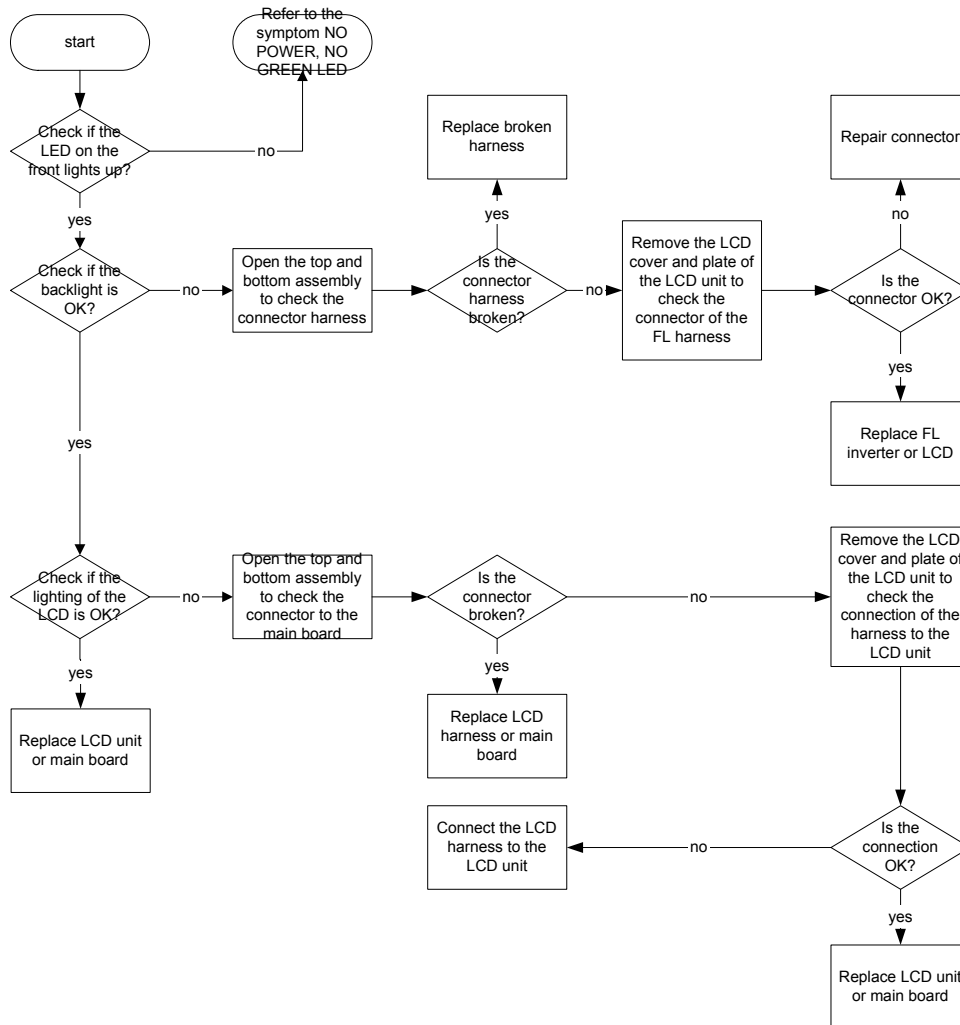


SYMPTOM: NO IMAGE OR SOUND COMES OUT FROM THE EXTERNAL OUTPUT

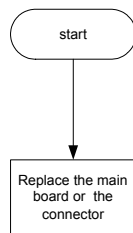


5.0 TROUBLESHOOTING & SERVICE TIPS

SYMPTOM: THE INITIAL SCREEN IS NOT DISPLAYED ON THE LCD

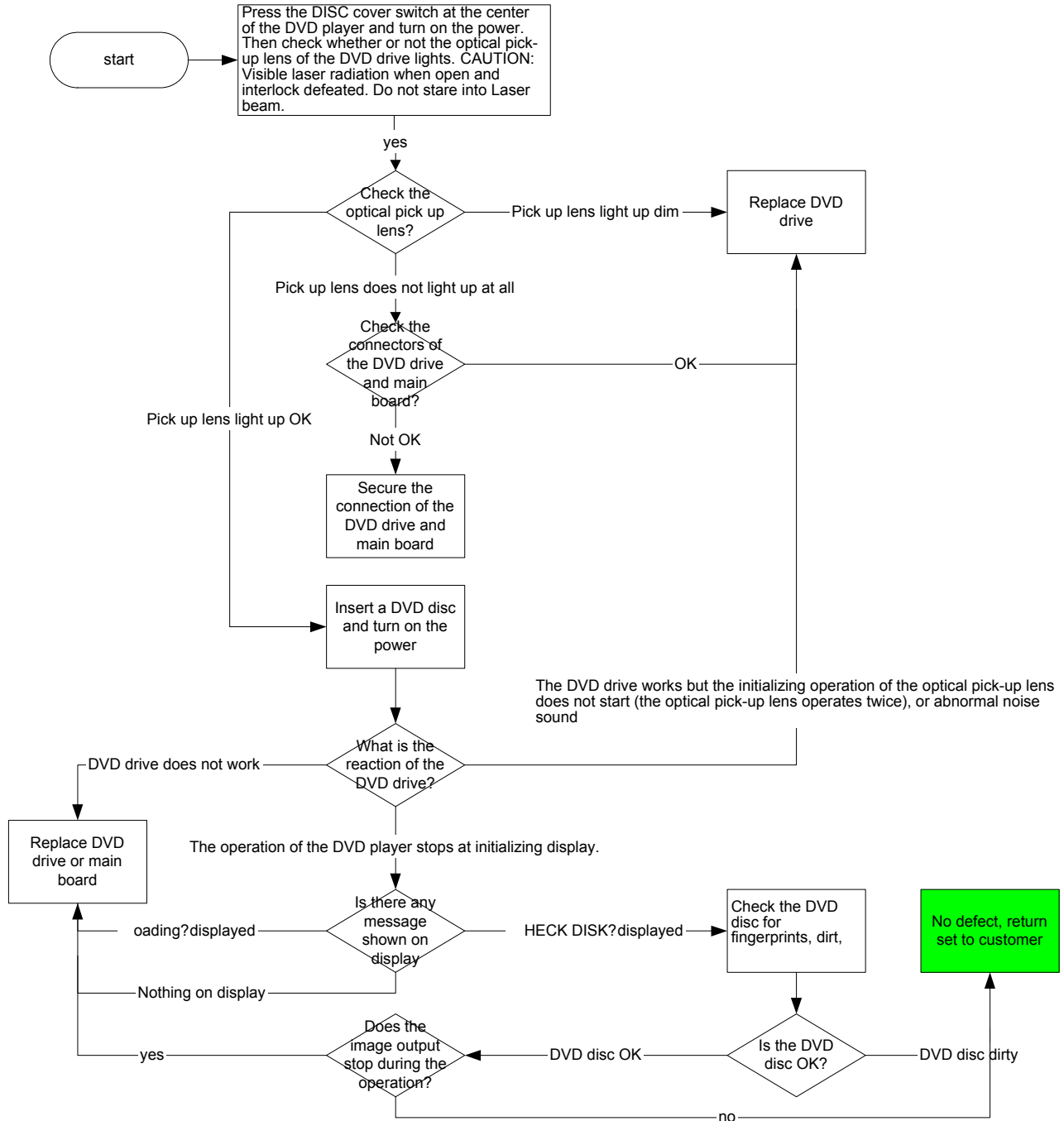


SYMPTOM: NO IMAGE OR SOUND COMES OUT FROM THE EXTERNAL INPUT



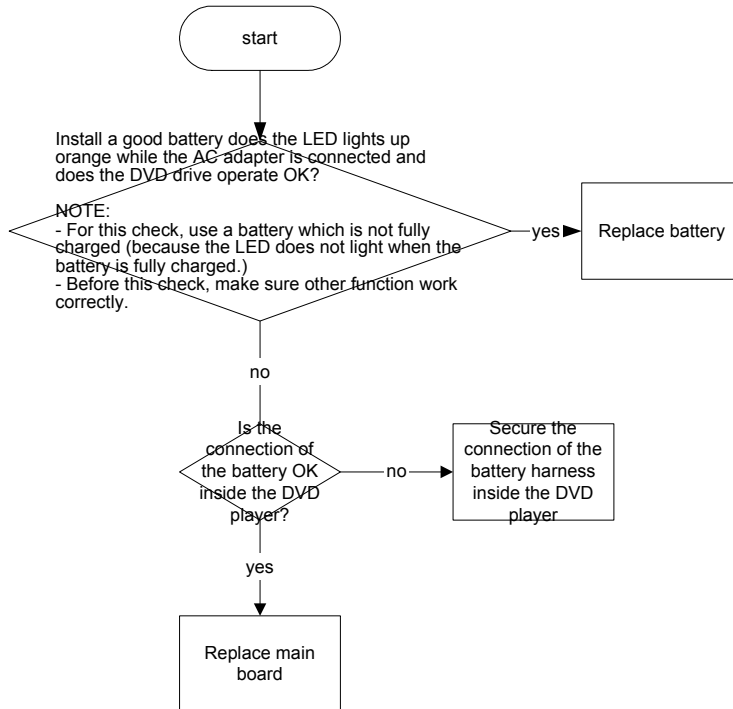
5.0 TROUBLESHOOTING & SERVICE TIPS

SYMPTOM: THE DVD DRIVE DOES NOT WORK

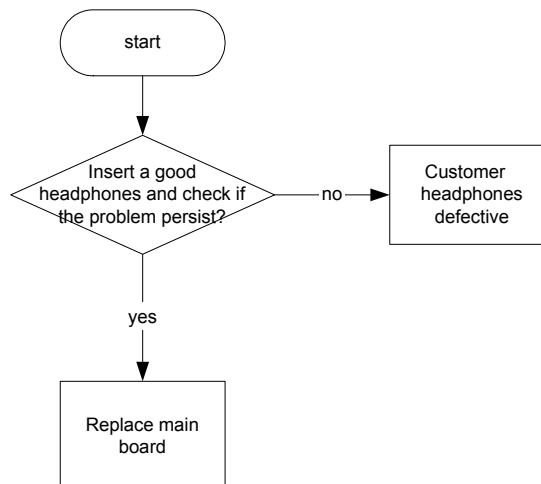


5.0 TROUBLESHOOTING & SERVICE TIPS

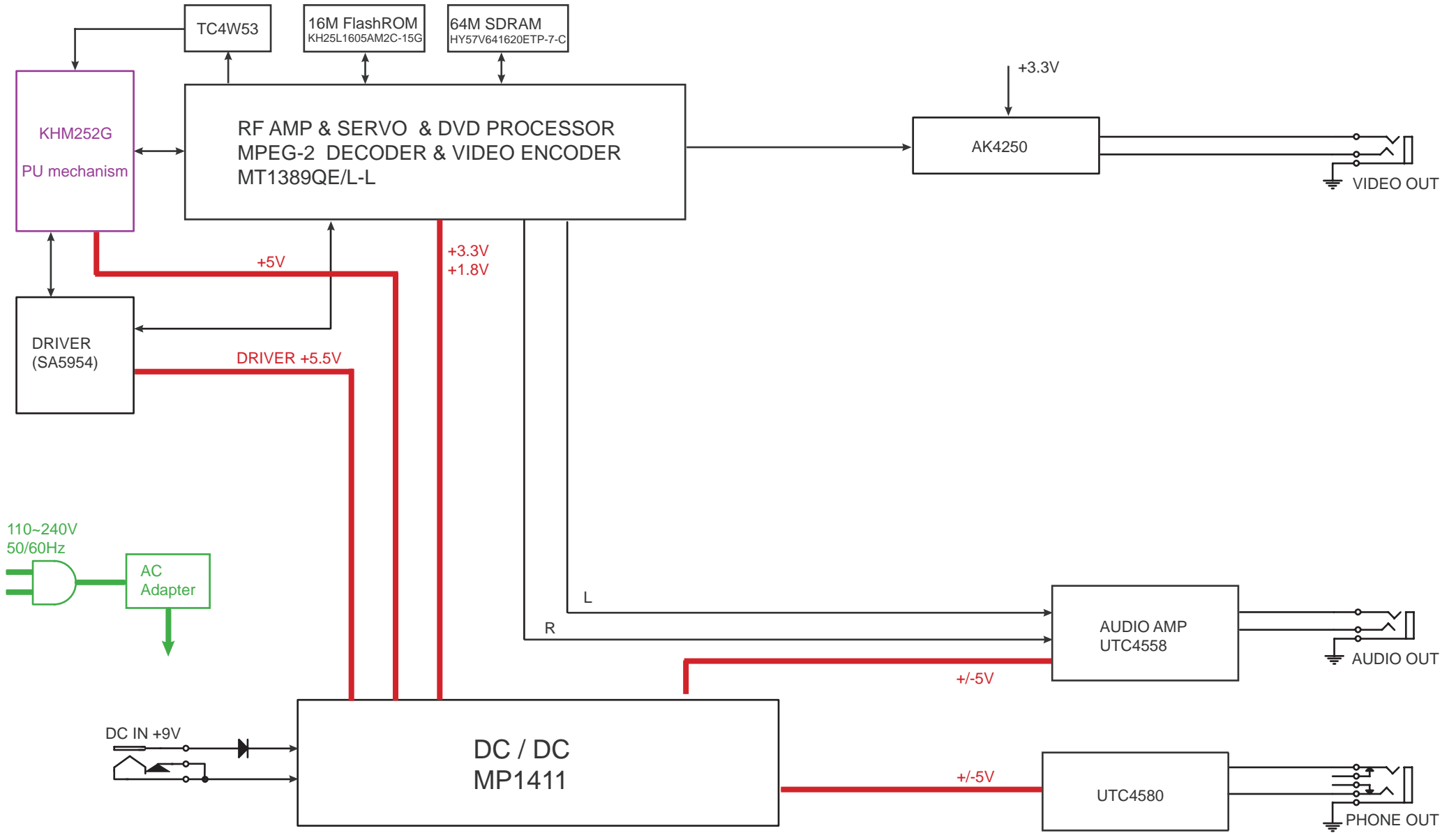
SYMPTOM: THE DVD DRIVE DOES NOT OPERATE WITH BATTERY



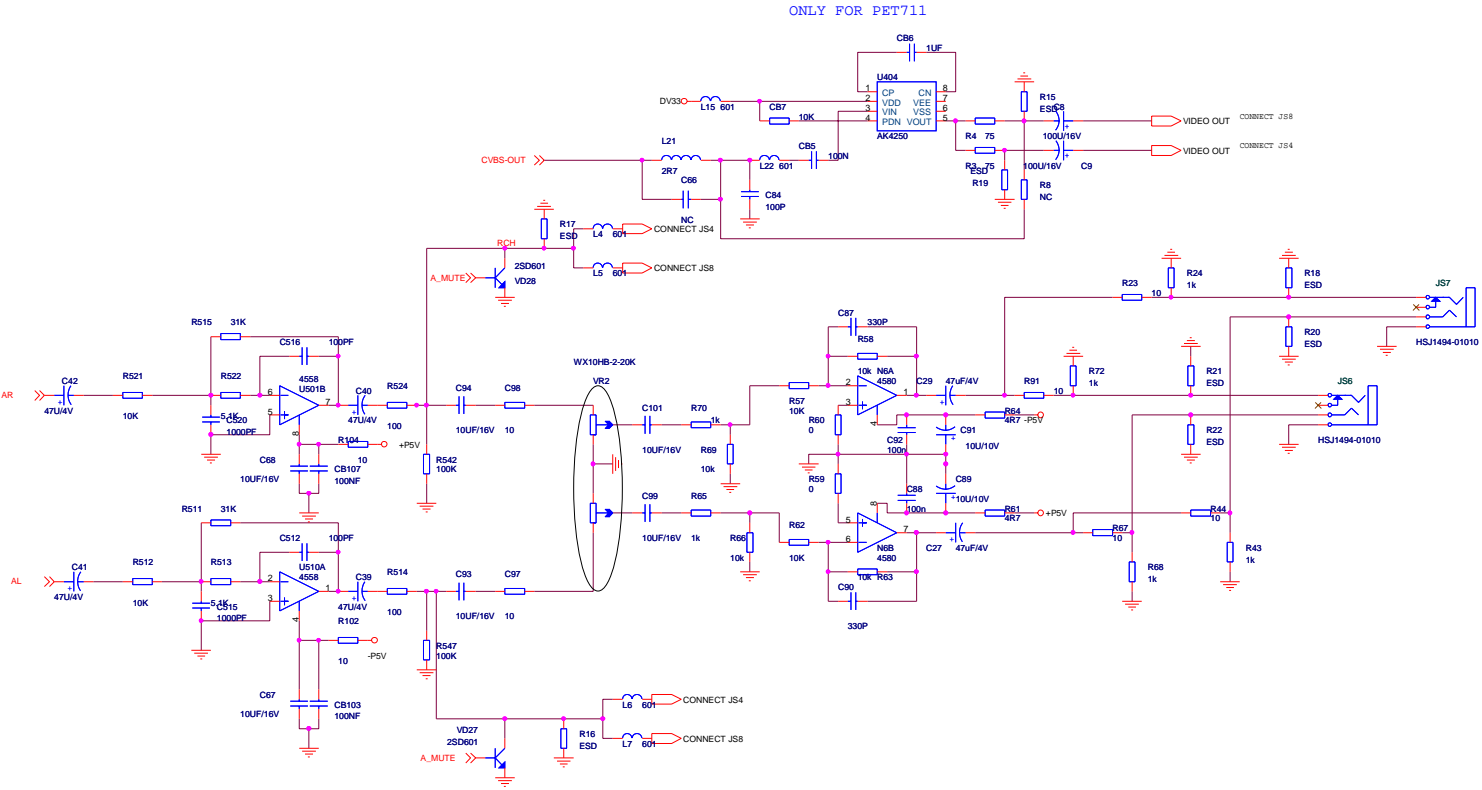
SYMPTOM: NO SOUND COMES FROM THE HEADPHONES



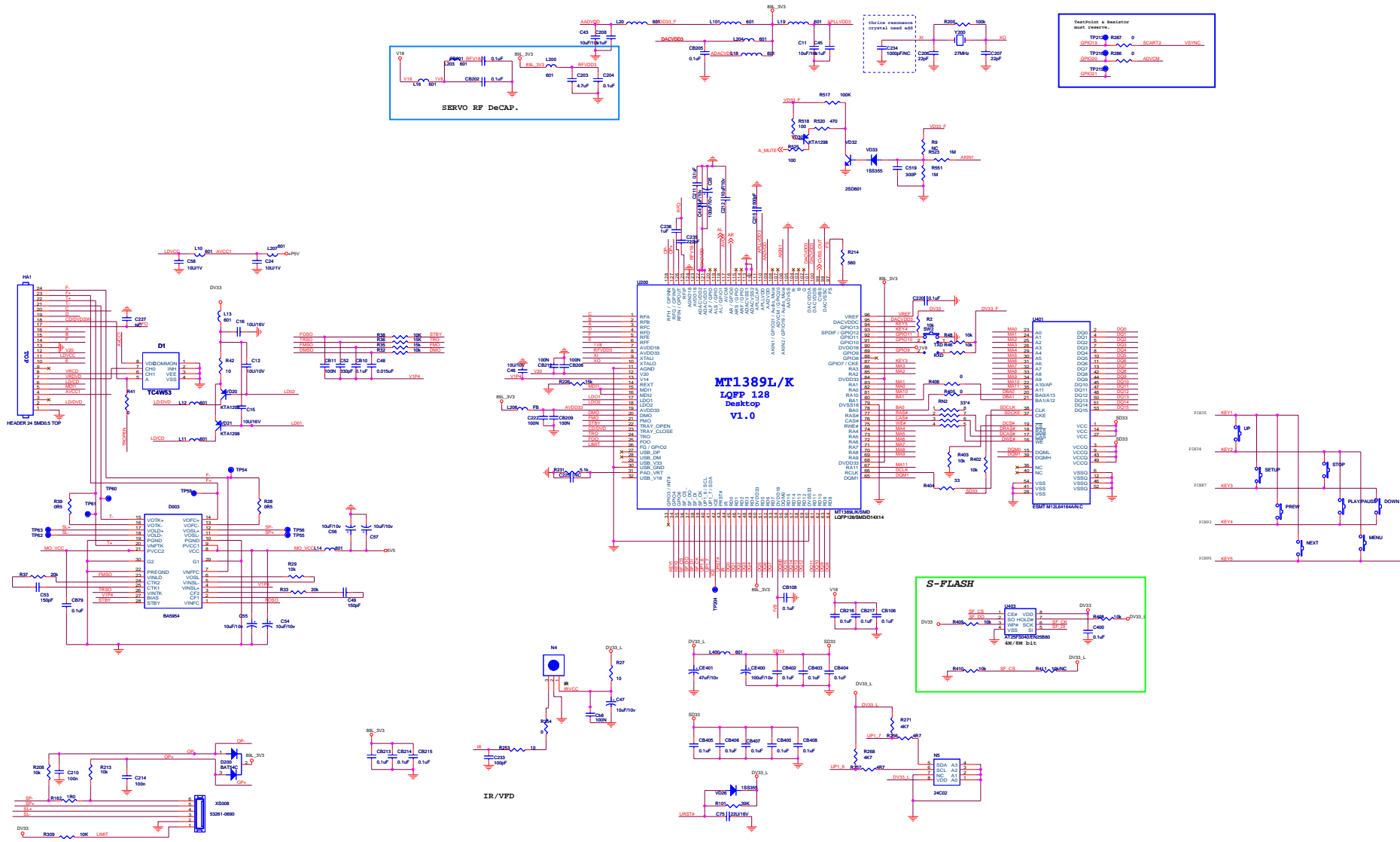
6.0 OVERALL BLOCK DIAGRAM



8.0 ELECTRICAL DIAGRAM MAIN BOARD CIRCUIT DIAGRAM (AUDIO)



8.0 ELECTRICAL DIAGRAM MAIN BOARD CIRCUIT DIAGRAM (MT1389L/K)

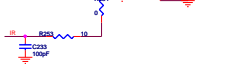
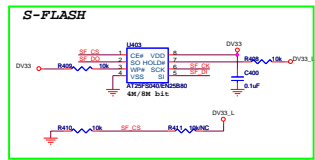


TP5400 & Resistor must reserve.

TP5400 R206 0
SCL1 --- SCL1 --- SCL1 --- V5V3NC

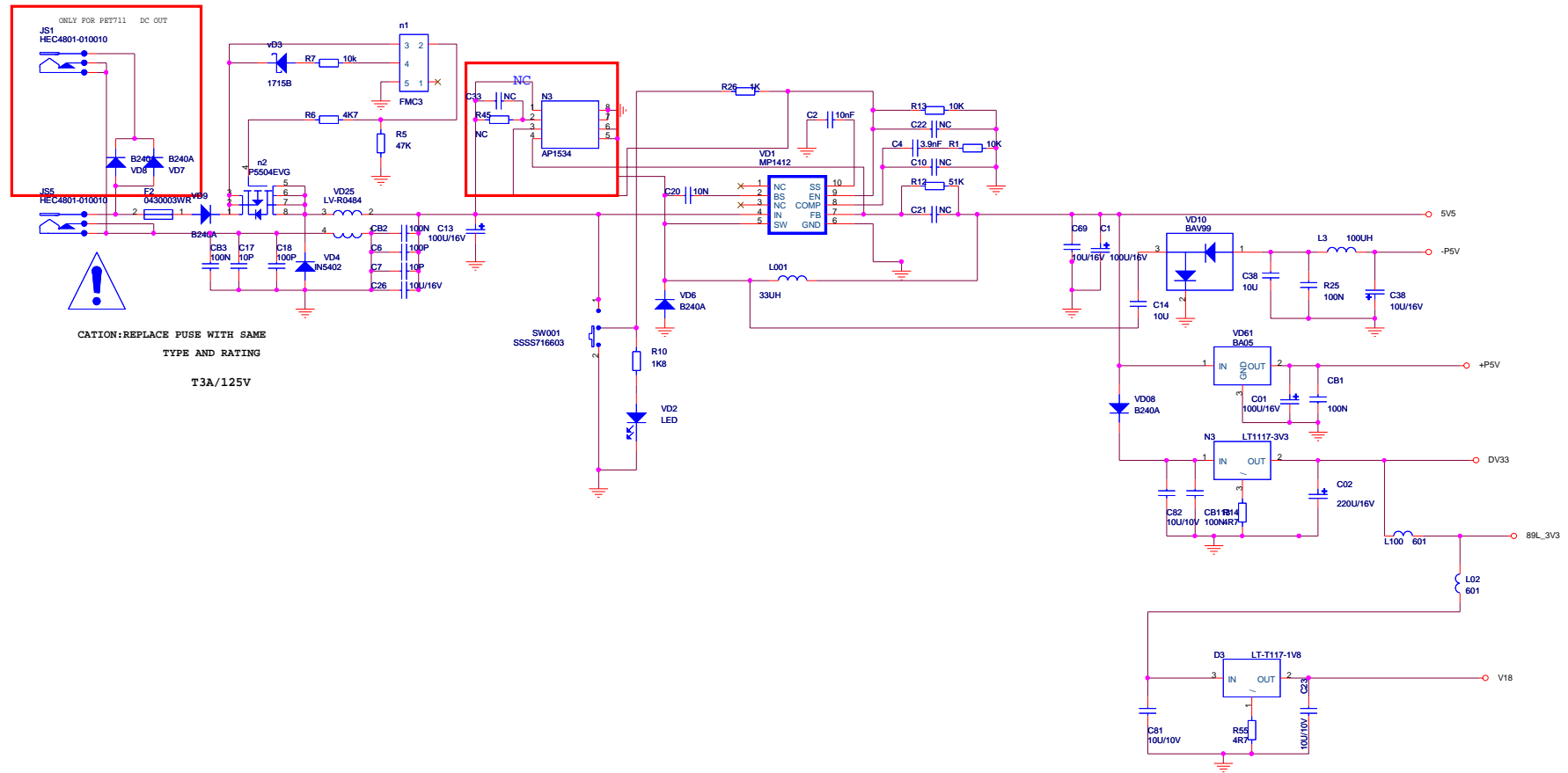
TP5400 R206 0
SCL1 --- SCL1 --- SCL1 --- AVDD18

TP5400
SCL1 --- SCL1

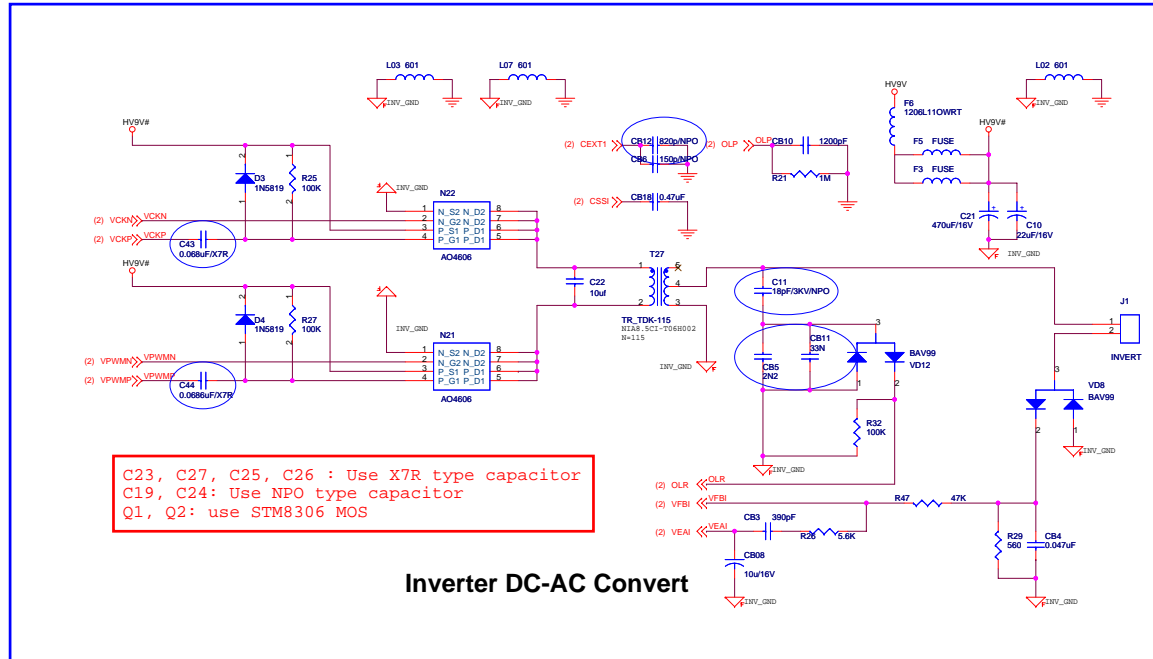
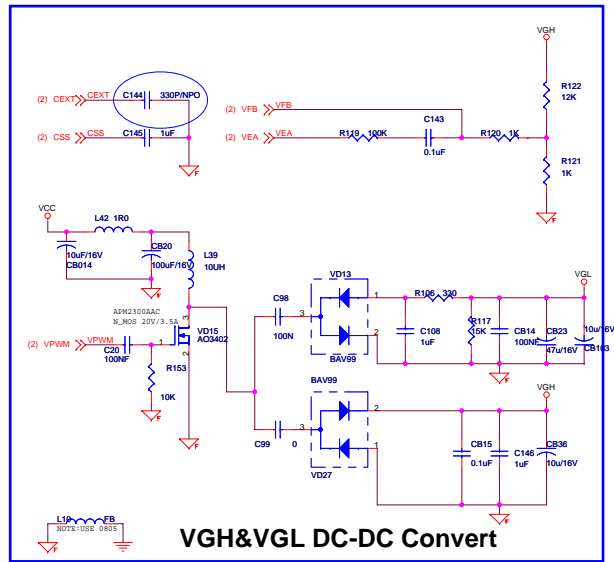


Chip Decap.

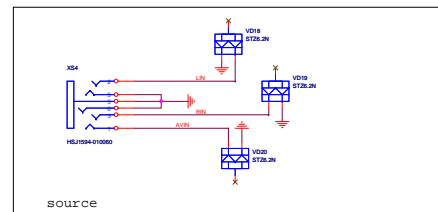
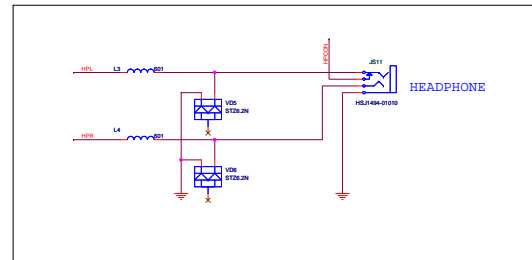
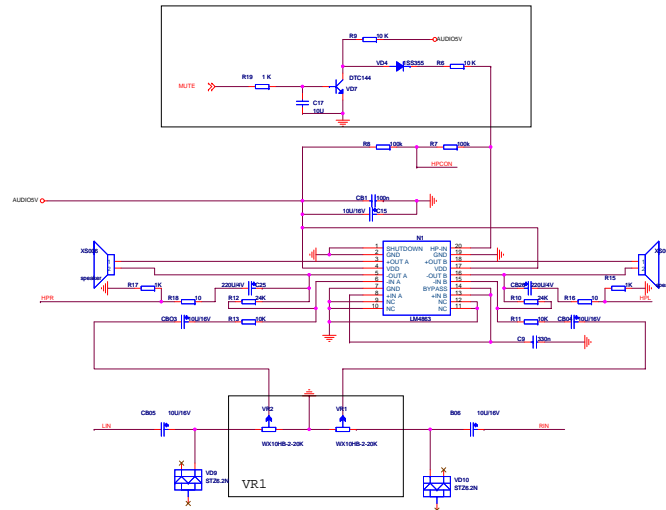
8.0 ELECTRICAL DIAGRAM MAIN BOARD CIRCUIT DIAGRAM (POWER)



8.0 ELECTRICAL DIAGRAM PAC133 MAIN BOARD CIRCUIT DIAGRAM (DC/AC)

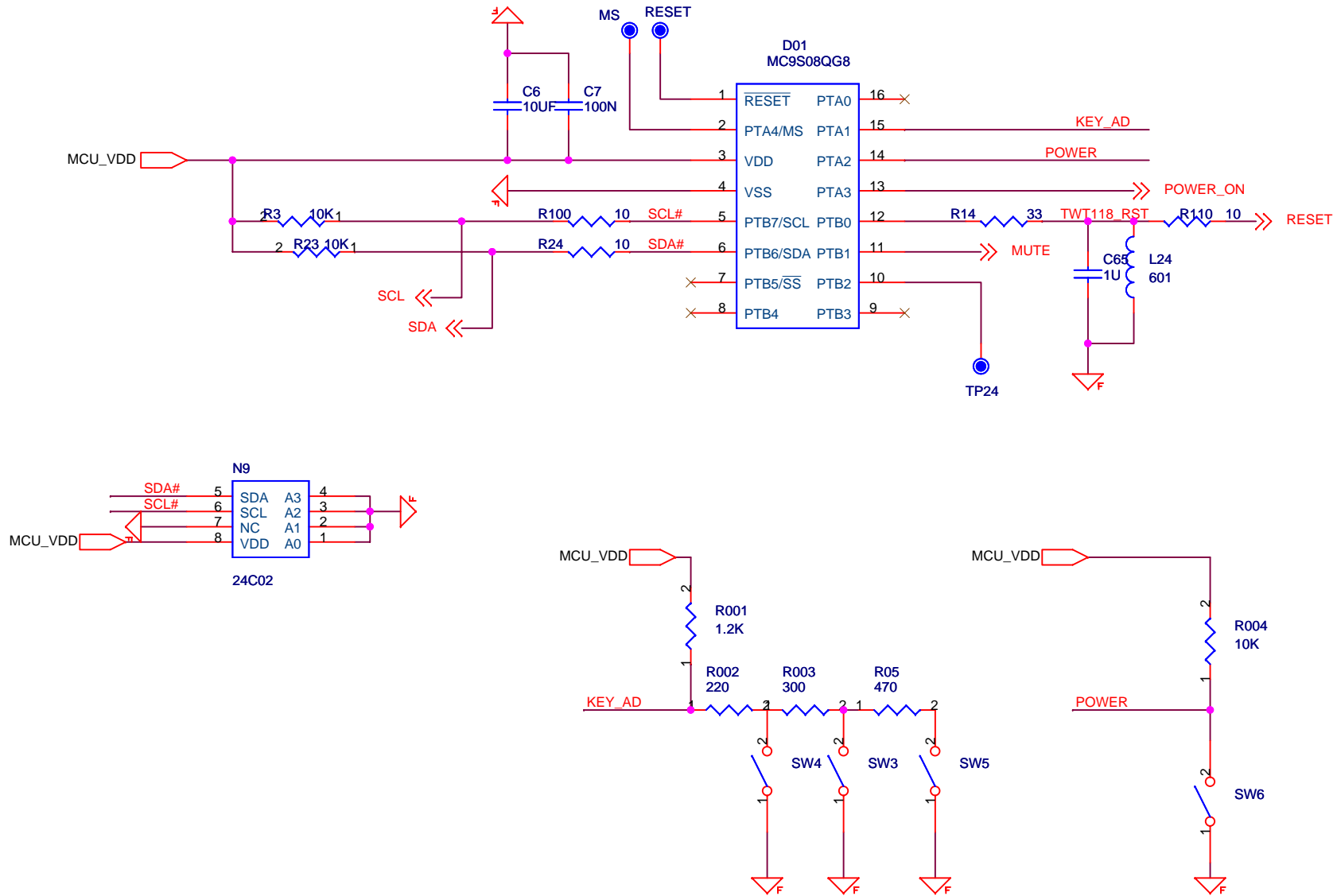


8.0 ELECTRICAL DIAGRAM PAC133 MAIN BOARD CIRCUIT DIAGRAM (LM4863)

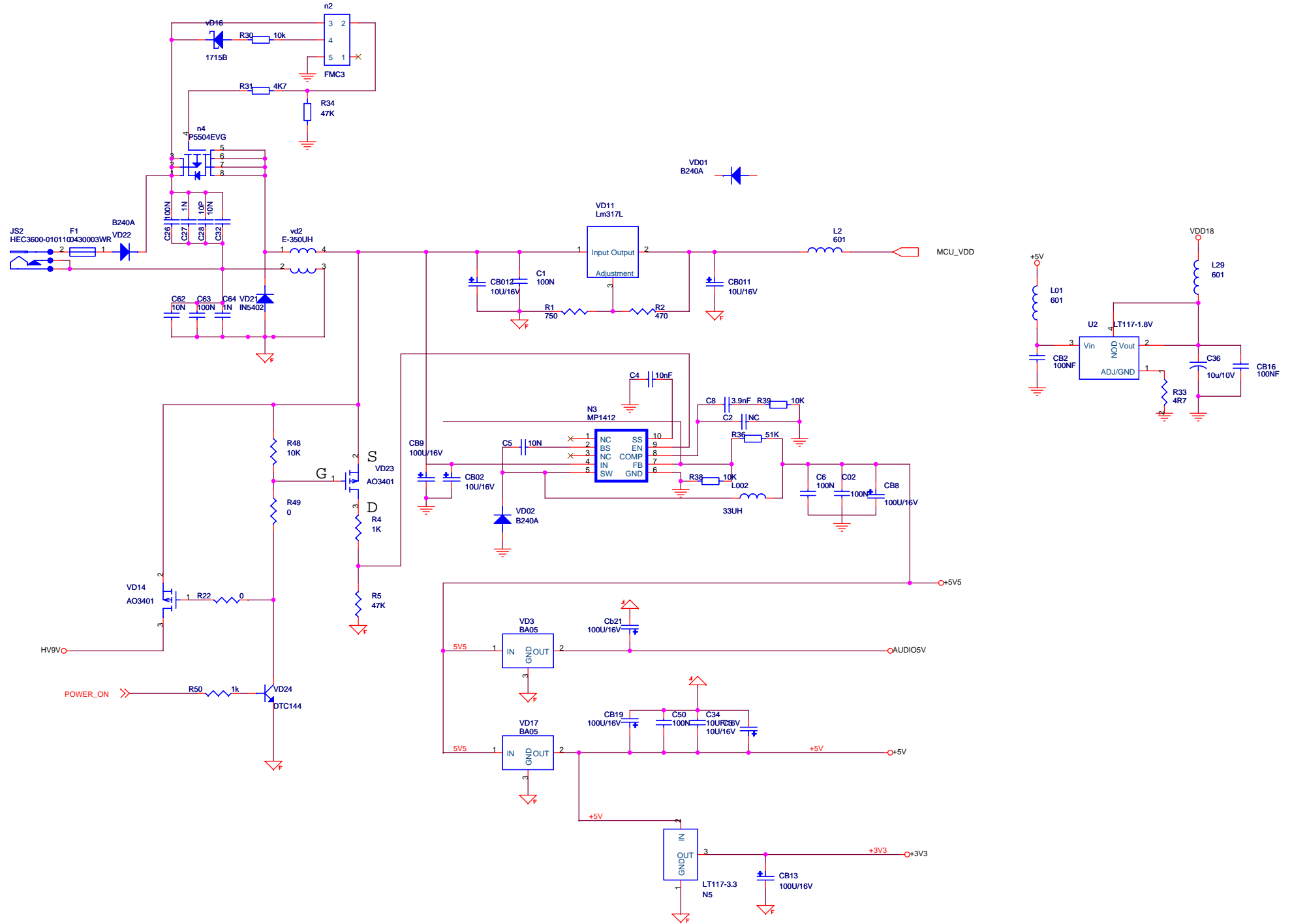


8.0 ELECTRICAL DIAGRAM

PAC133 MAIN BOARD CIRCUIT DIAGRAM (MCU&KEY)

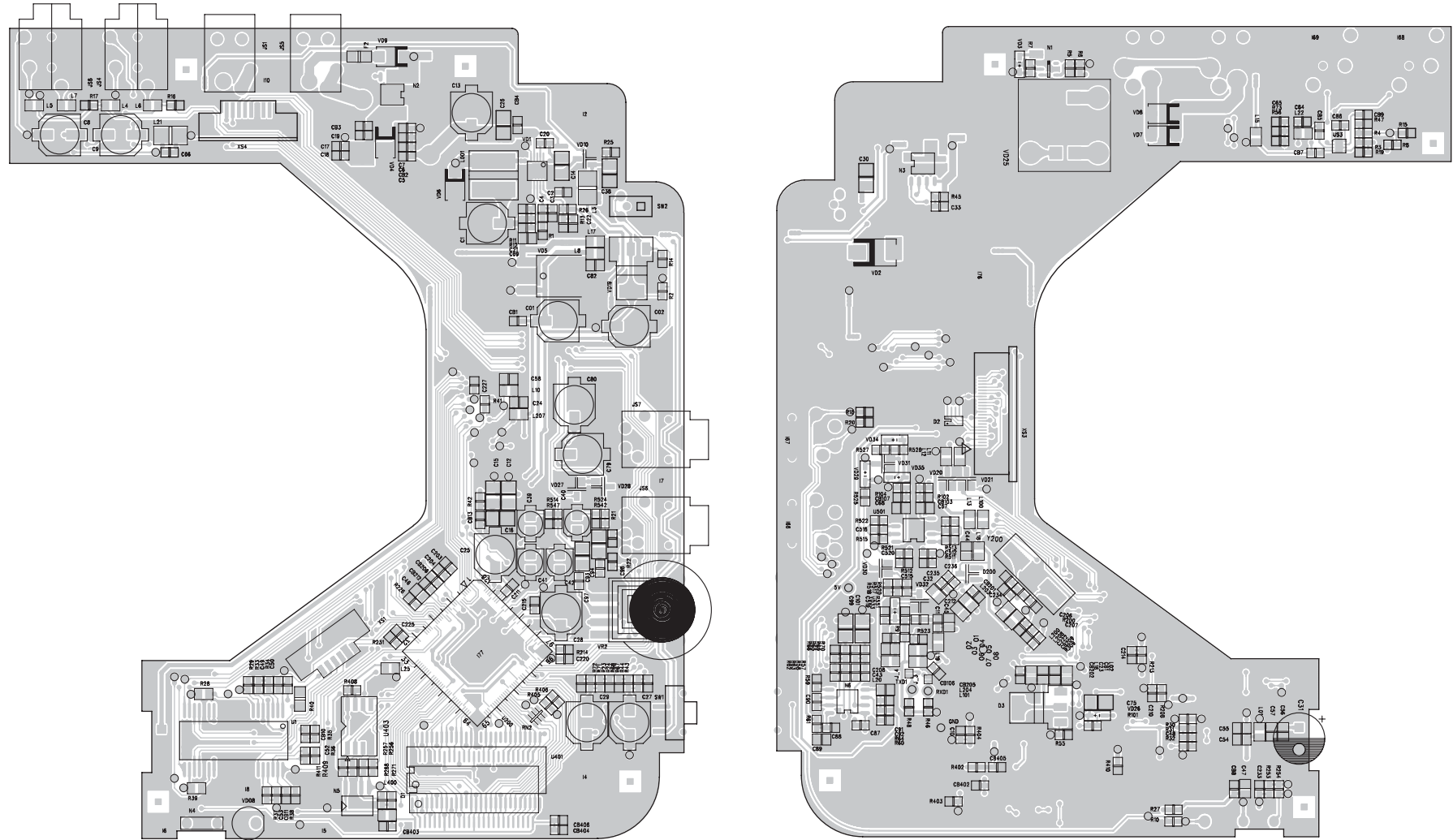


8.0 ELECTRICAL DIAGRAM PAC133 MAIN BOARD CIRCUIT DIAGRAM (POWER)



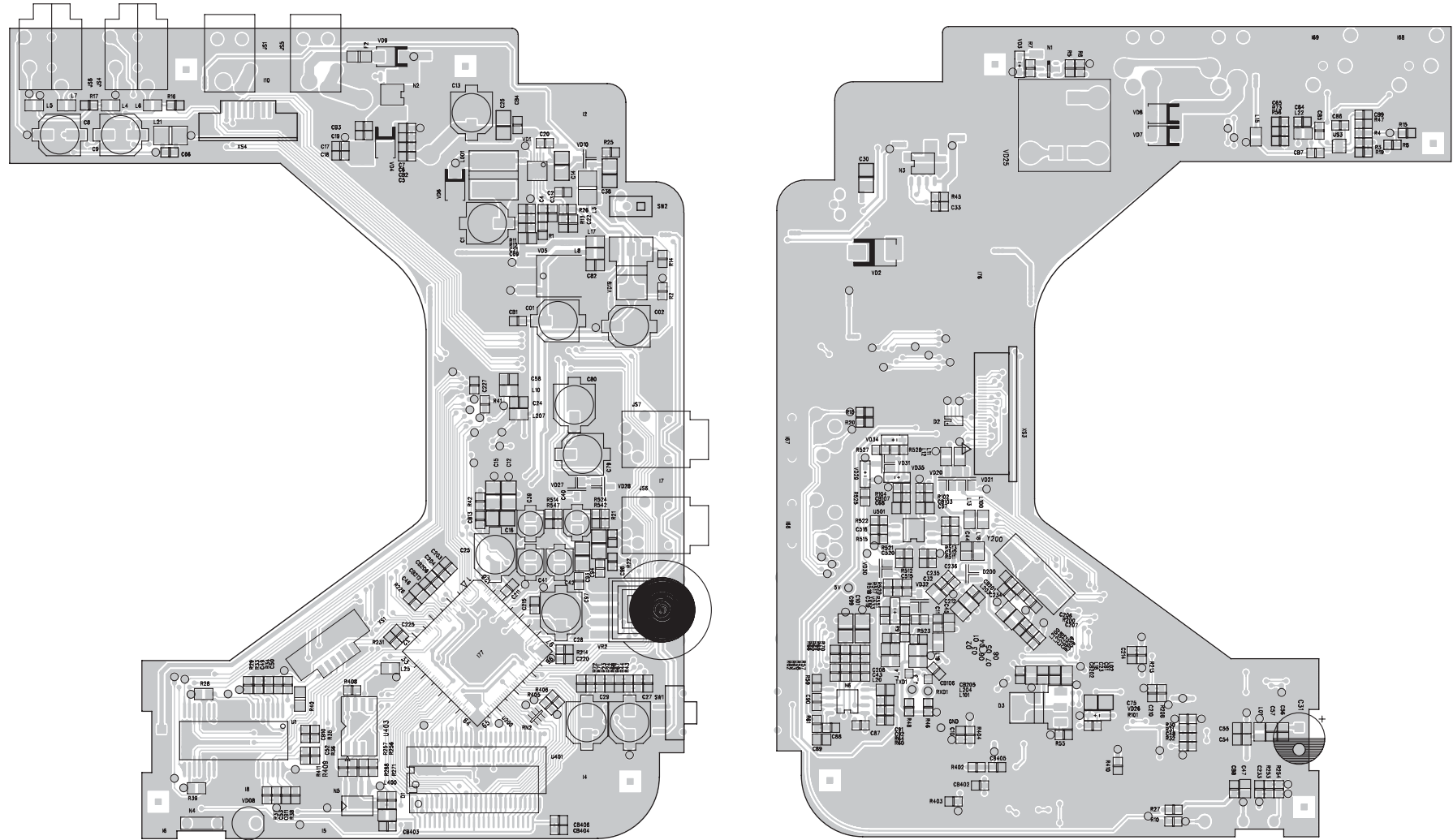
9.0 COMPONENT LAYOUT

PET711M MAIN BOARD DIAGRAM



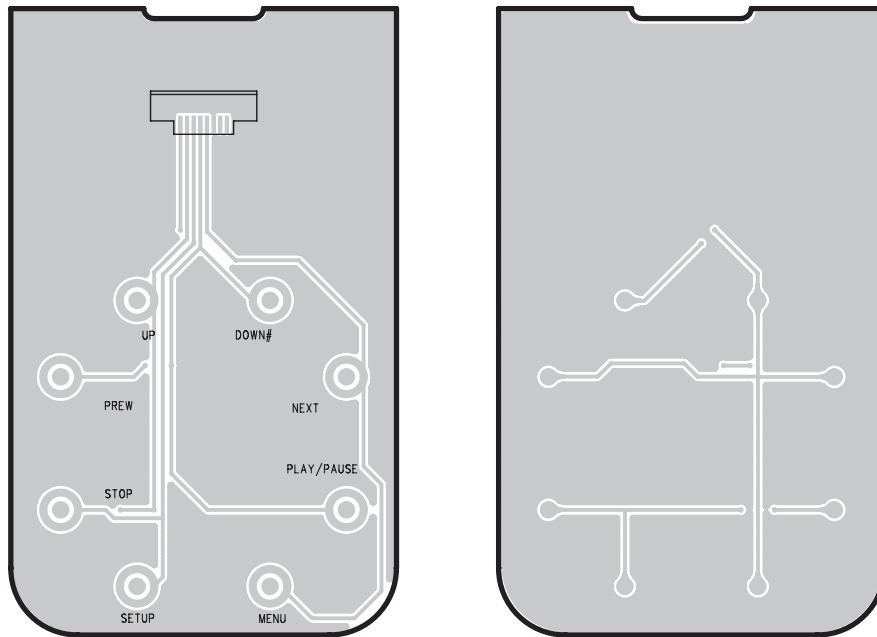
9.0 COMPONENT LAYOUT

PET100M MAIN BOARD DIAGRAM

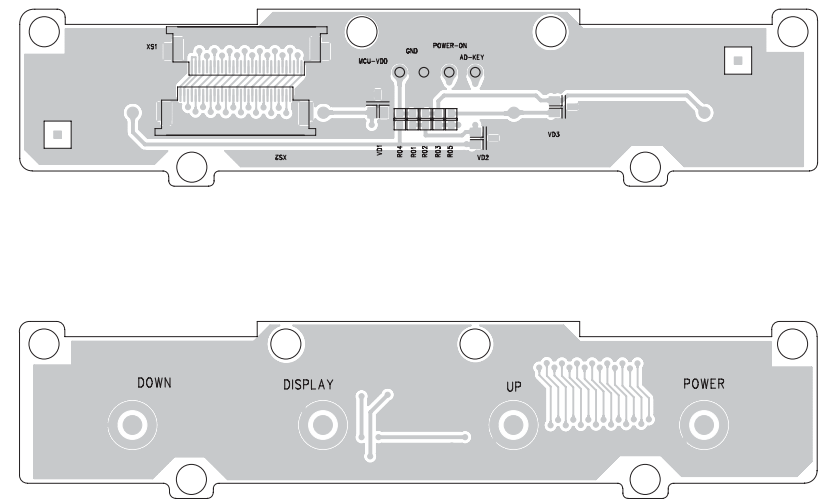


9.0 COMPONENT LAYOUT

PET711K FUNCTION BOARD DIAGRAM



PAC130K FUNCTION BOARD DIAGRAM



10.0 SERVICE PART LIST

Electrical Part List:

No.	CTN	Service 12NC	Service Description	Photo	Pos. No.
1	PET100/67	996510010517	PET100M MAIN PCBA /67		100
	PET100/85	996510015399	PET100M MAIN PCBA /85		
	PET711/05	996510010536	PET711M MAIN PCBA /05		
	PET711/98	996510010543	PET711M MAIN PCBA /98		
2	PET100/67 PET100/85 PET711/05 PET711/98	996510010518	PET711K FUNCTION PCBA		110

10.0 SERVICE PART LIST

Mechanical Part List:

No.	CTN	Service 12NC	Service Description	Photo	Pos. No.
3	PET100/67 PET100/85 PET711/05 PET711/98	996510010520	DVD LOADER		210
4	PET100/67 PET711/05 PET711/98	996510010519	FFC-0.5-24-125		220
	PET100/85	996510020229	FFC-SML2CD-24X114		
5	PET100/67 PET100/85 PET711/05 PET711/98	996510010521	DOOR & FUNCTION BUTTON DISCRETENESS		300
6	PET100/67 PET100/85 PET711/05 PET711/98	996510010522	MIDDLE CABINET DISCRETENESS		310
7	PET100/67 PET100/85	996510010523	BASE COVER DISCRETENESS		320
	PET711/05 PET711/98	996510010537			
8	PET100/67 PET100/85 PET711/05 PET711/98	996510010526	MAIN PCBA SHIELD COVER		330
9	PET100/67 PET100/85 PET711/05 PET711/98	996510010524	DOOR SPRING A		400
10	PET100/67 PET100/85 PET711/05 PET711/98	996510010525	DOOR SPRING B		410



10.0 SERVICE PART LIST

2ND SCREEN (for PET711 only) Part List:

No.	CTN	Service 12NC	Service Description	Photo	Pos. No.
11	PET711/05 PET711/98	996510010539	PAC133M MAIN PCBA	 A photograph of a green printed circuit board (PCBA) with various electronic components, including a microcontroller, capacitors, and connectors, mounted on it.	500
12	PET711/05 PET711/98	996510010538	PAC130K FUNCITON PCBA	 A photograph of a black printed circuit board (PCBA) with several integrated circuits, capacitors, and a ribbon cable connected to one of the components.	519
13	PET711/05 PET711/98	996510010540	LB070W02-TMJ2 TFT LCD	 A photograph of a rectangular, black TFT LCD screen with a white border, resting on a green surface.	520
14	PET711/05 PET711/98	994000002157	SPEAKER	 A close-up photograph of a small, circular speaker component mounted on a green PCB.	530
15	PET711/05 PET711/98	996510010541	PAC133 DISPLAY FRAME	 A photograph of a black plastic display frame with a white screen area in the center, featuring the Philips logo at the bottom.	540
16	PET711/05 PET711/98	996510010542	PAC133 BASE COVER	 A photograph of a white plastic base cover for the device, showing the Philips logo and some technical markings.	550

10.0 SERVICE PART LIST

Mechanical Part List:

No.	CTN	Service 12NC	Service Description	Photo	Pos. No.
17	PET711/05 PET711/98	996510019833	POWER KNOB		420
18	PET711/05 PET711/98	996510019834	POWER KNOB CUSHION		430

10.0 SERVICE PART LIST

Accessories Part List:

No.	CTN	Service 12NC	Service Description	Photo	Pos. No.
17	PET100/67	996510010529	ADPV60A AC/DC ADAPTER /67		ACAPT
	PET100/85	996510015400	ADPV60A AC/DC ADAPTER /85		
	PET711/05	996510001119	ADPV26B AC/DC ADAPTER /05		
	PET711/98	996510001129	ADPV26B AC/DC ADAPTER /98		
18	PET100/67 PET100/85 PET711/05 PET711/98	994000001912	AV CABLE		AVCABLE
19	PET100/67 PET100/85 PET711/05 PET711/98	996510010528	CAR ADAPTER AY4196		CARAPT
20	PET100/67 PET100/85 PET711/05 PET711/98	996510010527	RC-AY5513 REMOTE		RC
21	PET711/05 PET711/98	996510010535	POWER CABLE		PCABLE

11.0 REVISION LIST

Version 1.0 (3141 785 32280)

- Initial release PET100/67, PET711/05/98

Version 1.1 (3141 785 32281)

- Delete section 1 - region code change procedure

Version 1.2 (3141 785 32282)

- Update section 10 – add PET100/85 part-list