

Service  
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**Service**

**BDP9000**



# Service Manual

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**PHILIPS**

# 1. About this Manual

## 1.1. Content of this Manual

**Note:** The BDP9000 will be serviced on a modular level only. Faulty modules will be identified and replaced. Detailed circuit diagrams and technical information on a component level are therefore not provided in this document.

### 1.1.1. What is included in this Manual

- Safety Information
- System Overview
- Basic System Block Diagrams
- Parts / Module Identification
- Module Functional Descriptions
- Basic Module Technical Descriptions
- Basic Measuring Point Information
- Basic Fault Finding Strategy
- Module Removal & Replacement Procedures
- Parts List / 12NC Numbers

## 1.2. Additional Documentation


The following documentation is supplied by Philips and must be kept with this Service Manual.

- BDP9000 User Manual
- RC4380 User Manual

## 2. Safety Instructions, Warnings and Notes

### 2.1. Safety Instructions

#### 2.1.1. Safety components

Replace safety components, indicated by the symbol  , only by components identical to the original ones. Any other component substitution (other than original type) may increase risk of fire or electrical shock hazard.

#### 2.1.2. After repair

- Safety regulations require that after a repair, the set must be returned in its original condition.
- Before returning the BDP9000 to the customer always do a safety check. Pay attention to the built-in protective devices, leakage current and insulation resistance.

### 2.2. Warnings

#### 2.2.1. General

Never replace modules or other components while the unit is switched "on".

#### 2.2.2. ESD Protection

##### ESD



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.

### 2.3. Notes

#### 2.3.1. Handling of the optical pick-up

The laser diode in the optical pick-up may suffer electrical breakdown because of potential static electricity from clothing and your body. The following method is recommended to prevent damage:

1. Place a conductive sheet on the work bench. You can use the black sheet that is used to wrap repair parts.
2. Place the set on the conductive sheet to ground the chassis to the sheet.
3. Place your hands on the conductive sheet to give them the same ground as the sheet.
4. Remove the optical pick-up block.
5. Perform work on top of the conductive sheet. Be careful not to touch the unit with your clothes or any other static objects.
6. Short the short terminal on the PCB in the pick-up assembly before you lift or remove the pick-up assembly.
7. After replacing the pick-up assembly, open the short terminal on the PCB.

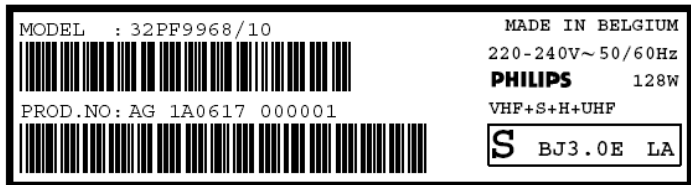
#### 2.3.2. Schematic notes

- All resistor values are in ohms, and the value multiplier is often used to indicate the decimal point location (e.g. 2K2 indicates 2.2 kohm).
- Resistor values with no multiplier may be indicated with either an "E" or an "R" (e.g. 220E or 220R indicates 220 ohm).
- All capacitor values are given in micro-farads ( $\mu = \times 10^{-6}$ ), nano-farads ( $n = \times 10^{-9}$ ), or pico-farads ( $p = \times 10^{-12}$ ).
- Capacitor values may also use the value multiplier as the decimal point indication (e.g. 2p2 indicates 2.2 pF).
- An "asterisk" (\*) indicates component usage varies. Refer to the diversity tables for the correct values.
- The correct component values are listed in the Spare Parts List. Therefore, always check this list when there is any doubt.

### 2.3.3. Led-free solder

Philips CE is producing lead-free sets (PBF) from 1.1.2005 onwards.

**Identification:** The bottom line of a type plate gives a 14-digit serial number. Digits 5 and 6 refer to the production year, digits 7 and 8 refer to production week (in example below it is 1991 week 18).



E\_06532\_024.eps  
130606

Figure 2.1-1

Regardless of the special lead-free logo (which is not always indicated), one must treat all sets from this date onwards according to the rules as described below.



Figure 2.1-2

Due to lead-free technology some rules have to be respected by the workshop during a repair:

- Use only lead-free soldering tin Philips SAC305 with order code 0622 149 00106. If lead-free solder paste is required, please contact the manufacturer of your soldering equipment. In general, use of solder paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free soldering tin. The solder tool must be able:
  - To reach a solder-tip temperature of at least 400 °C.
  - To stabilize the adjusted temperature at the solder-tip.
  - To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature of around 360 °C – 380 °C is reached and stabilized at the solder joint. Heating time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400 °C, otherwise wear-out of tips will increase drastically and flux-fluid will be destroyed. To avoid wear-out of tips, switch "off" unused equipment or reduce heat.
- Mix of lead-free soldering tin/parts with leaded soldering tin/parts is possible but PHILIPS recommends strongly to avoid mixed regimes. If this cannot be avoided, carefully clean the solder-joint from old tin and re-solder with new tin.
- Use only original spare-parts listed in the Service-Manuals. Not listed standard material (commodities) has to be purchased at external companies.
- Special information for lead-free BGA ICs: these ICs will be delivered in so-called "dry-packaging" to protect the IC against moisture. This packaging may only be opened shortly before it is used (soldered). Otherwise the body of the IC gets "wet" inside and during the heating time the structure of the IC will be destroyed due to high (steam-) pressure inside the body. If the packaging was opened before usage, the IC has to be heated up for some hours (around 90 °C) for drying (think of ESD-protection!).
- **Do not re-use BGAs at all!**
- For sets produced before 1.1.2005, containing leaded soldering tin and components, all needed spare parts will be available till the end of the service period. For the repair of such sets nothing changes. In case of doubt whether the board is lead-free or not (or with mixed technologies), you can use the following method:
  - Always use the highest temperature to solder, when using SAC305 (see also instructions below).
  - De-solder thoroughly (clean solder joints to avoid mix of two alloys).

**Caution:** For BGA-ICs, you **must** use the correct temperature profile, which is coupled to the 12NC. For an overview of these profiles, visit the website [www.atyourservice.ce.philips.com](http://www.atyourservice.ce.philips.com) (needs subscription, but is not available for all regions) You will find this and more technical information within the "Magazine", chapter "Repair downloads". For additional questions please contact your local repair help desk.



## 3. System Overview

### 3.1. Technical Specification

#### System - General

Power requirements	AC 120 V, 60 Hz
Power consumption	51 W (< 10 W stand-by)
Standby/on light	Red/blue
Weight	9.3 lbs
Dimensions (W x D x H)	16.9 x 12.8 x 3.1 inches
Operating temperature	+41 °F to 104 °F
Operating humidity	10 to 75% (non-condensing)

#### Optical drive

BD (Blu-ray Disc)	<i>Reading speed:</i> 4.917 m/s
DVD (Digital Versatile Disc)	<i>Reading speed:</i> 3.49 - 4.06 m/s
	<i>Approx. play time:</i> 135 min. (single side and layer)
CD: 12 cm (Compact Disc)	<i>Reading speed:</i> 4.8 - 5.6 m/s
	<i>Max. play time:</i> 74 min.
CD: 8 cm (Compact Disc)	<i>Reading speed:</i> 4.8 - 5.6 m/s
	<i>Max. play time:</i> 20 min.

#### Video output

Component video	<i>Y:</i> 1.0 Vp-p (75 Ω load)
	<i>Pr:</i> 0.70 Vp-p (75 Ω load)
	<i>Pb:</i> 0.70 Vp-p (75 Ω load)

Composite video

S-Video

HDMI

#### Audio output

2-Channel

5.1-Channel

HDMI

Digital audio output

Frequency response

S/N Ratio

Dynamic range

Total Harmonic Distortion

<i>I channel:</i>	1.0Vp-p (75 Ω load)
<i>Luminance:</i>	1.0 Vp-p (75 Ω load)
<i>Chrominance:</i>	0.3 Vp-p (75 Ω load)
	480p, 720p, 1080i, 1080p

L (1/L), R (2/R)	
F/L, F/R, R/L, R/R, C, SubW	
PCM multichannel audio, Bitstream audio	
PCM audio	
Optical/Coaxial (S/PDIF)	
<i>48 kHz sampling:</i>	4 Hz to 22 kHz
<i>96 kHz sampling:</i>	4 Hz to 44 kHz
	110 dB

100 dB
0.0004%

#### Connections, front

Card reader	CF Type 1
	MD
	SM
	MS Pro
	MS Duo (with adapter)
	MMC
	RS-MMC (with adapter)
	SD
	Mini SD (with adapter)

#### Connections, rear

Video outputs	HDMI
	Component video
	Composite video
	S-Video
Audio outputs	HDMI
	Digital audio (S/PDIF)
	5.1-Channel
	2-Channel

#### Playable discs

Types	<i>BD:</i> BD-ROM, BD-RE
	<i>DVD:</i> DVD-VIDEO, DVD+RW (4.7 GB), DVD-RW (4.7 GB), DVD+R (4.7 GB), DVD-R (4.7 GB),
	<i>CD:</i> AUDIO-CD, CD-RW, CD-R

Region codes

<i>BD:</i>	A
<i>DVD:</i>	All or 1

#### Playable memory cards

	CD Type 1, MD, SM, MS PRO, MS Duo (with adapter), MMC, RS-MMC (with adapter), SD Mini SD (with adapter)
--	---

#### Accessories

RC4380 Remote Control	(with batteries)
Quick Start Guide	
BDP9000 User Manual	
RC4380 User Manual	
Product registration card	
HDMI cable	
Component video cable	
Audio cable	

### 3.2. Video output

#### HDMI connection

##### Disc type

BD (with token)  
 BD, Image Constraint Token (ICT)  
 BD, Digital Only Token (DOT)  
 DVD

##### Supported resolutions

720p, 1080i, 1080p  
 720p, 1080i, 1080p  
 720p, 1080i, 1080p  
 480p, 720p, 1080i, 1080p

#### Component video connection

##### Disc type

BD (with token)  
 BD, Image Constraint Token (ICT)  
 BD, Digital Only Token (DOT)  
 DVD

##### Supported resolutions

720p, 1080i  
 Not supported  
 Not supported  
 480i, 480p

#### HDMI connection

##### Disc type

BD (with token)  
 BD, Image Constraint Token (ICT)  
 BD, Digital Only Token (DOT)  
 DVD

##### Supported resolutions

Not supported  
 Not supported  
 Not supported  
 480p, 720p, 1080i, 1080p

### 3.3. Audio output

#### 2-Channel analog

##### Disc type

BD  
 DVD with Dolby Digital  
 DVD with DTS

##### Output

2-Channel  
 2-Channel  
 Mute

#### 5.1-Channel analog

##### Disc type

BD  
 DVD with Dolby Digital  
 DVD with DTS

##### Output

5.1-Channel  
 2-Channel (front left, front right)  
 Mute

#### S/PDIF

##### Disc type

BD  
 DVD with Dolby Digital  
 DVD with DTS

##### Output

PCM: 2-Channel; Bitstream: bitstream from disc  
 2-Channel: (front left, front right); Bitstream: bitstream from disc  
 PCM: Mute; Bitstream: bitstream from disc

#### HDMI

##### Disc type

BD  
 DVD with Dolby Digital  
 DVD with DTS

##### Output

PCM: 2-Channel/5.1-Channel; Bitstream: bitstream from disc  
 2-Channel: (front left, front right); Bitstream: bitstream from disc  
 PCM: Mute; Bitstream: bitstream from disc

# 4. Technical Reference

## 4.1. System

### 4.1.1. System Block Diagram

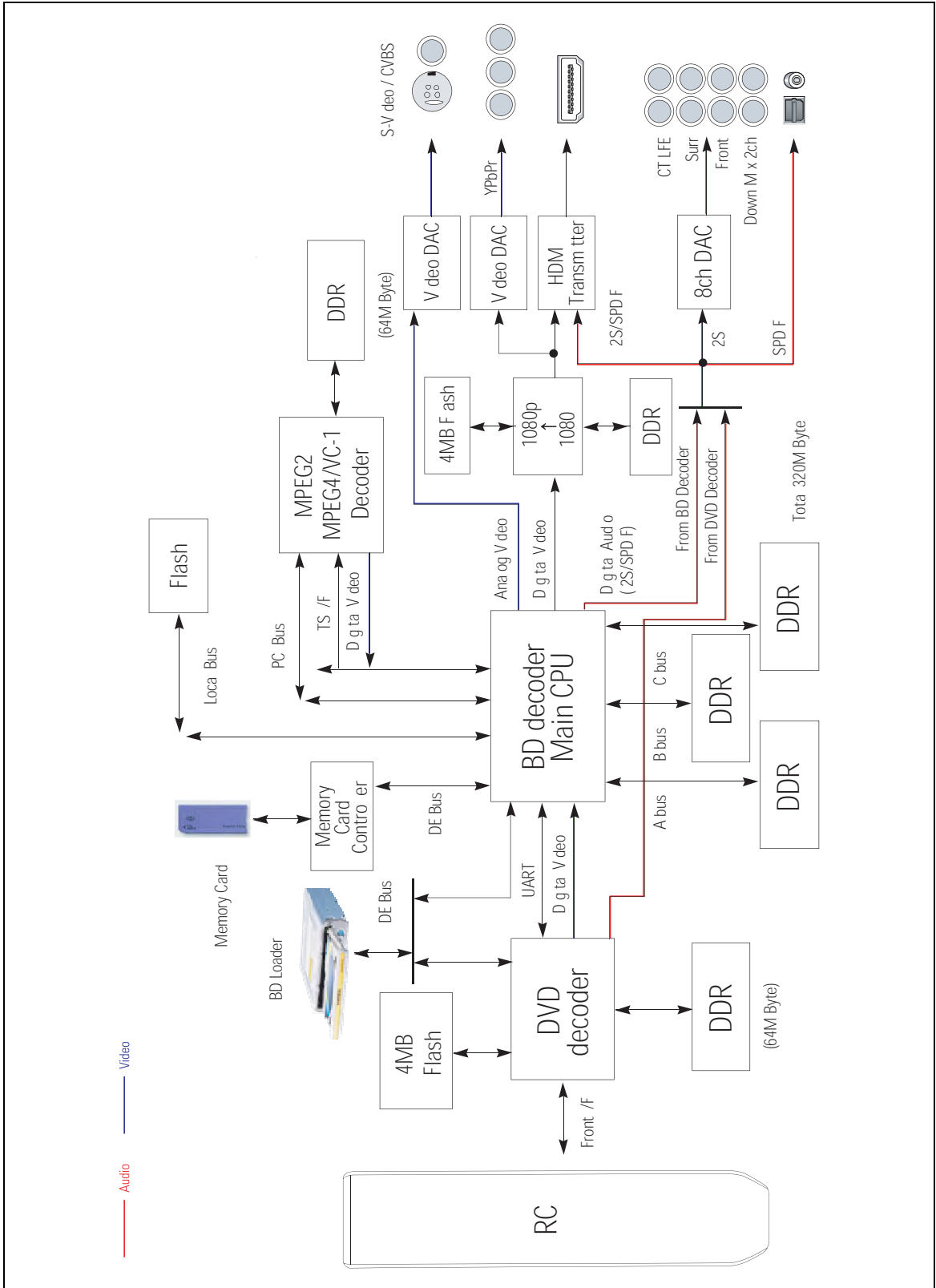


Figure 4.1-1

4.1.2. Wiring Diagram

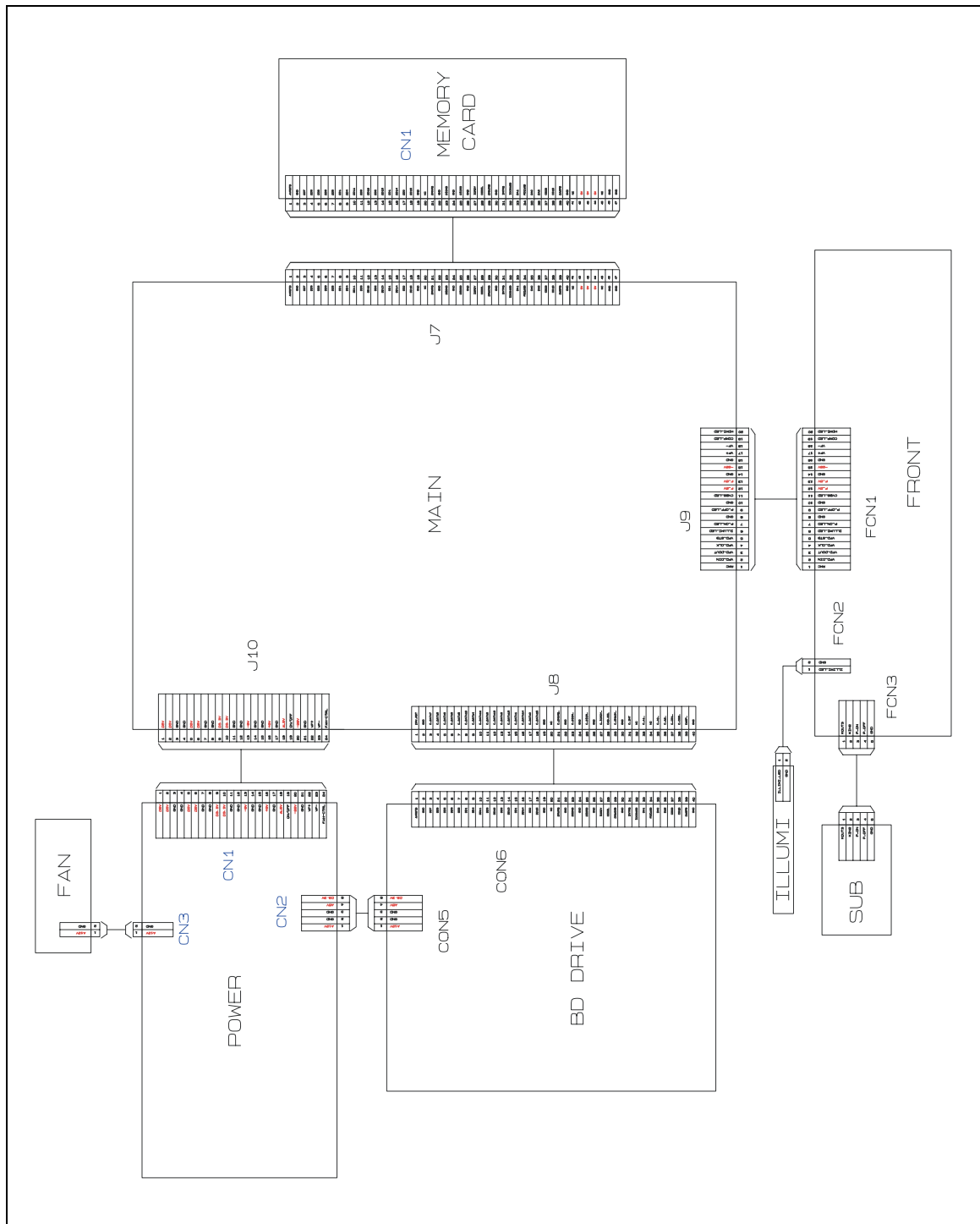


Figure 4.1-2

4.2. Audio - AK4358 (AIC1)

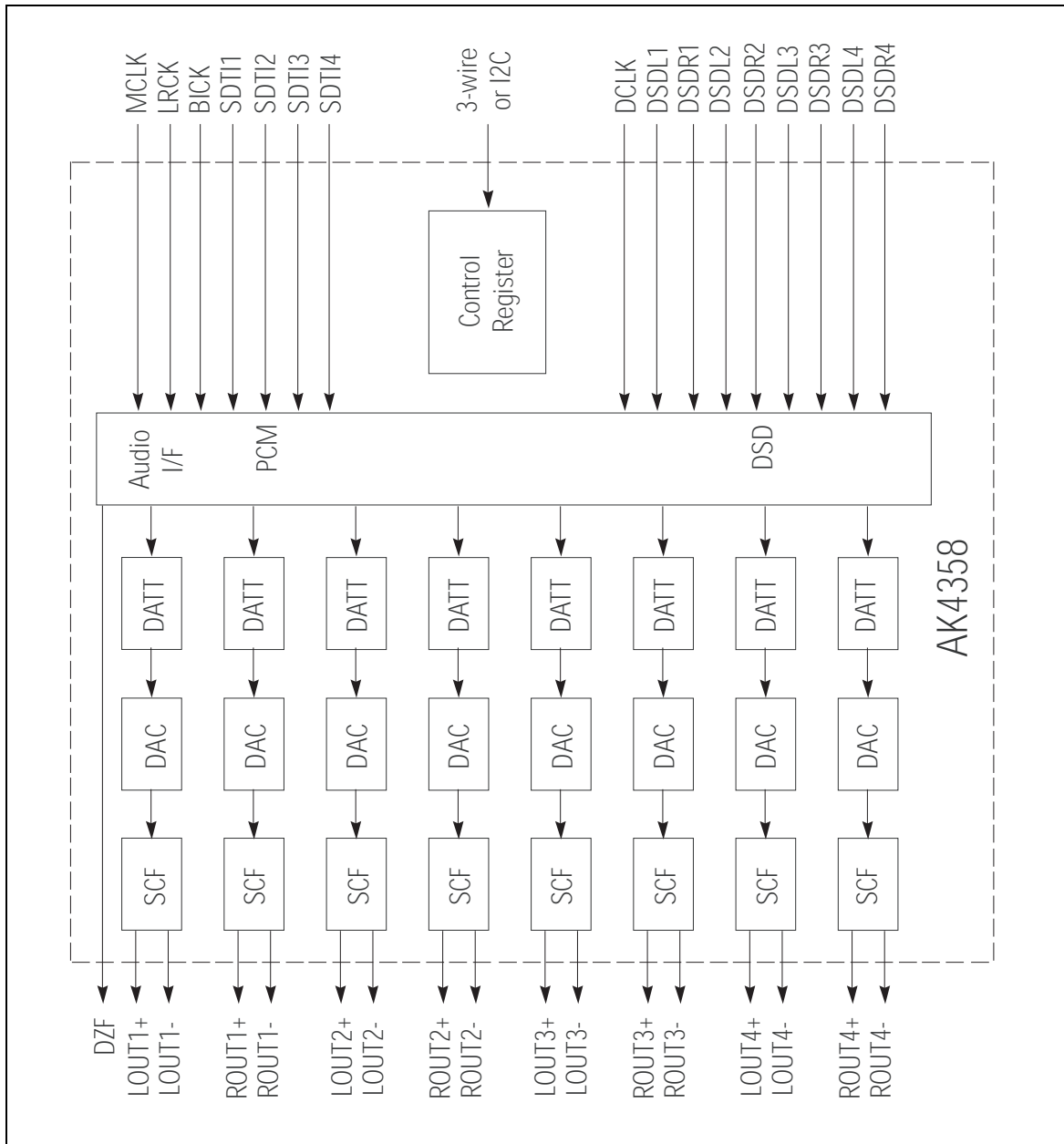


Figure 4.2-1

4.3. Video Encoder - ADV7322 (VIC4)

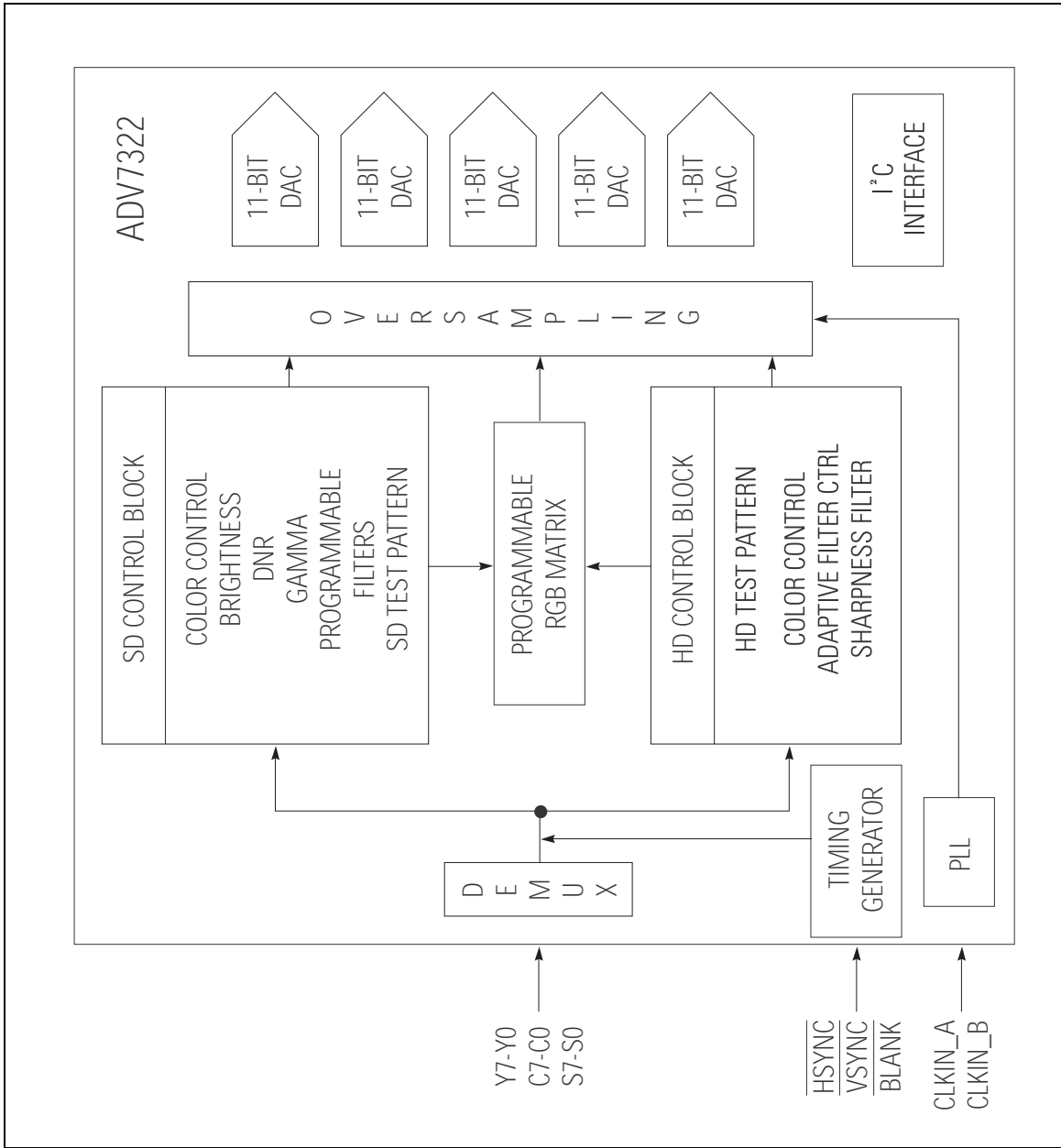


Figure 4.3-1

### 4.4. System Decoder (U1)

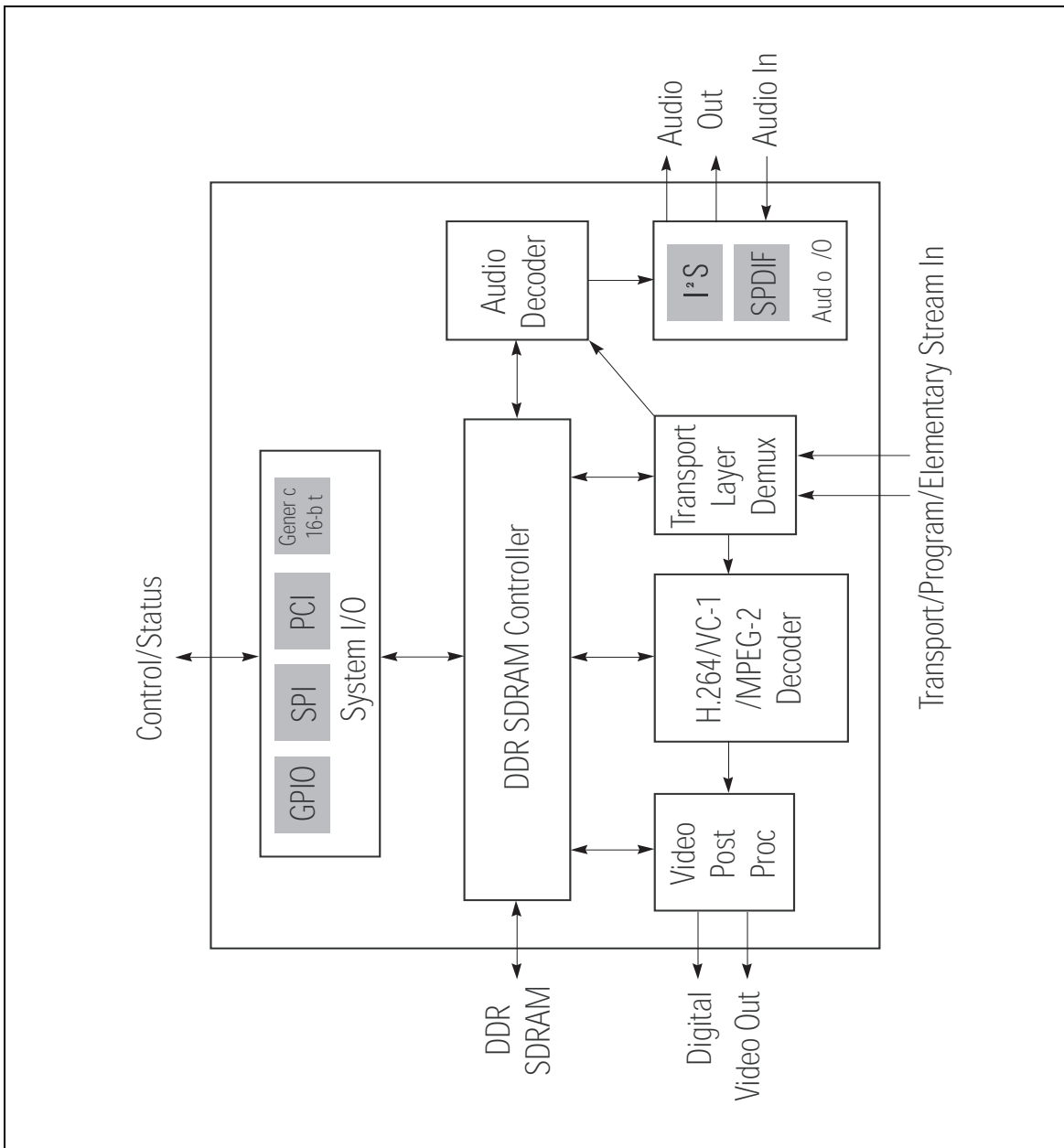


Figure 4.4-1

4.5. Video Driver (SM5302) block diagram (VIC3)

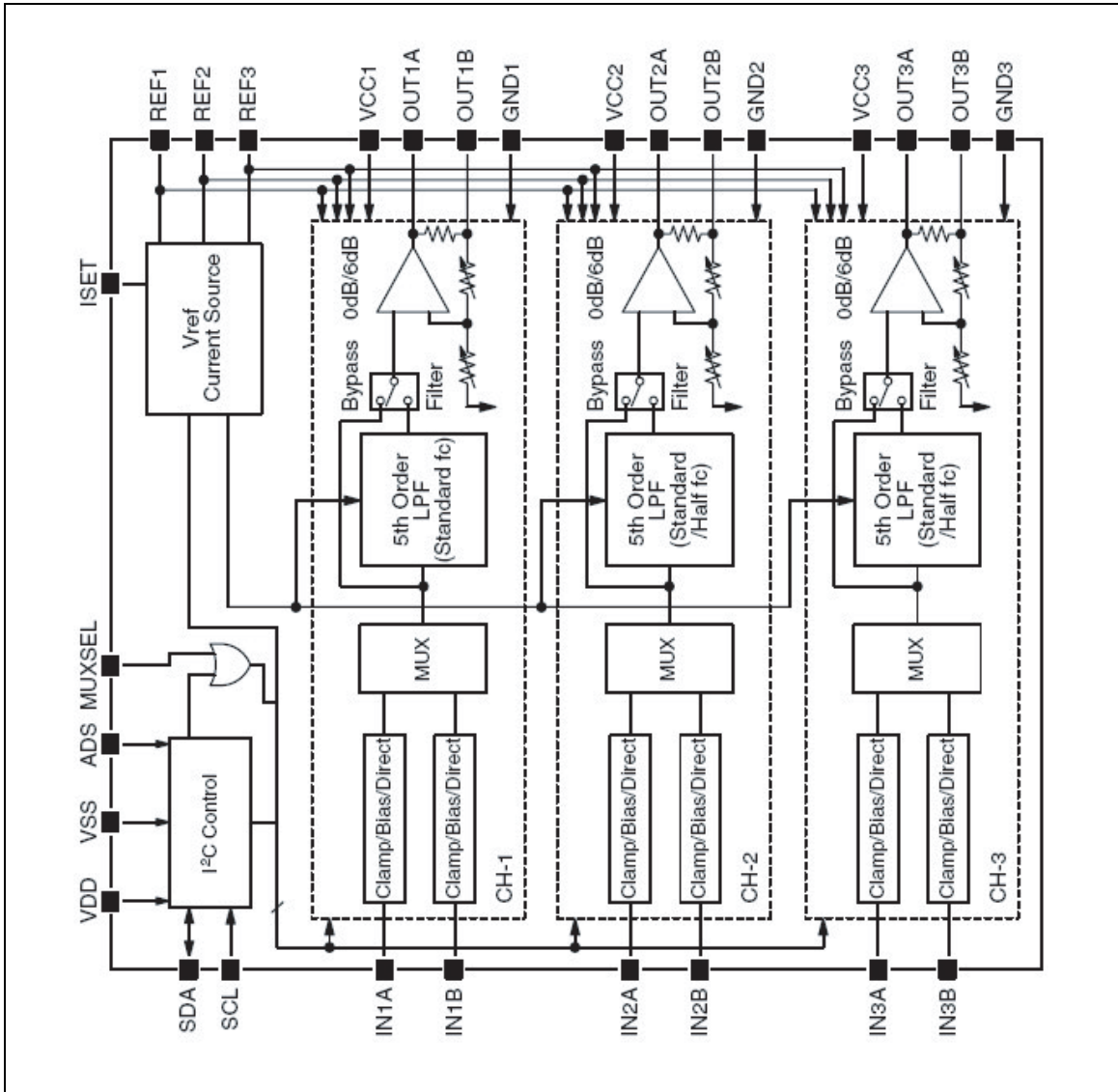


Figure 4.5-1



## 5. Required Equipment List

### Equipment & Facilities

- Remote control (Blu-ray version)
- Stereo Headphones (with 6.3 mm Jack Plug)
- External audio amplifier with the following connections:
  - audio L/R cinch inputs (x2)
  - coaxial SPDIF input
  - optical SPDIF input

### Cables

- HDMI cable
- S-Video cable
- 2x Audio L/R Chinch cables
- Digital audio coax cable
- Digital audio optical cable

### Memory Cards / Media

- Compact Flash (CF)
- Smart Media (SM)
- Secure Digital (SD)
- MultiMedia Card (MMC)
- Memory stick (MS)
- Audio CD
- Video DVD
- Blu-ray disc

## 6. Diagnosis and Repair Flowchart

### 6.1. Overview

Symptom	Refer to
No power detected (Standby LED off)	Flowchart 1
No digital audio output	Flowchart 2
No audio output	Flowchart 3
Disc loading error	Flowchart 4
Remote control does not work	Flowchart 5
No picture	Flowchart 6
No Logo screen (HDMI)	Flowchart 7
No Logo screen (Component 1080i, 720p, 480p)	Flowchart 8
No Logo screen (Component 480i)	Flowchart 9
No Logo screen (Video, S-Video)	Flowchart 10
BD	Flowchart 11
DVD	Flowchart 12

6.2. Flowchart 1: No power detected (Standby LED off)

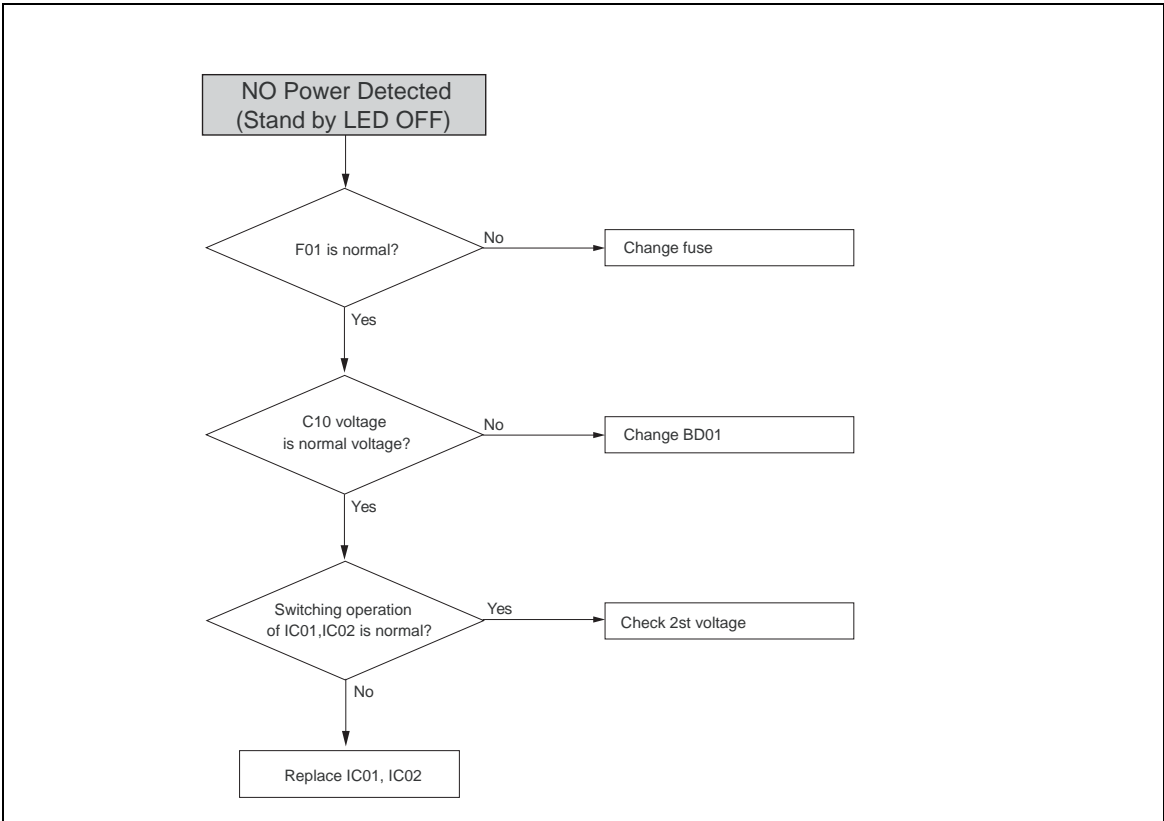


Figure 6.2-1

6.3. Flowchart 2: No digital audio output

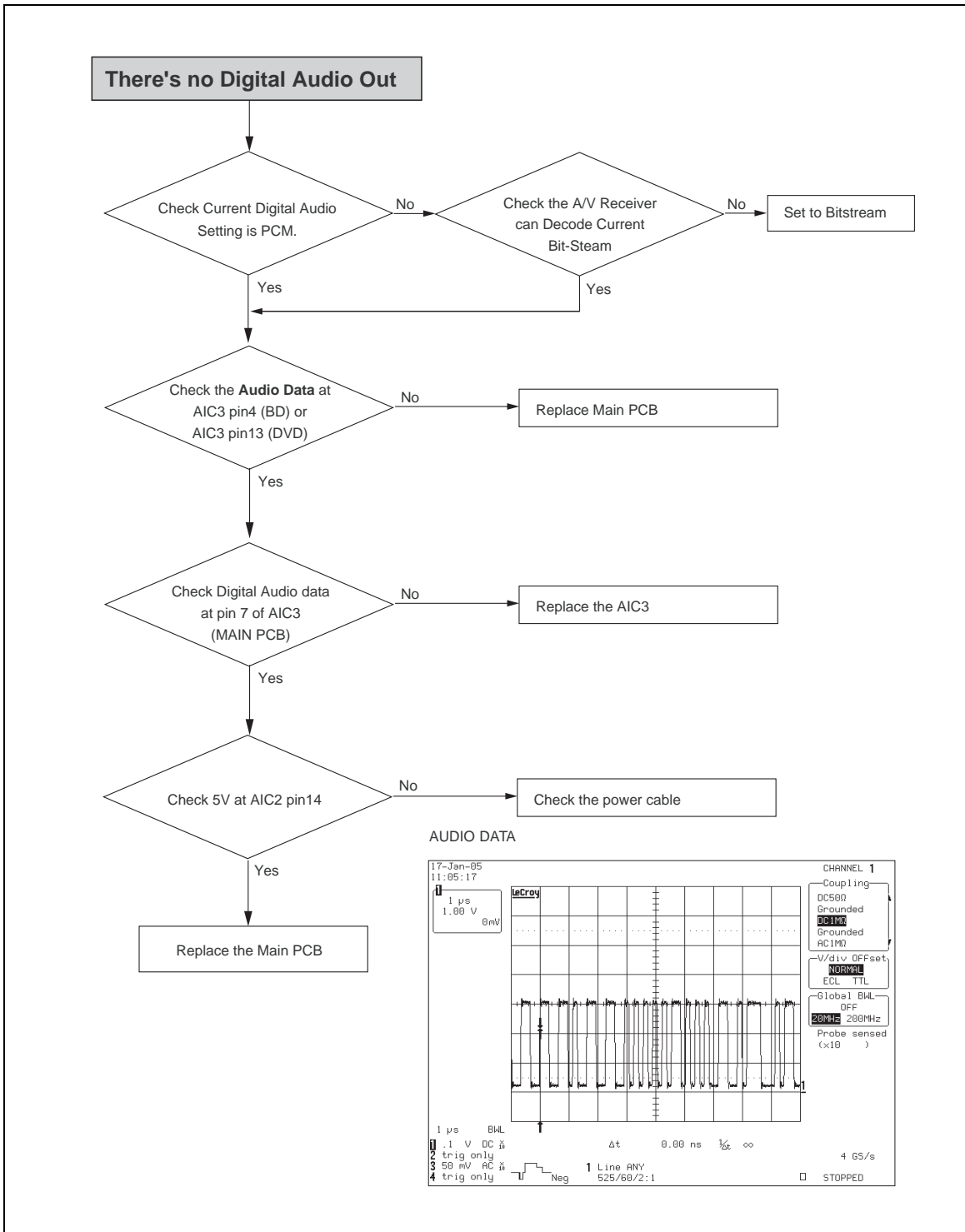


Figure 6.3-1

6.4. Flowchart 3: No audio output

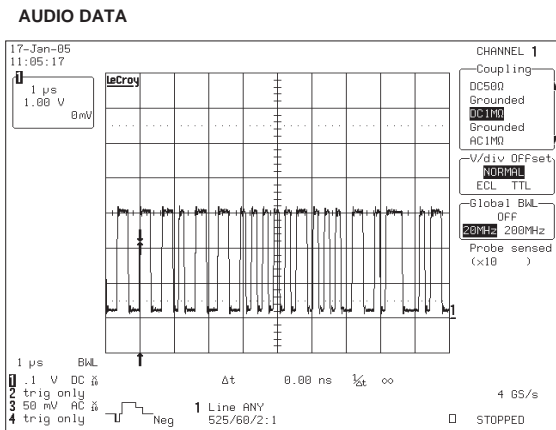
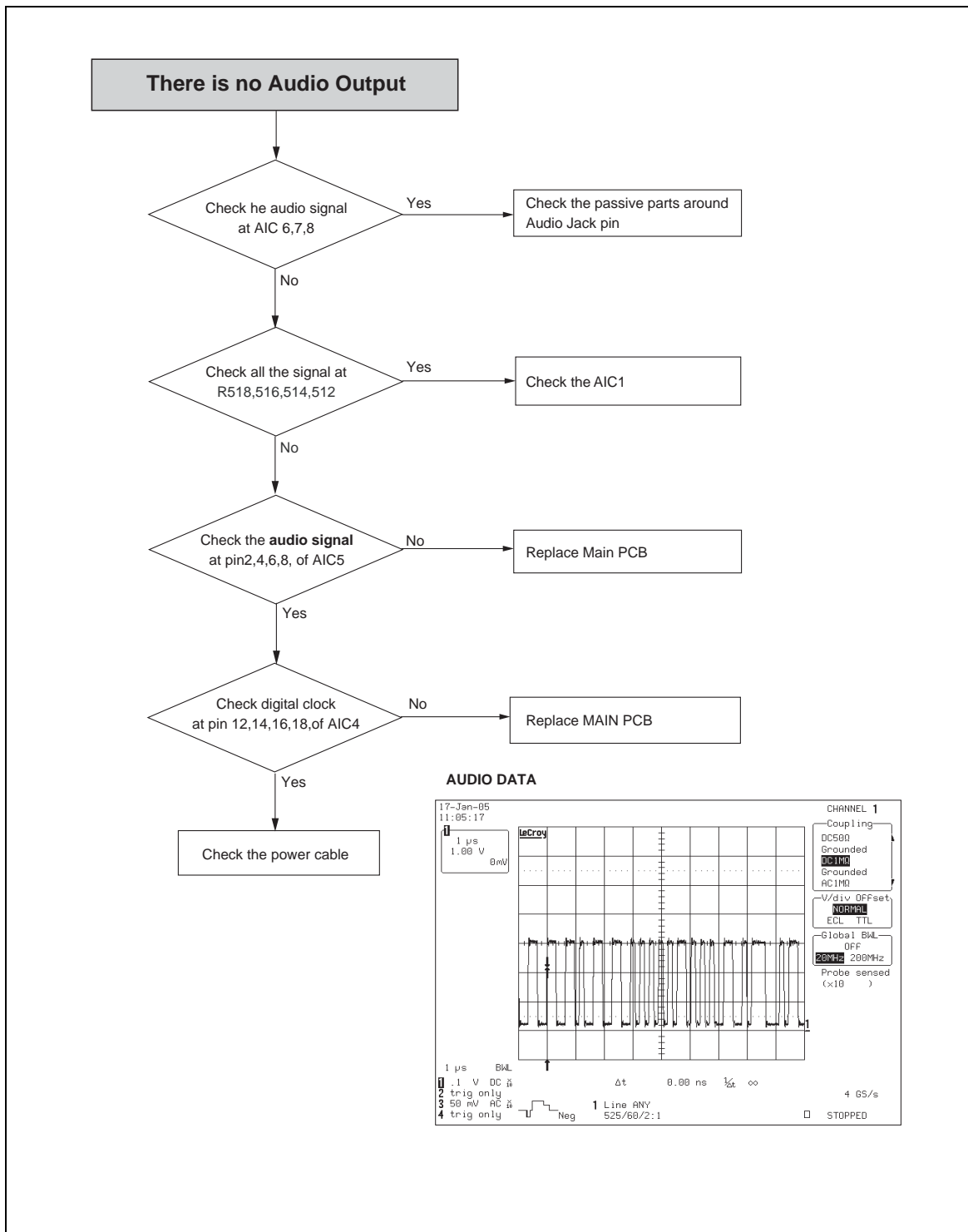


Figure 6.4-1

6.5. Flowchart 4: Disc loading error

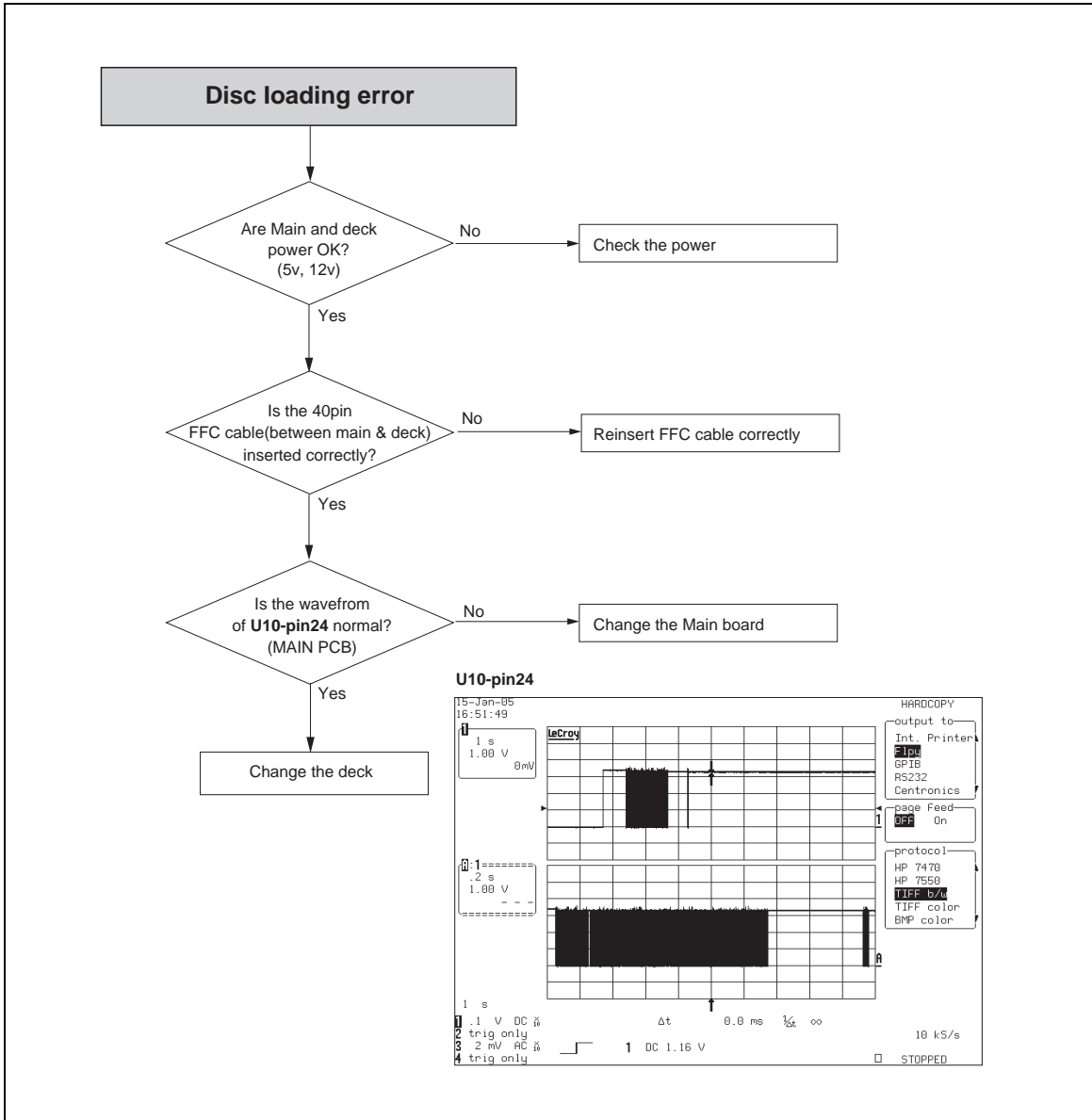


Figure 6.5-1

6.6. Flowchart 5: Remote control does not work

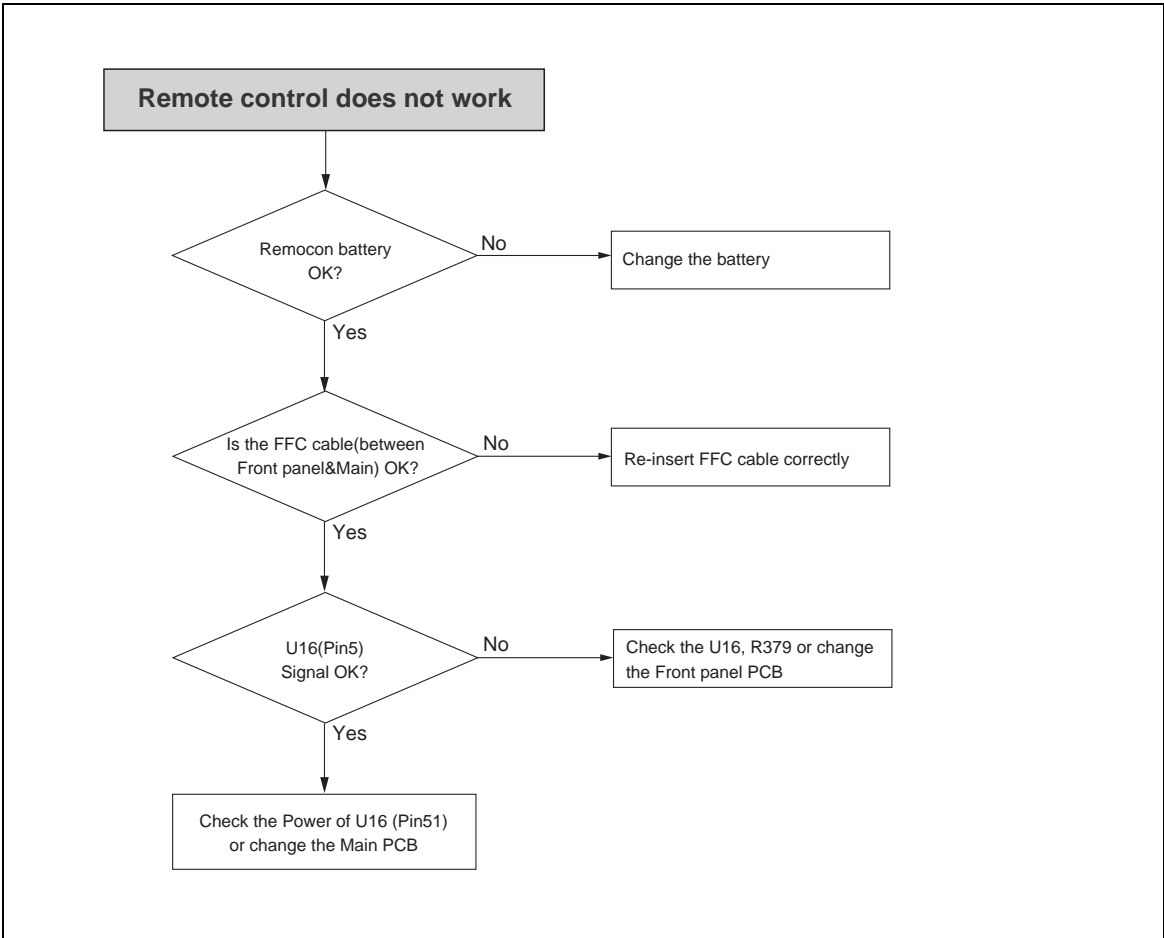


Figure 6.6-1

6.7. Flowchart 6: No picture

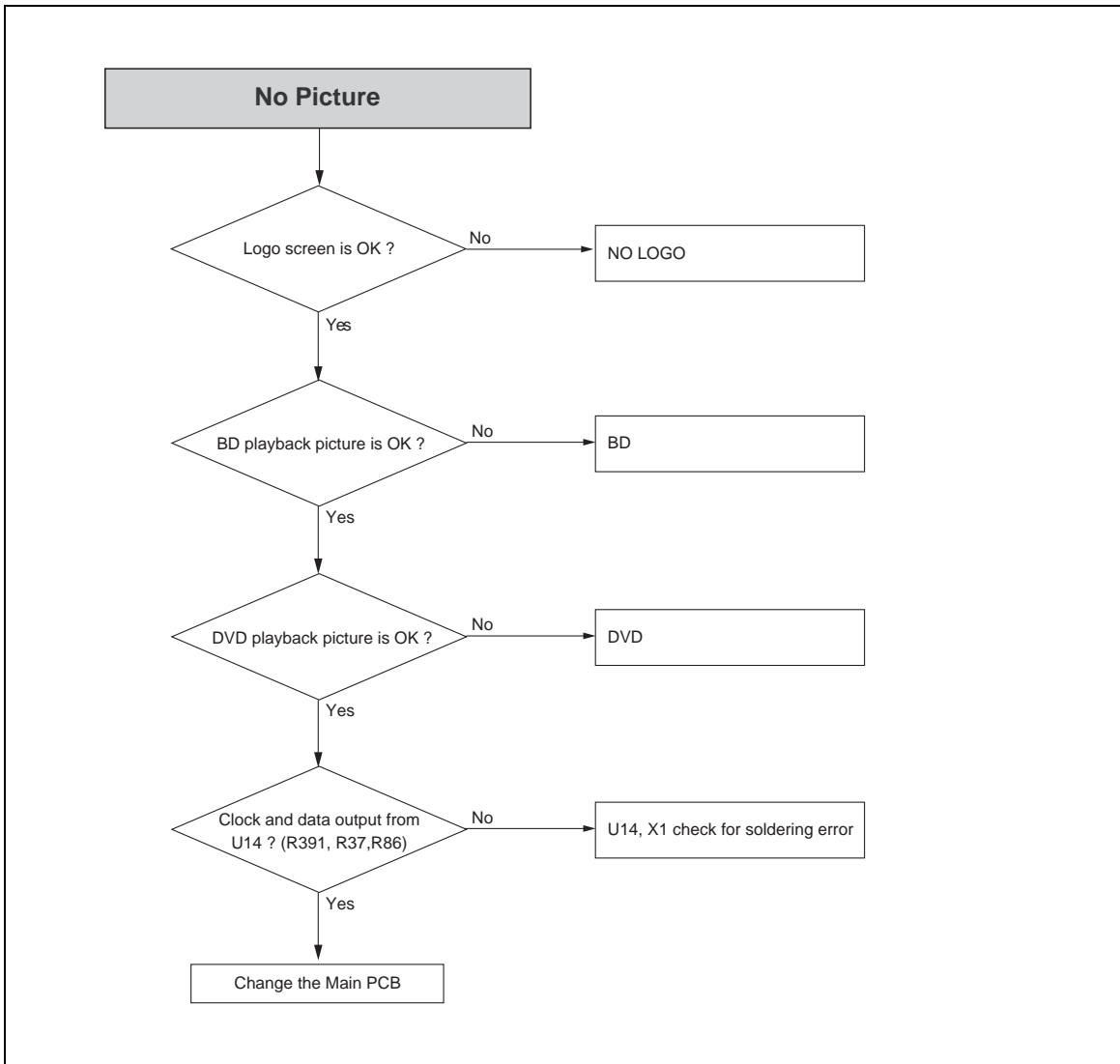


Figure 6.7-1



6.8. Flowchart 7: No logo screen (HDMI)

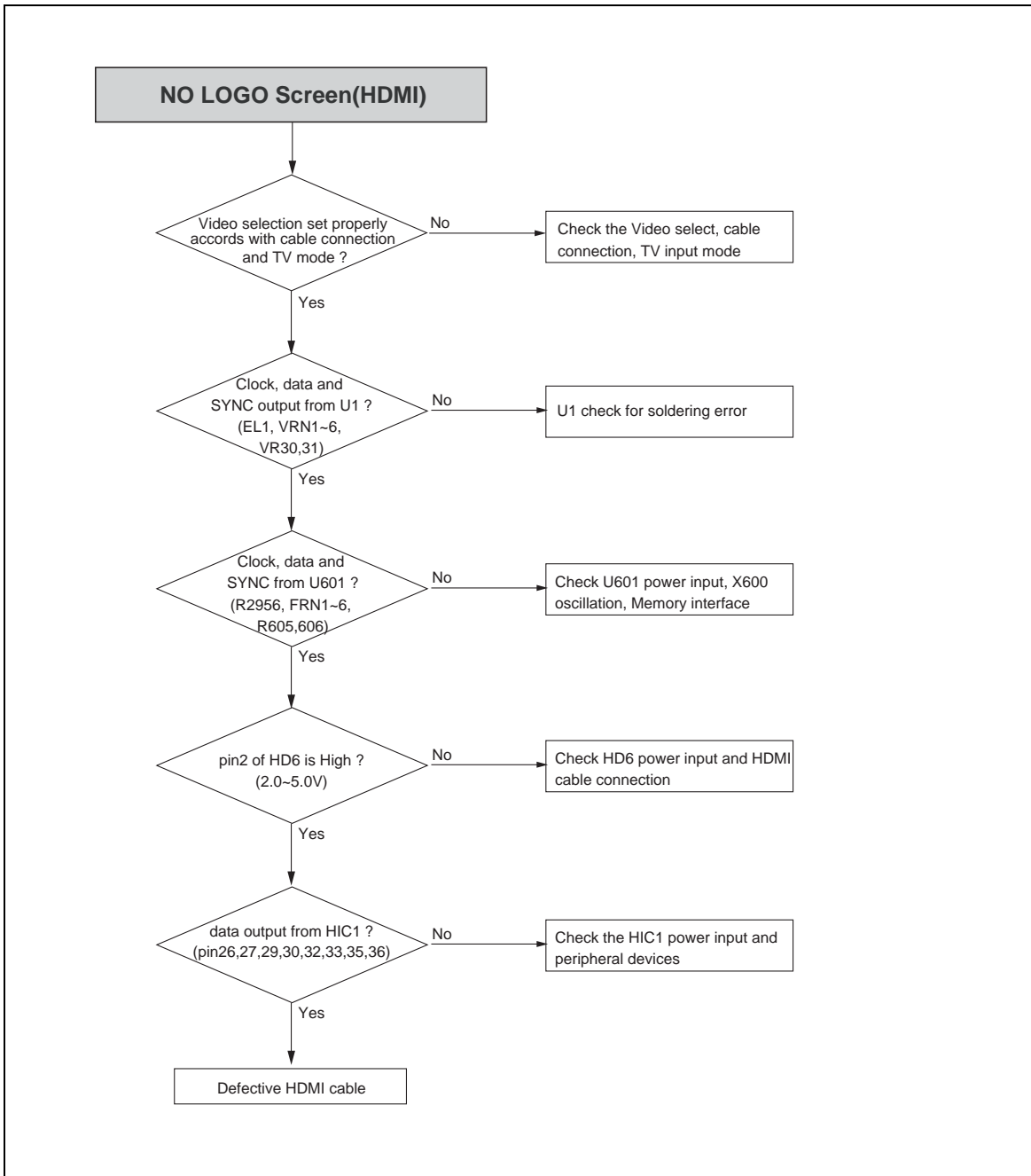


Figure 6.8-1

6.9. Flowchart 8: No logo screen (Component 1080i, 720p, 480p)

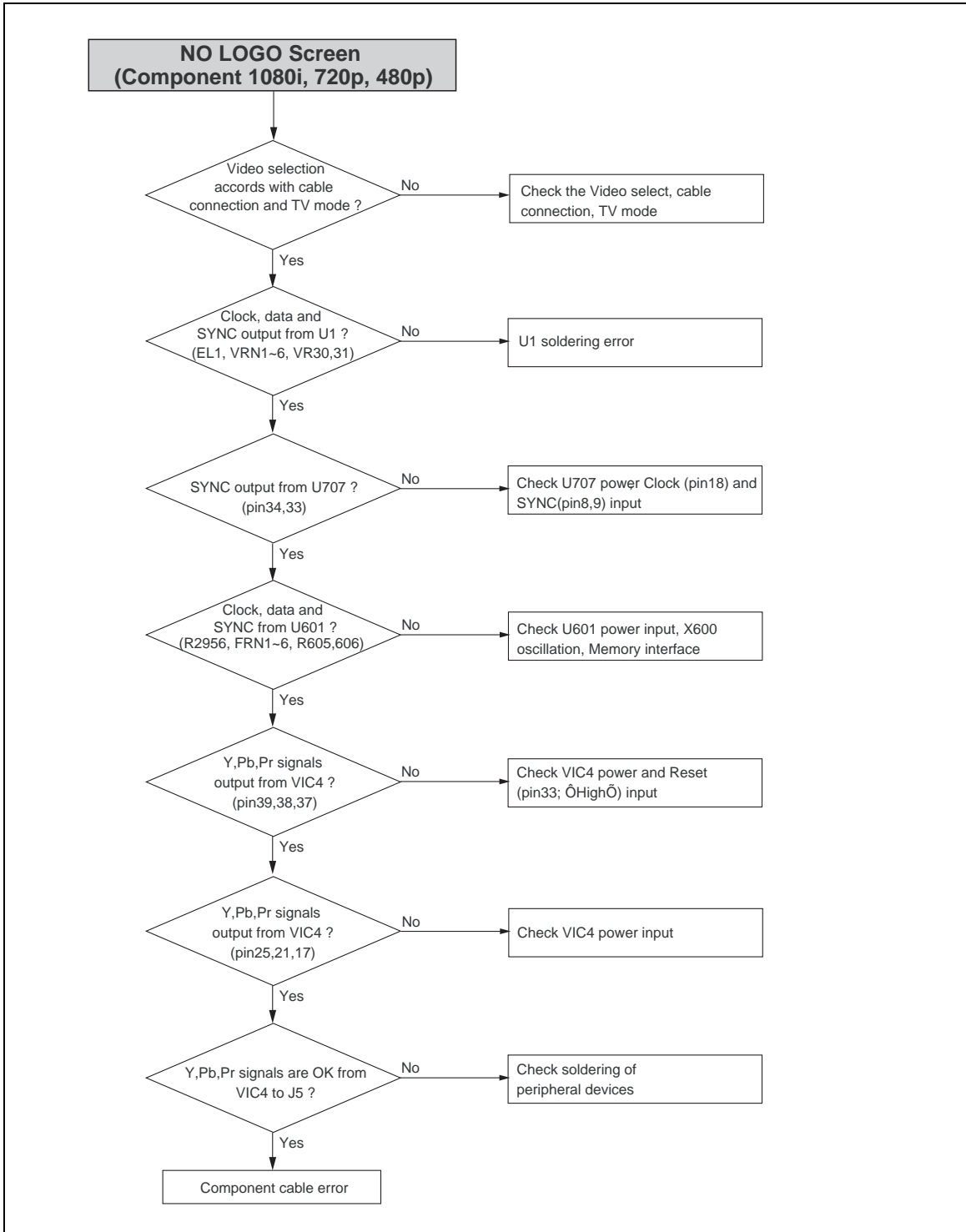


Figure 6.9-1

6.10. Flowchart 9: No logo screen (Component 480i)

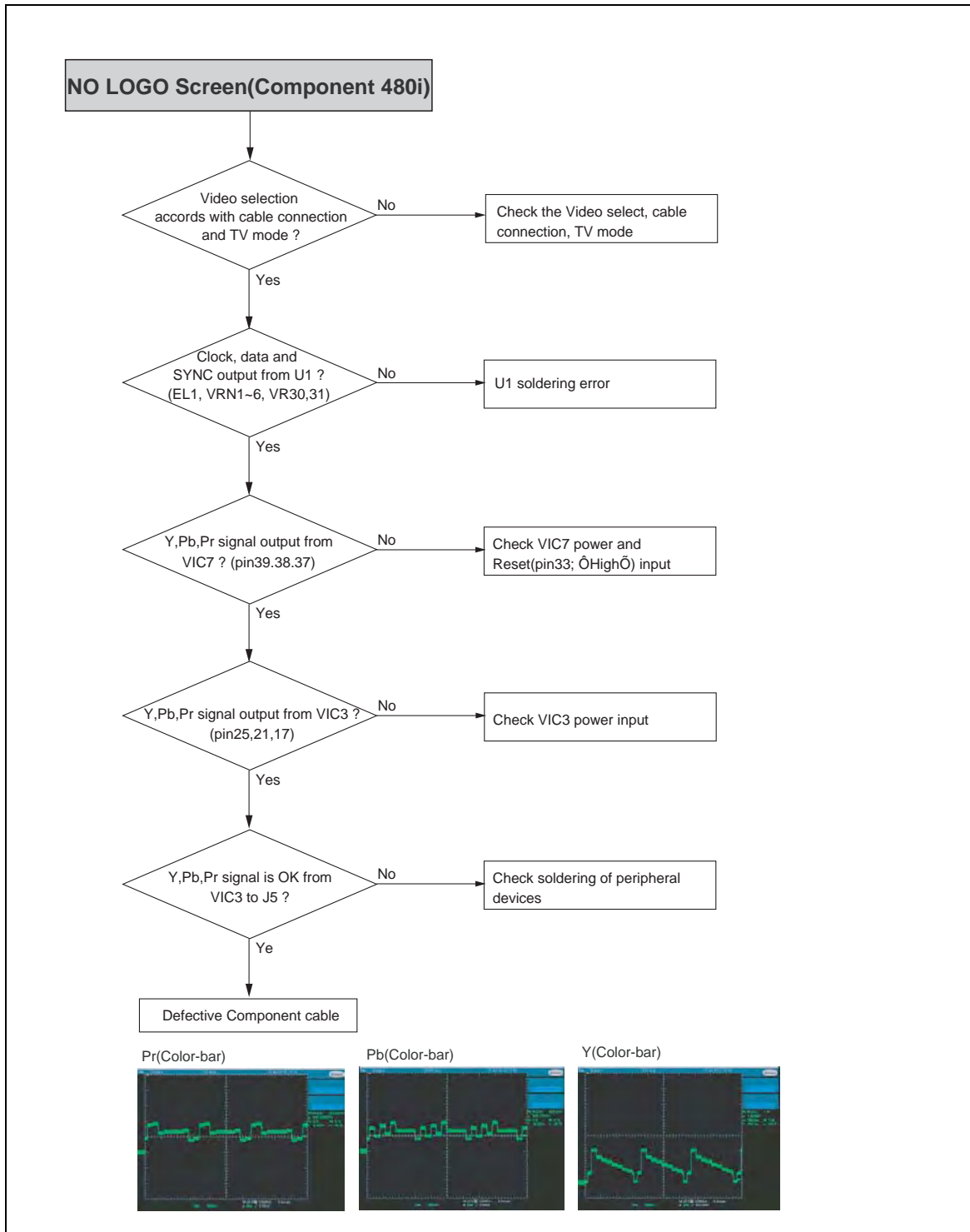


Figure 4.1-1

6.11. Flowchart 10: No logo screen (Video, S-Video)

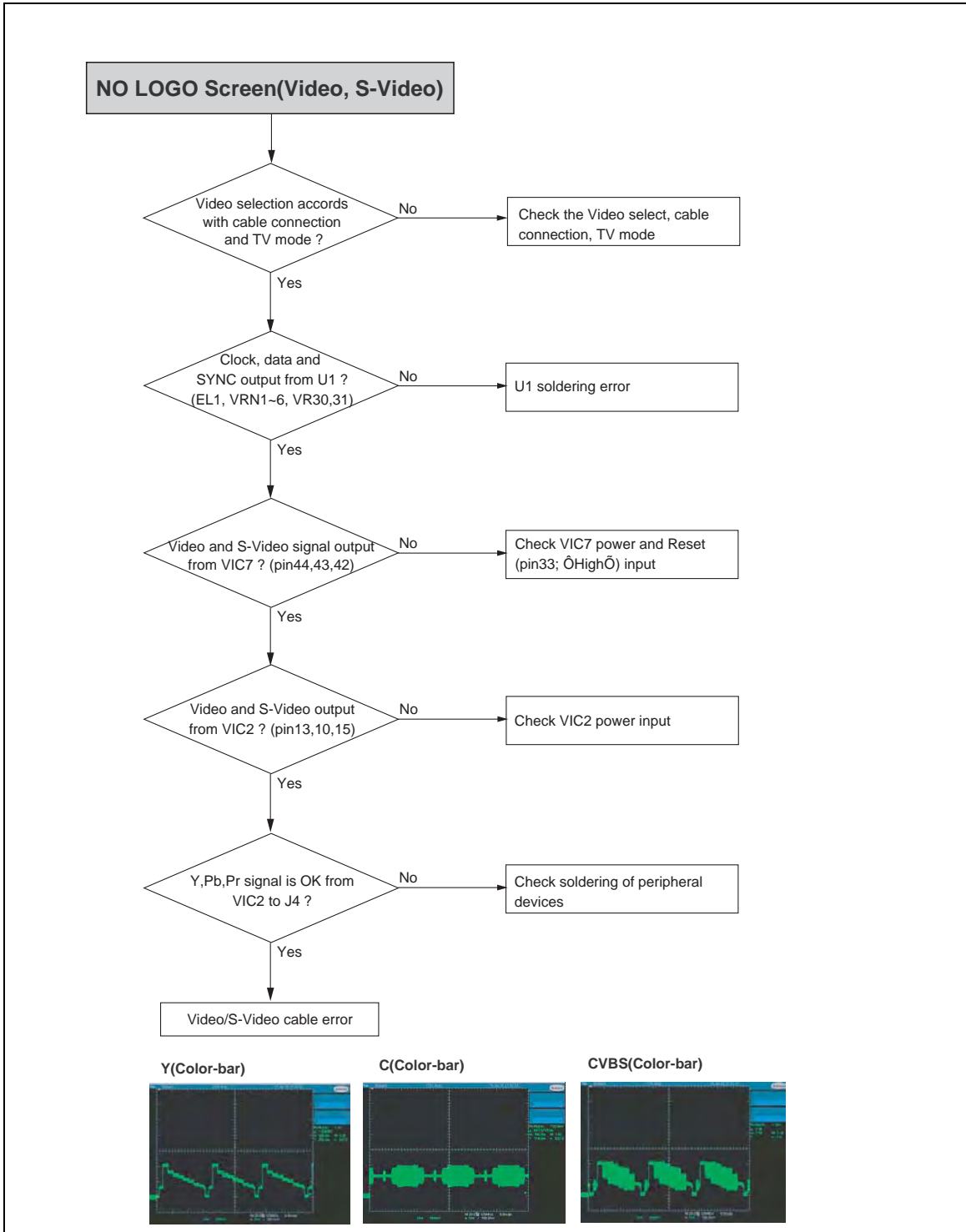


Figure 6.11-1

6.12. Flowchart 11: BD

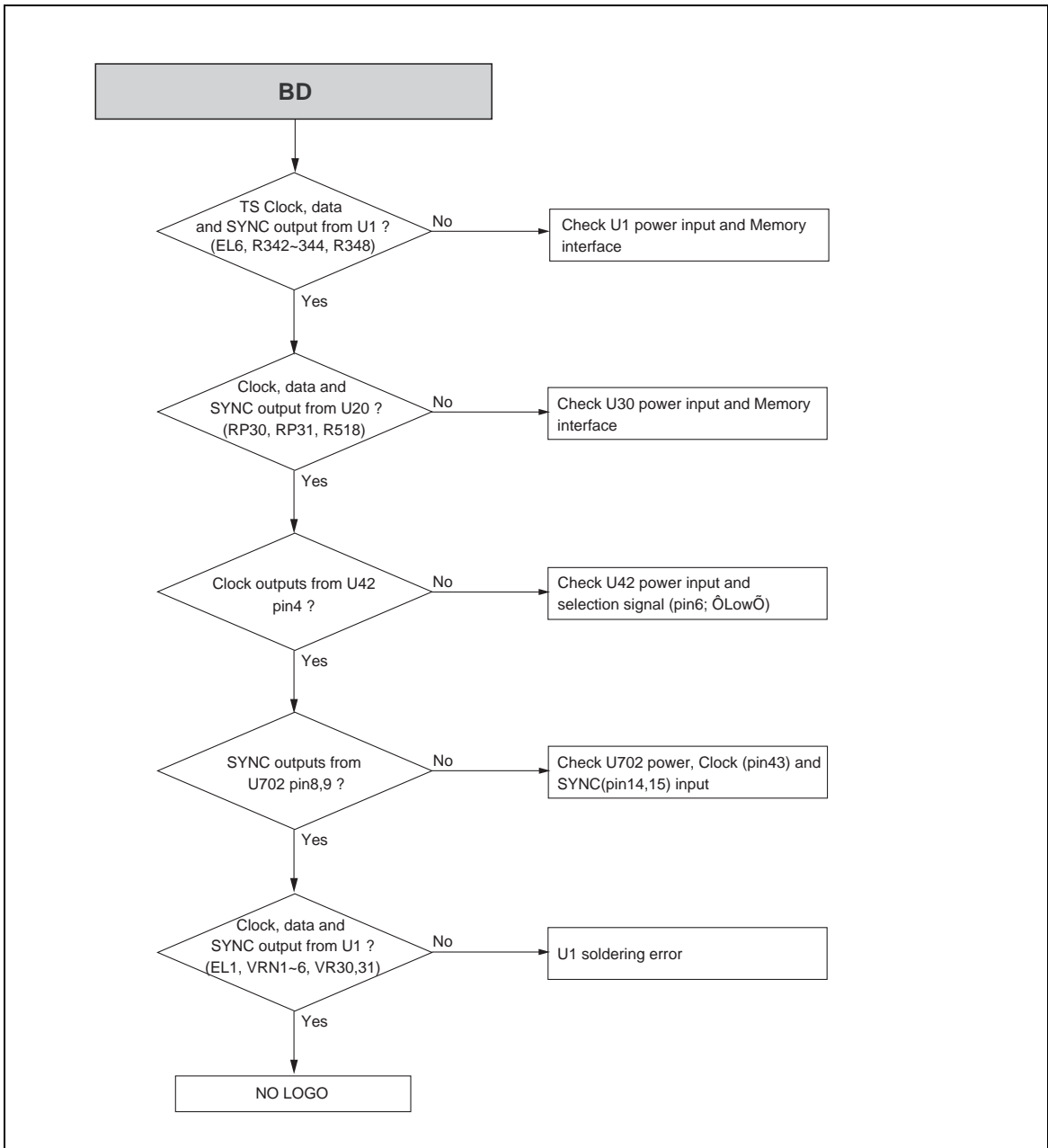


Figure 6.12-1

## 6.13. Flowchart 12: DVD

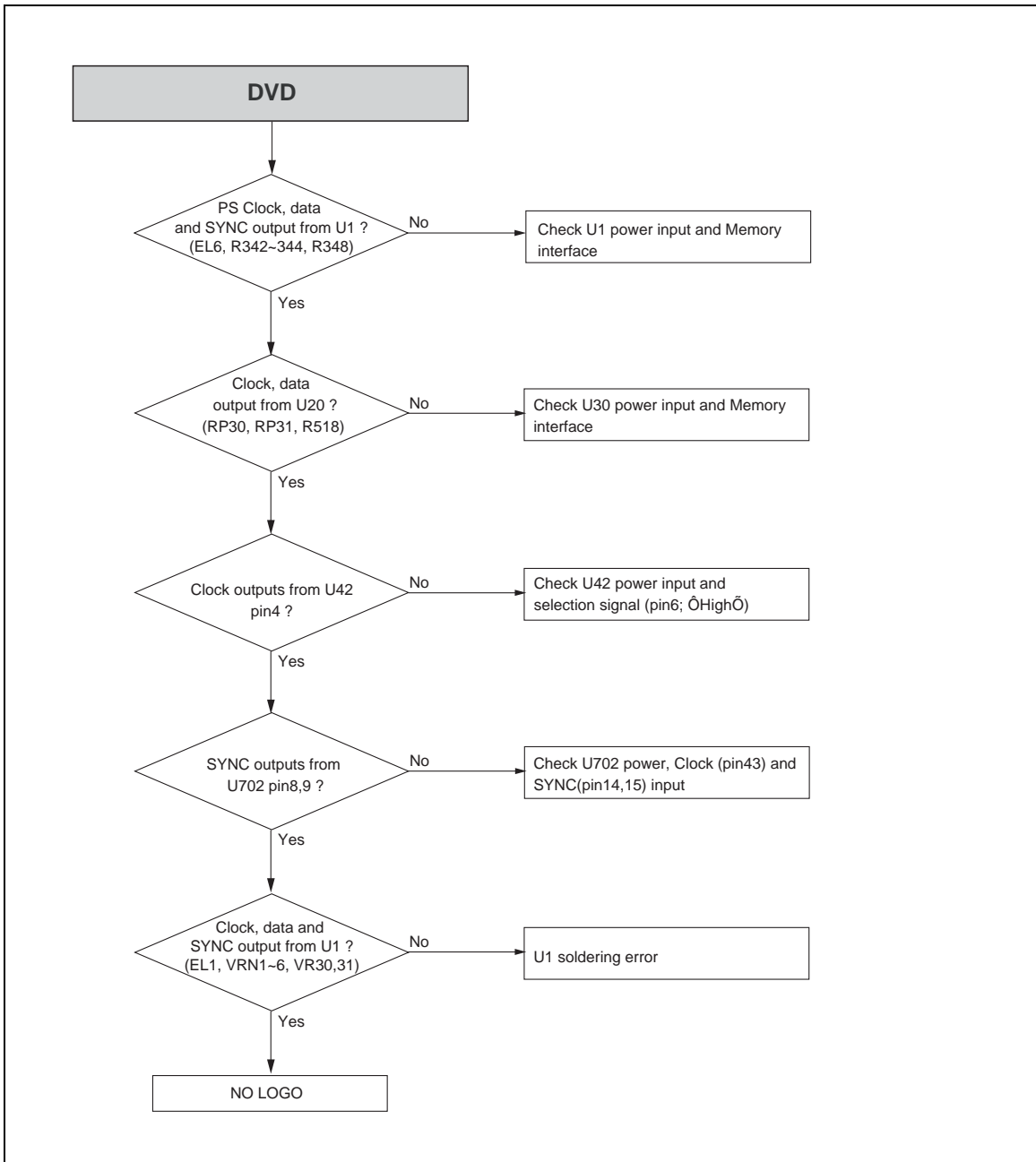


Figure 6.13-1

## 7. Software Update and Repair

### 7.1. Introduction

To improve the performance of the BDP9000 Blu-ray Disc Player, Philips will release software updates. This section describes how to update the software on the BDP9000 Blu-ray Disc Player.

### 7.2. How to make an update disc?

1. Download the software update from [www.philips.com](http://www.philips.com).
2. Write the software update to a CD-RW or CD-R. Refer to the next table for the recommended applications and recording options.

<b>Recommended applications</b>	Nero Burning, Easy CD Creator
<b>Recommended recording options</b>	
Extension name	*.REC
Multisession	No multisession
File name length	Max. of 11 = 8 + 3
Format	Mode 1
Character set	ISO 9660, Joliet Format
CD Close and Disc-at-once	Yes

### 7.3. How to update the software?

**CAUTION:**

DO NOT DISCONNECT THE POWER CORD FROM THE AC POWER SOURCE DURING THE SOFTWARE UPDATE PROCESS. IF YOU DO, THE SOFTWARE UPDATE PROCESS CAN STOP. IF THE SOFTWARE UPDATE PROCESS STOPS BEFORE THE SOFTWARE UPDATE IS COMPLETE, THE BDP9000 BLU-RAY DISC PLAYER CAN BE DAMAGED.

**CAUTION:**

IF AN OUTAGE OCCURS DURING THE SOFTWARE UPDATE PROCESS, THE SOFTWARE UPDATE PROCESS CAN STOP. IF THE SOFTWARE PROCESS STOPS BEFORE THE SOFTWARE UPDATE IS COMPLETE, THE BDP9000 BLU-RAY DISC PLAYER CAN BE DAMAGED.

**CAUTION:**

DO NOT OPEN THE DISC TRAY DURING THE SOFTWARE UPDATE PROCESS. IF YOU DO, THE SOFTWARE UPDATE PROCESS CAN STOP. IF THE SOFTWARE PROCESS STOPS BEFORE THE SOFTWARE UPDATE IS COMPLETE, THE BDP9000 BLU-RAY DISC PLAYER CAN BE DAMAGED.

**CAUTION:**

MAKE SURE THAT THE UPDATE DISC IS CLEAN. DIRT AND SCRATCHES CAN STOP THE SOFTWARE UPDATE PROCESS. IF THE SOFTWARE UPDATE PROCESS STOPS BEFORE THE SOFTWARE UPDATE IS COMPLETE, THE BDP9000 BLU-RAY DISC CAN BE DAMAGED.

1. Press the **OPEN/CLOSE** button.
  - The disc tray opens.
2. Put the update disc in the disc tray with the label on top.
3. Press the **OPEN/CLOSE** button again.
  - The disc tray closes.
4. Wait until the screen shows the following text (1 -2 minutes): Do you want to update Main F/W?
5. On the remote control, press the **OK** button.
  - The actual software update starts.
6. Wait until the screen shows the following text (5 - 6 minutes): Main F/W is successfully updated.
7. Remove the update disc from the disc tray.
8. Press the **STANDBY-ON** button.
  - The **STANDBY-ON** light comes on as red.
9. Press the **STANDBY-ON** button again.
  - The **STANDBY-ON** light comes on as blue and the disc tray closes.
10. Check new and old version (numbers).
11. Repeat the steps 1-10 to update the DVD firmware (Sub F/W).
12. Repeat the steps 1-10 to update the ODD firmware (Loader F/W).

## 8. Mechanical Instructions

### 8.1. Removal of the top cover

1. Remove the five screws (A, B, C).
2. Lift the top cover.

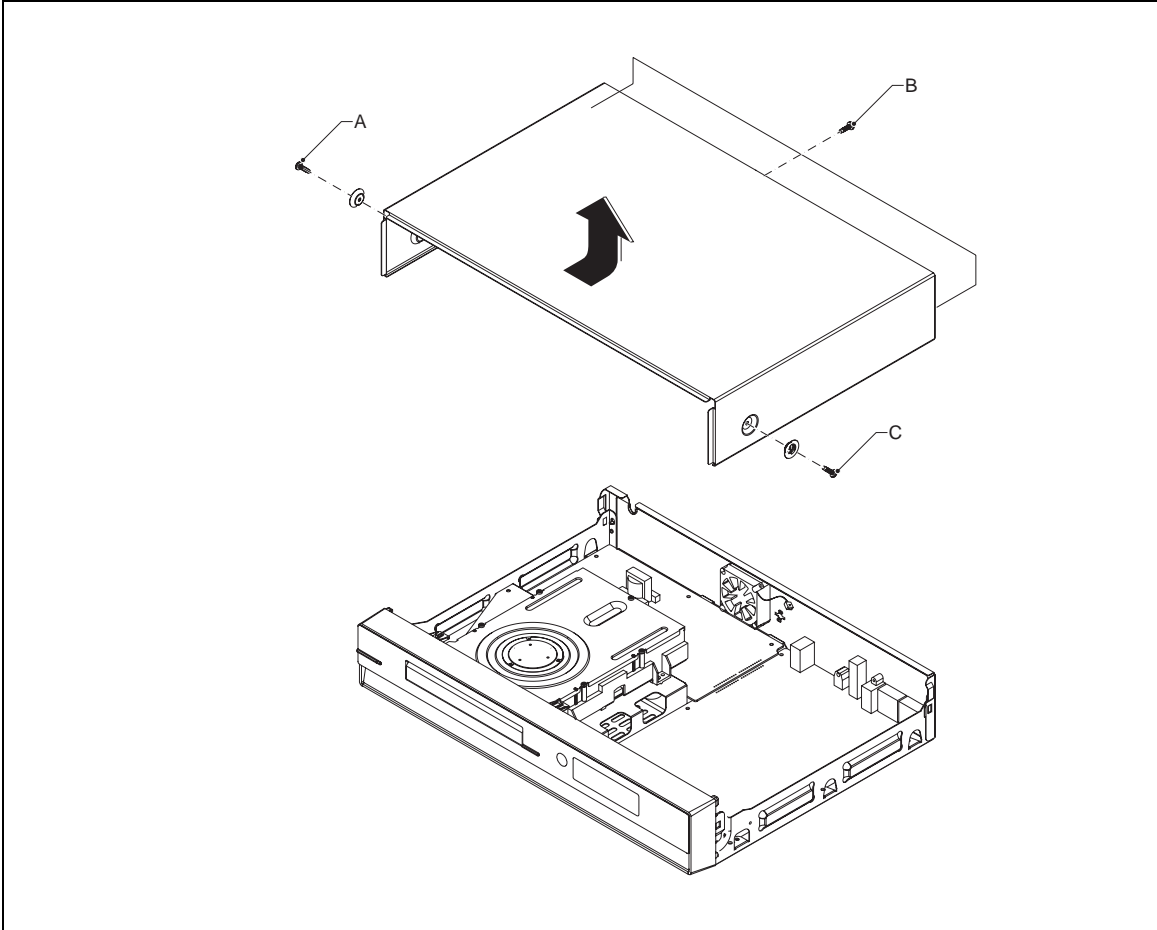


Figure 8.1-1



## 8.2. Removal of the front panel assembly

1. Remove the top cover (refer to 8.1).
2. Release the seven hooks (A, B, C, D)
3. Release the front panel assy. (E).

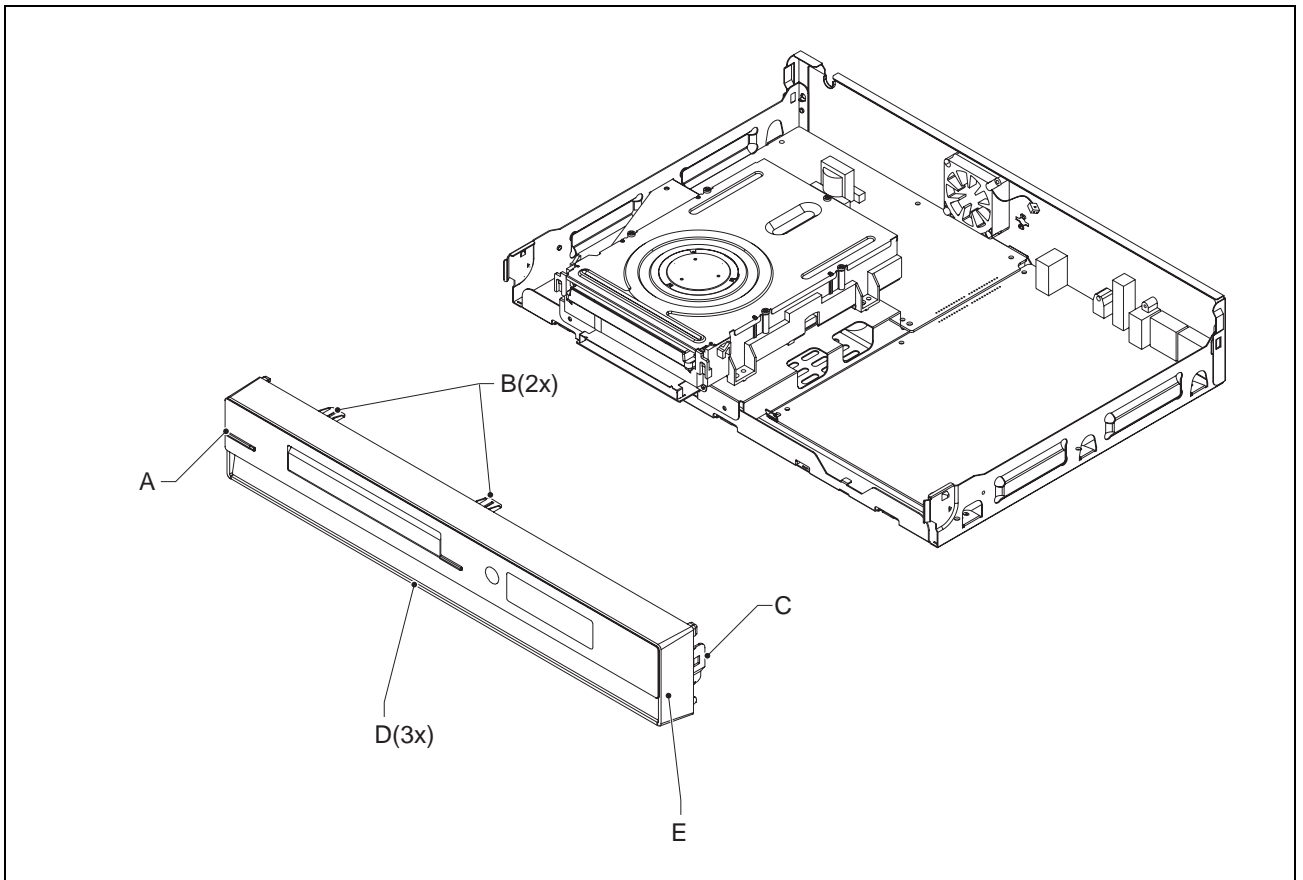


Figure 8.2-1

### 8.3. Removal of the optical drive

1. Remove the front panel assy. (refer to 8.2).
2. Remove the four screws (A, B).
3. Lift the optical drive (C).

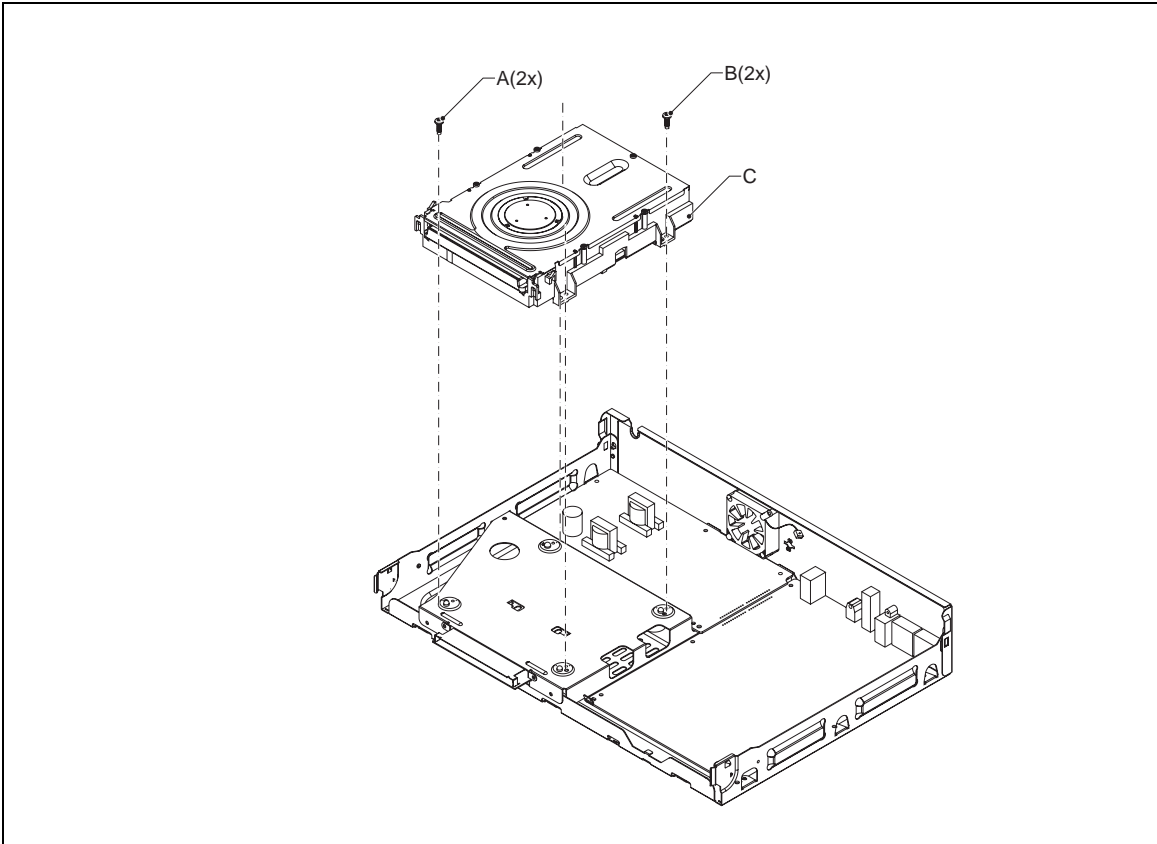


Figure 8.3-1

#### 8.4. Removal of the SMPS PCB

1. Remove the optical drive (refer to 8.3).
2. Remove the six screws (A).
3. Lift the SMPS PCB (B).

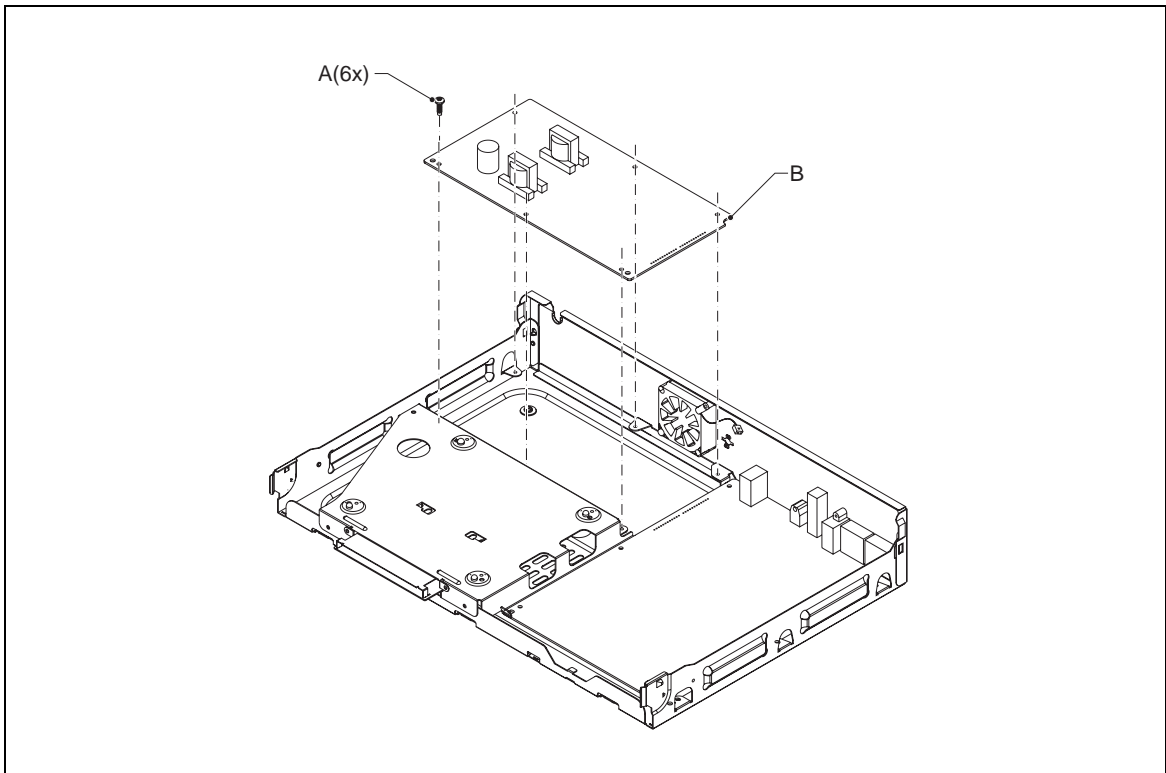


Figure 8.4-1

### 8.5. Removal of the Main PCB

1. Remove the optical drive (refer to 8.3).
2. Remove the eleven screws (A, B).
3. Lift the Main PCB (C).

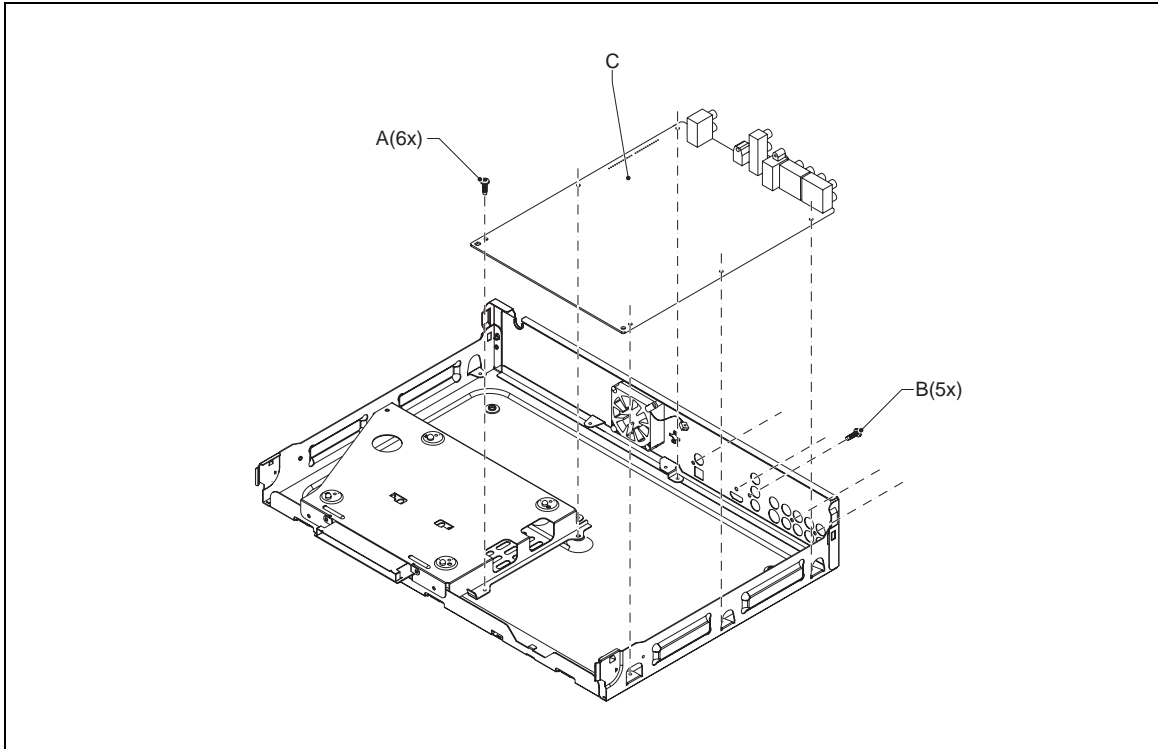


Figure 8.5-1

## 8.6. Removal of the memory card readers

1. Remove the optical drive (refer to 8.3).
2. Remove the two screws (A).
3. Lift the memory card readers (B).

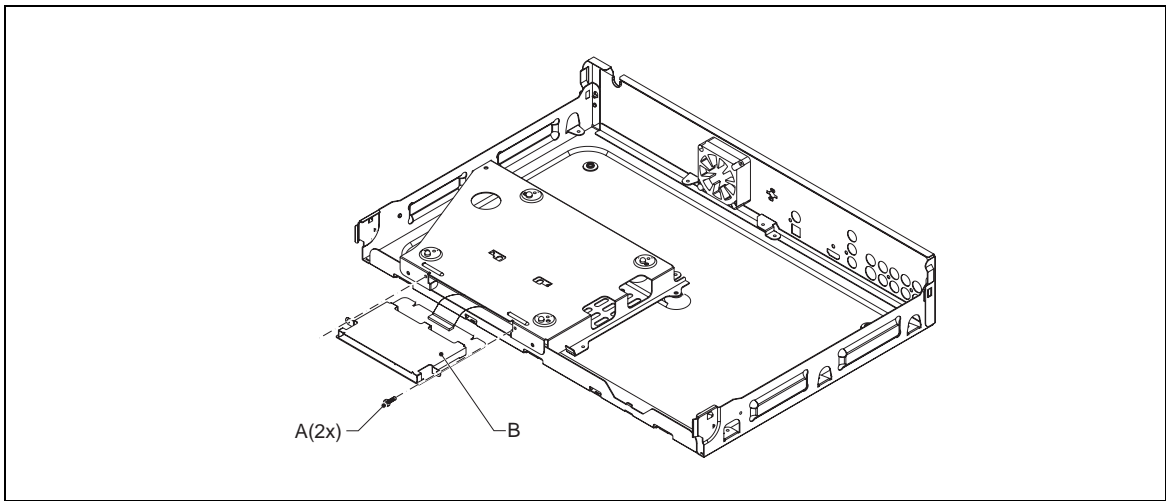


Figure 8.6-1

### 8.7. Removal of the fan

1. Remove the top cover (refer to 8.1).
2. Remove the 2 screws (A).
3. Remove the fan (B).

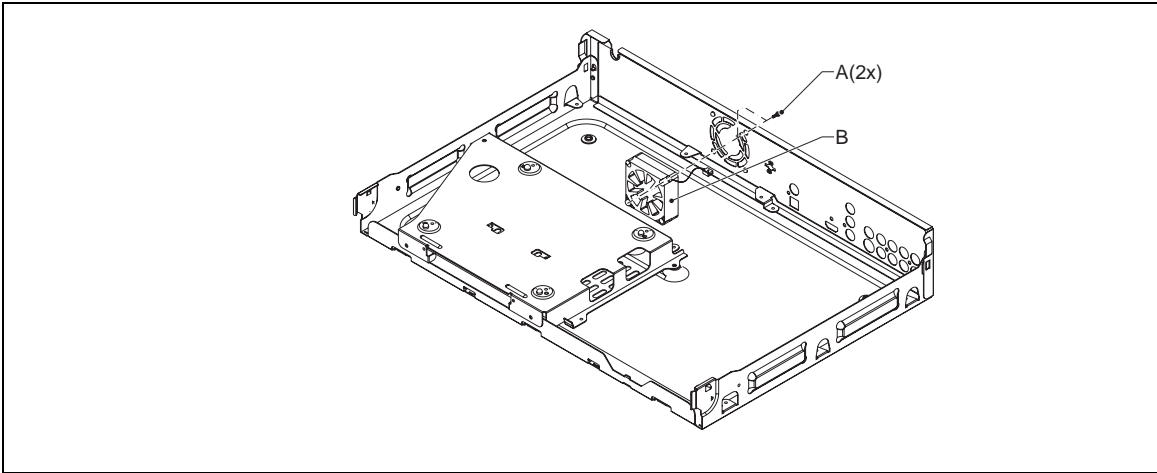


Figure 8.7-1

## 9. Circuit Diagrams and PWB Layouts

### 9.1. Overview

Diagram	Refer to
SMPS (SMPS PCB)	9.2
Audio DAC (Main PCB)	9.3
S5L3700 (Audio/ATA/PERI) (Main PCB)	9.4
SL5L3700 (Flash/CS8900) (Main PCB)	9.5
S5L3700 (DDR Memory) (Main PCB)	9.6
S5L3700 (Video Out) (Main PCB)	9.7
S5L3700 (Power/GND) (Main PCB)	9.8
DDR Termination (C) (Main PCB)	9.9
DDR Termination (A/B) (Main PCB)	9.10
ATA/ATAPI (Main PCB)	9.11
S5L3700 (Video In) (Main PCB)	9.12
HDMI Out (Main PCB)	9.13
Clock/Front Micom (Main PCB)	9.14
DMN8602 (Main PCB)	9.15
DMN8602 (DDR) (Main PCB)	9.16
DMN8682 (PERI) (Main PCB)	9.17
BCM7411A (DDR SDRAM) (Main PCB)	9.18
BCM7411A (AVC DECODER) (MAIN PCB)	9.19
BCM7411A (ANA/DIG DECOUPL) (MAIN PCB)	9.20
Power (Main PCB)	9.21
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FLI8638 (Main PCB)	9.23
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Front (Front PCB)	9.25
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POWER (SUB PCB)	9.27
DVD Main PCB (component side)	9.28
DVD Main PCB (conductor side)	9.29
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SMPS PCB (conductor side)	9.31
Front PCB (component side)	9.32
Front PCB (conductor side)	9.33
Memory Key PCB	9.34
Front Key PCB	9.35

9.2. SMPS (SMPS PCB)

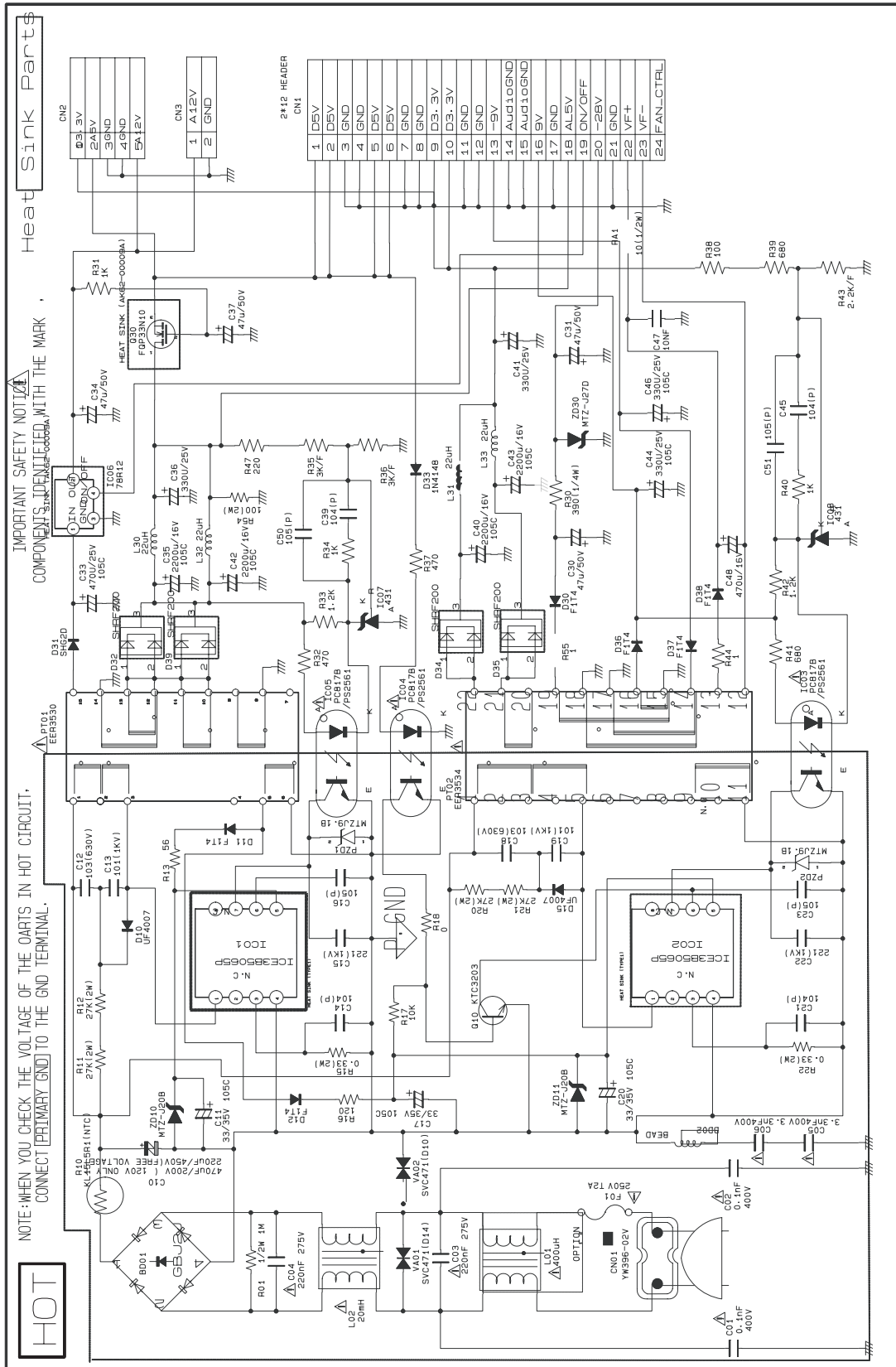


Figure 9.2-1



9.3. Audio DAC (Main PCB)

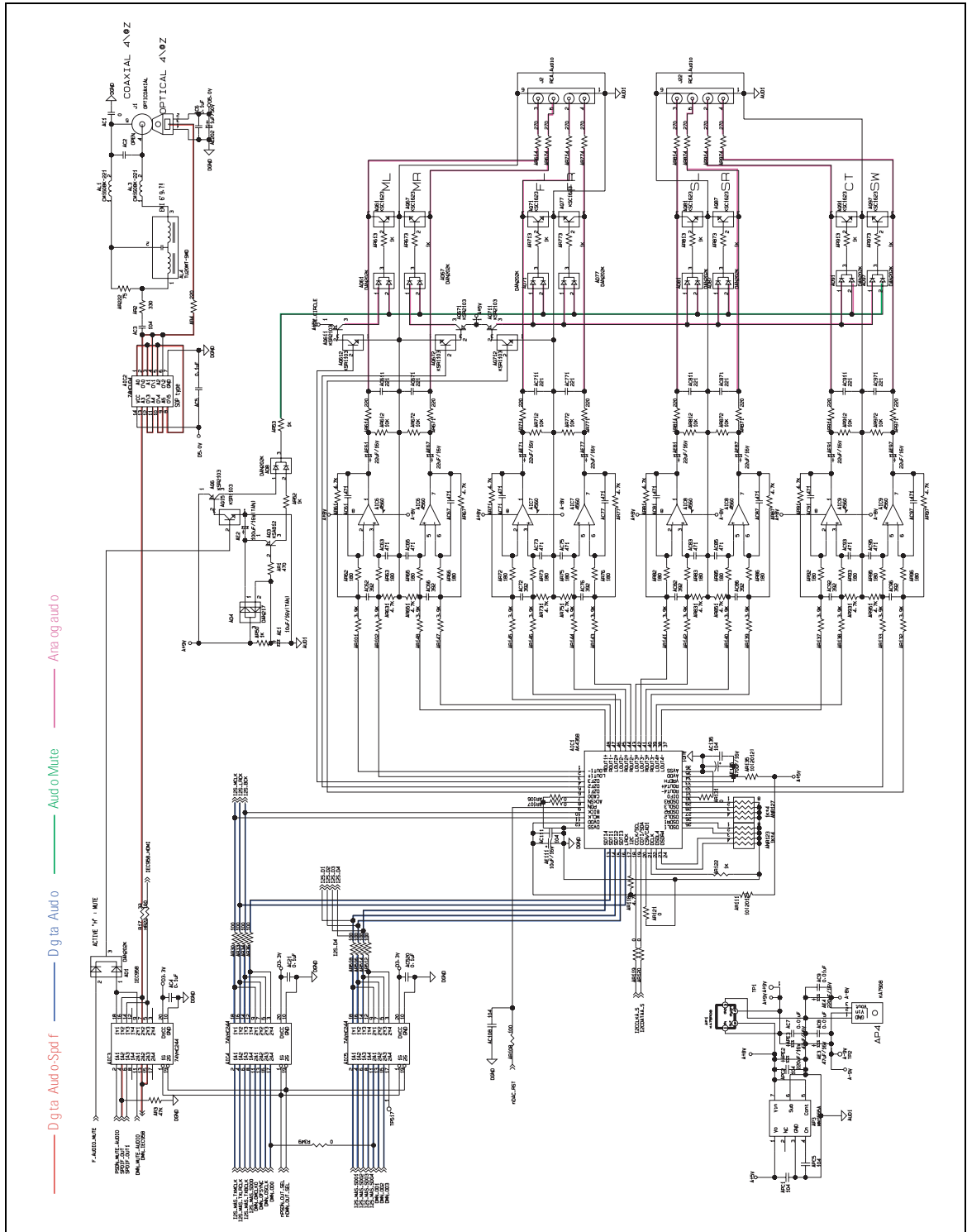


Figure 9.3-1









9.8. S5L3700 (Power/GND) (Main PCB)

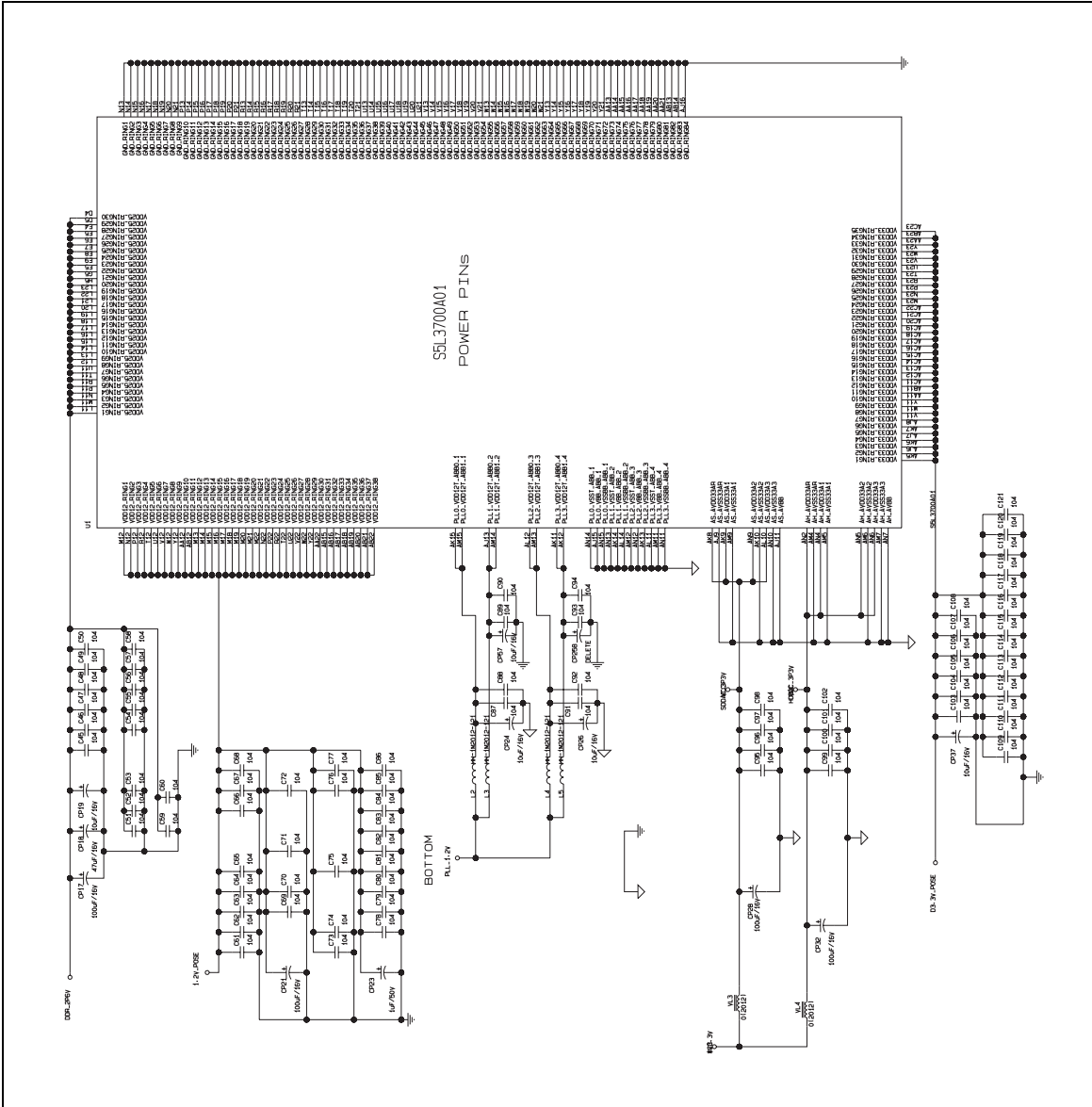


Figure 9.8-1

9.9. DDR Termination (C) (Main PCB)

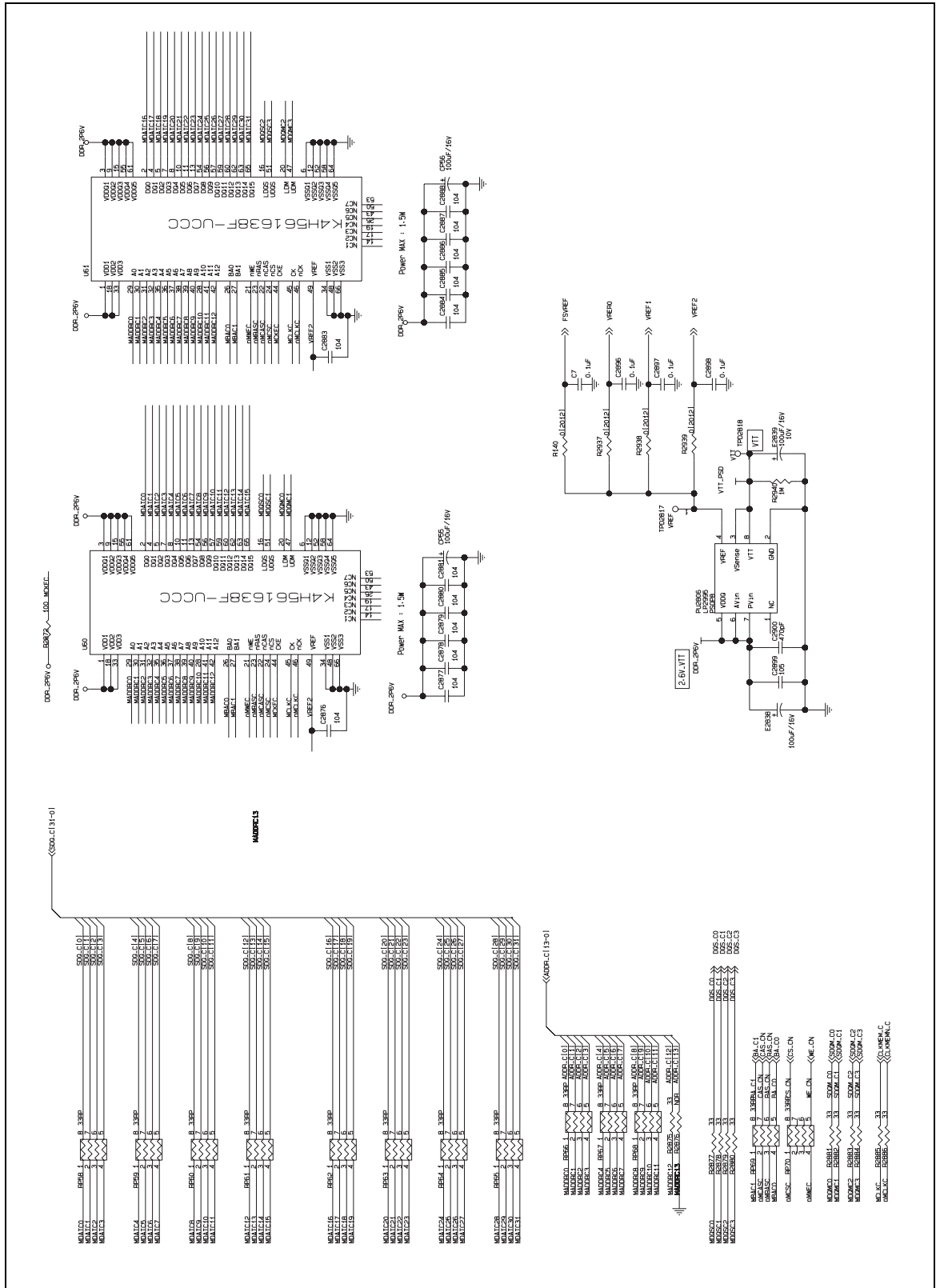


Figure 9.9-1













9.15. DMN8602 (Main PCB)

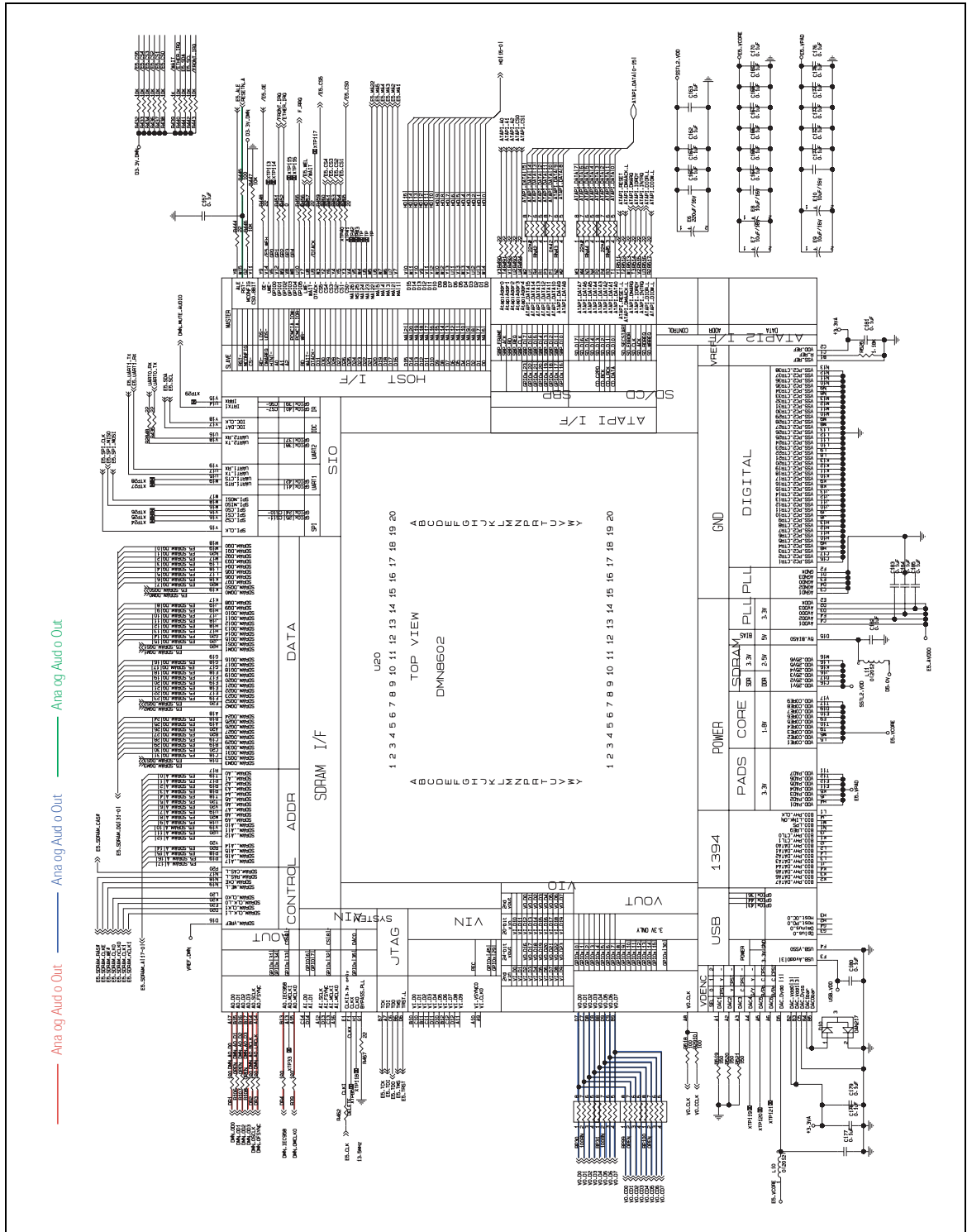


Figure 9.15-1



9.17. DMN8682 (PERI) (Main PCB)

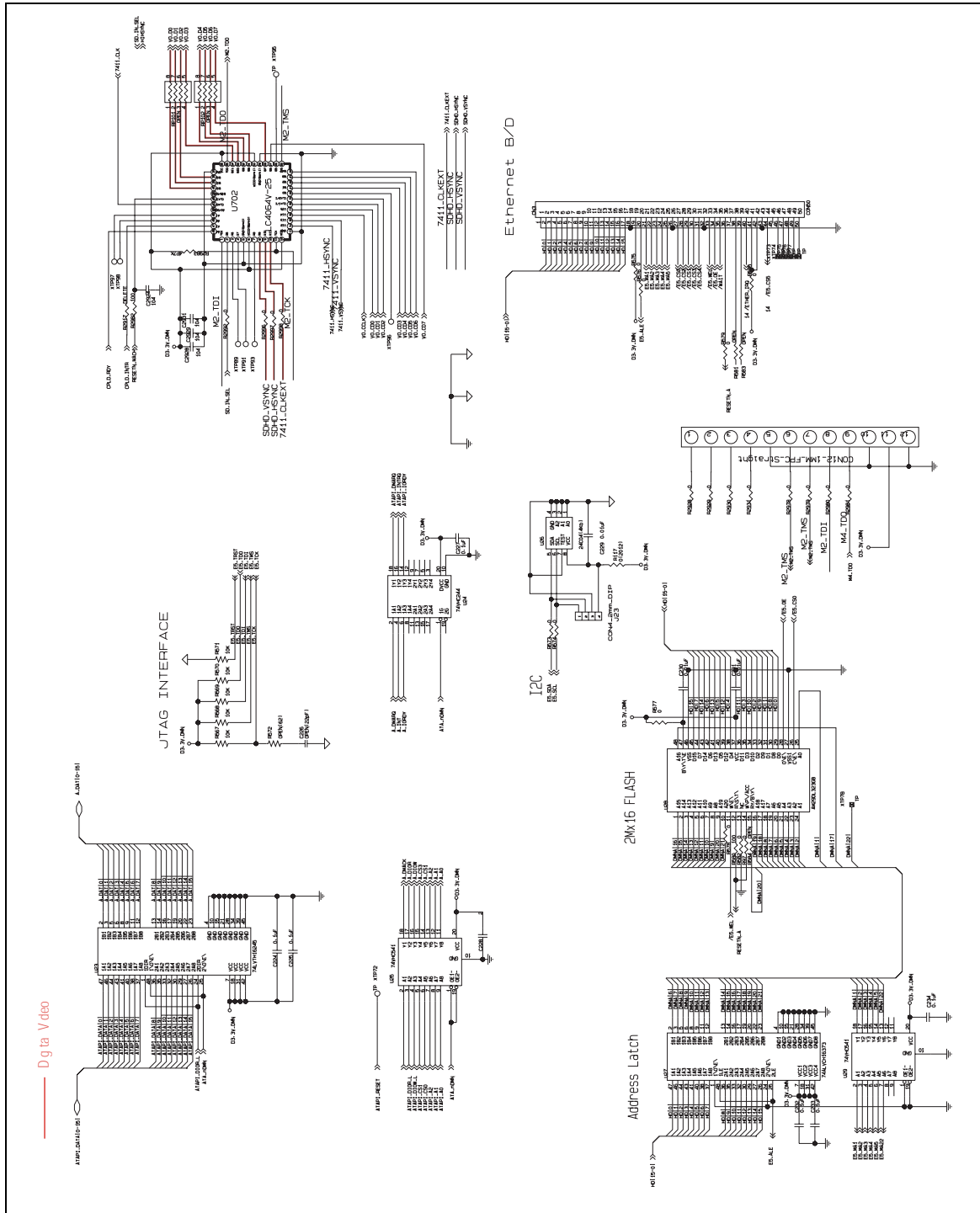
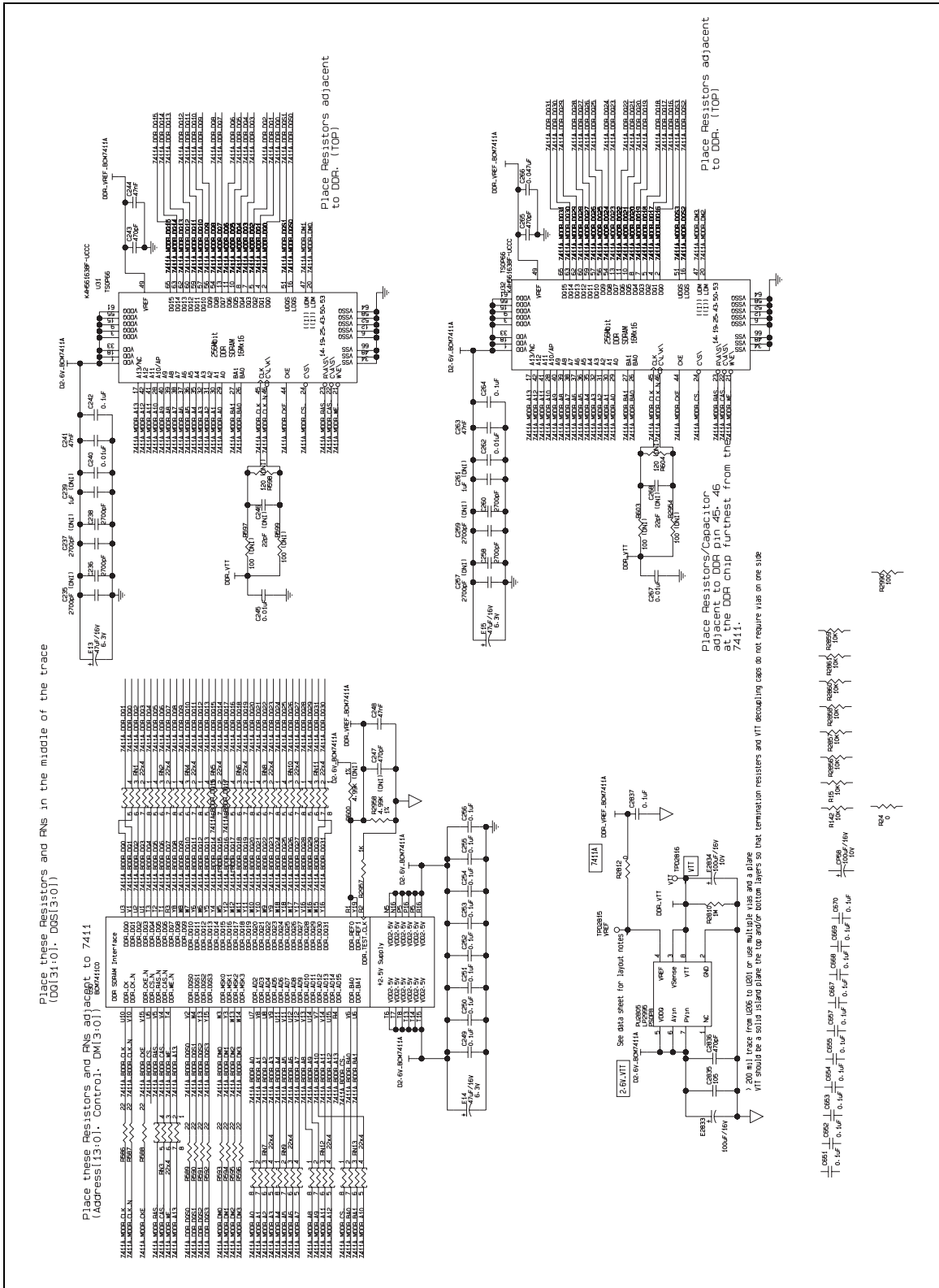


Figure 9.17-1

9.18. BCM7411A (DDR SDRAM) (Main PCB)





9.19. BCM7411A (AVC DECODER) (MAIN PCB)

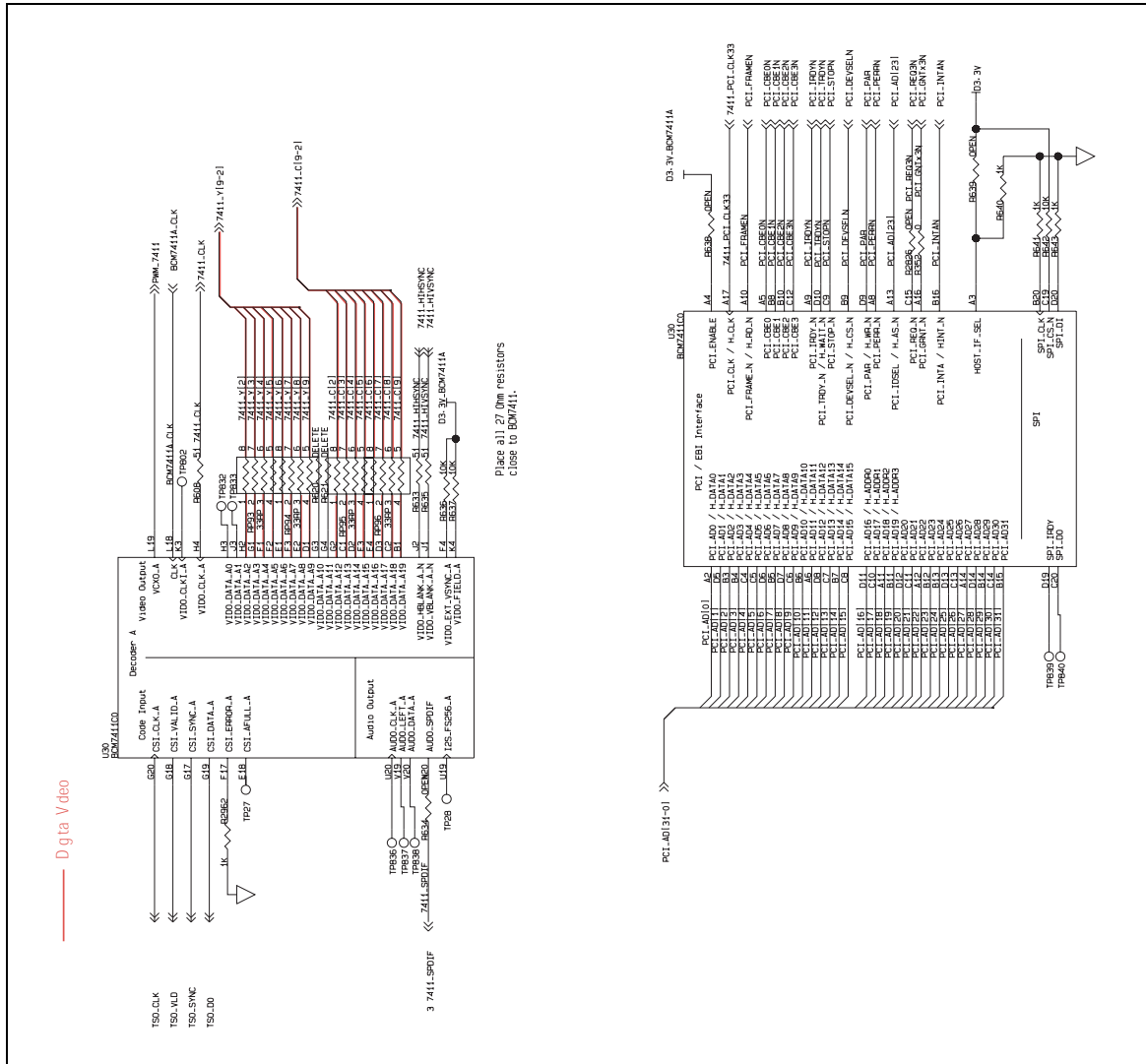


Figure 9.19-1

















9.27. POWER (SUB PCB)

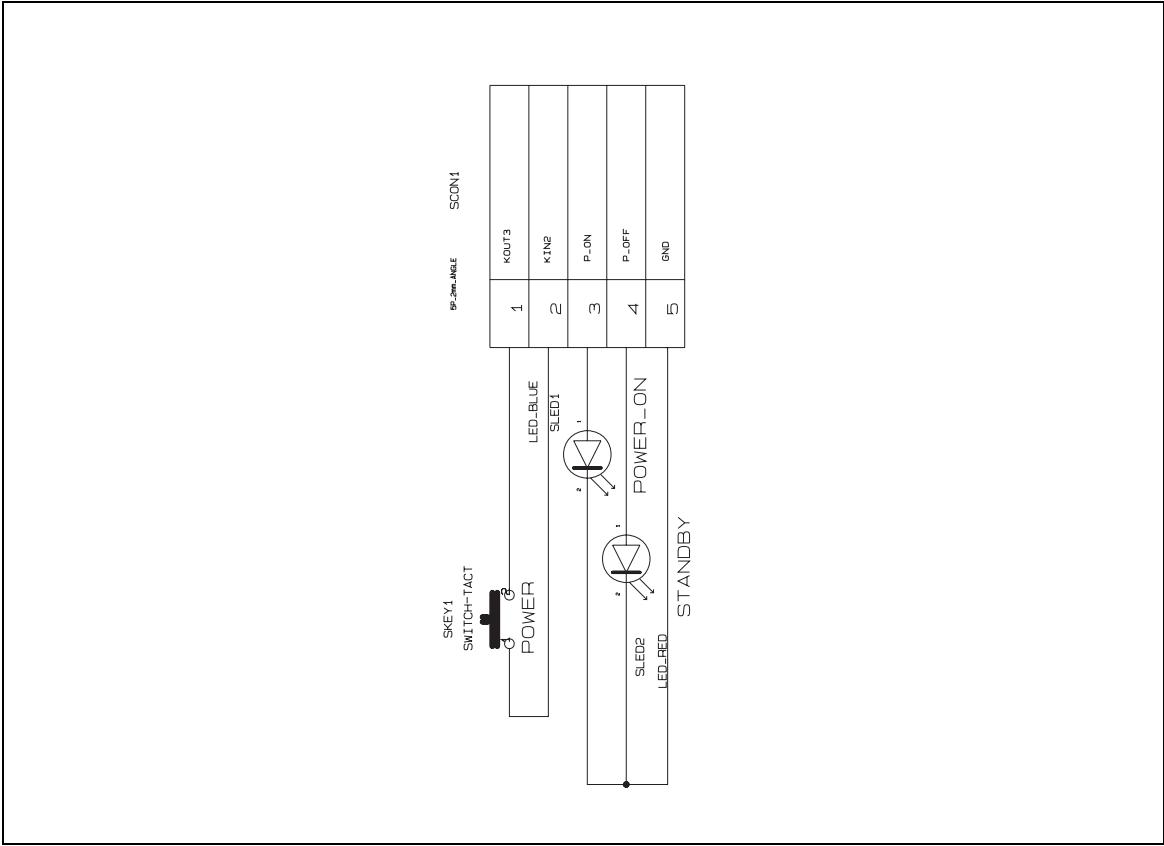


Figure 9.27-1

9.28. DVD Main PCB (component side)

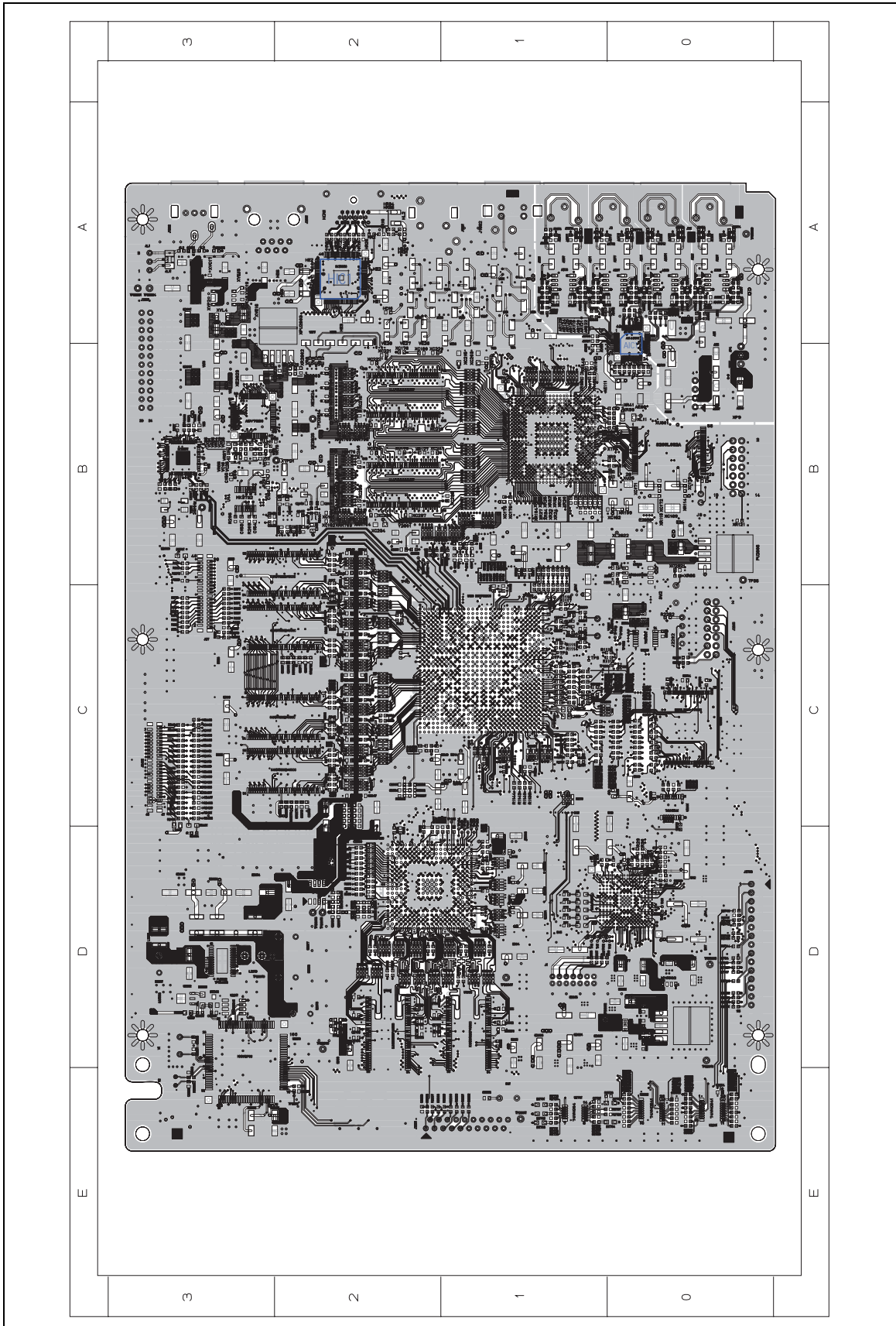


Figure 9.28-1

9.29. DVD Main PCB (conductor side)

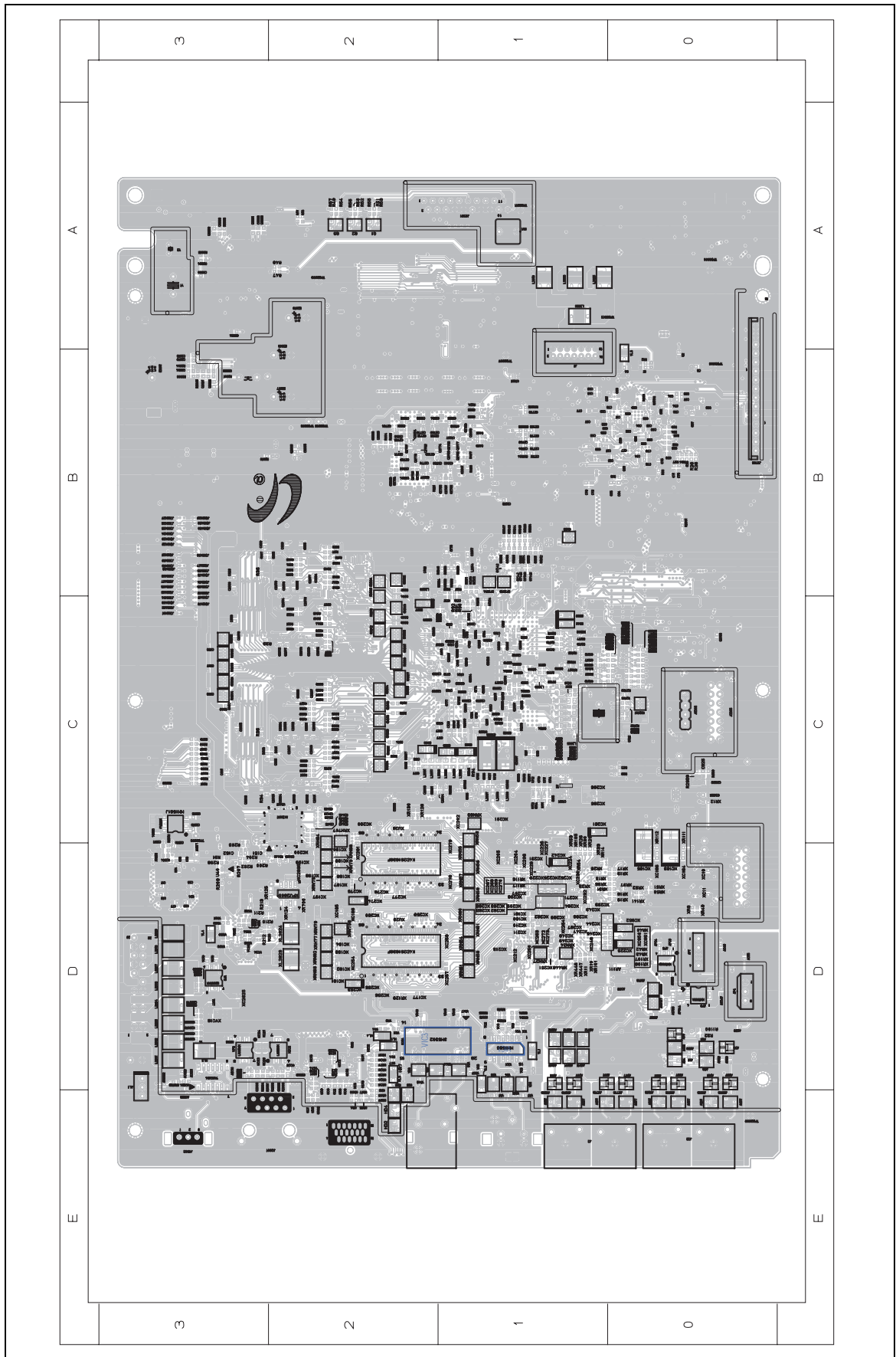


Figure 9.29-1

9.30. SMPS PCB (component side)

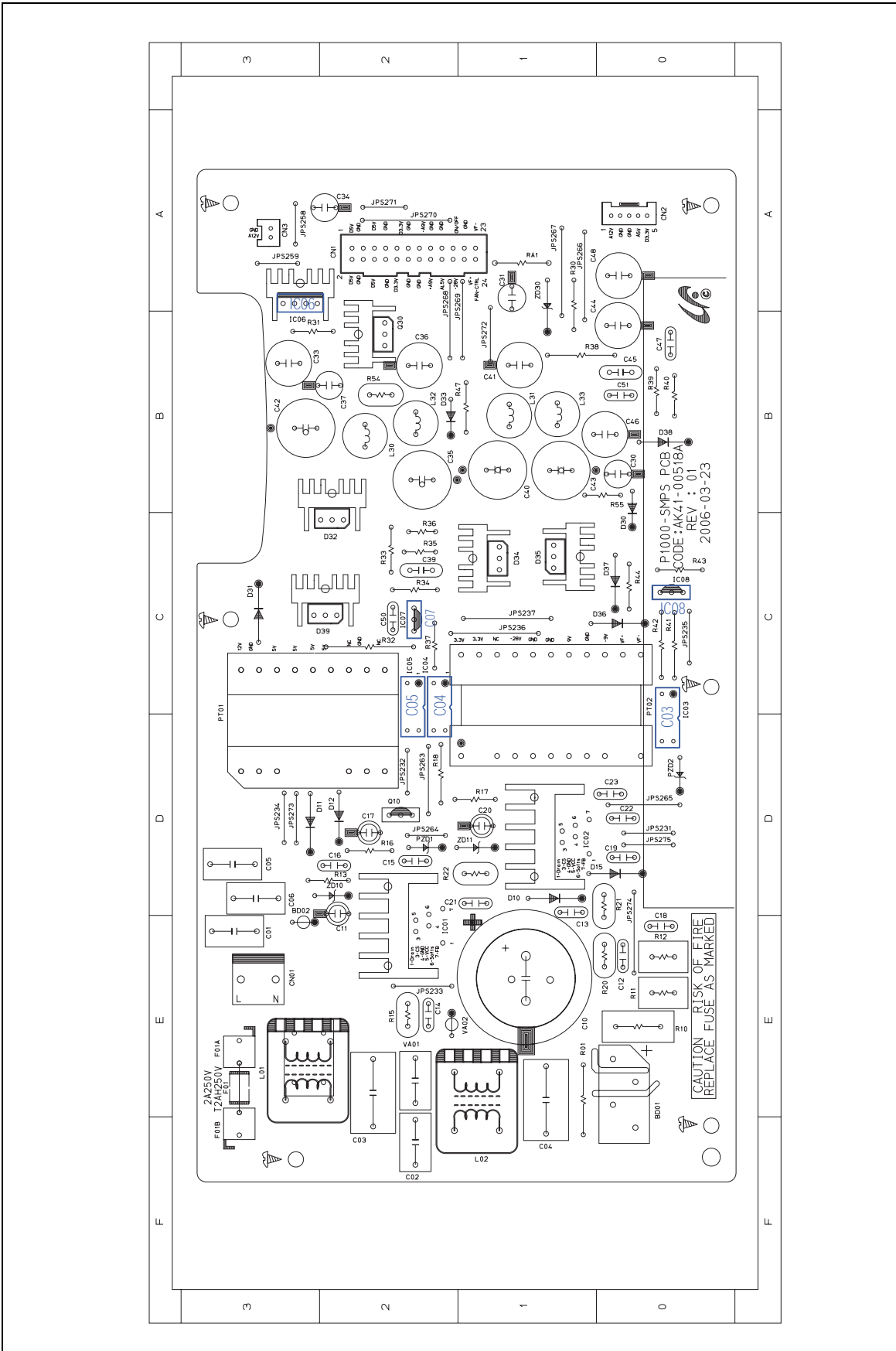


Figure 9.30-1

9.31. SMPS PCB (conductor side)

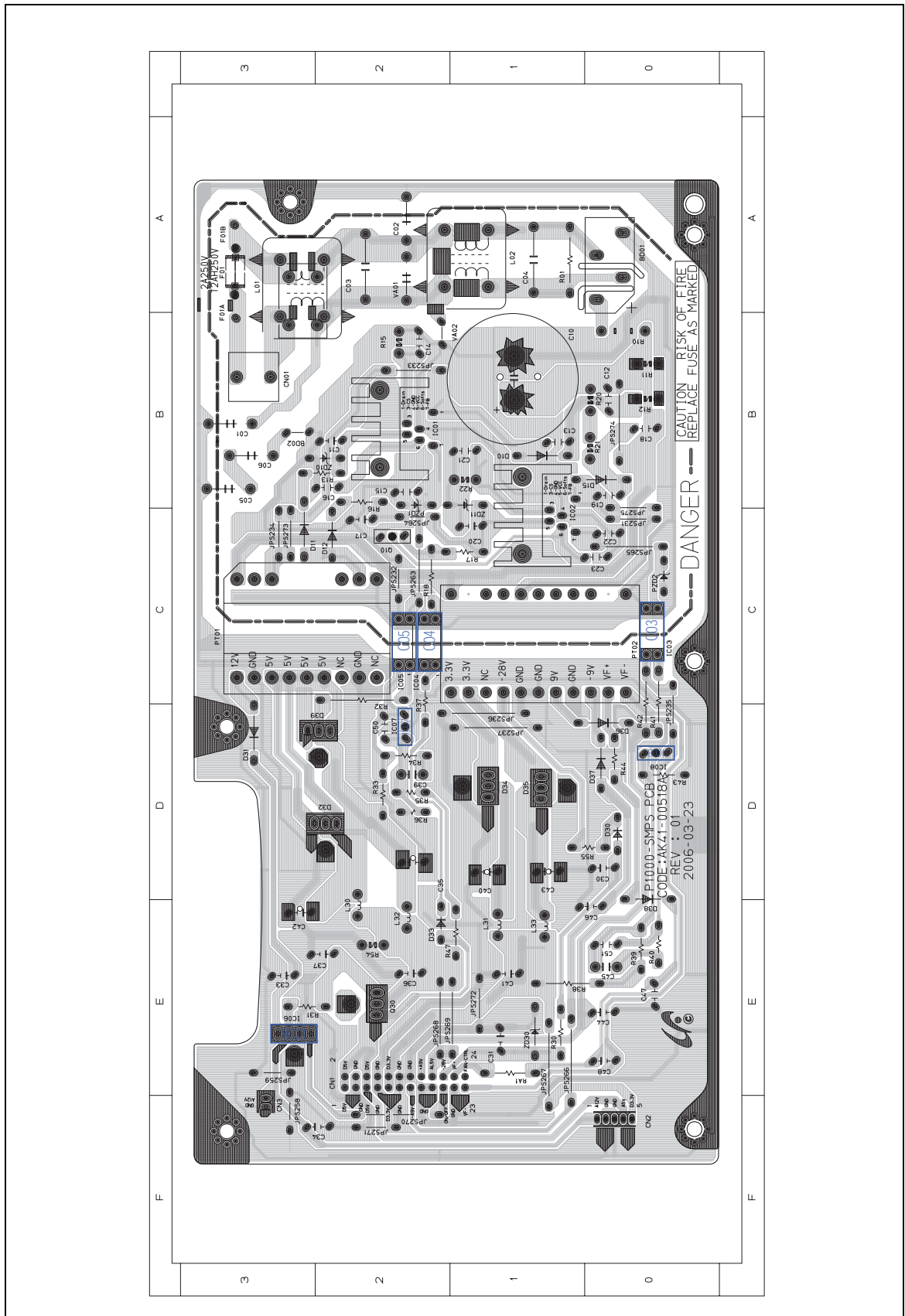


Figure 9.31-1

9.32. Front PCB (component side)

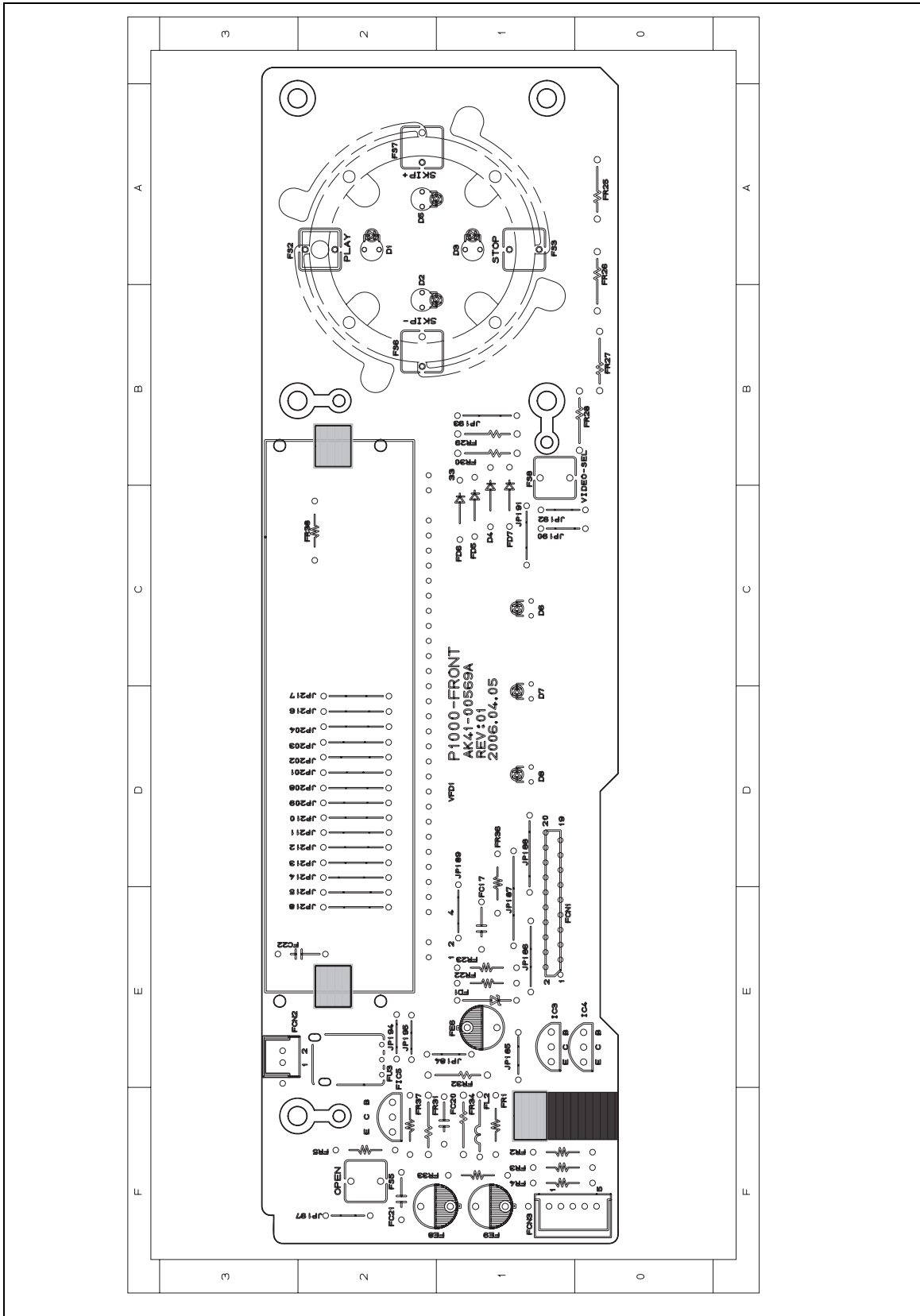


Figure 9.32-1

9.33. Front PCB (conductor side)

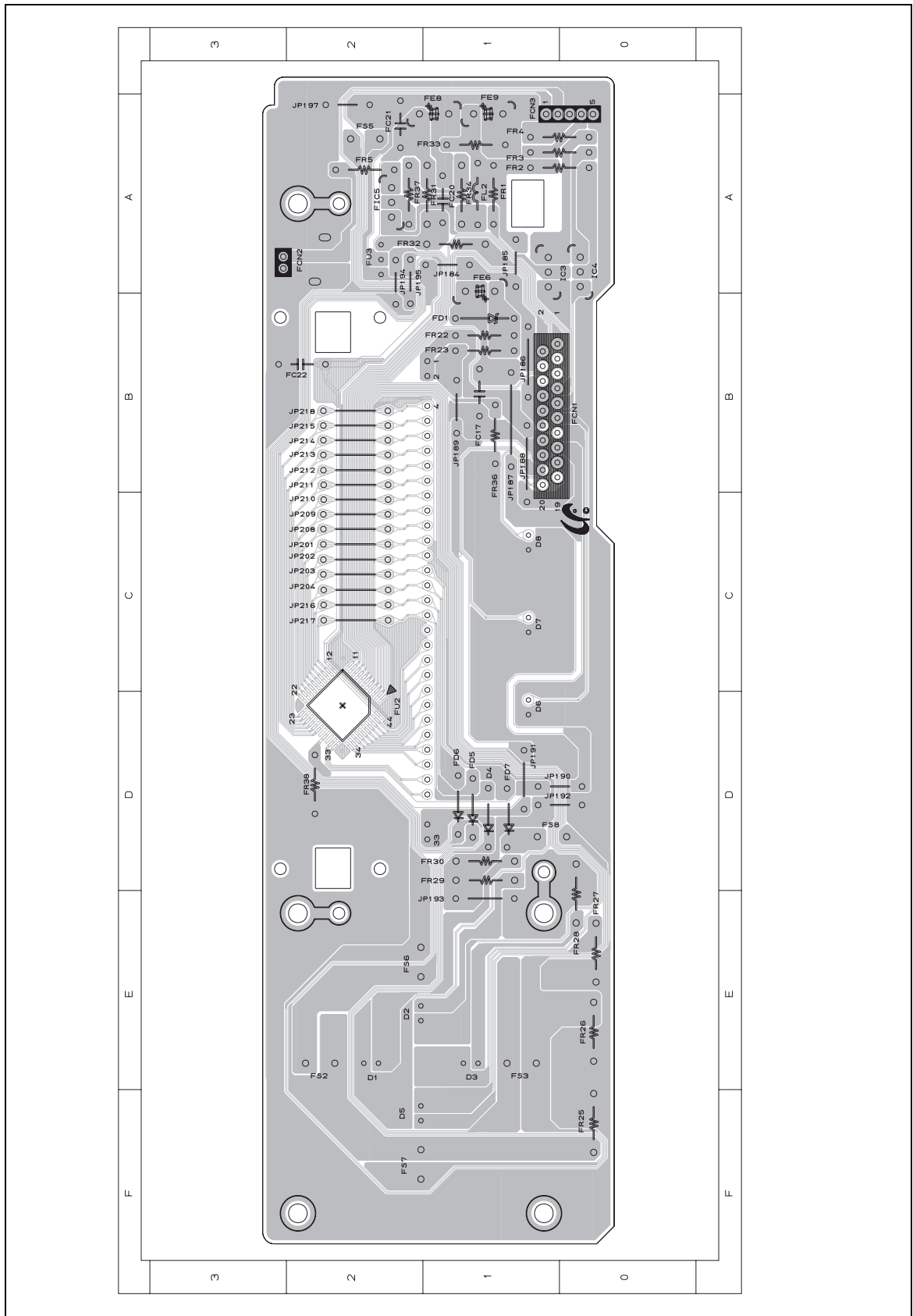


Figure 9.33-1



9.34. Memory Key PCB

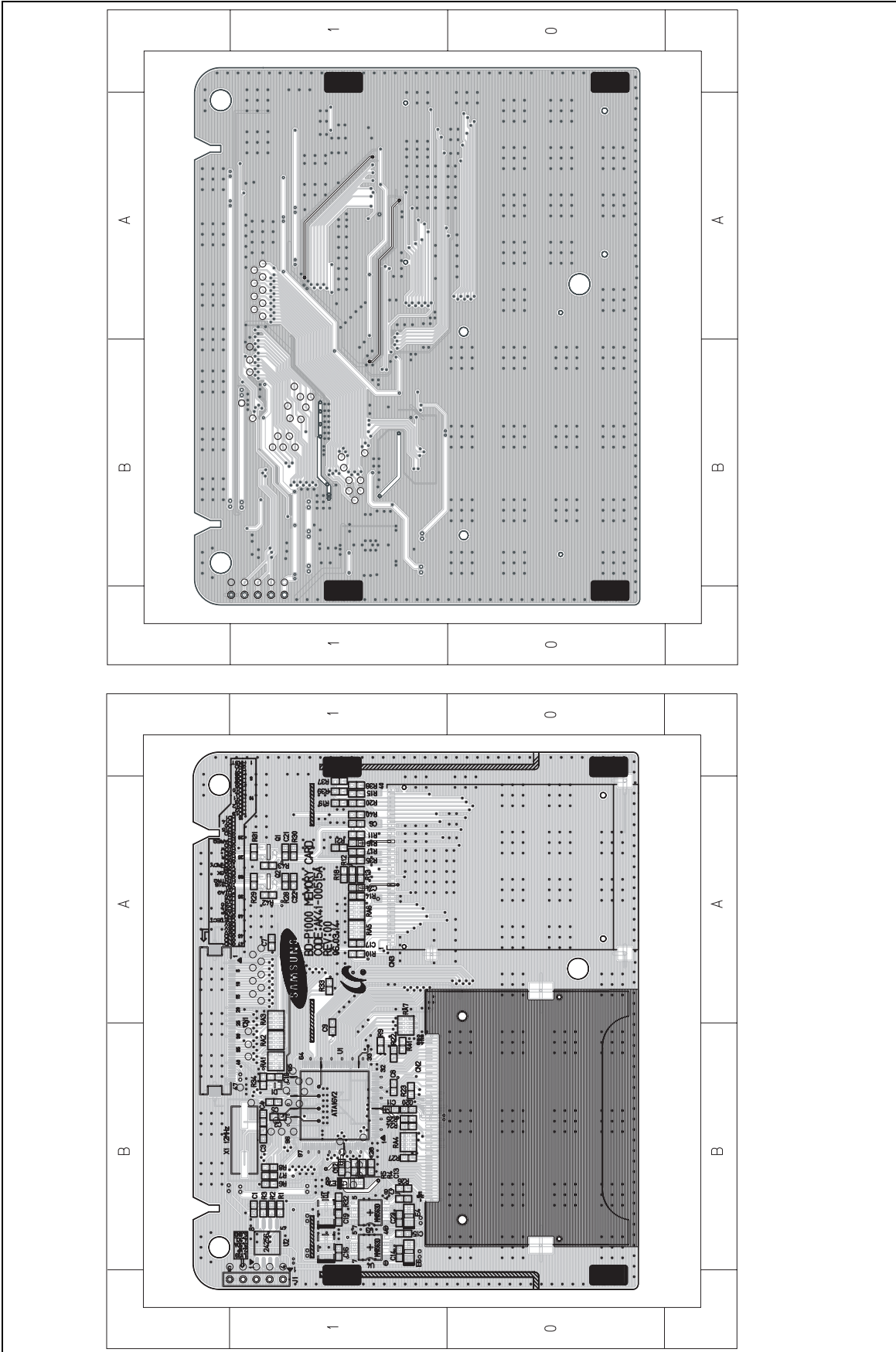


Figure 9.34-1



9.35. Front Key PCB

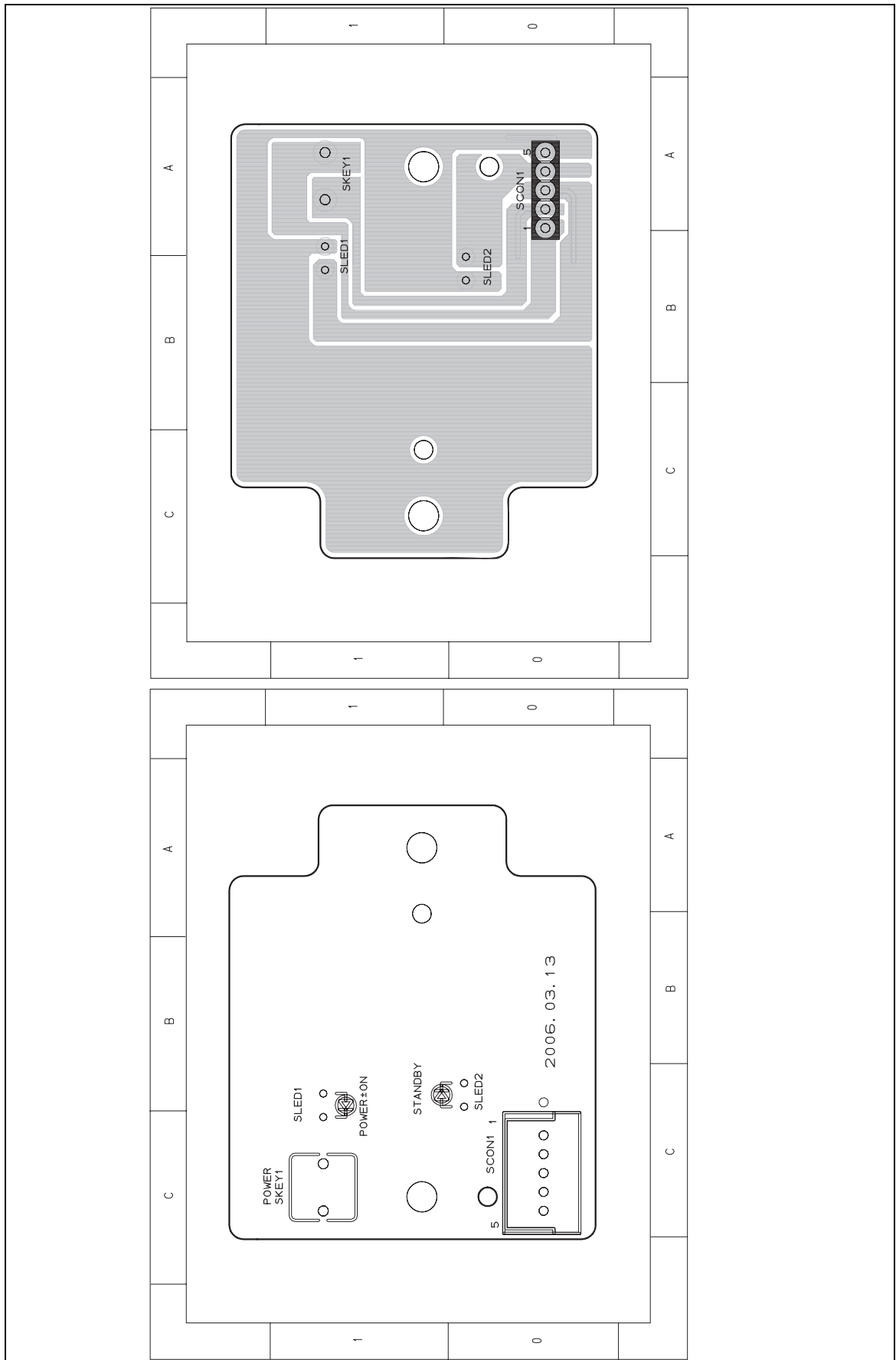


Figure 9.35-1

# 10. Spare Parts List

## 10.1. Cabinet assembly

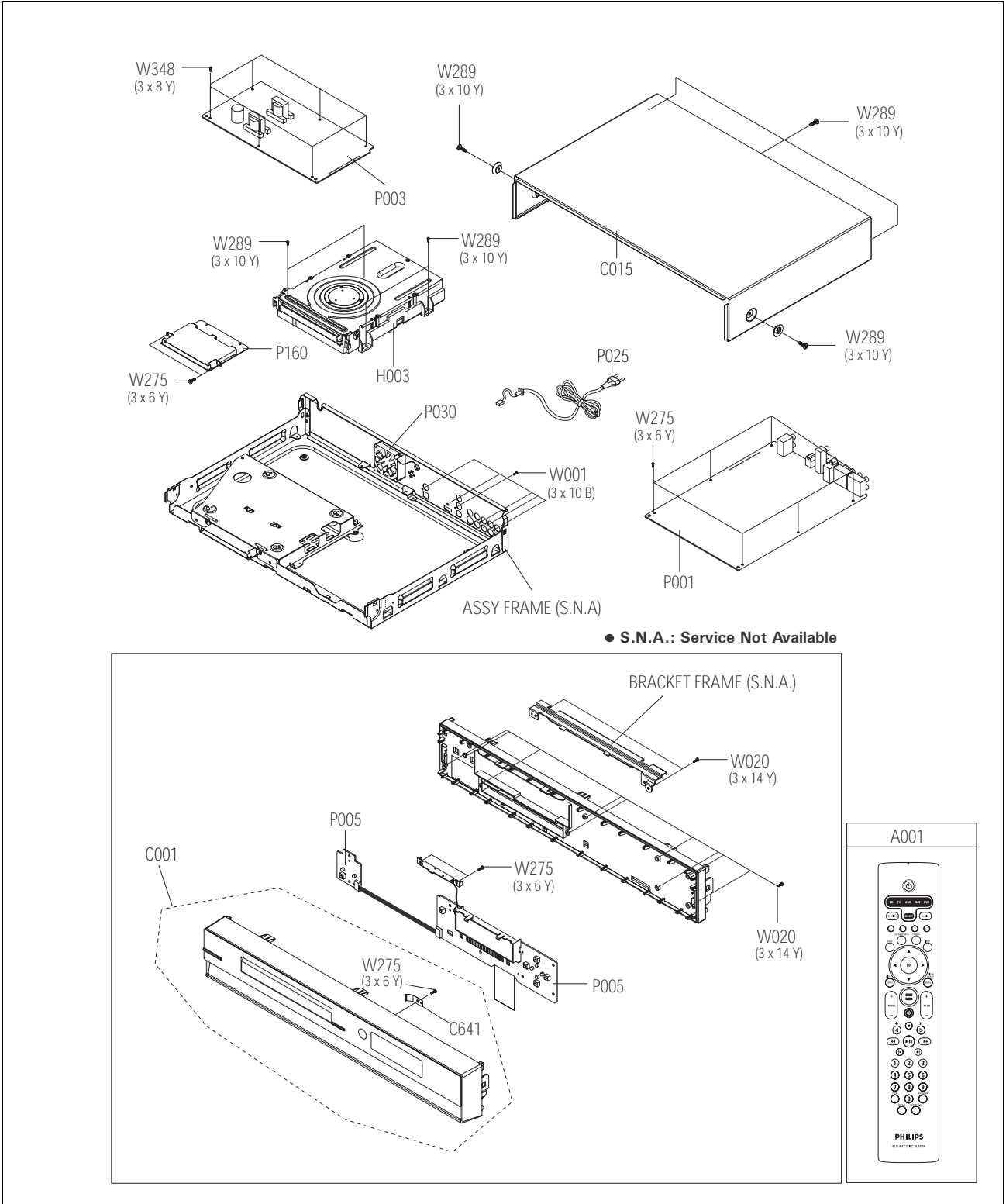


Figure 10.1-1

Pos.	Part number (12NC)	Description	Q't
P030	996500042116	FAN-DC;12V,20mA,2000rpm,0.125m <sup>3</sup> /mi,7	1
A001	313814719131	RC4380/01B	1
P025	996500042108	CBF-POWER CORD;KJ-10W,EP2,AWG2/18,1.83M	1
C015	996500042115	COVER-TOP;BDP9000,PCM,T0.7,W430,L285	1
P160	996500042110	ASSY PCB-MEMORY CARD;BD-P1000,MEMORY CAR	1
P003	996500042111	ASSY PCB-SMPS;BD-P1000,POWER PCB ASS	1
P001	996500042112	ASSY PCB-MAIN;BDP9000/37,MAIN PCB ASSY	1
H003	996500042113	ASSY-BDP LOADER;- ,BD-P1000,ASSY-BDP LOAD	1
C001	996500042114	ASSY-CABINET FRONT;HIPS 94V2,BDP9000,XAA	1

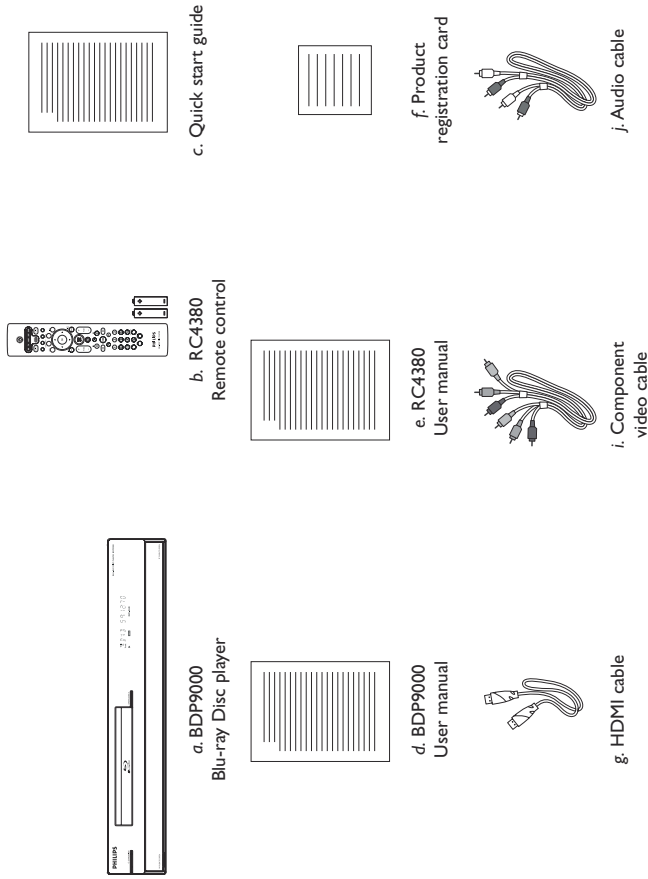
## 10.2. Exchangeable versus Consumable Modules

All faulty cables and modules must be stored by the service center for a minimum of two months. In that period Philips has the opportunity to ask for shipment to a central location for further analysis. After that period the faulty items may be disposed of in an appropriate manner.

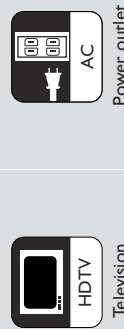
This section describes how to update and 'repair' the software on the BDP9000 without affecting the customer's data.

## **11. Directions for Use**

## What's in the box



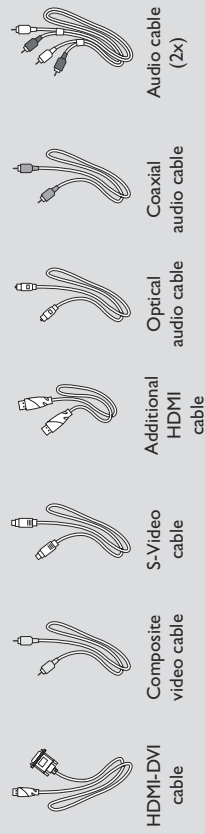
### What else you'll need



### Result after installation



### Optional components (not supplied)



## Your product

### BDP9000 Blu-ray Disc player

Watch movies in the highest picture quality available for your HDTV. The BDP9000 Blu-ray Disc player offers full high-definition video playback up to 1080p resolution for an amazing viewing experience. A highly detailed picture and increased sharpness delivers a more true-to-life picture.

#### Upconvert DVDs for enhanced picture quality

Your current DVDs will look even better than before thanks to video upconversion. Upconversion will increase the resolution of standard definition DVDs to high definition up to 1080p over an HDMI connection. The picture will be less jagged and more realistic for a near high-definition experience.

#### Enjoy your content on different kinds of media

Full backwards compatibility with DVDs. CDs ensures that you can continue to enjoy your current audio-video collection. Additionally, you can view JPEG digital pictures or listen to MP3 music files on popular memory card formats, thanks to the built-in memory card reader.

#### Listen to rich uncompressed multi-channel surround sound

The BDP9000 supports 5.1 channels of uncompressed audio, which realizes real-to-life sound and makes you feel that you are really there.

#### Intuitive User interface and universal Remote control

The Philips logical user interface allows you to easily navigate through your content and settings, so you can quickly find what you are looking for. With the included universal remote control, you can control multiple other audio/video devices, so you don't have to continuously switch remote controls.

#### Easy and simple connection to your HDTV via HDMI

Connect your BDP9000 to your HDTV with one single HDMI (High Definition Multimedia Interface) cable. The high definition video output signal will be transferred to your HDTV without conversion to analog signals, so you will get an excellent picture and sound quality, completely free from noise. Thanks to other multiple outputs, you can also easily connect to your home theater system or amplifier.

## Before you start

### Important safety instructions

- 1 Read these instructions.
- 2 Keep these instructions.
- 3 Heed all warnings and cautions.
- 4 Follow all instructions.
- 5 Do not use this apparatus near water.
- 6 Clean only with dry cloth.
- 7 Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 8 Do not install near any heat sources such as radiators, heat registers, or other apparatus (including amplifiers) that produce heat.
- 9 Do not defeat the safety purpose of the polarized plug. A polarized plug has two blades with one wider than the other. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10 Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11 Only use attachments/accessories specified by the manufacturer.
- 12 Unplug this apparatus during lightning storms or when unused for long periods of time.
- 13 Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 14 Apparatus shall not be exposed to dripping or splashing.
- 15 Do not place any sources of danger on the apparatus (e.g. liquid filled objects, light candles).

### Warnings and cautions

Warnings and cautions tell you that parts of procedures can be dangerous and/or cause damage. A warning means that injury or death is possible if the instructions are not obeyed. A caution means that damage to the equipment is possible.

## Product handling

### WARNING

- TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER (OR THE BACK). NO USER-SERVICABLE PARTS ARE INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.
- THIS UNIT EMPLOYS A LASER. DUE TO POSSIBLE EYE INJURY, ONLY A QUALIFIED SERVICE PERSON SHOULD REMOVE THE COVER OR ATTEMPT TO SERVICE THIS DEVICE.
- TO PREVENT DAMAGE WHICH MAY RESULT IN FIRE OR ELECTRIC SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
- TO PREVENT THE SPREAD OF FIRE, KEEP CANDLES OR OTHER OPEN FLAMES AWAY FROM THIS PRODUCT AT ALL TIMES
- BEFORE YOU CONNECT THE PRODUCT TO A POWER SUPPLY, MAKE SURE THAT THE VOLTAGE ON THE TYPE PLATE OF THE PRODUCT IS THE SAME AS THE VOLTAGE OF THE POWER SUPPLY. WHEN THE VOLTAGES ARE NOT THE SAME, REFER TO YOUR DEALER
- TO REDUCE THE RISK OF ELECTRIC SHOCK, MAKE SURE THAT THE PRODUCT AND THE OTHER COMPONENTS ARE TURNED OFF BEFORE YOU CONNECT OTHER COMPONENTS TO THE PRODUCT.
- DO NOT PUT YOUR HAND IN THE DISC TRAY. IF YOU DO, YOU CAN GET STUCK IN THE DISC TRAY.

### CAUTION

- ONLY LOAD DISCS WITH REGULAR SHAPES INTO THE PRODUCT. DISCS WITH IRREGULAR SHAPES CAN DAMAGE THE PRODUCT.
- DO NOT BLOCK THE VENTILATION OPENINGS. MAKE SURE THAT THERE IS ALWAYS AT LEAST 4 INCHES (10 CENTIMETERS) OF FREE SPACE BETWEEN THE REAR PANEL OF THE PRODUCT AND ANY OTHER OBJECT.
- ONLY LOAD PLAYABLE DISCS INTO THE PRODUCT. DISCS THAT CANNOT BE PLAYED OR OTHER OBJECTS CAN DAMAGE THE PRODUCT.
- DO NOT MOVE THE PRODUCT WHILE A DISC IS BEING PLAYED. IF YOU DO, YOU CAN DAMAGE THE PRODUCT AND THE DISC.

## North-American regulations

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## Need help?

### Troubleshooting

Refer to page 34.

### Online help

Refer to [www.usasupport.philips.com](http://www.usasupport.philips.com) for:

- Interactive help
- Frequently asked questions

### Helpline

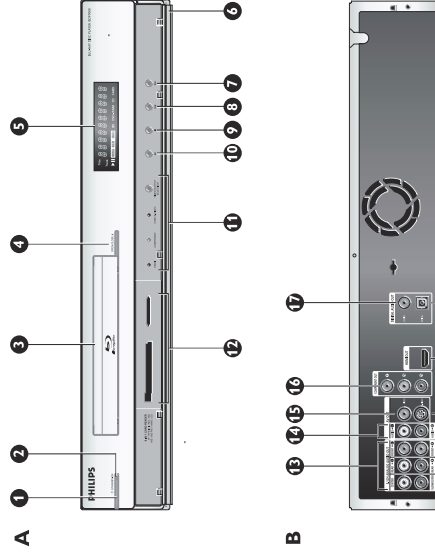
Language	Telephone number
English	1-888-PHILIPS (1-888-744-5477)
French	1-800-661-6162
Spanish	1-888-PHILIPS (1-888-744-5477)

Be prepared to give this information:

- A description of the problem and when it occurs
- The type number on the label of the product
- The date of purchase

## Overview

### Blu-ray Disc player



#### 1 Standby/on button

Turns the product on and off

#### 2 Standby/on light

- Shows the on/off status of the product.
- Off - Not connected to a power supply
  - Red - Stand-by mode
  - Blue - On

#### 3 Disc tray

#### 4 Open/close button

Opens and closes the disc tray.

#### 5 Front display

Shows information about the product and the disc.

#### 6 Cover buttons

Opens the user access panel.

#### 7 Next/Forward button

- Videos, music, pictures - Next (short press)
- Videos - Forward (long press)

#### 8 Previous/Rewind button

- Videos, music, pictures - Previous (short press)
- Videos - Rewind (long press)

#### 9 Stop button

#### 10 Play/pause button

#### 11 Video output button & video output lights

Selects the video output. The video output lights show the selected video output.

#### 12 Memory card readers

#### 13 5.1 Analog audio ports

Connects the audio output to an amplifier



**14 Stereo analog audio ports**

Connects the audio output to an amplifier

**15 Composite video port (CVBS)**

Connects the video output to an amplifier

**16 Component video ports (YPbPr)**

Connects the audio output to an amplifier

**17 Digital audio port - coaxial**

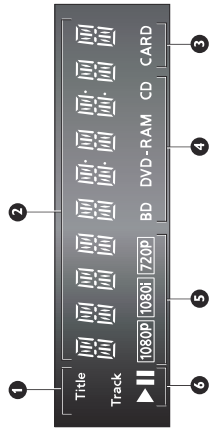
Connects the audio output to an amplifier

**18 Digital audio port - optical**

Connects the audio output to an amplifier

**19 HDMI port**

Connects the video and audio signals to a TV or amplifier. Recommended for HDTV.

**20 S-Video port****Display****1 Title/Track indicator****2 Status indicator**

Shows the information about playing time, clock and status.

**3 Memory card indicator****4 Disc type indicator****5 Video output resolution indicator****6 Play mode indicator****Universal remote control**

Refer to the RC4380 User Manual.

**Connect****Connect to the TV**

This product is designed for high-definition televisions (HDTV).

**Need help?**

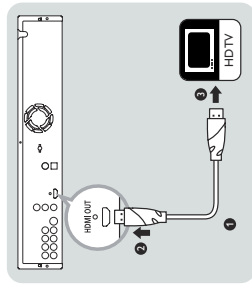
Refer to the documentation that came with your TV for information about:

- The devices that you can connect to your TV.
- The type of cables that you can connect to your TV.

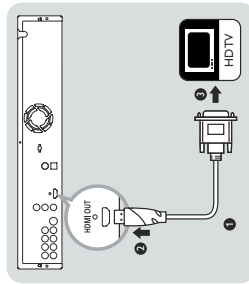
**Option 1 - Best quality (HDMI)**

- 1 Take the supplied HDMI cable.
- 2 Plug one end of the HDMI cable into the **HDMI OUT** port.
- 3 Plug the other end of the HDMI cable into the HD compliant TV.

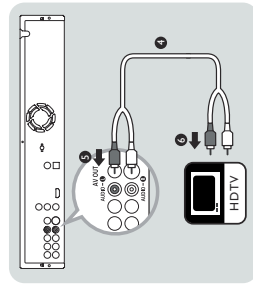
This type of connection requires no audio connection.

**Option 2 - Best quality (HDMI to DVI)**

- 1 Take a HDMI-DVI cable (not supplied).
- 2 Plug one end of the HDMI-DVI cable into the **HDMI OUT** port.
- 3 Plug the other end of the HDMI-DVI cable into the HD compliant TV.

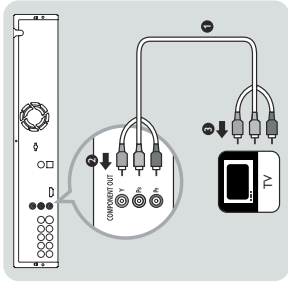
**Option 3 - Best quality (AUDIO-L and AUDIO-R)**

- 4 Take the supplied audio cable.
- 5 Plug one end of the audio cable into the **AUDIO-L** and **AUDIO-R** ports.
- 6 Plug the other end of the audio cable into the TV.



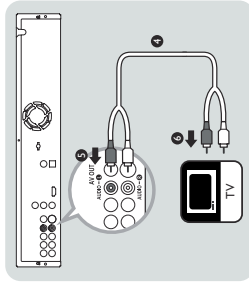
### Option 3 - Good quality (Component video)

- 1 Take the supplied component video cable.
- 2 Plug one end of the component video cable into the **Y**, **Pb** and **Pr** ports.
- 3 Plug the other end of the component video cable into the TV.



- 4 Take the supplied audio cable.

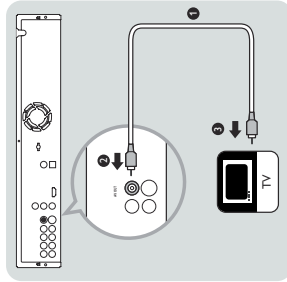
- 5 Plug one end of the audio cable into the **AUDIO-L** and **AUDIO-R** ports.
- 6 Plug the other end of the audio cable into the TV.



When a BD with Image Constraint Token or Digital Only Token is played, the output is disabled.

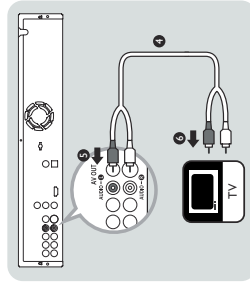
### Option 4 - Standard quality (Composite video)

- 1 Take a composite video cable (not supplied).
- 2 Plug one end of the composite video cable into the **VIDEO** port.
- 3 Plug the other end of the composite video cable into the TV.



- 4 Take the supplied audio cable.

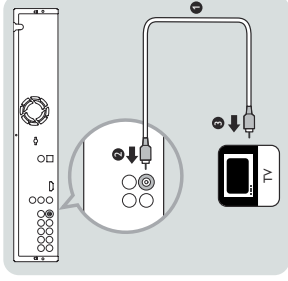
- 5 Plug one end of the audio cable into the **AUDIO-L** and **AUDIO-R** ports.
- 6 Plug the other end of the audio cable into the TV.



When a BD is played, the output is disabled.

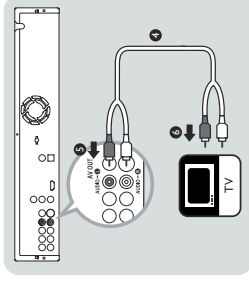
### Option 5 - Standard quality (S-Video)

- 1 Take an S-Video cable (not supplied).
- 2 Plug one end of the S-Video cable into the **S-VIDEO** port.
- 3 Plug the other end of the S-Video cable into the TV.



- 4 Take the supplied audio cable.

- 5 Plug one end of the audio cable into the **AUDIO-L** and **AUDIO-R** ports.
- 6 Plug the other end of the audio cable into the TV.



When a BD is played, the output is disabled.

## Connect to the audio system (optional)

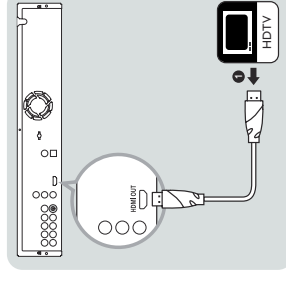
### Need help?

Refer to the documentation that came with your audio system for information about:

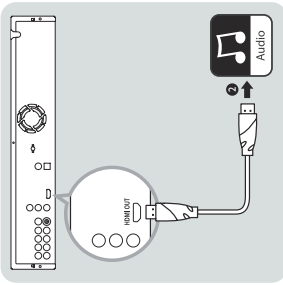
- The devices that you can connect to your audio system.
- The type of cables that you can connect to your audio system.

### Option 1 - Best quality (HDMI)

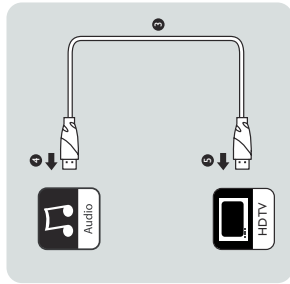
- 1 If you connected the TV to the **HDMI** port, unplug the HDMI cable on the TV.



- 2 Plug the end of the HDMI cable into the HDMI input of the audio system.

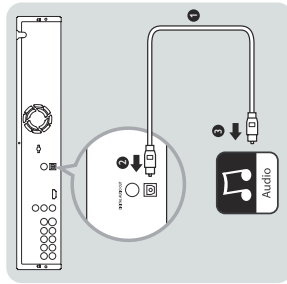


- 3 Take another HDMI cable (not supplied).
- 4 Plug one end of the HDMI cable into the HDMI output of the audio system.
- 5 Plug the other end of the HDMI cable into the TV.



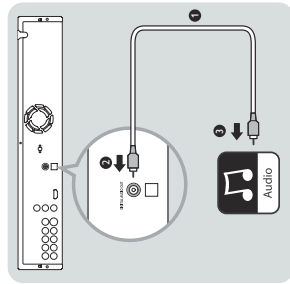
#### Option 2 - Good quality (digital audio, optical connection)

- 1 Take an optical audio cable (not supplied).
- 2 Plug one end of the optical audio cable into the **OPTICAL** port.
- 3 Plug the other end of the optical audio cable into the audio system.



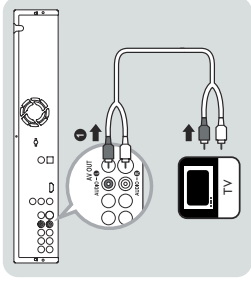
#### Option 3 - Good quality (digital audio, coaxial connection)

- 1 Take a coaxial audio cable (not supplied).
- 2 Plug one end of the coaxial audio cable into the **COAXIAL** port.
- 3 Plug the other end of the coaxial audio cable into the audio system.

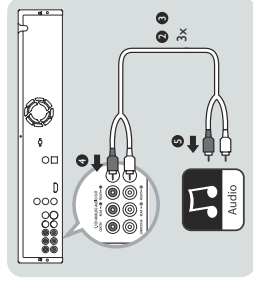


#### Option 4 - Standard quality (5:1 analog audio)

- 1 If you connected the TV to the **COMPONENT OUT, VIDEO** or **S-VIDEO** ports or used a HDMI-DVI cable, remove the audio cable between the Blu-ray Disc player and the TV.

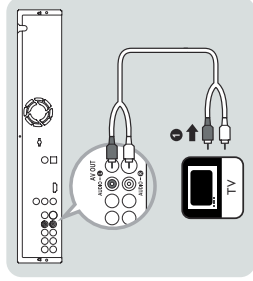


- 2 Take the supplied audio cable.
- 3 Take another two audio cables (not supplied).
- 4 Plug the three audio cables into the **5.1CH ANALOG AUDIO OUT** ports.
- 5 Plug the other ends of the three audio cables into the audio system.

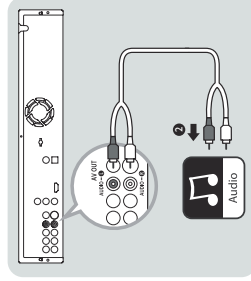


#### Option 5 - Standard quality (stereo analog audio)

- 1 If you connected the TV to the **COMPONENT OUT, VIDEO** or **S-VIDEO** ports or used a HDMI-DVI cable, unplug the audio cable on the TV.

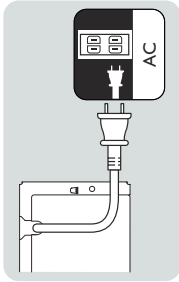


- 2 Plug the ends of the audio cable into the audio system.



## Connect to the power outlet

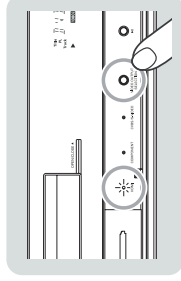
- 1 Plug the power cable into the power outlet.
- > The standby/on light on the front of the product comes on as red.



## Set up

### Set the TV connection

- 1 Turn the TV on.
- 2 Set the TV to the correct external input.
- 3 Press the **STANDBY/ON** button.
  - > The **STANDBY/ON** light on the front of the product comes on as blue.
- 4 Open the user access panel.
- 5 Press the video output selection button until the correct light comes on.



TV connection	Light
HDMI	<b>HDMI</b>
Component video	<b>COMPONENT</b>
Composite video	<b>CVBS/S-VIDEO</b>
S-Video	<b>CVSS/S-VIDEO</b>

> The video signal of the Blu-ray Disc player shows.

- 6 Follow the on-screen instructions

### Menu language selection

Press 1 for English  
Pulsar 2 para Español  
Touche 3 pour Français

### Set the audio connection

- 1 Turn the audio system on.
- 2 Set the audio system to the correct external input.

### Open the Settings menu

With the **Settings** menu, you can change the set up of the product.

- 1 Take the supplied universal remote control.
- 2 Press the **STANDBY/ON** button.
  - > The **Home** menu shows.
- 3 Select **Settings** and press **OK**.
  - > The **Settings** menu shows.



## Overview

<b>Language setup</b>	<b>Audio</b>
	<b>Subtitle</b>
	<b>Disc menu</b>
	<b>Player menu</b>
<b>Audio setup</b>	<b>Digital output</b>
	<b>PCM downsampling</b>
	<b>Dynamic compression</b>
	<b>Speaker setup</b>
<b>Display setup</b>	<b>TV shape</b>
	<b>Black level</b>
	<b>Resolution</b>
	<b>HDMI format</b>
	<b>Screen message</b>
	<b>Front display</b>
<b>Parental control</b>	<b>Use PIN</b>
	<b>Rating level</b>
	<b>New PIN</b>

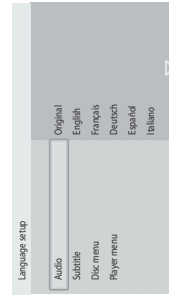
## Navigation

<b>Action</b>	<b>Button</b>
Go up or down in a list	▲
Move a cell in the list	◀ ▶
Confirm a selection	OK

## Configure the languages

- Open the language menu
- 1 Open the **Settings** menu.
  - 2 Select **Language setup** and press **OK**.
    - > *The Language setup menu shows.*
- Change the preferred audio language
- 1 Open the **Language setup** menu.
  - 2 Select **Audio** and press **OK**.
    - > *The available languages show.*
  - 3 Choose the preferred language and press **OK**.

When the preferred language is not available, the default language is used. The default language is English.

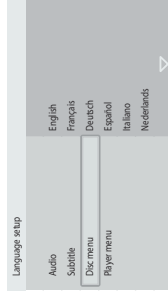


- Change the preferred subtitle language
- 1 Open the **Language setup** menu.
  - 2 Select **Subtitle** and press **OK**.
    - > *The available languages show.*
  - 3 Choose the preferred language and press **OK**.



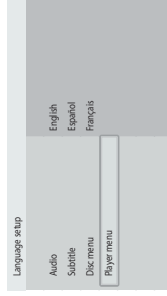
When the preferred language is not available, the default language is used. The default language is English.

- Change the preferred disc menu language
- 1 Open the **Language setup** menu.
  - 2 Select **Disc menu** and press **OK**.
    - > *The available languages show.*
  - 3 Choose the preferred language and press **OK**.



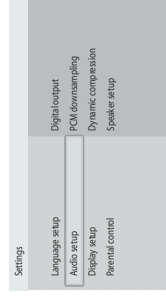
When the preferred language is not available, the default language is used. The default language is English.

- Change the player language
- 1 Open the **Language setup** menu.
  - 2 Select **Player menu** and press **OK**.
    - > *The available languages show.*
  - 3 Choose the preferred language and press **OK**.



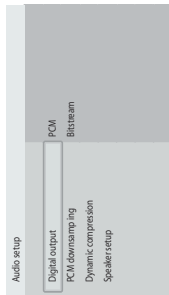
## Configure the audio output

- Open the audio menu
- 1 Open the **Settings** menu.
  - 2 Select **Audio setup** and press **OK**.
    - > *The Audio setup menu shows.*



### Change the format of the digital audio signal

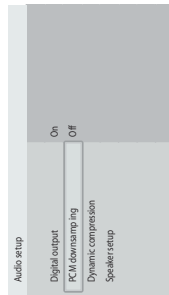
- 1 Open the **Audio setup** menu.
- 2 Select **Digital output** and press **OK**.  
> *The available options show.*
- 3 Choose the preferred option and press **OK**. Refer to 'Audio output' on page 36.



Option	Description
<b>PCM</b>	The format of the digital audio signal is PCM.
<b>Bitstream</b>	The format of the digital audio signal is bitstream.

### Enable PCM downsampling

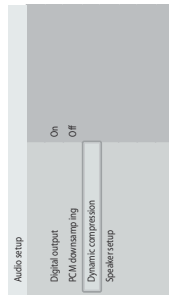
- 1 Open the **Audio setup** menu.
- 2 Select **PCM downsampling** and press **OK**.  
> *The available options show.*
- 3 Choose the preferred option and press **OK**.



Option	Description
<b>On</b>	If the format of the digital audio signal is 96 kHz PCM, the audio is downsampled to 48 kHz.
<b>Off</b>	Regardless of the sampling frequency of the digital audio signal, the audio is never downsampled.

### Enable dynamic range compression

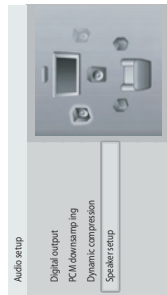
- 1 Open the **Audio setup** menu.
- 2 Select **Dynamic compression** and press **OK**.  
> *The available options show.*
- 3 Choose the preferred option and press **OK**.



Option	Description
<b>On</b>	The dynamic range compression is enabled.
<b>Off</b>	The dynamic range compression is disabled.

### Change the set up of your speakers

- 1 Open the **Audio setup** menu.
- 2 Select **Speaker setup** and press **OK**.
- 3 Select the speakers to change and press **OK**.



Option	Description
<b>Front</b>	Choose between large or small speakers
<b>Center</b>	Choose between no speaker, a large or a small speaker
<b>Rear</b>	Choose between no speakers, large or small speakers
<b>Subwoofer</b>	Choose between on or off. Available when front speakers are set to large.

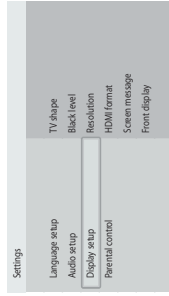
- 4 Change the size of your speakers and press **OK**.

When the front speakers are set to large and the subwoofer is on, the subwoofer is used for the output of bass sounds (below 100 Hz). Set the subwoofer to off for output of the bass sounds through the front speakers

## Configure the video output

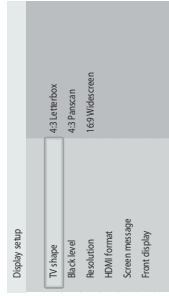
### Open the video menu

- 1 Open the **Settings** menu.
- 2 Select **Display setup** and press **OK**.  
> *The Display setup menu shows.*

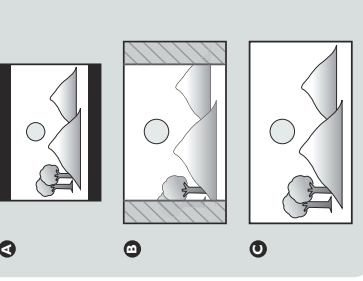


### Change the aspect ratio

- 1 Open the **Display setup** menu.
- 2 Select **TV shape** and press **OK**.  
> *The available options show.*



- 3 Choose the preferred option and press **OK**.

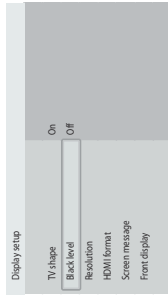


Option	Description
<b>4:3 Letterbox</b>	The TV shape is 4:3. The top and bottom parts of widescreen images show black bars. Refer to A.
<b>4:3 Panscan</b>	The TV shape is 4:3. The left and right parts of widescreen images do not show. Refer to B.
<b>16:9 Widescreen</b>	The TV shape is 16:9 (widescreen). Refer to C.

## Change the black level

Only applicable when the connection to the TV is composite video or S-Video.

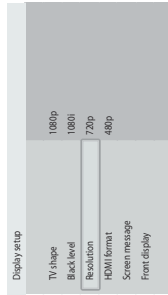
- 1 Open the **Display setup** menu.
- 2 Select **Black level** and press **OK**.  
> *The available options show.*
- 3 Choose the preferred option and press **OK**.



Option	Description
<b>On</b>	Increases the darkness of black sections in the picture.
<b>Off</b>	Decreases the darkness of black sections in the picture.

## Change the resolution

- 1 Open the **Display setup** menu.
- 2 Select **Resolution** and press **OK**.  
> *The available options show.*
- 3 Choose the preferred option and press **OK**.



Disc type	Supported resolutions
BD (without token)	720p, 1080i, 1080p
BD, Image Constraint Token (ICT)	720p, 1080i, 1080p
BD, Digital Only Token (DOT)	720p, 1080i, 1080p
DVD	480p, 720p, 1080i, 1080p

## Component video connection

Disc type	Supported resolutions
BD (without token)	720p, 1080i
BD, Image Constraint Token (ICT)	Not supported
BD, Digital Only Token (DOT)	Not supported
DVD	480i, 480p

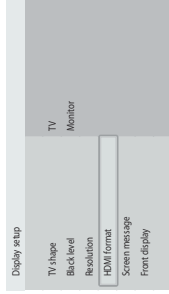
## Composite video/S-Video connection

Disc type	Supported resolutions
BD (without token)	Not supported
BD, Image Constraint Token (ICT)	Not supported
BD, Digital Only Token (DOT)	Not supported
DVD	480i

When a resolution is selected that is not supported by the TV, the product must be reset. Press-and-hold the **▶▶▶**-button on the front panel for 5 seconds to restore the factory settings (with no disc in the disc tray).

## Change the HDMI format

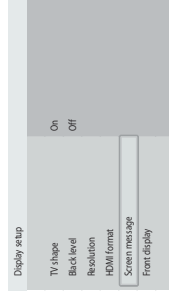
- 1 Open the **Display setup** menu.
- 2 Select **HDMI format** and press **OK**.  
> *The available options show.*
- 3 Choose the preferred option and press **OK**.



Option	Description
<b>TV</b>	The format of the HDMI signal is TV. Use this if you connected the HDMI port to a TV.
<b>Monitor</b>	The format of the HDMI signal is monitor. Use this if you connected the HDMI port to a monitor.

## Enable screen messages

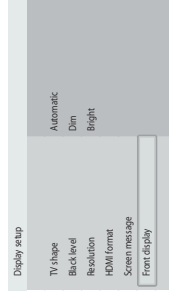
- 1 Open the **Display setup** menu.
- 2 Select **Screen message** and press **OK**.  
> *The available options show.*
- 3 Choose the preferred option and press **OK**.



Option	Description
<b>On</b>	The screen messages are enabled.
<b>Off</b>	The screen messages are disabled.

## Configure the front display

- 1 Open the **Display setup** menu.
- 2 Select **Front display** and press **OK**.  
> *The available options show.*
- 3 Choose the preferred option and press **OK**.

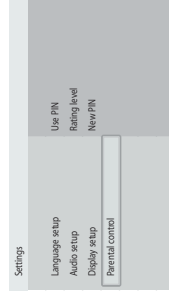


Option	Description
<b>Automatic</b>	Low brightness of the front display during playback.
<b>Dim</b>	Low brightness of the front display.
<b>Bright</b>	High brightness of the front display.

## Change the parental control

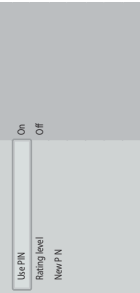
### Open the parental control menu

- 1 Open the **Settings** menu.
- 2 Select **Parental control** and press **OK**.
- 3 Enter your PIN.



The default PIN is 0000.

- 4 Follow the on-screen instructions.  
> *The Parental control menu shows.*

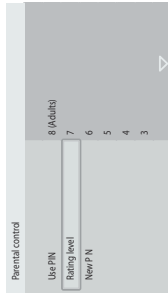


- Enable the PIN**
- 1 Open the **Parental control** menu.
  - 2 Select **Use PIN** and press **OK**.  
> *The available options show.*
  - 3 Choose the preferred option and press **OK**.

Option	Description
<b>On</b>	The PIN is enabled.
<b>Off</b>	The PIN is disabled.

### Change the rating level

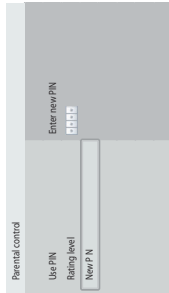
- 1 Open the **Parental control** menu.
- 2 Select **Rating level** and press **OK**.  
> *The available options show.*
- 3 Choose the preferred option and press **OK**.



For example, when you set the rating level to 6, discs with rating levels 7 and 8 cannot be played.

### Change the PIN

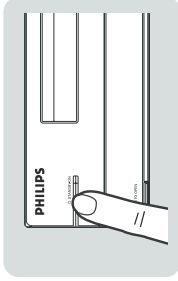
- 1 Open the **Parental control** menu.
- 2 Select **New PIN** and press **OK**.
- 3 Follow the on-screen instructions.



## Enjoy

### Turn the product on

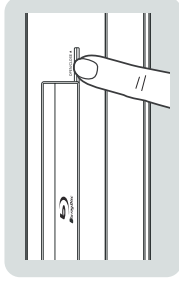
- 1 Set the TV to the correct external input.
- 2 On the front of the product, press the **STANDBY/ON** button.  
> *The STANDBY/ON light comes on as blue.*



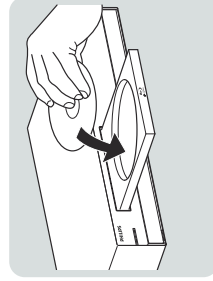
### Load a disc

Before you load a disc into the Blu-ray Disc player, make sure that the disc type is supported. Refer to 'Playable discs' on page 37.

- 1 Turn the product on.
- 2 Press the **OPEN/CLOSE** button.  
> *The disc tray opens.*



- 3 Place the disc in the disc tray.
- 4 Press the **OPEN/CLOSE** button again.  
> *The disc tray closes.*

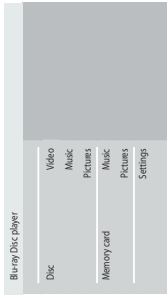




## Videos

### Play a title

- 1 Turn the product on.
- 2 Load the video disc.  
> *The Home menu shows.*



Discs that contain a disc menu show the disc menu. If the disc contains a disc menu, the rest of the procedure is not applicable. Refer to the documentation that came with the disc for instructions that tell you how to operate the disc menu.

- 3 From the home menu, select **Video**.  
> *The Title list shows.*
- 4 Use the universal remote control to go to the title.

Action	Button
Previous title	◀
Next title	▶

- 5 Press the **OK** button.

### Control titles

- 1 Play the title.
- 2 Use the universal remote control to control the title.

Action	Button
Play the title	▶ ◀
Pause the title	⏸
Stop the title	⏹
Restart the title	⏮
Jump to the previous title/chapter	⏪
Jump to the next title/chapter	⏩
Repeat the title/chapter	⏮⏩
Repeat a defined selection	<b>REPEAT A-B</b>
Bookmark a point on the disc	<b>BOOKMARK</b>

### Jump to the next or previous title

**Tip** You can use the universal remote control to jump to the next or previous title. Refer to 'Control titles' on page 28 for instructions.

- 1 Play the title.
- 2 Press the **INFO** button.  
> *The Info menu shows.*
- 3 Select **Title**.
- 4 Select the preferred option and press **OK**.

Option	Button
Previous title	◀
Next title	▶

### Jump to the next or previous chapter

**Tip** You can use the universal remote control to jump to the next or previous chapter. Refer to 'Control titles' on page 28 for instructions.

- 1 Play the title.
- 2 Press the **INFO** button.  
> *The Info menu shows.*
- 3 Select **Chapter**.
- 4 Select the preferred option and press **OK**.

Option	Button
Previous chapter	◀
Next chapter	▶

### Jump to a point of time

- 1 Play the title.
- 2 Press the **INFO** button.  
> *The Info menu shows.*
- 3 Select **Playing time**.
- 4 With the number keys, enter the point of time.
- 5 Press **OK**.

### Search through a chapter

When you search through a chapter, the audio is muted.

- 1 Play the title.
- 2 Go to the chapter.
- 3 Set the speed.

Option	Button
Search forwards	▶▶
Search backwards	◀◀

### Search for a scene

This feature is not applicable to all video discs.

- 1 Play a title.
- 2 Press the **SCENE SEARCH** button.  
> *The Scene search menu shows.*
- 3 Select the type of scene search.
- 4 Press **OK**.
- 5 Select the category of the search.
- 6 Press **OK**.
- 7 Select the scene from the selection.
- 8 Press **OK**.

Option	Button
Previous scene in the category	◀
Next scene in the category	▶

### Play a title frame by frame

- When you play a title frame by frame, the audio is muted.
- For BD, only jump to the next frame is possible.

- 1 Pause the title.
- 2 Jump to the frame.

#### Option

#### Button

Jump to the next frame



Jump to the previous frame



### Play a title in slow motion

- When you play a title in slow motion, the audio is muted.
- For BD, only jump slow forward is possible.

- 1 Pause the title.
- 2 Set the speed.

#### Option

#### Button

Slow forward



Slow backward



### Change the audio language

- 1 Play the title.
- 2 Press the **AUDIO** button.
- 3 Select the audio language.
- 4 Press **OK**.

#### Action

Up



Down



### Change the camera angle

This feature is not applicable to all video discs.

- 1 Play a title.
- 2 Press the **TITLE/POPUP MENU** button.
- 3 Control the disc menu with the universal remote control.

### Change the subtitle language

- 1 Play the title.
- 2 Press the **SUBTITLE** button.
- 3 Select the subtitle language.
- 4 Press **OK**.

#### Action

Up



Down



## Music

### Play a track

- 1 Turn the product on.
- 2 Load the audio disc or insert the memory card. To insert a memory card, refer to page 33.
- 3 From the home menu shows.
- 4 Use the universal remote control to go to the track.

#### Action

Next track



Previous track



- 5 Press the **OK** button.

### Control tracks

- 1 Play the track.
- 2 Use the universal remote control to control the track.

#### Action

Play the track



Pause the track



Stop the track



Restart the track



Play the previous track



Play the next track



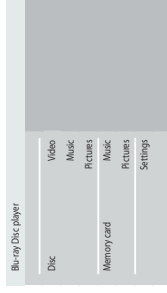
Repeat the track



Repeat the audio disc



Play the tracks in random order



## Pictures

### View a picture

- 1 Turn the product on.
- 2 Load the disc or insert the memory card. To insert a memory card, refer to page 33.
- 3 From the home menu, select **Picture**.
  - > The home menu shows.
- 4 Use the universal remote control to go to the picture.
  - > The **Picture** list shows.
- 5 Press the **OK** button.



### Start a slideshow

- 1 View the first picture of the slideshow.
- 2 Press the **INFO** button.
  - > The **Info** menu shows.
- 3 Select **Slideshow**.
  - > The available options show.
- 4 Choose the preferred speed and press **OK**.

### Rotate a picture

**Tip** You can use up-down arrow keys of the universal remote control to rotate a picture. The function is not available in a slideshow.

- 1 View the picture or stop the slide show.
- 2 Press the **INFO** button.
  - > The **Info** menu shows.
- 3 Select **Rotate**.
  - > The available options show.
- 4 Choose the preferred option and press **OK**.

Option	Description
Rotate	▲ ▼

### Zoom in and out on a picture

- 1 View the photo or stop the slide show.
- 2 Press the **INFO** button.
  - > The **Info** menu shows.
- 3 Select **Zoom**.
  - > The available options show.
- 4 Choose the preferred option and press **OK**.

Option	Description
On	Zoom in
Off	Normal size (100%)
Scroll	▲ ▼ ◀ ▶

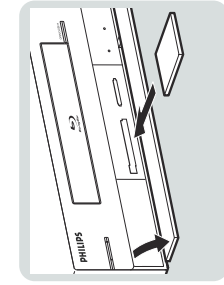
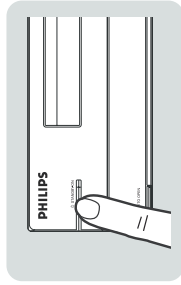
## Memory cards

### Insert memory cards

**CAUTION** DO NOT INSERT AN MS DUO, RS-MMC OR MINI SD INTO THE MEMORY CARD READER WITHOUT AN ADAPTER. IF YOU DO, YOU CAN DAMAGE THE BLU-RAY DISC PLAYER AND THE MEMORY CARD.

Before you insert a memory card into the Blu-ray Disc player, make sure that the memory card is supported. Refer to 'Playable memory cards' on page 38.

- 1 Turn the product on.



- 2 Open the user access panel.
- 3 Insert the memory card into the correct slot.

Left slot	Right slot
CF Type I	MS
MD	MS PRO
	MS Duo (only with adapter)
	MMC
	RS-MMC (only with adapter)
	SD
	Mini SD (only with adapter)

### Music

Refer to 'Music' on page 31.

### Pictures

Refer to 'Pictures' on page 32.

### Set to stand-by

- 1 On the front of the product, press the **STANDBY/ON** button.
  - > The **STANDBY/ON** light on the front of your product comes on as red.

When the product is switched to stand-by, it still uses some power. To turn the product off, remove the power cord from the power outlet.

## Troubleshooting

### Online help

Refer to [www.usasupport.philips.com](http://www.usasupport.philips.com) for:

- Interactive help
- Frequently asked questions

### Helpline

Language	Telephone number
English	1-888-PHILIPS (1-888-744-5477)
French	1-800-661-6162
Spanish	1-888-PHILIPS (1-888-744-5477)

Be prepared to give this information:

- A description of the problem and when it occurs
- The type number on the label of the product
- The date of purchase

### Problems and tips

Problem	Tip
No reaction to the supplied universal remote control.	Connect the product to the power outlet. Point the remote control at the product. Insert the batteries correctly.
No video signal on the TV.	Insert new batteries in the universal remote control. Turn the TV on. Set the TV to the correct external input. Select the correct video output with the <b>VIDEO OUTPUT SELECTION</b> button on the front panel. Change the resolution of the output to the TV. Press-and-hold the ►►►-button on the front panel for 5 seconds to restore the factory settings (with no disc in the disc tray).
No high-definition video signal on the TV via component video.	Does the disc contain high-definition video? High-definition video is not available when the disc does not contain it. Does the TV support high-definition video? High-definition video is not available when the TV does not support it.
No audio signal from the loudspeakers of the TV.	Assign the audio input of the TV to the corresponding video input.
No audio signal from the loudspeakers of the audio system.	Turn the audio system on. Set the audio system to the correct external input. Increase the volume level of the audio system.

Problem	Tip
No 5.1-channel audio from the loudspeakers of the audio system	Does the disc or memory card contain 5.1-channel audio? The 5.1-channel audio is not available when the disc or memory card does not contain it. Does the audio system support 5.1-channel audio? The 5.1-channel audio is not available when the audio system does not contain it. In the <b>SETTINGS</b> menu, set <b>Digital out</b> to <b>PCM</b> .
Cannot play a disc.	Make sure that the product supports the disc. Make sure that the Blu-ray Disc player supports the region code of the DVD or BD. (BD: A; DVD: All or I) For DVD+R discs, make sure that the disc is finalized. Clean the disc.
Cannot play JPEG files from a disc.	Make sure that the disc was recorded in the UDF, ISO9660 or JOLIET format.
Cannot play MP3 files from a disc or a memory card.	Make sure that the disc was recorded in the UDF, ISO9660 or JOLIET format. Make sure that the bit rate of the MP3 files is between 56 and 320 kbps.
Cannot play a memory card.	Make sure that the sample rate of the MP3 files is 32 kHz, 44.1 kHz or 48 kHz. Make sure the memory card is supported by the product.
Red cross in the upper right hand corner of the screen.	The operation is not possible.
Cannot find a JPEG file.	Make sure that the selected folder does not contain more than 1500 files. Only the first 1500 files are shown. Make sure that the file extension is .jpg, .jpeg or .JPEG.
Cannot find an MP3 file.	Make sure that the selected folder does not contain more than 1500 files. Only the first 1500 files are shown. Make sure that the file extension is .mp3 or .MP3.
The product gives no response to any control.	Press and hold the standby/on button for 5 seconds to set the product to stand-by.

## Technical data

### Dimensions

<b>Product dimensions (W x D x H)</b>	16.9 x 12.8 x 3.1 in (430 x 325 x 789 mm)
<b>Product weight</b>	9.3 lbs (4.2 kg)

### Operating environment

<b>Operating temperature</b>	41 to 104 F (+5 to 40 °C)
<b>Operating humidity</b>	10 to 75 % (non-condensing)

### Power

<b>Mains power</b>	AC, 120 V, 60 Hz
<b>Standby/on switch</b>	
<b>Power consumption</b>	51 W (< 10 W stand-by)
<b>Standby/on light</b>	Red/blue

### Video output

<b>HDMI</b>	480p, 720p, 1080i, 1080p
<b>Component video</b>	Y: 1.0 Vp-p (75 Ω load), Pb: 0.70 Vp-p (75 Ω load), Pr: 0.70 Vp-p (75 Ω load)
<b>Composite video</b>	1 channel: 1.0 Vp-p (75 Ω load)
<b>S-Video</b>	Luminance: 1.0 Vp-p (75 Ω load), Chrominance: 0.3 Vp-p (75 Ω load)

### Audio output

<b>HDMI</b>	PCM multi-channel audio, PCM audio, bitstream audio,
<b>Digital audio output</b>	Optical, coaxial (S/PDIF)
<b>5.1-Channel</b>	Front and rear left, front and rear right, center, subwoofer
<b>2-Channel</b>	Left, right
<b>Frequency response</b>	48 kHz sampling: 4 Hz to 22 kHz, 96 kHz sampling: 4 Hz to 44 kHz
<b>Signal-to-noise ratio</b>	110 dB
<b>Dynamic range</b>	100 dB
<b>Total harmonic distortion</b>	0.004%

When you play a video from a disc, the audio is dependent upon:

- The type of audio connection
- The disc type and the audio on the disc
- The selected digital audio format (only for S/PDIF and HDMI connections)

### 2-Channel analog

<b>Disc type</b>	<b>Output</b>
BD	2-Channel
DVD with Dolby Digital	2-Channel
DVD with DTS	Mute

### 5.1-Channel analog

<b>Disc type</b>	<b>Output</b>
BD	5.1-Channel
DVD with Dolby Digital	2-Channel (front left, front right)
DVD with DTS	Mute

### S/PDIF

<b>Disc type</b>	<b>Output</b>
BD	PCM: 2-Channel; Bitstream: bitstream from disc
DVD with Dolby Digital	2-Channel (front left, front right); Bitstream: bitstream from disc
DVD with DTS	PCM; Mute; Bitstream: bitstream from disc

### HDMI

<b>Disc type</b>	<b>Output</b>
BD	PCM: 2-Channel/5.1-Channel; Bitstream: bitstream from disc
DVD with Dolby Digital	2-Channel (front left, front right); Bitstream: bitstream from disc
DVD with DTS	PCM; Mute; Bitstream: bitstream from disc

### Playable discs

<b>Types</b>	BD: BD-ROM, BD-RE; DVD: DVD-VIDEO, DVD+RW (4.7 GB), DVD-RW (4.7 GB), DVD+R (4.7 GB), DVD-R (4.7 GB); CD: AUDIO-CD, CD-RW, CD-R
<b>Region codes</b>	BD: A; DVD: All or I

PRODUCT IS FULLY COMPATIBLE WITH THE FOLLOWING CURRENT FORMATS:

- BD-ROM / BD-R / BD-RE\*
- DVD-Video / DVD-R / DVD-RW
- Audio CD / CD-R / CD-RW

PRODUCT IS COMPATIBLE WITH THE FOLLOWING FORMATS, WITH LIMITED FUNCTIONALITY:

- DVD+R / DVD+RW

PRODUCT WILL NOT PLAY DISCS WITH THE FOLLOWING FORMATS:

- HD-DVD
- Any other

\* Due to the intentional progression of the Blu-ray Disc format by its standard setting authority, Philips cannot guarantee or warrant the playability of future extensions of the Blu-ray Disc format with this product.

## Playable memory cards

### Types

CF Type I, MD, SM, MS PRO, MS Duo (with adapter), MMC, RS-MMC (with adapter), SD, Mini SD (with adapter).

## Information

### Trademarks and licenses

#### Dolby Laboratories

Manufactured under license from Dolby Laboratories. "Dolby", "Pro-logic" and the double-D symbol are trademarks of Dolby Laboratories.



#### DTS

"DTS" and "DTS DIGITAL SURROUND" are registered trademarks of Digital Theater Systems, Inc.



#### HDMI

HDMI, the HDMI logo and High-Definition-Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC.



### Environmental information

All unnecessary packaging has been omitted. The packaging has been made easy to separate into two materials: cardboard (box, buffer) and polyethylene (bags, protective foam sheets). Your product consists of materials which can be recycled and reused if disassembled by a specialized company. Please observe the local regulations regarding the disposal of packaging materials, exhausted batteries and old equipment. Dispose of in accordance with local – state and federal regulation. For additional information on recycling contact [www.eia.org](http://www.eia.org) (Consumer Education Initiative).

### Maintenance and service

If the product is defective and needs repair, but the warranty period has expired, you can consult our specialists (refer to page 10).

### Philips limited warranty one (1) year

#### Warranty coverage:

PHILIPS warranty obligation is limited to the terms set forth below.

#### Who is covered:

Philips warrants the product to the original purchaser or the person receiving the product as a gift, against defects in materials and workmanship as based on the date of original purchase ("Warranty Period") from an Authorized Dealer. The original sales receipt showing the product name and the purchase date from an authorized retailer is considered such proof.

#### What is covered:

The Philips warranty covers new products if a defect arises and a valid claim is received by Philips within the Warranty Period. At its option, Philips will either (1) repair the product at no charge, using new or refurbished replacement parts, or (2) exchange the product with a product that is new or which has been manufactured from new, or serviceable used parts and is at least functionally equivalent or most comparable to the original product in Philips current inventory, or (3) refund the original purchase price of the product.

Philips warrants replacement products or parts provided under this warranty against defects in materials and workmanship from the date of the replacement or repair for ninety (90) days or for the remaining portion of the original product's warranty, whichever provides longer coverage for you. When a product or part is exchanged, any replacement item becomes your property and the replaced item becomes Philips' property. When a refund is given, your product becomes Philips' property.

**Note:**

- Any product sold and identified as refurbished or renewed carries a ninety (90) day limited warranty.
- Replacement product can only be sent if all warranty requirements are met. Failure to follow all requirements can result in delay.

**What is not covered - Exclusions and limitations:**

This Limited Warranty applies only to the new products manufactured by or for Philips that can be identified by the trademark, trade name, or logo affixed to it. This Limited Warranty does not apply to any non-Philips hardware product or any software, even if packaged or sold with the product. Non-Philips manufacturers, suppliers, or publishers may provide a separate warranty for their own products packaged with the bundled product.

Philips is not liable for any damage to or loss of any programs, data, or other information stored on any media contained within the product, or any non-Philips product or part not covered by this warranty. Recovery or reinstallation of programs, data or other information is not covered under this Limited Warranty.

This warranty does not apply (a) to damage caused by accident, abuse, misuse, misapplication, or non-Philips product, (b) to damage caused by service performed by anyone other than Philips or Philips Authorized Service Location, (c) to a product or a part that has been modified without the written permission of Philips, or (d) if any Philips serial number has been removed or defaced, or (e) product, accessories or consumables sold "AS IS" without warranty of any kind by including refurbished Philips product sold "AS IS" by some retailers.

**This limited warranty does not cover:**

- Shipping charges to return defective product to Philips.
- Labor charges for installation or setup of the product, adjustment of customer controls on the product, and installation or repair of antenna systems outside of the product.
- Product repair and/or part replacement because of improper installation, connections to improper voltage supply, abuse, neglect, misuse, accident, unauthorized repair or other cause not within the control of Philips.
- Damage or claims for products not being available for use, or for lost data or lost software.
- Damage occurring to product during shipping.
- A product that requires modification or adaptation to enable it to operate in any country other than the country for which it was designed, manufactured, approved and/or authorized, or repair of products damaged by these modifications.
- A product used for commercial or institutional purposes (including but not limited to rental purposes).
- Product lost in shipment and no signature verification receipt can be provided.
- Failure to operate per Owner's Manual.

If you need information or if you have a problem, please visit the Philips website at [www.philips.com/support](http://www.philips.com/support) or contact the Philips Customer Care Centre in your country (you find the phone numbers in this user manual). If there is no Customer Care Centre in your country, please turn to your local Philips dealer or contact Consumer Electronics B.V.

To obtain assistance in the U.S.A., Puerto Rico or U.S. Virgin Islands...  
Contact Philips Customer Care Center at:  
1-888-PHILIPS (1-888-744-5477)

To obtain assistance in Canada...  
1-800-661-6162 (French Speaking)  
1-888-PHILIPS (1-888-744-5477) - (English or Spanish Speaking)

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY FOR THE CONSUMER. PHILIPS SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some states do not allow the exclusions or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you.

*This warranty gives you specific legal rights. You may have other rights which vary from state/province to state/province.*

Philips, P.O. Box 671539, Marietta, GA, 30006-0026

# Glossary

## Terms and definitions

Term	Definition
BD	Blu-ray Disc.
BD-ROM	BD Read Only Memory. A BD-ROM contains recorded data. For example, high-definition videos.
BD-RE	BD Rewritable. You can record a BD-RE over and over again. For example, you can use a BD-RE to make sequential back-ups.
DVD-VIDEO	DVD Video.
DVD	Digital Versatile Disc.
DVD+/-R	DVD Recordable. You can record a DVD+/-R once and you cannot erase it. For example, you can use it to archive data.
DVD+/-RW	DVD Rewritable. You can record a DVD+/-RW over and over again. For example, you can use a DVD+/-RW to make sequential back-ups.
CD	Compact Disc.
CD-R	CD Recordable. You can record a CD-R once and you cannot erase it. For example, you can use it to archive data.
CD-RW	CD Rewritable. You can record a CD-RW over and over again. For example, you can use a CD-RW to make sequential back-ups.
AUDIO-CD	Audio CD.
HDMI	High Definition Media Interface. It is a direct digital connection that can carry digital high-definition as well as digital multi-channel audio.
kbps	Kilobit per second (1000 bit/s).
JPEG	Data compression standard for digital images.
MP3	Data compression standard for digital audio.
CVBS	Composite video. A type of video signal.
CF	CompactFlash. A memory card with a flash memory.
MD	Microdrive. A type of memory card with a miniature harddisk.
SM	SmartMedia. A type of memory card with a flash memory.
MS	Memory Stick. A type of memory card with a flash memory.
SD	Secure Digital. A type of memory card with a flash memory.
MMC	MultimediaCard. A type of memory card with a flash memory.
RS-MMC	Reduced size MMC.
Chapter	Sections of a video or a music track.

## Term

Term	Definition
Title	A complete video on a disc.
Track	A music track on a disc.
GB	Gigabyte.



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## Your product

### Universal remote control

The universal remote control can operate in 5 modes. In each mode, you can control another type of device.

Mode	Device
BD	BDP9000 Blu-ray Disc player
TV	TV
AMP	Amplifier
	<b>OR</b>
	Receiver
SAT	Satellite set-top box
	<b>OR</b>
	Cable set-top box
DVD	DVD Recorder
	<b>OR</b>
	DVD Player
	<b>OR</b>
	VCR

## Need help?

### Troubleshooting

Refer to page 15.

### Online help

Refer to [www.usasupport.philips.com](http://www.usasupport.philips.com) for:

- Interactive help
- Frequently asked questions

### Helpline

Language	Telephone number
English	1-888-PHILIPS (1-888-744-5477)
French	1-800-561-6162
Spanish	1-888-PHILIPS (1-888-744-5477)

Be prepared to give this information:

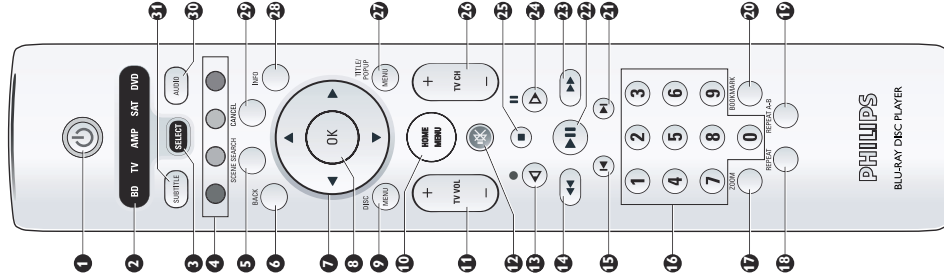
- A description of the problem and when it occurs
- The type number on the label of the product
- The date of purchase

## Overview

### Universal remote control

Overview of the functions of the buttons in the different modes. It is possible that a function is not available for the device or disc you control.

- Stand-by button**  
Turns the selected device on and off.
- Mode lights**  
Show the selected mode.
  - **BD** - Philips BDP9000 Blu-ray Disc player
  - **TV** - TV
  - **AMP** - Amplifier or receiver
  - **SAT** - Cable or satellite set-top box
  - **DVD** - DVD player; DVD recorder or VCR
- Mode selector**
  - **BD** - Philips BDP9000 Blu-ray Disc player
  - **TV** - TV
  - **AMP** - Amplifier or receiver
  - **SAT** - Cable or satellite set-top box
  - **DVD** - DVD player; DVD recorder or VCR
- Color buttons**  
The TV shows the functions of the color buttons.
- Scene search button**
  - BD - Scene search
- Back button**
  - BD, SAT, DVD - Back
- Up, down, left and right buttons**  
Move the cursor in the specified direction.
- OK button**  
Confirms a choice.
- Disc menu button**
  - BD, DVD - Disc menu
- Home menu button**
  - BD - Home menu
  - TV, AMP, SAT, DVD - Set-up menu
- Volume button**
  - BD, TV, SAT, DVD - TV volume up/down.
  - AMP - Amplifier volume up/down.
- Mute button**
  - BD, TV, SAT, DVD - Mute TV.
  - AMP - Mute amplifier.
- Rewind slow/Record button**
  - BD - Rewind slow
  - DVD - Record
- Rewind button**
  - BD, SAT, DVD - Rewind
  - AMP - Decrease the volume of the center loudspeaker
- Previous button**
  - BD, DVD - Previous
  - AMP - Decrease the volume of the rear loudspeakers



- 16 Number keys**
- BD, TV, SAT, DVD - Enter digits
  - AMP - Chooses the audio source (1 = TV, 2 = DVD, 3 = VCR, 4 = Tuner, 5 = CD, 6 = Aux/SAT/MD, 7 = Tape).

**17 Zoom button**

- BD, DVD - Zoom
- AMP - Surround mode

**18 Repeat button**

- BD - Repeat title, chapter, track or disc, random

**19 Repeat A-B**

- BD, DVD - Repeat a defined selection

**20 Bookmark button**

- BD - Bookmark a position on the disc.

**21 Next button**

- DVD - Select a chapter
- BD, DVD - Next
- AMP - Increase the volume of the rear loudspeakers.

**22 Play/Pause button**

- BD - Play/Pause
- SAT, DVD - Play

**23 Fast forward button**

- BD, SAT, DVD - Fast forward
- AMP - Increase the volume of the center loudspeaker

**24 Slow forward button**

- BD - Slow forward
- DVD - Pause

**25 Stop button**

- BD, SAT, DVD - Stop

**26 Channel button**

- BD, TV, SAT, DVD - TV Channel up/down

**27 Title/Pop-up menu button**

- BD - Title/pop-up menu
- SAT, DVD - Guide

**28 Info button**

- BD, TV, SAT, DVD - Info

**29 Cancel button**

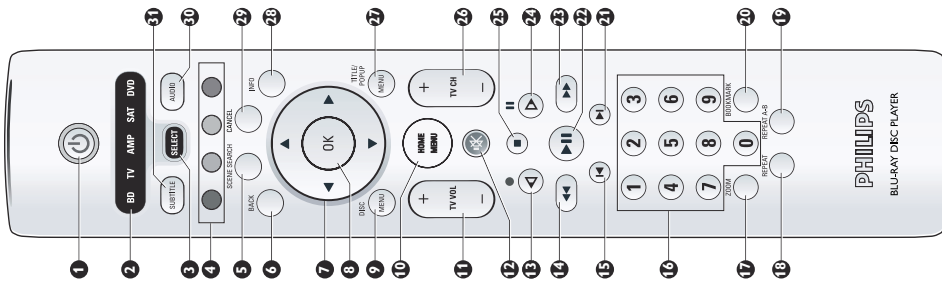
- BD - Cancel

**30 Audio button**

- BD, DVD - Audio
- AMP - Surround on/off

**31 Subtitle button**

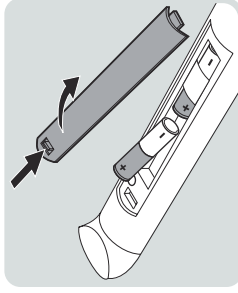
- BD, SAT, DVD - Subtitles



## Prepare

### Prepare the remote control

- 1 Open the battery compartment of the remote control.
- 2 Insert the batteries correctly.
- 3 Close the battery compartment.



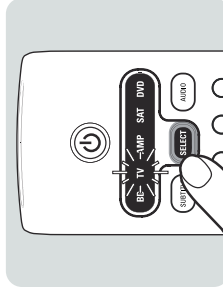
## Set up

### Test the remote control

The instructions are applicable to a TV. You can use the same procedure to test other devices (for example, DVD players or home theater systems).

- 1 Turn the TV on with the controls on the TV or its own remote control.
- 2 Select the **TV** mode.
  - > The **TV** mode light comes on.
- 3 Make sure that you can operate the TV with the universal remote control. Refer to 'Overview' on page 5 for an overview of the functions of the keys and the buttons.

If the device does not react correctly to the universal remote control, you must identify the device yourself (refer to 'Identify devices').



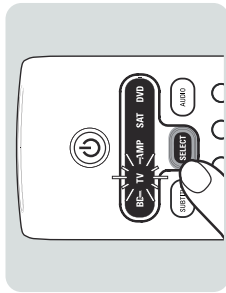
## Identify devices

### Manually

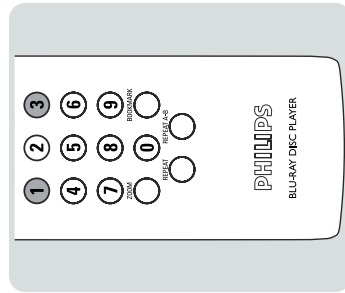
If a device does not react correctly to the universal remote control, you must identify the device yourself. The instructions are applicable to a TV. You can use the same procedure to identify other devices (for example, DVD players or home theater systems).

- 1 Turn the TV with its own remote control or the TV.
- 2 Go to the first TV channel.

- 3 Press the mode selector until the **TV** light comes on.
- 4 Find the first code for the TV in the TV code list (refer to 'Codes' on page 16).



- 5 Press-and-hold the **1** and **3**.
- 6 When the **TV** light flashes two times, release the **1** and **3**.
- 7 Enter the code from step 4.



After the first and second digits, the **TV** light flashes one time. After the third digit, the **TV** light goes off and flashes two times.

- 8 Make sure that you can operate the TV with the universal remote control. Refer to 'Overview' on page 5 for an overview of the functions of the keys and the buttons.

If the device does not react correctly to the universal remote control:

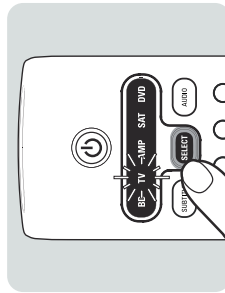
- 1 Find the next code in the code list.
- 2 Go back to step 5.

**OR:**

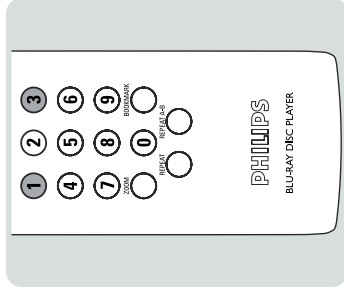
- 1 Search automatically for the correct code.

**Search automatically for the correct code**

- 1 Turn the TV on with its own remote control or the controls on the TV.
- 2 Go to the first TV channel.
- 3 Press the mode selector until the **TV** light comes on.



- 4 Press-and-hold the **1** and **3**.
- 5 When the **TV** light flashes two times, release the **1** and **3**.



- 6 Press the stand-by button.

> The universal remote control searches automatically for the signal that turns the TV off. Each time that the universal remote control transmits a signal, the **TV** light in the display flashes.

- 7 When the TV is turned off, press the stand-by key.
- 8 Make sure that you can operate the TV with the universal remote control. Refer to 'Overview' on page 5 for an overview of the functions of the keys and the buttons.

## Enjoy

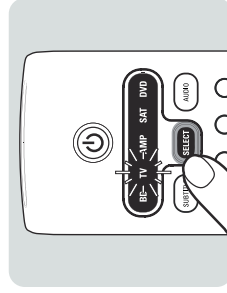
### Volume buttons

Depending on the selected mode, the volume buttons are assigned to the TV or the amplifier. These are the factory settings:

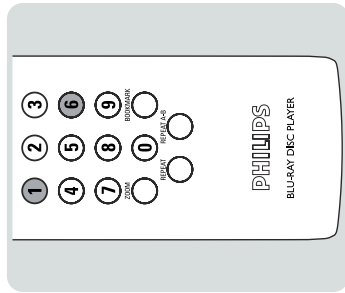
Mode	Volume buttons
<b>BD</b>	TV
<b>TV</b>	TV
<b>AMP</b>	Amplifier
<b>SAT</b>	TV
<b>DVD</b>	TV

You can change the assignment of the volume controls. For example, you can assign the volume button in the **TV** mode to the amplifier:

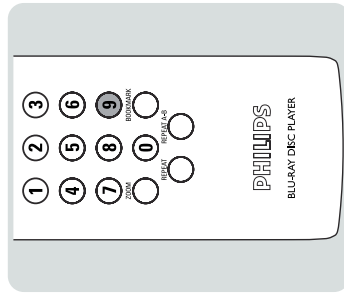
- 1 Select the **TV** mode.



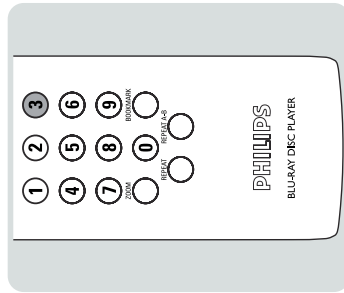
- 2 Press-and-hold the **1** and **6** until the **TV** mode light flashes two times.



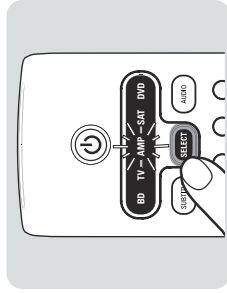
- 3 Press the **9**.  
 > The mode light flashes one time.  
 4 Press the **9** again.  
 > The mode light flashes one time.



- 5 Press the **3**.  
 > The mode light flashes two times.



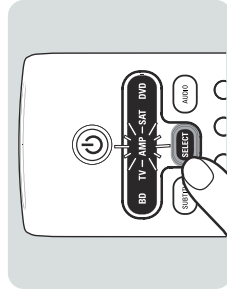
- 6 Select the **AMP** mode.  
 7 Press any button.  
 > The volume button is assigned to the amplifier.



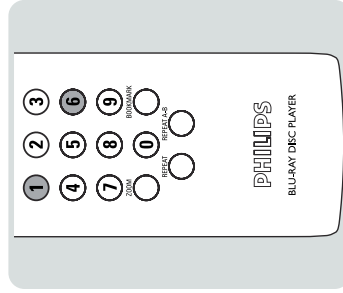
## Copy functions

You can copy the function of a device from its own mode to another mode. For example, the mute button of the **AMP** mode to the **TV** mode. Then, you can mute the amplifier in the **TV** mode.

- 1 Select the **AMP** mode.

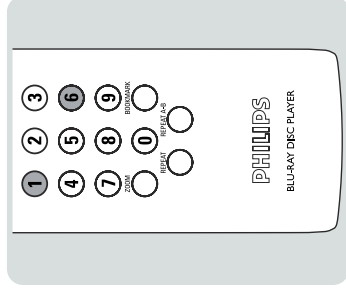


- 2 Press-and-hold the **1** and **6** until the **AMP** mode light flashes two times.

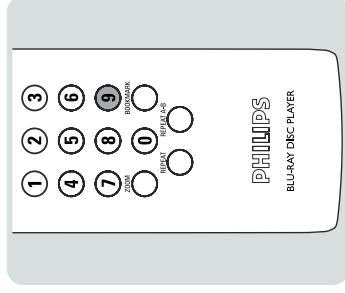


## Restore the factory default settings

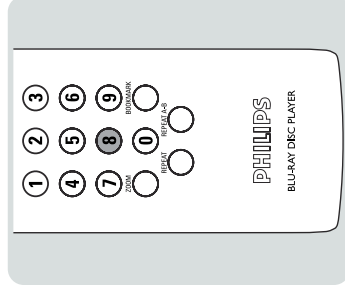
- 1 Press-and-hold the **1** and **6** until the mode light flashes two times.



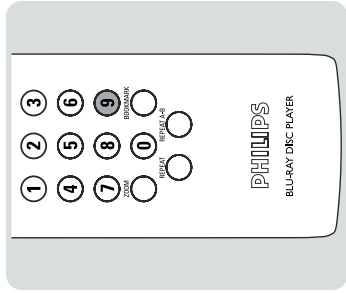
- 2 Press the **9**.
  - > The mode light flashes one time.



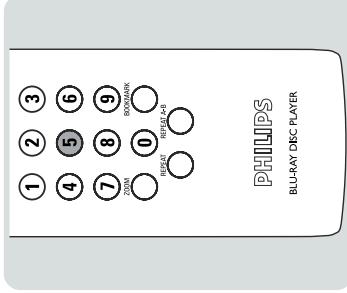
- 3 Press the **8**.
  - > The mode light flashes one time.



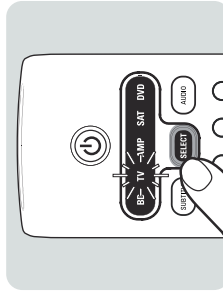
- 3 Press the **9**.
  - > The mode light flashes one time.
- 4 Press the **9** again.
  - > The mode light flashes one time.



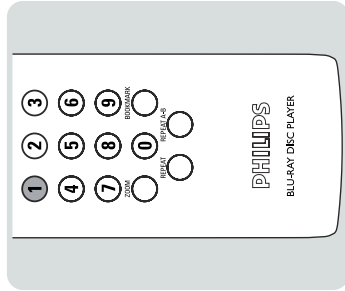
- 5 Press the **5**.
  - > The mode light flashes one time.
- 6 Press the mute button (the source button).
  - > The mode light flashes one time.



- 7 Select the **TV** mode.
  - > The TV mode light comes on.
- 8 Press the target button.
  - > The function is copied.



- 4 Press the 1.  
 > The mode light flashes two times and the factory default settings are restored.



## Troubleshooting

### Problems and tips

Problem	Tip
The device indicator flashes four times when you press a key or button.	Replace the batteries. Refer to page 14.
The device that you want to operate does not respond <b>AND</b> the device indicator does not flash when you press a key or button.	Replace the batteries. Refer to page 14.
The device that you want to operate does not respond <b>AND</b> the device indicator flashes when you press a key or button.	Remove any obstructions between the remote control and the device.
The universal remote control does not correctly operate the device.	Identify the device again. Refer to page 7.
You cannot copy functions.	The function copy keys is limited to six keys. Restore the factory default settings to delete the copy keys. Refer to page 13.

## Technical data

### Infra-red capabilities

Operating distance	30 ft. (10 m)
Transmitting LEDs	1
Carrier frequency range	36 kHz
Transmission angle	± 22.5 degrees

### Dimensions

Product dimensions (WxDxH)	1.9 x 1.1 x 9.3 in (47 x 29 x 237 mm)
Product weight	8 oz (226 g)

### Power

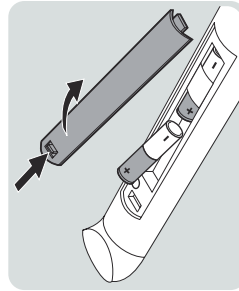
Number of batteries	2
Battery type	AA

## Replace the batteries

**WARNING DO NOT USE OLD AND NEW BATTERIES OR DIFFERENT TYPES OF BATTERIES IN COMBINATION. IF YOU DO, THE BATTERIES CAN LEAK CHEMICALS, THE CHEMICALS CAN CAUSE DAMAGE TO THE PRODUCT AND CAUSE INJURIES.**

- When you replace the batteries, make sure you replace them within 5 minutes. The memory of the universal remote control holds all programmed settings for 5 minutes. After 5 minutes, the programmed settings are replaced with the factory default settings.
- When you replace the batteries, make sure that you do not press any key or button. If you do, the programmed settings can be replaced with the factory default settings.
- To prevent battery leakage which may result in bodily injury, property damage, or damage to the unit:
  - Install all batteries correctly, + and - as marked on the unit.
  - Do not mix batteries (old and new, or carbon and alkaline, etc.)
  - Remove batteries when the unit is not used for a long time.

- Open the battery compartment.
- Remove the used batteries.
- Insert the new batteries correctly.
- Close the battery compartment.



## Codes

## TV

Abex	018
Acer	027
Admiral	000 019
Adventura	020
Aiko	008
Alwa	049
Alkal	001
Alleron	011
Amtron	010
Anam National	002 010
AOC	003 004
Apex	043 044 056 083
Audiovox	010
Bell & Howell	000
Benq	042 068
Bradford	010
Broksonic	053 057
Candle	004 005 020
Celebrity	001
Citizen	004 005 008 010 016 017
Colortyne	004
Concerto	004
Contec/Cony	006 010
Craig	010
Crown	010 014
Curtis Mathes	004 007 016 017 024
CXC	010
Daewoo	003 004 008 017 041 067
Daytron	004 017
Dell	071 072
Dimensia	024
Electroband	001
Electrohome	001 002 004
Emerson	004 006 009 010 011 017 022 041
Envision	004
Fisher	040
Fujitsu	011 026
Funai	010 011
Futuretech	010
Gateway	045
GE	002 004 012 013 024 073 084
Goldstar	003 004 006 017 018
Grumpy	010 011
Hallmark	004
Harvard	010
Hisense	051
Hitachi	004 006 023 039 064 065 066
IMA	010
Infinity	014

Janeil	020
JBL	014
JC Penney	003 004 005 012 013 016 017 018 024
JCB	001
Jensen	004
JVC	006 013 015 038 054 063
Kawasho	001 004
Kenwood	004
Kloss Novabeam	010 020
KTV	010 017
LG	003
Loewe	014
Logik	000
Luxman	004
LXI	004 014 024
Magnavox	004 005 014 075
Majestic	000
Marantz	004 014
Megatron	004
Memorex	000 003 004 037
MGA	003 004
Midland	013 017 018
Minutz	012
Mitsubishi	003 004 036
Montgomery Ward	000
Motorola	002 019
MTC	003 004 016
Multitech	010
NAD	004 023
NEC	002 003 004
NET-TV	046
Nikko	004 008
NTC	008
Onwa	010
Optimus	023
Optonica	019
Orion	009 022 035
Panasonic	002 013 014 034 059
Philco	002 003 004 005 006 014
Philips	002 005 006 014 033 047 060 076
Philips Magnavox	076
Pilot	017
Pioneer	004 023 048
Portland	003 004 008 017
Price Club	016
Prima	052
Prism	013
Proscan	024
Proton	004 006
Quasar	002 013 032 085
Radio Shack	024
Radio Shack/Realistic	004 006 010 017 018
RCA	002 003 004 024 086
Realistic	024
Sampo	004 017 018
Samsung	003 004 006 007 016 017 018 031 081 082
Sansul	022 035 058





## Set-top boxes

## Satellite

Alphastar	023
Chaparral	002 003
DISH Network	053
Dishnet	022
Drake	004 005
Echostar	030
GE	000 001 016 033
General Instruments	006 007 008
Hitachi	026 027
Hughes	051
Hughes Network Systems	021 031
JVC	025
Mitsubishi	040
Panasonic	019 045 048 049
Philips	028 037 044 051 054 109
Primestar	020
Proscan	000 001 016 033
RCA	000 001 016 024 033 038 050 051
Realistic	009
Samsung	041 042 051
Sony	017 034 036 039 043 052
STS	032
STS1	010
STS2	011
STS3	012
STS4	013
Toshiba	014 018 046
Uniden	015 029
Zenith	035 047

## Cable

ABC	055 056 057 059 101
Antronix	061 062
Archer	062 063
Cabletenna	061
Cableview	060
Colour Voice	065 066
Comtronics	067
Contec	069
Eastern	070
GC Electronics	062
GE	055 056
Gemini	071 072
General Instruments	056 103 106
Hamlin	073 074 075 081 088 094 102
Hitachi	056
Jerrold	056 071 076 077 095 101 103
Magnavox	078
Memorex	079
Motorola	107
Movie Time	080
NEC	058
NSC	080
Oak	069 082
Panasonic	097 100
Philips	064 065 066 068 072 078 083 084 085
Pioneer	086 087
Proscan	055 056
RCA	060 096 098 100 103
Realistic	062
Regal	075 088 102
Regency	070
Rembrandt	056
Samsung	087
Scientific Atlanta	059 089 090 091 104
Signal	071
Signature	056
Sony	105
Sprucer	100
Standard Component	092 093
Starcom	071 101
Stargate	071
Starquest	071
TIME WARNER	108
Tocom	057 076
Tusa	071
TV86	080
Unika	061 062
United Cable	101
Universal	061 062 063
View Star	069 078 080
Zenith	099

## DVD

## Players

Memorex	008
Mintek	009
Mitsubishi	084 100
NAD	040 094
Nakamichi	078
Nexstech	095
Norcent	010 079
Onkyo	002 011
Oritron	013
Panasonic	047 054 072 073
Philips	021 027 033 171
Pioneer	003 012
Polaroid	001
Proscan	080 099
Qwestar	013
RCA	024 030 036 044 055 069 074 080
Sampo	081
Samsung	014 031 053
Sansui	050
Sanyo	032 082
Sharp	015 016 026 060 062
Sherwood	083
Sony	017 018 046 048 049 063
Sylvania	045 056 066
Techwood	096
Toshiba	019 058 067
Venturer	004
Yamaha	101
Zenith	034 088

## Recorders

Apex Digital	181
Panasonic	175
Philips	173 176 178 179
Pioneer	177
RCA	172
Sony	174
Yamaha	180

## VCR

Adventura	115
Aiko	116
Aiwa	115
Akal	103 125
American High	113
Asha	108
Audio Dynamics	104 105
Audiovox	109
Beaumarck	107 108
Bell & Howell	106
Brokssonic	107 145 146
Calix	109
Candle	108 109 110 111 112
Canon	113
Capehart	124
Carver	121
CCE	116 120
Citizen	108 109 110 111 112 116
Colorlyme	104
Colt	120
Craig	108 109 114 120
Curtis Mathes	104 108 111 112 113 127
Cybernex	108
Daewoo	110 115 116 124 140
Daytron	124
DBX	104 105
Dimensia	127
Dynatech	115
Electrohome	109 117
Electrohome	109
Emerson	107 109 110 113 115 117 147
Fisher	106 114
Fuji	103 113
Funai	115 128
Garrard	115
GE	108 113 127 153
Go Video	130 137 167
Goldstar	104 109 112
Gradiente	115
Harley Davidson	115
Harmon/Kardon	104
Harwood	120
Headquarter	106
Hi-Q	114
Hitachi	119 125 169
Instant Replay	113
JC Penney	104 105 106 107 108 109 113 119 120 121
JCL	113
Jensen	119 125
JVC	104 105 106 112 125 131
Kenwood	104 105 106 111 112 125
KLH	120
Kodak	109 113
LG	109

Lloyd's	115	
Logik	120	
LXI	109	
Magnavox	113 121 123	
Magnih	109	
Marantz	104 105 106 111 112 113 121	
Marta	109	
Matsushita	113	
MEI	113	
Memorex	106 108 109 113 114 115 123 129	
MGA	117	
MGN Technology	108	
Midland	118	
Minolta	119	
Mitsubishi	117 119 166	
Motorola	113	
MTC	108	
Multitech	108 111 115 118 120	
NEC	104 105 106 111 112 125	
Nikko	109	
Noblex	108	
Olympus	113	
Optimus	109	
Optonica	122	
Orion	129	
Panasonic	113 141 142 143 150 165	
Pentax	111 119	
Pentex Research	112	
Philco	113 121	
Philips	113 121 122 135	
Pilot	109	
Pioneer	105 119	
Polaroid	168	
Portland	111 124	
Proscan	127	
Protec	120	
Pulsar	123	
Quarter	106	
Quartz	106	
Quasar	113 154	
Radio Shack	109 122	
Radio Shack/Realistic	106 108 109 113 114 115 117 122	
Radix	109	
Randex	109	
RCA	108 113 119 127 132 139 155	
Realistic	106 108 109 110 113 114 115 117 122	
Ricoh	126	
Runco	123	
Samsung	108 110 118 133 148 152	
Sanky	123	
Sansui	105 125 129	
Sanyo	106 108 114 134	
Scott	107 110	
Sears	106 109 113 114 119	
Sharp	117 122 144 161	
Shintom	103 120	
Shogun	108	

Singer	113 120 126	
Sony	103 149 163	
STS	113	
Sylvania	113 115 121 151 156 164	
Symphonic	115 128	
Tandy	106	
Tashiko	109	
Tatung	125	
Teac	115 125	
Technics	113	
Teknika	109 113 115	
Tivo	138	
TNK	108	
Toshiba	110 119 157 159 160 162	
Television	108 109	
Unitech	108	
Vector Research	104 105 110 111	
Victor	105	
Video Concepts	104 105 110 111	
Videoseonic	108	
Wards	108 109 110 113 114 115 117 119 120 122	
White Westinghouse	128	
XR-1000	113 115 120	
Yamaha	104 105 106 112 125	
Zenith	103 123 126 136 158 170	

