

Service
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Service Manual

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3141 785 32870

1.0 TECHNICAL SPECIFICATION

General

Dimensions (W x H x D):	205 x 168 x 45 mm
Weight:	1.07kg
Power supply:	DC 9-12V 1.8A
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 / DivX

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

Disc Diameter 12cm

Pixel specification

Zero 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 hour

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)

Procedure to check the software version of your portable DVD Player

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 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

Procedure to change region code of your portable DVD player

1. Power on player and open the DVD door
2. Press [SETUP] by remote control.
3. In Set Up Menu, select <Audio> and press [OK]
4. Press [2], [1], [2], [2], [2], [5], [<], [V]
5. Display will show the Region Code
6. Press Number Key button by remote control to select the region code
7. Refer below table for your region code setting

Region Code	Region
1	USA
2	EUROPE
3	ASIA PACIFIC
4	AUSTRALIA, NEW ZEALAND, LATAM
5	RUSSIA, INDIA
6	CHINA

Region code "0" can be used for all regions!

8. Press [SETUP] to save and exit your setting
9. Power off and power on again to verify if region code change is done

Remarks:

1. **Password is CONFIDENTIAL**
2. **Region code is printed on product type plate. Due to DVD legislation region codes different to assigned region may not be released**

1.0 TECHNICAL SPECIFICATION

PCBA Policy Matrix

STROKE VER	/05	/12
PCBA TYPE		
MAIN BOARD	MLR	MLR
IF BOARD	MLR	MLR
FUNCTION BOARD	MLR	MLR
BATTERY BOARD	MLR	MLR

MLR = module level repair

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. Betrakta 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.

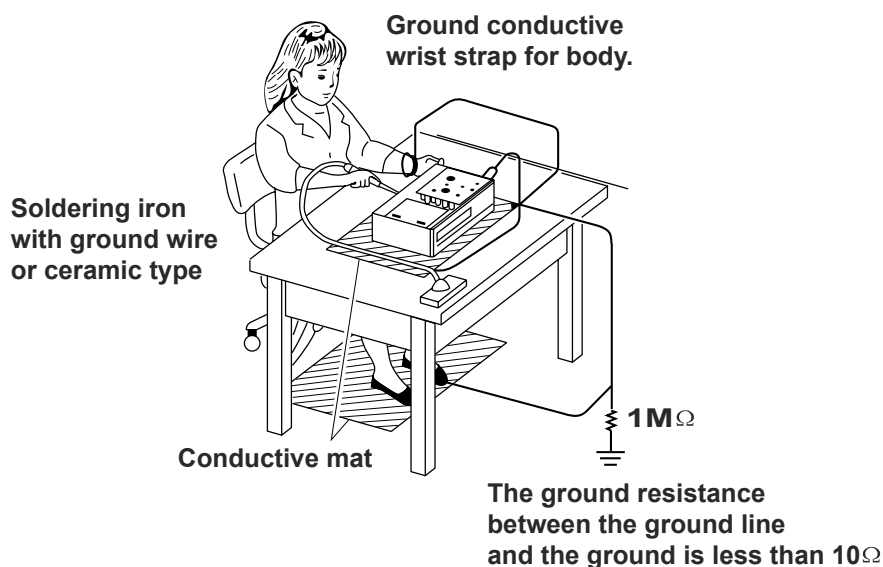
When the power supply is being turned on, you may not remove this laser cautions label. If it removes, radiation of laser may be received.

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.



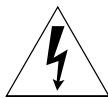
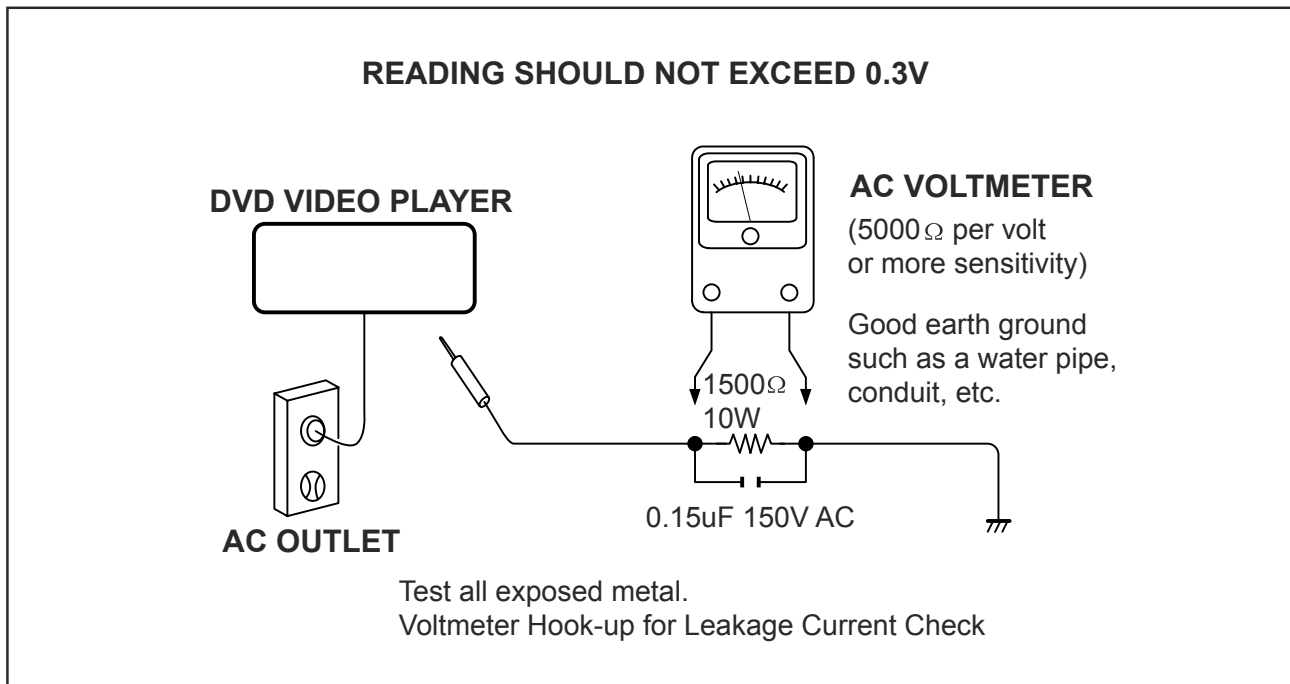
SAFTY NOTICE

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.

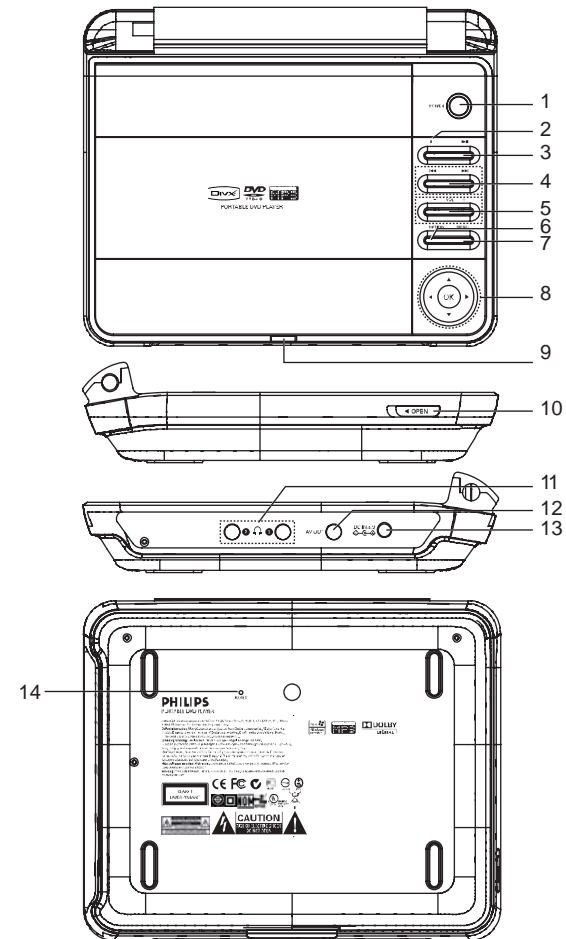
3.0 INSTRUCTIONS FOR USE

- | | |
|--|--|
| <p>① POWER
Switch the power on/off.</p> <p>② ■
Press once to stop playback and store the stop position. Press twice to stop playback completely.</p> <p>③ ▶
Start / pause / resume playback.</p> <p>④ ⏮ / ⏭
Skip to previous/next track or fast search backward/forward.</p> <p>⑤ - VOL +
Volume control.</p> <p>⑥ OPTION
Access additional functions.</p> <p>⑦ MENU
Display MENU page.</p> | <p>⑧ ▲, ▼, ◀, ▶
Up / down / left / right cursor.</p> <p>OK
Confirm selection.</p> <p>⑨ POWER/IR/CHR
Power /remote sensor /charging indicator.</p> <p>⑩ OPEN
Open the disc door to insert or remove disc.</p> <p>⑪ 1 2
Headphones jacks.</p> <p>⑫ AVOUT
Audio/Video output.</p> <p>⑬ DC IN 12V
Power supply socket.</p> <p>⑭ RESET
Reset the player when it is hanged up.</p> |
|--|--|

CAUTION

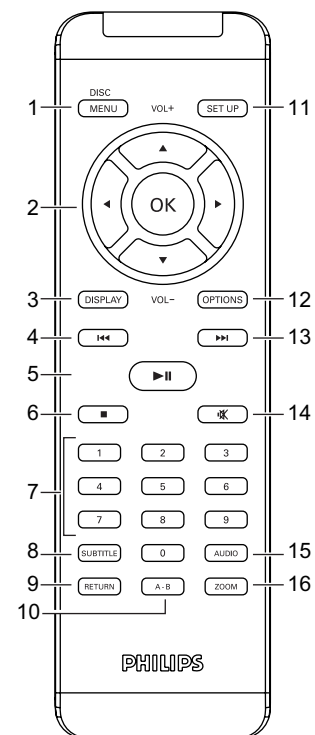
Use of controls or adjustments or performance of procedures other than herein may result in hazardous radiation exposure or other unsafe operation.

MAIN UNIT CONTROL



REMOTE CONTROL

- ① **MENU**
Display **MENU** page.
- ② ▲, ▼, ◀, ▶
Up / down / left / right navigation key.
- OK**
Confirm selection.
- VOL +/-**
Volume control.
- ③ **DISPLAY**
Adjust the display value of the system.
- ④ ⏮
Skip to previous chapter, track or title.
- ⑤ ▶⏪
Start / pause / resume playback
- ⑥ ■
Access additional functions.
- ⑦ **0 - 9**
Numeric keypad.
- ⑧ **SUBTITLE**
Subtitle language selector.
- ⑨ **RETURN**
For VCD menu page.
- ⑩ **A - B**
To repeat or loop a sequence in a title.
- ⑪ **SETUP**
Enter **SETUP** menu.
- ⑫ **OPTION**
Access additional functions.
- ⑬ ⏭
Skip to next chapter, track or title.
- ⑭ 🔊
Mute player volume
- ⑮ **AUDIO**
Audio language selector.
- ⑯ **ZOOM**
Enlarge video image.



4.0 MECHANICAL INSTRUCTIONS

1. Remove screws to remove the base cover discreteness and battery ass'y.

(1).Remove screws at the base as Fig.1.



Fig.1

(2).Remove output jack PC in the side first, then remove the screws as Fig.2.



Fig.2

(3).Open the door ,remove screws in the middle cabinet discreteness as Fig.3.



Fig.3

(4).Remove the base cover discreteness and battery ass'y as Fig.4.



Fig.4

2. Broken connections and remove screws to remove loading ass'y and main board as Fig.5.

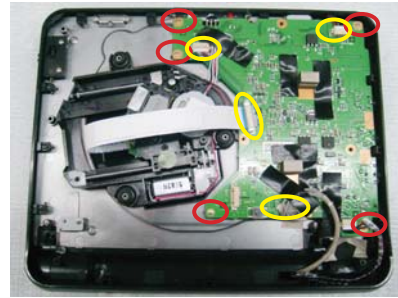


Fig.5

3. Then to remove function board as Fig.6.

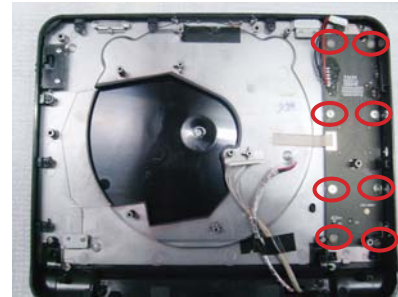


Fig.6

4. Remove screws to remove hinge adorn panel as Fig.7.

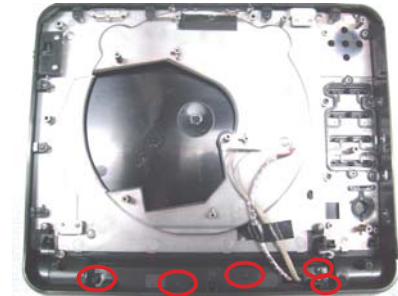


Fig.7

5. Remove the top cover discreteness.

(1).Remove speaker grill and cushion at the display frame first as Fig.8.



Fig.8

4.0 MECHNICAL INSTRUCTIONS

(2).Remove screws to remove the top cover discreteness as Fig.9.



Fig.9

6. Remove screws from the hinge to remove the middle cabinet discreteness as Fig.10.



Fig.10

7. Remove screws to remove display frame shade (base) as Fig.11.



Fig.11

8. Broken connections and remove screws to remove IF board as Fig.12.



Fig.12

9. Remove screws to remove display frame (top) and backlight board as Fig.13.

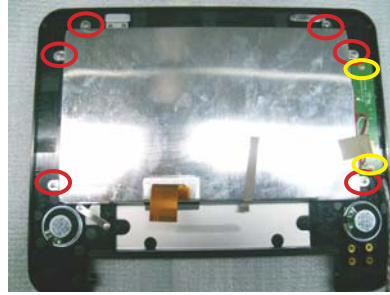


Fig.13

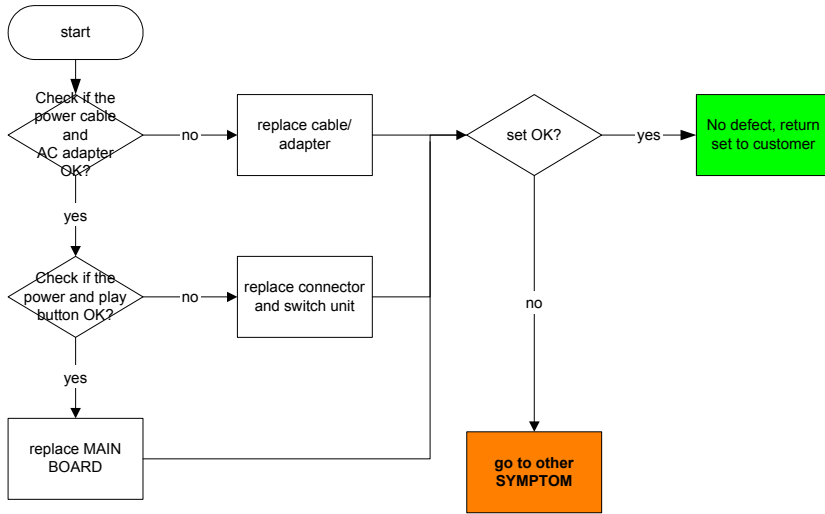
10. Then remove TFT LCD and speakers.



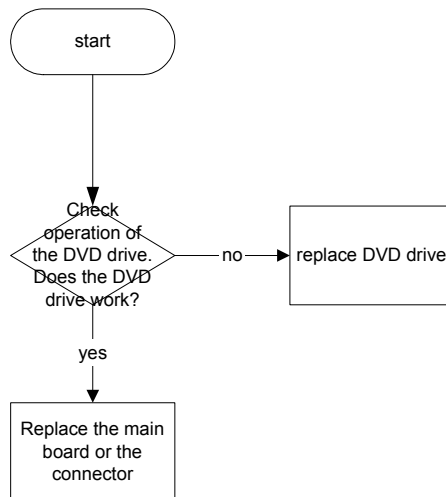
Fig.14

5.0 TROUBLESHOOTING & SERVICE TIPS

SYMPTOM: NO POWER, NO GREEN LED

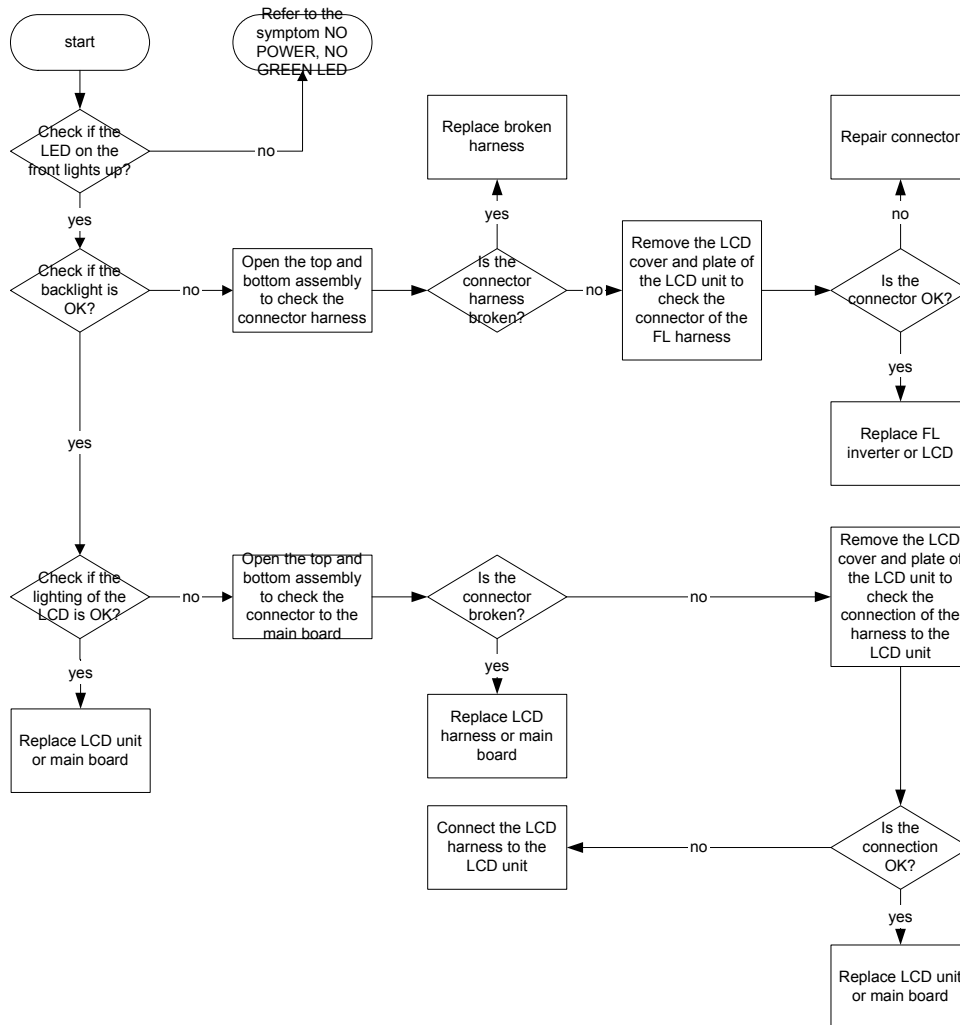


SYMPTOM: NO IMAGE OR SOUND COMES OUT FROM THE EXTERNAL OUTPUT

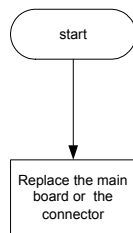


5.0 TROUBLESHOOTING & SERVICE TIPS

SYMPTOM: THE INITIAL SCREEN IS NOT DISPLAYED ON THE LCD

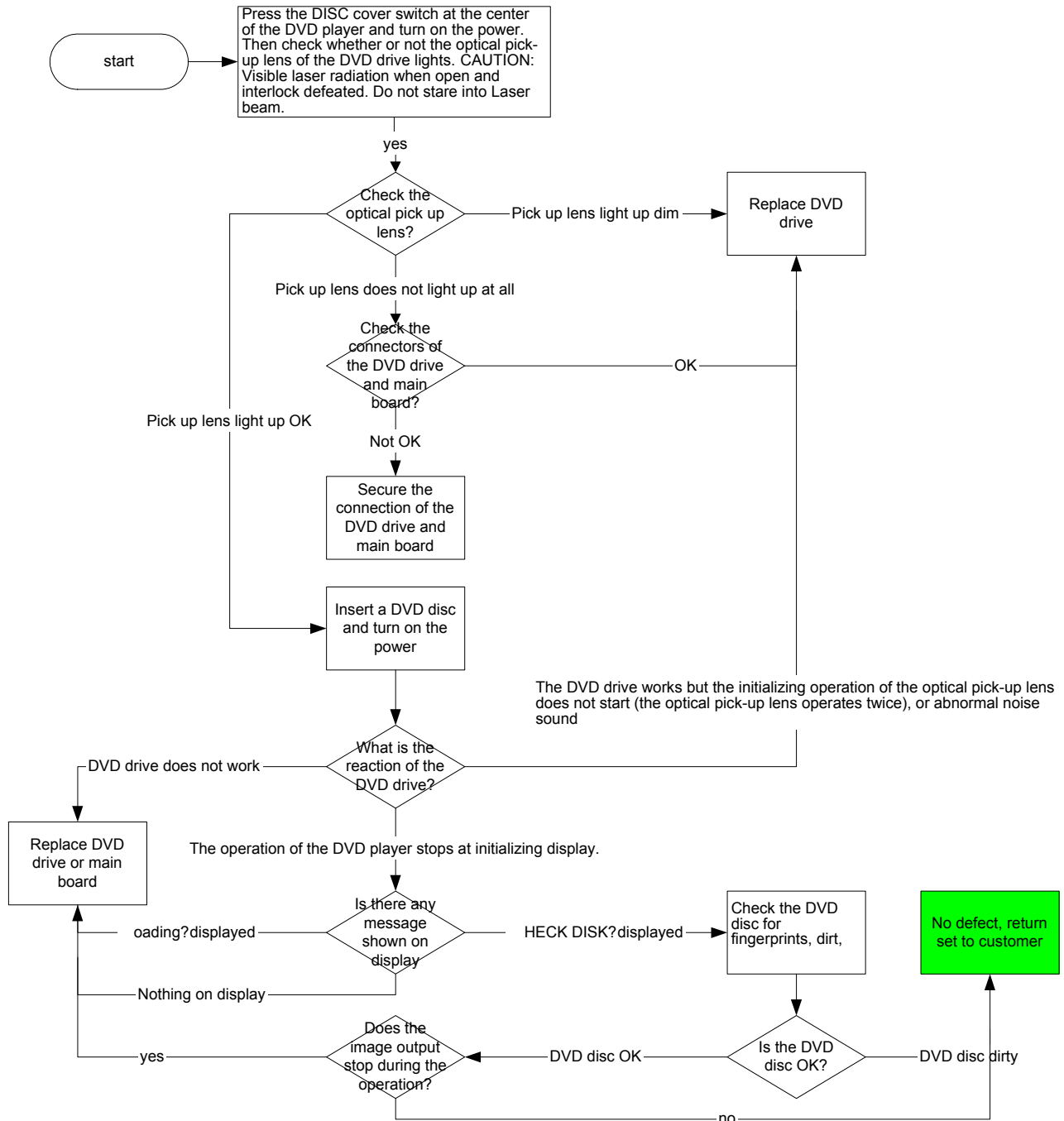


SYMPTOM: NO IMAGE OR SOUND COMES OUT FROM THE EXTERNAL INPUT



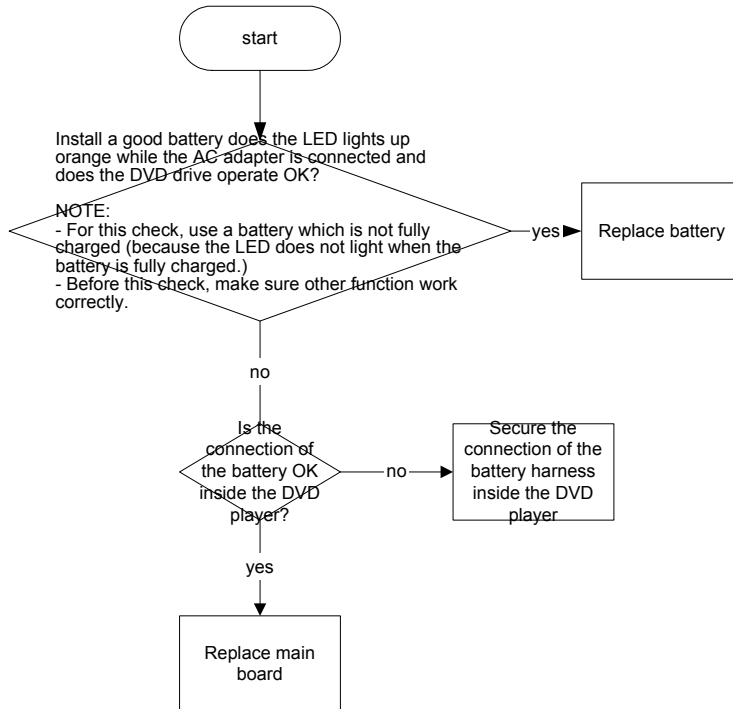
5.0 TROUBLESHOOTING & SERVICE TIPS

SYMPTOM: THE DVD DRIVE DOES NOT WORK

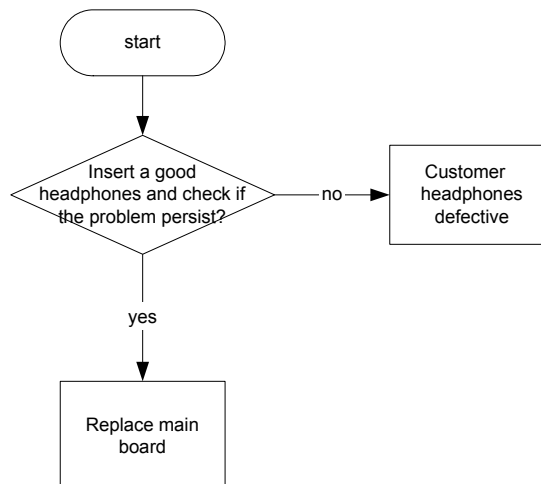


5.0 TROUBLESHOOTING & SERVICE TIPS

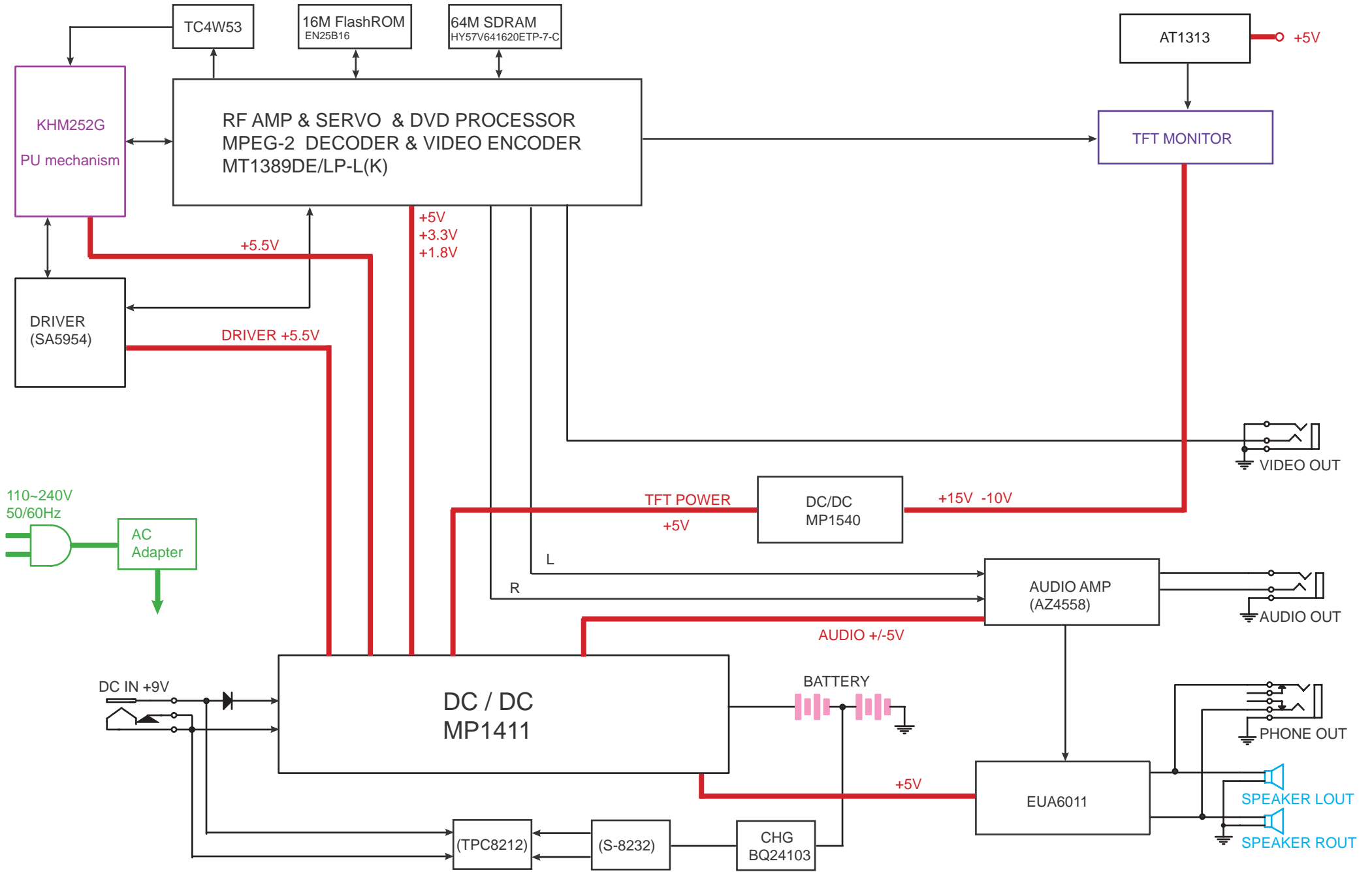
SYMPTOM: THE DVD DRIVE DOES NOT OPERATE WITH BATTERY



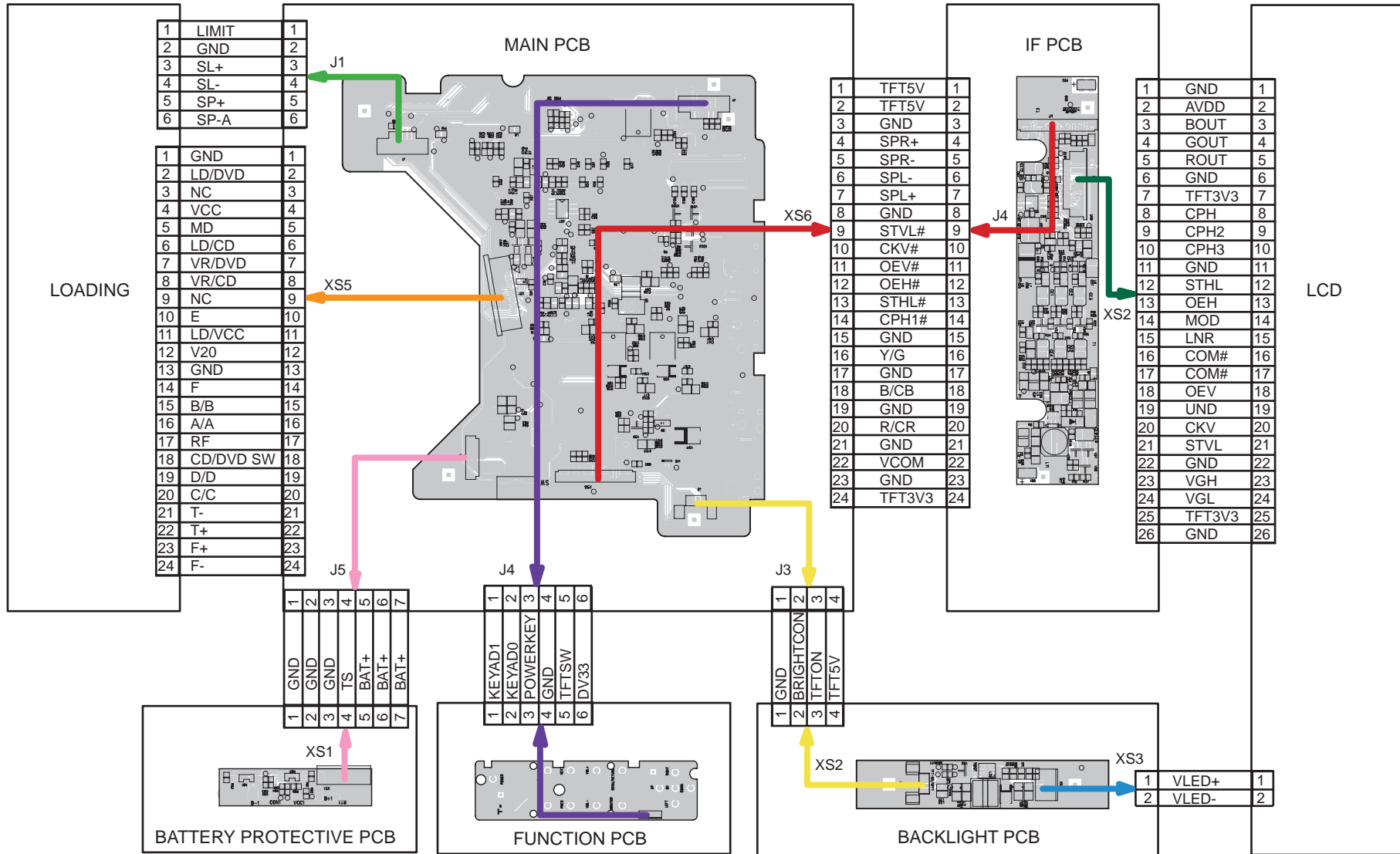
SYMPTOM: NO SOUND COMES FROM THE HEADPHONES



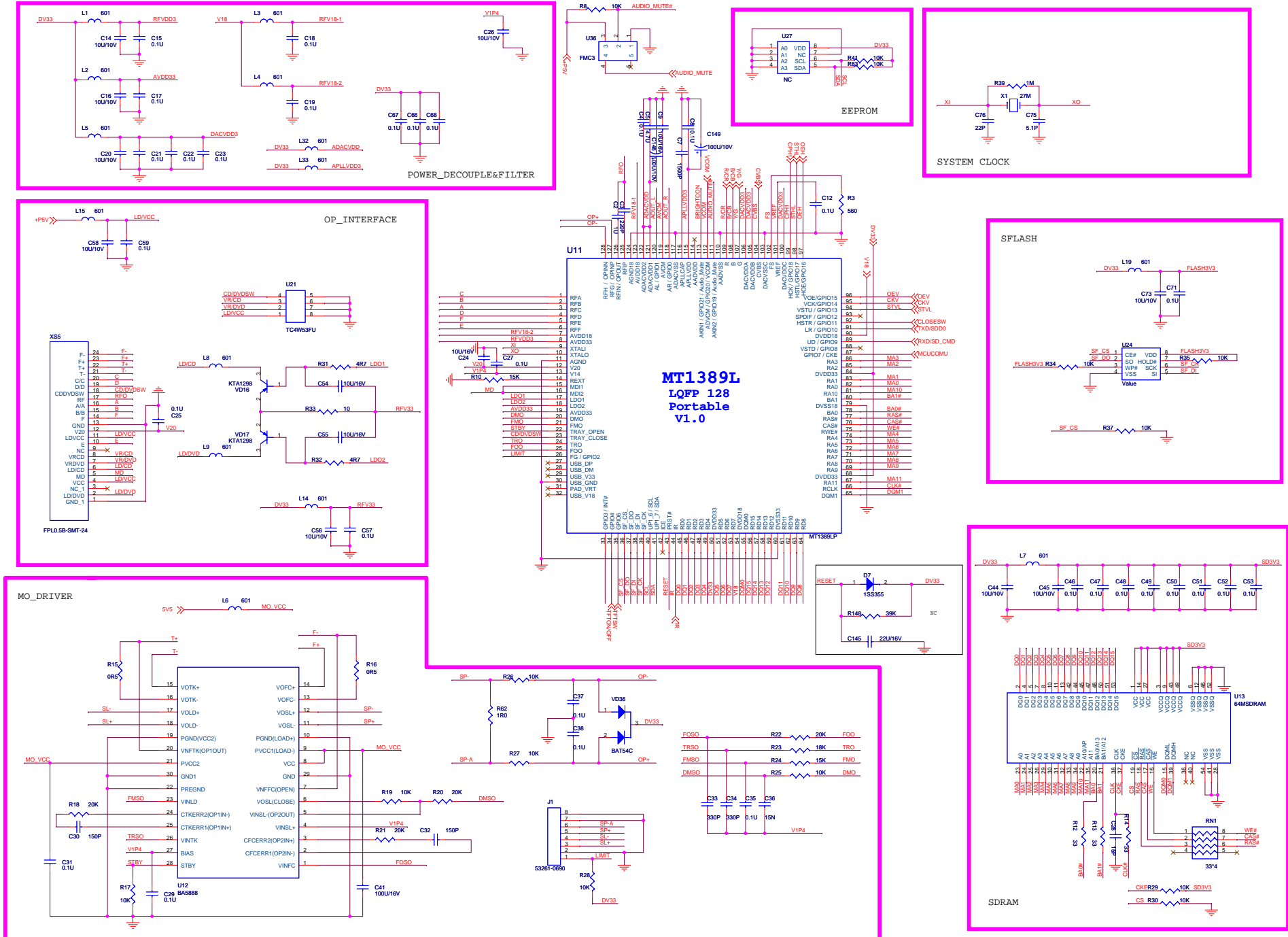
6.0 OVERALL BLOCK DIAGRAM



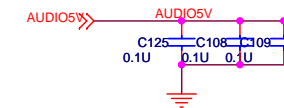
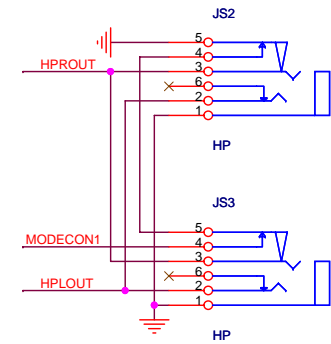
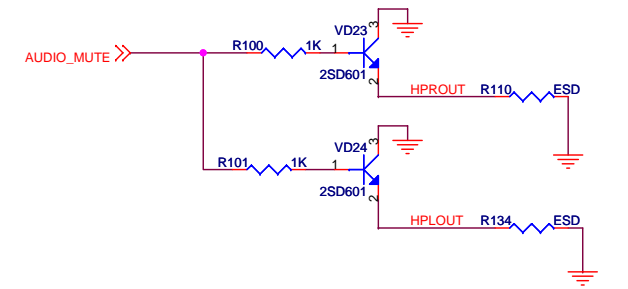
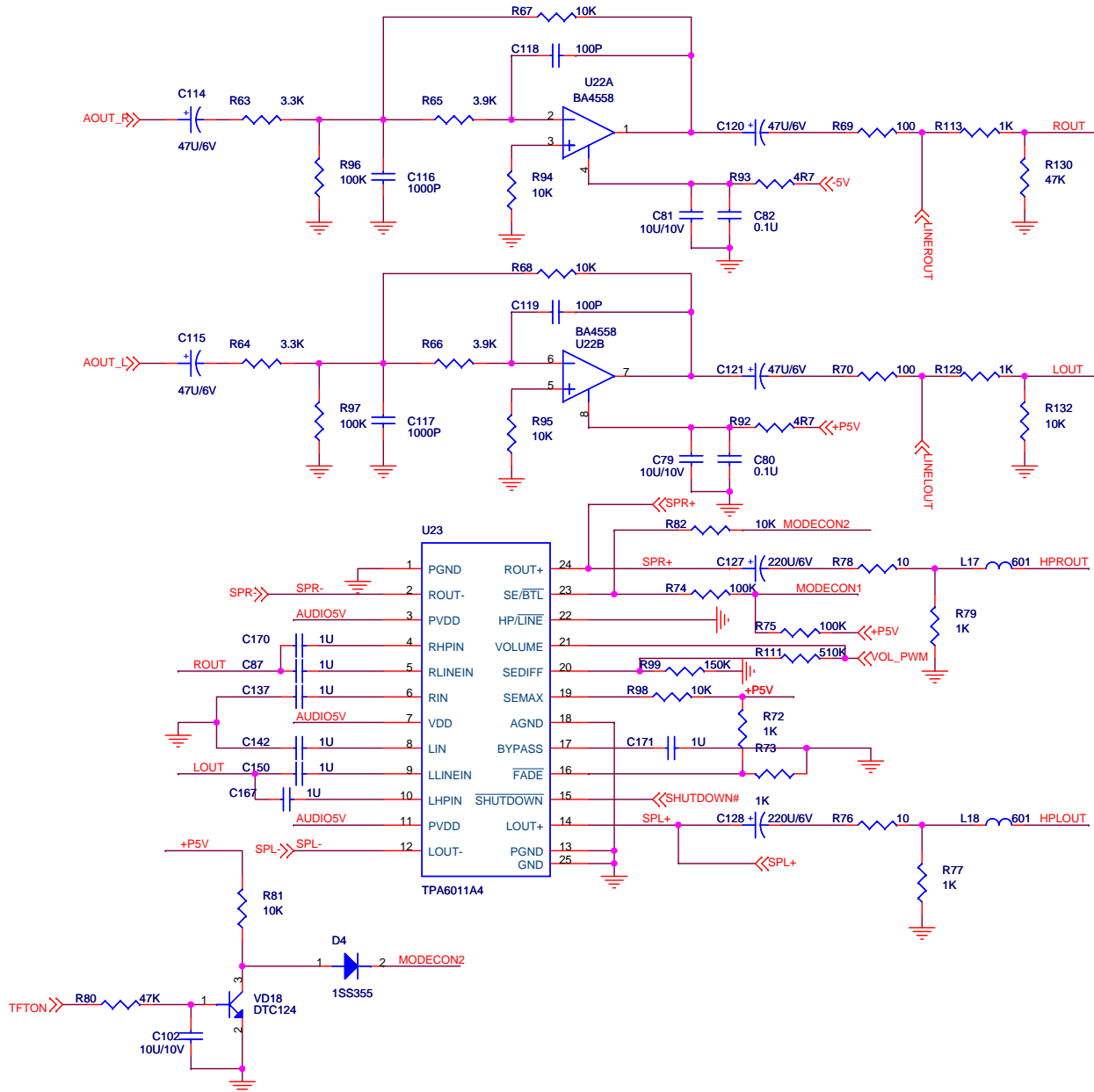
7.0 OVERALL WIRING DIAGRAM



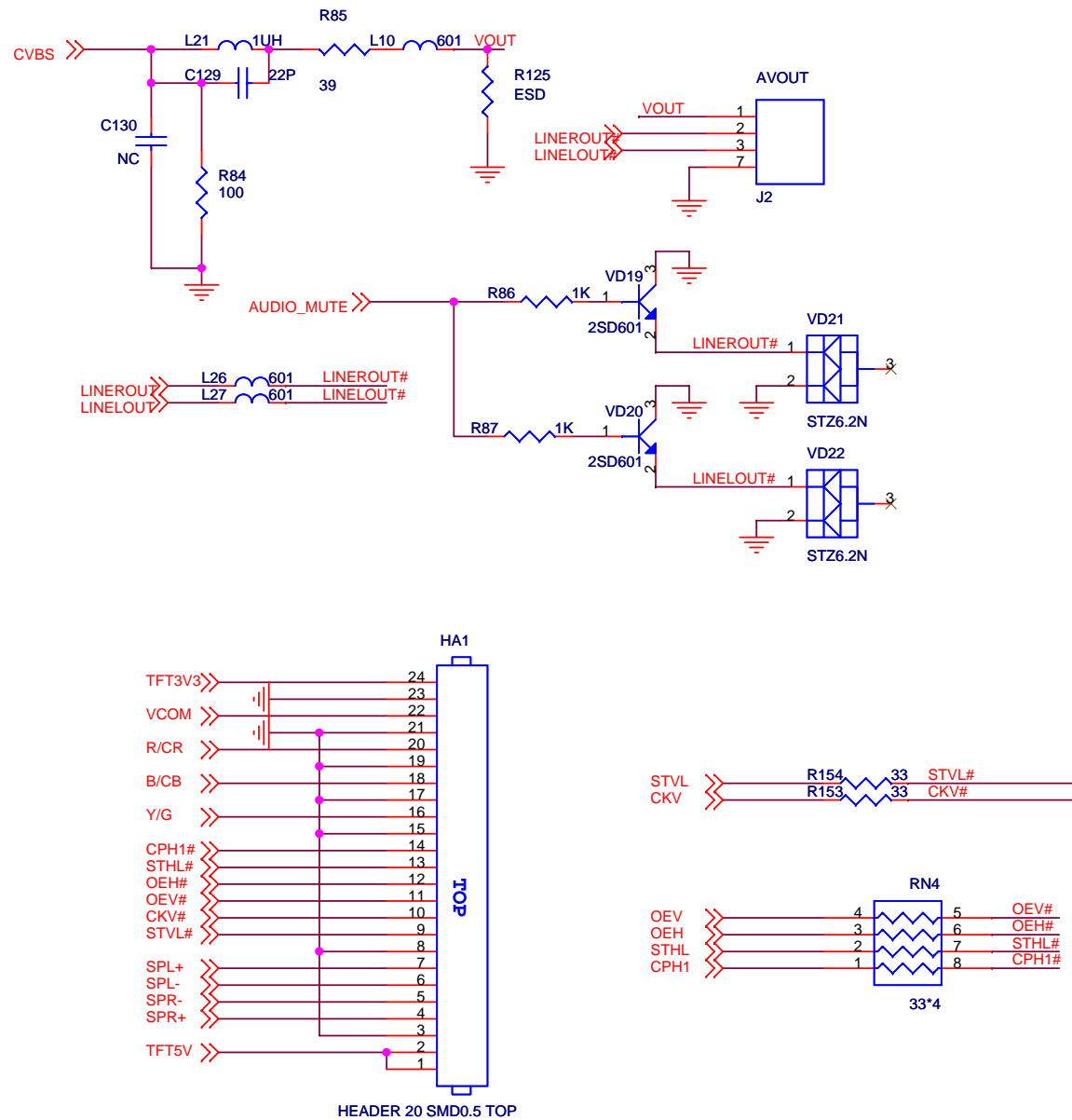
8.0 ELECTRICAL DIAGRAM MAIN BOARD CIRCUIT DIAGRAM (1389LP)



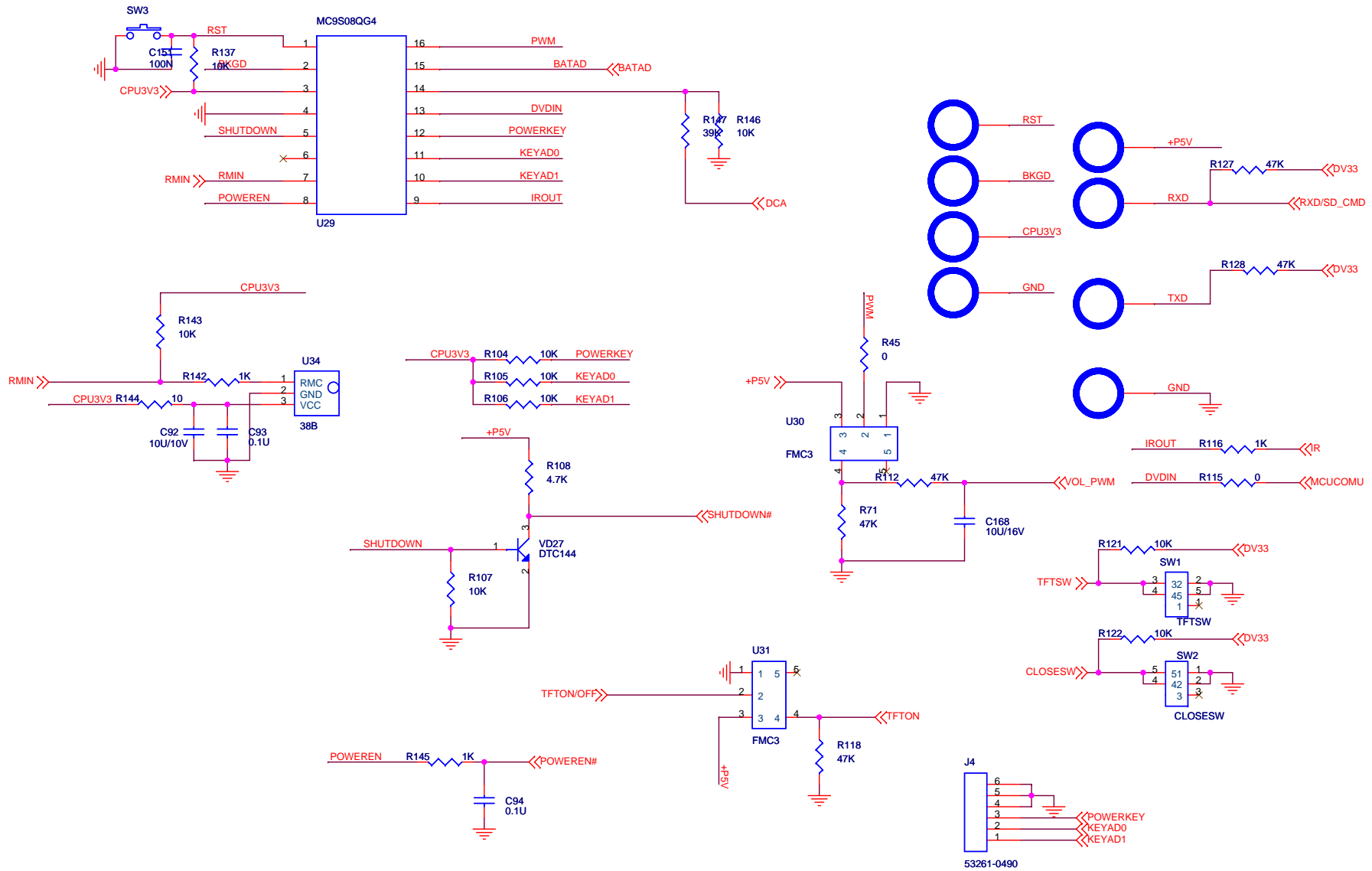
8.0 ELECTRICAL DIAGRAM MAIN BOARD CIRCUIT DIAGRAM (AUDIO)



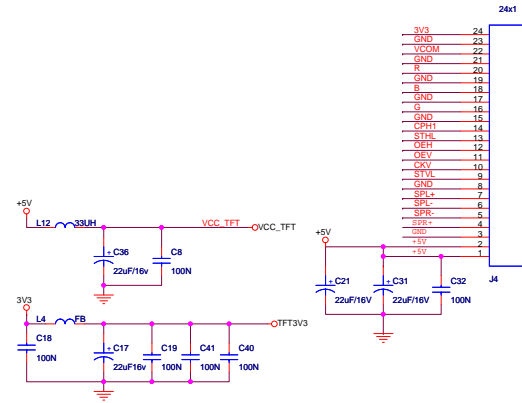
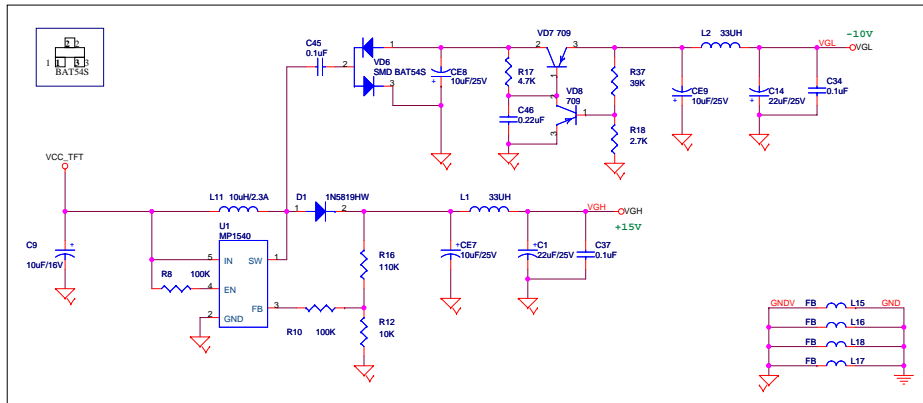
8.0 ELECTRICAL DIAGRAM MAIN BOARD CIRCUIT DIAGRAM (AV INTERFACE)



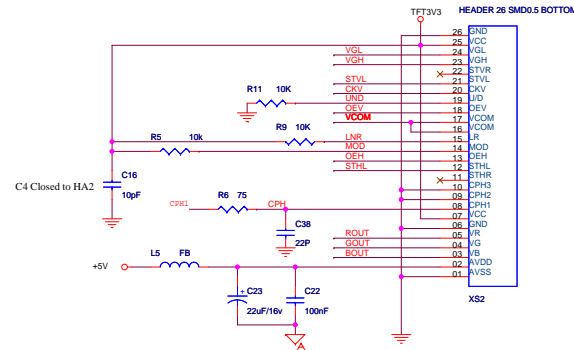
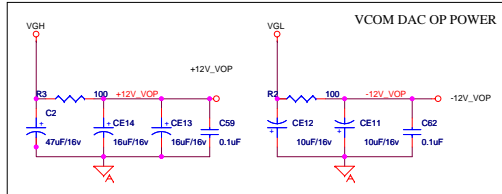
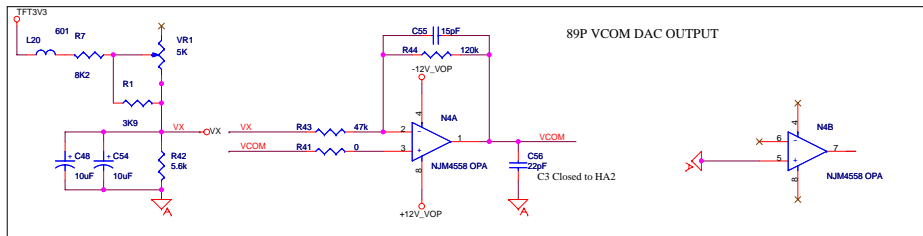
8.0 ELECTRICAL DIAGRAM MAIN BOARD CIRCUIT DIAGRAM (CPU&CONTROL)



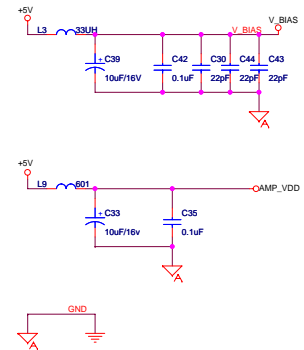
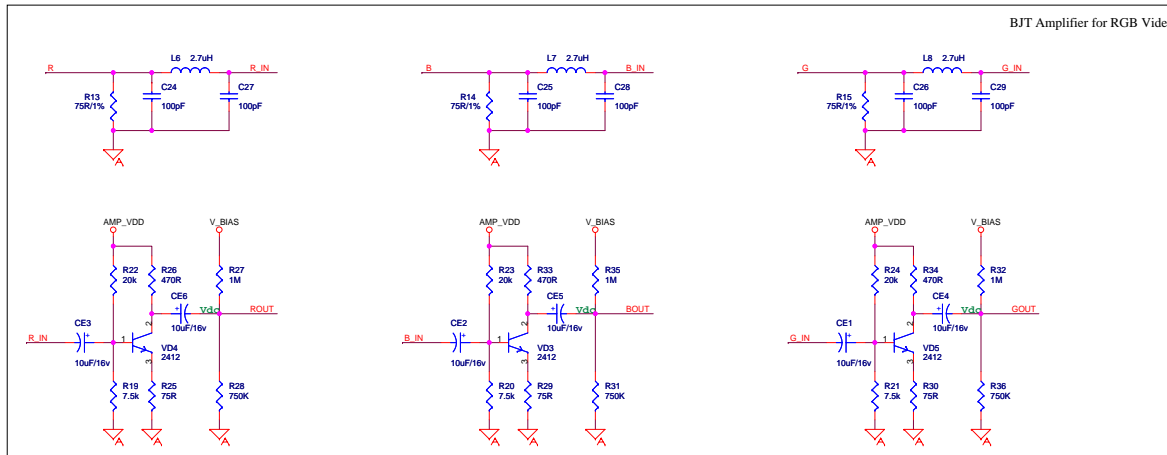
8.0 ELECTRICAL DIAGRAM IF BOARD CIRCUIT DIAGRAM



3V3	24
GND	23
VCOM	22
R	20
GND	19
B	18
GND	17
G	16
GND	15
CPH1	14
STHL	13
CEV	12
CEH	11
STVL	10
STVL	9
GND	8
SPL	7
SPL	6
SPR	5
SPR	4
IMP	3
IMP	2
+5V	1

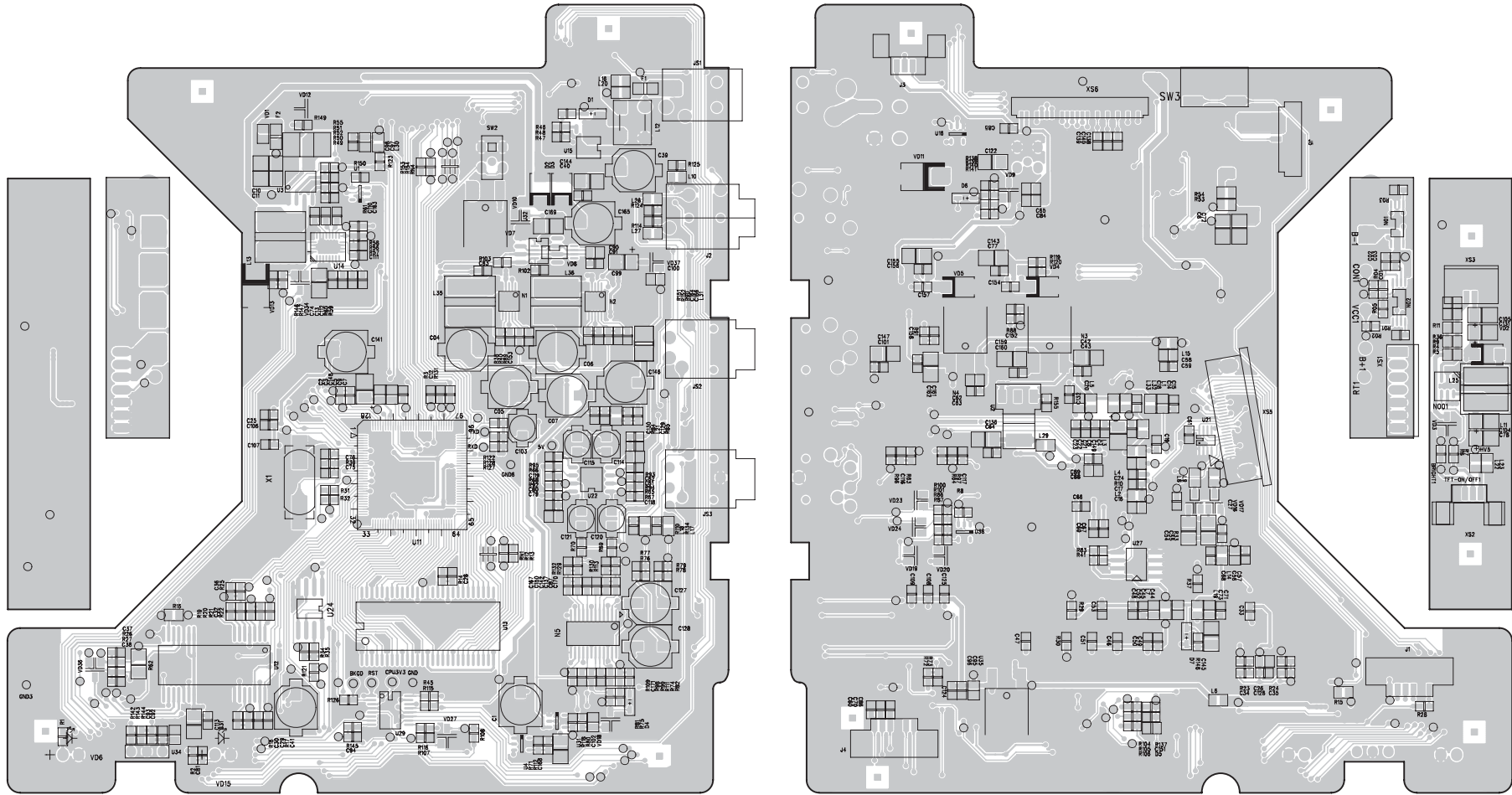


1	GND
2	VCC
3	VGL
4	VGH
5	STVR
6	STVL
7	CEV
8	I/D
9	OEV
10	DEV
11	VCOM
12	I/R
13	MOD
14	QBE
15	STHL
16	PH3R
17	CPH3
18	CPH2
19	CPH1
20	VCC
21	GND
22	VB
23	VG
24	VB
25	AVDD
26	AVSS



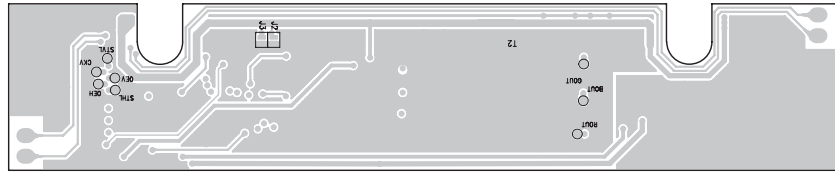
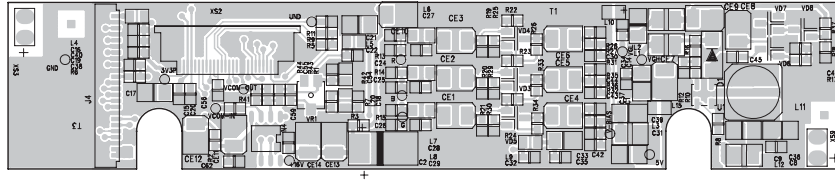
9.0 COMPONENT LAYOUT

MAIN BOARD DIAGRAM

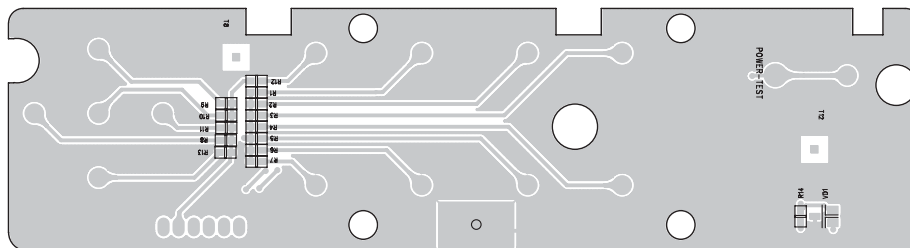
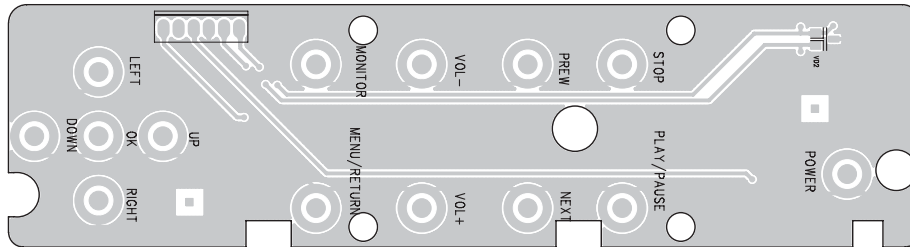


9.0 COMPONENT LAYOUT

IF BOARD DIAGRAM



FUNCTION BOARD DIAGRAM



10.0 SERVICE PART LIST

Electrical Part List:

CTN	Service 12NC	Service Description	Photo	Pos. No.
PET740/05 PET740/12	996510017189	PET740M MAIN PCBA	 A photograph of a large, green printed circuit board (PCBA) populated with various electronic components, including integrated circuits, capacitors, and connectors.	100
PET740/05 PET740/12	996510017171	PET740T IF PCBA	 A photograph of a smaller, green printed circuit board (PCBA) with several components, including a large integrated circuit and various passive components.	110
PET740/05 PET740/12	996510017172	PET704K FUNCTION PCBA	 A photograph of a long, narrow printed circuit board (PCBA) with several components, including a large integrated circuit and various passive components.	120
PET740/05 PET740/12	996510017173	PET740 BATTERY ASSY	 A photograph of a black battery assembly with two orange safety caps and several wires extending from it.	130

10.0 SERVICE PART LIST

Mechanical Part List:

CTN	Service 12NC	Service Description	Photo	Pos. No.
PET740/05 PET740/12	996510017261	7" LB070W02-TME2-LED10 TFT LCD		200
PET740/05 PET740/12	996510010520	KHM252G LOADING ASSY		210
PET740/05 PET740/12	996510002948	SPEAKER		220
PET740/05 PET740/12	996510001274	24 PIN FFC		230
PET740/05 PET740/12	969510009917	DVD1710 SPEAKER WIRE		240
PET740/05 PET740/12	996510017174	TOP COVER		300
PET740/05 PET740/12	996510017175	DISPLAY FRAME		310
PET740/05 PET740/12	996510017176	MIDDLE CABINET		320





10.0 SERVICE PART LIST

Mechanical Part List:

CTN	Service 12NC	Service Description	Photo	Pos. No.
PET740/05 PET740/12	996510017177	BASE CABINET		330
PET740/05 PET740/12	996510017178	SPEAKER GRILL		340
PET740/05 PET740/12	996510015947	LENS SENSOR		350
PET740/05 PET740/12	996510017179	HINGE ADORN PANEL		360
PET740/05 PET740/12	996510017180	HINGE		370
PET740/05 PET740/12	996510017181	OUTPUT JACK PC		380
PET740/05 PET740/12	996510017182	DISPLAY FRAME SHADE (TOP)		390
PET740/05 PET740/12	996510017183	DISPLAY FRAME SHADE (BASE)		400
PET740/05 PET740/12	996510017184	LOADING ADORN PANEL		410

10.0 SERVICE PART LIST

Accessories Part List:

CTN	Service 12NC	Service Description	Photo	Pos. No.
PET740/12	996510010987	ADPV60A AC POWER ADAPTER/12		
PET740/05	996510017185	ADPV60A AC POWER ADAPTER/05		ACAPT
PET740/05 PET740/12	994000001912	AV CABLE		AVCABLE
PET740/05 PET740/12	996510010528	CAR ADAPTER AY4196		CARAPT
PET740/05 PET740/12	996510001287	RC-AY5507 REMOTE		RC

11.0 REVISION LIST

Version 1.0 (3141 785 32870)

- Initial release PET740/05, /12