

DVP-S336/S345/S360/S365/ S560D/S570D/S745D RMT-D115E/D116A/D117A/D120A/D120E

SERVICE MANUAL

Self Diagnosis
Supported model



Photo: DVP-S360

US Model
Canadian Model
DVP-S360/S560D/S570D

E Model
DVP-S360/S560D

Chinese Model
Hong Kong Model
Singapore Model
DVP-S345/S745D

Korea Model
DVP-S336/S745D

PX Model
DVP-S365

SPECIFICATIONS

CD/DVD player

Laser Semiconductor laser
Signal format system
NTSC (S360/S365/S560D/S570D)
NTSC/PAL (S336/S345/S745D)

Audio characteristics

Frequency response
DVD (PCM 96 kHz): 2 Hz to 44 kHz (±1 dB)*
DVD (PCM 48 kHz): 2 Hz to 22 kHz (±0.5 dB)
CD: 2 Hz to 20 kHz (±0.5 dB)

Signal-to-noise ratio
More than 110 dB (AUDIO OUT connectors only) (EXCEPT S570D/S745D)
More than 115 dB (AUDIO OUT connectors only) (S570D/S745D)

Harmonic distortion
Less than 0.003 % (EXCEPT S570D/S745D)
Less than 0.0025 % (S570D/S745D)

Dynamic range
More than 100 dB (DVD)
More than 97 dB (CD) (EXCEPT S570D/S745D)
More than 98 dB (CD) (S570D/S745D)

Wow and flutter
Less than detected value (±0.001 % W PEAK)

Outputs

	Jack type	Output level	Load impedance
AUDIO OUT (1, 2)	Phono jacks	2 Vrms (at 50 kilohms)	Over 10 kilohms
DIGITAL OUT (OPTICAL)	Optical output connector	-18 dBm	Wave length: 660 nm
DIGITAL OUT (COAXIAL)	Phono jack	0.5 Vp-p	75 ohms terminated

	Jack type	Output level	Load impedance
VIDEO OUT (1, 2)	Phono jacks	1.0 Vp-p	75 ohms, sync negative
S VIDEO OUT (1, 2)	4-pin mini DIN	Y: 1.0 Vp-p C: 0.3 Vp-p (PAL) 0.286 Vp-p (NTSC)	75 ohms, sync negative 75 ohms terminated
5.1CH OUTPUT (S560D/S570D/S745D)	Phono jack	2 Vrms (at 50 kilohms)	Over 10 kilohms
COMPONENT VIDEO OUT (Y, Pb/B-Y, Pr/R-Y) (S360/S365/S560D/S570D)	Phono jacks	Y: 1.0 Vp-p Pb/B-Y, Pr/R-Y: 0.7 Vp-p	75 ohms, sync negative 75 ohms
PHONES (S560D/S570D/S745D)	Phone jack	12 mW	32 ohms
COMPONENT VIDEO OUT (Y, Cb/B-Y, Cr/R-Y) (S336/S345/S745D)	Phono jacks	Y: 1.0 Vp-p Cb/B-Y, Cr/R-Y: 0.7 Vp-p	75 ohms, sync negative 75 ohms
AUDIO OUT (WOOFER) (S336/S345)	Phono jack	2 Vrms (at 50 kilohms)	Over 10 kilohms

General

Power requirements

120 V AC, 60 Hz (S360: US, CND/S560: US, CND/S570D)
220 to 240 V AC, 50/60Hz (S336/S345: HK, SP)
110 to 240 V AC, 50/60Hz (S345: CH/S360: E/S365/S560D: E)

Power consumption

13 W (S336/S345/S360)
14 W (S365)
16 W (S560D/S570D/S745D)

Dimensions (approx.)

430 × 69 × 252 mm (17 × 2³/₄ × 10 in.) (w/h/d) incl. projecting parts (S336/S345/S360/S365)
430 × 69 × 260 mm (17 × 2³/₄ × 10¹/₄ in.) (w/h/d) incl. projecting parts (S560D)
430 × 74 × 260 mm (17 × 3 × 10¹/₄ in.) (w/h/d) incl. projecting parts (S570D/S745D)

Mass (approx.)

2.8 kg (6 lb 6 oz) (S336/S345/S360/S365)
2.9 kg (6 lb 3 oz) (S560D)
3.1 kg (6 lb 13 oz) (S570D/S745D)

Operating temperature

5 °C to 35 °C (41 °F to 95 °F)

Operating humidity

25 % to 80 %

Supplied accessories

- Audio/video connecting cord (1)
- S video cord (1) (S560D/S570D/S745D)
- Remote commander (remote) (1)
- Size AA (R6) batteries
- Plug adaptor (1) (S360: E/S345: HK/S365/S560D: E/S745D: HK)

* The signals from AUDIO OUT connectors are measured. When you play PCM sound tracks with a 96 kHz sampling frequency, the output signals from the DIGITAL OUT (OPTICAL, COAXIAL) are converted to 48 kHz (sampling frequency). (S336/S345/S360/S365)

Design and specifications are subject to change without notice.



CD/DVD PLAYER

SONY®

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the line cord for cracks and abrasion. Recommend the replacement of any such line cord to the customer.
6. Check the B+ voltage to see it is at the values specified.
7. Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

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

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

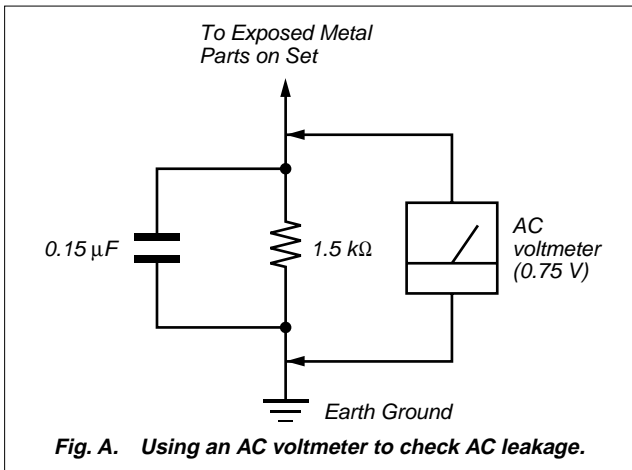


Fig. A. Using an AC voltmeter to check AC leakage.

WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 25 cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.

SAFETY-RELATED COMPONENT WARNING!!

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

CAUTION:

The use of optical instrument with this product will increase eye hazard.

CAUTION

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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

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

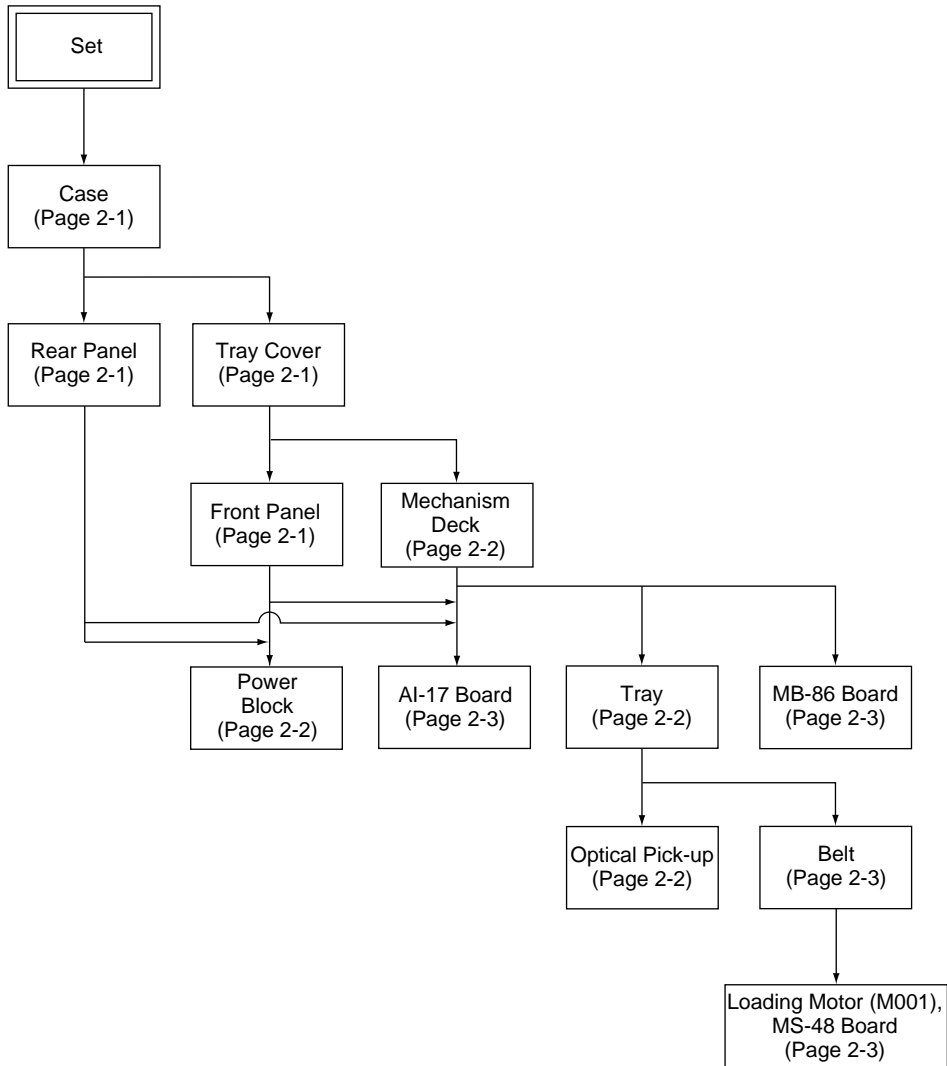
TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>	<u>Section</u>	<u>Title</u>	<u>Page</u>
Service Note		4		HS16S9U Printed Wiring Board	4-59
1. GENERAL				HS16S9U Schematic Diagram	4-61
Getting Started		1-1		SRV940JUC Printed Wiring Board	4-63
Playing Discs		1-4		SRV940JUC Schematic Diagram	4-65
Using Various Functions with the Control Menu		1-6	5. IC PIN FUNCTION DESCRIPTION		
Settings and Adjustments		1-10	5-1. System Control Pin Function (MB-86 Board IC102)		5-1
2. DISASSEMBLY			6. TEST MODE		
2-1. Case Removal		2-1	6-1. General Description		6-1
2-2. Rear Panel Removal		2-1	6-2. Starting Test Mode		6-1
2-3. Tray Cover Removal		2-1	6-3. Syscon Diagnosis		6-1
2-4. Front Panel Removal		2-1	6-4. Drive Auto Adjustment		6-5
2-5. Power Block Removal		2-2	6-5. Drive Manual Operation		6-7
2-6. Mechanism Deck Removal		2-2	6-6. Mecha Aging		6-9
2-7. Tray Removal		2-2	6-7. Emergency History		6-9
2-8. Optical Pick-up Removal		2-2	6-8. Version Information		6-10
2-9. Belt, MB-86 Board, Loading Motor (M001), MS-48 Board Removal		2-3	6-9. Video Level Adjustment		6-10
2-10. AI-17 Board Removal		2-3	6-10. If Con Self Diagnostic Function		6-11
2-11. Internal Views		2-4			
2-12. Circuit Boards Location		2-5	7. ELECTRICAL ADJUSTMENT		
3. BLOCK DIAGRAMS			7-1. Power Supply Adjustment		7-1
3-1. Overall Block Diagram		3-1	1. Power Supply Check		7-1
3-2. RF/Servo Block Diagram		3-3	2. +3.3 V Adjustment		7-1
3-3. Signal Processor Block Diagram		3-5	7-2. Adjustment of Video System		7-2
3-4. System Control Block Diagram		3-7	1. Video Level Adjustment		7-2
3-5. Audio Block Diagram		3-9	2. S-terminal Output Check		7-2
3-6. Video Block Diagram		3-11	3. Checking Component Video Output B-Y		7-2
3-7. Interface Control Block Diagram		3-13	4. Checking Component Video Output R-Y		7-2
3-8. Power Block Diagram		3-15	5. Checking Component Video Output Y		7-3
			6. Checking S Video Output S-C		7-3
4. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS			7-3. Adjustment Related Parts Arrangement		7-4
4-1. Frame Schematic Diagrams		4-3	8. REPAIR PARTS LIST		
4-2. Printed Wiring Boards and Schematic Diagrams		4-5	8-1. Exploded Views		8-1
MS-48 Printed Wiring Board and Schematic Diagram		4-5	8-1-1. Case Assembly (S336/S345/S360/S365/S560D) ...		8-1
MB-86 Printed Wiring Board		4-7	8-1-2. Case Assembly (S570D/S745D)		8-3
MB-86 (RF AMP, SERVO) Schematic Diagram		4-11	8-1-3. Chassis Assembly		8-4
MB-86 (ARP) Schematic Diagram		4-13	8-1-4. Mechanism Deck Section		8-6
MB-86 (AV DECODER) Schematic Diagram		4-15	8-2. Electrical Parts List		8-7
MB-86 (SDRAM) Schematic Diagram		4-17			
MB-86 (VGA) Schematic Diagram		4-19			
MB-86 (DRIVE) Schematic Diagram		4-21			
MB-86 (SERVO DSP) Schematic Diagram		4-23			
MB-86 (SYSTEM CONTROL) Schematic Diagram		4-25			
MB-86 (MEMORY, CLOCK GENERATOR) Schematic Diagram		4-27			
MB-86 (FGA) Schematic Diagram		4-29			
MB-86 (AUDIO DSP) Schematic Diagram		4-31			
AI-17 Printed Wiring Board		4-33			
AI-17 (VIDEO BUFFER) Schematic Diagram		4-35			
AI-17 (D/A CONVERTER, DSP) Schematic Diagram ..		4-37			
AI-17 (AMP, LPF) Schematic Diagram		4-39			
AI-17 (D/A CONVERTER) Schematic Diagram		4-41			
AI-17 (MODE CONTROL, POWER SUPPLY) Schematic Diagram		4-43			
AI-17 (IF CON) Schematic Diagram		4-45			
HP-127 Printed Wiring Board		4-48			
HP-127 Schematic Diagram		4-49			
HS16S9E Printed Wiring Board		4-51			
HS16S9E Schematic Diagram		4-53			
HS16S9F Printed Wiring Board		4-55			
HS16S9F Schematic Diagram		4-57			

SERVICE NOTE

1. DISASSEMBLY

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



2. DISC REMOVAL PROCEDURE (at POWER OFF)

- 1) Insert a tapering driver into the aperture of the unit bottom, and move the lever of chuck cam in the direction of the arrow **(A)**. (See Fig. 1)
- 2) Draw out the tray in the direction of the arrow **(B)**, and remove a disc. (See Fig. 1)

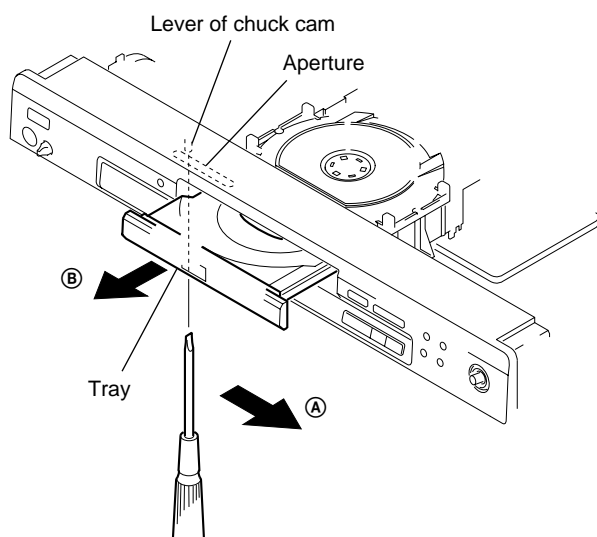


Fig. 1

3. HOW TO SERVICE MB-86 BOARD

- 1) Remove the case from the set. (Refer to 2-1)
- 2) Remove the mechanism deck. (Refer to 2-6)
- 3) Remove the MB-86 board. (Refer to 2-9)
- 4) Set the CK-MD board as shown in Fig. 2.

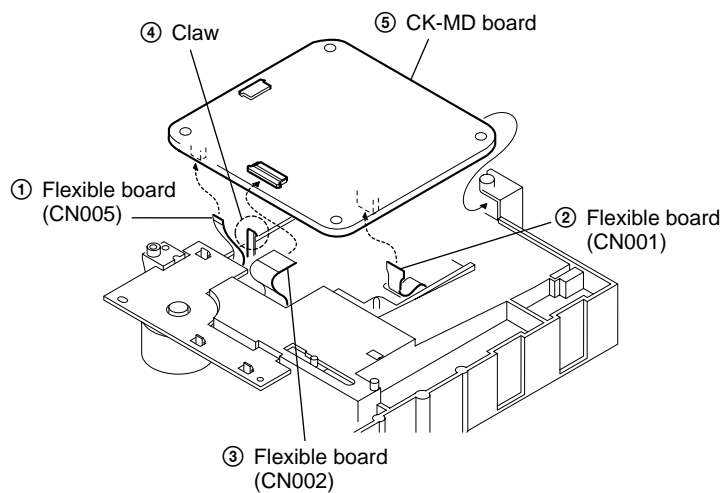


Fig. 2

- 5) Set the MB-86 board as shown in Fig. 3.

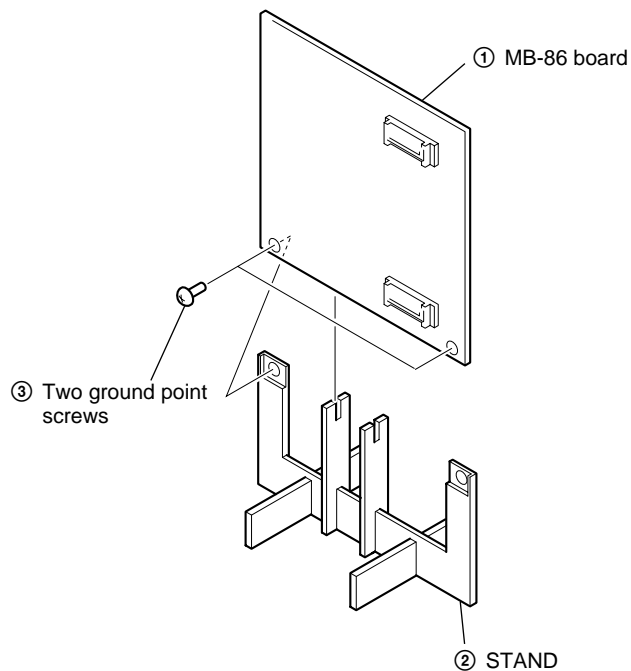


Fig. 3

6) Set the CK-MB board as shown in Fig. 4.

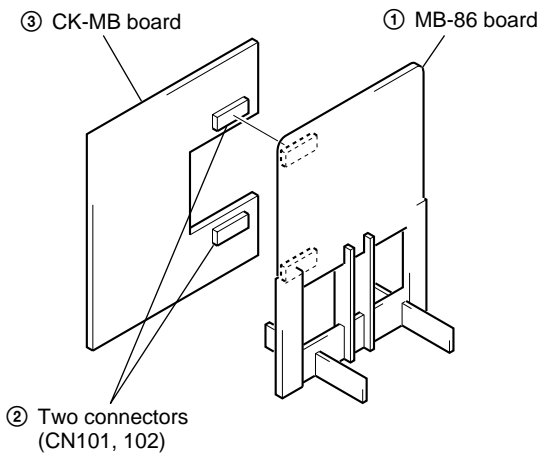


Fig. 4

8) Set the mechanism deck as shown in Fig. 6.

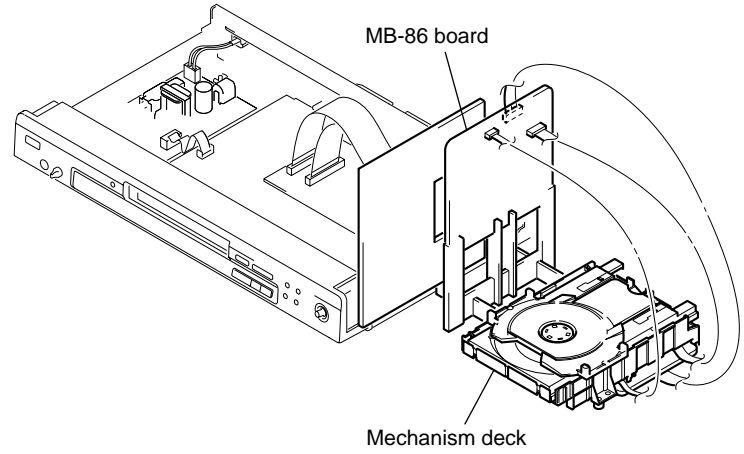


Fig. 6

7) Set the CK-AI board as shown in Fig. 5.

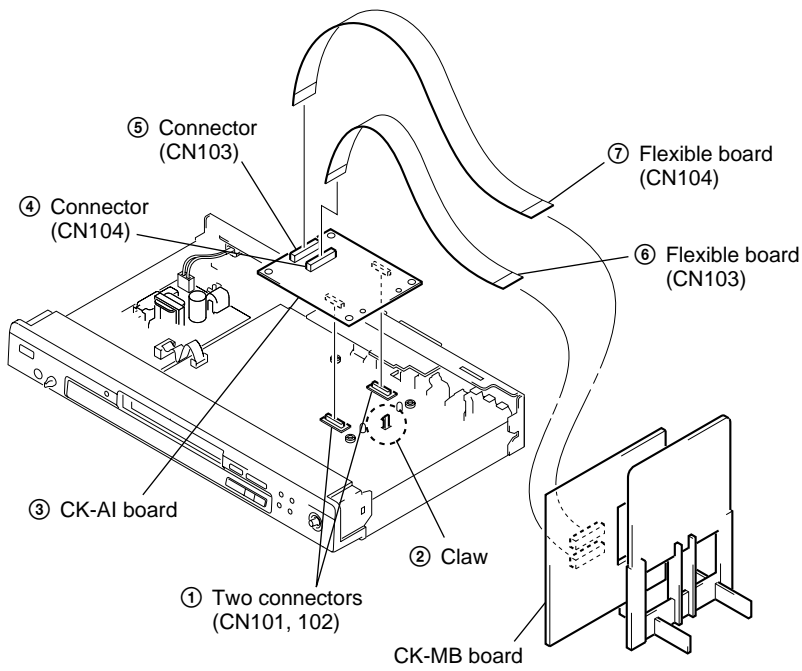


Fig. 5

SECTION 1 GENERAL

This section is extracted from DVP-S360/S365 instruction manual (3-059-580-11).

About This Manual

Conventions

- Instructions in this manual describe the controls on the player. You can also use the controls on the remote if they have the same or similar names as those on the player.
- The icons on the right are used in this manual:

Icon	Meaning
	Indicates that you can use only the remote to do the task.
	Indicates tips and hints for making the task easier.
	Indicates that the function is for DVD VIDEOS.
	Indicates that the function is for VIDEO CDs.
	Indicates that the function is for Audio CDs.

This Player Can Play the Following Discs

Disc logo	DVD VIDEOS		VIDEO CDs		Audio CDs	
Contents	Audio + Video		Audio + Video		Audio	
Disc size	12 cm	8 cm	12 cm	8 cm	12 cm	8 cm (CD single)
Play time	About 4 h (for single-sided DVD)/ about 8 h (for double-sided DVD)	About 80 min. (for single-sided DVD)/ about 160 min. (for double-sided DVD)	74 min.	20 min.	74 min.	20 min.

The "DVD VIDEO" logo is a trademark.

This player conforms to the NTSC color system. You cannot play discs recorded in other color systems such as PAL or SECAM.

Region code of DVDs you can play on this unit

Your DVD player has a region code printed on the back of the unit and will only play DVDs that are labeled with identical region codes.

DVDs labeled will also play on this unit.

If you try to play any other DVD, the message "Playback prohibited by area limitations." will appear on the TV screen.

Depending on the DVD, no region code indication may be labeled even though playing the DVD is prohibited by area restrictions.

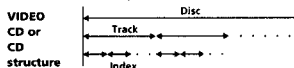
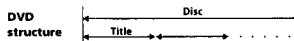


Note on playback operations of DVDs and VIDEO CDs

Some playback operations of DVDs and VIDEO CDs may be intentionally fixed by software producers. Since this player plays DVDs and VIDEO CDs according to the disc contents the software producers designed, some playback features may not be available. Also refer to the instructions supplied with the DVDs or VIDEO CDs.

Terms for discs

- Title**
The longest section of a picture or music feature on a DVD, the movie, etc. in video software, or the name of an album in audio software.
- Chapter**
Sections of a picture or a music feature that are smaller than titles. A title is composed of several chapters. Each chapter is assigned a chapter number enabling you to locate the chapter you want. Depending on the disc, no chapters may be recorded.
- Track**
Sections of a picture or a music feature on a VIDEO CD or a CD. Each track is assigned a track number enabling you to locate the track you want.



Index (CD) / Video index (VIDEO CD)

A number that divides a track into sections to easily locate the point you want on a VIDEO CD or a CD. Depending on the disc, no indexes may be recorded.

Scene

On a VIDEO CD with PBC (playback control) functions, the menu screens, moving pictures and still pictures are divided into sections called "scenes". Each scene is assigned a scene number enabling you to locate the scene you want.

Note on PBC (Playback Control) (VIDEO CDs)

This player conforms to Ver. 1.1 and Ver. 2.0 of VIDEO CD standards. You can enjoy two kinds of playback according to the disc type.

Disc type	You can
VIDEO CDs without PBC functions (Ver. 1.1 discs)	Enjoy video playback (moving pictures) as well as music.
VIDEO CDs with PBC functions (Ver. 2.0 discs)	Play interactive software using menu screens displayed on the TV screen (PBC Playback), in addition to the video playback functions of Ver. 1.1 discs. Moreover, you can play high-resolution still pictures if they are included on the disc.

Discs that the player cannot play

The player cannot play discs other than the ones listed in the table on page 4. CD-Rs, CD-ROMs including PHOTO CDs, data sections in CD-EXTRAS, DVD-ROMs, DVD-audio, HD (high density) layer of Super Audio CD etc., cannot be played.

When playing DTS-encoded CDs, excessive noise will be heard from the analog stereo outputs. To avoid possible damage to the audio system, the consumer should take proper precautions when the analog stereo outputs of the DVD player are connected to an amplification system. To enjoy DTS Digital Surround™ playback, an external 5.1-channel DTS Digital Surround™ decoder system must be connected to the digital output of the DVD player.

This product incorporates copyright protection technology that is protected by method claims of certain U.S. patents and other intellectual property rights owned by Macrovision Corporation and other rights owners. Use of this copyright protection technology must be authorized by Macrovision Corporation, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision Corporation. Reverse engineering or disassembly is prohibited.

* "DTS" is a trademark of Digital Theater Systems, Inc.

Precautions

On safety

- Caution - The use of optical instruments with this product will increase eye hazard.
- Should any solid object or liquid fall into the cabinet, unplug the player and have it checked by qualified personnel before operating it any further.

On power sources

- The player is not disconnected from the AC power source (mains) as long as it is connected to the wall outlet, even if the player itself has been turned off.
- If you are not going to use the player for a long time, be sure to disconnect the player from the wall outlet. To disconnect the AC power cord (mains lead), grasp the plug itself, never pull the cord.
- Should the AC power cord (mains lead) need to be changed, have it done at a qualified service shop only.

On placement

- Place the player in a location with adequate ventilation to prevent heat build-up in the player.
- Do not place the player on a soft surface such as a rug that might block the ventilation holes on the bottom.
- Do not place the player in a location near heat sources, or in a place subject to direct sunlight, excessive dust or mechanical shock.

On operation

- If the player is brought directly from a cold to a warm location, or is placed in a very damp room, moisture may condense on the lenses inside the player. Should this occur, the player may not operate properly. In this case, remove the disc and leave the player turned on for about half an hour until the moisture evaporates.
- When you move the player, take out any discs. If you don't, the disc may be damaged.

On adjusting volume

- Do not turn up the volume while listening to a portion with very low level inputs or no audio signals. If you do, the speakers may be damaged when a peak level portion is played.

On cleaning

- Clean the cabinet, panel and controls with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder or solvent such as alcohol or benzene.

If you have any questions or problems concerning your player, please consult your nearest Sony dealer.

IMPORTANT NOTICE

Caution: The enclosed DVD player is capable of holding a still video image or on-screen display image on your television screen indefinitely. If you leave the still video image or on-screen display image displayed on your TV for an extended period of time you risk permanent damage to your television screen. Projection televisions are especially susceptible to this.

Notes About the Discs

On handling discs

- To keep the disc clean, handle the disc by its edge. Do not touch the surface.
- Do not stick paper or tape on the disc.
- If there is glue (or a similar substance) on the disc, remove the glue completely before using the disc.



- Do not expose the disc to direct sunlight or heat sources such as hot air ducts, or leave it in a car parked in direct sunlight as the temperature may rise considerably inside the car.
- After playing, store the disc in its case.

On cleaning

- Before playing, clean the disc with a cleaning cloth. Wipe the disc from the center out.



- Do not use solvents such as benzene, thinner, commercially available cleaners or anti-static spray intended for vinyl LPs.

On novelty discs

- Do not use irregularly shaped CDs such as heart- or star-shaped CDs as they may cause the player to malfunction.

Getting Started

This section describes how to hook up the CD/DVD player to a TV (with audio/video input jacks) and/or an AV receiver (amplifier). You cannot connect this player to a TV which does not have a video input connector. Be sure to turn off the power of each component before making the connections.

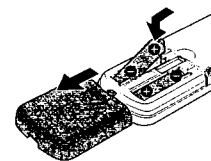
Unpacking

Check that you have the following items:

- Audio/video connecting cord (1)
- Remote commander (remote) RMT-D116A (1)
- Size AA (R6) batteries (2)
- Plug adaptor (1) (DVP-S365 only)

Inserting batteries into the remote

You can control the player using the supplied remote. Insert two Size AA (R6) batteries by matching the + and - ends on the batteries to the markings inside the compartment. When using the remote, point it at the remote sensor on the player.



You can control TVs or AV receivers (amplifier) using the supplied remote. See page 53.

Notes

- Do not leave the remote in an extremely hot or humid place.
- Do not drop any foreign object into the remote casing, particularly when replacing the batteries.
- Do not expose the remote sensor to direct sunlight or lighting apparatuses. Doing so may cause a malfunction.
- If you do not use the remote for an extended period of time, remove the batteries to avoid possible damage from battery leakage and corrosion.

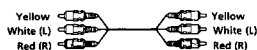
TV Hookups

This connection is for listening to the sound through TV speakers (L: left, R: right). Refer to the instructions supplied with the component to be connected.

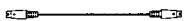
You can enjoy surround sound with built-in TV speakers only
You can use 3D sound imaging to create virtual rear speakers from the sound of built-in TV speakers without using actual rear speakers (VES: Virtual Enhanced Surround TV). For details, see page 33.

Required cords

Audio/video connecting cord (supplied) (1)

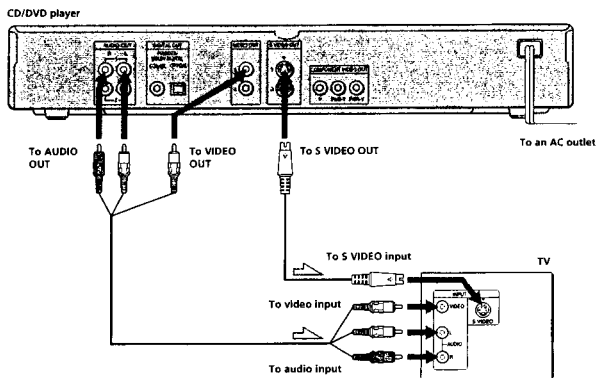


S video cord (not supplied) (1)



When connecting the cords, be sure to match the color-coded cord to the appropriate jacks on the components: Yellow (video) to Yellow, Red (right) to Red and White (left) to White. Be sure to make connections firmly to avoid hum and noise.

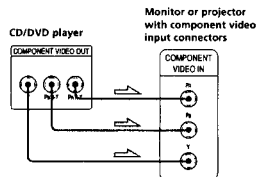
If your TV has an S video input connector, connect the component via the S VIDEO OUT connector using an S video cord (not supplied). You will get a better picture. Refer to the instructions supplied with the TV to be connected.



Signal flow

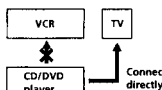
If you connect the player to a monitor or projector having component video input connectors that conform to output signals from the COMPONENT VIDEO OUT (Y, Pb/B-Y, Pr/R-Y) connectors on the player

Connect the component via the COMPONENT VIDEO OUT connectors using three video connecting cords (not supplied) of the same kind. You will get a better picture.



Notes

- Refer to the instructions supplied with the component to be connected.
- Do not connect this player to a video deck. If you do, noise may appear in the picture.



- Depending on the TV or receiver (amplifier), sound distortion may occur because the audio output level is high. In this case, set "AUDIO ATT" in "AUDIO SETUP" to "ON" in the setup display. For details, see page 51.

Setups for the player

Some setup adjustments are necessary for the player depending on the TV or other components to be connected.

Use the setup display to change the various settings. For details on using the setup display, see page 43.

- To connect the player to a normal TV**
In the setup display, set "TV TYPE" in "SCREEN SETUP" to "4:3 LETTER BOX" (default setting) or "4:3 PAN SCAN." For details, see page 47.
- To connect the player to a TV having the WIDE MODE function**
In the setup display, set "TV TYPE" in "SCREEN SETUP" to "16:9/4:3 WIDE MODE." For details, see page 47.
- To connect the player to a wide-screen TV**
In the setup display, set "TV TYPE" in "SCREEN SETUP" to "16:9/4:3 WIDE MODE." For details, see page 47.

Receiver (Amplifier) Hookups

This connection is for listening to the sound through speakers connected to a receiver lacking a built-in DTS or Dolby Digital decoder. Refer to the instructions supplied with the component to be connected as well.

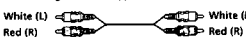
You can enjoy surround sounds even if you connect front speakers only
You can use 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers (VES: Virtual Enhanced Surround). For details, see page 33.

If you have a digital component with a built-in DTS or Dolby Digital decoder
You can enjoy multi-channel surround sound by connecting the component via the DIGITAL OUT OPTICAL or COAXIAL connector using an optical or coaxial digital connecting cord (not supplied). For details on hookups and settings, see page 12.

* Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories. Confidential unpublished works. ©1992-1997 Dolby Laboratories. All rights reserved.

Required cords

Audio connecting cord (not supplied) (1)



S video cord (not supplied) (1)



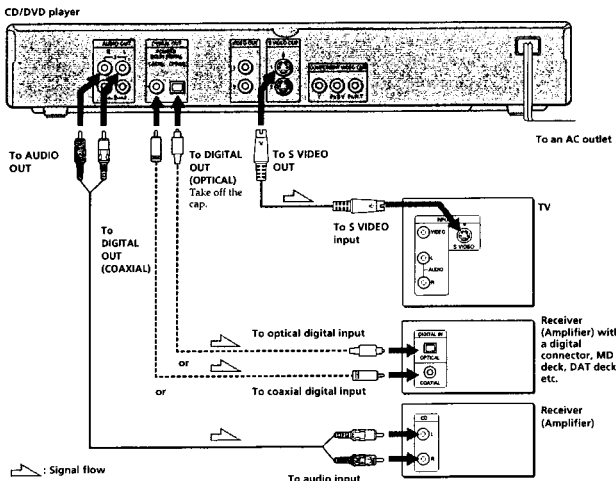
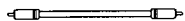
When connecting the cords, be sure to match the color-coded cord to the appropriate jacks on the components: Red (right) to Red and White (left) to White. Be sure to make connections firmly to avoid hum and noise.

If you have a digital component such as a receiver (amplifier) with a digital connector, DAT or MD, connect the component via the DIGITAL OUT OPTICAL or COAXIAL connector using an optical or coaxial digital connecting cord (not supplied).

Optical digital connecting cord (not supplied) (1)



Coaxial digital connecting cord (not supplied) (1)



Signal flow

Notes

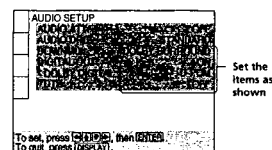
- You cannot enjoy a picture with an S video signal if your TV does not conform to the S video signal. When your TV does not have an S VIDEO input, connect the component via the VIDEO INPUT connector using the audio/video connecting cord (supplied) instead of the S video cord. For details, see page 8.
- Refer to the instructions supplied with the component to be connected.
- You cannot make digital audio recordings of discs recorded in multi-channel surround format directly using an MD deck or DAT deck.
- When you connect the component via the DIGITAL OUT OPTICAL or COAXIAL connector, set Virtual Enhanced Surround (VES) to "OFF." Otherwise, the player will not output signals from the DIGITAL OUT OPTICAL or COAXIAL connector.

When you have made the connections using an optical or coaxial digital connecting cord, do not set "DOLBY DIGITAL" to "DOLBY DIGITAL" and "DTS" to "ON." If you do, a loud noise will suddenly come out from the speakers, affecting your ears or causing the speakers to be damaged.

Setups for the player

Some setup adjustments are necessary for the player depending on the components to be connected. Use the setup display to change the various settings. For details on using the setup display, see page 43.

- To listen to the sound through speakers connected to a receiver (amplifier) which has a digital decoder and lacks a built-in DTS or Dolby Digital decoder, or to output the sound to a digital component such as a DAT or MD deck**
Set the "AUDIO SETUP" items in the setup display (page 51) as shown in the illustration below. These are the default settings.



Set "VES" to "OFF" in the Control Menu display (page 33). When you select the VES mode other than "OFF," the Virtual Enhanced Surround (VES) effect cannot be heard.

Note

When you output the signals which do not reproduce the Dolby Surround (Pro Logic) effect from the DIGITAL OUT OPTICAL or COAXIAL connector, set "DOWNMIX" to "NORMAL" in "AUDIO SETUP" in the setup display (page 52).

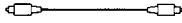
5.1 Channel Surround Hookups

With DVDs which contain DTS or Dolby Digital sound, you can enjoy the surround sound while producing the effect of being in a movie theater or a concert hall using a digital component with a built-in DTS or Dolby Digital decoder (not supplied). The player outputs the surround sound signals from the DIGITAL OUT OPTICAL and COAXIAL connectors.

Using a receiver (amplifier) having the OPTICAL or COAXIAL connector and 6 speakers, you can enjoy even greater real audio presence in the comfort of your own home.

Required cords

Optical digital connecting cord* (not supplied) (1)



Coaxial digital connecting cord* (not supplied) (1)



S video cord (not supplied) (1)



* Connect the component via the DIGITAL OUT OPTICAL or COAXIAL connector using an optical or coaxial digital connecting cord (not supplied). You do not need to connect both of these cords. See the figure on the next page.

Notes

- Do not connect the power cord to an AC outlet or press the POWER switch before completing all connections.
- Refer to the instructions supplied with the component to be connected.
- The cord connectors should be fully inserted into the jacks. Loose connection may cause hum and noise.

Setups for the player

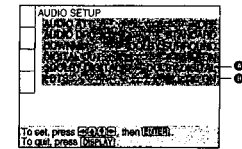
Some setup adjustments are necessary for the player depending on the components to be connected. Use the setup display to change the various settings. For details on using the setup display, see page 43.

- When you connect an audio component with a built-in Dolby Digital decoder ①

Set "DIGITAL OUT" in "AUDIO SETUP" to "ON" and then set "DOLBY DIGITAL" to "DOLBY DIGITAL" in the setup display. (page 52)

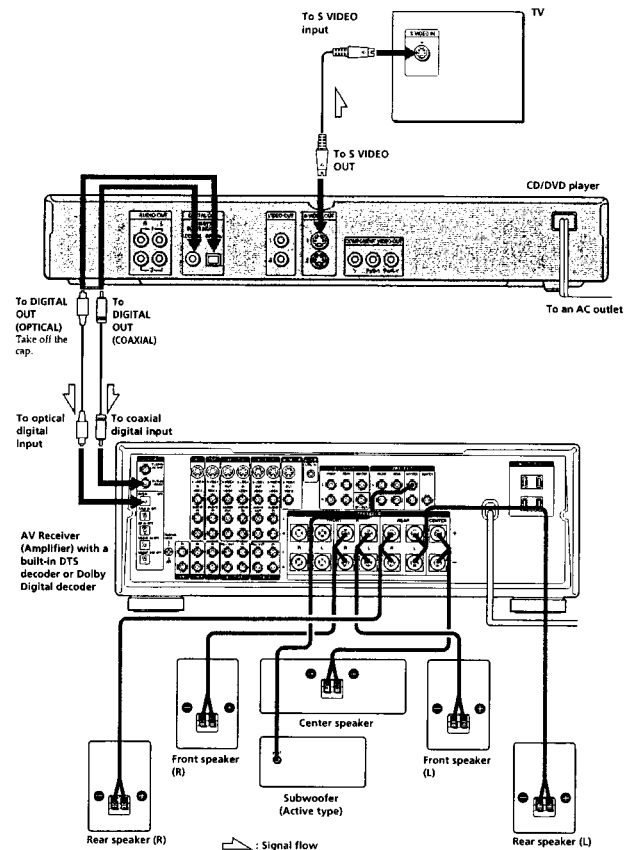
- When you connect an audio component with a built-in DTS decoder ②

Set "DIGITAL OUT" in "AUDIO SETUP" to "ON" and then set "DTS" to "ON" in the setup display. (page 52)



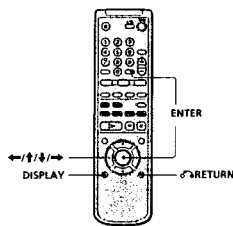
Notes

- When you do not connect an audio component with a built-in Dolby Digital decoder, do not set "DOLBY DIGITAL" to "DOLBY DIGITAL."
- When you do not connect an audio component with a built-in DTS decoder, do not set "DTS" to "ON."

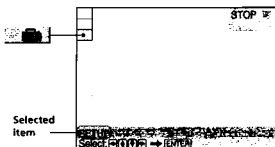


Selecting the Language for the On-Screen Display

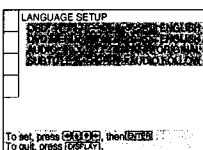
You can select the language for the setup display, the Control Menu display or the messages displayed on the screen. The default setting is "ENGLISH."



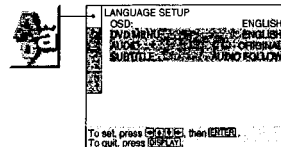
- When the player is in stop mode, press DISPLAY and select "SETUP" using \uparrow/\downarrow . The on-screen menu items are different depending on whether there is a disc in the player or not.



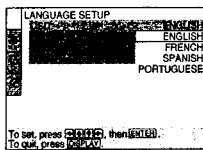
- Press ENTER. The setup display appears on the TV screen.



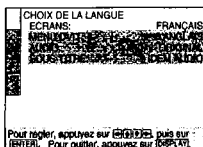
- Select "LANGUAGE SETUP" using \uparrow/\downarrow , and then press ENTER.



- Select "OSD" using \uparrow/\downarrow , then press \rightarrow or ENTER. The languages you can select are displayed.



- Select the desired language using \uparrow/\downarrow , then press ENTER.



- Press DISPLAY. The setup display disappears.
- Press DISPLAY repeatedly to turn off the on-screen menu.

- To return to the previous screen Press \leftarrow RETURN.

- To quit while making a selection Press DISPLAY.

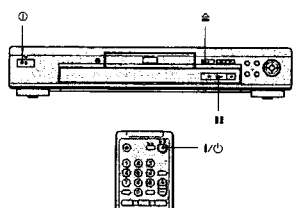
Note

The languages you can select are the ones displayed in step 4. For details, see page 46.

Operation Sound Effects (Sound Feedback)

The player beeps when the following operations are performed. The default setting of the Sound Feedback function is set to off.

Operation	Operation sound
Power is turned on	One beep
Power is turned off	Two beeps
\rightarrow is pressed	One beep
\uparrow/\downarrow is pressed	Two beeps
Playback is stopped	One long beep
Operation is not possible	Three beeps



- Press I/O on the player, then press I/O on the remote. The power indicator lights up in green. When there is a disc in the player, press II and remove the disc. Then press II again to close the disc tray.
- Press and hold II on the player for more than two seconds. You will hear one beep and the Sound Feedback function is turned on.

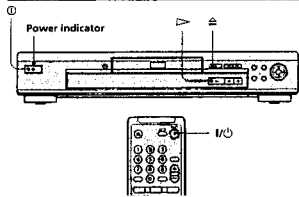
To turn off the Sound Feedback Function
When there is no disc in the player, press and hold II on the player for more than two seconds. You will hear two beeps and the Sound Feedback function is turned off.



Playing Discs

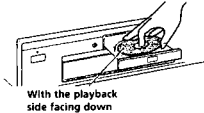
This chapter describes how to play a DVD/CD/VIDEO CD.


Playing Discs

Depending on the DVD or VIDEO CD, some operations may be different or restricted. Refer to the instructions supplied with your disc.









- Turn on your TV**
Turn on the TV and select the video input so that you can view the pictures from this player.
When using a receiver (amplifier)
Turn on the receiver (amplifier) and select the appropriate position so that you can listen to the sound from this player.
- Press  on the player**
The player enters standby mode and the power indicator lights up in red.
- Press  on the player and place a disc on the disc tray**
The player automatically turns on and the power indicator lights up in green.



- Press  on the player**
The disc tray closes and the player starts playback (continuous play). Adjust the volume on the TV or the receiver (amplifier).






After following Step 4
 ■ When playing a DVD
 A DVD menu or title menu may appear on the TV screen (see page 20).
 ■ When playing a VIDEO CD
 A menu may appear on the TV screen depending on the VIDEO CD. You can play the disc interactively, following the instructions on the menu. (PBC Playback, see page 21.)

To turn on the player
 Press  on the player. The player enters standby mode and the power indicator lights up in red. Then press  on the remote. The player turns on and the power indicator lights up in green. In standby mode, the player also turns on by pressing  on the player or by pressing  on the remote.

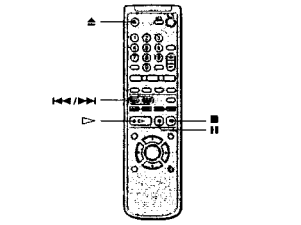
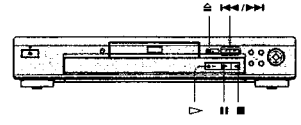
To turn off the player
 Press  on the remote. The player enters standby mode and the power indicator lights up in red. To disconnect the power of the player, press  on the player.








Notes on playing DTS sound tracks on a CD
 • Do not play DTS sound tracks without first connecting the player to an audio component having a built-in DTS decoder. The player outputs the DTS signal via the DIGITAL OUT OPTICAL and COAXIAL connectors even if "DTS" in "AUDIO SETUP" is set to "OFF" in the setup display, and may affect your ears or cause your speakers to be damaged.
 • Set the sound to "STEREO" when you play DTS sound tracks on a CD. (See "Changing the Sounds" on page 30.) If you set the sound to "L/R" or "2/R", no sound will come from the DIGITAL OUT OPTICAL and COAXIAL connectors.
 • If you play a CD with a DTS sound track, a loud noise may come out from the AUDIO OUT connectors, affecting your ears or causing the speakers to be damaged.

Notes on playing DTS sound tracks on a DVD
 The signals of the DTS sound tracks are output from the DIGITAL OUT OPTICAL and COAXIAL connectors only. No sound will output from the AUDIO OUT connectors.
 • If the player is connected to an audio component lacking a built-in DTS decoder, do not set "DTS" in "DIGITAL OUT" to "ON" in the setup display. Other wise, when you play the DTS sound tracks, a loud noise will come out from the speakers, affecting your ears or causing the speakers to be damaged.
 • When you set "DTS" in "AUDIO SETUP" to "OFF", no sound will come out from the DIGITAL OUT OPTICAL and COAXIAL connectors even if you play DTS sound tracks on DVDs.

Notes
 • If you leave the player or the remote in pause or stop mode for 15 minutes, the screen saver image appears automatically. To make the screen saver image go away, press . If you want to set the screen saver function to off, see page 47.
 • While playing a disc, do not turn on the player by pressing . Doing so may cancel the settings of the menu. When you turn off the player, press  first to stop playback and then press  on the remote. After the power indicator lights up in red and the player enters standby mode, press  on the player.

Additional operations

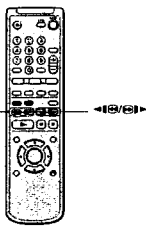


To	Operation
Stop	Press 
Pause	Press 
Resume play after pause	Press  or 
Go to the next chapter, track or scene in continuous play mode	Press 
Go back to the preceding chapter, track or scene in continuous play mode	Press 
Stop play and remove the disc	Press 






You can play discs in various modes such as Program Play using the on-screen menu (Control Menu). For Control Menu operations, see page 24.



Searching for a Particular Point on a Disc



You can locate a particular point on a disc at the desired speed by monitoring the picture.







Locating a point slowly by watching the screen (Slow-motion Play)




You can use this function only for DVDs or VIDEO CDs. When the player is in the pause mode, press  to locate a point in playback direction, or press  to locate a point in opposite direction. When you find the point you want, press  to return to the normal speed playback. Each time you press the  or  button during Slow-motion play, the playback speed changes. Two speeds are available. With each press, the display changes as follows:

Playback direction
 SLOW1  ↔ SLOW2 


Opposite direction (DVD only)
 SLOW1  ↔ SLOW2 

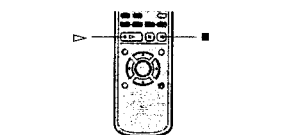
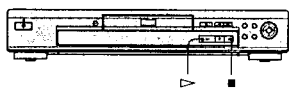
The playback speed of SLOW2 /SLOW2  is slower than SLOW1 /SLOW1 .


Playing a disc frame by frame



You can use this function only for DVDs or VIDEO CDs. When the player is in the pause mode, press  to go to the next frame. Press  to return to the preceding frame (DVD only). To return to normal playback, press .


Resuming Playback from the Point Where You Stopped the Disc (Resume Play)



The player remembers the point where you stopped the disc and when "RESUME" appears on the front panel display, you can resume playback from that point. As long as you do not open the disc tray, Resume Play will work even if the player enters standby mode by pressing  on the remote.



Notes
 • Resume Play may not be available on some DVDs.
 • Resume Play is not available in Shuffle or Program Play mode.
 • Depending on where you stopped the disc, the player may resume playback from a different point.
 • The point where you stopped playing is cleared when:
 - you open or close the disc tray
 - you turn the power off by pressing  on the player
 - you change the play mode
 - you start playback after selecting a title, chapter or track
 - you change the settings in the setup display





- While playing a disc, press  to stop playback.**
 "RESUME" appears on the front panel display and "Disc will restart from current point. To start from beginning, press  again." appears on the TV screen. If "RESUME" does not appear, Resume Play is not available.

- Press .**
 The player starts playback from the point where you stopped the disc in Step 1.






To play from the beginning of the disc
 When the playing time appears on the front panel display before you start playing, press  to reset the playing time, then press .




Note
 Depending on the DVD/VIDEO CD, you may not be able to do some of the operations described.




Locating a point quickly (Search)







While a disc is playing, keep pressing  to locate a point in playback direction at the FF1  speed or keep pressing  to locate a point in opposite direction at the FR1  speed. When you find the point you want, release the button to return to normal speed playback.

Locating a point quickly by playing a disc in fast forward or fast reverse (Scan)

While a disc is playing, press  to locate a point in playback direction, or press  to locate a point in opposite direction. When you find the point you want, press  to return to normal speed playback. Each time you press the  or  button during Speed scan, the playback speed changes. Two speeds are available. With each press, the display changes as follows:

Playback direction
 x2  (DVD/CD only) → FF1  → FF2 

Opposite direction
 x2  (DVD only) → FR1  → FR2 

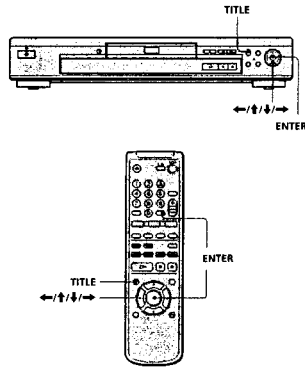
The playback speed of x2 /x2  is about twice the normal speed. The playback speed of FF2 /FR2  is faster than FF1 /FR1 .

Using the DVD's Menu

Some DVDs have a title menu or a DVD menu that is provided with DVDs only.

Using the title menu

A DVD is divided into long sections of a picture or a music feature called "titles." When you play a DVD which contains several titles, you can select the title you want using the title menu.



1 Press TITLE.

The title menu appears on the TV screen. The contents of the menu vary from disc to disc.

2 Press \leftarrow / \uparrow / \downarrow / \rightarrow to select the title you want to play.

Depending on the disc, you can use the number buttons to select the title.

3 Press ENTER.

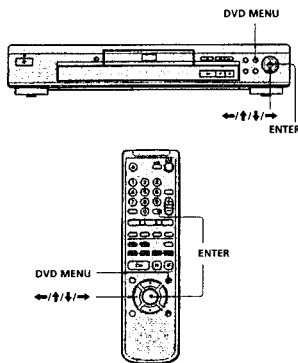
The player starts playing the selected title.

Notes

- On some DVDs, you may not be able to select the title.
- On some DVDs, a "title menu" may simply be called a "menu" or "title" in the instructions supplied with the disc. "Press ENTER" may also be expressed as "Press SELECT."

Using the DVD menu

Some DVDs allow you to select the disc contents using a menu. When you play these DVDs, you can select the language for the subtitles, the language for the sound, etc., using the DVD menu.



1 Press DVD MENU.


The DVD menu appears on the TV screen. The contents of the menu vary from disc to disc.

2 Press \leftarrow / \uparrow / \downarrow / \rightarrow to select the item you want to change.

Depending on the disc, you can use the number buttons to select the item.

3 To change other items, repeat Step 2.

4 Press ENTER.

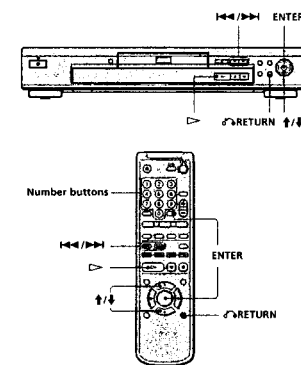
 If you want to select the language for the DVD menu, change the setting using "DVD MENU" in "LANGUAGE SETUP" in the setup display. For details, see page 46.

Note

Depending on the DVD, a "DVD menu" may simply be called a "menu" in the instructions supplied with the disc.

Playing VIDEO CDs with PBC Functions (PBC Playback)

When playing VIDEO CDs with PBC (Play Back Control) functions (Ver. 2.0 discs), you can enjoy simple interactive operations, search functions, and other such operations. PBC Playback allows you to play VIDEO CDs interactively by following the menu on the TV screen. On this player, you can use the number buttons, ENTER, \leftarrow , \rightarrow , \uparrow , \downarrow and RETURN during PBC Playback.



1 Start playing a VIDEO CD with PBC functions by following Steps 1 to 4 in "Playing Discs" on page 16.

2 Select the item number you want.


Press \uparrow / \downarrow to select the item number. You can also select the item number with the number buttons on the remote.

3 Press ENTER.

4 Follow the instructions in the menu for interactive operations. Refer to the instructions supplied with the disc, as the operating procedure may differ according to the VIDEO CD.

To go back to the menu

Press RETURN, \leftarrow , or \rightarrow .

 To cancel PBC playback of a VIDEO CD with PBC functions and play the disc in continuous play mode, there are two ways.

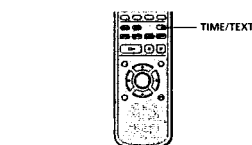
- Before you start playing, select the track you want using \leftarrow or \rightarrow , then press ENTER or \rightarrow .
- Before you start playing, select the track number using the number buttons on the remote, then press ENTER or \rightarrow . "Play without PBC" appears on the TV screen and the player starts in continuous play. You cannot play still pictures such as a menu.

Note

Depending on the VIDEO CD, "Press ENTER" in Step 3 may be expressed as "Press SELECT" in the instructions supplied with the disc.

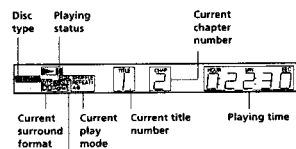
Using the Front Panel Display

You can check information about the disc, such as the total number of titles or tracks or remaining time, using the front panel display.



When playing back a DVD

Displaying information while playing the disc

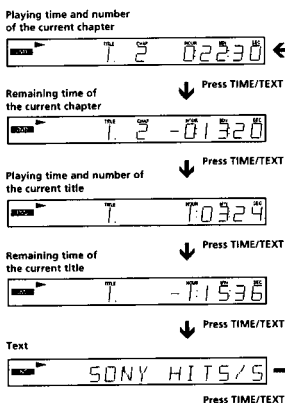


Lights up when you can change the angle

Checking the remaining time

Press TIME/TEXT

Each time you press TIME/TEXT while playing the disc, the display changes as shown in the following chart.

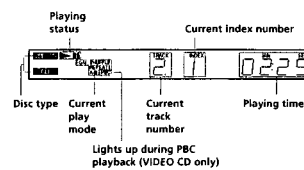


Notes

- On some DVDs, the chapter number or time may not appear or you may not be able to change the front panel display.
- While you are doing Shuffle Play or Program Play, the playing time of the title and the remaining time of the title are not displayed.

When playing back a CD/VIDEO CD

Displaying information while playing a disc



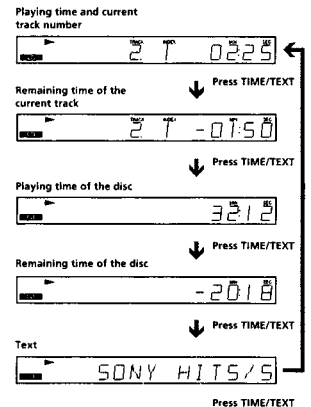
When playing VIDEO CDs with PBC functions

The current scene number is displayed instead of the current track number and the current index number. In this case, the front panel display does not change when you press TIME/TEXT if TEXT is recorded on the disc, the front panel display changes to TEXT display when you press TIME/TEXT (see page 29).

Checking the remaining time

Press TIME/TEXT

Each time you press TIME/TEXT while playing a disc, the display changes as shown in the following chart.



Note

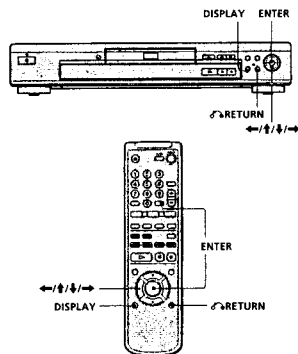
While you are doing Shuffle Play, or Program Play, the playing time of the disc and the remaining time of the disc are not displayed.

Using Various Functions with the Control Menu

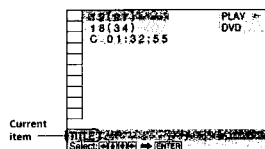
This chapter describes how to play discs in various modes and how to use the convenient features of the on-screen menu (Control Menu).

Using the Control Menu Display

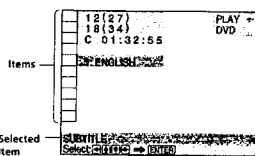
Using the Control Menu display, you can select the start point, play in any order you like, change the angles, make Digital Cinema Sound settings, and other such operations. The possible operations are different depending on the kind of disc. For details on each Control Menu display item, see pages 27 to 42.



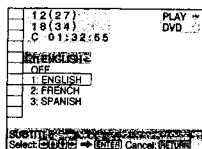
1 Press DISPLAY to show the Control Menu display on the TV screen.



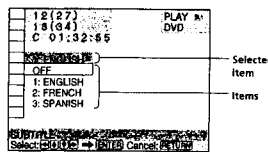
2 Select the item you want using ↑/↓.



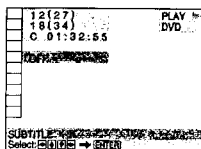
3 Press ENTER.



4 Select the item you want using ↑/↓.

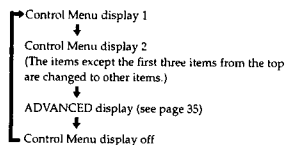


5 Press ENTER.



To cancel while making a selection Press RETURN.

To display other items Each time you press DISPLAY, the Control Menu display changes as follows:



The Control Menu display items are different depending on the disc.

You can select some items directly Some items can be selected by pressing the corresponding button on the remote. In this case, only the item you selected is displayed. For instructions on using the remote, see the pages of each relevant item.

Note Some Control Menu display items require operations other than selecting the setting. For details on these items, see the relevant pages.

Control Menu Item List

- TITLE (DVD only) (page 27)/ SCENE (VIDEO CD during PBC playback only) (page 27)/ TRACK (VIDEO CD only) (page 27)**
- CHAPTER (DVD only) (page 27)/ INDEX (VIDEO CD only) (page 27)**
- TRACK (CD only) (page 27)**
- INDEX (CD only) (page 27)**

You can search for a point on the DVD by selecting the title, chapter, track, index or scene.

TIME/TEXT (pages 28, 29)

You can check the playing time and remaining time of the current title, chapter or track and the total playing time or remaining time of the disc.

You can also search by inputting the time code.

You can check the DVD TEXT or CD TEXT of the disc on the TV screen and the front panel display.

AUDIO (page 30)

If the DVD is recorded with multilingual tracks, you can select the language you want while playing the DVD. If the DVD is recorded in multiple audio formats (PCM, Dolby Digital or DTS), you can select the audio format you want while playing the DVD.

With multiplex CDs or VIDEO CDs, you can select the sound from the right or left channel and listen to the sound of the selected channel through both the right and left speakers.

SUBTITLE (DVD only) (page 32)

With DVDs on which multilingual subtitles are recorded, you can change the subtitle language whenever you want while playing the DVD, and turn it on or off whenever you want.

ANGLE (DVD only) (page 32)

With DVDs on which various angles (multi-angles) for a scene are recorded, you can change the angles.

VES (DVD only) (page 33)

Select a mode to enjoy multichannel surround sound such as Dolby Digital.

Even if you connect only TV or front speakers, Virtual Enhanced Surround (VES) lets you enjoy 3D sound by using 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers.

ADVANCED (DVD only) (page 35)

You can check the play information about the bit rate or the position where the disc is played (layer).

CUSTOM PARENTAL CONTROL (page 36)

Using the registered password, you can set playback restrictions for desired disc.

The same password is used for both Parental Control (page 48) and Custom Parental Control.

SETUP (page 43)

Using the setup display, you can do the initial setup, adjust the picture and sound and the various outputs. You can also set a language for the subtitles and the setup display, limit playback by children, and so on. For details about the setup display, see page 45.

PROGRAM (page 37)

You can play the contents of the disc in the order you want by arranging the order of the titles, chapters or tracks on the disc to create your own program.

SHUFFLE (page 39)

You can have the player "shuffle" titles, chapters or tracks and play them in a random order. Subsequent "shuffling" may produce a different playing order.

REPEAT (page 40)

You can play all the titles/tracks on a disc or a single title/chapter/track repeatedly.

A-B REPEAT (page 41)

You can play a specific portion of a title, chapter, or track repeatedly.

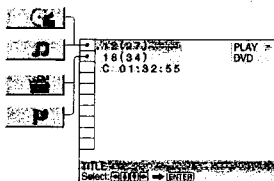
Searching for a Title/Chapter/Track/Index/Scene



You can search by selecting the title, chapter, track, index or scene.

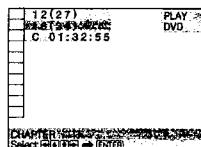
Select "TITLE," "CHAPTER," "TRACK," "INDEX" or "SCENE" after pressing DISPLAY. When you play back a DVD, "TITLE" and "CHAPTER" are displayed.

When you play back a VIDEO CD/CD, "TRACK" and "INDEX" are displayed. When you play back a VIDEO CD with PBC functions, "SCENE" is displayed.



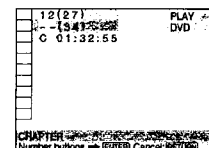
1 Select "TITLE," "CHAPTER," "TRACK," "INDEX" or "SCENE" using ↑/↓.

"** (***)" is highlighted. (** refers to a number) The number in parentheses indicates the total number of titles, chapters, tracks, indexes or scenes.



2 Press → or ENTER.

"** (***)" changes to "-- (***)".



3 Select the number of the title, chapter, track, index or scene you want to search for using the number buttons, then press ENTER.

The player starts searching. To cancel the number, press CLEAR before pressing ENTER.

To cancel while making a selection Press RETURN.

Notes

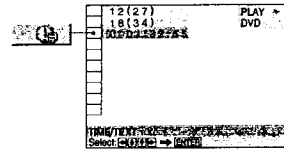
- The title, chapter or track number displayed is the same number recorded on the disc.
- The index numbers are not displayed during PBC playback of VIDEO CDs.

Checking the Playing Time and Remaining Time



You can check the playing time and remaining time of the current title, chapter or track and the total playing time or remaining time of the disc.

Press DISPLAY. Then press TIME/TEXT on the remote to change the time information. You can also check the DVD TEXT or CD TEXT. See page 29.



When playing a DVD

TIME/TEXT

- C **: **: **: **: Playing time of the current chapter
- C - **: **: **: **: Remaining time of the current chapter
- T **: **: **: **: Playing time of the current title
- T - **: **: **: **: Remaining time of the current title

When playing a VIDEO CD (during PBC playback)

TIME/TEXT

- **: **: **: **: Playing time of the current scene

When playing a VIDEO CD (in continuous play) or CD

TIME/TEXT

- T **: **: **: **: Playing time of the current track
- T - **: **: **: **: Remaining time of the current track
- D **: **: **: **: Playing time of the current disc
- D - **: **: **: **: Remaining time of the current disc

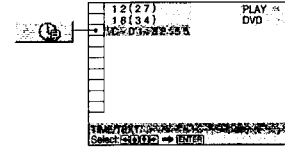
You can select "TIME/TEXT" directly. Press TIME/TEXT on the remote. Each time you press the button, the time information changes.

Selecting a Starting Point Using the Time Code

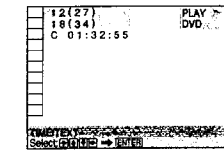


You can search by inputting the time code.

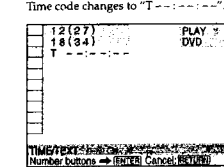
Select "TIME/TEXT" after pressing DISPLAY. The time code corresponds to the approximate actual playing time. For example, to search for a scene 2 hours 10 minutes 20 seconds past the beginning, input 2:10:20.



- 1 Select "C **: **: **: **: " (playing time of the current chapter) when playing a DVD.



- 2 Press → or ENTER. Time code changes to "T - : : : : :".

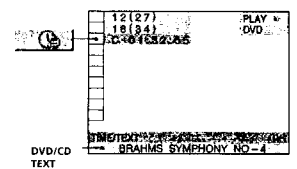


Viewing the Disc Information



You can check the DVD TEXT or CD TEXT of the disc on the TV screen and the front panel display. DVD TEXT and CD TEXT are information recorded on the disc which you cannot change.

Press DISPLAY. Then press TIME/TEXT on the remote until DVD/CD TEXT is displayed. The information is displayed at the bottom of the display.



You can select "TIME/TEXT" directly. Press TIME/TEXT on the remote. To display DVD/CD TEXT, press TIME/TEXT until DVD/CD TEXT is displayed.

You can view the entire DVD/CD TEXT recorded on the disc. DVD/CD TEXT is scrolled on the front panel display.

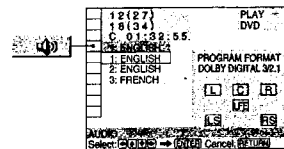
Notes

- DVD TEXT is displayed only in English.
- "NO TEXT" appears when the DVD/CD TEXT is not recorded on the disc.
- This player can only display the first level of DVD/CD TEXT information.

Changing the Sounds

If the DVD is recorded with multilingual tracks, you can select the language you want while playing the DVD. If the DVD is recorded in multiple audio formats (PCM, Dolby Digital or DTS), you can select the audio format you want while playing the DVD. With multiplex CDs or VIDEO CDs, you can select the sound from the right or left channel and listen to the sound of the selected channel through both the right and left speakers. In this case, the sound loses its stereo effect. For example, with a disc containing a song, the right channel may output the vocals and the left channel may output the instrumental. If you only want to hear the instrumental, you can select the left channel and hear it from both speakers.

Select "AUDIO" after pressing DISPLAY.



AUDIO

When playing a DVD

Select the language. The languages you can select are different depending on the DVD. When 4 digits are displayed, they represent the language code. Select the language code from the list on page 62. When the same language is displayed two or more times, the DVD is recorded in multiple audio formats. The current audio format is shown on the "PROGRAM FORMAT" display.

When playing a VIDEO CD or a CD

The default setting is underlined.

- STEREO: The standard stereo sound
- 1/L: The sound of the left channel (monaural)
- 2/R: The sound of the right channel (monaural)

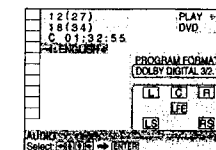
You can select "AUDIO" directly. Press AUDIO on the remote. Each time you press the button, the item changes.

Notes

- Depending on the DVD, you may not be able to change the languages even if multilingual tracks are recorded on the DVD.
- While playing the CD/VIDEO CD, standard stereo playback will be resumed when:
 - you open or close the disc tray
 - the player enters standby mode by pressing I/O on the remote
 - you turn the power off by pressing ⏻ on the player
- While playing the DVD, the sound may be changed when:
 - you open or close the disc tray
 - you change the title

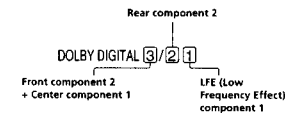
Displaying the audio information of the disc

When you select "AUDIO," the channels being played are displayed on the screen. In Dolby Digital format, multiple signals ranging from monaural to 5.1 channel signals can be recorded on a DVD. Depending on the DVD, the number of the recorded channels may be different.



* "PCM," "DTS" or "DOLBY DIGITAL" is displayed. In case of "DOLBY DIGITAL," the channels in the playing track are displayed by numbers as follows.

The case of Dolby Digital 5.1 ch:

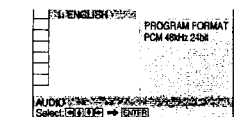


** The letters in the program format display mean the following:

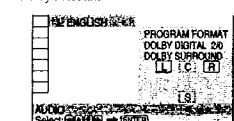
- L: Front (left)
- R: Front (right)
- C: Center (monaural)
- LS: Rear (left)
- RS: Rear (right)
- S: Rear (monaural) - the rear component of the Dolby Surround processed stereo signal and the Dolby Digital signal.
- LFE: - LFE (Low Frequency Effect)

The display examples are as follows:

• PCM (stereo)

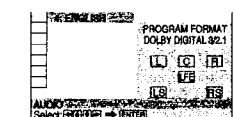


• Dolby Surround



• Dolby Digital 5.1 ch

"LFE" appears only when a disc contains an LFE signal component. "LFE" remains on the "PROGRAM FORMAT" display even if the LFE signal component is not being output.



• DTS

"LFE" is always enclosed in a solid line regardless of the LFE signal component output.



Notes

When the signal does not contain rear signal components such as LS, RS or S, the Virtual Enhanced Surround (VES) effect cannot be heard (page 33).

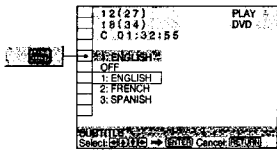
Displaying the Subtitles

DVD

With DVDs on which subtitles are recorded, you can turn the subtitles on and off whenever you want while playing the DVD.

With DVDs on which multilingual subtitles are recorded, you can change the subtitle language whenever you want while playing the DVD, and turn it on or off whenever you want. For example, you can select the language you want to practice and turn the subtitles on for better understanding.

Select "SUBTITLE" after pressing DISPLAY.



SUBTITLE

Select the language. The languages you can select are different depending on the DVD. When 4 digits are displayed, they indicate the language code. Select the language code from the list on page 62.

You can select "SUBTITLE" directly. Press SUBTITLE on the remote. Each time you press the button, the item changes.

Notes

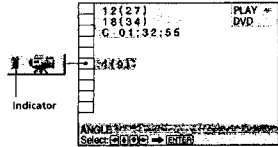
- When playing a DVD on which no subtitles are recorded, no subtitles appear.
- Depending on the DVD, you may not be able to turn the subtitles on even if they are recorded on the DVD.
- Depending on the DVD, you may not be able to turn the subtitles off.
- The type and number of languages for subtitles vary from disc to disc.
- Depending on the DVD, you may not be able to change the subtitles even if multilingual subtitles are recorded on it.
- While playing the DVD, the subtitle may change when:
 - you open or close the disc tray
 - you change the title

Changing the Angles

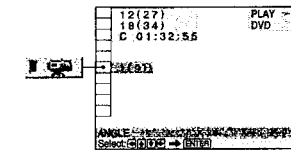
DVD

With DVDs on which various angles (multi-angles) for a scene are recorded, you can change the angles. For example, while playing a scene of a train in motion, you can display the view from either the front of the train, the left window of the train or from the right window without having the train's movement interrupted.

Select "ANGLE" after pressing DISPLAY. When the angles can be changed, the "ANGLE" indicator lights up in green.

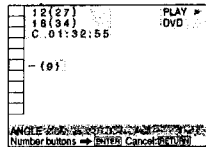


1 Select "ANGLE."

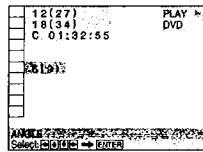


2 Press →.

The number of the angle changes to "0". The number in parentheses indicates the total number of angles.



- Select the number of the angles using the number buttons or ↑/↓, then press ENTER. The angle is changed to the selected angle.



You can select the "ANGLE" directly. Press ANGLE on the remote. Each time you press the button, the angle changes.

Notes

- The number of angles varies from disc to disc or from scene to scene. The number of angles that can be changed on a scene is equal to the number of angles recorded for that scene.
- Depending on the DVD, you may not be able to change the angles even if multi-angles are recorded on the DVD.

Digital Cinema Sound Settings

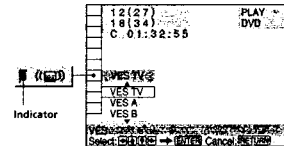
DVD

Select a mode to enjoy multichannel surround sound such as Dolby Digital.

Even if you connect only a TV or front speakers, Virtual Enhanced Surround (VES) lets you enjoy 3D sound by using 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, left, R, right) without using actual rear speakers.

When you select a surround mode, the player does not output the Dolby Digital signals from the DIGITAL OUT OPTICAL or COAXIAL connector if you set "DOLBY DIGITAL" in "AUDIO SETUP" to "D-PCM."

Select "VES" after pressing DISPLAY. When you select any item except "OFF," the "VES" indicator lights up in green.



VES

Select the desired item. For details on each item, see "Effects of each item."

The default setting is underlined.

- OFF
- VES TV
- VES A
- VES B
- VIRTUAL SEMI MULTI DIMENSION

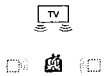
Digital Cinema Sound Settings

Effects of each item

OFF
Outputs 2-channel signals for stereo sound. 5-channel signals for Dolby Digital sound of a DVD are mixed down to 2-channels.

VES (Virtual Enhanced Surround) TV

Uses 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers. This mode is effective when the distance between the front L and R speakers is short, such as built-in TV speakers.



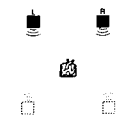
VES (Virtual Enhanced Surround) A

Uses 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers. The virtual speakers are reproduced as shown in the illustration below.



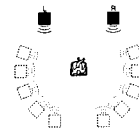
VES (Virtual Enhanced Surround) B

Uses 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers. The virtual speakers are reproduced as shown in the illustration below.



VIRTUAL SEMI MULTI DIMENSION

Uses 3D sound imaging to create virtual rear speakers from the sound of the front speakers (L, R) without using actual rear speakers. This mode creates 5 sets of virtual speakers surrounding the listener at a 30° angle of elevation.



You can select "VES" directly. Press VES on the player. Each time you press the button, the item changes.

Notes

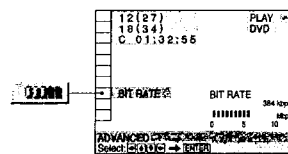
- When you select an item, the sound cuts off for a moment.
- When the playing signal does not contain the surround component, the effects may be difficult to hear even if you select "VES TV," "VES A," "VES B" or "VIRTUAL SEMI MULTI DIMENSION."
- Set the front speakers to form an equilateral triangle with the listening position at the top, or the effects may be difficult to hear even if you select "VES A," "VES B" or "VIRTUAL SEMI MULTI DIMENSION."
- When you select "VES TV," "VES A," "VES B" or "VIRTUAL SEMI MULTI DIMENSION," set the surround settings of the connected units, such as the amplifier, to OFF.

Checking the Play Information

You can check information such as the bit rate or the disc layer that is being played.

While playing a disc, the approximate bit rate of the playback picture is always displayed as Mbps (Mega bit per second) and the audio as kbps (kilo bit per second).

Select "ADVANCED" after pressing DISPLAY.



ADVANCED

The default setting is underlined.

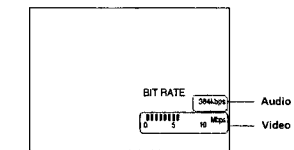
When playing a DVD

- BIT RATE: displays the bit rate.
- LAYER: displays the layer and the point picked up.
- OFF: turns off ADVANCED display.

Displays of each item

By pressing DISPLAY repeatedly, you can display either "BIT RATE" or "LAYER," whichever was selected in "ADVANCED."

BIT RATE



Bit rate refers to the amount of video/audio data per second in a disc. The higher the bit rate, the larger the amount of data. When the bit rate level is high, there is a large amount of data. However, this does not always mean that you can get higher quality pictures or sounds.

LAYER



Appears when the DVD has dual layers

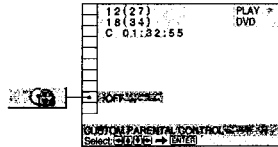
Indicates the approximate point where the disc is playing. If it is a dual-layer DVD, the player indicates which layer is being read ("Layer 0" or "Layer 1"). For details on the layers, see page 60 (DVD).

Locking Discs (Custom Parental Control)

Using the registered password, you can set playback restrictions for desired disc. You can set the Custom Parental Control up to 50 discs. When you set to the fifty-first disc, the first disc setting is canceled.

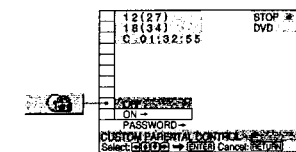
The same password is used for both Parental Control (page 48) and Custom Parental Control.

Select "CUSTOM PARENTAL CONTROL" after pressing DISPLAY.



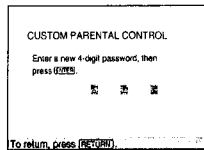
Setting the Custom Parental Control to a disc

- 1 Insert the disc you want to lock. If a disc is playing, press **STOP** to stop playback.
- 2 Select "CUSTOM PARENTAL CONTROL" using **↑/↓**, then press ENTER.

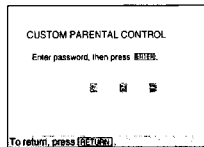


- 3 Select "ON" using **↑/↓**, then press ENTER.

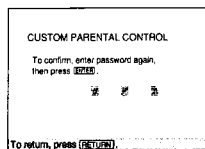
If you have not entered a password
The display for entering a password appears.



When you have already registered a password
The display for confirming the password appears. Skip Step 4.



- 4 Enter a 4-digit password using the number buttons, then press ENTER. The digits change to asterisks (*), and the display for confirming the password appears.



- 5 Enter the same 4-digit password using the number buttons, then press ENTER. "Custom parental control is set." appears and then the screen returns to the Control Menu display.

To return to the normal screen
Press **RETURN**.

To turn off the Custom Parental Control function
1 Select "CUSTOM PARENTAL CONTROL" using **↑/↓**, then press ENTER.

- 2 Select "OFF" using **↑/↓**, then press ENTER.
- 3 Enter your 4-digit password using the number buttons, then press ENTER.

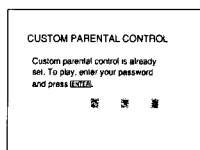
To change the password

- 1 Select "CUSTOM PARENTAL CONTROL" using **↑/↓**, then press ENTER.
- 2 Select "PASSWORD" using **↑/↓**, then press ENTER.
- 3 Enter your 4-digit password using the number buttons, then press ENTER.

- 4 Enter a new 4-digit password using the number buttons, then press ENTER.
- 5 To confirm your password, re-enter it using the number buttons, then press ENTER.

Playing the disc on which the Custom Parental Control is set

- 1 Insert the disc. The CUSTOM PARENTAL CONTROL display appears.



- 2 Enter your 4-digit password using the number buttons, then press ENTER. The player starts playback.

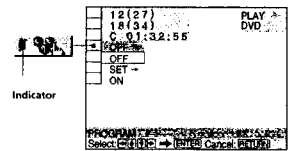
If you forget your password
Enter the 6-digit number "199703" in Step 2 to clear the current password. To enter a new password, follow the "Setting the Custom Parental Control to a disc" procedure.

Note
Unless you enter the password, the player cannot play the disc in which the Custom Parental Control is set. When you do not know the password, press **STOP** and remove the disc.

Creating Your Own Program (Program Play)

You can play the contents of the disc in the order you want by arranging the order of the titles, chapters or tracks on the disc and create your own program. One program can be stored in the player and contain up to 99 titles, chapters and tracks.

Select "PROGRAM" after pressing DISPLAY. When you select "ON," the "PROGRAM" indicator lights up in green.



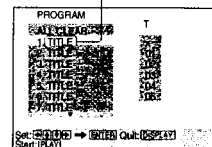
PROGRAM

- The default setting is underlined.
- QFE: plays normally.
- SET: allows you to create your own program.
- ON: plays Program Play.

Creating the program

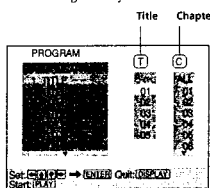
- 1 Select "SET" in "PROGRAM." The programming display appears.

"TRACK" is displayed when you play a VIDEO CD or a CD.

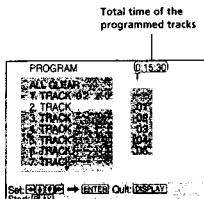


Creating Your Own Program (Program Play)

- 2 Press **→**. "01" is highlighted. It is ready to set the first title or track for Program Play.

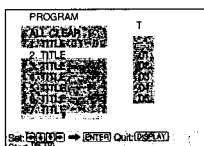
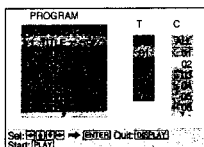


When playing a VIDEO CD or CD
Select the track you want to program.



- 3 Select the title, chapter or track you want to program using **↑/↓**, then press ENTER. For example, select title or track 2. (You can also use the number buttons and ENTER button to make a selection. In this case, the selected number is displayed on the screen.)

When playing a DVD
When both titles and chapters are recorded on the disc, select the title, then the chapter.



- 4 To program other titles, chapters or tracks, repeat Step 3. The programmed titles, chapters or tracks are displayed in the selected order.

- 5 Press **→** to start Program Play.

To stop Program Play
Press CLEAR on the remote.

To cancel programming
Press PROGRAM on the remote.

- 1 In Step 2, select the program number of the title, chapter or track you want to change using **↑/↓**.
- 2 Follow Step 3 for new programming.

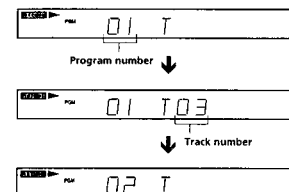
To cancel the programmed order
To cancel all the titles, chapters or tracks in the programmed order, select "ALL CLEAR" in Step 2. To cancel the selected program, select the program using **↑/↓** in Step 2 then press CLEAR, or select "→" in Step 3 then press ENTER.

The program remains even after Program Play ends
When you press **→**, you can play the same program again.

You can do Repeat Play or Shuffle Play of the programmed titles, chapters or tracks
During Program Play, press REPEAT or SHUFFLE on the remote or set "REPEAT" or "SHUFFLE" to "ON" in the Control Menu display.

You can select "PROGRAM" directly
Press PROGRAM on the remote.

You can select discs, titles, chapters and tracks for the program by looking at the front panel display
You can program by looking at the front panel display instead of using the programming display on the TV screen. When you select Track 3 in a VIDEO CD for Program 1, the front panel display will appear as follows:



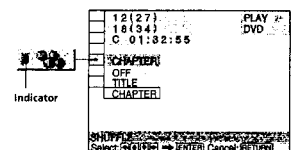
Notes

- The number of titles, chapters or tracks displayed are the same number of titles, chapters or tracks recorded on a disc.
- The program is canceled when:
 - you open or close the disc tray
 - the player enters standby mode by pressing **L/⏻** on the remote.
 - you turn the power off by pressing **⏻** on the player.
- You may not be able to perform Program Play depending on the DVD.
- If you are using the PBC playback function, you must first stop the disc before you can set a program.

Playing in Random Order (Shuffle Play)

You can have the player "shuffle" titles, chapters or tracks and play them in a random order. The playing order may differ from the previous "shuffling."

Select "SHUFFLE" after pressing DISPLAY. When you select a shuffle mode other than "OFF," the "SHUFFLE" indicator lights up in green.



SHUFFLE

Selects the Shuffle Play setting. The default settings are underlined.

When playing a DVD and when Program Play is set to OFF

- QFE: does not play a disc in random order.
- TITLE: has the player "shuffle" titles and play them in a random order.
- CHAPTER: has the player "shuffle" chapters and play them in a random order.

When playing a VIDEO CD, CD or DVD (when Program Play is set to ON)

- QFE: does not play a disc in random order.
- ON: has the player "shuffle" titles or tracks and play them in a random order.

When playing a VIDEO CD or CD (when Program Play is set to OFF)

- QFE: does not play a disc in random order.
- TRACK: has the player "shuffle" tracks and play in a random order.

To stop Shuffle Play
Press CLEAR on the remote.

Playing in Random Order (Shuffle Play)

You can set Shuffle Play while the disc is stopped. After selecting the "SHUFFLE" option, press \triangleright . The player starts Shuffle Play.

You can select "SHUFFLE" directly. Press SHUFFLE on the remote. Each time you press the button, the item changes.

Notes

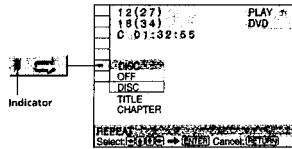
- Shuffle Play is canceled when:
 - you open or close the disc tray
 - the player enters standby mode by pressing I/O on the remote
 - you turn the power off by pressing \odot on the player
- You may not be able to perform Shuffle Play depending on the DVD.
- Up to 200 chapters in a disc can be played in random order when "CHAPTER" is selected.

Playing Repeatedly (Repeat Play)

You can play all of the titles or tracks on a disc or a single title, chapter or track repeatedly.

In Shuffle or Program Play mode, the player repeats the titles or tracks in the shuffled or programmed order. You cannot perform Repeat Play during PBC playback of VIDEO CDs (page 21).

Select "REPEAT" after pressing DISPLAY. When you select a repeat mode other than "OFF," the "REPEAT" indicator lights up in green.



REPEAT
Selects the Repeat Play setting. The default settings are underlined.

When playing a DVD and when Program Play and Shuffle Play are set to OFF

- OFF: does not play repeatedly.
- DISC: repeats all of the titles.
- TITLE: repeats the current title on a disc.
- CHAPTER: repeats the current chapter.

When playing a VIDEO CD/CD and when Program Play and Shuffle Play are set to OFF

- OFF: does not play repeatedly.
- DISC: repeats all of the tracks on a disc.
- TRACK: repeats the current track.

When Program Play or Shuffle Play is set to ON

- OFF: does not play repeatedly.
- ON: repeats Program Play or Shuffle Play.

To stop Repeat Play
Press CLEAR on the remote.

You can set Repeat Play while the disc is stopped. After selecting the "REPEAT" option, press \triangleright . The player starts Repeat Play.

You can select "REPEAT" directly. Press REPEAT on the remote. Each time you press the button, the item changes.

Notes

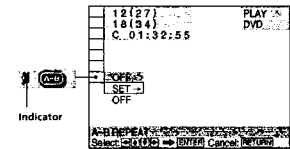
- Repeat play is canceled when:
 - you open or close the disc tray
 - the player enters standby mode by pressing I/O on the remote
 - you turn the power off by pressing \odot on the player
- You may not be able to perform Repeat Play depending on the DVD.

Repeating a Specific Portion (A-B Repeat)

You can play a specific portion of a title, chapter or track repeatedly. This function is useful when you want to do such things as memorize lyrics.

During PBC Playback of VIDEO CDs (page 21), this function is available only while playing moving pictures.

Select "A-B REPEAT" after pressing DISPLAY. During A-B Repeat Play, the "A-B REPEAT" indicator lights up in green.



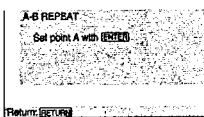
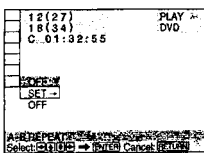
A-B REPEAT
The default setting is underlined.

- SET: sets the A and B points.
- OFF: does not play a specific portion of a title/chapter/track repeatedly.

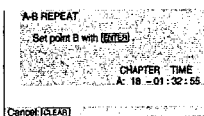
Repeating a Specific Portion (A-B Repeat)

Setting a portion for A-B repeat

1 Select "SET" in "A-B REPEAT."
The A-B REPEAT setting display appears.

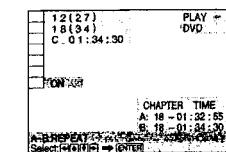


2 During playback, when you find the starting point (point A) of the portion to be played repeatedly, press ENTER.
The starting point (point A) is set.



3 When you reach the ending point (point B), press ENTER again.
The set points are displayed and the player starts repeating this specific portion.

"A-B" appears on the front panel display during A-B repeat play.



To stop A-B Repeat Play
Press CLEAR on the remote.

You can select "A-B REPEAT" directly. Press A-B on the remote.

Notes

- You can set A-B Repeat for only one specific portion.
- A-B Repeat is canceled when:
 - you open or close the disc tray
 - the player enters standby mode by pressing I/O on the remote
 - you turn the power off by pressing \odot on the player
- When you set A-B Repeat, the settings for Shuffle Play and Program Play are canceled.
- You may not be able to set A-B Repeat for some DVD or VIDEO CD scenes.

Settings and Adjustments

This chapter describes how to set and adjust the player using the on-screen setup menu. Most settings and adjustments are required to be set when you first use the player. This chapter also describes how to set the remote for controlling the TV or the AV receiver (amplifier).

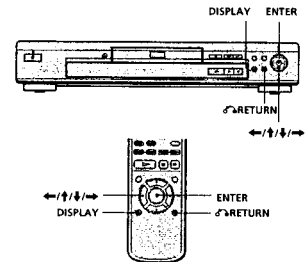
Using the Setup Display

DVD VIDEO CD

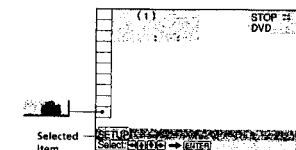
Using the setup display, you can do the initial setup, adjust the picture and sound and set the various outputs. You can also set a language for the subtitles and the setup display, limit playback by children, and so on. For details on each setup display item, see pages 46 to 53.

Note

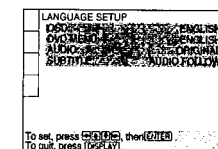
You can display the setup display only when the player is in stop mode.



1 Press DISPLAY and select "SETUP" using \uparrow/\downarrow .

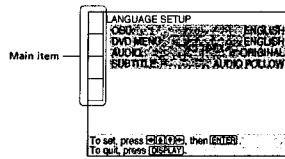


2 Press ENTER.
The setup display appears.



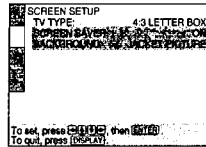
Using the Setup Display

3 Select the main item you want using \uparrow/\downarrow .

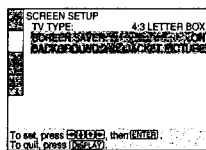


4 Press ENTER.

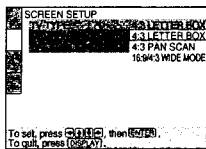
The selected main item is highlighted.



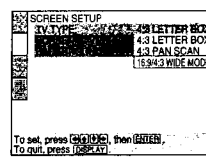
5 Select the item you want using \uparrow/\downarrow .



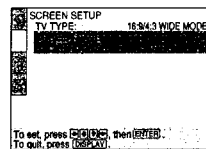
6 Press ENTER.



7 Select the setting you want using \leftarrow/\rightarrow .



8 Press ENTER.



9 Press DISPLAY.

The setup display disappears.

10 Press DISPLAY repeatedly to turn off the on-screen menu.

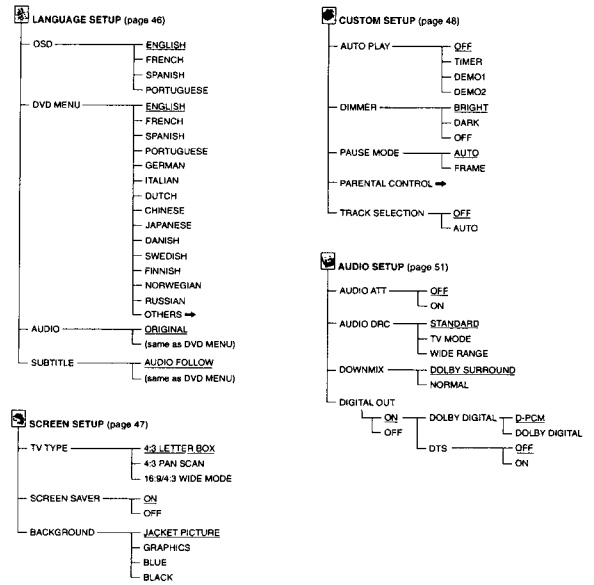
To return to the previous screen
Press $\left[\text{RETURN} \right]$.

To quit while making a selection
Press DISPLAY.

Note
Some setup display items require operations other than selecting the setting. For details on these items, see the relevant pages.

Setup Display Item List

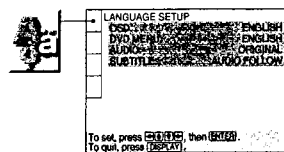
The default settings are underlined.



Setting the Display Language or Sound Track (LANGUAGE SETUP) DVD VIDEO CD

"LANGUAGE SETUP" allows you to set various languages for the on-screen display or sound track. The default settings are underlined.

Select "LANGUAGE SETUP" in the setup display.



Notes

- When you select a language that is not recorded on the DVD, one of the recorded languages is automatically selected for the "DVD MENU," "AUDIO" and "SUBTITLE" settings.
- Even when you select a language in "DVD MENU," "AUDIO" or "SUBTITLE" the player may not start playing with the selected language depending on the DVD.

OSD (On-Screen Display)

Selects the language for the on-screen display.

- ENGLISH
- FRENCH
- SPANISH
- PORTUGUESE

DVD MENU

Selects the language for the DVD menu.

- ENGLISH
- FRENCH
- SPANISH
- PORTUGUESE
- GERMAN
- ITALIAN
- DUTCH
- CHINESE
- JAPANESE
- DANISH
- SWEDISH
- FINNISH
- NORWEGIAN
- RUSSIAN
- OTHERS →

When you select "OTHERS →," select and enter the language code from the list using the number buttons (page 62). After you have made a selection, the language code (4 digits) is displayed.

AUDIO

Selects the language for the sound track.

- ORIGINAL: the language given priority in the disc
- ENGLISH
- FRENCH
- SPANISH
- PORTUGUESE
- GERMAN
- ITALIAN
- DUTCH
- CHINESE
- JAPANESE
- DANISH
- SWEDISH
- FINNISH
- NORWEGIAN
- RUSSIAN
- OTHERS →

When you select "OTHERS →," select and enter the language code from the list using the number buttons (page 62). After you have made a selection, the language code (4 digits) is displayed.

SUBTITLE

Selects the language for the subtitles.

- AUDIO FOLLOW
- ENGLISH
- FRENCH
- SPANISH
- PORTUGUESE
- GERMAN
- ITALIAN
- DUTCH
- CHINESE
- JAPANESE
- DANISH
- SWEDISH
- FINNISH
- NORWEGIAN
- RUSSIAN
- OTHERS →

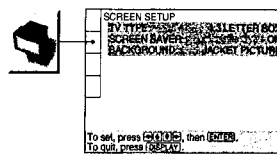
When you select "OTHERS →," select and enter the language code from the list using the number buttons (page 62). After you have made a selection, the language code (4 digits) is displayed.

When you select "AUDIO FOLLOW," the language for the subtitles changes according to the language for the setting you selected in "AUDIO."

Settings for the Display (SCREEN SETUP) DVD VIDEO CD

"SCREEN SETUP" allows you to set the display according to the playback conditions. The default settings are underlined.

Select "SCREEN SETUP" in the setup display.



TV TYPE

Selects the aspect ratio of the TV to be connected.

- 4:3 LETTER BOX: select this when you connect a normal TV to the player. Displays a wide picture with bands on the upper and lower portions of the screen.
- 4:3 PAN SCAN: select this when you connect a normal TV to the player. Displays the wide picture on the whole screen automatically and cuts off the portions that do not fit.
- 16:9/4:3 WIDE MODE: select this when you connect a wide-screen TV to the player or when you connect a TV with WIDE MODE function to the player (displays a wide picture with bands displayed on the upper and lower portions of the screen).

4:3 LETTER BOX



4:3 PAN SCAN



16:9



4:3 WIDE MODE



Note

Depending on the DVD, "4:3 LETTER BOX" may be selected automatically instead of "4:3 PAN SCAN" and vice versa.

SCREEN SAVER

Turns on and off the screen saver. If you turn on the screen saver, the screen saver image appears when you leave the player or the remote in pause or stop mode for 15 minutes or when you play back a CD for more than 15 minutes. The screen saver will help prevent your display device from becoming damaged.

- ON: turns on the screen saver.
- OFF: turns off the screen saver.

BACKGROUND

Selects the background color or picture of the TV screen in stop mode or while playing a CD.

- JACKET PICTURE: The jacket picture appears in the background, but only when the jacket picture is already recorded on the disc.
- GRAPHICS: A preset picture stored in the player appears in the background.
- BLUE: The background color is blue.
- BLACK: The background color is black.

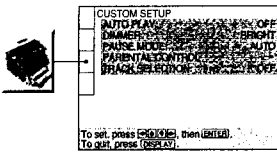
Note

If a disc which does not contain the jacket picture is played while "BACKGROUND" is set to "JACKET PICTURE," the picture stored in the player will automatically appear in the background.

Custom Settings (CUSTOM SETUP)

"CUSTOM SETUP" allows you to set the playback conditions. The default settings are underlined.

Select "CUSTOM SETUP" in the setup display.



AUTO PLAY

Selects the Auto Play setting when you connect the AC power cord to the AC outlet.

- **QEE**: does not use "TIMER," "DEMO1" or "DEMO2" to start playback.
- **TIMER**: starts playing at any time you want by connecting a timer (not supplied). Set a timer when the player is in standby mode (the power indicator lights up in red).
- **DEMO1**: starts playing the first demonstration automatically.
- **DEMO2**: starts playing the second demonstration automatically.

DIMMER

Adjusts the lighting of the front panel display.

- **BRIGHT**: makes the front panel display bright.
- **DARK**: makes the front panel display dark.
- **OFF**: turns off the lighting of the front panel display.

PAUSE MODE (DVD only)

Selects the picture in pause mode.

- **AUTO**: A picture, including subjects that move dynamically, is output with no jitter. Normally select this position.
- **FRAME**: A picture including subjects that do not move dynamically is output with high resolution.

PARENTAL CONTROL

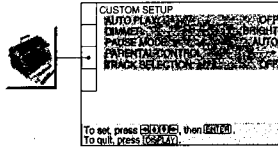
Sets a password and playback limitation level when you play DVDs with playback limitation for children. The same password is used for both Parental Control and Custom Parental Control (page 36).

For details, see "Limiting Playback by Children (Parental Control)".

Limiting Playback by Children (Parental Control)

Playback of some DVDs can be limited depending on the age of the users. The "Parental Control" function allows you to set a playback limitation level.

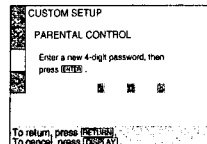
Select "CUSTOM SETUP" in the setup display.



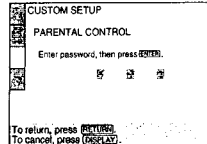
1 Select "PARENTAL CONTROL" using \uparrow/\downarrow , then press ENTER.



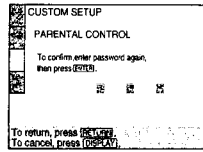
When you have not entered a password The display for entering a password appears.



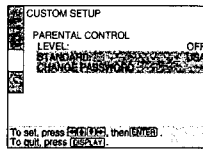
When you have already registered a password The display for confirming the password appears. Skip Step 2.



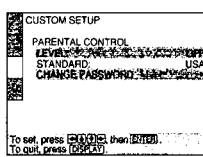
2 Enter a password in 4 digits using the number buttons, then press ENTER. The digits change to asterisks (*), and the display for confirming the password appears.



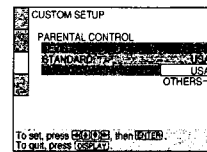
3 To confirm your password, enter it again using the number buttons, then press ENTER. The display for setting the playback limitation level and changing the password appears.



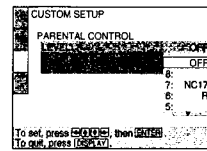
4 Select "STANDARD" using \uparrow/\downarrow , then press \rightarrow .



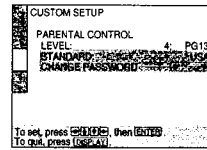
5 Select a geographic area as the playback limitation level standard using \uparrow/\downarrow , then press \rightarrow . When you select "OTHERS" select and enter the standard code in the table on the next page using the number buttons.



6 Select "LEVEL" using \uparrow/\downarrow , then press \rightarrow .



7 Select the level you want using \uparrow/\downarrow , then press ENTER.



The lower the value, the more strict the limitation.

To return to the normal screen Press DISPLAY.

To turn off the Parental Control function and play the DVD after entering your password Set "LEVEL" to "OFF" in Step 7, then press \rightarrow .

Custom Settings (CUSTOM SETUP)

To change the password

- 1 After Step 3, select "CHANGE PASSWORD" using \uparrow/\downarrow , then press \rightarrow or ENTER. The display for changing the password appears.
- 2 Follow Steps 2 and 3 to enter a new password.

Playing a disc which is blocked by the playback limitation level

- 1 Insert the disc and press \rightarrow . The PARENTAL CONTROL display appears.
- 2 Enter a 4-digit password using the number buttons, then press ENTER. The player starts playback. When you stop playing the DVD, the level returns to the original level.

If you forget your password

Enter the 6-digit number "199903" in Step 2 to clear the current password. To enter a new password, follow the procedure from Step 2 again.

Notes

- When you play DVDs which do not have the Parental Control function, playback cannot be limited on this player.
- If you do not set a password, you cannot change the settings for playback limitation.
- Depending on the DVD, you may be asked to change the parental control level while playing the disc. In this case, enter the password, then change the level. When you stop playing the DVD, the level returns to the original level.
- The same password is used for both Parental Control and Custom Parental Control (page 36).

Standard	Code number
Argentina	2044
Australia	2047
Austria	2046
Belgium	2057
Brazil	2070
Canada	2079
Chile	2090
China	2092
Denmark	2115
Finland	2165
France	2174
Germany	2109
Hong Kong	2219
India	2248
Indonesia	2238
Italy	2254
Japan	2276
Korea	2304
Malaysia	2363
Mexico	2362
Netherlands	2376
New Zealand	2390
Norway	2379
Pakistan	2427
Philippines	2424
Portugal	2436
Russia	2489
Singapore	2501
Spain	2149
Sweden	2499
Switzerland	2086
Taiwan	2543
Thailand	2528
United Kingdom	2184

TRACK SELECTION

Gives the sound track which contains the highest number of channels priority when you play a DVD on which multiple audio formats (PCM, DTS or Dolby Digital format) are recorded.

- **QEE**: No priority given.
- **AUTO**: Priority given.

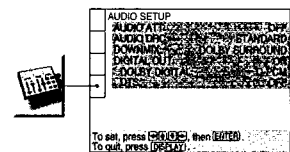
Notes

- When you set this item to "AUTO", the language may change depending on the "AUDIO" settings in "LANGUAGE SETUP". The "TRACK SELECTION" setting has higher priority than the "AUDIO" settings in "LANGUAGE SETUP" (page 46).
- If you set "DTS" in "AUDIO SETUP" to "OFF", the DTS sound track is not played even if you set this item to "AUTO" and the highest-numbered channel audio is recorded in DTS format.
- If PCM, DTS and Dolby Digital sound tracks have the same number of channels, the player selects PCM, DTS and Dolby Digital sound tracks in this order.
- Depending on the DVD, the audio channel with priority may be predetermined. In this case, you cannot give priority to the DTS or Dolby Digital format by selecting "AUTO."

Settings for the Sound (AUDIO SETUP)

"AUDIO SETUP" allows you to set the sound according to the playback conditions. The default settings are underlined.

Select "AUDIO SETUP" in the setup display.



AUDIO ATT (attenuation)

If the playback sound is distorted, set this item to "ON." The player reduces the audio output level.

Selects the setting of the output from the AUDIO OUT (1, 2) connectors according to the audio equipment to be connected.

- **QEE**: turns off the audio attenuation. Normally select this position.
- **ON**: reduces the audio output level so that no sound distortion occurs. Select this when the playback sound from the built-in TV speakers is distorted.

Note

The setting does not affect the output from the DIGITAL OUT OPTICAL and COAXIAL connectors.

AUDIO DRC (Dynamic Range Control)

Makes the sound clear when the volume is turned down when playing a DVD. This function works only when you play a DVD which has the AUDIO DRC function.

This affects the output from the DIGITAL OUT connectors only when "DOLBY DIGITAL" is set to "D-PCM" in "DIGITAL OUT," and it affects the output from the AUDIO OUT (1, 2) connectors.

- **STAND-BY**: Normally select this position.
- **TV MODE**: makes the low sounds clear even if you turn the volume down. It is especially recommended when you listen to the sound using the speakers of the TV.
- **WIDE RANGE**: It gives you the feeling of being at a live performance. When you use high quality speakers, it is more effective.

Note

When you play DVDs without the AUDIO DRC function, there may be no effect on the sound.

Settings for the Sound (AUDIO SETUP)

■ DOWNMIX

Switches the mixing down methods when you play a DVD on which rear signal components such as LS, RS or S in Dolby Digital format are recorded. For details on the rear signal components, see "Displaying the audio information of the disc" (page 31).

The "DOWNMIX" setting affects the following connectors:

- AUDIO OUT connectors
- DIGITAL OUT OPTICAL and COAXIAL connectors (when you set "DOLBY DIGITAL" to "D-PCM" in "AUDIO SETUP" in the setup display)
- **DOLBY SURROUND:** when the player is connected to an audio component that conforms to Dolby Surround (Pro Logic). The output signals which reproduce the Dolby Surround (Pro Logic) effect are mixed down to 2 channels.
- **NORMAL:** when the player is connected to an audio component that does not conform to Dolby Surround (Pro Logic). The signals without Dolby Surround (Pro Logic) effect are output.

■ DIGITAL OUT

Selects output signals via the DIGITAL OUT OPTICAL and COAXIAL connectors.

- **ON:** Normally select this position. When you select "ON," set "DOLBY DIGITAL" and "DTS." For details on setting these items, see "Setting the Digital Output Signal."
- **OFF:** when the player does not output the sound signals via the DIGITAL OUT OPTICAL and COAXIAL connectors, the influence of the digital circuit upon the analog circuit is at a minimum.

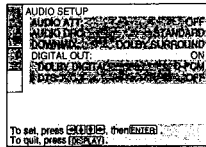
Notes

- When you play sound tracks with a 96 kHz sampling frequency, the output signals from the DIGITAL OUT (OPTICAL, COAXIAL) are converted to 48 kHz (sampling frequency). When the signals are output from the AUDIO OUT connectors, sampling frequency stays at 96 kHz and the output signals are converted to analog signals.
- When you select "OFF," you cannot set "DOLBY DIGITAL," and "DTS."

Setting the Digital Output Signal

Switches the methods of outputting audio signals when you 1. connect a digital component such as a receiver (amplifier) having a digital connector, 2. an audio component having a built-in decoder (Dolby Digital or DTS), 3. a DAT or MD via the DIGITAL OUT OPTICAL or COAXIAL connector using an optical or coaxial digital connecting cord. For details on the connection, see pages 10 and 12.

When you select "ON," set "DOLBY DIGITAL" and "DTS."



To set, press [DOLBY DIGITAL] then [ENTER].
To quit, press [EXIT].

■ DOLBY DIGITAL

Selects the Dolby Digital signals to be output via the DIGITAL OUT OPTICAL and COAXIAL connectors. You cannot select this item when you set "DIGITAL OUT" to "OFF."

- **D-PCM (Downmix PCM):** when you play Dolby Digital sound tracks, the output audio signals are mixed down to 2 channels. You can select whether the signals conform to Dolby Surround (Pro Logic) or not by making adjustments to the "DOWNMIX" item in "AUDIO SETUP."
- **DOLBY DIGITAL:** when the player is connected to an audio component with a built-in Dolby Digital decoder. If the player is connected to an audio component lacking a built-in Dolby Digital decoder, do not set this. Otherwise, when you play the Dolby Digital sound track, a loud noise or no sound will come out from the speakers, affecting your ears or causing the speakers to be damaged.

Note

When you select "D-PCM," set Virtual Enhanced Surround (VES) to "OFF." Otherwise, the player will not output signals from the DIGITAL OUT OPTICAL or COAXIAL connector.

■ DTS

Selects the DTS signals to be output via the DIGITAL OUT OPTICAL and COAXIAL connectors. You cannot select this item when you set "DIGITAL OUT" to "OFF."

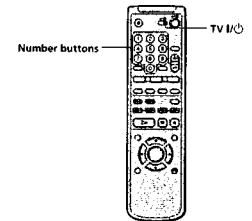
- **OFF:** when the player is connected to an audio component lacking a built-in DTS decoder.
- **ON:** when the player is connected to an audio component having a built-in DTS decoder. If the player is connected to an audio component lacking a built-in DTS decoder, do not set this. Otherwise, when you play the DTS sound track, a loud noise will come out from the speakers, affecting your ears or causing the speakers to be damaged.

Note

Select the setting correctly. Otherwise, no sound or a strange sound will come out from the speakers, affecting your ears or causing the speakers to be damaged.

Controlling your TV or AV Receiver (Amplifier) with the Supplied Remote

If you adjust the remote signal, you can control your TV or AV receiver (amplifier) with the supplied remote. Default setting is to control Sony TVs with the mark.



Controlling TVs or AV receivers (amplifiers) with the remote

Hold down TV I/O, and enter your TV's or AV receiver's manufacturer's code (see the table) using the number buttons. Then release TV I/O.

Code numbers of controllable TVs or AV receivers (amplifiers)

If more than one code number is listed, try entering them one at a time until you find the one that works with your TV or AV receiver (amplifier).

Notes

- If you enter a new code number, the code number previously entered will be erased.
- When you replace the batteries of the remote commander, the code number reset to 01 (Sony). Reset the appropriate code number.

Controlling your TV or AV Receiver (Amplifier) with the Supplied Remote

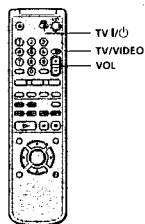
TV

Manufacturer	Code number	Manufacturer	Code number
Sony (default)	01	Panasonic	06,19
Alai	04	Philco	03,04
AOC	04	Philips	08
Centurion	12	Pioneer	16
Coronado	03	Portland	03
Curtis-Mathes	12	Quasar	06,18
Daytron	12	Radio Shack	05,14
Emerson	03,04,14	RCA	04,10
Fisher	11	Sampo	12
General Electric	06,10	Sanyo	11
Gold Star	03,04,17	Scott	12
Hitachi	02,03	Sears	07,10,11
J.C.Penny	04,12	Sharp	03,05,18
JVC	09	Sylvania	06,12
KMC	03	Teknika	03,06,14
Magnavox	03,06,12	Toshiba	07
Marantz	04,13	Wards	03,04,12
MCA/Mitsubishi	04,12,13,17	Yors	12
NEC	04,12	Zenith	15

AV receiver (amplifier)

Manufacturer	Code number
Sony	91, 89
Denon	84, 85, 86
Kenwood	92, 93
Onkyo	81, 82, 83
Pioneer	99
Sansui	87
Technics	97, 98
Yamaha	94, 95, 96

You can control your TV using the keys below.

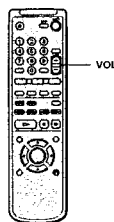


By pressing	You can
TV I/O	Turn the TV on or off
TV/VIDEO	Switch the TV's input source between the TV and other input sources
VOL	Adjust the volume of the TV

Note

Depending on the TV, you may not be able to control your TV or to use some of the buttons above.

You can also change the sound volume of the AV receiver (amplifier) using VOL.



Note

Depending on the AV receiver (amplifier), you may not be able to control your AV receiver (amplifier).

Self-diagnosis function

When the self-diagnosis function activates to prevent the player from malfunctioning, a five-character service number (combination of a letter and digits) flashes on the screen and on the front panel display. In this case, check the following table.



First three characters	Cause and/or Corrective Action
C13	• The disc is dirty. → Clean the disc with a cleaning cloth. (page 6)
C31	• The disc is not inserted correctly. → Open the disc tray and insert the disc correctly.
E0x (x is any number)	• To prevent a malfunction, the player has performed the self-diagnosis function. → When you contact your Sony dealer or local authorized Sony service facility, give the 5-character service number. (example: E01:10)

Language Code List

For details, see page 32, 46.

The language spellings conform to the ISO 639: 1988 (E/F) standard.

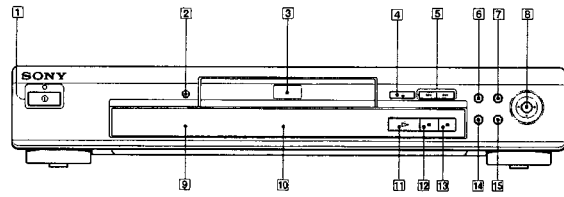
Code	Language	Code	Language	Code	Language	Code	Language
1027	Afar	1186	Scots Gaelic	1350	Malayalam	1513	Siswati
1028	Abkhazian	1194	Galician	1352	Mongolian	1514	Sesotho
1032	Afrikaans	1196	Guarani	1353	Moldavian	1515	Sundanese
1039	Amharic	1203	Gujarati	1356	Marathi	1516	Swedish
1044	Arabic	1209	Hausa	1357	Malay	1517	Swahili
1045	Assamese	1217	Hindi	1358	Maltese	1521	Tamil
1051	Aymara	1226	Croatian	1363	Burmese	1525	Telugu
1052	Azerbaijani	1229	Hungarian	1365	Nauru	1527	Tajik
1053	Bashkir	1233	Armenian	1369	Nepali	1528	Thai
1057	Byelorussian	1235	Interlingua	1376	Dutch	1529	Tigrinya
1059	Bulgarian	1239	Interlingue	1379	Norwegian	1531	Turkmen
1060	Bihari	1245	Inupiak	1393	Occitan	1532	Tagalog
1061	Bislama	1248	Indonesian	1403	(Afan) Oromo	1534	Setswana
1066	Bengali, Bangla	1253	Icelandic	1408	Oriya	1535	Tonga
1067	Tibetan	1254	Italian	1417	Punjabi	1538	Turkish
1070	Breton	1257	Hebrew	1428	Polish	1539	Tsonga
1079	Catalan	1261	Japanese	1435	Pasho; Pushto	1540	Tatar
1093	Corsican	1269	Yiddish	1436	Portuguese	1543	Twi
1097	Czech	1283	Javanese	1463	Quechua	1557	Ukrainian
1103	Welsh	1287	Georgian	1481	Rhaeto-Romance	1564	Urdu
1105	Danish	1297	Kazakh	1482	Kirundi	1572	Uzbek
1109	German	1298	Greenlandic	1483	Romanian	1581	Vietnamese
1130	Bhutani	1299	Cambodian	1489	Russian	1587	Volapuk
1142	Greek	1300	Kannada	1491	Kinyarwanda	1613	Wolof
1144	English	1301	Korean	1495	Sanskrit	1632	Xhosa
1145	Eperanto	1305	Kashmiri	1498	Sindhi	1665	Yoruba
1149	Spanish	1307	Kurdish	1501	Sangho	1684	Chinese
1150	Estonian	1311	Kirghiz	1502	Serbo-Croatian	1697	Zulu
1151	Basque	1313	Latin	1503	Singhalese	1703	Not specified
1157	Persian	1326	Lingala	1505	Slovak		
1165	Finnish	1327	Laotian	1506	Slovenian		
1166	Fiji	1332	Lithuanian	1507	Samoan		
1171	Faroese	1334	Latvian, Lettish	1508	Sitona		
1174	French	1345	Malagasy	1509	Somali		
1181	Frisian	1347	Maori	1511	Albanian		
1183	Irish	1349	Macedonian	1512	Serbian		

62

Index to Parts and Controls

Refer to the pages indicated in parentheses for details.

Front Panel

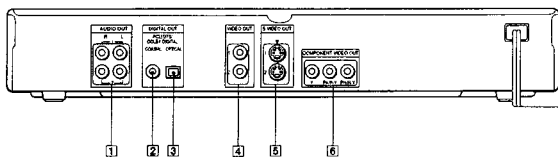


- 1 (power) button and indicator (16)
Disconnects the power of the player or places the player in standby mode.
- 2 VES (Virtual Enhanced Surround) button (33)
Press to select the desired "VES" item.
- 3 Disc tray (16)
Place a disc on the tray.
- 4 OPEN/CLOSE button (16)
Opens or closes the disc tray.
- 5 PREVIOUS/NEXT (previous/next) buttons (17)
Press to go to the next chapter or track, or to go back to the previous chapter or track.
- 6 TITLE button (20)
Displays the title menu on the TV screen.
- 7 DVD MENU button (20)
Displays the DVD menu on the TV screen.
- 8 ENTER button
Selects and executes the items or settings.
- 9 remote sensor (7)
Accepts the remote control signals.
- 10 Front Panel Display (22)
Indicates the playing time, etc.
- 11 play button (16)
Plays a disc.
- 12 pause button (17)
Pauses playing a disc.
- 13 stop button (17, 19)
Stops playing a disc.
- 14 DISPLAY button (24)
Displays the Control Menu display on the TV screen to set or adjust the items.
- 15 RETURN button (21, 25)
Press to return to the previously selected screen, etc.

63

Index to Parts and Controls

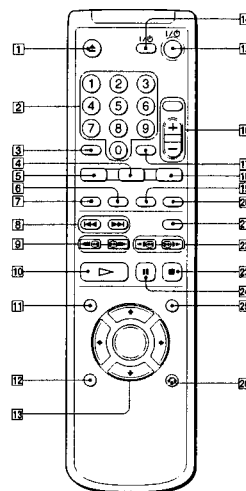
Rear Panel



- 1 AUDIO OUT R (right)/L (left) 1/2 connectors (8, 10)
Connect to the audio input connector on your TV or receiver (amplifier).
- 2 DIGITAL OUT COAXIAL connector (10, 12)
Connect to an audio component using the coaxial digital connecting cord.
- 3 DIGITAL OUT OPTICAL connector (10, 12)
Connect to an audio component using the optical digital connecting cord.
- 4 VIDEO OUT 1/2 connectors (8)
Connect to the video input connector on your TV or monitor.
- 5 S VIDEO OUT 1/2 connectors (8, 10)
Connect to the S video input connector on your TV or monitor.
- 6 COMPONENT VIDEO OUT connectors (9)
Connect to a monitor or projector having component video input connectors (Y, Pb/B-Y, Pr/R-Y) that conform to output signals from the player.

64

Remote



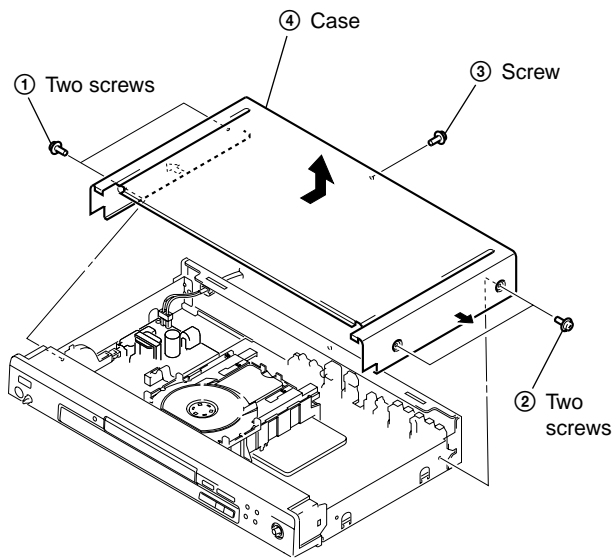
- 1 OPEN/CLOSE button (17)
Opens or closes the disc tray.
- 2 Number buttons
Selects the items or settings.
- 3 CLEAR button (27, 38)
Press to return to continuous play, etc.
- 4 ANGLE button (33)
Changes the angles when playing a DVD.
- 5 AUDIO button (30)
Changes the sound while playing a DVD or VIDEO CD.
- 6 PROGRAM button (39)
Displays the "PROGRAM" display on the TV screen.
- 7 SHUFFLE button (40)
Changes the "SHUFFLE" mode.
- 8 PREVIOUS/NEXT (previous/next) buttons (17)
Press to go to the next chapter or track, or to go back to the previous chapter or track.
- 9 SEARCH/STEP buttons (18)
While monitoring the picture, keep pressing to locate a point quickly or press sequentially to play a disc frame by frame.
- 10 play button (16)
Plays a disc.
- 11 TITLE button (20)
Displays the title menu on the TV screen.
- 12 DISPLAY button (24)
Displays the Control Menu display on the TV screen to set or adjust the items.
- 13 ENTER buttons
Selects and executes the items or settings.
- 14 TV (television on/standby) button (53)
Turns on and off the power of the TV.
- 15 (on/standby) button (17)
Press to turn on the player or place it in standby mode after power is connected by pressing (power) on the player.
- 16 TV (television)/AV receiver (amplifier) operation buttons (53)
Controls TVs or AV receivers (amplifiers).
- 17 ENTER button
Executes the items or settings.
- 18 SUBTITLE button (32)
Changes the subtitles when playing a DVD.
- 19 REPEAT button (41)
Changes the "REPEAT" mode.
- 20 A-B button (42)
Displays the "A-B REPEAT" display on the TV screen.
- 21 TIME/TEXT button (22)
Displays the playing time of the disc, etc., on the front panel display.
- 22 SEARCH/SCAN/SLOW buttons (18)
Locate a point quickly while monitoring the picture or play a disc in slow motion.
- 23 STOP button (17, 19)
Stops playing a disc.
- 24 PAUSE button (17)
Pauses playing a disc.
- 25 DVD MENU button (20)
Displays the DVD menu on the TV screen.
- 26 RETURN button (21, 25)
Press to return to the previously selected screen, etc.

65

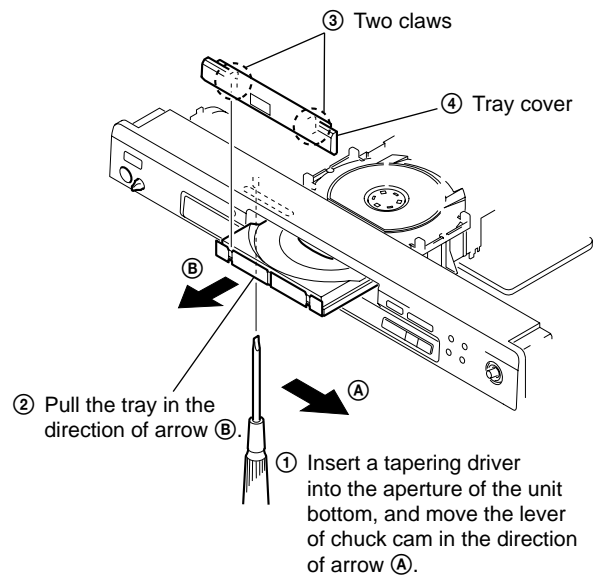
SECTION 2 DISASSEMBLY

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

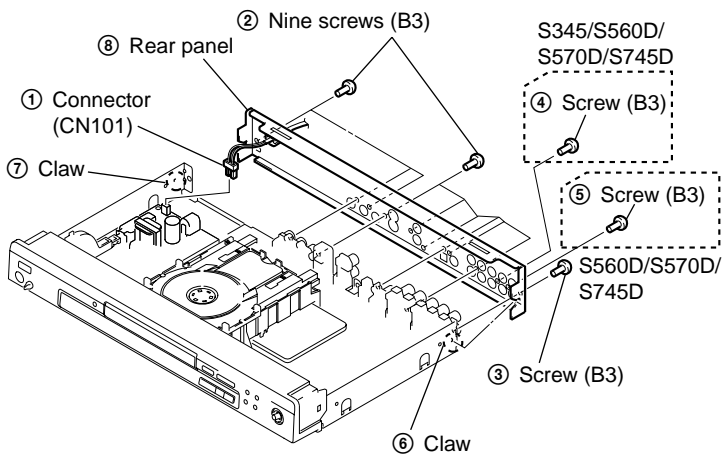
2-1. CASE REMOVAL



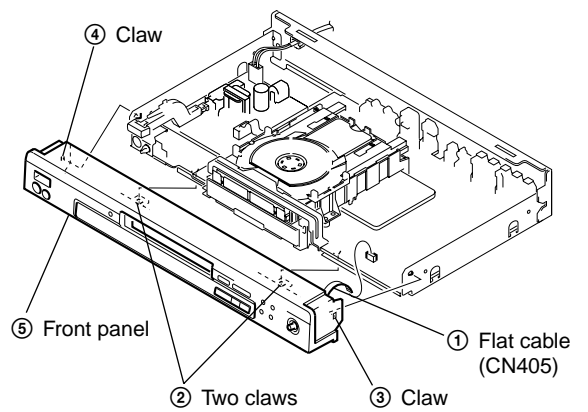
2-3. TRAY COVER REMOVAL



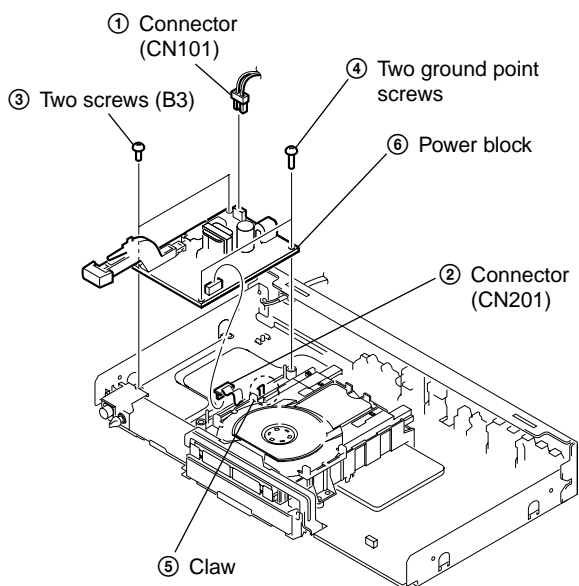
2-2. REAR PANEL REMOVAL



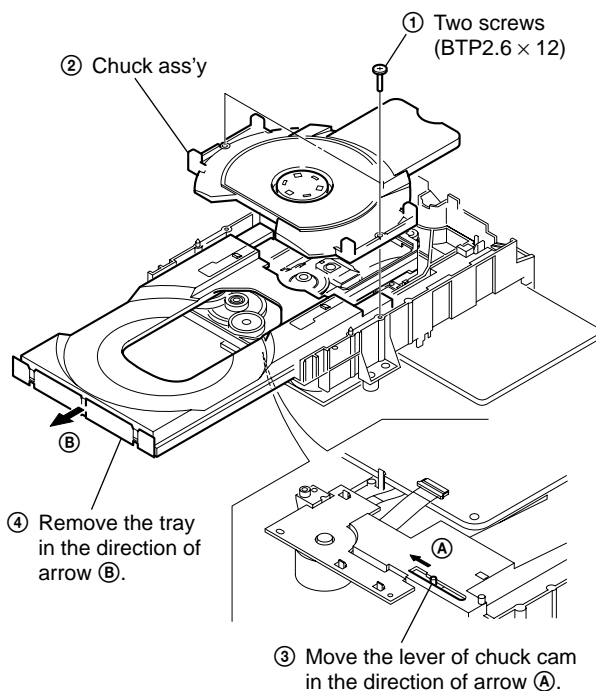
2-4. FRONT PANEL REMOVAL



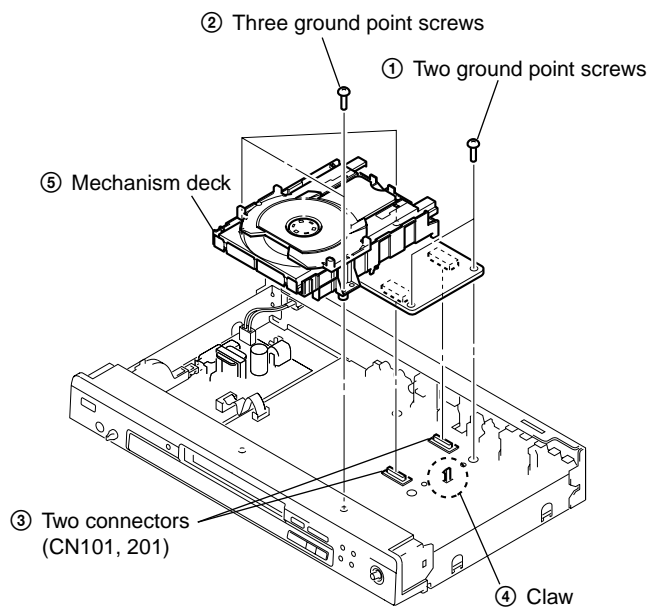
2-5. POWER BLOCK REMOVAL



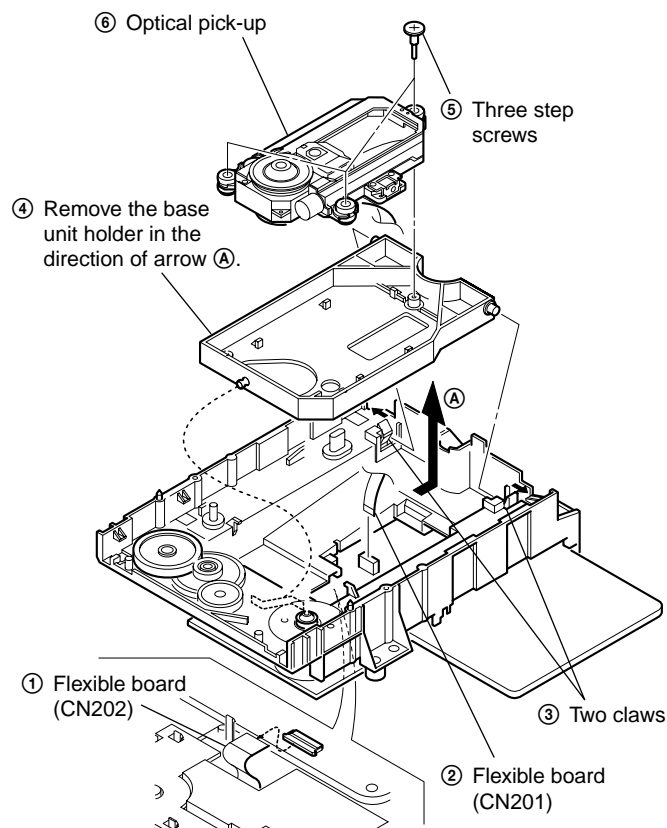
2-7. TRAY REMOVAL



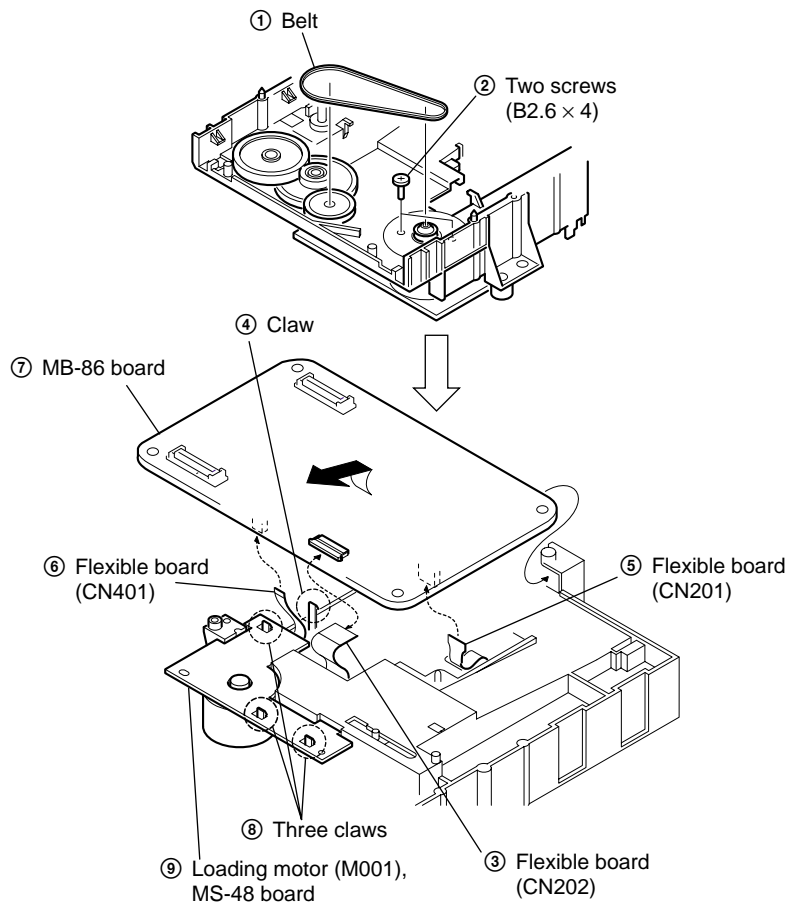
2-6. MECHANISM DECK REMOVAL



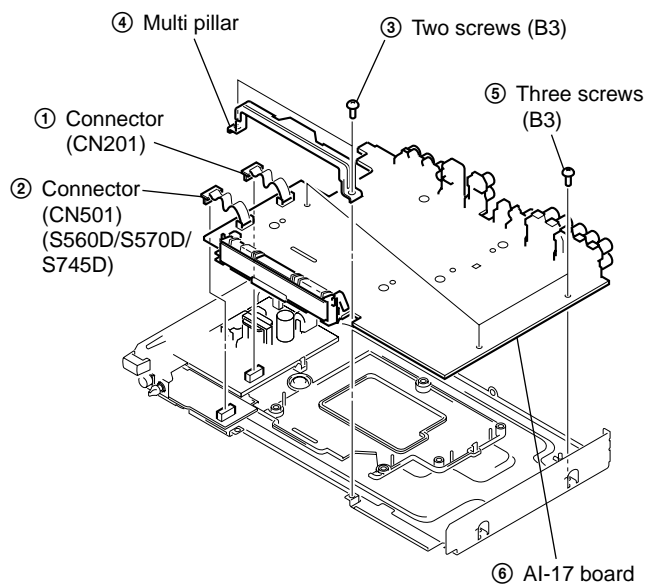
2-8. OPTICAL PICK-UP REMOVAL



2-9. BELT, MB-86 BOARD, LOADING MOTOR (M001), MS-48 BOARD REMOVAL

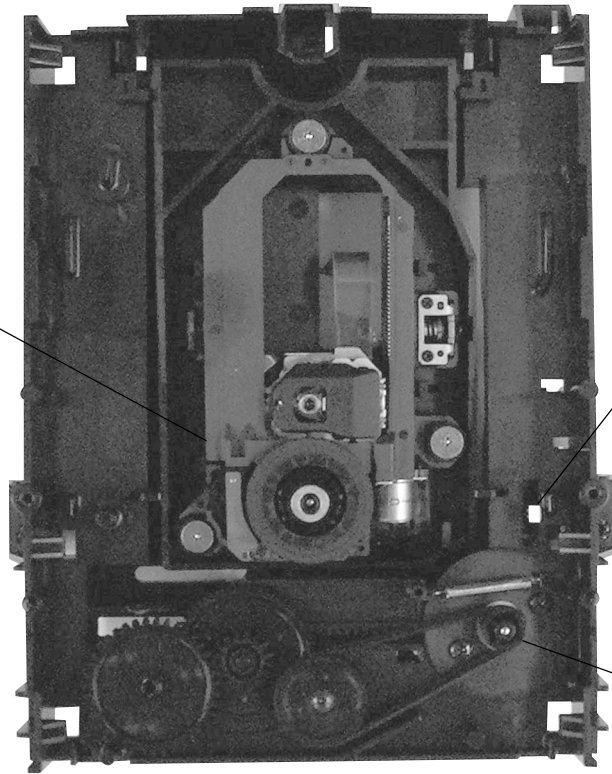


2-10. AI-17 BOARD REMOVAL



2-11. INTERNAL VIEWS

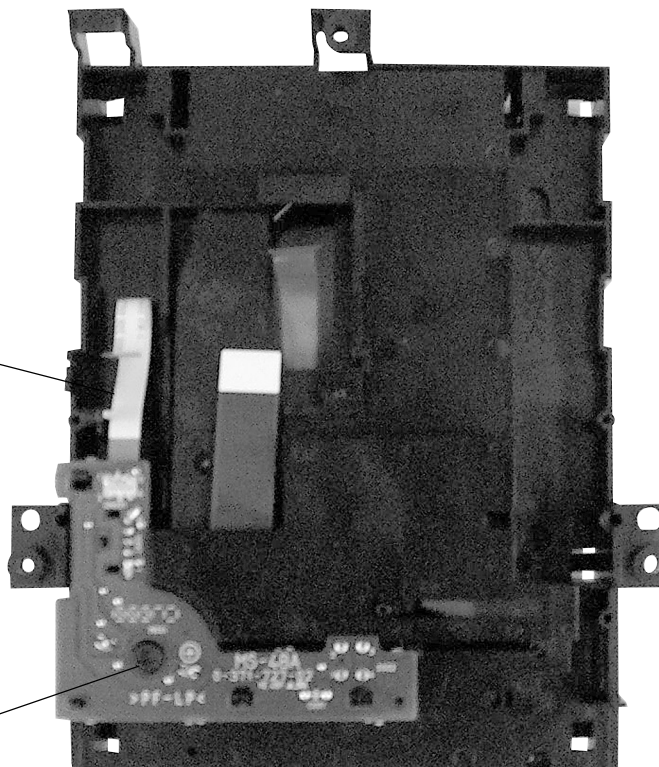
Optical pick-up
(KHM-220AAA)
A-6062-397-A



Lever switch
1-771-562-11

DC motor (loading)
1-541-632-11

Flexible flat cable
1-792-457-11



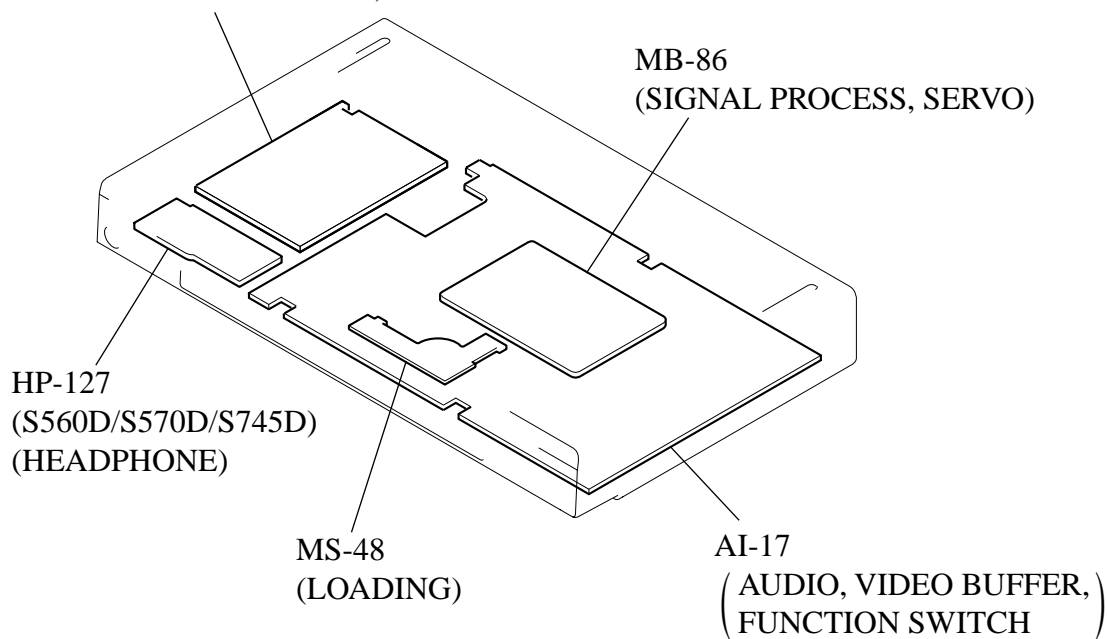
DC motor (loading)
1-541-632-11

2-12. CIRCUIT BOARDS LOCATION

Power Block

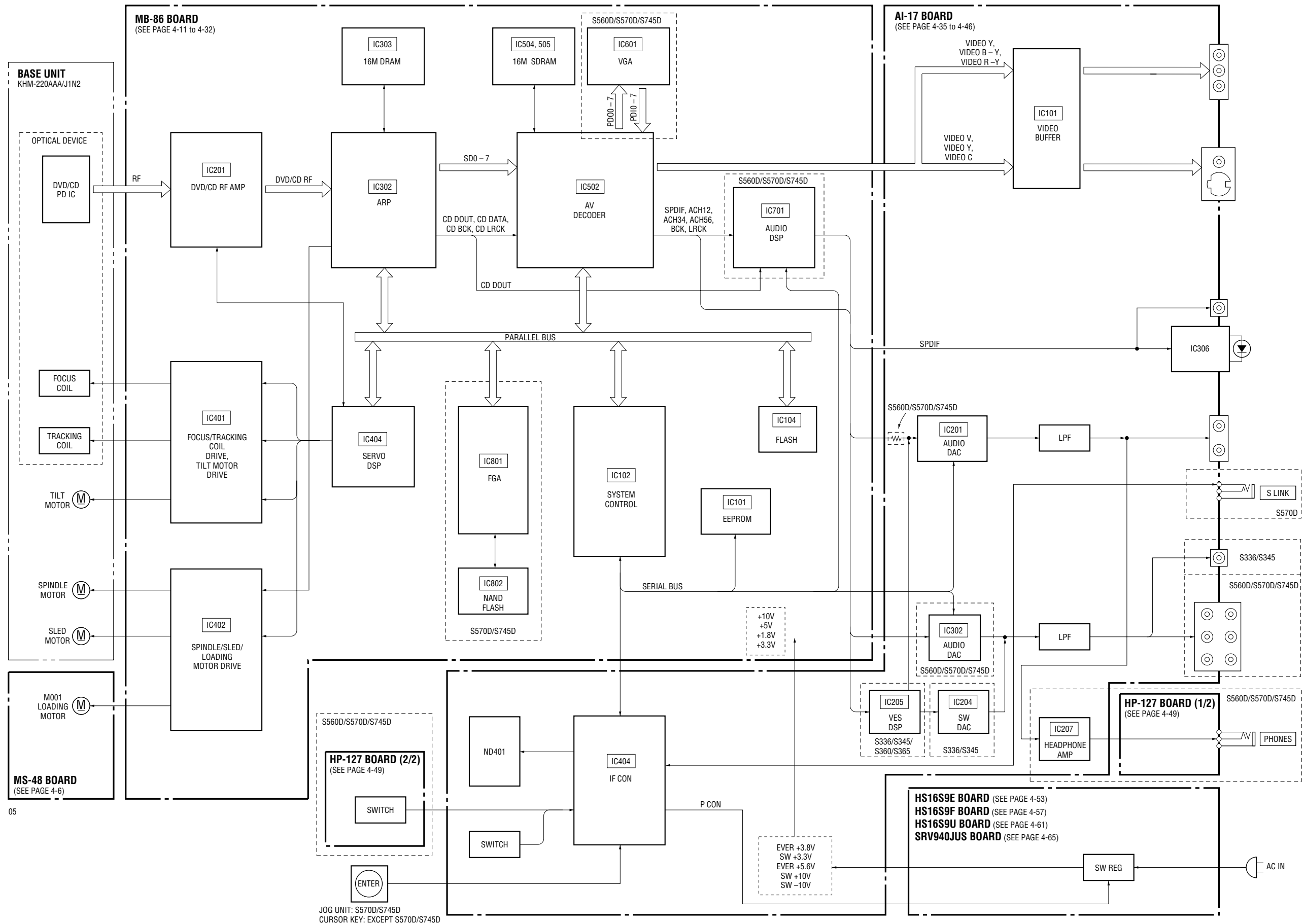
(HS16S9E (S336/S345: HK, SP/S745D)
 HS16S9F (S345: CH/S360: E/S365/S560D: E)
 HS16S9U (S360: US, CND)
 SRV940JUC (S560D: US, CND/S570D)
 (SWITCHING REGULATOR)

- Abbreviation
- CH : Chinese
- CND : Canadian
- HK : Hong Kong
- SP : Singapore



**SECTION 3
BLOCK DIAGRAMS**

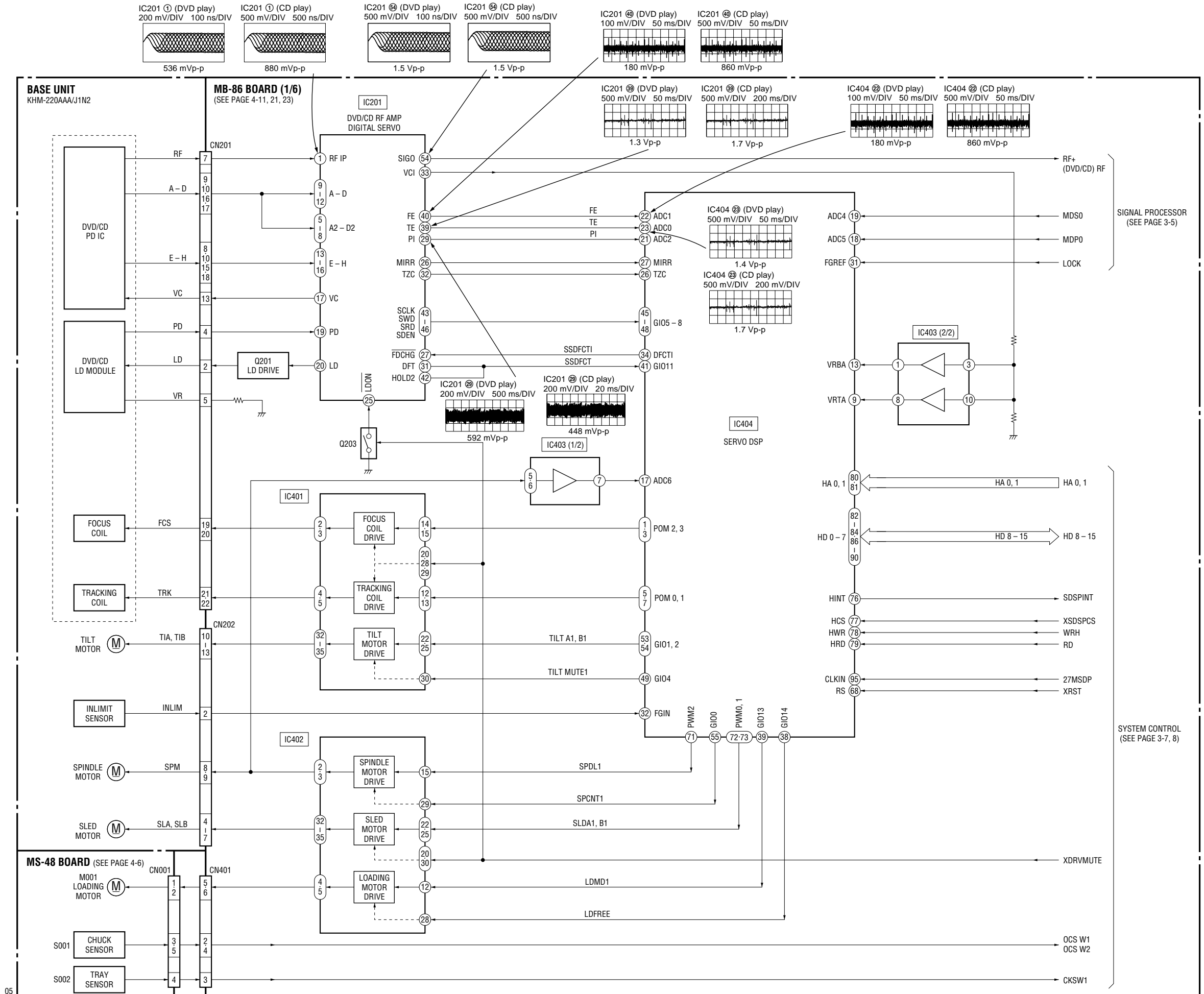
3-1. OVERALL BLOCK DIAGRAM



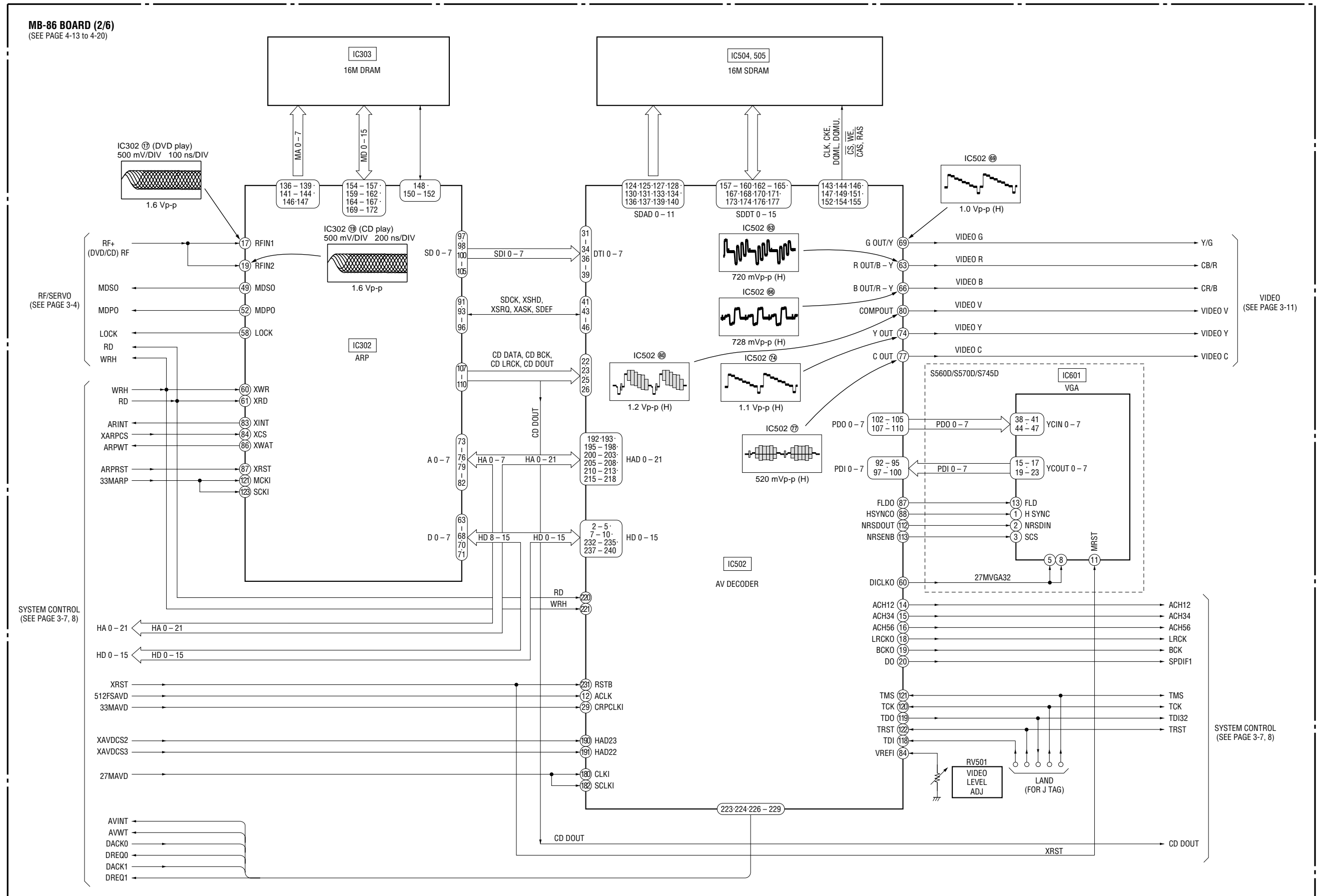
05

JOG UNIT: S570D/S745D
CURSOR KEY: EXCEPT S570D/S745D

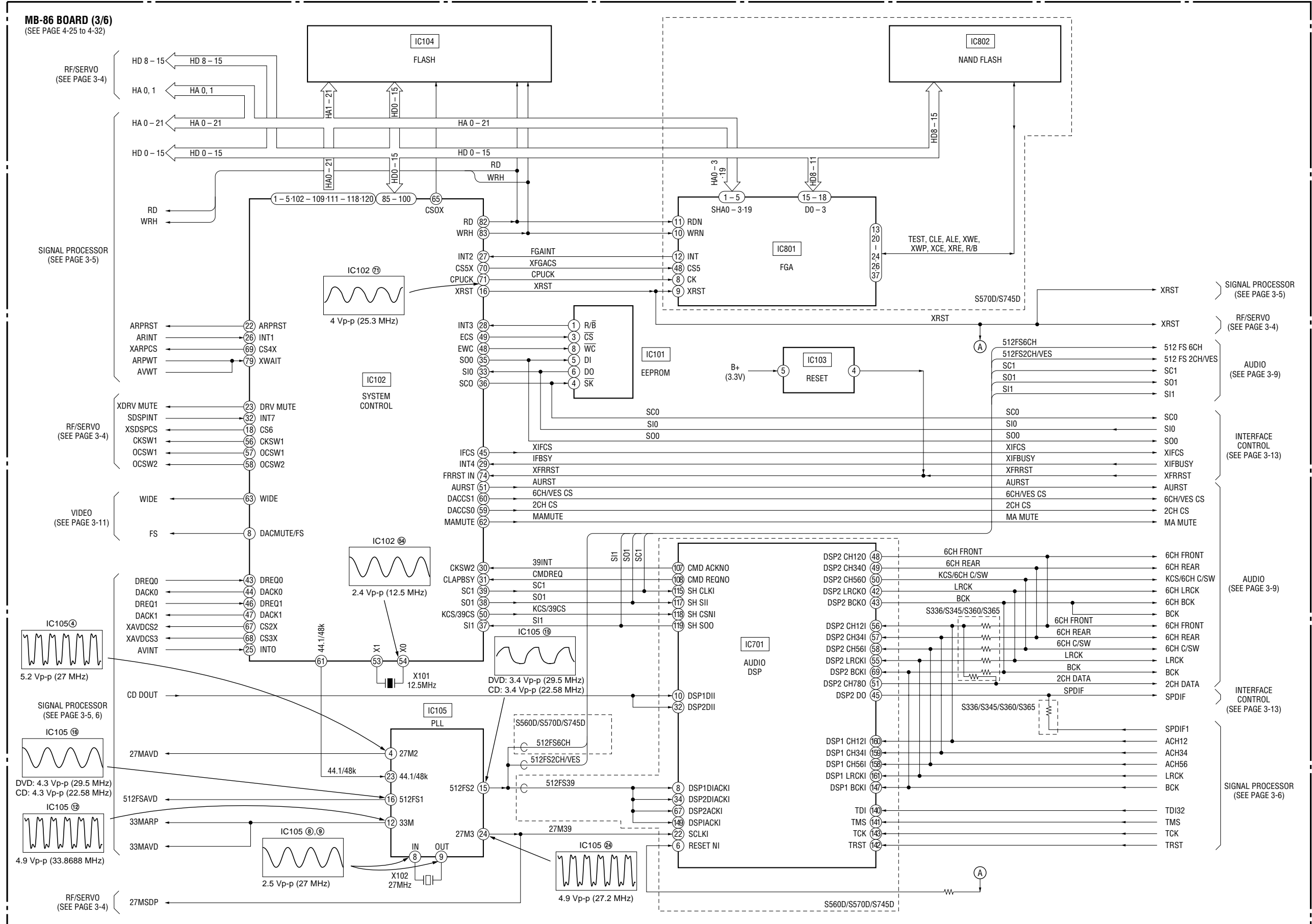
3-2. RF/SERVO BLOCK DIAGRAM



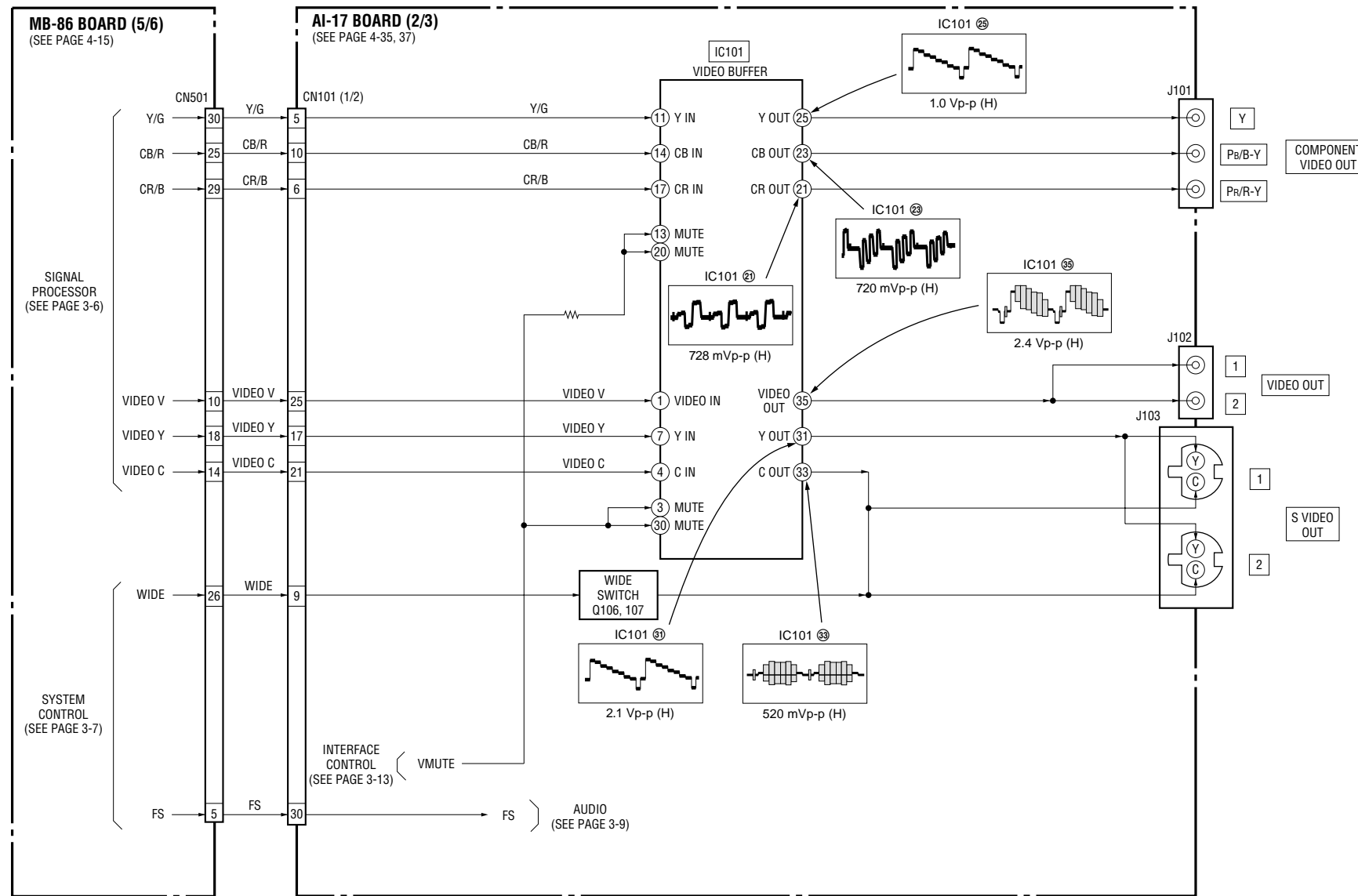
3-3. SIGNAL PROCESSOR BLOCK DIAGRAM



3-4. SYSTEM CONTROL BLOCK DIAGRAM

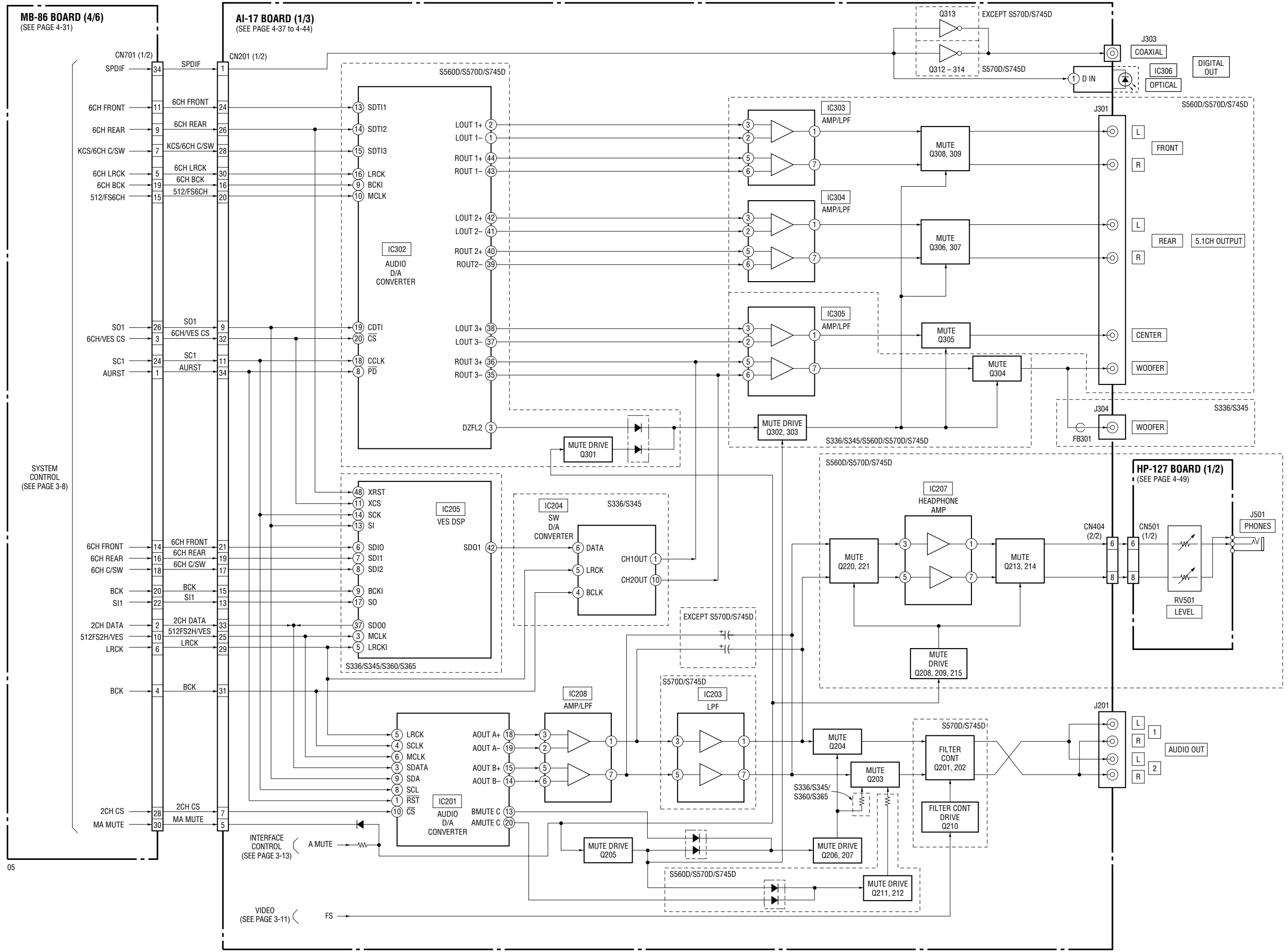


3-5. AUDIO BLOCK DIAGRAM



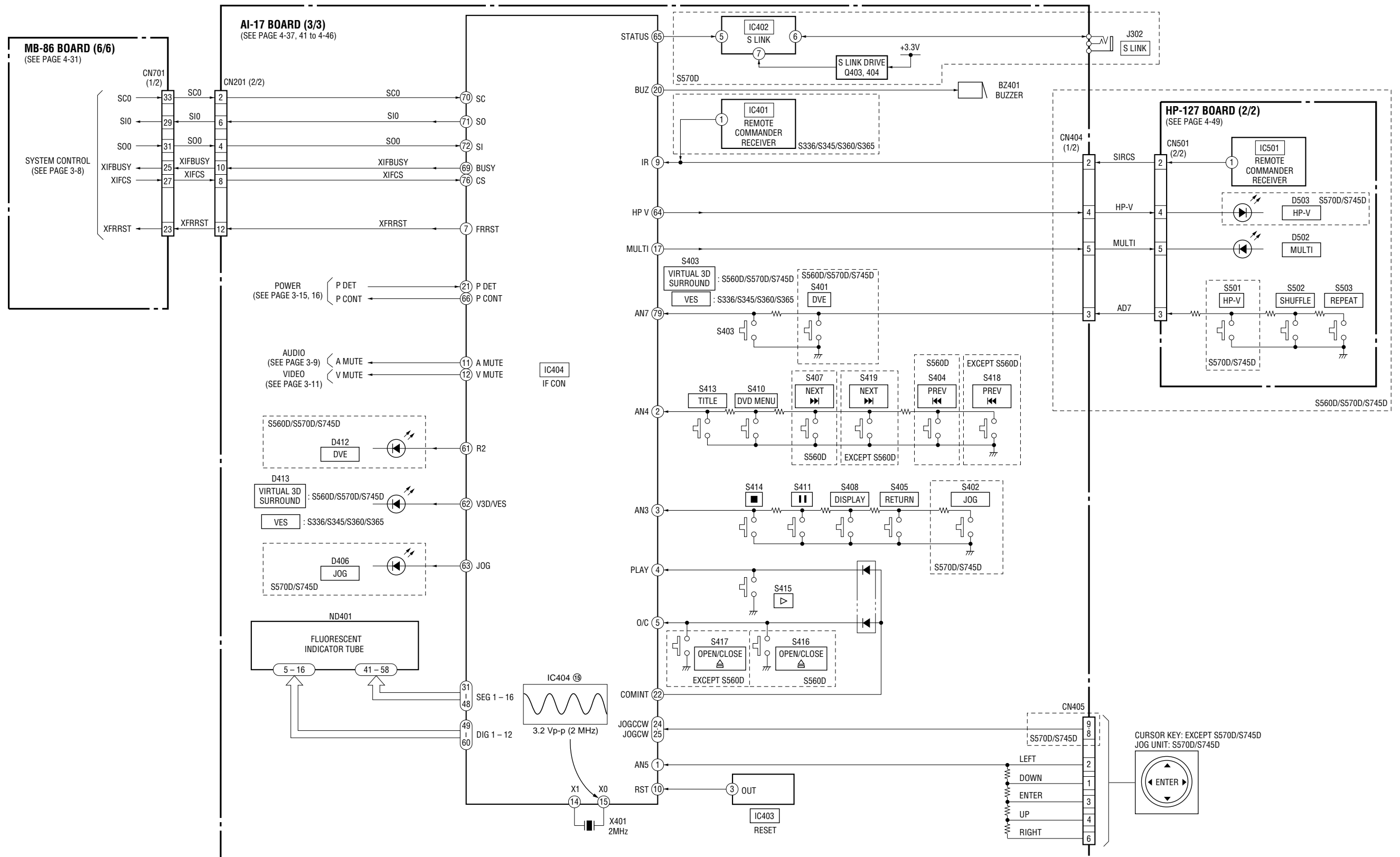
05

3-6. VIDEO BLOCK DIAGRAM



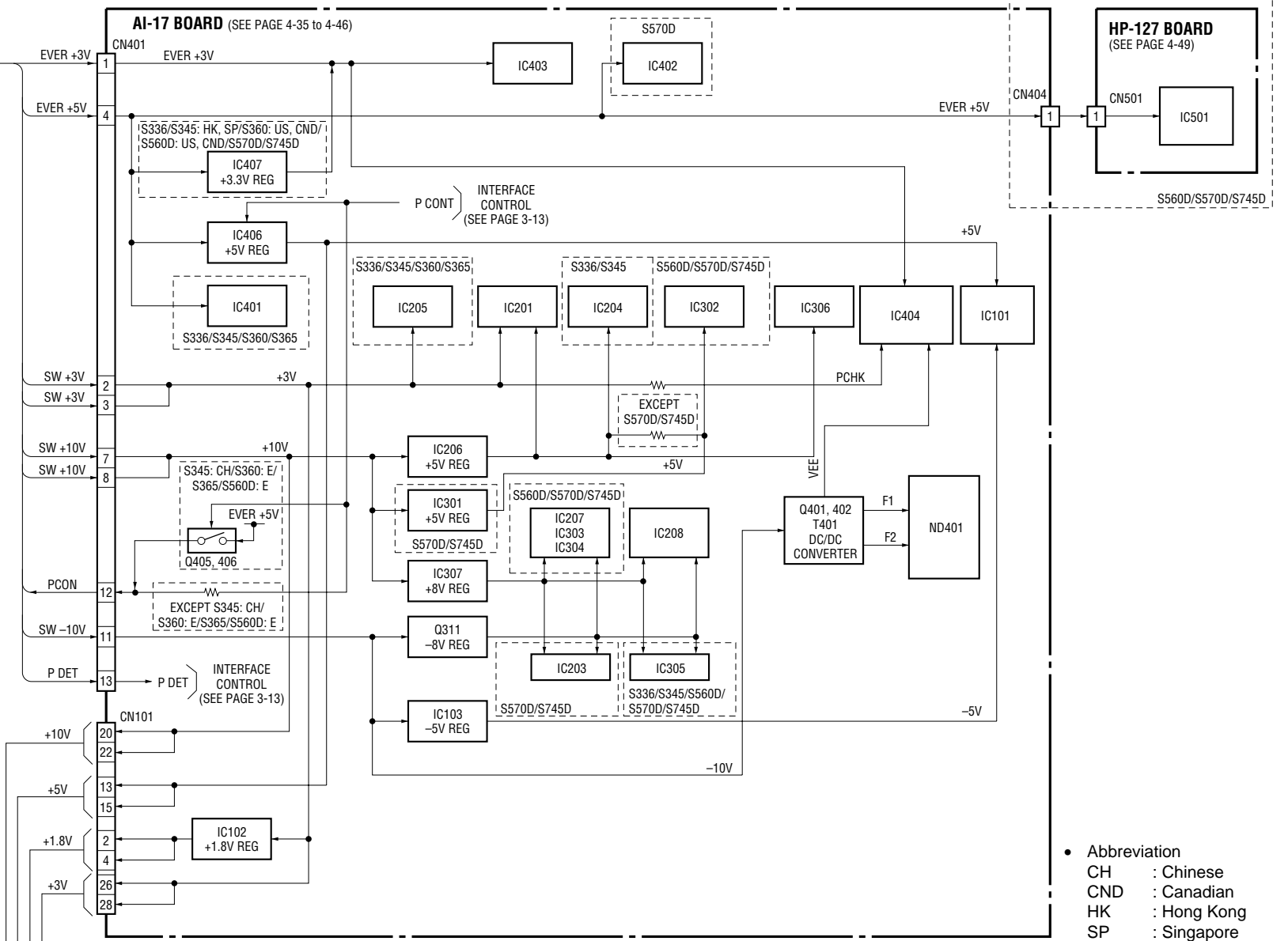
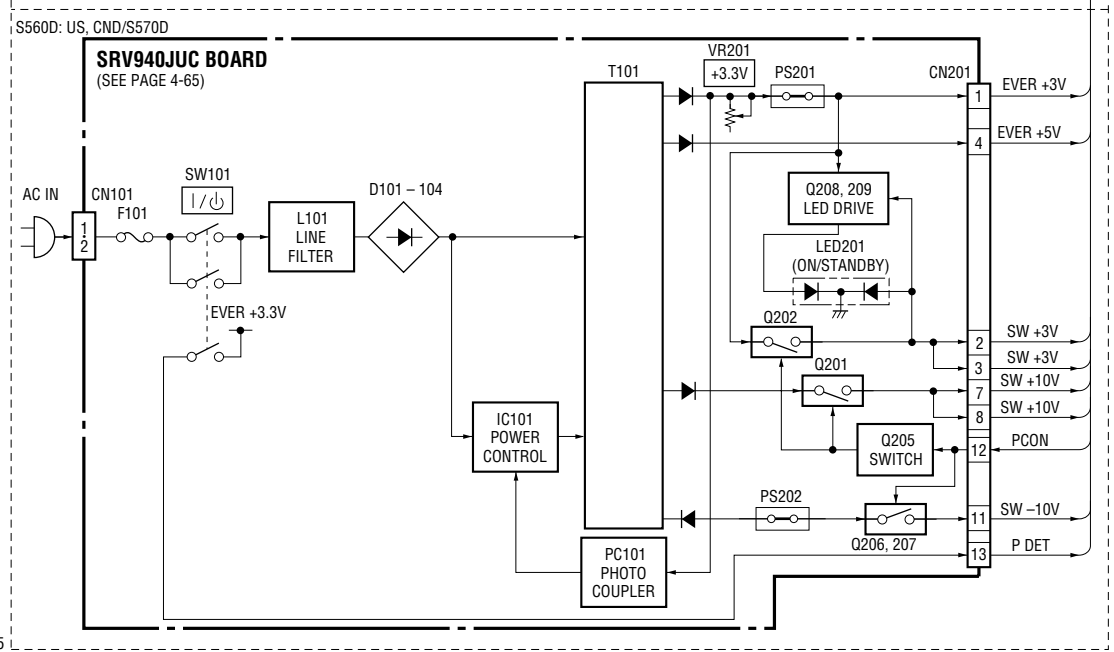
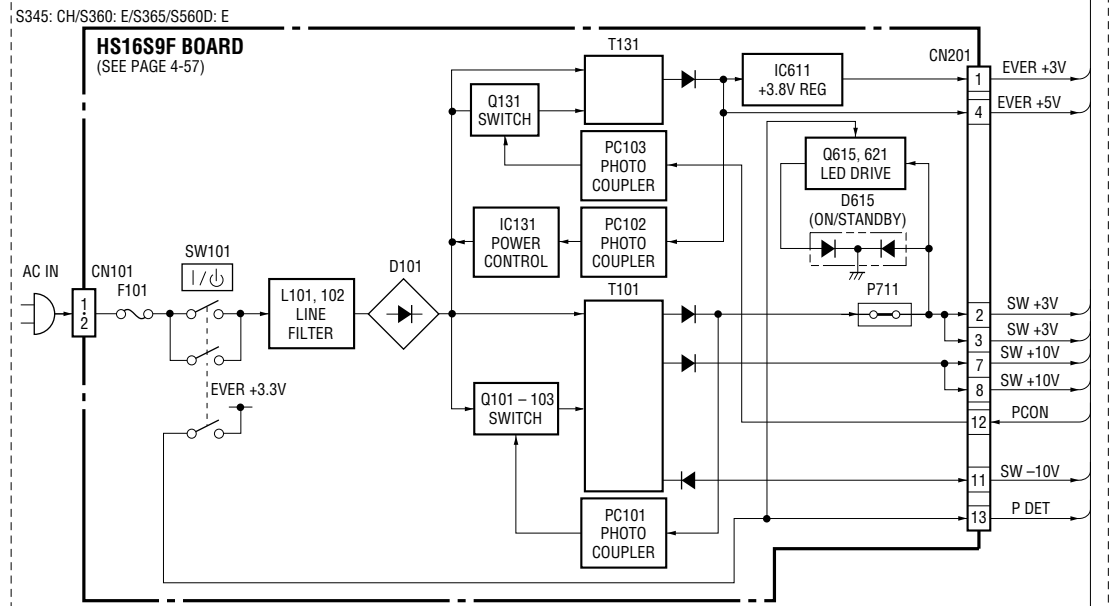
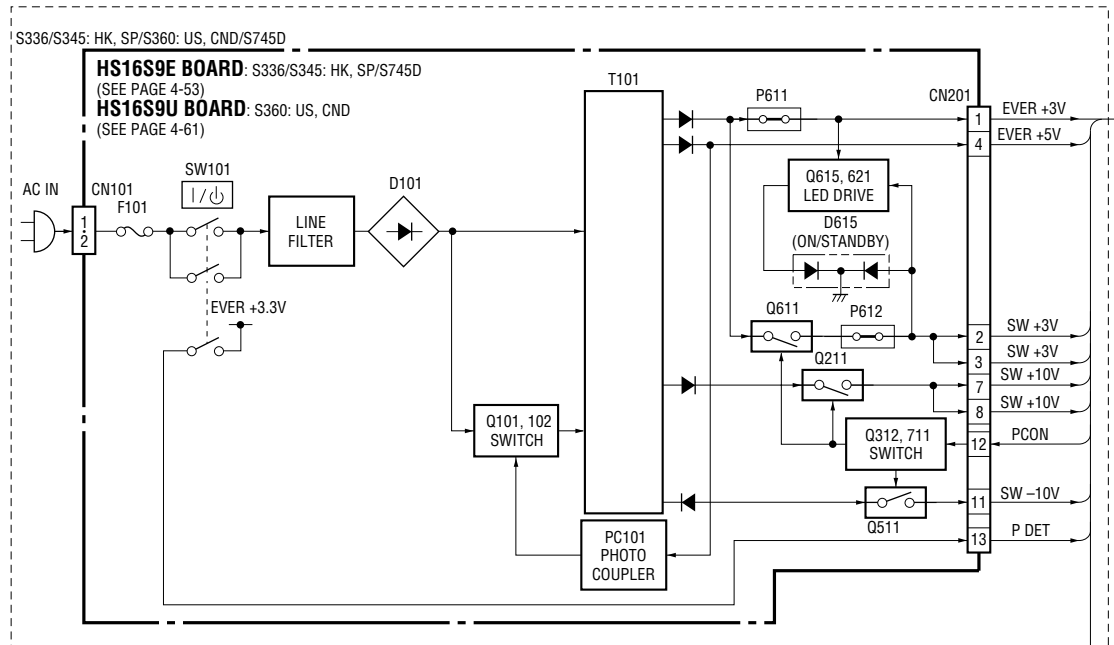
05

3-7. INTERFACE CONTROL BLOCK DIAGRAM

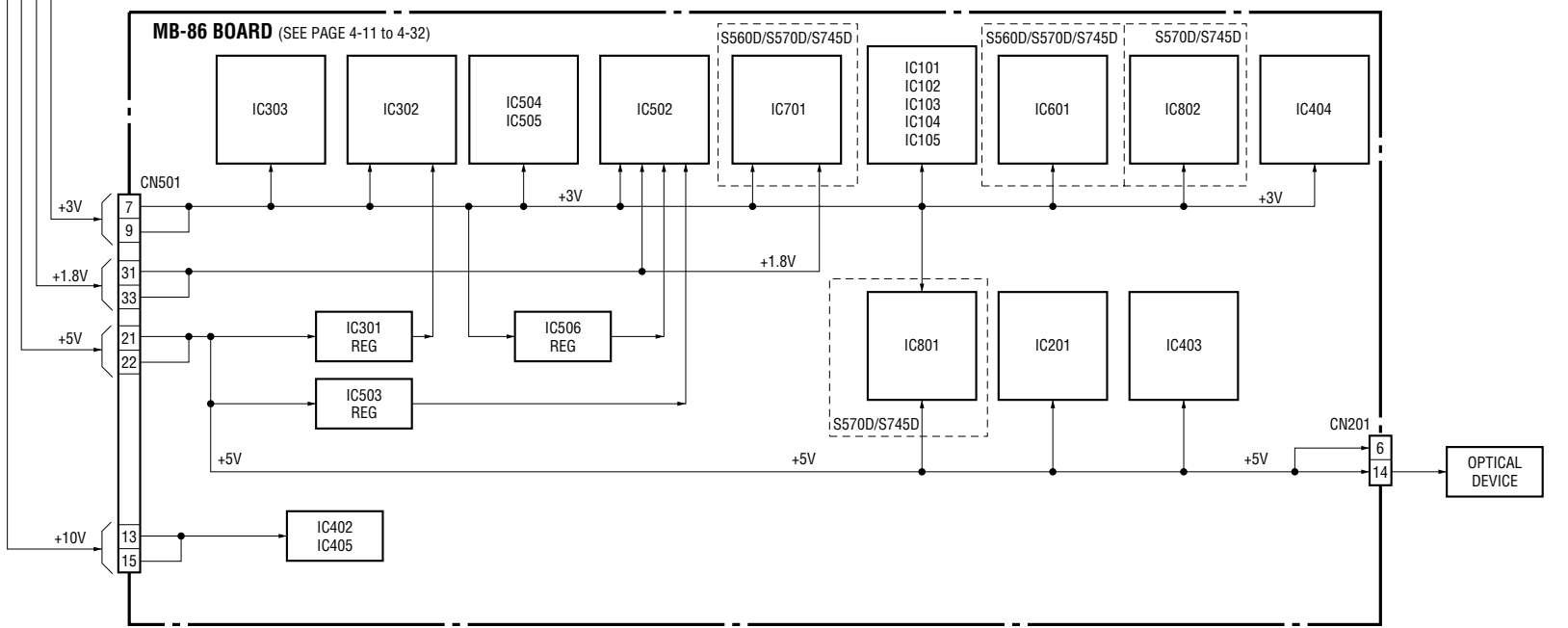


05

3-8. POWER BLOCK DIAGRAM







- Abbreviation
- CH : Chinese
- CND : Canadian
- HK : Hong Kong
- SP : Singapore



SECTION 4 PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

**THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)**








For printed wiring boards:

-  : indicates a lead wire mounted on the component side.
-  : indicates a lead wire mounted on the printed side.
-  : Through hole.
-  : Pattern from the side which enables seeing.
(The other layers' patterns are not indicated.)

Caution:
 Pattern face side: Parts on the pattern face side seen from the pattern face are indicated.
 (Side B)
 Parts face side: Parts on the parts face side seen from the parts face are indicated.
 (Side A)

- Abbreviation
 - CH : Chinese
 - CND : Canadian
 - HK : Hong Kong
 - KR : Korea
 - SP : Singapore

For schematic Diagram:

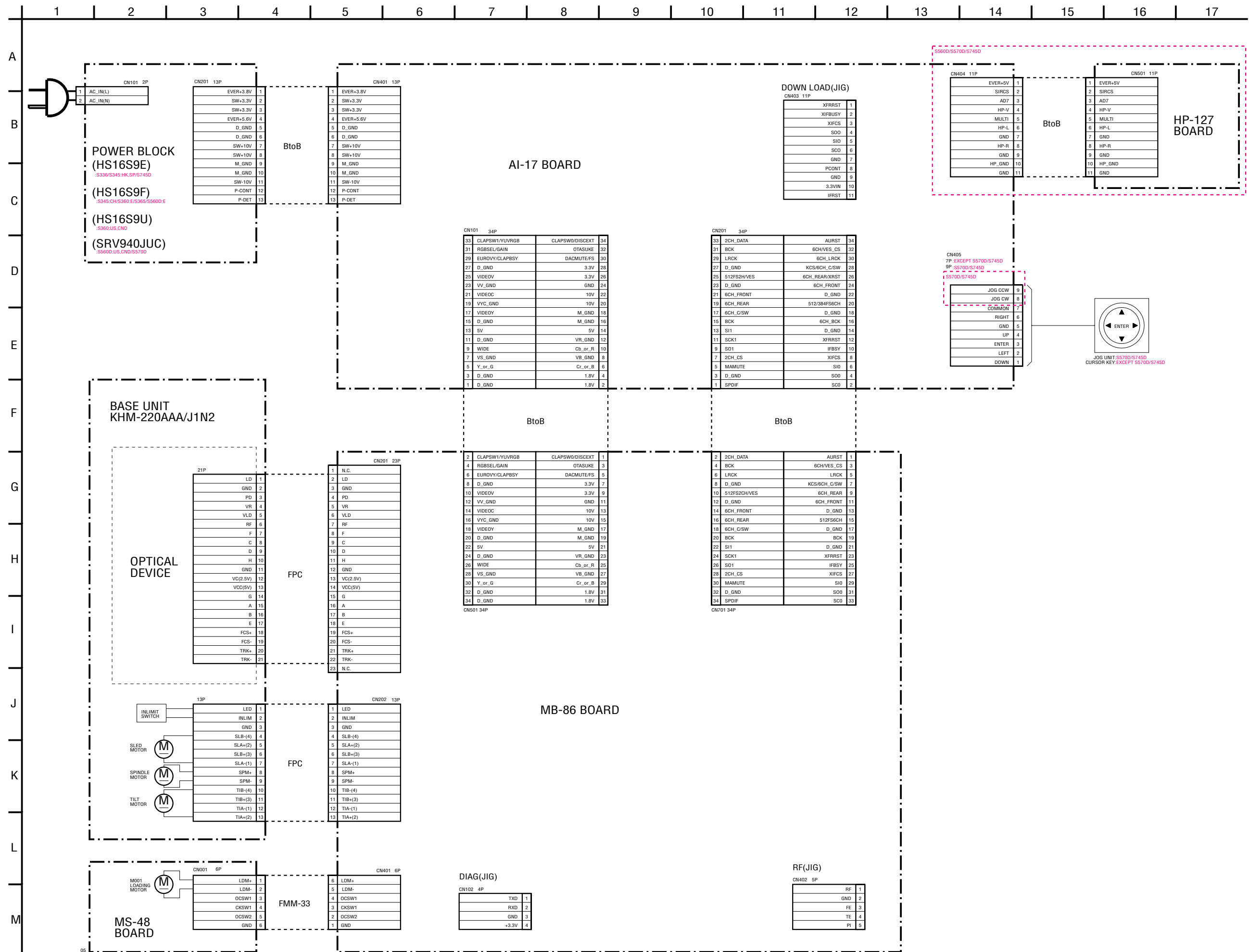
- Caution when replacing chip parts.
New parts must be attached after removal of chip.
Be careful not to heat the minus side of tantalum capacitor, because it is damaged by the heat.
- All resistors are in ohms, $\frac{1}{4}$ W (Chip resistors : $\frac{1}{10}$ W) unless otherwise specified.
k Ω : 1000 Ω , M Ω : 1000k Ω .
- All capacitors are in μ F unless otherwise noted. pF : μ μ F
50V or less are not indicated except for electrolytics and tantalums.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
-  : nonflammable resistor.
-  : fusible resistor.
-  : panel designation.
-  : internal component.
-  : adjustment for repair.
-  : B+ Line.
-  : B- Line.
- Circled numbers refer to waveforms.
- Voltages are dc between measurement point.
- Readings are taken with a color-bar signals on DVD reference disc and when playing CD reference disc.
- Readings are taken with a digital multimeter (DC 10M Ω).
- Voltage variations may be noted due to normal production tolerances.

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

When indicating parts by reference number, please include the board name.

- Abbreviation
 - CH : Chinese
 - CND : Canadian
 - HK : Hong Kong
 - KR : Korea
 - SP : Singapore

4-1. FRAME SCHEMATIC DIAGRAM

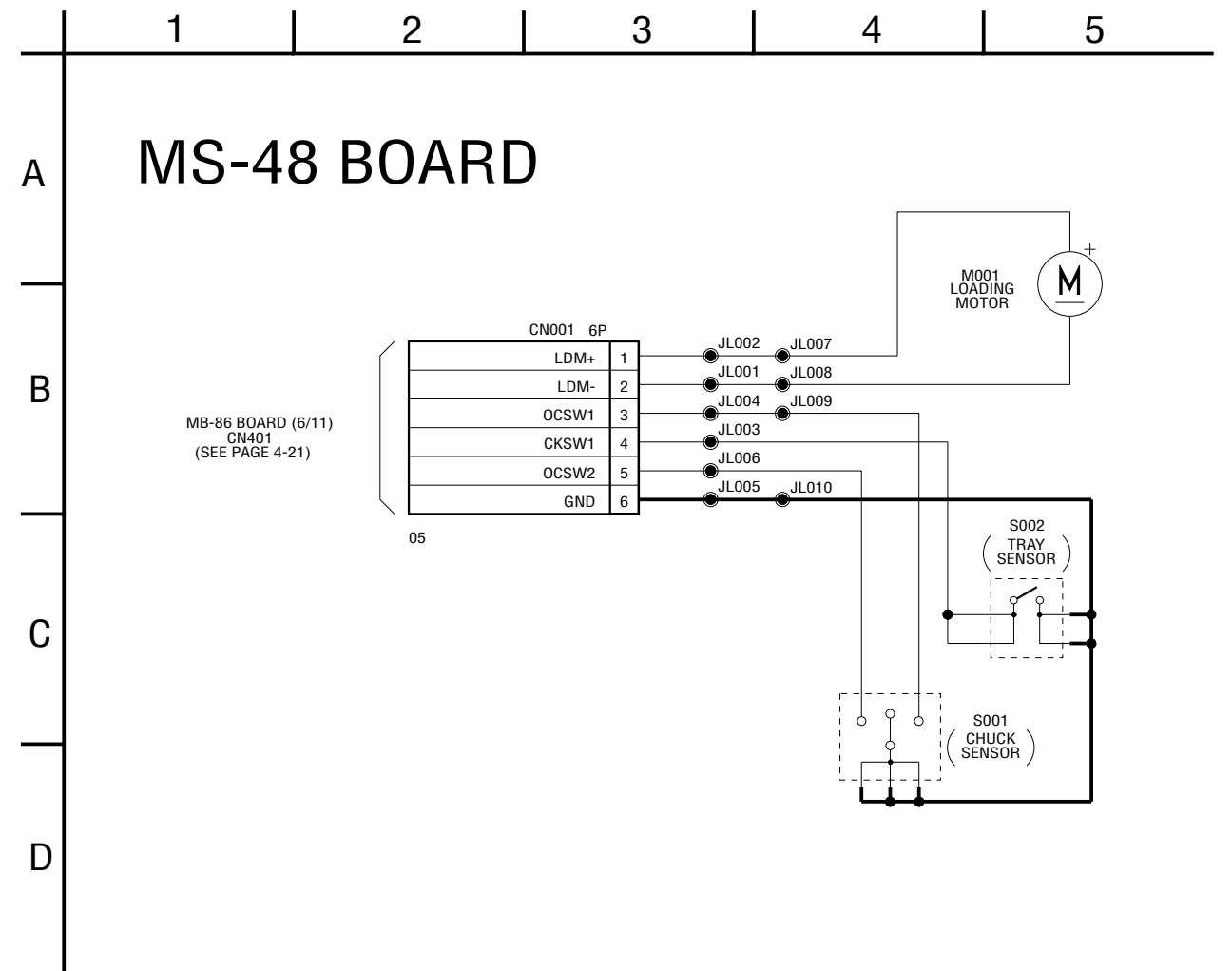
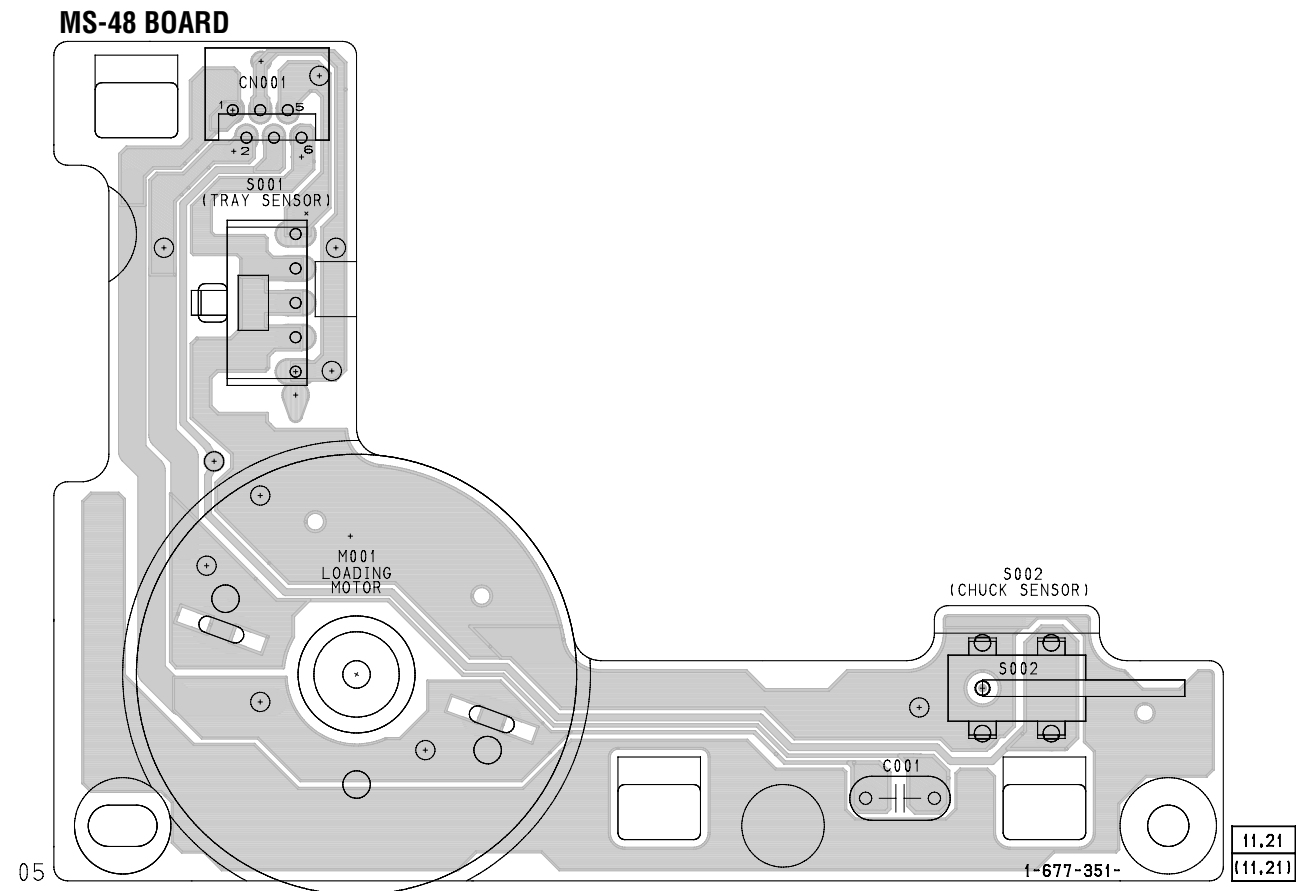


4-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

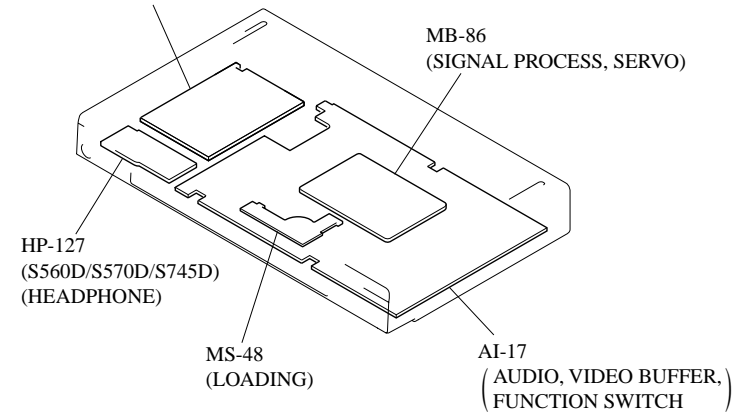
MS-48 (LOADING) PRINTED WIRING BOARD AND SCHEMATIC DIAGRAM

- Ref. No.: MS-48 board; 2,000 series -

There are few cases that the part isn't mounted in this model is printed on this diagram.



Power Block
 (HS16S9E (S336/S345: HK, SP/S745D)
 HS16S9F (S345: CH/S360: E/S365/S560D: E)
 HS16S9U (S360: US, CND)
 SRV940JUC (S560D: US, CND/S570D)
 (SWITCHING REGULATOR)



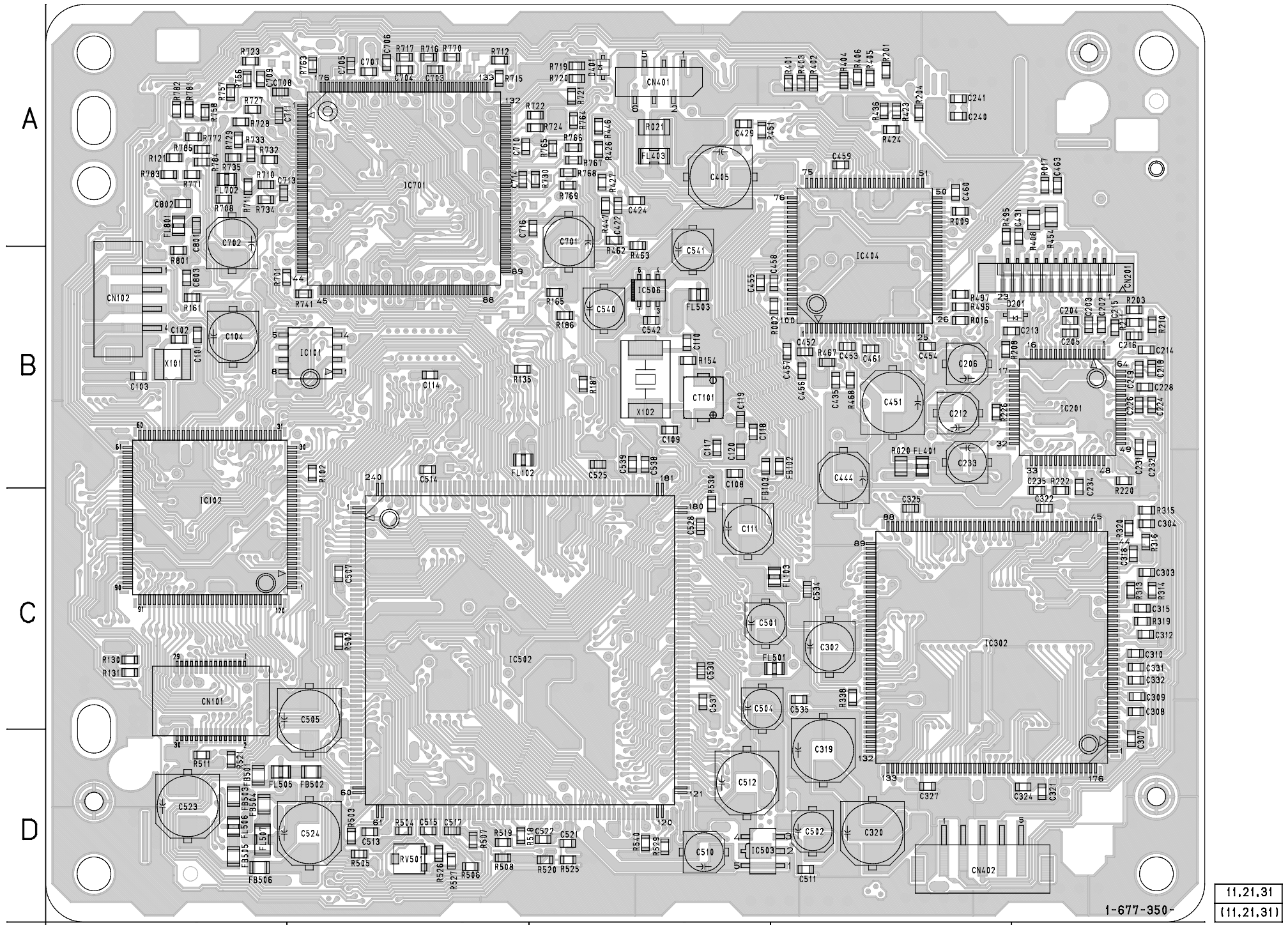
There are few cases that the part isn't mounted in this model is printed on this diagram.

MB-86 (SIGNAL PROCESS, SERVO) PRINTED WIRING BOARD
 - Ref. No.: MB-86 board; 1,000 series -

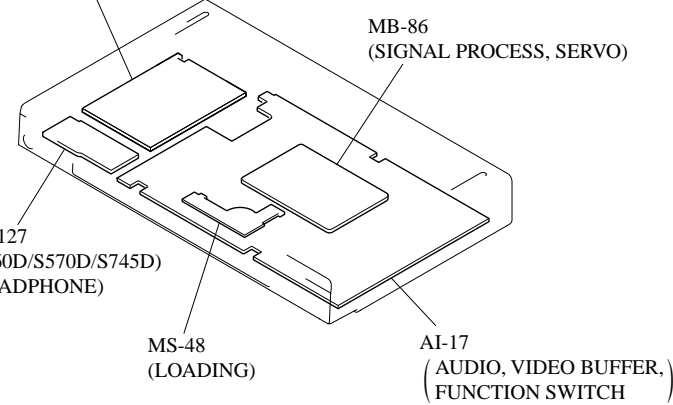
MB-86 BOARD (SIDE A)

- CN102 B-1
- CN201 B-5
- CN401 A-3
- CN402 D-4
- D201 B-5
- IC101 B-2
- IC102 C-1
- IC201 B-5
- IC302 C-4
- IC404 B-4
- IC502 C-2
- IC503 D-3
- IC506 B-3
- IC701 A-2

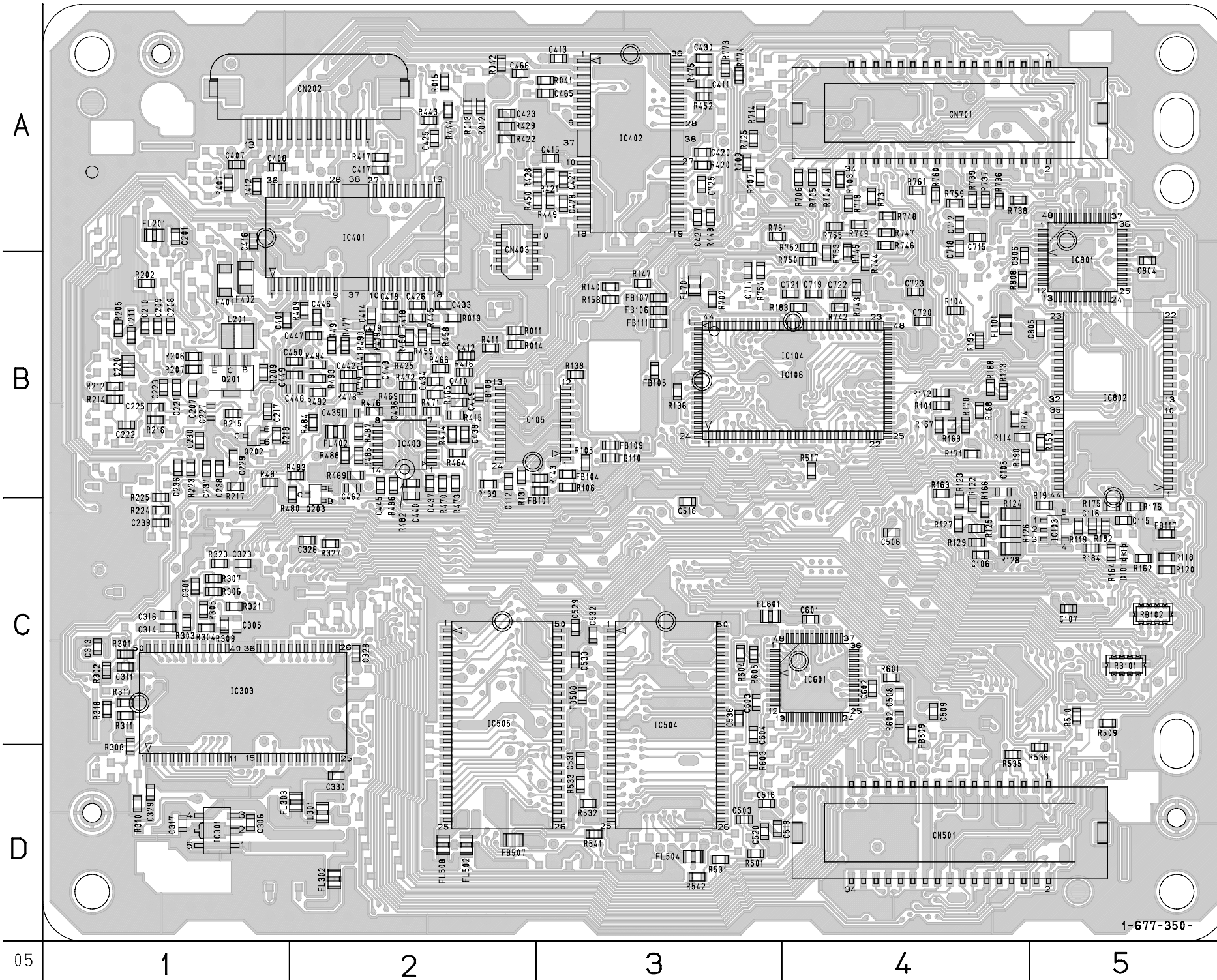
MB-86 BOARD (SIDE A)



Power Block
 (HS16S9E (S336/S345: HK, SP/S745D)
 HS16S9F (S345: CH/S360: E/S365/S560D: E)
 HS16S9U (S360: US, CND)
 SRV940JUC (S560D: US, CND/S570D)
 (SWITCHING REGULATOR))



MB-86 BOARD (SIDE B)

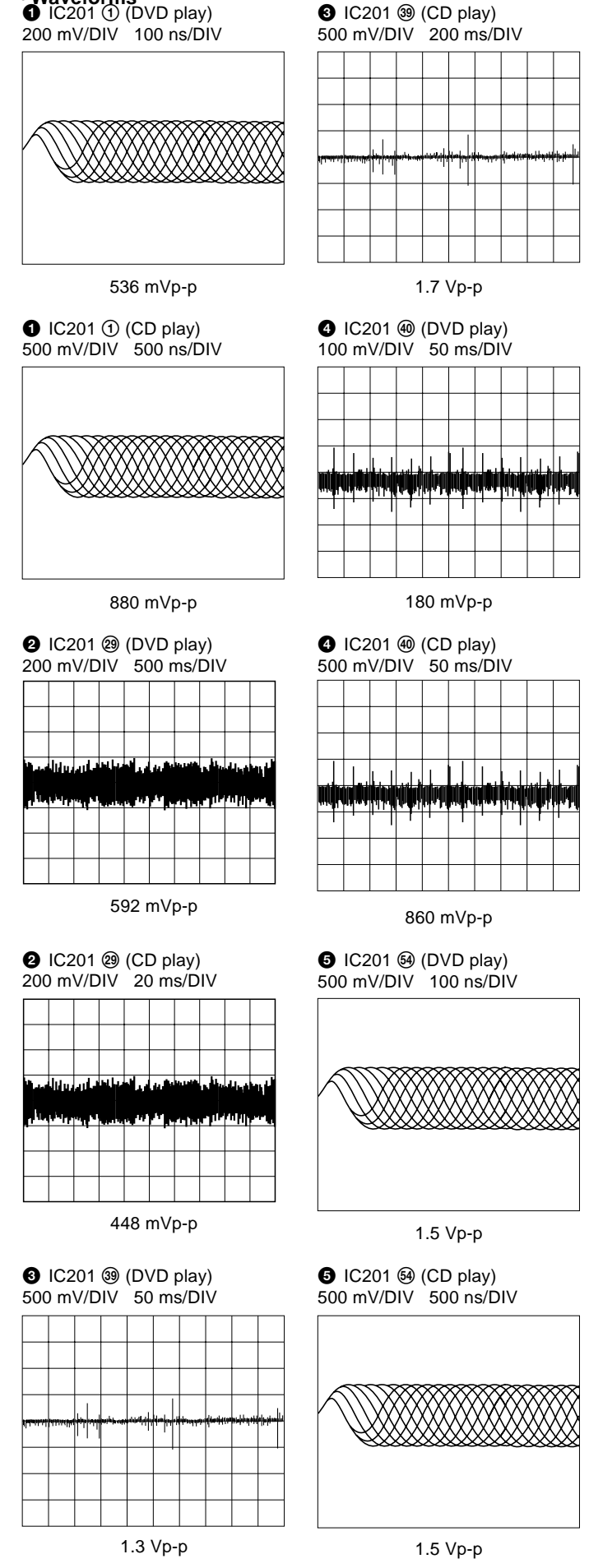


11.21.31
[11.21.31]

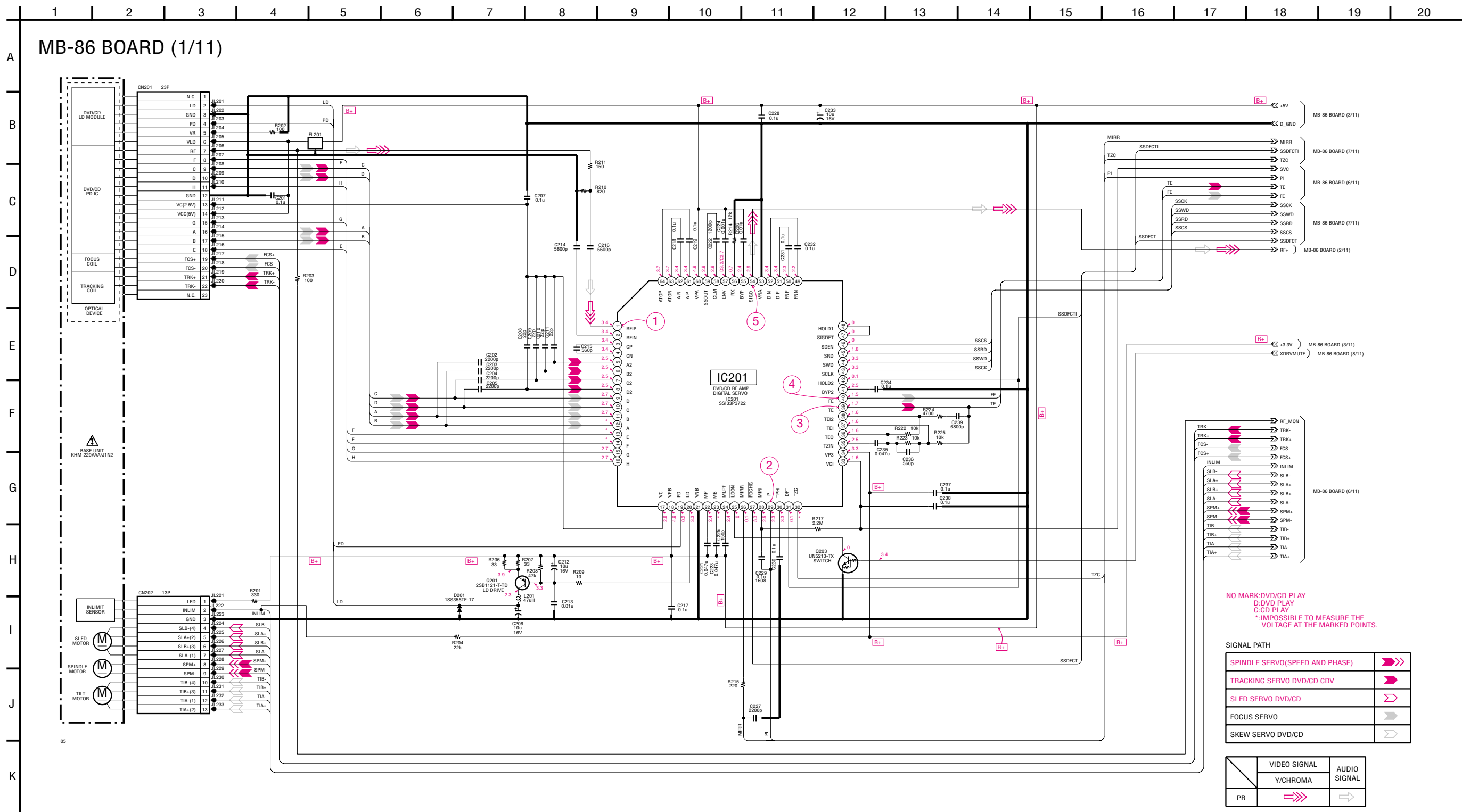
MB-86 BOARD (SIDE B)

CN202	A-2	IC402	A-3
CN501	D-4	IC403	B-2
CN701	A-4	IC504	C-3
		IC505	C-2
D101	C-5	IC601	C-4
		IC801	B-5
IC103	C-5	IC802	B-5
IC104	B-4		
IC105	B-2	Q201	B-1
IC301	D-1	Q203	B-1
IC303	C-1		
IC401	A-2		

• Waveforms



MB-86 (RF AMP, SERVO) SCHEMATIC DIAGRAM • See page 4-7 for printed wiring board and page 4-10 for waveforms.
 – Ref. No.: MB-86 board; 1,000 series –

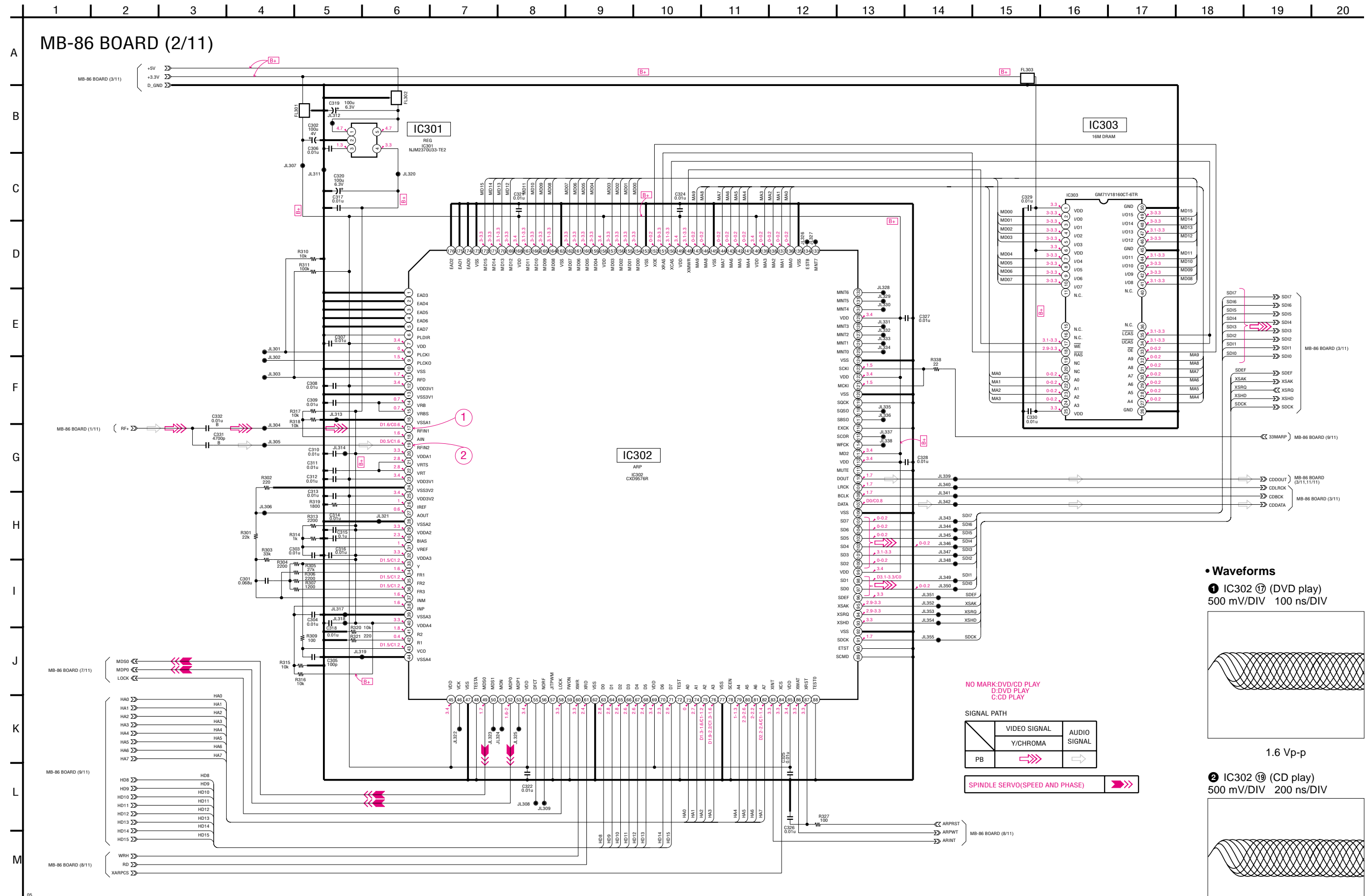


The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

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

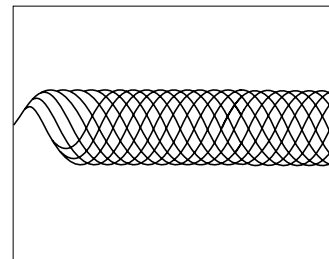
MB-86 (ARP) SCHEMATIC DIAGRAM • See page 4-7 for printed wiring board.

– Ref. No.: MB-86 board; 1,000 series –



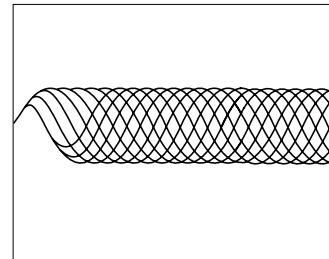
• Waveforms

① IC302 ⑰ (DVD play)
500 mV/DIV 100 ns/DIV



1.6 Vp-p

② IC302 ⑱ (CD play)
500 mV/DIV 200 ns/DIV



1.6 Vp-p

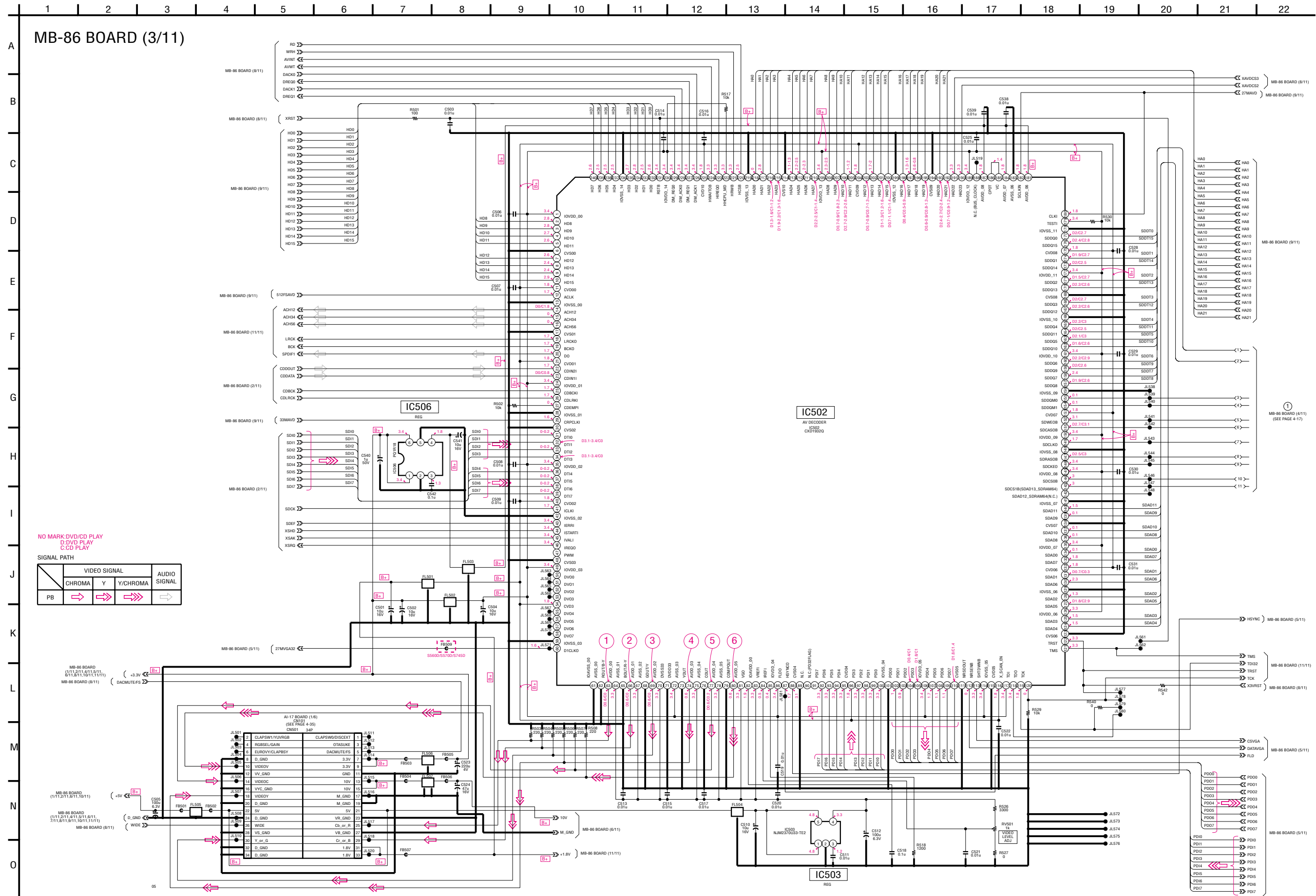
NO MARK: DVD/CD PLAY
D: DVD PLAY
C: CD PLAY

SIGNAL PATH

	VIDEO SIGNAL	AUDIO SIGNAL
	Y/CHROMA	
PB	→	→

SPINDLE SERVO(SPEED AND PHASE) →

MB-86 (AV DECODER) SCHEMATIC DIAGRAM • See page 4-7 for printed wiring board.
 – Ref. No.: MB-86 board; 1,000 series –



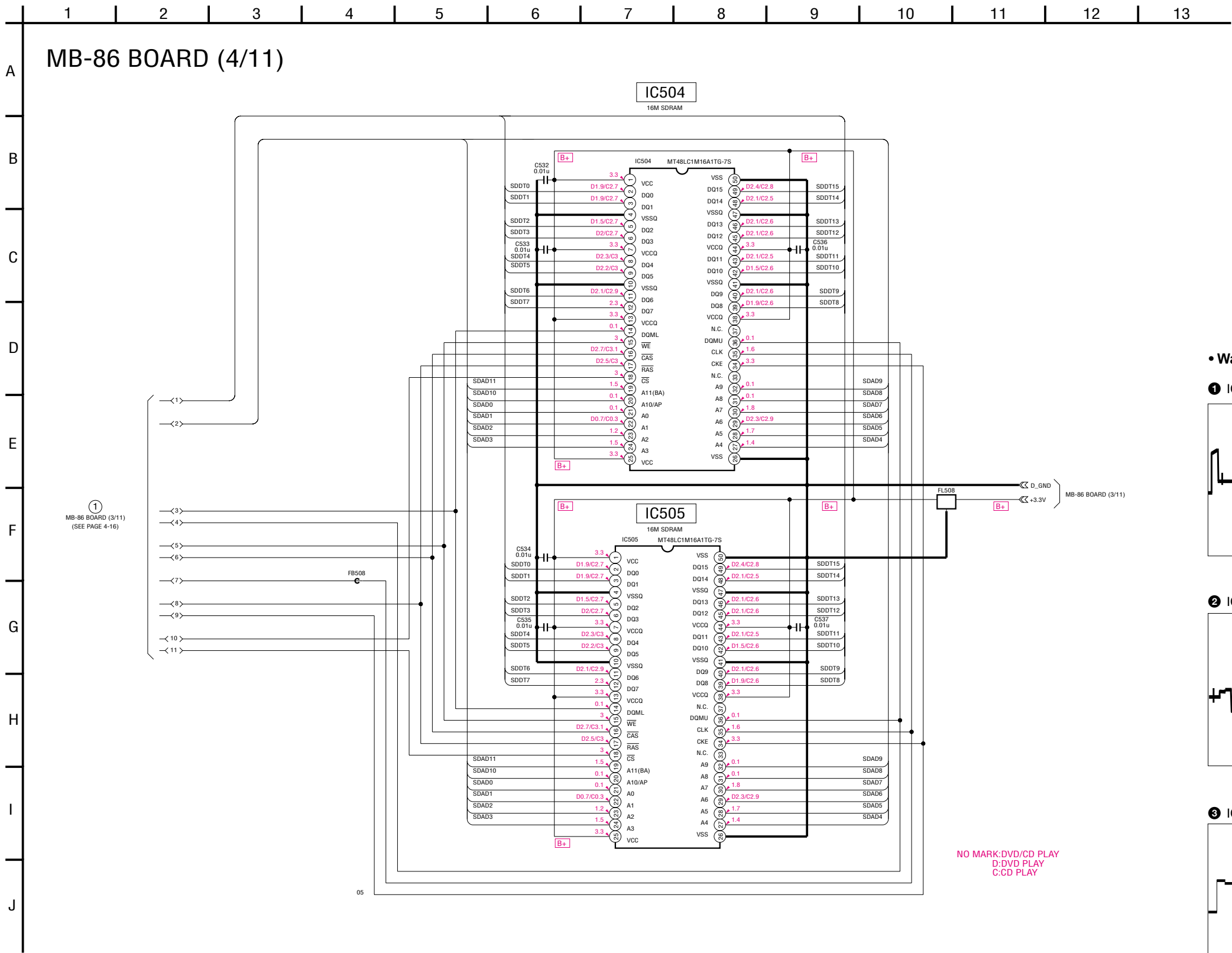
MB-86 BOARD (3/11)

NO MARK: DVD/CD PLAY
 D: DVD PLAY
 C: CD PLAY

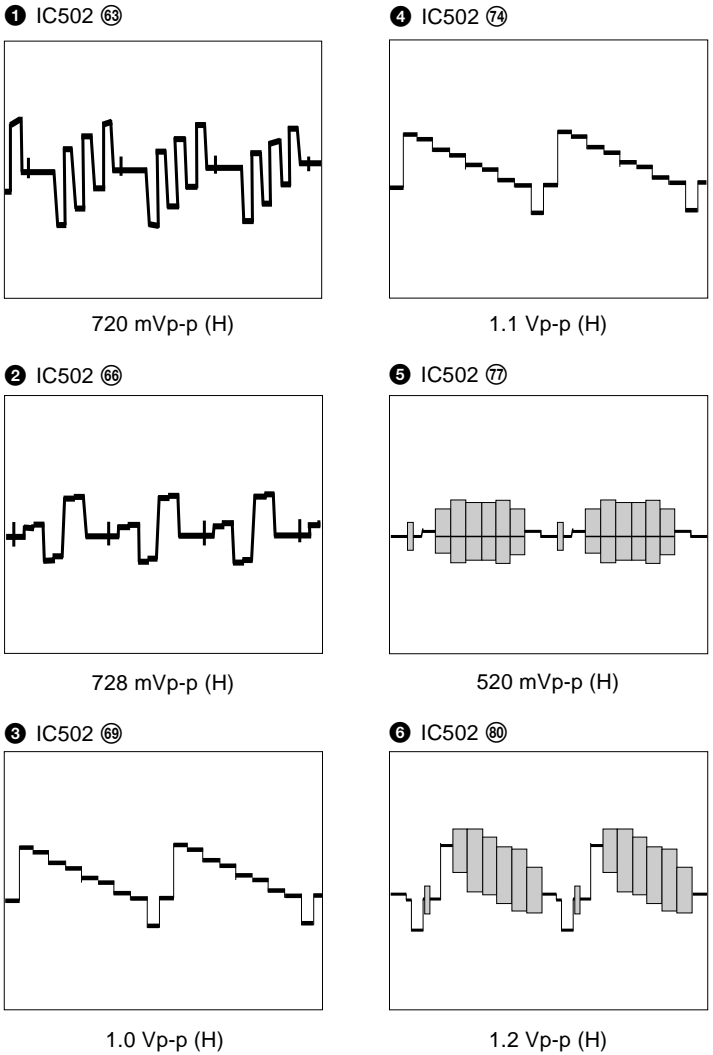
SIGNAL PATH	VIDEO SIGNAL			AUDIO SIGNAL
	CHROMA	Y	Y/CHROMA	
PB	→	→	→	→

MB-86 (SDRAM) SCHEMATIC DIAGRAM • See page 4-7 for printed wiring board.

– Ref. No.: MB-86 board; 1,000 series –

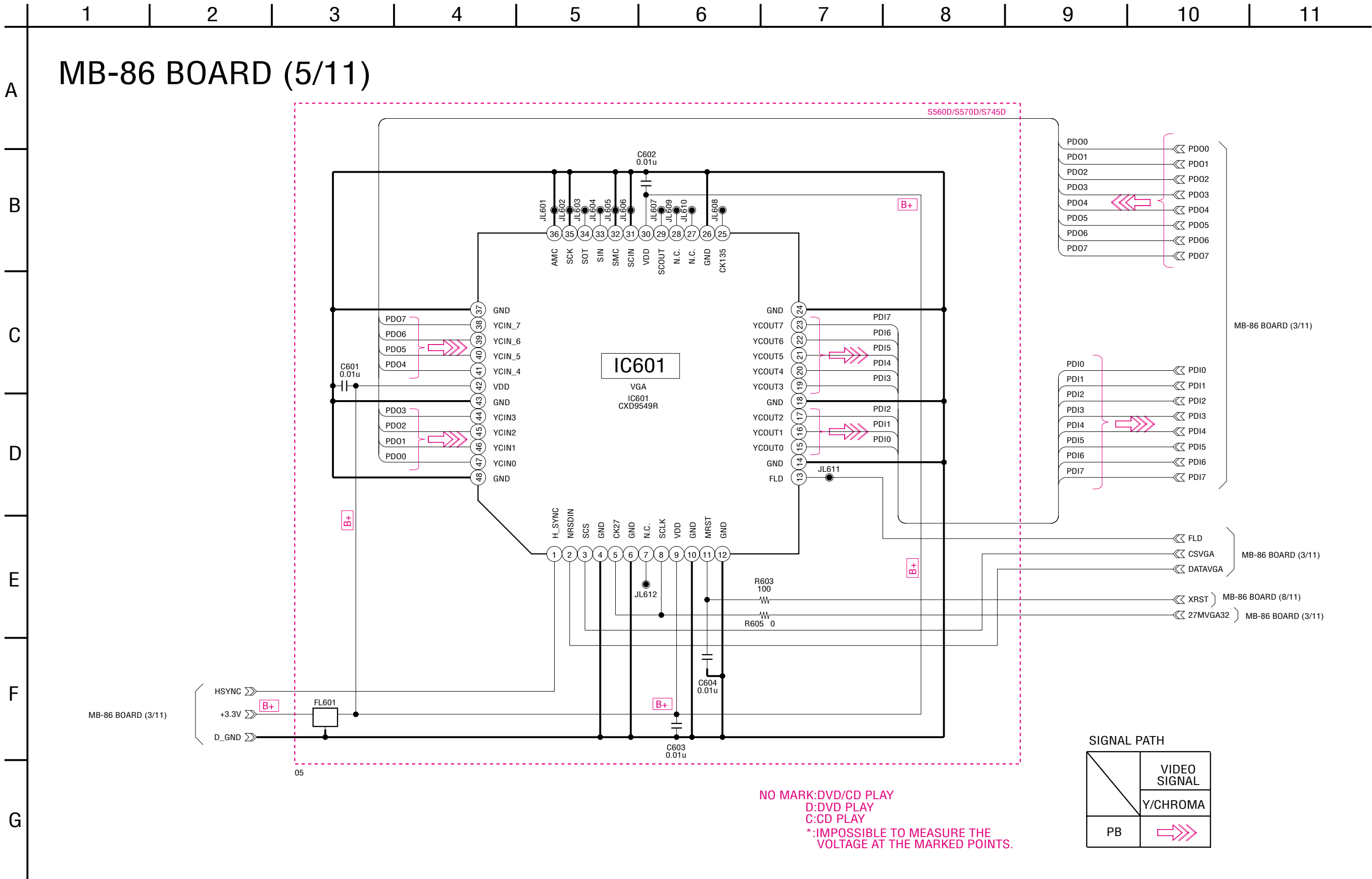


• Waveforms



NO MARK: DVD/CD PLAY
D: DVD PLAY
C: CD PLAY

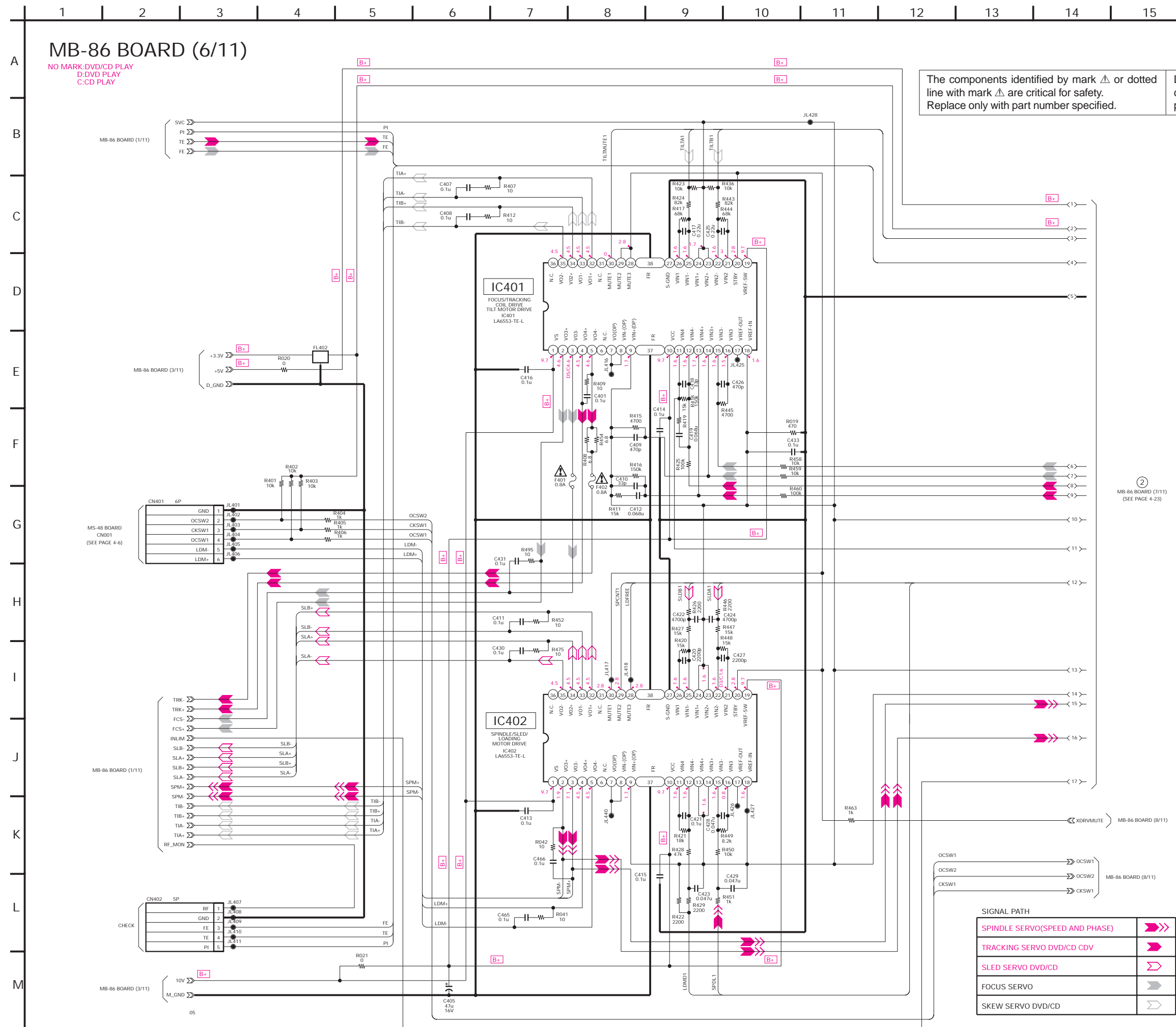
MB-86 (VGA) SCHEMATIC DIAGRAM • See page 4-7 for printed wiring board.
 – Ref. No.: MB-86 board; 1,000 series –



NO MARK:DVD/CD PLAY
 D:DVD PLAY
 C:CD PLAY
 *:IMPOSSIBLE TO MEASURE THE VOLTAGE AT THE MARKED POINTS.

SIGNAL PATH

PB	VIDEO SIGNAL
	Y/CHROMA



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

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

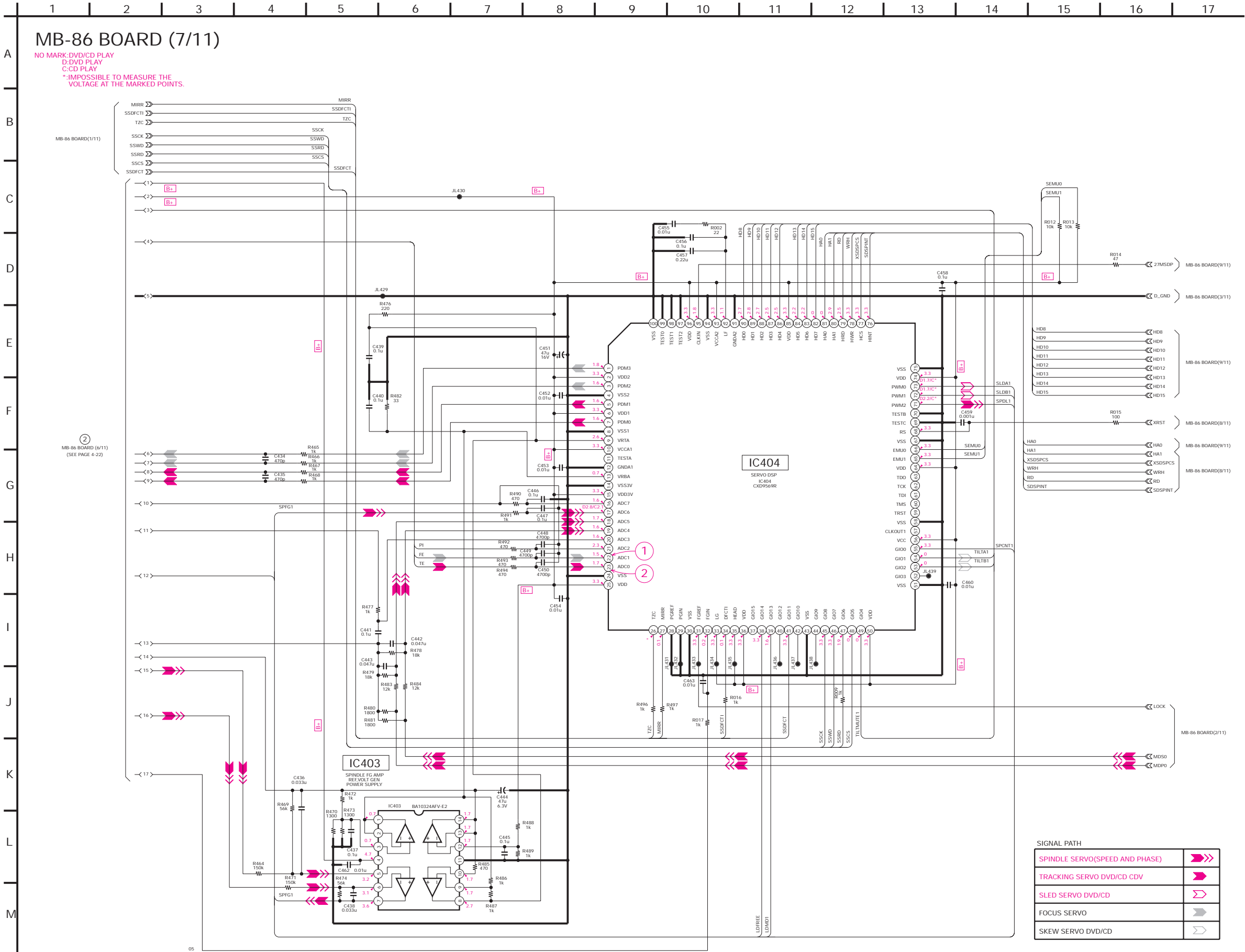
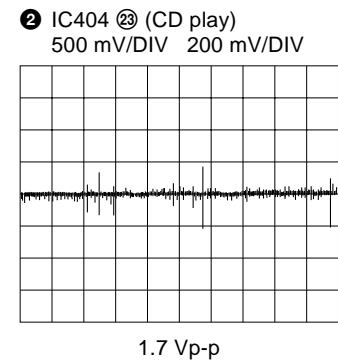
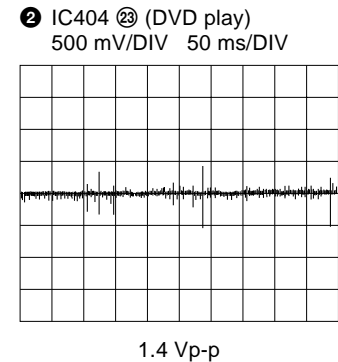
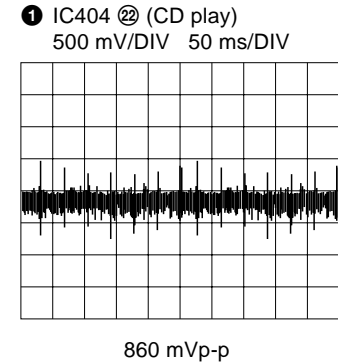
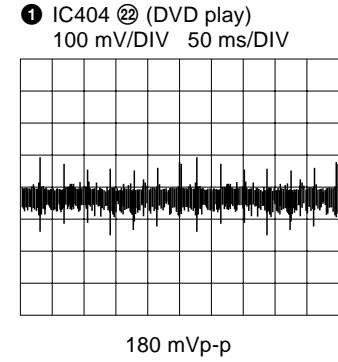
② MB-86 BOARD (7/11)
(SEE PAGE 4-23)

SIGNAL PATH	
SPINDLE SERVO(SPEED AND PHASE)	\gggg
TRACKING SERVO DVD/CD CDV	\gg
SLED SERVO DVD/CD	\gg
FOCUS SERVO	\gg
SKREW SERVO DVD/CD	\gg

MB-86 (SERVO DSP) SCHEMATIC DIAGRAM • See page 4-7 for printed wiring board.

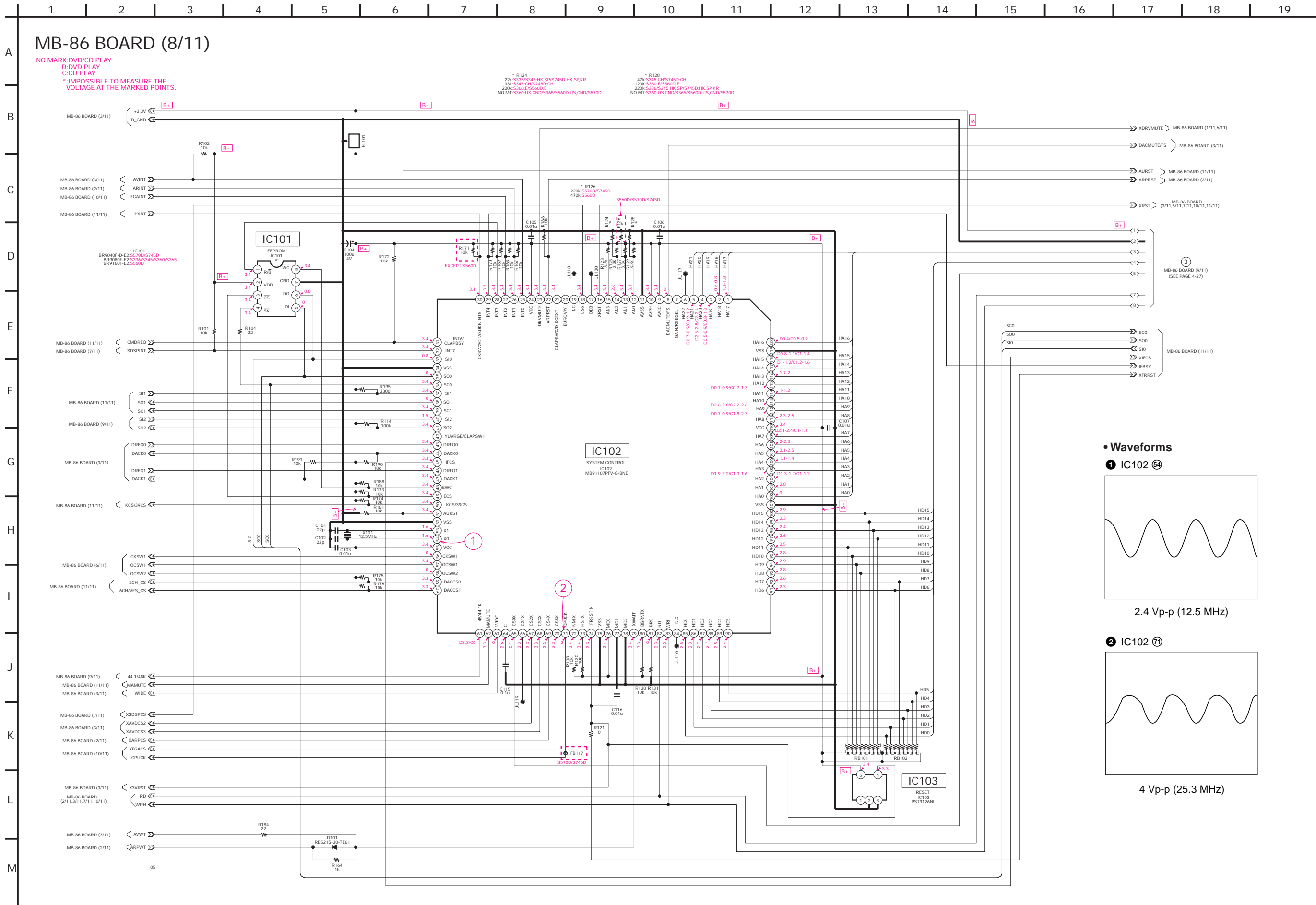
– Ref. No.: MB-86 board; 1,000 series –

• Waveforms



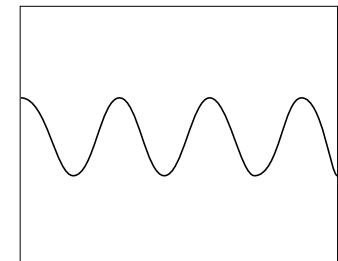
MB-86 (SYSTEM CONTROL) SCHEMATIC DIAGRAM • See page 4-7 for printed wiring board.

- Ref. No.: MB-86 board; 1,000 series -



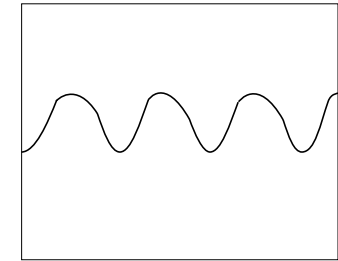
• Waveforms

① IC102 (54)



2.4 Vp-p (12.5 MHz)

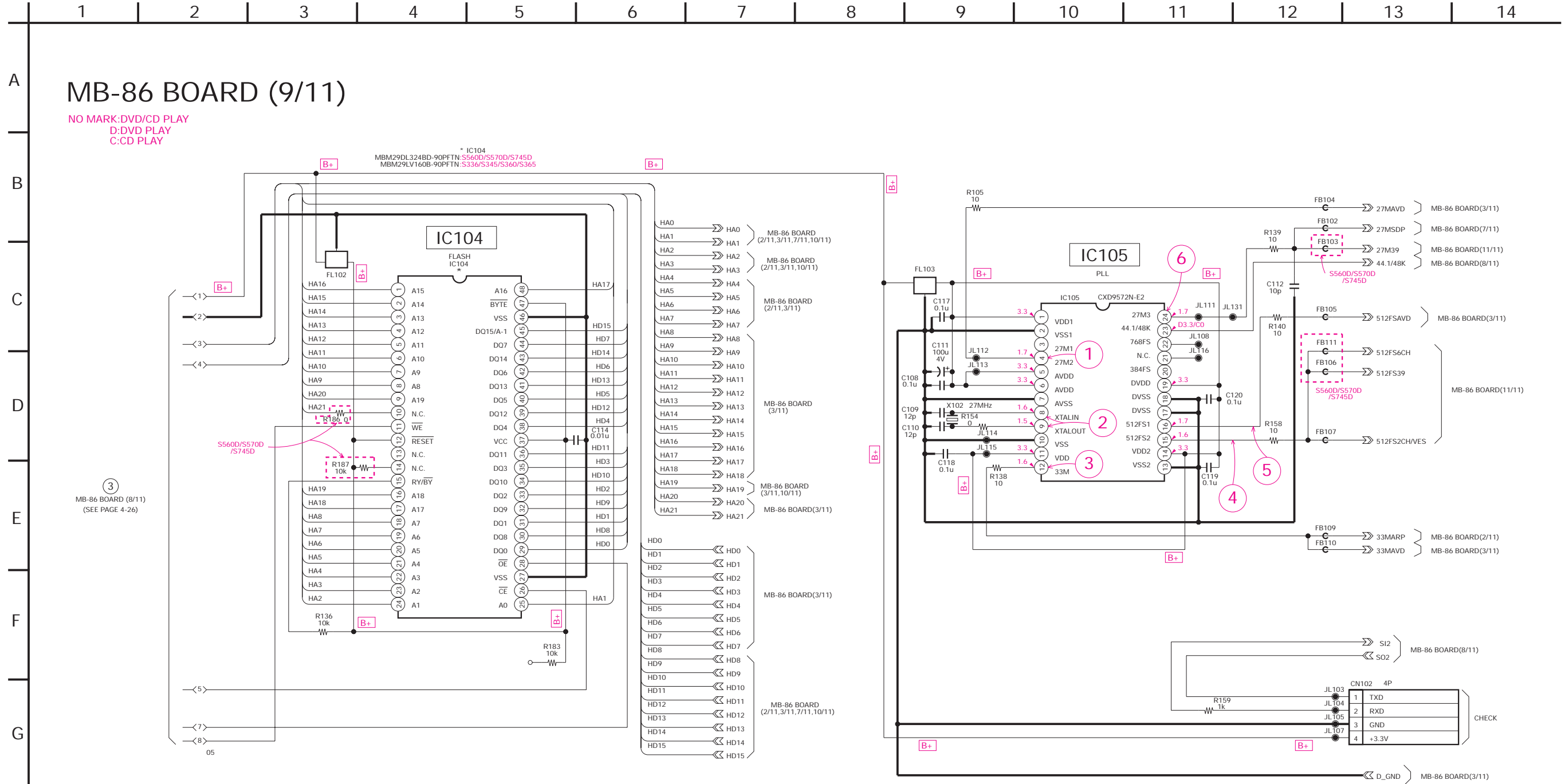
② IC102 (7)



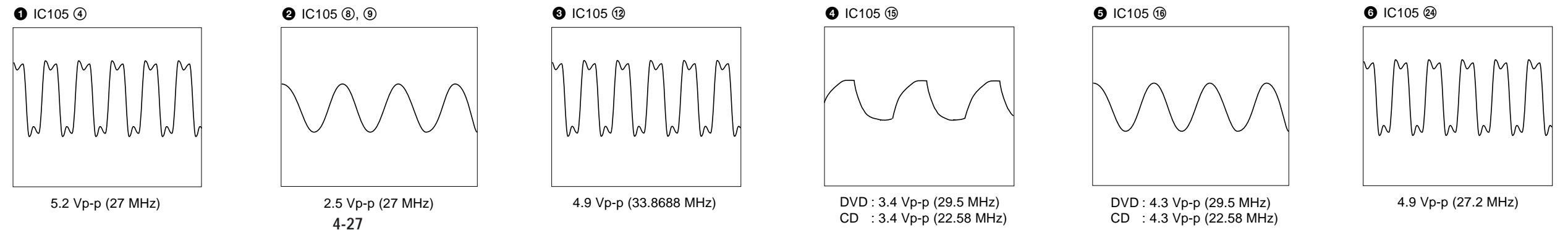
4 Vp-p (25.3 MHz)

MB-86 (MEMORY, CLOCK GENERATOR) SCHEMATIC DIAGRAM • See page 4-7 for printed wiring board.

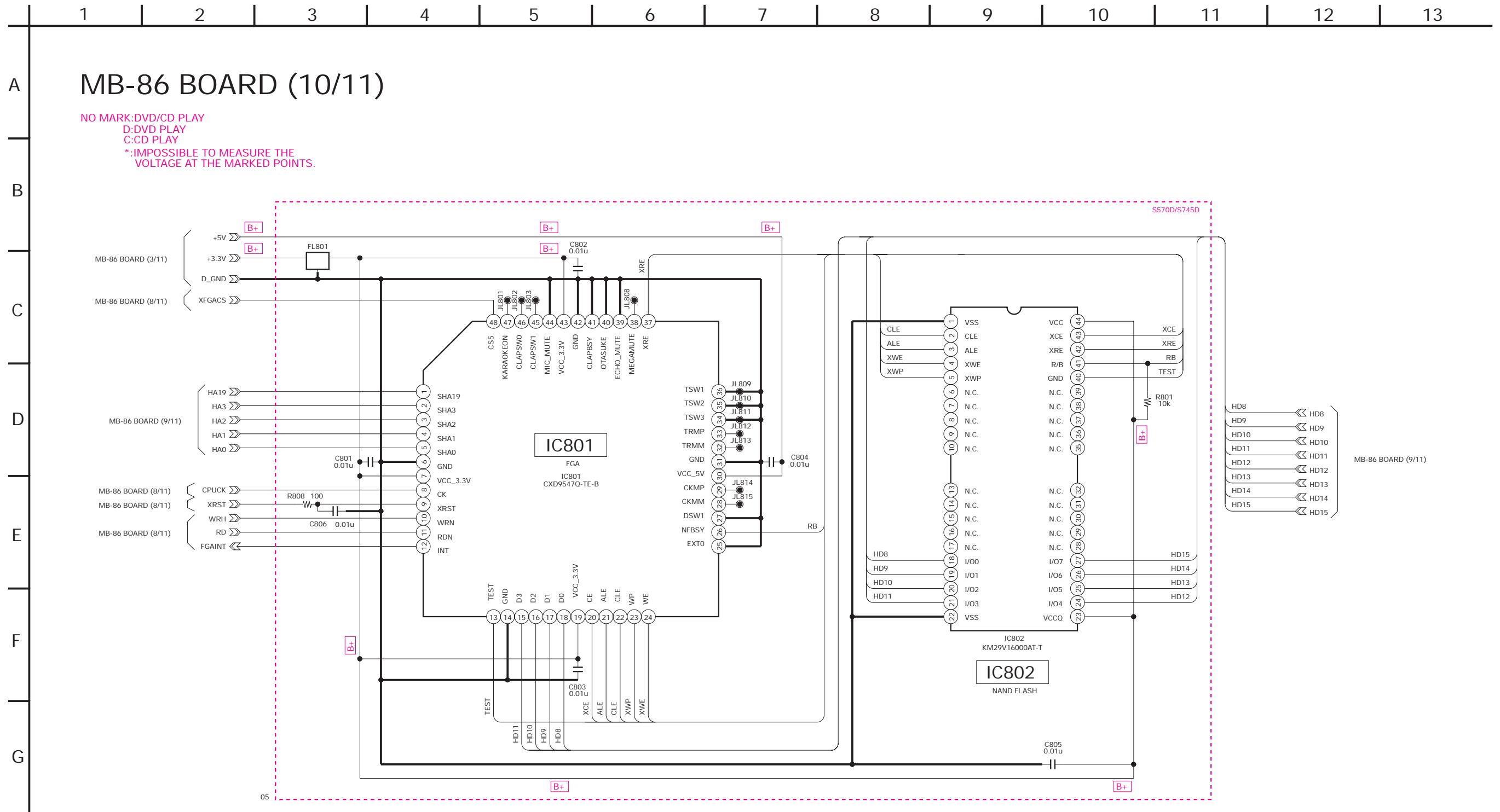
– Ref. No.: MB-86 board; 1,000 series –



• Waveforms

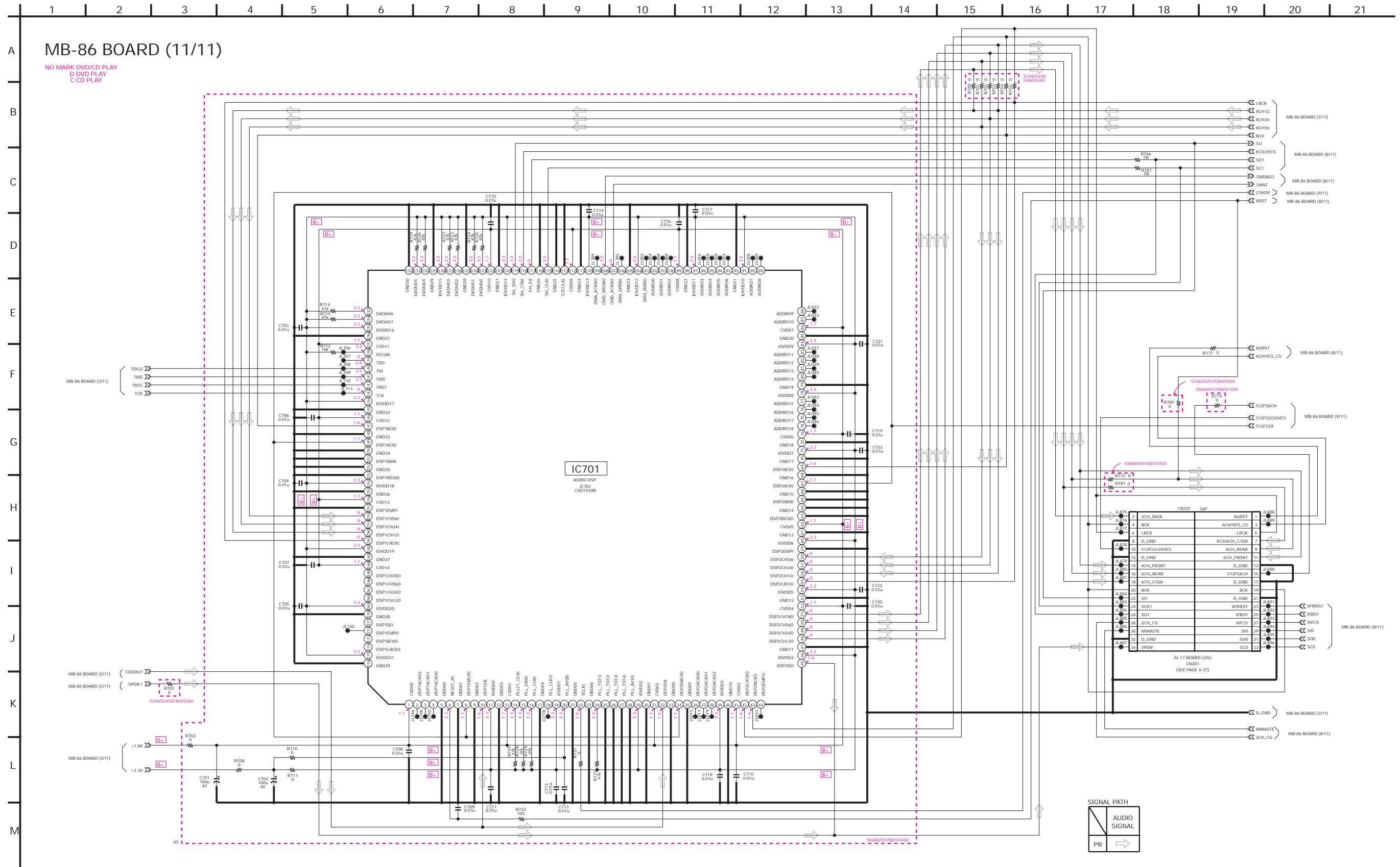


MB-86 (FGA) SCHEMATIC DIAGRAM • See page 4-7 for printed wiring board.
 – Ref. No.: MB-86 board; 1,000 series –



MB-86 (AUDIO DSP) SCHEMATIC DIAGRAM • See page 4-7 for printed wiring board.

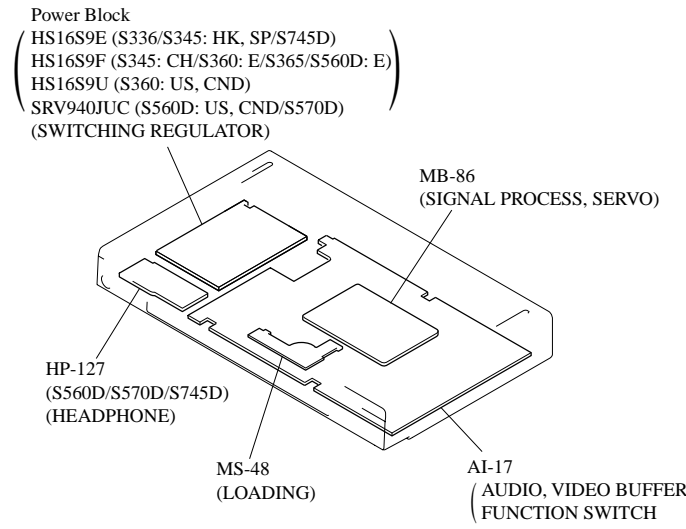
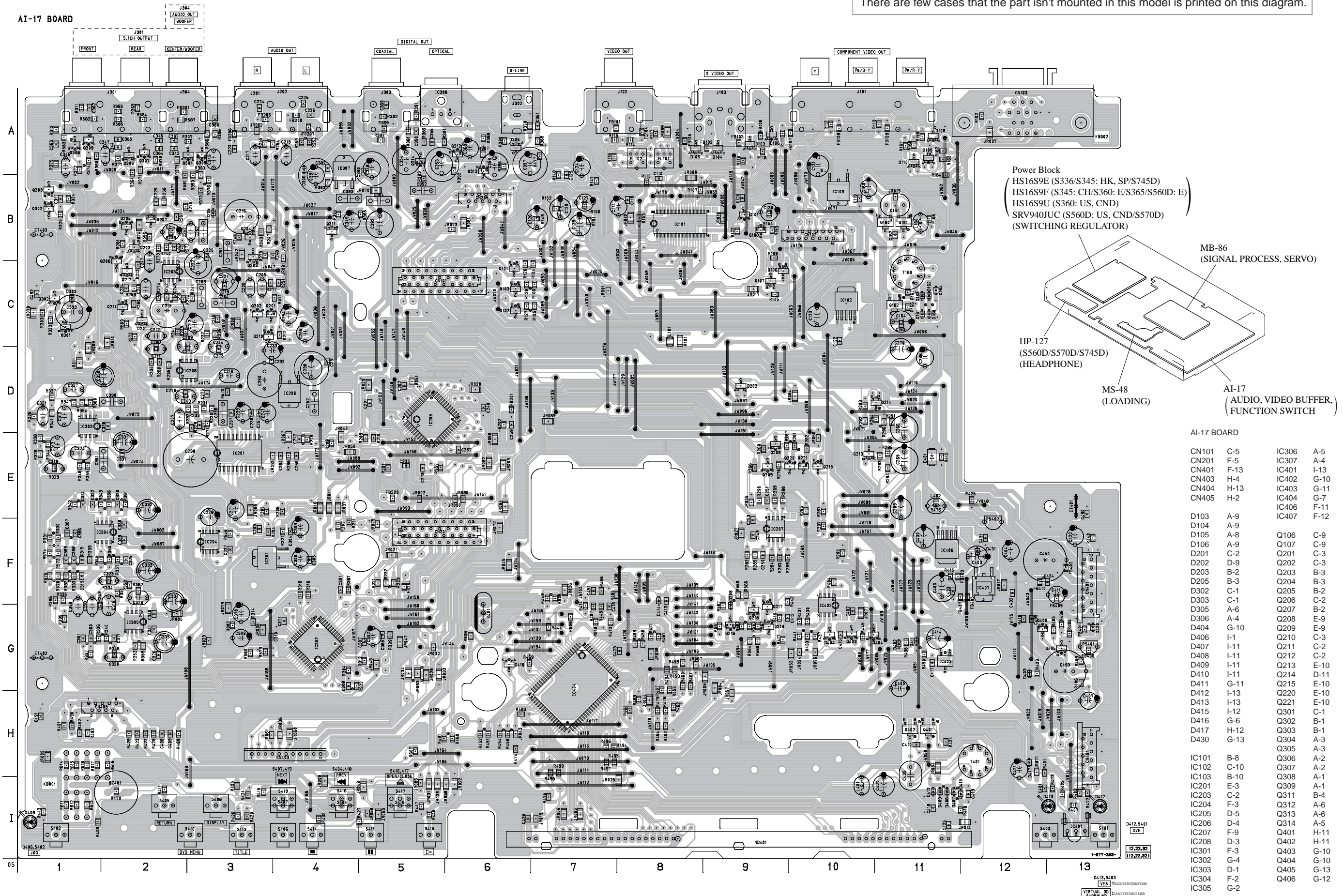
– Ref. No.: MB-86 board; 1,000 series –



AI-17 (AUDIO, VIDEO BUFFER, FUNCTION SWITCH) PRINTED WIRING BOARD

- Ref. No.: AI-17 board; 2,000 series -

There are few cases that the part isn't mounted in this model is printed on this diagram.

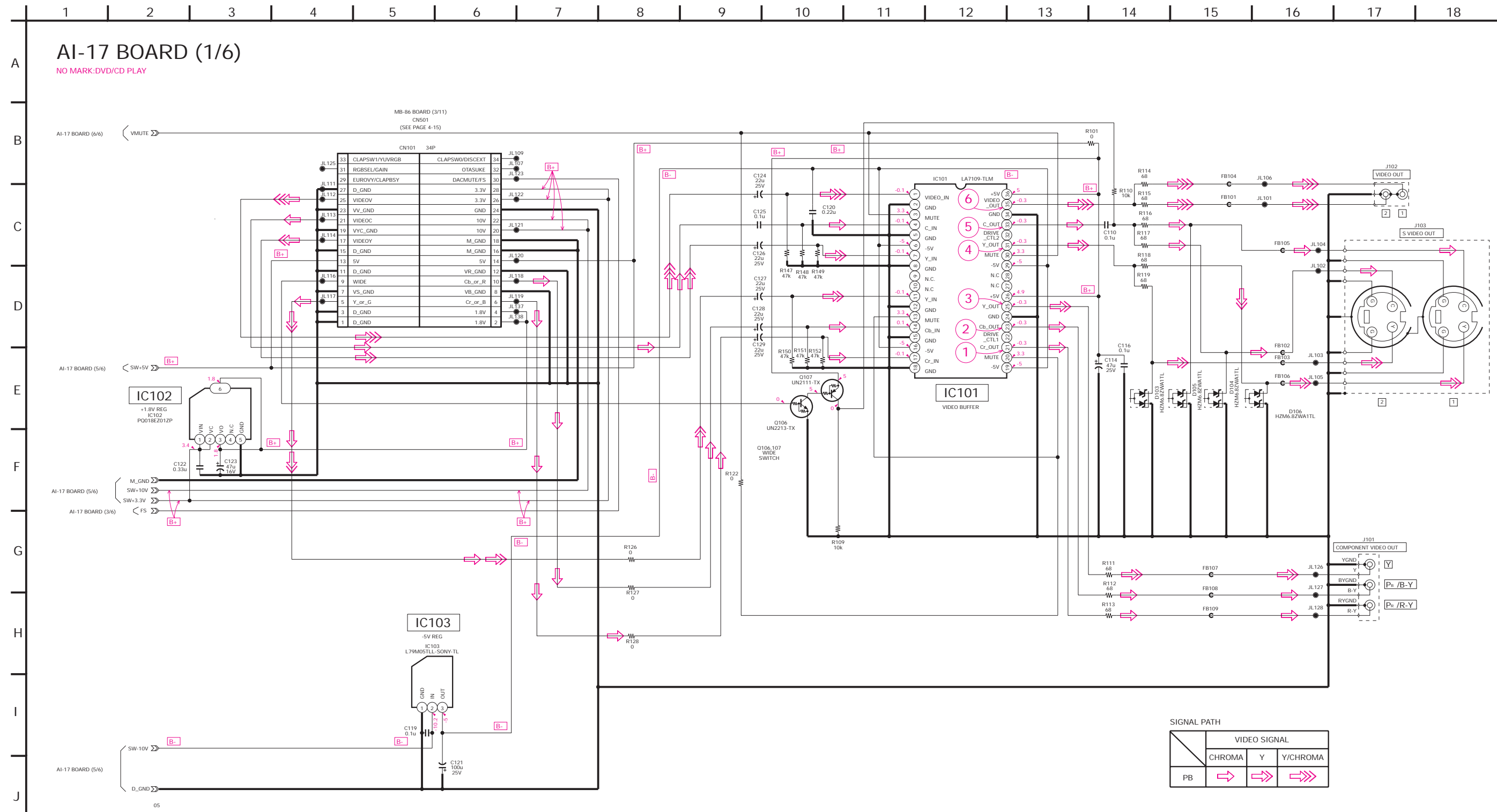


AI-17 BOARD

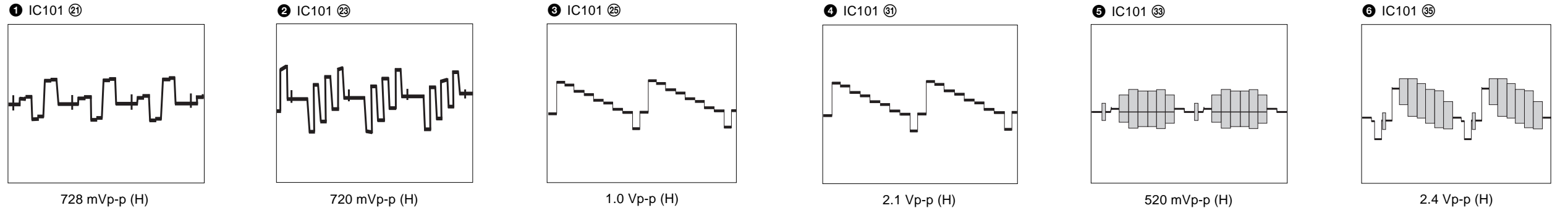
CN101	C-5	IC306	A-5
CN201	F-5	IC307	A-4
CN401	F-13	IC401	I-13
CN403	H-4	IC402	G-10
CN404	H-13	IC403	G-11
CN405	H-2	IC404	G-7
		IC406	F-12
		IC407	F-11
D103	A-9	Q106	C-9
D104	A-9	Q107	C-9
D105	A-8	Q201	C-3
D106	A-9	Q202	C-3
D201	C-2	Q203	B-3
D202	D-9	Q204	B-3
D203	B-2	Q205	B-2
D205	B-3	Q206	C-2
D302	C-1	Q207	B-2
D303	C-1	Q208	E-9
D305	A-6	Q209	E-9
D306	A-4	Q210	C-3
D404	G-10	Q211	C-2
D406	I-1	Q212	C-2
D407	I-11	Q213	E-10
D408	I-11	Q214	D-11
D409	I-11	Q215	E-10
D410	I-11	Q220	E-10
D411	G-11	Q221	E-10
D412	I-13	Q301	C-1
D413	I-13	Q302	B-1
D415	I-12	Q303	B-1
D416	G-6	Q304	A-3
D417	H-12	Q305	A-3
D430	G-13	Q306	A-2
		Q307	A-2
		Q308	A-1
		Q309	A-1
		Q311	B-4
		Q312	A-6
		Q313	A-6
		Q314	A-5
		Q401	H-11
		Q402	H-11
		Q403	G-10
		Q404	G-10
		Q405	G-13
		Q406	G-12

AI-17 (VIDEO BUFFER) SCHEMATIC DIAGRAM • See page 4-33 for printed wiring board.

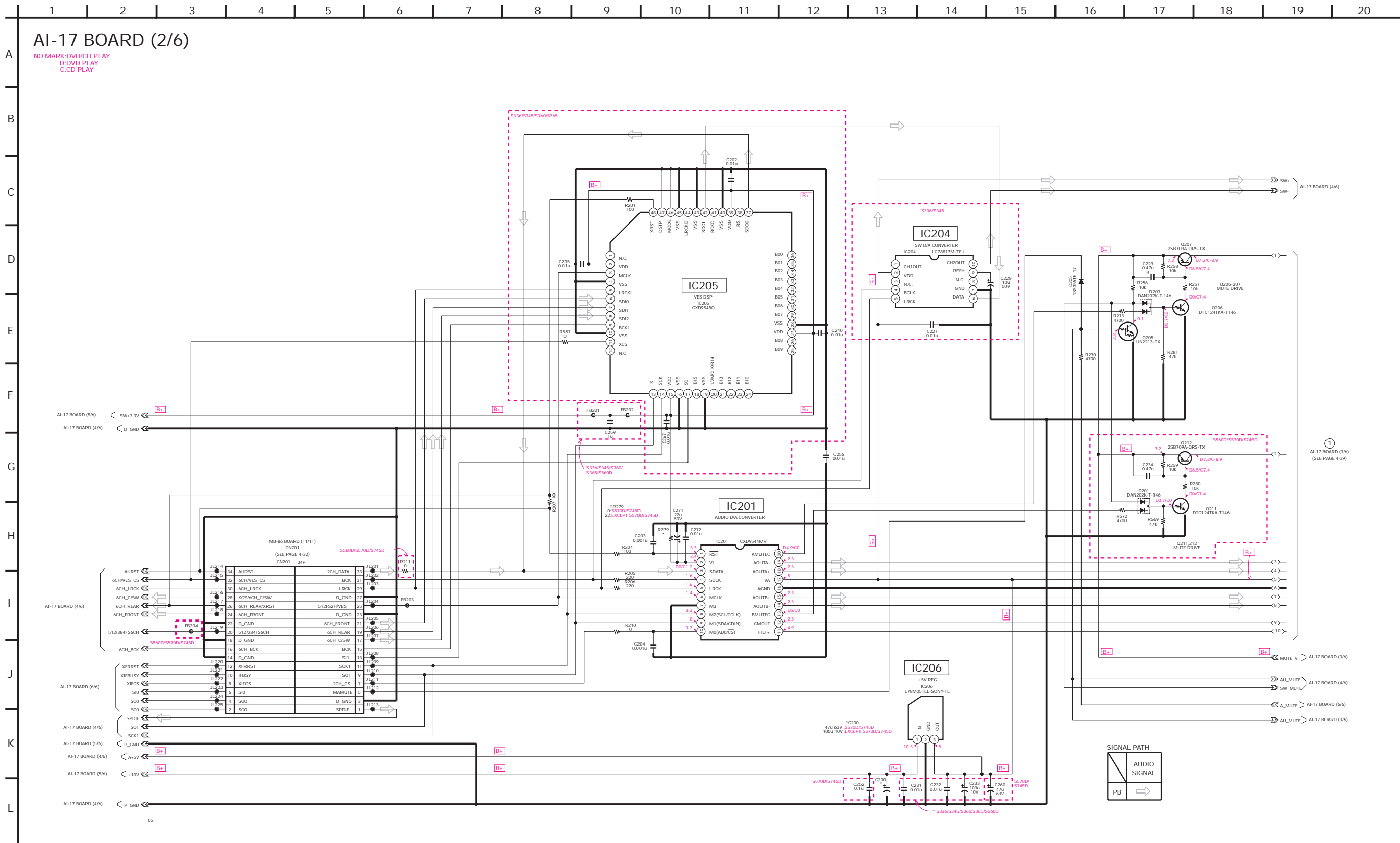
– Ref. No.: AI-17 board; 2,000 series –



• Waveforms



AI-17 (D/A CONVERTER, DSP) SCHEMATIC DIAGRAM • See page 4-33 for printed wiring board.
 – Ref. No.: AI-17 board; 2,000 series –



AI-17 (AMP, LPF) SCHEMATIC DIAGRAM • See page 4-33 for printed wiring board.

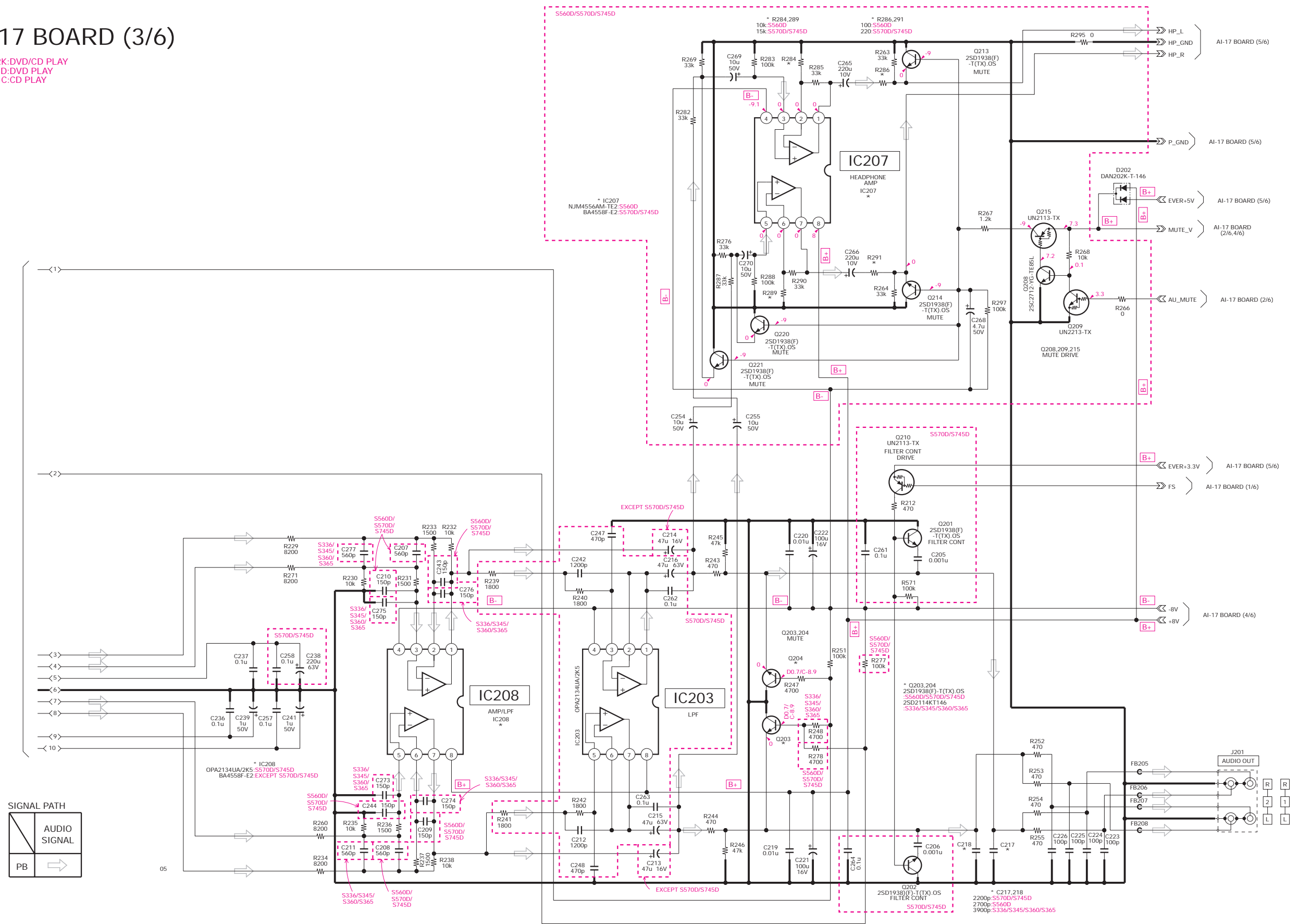
- Ref. No.: AI-17 board; 2,000 series -

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

A
B
C
D
E
F
G
H
I
J

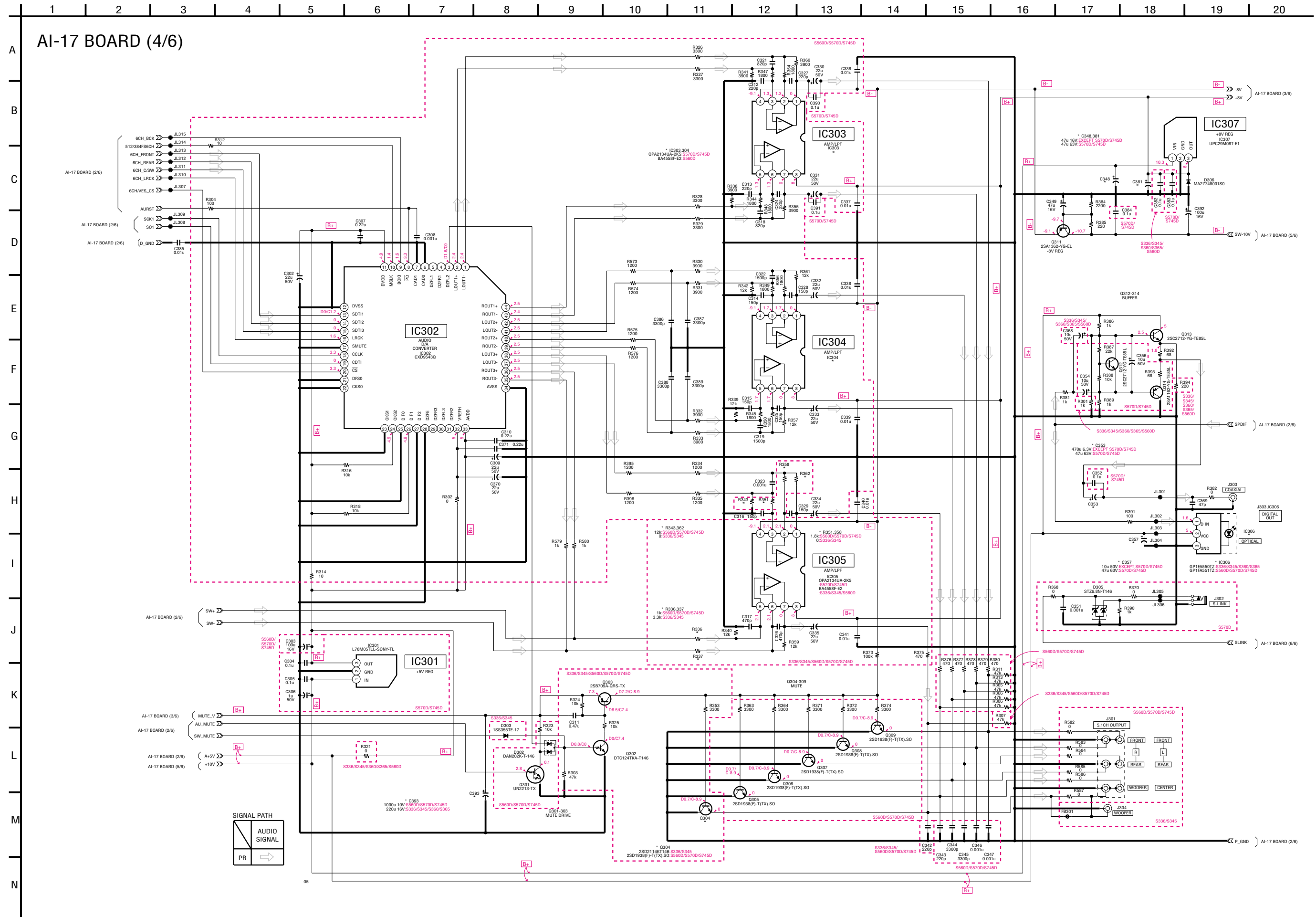
AI-17 BOARD (3/6)

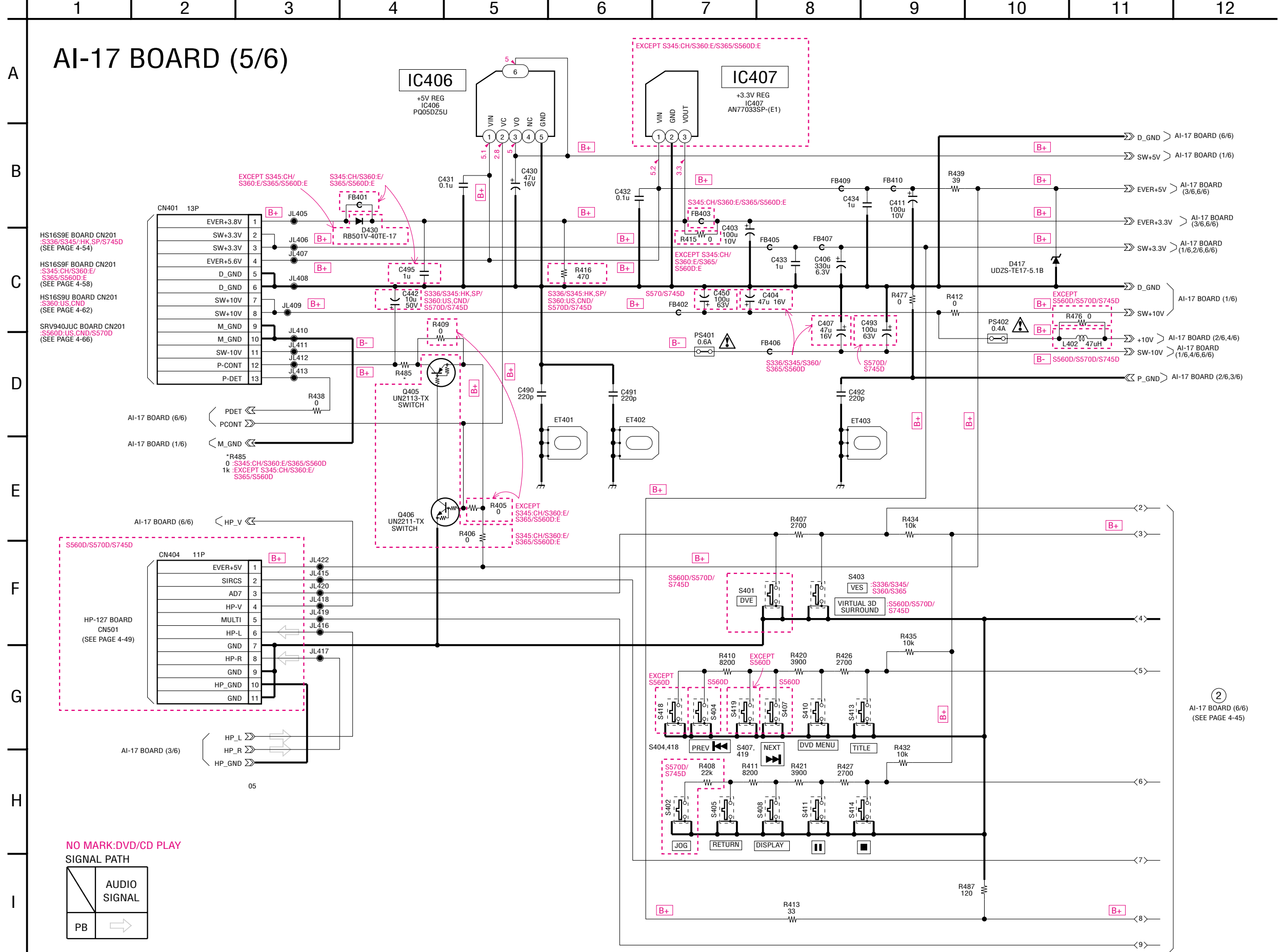
NO MARK: DVD/CD PLAY
D: DVD PLAY
C: CD PLAY



AI-17 (D/A CONVERTER) SCHEMATIC DIAGRAM • See page 4-33 for printed wiring board.

- Ref. No.: AI-17 board; 2,000 series -

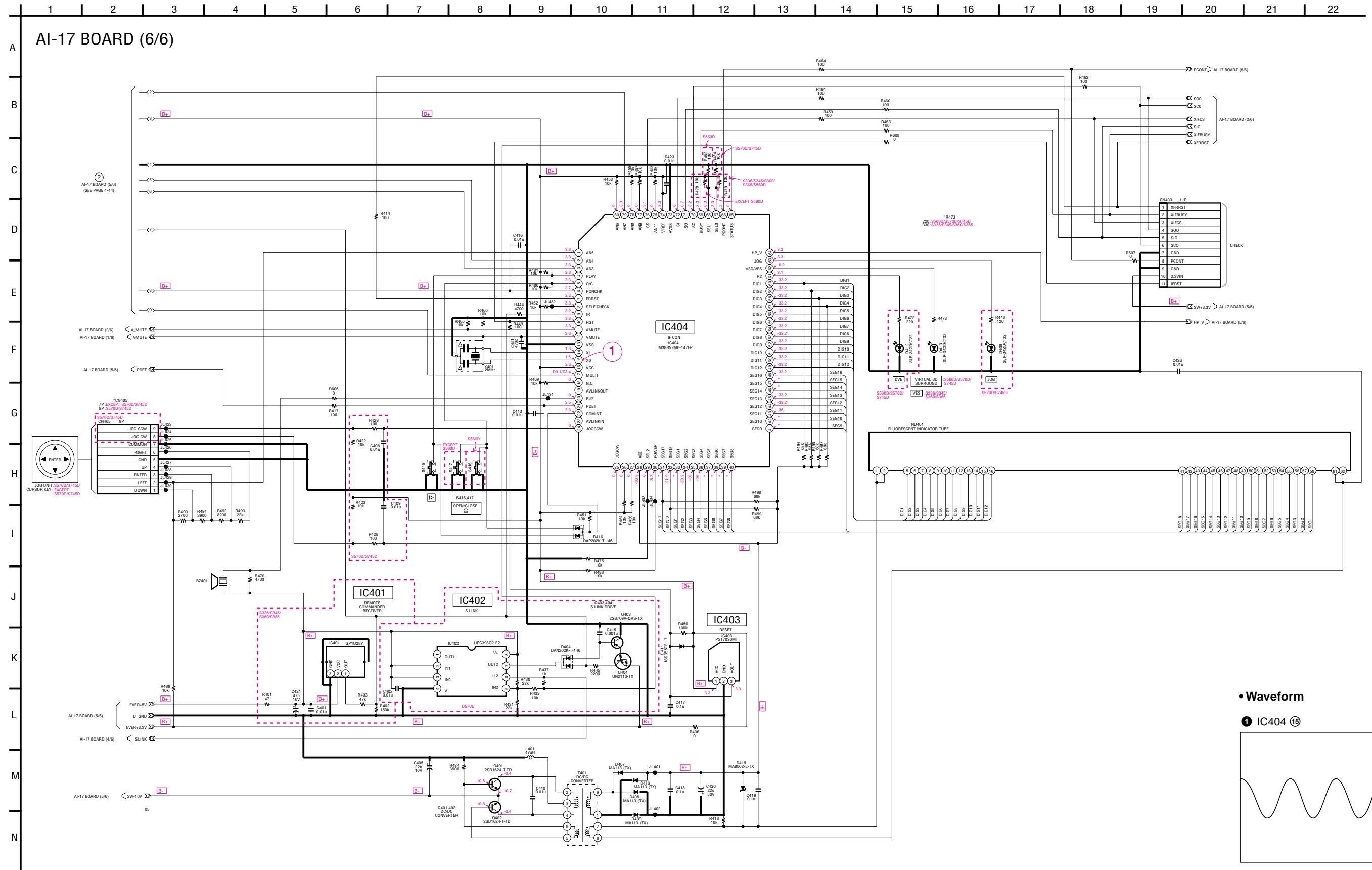




The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

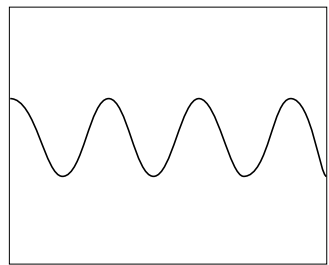
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

AI-17 (IF CON) SCHEMATIC DIAGRAM
 - Ref. No.: AI-17 board; 2,000 series -



• Waveform

① IC404 (1)



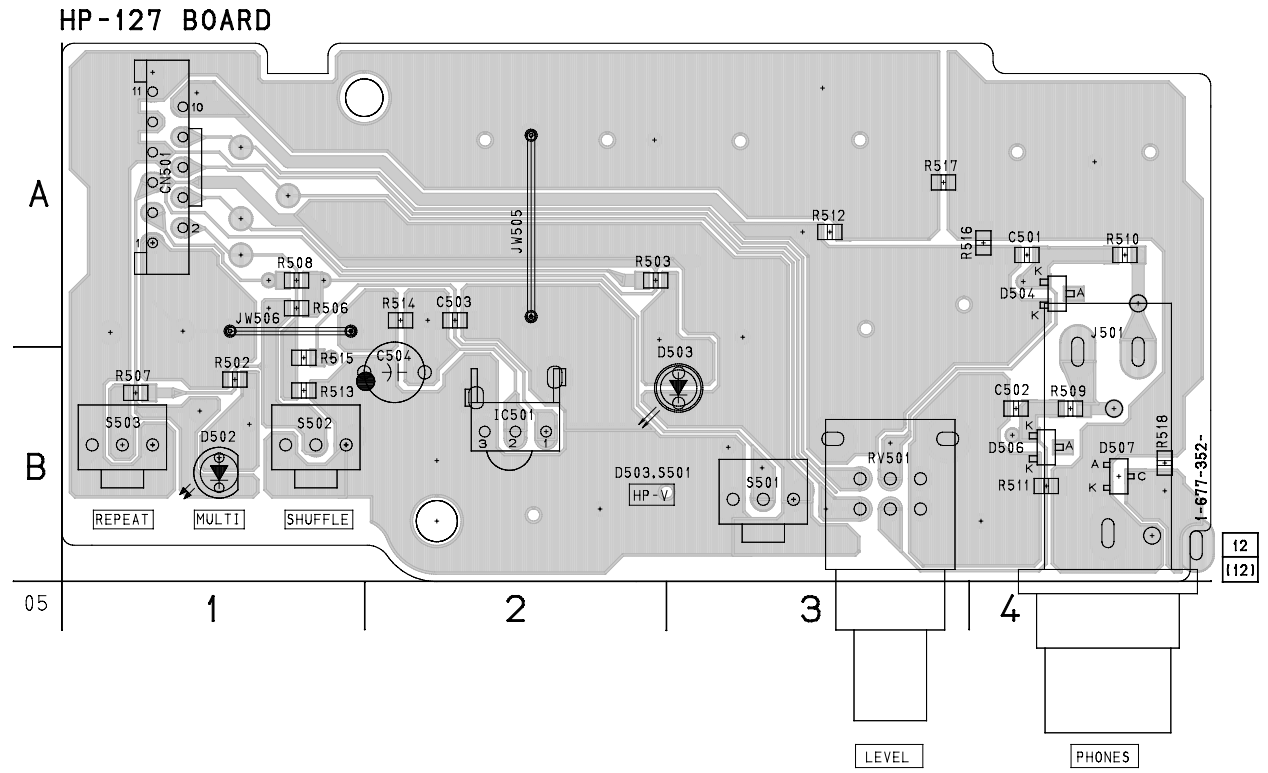
3.2 Vp-p (2 MHz)

HP-127 (HEADPHONE) PRINTED WIRING BOARD

– Ref. No.: HP-127 board; 2,000 series –

– DVP-S560D/S570D/S745D –

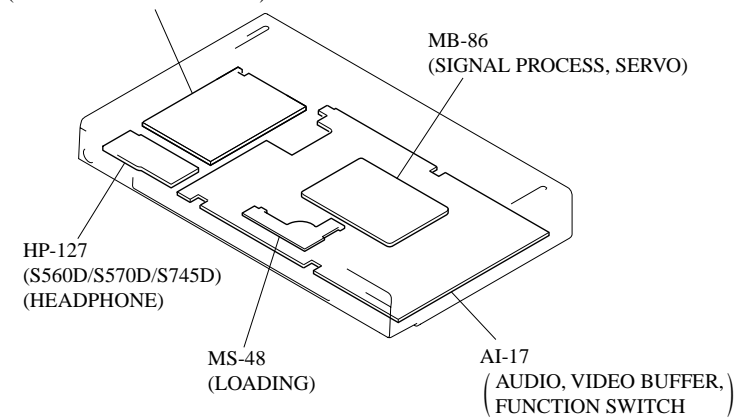
There are few cases that the part isn't mounted in this model is printed on this diagram.



HP-127 BOARD

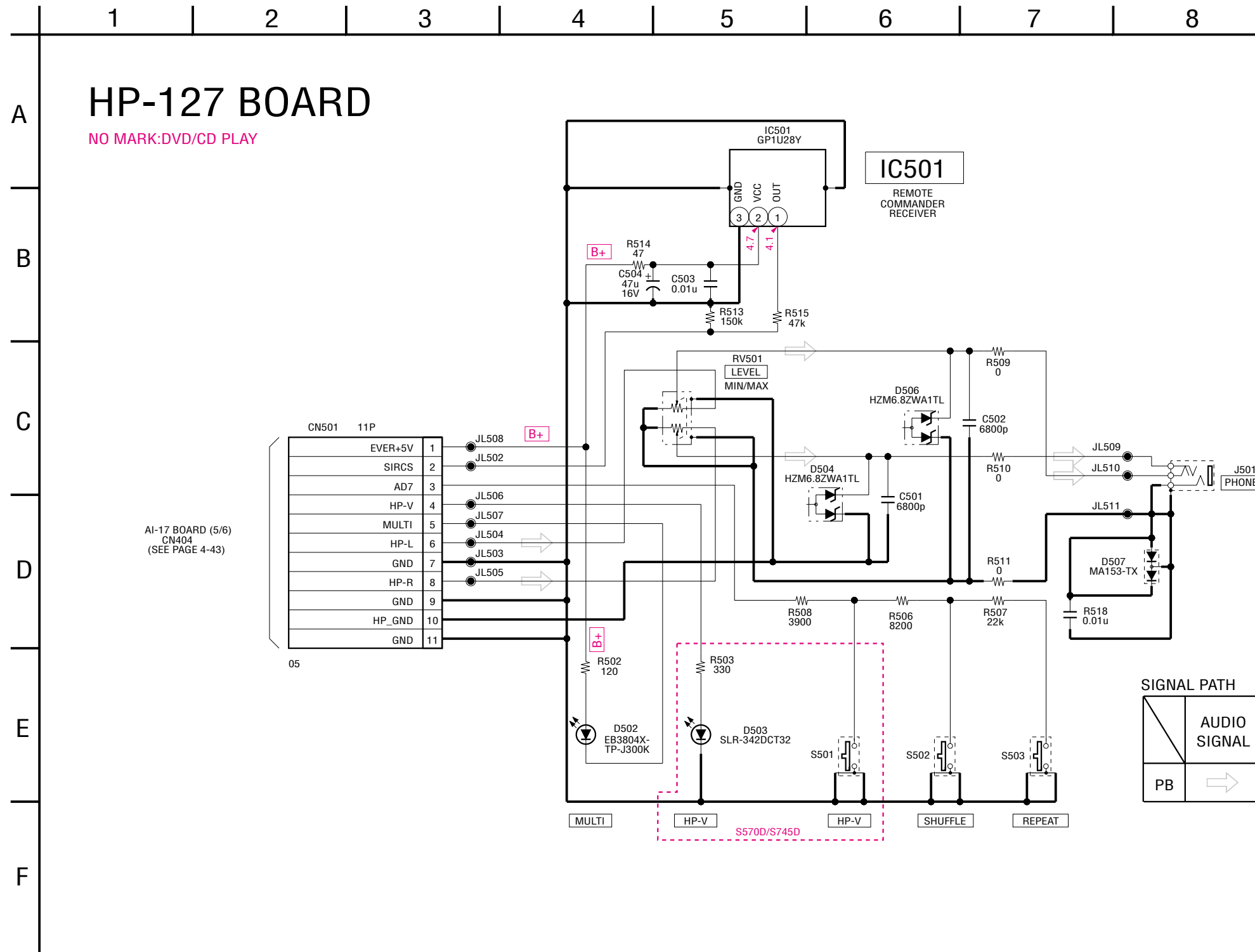
CN501	A-1
D502	B-1
D503	B-3
D504	A-4
D506	B-4
D507	B-4
IC501	B-2

Power Block
 (HS16S9E (S336/S345: HK, SP/S745D)
 HS16S9F (S345: CH/S360: E/S365/S560D: E)
 HS16S9U (S360: US, CND)
 SRV940JUC (S560D: US, CND/S570D)
 (SWITCHING REGULATOR)



HP-127 (HEADPHONE) SCHEMATIC DIAGRAM

– Ref. No.: HP-127 board; 2,000 series –
 – DVP-S560D/S570D/S745D –



HS16S9E (SWITCHING REGULATOR) PRINTED WIRING BOARD

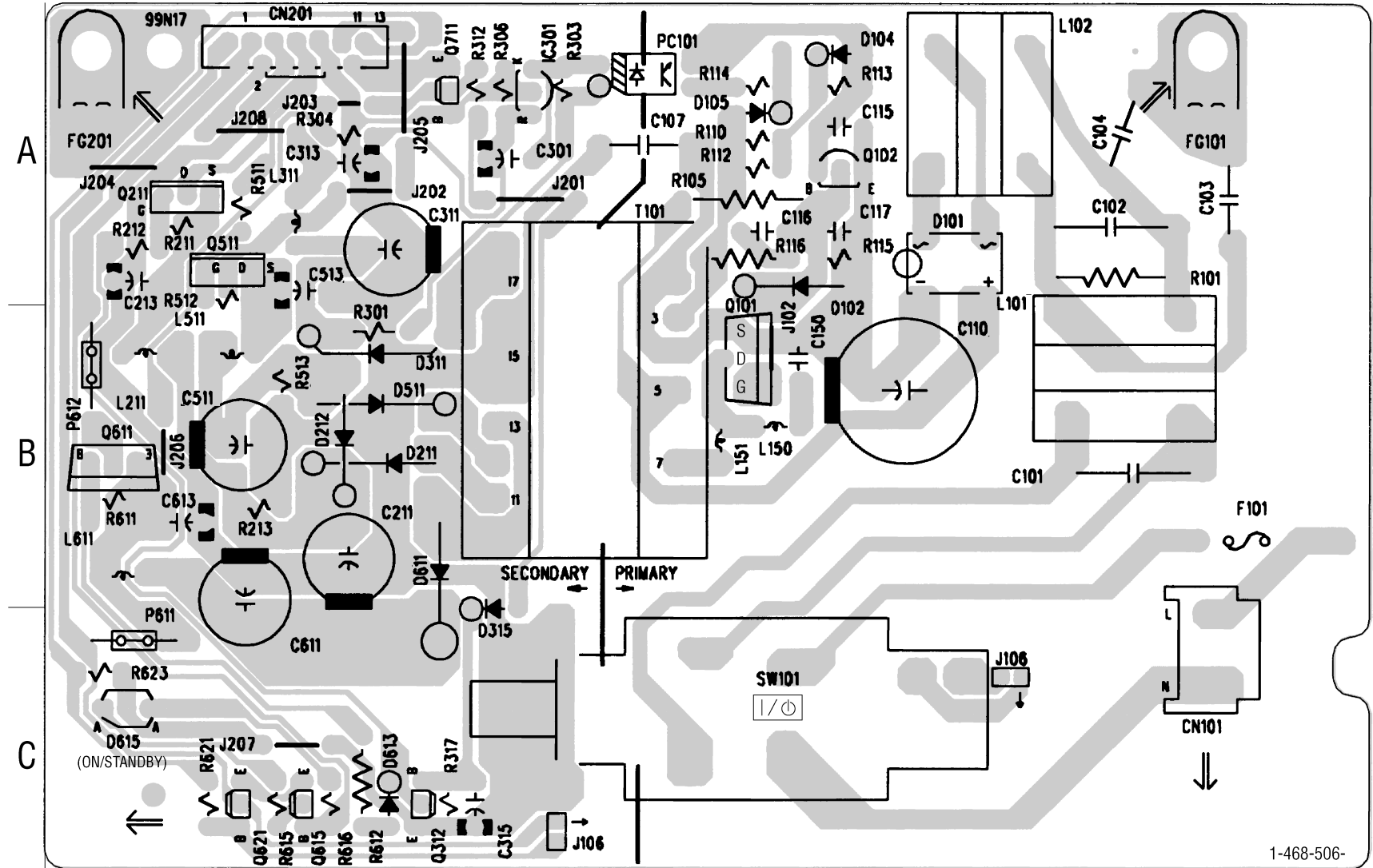
– Ref. No.:HS16S9E board; 3,000 series –
 – DVP-S336/S345: HK, SP/S745D –

There are few cases that the part isn't mounted in this model is printed on this diagram.

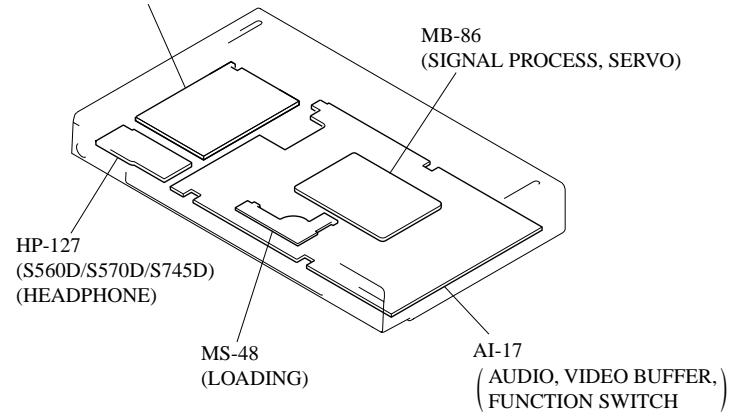
HS16S9E BOARD

HS16S9E BOARD

CN101	C-4
CN201	A-1
D101	A-3
D102	A-3
D104	A-3
D105	A-3
D211	B-2
D212	B-1
D311	B-2
D315	C-2
D511	B-2
D611	B-2
D613	C-2
D615	C-1
IC301	A-2
Q101	B-3
Q102	A-3
Q211	A-1
Q312	C-2
Q511	A-1
Q611	B-1
Q615	C-1
Q621	C-1
Q711	A-2

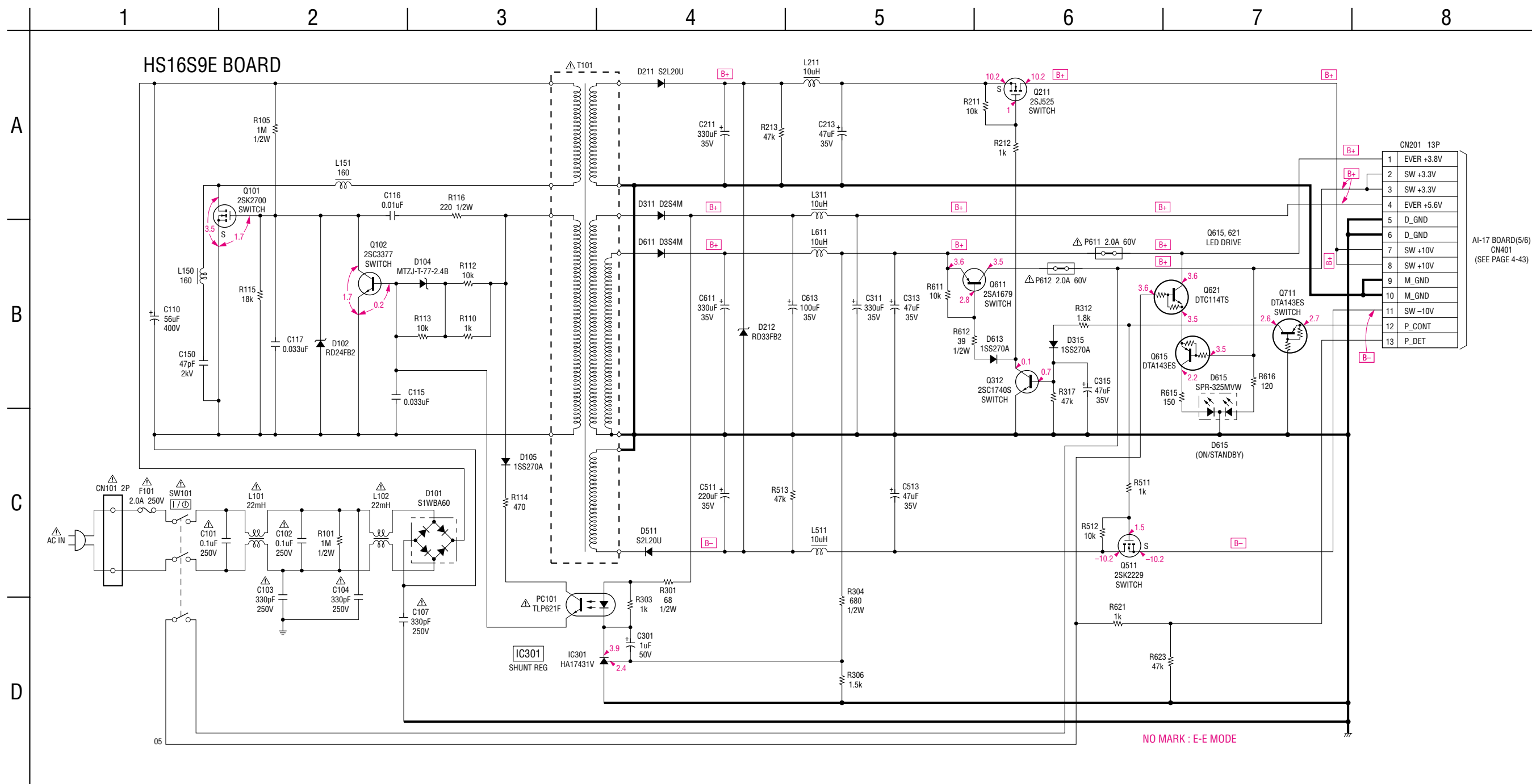


Power Block
 HS16S9E (S336/S345: HK, SP/S745D)
 HS16S9F (S345: CH/S360: E/S365/S560D: E)
 HS16S9U (S360: US, CND)
 SRV940JUC (S560D: US, CND/S570D)
 (SWITCHING REGULATOR)



HS16S9E (SWITCHING REGULATOR) SCHEMATIC DIAGRAM

– Ref. No.: HS16S9E board; 3,000 series –
 – DVP-S336/S345: HK, SP/S745D –



CN201 13P	
1	EVER +3.8V
2	SW +3.3V
3	SW +3.3V
4	EVER +5.6V
5	D_GND
6	D_GND
7	SW +10V
8	SW +10V
9	M_GND
10	M_GND
11	SW -10V
12	P_CONT
13	P_DET

AI-17 BOARD(5/6)
 CN401
 (SEE PAGE 4-43)

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

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

HS16S9F (SWITCHING REGULATOR) PRINTED WIRING BOARD

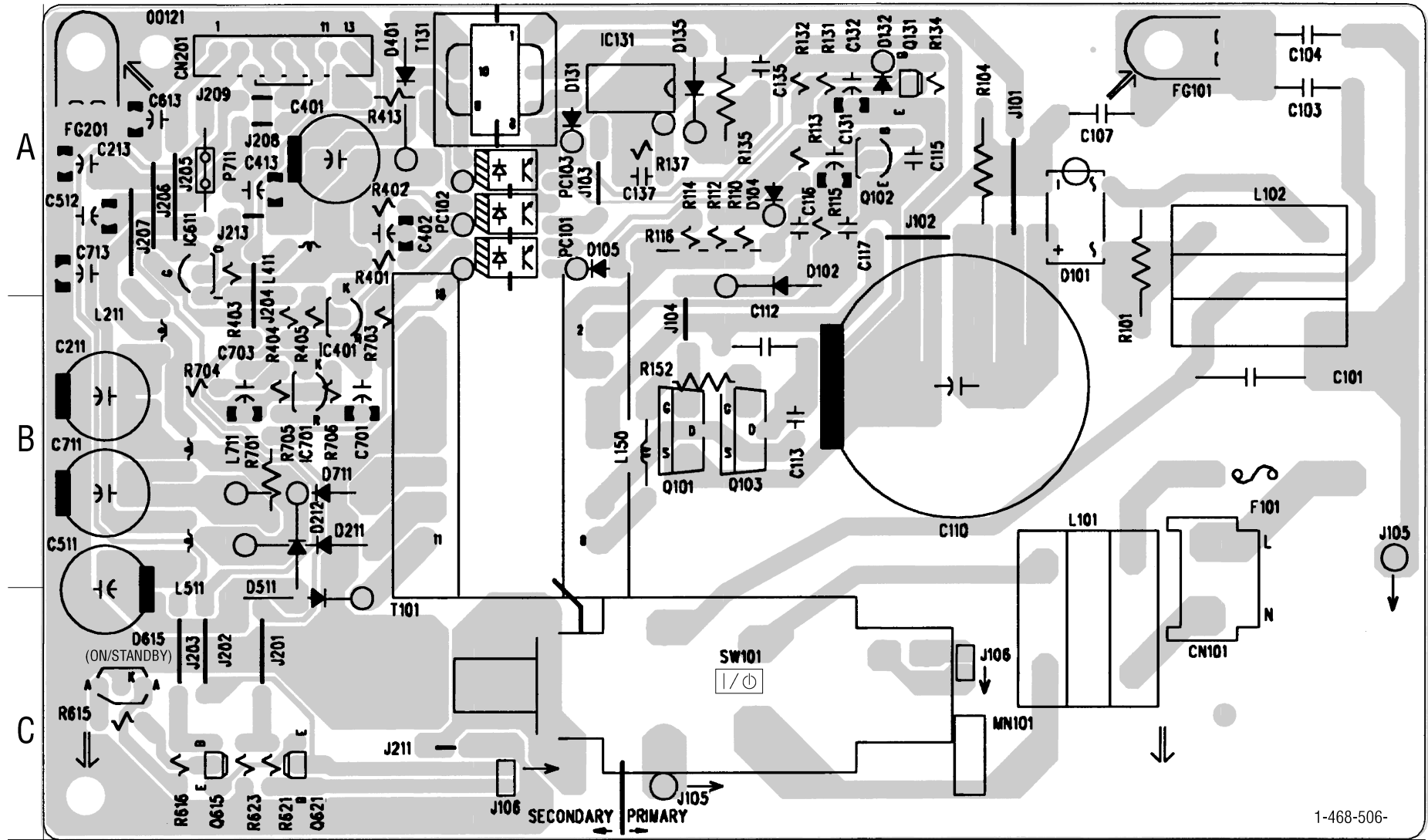
- Ref. No.:HS16S9F board; 4,000 series -
 - DVP-S345: CH/S360: E/S365/S560D: E -

There are few cases that the part isn't mounted in this model is printed on this diagram.

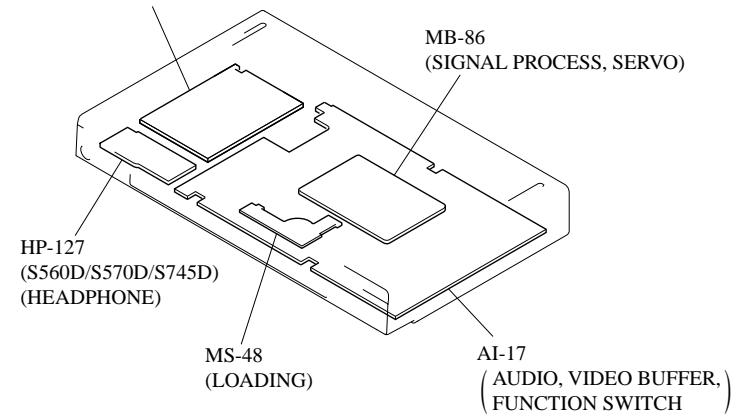
HS16S9F BOARD

CN101	C-4
CN201	A-1
D101	A-4
D102	A-3
D104	A-3
D105	A-2
D131	A-2
D132	A-3
D135	A-3
D211	B-1
D212	B-1
D401	A-2
D511	C-1
D615	C-1
D711	B-1
IC131	A-2
IC401	B-1
IC611	A-1
IC701	B-1
Q101	B-3
Q102	A-3
Q103	B-3
Q131	A-3
Q615	C-1
Q621	C-1

HS16S9F BOARD

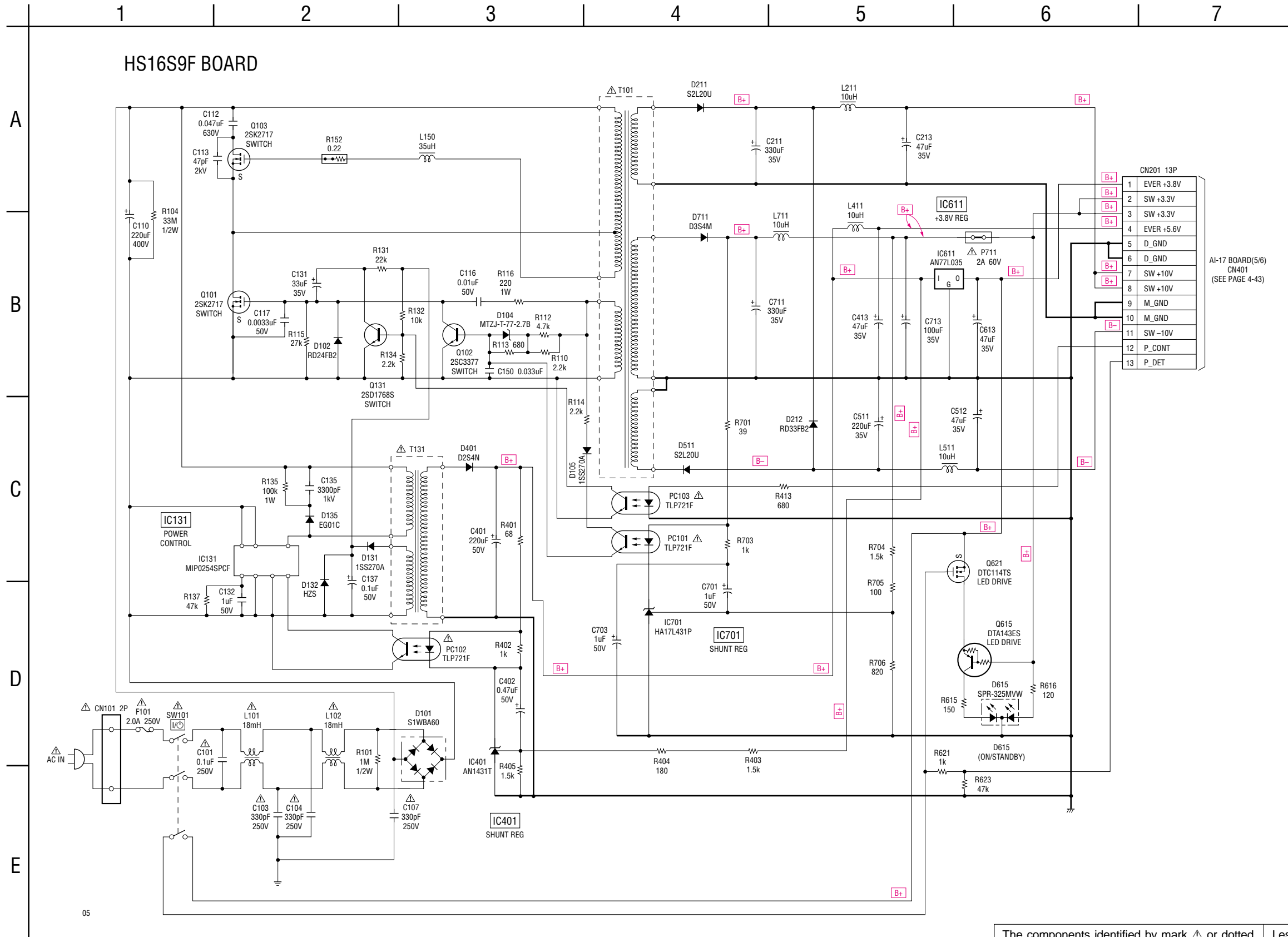


Power Block
 HS16S9E (S336/S345: HK, SP/S745D)
 HS16S9F (S345: CH/S360: E/S365/S560D: E)
 HS16S9U (S360: US, CND)
 SRV940JUC (S560D: US, CND/S570D)
 (SWITCHING REGULATOR)



HS16S9F (SWITCHING REGULATOR) SCHEMATIC DIAGRAM

– Ref. No.: HS16S9F board; 4,000 series –
 – DVP-S345: CH/S360: E/S365/S560D: E –



AI-17 BOARD(5/6)
 CN401
 (SEE PAGE 4-43)

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

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

HS16S9U (SWITCHING REGULATOR) PRINTED WIRING BOARD

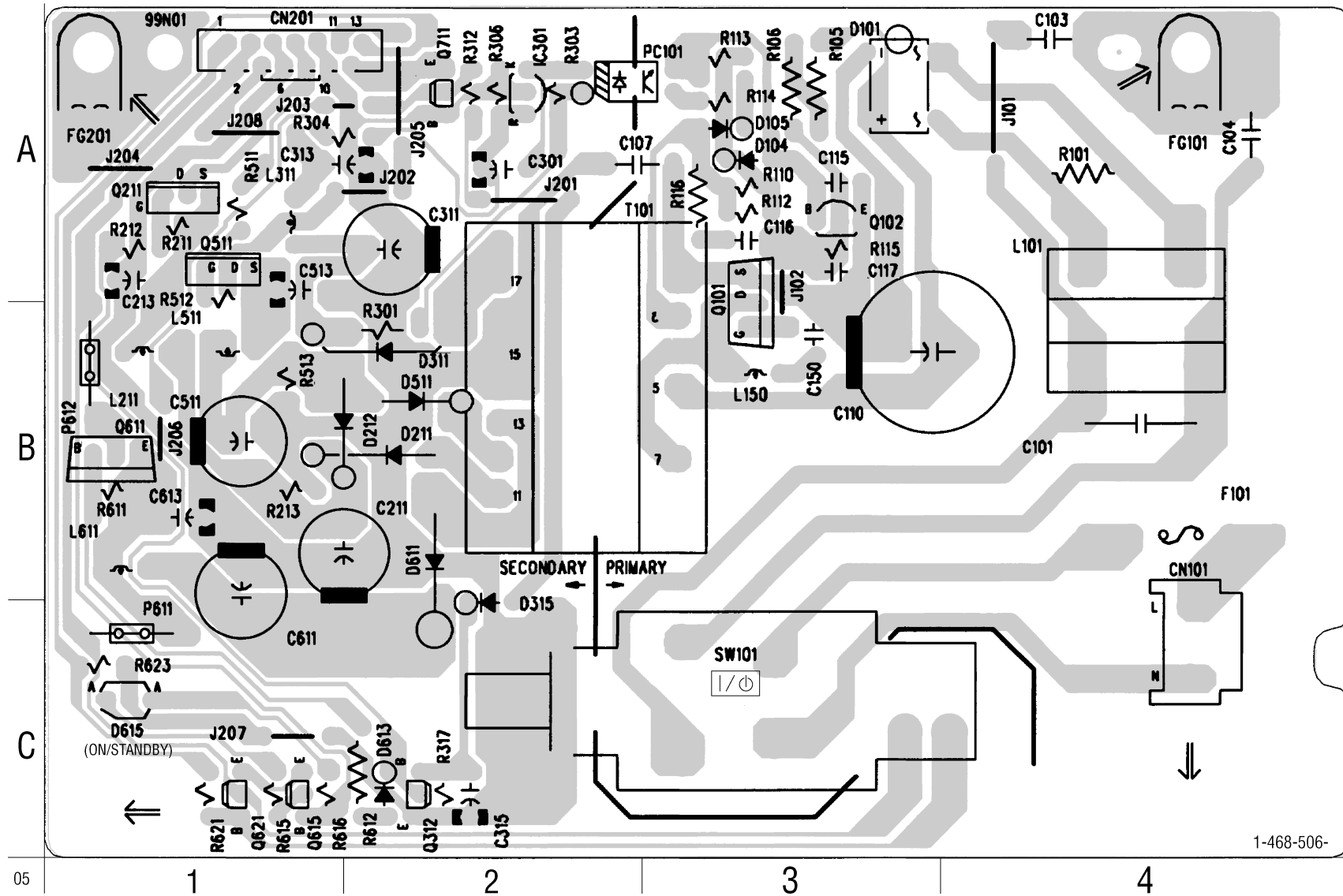
- Ref. No.:HS16S9U board; 5,000 series -
 - DVP-S360: US, CND -

There are few cases that the part isn't mounted in this model is printed on this diagram.

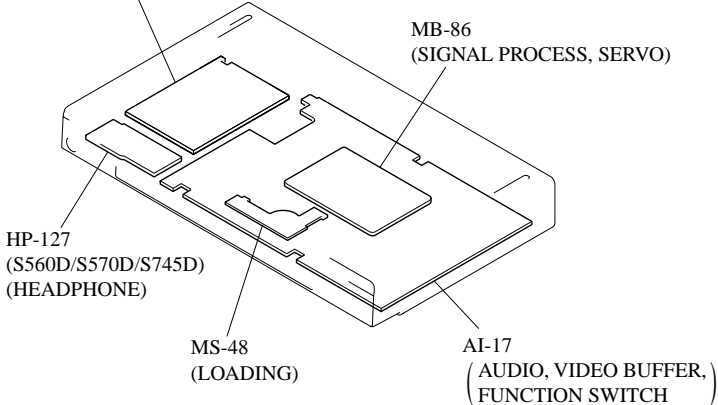
HS16S9U BOARD

- CN101 C-4
- CN201 A-1
- D101 A-3
- D104 A-3
- D105 A-3
- D211 B-2
- D212 B-2
- D311 B-2
- D315 C-2
- D511 B-2
- D611 B-2
- D613 C-2
- D615 C-1
- IC301 A-2
- Q101 B-3
- Q102 A-3
- Q211 A-1
- Q312 C-2
- Q511 A-1
- Q611 B-1
- Q615 C-1
- Q621 C-1
- Q711 A-2

HS16S9U BOARD

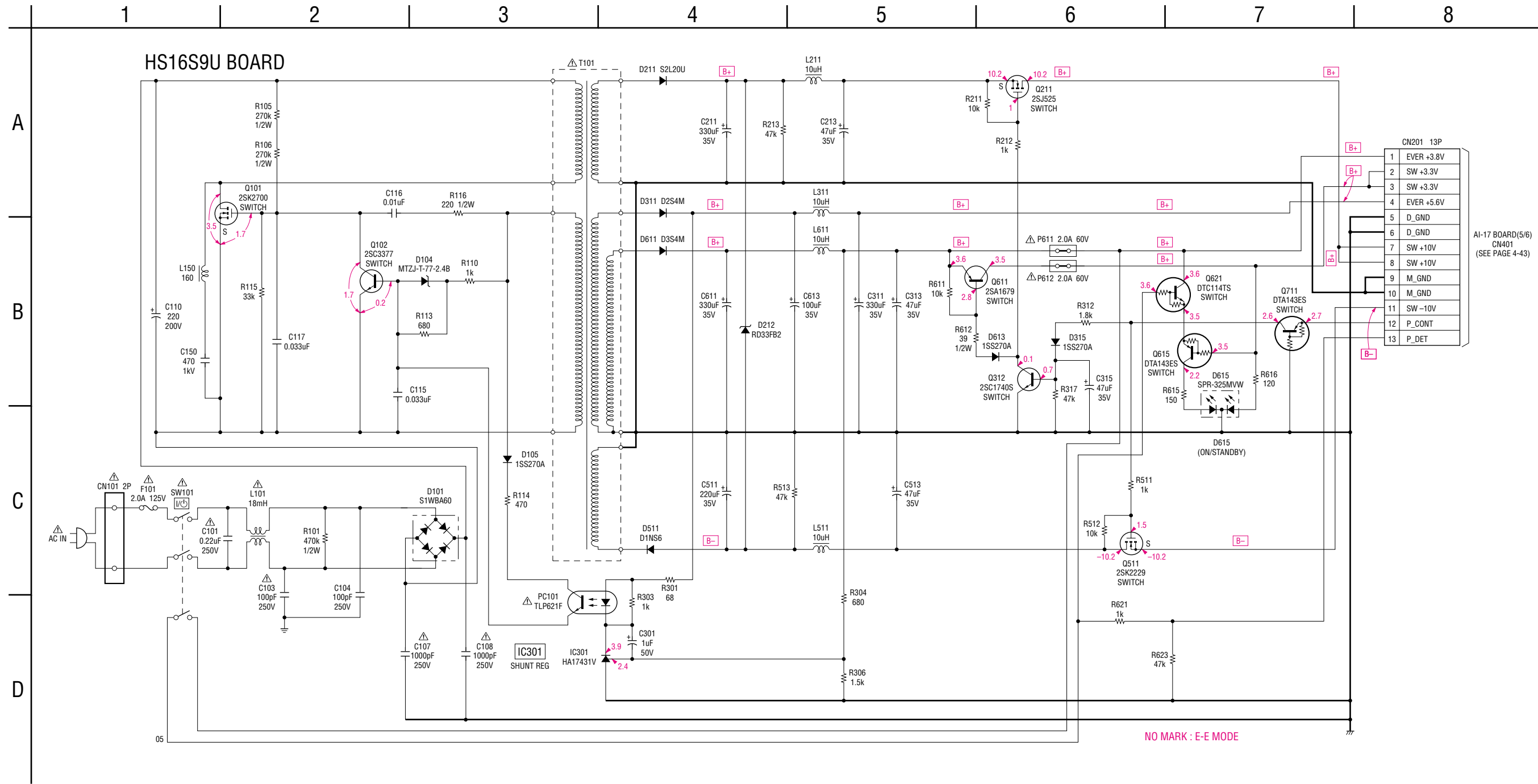


- Power Block
- HS16S9E (S336/S345: HK, SP/S745D)
- HS16S9F (S345: CH/S360: E/S365/S560D: E)
- HS16S9U (S360: US, CND)
- SRV940JUC (S560D: US, CND/S570D)
- (SWITCHING REGULATOR)



HS16S9U (SWITCHING REGULATOR) SCHEMATIC DIAGRAM

– Ref. No.: HS16S9U board; 5,000 series –
 – DVP-S360: US, CND –



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

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

SRV940JUC (SWITCHING REGULATOR) PRINTED WIRING BOARD

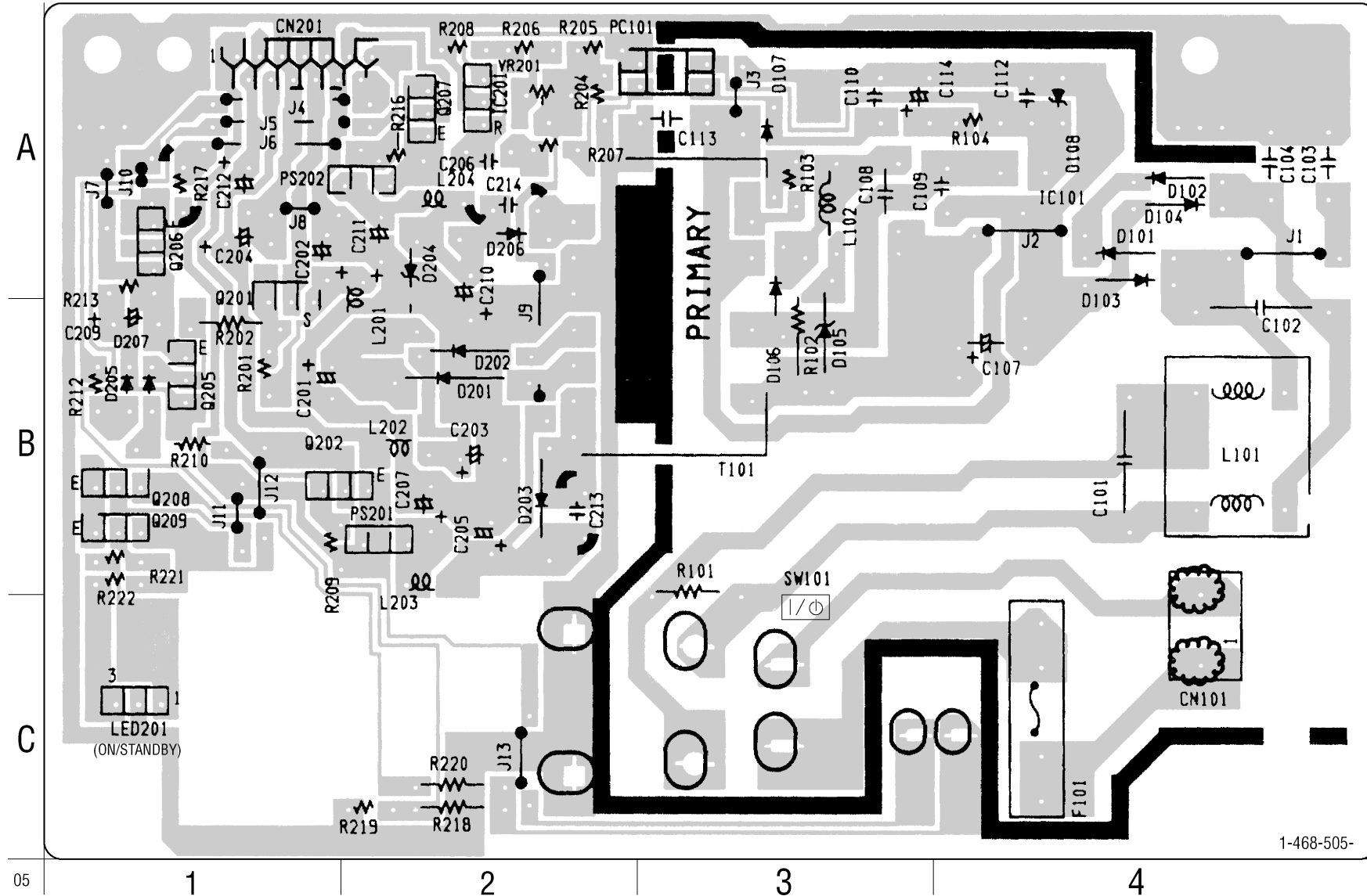
- Ref. No.:SRV940JUC board; 6,000 series -
 - DVP-S560D: US, CND/S570D -

There are few cases that the part isn't mounted in this model is printed on this diagram.

SRV940JUC BOARD

SRV940JUC BOARD

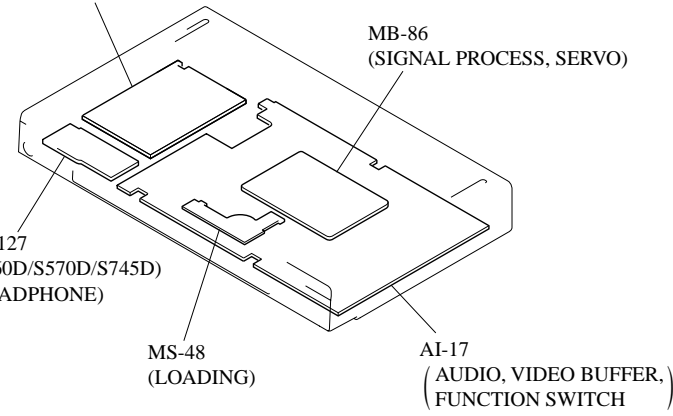
CN101	C-4
CN201	A-1
D101	A-4
D102	A-4
D103	A-4
D104	A-4
D105	B-3
D106	B-3
D107	A-3
D108	A-4
D201	B-2
D202	B-2
D203	B-2
D204	A-2
D205	B-1
D206	A-2
D207	B-1
LED201	C-1
IC101	A-4
IC201	A-2
Q201	A-1
Q202	B-1
Q205	B-1
Q206	A-1
Q207	A-2
Q208	B-1
Q209	B-1



1-468-505-

11

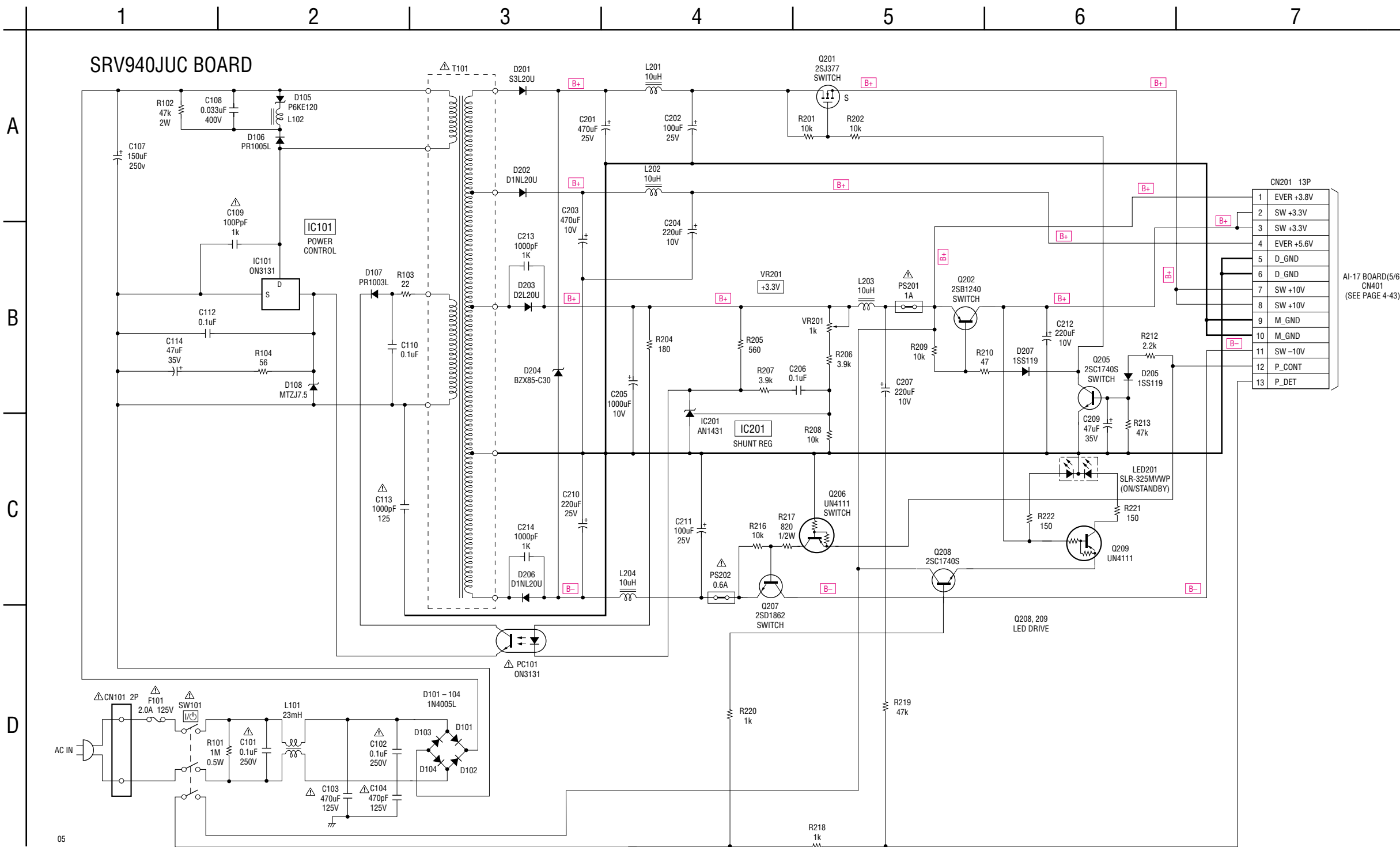
Power Block
 (HS16S9E (S336/S345: HK, SP/S745D)
 HS16S9F (S345: CH/S360: E/S365/S560D: E)
 HS16S9U (S360: US, CND)
 SRV940JUC (S560D: US, CND/S570D)
 (SWITCHING REGULATOR)



SRV940JUC (SWITCHING REGULATOR) SCHEMATIC DIAGRAM

– Ref. No.: SRV940JUC board; 6,000 series –

– DVP-S560D: US, CND/S570D –



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

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

SECTION 5

IC PIN FUNCTION DESCRIPTION

5-1. SYSTEM CONTROL PIN FUNCTION (MB-86 BOARD IC102)

Pin No.	Pin name	I/O	Function
1-5	HA17-HA21	O	Address bus A17-A21
6	HA22	-	Not used
7	GAIN/RGBSEL	O	Color difference signal/RGB signal select signal output
8	DACMUTE/FS	O	Filter control signal output
9	AVCC	-	Power supply
10	AVRH	-	Reference power supply (+3.3 V)
11	AVSS	-	Ground
12	AN0	I	Set of mode 0
13	AN1	I	Set of mode 1
14	AN2	I	Set of mode 2
15	AN3	I	Set of mode 3
16	XRST	O	System reset signal output
17	OEB	-	Not used
18	CS6	O	Chip select signal for servo DSP
19	NC	-	Not used
20	EUROV/Y	O	EURO V/Y select signal output
21	CLAPSW0/DISCEXT	O	Line input select signal output (DISC: "H", EXT: "L")
22	ARPRST	O	Reset signal output for ARP
23	DRV/MUTE	O	Drive mute signal output
24	VCC	-	Power supply
25	INT0	I	Input of interrupt from AV DEC
26	INT1	I	Input of interrupt from ARP
27	INT2	I	Input of interrupt from FGA
28	INT3	I	Input of interrupt from EEPROM
29	INT4	I	Input of interrupt from IF CON
30	CKSW2/OTASUKE/INT5	I	Input of interrupt from audio DSP
31	CLAPBSY/INT6	I	Input of interrupt from audio DSP
32	INT7	I	Input of interrupt from servo DSP
33	S10	I	Serial data input from IF CON and EEPROM
34	VSS	-	Ground
35	SO0	O	Serial data output to IF CON and EEPROM
36	SC0	O	Serial clock output to IF CON and EEPROM
37	S11	I	Serial bus 1 (for data input)
38	SO1	O	Serial bus 1 (for data output)

Pin No.	Pin name	I/O	Function
39	SC1	O	Serial clock output
40	SI2	I	Serial bus 2 (for data input)
41	SO2	O	Serial bus 2 (for data output)
42	YUVRGB/CLAPSW1	O	Mute signal output to video buffer and EURO C/R select signal output
43	DREQ0	I	Input of DMA-REQ 0 from AV DEC
44	DACK0	O	Output of DMA-ACK 0 to AV DEC
45	IFCS	O	Chip select signal to IF CON
46	DREQ1	I	Input of DMA-REQ 1 from AV DEC
47	DACK1	O	Output of DMA-ACK 1 to AV DEC
48	EWC	O	Write control signal output to EEPROM
49	ECS	O	Chip select signal output to EEPROM
50	KCS/39CS	O	Chip select signal output to audio DSP
51	AURST	O	Reset signal output to audio DAC
52	VSS	-	Ground
53	X1	O	Clock output (12.5 MHz)
54	X0	I	Clock input (12.5 MHz)
55	VCC	-	Power supply
56	CKSW1	I	Chuck sensor input
57	OCSW1	I	Tray sensor input
58	OCSW2	I	Tray sensor input
59	DACCS0	O	Chip select signal output to DAC (2ch)
60	DACCS1	O	Chip select signal output to DAC (6ch) and DSP
61	48/44.1K	O	PLL FS control signal output
62	MAMUTE	O	Audio mute signal output
63	WIDE	O	WIDE select signal output
64	C	-	Capacitor (0.1uF) connect between ground
65	CS0X	O	External ROM chip select signal output
66	CS1X	-	Not used
67	CS2X	O	Chip select signal output (for AV DEC)
68	CS3X	O	Chip select signal output (for AV DEC)
69	CS4X	O	Chip select signal output (for ARP)
70	CS5X	O	Chip select signal output (for FGA)

Pin No.	Pin name	I/O	Function
71	CPUCK	O	CPU clock signal output
72	NMIX	-	Not used (fixed at "H")
73	HSTX	-	Not used (fixed at "H")
74	FRRSTIN	I	Reset signal input from IF CON
75	VSS	-	Ground
76	MD0	I	Input of mode select 0 (fixed at "1")
77	MD1	-	Ground
78	MD2	-	Ground
79	XWAIT	I	Wait signal input
80	BGRNTX	-	Test terminal (fixed at "H")
81	BRQ	-	Test terminal (fixed at "L")
82	RD	O	Read enable signal output
83	WRH	O	High byte write enable signal output (16 bit and 8 bit)
84	NC	-	Not used
85-92	HD0-HD7	I/O	Data bus D0-D7 (16 bit only)
93-100	HD8-HD15	I/O	Data bus D8-D15 (16 bit), D0-D7 (8 bit)
101	VSS	-	Ground
102-109	HA0-HA7	O	Address bus A00-A07
110	VCC	-	Power supply
110-118	HA8-HA15	O	Address bus A08-A15

SECTION 6 TEST MODE

6-1. GENERAL DESCRIPTION

The Test Mode allows you to make diagnosis and adjustment easily using the remote commander and monitor TV. The instructions, diagnostic results, etc. are given on the on-screen display (OSD).

6-2. STARTING TEST MODE

Press **[TITLE]**, **[CLEAR]**, **[POWER]** buttons on the remote commander in this order with the power of main unit in OFF status, and the Test Mode starts, then the menu shown below will be displayed on the TV screen. At the bottom of menu screen, the model name and revision number are displayed.

To execute each function, select the desired menu and press its number on the remote commander.

To exit from the Test Mode, press the **POWER** button.

```

Test Mode Menu

0. Syscon Diagnosis
1. Drive Auto Adjustment
2. Drive Manual Operation
3. Mecha Aging
4. Emergency History
5. Version Information
6. Video Level Adjustment
   Exit: Power Key
-
Model      : DPX13xxxx
Revision   : 1.xxxx

```

6-3. SYSCON DIAGNOSIS

The same contents as board detail check by serial interface can be checked from the remote commander.

On the Test Mode Menu screen, press **[0]** key on the remote commander, and the following check menu will be displayed.

```

### Syscon Diagnosis ###
Check Menu

0. Quit
1. All
2. Version
3. Peripheral
4. Servo
5. Supply
6. AV Decoder
7. Video
8. Audio
-

```

0. Quit

Quit the Syscon Diagnosis and return to the Test Mode Menu.

1. All

All items continuous check

This menu checks all diagnostic items continuously. Normally, all items are checked successively one after another automatically unless an error is found, but at a certain item that requires judgment through a visual check to the result, the following screen is displayed for the key entry.

```

### Syscon Diagnosis ###

Diag All Check
No. 2 Version

2-3. ROM Check Sum
Check Sum = xxxx

Press NEXT Key to Continue
Press PREV Key to Repeat
-

```

For the ROM Check, the check sum calculated by the Syscon is output, and therefore you must compare it with the specified value for confirmation.

Following the message, press **[NEXT]** key to go to the next item, or **[PREV]** key to repeat the same check again. To quit the diagnosis and return to the Check Menu screen, press **[STOP]** or **[ENTER]** key. If an error occurred, the diagnosis is suspended and the error code is displayed as shown below.

```

### Syscon Diagnosis ###

3-2. EEPROM Check
Error 03: EEPROM Write/Reed N
Address   : 00000001
Write Data : 2492
Read Data  : 2490
Press NEXT Key to Continue
Press PREV Key to Repeat
-

```

Press **[STOP]** key to quit the diagnosis, or **[PREV]** key to repeat the same item where an error occurred, or **[NEXT]** key to continue the check from the item next to faulty item.

Submenu

Selecting 2 and subsequent items calls the submenu screen of each item.

For example, if "5. Supply" is selected, the following submenu will be displayed.

```

### Syscon Diagnosis ###
Check Menu
No. 5 Supply

0. Quit
1. All
2. ARP Register Check
3. ARP to RAM Data Bus
4. ARP to RAM Address Bus
5. ARP RAM Check
-

```

0. Quit

Quit the submenu and return to the main menu.

1. All

All submenu items continuous check

This menu checks 2 and subsequent items successively. At the item where visual check is required for judgment or an error occurred, the checking is suspended and the message is output for key entry. Normally, all items are checked successively one after another automatically unless an error is found.

Selecting 2 and subsequent items executes respective menus and outputs the results.

For the contents of each submenu, see “Check Items List”.

General Description of Checking Method

2. Version

(2-2) Revision

ROM revision number is displayed.

Error: Not detected.

The revision number defined in the source file of ROM (IC104) is displayed with four digits.

(2-3) ROM Check Sum

Check sum is calculated.

Error: Not detected.

The data are added of ROM (IC104) and the result is displayed with 4-digit hexadecimal number. Error is not detected. Compare the result with the specified value.

(2-4) Model Type

Model code is displayed.

Error: Not detected.

The model code is displayed with 2-digit hexadecimal number.

	Model Type	
DVP-S336 (KR)	0	7
DVP-S345 (CH)	0	6
DVP-S345 (HK, SP)	0	7
DVP-S360 (US, CND, E)	0	0
DVP-S365 (PX)	0	0
DVP-S560D (US, CND, E)	1	0
DVP-S570D (US, CND)	2	0
DVP-S745D (HK, SP, KR)	2	3
DVP-S745D (CH)	2	6

• Abbreviation

CH : Chinese

CND: Canadian

HK : Hong Kong

KR : Korea

SP : Singapore

(2-5) Region

Region code is displayed.

Error: Not detected.

The region code determined from the model code is displayed.

3. Peripheral

(3-2) EEPROM Check

Data write → read, and accord check

Error 03: EEPROM write/read discord

Before writing, the data are saved, then after checking, they are written to restore the contents of EEPROM.

(3-3) Gate Array Check

Data write → read, and accord check

Error 02: Gate array write/read discord

(3-4) NAND Flash Check

Data clear → write → read, and accord check

This check is conducted to the DVP-S570D/S745D only.

Error 04: Clear error

05: Write error

06: Read data discord

21: Faulty blocks exceed 10

The data clear, write, read, and check are executed to the block 0 of Flash memory (IC802).

In case of a faulty block, its address is displayed.

4. Servo

(4-2) Servo DSP Check

Data write → read, and accord check

Error 12: Read data discord

(4-3) DSP Driver Test

Test signal data → DSP Driver

Error: Not detected.

5. Supply

Caution: Do not conduct this check with a mechanical deck connected.

An access is made to the stream supply and servo control IC (IC302) and external RAM (IC303) using check data. If mechanical deck is connected, the motor and optics could be damaged. This check is also executed by the “All” menu item.

Supplement: How to disconnect mechanical deck

Disconnect flexible flat cables connected to the CN201 and CN202 of MB-86 board. Also, disconnect flat cable from the CN401.

(5-2) ARP Register Check

Data write → read, and accord check

Error 08: ARP register write, and read data discord

(5-3) ARP to RAM Data Bus

Data write → read, and accord check

Error 09: ARP ↔ RAM data bus error

Data 0x0001 to 0x8000 where one bit each is set to 1 are written to the address 0 of RAM (IC303) connected to the ARP (IC302) through the bus, then they are read and checked. In case of discord, written bit pattern and read data are displayed. If data where multiple bits are 1 are read, the bits concerned may touch each other. Further, if data where certain bit is always 1 or 0 regardless of written data, the line could be disconnected or shorted.

(5-4) ARP to RAM Address Bus

Data write → other address read discord check

Error 10: ARP → RAM address bus error

Caution: Address and data display in case of an error is different from the display of other diagnosis (described later).

Before starting the test, all addresses of RAM (IC303) are cleared to 0x0000.

First, 0xA55A is written to the address 0x000000, and the address data are read and checked from addresses 0x000001 to 0x800000 while shifting 1 bit each. Next, the data at that address is cleared, and it is written to the address 0x000001, and read and checked in the same manner. This check is repeated up to the address 0x800000 while shifting the address data by 1 bit each.

If data other than 0 is read at the addresses except written address, an error is given because all addresses were already cleared to 0. In this check, the error display pattern is different from that of other diagnosis; read data, written address, and read address are displayed in this order. However, the message uses same template, and accordingly exchange Address and Data when reading. The following display, for example,

```
### Syscon Diagnosis ###

5-4. ARP to RAM Address Bus
Error 10: ARP - RAM Address B
Address   : 0000A55A
Write Data: 00000000
Read Data : 00080000
Press NEXT Key to Continue
Press PREV Key to Repeat
-
```

shows the data 0xA55A was read from address 0x00080000 though it was written to the address 0x00000000. This implies that these addresses are in the form of shadow. Also, if the read data is not 0xA55A, another error will be present.

(5-5) ARP RAM Check

Data write → read, and accord check

Error 11: ARP RAM read data discord

The program code data stored in ROM are copied to all areas of RAM (IC303) connected to the ARP (IC302) through the bus, then they are read and checked if they accord. If the detail check was selected initially, the data are written to all areas and read, then the same test is conducted once again with the data where all bits are inverted between 1 and 0. If discord is detected, faulty address, written data, and read data are displayed following the error code 11, and the test is suspended.

6. AV Decoder

(6-2) 1930 RAM

Data write → read, and accord check

Error 13: AVD RAM read data discord

The program code data stored in ROM (IC104) are copied to all areas of RAM (IC504, IC505) connected to the AVD (IC502) through the bus, then they are read and checked if they accord. Further, the same test is conducted once again with the data where all bits are inverted between 1 and 0. If discord is detected, faulty address, written data, and read data are displayed following the error code 13, and the test is suspended.

(6-3) 1930 SP

ROM → AVD RAM → Video OUT

Error: Not detected.

The data including sub picture streams in ROM (IC104) are transferred to the RAM (IC504, IC505) in AVD (IC502), and output as video signals from the AVD (IC502).

They are output from all video terminals (Composite, Y/C, Component) except EURO AV terminal.

7. Video

(7-2) Color Bar

AVD color bar command write → Video OUT

Error: Not detected.

The command is transferred to the AVD, and the color bar signals are output from video terminals.

They are output from all video terminals (Composite, Y/C, Component) except EURO AV terminal.

8. Audio

(8-2) ARP → 1930

Error 14 : ARP → 1930 video NG

15 : ARP → 1930 audio NG

(8-3) Test Tone

A pink noise signal is output from the AVD (IC502) through optical coaxial digital terminal and analog audio terminal. Error: Not detected.

All channels → 2ch Left → 2ch Right → Front Left → Front Right → Rear Left → Rear Right → Center → Sub Woofer are checked in this order.

Caution: Sub Woofer is checked only for low-frequency components, and no sound will be heard unless a proper super woofer is connected.

Check Items List

- 2) Version
 - (2-2) Revision
 - (2-3) ROM Check Sum
 - (2-4) Model Type
 - (2-5) Region
- 3) Peripheral
 - (3-2) EEPROM Check
 - (3-3) Gate Array Check
 - (3-4) NAND Flash Check
(DVP-S570D/S745D)
- 4) Servo
 - (4-2) Servo DSP Check
 - (4-3) DSP Driver Test
- 5) Supply
 - (5-2) ARP Register Check
 - (5-3) ARP to RAM Data Bus
 - (5-4) ARP to RAM Address Bus
 - (5-5) ARP RAM Check
- 6) AV Decoder
 - (6-2) 1930 RAM
 - (6-3) 1930 SP
- 7) Video
 - (7-2) Color Bar
- 8) Audio
 - (8-2) ARP → 1930
 - (8-3) Test Tone

Error Codes List

- 00: Error not detected
- 01: RAM write/read data discord
- 02: Gate array NG
- 03: EEPROM NG
- 04: Flash memory clear error
- 05: Flash memory write error
- 06: Flash memory read data discord
- 08: ARP register read data discord
- 09: ARP ↔ RAM data bus error
- 10: ARP ↔ RAM address bus error
- 11: ARP RAM read data discord
- 12: Servo DSP NG
- 13: 1930 SDRAM NG
- 14: ARP → 1930 video NG
- 15: ARP → 1930 audio NG
- 16: 1939 UCODE download NG
- 17: System call error (function not supported)
- 18: System call error (parameter error)
- 19: System call error (illegal ID number)
- 20: System call error (time out)
- 21: NAND Flash faulty blocks exceed 10
- 90: Error occurred
- 91: User verification NG
- 92: Diagnosis cancelled

6-4. DRIVE AUTO ADJUSTMENT

On the Test Mode Menu screen, press **[1]** key on the remote commander, and the drive auto adjustment menu will be displayed.

```
## Drive Auto Adjustment ##

      Adjustment Menu

0. ALL
1. DVD-SL
2. CD
3. DVD-DL
4. SACD

Exit: RETURN
```

Normally, **[0]** is selected to adjust DVD (single layer), CD, DVD (dual layer), and SACD in this order. But, individual items can be adjusted for the case where adjustment is suspended due to an error. In this mode, the adjustment can be made easily through the operation following the message displayed on the screen.

The disc used for adjustment must be the one specified for adjustment. However, for SACD disc, use the player with initial data if the disc is not available.

0. ALL

You will be asked if EEPROM data are initialized or not, and for this prompt, select **[0]** and press the **[ENTER]** key, and the servo set data in EEPROM will be initialized. Then, 1. DVD-SL disc, 2. CD disc, 3. DVD-DL disc, and 4. SACD disc are adjusted in this order. Each time one disc was adjusted, it is ejected. Replace it with the specified disc following the message. Though the message to confirm whether discs other than SACD disc are adjusted is not displayed, you can finish the adjustment if pressing the **[STOP]** button. The S curve level, RF level, and jitter value can be confirmed during adjustment, and if OK, press the **[ENTER]** key and continue adjustment. (If NG, press the **[STOP]** button) During adjustment of each disc, the measurement for disc type judgment is made. As automatic adjustment does not judge the disc type unlike conventional models, take care not to insert wrong type discs. Also, do not give a shock during adjustment.

1. DVD-SL (single layer)

Select **[1]**, insert DVD single layer disc, and press **[ENTER]** key, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM.

DVD Single Layer Disc Adjustment Steps

1. SLED TILT Reset
2. Disc Check Memory SL
3. Wait 500 msec
4. Set Disc Type SL
5. LD ON
6. Spdl Start
7. Wait 1 sec
8. Focus Search ON
9. Focus Search OFF
10. Focus Servo ON 1
11. Auto Track Offset Adjust
12. Tracking ON
13. CLVA ON
14. Wait 1 sec
15. Sled ON
16. Check CLV Lock
17. Auto LFO Adjust
18. Auto Focus Offset Adjust
19. Auto Tilt Position Adjust
20. Auto Focus Gain Adjust
21. Auto Focus Offset Adjust
22. EQ Boost Adjust
23. Auto LFO Adjust
24. Auto Track Gain Adjust
25. All Servo Stop
26. Eep Copy Loop Filter Offset

2. CD

Select [2], insert CD disc, and press [ENTER] key, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM.

CD Adjustment Steps

1. Sled Tilt Rest
2. Disc Check Memory CD
3. Wait 500 msec
4. Set Disc Type CD
5. LD ON
6. Spdl Start
7. Wait 1 sec
8. Focus Search ON
9. Focus Search OFF
10. Focus Servo ON 1
11. Auto Track Offset Adjust
12. Tracking ON
13. (TC Display Start)
14. CLVA ON
15. Wait 1 sec
16. Jitter Display Start
17. Sled ON
18. Check CLV ON
19. Auto LFO Adjust
20. Auto Focus Offset Adjust
21. Auto Focus Gain Adjust
22. Auto Focus Offset Adjust
23. Eq Boost Adjust
24. Auto LFO Adjust
25. Auto Track Gain Adjust
26. All Servo Stop

3. DVD-DL (dual layer)

Select [3], insert DVD dual layer disc, and press [ENTER] key, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM.

DVD Dual Layer Disc Adjustment Steps

1. Sled Tilt Reset
2. Disc Check Memory DL
3. Wait 500 msec
4. Set Disc Type DL
5. LD ON
6. Spdl Start
7. Wait 1 sec
Layer 1 Adjust
8. Focus Servo ON 1
9. Auto Track Offset Adjust
10. Tracking ON
11. Clva ON
12. Wait 1 sec
13. Sled ON
14. Check CLV Lock
15. Auto Loop Filter Offset Adjust
16. Auto Focus Offset Adjust
17. Auto Focus Gain Adjust
18. Auto Focus Offset Adjust
19. Eq Boost Adjust
20. Auto Loop Filter Offset
21. Auto Track Gain Adjust
Layer 0 Adjust
22. Fj (L1 → L0)
23. Auto Track Offset Adjust L0
24. Tracking ON
25. Clva ON
26. Wait 1 sec
27. Sled ON
28. Check CLV Lock
29. Auto Loop Filter Offset Adjust
30. Auto Focus Offset Adjust
31. Auto Focus Gain Adjust
32. Auto Focus Offset Adjust
33. Eq Boost Adjust
34. Auto Loop Filter Offset
35. Auto Track Gain Adjust
36. All Servo Stop

4. SACD

Select [4], insert SACD disc, and press [ENTER] key, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM. However, if SACD disc is not available, use the player with initial data, skipping the SACD adjustment. In this case, you can finish the adjustment if pressing the [STOP] button.

SACD Adjustment Steps

1. Sled Tilt Reset
2. Set Disc Type CD
3. LD ON
4. Spdl Start
5. Wait 1 sec
6. Focus Servo ON 0
7. Auto track Offset Adjust
8. Tracking ON
9. CLVA ON
10. Wait 1 sec
11. Sled ON
12. Check CLV ON
13. Auto LFO Adjust
14. Auto Focus Offset Adjust
15. Auto Focus Gain Adjust
16. Auto Focus Offset Adjust
17. Eq Boost Adjust
18. Auto LFO Adjust
19. Auto Track Gain Adjust
20. All Servo Stop

6-5. DRIVE MANUAL OPERATION

On the Test Mode Menu screen, select [2], and the manual operation menu will be displayed. For the manual operation, each servo on/off control and adjustment can be executed manually.

```
## Drive Manual Operation ##

          Operation Menu
1. Disc type
2. Servo Control
3. Track/Layer Jump
4. Manual Adjustment
5. Auto Adjustment
6. Memory Check

0. Disc Check Memory

          Exit: Return
```

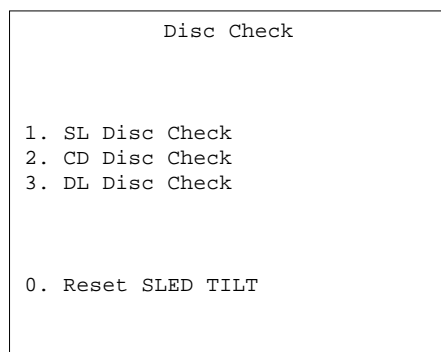
In using the manual operation menu, take care of the following points. These commands do not provide protection, thus requiring correct operation. The sector address or time code field is displayed when a disc is loaded.

1. Set correctly the disc type to be used on the Disc Type screen.
The disc type must be set after a disc was loaded.
The set disc type is cleared when the tray is opened.
2. After power ON, if the Drive Manual Operation was selected, first perform "Reset SLED TILT" by opening 1. Disc Type screen.
3. In case of an alarm, immediately press the [STOP] button to stop the servo operation, and turn the power OFF.

Basic operation (controllable from front panel or remote commander)

[POWER]	Power OFF
[STOP]	Servo stop
[OPEN/CLOSE]	Stop+Eject/Loading
[RETURN]	Return to Operation Menu or Test Mode Menu
[NEXT], [PREV]	Transition between sub modes of menu
[1] to [9], [0]	Selection of menu items
Cursor UP/DOWN	Increase/Decrease in manually adjusted value

0. Disc Check Memory



On this screen, the mirror time is measured to judge the disc and it is written to the EEPROM. First load DVD SL disc and press [1], next load CD disc and press [2], and finally load DVD DL disc and press [3].

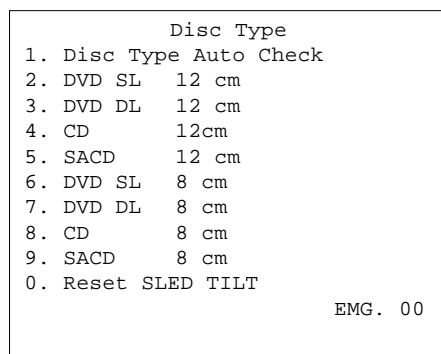
The adjustment must be executed more than once after default data were written. External vibration or shock to the player must not be given. Reference value for DVD is from 10 to 20, and for CD, from 28 to 4F.

Check that the value of CD is larger than that of DVD.

When those values are beyond a range perform this adjustment again.

From this screen, you can go to another mode by pressing [NEXT] or [PREV] key, but you cannot enter this mode from another mode. You can enter this mode from the Operation Menu screen only.

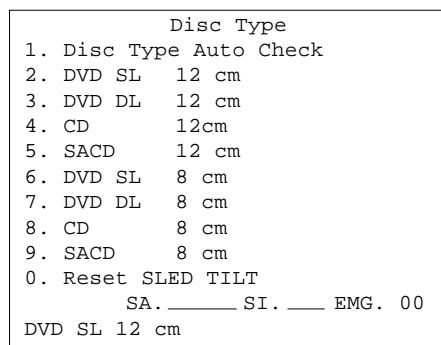
1. Disc Type



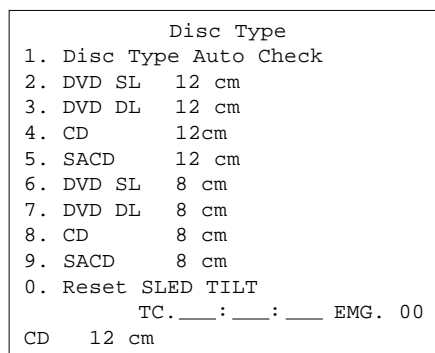
On this screen, select the disc type. To select the disc type, press the number of the loaded disc. The selected disc type is displayed at the bottom. Selecting [1] automatically selects and displays the disc type. In case of wrong display, retry "Disc Check Memory". Also, opening the tray causes the set disc type to be cleared. In this case, set the disc type again after loading.

In performing manual operation, the disc type must be set.

Once the disc type has been selected, the sector address or time code display field will appear as shown below. These values are displayed when PLL is locked.



Display when DVD SL 12cm disc was selected



Display when CD 12cm disc was selected

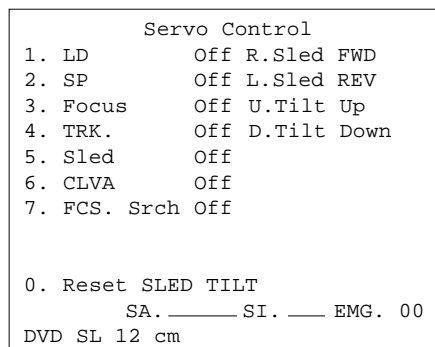
[0] Reset SLED TILT Reset the Sled and Tilt to initial position.

[1] Disk Type Check Judge automatically the loaded disc. As the judged result is displayed at the bottom of screen, make sure that it is correct.

If Disc Check Memory menu has not been executed after EEPROM default setting, the disc type cannot be judged. In this case, return to the initial menu and make a check for three types of discs (SL, DL, CD).

[2] to [9] Select the loaded disc. The adjusted value is written to the address of selected disc. No further entry is necessary if [1] was selected.

2. Servo Control



On this screen, the servo on/off control necessary for replay is executed. Normally, turn on each servo from 1 sequentially and when CLVA is turned on, the usual trace mode becomes active. In the trace mode, DVD sector address or CD time code is displayed. This is not displayed where the spindle is not locked.

The spindle could run overriding the control if the spindle system is faulty or RF is not present. In such a case, do not operate CLVA.

- 0 Reset SLED TILT Reset the Sled and Tilt to initial position.
- 1 LD Turn ON/OFF the laser.
- 2 SP Turn ON/OFF the spindle.
- 3 Focus Search the focus and turn on the focus.
- 4 TRK Turn ON/OFF the tracking servo.
- 5 Sled Turn ON/OFF the sled servo.
- 6 CLVA Turn ON/OFF normal servo of spindle servo.

- 7 FCS. Srch Apply same voltage as that of focus search to the focus drive to check the focus drive system.

- Sled FWD Move the sled outward. Perform this operation with the tracking servo turned off.

- ← Sled REV Move the sled inward. Perform this operation with the tracking servo turned off.

- ↑ Tilt UP Move the tilt upward.
- ↓ Tilt DOWN Move the tilt downward.

The following menus are normally not used.

- 3. Track/Layer Jump
- 4. Manual Adjustment
- 5. Auto Adjustment

The persons who do not know well about these menus should not use them.

6. Memory Check

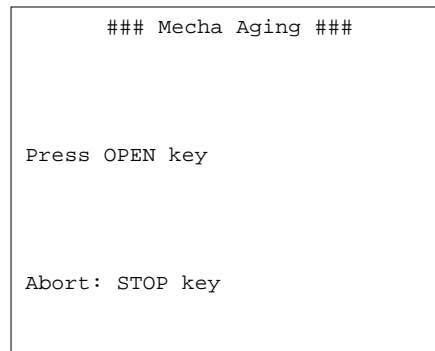
EEPROM DATA					
	CD	SACD	SL	L0	L1
Focus Gain	xx	xx	xx	xx	xx
TRK. Gain	xx	xx	xx	xx	xx
Focus Offset	xx	xx	xx	xx	xx
TRK. Offset	xx	xx	xx	xx	xx
L. F. Offset	xx	xx	xx	xx	xx
Analog FRWS	xx	xx	xx	xx	xx
PLL DAC Gain	xx	xx	xx	xx	xx
EQ Boost	xx	xx	xx	xx	xx
Jitter	xx	xx	xx	xx	xx
Mirror Time	xx		xx	xx	
—	CLEAR: Default Set				

This screen displays current servo adjusted data stored in the EEPROM. Though adjusted data can be initialized with the [CLEAR] key, they cannot be restored after initialization.

So, before clearing, make a note of the adjusted data.

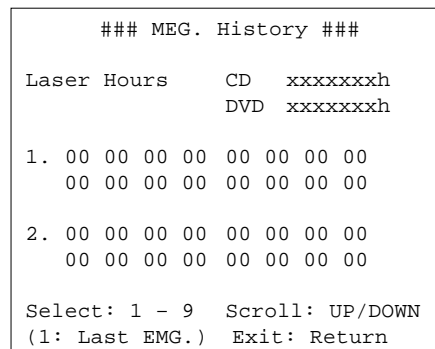
For reference, the drive has been designed so that the gain center value is 20 and offset value is 80. Other values will be in a range of 10 to 80. If extreme value such as 00 or FF is set, adjustment will be faulty. In such a case, check for disc scratch or cable disconnection, then perform adjustment again.

6-6. MECHA AGING



On the Test Mode Menu screen, selecting [3] executes the aging of mechanism. First, open the tray and load a disc. Press the [PLAY] key, and the aging will start. When the tray is closed, the disc type and size are judged and displayed. During aging, the repeat cycle is displayed. Aging can be aborted at any time by pressing the [STOP] key. After the operation has stopped, unload the disc and press again the [STOP] key or the [RETURN] key to return to the Test Mode Menu.

6-7. EMERGENCY HISTORY



On the Test Mode Menu screen, selecting [4] displays the information such as servo emergency history. The history information from last 1 up to 10 can be scrolled with [↑] key or [↓] key. Also, specific information can be displayed by directly entering that number with ten keys.

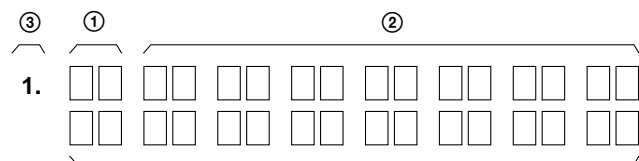
The upper two lines display the laser ON total hours. Data below minutes are omitted.

Clearing History Information

- Clearing laser hours
 - ⊙ Press [DISPLAY] and [CLEAR] keys in this order. Both CD and DVD data are cleared.
- Clearing emergency history
 - ⊙ Press [TITLE] and [CLEAR] keys in this order.
- Initializing set up data
 - ⊙ Press [DVD] and [CLEAR] keys in this order.

The data have been initialized when "Set Up Initialized" message is displayed. The EMG. History screen will be restored soon.

How to see Emergency History



①: Emergency Code

②: Don't Care

These codes are used for verification of software designing.

③: Historical order 1 to 9

Emergency Codes List

- 10: Communication to IC201 (MB-86 board) failed.
- 11: Each servo for focus, tracking, and spindle is unlocked.
- 12: Communication to EEPROM, IC101 (MB-86 board) failed.
- 13: Writing of hours meter data to EEPROM, IC101 (MB-86 board) failed.
- 14: Communication to Servo DSP IC404 (MB-86 board) failed, or Servo DSP is faulty.
- 20: Initialization of tilt servo and sled servo failed. They are not placed in the initial position.
- 21: Tilt servo operation error
- 22: Syscon made a request to move the tilt servo to wrong position.
- 23: Sled servo operation error
- 24: Syscon made a request to move the sled servo to wrong position.
- 30: Tracking balance adjustment error
- 31: Tracking gain adjustment error
- 32: Focus balance adjustment error
- 33: Focus bias adjustment error
- 34: Focus gain adjustment error
- 35: Tilt servo adjustment error
- 36: RF equalizer adjustment error
- 37: RF group delay adjustment error
- 38: Jitter value after adaptive servo operation is too large.
- 40: Focus servo does not operate.
- 41: With a dual layer (DL) disc, focus jump failed.50: CLV (spindle) servo does not operate.
- 51: Spindle does not stop.
- 60: With a DVD disc, Syscon made a request to seek nonexistent address.
- 61: With a CD disc, Syscon made a request to seek nonexistent address.
- 62: With a CD disc, Syscon made a request to seek nonexistent track No. and index No.
- 63: With a DVD disc, seeking of target address failed.
- 64: With a CD disc, seeking of target address failed.
- 65: With a CD disc, seeking of target index failed.
- 70: With a DVD disc, physical information data could not be read.
- 71: With a CD disc, TOC data could not be read.
- 80: Disc type judgment failed.
- 81: As disc type judgment failed, retry was repeated.
- 82: As disc type judgment failed, a measurement error occurred.
- 83: Disc type could not be judged within the specified time.
- 84: Illegal command code was received from Syscon.
- 85: Illegal command was received from Syscon.

6-8. VERSION INFORMATION

```

## Version Information ##
IF con.   Ver. x. xxx (xxxx)
          Group    00

SYScon.   Ver. x. xxx (xxxx)
          Model    xx
          Region   0x
Servo DSP. Ver. 1. xxxxx

Exit: RETURN
    
```

On the Test Mode Menu screen, selecting **[5]** displays the ROM version and region code.

The parenthesized hexadecimal number in version field is checksum value of ROM.

6-9. VIDEO LEVEL ADJUSTMENT

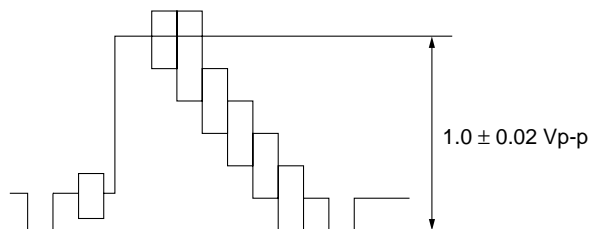
On the Test Mode Menu screen, selecting **[6]** displays color bars for video level adjustment. During display of color bars, OSD disappears but the menu screen will be restored if pressing any key.

Measurement point : LINE OUT VIDEO
(75 Ω terminating resistance)

Measuring instrument : Oscilloscope

Adjustment device : RV501 on MB-86 board

Specified value : 1.0 ± 0.02 Vp-p



6-10. IF CON SELF DIAGNOSTIC FUNCTION

1. AI-17 BOARD (IF CON) TEST MODE

The front board test mode is the IF CON self diagnostic mode. The IF CON can diagnose the functions of the front panel boards that the IF CON controls. Normally, the IF CON makes a serial communication with the SYSTEM CONTROL and operates following the commands from the SYSTEM CONTROL, but in the Test mode, the IF CON operates independently from the SYSTEM CONTROL.

In the Test mode, the following functions can be checked.

1. Button function
2. Remocon receiving function
3. SYSTEM CONTROL-IF CON serial communication
4. Click shuttle function
5. Fluorescent display tube lighting check
 - Grid check
 - Anode check
6. LED control function

In the Test mode, the set operates same as usual, except voltage monitoring, communication monitoring, display of fluorescent display tube, and LED control.

1. The routine that monitors +3.3 V (PCONT) of MB-86 board is not provided.
2. The monitoring timer for serial communication with the SYSTEM CONTROL is not provided. The set is not placed in the Standby mode, even if the communication with SYSTEM CONTROL is normal.
3. Display of fluorescent display tube (normally, display is made following the commands from SYSTEM CONTROL)
4. LED control (normally, control is made following the commands from SYSTEM CONTROL)

2. OPERATION OF SELF CHECK MODE

The Self Check mode is the function to conduct the basic test to the FL display and DVD panel section.

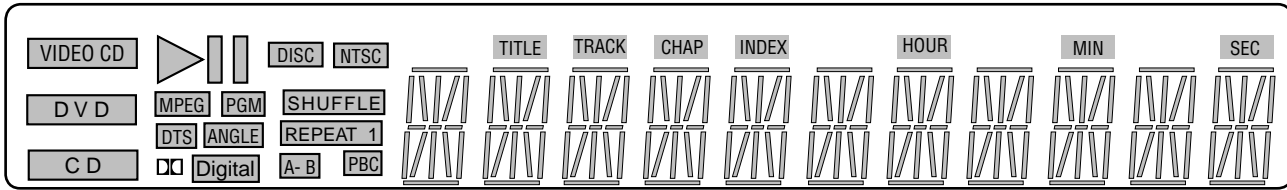
2-1. Self Check Mode Transition Processing

At the AC Power ON after IF CON was reset, the input to 8pin (P60) is judged and if "Low" is entered, the main unit transits to the Self Check mode. In this port input judgment, the result of 3-time attempts must be same (assuming that the MB-86 board is not connected). While pressing the **[STOP]** key on the main unit with the IF CON in STANDBY mode, enter **[RETURN]** → **[DISPLAY]** (or **[SET UP]**) on the remote commander, and the unit transits to the Self Check Mode. The Self Check mode terminates when the IF CON transits to the STANDBY mode.

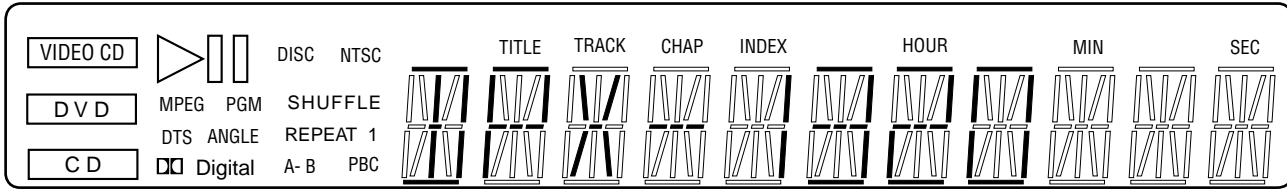
2-2. Operation of Auto Self Check

When the Self Check mode becomes active at the AC Power ON or by key input, the test display of the following steps (1) to (4) is repeated.

(1) FLD and LED all ON (for 5 seconds)



(2) MODEL display (for 2 seconds)



If MODEL is judged as Step UP-DD

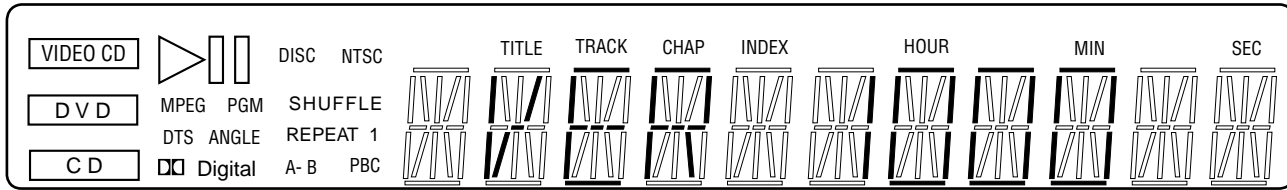
Contents of display

“DPX-1300” Basic

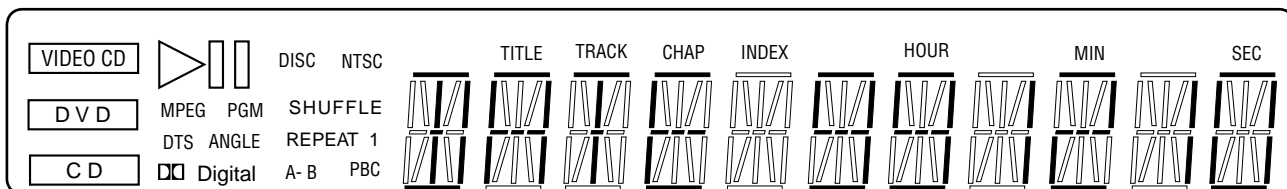
“DPX-1310” Entry-DD

“DPX-1320” Step UP-DD

(3) Version display (for 2 seconds)



(4) ROM creation date display (for 2 seconds)



2-3. Each Self Check Function

Each Self Check function tests the FLD display, LED display, and key input.

Basic, Entry-DD, Step Up-DD

Input Voltage [V]	IC404: Pin No. (Signal)			
	Pin ③ (AN3)	Pin ② (AN4)	Pin ① (AN5)	Pin ⑦ (AN7)
0	STOP	TITLE	RIGHT	V_3D
0.70	PAUSE	DVD MENU	UP	DVE
1.31	DISP	NEXT	ENTER	HP_V
1.97	RETURN	PREV	DOWN	SHUFFLE
2.59	JOG		LEFT	REPEAT
3.3				

2-3-1. FLD and LED All ON

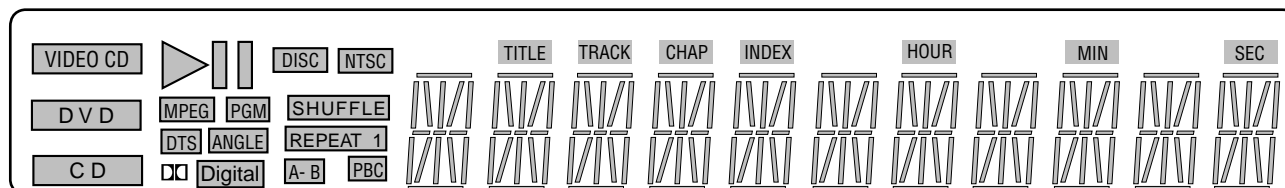
2-3-1-1. Transition Keys in Self Check Mode

- [STOP] key and [PLAY] key on the main unit
- [LEFT] key on the main unit and the remote commander

2-3-1-2. Operation and Display

In this mode, all LEDs except STANDBY LED and all segments of FLD turn ON.

Example of FLD all ON



2-3-2. Main Unit Key Name Display and Key Code Display

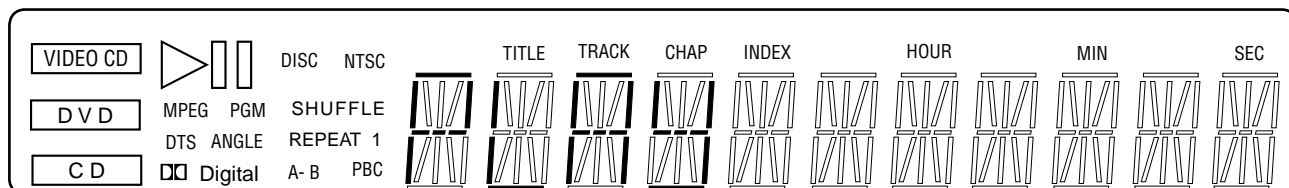
2-3-2-1. Transition Keys in Self Check Mode

- Keys on main unit except keys transitioned in self check

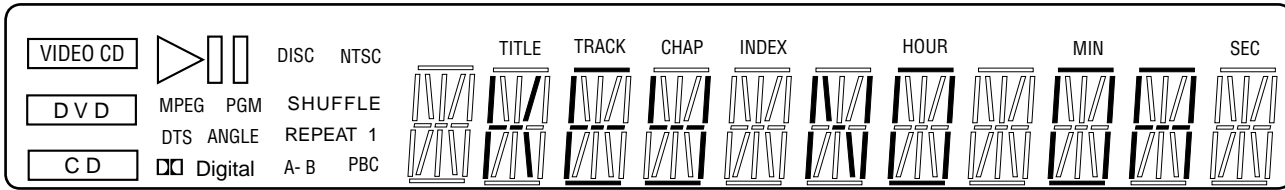
2-3-2-2. Operation and Display

When a key on the main unit is pressed in the Self Check mode, the name of that key is displayed on the FLD. Also, the key name display and the key code display can be switched with the [DISPLAY] key on the remote commander. "NOTHING" is displayed when nothing is entered. Also, VIDEO CD, DVD, and CD segments turn on when a communication error occurred.

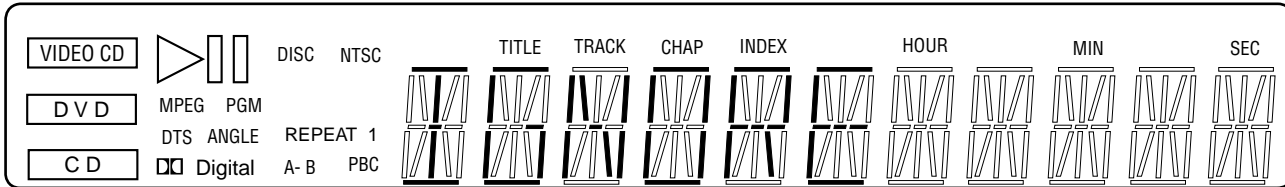
FLD display (at input of [PLAY] key on the main unit)



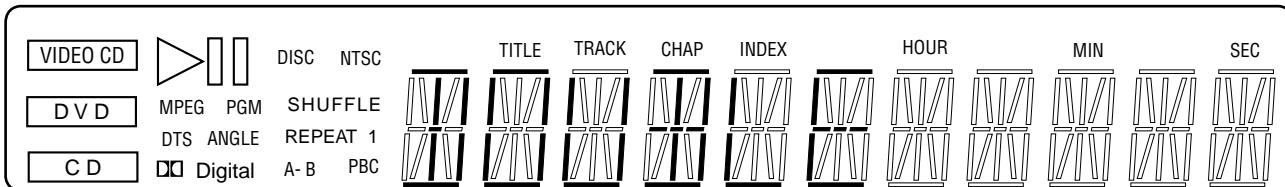
Key code display (at input of **PLAY** key, Key code: 0Ah)



At input of faulty voltage



When two keys are pressed



2-3-3. Remote Commander Key Name Display and Key Code Display

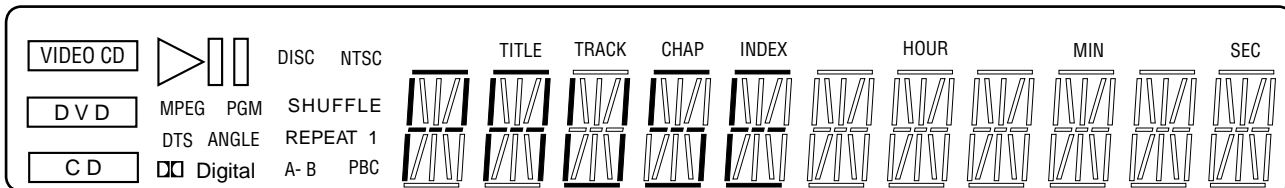
2-3-3-1. Transition Keys in Self Check Mode

- Remote commander keys except keys transitioned in self check

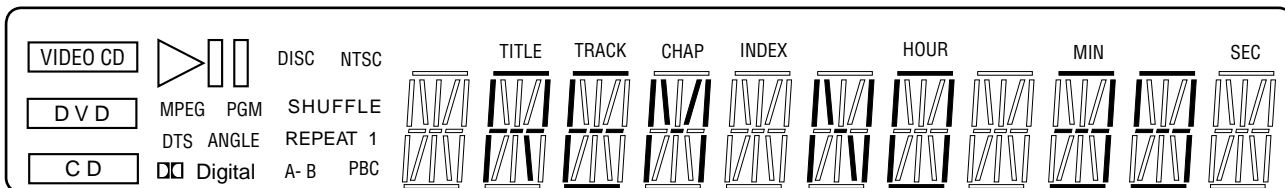
2-3-3-2. Operation and Display

When a key on the remote commander is pressed in the Self Check mode, the name of that key is displayed on the FLD. Also, the key name display and the key code display can be switched with the **DISPLAY** key on the remote commander. "NOTHING" is displayed when nothing is entered. Also, VIDEO CD, DVD, and CD segments turn on when a communication error occurred.

Remote commander key name display (at input of **PAUSE** key)



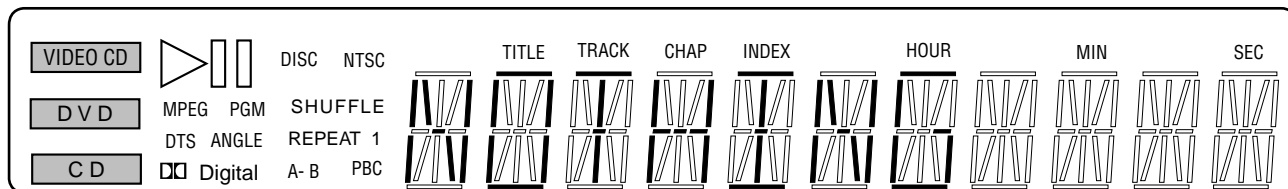
Remote commander key code display (at input of **PAUSE** key, Key code: 39h)



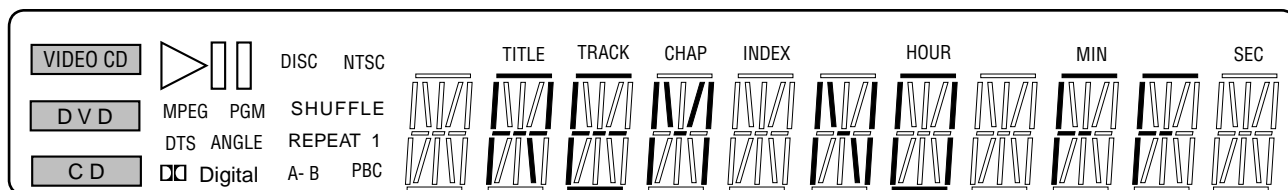
2-3-4. Communication Monitoring Display

The communication state is monitored and displayed while the key name on the main unit and the remote commander is displayed. When the communication to the System Controller failed, VIDEO CD, DVD, and CD segments turn on.

Communication error display (at no key input)



Communication error display (at code display without input of the remote commander)



2-3-5. FLD Anode Test Display and SHUTTLE Click Operation Test

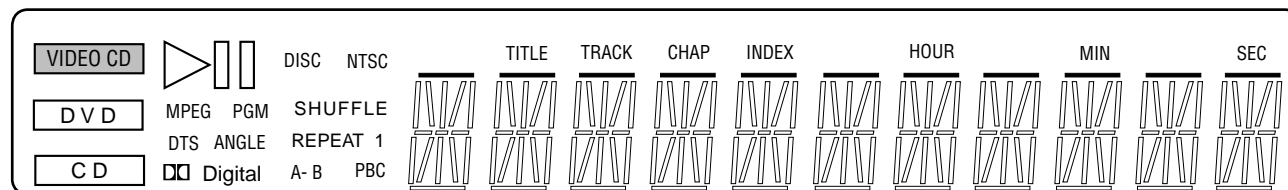
2-3-5-1. Transition Keys in Self Check Mode

- [RIGHT] on the main unit and the remote commander
- SHUTTLE on the main unit and the remote commander during Anode Test display

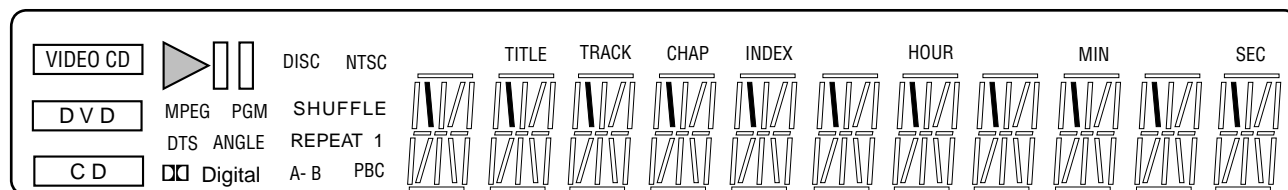
2-3-5-2. Operation and Display

The Self Check mode transits to this mode when [RIGHT] key is entered. Only the first segment of each grid of FLD turns on, and each time the SHUTTLE is entered, the segment of each grid is switched in order. When SHUTTLE input is clockwise, the segment switches in 1 → 2 → 3 direction, or counterclockwise it switches in 3 → 2 → 1 direction. This tests whether each segment turns on individually. Also, if the main unit does not have the JOG/SHUTTLE, use the remote commander JOG/SHUTTLE to switch over the segment display position.

Display at the start of Anode Test



↓ (Input in CW direction)



2-3-6. FLD Grid Test Display and SHUTTLE Click

Operation Test

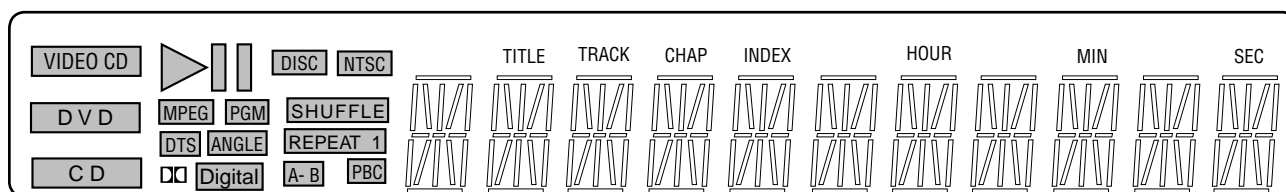
2-3-6-1. Transition Keys in Self Check Mode

- [UP] on the main unit and the remote commander
- SHUTTLE on the main unit and the remote commander during Grid Test display

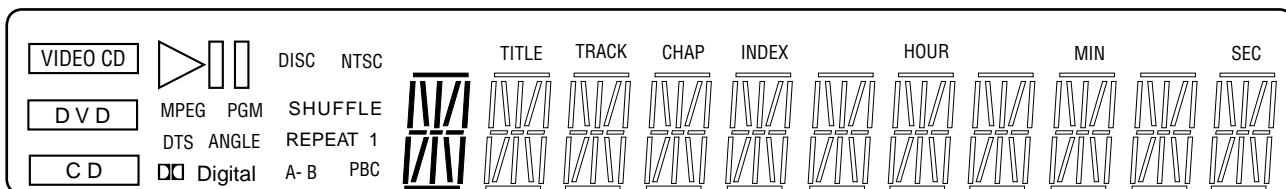
2-3-6-2. Operation and Display

The Self Check mode transits to this mode when [UP] key is entered. The first grid of FLD all turns on and other grids turn off. Each time the SHUTTLE is entered, the grid is switched in order. When SHUTTLE input is clockwise, the grid switches in 1 → 2 → 3 direction, or counterclockwise it switches in 3 → 2 → 1 direction. This tests whether each grid turns on individually.

Display at the start of Grid Test



↓ (Input in CW direction)



2-3-7. LED Test Display

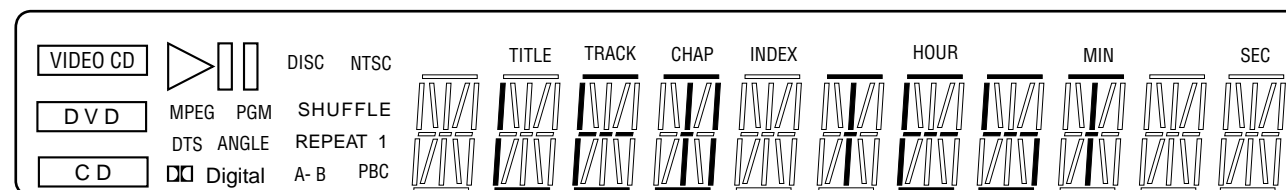
2-3-7-1. Transition Keys in Self Check Mode

- [DOWN] on the main unit and the remote commander
- SHUTTLE on the main unit and the remote commander during LED Test display

2-3-7-2. Operation and Display

LED is switched in order by the input of JOG/SHUTTLE. Also, LED ON/OFF is switched by the input of same key as the function that turns on the LED concerned. For the MULTI LED only, there is no key which switches that function, and therefore use the [RETURN] key on the main unit.

FLD display during LED Test



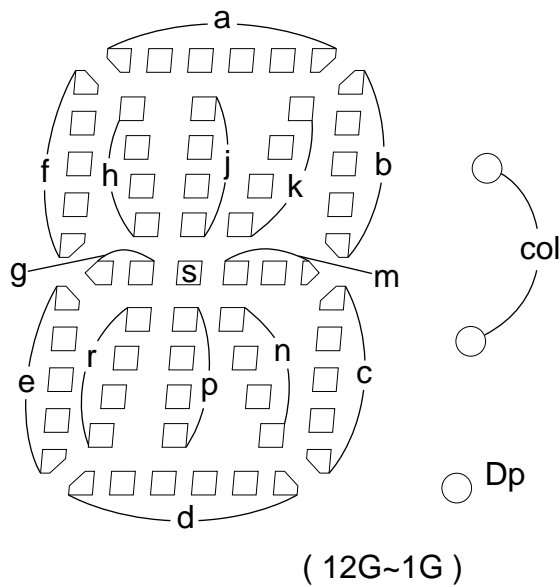
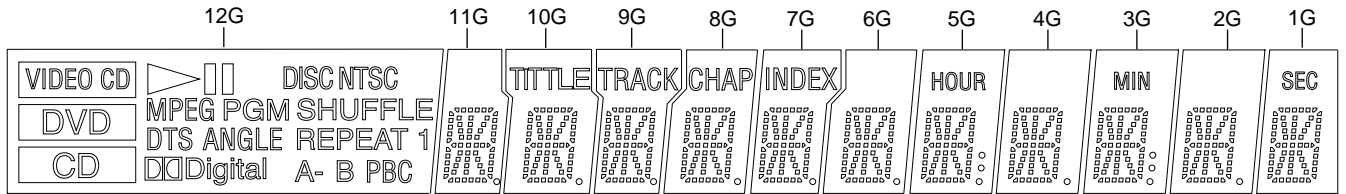
2-3-8. Beep Sound Test

2-3-8-1. Transition Keys in Self Check Mode

- Input of a key on main unit

2-3-8-2. Operation and Display

In the Self Check mode, each time a key on the main unit is entered, a beep sound of 2kHz (100ms) is generated.



ANODE CONNECTION

	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	VIDEO CD	a	a	a	a	a	a	a	a	a	a	a
P2	▶	h	h	h	h	h	h	h	h	h	h	h
P3	▯▯	j	j	j	j	j	j	j	j	j	j	j
P4	DISC	k	k	k	k	k	k	k	k	k	k	k
P5	NTSC	b	b	b	b	b	b	b	b	b	b	b
P6	DVD	f	f	f	f	f	f	f	f	f	f	f
P7	MPEG	m	m	m	m	m	m	m	m	m	m	m
P8	PGM	s	s	s	s	s	s	s	s	s	s	s
P9	SHUFFLE	g	g	g	g	g	g	g	g	g	g	g
P10	DTS	e	e	e	e	e	e	e	e	e	e	e
P11	ANGLE	n	n	n	n	n	n	n	n	n	n	n
P12	REPEAT	p	p	p	p	p	p	p	p	p	p	p
P13	1	r	r	r	r	r	r	r	r	r	r	r
P14	PBC	c	c	c	c	c	c	c	c	c	c	c
P15	B	d	d	d	d	d	d	d	d	d	d	d
P16	A-	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp	-
P17	Digital	-	-	-	-	-	-	col	-	col	-	-
P18	CD	-	TITLE	TRACK	CHAP	INDEX	-	HOUR	-	MIN	-	SEC

3. TROUBLESHOOTING

3-1. Test Mode is not activated

With the set assembled in the front panel, the Test mode does not become active if any button was pressed by any reason. Under this condition, the power is not turned on even in the normal status. (The set is kept in Standby status = Red LED is kept on) Not only the buttons are inactive, but also a signal from remote commander is not accepted. To check this condition, with the self check port (pin ⑧ of IF CON) kept in "Low" status, supply the AC power, so that the Test mode is forcibly activated. On the board, short the lands where SELF is printed. The IF CON checks the self check port only after the power on reset (only when AC is supplied; not in Standby status). If any button was pressed, the button name should be displayed on the FL display tube. Though no button is pressed this time, display of other than NOTHING implies that the button was pressed.

3-2. Power is not turned on

- ① Red (STANDBY) LED does not light up when AC was supplied. The power (EVER 3.3 V) is not supplied.
X401 is oscillating.
- ② Red (STANDBY) LED is kept on though POWER button was pressed. Any button is kept pressed.
PONCHK (IF CON pin ⑥) is over 0.1 V.
- ③ Green LED lights up when POWER button was pressed, but red LED lights up again after several seconds. PONCHK (IF CON pin ⑥) is abnormal. (Slow rise time from 0.1 V to 1.5 V. Voltage must be less than 1.5 V)
SYSTEM CONTROL does not operate normally.

3-3. Power is turned on and off repeatedly

EVER 3.3 V may not be supplied normally. Check that D430 is not broken.

SECTION 7 ELECTRICAL ADJUSTMENT

In making adjustment, refer to 7-3. Adjustment Related Parts Arrangement.

Note: During diagnostic check, the characters and color bars can be seen only with the NTSC monitor. Therefore, for diagnostic check, use the monitor that supports both NTSC and PAL modes.

This section describes procedures and instructions necessary for adjusting electrical circuits in this set.

Instruments required:

- 1) Color monitor TV
- 2) Oscilloscope 1 or 2 phenomena, band width over 100 MHz, with delay mode
- 3) Frequency counter (over 8 digits)
- 4) Digital voltmeter
- 5) Standard commander (RMT-D115E/D116A/D117A/D120A/D120E)
- 6) DVD reference disc
HLX-501 (J-6090-071-A) (dual layer)
HLX-503 (J-6090-069-A) (single layer)
HLX-504 (J-6090-088-A) (single layer)
HLX-505 (J-6090-089-A) (dual layer)
- 7) SACD reference disc
HLXA-509 (J-6090-090-A)

7-1. POWER SUPPLY ADJUSTMENT

1. Power Supply Check (HS16S9E, HS16S9F, HS16S9U and SRV940JUC BOARDS)

Mode	E-E
Instrument	Digital voltmeter
EVER +3 V Check	
Test point	CN201 pin ①
Specification	3.6 ± 0.2 Vdc
SW +3 V Check	
Test point	CN201 pin ②, ③
Specification	3.4 ± 0.2 Vdc
EVER+5 V Check	
Test point	CN201 pin ④
Specification	5.3 ± 0.3 Vdc
SW +10 V Check	
Test point	CN201 pin ⑦, ⑧
Specification	$10.5^{+1.0}_{-1.5}$ Vdc
SW -10 V Check	
Test point	CN201 pin ⑩
Specification	$-10.0^{+1.5}_{-1.0}$ Vdc

Checking method:

- 1) Confirm that each voltage satisfies the specification.

2. +3.3 V Adjustment (SRV940JUC BOARD) (DVP-S560D: US, Canadian/S570D)

Mode	PB
Measuring Instrument	Digital voltmeter
Measurement Point	CN201 pin ②, ③
Adjusting Element	VR201
Specified Value	3.4 ± 0.2 V

7-2. ADJUSTMENT OF VIDEO SYSTEM

1. Video Level Adjustment (MB-86 BOARD)

<Purpose>

This adjustment is made to satisfy the NTSC standard, and if not adjusted correctly, the brightness will be too large or small.

Mode	Video level adjustment in test mode
Signal	Color bars
Test point	LINE OUT (VIDEO) connector (75 Ω terminated)
Instrument	Oscilloscope
Adjusting element	RV501
Specification	1.0 ± 0.02 Vp-p

Adjusting method:

- 1) In the test mode initial menu "6" Video Level Adjustment, set so that color bars are generated.
- 2) Adjust the RV501 to attain 1.0 ± 0.02 Vp-p.

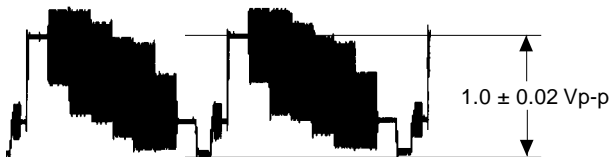


Figure 7-1

2. S-terminal Output Check (MB-86 BOARD)

<Purpose>

Check S-terminal video output. If it is incorrect, pictures will not be displayed correctly in spite of connection to the TV with a S-terminal cable.

Mode	Video level adjustment in test mode
Signal	Color bars
Test point	S VIDEO OUT (S-Y) connector (75 Ω terminated)
Instrument	Oscilloscope
Specification	1.0 ± 0.1 Vp-p

Checking method:

- 1) In the test mode initial menu "6" Video Level Adjustment, set so that color bars are generated.
- 2) Confirm that the S-Y level is 1.0 ± 0.1 Vp-p.



Figure 7-2

3. Checking Component Video Output B-Y (MB-86 BOARD)

<Purpose>

This checks component video output B-Y. If it is incorrect, correct colors will not be displayed when connected to, for instance, projector.

Mode	Video level adjustment in test mode
Signal	Color bars
Test point	COMPONENT VIDEO OUT (B-Y) connector (75 Ω terminated)
Instrument	Oscilloscope
Specification	700 ± 70 mVp-p

Checking method:

- 1) Confirm that the B-Y level is 700 ± 70 mVp-p.

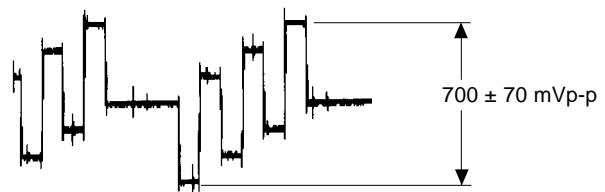


Figure 7-3

4. Checking Component Video Output R-Y (MB-86 BOARD)

<Purpose>

This checks component video output R-Y. If it is incorrect, correct colors will not be displayed when connected to, for instance, projector.

Mode	Video level adjustment in test mode
Signal	Color bars
Test point	COMPONENT VIDEO OUT (R-Y) connector (75 Ω terminated)
Instrument	Oscilloscope
Specification	700 ± 70 mVp-p

Checking method:

- 1) Confirm that the R-Y level is 700 ± 70 mVp-p.

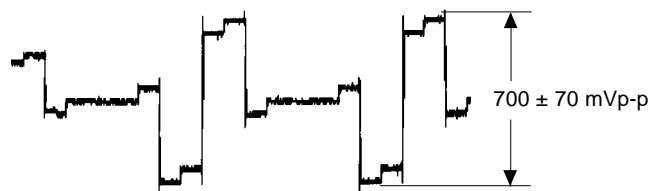


Figure 7-4

5. Checking Component Video Output Y (MB-86 BOARD)

<Purpose>

This checks component video output Y. If it is incorrect, correct brightness will not be attained when connected to, for instance, projector.

Mode	Video level adjustment in test mode
Signal	Color bars
Test point	COMPONENT VIDEO OUT (Y) connector (75 Ω terminated)
Instrument	Oscilloscope
Specification	1.0 ± 0.1 Vp-p

Checking method:

- 1) Confirm that the Y level is 1.0 ± 0.1 Vp-p.



Figure 7-5

6. Checking S Video Output S-C (MB-86 BOARD)

<Purpose>

This checks whether the S-C satisfies the NTSC Standard. If it is not correct, the colors will be too dark or light.

Mode	Video level adjustment in test mode
Signal	Color bars
Test point	S VIDEO OUT (S-C) connector (75 Ω terminated)
Instrument	Oscilloscope
Specification	286 ± 50 mVp-p (NTSC) 300 ± 100 mVp-p (PAL)

Checking method:

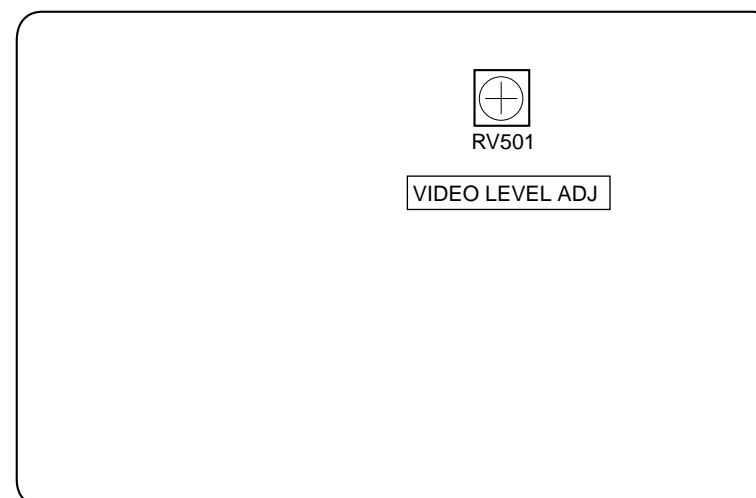
- 1) In the test mode initial menu "6" Video Level Adjustment, set so that color bars are generated.
- 2) Confirm that the S-C burst is 300 ± 100 mVp-p.



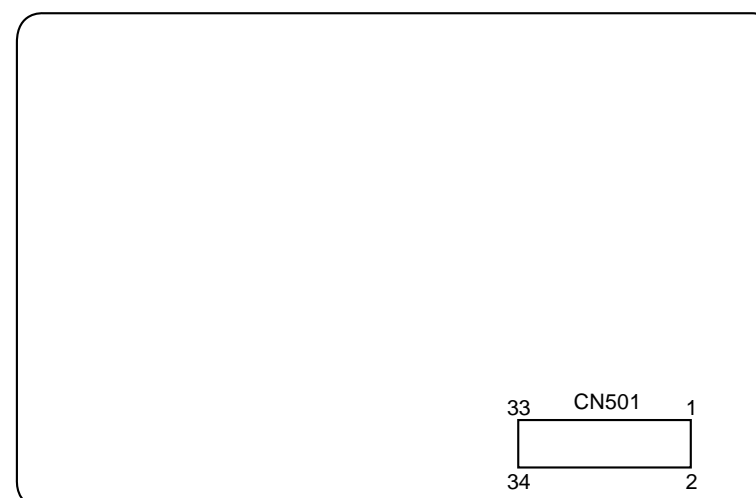
Figure 7-9

7-3. ADJUSTMENT RELATED PARTS ARRANGEMENT

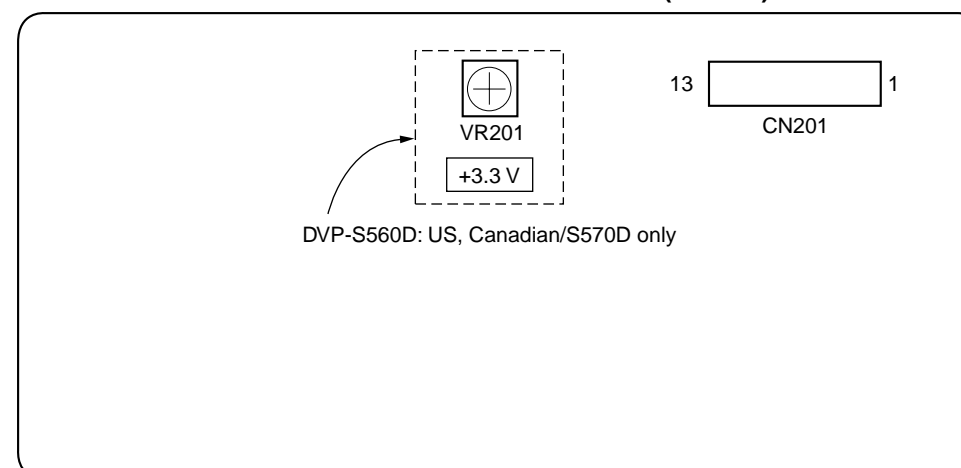
MB-86 BOARD (SIDE A)



MB-86 BOARD (SIDE B)



HS16S9E/HS16S9F/HS16S9U/SRV940JUC BOARD (SIDE A)



SECTION 8 REPAIR PARTS LIST

8-1. EXPLODED VIEWS

NOTE:

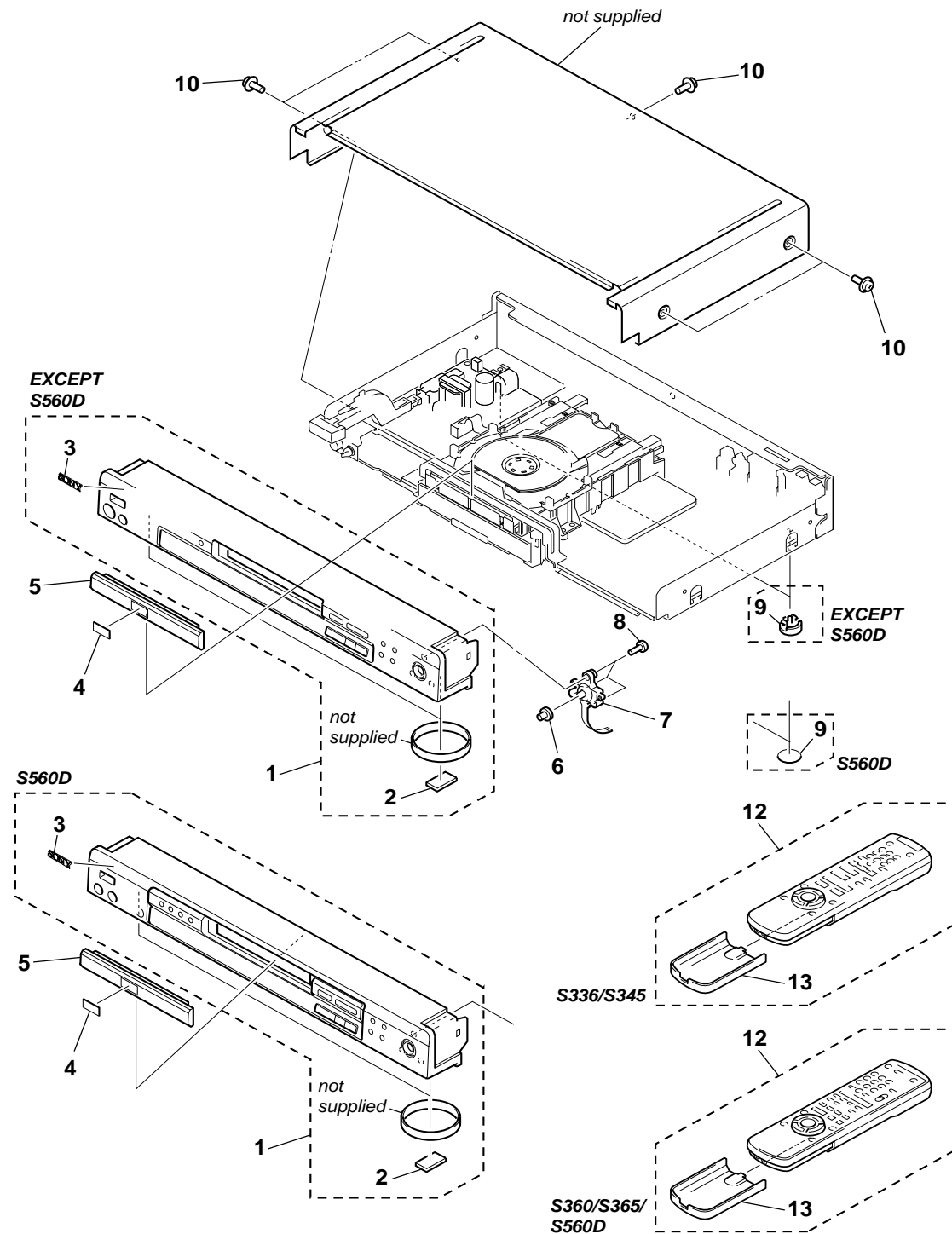
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) . . . (RED)
 ↑ ↑
 Parts Color Cabinet's Color

- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories and packing materials are given in the last of the electrical parts list.
- Abbreviation
CH : Chinese
CND : Canadian
HK : Hong Kong
KR : Korea
SP : Singapore

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

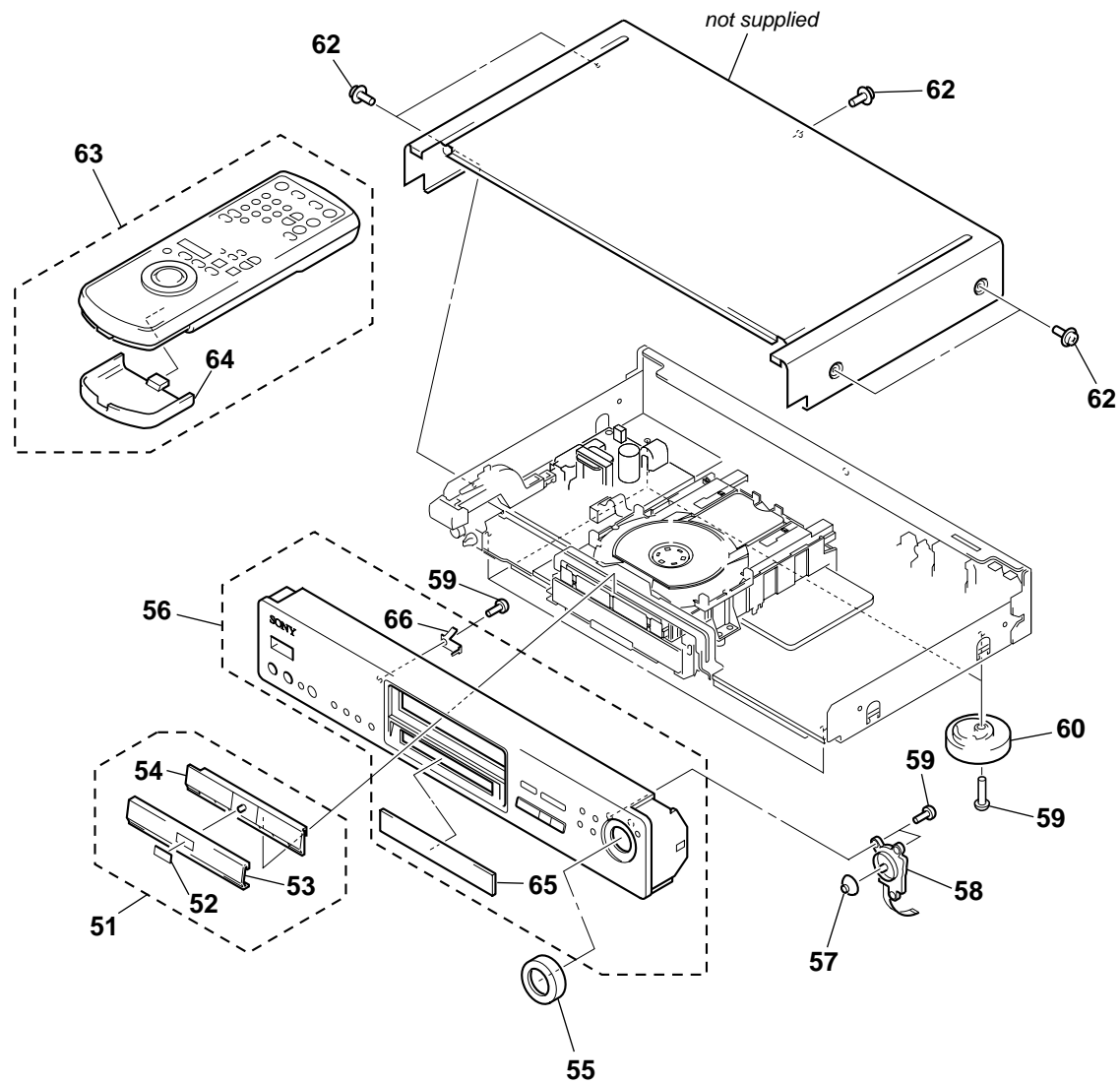
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

8-1-1. CASE ASSEMBLY (S336/S345/S360/S365/S560D)



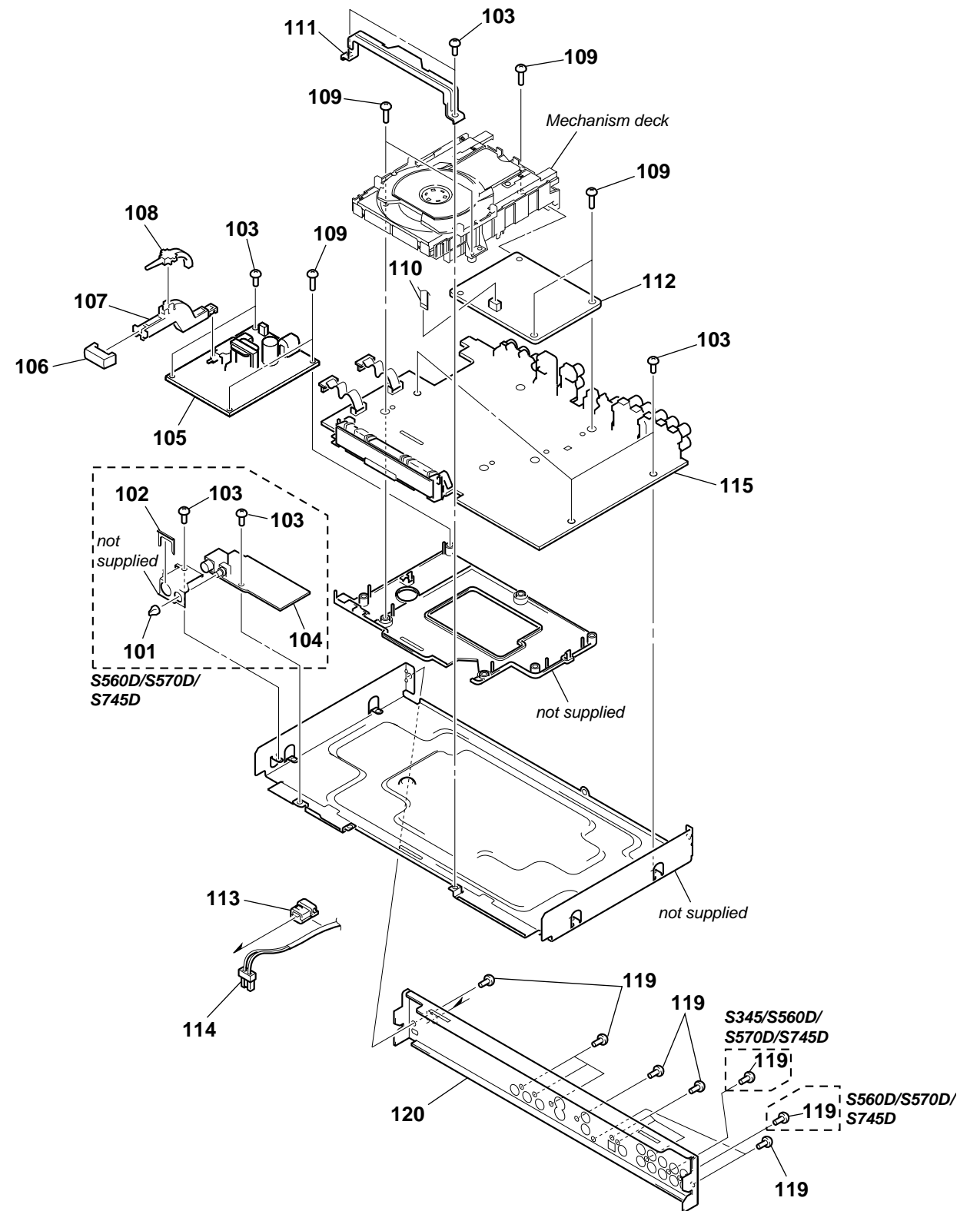
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-3950-400-1	PANEL ASSY, FRONT (S336)		5	3-059-377-11	COVER, TRAY (S560D: E)	
1	X-3950-390-1	PANEL ASSY, FRONT (S560D: US, CND)		5	3-061-152-01	COVER, TRAY (S360: US, CND/S365)	
1	X-3950-392-1	PANEL ASSY, FRONT (S360: US, CND)		6	3-059-322-01	STICK, CURSOR (S560D)	
1	X-3950-398-1	PANEL ASSY, FRONT (S345: HK, SP)		6	3-059-322-21	STICK, CURSOR (S345: CH)	
1	X-3950-408-1	PANEL ASSY, FRONT (S365)		6	3-059-322-31	STICK, CURSOR (S360: US, CND/S365)	
1	X-3950-413-1	PANEL ASSY, FRONT (S560D: E)		6	3-059-322-41	STICK, CURSOR (S336/S360: E)	
1	X-3950-642-1	PANEL ASSY, FRONT (S360: E)		6	3-059-322-51	STICK, CURSOR (S345: HK, SP)	
1	X-3950-702-1	PANEL ASSY, FRONT (S345: CH)		7	1-771-913-11	SWITCH, TACTILE	
2	3-059-349-01	CUSHION, FOOT (S560D)		8	3-970-608-51	SUMITITE (B3), +BV	
2	3-059-349-11	CUSHION, FOOT (EXCEPT S560D)		9	3-059-331-01	FOOT, REAR (S560D)	
3	4-217-485-01	EMBLEM (5-A), SONY (S336/S360: E)		9	3-059-389-01	CUSHION (REAR), FOOT (EXCEPT S560D)	
3	4-217-485-11	EMBLEM (5-A), SONY (S560D: E)		10	3-710-901-11	SCREW, TAPPING	
3	4-963-404-21	EMBLEM (5-A), SONY (S360: US, CND/S365)				(S360: US, CND/S365/S560D: US, CND)	
3	4-963-404-22	EMBLEM (5-A), SONY (S560D: US, CND)		10	3-710-901-51	SCREW, TAPPING (S336/S560D: E)	
3	4-963-404-41	EMBLEM (5-A), SONY (S345)		10	3-710-901-61	SCREW, TAPPING (S345/S360: E)	
4	3-056-508-01	EMBLEM, DVD (S560D)		12	1-418-988-31	COMMANDER, STANDARD (RMT-D115E)	(S336/S345)
4	3-975-726-61	EMBLEM, DVD (S336/S360: E)				(S360/S365)	
4	3-975-726-71	EMBLEM, DVD (S360: US, CND/S365)		12	1-418-990-11	COMMANDER, STANDARD (RMT-D116A)	(S360/S365)
4	3-975-726-81	EMBLEM, DVD (S345)		12	1-418-991-61	COMMANDER, STANDARD (RMT-D117A)	(S560D)
5	3-059-323-21	COVER, TRAY (S345: CH)		13	3-053-633-01	COVER, BATTERY (for RMT-D115E/D116A/D117A)	
5	3-059-323-41	COVER, TRAY (S336/S360: E)					
5	3-059-323-51	COVER, TRAY (S345: HK, SP)					
5	3-059-377-01	COVER, TRAY (S560D: US, CND)					

8-1-2. CASE ASSEMBLY (S570D/S745D)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	X-3950-318-1	COVER ASSY, TRAY (S570D)		57	3-058-938-11	STICK, CURSOR (S745D)	
51	X-3950-322-1	COVER ASSY, TRAY (S745D)		58	1-418-097-11	ENCODER, ROTARY	
52	3-975-726-31	EMBLEM, DVD (S570D)		59	3-970-608-51	SUMITITE (B3), +BV	
52	3-975-726-51	EMBLEM, DVD (S745D)		60	X-3950-447-1	FOOT ASSY (S570D)	
53	3-058-936-01	COVER (AL), TRAY (S570D)		60	X-3950-449-1	FOOT ASSY (S745D)	
53	3-058-936-11	COVER (AL), TRAY (S745D)		62	3-710-901-61	SCREW, TAPPING	
54	3-058-935-01	COVER (M), TRAY (S570D)		63	1-418-989-11	COMMANDER, STANDARD (RMT-D120A) (S570D/S745D: CH, KR)	
54	3-058-935-11	COVER (M), TRAY (S745D)		63	1-418-989-51	COMMANDER, STANDARD (RMT-D120E) (S745D: HK, SP)	
55	3-058-939-01	RING, SHUTTLE (S570D)		64	3-055-539-01	COVER, BATTERY (for RMT-D120A/120E)	
55	3-058-939-11	RING, SHUTTLE (S745D)		65	3-058-947-01	WINDOW, FL	
56	X-3950-317-1	PANEL ASSY, FRONT (S570D)		66	3-058-944-01	PLATE (T), GROUND	
56	X-3950-481-1	PANEL ASSY, FRONT (S745D)					
57	3-058-938-01	STICK, CURSOR (S570D)					

8-1-3. CHASSIS ASSEMBLY

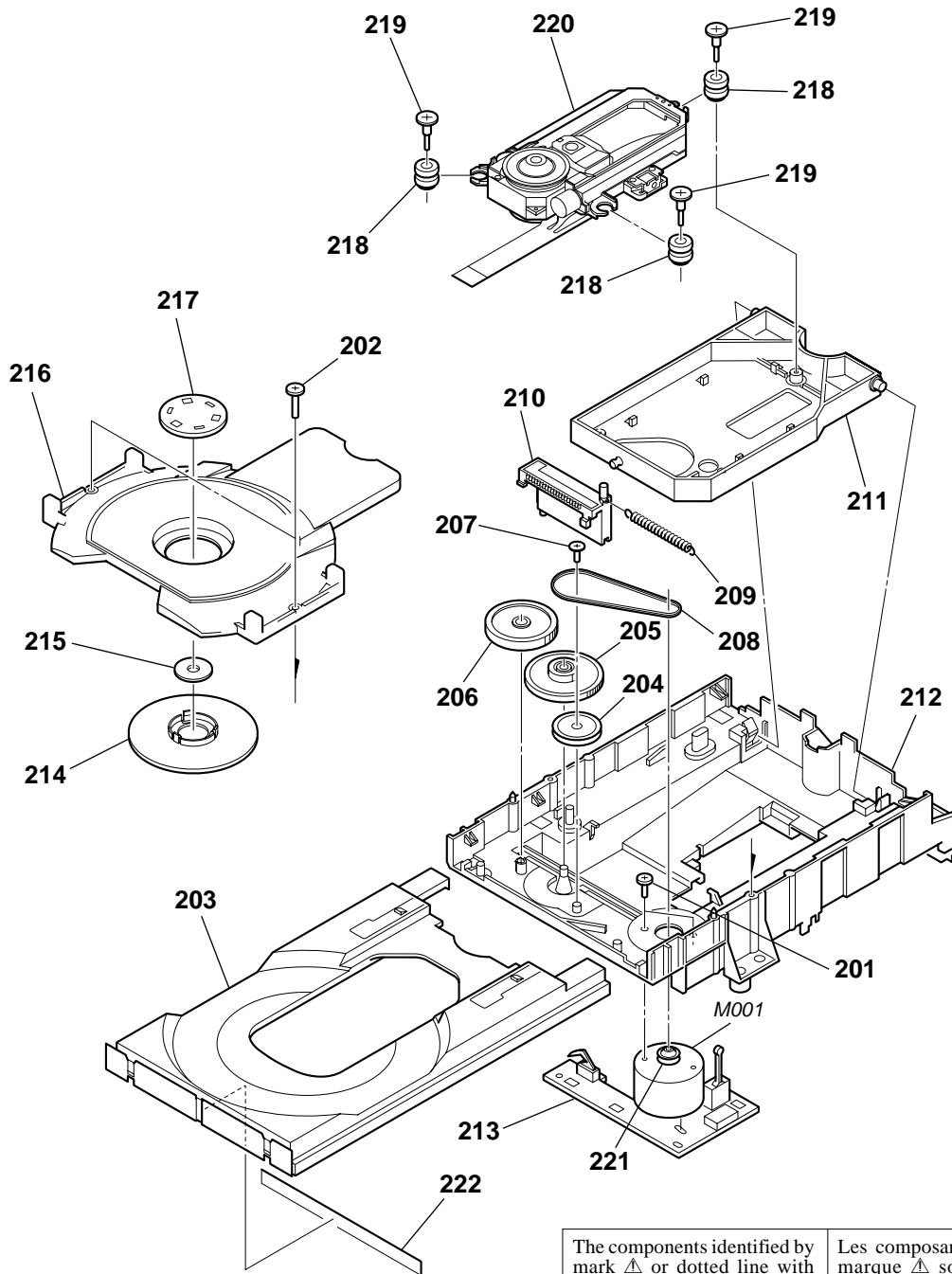


Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-059-379-01	KNOB, VOLUME (S560D: US, CND)		* 112	A-6065-447-A	MB-86 BOARD, COMPLETE	
101	3-059-379-11	KNOB, VOLUME (S560D: E/S570D)				(S336/S345: HK, SP)	
101	3-059-379-21	KNOB, VOLUME (S745D)		* 112	A-6065-457-A	MB-86 BOARD, COMPLETE (S560D: E)	
* 102	3-684-436-01	PLATE, MOUNT (S560D/S570D/S745D)		* 112	A-6065-460-A	MB-86 BOARD, COMPLETE (S560D: US, CND)	
103	3-970-608-01	SUMITITE (B3), +BV		* 112	A-6065-464-A	MB-86 BOARD, COMPLETE (S345: CH)	
				* 112	A-6065-472-A	MB-86 BOARD, COMPLETE (S570D)	
* 104	A-6065-458-A	HP-127 BOARD, COMPLETE (S560D)					
* 104	A-6065-470-A	HP-127 BOARD, COMPLETE (S570D/S745D)		* 112	A-6065-481-A	MB-86 BOARD, COMPLETE (S745D: CH)	
* 105	1-468-505-11	POWER BLOCK (SRV940JUC)		* 112	A-6065-483-A	MB-86 BOARD, COMPLETE	
		(S560D: US, CND/S570D)				(S745D: HK, SP, KR)	
* 105	1-468-506-11	POWER BLOCK (HS16S9F)		113	4-966-267-11	BUSHING (FBS001), CORD	
		(S345: CH/S360: E/S365/S560D: E)		△ 114	1-769-744-91	CORD, POWER (S336/S345: HK, SP/S360: E/	
* 105	1-468-506-21	POWER BLOCK (HS16S9U) (S360: US, CND)				S365/S560D: E/S745D: HK, SP)	
				△ 114	1-782-510-11	CORD, POWER (S345: CH/S745D: CH)	
* 105	1-468-506-31	POWER BLOCK (HS16S9E)					
		(S336/S345: HK, SP/S745D)		△ 114	1-782-752-31	CORD, POWER (S745D: KR)	
106	3-059-319-01	BUTTON, POWER (S560D: US, CND)		△ 114	1-783-531-31	CORD, POWER	
106	3-059-319-21	BUTTON, POWER				(S360: US, CND/S560D: US, CND/S570D)	
		(S345: CH/S560D: E/S570D/S745D)		* 115	A-6065-436-A	AI-17 BOARD, COMPLETE (S360: US, CND)	
106	3-059-319-31	BUTTON, POWER (S360: US, CND/S365)		* 115	A-6065-440-A	AI-17 BOARD, COMPLETE (S360: E/S365)	
106	3-059-319-41	BUTTON, POWER (S336/S360: E)		* 115	A-6065-456-A	AI-17 BOARD, COMPLETE (S560D: E)	
106	3-059-319-51	BUTTON, POWER (S345: HK, SP)		* 115	A-6065-459-A	AI-17 BOARD, COMPLETE (S560D: US, CND)	
107	3-059-320-01	JOINT (P) (S345: CH/S560D/S570D/S745D)		* 115	A-6065-463-A	AI-17 BOARD, COMPLETE	
107	3-059-320-11	JOINT (P) (S336/S345: HK, SP/S360/S365)				(S336/S345: HK, SP)	
108	3-059-321-01	INDICATOR (P) (S345: CH/S560D/S570D/		* 115	A-6065-466-A	AI-17 BOARD, COMPLETE (S345: CH)	
		S745D)		* 115	A-6065-471-A	AI-17 BOARD, COMPLETE (S570D)	
108	3-059-321-11	INDICATOR (P) (S336/S345: HK, SP/S360/		* 115	A-6065-482-A	AI-17 BOARD, COMPLETE (S745D)	
		S365)					
				119	3-970-608-51	SUMITITE (B3), +BV	
109	3-061-608-01	POINT (GROUND), +BV S TITE FRONT		120	3-058-948-01	PANEL, REAR (S570D)	
110	1-792-457-11	CABLE, FLEXIBLE FLAT (FMM-33)		120	3-059-326-11	PANEL, REAR (S345: CH)	
111	3-059-327-01	PILLAR, MULTI (S560D/S570D/S745D)		120	3-059-326-51	PANEL, REAR (S560D: US, CND)	
111	3-059-388-01	PILLAR, MULTI (S336/S345: HK, SP/S360/		120	3-059-326-61	PANEL, REAR (S745D)	
		S365)					
111	3-059-388-11	PILLAR, MULTI (S345: CH)		120	3-059-326-81	PANEL, REAR (S560D: E)	
				120	3-059-390-01	PANEL, REAR (S360: US, CND/S365)	
* 112	A-6065-437-A	MB-86 BOARD, COMPLETE		120	3-059-390-11	PANEL, REAR (S336/S345: HK, SP)	
		(S360: US, CND/S365)		120	3-059-390-31	PANEL, REAR (S360: E)	
* 112	A-6065-441-A	MB-86 BOARD, COMPLETE (S360: E)					

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

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

8-1-4. MECHANISM DECK SECTION



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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	7-621-775-10	SCREW +B 2.6X4		* 213	A-6066-016-A	MS-48 BOARD, COMPLETE	
202	7-685-648-79	SCREW +BVTP 3X12 TYPE2 IT-3		214	3-061-044-01	PLATE, CHUCK	
203	3-061-036-01	TRAY		215	3-061-043-01	YOKE	
204	3-053-841-21	GEAR, PULLEY		216	3-061-042-01	HOLDER, CHUCK	
205	3-053-840-21	GEAR, CAM DRIVING		217	3-053-846-01	YOKE HOLDER	
206	3-053-839-22	TRAY DRIVING GEAR		218	3-053-847-01	INSULATOR	
207	4-974-711-01	SCREW (2X5) (P TYIGHT), (+) PTTWH		219	4-981-923-01	SCREW (M), STEP	
208	3-053-842-01	BELT		Δ 220	A-6062-397-A	OPTICAL PICK-UP KHM-220AAA	
209	3-053-849-01	SPRING, TENSION		221	3-053-843-21	PULLEY, MOTOR	
210	3-053-838-21	CHUCK CAM		222	3-055-097-01	SEAL, TRAY DUST	
211	3-059-557-11	HOLDER, BASE UNIT		M001	1-541-632-11	MOTOR, DC (LOADING)	
212	3-059-556-11	BASE, LOADING					

8-2. ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable
- Not all of the parts for POWER BLOCK (HS16S9E, HS16S9F, HS16S9U and SRV940JUC) are listed.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA. . : μ A. . uPA. . : μ PA. .
uPB. . : μ PB. . uPC. . : μ PC. .
uPD. . : μ PD. .
- CAPACITORS
uF: μ F
- COILS
uH: μ H
- Abbreviation
CH : Chinese KR : Korea
CND : Canadian SP : Singapore
HK : Hong Kong

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

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

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-6065-436-A	AI-17 BOARD, COMPLETE (S360: US, CND)		C208	1-107-737-11	MYLAR 560PF 5% 50V	
*	A-6065-440-A	AI-17 BOARD, COMPLETE (S360: E/S365)				(S560D/S570D/S745D)	
*	A-6065-456-A	AI-17 BOARD, COMPLETE (S560D: E)		C209	1-137-256-11	MYLAR 150PF 5% 50V	
*	A-6065-459-A	AI-17 BOARD, COMPLETE (S560D: US, CND)				(S560D/S570D/S745D)	
*	A-6065-463-A	AI-17 BOARD, COMPLETE (S336/S345: HK, SP)		C210	1-137-256-11	MYLAR 150PF 5% 50V	
						(S560D/S570D/S745D)	
*	A-6065-466-A	AI-17 BOARD, COMPLETE (S345: CH)		C211	1-163-135-00	CERAMIC CHIP 560PF 5% 50V	
*	A-6065-471-A	AI-17 BOARD, COMPLETE (S570D)				(S336/S345/S360/S365)	
*	A-6065-482-A	AI-17 BOARD, COMPLETE (S745D)		C212	1-130-472-00	MYLAR 0.0012uF 5% 50V	
		*****				(S570D/S745D)	
		(Ref.No. 2,000 Series)		C213	1-104-664-11	ELECT 47uF 20% 16V	
	3-059-329-01	HOLDER (T), FL				(S336/S345/S360/S365/S560D)	
	3-059-330-01	HOLDER (U), FL		C214	1-104-664-11	ELECT 47uF 20% 16V	
		< BUZZER >				(S336/S345/S360/S365/S560D)	
BZ401	1-504-920-11	BUZZER		C215	1-128-200-11	ELECT 47uF 20% 63V	
		< CAPACITOR >				(S570D/S745D)	
C110	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V		C216	1-128-200-11	ELECT 47uF 20% 63V	
C114	1-104-664-11	ELECT 47uF 20% 25V				(S570D/S745D)	
C116	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V		C217	1-106-351-00	MYLAR 2200PF 5% 200V	
C119	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V				(S570D/S745D)	
C120	1-115-340-11	CERAMIC CHIP 0.22uF 10% 25V		C217	1-106-353-00	MYLAR 0.0027uF 5% 50V	
						(S560D)	
C121	1-104-665-11	ELECT 100uF 20% 25V		C217	1-130-478-00	MYLAR 0.0039uF 5% 50V	
C122	1-110-501-11	CERAMIC CHIP 0.33uF 10% 16V				(S336/S345/S360/S365)	
C123	1-124-589-11	ELECT 47uF 20% 16V		C218	1-106-351-00	MYLAR 2200PF 5% 200V	
C124	1-128-551-11	ELECT 22uF 20% 25V				(S570D/S745D)	
C125	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V		C218	1-106-353-00	MYLAR 0.0027uF 5% 50V	
						(S560D)	
C126	1-124-248-00	ELECT 22uF 20% 35V		C218	1-130-478-00	MYLAR 0.0039uF 5% 50V	
C127	1-128-551-11	ELECT 22uF 20% 25V				(S336/S345/S360/S365)	
C128	1-124-248-00	ELECT 22uF 20% 35V		C219	1-163-021-91	CERAMIC CHIP 0.01uF 10% 50V	
C129	1-124-248-00	ELECT 22uF 20% 35V		C220	1-163-021-91	CERAMIC CHIP 0.01uF 10% 50V	
C202	1-163-021-91	CERAMIC CHIP 0.01uF 10% 50V	(S336/S345/S360/S365)	C221	1-126-052-11	ELECT 100uF 20% 16V	
						(S570D/S745D)	
C203	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V		C221	1-126-933-11	ELECT 100uF 20% 16V	
C204	1-163-009-11	CERAMIC CHIP 0.001uF 10% 50V				(S336/S345/S360/S365/S560D)	
C205	1-106-343-00	MYLAR 1000PF 5% 200V		C222	1-126-052-11	ELECT 100uF 20% 16V	
						(S570D/S745D)	
C206	1-106-343-00	MYLAR 1000PF 5% 200V				(S570D/S745D)	
				C222	1-126-933-11	ELECT 100uF 20% 16V	
C207	1-107-737-11	MYLAR 560PF 5% 50V	(S560D/S570D/S745D)			(S336/S345/S360/S365/S560D)	
				C223	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
				C224	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
				C225	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
				C226	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
				C227	1-163-021-91	CERAMIC CHIP 0.01uF 10% 50V	(S336/S345)

AI-17

Ref. No.	Part No.	Description	Remark		
C228	1-126-964-11	ELECT	10uF	20%	50V (S336/S345)
C229	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V
C230	1-124-584-00	ELECT	100uF	20%	10V (S336/S345/S360/S365/S560D)
C230	1-128-200-11	ELECT	47uF	20%	63V (S570D/S745D)
C231	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V (S336/S345/S360/S365/S560D)
C232	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V (S336/S345/S360/S365/S560D)
C233	1-104-665-11	ELECT	100uF	20%	10V (S336/S345/S360/S365/S560D)
C234	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V (S560D/S570D/S745D)
C235	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V (S336/S345/S360/S365)
C236	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C237	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C238	1-128-202-11	ELECT	220uF	20%	63V (S570D/S745D)
C239	1-126-960-11	ELECT	1uF	20%	50V
C240	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V (S336/S345/S360/S365)
C241	1-126-960-11	ELECT	1uF	20%	50V
C242	1-130-472-00	MYLAR	0.0012uF	5%	50V (S570D/S745D)
C243	1-137-256-11	MYLAR	150PF	5%	50V (S560D/S570D/S745D)
C244	1-137-256-11	MYLAR	150PF	5%	50V (S560D/S570D/S745D)
C247	1-130-467-00	MYLAR	470PF	5%	50V (S570D/S745D)
C248	1-130-467-00	MYLAR	470PF	5%	50V (S570D/S745D)
C252	1-136-850-11	MYLAR	0.1uF	5%	63V (S570D/S745D)
C254	1-126-964-11	ELECT	10uF	20%	50V (S560D/S570D/S745D)
C255	1-126-964-11	ELECT	10uF	20%	50V (S560D/S570D/S745D)
C256	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C257	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V
C258	1-136-850-11	MYLAR	0.1uF	5%	63V (S570D/S745D)
C259	1-109-982-11	CERAMIC CHIP	1uF	10%	10V (S336/S345/S360/S365/S560D)
C260	1-128-200-11	ELECT	47uF	20%	63V (S570D/S745D)
C261	1-136-850-11	MYLAR	0.1uF	5%	63V (S570D/S745D)
C262	1-136-850-11	MYLAR	0.1uF	5%	63V (S570D/S745D)
C263	1-136-850-11	MYLAR	0.1uF	5%	63V (S570D/S745D)
C264	1-136-850-11	MYLAR	0.1uF	5%	63V (S570D/S745D)
C265	1-126-176-11	ELECT	220uF	20%	10V (S560D/S570D/S745D)
C266	1-126-176-11	ELECT	220uF	20%	10V (S560D/S570D/S745D)
C267	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V (S336/S345/S360/S365)
C268	1-126-963-11	ELECT	4.7uF	20%	50V (S560D/S570D/S745D)

Ref. No.	Part No.	Description	Remark		
C269	1-124-261-00	ELECT	10uF	20%	50V (S560D/S570D/S745D)
C270	1-124-261-00	ELECT	10uF	20%	50V (S560D/S570D/S745D)
C271	1-126-965-11	ELECT	22uF	20%	50V
C272	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V
C273	1-163-255-11	CERAMIC CHIP	150PF	5%	50V (S336/S345/S360/S365)
C274	1-163-255-11	CERAMIC CHIP	150PF	5%	50V (S336/S345/S360/S365)
C275	1-163-255-11	CERAMIC CHIP	150PF	5%	50V (S336/S345/S360/S365)
C276	1-163-255-11	CERAMIC CHIP	150PF	5%	50V (S336/S345/S360/S365)
C277	1-163-135-00	CERAMIC CHIP	560PF	5%	50V (S336/S345/S360/S365)
C302	1-126-965-11	ELECT	22uF	20%	50V (S560D/S570D/S745D)
C303	1-126-933-11	ELECT	100uF	20%	16V (S560D/S570D/S745D)
C304	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V (S570D/S745D)
C305	1-164-004-11	CERAMIC CHIP	0.1uF	10%	25V (S570D/S745D)
C306	1-126-960-11	ELECT	1uF	20%	50V (S570D/S745D)
C307	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V (S560D/S570D/S745D)
C308	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V (S560D/S570D/S745D)
C309	1-126-965-11	ELECT	22uF	20%	50V (S560D/S570D/S745D)
C310	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V (S560D/S570D/S745D)
C311	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V (S336/S345/S560D/S570D/S745D)
C312	1-137-605-11	MYLAR	220PF	5%	50V (S560D/S570D/S745D)
C313	1-137-605-11	MYLAR	220PF	5%	50V (S560D/S570D/S745D)
C314	1-163-255-11	CERAMIC CHIP	150PF	5%	50V (S560D/S570D/S745D)
C315	1-163-255-11	CERAMIC CHIP	150PF	5%	50V (S560D/S570D/S745D)
C316	1-137-256-11	MYLAR	150PF	5%	50V (S560D/S570D/S745D)
C317	1-163-133-00	CERAMIC CHIP	470PF	5%	50V (S336/S345/S560D/S570D/S745D)
C318	1-130-470-00	MYLAR	820PF	5%	50V (S560D/S570D/S745D)
C319	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V (S560D/S570D/S745D)
C321	1-130-470-00	MYLAR	820PF	5%	50V (S560D/S570D/S745D)
C322	1-163-145-00	CERAMIC CHIP	0.0015uF	5%	50V (S560D/S570D/S745D)
C323	1-106-343-00	MYLAR	1000PF	5%	200V (S560D/S570D/S745D)
C324	1-137-605-11	MYLAR	220PF	5%	50V (S560D/S570D/S745D)
C325	1-163-255-11	CERAMIC CHIP	150PF	5%	50V (S560D/S570D/S745D)
C326	1-163-133-00	CERAMIC CHIP	470PF	5%	50V (S336/S345/S560D/S570D/S745D)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C327	1-137-605-11	MYLAR	220PF 5% 50V (S560D/S570D/S745D)	C353	1-128-200-11	ELECT	47uF 20% 63V (S570D/S745D)
C328	1-163-255-11	CERAMIC CHIP	150PF 5% 50V (S560D/S570D/S745D)	C354	1-128-197-11	ELECT	10uF 20% 50V (S570D/S745D)
C329	1-137-256-11	MYLAR	150PF 5% 50V (S560D/S570D/S745D)	C356	1-128-197-11	ELECT	10uF 20% 50V (S570D/S745D)
C330	1-126-965-11	ELECT	22uF 20% 50V (S560D)	C357	1-126-964-11	ELECT	10uF 20% 50V (S336/S345/S360/S365/S560D)
C330	1-128-198-11	ELECT	22uF 20% 50V (S570D/S745D)	C357	1-128-200-11	ELECT	47uF 20% 63V (S570D/S745D)
C331	1-126-965-11	ELECT	22uF 20% 50V (S560D)	C368	1-126-964-11	ELECT	10uF 20% 50V (S336/S345/S360/S365/S560D)
C331	1-128-198-11	ELECT	22uF 20% 50V (S570D/S745D)	C369	1-163-243-11	CERAMIC CHIP	47PF 5% 50V
C332	1-126-965-11	ELECT	22uF 20% 50V (S560D)	C370	1-126-965-11	ELECT	22uF 20% 50V (S560D/S570D/S745D)
C332	1-128-198-11	ELECT	22uF 20% 50V (S570D/S745D)	C371	1-115-340-11	CERAMIC CHIP	0.22uF 10% 25V (S560D/S570D/S745D)
C333	1-126-965-11	ELECT	22uF 20% 50V (S560D)	C381	1-104-664-11	ELECT	47uF 20% 16V (S336/S345/S360/S365/S560D)
C333	1-128-198-11	ELECT	22uF 20% 50V (S570D/S745D)	C381	1-128-200-11	ELECT	47uF 20% 63V (S570D/S745D)
C334	1-126-965-11	ELECT	22uF 20% 50V (S560D)	C382	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V (S336/S345/S360/S365/S560D)
C334	1-128-198-11	ELECT	22uF 20% 50V (S570D/S745D)	C383	1-136-850-11	MYLAR	0.1uF 5% 63V (S570D/S745D)
C335	1-126-965-11	ELECT	22uF 20% 50V (S336/S345/S560D)	C384	1-136-850-11	MYLAR	0.1uF 5% 63V (S570D/S745D)
C335	1-128-198-11	ELECT	22uF 20% 50V (S570D/S745D)	C385	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V
C336	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V (S560D/S570D/S745D)	C386	1-164-182-11	CERAMIC CHIP	0.0033uF 10% 50V (S560D/S570D/S745D)
C337	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V (S560D/S570D/S745D)	C387	1-164-182-11	CERAMIC CHIP	0.0033uF 10% 50V (S560D/S570D/S745D)
C338	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V (S560D/S570D/S745D)	C388	1-164-182-11	CERAMIC CHIP	0.0033uF 10% 50V (S560D/S570D/S745D)
C339	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V (S560D/S570D/S745D)	C389	1-164-182-11	CERAMIC CHIP	0.0033uF 10% 50V (S560D/S570D/S745D)
C340	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V (S336/S345/S560D/S570D/S745D)	C390	1-136-850-11	MYLAR	0.1uF 5% 63V (S570D/S745D)
C341	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V (S336/S345/S560D/S570D/S745D)	C391	1-136-850-11	MYLAR	0.1uF 5% 63V (S570D/S745D)
C342	1-163-259-91	CERAMIC CHIP	220PF 5% 50V (S336/S345/S560D/S570D/S745D)	C392	1-119-774-11	ELECT	100uF 20% 16V
C343	1-137-605-11	MYLAR	220PF 5% 50V (S560D/S570D/S745D)	C393	1-126-926-11	ELECT	1000uF 20% 10V (S560D/S570D/S745D)
C344	1-164-182-11	CERAMIC CHIP	0.0033uF 10% 50V (S560D/S570D/S745D)	C393	1-126-934-11	ELECT	220uF 20% 16V (S336/S345/S360/S365)
C345	1-164-182-11	CERAMIC CHIP	0.0033uF 10% 50V (S560D/S570D/S745D)	C401	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V (S336/S345/S360/S365)
C346	1-106-343-00	MYLAR	1000PF 5% 200V (S560D/S570D/S745D)	C402	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V (S570D)
C347	1-106-343-00	MYLAR	1000PF 5% 200V (S560D/S570D/S745D)	C403	1-124-584-00	ELECT	100uF 20% 10V
C348	1-104-664-11	ELECT	47uF 20% 16V (S336/S345/S360/S365/S560D)	C404	1-104-664-11	ELECT	47uF 20% 16V (S336/S345/S360/S365/S560D)
C348	1-128-200-11	ELECT	47uF 20% 63V (S570D/S745D)	C405	1-124-234-00	ELECT	22uF 20% 16V
C349	1-104-664-11	ELECT	47uF 20% 16V	C406	1-128-057-11	ELECT	330uF 20% 6.3V
C351	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (S570D)	C407	1-104-664-11	ELECT	47uF 20% 16V (S336/S345/S360/S365/S560D)
C352	1-136-850-11	MYLAR	0.1uF 5% 63V (S570D/S745D)	C408	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V (S570D/S745D)
C353	1-126-935-11	ELECT	470uF 20% 6.3V (S336/S345/S360/S365/S560D)	C409	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V (S570D/S745D)
				C410	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V
				C411	1-104-665-11	ELECT	100uF 20% 10V
				C413	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V
				C415	1-163-009-11	CERAMIC CHIP	0.001uF 10% 50V (S570D)

AI-17

Ref. No.	Part No.	Description	Remark
C416	1-163-021-91	CERAMIC CHIP 0.01uF 10% 50V	
C417	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C418	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	
C419	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	
C420	1-128-131-11	ELECT 22uF 20% 50V	
C421	1-104-664-11	ELECT 47uF 20% 16V (S336/S345/S360/S365)	
C422	1-126-964-11	ELECT 10uF 20% 50V (S336/S345: HK, SP/S360: US, CND/S570D/S745D)	
C423	1-163-021-91	CERAMIC CHIP 0.01uF 10% 50V	
C426	1-163-021-91	CERAMIC CHIP 0.01uF 10% 50V	
C430	1-124-589-11	ELECT 47uF 20% 16V	
C431	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C432	1-164-004-11	CERAMIC CHIP 0.1uF 10% 25V	
C433	1-109-982-11	CERAMIC CHIP 1uF 10% 10V	
C434	1-109-982-11	CERAMIC CHIP 1uF 10% 10V	
C450	1-128-201-11	ELECT 100uF 20% 63V (S570D/S745D)	
C451	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C490	1-163-259-91	CERAMIC CHIP 220PF 5% 50V	
C491	1-163-259-91	CERAMIC CHIP 220PF 5% 50V	
C492	1-163-259-91	CERAMIC CHIP 220PF 5% 50V	
C493	1-128-201-11	ELECT 100uF 20% 63V (S570D/S745D)	
C495	1-109-982-11	CERAMIC CHIP 1uF 10% 10V (S345: CH/S360: E/S365/S560D: E)	
		< CONNECTOR >	
CN101	1-794-325-11	CONNECTOR, BOARD TO BOARD 34P	
CN201	1-794-325-11	CONNECTOR, BOARD TO BOARD 34P	
CN401	1-778-317-21	CONNECTOR, BOARD TO BOARD 13P	
CN403	1-568-788-21	PIN, CONNECTOR 11P (S560D/S570D/S745D)	
* CN403	1-568-938-11	PIN, CONNECTOR 11P (S336/S345/S360/ S365)	
CN404	1-784-641-21	CONNECTOR, BOARD TO BOARD 11P (S560D/S570D/S745D)	
CN405	1-785-694-11	CONNECTOR, FFC/FPC 7P (S336/S345/S360/S365/S560D)	
CN405	1-793-481-11	CONNECTOR, FFC/FPC 9P (S570D/S745D)	
		< DIODE >	
D103	8-719-071-15	DIODE HZM6.8ZWA1TL	
D104	8-719-071-15	DIODE HZM6.8ZWA1TL	
D105	8-719-071-15	DIODE HZM6.8ZWA1TL	
D106	8-719-071-15	DIODE HZM6.8ZWA1TL	
D201	8-719-914-43	DIODE DAN202K-T-146 (S560D/S570D/S745D)	
D202	8-719-914-43	DIODE DAN202K-T-146	
D203	8-719-914-43	DIODE DAN202K-T-146	
D205	8-719-988-61	DIODE 1SS355TE-17	
D302	8-719-914-43	DIODE DAN202K-T-146 (S560D/S570D/S745D)	
D303	8-719-988-61	DIODE 1SS355TE-17 (S336/S345)	
D305	8-719-067-40	DIODE STZ6.8N-T146 (S570D)	
D306	8-719-072-27	DIODE MA2Z748001S0	
D404	8-719-914-43	DIODE DAN202K-T-146 (S570D)	
D406	8-719-056-06	DIODE SLR-342DCT32 (JOG)(S570D/S745D)	
D407	8-719-041-97	DIODE MA113-(TX)	
D408	8-719-041-97	DIODE MA113-(TX)	
D409	8-719-041-97	DIODE MA113-(TX)	
D410	8-719-041-97	DIODE MA113-(TX)	

Ref. No.	Part No.	Description	Remark
D411	8-719-988-61	DIODE 1SS355TE-17	
D412	8-719-056-06	DIODE SLR-342DCT32 (DVE) (S560D/S570D/S745D)	
D413	8-719-056-06	DIODE SLR-342DCT32 (VES) (S336/S345/S360/S365)	
D413	8-719-056-06	DIODE SLR-342DCT32 (VIRTUAL 3D SURROUND) (S560D/S570D/S745D)	
D415	8-719-422-62	DIODE MA8062-L-TX	
D416	8-719-914-44	DIODE DAP202K-T-146	
D417	8-719-069-54	DIODE UDZS-TE17-5.1B	
D430	8-719-058-24	DIODE RB501V-40TE-17 (S336/S345: HK, SP/S360: US, CND/S560D: US, CND/ S570D/S745D)	
		< EARTH TERMINAL >	
* ET401	1-537-738-21	TERMINAL, EARTH	
* ET402	1-537-738-21	TERMINAL, EARTH	
* ET403	1-537-738-21	TERMINAL, EARTH	
		< FERRITE BEAD >	
FB101	1-414-766-22	INDUCTOR CHIP 0uH	
FB102	1-414-766-22	INDUCTOR CHIP 0uH	
FB103	1-414-766-22	INDUCTOR CHIP 0uH	
FB104	1-414-766-22	INDUCTOR CHIP 0uH	
FB105	1-414-766-22	INDUCTOR CHIP 0uH	
FB106	1-414-766-22	INDUCTOR CHIP 0uH	
FB107	1-414-766-22	INDUCTOR CHIP 0uH	
FB108	1-414-766-22	INDUCTOR CHIP 0uH	
FB109	1-414-766-22	INDUCTOR CHIP 0uH	
FB201	1-414-230-22	INDUCTOR CHIP 0uH (S336/S345/S360/S365/S560D)	
FB202	1-414-230-22	INDUCTOR CHIP 0uH (S336/S345/S360/S365/S560D)	
FB203	1-414-230-22	INDUCTOR CHIP 0uH	
FB204	1-414-230-22	INDUCTOR CHIP 0uH (S560D/S570D/S745D)	
FB205	1-414-766-22	INDUCTOR CHIP 0uH	
FB206	1-414-766-22	INDUCTOR CHIP 0uH	
FB207	1-414-766-22	INDUCTOR CHIP 0uH	
FB208	1-414-766-22	INDUCTOR CHIP 0uH	
FB301	1-414-766-22	INDUCTOR CHIP 0uH (S336/S345)	
FB401	1-469-324-21	FERRITE 0uH (S345: CH/S360: E/S365/S560D: E)	
FB402	1-469-324-21	FERRITE 0uH	
FB403	1-469-324-21	FERRITE 0uH (S345: CH/S360: E/S365/S560D: E)	
FB405	1-469-324-21	FERRITE 0uH	
FB406	1-469-324-21	FERRITE 0uH	
FB407	1-469-324-21	FERRITE 0uH	
FB409	1-469-324-21	FERRITE 0uH	
FB410	1-469-324-21	FERRITE 0uH	
		< IC >	
IC101	8-759-667-63	IC LA7109-TLM	
IC102	8-759-667-18	IC PQ018EZ01ZP	
IC103	8-759-667-17	IC L79M05TLL-SONY-TL	
IC201	8-759-669-29	IC CXD9544MR	
IC203	8-759-587-83	IC OPA2134UA/2K5 (S570D/S745D)	
IC204	8-759-377-65	IC LC78817M-TE-L (S336/S345)	
IC205	7-759-667-85	IC CXD9545Q (S336/S345/S360/S365)	
IC206	8-759-052-52	IC L78M05TLL-SONY-TL	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
IC207	8-759-369-74	IC NJM4556AM-TE2 (S560D)		JR012	1-216-296-91	SHORT	0
IC207	8-759-909-71	IC BA4558F-E2 (S570D/S745D)		JR013	1-216-295-91	SHORT	0
IC208	8-759-587-83	IC OPA2134UA/2K5 (S570D/S745D)		JR014	1-216-296-91	SHORT	0
IC208	8-759-909-71	IC BA4558F-E2 (S336/S345/S360/S365/S560D)		JR016	1-216-296-91	SHORT	0
IC301	8-759-052-52	IC L78M05TLL-SONY-TL (S570D/S745D)		JR017	1-216-296-91	SHORT	0
IC302	8-759-668-03	IC CXD9543Q (S560D/S570D/S745D)		JR018	1-216-296-91	SHORT	0
IC303	8-759-587-83	IC OPA2134UA/2K5 (S570D/S745D)		JR019	1-216-295-91	SHORT	0
IC303	8-759-909-71	IC BA4558F-E2 (S560D)		JR020	1-216-296-91	SHORT	0
IC304	8-759-587-83	IC OPA2134UA/2K5 (S570D/S745D)					(S336/S345/S360/S365/S560D)
IC304	8-759-909-71	IC BA4558F-E2 (S560D)		JR021	1-216-296-91	SHORT	0
IC305	8-759-587-83	IC OPA2134UA/2K5 (S570D/S745D)		JR022	1-216-296-91	SHORT	0
IC305	8-759-909-71	IC BA4558F-E2 (S336/S345/S560D)		JR023	1-216-295-91	SHORT	0
IC306	8-749-017-31	IC GP1FA550TZ (OPTICAL) (S336/S345/S360/S365)		JR024	1-216-295-91	SHORT	0
IC306	8-749-017-80	IC GP1FA551TZ (OPTICAL) (S560D/S570D/S745D)		JR025	1-216-296-91	SHORT	0
IC307	8-759-667-19	IC uPC29M08T-E1		JR026	1-216-296-91	SHORT	0
IC401	8-719-066-43	DIODE GP1U28Y (S336/S345/S360/S365)		JR027	1-216-296-91	SHORT	0
IC402	8-759-100-93	IC uPC393G2-E2 (S570D)		JR028	1-216-296-91	SHORT	0
IC403	8-759-673-34	IC PST7030MT		JR029	1-216-296-91	SHORT	0 (S336/S345/S360/S365)
IC404	8-759-669-95	IC M38B57M6-147FP		JR030	1-216-296-91	SHORT	0
IC406	8-759-521-90	IC PQ05DZ5U		JR031	1-216-296-91	SHORT	0
IC407	8-759-671-84	IC AN77033SP-(E1) (S336/S345: HK, SP/ S360: US, CND/S560D: US, CND/S570D/S745D)		JR032	1-216-295-91	SHORT	0
		< JACK >		JR033	1-216-296-91	SHORT	0
J101	1-793-445-11	JACK, PIN 3P (COMPONENT VIDEO OUT) (S336/S345/S360/S365/S560D)		JR034	1-216-296-91	SHORT	0
J101	1-793-445-21	JACK, PIN 3P (COMPONENT VIDEO OUT) (S570D/S745D)		JR035	1-216-296-91	SHORT	0
J102	1-793-475-11	JACK, PIN 2P (VIDEO OUT) (S570D/S745D)		JR036	1-216-295-91	SHORT	0
J102	1-793-475-21	JACK, PIN 2P (VIDEO OUT) (S336/S345/S360/S365/S560D)		JR037	1-216-296-91	SHORT	0 (S336/S345/S360/S365)
J103	1-694-484-11	TERMINAL, S (2P.V) (S VIDEO OUT) (S570D/S745D)		JR038	1-216-296-91	SHORT	0
J103	1-694-484-21	TERMINAL, S (2P.V) (S VIDEO OUT) (S336/S345/S360/S365/S560D)		JR039	1-216-296-91	SHORT	0
J201	1-793-526-11	JACK, PIN 4P (AUDIO OUT) (S570D/S745D)		JR040	1-216-296-91	SHORT	0
J201	1-793-526-21	JACK, PIN 4P (AUDIO OUT) (S336/S345/S360/S365/S560D)		JR041	1-216-296-91	SHORT	0
J301	1-785-489-11	JACK, PIN 6P (5.1CH OUTPUT) (S570D/S745D)		JR042	1-216-296-91	SHORT	0
J301	1-785-536-11	JACK, PIN 6P (5.1CH OUTPUT) (S560D)		JR043	1-216-295-91	SHORT	0
J302	1-764-188-21	JACK (SMALL TYPE) (DIA.3.5) (S-LINK) (S570D)		JR044	1-216-296-91	SHORT	0
J303	1-784-432-11	JACK, PIN 1P (COAXIAL) (S570D/S745D)		JR045	1-216-296-91	SHORT	0
J303	1-793-446-21	JACK, PIN 1P (COAXIAL) (S336/S345/S360/S365/S560D)		JR046	1-216-296-91	SHORT	0 (S560D/S570D/S745D)
J304	1-793-446-11	JACK, PIN 1P (WOOFER) (S336/S345)		JR047	1-216-296-91	SHORT	0
		< SHORT >		JR048	1-216-296-91	SHORT	0
JR001	1-216-295-91	SHORT	0	JR049	1-216-296-91	SHORT	0
JR002	1-216-295-91	SHORT	0	JR050	1-216-296-91	SHORT	0
JR003	1-216-296-91	SHORT	0	JR051	1-216-295-91	SHORT	0
JR004	1-216-296-91	SHORT	0	JR052	1-216-296-91	SHORT	0 (S336/S345/S360/S365/S560D)
JR005	1-216-296-91	SHORT	0	JR053	1-216-296-91	SHORT	0
JR006	1-216-296-91	SHORT	0	JR054	1-216-296-91	SHORT	0
JR008	1-216-296-91	SHORT	0	JR055	1-216-295-91	SHORT	0 (S560D/S570D/S745D)
JR009	1-216-296-91	SHORT	0 (S560D/S570D/S745D)	JR056	1-216-295-91	SHORT	0 (S560D/S570D/S745D)
JR010	1-216-296-91	SHORT	0	JR057	1-216-295-91	SHORT	0
JR011	1-216-296-91	SHORT	0 (S560D/S570D/S745D)	JR058	1-216-295-91	SHORT	0
				JR059	1-216-296-91	SHORT	0
				JR060	1-216-296-91	SHORT	0
				JR061	1-216-295-91	SHORT	0
				JR062	1-216-295-91	SHORT	0
				JR063	1-216-296-91	SHORT	0
				JR064	1-216-296-91	SHORT	0
				JR065	1-216-296-91	SHORT	0
				JR066	1-216-296-91	SHORT	0
				JR067	1-216-296-91	SHORT	0
				JR068	1-216-296-91	SHORT	0
				JR069	1-216-296-91	SHORT	0
				JR070	1-216-296-91	SHORT	0
				JR071	1-216-295-91	SHORT	0

Ref. No.	Part No.	Description	Remark
JR072	1-216-296-91	SHORT	0
JR074	1-216-296-91	SHORT	0
JR075	1-216-295-91	SHORT	0
JR076	1-216-295-91	SHORT	0
JR077	1-216-296-91	SHORT	0
JR078	1-216-296-91	SHORT	0
JR079	1-216-296-91	SHORT	0 (S560D/S570D/S745D)
JR080	1-216-295-91	SHORT	0
JR082	1-216-296-91	SHORT	0 (S336/S345/S360/S365)
JR083	1-216-296-91	SHORT	0
JR084	1-216-296-91	SHORT	0 (S560D/S570D/S745D)
JR085	1-216-296-91	SHORT	0 (EXCEPT S345: CH)
JR086	1-216-295-91	SHORT	0
JR087	1-216-295-91	SHORT	0
JR088	1-216-296-91	SHORT	0
JR089	1-216-296-91	SHORT	0
JR090	1-216-295-91	SHORT	0 (S336/S345/S360/S365)
JR091	1-216-295-91	SHORT	0
< COIL >			
L401	1-408-978-21	INDUCTOR	47uH
L402	1-408-978-21	INDUCTOR	47uH (S570D/S745D)
L402	1-410-427-11	INDUCTOR	47uH (S560D)
< FLUORESCENT INDICATOR TUBE >			
ND401	1-517-971-11	INDICATOR TUBE, FLUORESCENT	(EXCEPT S560D)
ND401	1-517-972-11	INDICATOR TUBE, FLUORESCENT	(S560D)
< IC LINK >			
△ PS401	1-532-679-00	LINK, IC (0.6A)	
△ PS402	1-532-605-00	LINK, IC (0.4A)	
< TRANSISTOR >			
Q106	8-729-421-19	TRANSISTOR	UN2213-TX
Q107	8-729-424-08	TRANSISTOR	UN2111-TX
Q201	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S570D/S745D)
Q202	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S570D/S745D)
Q203	8-729-023-22	TRANSISTOR	2SD2114KT146 (S336/S345/S360/S365)
Q203	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S560D/S570D/S745D)
Q204	8-729-023-22	TRANSISTOR	2SD2114KT146 (S336/S345/S360/S365)
Q204	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S560D/S570D/S745D)
Q205	8-729-421-19	TRANSISTOR	UN2213-TX
Q206	8-729-027-53	TRANSISTOR	DTC124TKA-T146
Q207	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX
Q208	8-729-230-49	TRANSISTOR	2SC2712-YG-TE85L (S560D/S570D/S745D)
Q209	8-729-421-19	TRANSISTOR	UN2213-TX (S560D/S570D/S745D)
Q210	8-729-424-18	TRANSISTOR	UN2113-TX (S570D/S745D)
Q211	8-729-027-53	TRANSISTOR	DTC124TKA-T146 (S560D/S570D/S745D)

Ref. No.	Part No.	Description	Remark
Q212	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX (S560D/S570D/S745D)
Q213	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S560D/S570D/S745D)
Q214	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S560D/S570D/S745D)
Q215	8-729-424-18	TRANSISTOR	UN2113-TX (S560D/S570D/S745D)
Q220	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S560D/S570D/S745D)
Q221	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S560D/S570D/S745D)
Q301	8-729-421-19	TRANSISTOR	UN2213-TX (S560D/S570D/S745D)
Q302	8-729-027-53	TRANSISTOR	DTC124TKA-T146 (S336/S345/S560D/S570D/S745D)
Q303	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX (S336/S345/S560D/S570D/S745D)
Q304	8-729-023-22	TRANSISTOR	2SD2114KT146 (S336/S345)
Q304	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S560D/S570D/S745D)
Q305	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S560D/S570D/S745D)
Q306	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S560D/S570D/S745D)
Q307	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S560D/S570D/S745D)
Q308	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S560D/S570D/S745D)
Q309	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO (S560D/S570D/S745D)
Q311	8-729-230-72	TRANSISTOR	2SA1362-YG-EL
Q312	8-729-230-49	TRANSISTOR	2SC2712-YG-TE85L (S570D/S745D)
Q313	8-729-230-49	TRANSISTOR	2SC2712-YG-TE85L
Q314	8-729-216-22	TRANSISTOR	2SA1162-YG-TE85L (S570D/S745D)
Q401	8-729-808-42	TRANSISTOR	2SD1624-T-TD
Q402	8-729-808-42	TRANSISTOR	2SD1624-T-TD
Q403	8-729-216-22	TRANSISTOR	2SB709A-QRS-TX (S570D)
Q404	8-729-424-18	TRANSISTOR	UN2113-TX (S570D)
Q405	8-729-424-18	TRANSISTOR	UN2113-TX (S345: CH/S360: E/S365/S560D: E)
Q406	8-729-421-22	TRANSISTOR	UN2211-TX (S345: CH/S360: E/S365/S560D: E)
< RESISTOR >			
R101	1-216-296-91	SHORT	0
R109	1-216-073-00	METAL CHIP	10K 5% 1/10W
R110	1-216-073-00	METAL CHIP	10K 5% 1/10W
R111	1-216-021-00	METAL CHIP	68 5% 1/10W
R112	1-216-021-00	METAL CHIP	68 5% 1/10W
R113	1-216-021-00	METAL CHIP	68 5% 1/10W
R114	1-216-021-00	METAL CHIP	68 5% 1/10W
R115	1-216-021-00	METAL CHIP	68 5% 1/10W
R116	1-216-021-00	METAL CHIP	68 5% 1/10W
R117	1-216-021-00	METAL CHIP	68 5% 1/10W
R118	1-216-021-00	METAL CHIP	68 5% 1/10W
R119	1-216-021-00	METAL CHIP	68 5% 1/10W
R122	1-216-295-91	SHORT	0
R126	1-216-295-91	SHORT	0

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

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R127	1-216-295-91	SHORT	0	R269	1-216-085-00	METAL CHIP	33K 5% 1/10W (S560D/S570D/S745D)
R128	1-216-295-91	SHORT	0	R270	1-216-065-91	RES, CHIP	4.7K 5% 1/10W
R147	1-216-089-91	RES, CHIP	47K 5% 1/10W	R271	1-216-673-11	METAL CHIP	8.2K 0.5% 1/10W
R148	1-216-089-91	RES, CHIP	47K 5% 1/10W	R276	1-216-085-00	METAL CHIP	33K 5% 1/10W (S560D/S570D/S745D)
R149	1-216-089-91	RES, CHIP	47K 5% 1/10W	R277	1-216-097-91	RES, CHIP	100K 5% 1/10W (S560D/S570D/S745D)
R150	1-216-089-91	RES, CHIP	47K 5% 1/10W	R278	1-216-065-91	RES, CHIP	4.7K 5% 1/10W (S560D/S570D/S745D)
R151	1-216-089-91	RES, CHIP	47K 5% 1/10W	R279	1-216-009-91	RES, CHIP	22 5% 1/10W (EXCEPT S570D/S745D)
R152	1-216-089-91	RES, CHIP	47K 5% 1/10W	R279	1-216-295-91	SHORT	0 (S570D/S745D)
R201	1-216-295-91	SHORT	0 (S336/S345/S360/S365)	R280	1-216-073-00	METAL CHIP	10K 5% 1/10W (S560D/S570D/S745D)
R204	1-216-025-91	RES, CHIP	100 5% 1/10W	R281	1-216-089-91	RES, CHIP	47K 5% 1/10W
R205	1-216-033-00	METAL CHIP	220 5% 1/10W	R282	1-216-085-00	METAL CHIP	33K 5% 1/10W (S560D/S570D/S745D)
R206	1-216-033-00	METAL CHIP	220 5% 1/10W	R283	1-216-097-91	RES, CHIP	100K 5% 1/10W (S560D/S570D/S745D)
R210	1-216-295-91	SHORT	0	R284	1-216-073-00	METAL CHIP	10K 5% 1/10W (S560D)
R211	1-216-295-91	SHORT	0 (S560D/S570D/S745D)	R284	1-216-077-91	RES, CHIP	15K 5% 1/10W (S570D/S745D)
R212	1-216-041-00	METAL CHIP	470 5% 1/10W (S570D/S745D)	R285	1-216-085-00	METAL CHIP	33K 5% 1/10W (S560D/S570D/S745D)
R213	1-216-065-91	RES, CHIP	4.7K 5% 1/10W	R286	1-216-025-91	RES, CHIP	100 5% 1/10W (S560D)
R229	1-216-673-11	METAL CHIP	8.2K 0.5% 1/10W	R286	1-216-033-00	METAL CHIP	220 5% 1/10W (S570D/S745D)
R230	1-208-806-11	RES, CHIP	10K 2% 1/10W	R287	1-216-085-00	METAL CHIP	33K 5% 1/10W (S560D/S570D/S745D)
R231	1-216-053-00	METAL CHIP	1.5K 5% 1/10W	R288	1-216-097-91	RES, CHIP	100K 5% 1/10W (S560D/S570D/S745D)
R232	1-208-806-11	RES, CHIP	10K 2% 1/10W	R289	1-216-073-00	METAL CHIP	10K 5% 1/10W (S560D)
R233	1-216-053-00	METAL CHIP	1.5K 5% 1/10W	R289	1-216-077-91	RES, CHIP	15K 5% 1/10W (S570D/S745D)
R234	1-216-673-11	METAL CHIP	8.2K 0.5% 1/10W	R290	1-216-085-00	METAL CHIP	33K 5% 1/10W (S560D/S570D/S745D)
R235	1-208-806-11	RES, CHIP	10K 2% 1/10W	R291	1-216-025-91	RES, CHIP	100 5% 1/10W (S560D)
R236	1-216-053-00	METAL CHIP	1.5K 5% 1/10W	R291	1-216-033-00	METAL CHIP	220 5% 1/10W (S570D/S745D)
R237	1-216-053-00	METAL CHIP	1.5K 5% 1/10W	R295	1-216-295-91	SHORT	0 (S560D/S570D/S745D)
R238	1-208-806-11	RES, CHIP	10K 2% 1/10W	R297	1-216-097-91	RES, CHIP	100K 5% 1/10W (S560D/S570D/S745D)
R239	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S570D/S745D)	R301	1-216-049-91	RES, CHIP	1K 5% 1/10W (S336/S345/S360/S365/S560D)
R240	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S570D/S745D)	R302	1-216-295-91	SHORT	0 (S560D/S570D/S745D)
R241	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S570D/S745D)	R303	1-216-089-91	RES, CHIP	47K 5% 1/10W (S336/S345/S560D/S570D/S745D)
R242	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S570D/S745D)	R304	1-216-025-91	RES, CHIP	100 5% 1/10W (S560D/S570D/S745D)
R243	1-216-041-00	METAL CHIP	470 5% 1/10W	R306	1-216-089-91	RES, CHIP	47K 5% 1/10W (S560D/S570D/S745D)
R244	1-216-041-00	METAL CHIP	470 5% 1/10W	R307	1-216-089-91	RES, CHIP	47K 5% 1/10W (S336/S345/S560D/S570D/S745D)
R245	1-216-089-91	RES, CHIP	47K 5% 1/10W	R311	1-216-089-91	RES, CHIP	47K 5% 1/10W (S560D/S570D/S745D)
R246	1-216-089-91	RES, CHIP	47K 5% 1/10W	R312	1-216-001-00	METAL CHIP	10 5% 1/10W (S560D/S570D/S745D)
R247	1-216-065-91	RES, CHIP	4.7K 5% 1/10W	R313	1-216-089-91	RES, CHIP	47K 5% 1/10W (S560D/S570D/S745D)
R248	1-216-065-91	RES, CHIP	4.7K 5% 1/10W (S336/S345/S360/S365)				
R251	1-216-097-91	RES, CHIP	100K 5% 1/10W				
R252	1-216-041-00	METAL CHIP	470 5% 1/10W				
R253	1-216-041-00	METAL CHIP	470 5% 1/10W				
R254	1-216-041-00	METAL CHIP	470 5% 1/10W				
R255	1-216-041-00	METAL CHIP	470 5% 1/10W				
R256	1-216-073-00	METAL CHIP	10K 5% 1/10W				
R257	1-216-073-00	METAL CHIP	10K 5% 1/10W				
R258	1-216-073-00	METAL CHIP	10K 5% 1/10W				
R259	1-216-073-00	METAL CHIP	10K 5% 1/10W (S560D/S570D/S745D)				
R260	1-216-673-11	METAL CHIP	8.2K 0.5% 1/10W				
R263	1-216-085-00	METAL CHIP	33K 5% 1/10W (S560D/S570D/S745D)				
R264	1-216-085-00	METAL CHIP	33K 5% 1/10W (S560D/S570D/S745D)				
R266	1-216-295-91	SHORT	0 (S560D/S570D/S745D)				
R267	1-216-051-00	METAL CHIP	1.2K 5% 1/10W (S560D/S570D/S745D)				
R268	1-216-073-00	METAL CHIP	10K 5% 1/10W (S560D/S570D/S745D)				

AI-17

Ref. No.	Part No.	Description	Remark
R314	1-216-001-00	METAL CHIP	10 5% 1/10W (S560D/S570D/S745D)
R316	1-216-073-00	METAL CHIP	10K 5% 1/10W (S560D/S570D/S745D)
R318	1-216-073-00	METAL CHIP	10K 5% 1/10W (S560D/S570D/S745D)
R321	1-216-295-91	SHORT	0 (S336/S345/S360/S365/ S560D)
R323	1-216-073-00	METAL CHIP	10K 5% 1/10W (S560D/S570D/S745D)
R324	1-216-073-00	METAL CHIP	10K 5% 1/10W (S336/S345/S560D/S570D/S745D)
R325	1-216-073-00	METAL CHIP	10K 5% 1/10W (S336/S345/S560D/S570D/S745D)
R326	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (S560D/S570D/S745D)
R327	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (S560D/S570D/S745D)
R328	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (S560D/S570D/S745D)
R329	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (S560D/S570D/S745D)
R330	1-216-063-91	RES, CHIP	3.9K 5% 1/10W (S560D/S570D/S745D)
R331	1-216-063-91	RES, CHIP	3.9K 5% 1/10W (S560D/S570D/S745D)
R332	1-216-063-91	RES, CHIP	3.9K 5% 1/10W (S560D/S570D/S745D)
R333	1-216-063-91	RES, CHIP	3.9K 5% 1/10W (S560D/S570D/S745D)
R334	1-216-051-00	METAL CHIP	1.2K 5% 1/10W (S560D/S570D/S745D)
R335	1-216-051-00	METAL CHIP	1.2K 5% 1/10W (S560D/S570D/S745D)
R336	1-216-049-91	RES, CHIP	1K 5% 1/10W (S560D/S570D/S745D)
R336	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (S336/S345)
R337	1-216-049-91	RES, CHIP	1K 5% 1/10W (S560D/S570D/S745D)
R337	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (S336/S345)
R338	1-216-063-91	RES, CHIP	3.9K 5% 1/10W (S560D/S570D/S745D)
R339	1-216-075-00	METAL CHIP	12K 5% 1/10W (S560D/S570D/S745D)
R340	1-216-075-00	METAL CHIP	12K 5% 1/10W (S336/S345/S560D/S570D/S745D)
R341	1-216-063-91	RES, CHIP	3.9K 5% 1/10W (S560D/S570D/S745D)
R342	1-216-075-00	METAL CHIP	12K 5% 1/10W (S560D/S570D/S745D)
R343	1-216-075-00	METAL CHIP	12K 5% 1/10W (S560D/S570D/S745D)
R343	1-216-295-91	SHORT	0 (S336/S345)
R344	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S560D/S570D/S745D)
R345	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S560D/S570D/S745D)
R347	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S560D/S570D/S745D)
R348	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S560D/S570D/S745D)
R349	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S560D/S570D/S745D)

Ref. No.	Part No.	Description	Remark
R350	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S560D/S570D/S745D)
R351	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S560D/S570D/S745D)
R351	1-216-295-91	SHORT	0 (S336/S345)
R353	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (S336/S345/S560D/S570D/S745D)
R354	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S560D/S570D/S745D)
R355	1-216-063-91	RES, CHIP	3.9K 5% 1/10W (S560D/S570D/S745D)
R356	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S560D/S570D/S745D)
R357	1-216-075-00	METAL CHIP	12K 5% 1/10W (S560D/S570D/S745D)
R358	1-216-055-00	METAL CHIP	1.8K 5% 1/10W (S560D/S570D/S745D)
R358	1-216-295-91	SHORT	0 (S336/S345)
R359	1-216-075-00	METAL CHIP	12K 5% 1/10W (S336/S345/S560D/S570D/S745D)
R360	1-216-063-91	RES, CHIP	3.9K 5% 1/10W (S560D/S570D/S745D)
R361	1-216-075-00	METAL CHIP	12K 5% 1/10W (S560D/S570D/S745D)
R362	1-216-075-00	METAL CHIP	12K 5% 1/10W (S560D/S570D/S745D)
R362	1-216-295-91	SHORT	0 (S336/S345)
R363	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (S560D/S570D/S745D)
R364	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (S560D/S570D/S745D)
R365	1-216-089-91	RES, CHIP	47K 5% 1/10W (S560D/S570D/S745D)
R366	1-216-089-91	RES, CHIP	47K 5% 1/10W (S560D/S570D/S745D)
R368	1-216-295-91	SHORT	0 (S570D)
R370	1-216-295-91	SHORT	0 (S570D)
R371	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (S560D/S570D/S745D)
R372	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (S560D/S570D/S745D)
R373	1-216-097-91	RES, CHIP	100K 5% 1/10W (S336/S345/S560D/S570D/S745D)
R374	1-216-061-00	METAL CHIP	3.3K 5% 1/10W (S560D/S570D/S745D)
R375	1-216-041-00	METAL CHIP	470 5% 1/10W (S336/S345/S560D/S570D/S745D)
R376	1-216-041-00	METAL CHIP	470 5% 1/10W (S560D/S570D/S745D)
R377	1-216-041-00	METAL CHIP	470 5% 1/10W (S560D/S570D/S745D)
R378	1-216-041-00	METAL CHIP	470 5% 1/10W (S560D/S570D/S745D)
R379	1-216-041-00	METAL CHIP	470 5% 1/10W (S560D/S570D/S745D)
R380	1-216-041-00	METAL CHIP	470 5% 1/10W (S560D/S570D/S745D)
R381	1-216-049-91	RES, CHIP	1K 5% 1/10W
R382	1-216-295-91	SHORT	0
R384	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R385	1-216-033-00	METAL CHIP	220 5% 1/10W
R386	1-216-049-91	RES, CHIP	1K 5% 1/10W
R387	1-216-081-00	METAL CHIP	22K 5% 1/10W (S570D/S745D)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R388	1-216-073-00	METAL CHIP	10K 5% 1/10W (S570D/S745D)	R436	1-216-295-91	SHORT	0
R389	1-216-049-91	RES, CHIP	1K 5% 1/10W (S570D/S745D)	R437	1-216-049-91	RES, CHIP	1K 5% 1/10W (S570D)
R390	1-216-049-91	RES, CHIP	1K 5% 1/10W (S570D)	R438	1-216-295-91	SHORT	0
R391	1-216-025-91	RES, CHIP	100 5% 1/10W	R439	1-216-015-00	METAL CHIP	39 5% 1/10W
R392	1-216-021-00	METAL CHIP	68 5% 1/10W	R443	1-216-027-00	METAL CHIP	120 5% 1/10W (S570D/S745D)
R393	1-216-021-00	METAL CHIP	68 5% 1/10W (S570D/S745D)	R444	1-216-065-91	RES, CHIP	4.7K 5% 1/10W
R394	1-216-033-00	METAL CHIP	220 5% 1/10W (S336/S345/S360/S365/S560D)	R445	1-216-057-00	METAL CHIP	2.2K 5% 1/10W (S570D)
R395	1-216-051-00	METAL CHIP	1.2K 5% 1/10W (S560D/S570D/S745D)	R449	1-216-025-91	RES, CHIP	100 5% 1/10W
R396	1-216-051-00	METAL CHIP	1.2K 5% 1/10W (S560D/S570D/S745D)	R450	1-216-097-91	RES, CHIP	100K 5% 1/10W
R401	1-216-017-91	RES, CHIP	47 5% 1/10W (S336/S345/S360/S365)	R451	1-216-073-00	METAL CHIP	10K 5% 1/10W
R402	1-216-101-00	METAL CHIP	150K 5% 1/10W (S336/S345/S360/S365)	R452	1-216-073-00	METAL CHIP	10K 5% 1/10W
R403	1-216-089-91	RES, CHIP	47K 5% 1/10W (S336/S345/S360/S365)	R453	1-216-073-00	METAL CHIP	10K 5% 1/10W
R405	1-216-295-91	SHORT	0 (S336/S345: HK, SP/ S360: US, CND/S560D: US, CND/S570D/S745D)	R454	1-216-073-00	METAL CHIP	10K 5% 1/10W
R406	1-216-295-91	SHORT	0 (S345: CH/S360: E/S365/S560D: E)	R455	1-216-073-00	METAL CHIP	10K 5% 1/10W
R407	1-216-059-00	METAL CHIP	2.7K 5% 1/10W	R456	1-216-073-00	METAL CHIP	10K 5% 1/10W
R408	1-216-081-00	METAL CHIP	22K 5% 1/10W (S570D/S745D)	R457	1-216-073-00	METAL CHIP	10K 5% 1/10W
R409	1-216-295-91	SHORT	0 (S336/S345: HK, SP/ S360: US, CND/S560D: US, CND/S570D/S745D)	R458	1-216-073-00	METAL CHIP	10K 5% 1/10W
R410	1-216-071-00	METAL CHIP	8.2K 5% 1/10W	R459	1-216-025-91	RES, CHIP	100 5% 1/10W
R411	1-216-071-00	METAL CHIP	8.2K 5% 1/10W	R460	1-216-025-91	RES, CHIP	100 5% 1/10W
R412	1-216-295-91	SHORT	0	R461	1-216-025-91	RES, CHIP	100 5% 1/10W
R413	1-216-013-00	METAL CHIP	33 5% 1/10W	R462	1-216-025-91	RES, CHIP	100 5% 1/10W
R414	1-216-025-91	RES, CHIP	100 5% 1/10W	R463	1-216-025-91	RES, CHIP	100 5% 1/10W
R415	1-216-295-91	SHORT	0 (S336/S345: HK, SP/ S360: US, CND/S560D: US, CND/S570D/S745D)	R464	1-216-025-91	RES, CHIP	100 5% 1/10W
R416	1-216-041-00	METAL CHIP	470 5% 1/10W (S336/S345: HK, SP/S360: US, CND/S570D/S745D)	R465	1-216-073-00	METAL CHIP	10K 5% 1/10W
R417	1-216-025-91	RES, CHIP	100 5% 1/10W	R466	1-216-073-00	METAL CHIP	10K 5% 1/10W
R418	1-216-073-00	METAL CHIP	10K 5% 1/10W	R469	1-216-073-00	METAL CHIP	10K 5% 1/10W
R420	1-216-063-91	RES, CHIP	3.9K 5% 1/10W	R470	1-216-065-91	RES, CHIP	4.7K 5% 1/10W
R421	1-216-063-91	RES, CHIP	3.9K 5% 1/10W	R472	1-216-033-00	METAL CHIP	220 5% 1/10W (S560D/S570D/S745D)
R422	1-216-073-00	METAL CHIP	10K 5% 1/10W (S570D/S745D)	R473	1-216-033-00	METAL CHIP	220 5% 1/10W (S560D/S570D/S745D)
R423	1-216-073-00	METAL CHIP	10K 5% 1/10W (S570D/S745D)	R473	1-216-037-00	METAL CHIP	330 5% 1/10W (S336/S345/S360/S365)
R424	1-216-063-91	RES, CHIP	3.9K 5% 1/10W	R475	1-216-073-00	METAL CHIP	10K 5% 1/10W
R426	1-216-059-00	METAL CHIP	2.7K 5% 1/10W	R476	1-216-295-91	SHORT	0 (S336/S345/S360/S365/S745D)
R427	1-216-059-00	METAL CHIP	2.7K 5% 1/10W	R477	1-216-295-91	SHORT	0
R428	1-216-025-91	RES, CHIP	100 5% 1/10W (S570D/S745D)	R478	1-216-073-00	METAL CHIP	10K 5% 1/10W (S336/S345/S360/S365/S570D/S745D)
R429	1-216-025-91	RES, CHIP	100 5% 1/10W (S570D/S745D)	R479	1-216-073-00	METAL CHIP	10K 5% 1/10W (S336/S345/S360/S365/S560D)
R430	1-216-081-00	METAL CHIP	22K 5% 1/10W (S570D)	R480	1-216-073-00	METAL CHIP	10K 5% 1/10W
R431	1-216-081-00	METAL CHIP	22K 5% 1/10W (S570D)	R481	1-216-073-00	METAL CHIP	10K 5% 1/10W
R432	1-216-073-00	METAL CHIP	10K 5% 1/10W	R482	1-216-073-00	METAL CHIP	10K 5% 1/10W (S560D)
R433	1-216-073-00	METAL CHIP	10K 5% 1/10W (S570D)	R483	1-216-073-00	METAL CHIP	10K 5% 1/10W
R434	1-216-073-00	METAL CHIP	10K 5% 1/10W	R484	1-216-073-00	METAL CHIP	10K 5% 1/10W (S570D/S745D)
R435	1-216-073-00	METAL CHIP	10K 5% 1/10W	R485	1-216-049-91	RES, CHIP	1K 5% 1/10W (S336/S345: HK, SP/S360: US, CND/S570D/S745D)
				R485	1-216-295-91	SHORT	0 (S345: CH/S360: E/S365/S560D)
				R487	1-216-027-00	METAL CHIP	120 5% 1/10W
				R489	1-216-073-00	METAL CHIP	10K 5% 1/10W
				R490	1-216-059-00	METAL CHIP	2.7K 5% 1/10W
				R491	1-216-063-91	RES, CHIP	3.9K 5% 1/10W
				R492	1-216-071-00	METAL CHIP	8.2K 5% 1/10W
				R493	1-216-081-00	METAL CHIP	22K 5% 1/10W
				R494	1-216-093-91	RES, CHIP	68K 5% 1/10W

Ref. No.	Part No.	Description	Remark
R495	1-216-093-91	RES, CHIP	68K 5% 1/10W
R496	1-216-093-91	RES, CHIP	68K 5% 1/10W
R497	1-216-093-91	RES, CHIP	68K 5% 1/10W
R498	1-216-093-91	RES, CHIP	68K 5% 1/10W
R499	1-216-093-91	RES, CHIP	68K 5% 1/10W
R557	1-216-295-91	SHORT	0 (S336/S345/S360/S365)
R569	1-216-089-91	RES, CHIP	47K 5% 1/10W (S560D/S570D/S745D)
R571	1-216-097-91	RES, CHIP	100K 5% 1/10W (S570D/S745D)
R572	1-216-065-91	RES, CHIP	4.7K 5% 1/10W (S560D/S570D/S745D)
R573	1-216-051-00	METAL CHIP	1.2K 5% 1/10W (S560D/S570D/S745D)
R574	1-216-051-00	METAL CHIP	1.2K 5% 1/10W (S560D/S570D/S745D)
R575	1-216-051-00	METAL CHIP	1.2K 5% 1/10W (S560D/S570D/S745D)
R576	1-216-051-00	METAL CHIP	1.2K 5% 1/10W (S560D/S570D/S745D)
R579	1-216-049-91	RES, CHIP	1K 5% 1/10W (S560D/S570D/S745D)
R580	1-216-049-91	RES, CHIP	1K 5% 1/10W (S560D/S570D/S745D)
R582	1-414-766-22	INDUCTOR CHIP	0uH (S560D/S570D/S745D)
R583	1-414-766-22	INDUCTOR CHIP	0uH (S560D/S570D/S745D)
R584	1-414-766-22	INDUCTOR CHIP	0uH (S560D/S570D/S745D)
R585	1-414-766-22	INDUCTOR CHIP	0uH (S560D/S570D/S745D)
R586	1-414-766-22	INDUCTOR CHIP	0uH (S560D/S570D/S745D)
R587	1-414-766-22	INDUCTOR CHIP	0uH (S560D/S570D/S745D)
R606	1-216-295-91	SHORT	0
R607	1-216-295-91	SHORT	0
R608	1-216-295-91	SHORT	0
R611	1-216-295-91	SHORT	0 (S336/S345/S360/S365)
R612	1-216-295-91	SHORT	0 (S560D/S570D)
R613	1-216-295-91	SHORT	0 (S745D)
R614	1-216-295-91	SHORT	0 (S360: US, CND/S560D)
R615	1-216-295-91	SHORT	0 (S336/S345)
R616	1-216-295-91	SHORT	0 (S360: E/S365/S570D/S745D)
< SWITCH >			
S401	1-771-574-21	SWITCH, TACTILE (DVE)	(S560D/S570D/S745D)
S402	1-771-574-21	SWITCH, TACTILE (JOG)	(S570D/S745D)
S403	1-771-574-21	SWITCH, TACTILE (VES)	(S336/S345/S360/S365)
S403	1-771-574-21	SWITCH, TACTILE (VIRTUAL 3D SURROUND)	(S560D/S570D/S745D)
S404	1-771-574-21	SWITCH, TACTILE (PREV ◀◀)	(S560D)
S405	1-771-574-21	SWITCH, TACTILE (RETURN)	
S407	1-771-574-21	SWITCH, TACTILE (NEXT ▶▶)	(S560D)
S408	1-771-574-21	SWITCH, TACTILE (DISPLAY)	
S410	1-771-574-21	SWITCH, TACTILE (DVD MENU)	
S411	1-771-574-21	SWITCH, TACTILE (■)	
S413	1-771-574-21	SWITCH, TACTILE (TITLE)	
S414	1-771-574-21	SWITCH, TACTILE (■)	
S415	1-771-574-21	SWITCH, TACTILE (▷)	
S416	1-771-574-21	SWITCH, TACTILE (OPEN/CLOSE ⇄)	(S560D)
S417	1-771-574-21	SWITCH, TACTILE (OPEN/CLOSE ⇄)	(EXCEPT S560D)

Ref. No.	Part No.	Description	Remark
S418	1-771-574-21	SWITCH, TACTILE (PREV ◀◀)	(EXCEPT S560D)
S419	1-771-574-21	SWITCH, TACTILE (NEXT ▶▶)	(EXCEPT S560D)
< TRANSFORMER >			
T401	1-435-411-11	TRANSFORMER, DC-DC CONVERTER	
< VIBRATOR >			
X401	1-781-853-21	VIBRATOR, CERAMIC (2MHz)	

*	A-6065-458-A	HP-127 BOARD, COMPLETE	(S560D)
*	A-6065-470-A	HP-127 BOARD, COMPLETE	(S570D/S745D)

(Ref.No. 2,000 Series)			
< CAPACITOR >			
C501	1-163-019-00	CERAMIC CHIP	0.0068uF 10% 50V
C502	1-163-019-00	CERAMIC CHIP	0.0068uF 10% 50V
C503	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V
C504	1-104-664-11	ELECT	47uF 20% 16V
< CONNECTOR >			
CN501	1-784-642-21	CONNECTOR, BOARD TO BOARD	11P
< DIODE >			
D502	8-719-066-39	DIODE	EB3804X-TP-J300K (MULTI)
D503	8-719-056-06	DIODE	SLR-342DCT32 (HP-V)
(S570D/S745D)			
D504	8-719-071-15	DIODE	HZM6.8ZWA1TL
D506	8-719-071-15	DIODE	HZM6.8ZWA1TL
D507	8-719-800-76	DIODE	MA153-TX
< IC >			
IC501	8-719-066-43	DIODE	GP1U28Y
< JACK >			
J501	1-785-505-31	JACK, LARGE TYPE (PHONES)	(S560D)
J501	1-785-505-41	JACK, LARGE TYPE (PHONES)	(S570D/S745D)
< RESISTOR >			
R502	1-216-027-00	METAL CHIP	120 5% 1/10W
R503	1-216-037-00	METAL CHIP	330 5% 1/10W (S570D/S745D)
R506	1-216-071-00	METAL CHIP	8.2K 5% 1/10W
R507	1-216-081-00	METAL CHIP	22K 5% 1/10W
R508	1-216-063-91	RES, CHIP	3.9K 5% 1/10W
R509	1-414-233-22	INDUCTOR CHIP	0uH
R510	1-414-233-22	INDUCTOR CHIP	0uH
R511	1-216-295-91	SHORT	0
R513	1-216-101-00	METAL CHIP	150K 5% 1/10W
R514	1-216-017-91	RES, CHIP	47 5% 1/10W
R515	1-216-089-91	RES, CHIP	47K 5% 1/10W
R518	1-163-021-91	CERAMIC CHIP	0.01uF 10% 50V
< VARIABLE RESISTOR >			
RV501	1-227-186-11	RES, VAR, CARBON	500/500 (LEVEL)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< SWITCH >							
S501	1-771-574-21	SWITCH, TACTILE (HP-V) (S570D/S745D)		C223	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V	
S502	1-771-574-21	SWITCH, TACTILE (SHUFFLE)		C224	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
S503	1-771-574-21	SWITCH, TACTILE (REPEAT)		C225	1-164-217-11	CERAMIC CHIP 150PF 5% 50V	
				C226	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
				C227	1-162-966-11	CERAMIC CHIP 0.0022uF 10% 50V	
				C228	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
* A-6065-437-A	MB-86 BOARD, COMPLETE			C229	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
	(S360: US, CND/S365)			C230	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
* A-6065-441-A	MB-86 BOARD, COMPLETE (S360: E)			C231	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
* A-6065-447-A	MB-86 BOARD, COMPLETE			C232	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
	(S336/S345: HK, SP)			C233	1-124-779-00	ELECT CHIP 10uF 20% 16V	
* A-6065-457-A	MB-86 BOARD, COMPLETE (S560D: E)			C234	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
* A-6065-460-A	MB-86 BOARD, COMPLETE (S560D: US, CND)			C235	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V	
* A-6065-464-A	MB-86 BOARD, COMPLETE (S345: CH)			C236	1-164-739-11	CERAMIC CHIP 560PF 5% 50V	
* A-6065-472-A	MB-86 BOARD, COMPLETE (S570D)			C237	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
* A-6065-481-A	MB-86 BOARD, COMPLETE (S745D: CH)			C238	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
* A-6065-483-A	MB-86 BOARD, COMPLETE			C239	1-162-969-11	CERAMIC CHIP 0.0068uF 10% 25V	
	(S745D: HK, SP, KR)			C301	1-110-563-11	CERAMIC CHIP 0.068uF 10% 16V	
	*****			C302	1-126-209-11	ELECT CHIP 100uF 20% 4V	
	(Ref.No. 1,000 Series)			C303	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
< CAPACITOR >							
C101	1-162-919-11	CERAMIC CHIP 22PF 5% 50V		C304	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C102	1-162-919-11	CERAMIC CHIP 22PF 5% 50V		C305	1-162-927-11	CERAMIC CHIP 100PF 5% 50V	
C103	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		C306	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C104	1-126-209-11	ELECT CHIP 100uF 20% 4V		C307	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C105	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		C308	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C106	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		C309	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C107	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		C310	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C108	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V		C311	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C109	1-162-916-11	CERAMIC CHIP 12PF 5% 50V		C312	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C110	1-162-916-11	CERAMIC CHIP 12PF 5% 50V		C313	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C111	1-126-209-11	ELECT CHIP 100uF 20% 4V		C314	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C112	1-162-915-11	CERAMIC CHIP 10PF 0.5PF 50V		C315	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
C114	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		C316	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C115	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V		C317	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C116	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		C318	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C117	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V		C319	1-126-206-11	ELECT CHIP 100uF 20% 6.3V	
C118	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V		C320	1-126-206-11	ELECT CHIP 100uF 20% 6.3V	
C119	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V		C321	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C120	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V		C322	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C201	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V		C324	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C202	1-162-966-11	CERAMIC CHIP 0.0022uF 10% 50V		C325	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C203	1-162-966-11	CERAMIC CHIP 0.0022uF 10% 50V		C326	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C204	1-162-966-11	CERAMIC CHIP 0.0022uF 10% 50V		C327	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C205	1-162-966-11	CERAMIC CHIP 0.0022uF 10% 50V		C328	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C206	1-124-779-00	ELECT CHIP 10uF 20% 16V		C329	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C207	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V		C330	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C208	1-162-919-11	CERAMIC CHIP 22PF 5% 50V		C331	1-162-968-11	CERAMIC CHIP 0.0047uF 10% 50V	
C209	1-162-919-11	CERAMIC CHIP 22PF 5% 50V		C332	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V	
C210	1-162-919-11	CERAMIC CHIP 22PF 5% 50V		C401	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
C211	1-162-919-11	CERAMIC CHIP 22PF 5% 50V		C405	1-126-204-11	ELECT CHIP 47uF 20% 16V	
C212	1-124-779-00	ELECT CHIP 10uF 20% 16V		C407	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
C213	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		C408	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
C214	1-164-172-11	CERAMIC CHIP 0.0056uF 10% 25V		C409	1-164-315-11	CERAMIC CHIP 470PF 5% 50V	
C215	1-164-739-11	CERAMIC CHIP 560PF 5% 50V		C410	1-162-921-11	CERAMIC CHIP 33PF 5% 50V	
C216	1-164-172-11	CERAMIC CHIP 0.0056uF 10% 25V		C411	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
C217	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V		C412	1-110-563-11	CERAMIC CHIP 0.068uF 10% 16V	
C218	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V		C413	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
C219	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V		C414	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
C221	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V		C415	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	
C222	1-164-730-11	CERAMIC CHIP 0.0012uF 10% 50V		C416	1-107-826-91	CERAMIC CHIP 0.1uF 10% 16V	

MB-86

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C417	1-115-467-11	CERAMIC CHIP	0.22uF 10% 10V	C514	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C418	1-162-921-11	CERAMIC CHIP	33PF 5% 50V	C515	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C419	1-110-563-11	CERAMIC CHIP	0.068uF 10% 16V	C516	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C420	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V	C517	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C421	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V	C518	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V
C422	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V	C519	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C423	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V	C520	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C424	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V	C521	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C425	1-115-467-11	CERAMIC CHIP	0.22uF 10% 10V	C522	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C426	1-164-315-11	CERAMIC CHIP	470PF 5% 50V	C523	1-126-246-11	ELECT CHIP	220uF 20% 4V
C427	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V	C524	1-126-204-11	ELECT CHIP	47uF 20% 16V
C428	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V	C525	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C429	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V	C528	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C430	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V	C529	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C431	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V	C530	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C433	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V	C531	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C434	1-164-315-11	CERAMIC CHIP	470PF 5% 50V	C532	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C435	1-164-315-11	CERAMIC CHIP	470PF 5% 50V	C533	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C436	1-164-677-11	CERAMIC CHIP	0.033uF 10% 16V	C534	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C437	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V	C535	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C438	1-164-677-11	CERAMIC CHIP	0.033uF 10% 16V	C536	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C439	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V	C537	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C440	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V	C538	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C441	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V	C539	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C442	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V	C540	1-126-193-11	ELECT CHIP	1uF 20% 50V
C443	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V	C541	1-124-779-00	ELECT CHIP	10uF 20% 16V
C444	1-126-205-11	ELECT CHIP	47uF 20% 6.3V	C542	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V
C445	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V	C601	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C446	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V	C602	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C447	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V	C603	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C448	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V	C604	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C449	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V	C701	1-126-209-11	ELECT CHIP	100uF 20% 4V (S560D/S570D/S745D)
C450	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V	C702	1-126-209-11	ELECT CHIP	100uF 20% 4V (S560D/S570D/S745D)
C451	1-126-204-11	ELECT CHIP	47uF 20% 16V	C703	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C452	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C704	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C453	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C705	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C454	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C706	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C455	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C707	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C456	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V	C708	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C457	1-115-467-11	CERAMIC CHIP	0.22uF 10% 10V	C709	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C458	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V	C710	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C459	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C711	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C460	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C712	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C462	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C713	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C463	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C714	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)
C465	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V				
C466	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V				
C501	1-124-779-00	ELECT CHIP	10uF 20% 16V				
C502	1-124-779-00	ELECT CHIP	10uF 20% 16V				
C503	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V				
C504	1-124-779-00	ELECT CHIP	10uF 20% 16V				
C505	1-126-206-11	ELECT CHIP	100uF 20% 6.3V				
C506	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V				
C507	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V				
C508	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V				
C509	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V				
C510	1-124-779-00	ELECT CHIP	10uF 20% 16V				
C511	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V				
C512	1-126-206-11	ELECT CHIP	100uF 20% 6.3V				
C513	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V				

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C715	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)	FB501	1-469-324-21	FERRITE	0uH
C716	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)	FB502	1-469-324-21	FERRITE	0uH
C717	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)	FB503	1-469-324-21	FERRITE	0uH
C718	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)	FB504	1-469-324-21	FERRITE	0uH
C719	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)	FB505	1-469-324-21	FERRITE	0uH
C720	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)	FB506	1-469-324-21	FERRITE	0uH
C721	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)	FB507	1-469-324-21	FERRITE	0uH
C722	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)	FB508	1-216-797-11	METAL CHIP	10 5% 1/16W
C723	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S560D/S570D/S745D)	FB509	1-414-226-21	INDUCTOR CHIP	0uH (S560D/S570D/S745D)
C801	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S570D/S745D)	< FILTER >			
C802	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S570D/S745D)	FL101	1-234-177-21	FILTER, CHIP EMI	
C803	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S570D/S745D)	FL102	1-234-177-21	FILTER, CHIP EMI	
C804	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S570D/S745D)	FL103	1-234-177-21	FILTER, CHIP EMI	
C805	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S570D/S745D)	FL201	1-234-177-21	FILTER, CHIP EMI	
C806	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (S570D/S745D)	FL301	1-234-177-21	FILTER, CHIP EMI	
< CONNECTOR >				FL302	1-234-177-21	FILTER, CHIP EMI	
* CN102	1-764-250-11	PIN, CONNECTOR (PC BOARD) 4P		FL303	1-234-177-21	FILTER, CHIP EMI	
CN201	1-764-530-21	CONNECTOR, FFC/FPC (ZIF) 23P		FL402	1-234-177-21	FILTER, CHIP EMI	
CN202	1-566-529-11	CONNECTOR, FPC (ZIF) 13P		FL501	1-234-177-21	FILTER, CHIP EMI	
CN401	1-794-234-11	CONNECTOR, FFC/FPC 6P		FL502	1-234-177-21	FILTER, CHIP EMI	
CN402	1-779-993-11	PIN, CONNECTOR (PWB) 5P		FL503	1-234-177-21	FILTER, CHIP EMI	
CN501	1-794-324-11	CONNECTOR, BOARD TO BOARD 34P		FL504	1-234-177-21	FILTER, CHIP EMI	
CN701	1-794-324-11	CONNECTOR, BOARD TO BOARD 34P		FL505	1-234-177-21	FILTER, CHIP EMI	
< DIODE >				FL506	1-234-177-21	FILTER, CHIP EMI	
D101	8-719-071-34	DIODE RB521S-30-TE61		FL507	1-233-893-21	FILTER, CHIP EMI	
D201	8-719-988-61	DIODE 1SS355TE-17		FL508	1-234-177-21	FILTER, CHIP EMI	
< FUSE >				FL601	1-234-177-21	FILTER, CHIP EMI (S560D/S570D/S745D)	
△ F401	1-533-771-21	FUSE (SMD) (0.8A)		FL801	1-234-177-21	FILTER, CHIP EMI (S570D/S745D)	
△ F402	1-533-771-21	FUSE (SMD) (0.8A)		< IC >			
< FERRITE BEAD >				IC101	8-759-667-20	IC BR9080F-E2 (S336/S345/S360/S365)	
FB102	1-414-226-21	INDUCTOR CHIP	0uH	IC101	8-759-667-21	IC BR9160F-E2 (S560D)	
FB103	1-414-226-21	INDUCTOR CHIP	0uH (S560D/S570D/S745D)	IC101	8-759-668-01	IC BR9040F-D-E2 (S570D/S745D)	
FB104	1-414-226-21	INDUCTOR CHIP	0uH	IC102	8-759-663-92	IC MB91107PFV-G-BND	
FB105	1-414-226-21	INDUCTOR CHIP	0uH	IC103	8-759-427-92	IC PST9126NL	
FB106	1-414-226-21	INDUCTOR CHIP	0uH (S560D/S570D/S745D)	IC105	8-759-667-86	IC CXD9572N-E2	
FB107	1-414-226-21	INDUCTOR CHIP	0uH	IC201	8-759-567-24	IC SSI33P3722	
FB109	1-414-226-21	INDUCTOR CHIP	0uH	IC301	8-759-486-55	IC NJM2370U33-TE2	
FB110	1-414-226-21	INDUCTOR CHIP	0uH	IC302	8-759-666-84	IC CXD9576R	
FB111	1-414-226-21	INDUCTOR CHIP	0uH (S560D/S570D/S745D)	IC303	8-759-643-10	IC GM71V18160CT-6TR	
FB117	1-414-226-21	INDUCTOR CHIP	0uH (S570D/S745D)	IC401	8-759-660-88	IC LA6553-TE-L	
< COIL >				IC402	8-759-660-88	IC LA6553-TE-L	
L201	1-412-031-11	INDUCTOR (CHIP)	47uH	IC403	8-759-338-78	IC BA10324AFV-E2	
< FERRITE BEAD >				IC404	8-759-660-87	IC CXD9569R	
FB102	1-414-226-21	INDUCTOR CHIP	0uH	IC502	8-752-399-55	IC CXD1932Q	
FB103	1-414-226-21	INDUCTOR CHIP	0uH (S560D/S570D/S745D)	IC503	8-759-486-55	IC NJM2370U33-TE2	
FB104	1-414-226-21	INDUCTOR CHIP	0uH	IC504	8-759-573-19	IC MT48LC1M16A1TG-7S	
FB105	1-414-226-21	INDUCTOR CHIP	0uH	IC505	8-759-573-19	IC MT48LC1M16A1TG-7S	
FB106	1-414-226-21	INDUCTOR CHIP	0uH (S560D/S570D/S745D)	IC506	8-759-669-28	IC PQ1R18	
FB107	1-414-226-21	INDUCTOR CHIP	0uH	IC601	8-759-663-93	IC CXD9549R (S560D/S570D/S745D)	
FB109	1-414-226-21	INDUCTOR CHIP	0uH	IC701	8-752-402-09	IC CXD1939R (S560D/S570D/S745D)	
FB110	1-414-226-21	INDUCTOR CHIP	0uH	IC801	8-759-670-52	IC CXD9547Q-TE-B (S570D/S745D)	
FB111	1-414-226-21	INDUCTOR CHIP	0uH (S560D/S570D/S745D)	IC802	8-759-641-58	IC KM29W16000AT-T (S570D/S745D)	
FB117	1-414-226-21	INDUCTOR CHIP	0uH (S570D/S745D)	< COIL >			

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

MB-86

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< TRANSISTOR >							
Q201	8-729-820-86	TRANSISTOR	2SB1121-T-TD	R170	1-216-833-91	RES, CHIP	10K 5% 1/16W
Q203	8-729-402-42	TRANSISTOR	UN5213-TX	R171	1-216-833-91	RES, CHIP	10K 5% 1/16W (S336/S345/S360/S365/S570D/S745D)
< RESISTOR >							
R002	1-216-801-11	METAL CHIP	22	5%	1/16W		
R009	1-216-821-11	METAL CHIP	1K	5%	1/16W		
R012	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R013	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R014	1-216-805-11	METAL CHIP	47	5%	1/16W		
R015	1-216-809-11	METAL CHIP	100	5%	1/16W		
R016	1-216-821-11	METAL CHIP	1K	5%	1/16W		
R017	1-216-821-11	METAL CHIP	1K	5%	1/16W		
R019	1-216-817-11	METAL CHIP	470	5%	1/16W		
R020	1-216-295-91	SHORT	0				
R021	1-216-296-91	SHORT	0				
R041	1-216-797-11	METAL CHIP	10	5%	1/16W		
R042	1-216-797-11	METAL CHIP	10	5%	1/16W		
R101	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R102	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R104	1-216-801-11	METAL CHIP	22	5%	1/16W		
R105	1-216-797-11	METAL CHIP	10	5%	1/16W		
R114	1-216-845-11	METAL CHIP	100K	5%	1/16W		
R118	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R120	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R121	1-216-864-11	METAL CHIP	0	5%	1/16W		
R123	1-216-827-11	METAL CHIP	3.3K	5%	1/16W		
R124	1-216-081-00	METAL CHIP	22K	5%	1/10W		
R124	1-216-085-00	METAL CHIP	33K	5%	1/10W		(S336/S345: HK, SP/S745D: HK, SP, KR)
R124	1-216-105-91	RES, CHIP	220K	5%	1/10W		(S345: CH/S745D: CH) (S360: E/S560D: E)
R125	1-216-827-11	METAL CHIP	3.3K	5%	1/16W		
R126	1-216-105-91	RES, CHIP	220K	5%	1/10W		(S570D/S745D)
R126	1-216-113-00	METAL CHIP	470K	5%	1/10W		(S560D)
R127	1-216-827-11	METAL CHIP	3.3K	5%	1/16W		
R128	1-216-089-91	RES, CHIP	47K	5%	1/10W		(S345: CH/S745D: CH)
R128	1-216-099-00	METAL CHIP	120K	5%	1/10W		(S360: E/S560D: E)
R128	1-216-105-91	RES, CHIP	220K	5%	1/10W		(S336/S345: HK, SP/S745D: HK, SP, KR)
R129	1-216-827-11	METAL CHIP	3.3K	5%	1/16W		
R130	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R131	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R136	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R138	1-216-797-11	METAL CHIP	10	5%	1/16W		
R139	1-216-797-11	METAL CHIP	10	5%	1/16W		
R140	1-216-797-11	METAL CHIP	10	5%	1/16W		
R154	1-216-864-11	METAL CHIP	0	5%	1/16W		
R158	1-216-797-11	METAL CHIP	10	5%	1/16W		
R159	1-216-821-11	METAL CHIP	1K	5%	1/16W		
R161	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R164	1-216-821-11	METAL CHIP	1K	5%	1/16W		
R166	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R167	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R168	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R169	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R172	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R173	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R174	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R175	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R176	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R183	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R184	1-216-801-11	METAL CHIP	22	5%	1/16W		
R186	1-216-864-11	METAL CHIP	0	5%	1/16W		(S560D/S570D/S745D)
R187	1-216-833-91	RES, CHIP	10K	5%	1/16W		(S560D/S570D/S745D)
R188	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R190	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R191	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R195	1-216-827-11	METAL CHIP	3.3K	5%	1/16W		
R201	1-216-815-11	METAL CHIP	330	5%	1/16W		
R202	1-216-809-11	METAL CHIP	100	5%	1/16W		
R203	1-216-809-11	METAL CHIP	100	5%	1/16W		
R204	1-216-837-11	METAL CHIP	22K	5%	1/16W		
R206	1-216-803-11	METAL CHIP	33	5%	1/16W		
R207	1-216-803-11	METAL CHIP	33	5%	1/16W		
R208	1-216-841-11	METAL CHIP	47K	5%	1/16W		
R209	1-216-797-11	METAL CHIP	10	5%	1/16W		
R210	1-216-820-11	METAL CHIP	820	5%	1/16W		
R211	1-216-811-11	METAL CHIP	150	5%	1/16W		
R214	1-216-834-11	METAL CHIP	12K	5%	1/16W		
R215	1-216-813-11	METAL CHIP	220	5%	1/16W		
R217	1-216-861-11	METAL CHIP	2.2M	5%	1/16W		
R222	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R223	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R224	1-216-829-11	METAL CHIP	4.7K	5%	1/16W		
R225	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R301	1-218-879-11	METAL CHIP	22K	0.5%	1/16W		
R302	1-218-831-11	METAL CHIP	220	0.5%	1/16W		
R303	1-218-883-11	METAL CHIP	33K	0.5%	1/16W		
R304	1-216-825-11	METAL CHIP	2.2K	5%	1/16W		
R305	1-216-838-11	METAL CHIP	27K	5%	1/16W		
R306	1-216-825-11	METAL CHIP	2.2K	5%	1/16W		
R307	1-216-822-11	METAL CHIP	1.2K	5%	1/16W		
R309	1-216-809-11	METAL CHIP	100	5%	1/16W		
R310	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R311	1-216-845-11	METAL CHIP	100K	5%	1/16W		
R313	1-218-855-11	METAL CHIP	2.2K	0.5%	1/16W		
R314	1-218-847-11	METAL CHIP	1K	0.5%	1/16W		
R315	1-218-871-11	METAL CHIP	10K	0.5%	1/16W		
R316	1-218-871-11	METAL CHIP	10K	0.5%	1/16W		
R317	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R318	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R319	1-218-853-11	METAL CHIP	1.8K	0.5%	1/16W		
R320	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R321	1-216-813-11	METAL CHIP	220	5%	1/16W		
R327	1-216-809-11	METAL CHIP	100	5%	1/16W		
R338	1-216-801-11	METAL CHIP	22	5%	1/16W		
R401	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R402	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R403	1-216-833-91	RES, CHIP	10K	5%	1/16W		
R404	1-216-821-11	METAL CHIP	1K	5%	1/16W		

Ref. No.	Part No.	Description	Quantity	Unit	Percentage	Remark	Ref. No.	Part No.	Description	Quantity	Unit	Percentage	Remark
R405	1-216-821-11	METAL CHIP	1K		5%	1/16W	R486	1-218-847-11	METAL CHIP	1K		0.5%	1/16W
R406	1-216-821-11	METAL CHIP	1K		5%	1/16W	R487	1-218-847-11	METAL CHIP	1K		0.5%	1/16W
R407	1-216-797-11	METAL CHIP	10		5%	1/16W	R488	1-218-847-11	METAL CHIP	1K		0.5%	1/16W
R408	1-216-311-00	METAL CHIP	6.8		5%	1/10W	R489	1-218-847-11	METAL CHIP	1K		0.5%	1/16W
R409	1-216-797-11	METAL CHIP	10		5%	1/16W	R490	1-216-817-11	METAL CHIP	470		5%	1/16W
R411	1-216-835-11	METAL CHIP	15K		5%	1/16W	R491	1-216-821-11	METAL CHIP	1K		5%	1/16W
R412	1-216-797-11	METAL CHIP	10		5%	1/16W	R492	1-216-817-11	METAL CHIP	470		5%	1/16W
R415	1-216-829-11	METAL CHIP	4.7K		5%	1/16W	R493	1-216-817-11	METAL CHIP	470		5%	1/16W
R416	1-216-847-11	METAL CHIP	150K		5%	1/16W	R494	1-216-817-11	METAL CHIP	470		5%	1/16W
R417	1-216-843-11	METAL CHIP	68K		5%	1/16W	R495	1-216-797-11	METAL CHIP	10		5%	1/16W
R418	1-216-847-11	METAL CHIP	150K		5%	1/16W	R496	1-216-821-11	METAL CHIP	1K		5%	1/16W
R419	1-216-835-11	METAL CHIP	15K		5%	1/16W	R497	1-216-821-11	METAL CHIP	1K		5%	1/16W
R420	1-216-835-11	METAL CHIP	15K		5%	1/16W	R501	1-216-809-11	METAL CHIP	100		5%	1/16W
R421	1-216-836-11	METAL CHIP	18K		5%	1/16W	R502	1-216-833-91	RES, CHIP	10K		5%	1/16W
R422	1-216-825-11	METAL CHIP	2.2K		5%	1/16W	R503	1-218-831-11	METAL CHIP	220		0.5%	1/16W
R423	1-216-833-91	RES, CHIP	10K		5%	1/16W	R504	1-218-831-11	METAL CHIP	220		0.5%	1/16W
R424	1-216-844-11	METAL CHIP	82K		5%	1/16W	R505	1-218-831-11	METAL CHIP	220		0.5%	1/16W
R425	1-216-845-11	METAL CHIP	100K		5%	1/16W	R506	1-218-831-11	METAL CHIP	220		0.5%	1/16W
R426	1-216-825-11	METAL CHIP	2.2K		5%	1/16W	R507	1-218-831-11	METAL CHIP	220		0.5%	1/16W
R427	1-216-835-11	METAL CHIP	15K		5%	1/16W	R508	1-218-831-11	METAL CHIP	220		0.5%	1/16W
R428	1-216-841-11	METAL CHIP	47K		5%	1/16W	R517	1-216-833-91	RES, CHIP	10K		5%	1/16W
R429	1-216-825-11	METAL CHIP	2.2K		5%	1/16W	R518	1-216-822-11	METAL CHIP	1.2K		5%	1/16W
R436	1-216-833-91	RES, CHIP	10K		5%	1/16W	R526	1-216-827-11	METAL CHIP	3.3K		5%	1/16W
R443	1-216-844-11	METAL CHIP	82K		5%	1/16W	R527	1-216-864-11	METAL CHIP	0		5%	1/16W
R444	1-216-843-11	METAL CHIP	68K		5%	1/16W	R529	1-216-833-91	RES, CHIP	10K		5%	1/16W
R445	1-216-829-11	METAL CHIP	4.7K		5%	1/16W	R530	1-216-833-91	RES, CHIP	10K		5%	1/16W
R446	1-216-825-11	METAL CHIP	2.2K		5%	1/16W	R540	1-216-864-11	METAL CHIP	0		5%	1/16W
R447	1-216-835-11	METAL CHIP	15K		5%	1/16W	R542	1-216-864-11	METAL CHIP	0		5%	1/16W
R448	1-216-835-11	METAL CHIP	15K		5%	1/16W	R603	1-216-809-11	METAL CHIP	100		5%	1/16W
R449	1-216-832-11	METAL CHIP	8.2K		5%	1/16W							(S560D/S570D/S745D)
R450	1-216-833-91	RES, CHIP	10K		5%	1/16W	R605	1-216-864-11	METAL CHIP	0		5%	1/16W
R451	1-216-821-11	METAL CHIP	1K		5%	1/16W							(S560D/S570D/S745D)
R452	1-216-797-11	METAL CHIP	10		5%	1/16W	R701	1-216-864-11	METAL CHIP	0		5%	1/16W
R454	1-216-311-00	METAL CHIP	6.8		5%	1/10W							(S336/S345/S360/S365)
R458	1-216-833-91	RES, CHIP	10K		5%	1/16W	R702	1-216-864-11	METAL CHIP	0		5%	1/16W
R459	1-216-833-91	RES, CHIP	10K		5%	1/16W							(S560D/S570D/S745D)
R460	1-216-845-11	METAL CHIP	100K		5%	1/16W	R708	1-216-864-11	METAL CHIP	0		5%	1/16W
R463	1-216-821-11	METAL CHIP	1K		5%	1/16W							(S560D/S570D/S745D)
R464	1-218-899-11	METAL CHIP	150K		0.5%	1/16W	R710	1-216-864-11	METAL CHIP	0		5%	1/16W
R465	1-216-821-11	METAL CHIP	1K		5%	1/16W							(S560D/S570D/S745D)
R466	1-216-821-11	METAL CHIP	1K		5%	1/16W	R711	1-216-864-11	METAL CHIP	0		5%	1/16W
R467	1-216-821-11	METAL CHIP	1K		5%	1/16W							(S560D/S570D/S745D)
R468	1-216-821-11	METAL CHIP	1K		5%	1/16W	R712	1-216-833-91	RES, CHIP	10K		5%	1/16W
R469	1-218-889-11	METAL CHIP	56K		0.5%	1/16W							(S560D/S570D/S745D)
R470	1-218-850-11	METAL CHIP	1.3K		0.5%	1/16W	R714	1-216-841-11	METAL CHIP	47K		5%	1/16W
R471	1-218-899-11	METAL CHIP	150K		0.5%	1/16W							(S560D/S570D/S745D)
R472	1-218-847-11	METAL CHIP	1K		0.5%	1/16W	R715	1-216-841-11	METAL CHIP	47K		5%	1/16W
R473	1-218-850-11	METAL CHIP	1.3K		0.5%	1/16W							(S560D/S570D/S745D)
R474	1-218-889-11	METAL CHIP	56K		0.5%	1/16W	R719	1-216-841-11	METAL CHIP	47K		5%	1/16W
R475	1-216-797-11	METAL CHIP	10		5%	1/16W							(S560D/S570D/S745D)
R476	1-216-813-11	METAL CHIP	220		5%	1/16W	R720	1-216-841-11	METAL CHIP	47K		5%	1/16W
R477	1-216-821-11	METAL CHIP	1K		5%	1/16W							(S560D/S570D/S745D)
R478	1-216-836-11	METAL CHIP	18K		5%	1/16W	R721	1-216-841-11	METAL CHIP	47K		5%	1/16W
R479	1-216-836-11	METAL CHIP	18K		5%	1/16W							(S560D/S570D/S745D)
R480	1-216-824-11	METAL CHIP	1.8K		5%	1/16W	R722	1-216-841-11	METAL CHIP	47K		5%	1/16W
R481	1-216-824-11	METAL CHIP	1.8K		5%	1/16W							(S560D/S570D/S745D)
R482	1-216-803-11	METAL CHIP	33		5%	1/16W	R723	1-216-809-11	METAL CHIP	100		5%	1/16W
R483	1-216-834-11	METAL CHIP	12K		5%	1/16W							(S560D/S570D/S745D)
R484	1-216-834-11	METAL CHIP	12K		5%	1/16W	R724	1-216-841-11	METAL CHIP	47K		5%	1/16W
R485	1-216-817-11	METAL CHIP	470		5%	1/16W							(S560D/S570D/S745D)
							R725	1-216-841-11	METAL CHIP	47K		5%	1/16W
													(S560D/S570D/S745D)

MB-86

MS-48

POWER BLOCK

Ref. No.	Part No.	Description	Remark
R727	1-216-841-11	METAL CHIP	47K 5% 1/16W (S560D/S570D/S745D)
R728	1-216-841-11	METAL CHIP	47K 5% 1/16W (S560D/S570D/S745D)
R729	1-216-841-11	METAL CHIP	47K 5% 1/16W (S560D/S570D/S745D)
R731	1-216-864-11	METAL CHIP	0 5% 1/16W (S560D/S570D/S745D)
R733	1-216-841-11	METAL CHIP	47K 5% 1/16W (S560D/S570D/S745D)
R750	1-216-864-11	METAL CHIP	0 5% 1/16W (S336/S345/S360/S365)
R751	1-216-864-11	METAL CHIP	0 5% 1/16W (S336/S345/S360/S365)
R752	1-216-864-11	METAL CHIP	0 5% 1/16W (S336/S345/S360/S365)
R753	1-216-864-11	METAL CHIP	0 5% 1/16W (S336/S345/S360/S365)
R754	1-216-864-11	METAL CHIP	0 5% 1/16W (S336/S345/S360/S365)
R755	1-216-864-11	METAL CHIP	0 5% 1/16W (S336/S345/S360/S365)
R766	1-414-226-21	INDUCTOR CHIP	0uH
R767	1-414-226-21	INDUCTOR CHIP	0uH
R771	1-216-864-11	METAL CHIP	0 5% 1/16W
R772	1-216-864-11	METAL CHIP	0 5% 1/16W (S560D/S570D/S745D)
R774	1-216-864-11	METAL CHIP	0 5% 1/16W (S560D/S570D/S745D)
R781	1-216-864-11	METAL CHIP	0 5% 1/16W (S560D/S570D/S745D)
R785	1-216-864-11	METAL CHIP	0 5% 1/16W (S336/S345/S360/S365)
R801	1-216-833-91	RES, CHIP	10K 5% 1/16W (S570D/S745D)
R808	1-216-809-11	METAL CHIP	100 5% 1/16W (S570D/S745D)
< COMPOSITION CIRCUIT BLOCK >			
* RB101	1-233-270-11	NETWORK, RES (8 GANG)	10K
* RB102	1-233-270-11	NETWORK, RES (8 GANG)	10K
< VARIABLE RESISTOR >			
RV501	1-223-583-11	RES, ADJ, CARBON	1K
< VIBRATOR >			
X101	1-781-185-21	VIBRATOR, CERAMIC	(12.5MHz)
X102	1-781-867-21	VIBRATOR, CRYSTAL	(27MHz)

* A-6066-016-A	MS-48 BOARD, COMPLETE		(Ref.No. 2,000 Series)
< CONNECTOR >			
CN001	1-794-197-11	CONNECTOR, FFC/FPC	6P
< SWITCH >			
S001	1-771-562-11	SWITCH, LEVER	(CHUCK SENSOR)
S002	1-762-386-11	SWITCH, PUSH	(TRAY SENSOR)

Ref. No.	Part No.	Description	Remark
*	1-468-506-31	POWER BLOCK (HS16S9E)	(S336/S345: HK, SP/S745D) ***** (Ref.No. 3,000 Series)
< CAPACITOR >			
C211	1-107-895-11	ELECT	330uF 35V
C213	1-126-947-11	ELECT	47uF 35V
C301	1-126-960-11	ELECT	1uF 50V
C311	1-107-895-11	ELECT	330uF 35V
C313	1-126-947-11	ELECT	47uF 35V
C315	1-126-947-11	ELECT	47uF 35V
C511	1-107-911-11	ELECT	220uF 35V
C513	1-126-947-11	ELECT	47uF 35V
C611	1-107-895-11	ELECT	330uF 35V
C613	1-126-948-11	ELECT	100uF 35V
< DIODE >			
D101	9-885-000-79	DIODE	S1WBA60
D102	8-719-160-78	DIODE	RD24FB2
D104	8-719-983-00	DIODE	MTZJ-T-77-2.4B
D105	8-719-991-33	DIODE	1SS133T-77
D211	8-719-027-43	DIODE	S2L20U
D212	8-719-160-87	DIODE	RD33FB2
D311	8-719-018-83	DIODE	D2S4M
D315	8-719-991-33	DIODE	1SS133T-77
D511	8-719-027-43	DIODE	S2L20U
D611	8-719-500-50	DIODE	D3S4M
D613	8-719-991-33	DIODE	1SS133T-77
D615	8-719-064-11	DIODE	SPR-325MVW (ON/STANDBY)
< FUSE >			
△ F101	1-532-388-31	FUSE (T2AL/250V)	
< IC >			
IC301	8-759-420-19	IC	AN1431T
< IC LINK >			
△ P611	1-533-593-11	LINK, IC (2A)	
△ P612	1-533-593-11	LINK, IC (2A)	
< PHOTO COUPLER >			
△ PC101	8-749-011-50	PHOTO COUPLER	PS2561L1-1-V-Q
< TRANSISTOR >			
Q102	8-729-024-00	TRANSISTOR	2SC3377
Q312	8-729-901-41	TRANSISTOR	2SC1740S
Q611	8-729-921-42	TRANSISTOR	2SA1679
Q615	8-729-029-46	TRANSISTOR	DTA143ESA
Q621	8-729-029-68	TRANSISTOR	DTC114TSA
Q711	8-729-029-46	TRANSISTOR	DTA143ESA
< RESISTOR >			
R101	1-129-774-11	CARBON	1M 1/2W
R105	1-129-774-11	CARBON	1M 1/2W
R306	1-247-835-11	METAL	1.5K 1/4W

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

POWER BLOCK

Ref. No.	Part No.	Description	Remark
*	1-468-506-11	POWER BLOCK (HS16S9F) (S345: CH/S360: E/S365/S560D: E) ***** (Ref.No. 4,000 Series)	
< CAPACITOR >			
C131	1-104-668-11	ELECT 33uF	35V
C132	1-126-960-11	ELECT 1uF	50V
C211	1-107-895-11	ELECT 330uF	35V
C213	1-126-947-11	ELECT 47uF	35V
C401	1-107-911-11	ELECT 220uF	35V
C402	1-126-959-11	ELECT 0.47uF	50V
C413	1-126-947-11	ELECT 47uF	35V
C511	1-107-911-11	ELECT 220uF	35V
C512	1-126-947-11	ELECT 47uF	35V
C613	1-126-947-11	ELECT 47uF	35V
C701	1-126-960-11	ELECT 1uF	50V
C703	1-126-960-11	ELECT 1uF	50V
C711	1-107-895-11	ELECT 330uF	35V
C713	1-126-948-11	ELECT 100uF	35V
< DIODE >			
D101	9-885-000-79	DIODE S1WBA60	
D102	8-719-160-78	DIODE RD24FB2	
D104	8-719-983-03	DIODE MTZJ-T-77-2.7B	
D105	8-719-991-33	DIODE 1SS133T-77	
D131	8-719-991-33	DIODE 1SS133T-77	
D132	8-719-924-13	DIODE MTZJ-T-77-22B	
D135	8-719-030-24	DIODE EG01C	
D211	8-719-027-43	DIODE S2L20UF	
D212	8-719-160-87	DIODE RD33FB2	
D401	8-719-018-83	DIODE D2S4M	
D511	8-719-027-43	DIODE S2L20UF	
D615	8-719-064-11	DIODE SPR-325MVW (ON/STANDBY)	
D711	8-719-500-50	DIODE D3S4M	
< FUSE >			
△F101	1-532-503-31	FUSE (T1.6AL/250V)	
< IC >			
IC401	8-759-420-19	IC AN1431T	
IC611	8-759-191-58	IC AN77L035	
IC701	8-759-667-11	IC HA17L431P-TZ	
< IC LINK >			
△P711	1-533-593-11	LINK, IC (2A)	
< PHOTO COUPLER >			
△PC101	8-749-011-50	PHOTO COUPLER PS2561L1-1-V-Q	
△PC102	8-749-011-50	PHOTO COUPLER PS2561L1-1-V-Q	
△PC103	8-749-011-50	PHOTO COUPLER PS2561L1-1-V-Q	
< TRANSISTOR >			
Q102	8-729-023-98	TRANSISTOR 2SC3377-Q	
Q615	8-729-029-46	TRANSISTOR DTA143ESA	
Q621	8-729-029-68	TRANSISTOR DTC114TSA	
Q711	8-729-029-46	TRANSISTOR DTA143ESA	

Ref. No.	Part No.	Description	Remark
< RESISTOR >			
R101	1-219-774-11	CARBON 1M	1/2W
R104	1-219-777-11	CARBON 3.3M	1/2W
*	1-468-506-21	POWER BLOCK (HS16S9U) (S360: US, CND) ***** (Ref.No. 5,000 Series)	
< CAPACITOR >			
C211	1-107-895-11	ELECT 330uF	35V
C213	1-126-947-11	ELECT 47uF	35V
C301	1-126-960-11	ELECT 1uF	50V
C311	1-107-895-11	ELECT 330uF	35V
C313	1-126-947-11	ELECT 47uF	35V
C315	1-126-947-11	ELECT 47uF	35V
C511	1-107-911-11	ELECT 220uF	35V
C513	1-126-947-11	ELECT 47uF	35V
C611	1-107-895-11	ELECT 330uF	35V
C613	1-126-948-11	ELECT 100uF	35V
< DIODE >			
D101	9-885-000-79	DIODE S1WBA60	
D104	8-719-983-00	DIODE MTZJ-T-77-2.4B	
D105	8-719-991-33	DIODE 1SS133T-77	
D211	8-719-027-43	DIODE S2L20U	
D212	8-719-160-87	DIODE RD33FB2	
D311	8-719-018-83	DIODE D2S4M	
D315	8-719-991-33	DIODE 1SS133T-77	
D511	8-719-032-12	DIODE D1NS6	
D611	8-719-500-50	DIODE D3S4M	
D613	8-719-991-33	DIODE 1SS133T-77	
D615	8-719-064-11	DIODE SPR-325MVW (ON/STANDBY)	
< FUSE >			
△F101	1-532-388-31	FUSE (2.0A/125V)	
< IC >			
IC301	8-759-420-19	IC AN1431T	
< IC LINK >			
△P611	1-532-593-11	LINK, IC (2A)	
△P612	1-532-593-11	LINK, IC (2A)	
< PHOTO COUPLER >			
△PC101	8-749-923-91	PHOTO COUPLER PS2501	
< TRANSISTOR >			
Q102	8-729-024-00	TRANSISTOR 2SC3377	
Q312	8-729-901-41	TRANSISTOR 2SC1740S	
Q611	8-729-921-42	TRANSISTOR 2SA1679	
Q615	8-729-029-46	TRANSISTOR DTA143ESA	
Q621	8-729-029-68	TRANSISTOR DTC114TSA	
Q711	8-729-029-46	TRANSISTOR DTA143ESA	

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

POWER BLOCK

Ref. No.	Part No.	Description	Remark
*	1-468-505-11	POWER BLOCK (SRV940JUC) (S560D: US, CND/S570D) ***** (Ref.No. 6,000 Series)	
		< CAPACITOR >	
C114	1-126-947-11	ELECT	47uF 35V
C201	1-126-941-11	ELECT	470uF 25V
C202	1-104-665-11	ELECT	100uF 25V
C203	1-126-925-11	ELECT	470uF 10V
C204	1-126-923-11	ELECT	220uF 10V
C205	1-126-926-11	ELECT	1000uF 10V
C207	1-126-923-11	ELECT	220uF 10V
C209	1-126-947-11	ELECT	47uF 35V
C210	1-104-666-11	ELECT	220uF 25V
C211	1-104-665-11	ELECT	100uF 25V
C212	1-126-923-11	ELECT	220uF 10V
		< DIODE >	
D101	8-719-904-05	DIODE	1N4005L
D102	8-719-904-05	DIODE	1N4005L
D103	8-719-904-05	DIODE	1N4005L
D104	8-719-904-05	DIODE	1N4005L
D106	9-998-387-01	DIODE	PR1005L
D107	8-719-061-02	DIODE	PR1003L
D108	8-719-923-52	DIODE	MTZJ7.5
D201	9-909-291-01	DIODE	S3L20U
D202	8-719-510-26	DIODE	D1NL20U
D203	8-719-027-43	DIODE	D2L20U
D204	1-801-320-11	DIODE	MA2300
D205	8-719-991-33	DIODE	1SS133
D206	8-719-510-26	DIODE	D1NL20U
D207	8-719-991-33	DIODE	1SS133
LED201	8-719-064-11	DIODE	SLR-325MVWF (ON/STANDBY)
		< FUSE >	
△ F101	1-532-388-31	FUSE (2A/125V)	
		< IC >	
IC201	9-900-532-01	IC	AN1431
		< PHOTO COUPLER >	
△ PC101	8-749-015-19	PHOTO COUPLER	ON3131
		< IC LINK >	
△ PS201	1-532-637-11	LINK, IC (1.0A)	
△ PS202	1-532-679-11	LINK, IC (0.6A)	
		< TRANSISTOR >	
Q201	8-729-041-37	TRANSISTOR	2SJ377
Q202	8-729-040-88	TRANSISTOR	2SB1240
Q205	8-729-901-41	TRANSISTOR	2SC1740S
Q206	8-729-422-57	TRANSISTOR	UN4111
Q207	8-729-040-22	TRANSISTOR	2SD1862
Q208	8-729-901-41	TRANSISTOR	2SC1740S
Q209	8-729-422-57	TRANSISTOR	UN4111

Ref. No.	Part No.	Description	Remark
		< RESISTOR >	
R104	1-247-801-11	CARBON	56 1/4W
R205	1-247-825-11	CARBON	560 1/4W
R206	1-247-845-11	CARBON	3.9k 1/4W
R207	1-247-845-11	CARBON	3.9k 1/4W
		MISCELLANEOUS *****	
7	1-771-913-11	SWITCH, TACTILE (S336/S345/S360/S365/S560D)	
58	1-418-097-11	ENCODER, ROTARY (S570D/S745D)	
110	1-792-457-11	CABLE, FLEXIBLE FLAT (FMM-33)	
△ 114	1-769-744-91	CORD, POWER (S336/S345: HK, SP/S360: E/ S365/S560D: E/S745D: HK, SP)	
△ 114	1-782-510-11	CORD, POWER (S345: CH/S745D: CH)	
△ 114	1-782-752-31	CORD, POWER (S745D: KR)	
△ 114	1-783-531-31	CORD, POWER (S360: US, CND/S560D: US, CND/S570D)	
△ 220	A-6062-397-A	OPTICAL PICK-UP KHM-220AAA	
M001	1-541-632-11	MOTOR, DC (LOADING)	
		ACCESSORIES & PACKING MATERIALS *****	
	1-418-988-31	COMMANDER, STANDARD (RMT-D115E) (S336/S345)	
	1-418-989-11	COMMANDER, STANDARD (RMT-D120A) (S570D/S745D: CH, KR)	
	1-418-989-51	COMMANDER, STANDARD (RMT-D120E) (S745D: HK, SP)	
	1-418-990-11	COMMANDER, STANDARD (RMT-D116A) (S360/S365)	
	1-418-991-61	COMMANDER, STANDARD (RMT-D117A) (S560D)	
△	1-569-008-21	ADAPTOR, CONVERSION 2P (S360: E/S365/S560D: E)	
	1-575-334-11	CORD, CONNECTION (STEREO AV CABLE 1.5m) (S336/S345/S360/S365/S560D)	
	1-575-334-41	CORD, CONNECTION (STEREO AV CABLE 1.5m) (S570D/S745D)	
	1-575-335-21	CORD, CONNECTION (S-VIDEO CABLE 1.5m) (S560D)	
△	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (S345: HK/S745D: HK)	
	1-775-454-21	CORD, CONNECTION (STEREO AV S LINK CABLE 1.5m) (S570D)	
	1-776-078-31	CORD, CONNECTION (S-VIDEO CABLE 1.5m) (S570D/S745D)	
	3-053-633-01	COVER, BATTERY (for RMT-D115E/D116A/D117A) (S336/S345/S360/S365/S560D)	
	3-055-539-01	COVER, BATTERY (for RMT-D120A/120E) (S745D)	
	3-060-985-11	MANUAL, INSTRUCTION (ENGLISH) (S360: US, CND/S365)	
	3-060-985-21	MANUAL, INSTRUCTION (FRENCH) (S360: CND)	
	3-060-985-31	MANUAL, INSTRUCTION (SPANISH) (S360: E)	

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

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

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
	3-060-987-11	MANUAL, INSTRUCTION (ENGLISH) (S345: HK, SP, CH, KP)	
	3-060-987-21	MANUAL, INSTRUCTION (SIMPLIFIED CHINESE) (S345: SP, CH)	
	3-060-987-31	MANUAL, INSTRUCTION (TRADITIONAL CHINESE) (S345: HK)	
	3-060-987-51	MANUAL, INSTRUCTION (KOREAN) (S336)	
	3-061-775-11	MANUAL, INSTRUCTION (ENGLISH) (S570D)	
	3-061-775-21	MANUAL, INSTRUCTION (FRENCH) (S570D)	
	3-061-776-11	MANUAL, INSTRUCTION (ENGLISH) (S745D)	
	3-061-776-21	MANUAL, INSTRUCTION (SIMPLIFIED CHINESE) (S745D: CH, SP)	
	3-061-776-31	MANUAL, INSTRUCTION (TRADITIONAL CHINESE) (S745D: HK)	
	3-061-776-41	MANUAL, INSTRUCTION (KOREAN) (S745D: KR)	
	3-062-059-11	MANUAL, INSTRUCTION (ENGLISH) (S560D: US, CND)	
	3-062-059-21	MANUAL, INSTRUCTION (FRENCH) (S560E: CND)	
	3-062-059-31	MANUAL, INSTRUCTION (SPANISH) (S560D: E)	

