

Service
Service
Service



Service Manual

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1.0 TECHNICAL SPECIFICATION

General

Dimensions (W x H x D): 195 x 154.7x 38 mm
Bear Unit Weight: 1100g
Power supply:
Supply voltage AC 100~240V (adapter)
DC 9V/1A
Supply Power consumption 9W
Operating Temp & RH 0~ 50degC / 40-90% RH
Audio System
Output voltage 1kHz: 2V +/-0.2V
THD 20-20kHz (%): ≤ 1%
Dynamic range 1kHz >/=80dB
Signal/Noise ratio: >/=85dB
Frequency response (20-20kHz): +/-1dB
Channel Separation 1kHz >=80dB
Channel Balance 1kHz <1dB

Playback disc type: CD,+/- R/RW,DVD,DVD +/-R/RW
Video Playback Format: DVD / VCD /MP3,JPEG Image,
Audio Playback Format: CD/MP3, DVD,Divx5
Disc Diameter 8cm/12cm

Pixel specification

Max. 0 bright-dot & max. 3 dark-dots

Current consumption

DC Supply	DC9.3V-15.5V
Standby Power off	<0.45W
Battery	
Voltage	≤6.3V
Capacity	1200mAH
Battery playtime	
Charging time	5.5h
Standby Power off	

Headphone out (headphone output load 2x16 ohm)

Maximum output power: 250mW(Typical)
Frequency response: +/-3dB
SNR (A-wght): ≥70dB
THD (w/16 ohm loading): 1.0%
Left-Right Channel Separation: ≥55dB
Left-Right Channel Balance: ≤2.5dB

Supported disc type

Video Playback Formats:



Audio Playback Formats:



1.0 TECHNICAL SPECIFICATION

Factory Service Mode (FSM)

Procedure to change region code of your DVD Portable

1. Power ON the DVD player and do not insert DISC inside player
2. Setup→Prefer
Press IR in the sequence as
9→6→5→3
The LCD display showed the existing region Code.
3. Press ▲ (navigation up) or ▼ (navigation down) repeatedly to select the number from 0 to 6.
4. Then press OK to confirm your region code.
5. 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

Select "0" setting = Region Free (confidential)

Procedure for SW upgrade

1. Download the "PHILIPS.BIN" file from the Philips support site
2. Power on PET7432 with AC/DC adapter
3. The set will detect the upgraded SW
4. Press "OK" to confirm and proceed
5. The set will reset once finished upgrade

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

Procedure to check SW version of your DVD Portable

1. Setup→General
Press IR in the sequence as
3→3→0→8
Then a menu will be show XX-YY-MM-DD

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 Advarsel !

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.

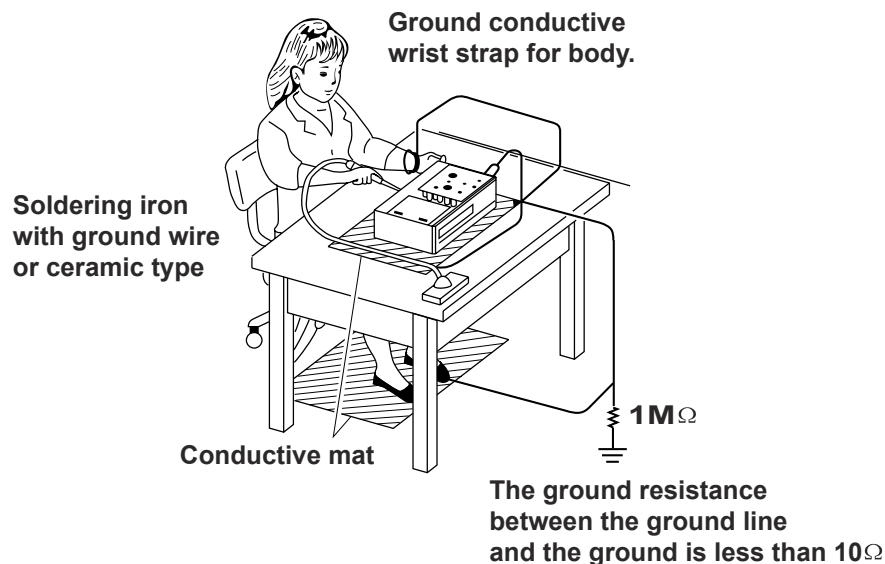
When the power supply is being turned on, you may not remove this laser cautions label. If it removes, radiation of laser may be received.

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.



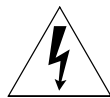
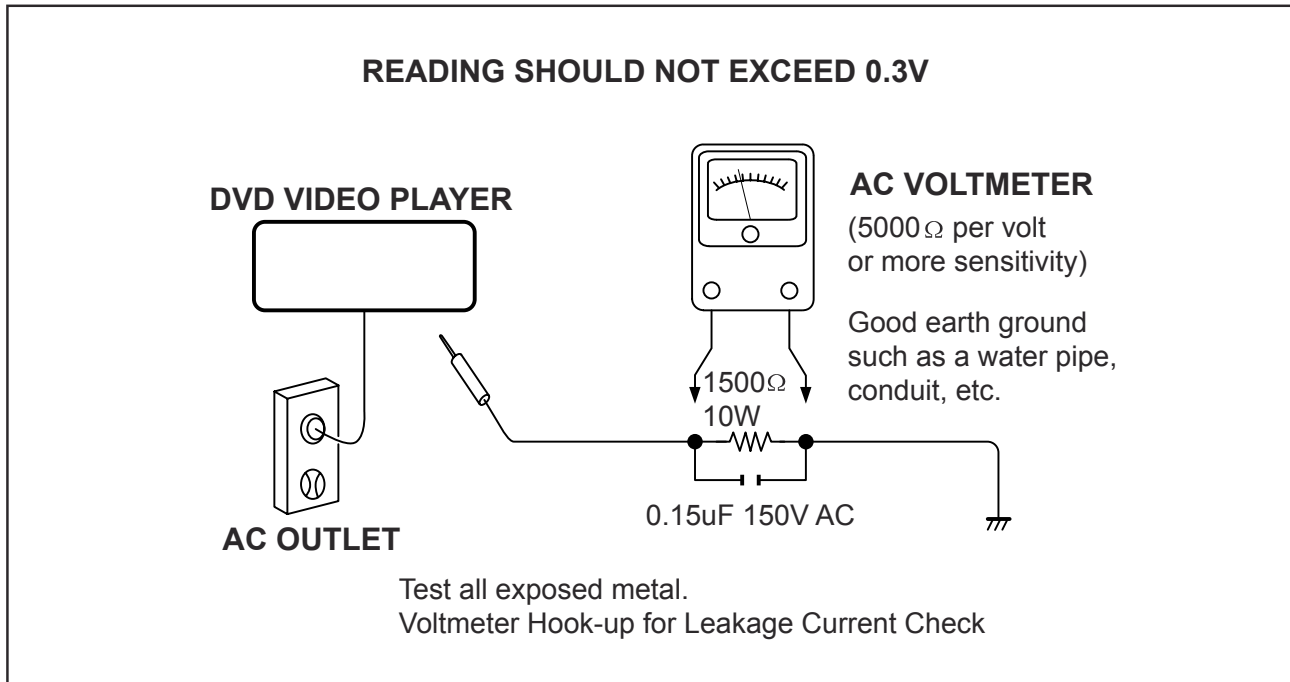
SAFTY NOTICE

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.



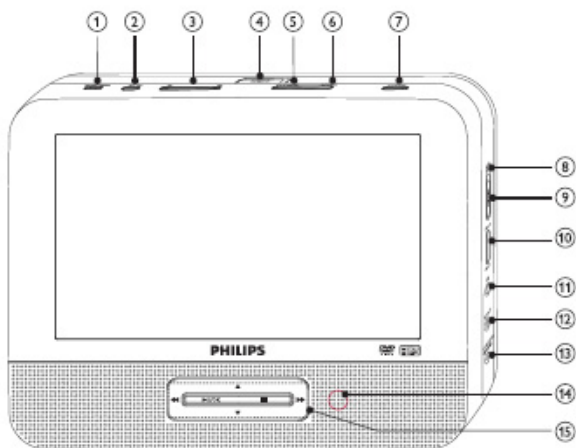
The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



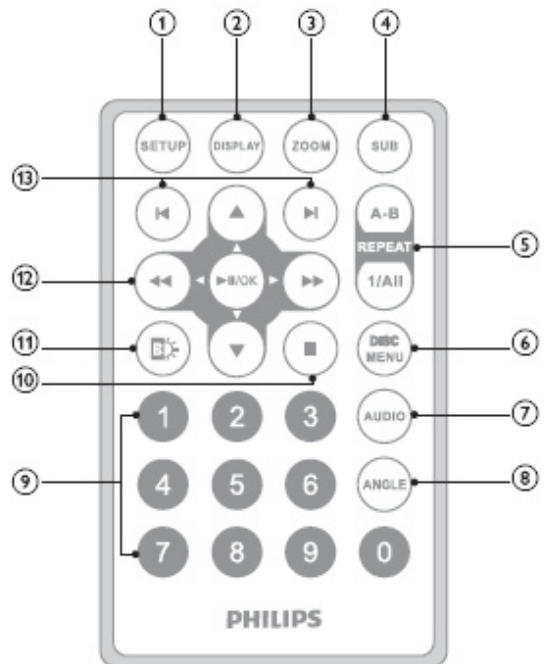
The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

3.0 INSTRUCTION FOR USE

Overview of the main unit






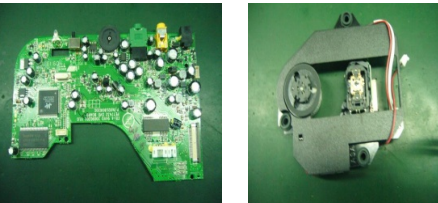



- ① **BRIGHTNESS**
 - Adjusts screen brightness.
- ② **SETUP**
 - Accesses or exits the setup menu.
- ③ **⏮ ⏭**
 - Skips to the previous or next title, chapter, or track.
- ④ **OPEN ▶**
 - Opens the disc compartment.
- ⑤ **DISC MENU**
 - For DVD, accesses or exits disc menu.
 - For VCD, turns on or off PBC (Playback Control) mode.
 - For VCD version 2.0 or SVCD with PBC turned on, returns to the menu.
- ⑥ **OPTION**
 - Accesses options relating to the current activity or selection.
- ⑦ **AV MODE**
 - Turns off the front panel display when the player is connected to TV.
- ⑧ **Charging indicator/Power indicator**
- ⑨ **POWER**
 - Turns on/off DVD player.
- ⑩ **VOL +/-**
 - Increases or decreases volume.
- ⑪ **🎧**
 - Headphone jack.
- ⑫ **AV OUT**
 - Audio/video output jack.
- ⑬ **DC IN**
 - Power supply socket.
- ⑭ **IR**
 - Remote control sensor
- ⑮ **▲, ▼, ⏮, ⏭**
 - Navigates through the menus.
 - Searches backward/forward at different speeds.
- ▶||OK**
 - Confirms an entry or selection.
 - Starts, pauses or resumes disc play.
- - Stops disc play.



- ① **SETUP**
 - Accesses or exits the setup menu.
- ② **DISPLAY**
 - Displays play information.
- ③ **ZOOM**
 - Zooms in or out of the picture.
- ④ **SUB**
 - Selects DVD subtitle language.
- ⑤ **A-B REPEAT**
 - Marks the section for repeat play.
- REPEAT 1/ALL**
 - Repeats a chapter/track/title.
- ⑥ **DISC MENU**
 - For DVD, accesses or exits disc menu.
 - For VCD, turns on or off PBC (Playback Control) mode.
 - For VCD version 2.0 or SVCD with PBC turned on, returns to the menu.
- ⑦ **AUDIO**
 - For DVD, selects an audio language.
 - For VCD, selects an audio mode.
- ⑧ **ANGLE**
 - Selects a different viewing angle of a DVD.
- ⑨ **0-9**
 - Inputs numbers.
- ⑩ **■**
 - Stops disc play.
- ⑪ **☰**
 - Adjusts brightness of the screen backlight.
- ⑫ **▶, ▼, ⏮, ⏭**
 - Navigates through the menus.
 - Searches backward/forward at different speeds.
- ▶||OK**
 - Confirms an entry or selection.
 - Starts, pauses or resumes disc play.
- ⑬ **⏮ ⏭**
 - Skips to the previous or next title, chapter, or track.

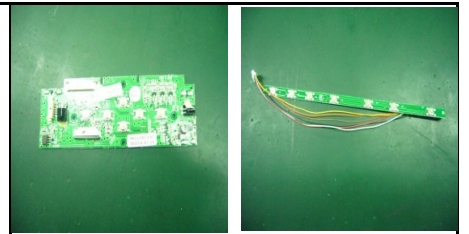
4.0 MECHANICAL INSTRUCTION

Disassembly Procedure on PET7432

	<p>Remove seven screws on back cabinet to separate top cabinet and back cabinet.</p>	<p>screws 7pcs</p>
	<p>Generally open the front cabinet.</p>	
	<p>Remove three screws and disassemble the connector on the Main board and DVD loader.</p>	<p>screws 3pcs</p> 
	<p>Remove two screws on the battery and battery board.</p>	
	<p>Remove the 7pcs screws on top cover</p>	

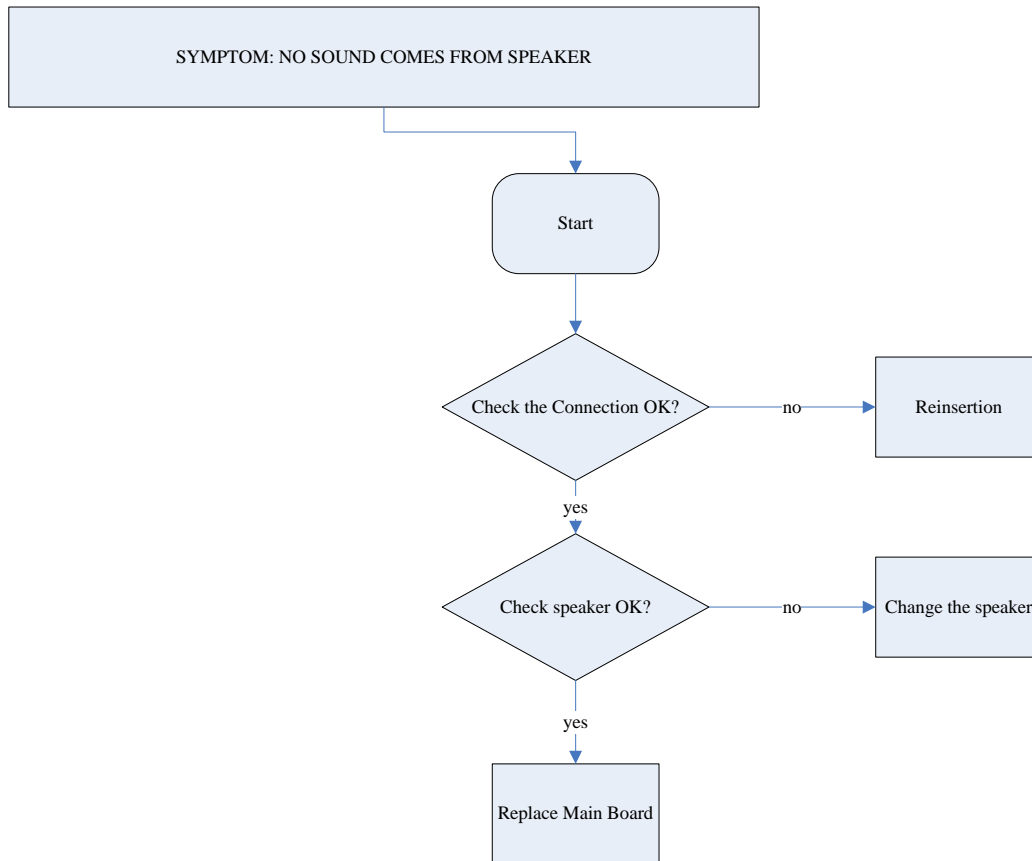
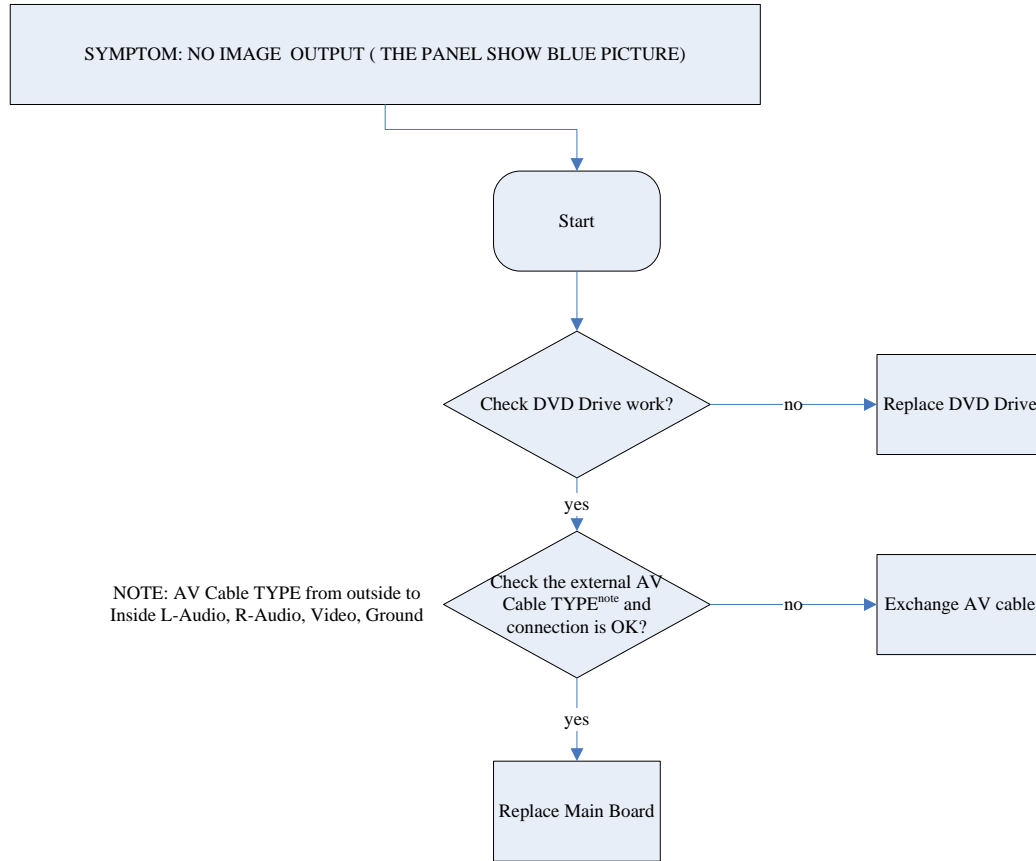


Remove the 4pcs screws and
connector on the TFT and IR board.



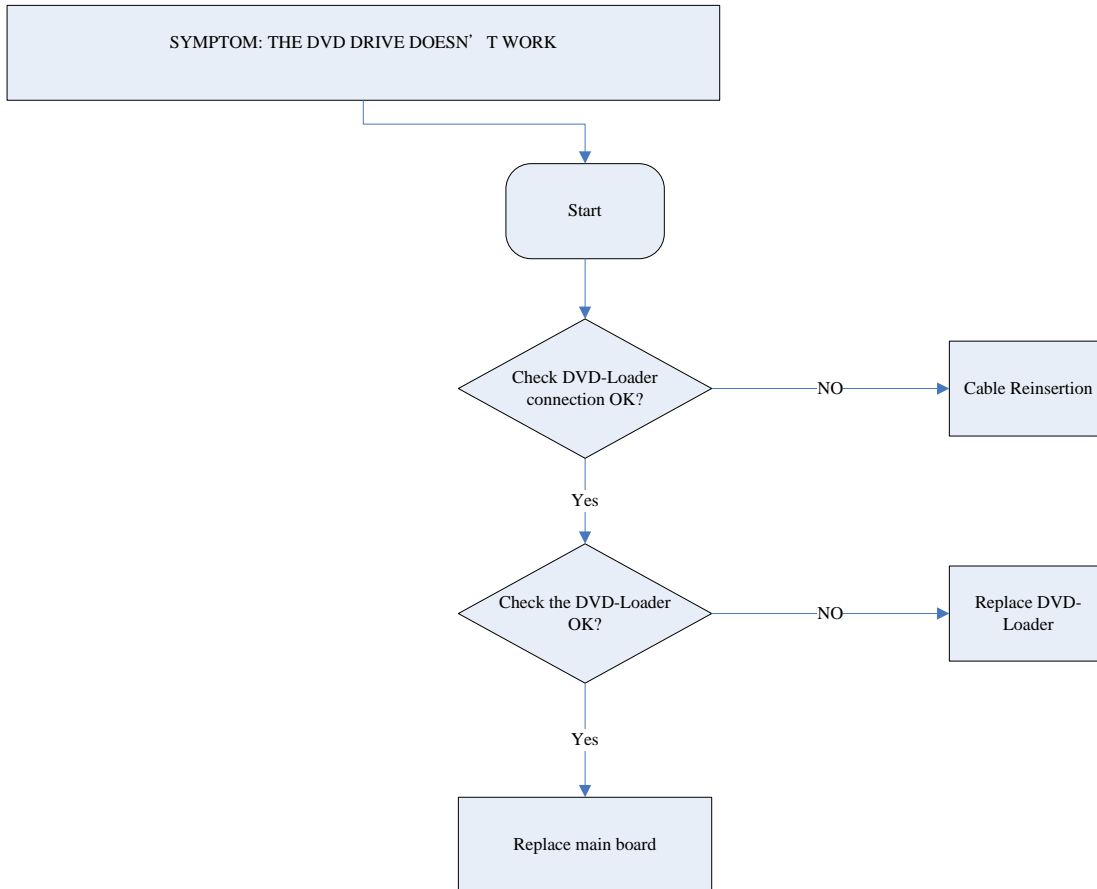
5.0 TROUBLESHOOTING

SYMPTOM: NO IMAGE / NO SOUND



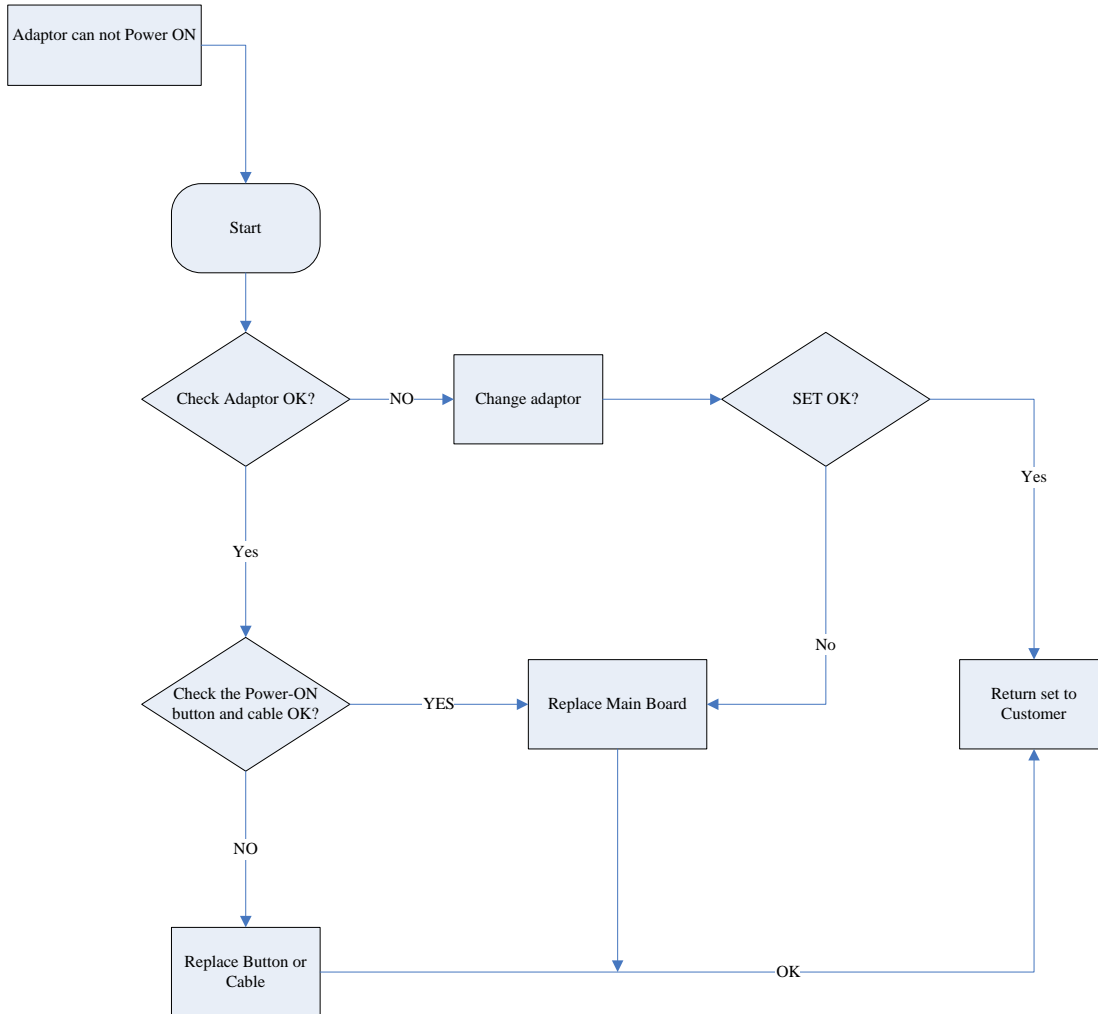
5.0 TROUBLESHOOTING

SYMPTOM: THE DVD DRIVE DOES NOT WORK



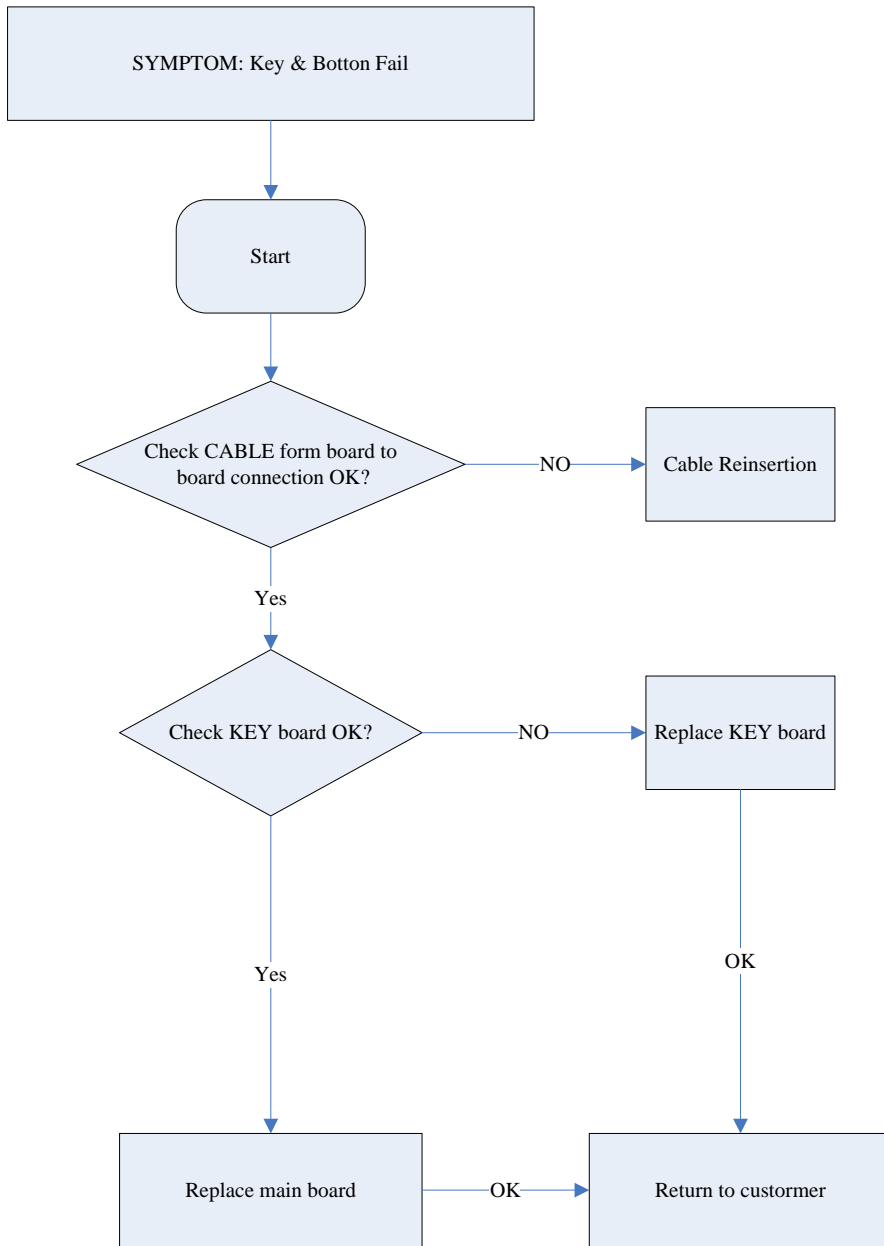
5.0 TROUBLESHOOTING

SYMPTOM: ADAPTOR CANNOT POWER ON



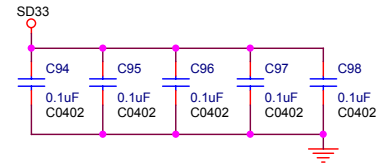
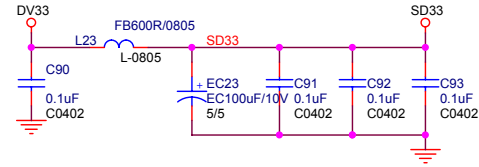
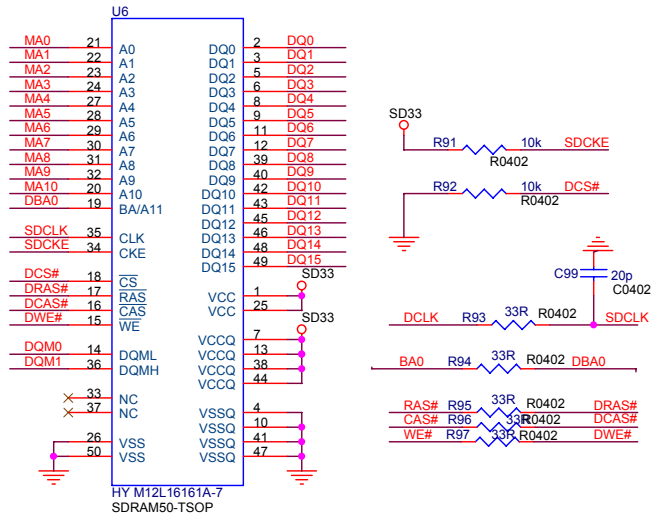
5.0 TROUBLESHOOTING

SYMPTOM: KEY & BOTTON FAILURE



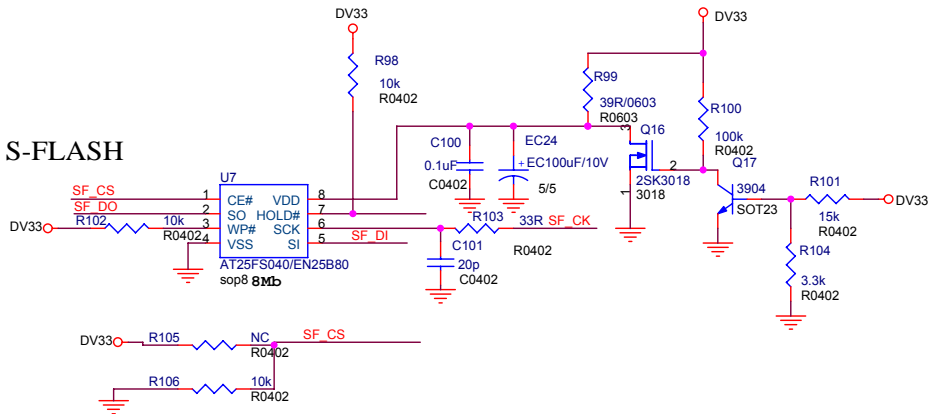
CIRCUIT OF SDRAM&FLASH

SDRAM (Dual Layout)

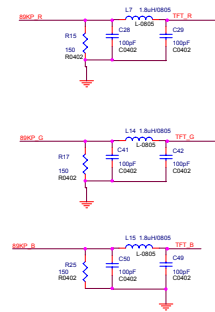
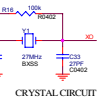
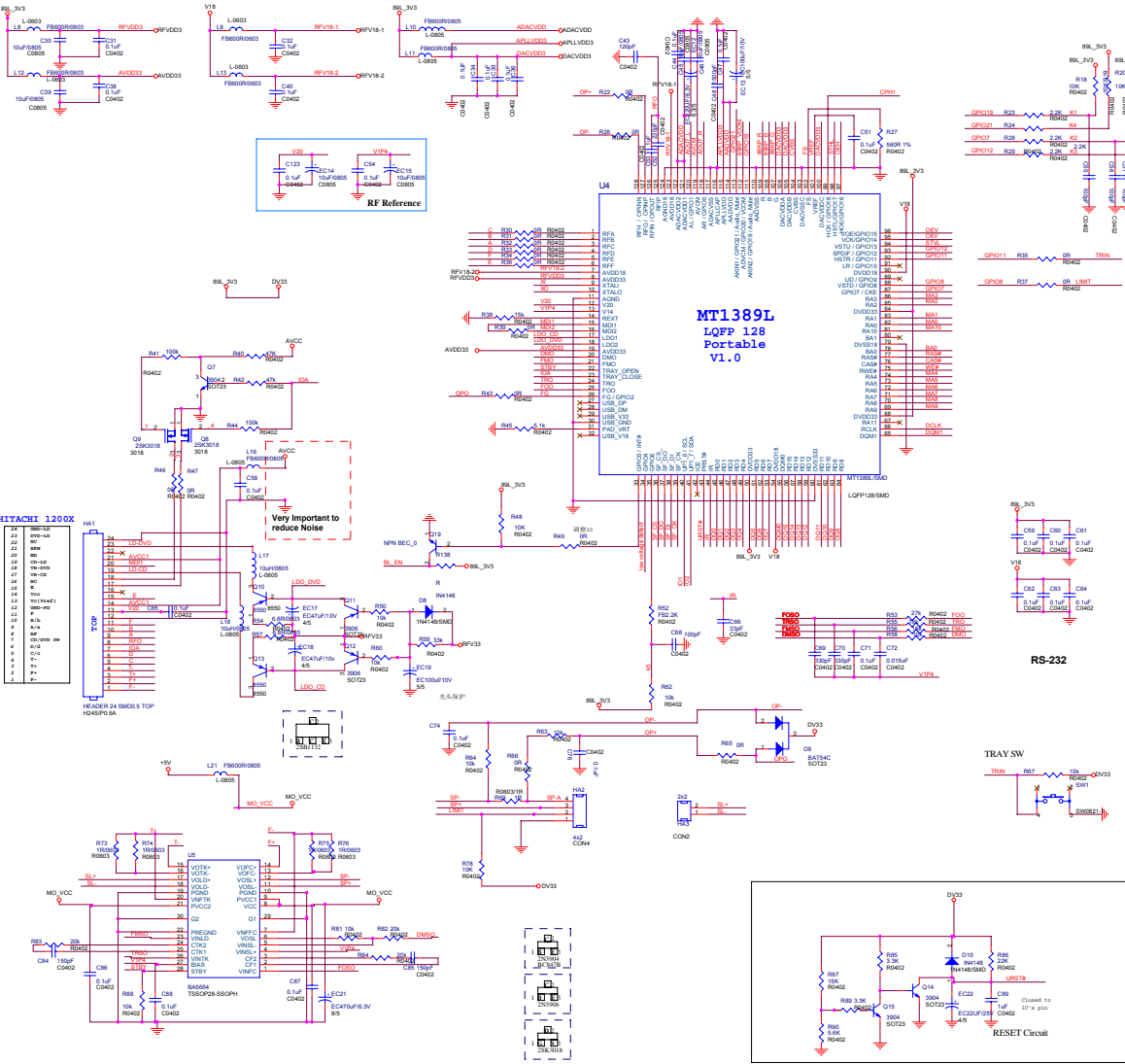


DV33	<< DV33	1,2
DCLK	<< DCLK	2
CAS#	<< CAS#	2
RAS#	<< RAS#	2
WE#	<< WE#	2
BA0	<< BA0	2
MA[0..10]	<< MA[0..10]	2
DQM[0..1]	<< DQM[0..1]	2
DQ[0..15]	<< DQ[0..15]	2
DRAM		
SF CK	<< SF_CK	2
SF CS	<< SF_CS	2
SF DI	<< SF_DI	2
SF DO	<< SF_DO	2
S-FLASH		

S-FLASH



CIRCUIT OF MCU



POWER

DVDD3	<<>> DVDD3	1	3
VDD	<<>> VDD	1	4
VDD	<<>> VDD	1	4
AVDD	<<>> AVDD	1	4

DRAM

DQ[15:0]	<<>> DQ[15:0]	3	3
DQ[15:0]	<<>> DQ[15:0]	3	3
DQ[15:0]	<<>> DQ[15:0]	3	3

X-FLASH

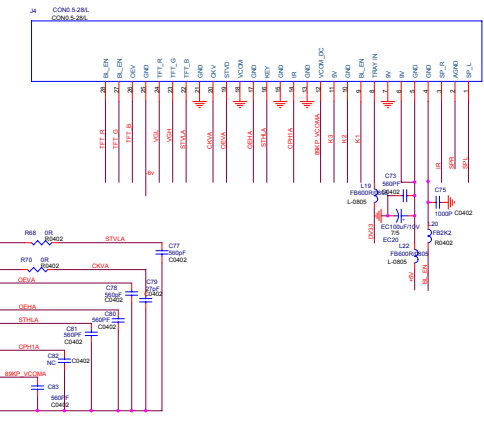
SP_CK	<<>> SP_CK	1	1
SP_DI	<<>> SP_DI	1	1
SP_DO	<<>> SP_DO	1	1

VIDEO INTERFACE

DVBS	<<>> DVBS	4	4
ADIT_L	<<>> ADIT_L	1	1
ADIT_R	<<>> ADIT_R	1	1

AUDIO INTERFACE

SPR	<<>> SPR	4	4
SP_L	<<>> SP_L	1	1
SP_R	<<>> SP_R	1	1
VOL	<<>> VOL	1	1
VSH	<<>> VSH	1	1
SV	<<>> SV	1	1

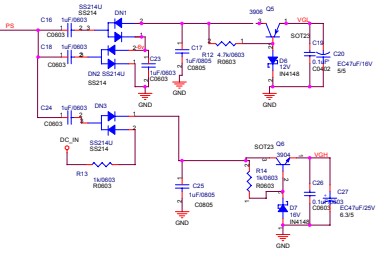
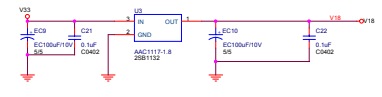
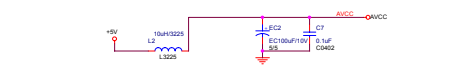
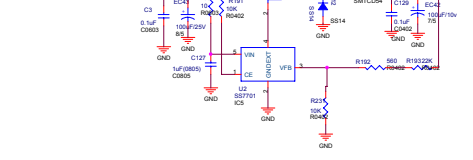
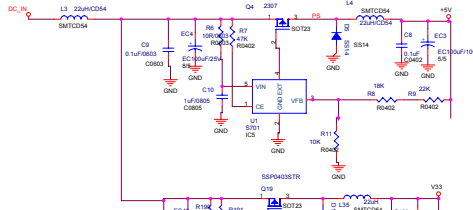
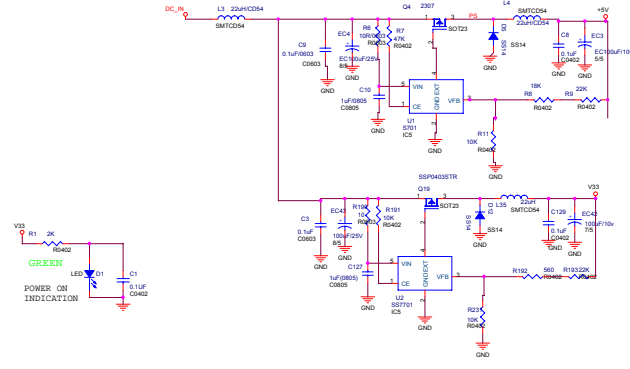
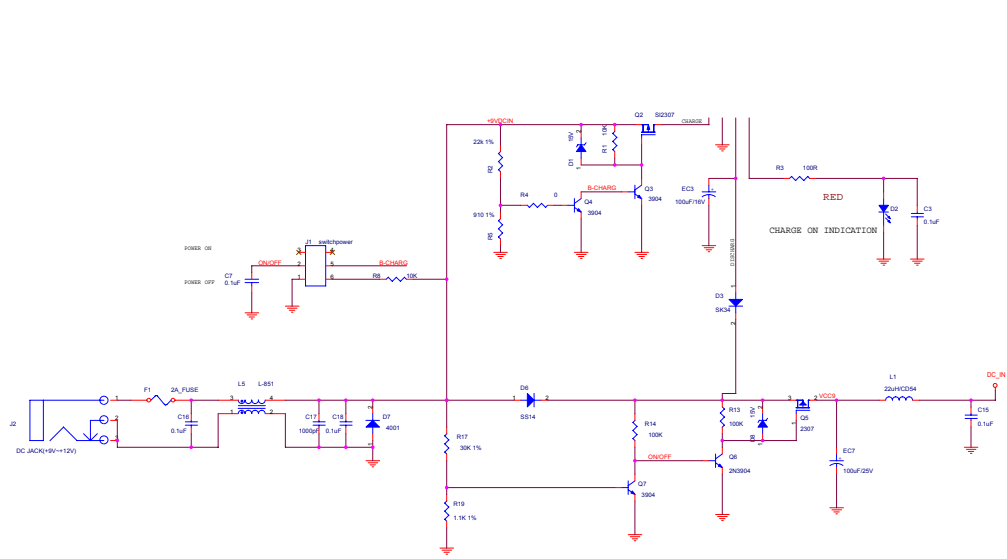


RS-232

TRAY SW

RESET Circuit

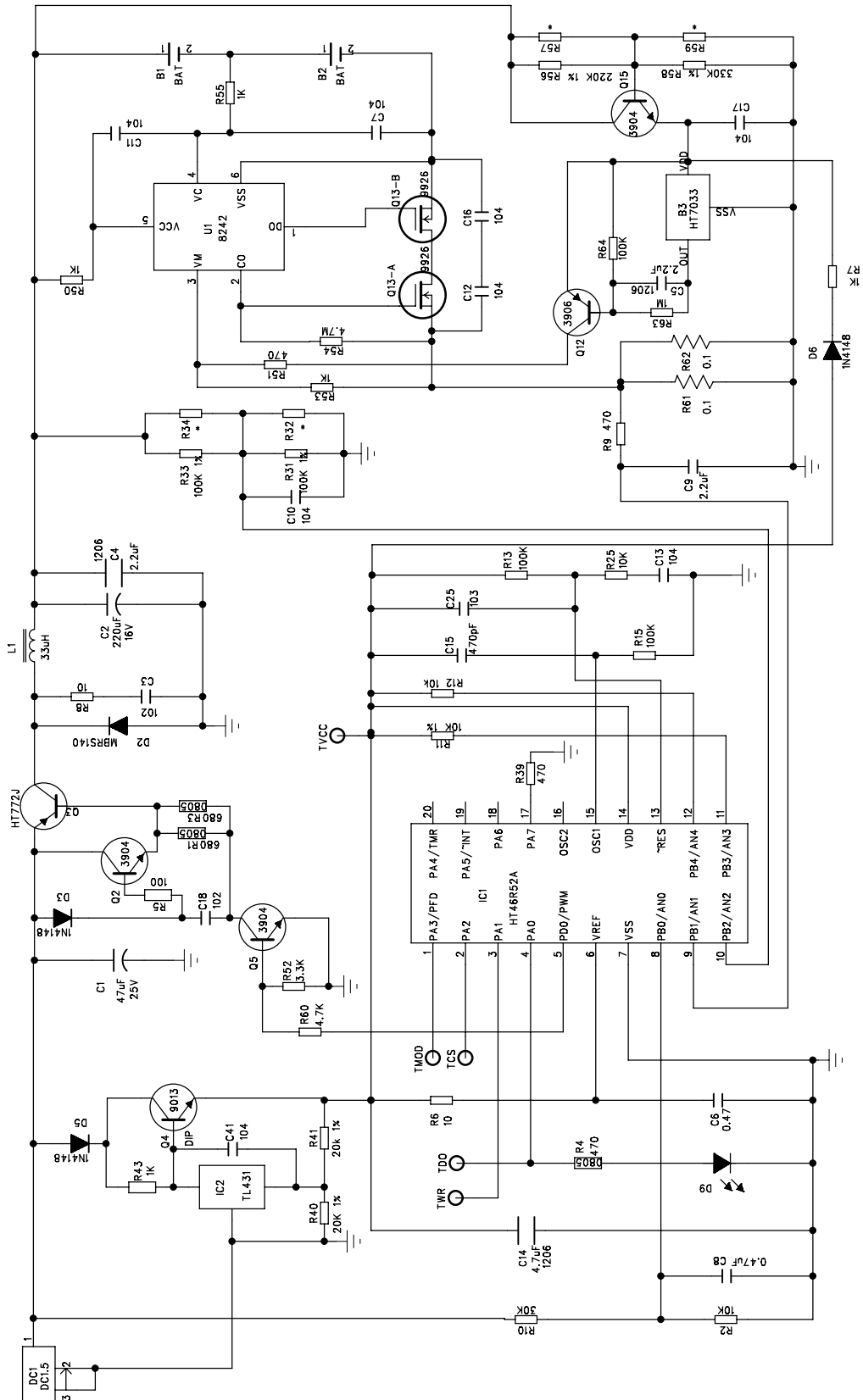
CIRCUIT OF POWER



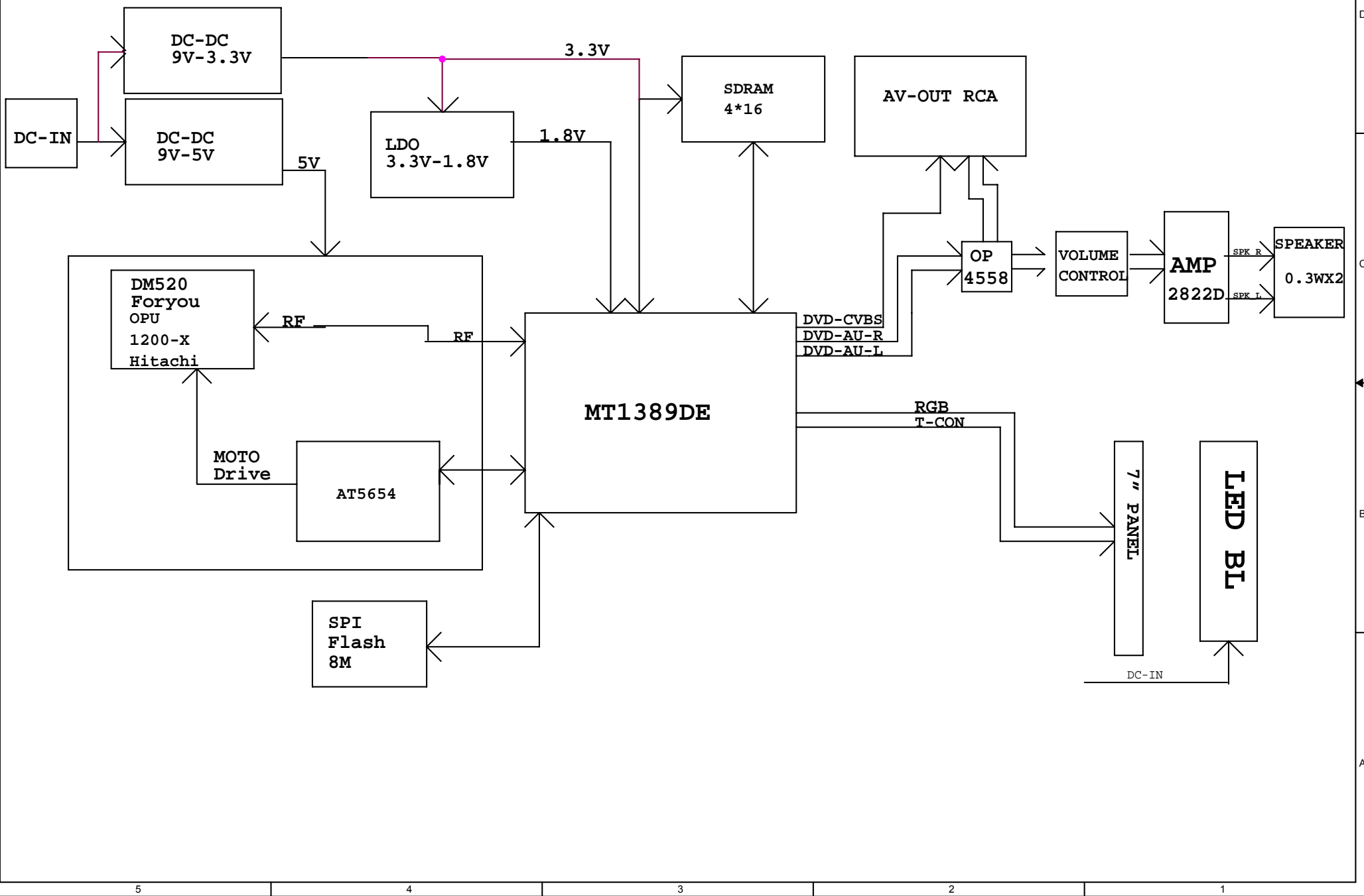
POWER	
DC-IN	DC-IN 4
DC+5V	DC+5V 2.3
DC+1.8V	DC+1.8V 2.1
DC+5V	DC+5V 2.4
DC+5V	DC+5V 2.4

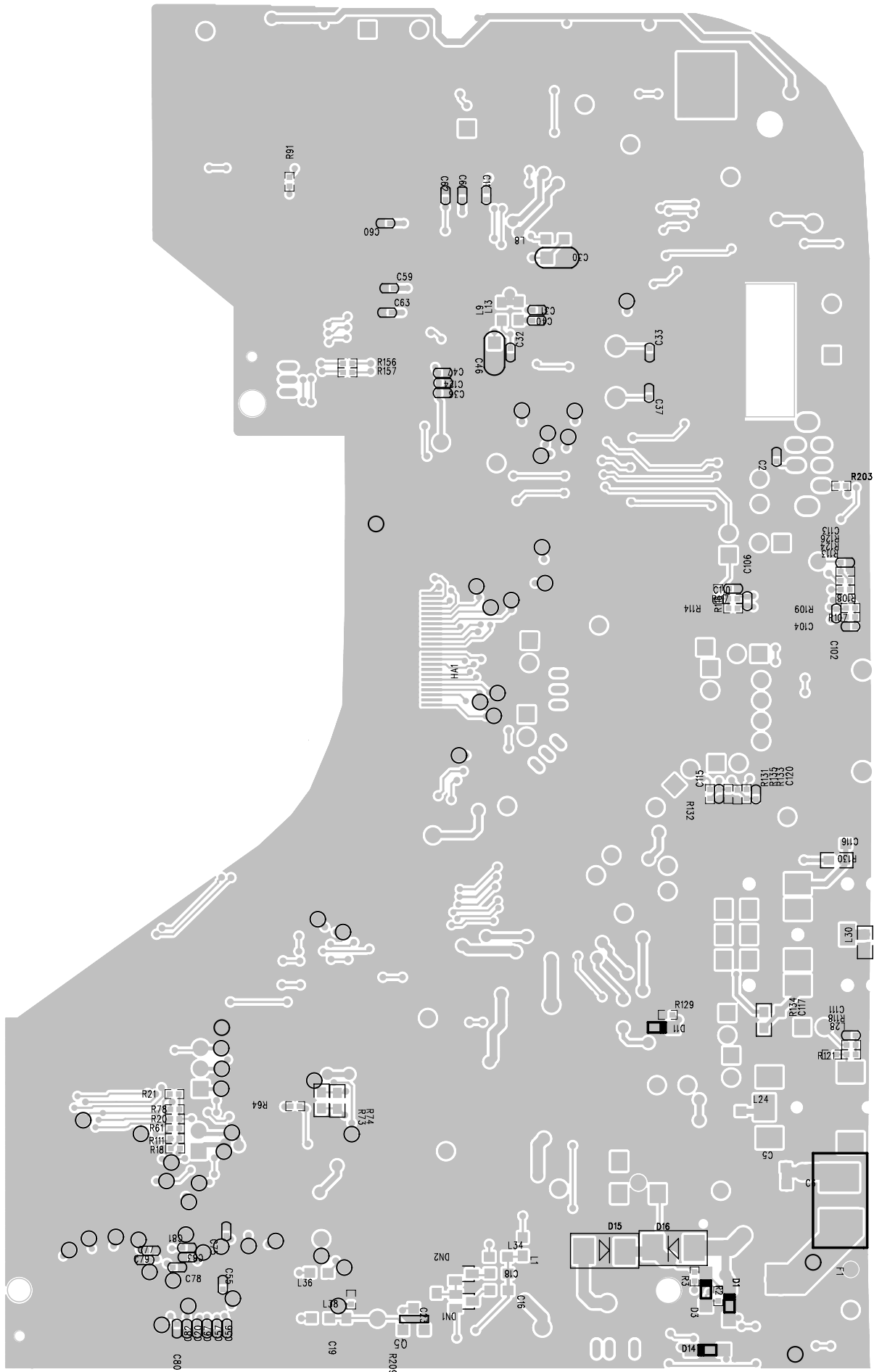
V5V	V5L 2
V5H	V5H 2
-5V	-5V 2

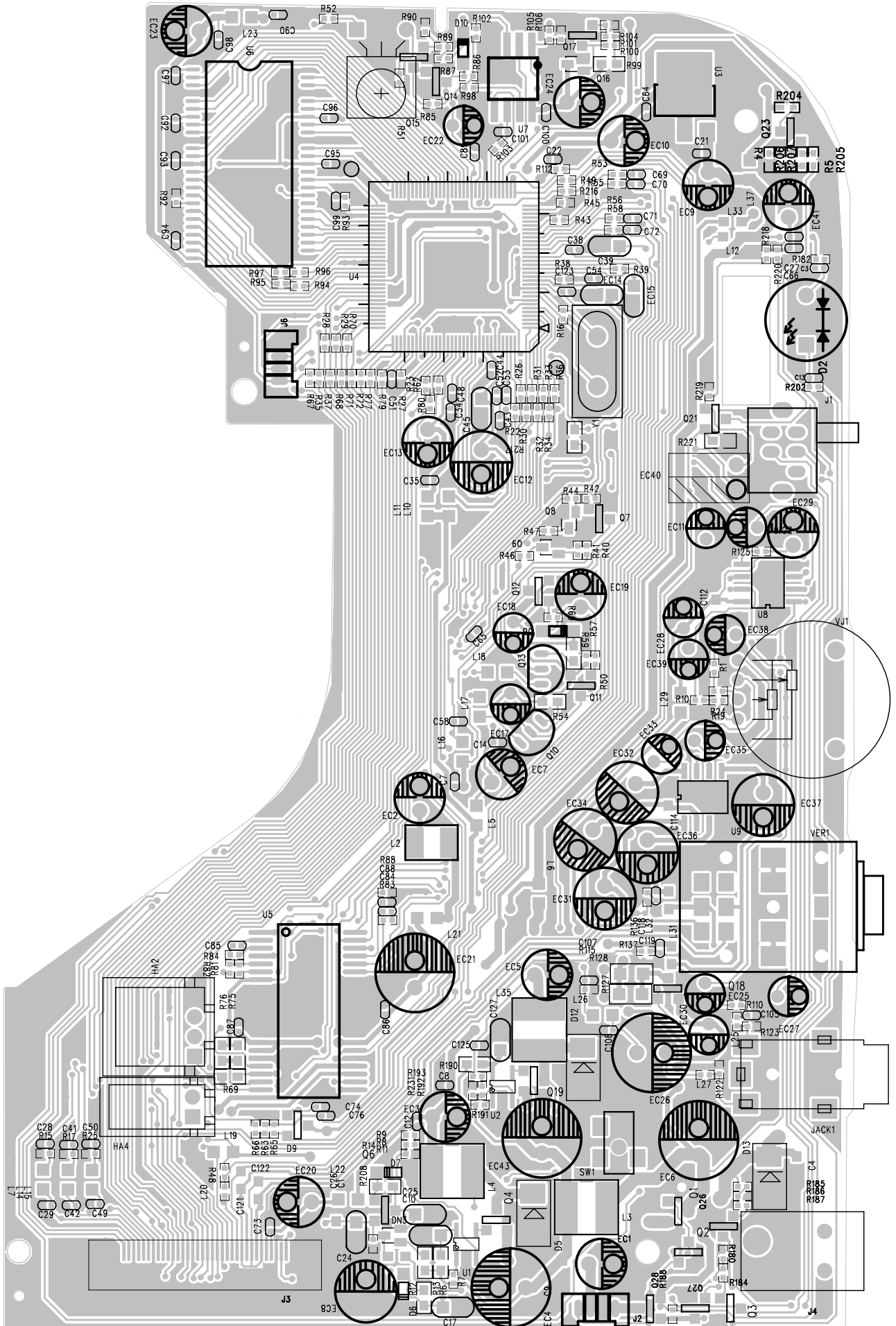
7432 BATTERY CIRCUIT



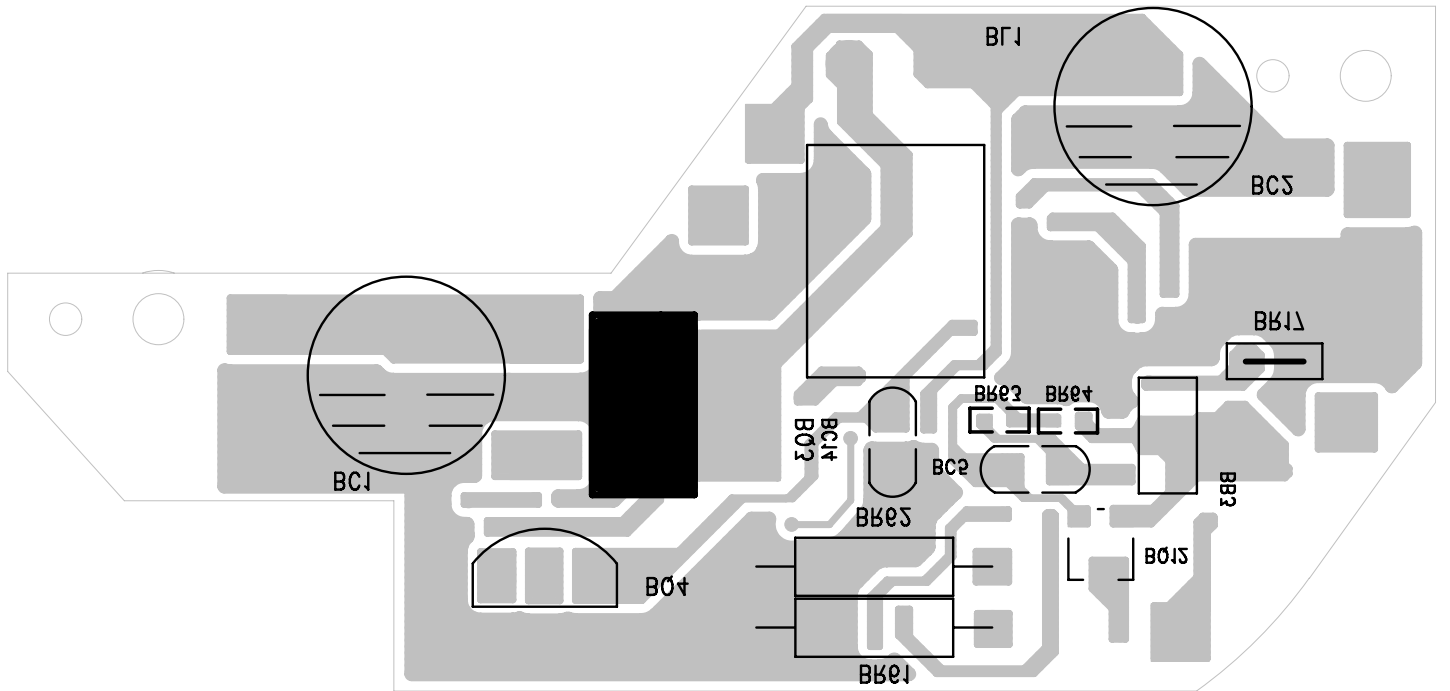
PET7432 circuit block



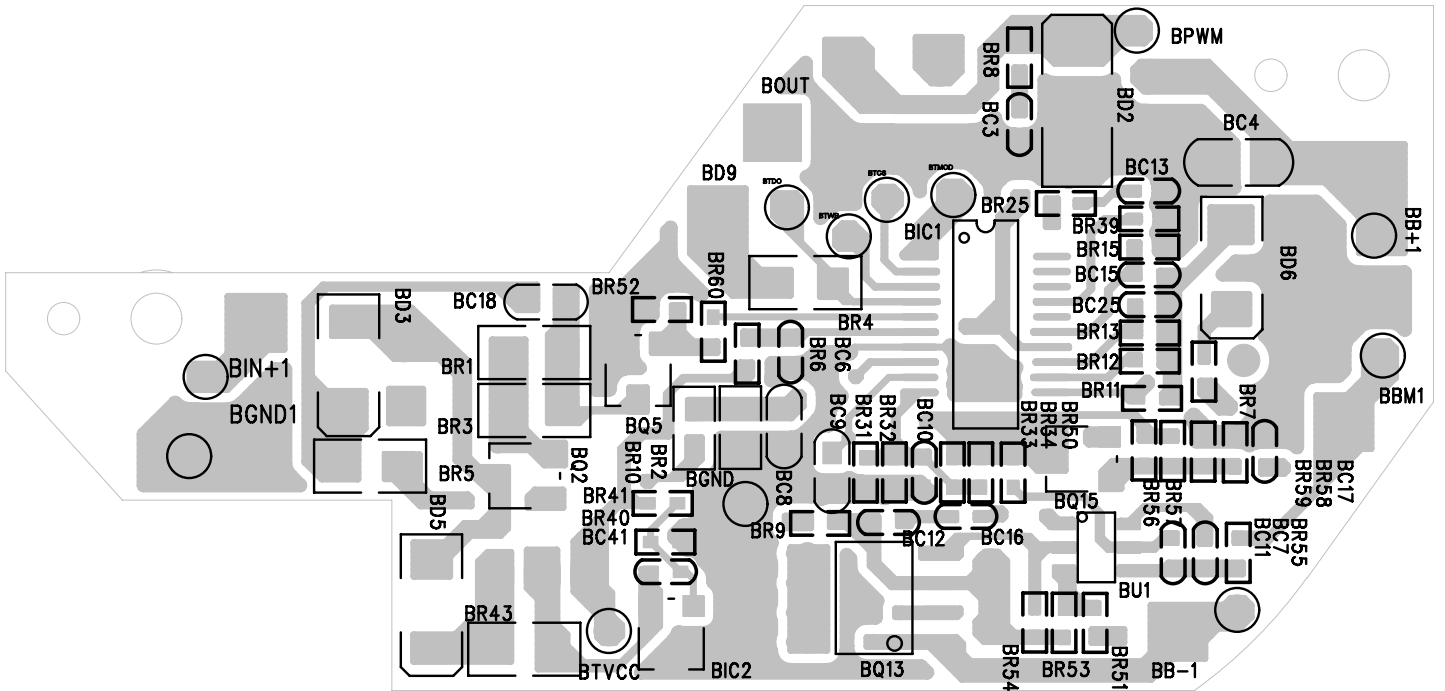




7432 BATTERY PCB



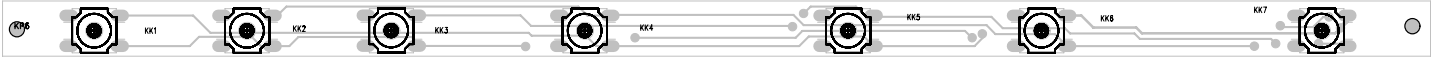
7432 BATTERY PCB



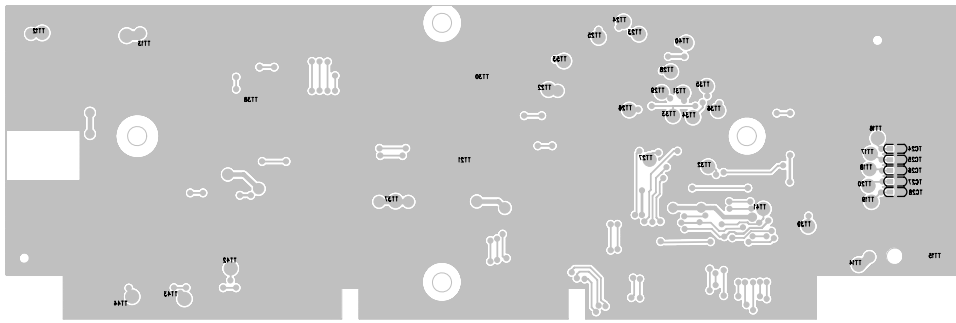
7432 KEY PCB



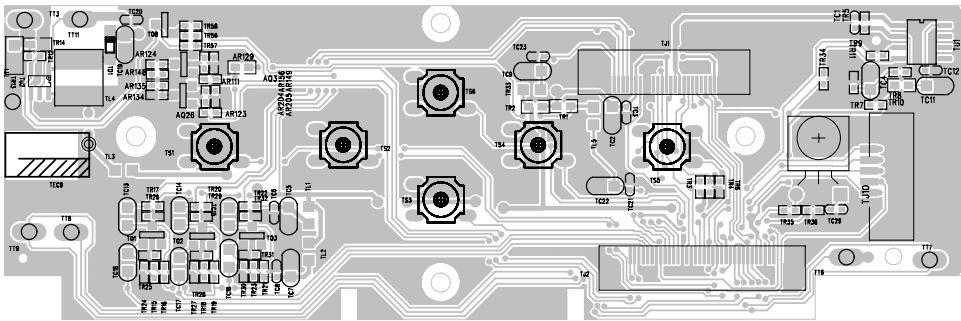
7432 KEY PCB



7432 TFT PCB



7432 TFT PCB





8.0 SERVICE PARTLIST

Electrical Part List:

CTN	Service 12NC	Service Description	Photo	Pos. No.
PET7432/05 PET7432/12	996510022837	KEYS PCBA ASS'Y PET7432		100
PET7432/05 PET7432/12	996510022838	MAIN PCBA ASS'Y PET7432		110
PET7432/05 PET7432/12	996510022847	TFT PCBA ASS'Y PET7432		120
PET7432/05 PET7432/12	996510022833	BATTERY ASS'Y PET7432		130
PET7432/05 PET7432/12	996510027143	7" PANEL HANNSTAR		200
PET7432/05 PET7432/12	996510022832	PAC134B MONITOR		210
PET7432/05 PET7432/12	996510024145	DVD DECK PM 2313D HOP1200X ASA		220
PET7432/05 PET7432/12	996510002384	FFC 24P/0.5mm L130mm		400

8.0 SERVICE PARTLIST

PET7432/05 PET7432/12	996510022834	FFC 34P/0.5mm 80mm		410
PET7432/05 PET7432/12	996510021385	HINGE LIFT TURN PET7402		420

8.0 SERVICE PARTLIST

Mechanical Part List:

CTN	Service 12NC	Service Description	Photo	Pos. No.
PET7432/05 PET7432/12	996510027123	MONITOR BACK CABINET PET7402		300
PET7432/05 PET7432/12	996510027122	MONITOR SIDE CABINET PET7402		305
PET7432/05 PET7432/12	996510027125	MONITOR SIDE CABINET2 PET7402		310
PET7432/05 PET7432/12	996510021398	MONITOR 4BUTTON PET7402		315
PET7432/05 PET7432/12	996510021397	MONITOR 2BUTTON PET7402		320
PET7432/05 PET7432/12	996510027126	DVD TOP CABINET PET7402 BK		325
PET7432/05 PET7432/12	996510022836	DVD BASE CABINET PET7432 BK		330
PET7432/05 PET7432/12	996510021394	OPEN KNOB ABS PET7402 BK		335

8.0 SERVICE PARTLIST

PET7432/05 PET7432/12	996510021374	POWER KNOB ABS PET7402 BK		340
PET7432/05 PET7432/12	996510021383	SUPPORT ABS PET7402 BK		345
PET7432/05 PET7432/12	996510021377	LATCH STAND POM PET7402 BK		350
PET7432/05 PET7432/12	996510027124	DISPLAY FRAME & SPK PET7432		355

8.0 SERVICE PARTLIST

Accessories Part List:

CTN	Service 12NC	Service Description	Photo	Pos. No.
PET7432/05	996510004261	SW ADAPTOR 9V/1A UK		ADT
PET7432/12	996510022078	SW ADAPTOR 9V/1A EU		ADT
PET7432/05 PET7432/12	996510010459	AV CABLE TO PAC134		AVCABLE
PET7432/05 PET7432/12	996510004975	AV CABLE		AVCORD
PET7432/05 PET7432/12	996510021372	CAR ADAPTER		CARADT

9.0 REVISION LIST

Version 1.0 (3141 785 33730)

- Initial release PET7432/05/12

Version 1.0 (3141 785 33730)

- Update 12nc