

HCD-S300

SERVICE MANUAL

Ver 1.6 2003.02

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Chinese Model



HCD-S300 is the amplifier, DVD/CD and tuner section in DAV-S300.

Model Name Using Similar Mechanism	NEW
Mechanism Type	CDM-55D-DVBU2
Base Unit Type	DVBU2
Optical Pick-up Type	KHM220AAA

SPECIFICATIONS

Amplifier section

Stereo mode 30 W + 30 W
(3 ohms at 1 kHz, THD 10 %)

Surround mode Front: 30 W + 30 W
Center*: 30 W
Rear*: 30 W + 30 W
(3 ohms at 1 kHz, THD 10 %)
Subwoofer*: 30 W
(3 ohms at 100 Hz, THD 10 %)

* Depending on the sound field settings and the source, there may be no sound output.

Inputs VIDEO 1, 2:
Sensitivity: 150 mV
Impedance: 50 kilohms

Outputs VIDEO 1 (AUDIO OUT):
Voltage: 2 V
Impedance: 1 kilohms

WOOFER:
Voltage: 2 V
Impedance: 1 kilohms

PHONES:
Accepts low- and high-impedance headphones

CD/DVD system

Laser Semiconductor laser

Signal format system PAL/(NTSC)

Frequency response (at 2 CH STEREO mode)
DVD (PCM): 2 Hz to 22 kHz (± 1.0 dB)
CD: 2 Hz to 20 kHz (± 1.0 dB)

Signal-to-noise ratio
More than 80 dB (VIDEO 1 (AUDIO) connectors only)

Harmonic distortion
Less than 0.03 %

FM tuner section

System PLL quartz-locked digital synthesizer system

Tuning range 87.50 – 108.00 MHz (50 kHz step)
(Except US, CND)
87.50 – 108.00 MHz (100 kHz step)
(US, CND)

Antenna FM wire antenna

Antenna terminals 75 ohms, unbalanced

Intermediate frequency 10.7 MHz

AM tuner section

System Tuner section:
PLL quartz-locked digital synthesizer system

Tuning range European models:
531 – 1602 kHz (9 kHz interval)
Australian models:
530 – 1710 kHz (10 kHz interval)
531 – 1602 kHz (9 kHz interval)
US, CND models:
530 – 1710 kHz (10 kHz interval)
531 – 1710 kHz (9 kHz interval)

Antenna Loop antenna

Video section

Inputs Video: 1 Vp-p 75 ohms

Outputs Video: 1 Vp-p 75 ohms
S-video:
Y: 1 Vp-p 75 ohms
C: PAL 0.3 Vp-p 75 ohms
NTSC 0.286 Vp-p 75 ohms

General

Power requirements
European models:
230 V AC, 50/60 Hz
Australian models:
220 – 240 V AC, 50/60 Hz
US, CND models:
120 V AC, 60 Hz

Power consumption 68 W

Dimensions (approx.) 355 × 70 × 365 mm
(15 × 2⁷/₈ × 14³/₈ inches) (w/h/d)
incl. projecting parts

Mass (approx.) 3.8 kg (8 lb 6 oz)

Operating temperature 5°C to 35°C (41°F to 95°F)

Operating humidity 5 % to 90 %

Supplied accessories
Check that you have the following items:
• AM loop antenna (1)
• FM wire antenna (1)
• Speakers (5)
• Speaker cords (5 m × 4, 15 m × 2)
• Video cord (1)
• Remote commander (remote) RM-SS300 (1)
• R6 (size AA) batteries (2)
• Foot pads (24)
• Speakers - Connection and Installation (card) (1)
• 21-pin adaptor (1) (only for the European models)

Design and specifications are subject to change without notice.

COMPACT AV SYSTEM

9-929-072-18
2003B0200-1
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Sony Corporation
Home Audio Company
Published by Sony Engineering Corporation

SONY®

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

This appliance is classified as a CLASS 1 LASER product. The CLASS 1 LASER PRODUCT MARKING is located on the rear exterior.

CLASS 1 LASER PRODUCT
一类激光产品

CAUTION : INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCKS DEFEATED. AVOID EXPOSURE TO BEAM.
ADVARSEL : USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VORSICHT : UNSICHTBARE LASERSTRÄHLUNG WENN ABDECKUNG GEÖFFNET UND SICHERHEITSVERRIEGELUNG ÜBERBRÜCKT. NICHT DEM STRAHL AUSSETZEN.
VARO! : AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTIINA NÄKYMÄTTÖMÄLLE LASERSÄTELYLLE. ÄLÄ KATSO SÄTEESEEN.
WARNING : OSYNLIG LASERSTRÅLING NÅR DENNA DEL ÅR ÖPPNAD OCH SPÅRREN ÅR URKOPPLAD. BETRÄKTA EJ STRÅLEN.
ADVERSEL : USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES OG SIKKERHEDSLÅS BRYTES. UNNGÅ EKSPONERING FOR STRÅLEN.
VIGYÁZAT! : A BURKOLAT NYITÁSÁKOR LÁTHATATLAN LÉZERSUGÁRVESZÉLY! KERÜLJE A BESUGÁRZÁST!

This caution label is located inside the unit.

CAUTION

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

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

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.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

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 0.75 V, 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)

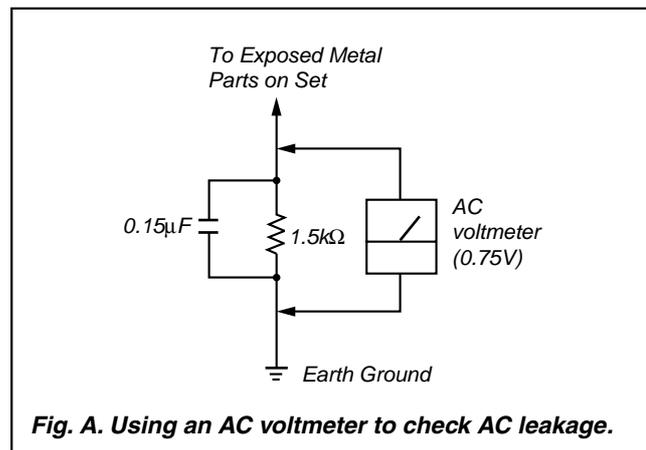


Fig. A. Using an AC voltmeter to check AC leakage.

与安全有关的零部件须知

在原理图上用阴影及 \triangle 标记来识别的零部件在安全操作上是具有关键性的。这些零部件要用本手册中所示的部件号对应的索尼零部件进行更换。

在安全操作上具有关键性的电路调整与索尼公司出版的维修手册完全一致。在更换关键零部件时或怀疑动作失常时，请进行这些调整操作。

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFÉS 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.

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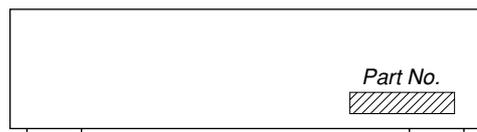
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8. ELECTRICAL PARTS LIST 74**MODEL IDENTIFICATION**

–Back panel–



Model	Part No.
US model	4-226-383-0□
AEP, UK, CEN, CEU models	4-226-383-1□
Hong Kong model	4-226-383-2□
Australian model	4-226-383-3□
E32 model	4-226-383-4□
Mexican model	4-226-383-6□
Russian model	4-226-383-7□
Chinese model	4-226-383-8□
Singapore model	4-226-383-9□
E12 model	4-230-797-0□
Saudi Arabia model	4-230-797-1□
Canadian model	4-230-797-3□
Taiwan model	4-230-797-4□
AEP, UK models (made in China)	4-232-194-0□
US model (made in China)	4-232-194-1□
Korean model (made in China)	4-232-194-2□

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

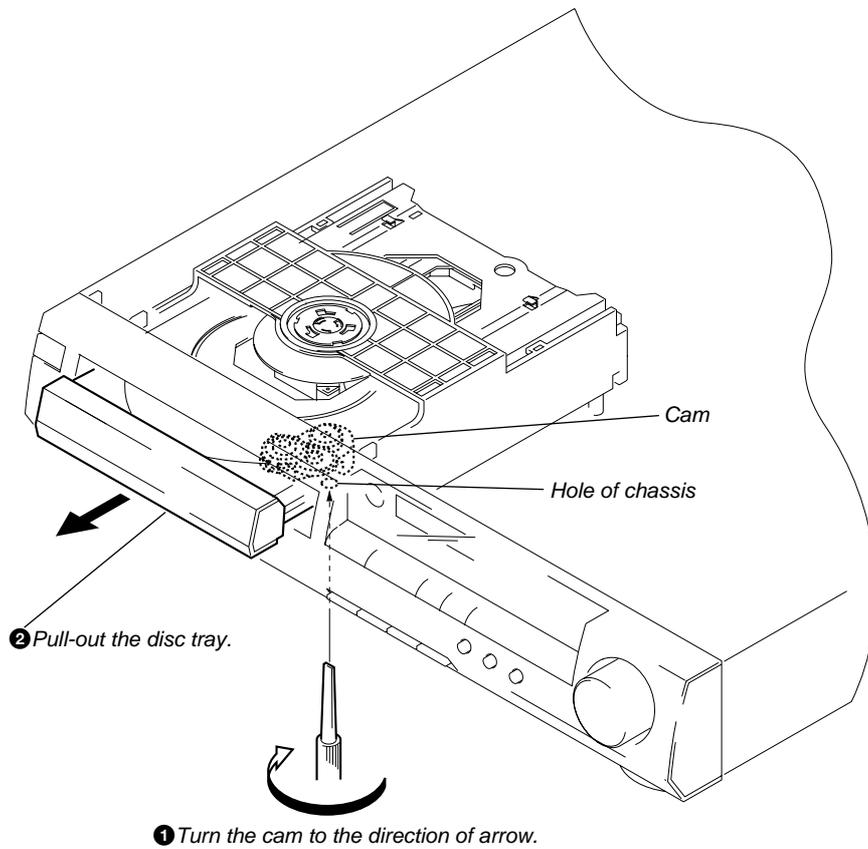
The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveform is output several times.

SECTION 1 SERVICING NOTE

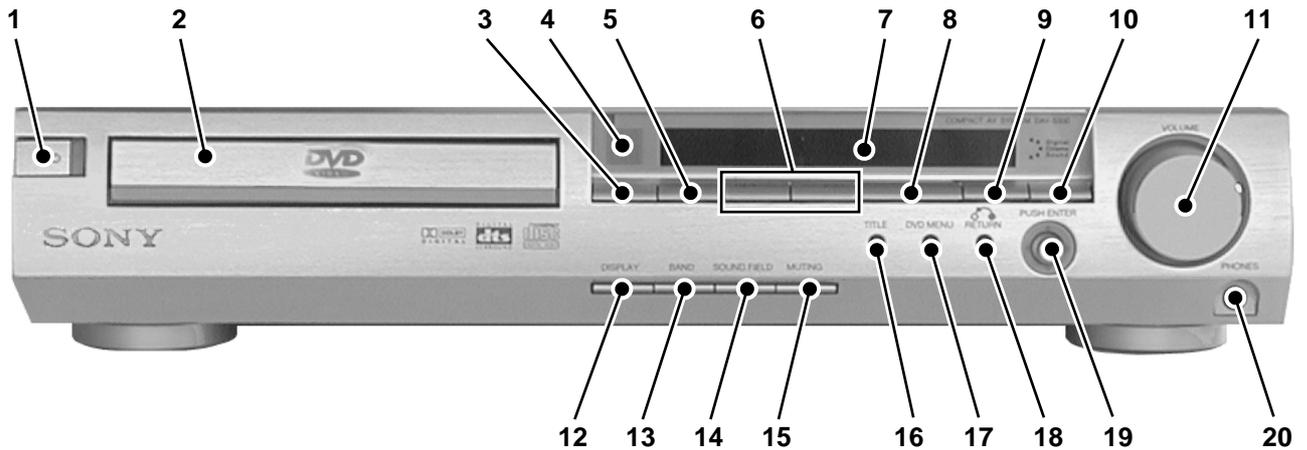
HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF



When removing the disc tray, high torque is necessary to turn the ejection cam on the bottom surface. Therefore, the screw thread is easily damaged. To prevent this damage, turn it carefully.

SECTION 2 GENERAL

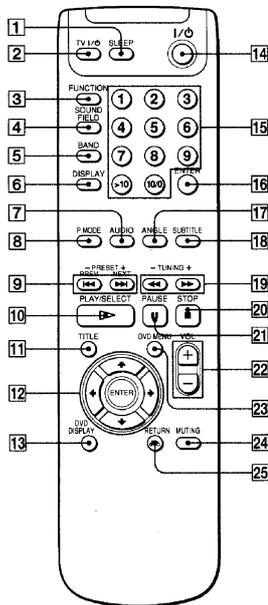
Front Panel



LOCATION OF PARTS AND CONTROLS

- | | | |
|-------------------------------------|-----------------------|------------------------------|
| 1 I/O (POWER) button and indicator | 8 ▷ PLAY button | 16 TITLE button |
| 2 DISC tray | 9 PAUSE button | 17 DVD MENU button |
| 3 □ remote sensor | 10 ■ STOP button | 18 ↻ RETURN button |
| 4 ≡ OPEN/CLOSE button | 11 VOLUME control | 19 ←/↓/↑/→ PUSH ENTER button |
| 5 FUNCTION button | 12 DISPLAY button | 20 PHONES connector |
| 6 ◀▶/▶▶ PREV/NEXT/PRESET +/- button | 13 BAND button | |
| 7 Front Panel Display | 14 SOUND FIELD button | |
| | 15 MUTING button | |

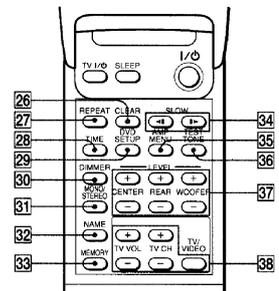
Remote



- 1 **SLEEP button**
Activates the sleep timer.
- 2 **TV I/O (POWER) switch**
Turns the TV on and off.
- 3 **FUNCTION button**
Selects the component you want to use.
- 4 **SOUND FIELD button**
Selects the sound field.
- 5 **BAND button**
Selects AM or FM band.
- 6 **DISPLAY button**
Switches the item displayed on the front panel display. In the VIDEO 1/2 functions, it switches: VIDEO 1 (or 2) → Sound field → VIDEO 1 (or 2)
- 7 **AUDIO button**
Changes the sound while playing a DVD or VIDEO CD.

- 8 **P. MODE button**
Selects program or shuffle play mode.
- 9 **◀▶/▶▶PREV/NEXT/PRESET +/- buttons**
◀▶/▶▶PREV/NEXT : Press to go to the next chapter or track or to go back to the previous chapter or track.
PRESET +/- : Scan all preset stations.
- 10 **▷ PLAY/SELECT button**
Plays a disc.
- 11 **TITLE button**
Displays the title menu on the TV screen.
- 12 **←/↓/↑/→/ENTER button**
Selects and executes the items or settings.
- 13 **DVD DISPLAY button**
Displays the Control Menu display on the TV screen to set or adjust the items.
- 14 **I/O (POWER) switch**
Turns on and off the power of the system.
- 15 **Number buttons**
Select the items or settings.
- 16 **ENTER button**
Executes the items or settings.
- 17 **ANGLE button**
Changes the angles when playing a DVD.
- 18 **SUBTITLE button**
Displays the "SUBTITLE" menu in the Control Menu display.
- 19 **◀▶/▶▶ (SCAN)/TUNING +/- buttons**
◀▶/▶▶ (SCAN) : Locate a point while monitoring the picture (19).
TUNING +/- : Scan all available radio stations.
- 20 **■ STOP button**
Stops playing a disc.
- 21 **|| PAUSE button**
Pauses playing a disc.
- 22 **VOL (volume) +/- buttons**
Adjust the volume.
- 23 **DVD MENU button**
Displays the DVD menu on the TV screen.
- 24 **MUTING button**
Mutes the sound.
- 25 **↻ RETURN button**
Press to return to the previously selected screen, etc.

This section is extracted from instruction manual.



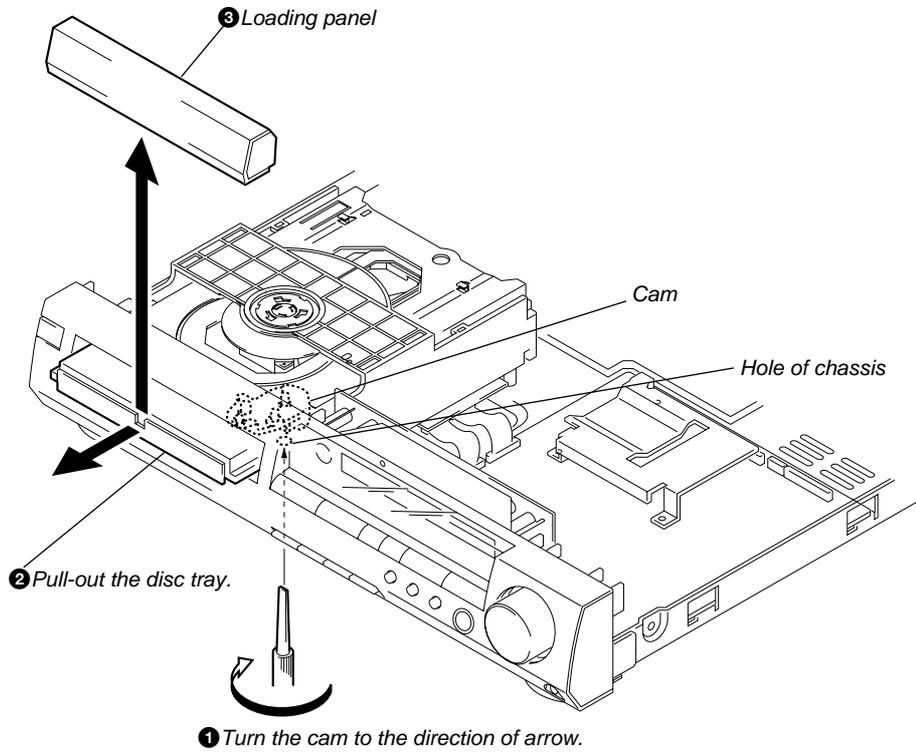
Inside the cover

- 26 **CLEAR button**
Press to return to the Continuous play, etc.
- 27 **REPEAT button**
Displays the "REPEAT" display on the TV screen.
- 28 **TIME button**
Displays the playing time of the disc, etc., on the front panel display.
- 29 **DVD SETUP button**
Displays the setup display on the TV screen to set or adjust the items.
- 30 **DIMMER button**
Turns the front panel display on or off.
- 31 **MONO/STEREO button**
Switches monaural or stereo of FM stereo reception.
- 32 **NAME button**
Activates the name function.
- 33 **MEMORY button**
Press to store a preset station.
- 34 **-1/▶ SLOW buttons**
Play a disc in slow motion.
- 35 **AMP MENU button**
Displays the speaker set up parameters on the front panel display.
- 36 **TEST TONE button**
Turns test tone on and off.
- 37 **SPEAKER LEVEL +/- buttons**
Press to adjust the speaker level.
- 38 **TV operation buttons**
Control TVs.

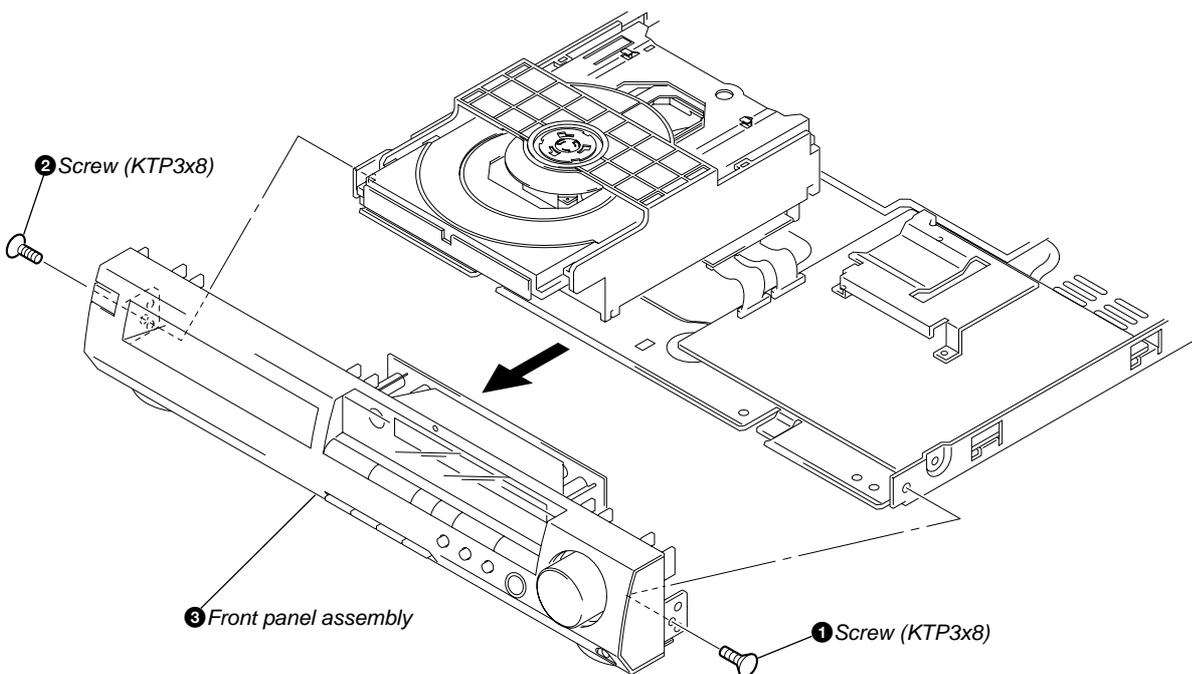
SECTION 3 DISASSEMBLY

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

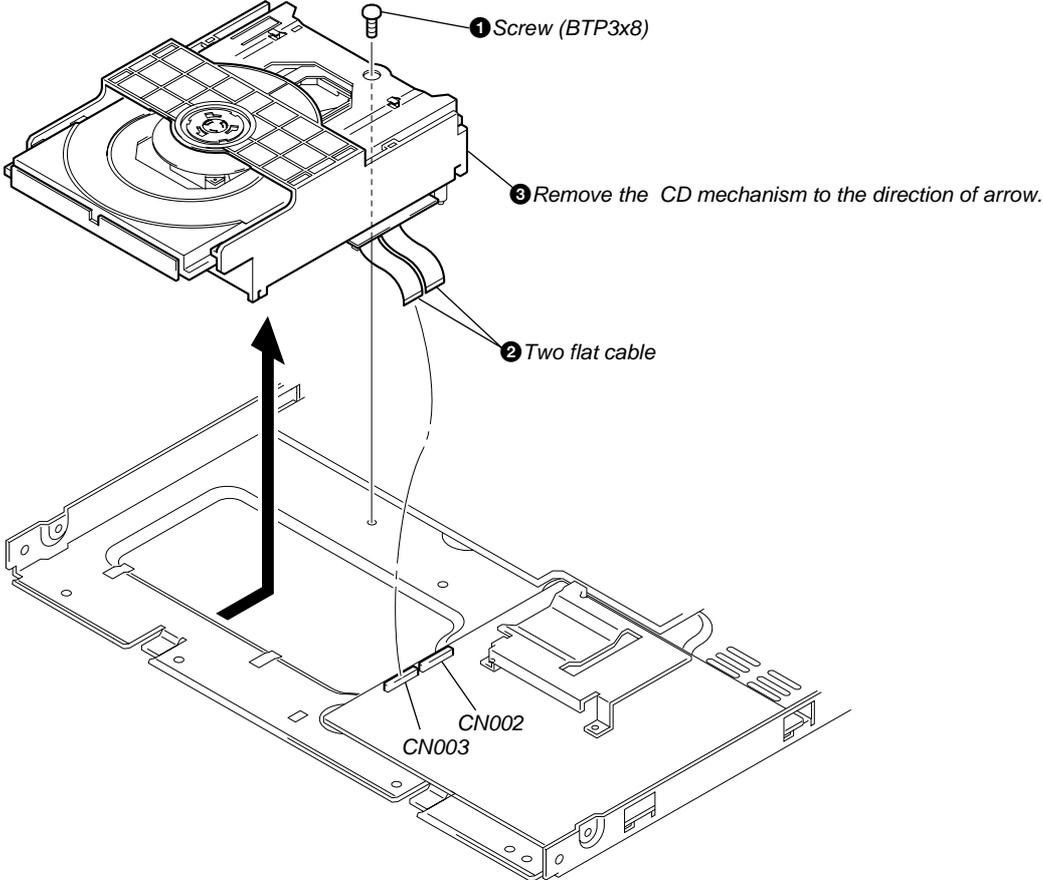
3-1. LOADING PANEL



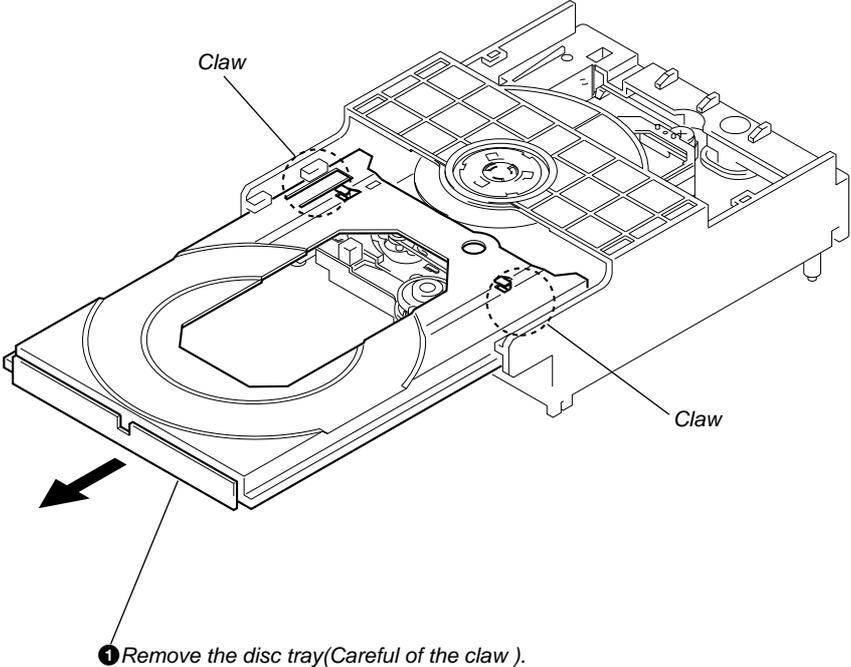
3-2. FRONT PANEL



3-3. CD MECHANISM



3-4. DISC TRAY



SECTION 4 TEST MODE

4-1. 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).

4-2. STARTING TEST MODE

Set the FUNCTION to DVD with the main unit power on. Next, while pushing the **[STOP]** button and the **[MUTING]** button on the main unit at the same time, turn the regulator to the right to start Test Mode and display the menu shown below on the TV screen. At the bottom of the 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 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   : HCX932xxxx
Revision: 1.xxx
```

4-3. 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 = 2005
```

```
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

```
3-3. 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.

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 (At the beginning of mass production, the Flash ROM of IC205 is used, but midway it is replaced by the IC206 OTP ROM. IC205 or IC206) is displayed with four digits.
Below IC205 are all IC205 or IC206.
- (2-3) ROM Check Sum
Check sum is calculated.
Error: Not detected.
The 8-bit data are added at addresses 0x000F0000 ~ 0x002EFFFF of ROM (IC205) 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 read from EEPROM (IC201) is displayed with 2-digit hexadecimal number.

	Model Type
DAV-S300 (US, CND)	20
DAV-S300 (E)	22
DAV-S300 (AEP)	23
DAV-S300 (Australian)	25
DAV-S300 (Singapore/Hong Kong)	26
DAV-S300 (Chinese)	27

- (2-5) Region
Region code is displayed.
Error: Not detected.
The region code determined from the model code is displayed.

3. Peripheral

- (3-2) Gate Array Check
Data write → read, and accord check
Error 02: Gate array write/read discord
Data 0x00~0xFF are written to the address 0xF of GA (IC601), then read and checked if they accord.
- (3-3) EEPROM Check
Data write → read, and accord check
Error 03: EEPROM write/read discord
Data 0x9249, 0x2942, 0x4294 are written to addresses 0x00~0xFF of EEPROM (IC201), then read and checked.
Before writing, the data are saved, then after checking, they are written to restore the contents of EEPROM.

4. Servo

- (4-2) Servo DSP Check
Data write → read, and accord check
Error 12: Read data discord
Data 0x9249, 0x2942, 0x4294 are written to the address 0x602 of RAM in the Servo DSP (IC701), then read and checked.
- (4-3) DSP Driver Test
Test signal data → DSP Driver
Error: Not detected.
Caution: Do not conduct this test with a mechanical deck connected.
The maximum voltage is applied to the Servo Driver IC (IC801, IC802). If mechanical deck is connected, the motor and optics could be damaged. Disconnect mechanical deck following the output message, then enter specified 4- or 5-digit number from the remote commander, and press the **[ENTER]**. The test is conducted only when the input data accord. Check the output level, then press the **[NEXT]** to finish the test.
This test is skipped if “All” is selected.

Supplement: How to disconnect mechanical deck
Disconnect flat cables connected to the CN002 and CN003 of MB-82/85 board. Also, disconnect harness from the CN011.

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 (IC303) and external RAM (IC304) 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 flat cables connected to the CN002 and CN003 of DVD board. Also, disconnect harness from the CN011.

- (5-2) ARP Register Check
Data write → read, and accord check
Error 08: ARP register write, and read data discord
Data 0x00 to 0xFF are written to the TMAX register (address 0xC6) in ARP (IC303), then they are read and checked.
- (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 (IC304) connected to the ARP (IC303) 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 (IC304) are cleared to 0x0000.

First, 0xA55A is written to the address 0x00000, and the address data are read and checked from addresses 0x00001 to 0x80000 while shifting 1 bit each. Next, the data at that address is cleared, and it is written to the address 0x00001, and read and checked in the same manner. This check is repeated up to the address 0x80000 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 (IC304) connected to the ARP (IC303) 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 (IC205) are copied to all areas of RAM (IC402, IC403) connected to the AVD (IC401) 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 (IC205) are transferred to the RAM (IC402, IC403) in AVD (IC401), and output as video signals from the AVD (IC401).

They are output from all video terminals (Composite, Y/C).

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).

8. Audio

(8-2) ARP → 1930

Error 14: ARP → 1930 video NG

15: ARP → 1930 audio NG

Check Items List

- 2) Version
 - (2-2) Revision
 - (2-3) ROM Check Sum
 - (2-4) Model Type
 - (2-5) Region
- 3) Peripheral
 - (3-2) Gate Array Check
 - (3-3) EEPROM Check
- 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
- 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: 1910 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)
- 90: Error occurred
- 91: User verification NG
- 92: Diagnosis cancelled

4-4. 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

Select [0] and press [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. 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 300 msec
4. Set Disc Type SL
5. LD ON
6. Spdl Start
7. Wait 1 sec
8. Focus Servo ON 0
9. Auto Track Offset Adjust
10. CLVA ON
11. Wait 500 msec
12. Tracking ON
13. Wait 1 sec
14. Sled ON
15. Check CLV Lock
16. Auto LFO Adjust
17. Auto Focus Offset Adjust
18. Auto Tilt Position Adjust
19. Auto Focus Gain Adjust
20. Auto Focus Offset Adjust
21. EQ Boost Adjust
22. Auto LFO Adjust
23. Auto Track Gain Adjust, Search Check
24. 32Tj Fwd
25. 32Tj Rev
26. 500Tj Fwd
27. 500Tj Rev

28. All Servo Stop
29. 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 500 msec
8. Focus Servo ON 0
9. Auto Track Offset Adjust
10. CLVA ON
11. Wait 500 msec
12. Tracking ON
13. (TC Display Start)
14. Wait 1 sec
15. Jitter Display Start
16. Sled ON
17. Check CLV ON
18. Auto LFO Adjust
19. Auto Focus Offset Adjust
- 20.
21. Auto Focus Gain Adjust
22. Auto Focus Offset Adjust
23. Eq Boost Adjust
24. Auto LFO Adjust
25. Auto Track Gain Adjust, Search Check
26. 32Tj Fwd
27. 32Tj Rev
28. 500Tj Fwd
29. 500Tj Rev
30. 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 0
9. Auto Track Offset Adjust
10. Clva ON
11. Wait 500 msec
12. Tracking ON
13. Wait 500 msec
14. Sled ON
15. Check CLV Lock
16. Auto Loop Filter Offset Auto Focus Adjust
- 17.
18. Auto Focus Gain Adjust
19. Auto Focus Offset Adjust
20. Eq Boost Adjust
21. Auto Loop Filter Offset
22. Auto Track Gain Adjust, Search Check
23. 32Tj Fwd
24. 32Tj Rev
25. 500Tj Fwd
26. 500Tj Rev, Layer 0 Adjust
27. Fj (L1 -> L0)
28. Auto Track Offset Adjust L0
29. Clva ON
30. Wait 500 msec
31. Tracking ON
32. Wait 500 msec
33. Sled ON
34. Check CLV Lock
35. Auto Focus Filter Offset
36. Auto Focus Adjust
- 37.
38. Auto Focus Gain Adjust
39. Auto Focus Offset Adjust
40. Eq Boost Adjust
41. Auto Loop Filter Offset
42. Auto Track Gain Adjust, Search Check
43. 32Tj Fwd
44. 32Tj Rev
45. 500Tj fwd
46. 500Tj Rev, Layer Jump Check
47. Lj (L0 -> L1)
48. Lj (L1 -> L0)
49. 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 500 msec
6. Focus Servo ON 0
7. Auto track Offset Adjust
- 8.
9. CLVA ON
10. Wait 500 msec
11. Tracking ON
12. Wait 1 sec
13. Sled ON
14. Check CLV ON
15. Auto Focus Offset Adjust
- 17.
18. Auto Focus Gain Adjust
19. Auto Focus Offset Adjust
20. Eq Boost Adjust
21. Auto LFO Adjust
22. Auto Track Gain Adjust

23. 32Tj Fwd
24. 32Tj Rev
25. 500Tj Fwd
26. 500Tj Rev

27. All Servo Stop */

4-5. 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
```

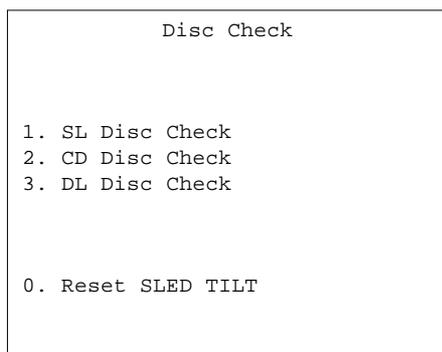
In using the manual operation menu, take care of the following points. These commands do not provide protection, thus requiring correct operation. The sector address or time code field is displayed when a disc is loaded.

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].

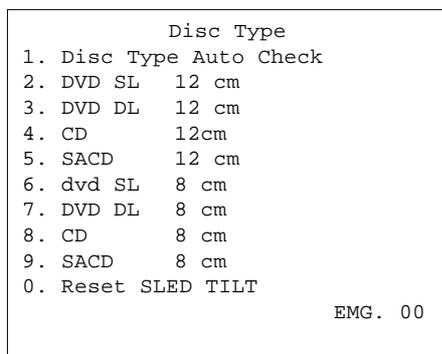
The adjustment must be executed more than once after default data were written. External vibration or shock to the player must not be given. Reference value for DVD is from 10 to 20, and for CD, from 28 to 4F.

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.

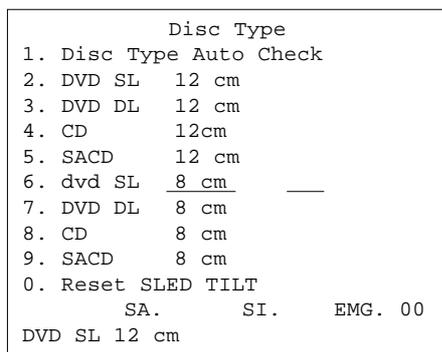
1. Disc Type



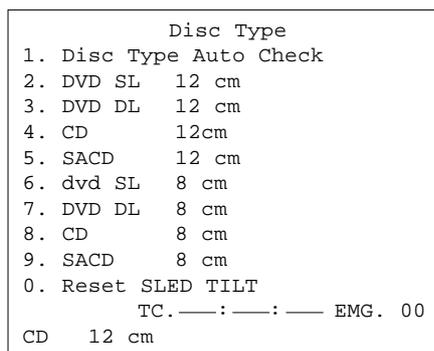
On this screen, select the disc type. To select the disc type, press the number of the loaded disc. The selected disc type is displayed at the bottom. Selecting [1] automatically selects and displays the disc type. In case of wrong display, retry "Disc Check Memory". Also, opening the tray causes the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

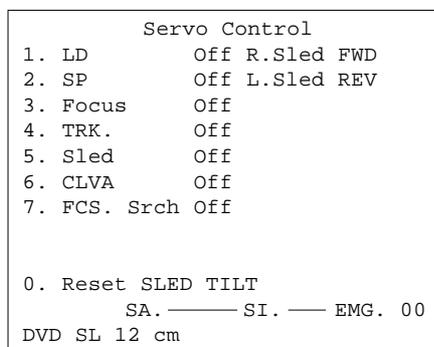
[0] Reset SLED TILT Reset the Sled and Tilt to initial position.

[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	- DVD -		
ID No.	00	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
EQ Boost	xx xx	xx	xx	xx
Jitter	xx xx	xx	xx	xx
Mirror Time	xx xx	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.

4-6. MECHA AGING

### Mecha Aging ###	
1.	TRAY Aging
2.	SEARCH Aging
Abort: STOP key	

On the Test Mode Menu Screen, selecting **[3]** executes the aging of the mechanism. TRAY aging or SEARCH aging are selected by **[1]** or **[2]**. Start aging with **PLAY**. During aging, the repeat cycle is displayed. Aging can be aborted at any time by pressing the **[STOP]** key. After the operation is stopped, press the **[STOP]** key or **[RETURN]** key again to return to the Test Mode Menu. SEARCH Aging is only for a CD.

4-7. EMERGENCY HISTORY

### MEG. History ###							
Laser Hours	CD	xxxxxxxxh					
	DVD	xxxxxxxxh					
1.	00 00 00 00	00	00	00	00	00	00
	00 00 00 00	00	00	00	00	00	00
2.	00 00 00 00	00	00	00	00	00	00
	00 00 00 00	00	00	00	00	00	00
Select: 1 - 9 Scroll: UP/DOWN							
(1: Last EMG.) Exit: Return							

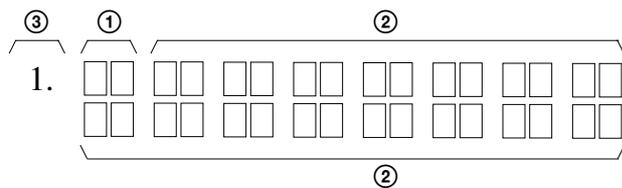
On the Test Mode Menu screen, selecting **[4]** displays the information such as servo emergency history. The history information from last 1 up to 10 can be scrolled with **[↑]** key or **[↓]** key. Also, specific information can be displayed by directly entering that number with ten keys.

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 IC001 (TK board) failed.
- 11: Each servo for focus, tracking, and spindle is unlocked.
- 12: Communication to EEPROM, IC201 (DVD board) failed.
- 13: Writing of hours meter data to EEPROM, IC201 (DVD board) failed.
- 14: Communication to Servo DSP IC701 (DVD 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.

4-8. VERSION INFORMATION

```

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

SYScon.   Ver. x. xxx (xxxx)
          Model    xx
          Region   0x
          SW1      ??
          SW2      ??

Exit: RETURN
    
```

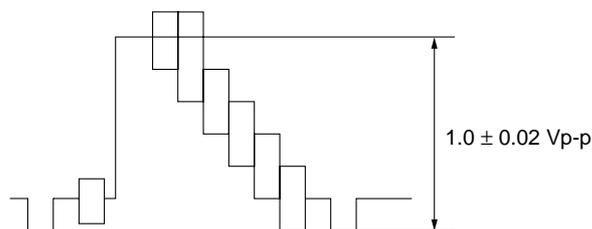
On the Test Mode Menu screen, selecting **[5]** displays the ROM version and region code.

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

4-9. 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 : RV401 on DVD board
- Specified value : 1.0 ± 0.02 V_{pp}



SECTION 5 ELECTRICAL ADJUSTMENTS

In making adjustment, refer to 5-2. Adjustment Related Parts Arrangement.

RE-ADJUSTMENT OF THE SERVO CIRCUIT
 The re-adjustment of the servo circuit is necessary when the part which relates to the servo circuit is replaced.
 Referring to "4-4. DRIVE AUTO ADJUSTMENT" (see page 12), Choose ALL and do the re-adjustment of each item of DVD-SL, CD and DVD-DL.

THE PART THAT THE RE-ADJUSTMENT OF THE SERVO CIRCUIT IS NECESSARY

1. Optical pick-up
2. RF AMP (IC001)
3. DSP IC (IC701)
4. Motor driver IC (IC801,802)
5. EEPROM (IC201)

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
 * RM-SS300 (1-418-838-11)
- 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)

* Use only the designated remote control when adjusting this system component.

5-1. ADJUSTMENT OF VIDEO SYSTEM

1. Video Level Adjustment (DVD 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	RV401
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 RV401 to attain 1.0 ± 0.02 Vp-p.

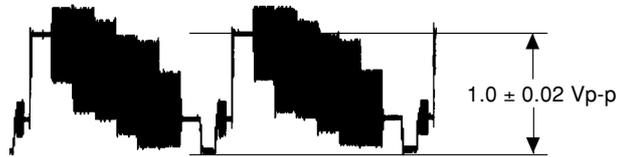


Figure 5-1

2. S-terminal Output Check (DVD 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 5-2

SECTION 6 DIAGRAMS

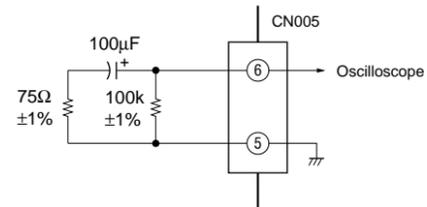
3. Checking S Video Output S-C (DVD BOARD)

<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	CN005 pin ⑥
Instrument	Oscilloscope
Specification	286 ± 50 mVp-p

Connection:



Checking method:

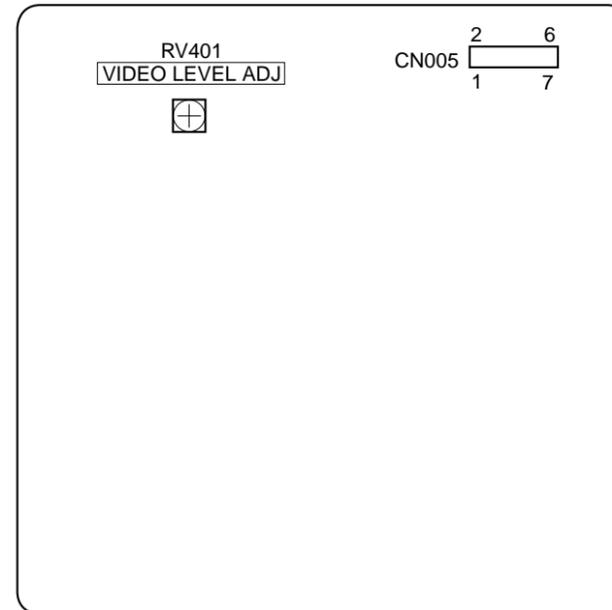
- 1) Confirm that the S-C burst is 286 ± 50 mVp-p.



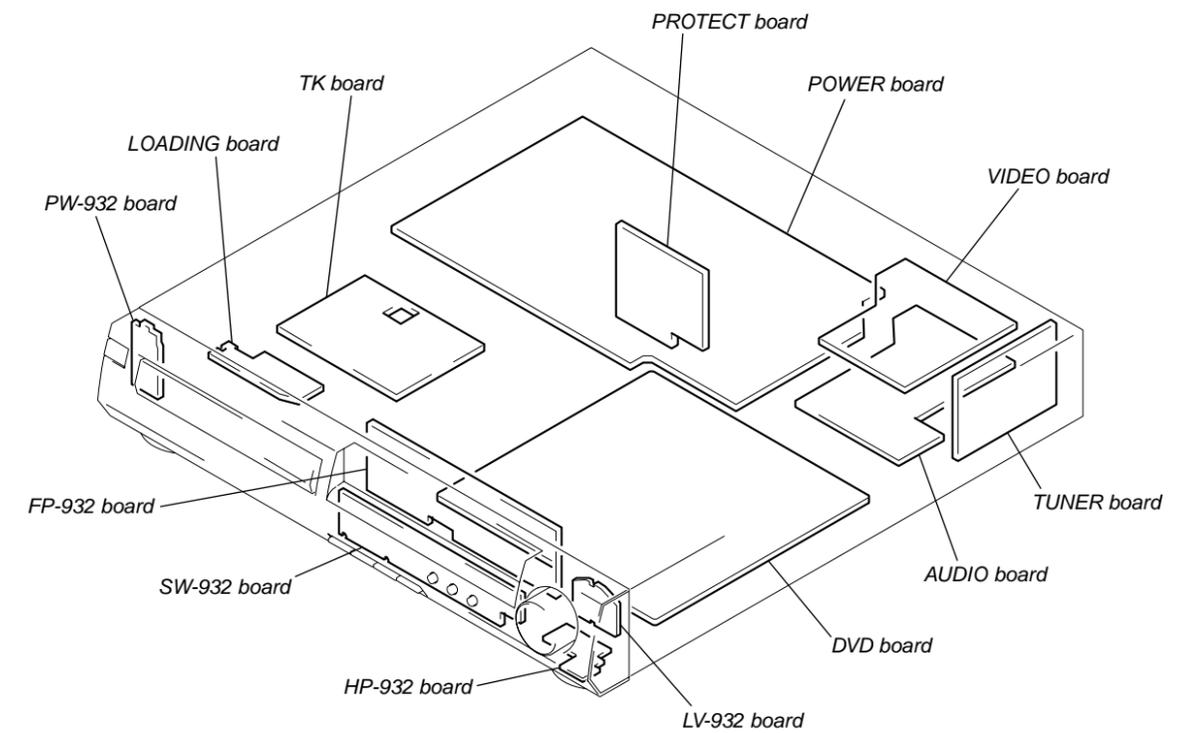
Figure 5-3

5-2. ADJUSTMENT RELATED PARTS ARRANGEMENT

DVD BOARD (SIDE A)



6-1. CIRCUIT BOARDS LOCATION



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

For schematic diagrams.

- Note:**
- All capacitors are in μF unless otherwise noted. pF: μpF
 - 50 WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}W$ or less unless otherwise specified.
 - Δ : internal component.
 -  : nonflammable resistor.
 -  : fusible resistor.
 -  : panel designation.

以阴影和 Δ 标志来识别的零部件在安全方面具有关键性。因此只能以规定号码的零部件来更换。

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

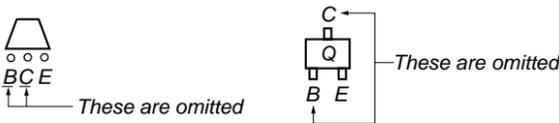
Note:
 Les composants identifiés par une marque Δ sont critiques pour la sécurité.
 Ne les remplacer que par une pièce portant le numéro spécifié.

-  : B+ Line.
-  : B- Line.
-  : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages and waveforms are dc with respect to ground in service mode.
- Waveforms are taken with a oscilloscope.
 Voltage variations may be noted due to normal production tolerances.
 no mark : STOP
- Circled numbers refer to waveforms.
- Signal path.
 : DVD/CD
 : AUDIO
 : VIDEO
 : C
 : Y
- Abbreviation
 SP : Singapore model.
 HK : Hong Kong model.
 AUS : Australian model.
 MX : Mexican model.
 CND : Canadian model.
 E32 : Cantral & South America model.

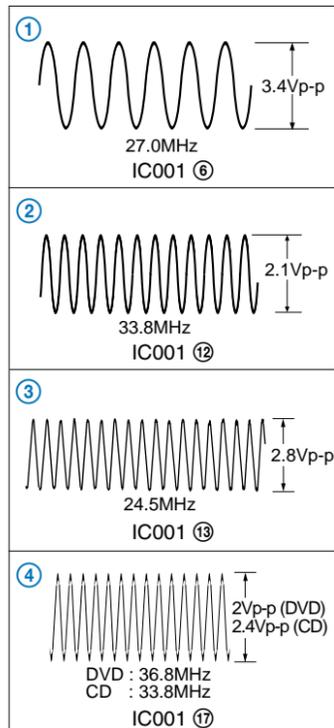
For printed wiring boards.

- Note:**
-  : parts extracted from the component side.
 -  : Through hole.
 -  : Pattern from the side which enables seeing.
 (The other layers' patterns are not indicated.)

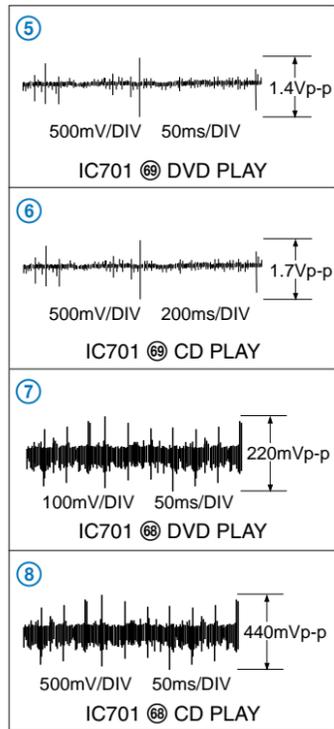
Indication of transistor



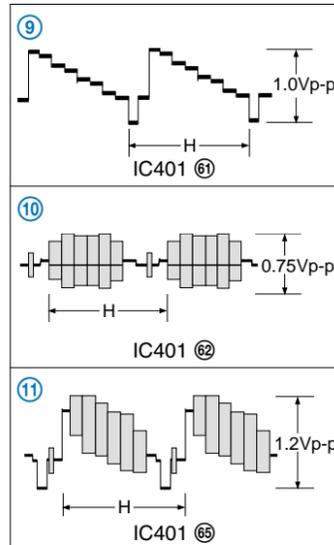
WAVEFORMS
 - DVD (1/12) SECTION -



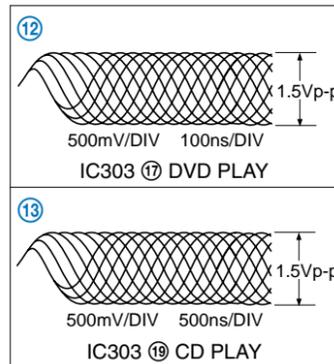
- DVD (2/12) SECTION -



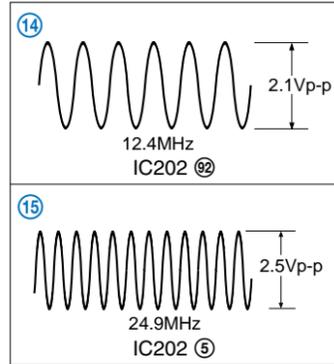
- DVD (4/12) SECTION -



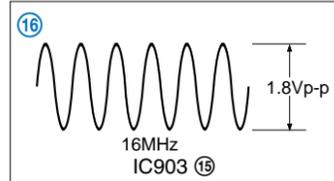
- DVD (5/12) SECTION -



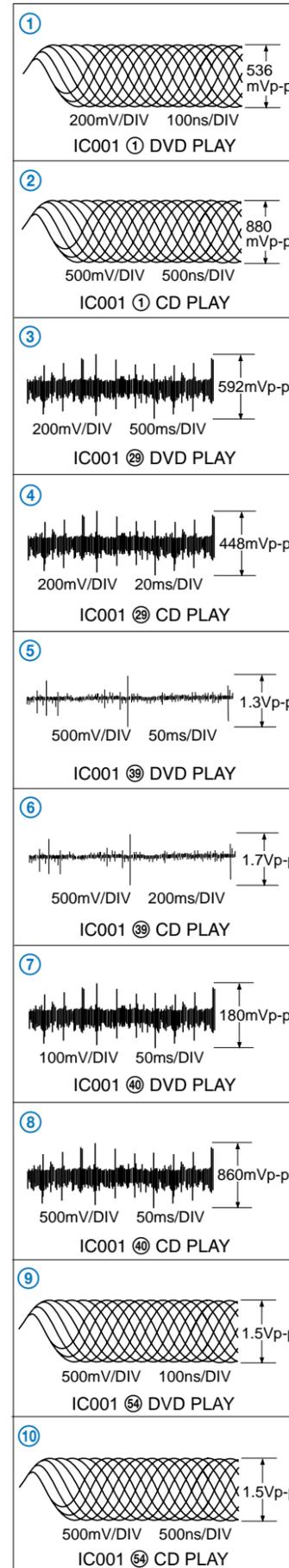
- DVD (8/12) SECTION -



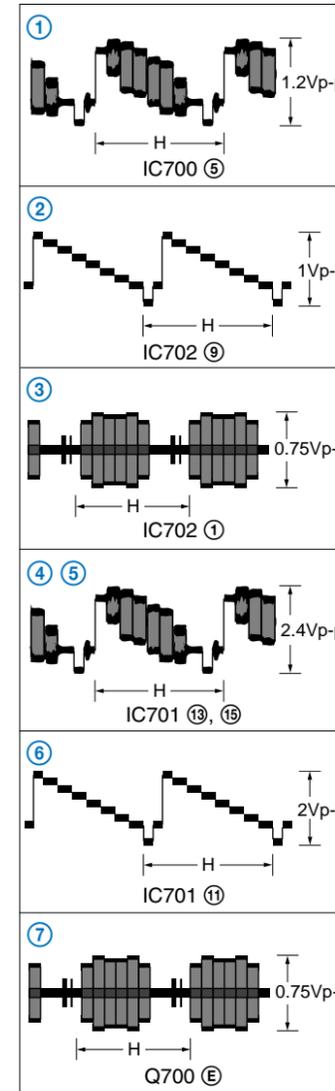
- DVD (10/12) SECTION -



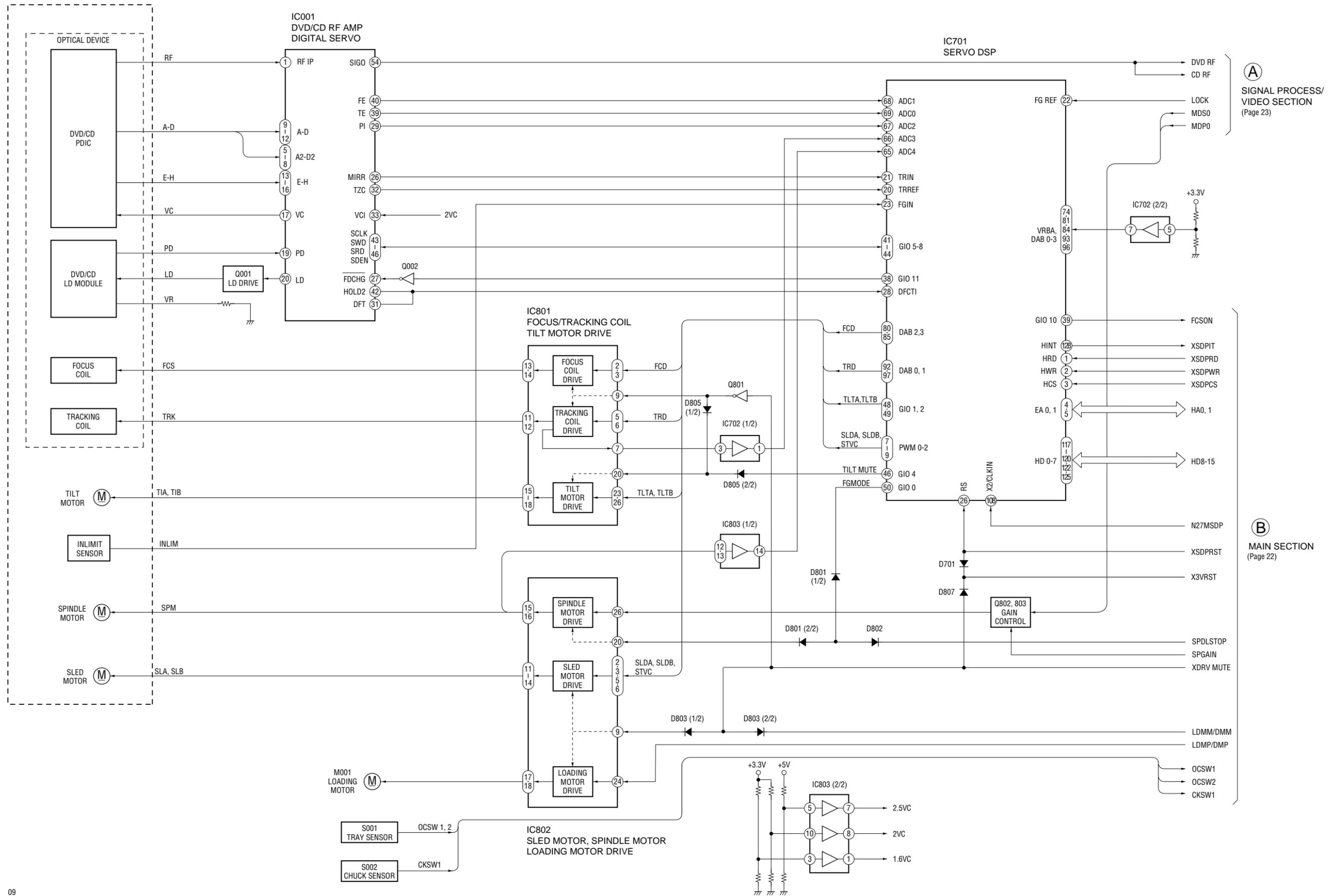
- TK SECTION -



- VIDEO SECTION -



6-2. BLOCK DIAGRAMS
- RF/SERVO SECTION -



A SIGNAL PROCESS/
VIDEO SECTION
(Page 23)

B MAIN SECTION
(Page 22)

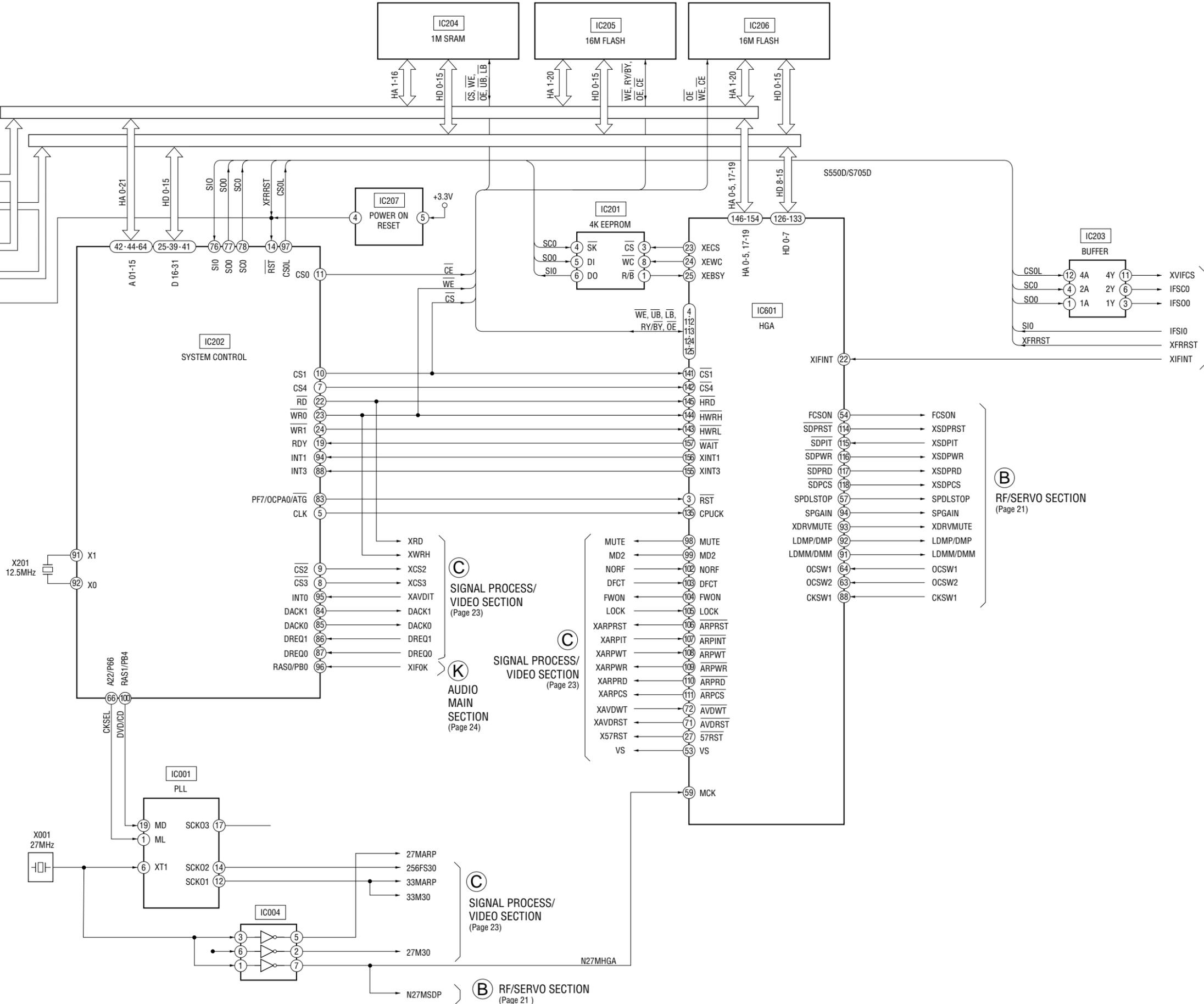
- MAIN SECTION -

C SIGNAL PROCESS/ VIDEO SECTION (Page 23)

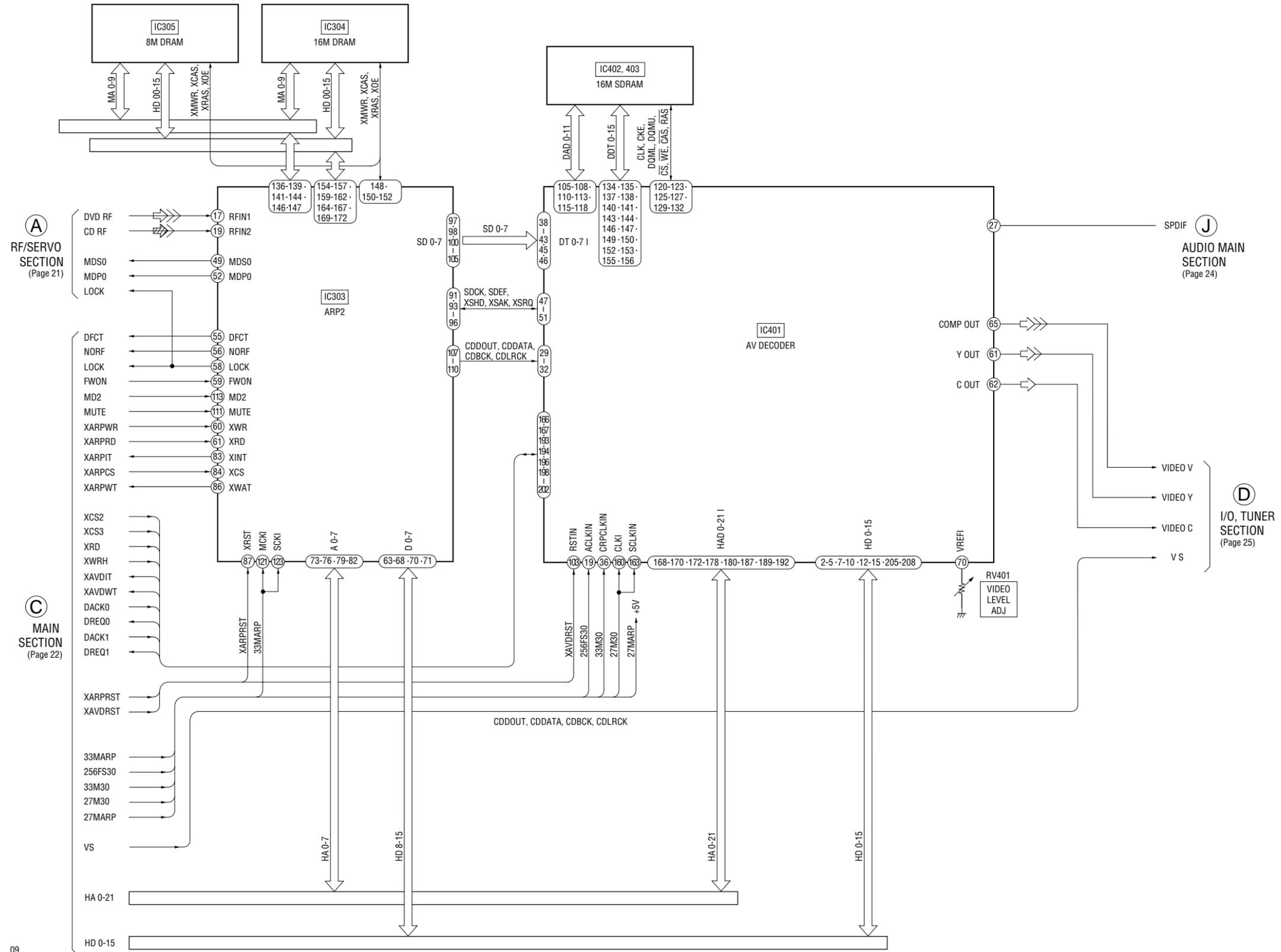
B RF/SERVO SECTION (Page 21)

E AUDIO MAIN SECTION (Page 24)

B RF/SERVO SECTION (Page 21)

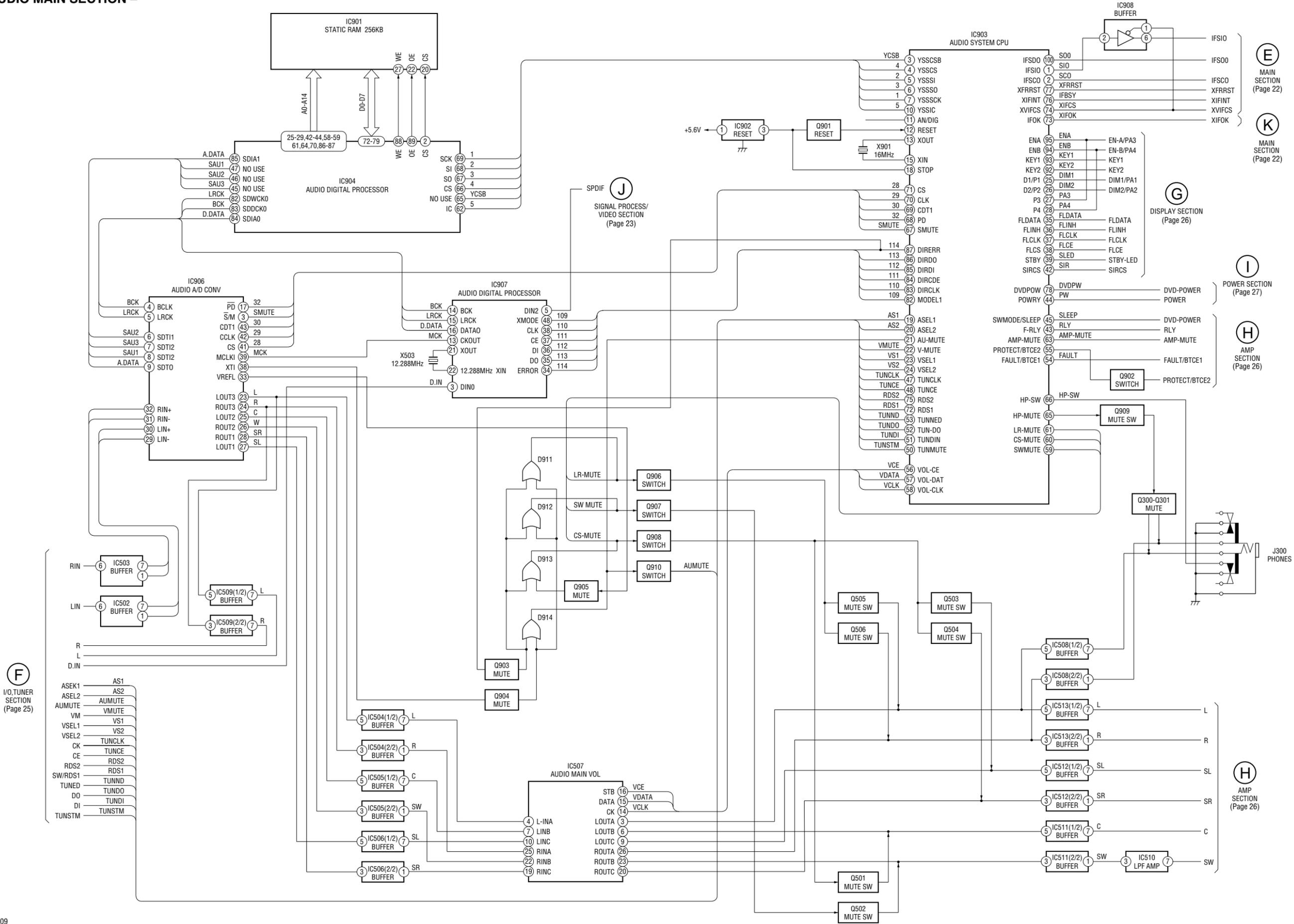


- SIGNAL PROCESS/VIDEO SECTION -



09

- AUDIO MAIN SECTION -



F I/O, TUNER SECTION (Page 25)

E MAIN SECTION (Page 22)

K MAIN SECTION (Page 22)

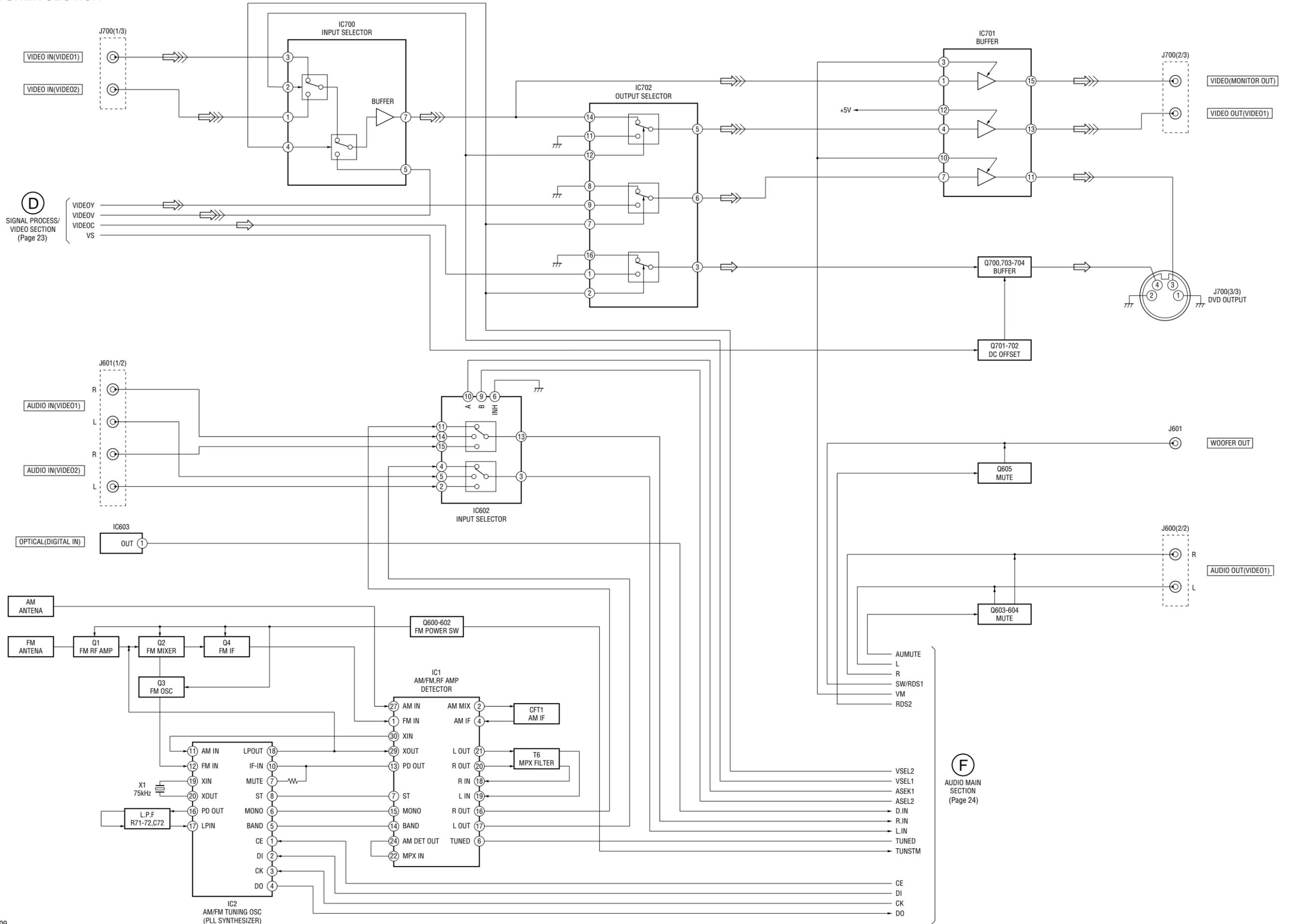
G DISPLAY SECTION (Page 26)

I POWER SECTION (Page 27)

H AMP SECTION (Page 26)

H AMP SECTION (Page 26)

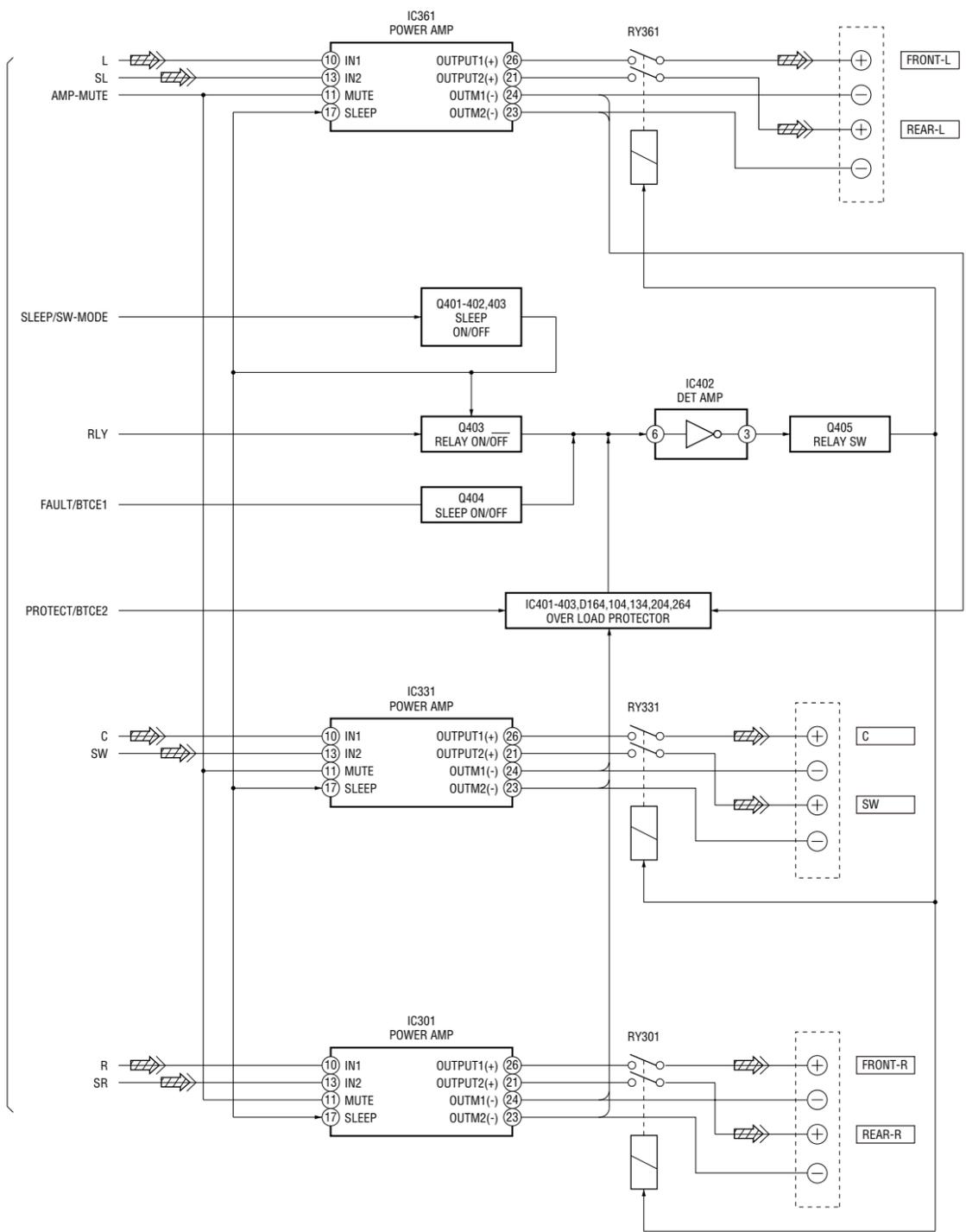
- I/O, TUNER SECTION -



(D) SIGNAL PROCESS/ VIDEO SECTION (Page 23)

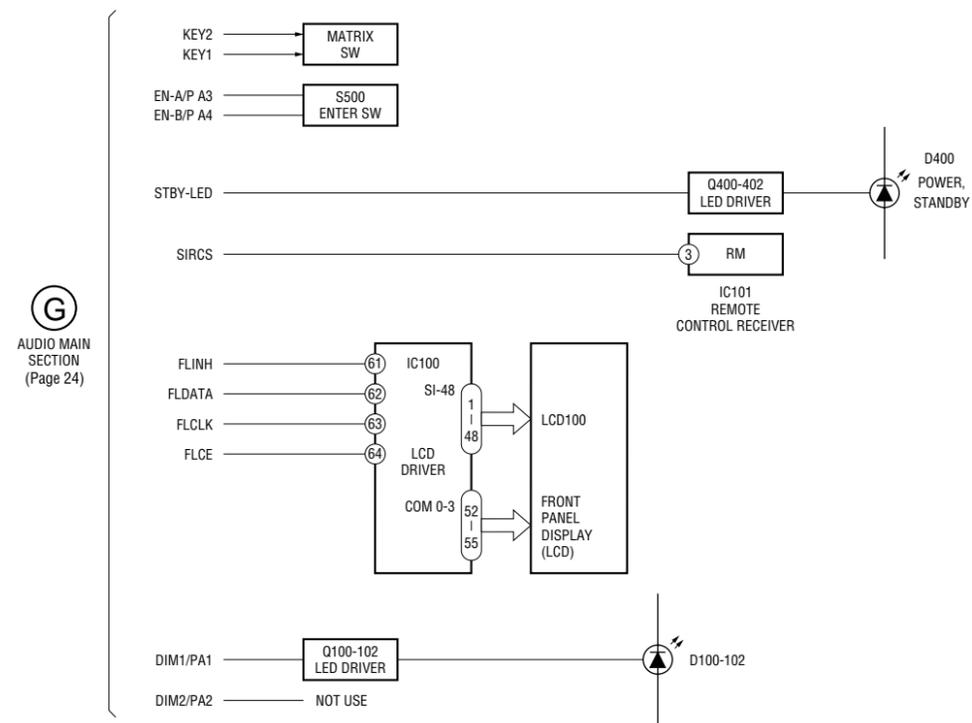
(F) AUDIO MAIN SECTION (Page 24)

- AMP SECTION -



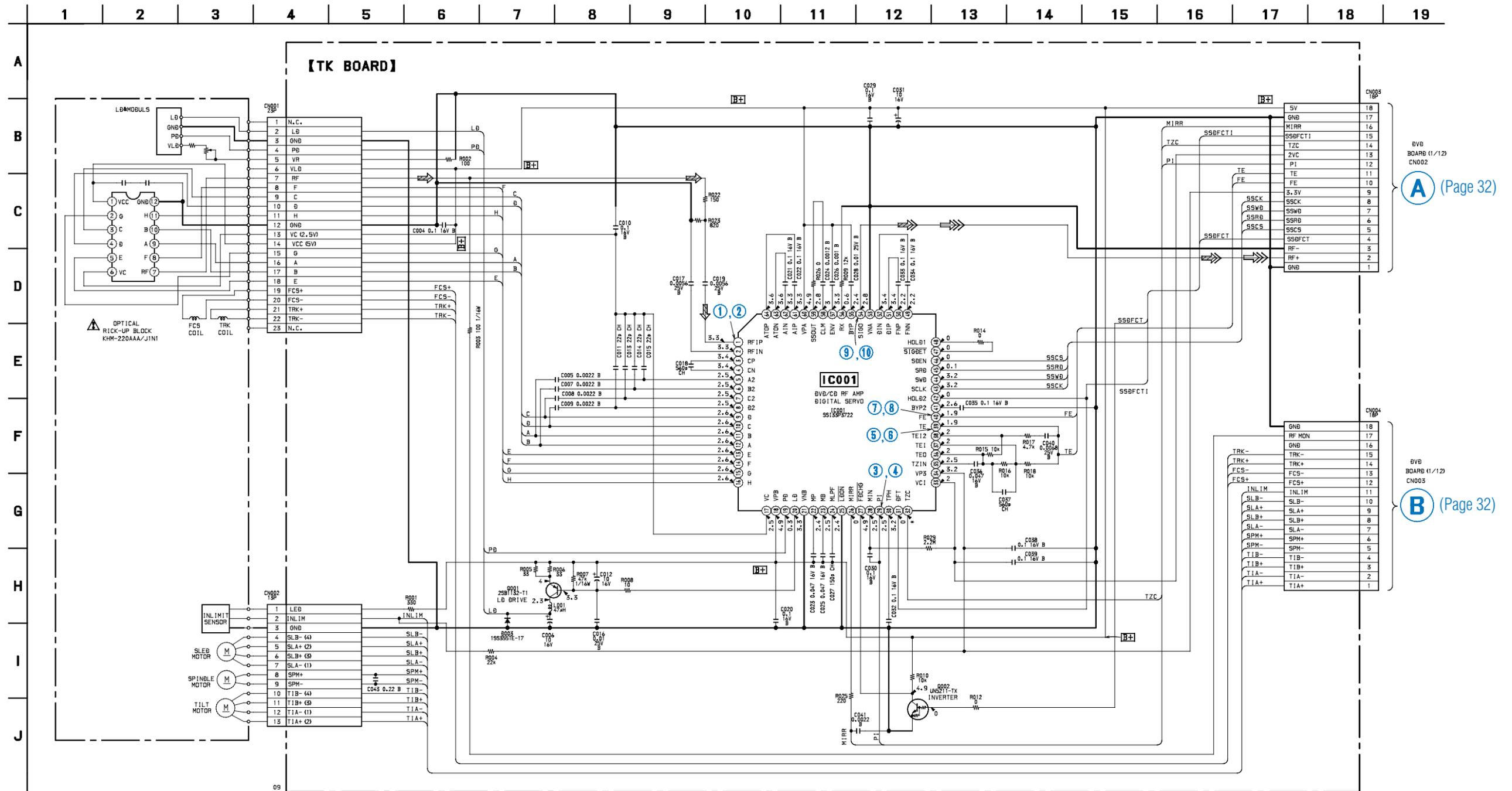
(H)
AUDIO MAIN
SECTION
(Page 24)

- DISPLAY SECTION -



(G)
AUDIO MAIN
SECTION
(Page 24)

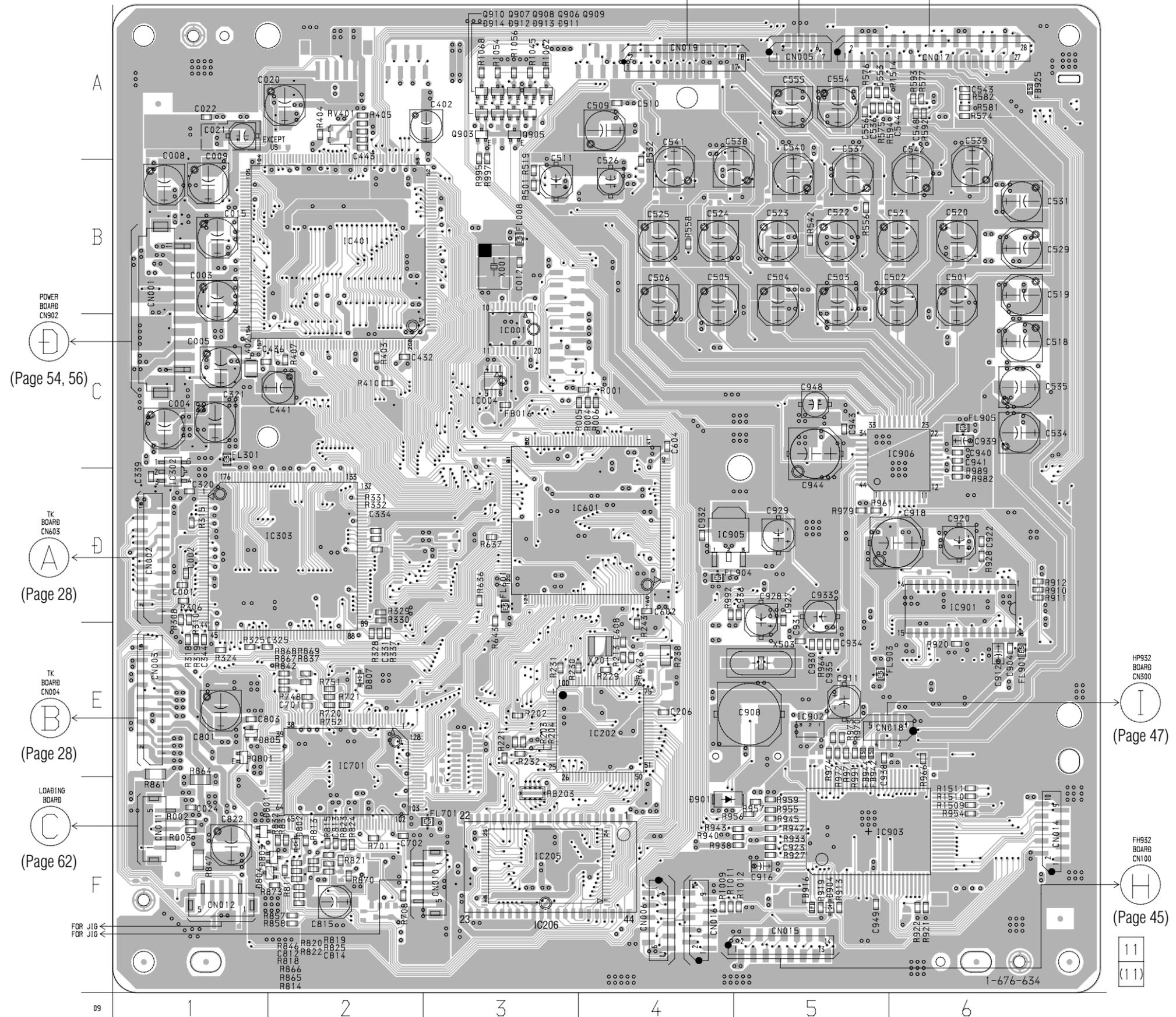
6-4. SCHEMATIC DIAGRAM – TK SECTION –
 • See page 20 for Waveforms.



6-5. PRINTED WIRING BOARD – DVD SECTION –
• See page 19 for Circuit Boards Location.

【DVD BOARD】(SIDE A)

(Page 54, 56) (Page 51) (Page 51)



• Semiconductor Location

Ref. No.	Location
D801	F-1
D802	F-2
D803	F-1
D804	F-1
D805	E-1
D807	E-2
D901	F-4
D904	F-5
D911	A-3
D912	A-3
D913	A-3
D914	A-3
IC001	C-3
IC004	C-3
IC202	E-4
IC205	F-3
IC206	F-3
IC302	D-1
IC303	D-2
IC401	B-2
IC601	D-3
IC701	E-2
IC901	D-6
IC902	E-5
IC903	F-5
IC905	D-4
IC906	C-6
Q801	E-1
Q903	A-3
Q905	A-3
Q906	A-3
Q907	A-3
Q908	A-3
Q909	A-3
Q910	A-3

• IC206 is repair parts of IC205

09

1

2

3

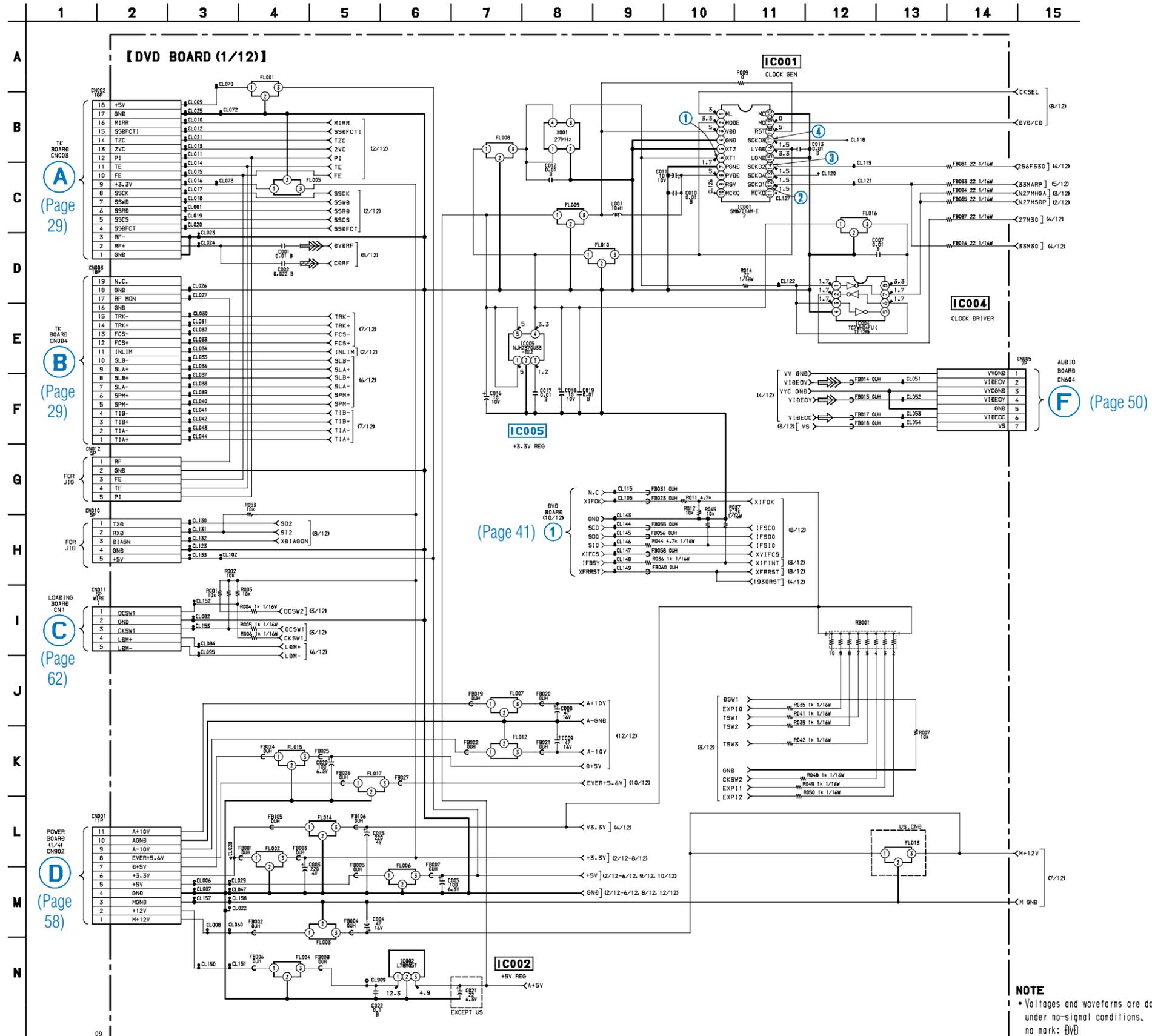
4

5

6

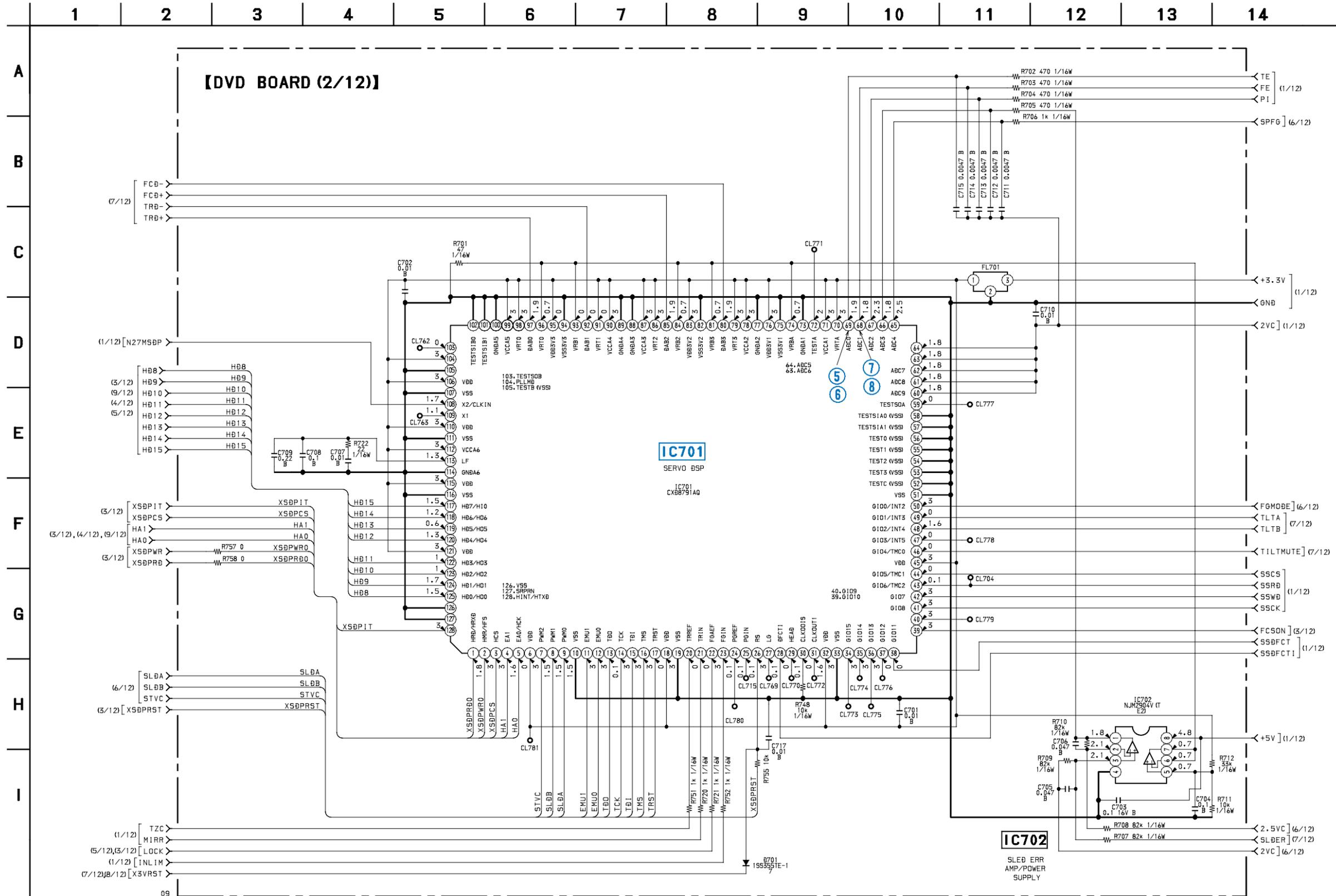
6-6. SCHEMATIC DIAGRAM – DVD (1/12) SECTION –

- See page 20 for Waveforms.
- See page 30 for Printed Wiring Board.
- See page 63 for IC Block Diagrams.



6-7. SCHEMATIC DIAGRAM – DVD (2/12) SECTION –

- See page 20 for Waveforms.
- See page 30 for Printed Wiring Board.
- See page 65 for IC Block Diagrams.

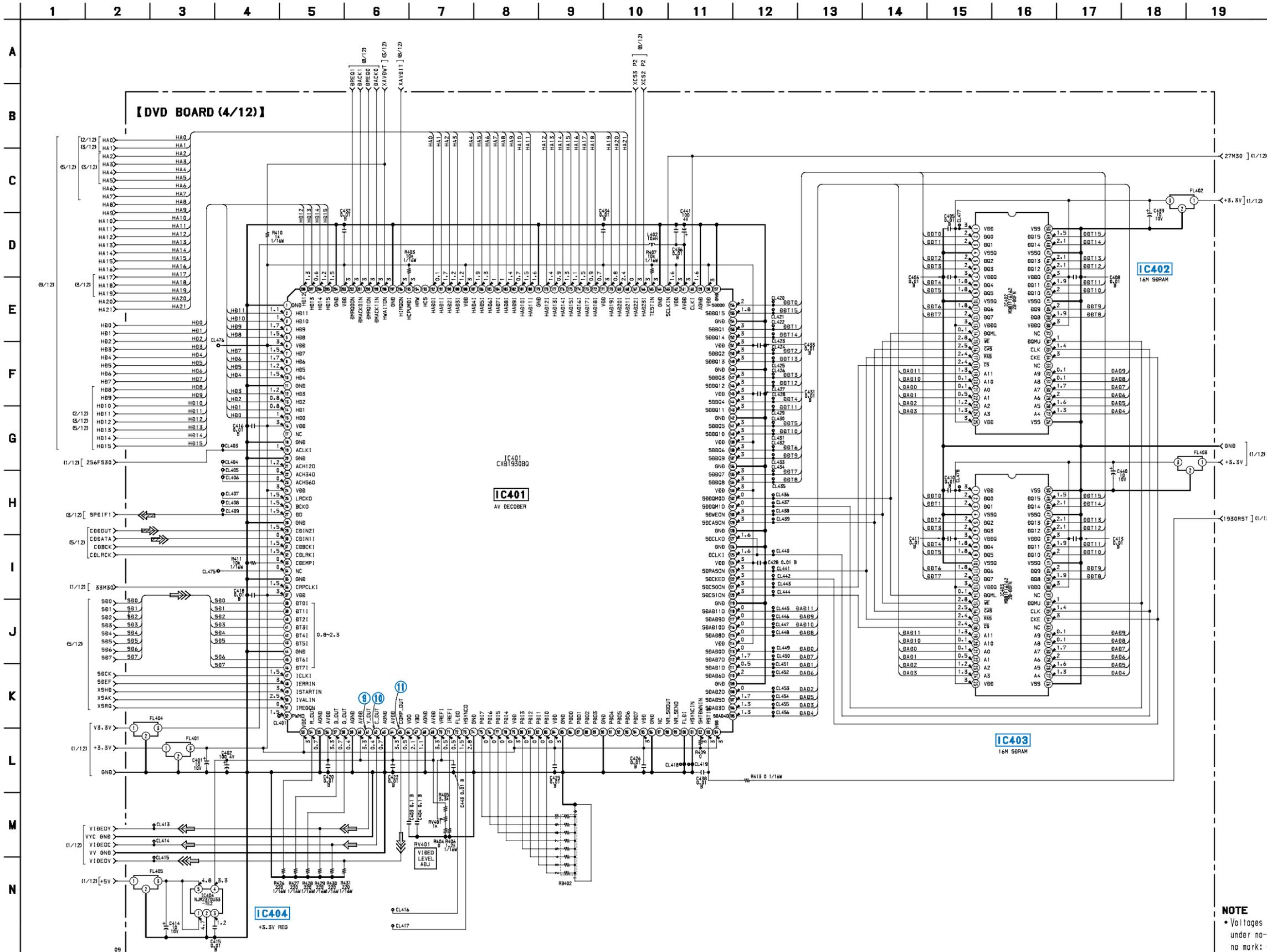


NOTE

• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark: DVD

6-9. SCHEMATIC DIAGRAM – DVD (4/12) SECTION –

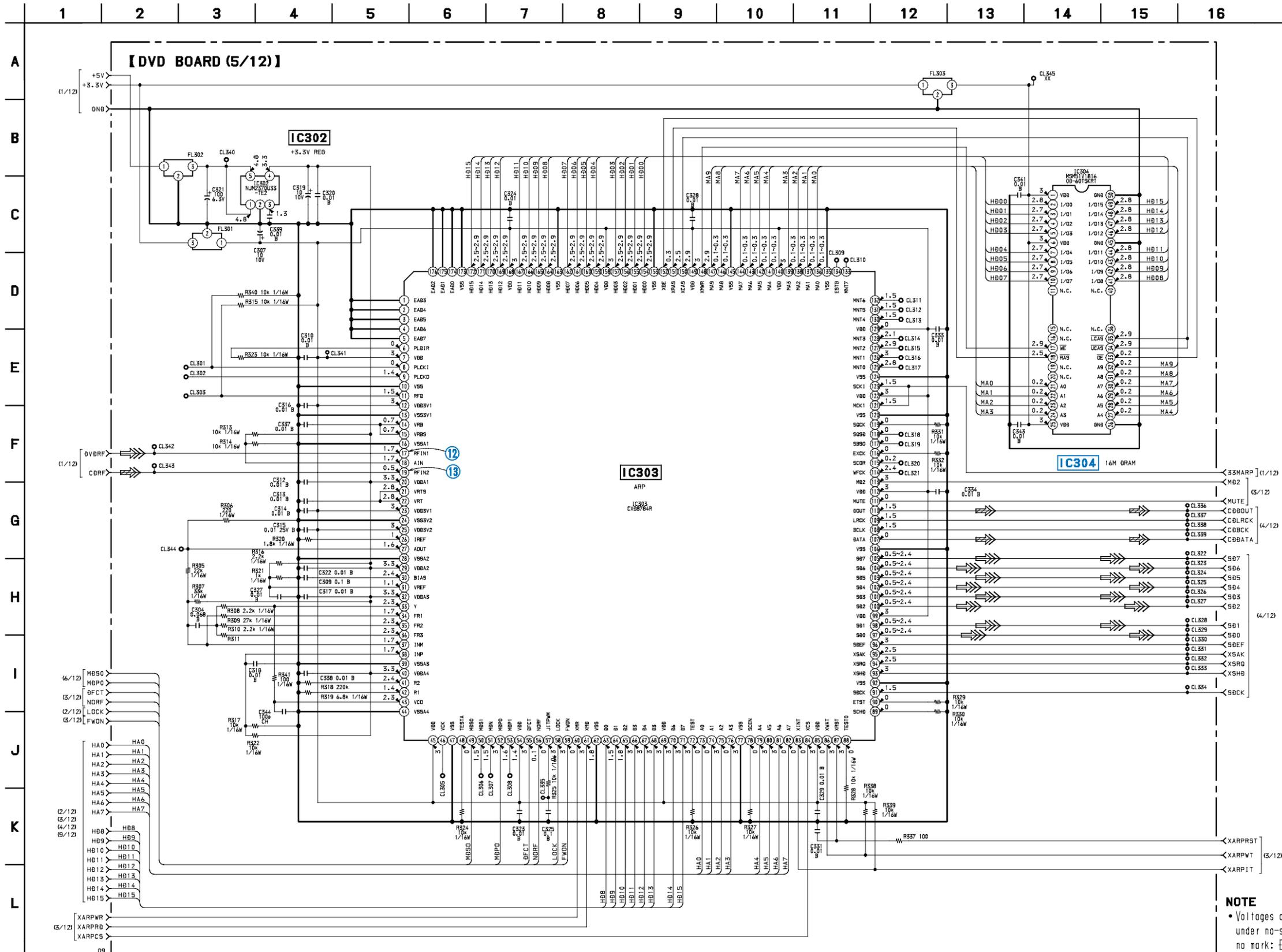
- See page 20 for Waveforms.
- See page 30 for Printed Wiring Board.
- See page 63, 64 for IC Block Diagrams.



NOTE
 • Voltages and waveforms are dc with respect to ground under no-signal conditions.
 no mark: 0V

6-10. SCHEMATIC DIAGRAM – DVD (5/12) SECTION –

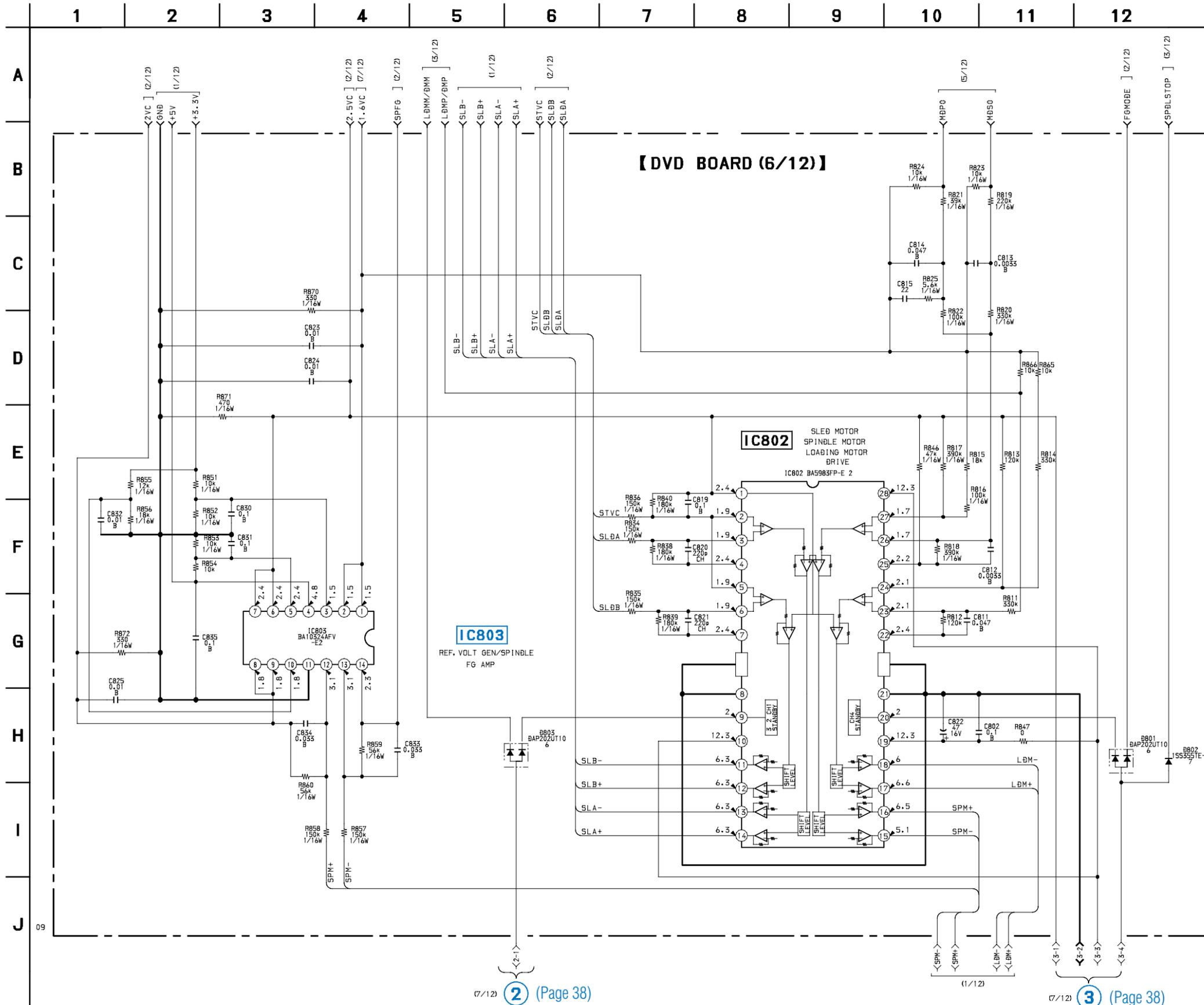
- See page 20 for Waveforms.
- See page 30 for Printed Wiring Board.
- See page 64 for IC Block Diagrams.



NOTE
• Voltages and waveforms are dc with respect to ground under no-signal conditions. no mark: EVD

6-11. SCHEMATIC DIAGRAM – DVD (6/12) SECTION –

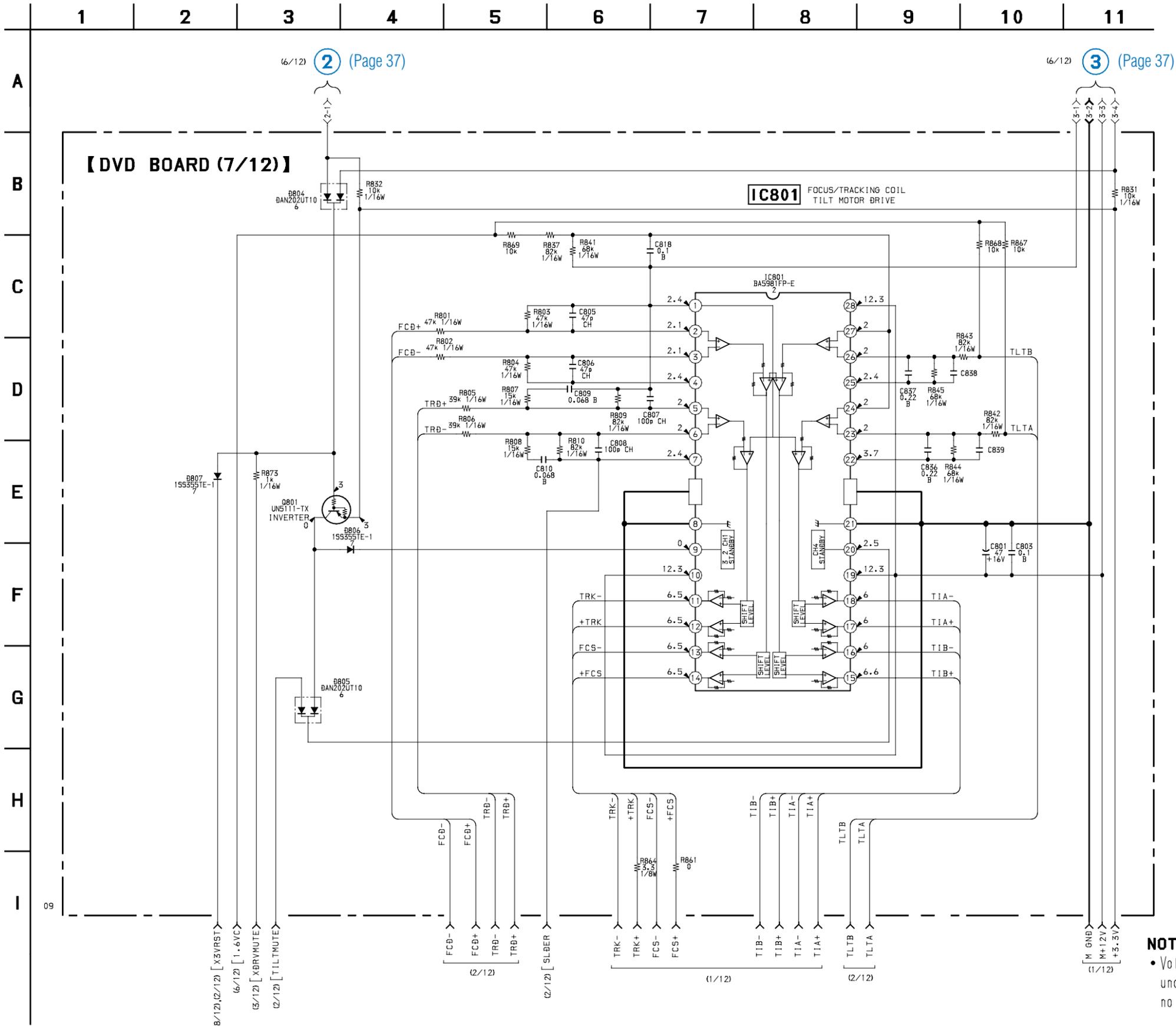
- See page 20 for Waveforms.
- See page 30 for Printed Wiring Board.
- See page 65 for IC Block Diagrams.



NOTE
 • Voltages and waveforms are dc with respect to ground under no-signal conditions.
 no mark: DVD

6-12. SCHEMATIC DIAGRAM – DVD (7/12) SECTION –

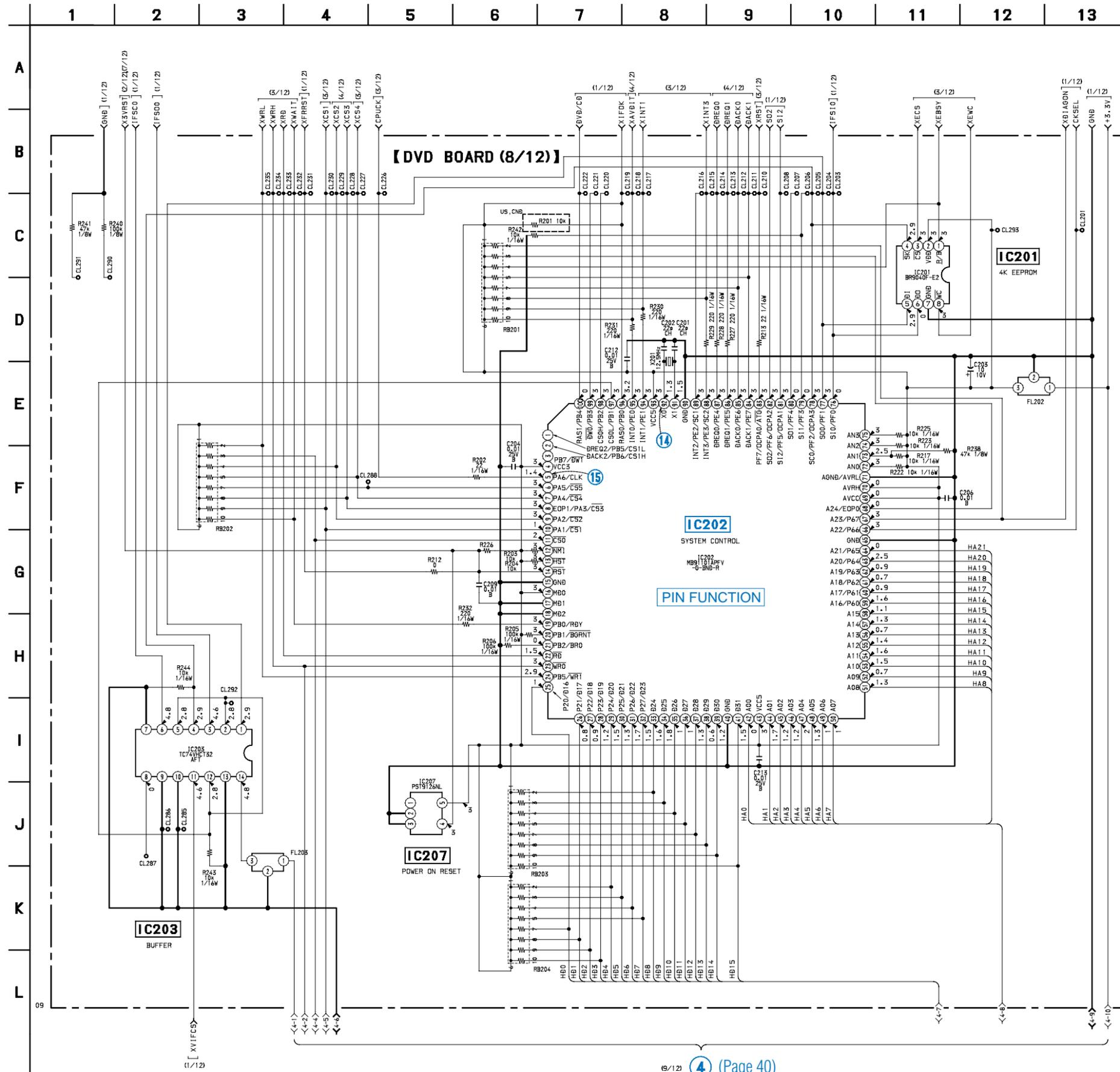
- See page 20 for Waveforms.
- See page 30 for Printed Wiring Board.



NOTE
 • Voltages and waveforms are dc with respect to ground under no-signal conditions.
 no mark: DVD

6-13. SCHEMATIC DIAGRAM – DVD (8/12) SECTION –

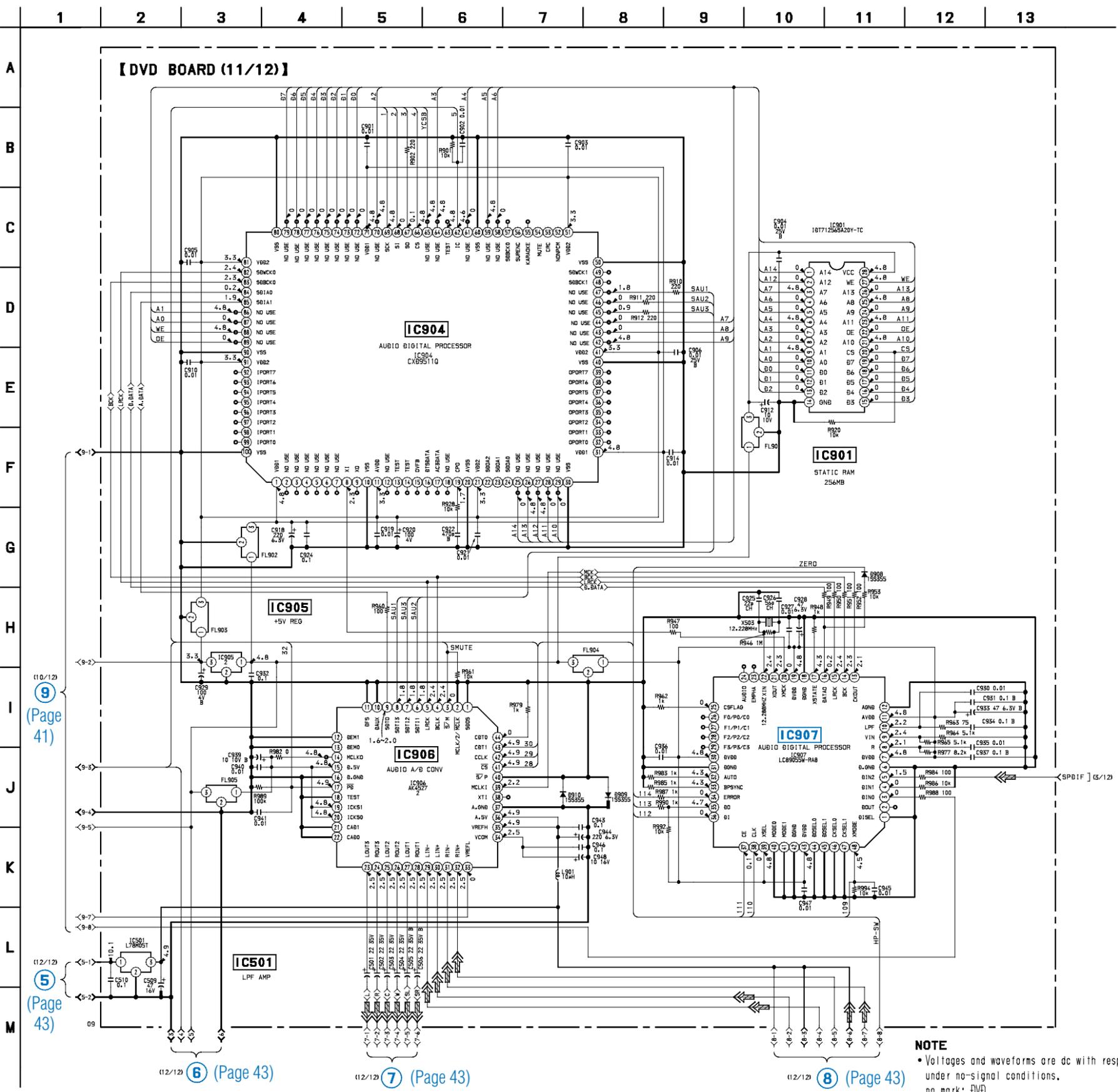
- See page 20 for Waveforms.
- See page 30 for Printed Wiring Board.
- See page 63 for IC Block Diagrams.
- See page 67 for IC Pin Functions.



NOTE
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark: DVD

6-16. SCHEMATIC DIAGRAM – DVD (11/12) SECTION –

- See page 20 for Waveforms.
- See page 30, 31 for Printed Wiring Board.
- See page 66 for IC Block Diagrams.



(11/12) 9 (Page 41)

(12/12) 5 (Page 43)

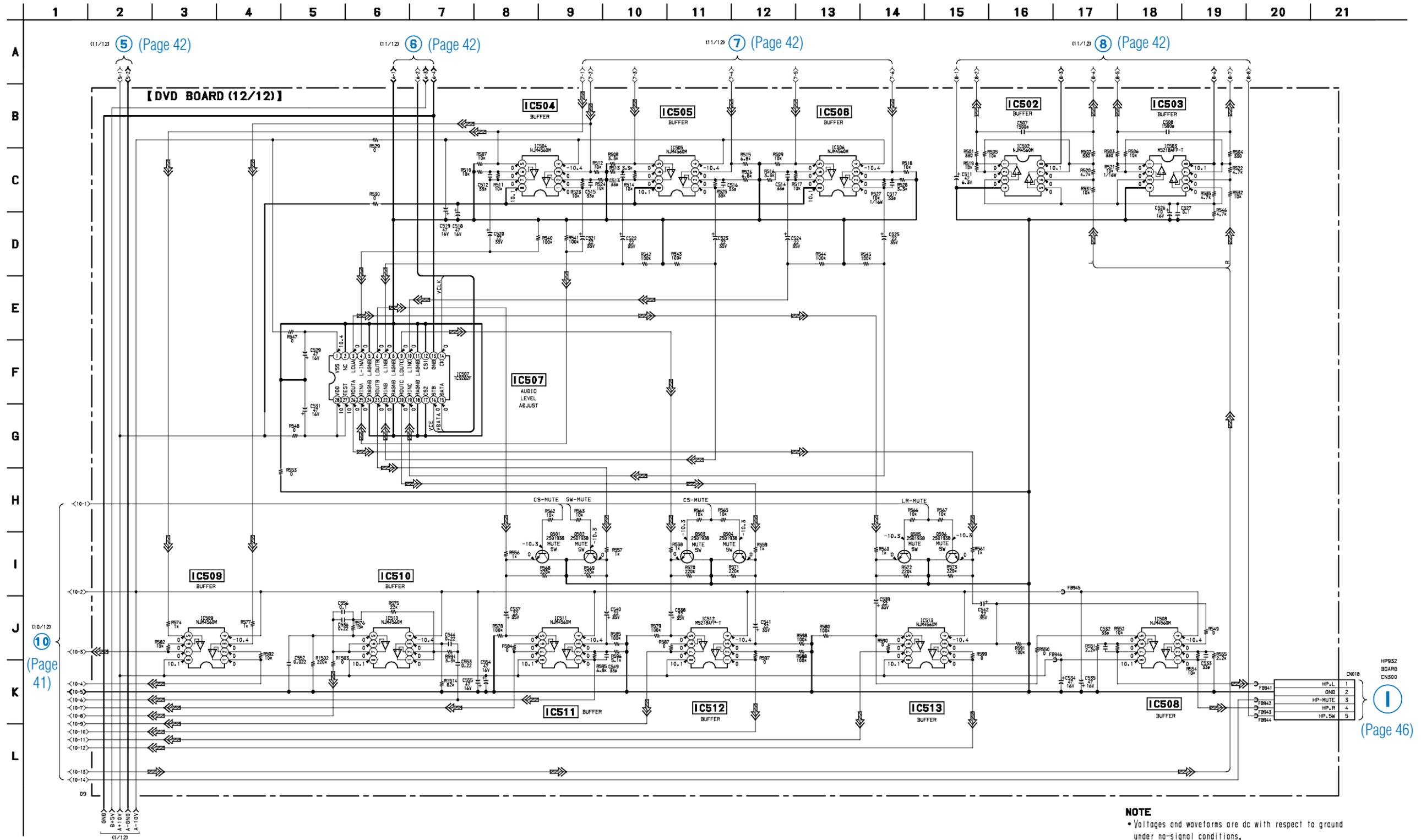
(12/12) 6 (Page 43)

(12/12) 7 (Page 43)

(12/12) 8 (Page 43)

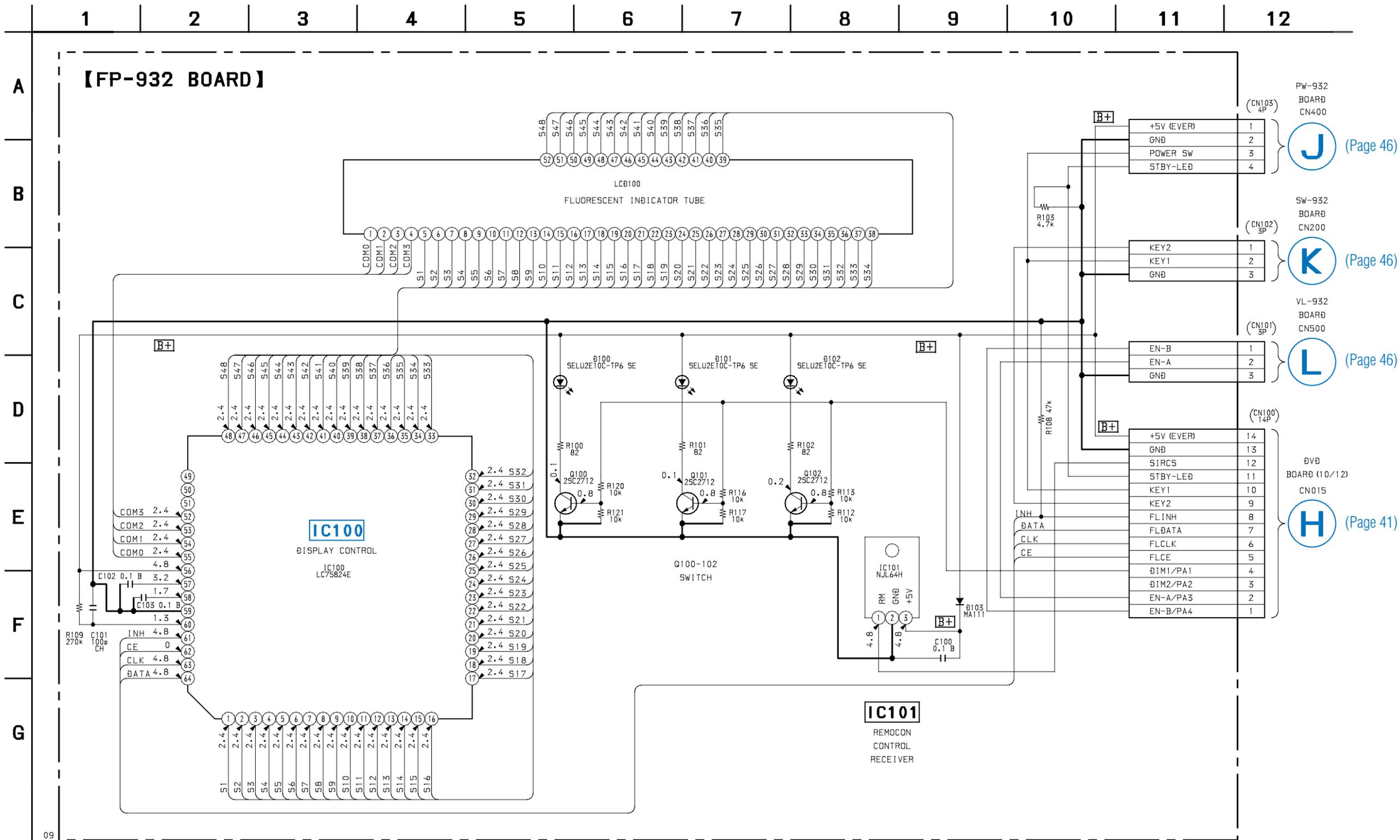
6-17. SCHEMATIC DIAGRAM – DVD (12/12) SECTION –

- See page 20 for Waveforms.
- See page 31 for Printed Wiring Board.



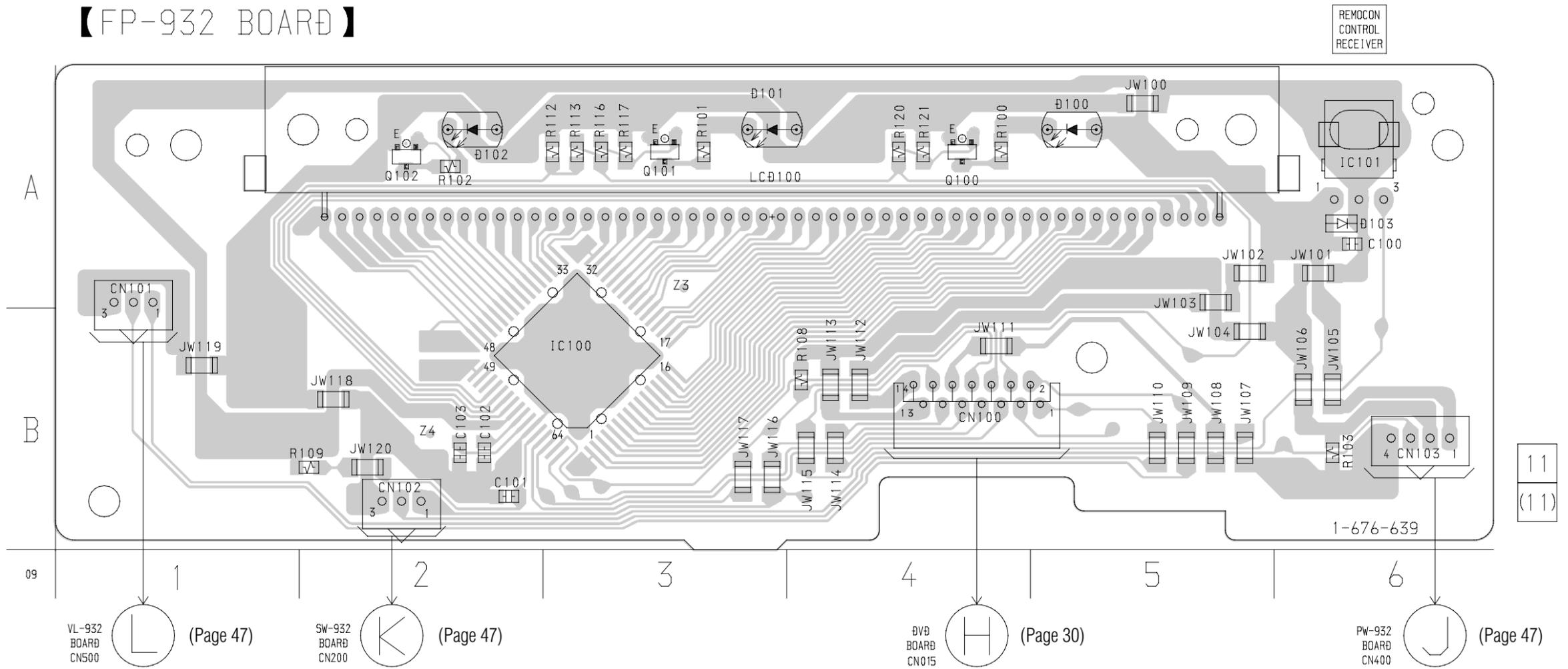
6-18. SCHEMATIC DIAGRAM – FRONT (1/2) SECTION –

- See page 20 for Waveforms.
- See page 66 for IC Block Diagrams.

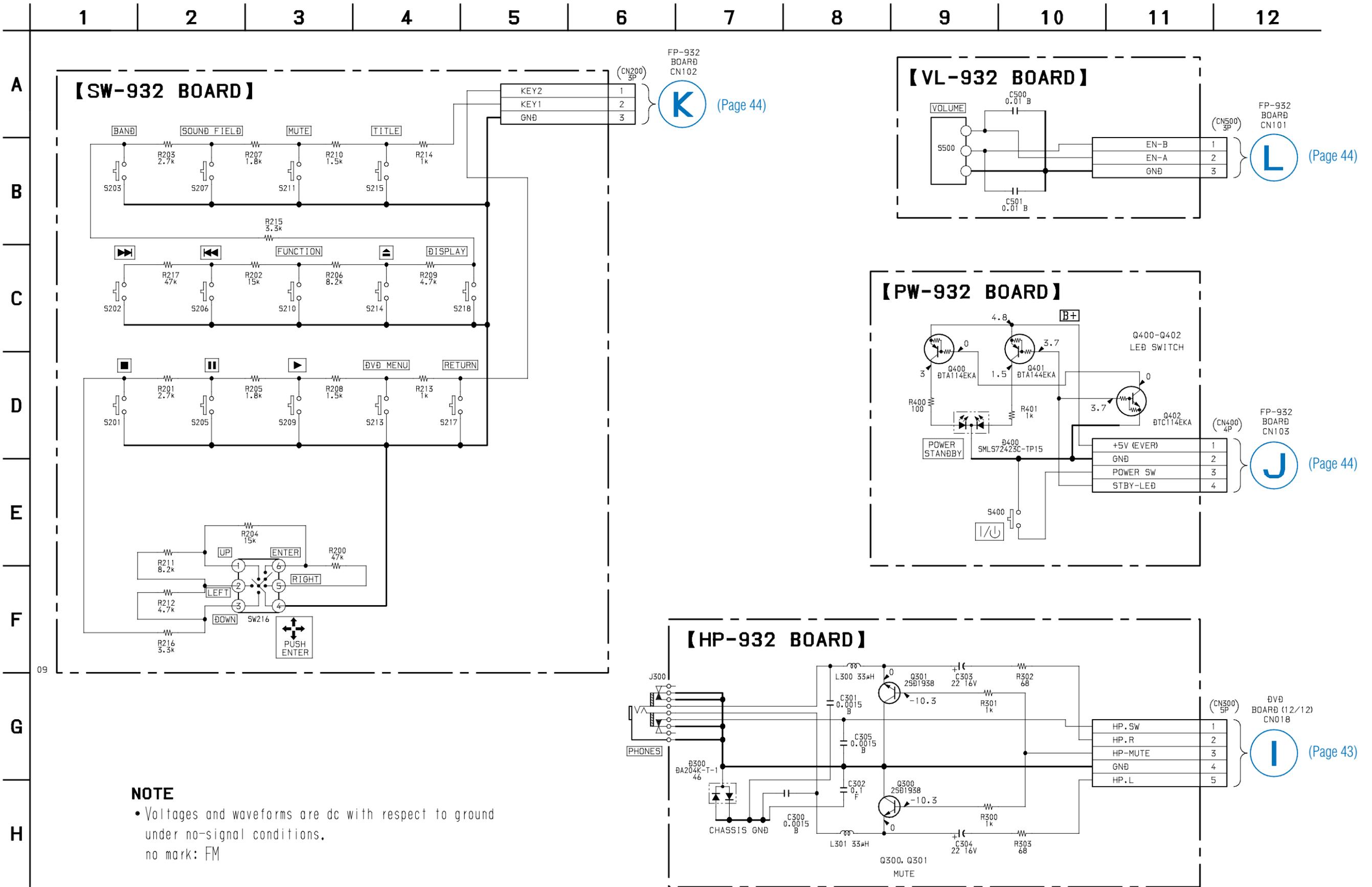


NOTE
 • Voltages and waveforms are dc with respect to ground under no-signal conditions.
 no mark: FM

6-19. PRINTED WIRING BOARD – FRONT (1/2) SECTION –
 • See page 19 for Circuit Boards Location.



6-20. SCHEMATIC DIAGRAM – FRONT (2/2) SECTION –
 • See page 20 for Waveforms.



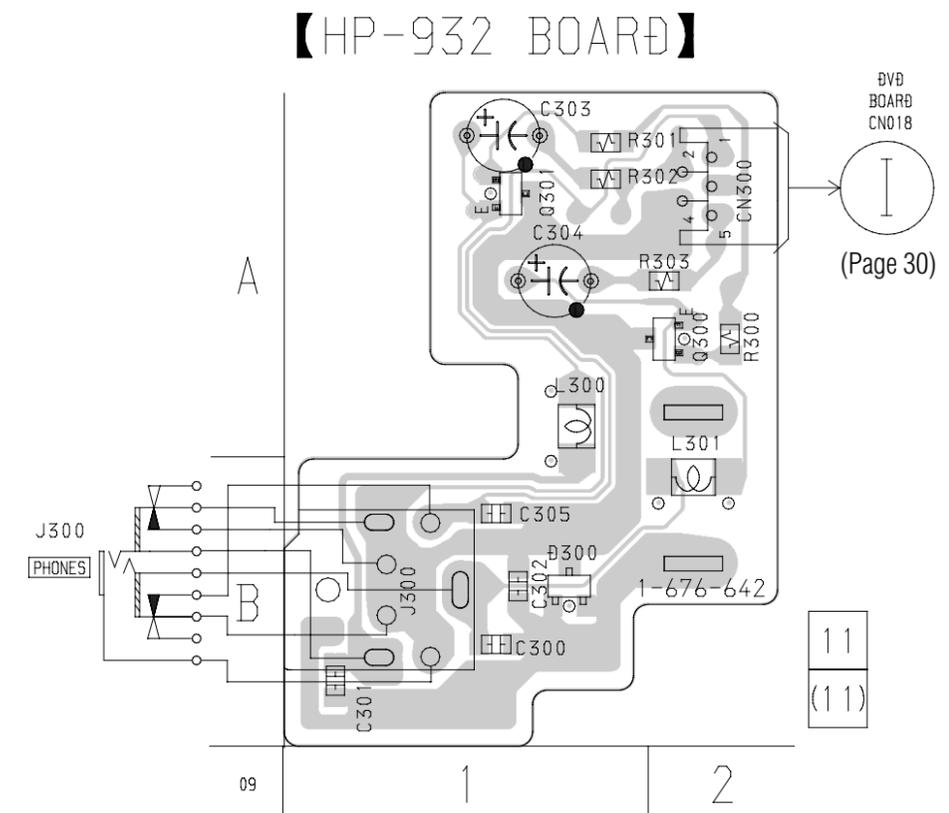
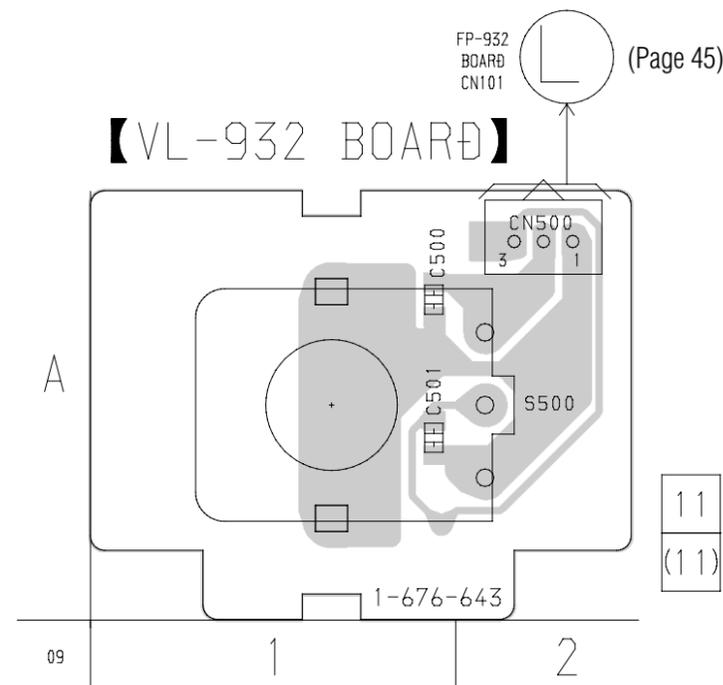
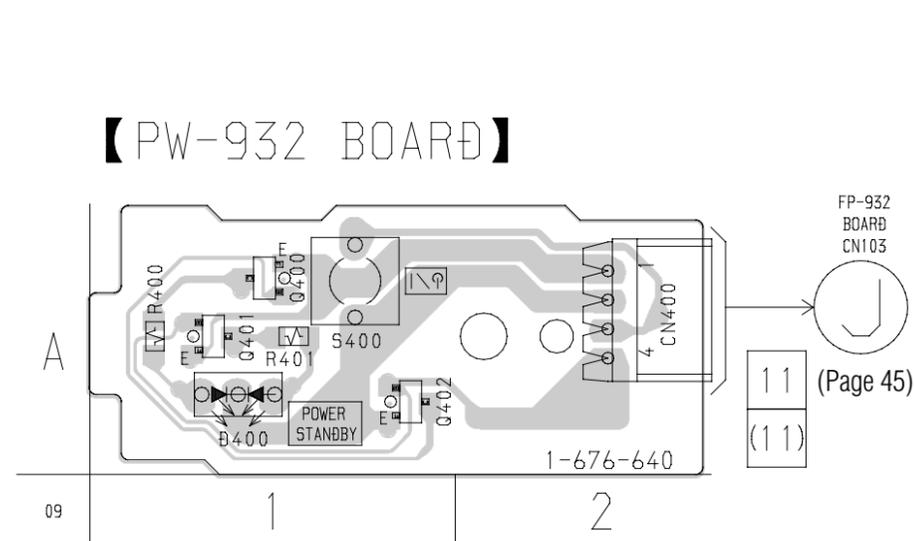
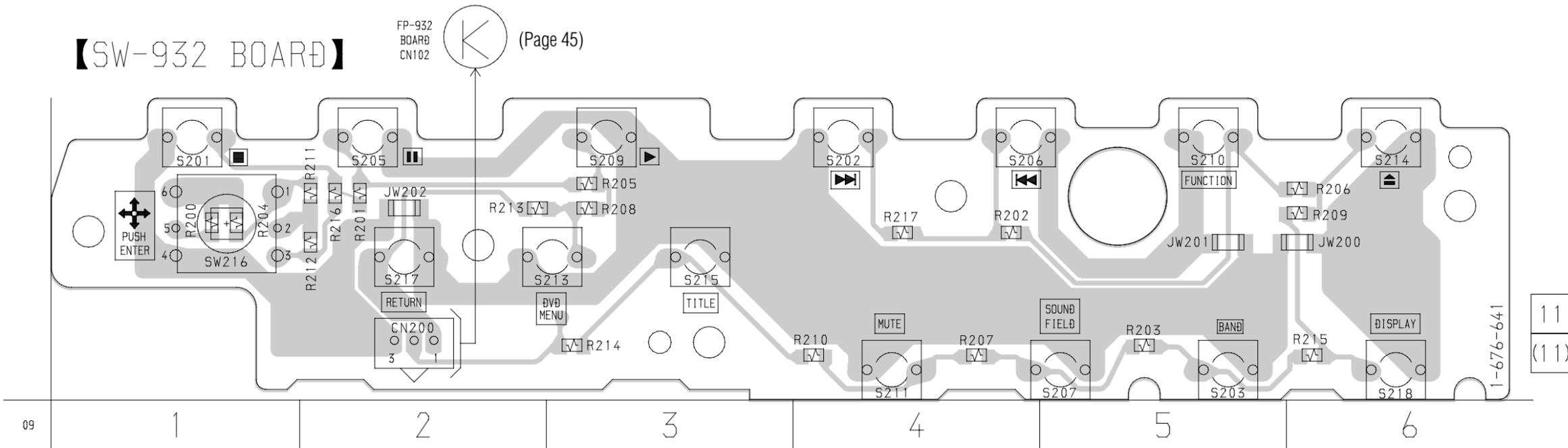
(CN200) 3P
 KEY2 1
 KEY1 2
 GND 3
K (Page 44)

(CN500) 3P
 EN-B 1
 EN-A 2
 GND 3
L (Page 44)

(CN400) 4P
 +5V (EVER) 1
 GND 2
 POWER SW 3
 STBY-LED 4
J (Page 44)

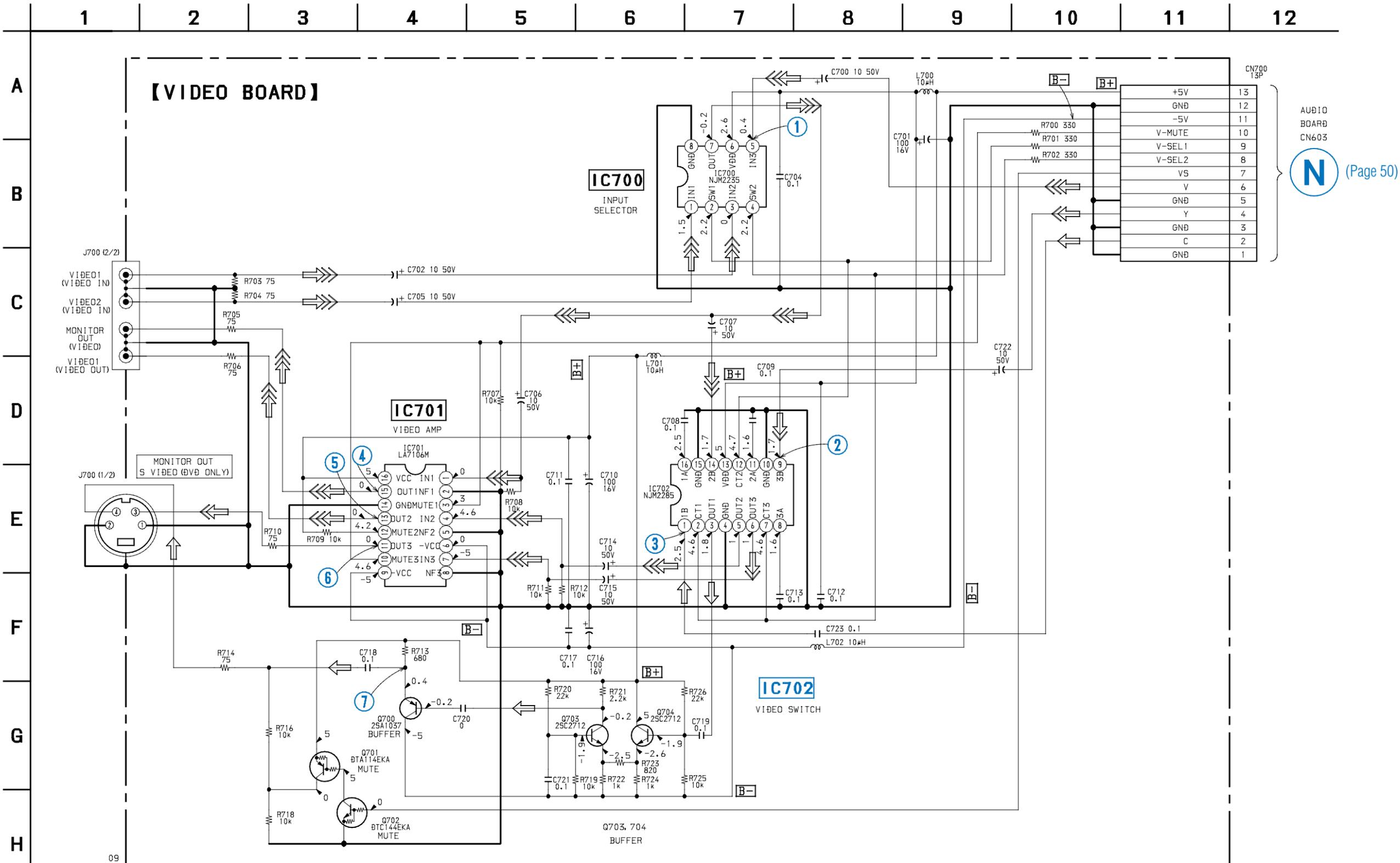
(CN500) 5P
 HP. SW 1
 HP. R 2
 HP-MUTE 3
 GND 4
 HP. L 5
I (Page 43)

6-21. PRINTED WIRING BOARD – FRONT (2/2) SECTION –
 • See page 19 for Circuit Boards Location.



6-22. SCHEMATIC DIAGRAM – VIDEO SECTION –

- See page 20 for Waveforms.
- See page 66 for IC Block Diagrams.



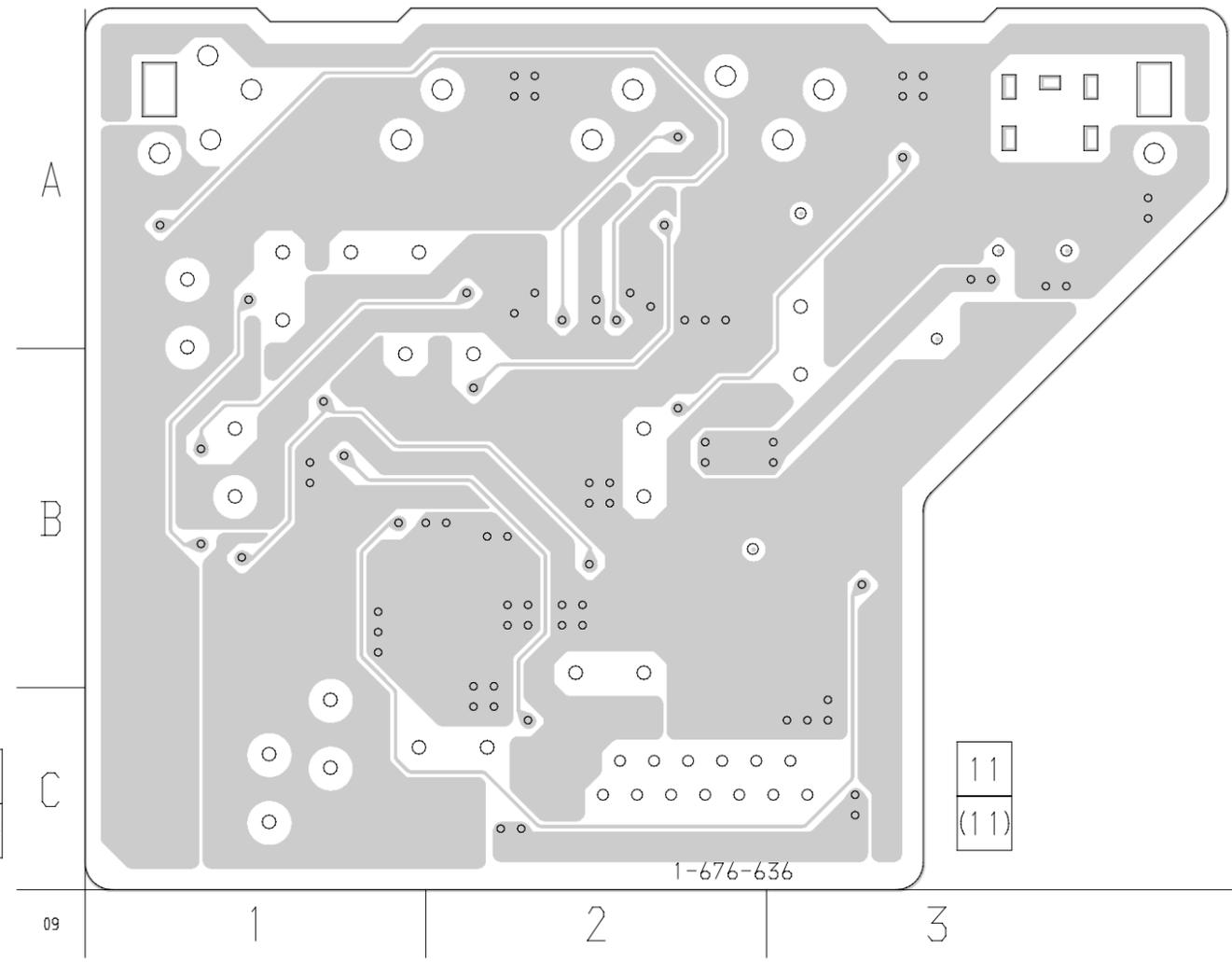
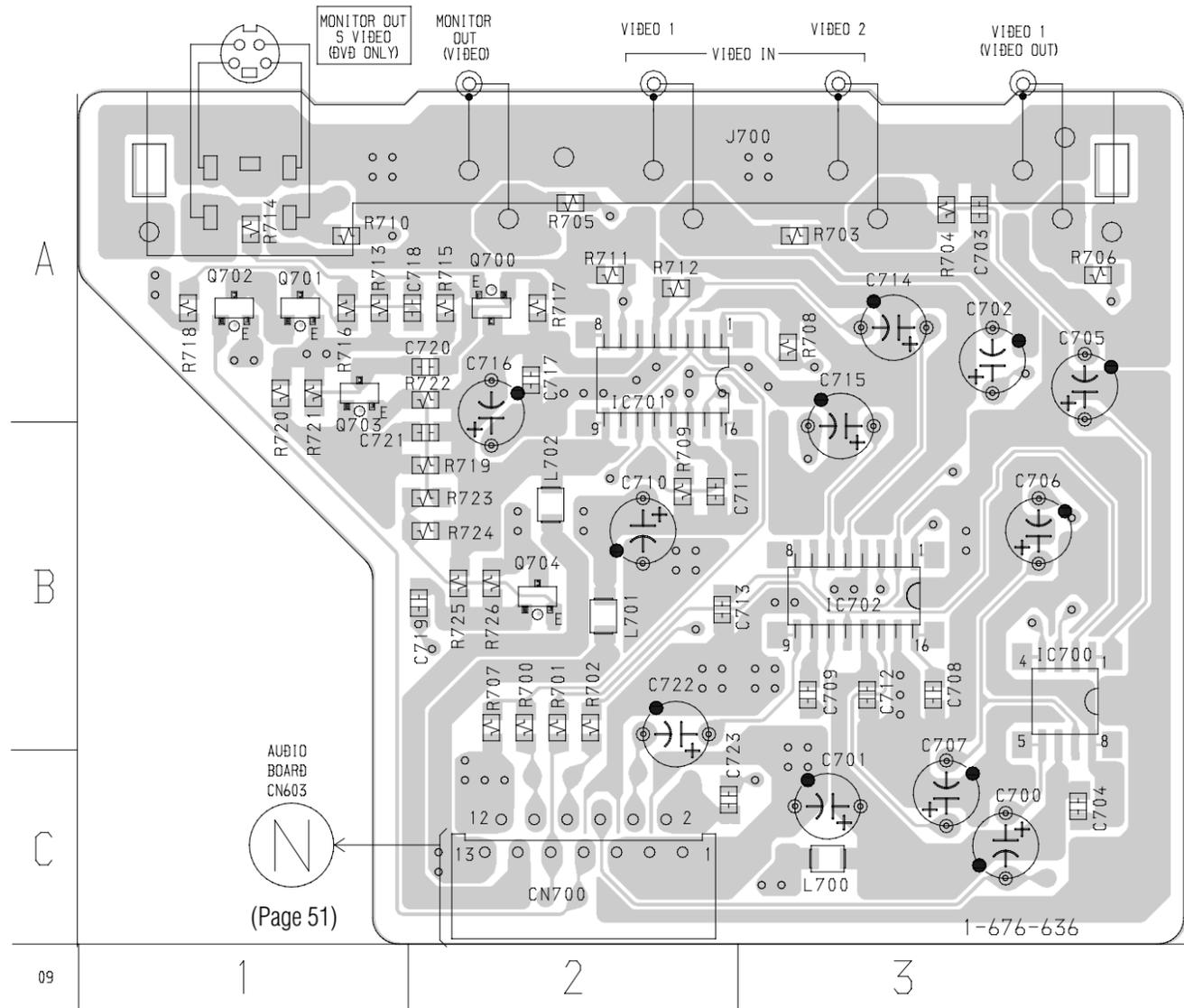
(Page 50)

NOTE
 • Voltages and waveforms are dc with respect to ground under no-signal conditions.
 no mark: FM

6-23. PRINTED WIRING BOARD – VIDEO SECTION –
 • See page 19 for Circuit Boards Location.

【VIDEO BOARD】 (SIDE A)

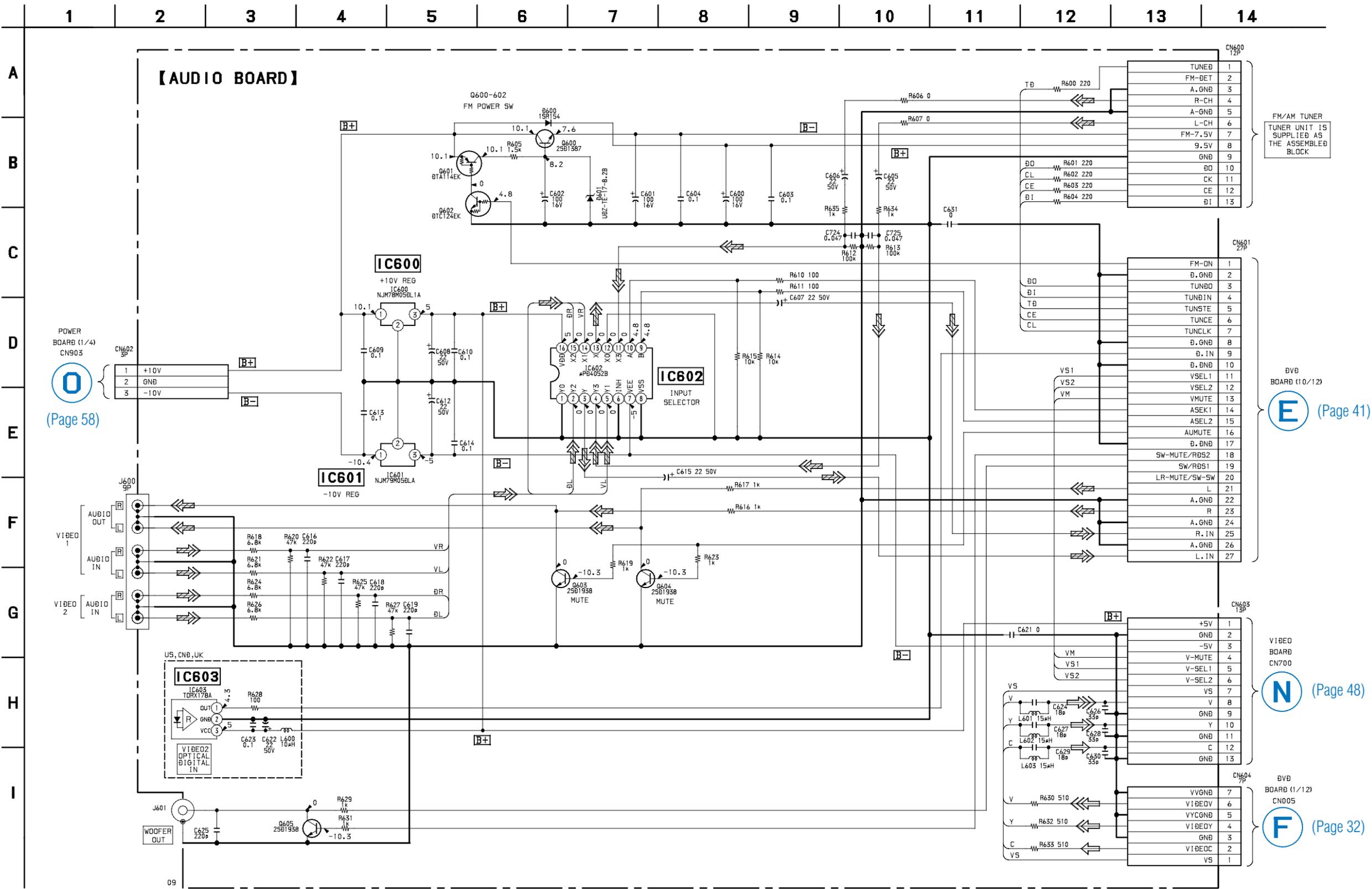
【VIDEO BOARD】 (SIDE B)



• Semiconductor Location

Ref. No.	Location
IC700	B-3
IC701	A-2
IC702	B-3
Q700	A-2
Q701	A-1
Q702	A-1
Q703	A-1
Q704	B-2

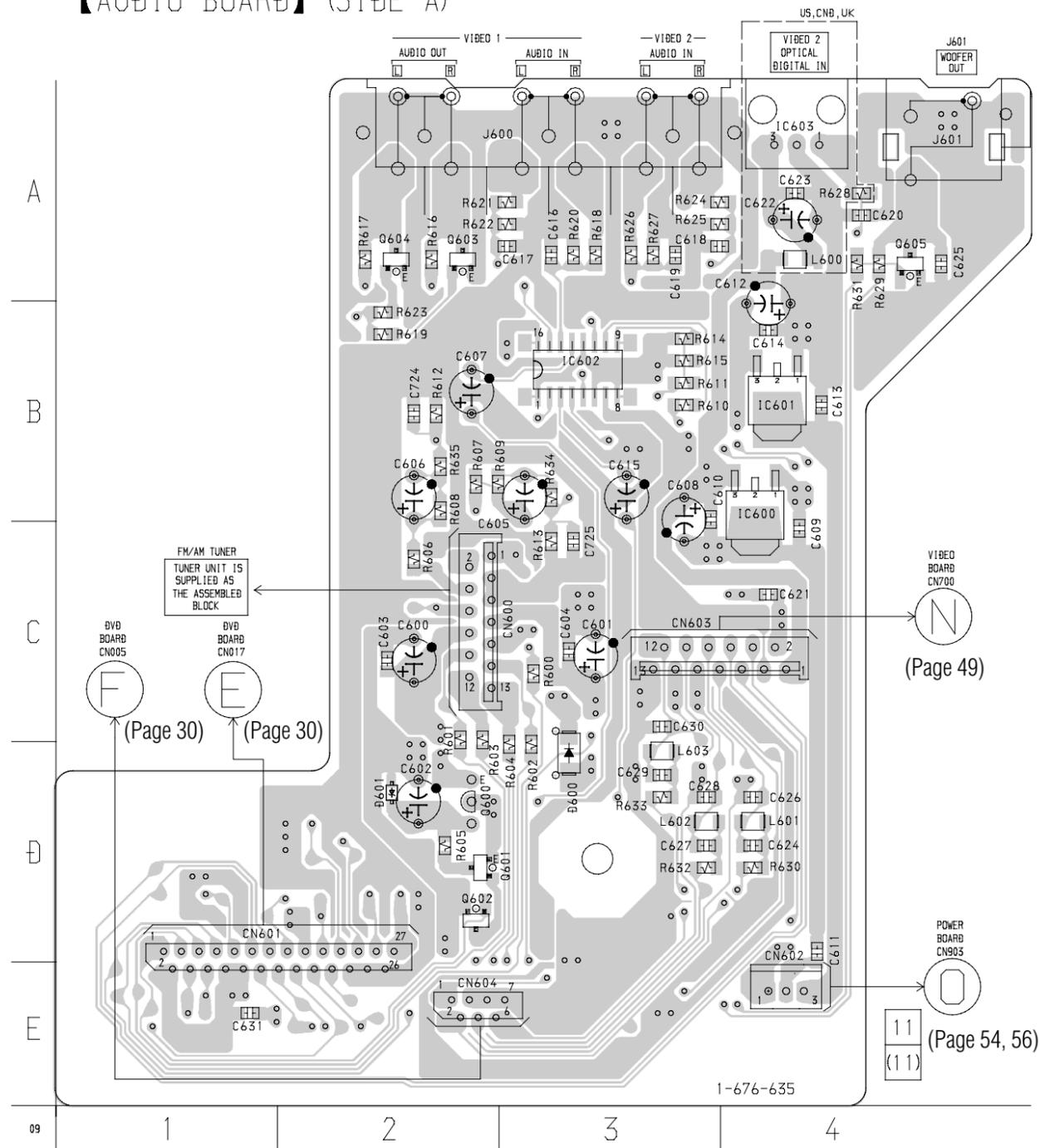
6-24. SCHEMATIC DIAGRAM – AUDIO SECTION –
 • See page 20 for Waveforms.



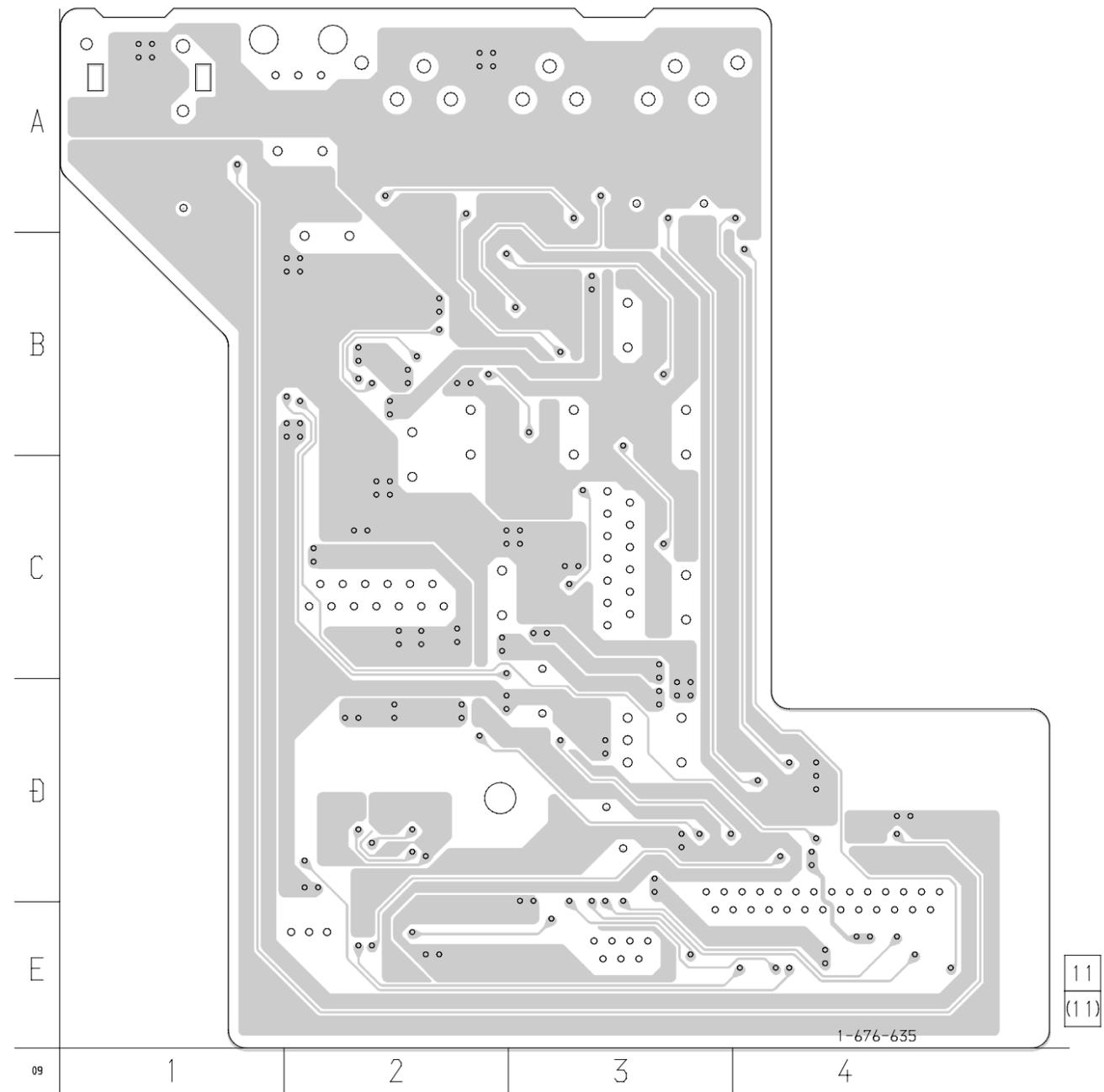
NOTE
 • Voltages and waveforms are dc with respect to ground under no-signal conditions.
 no mark: FM

6-25. PRINTED WIRING UNIT BOARD – AUDIO SECTION –
 • See page 19 for Circuit Boards Location.

【AUDIO BOARD】 (SIDE A)



【AUDIO BOARD】 (SIDE B)

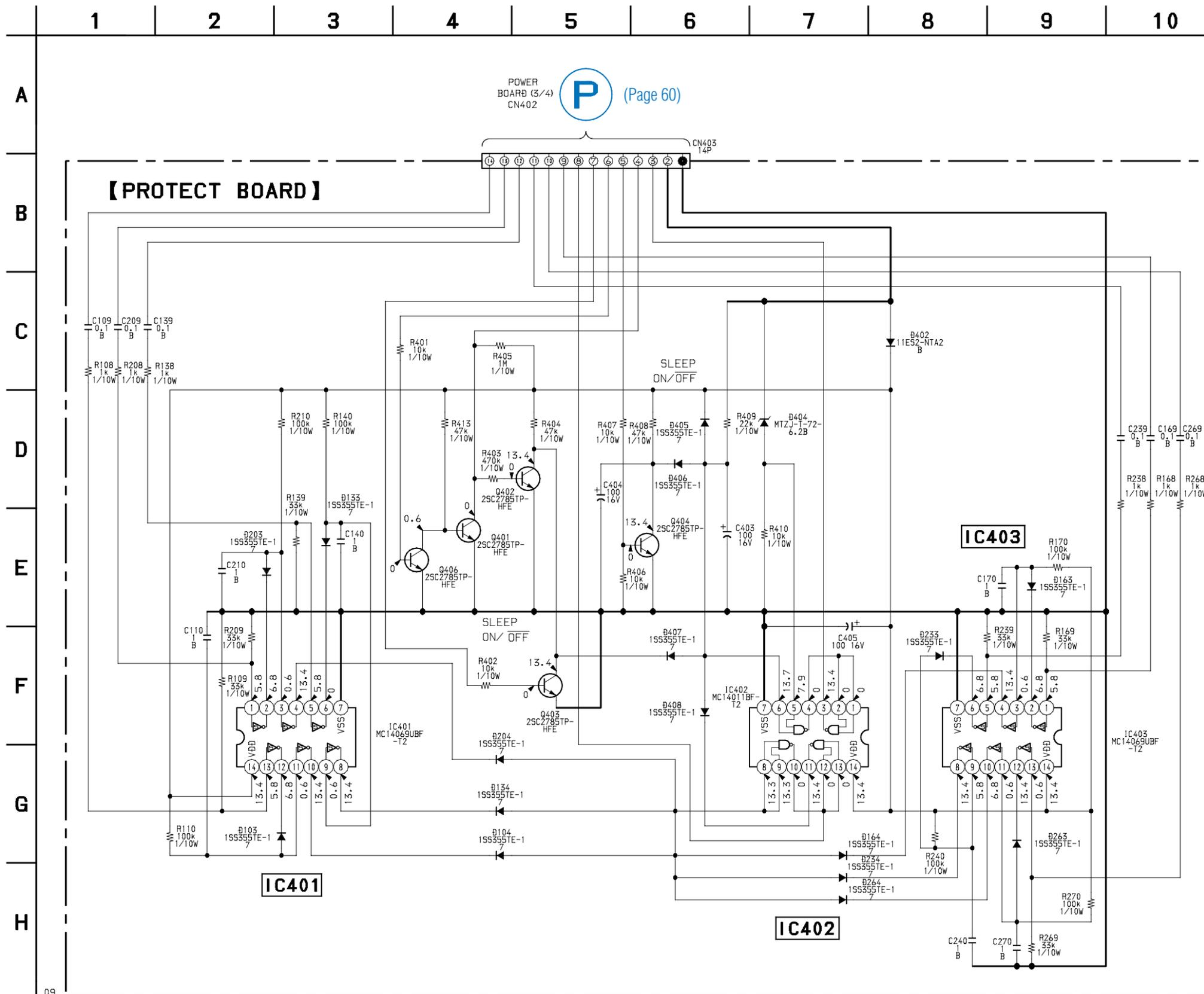


• Semiconductor Location

Ref. No.	Location
D600	D-3
D601	D-2
IC600	B-4
IC601	B-4
IC602	B-3
IC603	A-4
Q600	D-2
Q601	D-2
Q602	D-2
Q603	A-2
Q604	A-2
Q605	A-4

6-26. SCHEMATIC DIAGRAM – PROTECT SECTION –

• See page 20 for Waveforms.

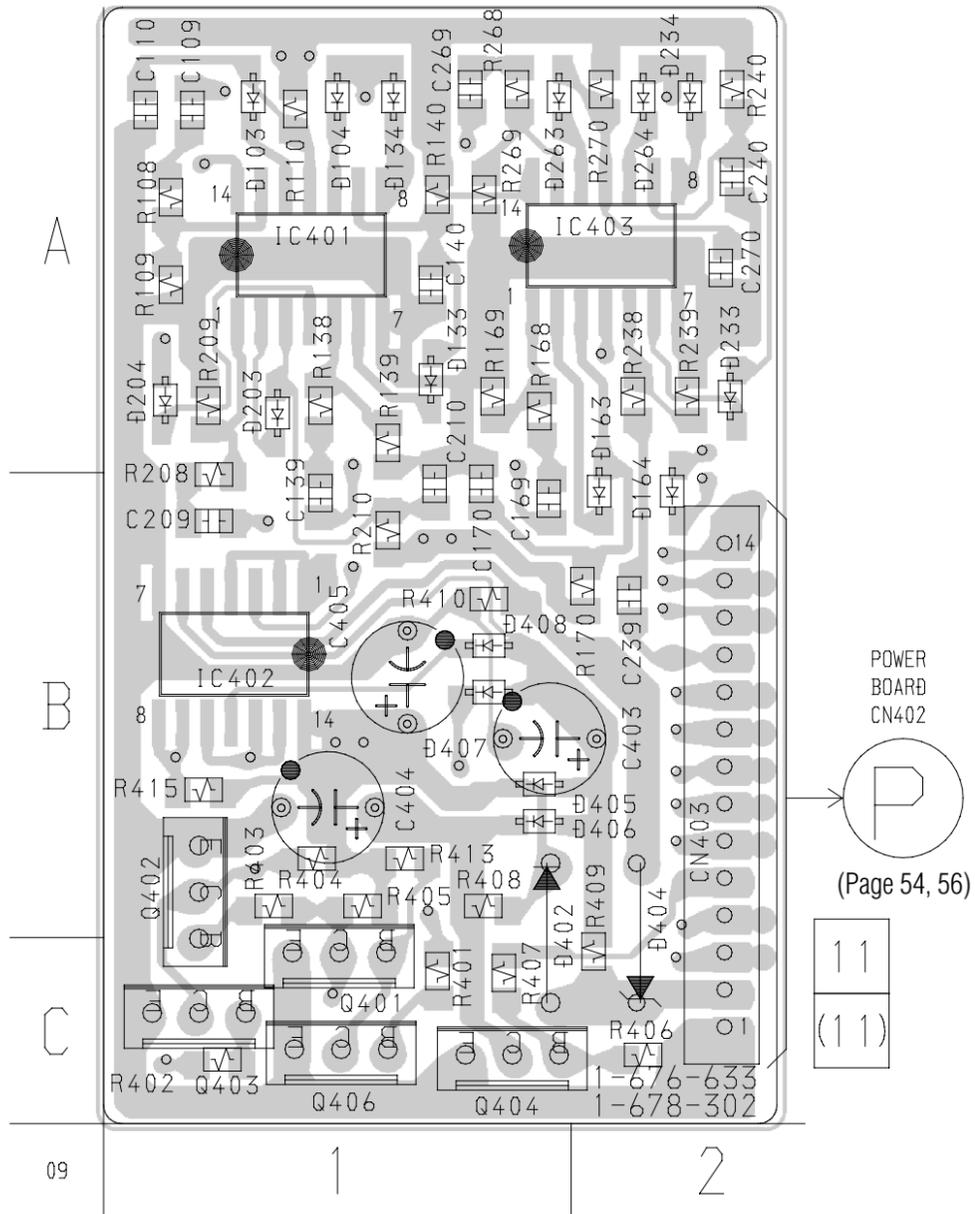


NOTE
 • Voltages and waveforms are dc with respect to ground under no-signal conditions.
 no mark: FM

6-27. PRINTED WIRING BOARD – PROTECT SECTION –
 • See page 19 for Circuit Boards Location.

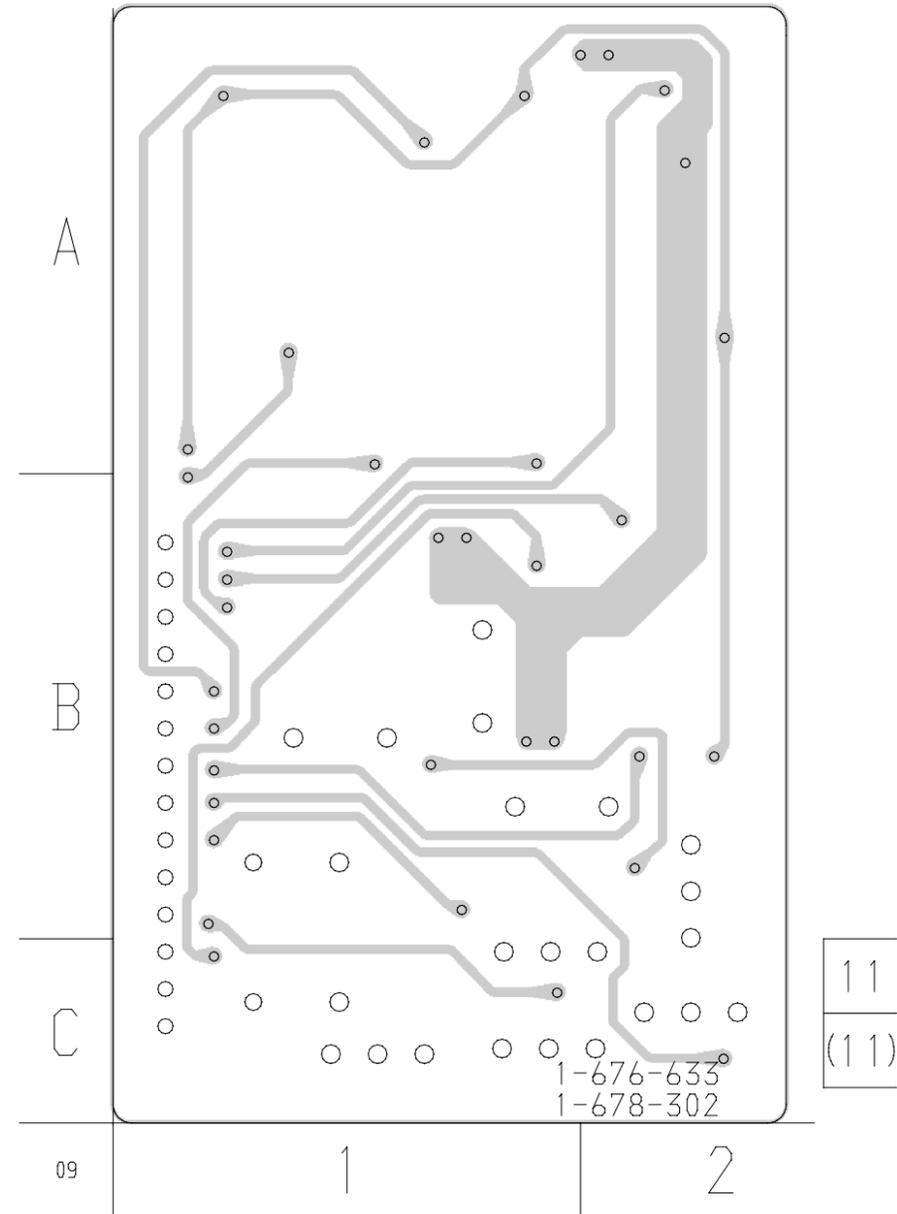
【PROTECT BOARD】(SIDE A)

【PROTECT BOARD】(SIDE B)



• Semiconductor Location

Ref. No.	Location
D103	A-1
D104	A-1
D133	A-1
D134	A-1
D163	B-2
D164	B-2
D203	A-1
D204	A-1
D233	A-2
D234	A-2
D263	A-1
D264	A-2
D402	B-1
D405	B-1
D406	B-1
D407	B-1
D408	B-1
IC401	A-1
IC402	B-1
IC403	A-2
Q401	C-1
Q402	B-1
Q403	C-1
Q404	C-1
Q406	C-1

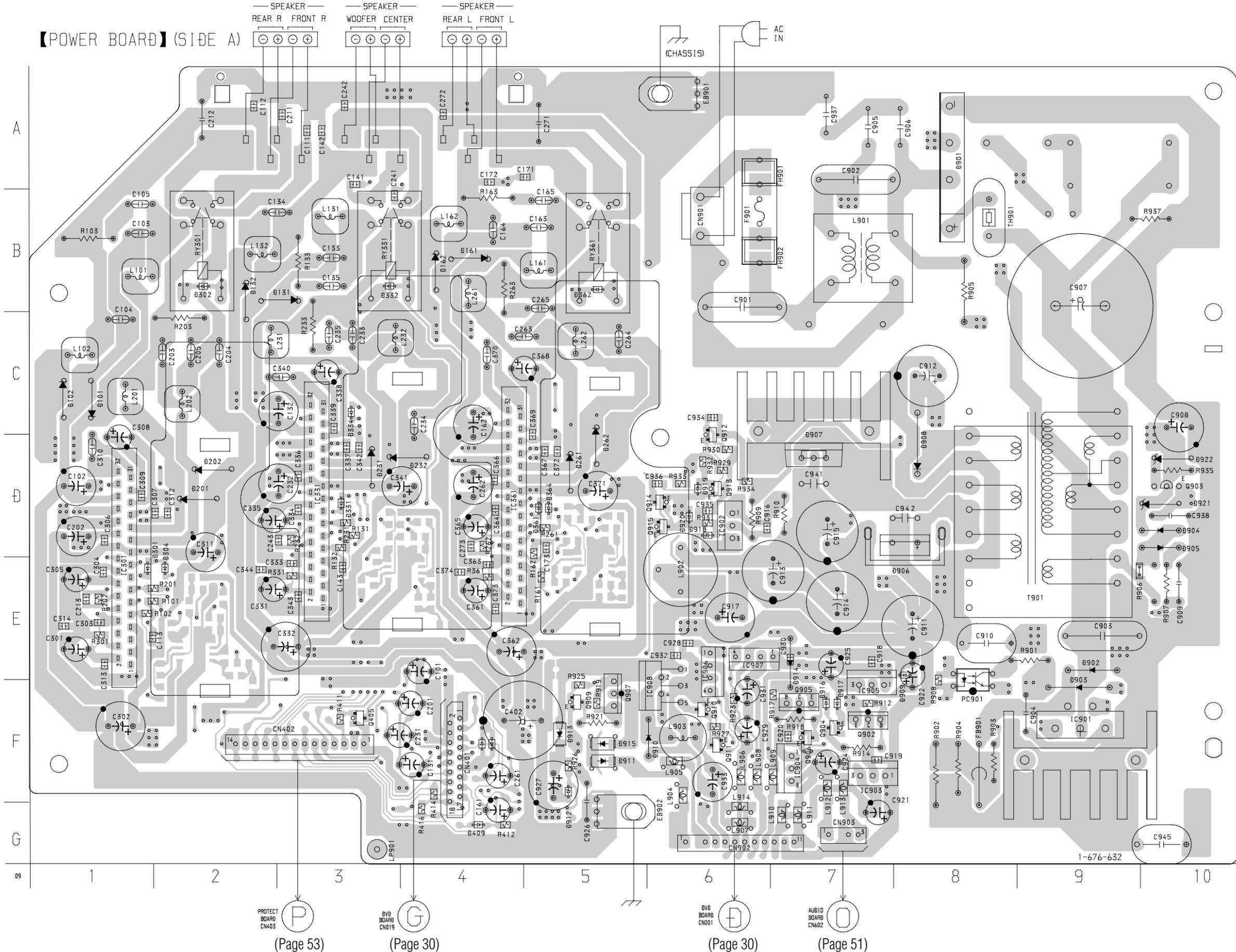


6-28. PRINTED WIRING BOARD – POWER (US,CND ONLY) SECTION –

• See page 19 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
D101	C-1
D102	C-1
D131	B-2
D132	B-2
D161	B-4
D162	B-4
D201	D-2
D202	D-2
D231	D-3
D232	D-3
D261	D-5
D262	D-5
D301	E-1
D302	B-2
D304	E-2
D331	D-3
D332	B-3
D334	C-3
D361	D-5
D362	B-5
D364	D-5
D409	G-4
D901	A-1
D902	E-9
D903	F-9
D904	D10
D905	D-10
D906	E-8
D907	D-7
D908	D-8
D909	E-8
D910	F-5
D911	F-5
D912	F-5
D913	F-5
D914	F-7
D915	F-5
D916	F-7
D917	F-7
D918	D-6
D919	D-6
D920	D-6
D921	D-10
D922	D-10
IC301	E-1
IC331	D-3
IC361	D-4
IC901	F-9
IC902	D-6
IC903	F-7
IC904	F-7
IC905	E-7
IC906	D-6
IC907	E-6
IC908	E-6
Q405	F-3
Q902	F-7
Q903	D-10
Q904	F-7
Q905	F-7
Q906	F-7
Q907	F-5
Q909	F-5
Q910	F-6
Q911	F-6
Q912	C-6
Q913	D-6
Q914	D-6
Q915	D-6



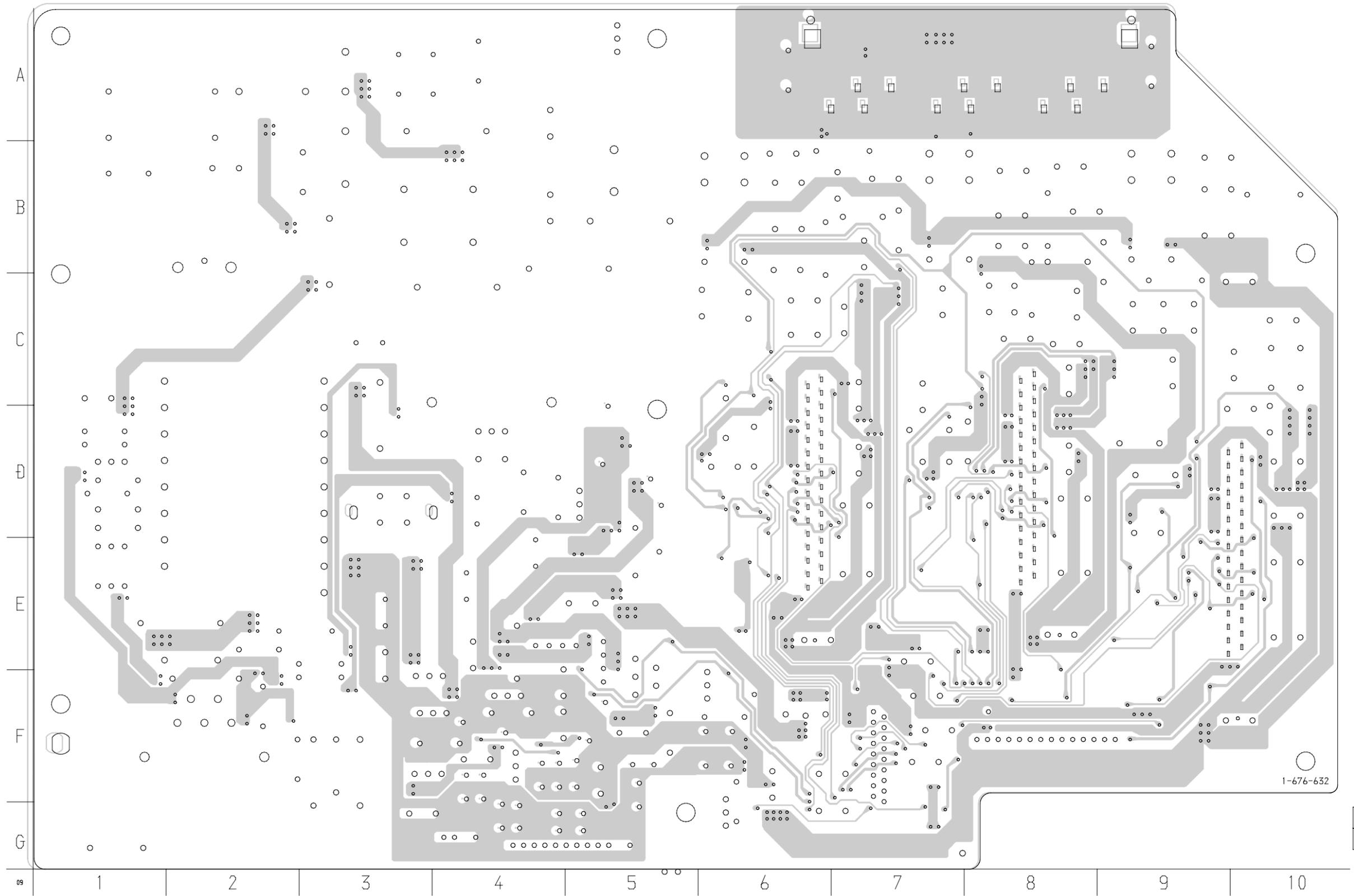
PROTECT BOARD CN405 (Page 53)

DVB BOARD CN019 (Page 30)

DVB BOARD CN001 (Page 30)

AUDIO BOARD CN602 (Page 51)

【POWER BOARD】(SIDE B)

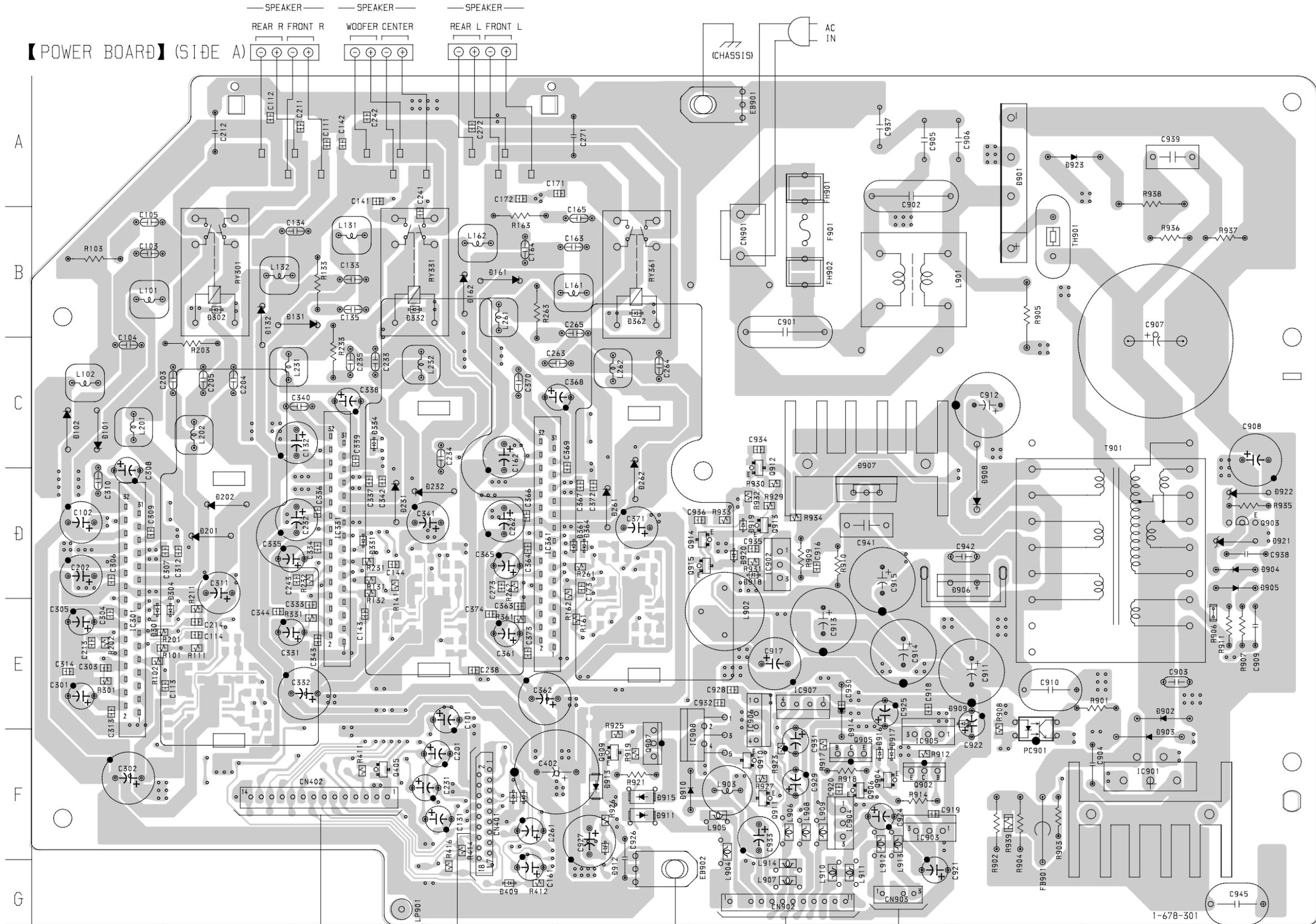


6-29. PRINTED WIRING BOARD – POWER (AEP, UK, SP, HK, E32, AUS ONLY) SECTION –

• See page 19 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
D101	C-1
D102	C-1
D131	B-2
D132	B-2
D161	B-4
D162	B-4
D201	D-2
D202	D-2
D231	D-3
D232	D-3
D261	D-5
D262	D-5
D301	E-1
D302	B-2
D304	E-2
D331	D-3
D332	B-3
D334	C-3
D361	D-5
D362	B-5
D364	D-5
D409	G-4
D901	A-1
D902	E-9
D903	F-9
D904	D10
D905	D-10
D906	E-8
D907	D-7
D908	D-8
D909	E-8
D910	F-5
D911	F-5
D912	F-5
D913	F-5
D914	E-7
D915	F-5
D916	F-7
D917	F-7
D918	D-6
D919	D-6
D920	D-6
D921	D-10
D922	D-10
D923	A-8
IC301	E-1
IC331	D-3
IC361	D-4
IC901	F-9
IC902	D-6
IC903	F-7
IC904	F-7
IC905	E-7
IC906	D-6
IC907	E-6
IC908	E-6
Q405	F-3
Q902	F-7
Q903	D-10
Q904	F-7
Q905	F-7
Q906	F-7
Q907	F-5
Q909	F-5
Q910	F-6
Q911	F-6
Q912	C-6
Q913	D-6
Q914	D-6
Q915	D-6



【POWER BOARD】(SIDE A)

PROTECT BOARD CN403 (Page 53)

DVD BOARD CN019 (Page 30)

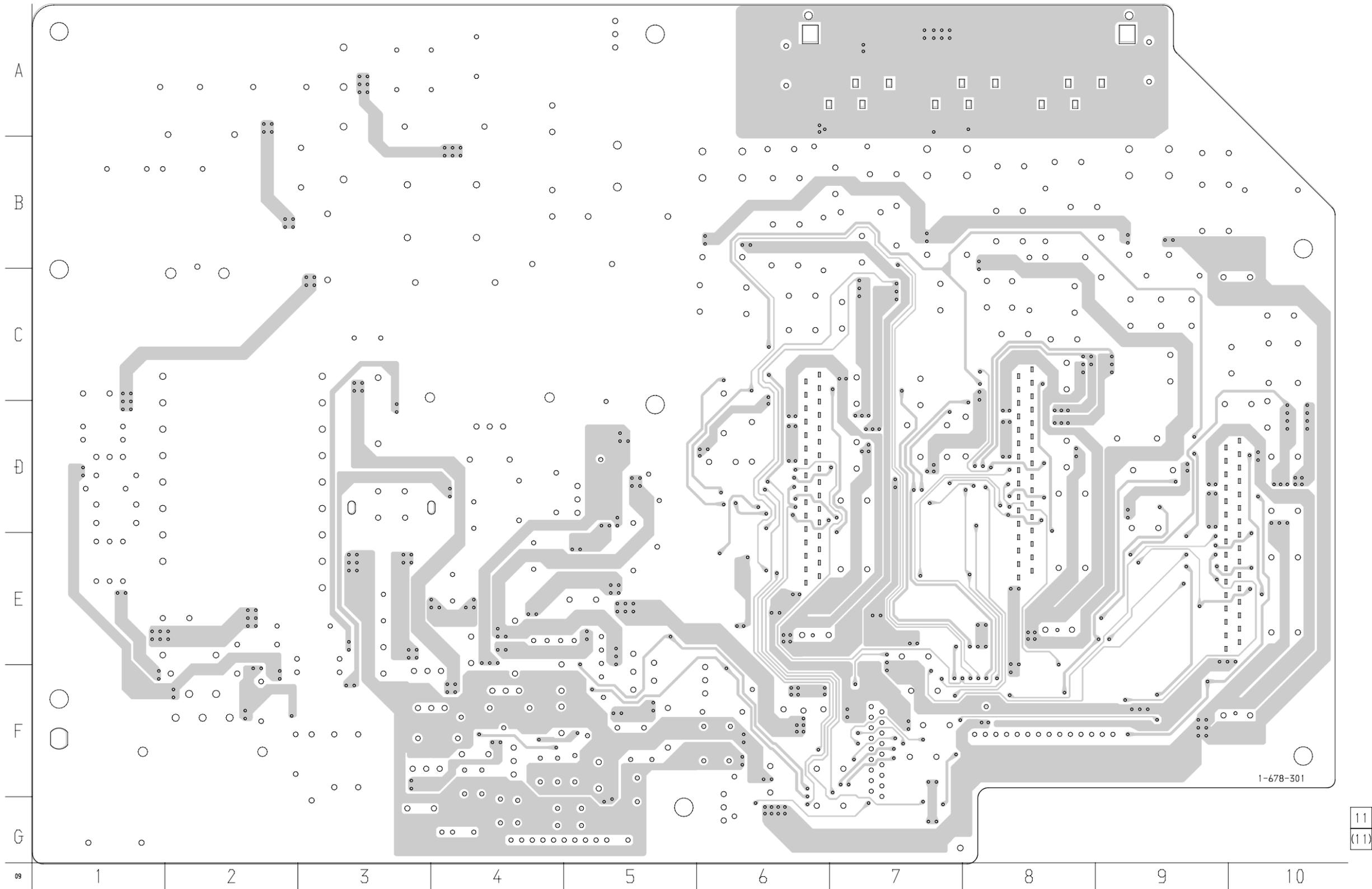
DVD BOARD CN001 (Page 30)

AUD10 BOARD CN602 (Page 51)

1-678-301

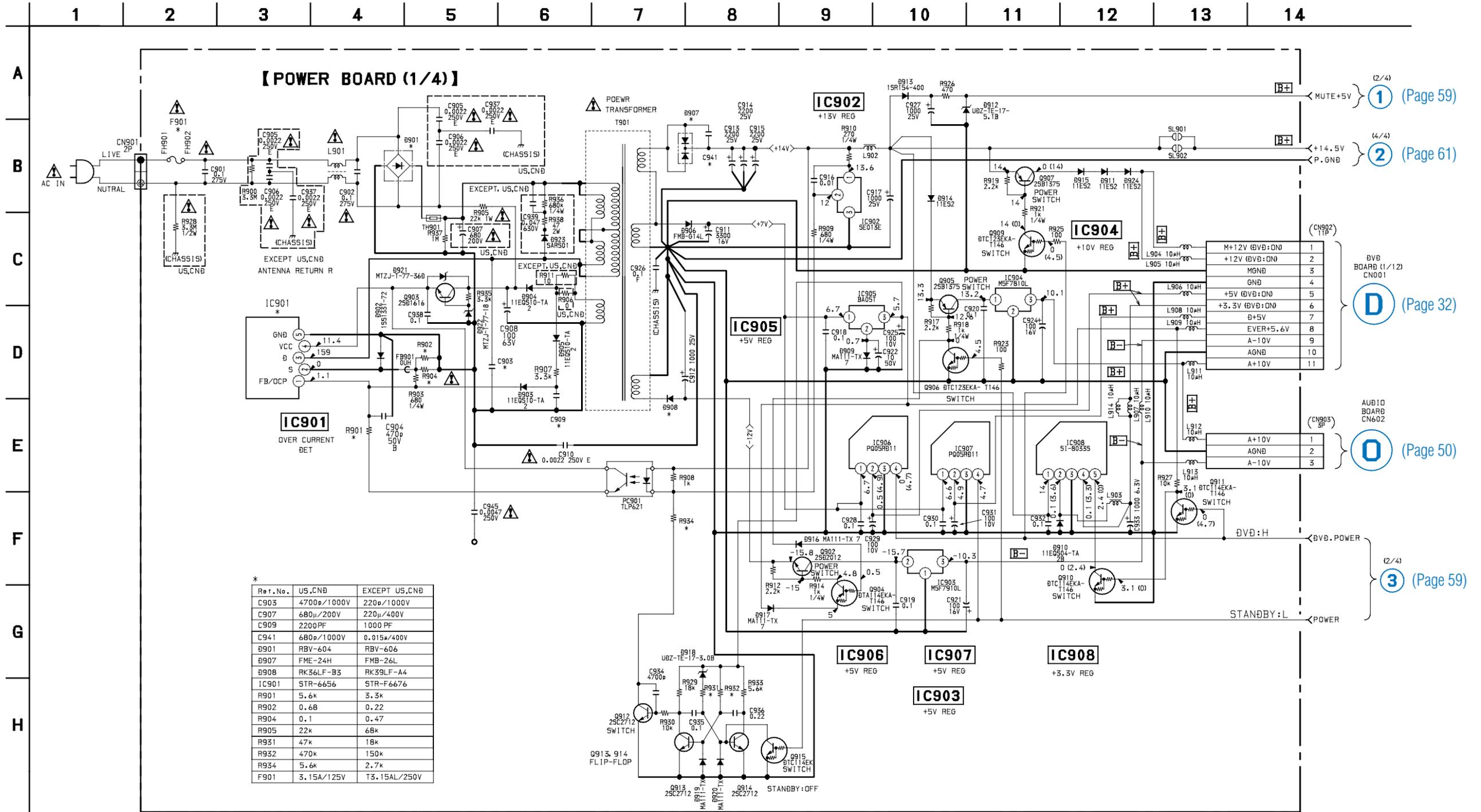
11
11

【POWER BOARD】(SIDE B)



6-30. SCHEMATIC DIAGRAM – POWER (1/4) SECTION –

- See page 20 for Waveforms.
- See page 54 for Printed Wiring Board.



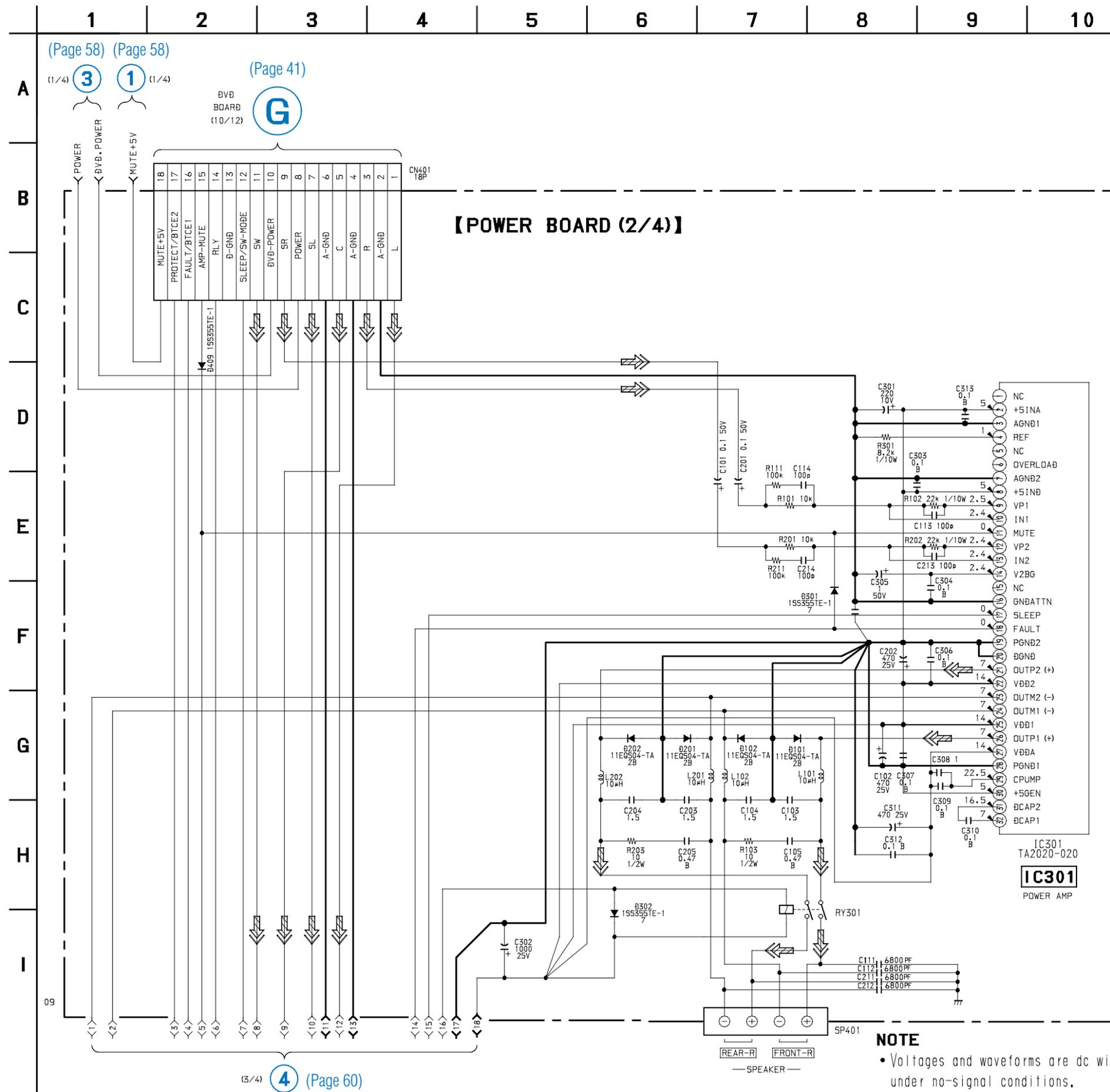
Ref. No.	US,CNB	EXCEPT US,CNB
C903	4700p/1000V	220p/1000V
C907	680u/200V	220u/400V
C909	2200PF	1000 PF
C941	680p/1000V	0.015u/400V
B901	RBV-604	RBV-606
B907	FME-24H	FMB-26L
B908	RK36LF-B3	RK39LF-A4
IC901	STR-6656	STR-F6676
R901	5.6k	3.3k
R902	0.68	0.22
R904	0.1	0.47
R905	22k	68k
R931	47k	18k
R932	470k	150k
R934	5.6k	2.7k
F901	3.15A/125V	T3.15AL/250V

NOTE

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
- no mark: FM
- (): DVD

6-31. SCHEMATIC DIAGRAM – POWER (2/4) SECTION –

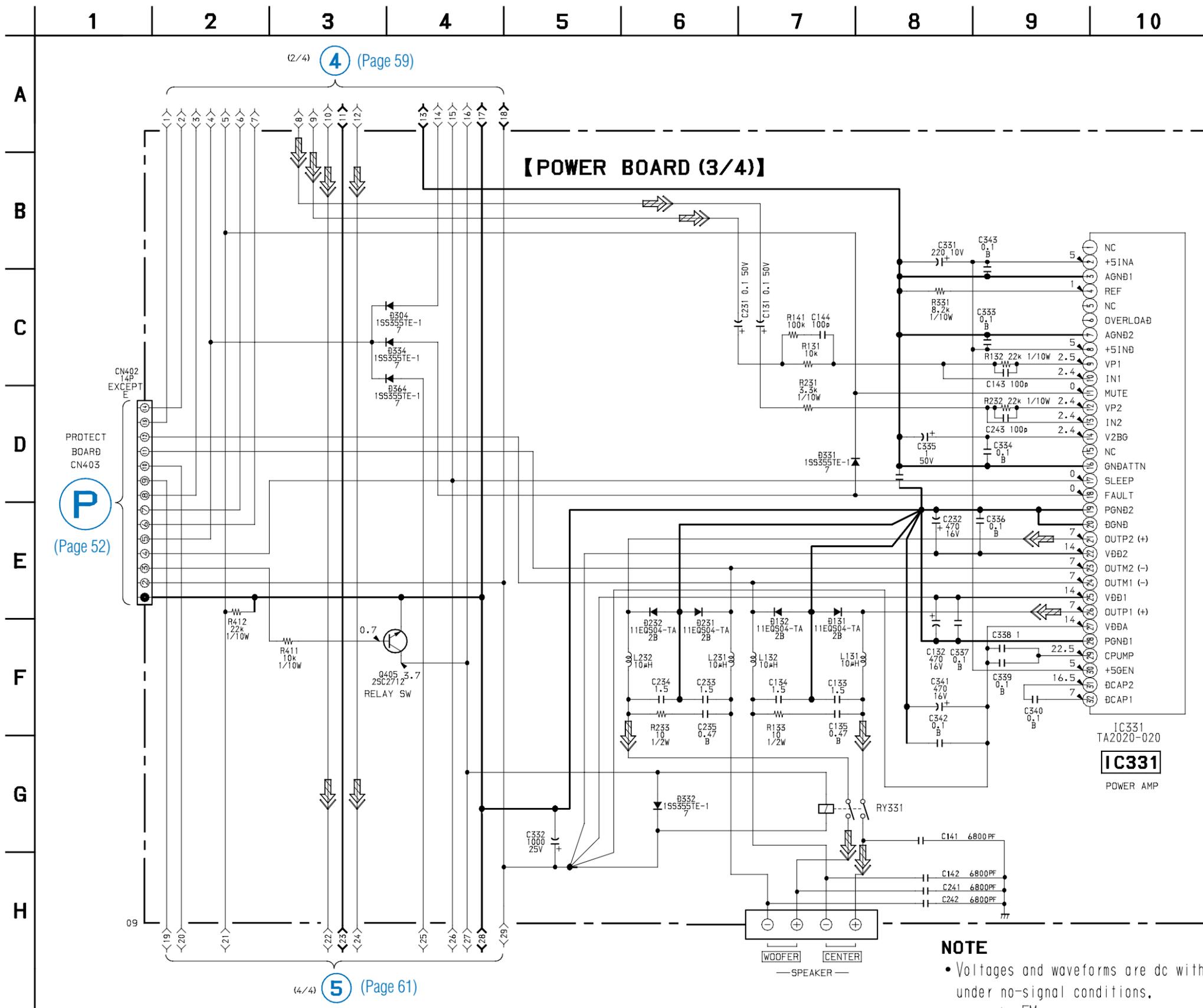
- See page 20 for Waveforms.
- See page 54 for Printed Wiring Board.



NOTE
 • Voltages and waveforms are dc with respect to ground under no-signal conditions.
 no mark: FM

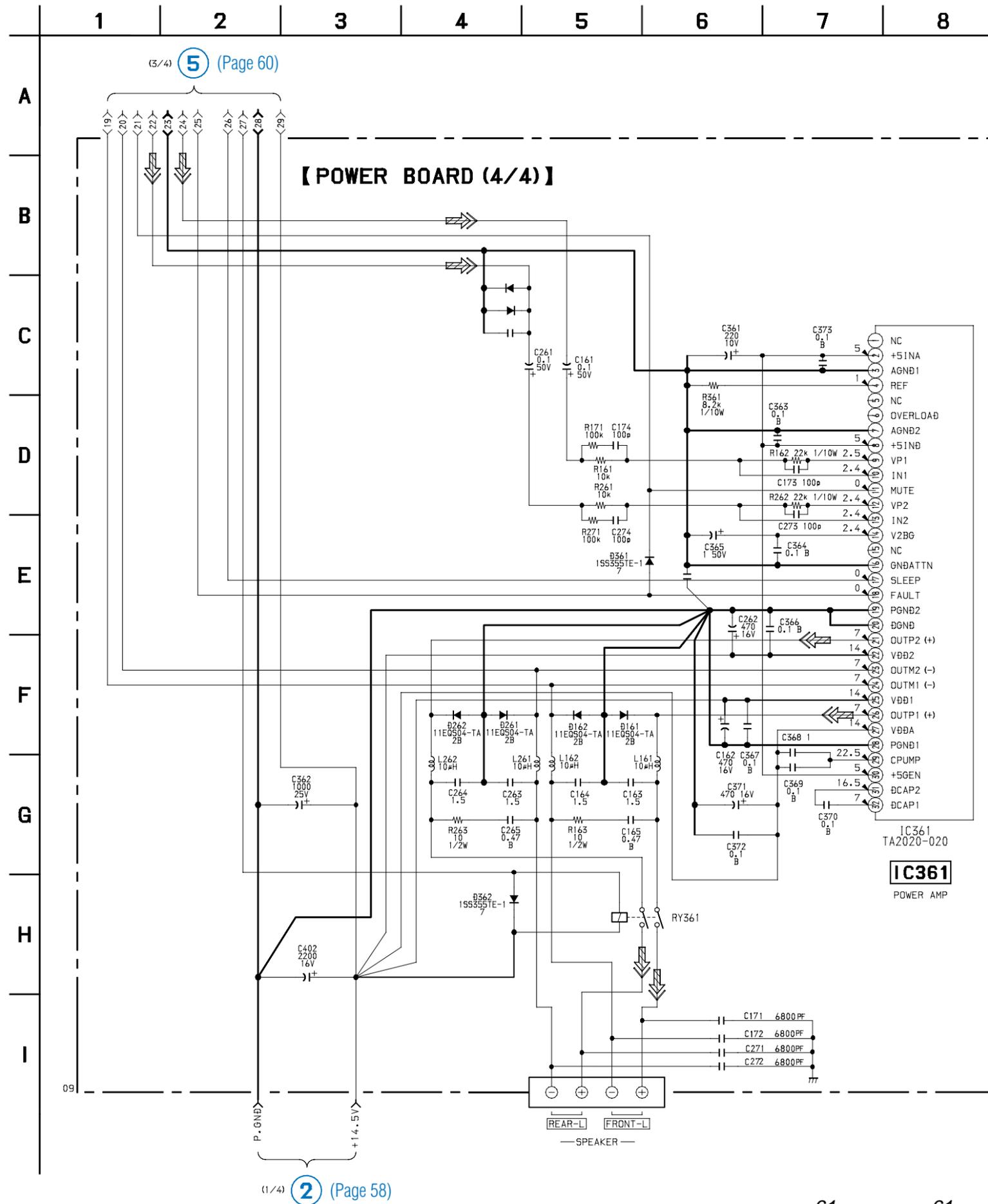
6-32. SCHEMATIC DIAGRAM – POWER (3/4) SECTION –

- See page 20 for Waveforms.
- See page 54 for Printed Wiring Board.



6-33. SCHEMATIC DIAGRAM – POWER (4/4) SECTION –

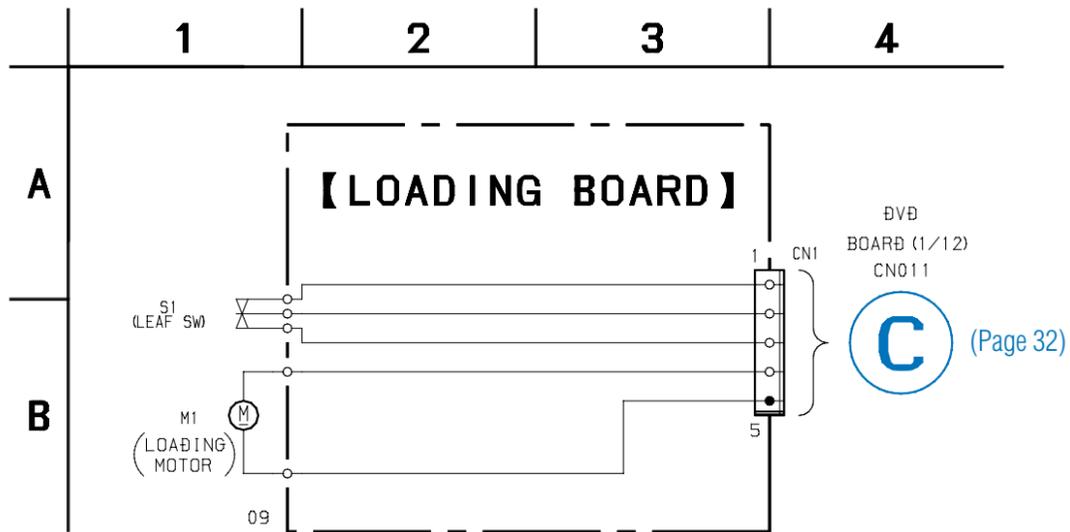
- See page 20 for Waveforms.
- See page 54 for Printed Wiring Board.



NOTE

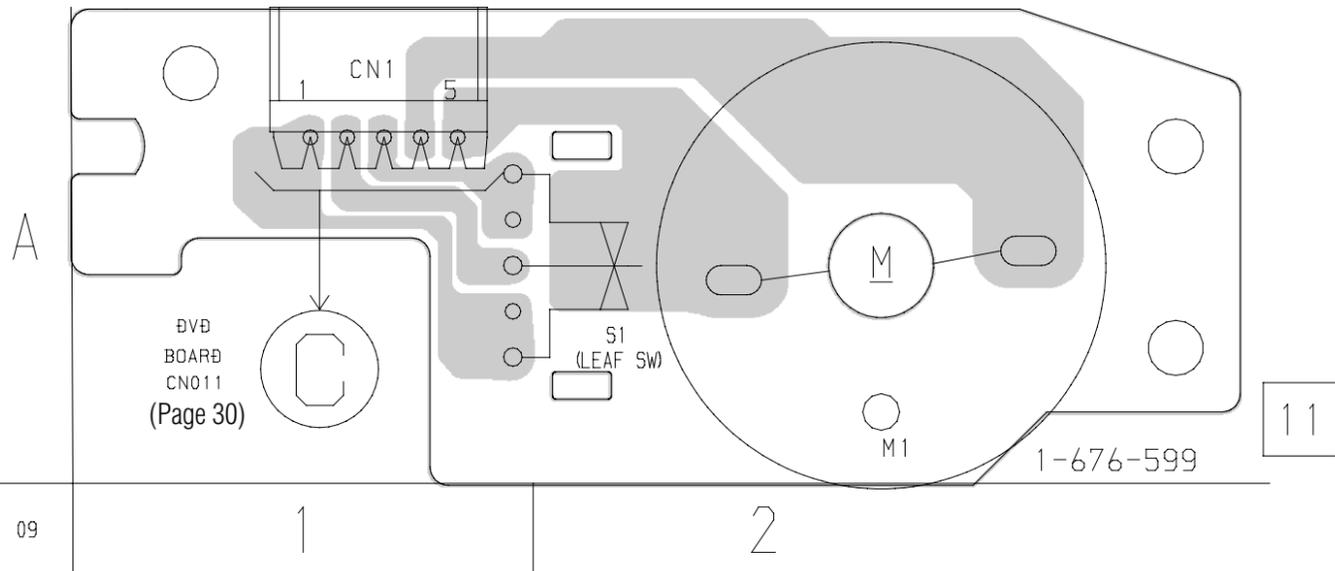
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
- no mark: FM

6-34. SCHEMATIC DIAGRAM – LOADING SECTION –
• See page 20 for Waveforms.



6-35. PRINTED WIRING BOARD – LOADING SECTION –
• See page 19 for Circuit Boards Location.

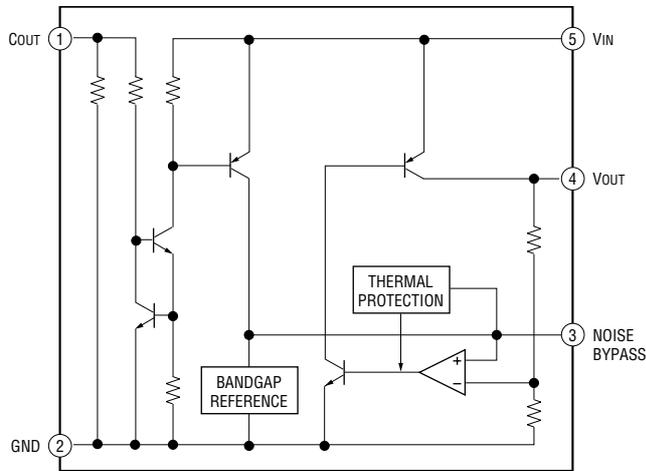
【LOADING BOARD】



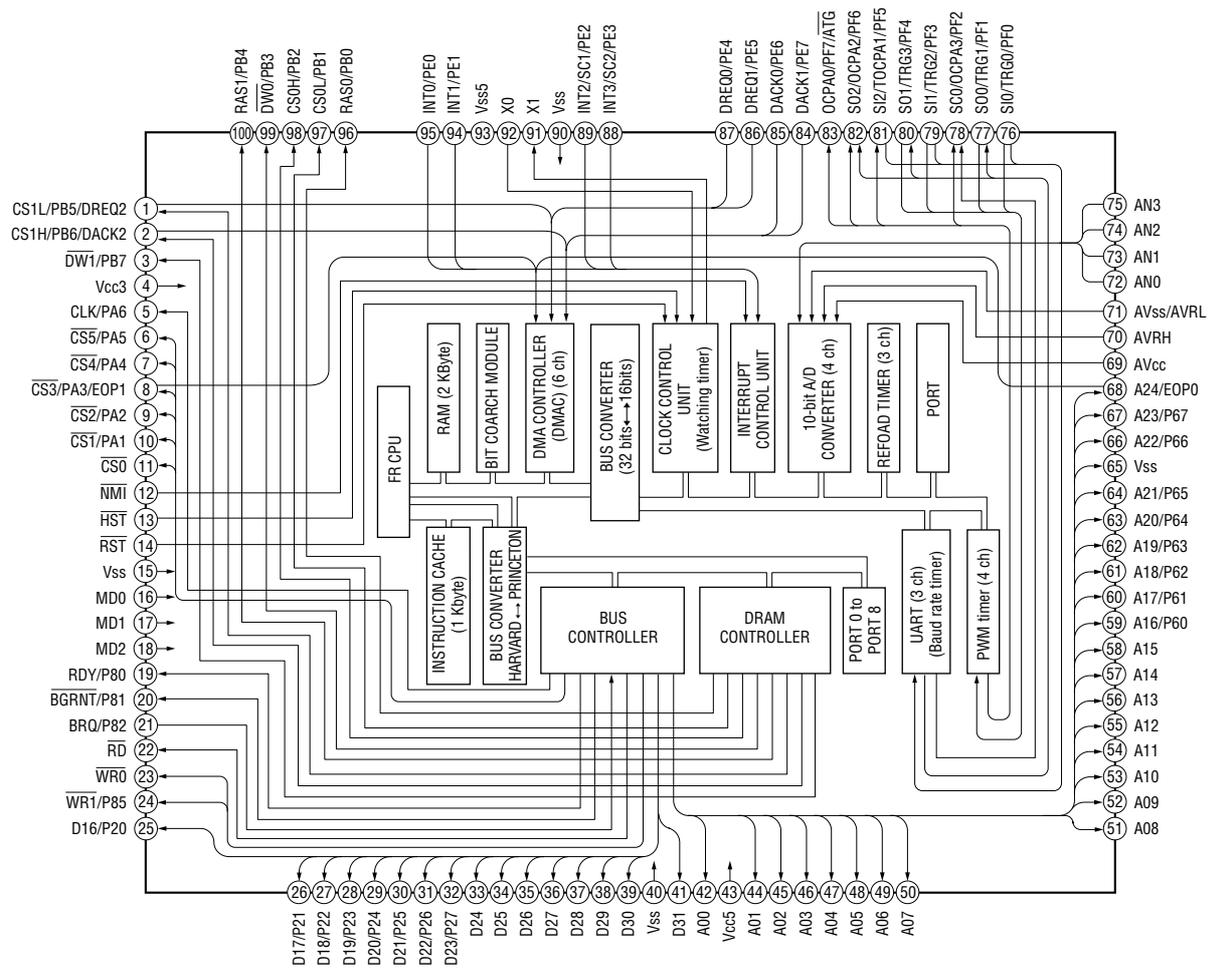
6-36. IC BLOCK DIAGRAMS

• DVD Board

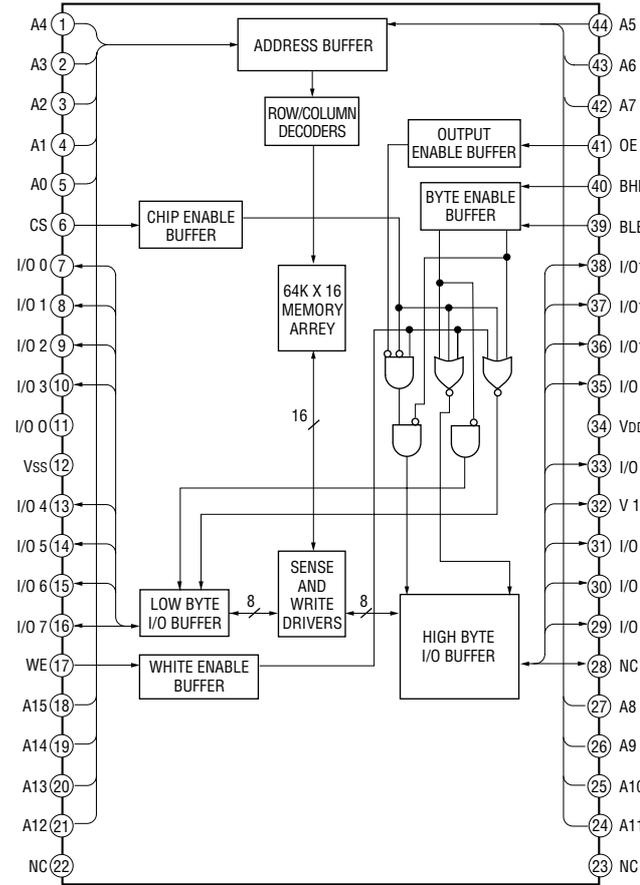
IC005, 404 NJM2370U33



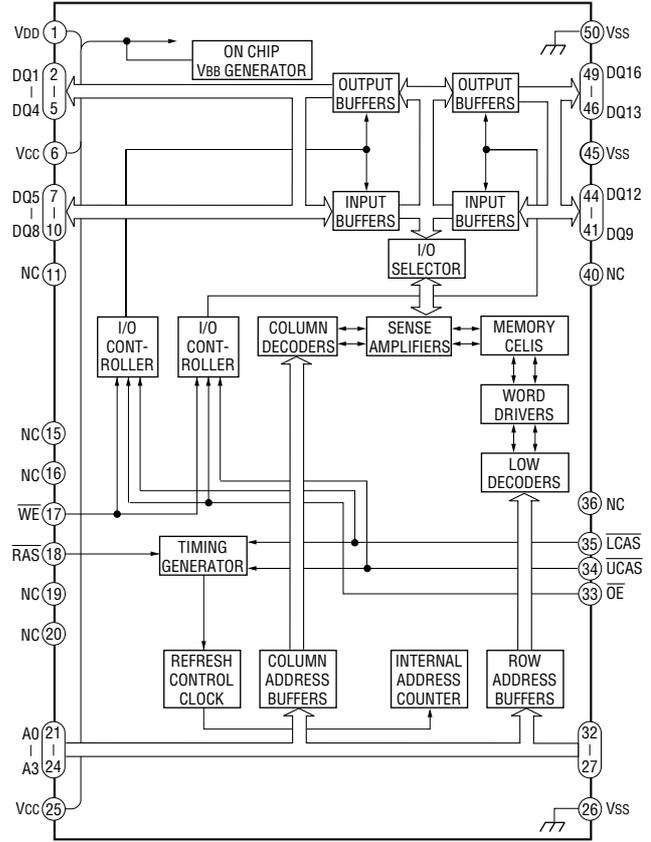
IC202 MB91101APFV



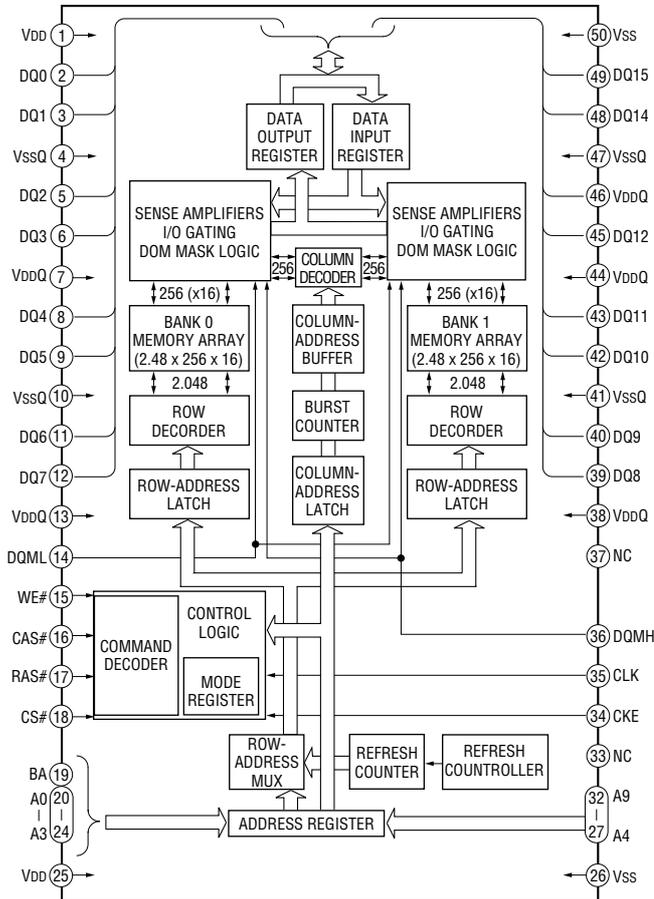
IC204 IDT71V016S20PHAU



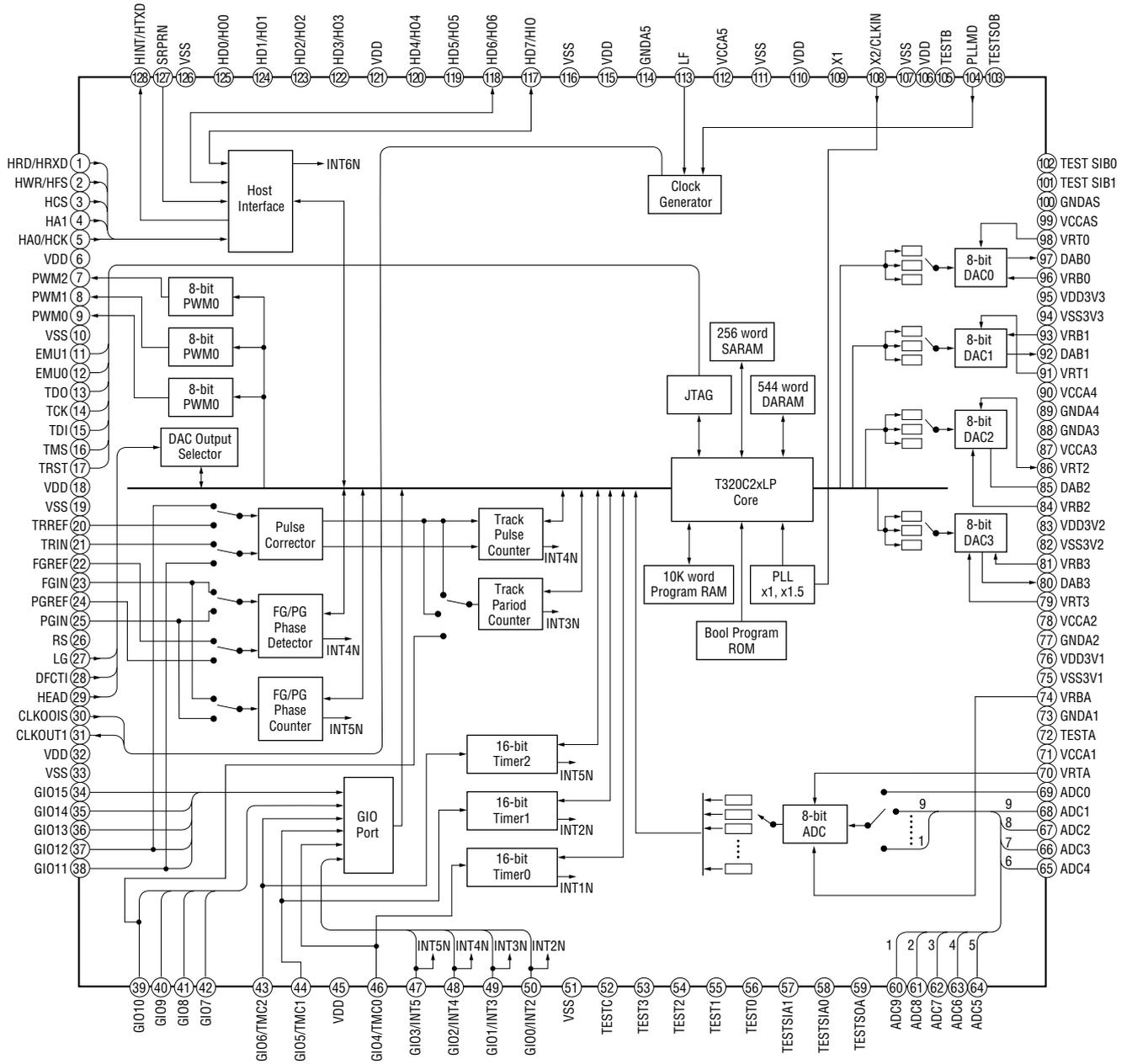
IC304 MSM51V1816



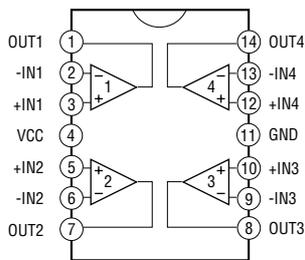
IC402, 403 MT48LC1M16A1TG



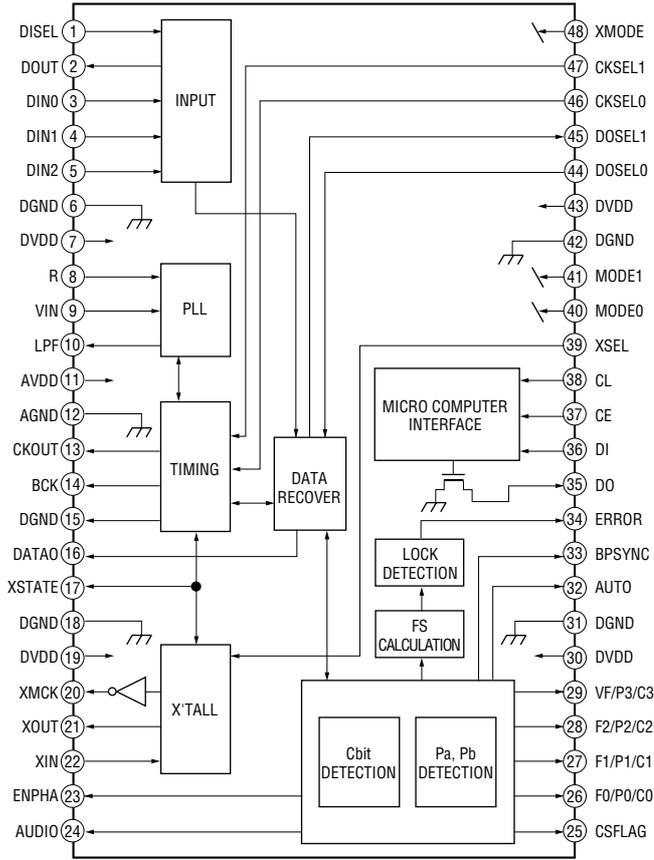
IC701 CXD8791AQ



IC803 BA10324FV

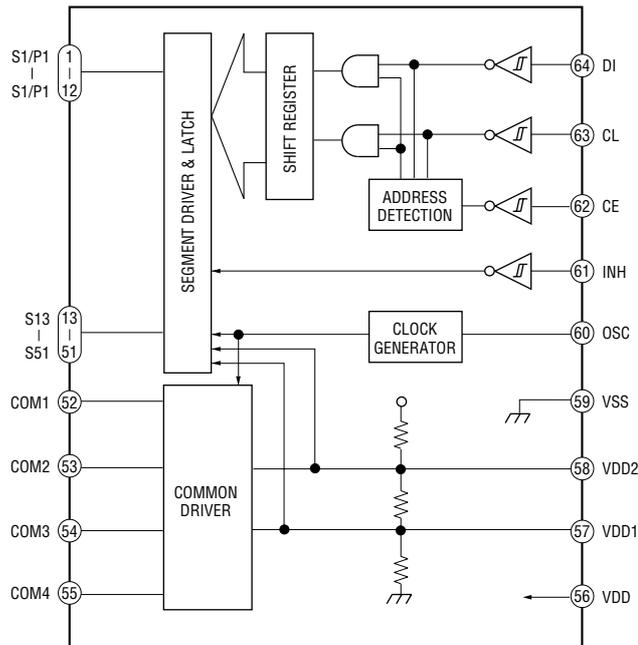


IC907 LC89055W-RA8



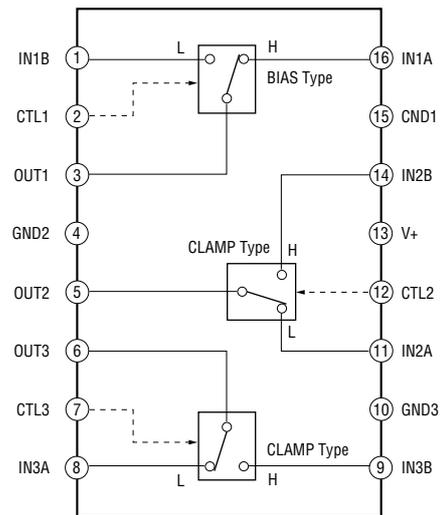
• FP-932 Board

IC100 LC75824E



• VIDEO Board

IC702 NJM2285



6-37. IC PIN FUNCTIONS

• IC202 DIGITAL SERVO & DIGITAL SIGNAL PROCESSOR (MB911101APFV-G-BND) (DVD Board)

Pin No.	Pin Name	I/O	Function
1	DREQ2/PB5/CS1L	O	Analog filter gain control
2	DACK2/PB6/CS1H	O	VES gain control "H" : VES
3	PB7/DW1	O	Rear CH boost "H" : rear boost
4	VCC3	-	Power supply
5	PA6/CLK	O	CPU clock out (25 MHz)
6	PA5/CS5	O	Not used
7	PA4/CS4	O	Chip select signal for ARP, SERVO DSP and HGA
8	EOP1/PA3/CS3	O	Chip select signal for SDRAM and AV DEC
9	PA2/CS2	O	Chip select signal for REG and AV DEC
10	PA1/CS1	O	Chip select signal for external SRAM
11	CS0	O	Chip select signal for external FLASH ROM
12	NMI	I	Not used (fixed at "H")
13	HST	I	Not used (fixed at "H")
14	RST	I	Reset signal input from IF CON
15	GND	-	Ground
16	MD0	I	Input of mode select 0 (fixed at "1")
17	MD1	I	Input of mode select 1 (fixed at "0")
18	MD2	I	Input of mode select 2 (fixed at "0")
19	P80/RDY	I	Wait signal input
20	P81/BGRNT	I	Test terminal (fixed at "H")
21	P82/BRQ	I	Test terminal (fixed at "L")
22	RD	O	Read enable signal output
23	WR0	O	High byte write enable signal output (16 bit and 8 bit)
24	P85/WR1	O	Low byte write enable signal output (16 bit only)
25	P20/D16	I/O	Data bus D0 (16 bit)
26	P21/D17	I/O	Data bus D1 (16 bit)
27	P22/D18	I/O	Data bus D2 (16 bit)
28	P23/D19	I/O	Data bus D3 (16 bit)
29	P24/D20	I/O	Data bus D4 (16 bit)
30	P25/D21	I/O	Data bus D5 (16 bit)
31	P26/D22	I/O	Data bus D6 (16 bit)
32	P27/D23	I/O	Data bus D7 (16 bit)
33	D24	I/O	Data bus D8 (16 bit), D0 (8 bit)
34	D25	I/O	Data bus D9 (16 bit), D1 (8 bit)
35	D26	I/O	Data bus D10 (16 bit), D2 (8 bit)
36	D27	I/O	Data bus D11 (16 bit), D3 (8 bit)
37	D28	I/O	Data bus D12 (16 bit), D4 (8 bit)
38	D29	I/O	Data bus D13 (16 bit), D5 (8 bit)
39	D30	I/O	Data bus D14 (16 bit), D6 (8 bit)
40	GND	-	Ground
41	D31	I/O	Data bus D15 (16 bit), D7 (8 bit)
42	A00	-	Address bus A0
43	VCC5	O	Power supply
44	A01	O	Address bus A1
45	A02	O	Address bus A2
46	A03	O	Address bus A3
47	A04	O	Address bus A4
48	A05	O	Address bus A5
49	A06	O	Address bus A6
50	A07	O	Address bus A7

Pin No.	Pin Name	I/O	Function
51	A08	O	Address bus A8
52	A09	O	Address bus A9
53	A10	O	Address bus A10
54	A11	O	Address bus A11
55	A12	O	Address bus A12
56	A13	O	Address bus A13
57	A14	O	Address bus A14
58	A15	O	Address bus A15
59	A16/P60	O	Address bus A16
60	A17/P61	O	Address bus A17
61	A18/P62	O	Address bus A18
62	A19/P63	O	Address bus A19
63	A20/P64	O	Address bus A20
64	A21/P65	O	Address bus A21
65	GND	–	Ground
66	A22/P66	O	PLL IC control output “H” : DOUBLE
67	A23/P67	I	DIAG mode signal input “L” : DIAG
68	A24/EOP0	I	Not used
69	AVCC	–	Power supply
70	AVRH	–	Reference power supply (+3.3 V)
71	AVSS/AVRL	–	Ground
72	AN0	I	Set of mode 0
73	AN1	I	Set of mode 1
74	AN2	I	Set of mode 2
75	AN3	I	Set of mode 3 (fixed at “H”)
76	SI0/TRG0/PF0	I	Serial data input from IF CON and EEPROM
77	SI1/TRG1/PF1	O	Serial data output to IF CON and EEPROM
78	SC0/PF2/OCPA3	O	Serial clock output to IF CON and EEPROM
79	SI1/TRG2/PF3	I	Serial bus 1 (for data input)
80	SO1/TRG3/PF4	O	Serial bus 1 (for data output)
81	SI2/PF5/OCPA1	I	Serial bus 2 (for data input)
82	SO2/PF6/OCPA2	O	Serial bus 2 (for data output)
83	PF7/OCPA0/ \overline{ATG}	O	Reset signal output
84	DACK1/PE7	O	Output of DMA-ACK 0 to AV DEC
85	DACK0/PE0	O	Output of DMA-ACK 1 to AV DEC
86	DREQ1/PE5	I	Input of DMA-REQ 0 from AV DEC
87	DREQ0/PE4	I	Input of DMA-REQ 1 from AV DEC
88	INT3/PE3/SC2	I	Input of interrupt from HGA
89	INT2/PE2/SC1	O	Serial clock output
90	VSS	–	Ground
91	X1	O	Clock output (12.5 MHz)
92	X0	I	Clock input (12.5 MHz)
93	VCC5	–	Power supply
94	INT1/PE1	I	Input of interrupt ARP and SERVO DSP
95	INT0/PE0	I	Input of interrupt from AV DEC
96	RAS0/PB0	I	Rear panel lime input select (“H” : DISC “L” : EXT)
97	CS0L/PB1	O	Chip select signal to IF CON
98	CS0H/PB2	O	Chip select signal to DAC (Lt and Rt)
99	$\overline{DW0}$ /PB3	O	Chip select signal to DAC (L and R)
100	RAS1/PB4	O	DVD/CD select (“H” : 44.1 kHz “L” : 48 kHz)

• IC903 I/F MICROCOMPUTER (M30622MA-A33FP) (DVD Board)

Pin No.	Pin Name	I/O	Function
1	IFSIO	O	Data output for SYS COM
2	IFSCO	I	Clock input for SYS COM
3	YSSCSB	O	Chip select for SUB DSP (YSS912)
4	YSS_CS	O	Chip select for MIN DSP (YSS912)
5	YSS_CI	O	Data output for DSP (YSS912)
6	YSS_SO	I	Data input for DSP (YSS912)
7	YSSCK	O	Clock for DSP (YSS912)
8	(GND)	-	Ground
9	CNVSS	-	CNVSS
10	YSSIC	O	Reset for DSP (YSS912)
11	AN/DIG	O	Analog/Digital
12	RESET	-	Reset
13	XOUT	-	16 MHz
14	VSS	-	Ground
15	XIN	-	16 MHz
16	VCC	-	+5 V
17	NMI	I	Not used
18	STOP	I	STOP input
19	ASEL1	O	Analog select
20	ASEL2	O	Analog select
21	AUMUTE	O	Audio mute
22	VMUTE	O	Video mute
23	ASEL1	O	Video select
24	VSEL2	O	Video select
25	D1/P1	O	Dimmer
26	D2/P2	O	Dimmer
27	P3	I	Not used
28	P4	I	Not used
29	NO USE	I	Not used
30	TSTPORT	I	Test port
31	TXD1	O	For flash write
32	RXD1	O	For flash write
33	CLK1	O	For flash write
34	RTS1	O	For flash write
35	FLDATA	O	Data output for IC100 (LC75824)
36	FLINH	O	Indicator lamp terminal for IC100 (LC75824)
37	FLCLK	O	Clock for IC100 (LC75824)
38	FL_CS	O	Chip select for IC100 (LC75824)
39	STBY	O	Standby LED
40	REAR-SW	O	Rear switch
41	HOLD	O	For flash write
42	SIRCS	I	SIRCS
43	F_RLT	O	Full relay
44	POWRY	O	Power relay
45	SWMODE/SLEEP	O	Sleep for digital amplifier
46	WR	O	For flash write
47	TUNCLK	O	Clock for LC72137
48	TUNCE	O	Chip enable for LC72137
49	TUNSTE	I	Stereo detection for LC72137
50	FM750N	O	AM/FM switch for LC72137

Pin No.	Pin Name	I/O	Function
51	TUN_DO	O	Data output for LC72137
52	TUN_DI	I	Data input for LC72137
53	TUNED	O	Tuning end for LC72137
54	FAULT/BTCE1	O	FAULT for digital amplifier
55	PROTECT/BTCE2	O	PROTECT for digital amplifier
56	VOL_CE	O	Chip enable for IC507 (TC9482)
57	VOL_DAT	O	Data output for IC507 (TC9482)
58	VOL_CLK	O	Clock for IC507 (TC9482)
59	SWMUTE	O	Not used
60	CS_MUTE	O	Not used
61	LR_MUTE	O	Not used
62	VCC	–	+5 V
63	AMP_MUTE	O	Mute for digital amplifier
64	VSS	–	Ground
65	HP_MUTE	–	MUTE during head phone IN
66	HP_SW	I	Headphone IN/OUT
67	S_MUTE	O	Soft mute for IC906 (AK4527)
68	PD	O	Reset for IC906 (AK4527)
69	CDT1	O	Data output for IC906 (AK4527)
70	CLK	O	Clock for IC906 (AK4527)
71	CS	O	Chip select for IC906 (AK4527)
72	RDS1	O	Not used
73	IF_OK	O	SYS COM data transmission/reception use
74	XVIFCS	I	SYS COM data transmission use
75	RDS2	I	Not used
76	XFIFNT	O	SYS COM data transmission start use
77	XFRRST	O	Reset for SYS COM
78	DVDPOW	O	Power ON/OFF for SYS COM
79	MODEL4	I	Distinguishing destination
80	MODEL3	I	Distinguishing destination
81	MODEL2	I	Distinguishing destination
82	DIRXMD	O	Reset for IC907 (LC89055)
83	DIRCLK	O	Clock for IC907 (LC89055)
84	DIRLAT	O	Latch for IC907 (LC89055)
85	DIRWRT	O	Data output for IC907 (LC89055)
86	DIRRDT	I	Data input for IC907 (LC89055)
87	DIRERR	I	Error for IC907 (LC89055)
88	ZERO	I	ZERO data for IC907 (LC89055)
89	NO USE	I	Not used
90	+3.3V	I	Not used
91	+5V	I	Not used
92	Key 2	I	KEY input
93	Key 1	I	KEY input
94	ENB	I	Encoder
95	ENA	I	Encoder
96	AVSS	–	Ground for AD
97	NO USE	I	Not used
98	VREF	–	+5 V for AD
99	AVCC	–	+5 V for AD
100	IFSDO	I	Data input for SYS COM

SECTION 7 EXPLODED VIEWS

Ver 1.4 2002.12

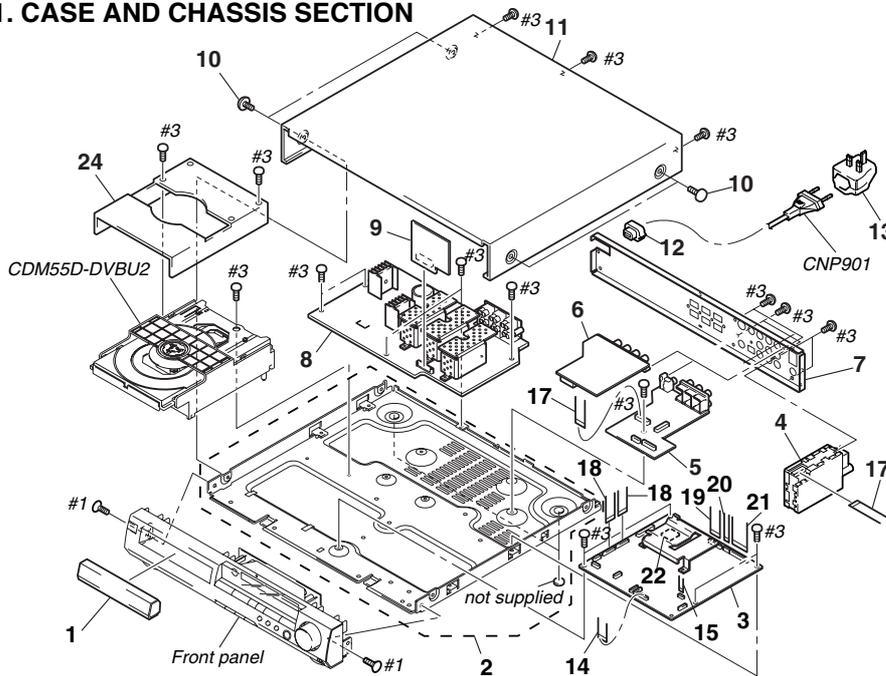
NOTE:

- -XX, -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)
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- Abbreviation
- CND : Canadian model
- AUS : Australian model
- SP : Singapore model
- HK : Hong Kong model
- CH : Chinese model
- E32 : Central & South America model
- CEN : AC230V area
- MX : Mexican
- RU : Russian
- CEU : East European & Russian
- E12 : AC220-230V area
- EA3 : Saudi Arabia
- KR : Korean
- TW : Taiwan

↑ ↑
Parts color Cabinets color

7-1. CASE AND CHASSIS SECTION



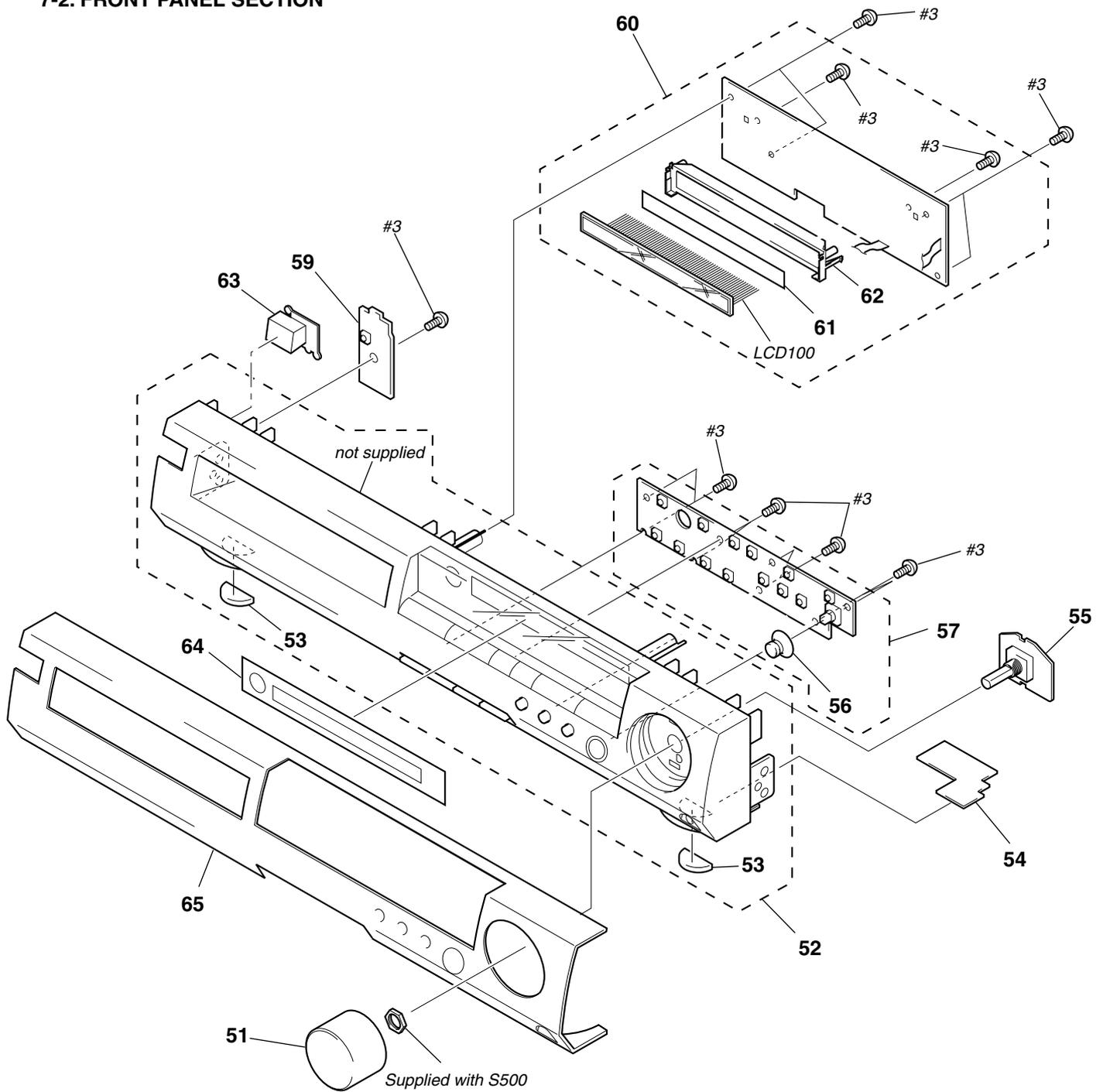
以阴影和△标志来识别的零部件在安全方面具有关键性。因此只能以规定号码的零部件来更换。

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.

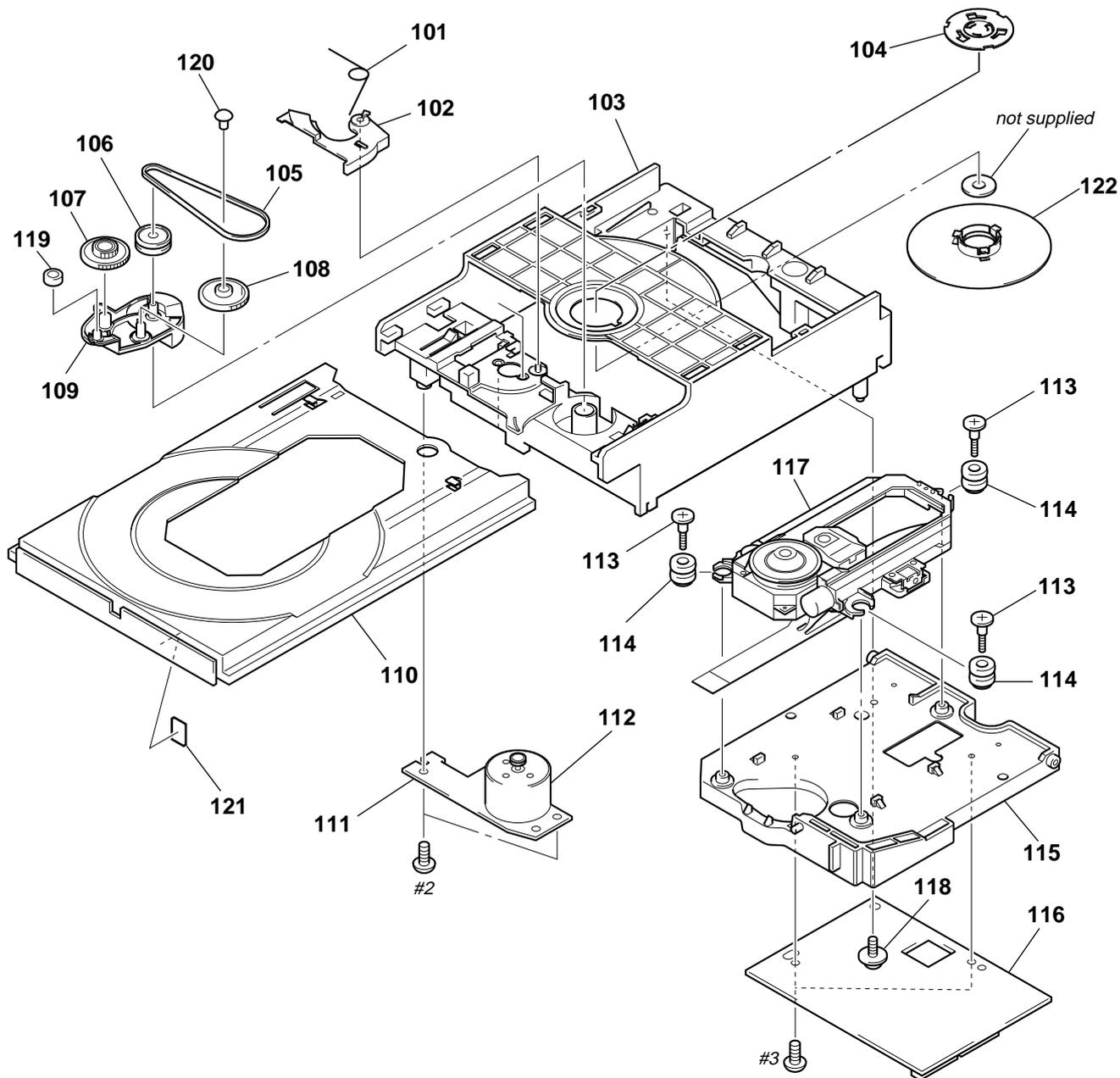
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-4952-565-1	PNEL ASSY, LOADING		7	X-4953-174-3	PANEL, BACK SUB ASSY (EA)	
2	X-4952-947-1	CHASSIS SUB ASSY		7	X-4953-354-2	PANEL, BACK SUB ASSY (CND)	
3	A-4424-426-A	DVD BOARD, COMPLETE (CND,US)		7	X-4953-617-3	PANEL, BACK SUB ASSY (TW)	
3	A-4424-645-A	DVD BOARD, COMPLETE (AEP,CEN,CEU,UK)		7	X-4953-652-3	PANEL, BACK SUB ASSY (KR)	
3	A-4424-649-A	DVD BOARD, COMPLETE (HK,SP,TW)		8	A-4428-327-A	POWER BOARD, COMPLETE (CND,US)	
3	A-4424-651-A	DVD BOARD, COMPLETE (AUS)		8	A-4473-122-A	POWER BOARD, COMPLETE (AEP,AUS,CEN,CEU,KR,RU,UK)	
3	A-4424-838-A	DVD BOARD, COMPLETE (MX)		8	A-4473-132-A	POWER BOARD, COMPLETE (E32,EA3)	
3	A-4424-840-A	DVD BOARD, COMPLETE (RU)		8	A-4473-889-A	POWER BOARD, COMPLETE (MX)	
3	A-4424-936-A	DVD BOARD, COMPLETE (EA3)		8	A-4475-197-A	POWER BOARD, COMPLETE (E12,HK,SP)	
3	A-4440-266-A	DVD BOARD, COMPLETE (KR)		8	A-4476-366-A	POWER BOARD, COMPLETE (TW)	
3	A-4440-353-A	DVD BOARD, COMPLETE (CH)		8	A-4726-265-A	POWER BOARD, COMPLETE (CH)	
3	A-4473-704-A	DVD BOARD, COMPLETE (E32)		9	A-4428-329-A	PROTECT BOARD, COMPLETE (EXCEPT CH)	
3	A-4475-303-A	DVD BOARD, COMPLETE (E12)		9	A-4726-264-A	PROTECT BOARD, COMPLETE (CH)	
4	A-4424-428-A	TUNER BOARD, COMPLETE (CND,US)		10	4-221-580-01	SCREW, CASE	
4	A-4424-647-A	TUNER BOARD,ASSY (AEP,CEN,CEU,CH,KR,TW,UK)		11	X-4952-949-01	CASE SUB ASSY	
4	A-4424-650-A	TUNER BOARD, ASSY (AUS,E12,E32,EA3,HK,MX,RU,SP)		12	4-217-350-01	STOPPER, CORD	
5	A-4428-331-A	AUDIO BOARD, COMPLETE (CND,US)		13	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK,HK)	
5	A-4473-125-A	AUDIO BOARD, COMPLETE (AUS,E12,E32,EA3,HK,KR,MX,RU,SP)		14	1-792-403-11	CABLE, FLAT (14 core)	
5	A-4473-703-A	AUDIO BOARD, COMPLETE (AEP,CEU,TW,UK)		15	1-792-404-11	CABLE, FLAT (5 core)	
5	A-4473-989-A	AUDIO BOARD, COMPLETE (CEN)		17	1-792-406-11	CABLE, FLAT (13 core)	
5	A-4726-266-A	AUDIO BOARD, COMPLETE (CH)		18	1-792-399-11	CABLE, FLAT (18 core)	
6	A-4428-332-A	VIDEO BOARD, COMPLETE (EXCEPT CH)		19	1-792-400-11	CABLE, FLAT (18 core)	
6	A-4726-267-A	VIDEO BOARD, COMPLETE (CH)		20	1-792-401-11	CABLE, FLAT (7 core)	
7	X-4952-948-3	PANEL, BACK SUB ASSY (US)		21	1-792-402-11	CABLE, FLAT (27 core)	
7	X-4952-950-2	PANEL, BACK SUB ASSY (AEP,UK,CEN,CEU,CH)		22	4-226-340-01	SHEET, RADIATION	
7	X-4952-951-2	PANEL, BACK SUB ASSY (HK)		24	4-227-964-11	COVER, MD	
7	X-4952-952-2	PANEL, BACK SUB ASSY (AUS)		25	4-227-962-03	SHEET (POWER)	
7	X-4952-953-2	PANEL, BACK SUB ASSY (E32)		△ CNP901	1-690-608-11	CORD, POWER (AUS)	
7	X-4952-979-2	PANEL, BACK SUB ASSY (MX)		△ CNP901	1-696-169-22	CORD,POWER (AEP,UK,CEN,CEU,RU,EA,E12,E32,SP,HK,TW)	
7	X-4952-980-2	PANEL, BACK SUB ASSY (RU)		△ CNP901	1-769-079-22	CORD, POWER (KR)	
7	X-4952-982-2	PANEL, BACK SUB ASSY (SP)		△ CNP901	1-775-789-91	CORD, POWER (MX)	
7	X-4953-173-3	PANEL, BACK SUB ASSY (E12)		△ CNP901	1-782-464-21	CORD, POWER (CH)	
				△ CNP901	1-783-531-61	CORD, POWER (US,CND)	

7-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	X-4952-564-1	KNOB (VOL) ASSY		59	A-4428-321-A	PW-932 BOARD, COMPLETE (EXCEPT CH)	
52	X-4952-562-1	PANEL ASSY, FRONT		59	A-4726-260-A	PW-932 BOARD, COMPLETE (CH)	
53	4-218-204-01	FOOT (FRONT)		60	A-4428-323-A	FP-932 BOARD, COMPLETE (EXCEPT CH)	
54	A-4428-322-A	HP-932 BOARD, COMPLETE (EXCEPT CH)		60	A-4726-262-A	FP-932 BOARD, COMPLETE (CH)	
54	A-4428-261-A	HP-932 BOARD, COMPLETE (CH)		61	4-227-174-01	SHEET, DIFFUSION	
55	A-4428-324-A	VL-932 BOARD, COMPLETE (EXCEPT CH)		62	4-226-339-01	HOLDER (LED)	
55	A-4428-263-A	VL-932 BOARD, COMPLETE (CH)		63	X-4952-563-1	BUTTON (POWER) ASSY	
56	A-226-334-01	KNOB (CURSOR)		64	X-4952-963-1	WINDOW SUB ASSY	
57	A-4428-320-A	SW-932 BOARD, COMPLETE		65	4-226-328-01	PANEL (AL), FRONT	
58	4-931-757-31	SCREW (2.6X8) (1T3B), +BVTP		LCD100	1-803-910-11	DISPLAY PANEL, LIQUID CRYSTAL	

7-3. MECHANISM SECTION



以阴影和 △标志来识别的零部件，在安全方面具有关键性。因此只能以规定号码的零部件来更换。	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.
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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	4-220-239-01	SPRING, TORSION		113	4-981-923-01	SCREW (M), STEP	
102	4-220-229-01	LEVER (SW)		114	3-053-847-01	INSULATOR	
103	4-225-884-01	CHASSIS (55D)		115	4-224-895-01	HOLDER (KHM-220)	
104	4-225-966-01	PULLEY (B)		116	A-4724-996-A	TK BOARD, COMPLETE	
105	4-221-816-01	BELT (CDM55)		△ 117	8-820-081-09	OPTICAL PICK-UP KHM220AAA	
106	4-220-234-01	PULLEY (LDG)		118	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
107	4-220-237-01	GEAR (A)		119	4-221-815-01	ROLLER	
108	4-220-238-01	GEAR (B)		120	4-227-598-01	SPACER (55)	
109	4-220-233-01	CAM (CDM55)		121	4-925-315-31	DAMPER	
110	4-224-894-01	TRAY (CDM55)		122	4-225-965-01	PULLEY (A)	
111	1-676-599-11	LOADING BOARD		#2	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	
112	A-4672-891-A	MOTOR (LD) ASSY		#3	7-685-546-14	SCREW +BTP 3X8 TYPE2 N-S	

SECTION 8 ELECTRICAL PARTS LIST

AUDIO

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, -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.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F : nonflammable
- 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
CND : Canadian model
CH : Chinese model
AUS : Australian model
SP : Singapore model
HK : Hong Kong model
E32 : Central & South America model
CEN : AC230V area
- MX : Mexican
RU : Russian
CEU : East European & Russian
E12 : AC220-230V area
EA3 : Saudi Arabia
KR : Korean
TW : Taiwan

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

以阴影和 Δ 标志来识别的零部件，在安全方面具有关键性。因此只能以规定号码的零部件来更换。

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.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	A-4428-331-A	AUDIO BOARD, COMPLETE (CND,US)		CN601	1-770-655-11	CONNECTOR, FFC/FPC 27P	
	A-4473-125-A	AUDIO BOARD, COMPLETE (AUS,E12,E32,EA3,HK,KR,MX,RU,SP)		* CN602	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
	A-4473-703-A	AUDIO BOARD, COMPLETE (AEP,CEU,TW,UK)		CN603	1-568-832-11	SOCKET, CONNECTOR 13P	
	A-4473-989-A	AUDIO BOARD, COMPLETE (CEN)		CN604	1-770-638-11	CONNECTOR, FFC/FPC 7P	
	A-4726-266-A	AUDIO BOARD, COMPLETE (CH)		< DIODE >			
	*****			D600	8-719-053-18	DIODE 1SR154-400TE-25	
	< CAPACITOR >			D601	8-719-069-59	DIODE UDZS-TE17-8.2B	
C600	1-126-933-11	ELECT	100uF 20% 16V	< IC >			
C601	1-126-933-11	ELECT	100uF 20% 16V	IC600	8-759-653-03	IC NJM78M05DL1A-TE1	
C602	1-126-933-11	ELECT	100uF 20% 16V	IC601	8-759-662-86	IC NJM79M05DL1A-TE1	
C603	1-165-319-11	CERAMIC CHIP	0.1uF 50V	IC602	8-759-106-22	IC uPD4052BG-T1	
C604	1-165-319-11	CERAMIC CHIP	0.1uF 50V	IC603	8-749-923-05	TORX178A (DIGITAL OPTICAL) (US,CND,UK)	
C605	1-126-965-11	ELECT	22uF 20% 50V	< JACK >			
C606	1-126-965-11	ELECT	22uF 20% 50V	J600	1-794-033-11	JACK, PIN (6P)	
C607	1-126-965-11	ELECT	22uF 20% 50V	J601	1-794-034-11	JACK (SMALL TYPE)	
C608	1-126-965-11	ELECT	22uF 20% 50V	< COIL >			
C609	1-165-319-11	CERAMIC CHIP	0.1uF 50V	L600	1-469-525-91	INDUCTOR 10uH (US,CND,UK)	
C610	1-165-319-11	CERAMIC CHIP	0.1uF 50V	L601	1-412-953-11	INDUCTOR 15uH	
C612	1-126-965-11	ELECT	22uF 20% 50V	L602	1-412-953-11	INDUCTOR 15uH	
C613	1-165-319-11	CERAMIC CHIP	0.1uF 50V	L603	1-412-953-11	INDUCTOR 15uH	
C614	1-165-319-11	CERAMIC CHIP	0.1uF 50V	< TRANSISTOR >			
C615	1-126-965-11	ELECT	22uF 20% 50V	Q600	8-729-801-93	TRANSISTOR 2SD1387-34-TP	
C616	1-163-001-11	CERAMIC CHIP	220PF 10% 50V	Q601	8-729-027-23	TRANSISTOR DTA114EKA-T146	
C617	1-163-001-11	CERAMIC CHIP	220PF 10% 50V	Q602	8-729-901-00	TRANSISTOR DTC124EKA-T146	
C618	1-163-001-11	CERAMIC CHIP	220PF 10% 50V	Q603	8-729-046-97	TRANSISTOR 2SD1938(F)-T(TX).SO	
C619	1-163-001-11	CERAMIC CHIP	220PF 10% 50V	Q604	8-729-046-97	TRANSISTOR 2SD1938(F)-T(TX).SO	
C621	1-216-295-91	SHORT	0	Q605	8-729-046-97	TRANSISTOR 2SD1938(F)-T(TX).SO	
C622	1-126-965-11	ELECT	22uF 20% 50V (US,CND,UK)	< RESISTOR >			
C623	1-165-319-11	CERAMIC CHIP	0.1uF 50V (US,CND,UK)	R600	1-216-033-00	METAL CHIP 220 5% 1/10W	
C624	1-163-098-00	CERAMIC CHIP	16PF 5% 50V	R601	1-216-033-00	METAL CHIP 220 5% 1/10W	
C625	1-163-001-11	CERAMIC CHIP	220PF 10% 50V	R602	1-216-033-00	METAL CHIP 220 5% 1/10W	
C626	1-163-105-00	CERAMIC CHIP	33PF 5% 50V	R603	1-216-033-00	METAL CHIP 220 5% 1/10W	
C627	1-163-098-00	CERAMIC CHIP	16PF 5% 50V	R604	1-216-033-00	METAL CHIP 220 5% 1/10W	
C628	1-163-105-00	CERAMIC CHIP	33PF 5% 50V	R605	1-216-053-00	METAL CHIP 1.5K 5% 1/10W	
C629	1-163-098-00	CERAMIC CHIP	16PF 5% 50V	R606	1-216-295-91	SHORT 0	
C630	1-163-105-00	CERAMIC CHIP	33PF 5% 50V	R607	1-216-295-91	SHORT 0	
C631	1-216-295-91	SHORT	0	R610	1-216-025-91	RES-CHIP 100 5% 1/10W	
C724	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V	R611	1-216-025-91	RES-CHIP 100 5% 1/10W	
C725	1-104-760-11	CERAMIC CHIP	0.047uF 10% 50V	R612	1-216-097-91	RES-CHIP 100K 5% 1/10W	
	< CONNECTOR >						
CN600	1-568-831-41	SOCKET, CONNECTOR 12P					

AUDIO

DVD

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R613	1-216-097-91	RES-CHIP	100K 5% 1/10W	C019	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
R614	1-216-073-00	METAL CHIP	10K 5% 1/10W	C020	1-126-206-11	ELECT CHIP	100uF 20% 6.3V
R615	1-216-073-00	METAL CHIP	10K 5% 1/10W	C021	1-124-778-00	ELECT CHIP	22uF 20% 6.3V
R616	1-216-049-91	RES-CHIP	1K 5% 1/10W				(AEP,UK,SP,HK,E32,AUS)
R617	1-216-049-91	RES-CHIP	1K 5% 1/10W	C022	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V
R618	1-216-049-91	RES-CHIP	1K 5% 1/10W	C024	1-115-467-11	CERAMIC CHIP	0.22uF 10% 10V
R619	1-216-049-91	RES-CHIP	1K 5% 1/10W	C201	1-162-919-11	CERAMIC CHIP	22PF 5% 50V
R620	1-216-097-91	RES-CHIP	100K 5% 1/10W	C202	1-162-919-11	CERAMIC CHIP	22PF 5% 50V
R621	1-216-049-91	RES-CHIP	1K 5% 1/10W	C203	1-104-851-11	TANTAL. CHIP	10uF 20% 10V
R622	1-216-097-91	RES-CHIP	100K 5% 1/10W	C204	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
R623	1-216-049-91	RES-CHIP	1K 5% 1/10W	C206	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
R624	1-216-049-91	RES-CHIP	1K 5% 1/10W	C209	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
R625	1-216-097-91	RES-CHIP	100K 5% 1/10W	C210	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
R626	1-216-049-91	RES-CHIP	1K 5% 1/10W	C211	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
R627	1-216-097-91	RES-CHIP	100K 5% 1/10W	C212	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
R628	1-216-025-91	RES-CHIP	100 5% 1/10W (US,CND,UK)	C213	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
R629	1-216-049-91	RES-CHIP	1K 5% 1/10W	C304	1-110-563-11	CERAMIC CHIP	0.068uF 10% 16V
R630	1-216-042-00	METAL CHIP	510 5% 1/10W	C307	1-104-851-11	TANTAL. CHIP	10uF 20% 10V
R631	1-216-049-91	RES-CHIP	1K 5% 1/10W	C309	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V
R632	1-216-042-00	METAL CHIP	510 5% 1/10W	C310	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
R633	1-216-042-00	METAL CHIP	510 5% 1/10W	C312	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
R634	1-216-049-91	RES-CHIP	1K 5% 1/10W	C313	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
R635	1-216-049-91	RES-CHIP	1K 5% 1/10W	C314	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V

A-4424-426-A	DVD BOARD, COMPLETE (CND,US)						
A-4424-645-A	DVD BOARD, COMPLETE (AEP,CEN,CEU,UK)						
A-4424-649-A	DVD BOARD, COMPLETE (HK,SP,TW)						
A-4424-651-A	DVD BOARD, COMPLETE (AUS)						
A-4424-838-A	DVD BOARD, COMPLETE (MX)						
A-4424-840-A	DVD BOARD, COMPLETE (RU)						
A-4424-936-A	DVD BOARD, COMPLETE (EA3)						
A-4440-266-A	DVD BOARD, COMPLETE (KR)						
A-4440-353-A	DVD BOARD, COMPLETE (CH)						
A-4473-704-A	DVD BOARD, COMPLETE (E32)						
A-4475-303-A	DVD BOARD, COMPLETE (E12)						

8-759-567-31	IC PLL1700E/2K (US,CND)						
< CAPACITOR >							
C001	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C317	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C002	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V	C318	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C003	1-126-246-11	ELECT CHIP	220uF 20% 4V	C319	1-104-851-11	TANTAL. CHIP	10uF 20% 10V
C004	1-126-204-11	ELECT CHIP	47uF 20% 16V	C320	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C005	1-126-206-11	ELECT CHIP	100uF 20% 6.3V	C321	1-126-206-11	ELECT CHIP	100uF 20% 6.3V
C007	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C322	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C008	1-126-204-11	ELECT CHIP	47uF 20% 16V	C323	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C009	1-126-204-11	ELECT CHIP	47uF 20% 16V	C324	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C010	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C325	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V
C011	1-104-851-11	TANTAL. CHIP	10uF 20% 10V	C327	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C012	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C328	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C013	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C329	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C015	1-126-246-11	ELECT CHIP	220uF 20% 4V	C331	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C016	1-104-851-11	TANTAL. CHIP	10uF 20% 10V	C333	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C017	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C334	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C018	1-104-851-11	TANTAL. CHIP	10uF 20% 10V	C337	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
				C338	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
				C339	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
				C341	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
				C343	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
				C344	1-162-927-11	CERAMIC CHIP	100PF 5% 50V
				C401	1-104-851-11	TANTAL. CHIP	10uF 20% 10V
				C402	1-126-209-11	ELECT CHIP	100uF 20% 4V
				C403	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V
				C404	1-107-826-91	CERAMIC CHIP	0.1uF 10% 16V
				C405	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
				C406	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
				C408	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
				C410	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
				C411	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
				C413	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
				C414	1-104-851-11	TANTAL. CHIP	10uF 20% 10V

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
C415	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C543	1-162-921-11	CERAMIC CHIP	33PF		
C416	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C544	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C418	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C548	1-162-921-11	CERAMIC CHIP	33PF		
C420	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C549	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C422	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C552	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C425	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C553	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C426	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C554	1-126-204-11	ELECT CHIP	47uF	20%	16V
C428	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C555	1-126-204-11	ELECT CHIP	47uF	20%	16V
C431	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C556	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C432	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C601	1-104-851-11	TANTAL. CHIP	10uF	20%	10V
C433	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C602	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C434	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C603	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C436	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C604	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C438	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C605	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C439	1-104-851-11	TANTAL. CHIP	10uF	20%	10V	C606	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C440	1-104-851-11	TANTAL. CHIP	10uF	20%	10V	C607	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C441	1-126-209-11	ELECT CHIP	100uF	20%	4V	C608	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C443	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	C701	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C501	1-126-400-11	ELECT	22uF	20%	35V	C702	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C502	1-126-400-11	ELECT	22uF	20%	35V	C703	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C503	1-126-400-11	ELECT	22uF	20%	35V	C704	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C504	1-126-400-11	ELECT	22uF	20%	35V	C705	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C505	1-126-400-11	ELECT	22uF	20%	35V	C706	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C506	1-126-400-11	ELECT	22uF	20%	35V	C707	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C507	1-164-672-11	CERAMIC CHIP	1500PF	5%	16V	C708	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C508	1-164-672-11	CERAMIC CHIP	1500PF	5%	16V	C709	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C509	1-126-204-11	ELECT CHIP	47uF	20%	16V	C710	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C510	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	C711	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C511	1-126-205-11	ELECT CHIP	47uF	20%	6.3V	C712	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C512	1-162-921-11	CERAMIC CHIP	33PF	5%	50V	C713	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C513	1-162-921-11	CERAMIC CHIP	33PF	5%	50V	C714	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C514	1-162-921-11	CERAMIC CHIP	33PF	5%	50V	C715	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C515	1-162-921-11	CERAMIC CHIP	33PF	5%	50V	C717	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C516	1-162-921-11	CERAMIC CHIP	33PF	5%	50V	C801	1-126-204-11	ELECT CHIP	47uF	20%	16V
C517	1-162-921-11	CERAMIC CHIP	33PF	5%	50V	C802	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C518	1-126-204-11	ELECT CHIP	47uF	20%	16V	C803	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C519	1-126-204-11	ELECT CHIP	47uF	20%	16V	C805	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C520	1-126-400-11	ELECT	22uF	20%	35V	C806	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C521	1-126-400-11	ELECT	22uF	20%	35V	C807	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C522	1-126-400-11	ELECT	22uF	20%	35V	C808	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C523	1-126-400-11	ELECT	22uF	20%	35V	C809	1-110-563-11	CERAMIC CHIP	0.068uF	10%	16V
C524	1-126-400-11	ELECT	22uF	20%	35V	C810	1-110-563-11	CERAMIC CHIP	0.068uF	10%	16V
C525	1-126-400-11	ELECT	22uF	20%	35V	C811	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C526	1-124-779-00	ELECT CHIP	10uF	20%	16V	C812	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C527	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	C813	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C529	1-126-204-11	ELECT CHIP	47uF	20%	16V	C814	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C531	1-126-204-11	ELECT CHIP	47uF	20%	16V	C815	1-110-666-11	ELECT CHIP	22uF	20%	6.3V
C532	1-162-921-11	CERAMIC CHIP	33PF	5%	50V	C818	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C533	1-162-921-11	CERAMIC CHIP	33PF	5%	50V	C819	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C534	1-126-204-11	ELECT CHIP	47uF	20%	16V	C820	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C535	1-126-204-11	ELECT CHIP	47uF	20%	16V	C821	1-164-230-11	CERAMIC CHIP	220PF	5%	50V
C536	1-107-826-91	CERAMIC CHIP	0.1uF	10%	10V	C822	1-126-204-11	ELECT CHIP	47uF	20%	16V
C537	1-126-400-11	ELECT	22uF	20%	35V	C823	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C538	1-126-400-11	ELECT	22uF	20%	35V	C824	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C539	1-126-400-11	ELECT	22uF	20%	35V	C825	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C540	1-126-400-11	ELECT	22uF	20%	35V	C830	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C541	1-126-400-11	ELECT	22uF	20%	35V	C831	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V
C542	1-126-400-11	ELECT	22uF	20%	35V	C832	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description		Remark
C833	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V			< CONNECTOR >		
C834	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V					
C835	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	CN001	1-794-032-21	PIN, CONNECTOR		
C836	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V	CN002	1-794-343-21	CONNECTOR, FFC/FPC 18P		
C837	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V	CN003	1-794-343-21	CONNECTOR, FFC/FPC 18P		
C901	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	CN005	1-785-466-11	CONNECTOR, FFC/FPC 7P		
C902	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	CN006	1-778-622-21	CONNECTOR, FFC/FPC 10P		
C903	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	* CN010	1-573-768-21	PIN, CONNECTOR (1.5MM) (SMD) 5P		
C904	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	CN011	1-573-768-61	PIN, CONNECTOR (1.5MM) (SMD) 5P		
C905	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V	CN012	1-573-768-41	PIN, CONNECTOR (1.5MM) (SMD) 5P		
C906	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	CN014	1-778-622-21	CONNECTOR, FFC/FPC 10P		
C907	1-107-823-11	CERAMIC CHIP	0.47uF	10%	16V	CN015	1-794-342-21	CONNECTOR, FFC/FPC 14P		
C909	1-104-851-11	TANTAL. CHIP	10uF	20%	10V	CN016	1-778-622-21	CONNECTOR, FFC/FPC 10P		
C910	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	CN017	1-794-341-21	CONNECTOR, FFC/FPC 27P		
C911	1-126-205-11	ELECT CHIP	47uF	20%	6.3V	CN018	1-784-365-21	CONNECTOR, FFC/FPC 5P		
C912	1-104-851-11	TANTAL. CHIP	10uF	20%	10V	CN019	1-794-343-21	CONNECTOR, FFC/FPC 18P		
C913	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V			< DIODE >		
C914	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	D701	8-719-073-01	DIODE MA111-(K8).SO		
C915	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	D801	8-719-941-09	DIODE DAP202UT106		
C916	1-104-851-11	TANTAL. CHIP	10uF	20%	10V	D802	8-719-404-50	DIODE MA111-TX		
C917	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	D803	8-719-941-21	DIODE DAP202UT106		
C918	1-128-390-11	ELECT CHIP	220uF	20%	6.3V	D804	8-719-941-21	DIODE DAN202UT106		
C919	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	D805	8-719-941-21	DIODE DAN202UT106		
C920	1-126-209-11	ELECT CHIP	100uF	20%	4V	D806	8-719-404-50	DIODE MA111-TX		
C921	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	D807	8-719-404-50	DIODE MA111-TX		
C922	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	D901	8-719-053-18	DIODE 1SR154-400TE-25		
C923	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	D902	8-719-053-18	DIODE 1SR154-400TE-25		
C924	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	D903	8-719-404-50	DIODE MA111-TX		
C925	1-162-919-91	CERAMIC CHIP	22PF	0.5PF	50V	D904	8-719-404-50	DIODE MA111-TX		
C926	1-162-924-91	CERAMIC CHIP	56PF	0.5PF	50V	D905	8-719-404-50	DIODE MA111-TX		
C927	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	D906	8-719-404-50	DIODE MA111-TX		
C928	1-126-205-11	ELECT CHIP	47uF	20%	6.3V	D907	8-719-404-50	DIODE MA111-TX		
C929	1-126-209-11	ELECT CHIP	100uF	20%	4V	D908	8-719-404-50	DIODE MA111-TX		
C930	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	D909	8-719-404-50	DIODE MA111-TX		
C931	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	D910	8-719-404-50	DIODE MA111-TX		
C932	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	D911	8-719-941-21	DIODE DAP202UT106		
C933	1-126-205-11	ELECT CHIP	47uF	20%	6.3V	D912	8-719-941-21	DIODE DAP202UT106		
C934	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	D913	8-719-941-21	DIODE DAP202UT106		
C935	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	D914	8-719-941-21	DIODE DAP202UT106		
C936	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V			< FERRITE BEAD >		
C937	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	FB001	1-469-669-21	INDUCTOR	0UH	
C938	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	FB002	1-469-669-21	INDUCTOR	0UH	
C939	1-104-851-11	TANTAL. CHIP	10uF	20%	10V	FB003	1-469-669-21	INDUCTOR	0UH	
C940	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	FB004	1-469-669-21	INDUCTOR	0UH	
C941	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	FB005	1-469-669-21	INDUCTOR	0UH	
C943	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	FB006	1-469-669-21	INDUCTOR	0UH	
C944	1-128-390-11	ELECT CHIP	220uF	20%	6.3V	FB007	1-469-669-21	INDUCTOR	0UH	
C945	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	FB008	1-469-669-21	INDUCTOR	0UH	
C946	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	FB016	1-216-801-11	METAL CHIP	22	5% 1/16W
C947	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V	* FB014	1-469-229-22	FERRITE	0UH	
C948	1-124-779-00	ELECT CHIP	10uF	20%	16V	* FB015	1-469-229-22	FERRITE	0UH	
C949	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	* FB017	1-469-229-22	FERRITE	0UH	
C951	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	* FB018	1-469-229-22	FERRITE	0UH	
C952	1-107-826-91	CERAMIC CHIP	0.1uF	10%	16V	FB019	1-469-669-21	INDUCTOR	0UH	
C953	1-104-905-11	CAPACITOR	0.22F		5.5V	FB020	1-469-669-21	INDUCTOR	0UH	
C954	1-104-851-11	TANTAL. CHIP	10uF	20%	10V	FB021	1-469-669-21	INDUCTOR	0UH	
C955	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V					

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
FB022	1-469-669-21	INDUCTOR	OUH	FB946	1-469-669-21	INDUCTOR	OUH
FB023	1-500-283-11	INDUCTOR CHIP	OUH	* FB947	1-469-229-22	FERRITE	OUH
FB024	1-469-669-21	INDUCTOR	OUH	* FB948	1-469-229-22	FERRITE	OUH
FB025	1-469-669-21	INDUCTOR	OUH	* FB949	1-469-229-22	FERRITE	OUH
FB026	1-469-669-21	INDUCTOR	OUH	FB956	1-469-669-21	INDUCTOR	OUH
FB027	1-469-669-21	INDUCTOR	OUH	* FB957	1-469-229-22	FERRITE	OUH
FB031	1-469-669-21	INDUCTOR	OUH (AEP,UK,SP,HK,E32,AUS)	* FB958	1-469-229-22	FERRITE	OUH
FB055	1-500-283-11	INDUCTOR CHIP	OUH	* FB959	1-469-229-22	FERRITE	OUH
FB056	1-500-283-11	INDUCTOR CHIP	OUH	* FB960	1-469-229-22	FERRITE	OUH
FB058	1-500-283-11	INDUCTOR CHIP	OUH	* FB961	1-469-229-22	FERRITE	OUH
FB060	1-500-283-11	INDUCTOR CHIP	OUH	* FB962	1-469-229-22	FERRITE	OUH
FB081	1-216-801-11	METAL CHIP	22 5% 1/16W	* FB963	1-469-229-22	FERRITE	OUH
FB083	1-216-801-11	METAL CHIP	22 5% 1/16W	* FB964	1-469-229-22	FERRITE	OUH
FB084	1-216-801-11	METAL CHIP	22 5% 1/16W	* FB965	1-469-229-22	FERRITE	OUH
FB085	1-216-801-11	METAL CHIP	22 5% 1/16W	* FB966	1-469-229-22	FERRITE	OUH
FB087	1-216-801-11	METAL CHIP	22 5% 1/16W	FB967	1-469-669-21	INDUCTOR	OUH
FB105	1-469-669-21	INDUCTOR	OUH	FB969	1-469-669-21	INDUCTOR	OUH
FB106	1-469-669-21	INDUCTOR	OUH				
FB901	1-469-669-21	INDUCTOR	OUH			< FILTER >	
* FB902	1-469-229-22	FERRITE	OUH	FL008	1-234-177-21	FILTER, CHIP EMI	
* FB903	1-469-229-22	FERRITE	OUH	FL001	1-234-177-21	FILTER, CHIP EMI	
* FB904	1-469-229-22	FERRITE	OUH	FL002	1-234-177-21	FILTER, CHIP EMI	
* FB905	1-469-229-22	FERRITE	OUH	FL003	1-233-893-21	FILTER, CHIP EMI	
* FB906	1-469-229-22	FERRITE	OUH	FL004	1-233-893-21	FILTER, CHIP EMI	
* FB907	1-469-229-22	FERRITE	OUH	FL005	1-234-177-21	FILTER, CHIP EMI	
* FB908	1-469-229-22	FERRITE	OUH	FL006	1-234-177-21	FILTER, CHIP EMI	
* FB909	1-469-229-22	FERRITE	OUH	FL007	1-233-893-21	FILTER, CHIP EMI	
FB916	1-500-283-11	INDUCTOR CHIP	OUH	FL009	1-234-177-21	FILTER, CHIP EMI	
* FB910	1-469-229-22	FERRITE	OUH	FL010	1-234-177-21	FILTER, CHIP EMI	
* FB911	1-469-229-22	FERRITE	OUH	FL011	1-234-177-21	FILTER, CHIP EMI (US,CND)	
* FB912	1-469-229-22	FERRITE	OUH	FL012	1-233-893-21	FILTER, CHIP EMI	
* FB915	1-469-229-22	FERRITE	OUH	FL013	1-233-893-21	FILTER, CHIP EMI (US,CND)	
FB917	1-500-283-11	INDUCTOR CHIP	OUH	FL014	1-234-177-21	FILTER, CHIP EMI	
* FB919	1-469-229-22	FERRITE	OUH	FL015	1-234-177-21	FILTER, CHIP EMI	
* FB925	1-469-229-22	FERRITE	OUH	FL016	1-234-177-21	FILTER, CHIP EMI	
* FB920	1-469-229-22	FERRITE	OUH	FL017	1-234-177-21	FILTER, CHIP EMI	
* FB921	1-469-229-22	FERRITE	OUH	FL202	1-234-177-21	FILTER, CHIP EMI	
* FB922	1-469-229-22	FERRITE	OUH	FL203	1-234-177-21	FILTER, CHIP EMI	
* FB923	1-469-229-22	FERRITE	OUH	FL204	1-234-177-21	FILTER, CHIP EMI	
* FB924	1-469-229-22	FERRITE	OUH	FL205	1-234-177-21	FILTER, CHIP EMI	
* FB926	1-469-229-22	FERRITE	OUH	FL301	1-234-177-21	FILTER, CHIP EMI	
* FB927	1-469-229-22	FERRITE	OUH	FL302	1-234-177-21	FILTER, CHIP EMI	
* FB928	1-469-229-22	FERRITE	OUH	FL303	1-234-177-21	FILTER, CHIP EMI	
* FB929	1-469-229-22	FERRITE	OUH	FL401	1-234-177-21	FILTER, CHIP EMI	
* FB930	1-469-229-22	FERRITE	OUH	FL402	1-234-177-21	FILTER, CHIP EMI	
* FB931	1-469-229-22	FERRITE	OUH	FL403	1-234-177-21	FILTER, CHIP EMI	
* FB932	1-469-229-22	FERRITE	OUH	FL404	1-234-177-21	FILTER, CHIP EMI	
* FB934	1-469-229-22	FERRITE	OUH	FL405	1-234-177-21	FILTER, CHIP EMI	
* FB936	1-469-229-22	FERRITE	OUH	FL601	1-234-177-21	FILTER, CHIP EMI	
* FB937	1-469-229-22	FERRITE	OUH	FL602	1-234-177-21	FILTER, CHIP EMI	
* FB938	1-469-229-22	FERRITE	OUH	FL701	1-234-177-21	FILTER, CHIP EMI	
* FB939	1-469-229-22	FERRITE	OUH	FL901	1-234-177-21	FILTER, CHIP EMI	
* FB942	1-469-229-22	FERRITE	OUH	FL903	1-234-177-21	FILTER, CHIP EMI	
* FB944	1-469-229-22	FERRITE	OUH	FL904	1-234-177-21	FILTER, CHIP EMI	
* FB940	1-469-229-22	FERRITE	OUH	FL905	1-234-177-21	FILTER, CHIP EMI	
* FB941	1-469-229-22	FERRITE	OUH	FL902	1-234-177-21	FILTER, CHIP EMI	
* FB943	1-469-229-22	FERRITE	OUH				
FB945	1-469-669-21	INDUCTOR	OUH				

DVD

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< IC >					
IC001	8-759-594-91	IC SM8701AM-E2		Q502	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO
IC004	8-759-531-92	IC TC7WH04FU(TE12R)		Q503	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO
IC002	8-759-052-52	IC L78M05TLL-SONY-TL		Q504	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO
IC005	8-759-486-55	IC NJM2370U33-TE2		Q505	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO
IC202	8-759-599-39	IC MB91101APFV-G-BND					
IC201	8-759-469-25	IC AK6440AF-E2		Q506	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO
IC203	8-759-645-76	IC TC74VHCT32AFT		Q801	8-729-028-73	TRANSISTOR	DTA114EUA-T106
IC204	8-759-573-65	IC KM616V1002AT-15T		Q901	8-729-230-63	TRANSISTOR	2SD1819A-QRS-TX
IC206	8-759-687-50	IC MR27V1602D-E8MAZ060 (US,CND,AUS)		Q902	8-729-028-96	TRANSISTOR	DTC114EUA-T106
IC206	8-759-687-52	IC MR27V1602D-F0MAZ060 (AEP,UK,CEN,CEU)		Q903	8-729-230-63	TRANSISTOR	2SD1819A-QRS-TX
IC206	8-759-697-51	IC MR27V1602E-10MAZH60 (SP,HK,TW,E12,KR)		Q905	8-729-907-00	TRANSISTOR	DTC114EUA-T106
IC206	8-759-712-18	IC MR27V1602E-E8MAZ060 (MX,RU,EA3,E32) (IC206 is repair parts of IC205)		Q906	8-729-028-73	TRANSISTOR	DTA114EUA-T106
IC207	8-759-427-92	IC PST9126NL		Q907	8-729-028-73	TRANSISTOR	DTA114EUA-T106
IC302	8-759-486-55	IC NJM2370U33-TE2		Q908	8-729-028-73	TRANSISTOR	DTA114EUA-T106
IC303	8-759-567-27	IC CXD8784R		Q909	8-729-028-73	TRANSISTOR	DTA114EUA-T106
IC304	8-759-583-44	IC MSM51V18160D-60TSKR1		Q910	8-729-028-73	TRANSISTOR	DTA114EUA-T106
IC401	8-752-398-60	IC CXD1930BQ				< RESISTOR >	
IC402	8-759-641-60	IC MT48LC1M16A1TG-7S		R001	1-216-833-11	RES-CHIP	10K 5% 1/16W
IC403	8-759-641-60	IC MT48LC1M16A1TG-7S		R002	1-216-833-11	RES-CHIP	10K 5% 1/16W
IC404	8-759-486-55	IC NJM2370U33-TE2		R003	1-216-833-11	RES-CHIP	10K 5% 1/16W
IC501	8-759-052-52	IC L78M05TLL-SONY-TL		R004	1-216-821-11	METAL CHIP	1K 5% 1/16W
IC502	8-759-636-55	IC M5218AFP-T1		R005	1-216-821-11	METAL CHIP	1K 5% 1/16W
IC503	8-759-636-55	IC M5218AFP-T1		R006	1-216-821-11	METAL CHIP	1K 5% 1/16W
IC504	8-759-636-55	IC M5218AFP-T1		R007	1-216-833-11	RES-CHIP	10K 5% 1/16W
IC505	8-759-636-55	IC M5218AFP-T1		R009	1-216-864-11	METAL CHIP	0 5% 1/16W
IC506	8-759-636-55	IC M5218AFP-T1		R011	1-216-829-11	METAL CHIP	47K 5% 1/16W
IC507	8-759-658-33	IC TC9482F		R012	1-216-833-11	RES-CHIP	10K 5% 1/16W
IC508	8-759-636-55	IC M5218AFP-T1		R014	1-216-824-11	METAL CHIP	47K 5% 1/16W
IC509	8-759-636-55	IC M5218AFP-T1		R035	1-216-821-11	METAL CHIP	1K 5% 1/16W
IC510	8-759-636-55	IC M5218AFP-T1		R036	1-216-821-11	METAL CHIP	1K 5% 1/16W
IC511	8-759-636-55	IC M5218AFP-T1		R037	1-216-825-11	METAL CHIP	2.2K 5% 1/16W
IC512	8-759-636-55	IC M5218AFP-T1		R039	1-216-821-11	METAL CHIP	1K 5% 1/16W
IC513	8-759-636-55	IC M5218AFP-T1		R041	1-216-821-11	METAL CHIP	1K 5% 1/16W
IC601	8-759-567-30	IC CXD8788Q		R042	1-216-821-11	METAL CHIP	1K 5% 1/16W
IC701	8-759-598-87	IC CXD8791AQ		R044	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
IC702	8-759-337-40	IC NJM2904V(TE2)		R045	1-216-833-91	RES-CHIP	10K 5% 1/16W
IC801	8-759-522-13	IC BA5981FP-E2		R048	1-216-821-11	METAL CHIP	1K 5% 1/16W
IC802	8-759-567-26	IC BA5983FP-E2		R049	1-216-821-11	METAL CHIP	1K 5% 1/16W
IC803	8-759-338-78	IC BA10324AFV-E2		R050	1-216-821-11	METAL CHIP	1K 5% 1/16W
IC901	8-759-342-94	IC IDT71256SA20Y-TL		R053	1-216-833-91	RES-CHIP	10K 5% 1/16W
IC902	8-759-557-35	IC M51943BML-600C		R201	1-216-833-91	RES-CHIP	10K 5% 1/16W
IC903	8-759-660-31	IC M30622MA-A33FP		R202	1-216-801-11	METAL CHIP	22 5% 1/16W
IC904	8-759-643-42	IC CXD9511AQ		R203	1-216-833-91	RES-CHIP	10K 5% 1/16W
IC905	8-759-460-72	IC BA033FP-E2		R204	1-216-833-91	RES-CHIP	10K 5% 1/16W
IC906	8-759-657-47	IC AK4527		R205	1-216-845-11	METAL CHIP	100K 5% 1/16W
IC907	8-759-639-35	IC LC89055W-RA8		R206	1-216-845-11	METAL CHIP	100K 5% 1/16W
IC908	8-759-497-44	IC TC7WH125FU(TE12R)		R207	1-216-833-91	RES-CHIP	10K 5% 1/16W
		< COIL >		R212	1-216-864-11	METAL CHIP	0 5% 1/16W
L001	1-414-754-11	INDUCTOR	10uH	R213	1-216-801-11	METAL CHIP	22 5% 1/16W
L402	1-414-754-11	INDUCTOR	10uH	R217	1-216-833-91	RES-CHIP	10K 5% 1/16W
L901	1-414-754-11	INDUCTOR	10uH	R222	1-216-833-91	RES-CHIP	10K 5% 1/16W
		< TRANSISTOR >		R223	1-216-833-91	RES-CHIP	10K 5% 1/16W
Q501	8-729-046-97	TRANSISTOR	2SD1938(F)-T(TX).SO	R225	1-216-833-91	RES-CHIP	10K 5% 1/16W
				R227	1-216-813-11	METAL CHIP	220 5% 1/16W
				R228	1-216-813-11	METAL CHIP	220 5% 1/16W
				R229	1-216-813-11	METAL CHIP	220 5% 1/16W
				R230	1-216-813-11	METAL CHIP	220 5% 1/16W

DVD

Ref. No.	Part No.	Description	Quantity	Unit Price	Remark	Ref. No.	Part No.	Description	Quantity	Unit Price	Remark
R240	1-216-246-00	RES-CHIP	100K	5%	1/8W	R507	1-216-833-91	RES-CHIP	10K	5%	1/16W
R241	1-216-238-91	RES-CHIP	47K	5%	1/8W	R508	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R242	1-216-833-91	RES-CHIP	10K	5%	1/16W	R509	1-216-833-91	RES-CHIP	10K	5%	1/16W
R243	1-216-833-91	RES-CHIP	10K	5%	1/16W	R510	1-216-833-91	RES-CHIP	10K	5%	1/16W
R244	1-216-833-91	RES-CHIP	10K	5%	1/16W	R511	1-216-833-91	RES-CHIP	10K	5%	1/16W
R305	1-218-879-11	METAL CHIP	22K	0.5%	1/16W	R512	1-216-833-91	RES-CHIP	10K	5%	1/16W
R306	1-218-831-11	METAL CHIP	220	0.5%	1/16W	R513	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R307	1-218-883-11	METAL CHIP	33K	0.5%	1/16W	R514	1-216-833-91	RES-CHIP	10K	5%	1/16W
R308	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R515	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R309	1-216-838-11	METAL CHIP	27K	5%	1/16W	R516	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R310	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R517	1-216-833-91	RES-CHIP	10K	5%	1/16W
R313	1-216-833-91	RES-CHIP	10K	5%	1/16W	R518	1-216-833-91	RES-CHIP	10K	5%	1/16W
R314	1-216-833-91	RES-CHIP	10K	5%	1/16W	R519	1-216-833-91	RES-CHIP	10K	5%	1/16W
R315	1-216-833-91	RES-CHIP	10K	5%	1/16W	R520	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R316	1-218-855-11	METAL CHIP	2.2K	0.5%	1/16W	R521	1-216-833-91	RES-CHIP	10K	5%	1/16W
R317	1-218-871-11	METAL CHIP	10K	0.5%	1/16W	R522	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R318	1-216-849-11	METAL CHIP	220K	5%	1/16W	R523	1-216-833-91	RES-CHIP	10K	5%	1/16W
R319	1-216-831-11	METAL CHIP	6.8K	5%	1/16W	R524	1-216-833-91	RES-CHIP	10K	5%	1/16W
R320	1-218-853-11	METAL CHIP	1.8K	0.5%	1/16W	R525	1-216-839-11	METAL CHIP	33K	5%	1/16W
R321	1-218-847-11	METAL CHIP	1K	0.5%	1/16W	R526	1-216-831-11	METAL CHIP	6.8K	5%	1/16W
R322	1-218-871-11	METAL CHIP	10K	0.5%	1/16W	R527	1-216-833-91	RES-CHIP	10K	5%	1/16W
R323	1-216-833-91	RES-CHIP	10K	5%	1/16W	R528	1-216-827-11	METAL CHIP	3.3K	5%	1/16W
R324	1-216-833-91	RES-CHIP	10K	5%	1/16W	R529	1-216-295-91	SHORT	0		
R325	1-216-833-91	RES-CHIP	10K	5%	1/16W	R530	1-216-295-91	SHORT	0		
R326	1-216-833-91	RES-CHIP	10K	5%	1/16W	R531	1-216-833-91	RES-CHIP	10K	5%	1/16W
R327	1-216-833-91	RES-CHIP	10K	5%	1/16W	R532	1-216-833-91	RES-CHIP	10K	5%	1/16W
R328	1-216-833-91	RES-CHIP	10K	5%	1/16W	R535	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R329	1-216-833-91	RES-CHIP	10K	5%	1/16W	R540	1-216-845-11	METAL CHIP	100K	5%	1/16W
R330	1-216-833-91	RES-CHIP	10K	5%	1/16W	R541	1-216-845-11	METAL CHIP	100K	5%	1/16W
R331	1-216-833-91	RES-CHIP	10K	5%	1/16W	R542	1-216-845-11	METAL CHIP	100K	5%	1/16W
R332	1-216-833-91	RES-CHIP	10K	5%	1/16W	R543	1-216-845-11	METAL CHIP	100K	5%	1/16W
R337	1-216-809-11	METAL CHIP	100	5%	1/16W	R544	1-216-845-11	METAL CHIP	100K	5%	1/16W
R338	1-216-833-91	RES-CHIP	10K	5%	1/16W	R545	1-216-845-11	METAL CHIP	100K	5%	1/16W
R339	1-216-833-91	RES-CHIP	10K	5%	1/16W	R546	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R340	1-216-833-91	RES-CHIP	10K	5%	1/16W	R547	1-216-295-91	SHORT	0		
R341	1-216-809-11	METAL CHIP	100	5%	1/16W	R548	1-216-295-91	SHORT	0		
R403	1-216-833-91	RES-CHIP	10K	5%	1/16W	R549	1-216-864-11	METAL CHIP	0	5%	1/16W
R404	1-216-864-11	METAL CHIP	0	5%	1/16W	R550	1-216-864-11	METAL CHIP	0	5%	1/16W
R405	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	R551	1-216-833-91	RES-CHIP	10K	5%	1/16W
R406	1-216-822-11	METAL CHIP	1.2K	5%	1/16W	R552	1-216-833-91	RES-CHIP	10K	5%	1/16W
R407	1-216-833-91	RES-CHIP	10K	5%	1/16W	R553	1-216-295-91	SHORT	0		
R409	1-216-864-11	METAL CHIP	0	5%	1/16W	R554	1-216-833-91	RES-CHIP	10K	5%	1/16W
R410	1-216-821-11	METAL CHIP	1K	5%	1/16W	R555	1-216-833-91	RES-CHIP	10K	5%	1/16W
R411	1-216-833-91	RES-CHIP	10K	5%	1/16W	R556	1-216-821-11	METAL CHIP	1K	5%	1/16W
R413	1-216-864-11	METAL CHIP	0	5%	1/16W	R557	1-216-821-11	METAL CHIP	1K	5%	1/16W
R426	1-216-813-11	METAL CHIP	220	5%	1/16W	R558	1-216-821-11	METAL CHIP	1K	5%	1/16W
R427	1-216-813-11	METAL CHIP	220	5%	1/16W	R559	1-216-821-11	METAL CHIP	1K	5%	1/16W
R428	1-216-813-11	METAL CHIP	220	5%	1/16W	R560	1-216-821-11	METAL CHIP	1K	5%	1/16W
R429	1-216-813-11	METAL CHIP	220	5%	1/16W	R561	1-216-821-11	METAL CHIP	1K	5%	1/16W
R430	1-216-813-11	METAL CHIP	220	5%	1/16W	R562	1-216-833-91	RES-CHIP	10K	5%	1/16W
R431	1-216-813-11	METAL CHIP	220	5%	1/16W	R563	1-216-833-91	RES-CHIP	10K	5%	1/16W
R501	1-216-815-11	METAL CHIP	330	5%	1/16W	R564	1-216-833-91	RES-CHIP	10K	5%	1/16W
R502	1-216-815-11	METAL CHIP	330	5%	1/16W	R565	1-216-833-91	RES-CHIP	10K	5%	1/16W
R503	1-216-815-11	METAL CHIP	330	5%	1/16W	R566	1-216-833-91	RES-CHIP	10K	5%	1/16W
R504	1-216-815-11	METAL CHIP	330	5%	1/16W	R567	1-216-833-91	RES-CHIP	10K	5%	1/16W
R505	1-216-833-91	RES-CHIP	10K	5%	1/16W	R568	1-216-849-11	METAL CHIP	220K	5%	1/16W
R506	1-216-833-91	RES-CHIP	10K	5%	1/16W	R569	1-216-849-11	METAL CHIP	220K	5%	1/16W
						R570	1-216-849-11	METAL CHIP	220K	5%	1/16W

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R571	1-216-849-11	METAL CHIP	220K	5%	1/16W	R748	1-216-833-91	RES-CHIP	10K	5%	1/16W
R572	1-216-849-11	METAL CHIP	220K	5%	1/16W	R751	1-216-821-11	METAL CHIP	1K	5%	1/16W
R573	1-216-849-11	METAL CHIP	220K	5%	1/16W	R752	1-216-821-11	METAL CHIP	1K	5%	1/16W
R574	1-216-821-11	METAL CHIP	1K	5%	1/16W	R755	1-216-833-91	RES-CHIP	10K	5%	1/16W
R575	1-216-833-91	RES-CHIP	10K	5%	1/16W	R757	1-216-864-11	METAL CHIP	0	5%	1/16W
R576	1-216-835-11	RES-CHIP	15K	5%	1/16W	R758	1-216-864-11	METAL CHIP	0	5%	1/16W
R577	1-216-821-11	METAL CHIP	1K	5%	1/16W	R801	1-216-841-11	METAL CHIP	47K	5%	1/16W
R578	1-216-845-11	METAL CHIP	100K	5%	1/16W	R802	1-216-841-11	METAL CHIP	47K	5%	1/16W
R579	1-216-845-11	METAL CHIP	100K	5%	1/16W	R803	1-216-841-11	METAL CHIP	47K	5%	1/16W
R580	1-216-845-11	METAL CHIP	100K	5%	1/16W	R804	1-216-841-11	METAL CHIP	47K	5%	1/16W
R581	1-216-833-91	RES-CHIP	10K	5%	1/16W	R805	1-216-840-11	METAL CHIP	39K	5%	1/16W
R581	1-216-833-91	RES-CHIP	10K	5%	1/16W	R806	1-216-840-11	METAL CHIP	39K	5%	1/16W
R584	1-216-864-11	METAL CHIP	0	5%	1/16W	R807	1-216-835-11	METAL CHIP	15K	5%	1/16W
R585	1-216-845-11	METAL CHIP	100K	5%	1/16W	R808	1-216-835-11	METAL CHIP	15K	5%	1/16W
R587	1-216-864-11	METAL CHIP	0	5%	1/16W	R809	1-216-844-11	METAL CHIP	82K	5%	1/16W
R588	1-216-845-11	METAL CHIP	100K	5%	1/16W	R810	1-216-844-11	METAL CHIP	82K	5%	1/16W
R590	1-216-864-11	METAL CHIP	0	5%	1/16W	R811	1-218-907-11	METAL CHIP	330K	0.5%	1/16W
R591	1-216-845-11	METAL CHIP	100K	5%	1/16W	R812	1-218-897-11	METAL CHIP	120K	0.5%	1/16W
R592	1-216-833-91	RES-CHIP	10K	5%	1/16W	R813	1-218-897-11	METAL CHIP	120K	0.5%	1/16W
R593	1-216-833-91	RES-CHIP	10K	5%	1/16W	R814	1-218-907-11	METAL CHIP	330K	0.5%	1/16W
R594	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	R815	1-216-836-11	METAL CHIP	18K	5%	1/16W
R595	1-216-831-11	METAL CHIP	6.8K	5%	1/16W	R816	1-216-845-11	METAL CHIP	100K	5%	1/16W
R596	1-218-272-11	RES-CHIP	5.1K	5%	1/16W	R817	1-216-852-11	METAL CHIP	390K	5%	1/16W
R597	1-216-864-11	METAL CHIP	0	5%	1/16W	R818	1-216-852-11	METAL CHIP	390K	5%	1/16W
R599	1-216-864-11	METAL CHIP	0	5%	1/16W	R819	1-216-849-11	METAL CHIP	220K	5%	1/16W
R601	1-216-833-91	RES-CHIP	10K	5%	1/16W	R820	1-216-851-11	METAL CHIP	330K	5%	1/16W
R602	1-216-833-91	RES-CHIP	10K	5%	1/16W	R821	1-216-840-11	METAL CHIP	39K	5%	1/16W
R604	1-216-833-91	RES-CHIP	10K	5%	1/16W	R822	1-216-845-11	METAL CHIP	100K	5%	1/16W
R605	1-216-833-91	RES-CHIP	10K	5%	1/16W	R823	1-216-833-91	RES-CHIP	10K	5%	1/16W
R606	1-216-833-91	RES-CHIP	10K	5%	1/16W	R824	1-216-833-91	RES-CHIP	10K	5%	1/16W
R607	1-220-151-11	RES-CHIP	51	5%	1/16W	R825	1-216-830-11	METAL CHIP	5.6K	5%	1/16W
R630	1-216-833-91	RES-CHIP	10K	5%	1/16W	R831	1-216-833-91	RES-CHIP	10K	5%	1/16W
R631	1-216-833-91	RES-CHIP	10K	5%	1/16W	R832	1-216-833-91	RES-CHIP	10K	5%	1/16W
R632	1-216-833-91	RES-CHIP	10K	5%	1/16W	R834	1-216-847-11	METAL CHIP	150K	5%	1/16W
R633	1-216-833-91	RES-CHIP	10K	5%	1/16W	R835	1-216-847-11	METAL CHIP	150K	5%	1/16W
R634	1-216-833-91	RES-CHIP	10K	5%	1/16W	R836	1-216-847-11	METAL CHIP	150K	5%	1/16W
R635	1-216-833-91	RES-CHIP	10K	5%	1/16W	R837	1-216-844-11	METAL CHIP	82K	5%	1/16W
R636	1-216-815-11	METAL CHIP	330	5%	1/16W	R838	1-216-848-11	METAL CHIP	180K	5%	1/16W
R637	1-216-809-11	METAL CHIP	100	5%	1/16W	R839	1-216-848-11	METAL CHIP	180K	5%	1/16W
R642	1-216-809-11	METAL CHIP	100	5%	1/16W	R840	1-216-848-11	METAL CHIP	180K	5%	1/16W
R643	1-216-815-11	METAL CHIP	330	5%	1/16W	R841	1-216-843-11	METAL CHIP	68K	5%	1/16W
R647	1-216-833-91	RES-CHIP	10K	5%	1/16W	R842	1-216-844-11	METAL CHIP	82K	5%	1/16W
R701	1-216-805-11	METAL CHIP	47	5%	1/16W	R843	1-216-844-11	METAL CHIP	82K	5%	1/16W
R702	1-216-817-11	METAL CHIP	470	5%	1/16W	R844	1-216-843-11	METAL CHIP	68K	5%	1/16W
R703	1-216-817-11	METAL CHIP	470	5%	1/16W	R845	1-216-843-11	METAL CHIP	68K	5%	1/16W
R704	1-216-817-11	METAL CHIP	470	5%	1/16W	R846	1-216-841-11	METAL CHIP	47K	5%	1/16W
R705	1-216-817-11	METAL CHIP	470	5%	1/16W	R847	1-216-296-91	SHORT	0		
R706	1-216-821-11	METAL CHIP	1K	5%	1/16W	R851	1-216-833-91	RES-CHIP	10K	5%	1/16W
R707	1-216-844-11	METAL CHIP	82K	5%	1/16W	R852	1-216-833-91	RES-CHIP	10K	5%	1/16W
R708	1-216-844-11	METAL CHIP	82K	5%	1/16W	R853	1-216-833-91	RES-CHIP	10K	5%	1/16W
R709	1-216-844-11	METAL CHIP	82K	5%	1/16W	R854	1-216-833-91	RES-CHIP	10K	5%	1/16W
R710	1-216-844-11	METAL CHIP	82K	5%	1/16W	R855	1-216-834-11	METAL CHIP	12K	5%	1/16W
R711	1-216-833-91	RES-CHIP	10K	5%	1/16W	R856	1-216-836-11	METAL CHIP	18K	5%	1/16W
R712	1-216-839-11	METAL CHIP	33K	5%	1/16W	R857	1-218-899-11	METAL CHIP	150K	0.5%	1/16W
R720	1-216-821-11	METAL CHIP	1K	5%	1/16W	R858	1-218-899-11	METAL CHIP	150K	0.5%	1/16W
R721	1-216-821-11	METAL CHIP	1K	5%	1/16W	R859	1-218-889-11	METAL CHIP	56K	0.5%	1/16W
R722	1-216-801-11	METAL CHIP	22	5%	1/16W	R860	1-218-889-11	METAL CHIP	56K	0.5%	1/16W
						R861	1-216-296-91	SHORT	0		

DVD

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark
R864	1-216-138-00	METAL CHIP	3.3	5%	1/8W	R962	1-216-821-11	METAL CHIP	1K 5% 1/16W
R865	1-216-833-91	RES-CHIP	10K	5%	1/16W	R963	1-218-285-11	RES-CHIP	75 5% 1/16W
R866	1-216-833-91	RES-CHIP	10K	5%	1/16W	R964	1-218-272-11	RES-CHIP	5.1K 5% 1/16W
R867	1-216-833-91	RES-CHIP	10K	5%	1/16W	R965	1-218-272-11	RES-CHIP	5.1K 5% 1/16W
R868	1-216-833-91	RES-CHIP	10K	5%	1/16W	R966	1-216-815-11	METAL CHIP	330 5% 1/16W
R869	1-216-833-91	RES-CHIP	10K	5%	1/16W	R967	1-216-815-11	METAL CHIP	330 5% 1/16W
R870	1-216-815-11	METAL CHIP	330	5%	1/16W	R968	1-216-815-11	METAL CHIP	330 5% 1/16W
R871	1-216-817-11	METAL CHIP	470	5%	1/16W	R969	1-216-815-11	METAL CHIP	330 5% 1/16W
R872	1-216-815-11	METAL CHIP	330	5%	1/16W	R970	1-216-815-11	METAL CHIP	330 5% 1/16W
R873	1-216-821-11	METAL CHIP	1K	5%	1/16W	R971	1-216-815-11	METAL CHIP	330 5% 1/16W
R901	1-216-833-91	RES-CHIP	10K	5%	1/16W	R972	1-216-815-11	METAL CHIP	330 5% 1/16W
R902	1-216-813-11	METAL CHIP	220	5%	1/16W	R973	1-216-815-11	METAL CHIP	330 5% 1/16W
R910	1-216-813-11	METAL CHIP	220	5%	1/16W	R974	1-216-815-11	METAL CHIP	330 5% 1/16W
R911	1-216-813-11	METAL CHIP	220	5%	1/16W	R975	1-216-833-91	RES-CHIP	10K 5% 1/16W
R912	1-216-813-11	METAL CHIP	220	5%	1/16W	R976	1-216-833-91	RES-CHIP	10K 5% 1/16W
R914	1-216-833-91	RES-CHIP	10K	5%	1/16W	R977	1-216-832-11	METAL CHIP	8.2K 5% 1/16W
R915	1-216-841-11	METAL CHIP	47K	5%	1/16W	R978	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R916	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R979	1-216-821-11	METAL CHIP	1K 5% 1/16W
R917	1-216-841-11	METAL CHIP	47K	5%	1/16W	R982	1-216-864-11	METAL CHIP	0 5% 1/16W
R918	1-216-174-00	RES-CHIP	100	5%	1/8W	R983	1-216-821-11	METAL CHIP	1K 5% 1/16W
R919	1-216-813-11	METAL CHIP	220	5%	1/16W	R984	1-216-809-11	METAL CHIP	100 5% 1/16W
R920	1-216-833-91	RES-CHIP	10K	5%	1/16W	R985	1-216-821-11	METAL CHIP	1K 5% 1/16W
R921	1-216-833-91	RES-CHIP	10K	5%	1/16W	R986	1-216-833-91	RES-CHIP	10K 5% 1/16W
R922	1-216-833-91	RES-CHIP	10K	5%	1/16W	R987	1-216-821-11	METAL CHIP	1K 5% 1/16W
R923	1-216-833-91	RES-CHIP	10K	5%	1/16W	R988	1-216-809-11	METAL CHIP	100 5% 1/16W
R924	1-216-833-91	RES-CHIP	10K	5%	1/16W	R989	1-216-845-11	METAL CHIP	100K 5% 1/16W
R925	1-216-833-91	RES-CHIP	10K	5%	1/16W	R990	1-216-821-11	METAL CHIP	1K 5% 1/16W
R926	1-216-833-91	RES-CHIP	10K	5%	1/16W	R991	1-216-833-91	RES-CHIP	10K 5% 1/16W
R927	1-216-821-11	METAL CHIP	1K	5%	1/16W	R992	1-216-833-91	RES-CHIP	10K 5% 1/16W
R928	1-216-833-91	RES-CHIP	10K	5%	1/16W	R994	1-216-833-91	RES-CHIP	10K 5% 1/16W
R929	1-216-833-91	RES-CHIP	10K	5%	1/16W	R995	1-216-833-91	RES-CHIP	10K 5% 1/16W
R933	1-216-833-91	RES-CHIP	10K	5%	1/16W	R997	1-216-833-91	RES-CHIP	10K 5% 1/16W
R934	1-216-833-91	RES-CHIP	10K	5%	1/16W	R999	1-216-821-11	METAL CHIP	1K 5% 1/16W
R935	1-216-833-91	RES-CHIP	10K	5%	1/16W	R1000	1-216-821-11	METAL CHIP	1K 5% 1/16W
R936	1-216-813-11	METAL CHIP	220	5%	1/16W	R1001	1-216-821-11	METAL CHIP	1K 5% 1/16W
R937	1-216-833-91	RES-CHIP	10K	5%	1/16W	R1002	1-216-821-11	METAL CHIP	1K 5% 1/16W
R938	1-216-821-11	METAL CHIP	1K	5%	1/16W	R1003	1-216-821-11	METAL CHIP	1K 5% 1/16W
R940	1-216-821-11	METAL CHIP	1K	5%	1/16W	R1004	1-216-833-91	RES-CHIP	10K 5% 1/16W
R942	1-216-833-91	RES-CHIP	10K	5%	1/16W	R1005	1-216-833-91	RES-CHIP	10K 5% 1/16W
R943	1-216-833-91	RES-CHIP	10K	5%	1/16W	R1006	1-216-295-91	SHORT	0
R944	1-216-833-91	RES-CHIP	10K	5%	1/16W	R1009	1-216-809-11	METAL CHIP	100 5% 1/16W
R945	1-216-821-11	METAL CHIP	1K	5%	1/16W	R1010	1-216-837-11	METAL CHIP	22K 5% 1/16W
R946	1-216-857-11	METAL CHIP	1M	5%	1/16W	R1011	1-216-833-91	RES-CHIP	10K 5% 1/16W
R947	1-216-809-11	METAL CHIP	100	5%	1/16W	R1012	1-216-845-11	METAL CHIP	100K 5% 1/16W
R948	1-216-821-11	METAL CHIP	1K	5%	1/16W	R1037	1-216-837-11	METAL CHIP	22K 5% 1/16W
R949	1-216-809-11	METAL CHIP	100	5%	1/16W	R1045	1-216-841-11	METAL CHIP	47K 5% 1/16W
R950	1-216-809-11	METAL CHIP	100	5%	1/16W	R1053	1-216-837-11	METAL CHIP	22K 5% 1/16W
R951	1-216-809-11	METAL CHIP	100	5%	1/16W	R1054	1-216-841-11	METAL CHIP	47K 5% 1/16W
R952	1-216-809-11	METAL CHIP	100	5%	1/16W	R1056	1-216-841-11	METAL CHIP	47K 5% 1/16W
R953	1-216-833-91	RES-CHIP	10K	5%	1/16W	R1057	1-216-837-11	METAL CHIP	22K 5% 1/16W
R954	1-216-815-11	METAL CHIP	330	5%	1/16W	R1058	1-216-837-11	METAL CHIP	22K 5% 1/16W
R955	1-216-821-11	METAL CHIP	1K	5%	1/16W	R1062	1-216-841-11	METAL CHIP	47K 5% 1/16W
R956	1-216-821-11	METAL CHIP	1K	5%	1/16W	R1068	1-216-841-11	METAL CHIP	47K 5% 1/16W
R957	1-216-818-11	METAL CHIP	560	5%	1/16W	R1509	1-216-815-11	METAL CHIP	330 5% 1/16W
R959	1-216-833-91	RES-CHIP	10K	5%	1/16W	R1510	1-216-815-11	METAL CHIP	330 5% 1/16W
R960	1-216-809-11	METAL CHIP	100	5%	1/16W	R1511	1-216-815-11	METAL CHIP	330 5% 1/16W
R961	1-216-833-91	RES-CHIP	10K	5%	1/16W	R1514	1-216-844-11	METAL CHIP	82K 5% 1/16W
						R1502	1-216-849-11	METAL CHIP	220K 5% 1/16W

DVD FP-932 HP-932

Ref. No.	Part No.	Description	Remark
R1503	1-216-864-11	METAL CHIP 0 5%	1/16W
R1504	1-216-815-11	METAL CHIP 330 5%	1/16W
R1505	1-216-815-11	METAL CHIP 330 5%	1/16W
R1506	1-216-815-11	METAL CHIP 330 5%	1/16W
R1507	1-216-815-11	METAL CHIP 330 5%	1/16W
R1508	1-216-815-11	METAL CHIP 330 5%	1/16W
R1512	1-216-833-91	RES-CHIP 10K 5%	1/16W
R1513	1-216-833-91	RES-CHIP 10K 5%	1/16W
< COMPOSITION CIRCUIT BLOCK >			
* RB001	1-233-270-11	NETWORK, RES (8 GANG) 10K	
* RB203	1-233-270-11	NETWORK, RES (8 GANG) 10K	
* RB201	1-233-270-11	NETWORK, RES (8 GANG) 10K	
* RB202	1-233-270-11	NETWORK, RES (8 GANG) 10K	
* RB204	1-233-270-11	NETWORK, RES (8 GANG) 10K	
* RB402	1-233-270-11	NETWORK, RES (8 GANG) 10K	
* RB601	1-233-270-11	NETWORK, RES (8 GANG) 10K	
< VARIABLE RESISTOR >			
RV401	1-223-583-11	RES, ADJ, CARBON 1K	
< VIBRATOR >			
X001	1-781-188-21	OSCILLATOR, CRYSTAL (27MHz)	
X201	1-781-185-21	VIBRATOR, CERAMIC (12.5MHz)	
X501	1-767-922-11	VIBRATOR, CERAMIC (16MHz)	
X503	1-781-465-21	VIBRATOR, CRYSTAL (12.288MHz)	

A-4428-323-A	FP-932 BOARD, COMPLETE (EXCEPT CH)		
A-4726-262-A	FP-932 BOARD, COMPLETE (CH)		

4-226-339-01	HOLDER (LED)		
4-227-174-01	SHEET, DIFFUSION		
4-931-757-31	SCREW(DIA.2.6X8)(IT3B), TAPPING		
< CAPACITOR >			
C100	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
C101	1-163-251-11	CERAMIC CHIP 100PF 5.00%	50V
C102	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
C103	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V
< CONNECTOR >			
CN100	1-784-084-11	CONNECTOR, FFC/FPC 14P	
CN102	1-506-468-11	PIN, CONNECTOR 3P	
< DIODE >			
D100	8-719-079-51	DIODE SELU2E10C-TP6	
D101	8-719-079-51	DIODE SELU2E10C-TP6	
D102	8-719-079-51	DIODE SELU2E10C-TP6	
D103	8-719-073-01	DIODE MA111	
< IC >			
IC100	8-759-366-34	IC LC75824E	
IC101	8-759-459-86	IC NJL64H400A	
< JUMPER RESISTOR >			
JW100	1-216-296-91	SHORT 0	

Ref. No.	Part No.	Description	Remark
JW101	1-216-296-91	SHORT 0	
JW102	1-216-296-91	SHORT 0	
JW103	1-216-296-91	SHORT 0	
JW104	1-216-296-91	SHORT 0	
JW105	1-216-296-91	SHORT 0	
JW106	1-216-296-91	SHORT 0	
JW107	1-216-296-91	SHORT 0	
JW108	1-216-296-91	SHORT 0	
JW109	1-216-296-91	SHORT 0	
JW110	1-216-296-91	SHORT 0	
JW111	1-216-296-91	SHORT 0	
JW112	1-216-296-91	SHORT 0	
JW113	1-216-296-91	SHORT 0	
JW114	1-216-296-91	SHORT 0	
JW115	1-216-296-91	SHORT 0	
JW116	1-216-296-91	SHORT 0	
JW117	1-216-296-91	SHORT 0	
JW118	1-216-296-91	SHORT 0	
JW119	1-216-296-91	SHORT 0	
JW120	1-216-296-91	SHORT 0	
< LIQUID CRYSTAL DISPLAY >			
LCD100	1-803-910-11	DISPLAY PANEL, LIQUID CRYSTAL	
< TRANSISTOR >			
Q100	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q101	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
Q102	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
< RESISTOR >			
R100	1-216-023-91	RES-CHIP 82 5%	1/10W
R101	1-216-023-91	RES-CHIP 82 5%	1/10W
R102	1-216-023-91	RES-CHIP 82 5%	1/10W
R103	1-216-065-91	RES-CHIP 4.7K 5%	1/10W
R108	1-216-089-91	RES-CHIP 47K 5%	1/10W
R109	1-216-107-00	METAL CHIP 270K 5%	1/10W
R112	1-216-073-00	METAL CHIP 10K 5%	1/10W
R113	1-216-073-00	METAL CHIP 10K 5%	1/10W
R116	1-216-073-00	METAL CHIP 10K 5%	1/10W
R117	1-216-073-00	METAL CHIP 10K 5%	1/10W
R120	1-216-073-00	METAL CHIP 10K 5%	1/10W
R121	1-216-073-00	METAL CHIP 10K 5%	1/10W

A-4428-322-A	HP-932 BOARD, COMPLETE (EXCEPT CH)		
A-4726-261-A	HP-932 BOARD, COMPLETE (CH)		

< CAPACITOR >			
C300	1-163-011-11	CERAMIC CHIP 0.0015uF 10%	50V
C301	1-163-011-11	CERAMIC CHIP 0.0015uF 10%	50V
C302	1-163-038-91	CERAMIC CHIP 0.1uF 25V	
C303	1-124-234-00	ELECT 22uF 20%	16V
C304	1-124-234-00	ELECT 22uF 20%	16V
C305	1-163-011-11	CERAMIC CHIP 0.0015uF 10%	50V

HP-932 **LOADING** **POWER**

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
CN300	1-779-000-11	CONNECTOR, FFC/FPC 5P	
< DIODE >			
D300	8-719-914-42	DIODE DA204K-T-146	
< JACK >			
J300	1-566-891-21	JACK (PHONES)	
< COIL >			
L300	1-410-387-11	INDUCTOR CHIP 33uH	
L301	1-410-387-11	INDUCTOR CHIP 33uH	
< TRANSISTOR >			
Q300	8-729-046-97	TRANSISTOR 2SD1938(F)-T(TX).SO	
Q301	8-729-046-97	TRANSISTOR 2SD1938(F)-T(TX).SO	
< RESISTOR >			
R300	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R301	1-216-049-91	RES-CHIP 1K 5% 1/10W	
R302	1-216-021-00	METAL CHIP 68 5% 1/10W	
R303	1-216-021-00	METAL CHIP 68 5% 1/10W	

	1-676-599-11	LOADING BOARD *****	
< CONNECTOR >			
* CN1	1-568-943-11	PIN, CONNECTOR 5P	
< SWITCH >			
S1	1-771-799-11	SWITCH, LEVER (SLIDE)	

	A-4428-327-A	POWER BOARD, COMPLETE (CND,US)	
	A-4473-122-A	POWER BOARD, COMPLETE (AEP,AUS,CEN,CEU,KR,RU,UK)	
	A-4473-132-A	POWER BOARD, COMPLETE (E32,EA3)	
	A-4473-889-A	POWER BOARD, COMPLETE (MX)	
	A-4475-197-A	POWER BOARD, COMPLETE (E12,HK,SP)	
	A-4476-366-A	POWER BOARD, COMPLETE (TW)	
	A-4726-265-A	POWER BOARD, COMPLETE (CH) *****	
	7-685-547-14	SCREW +BTP 3X10 TYPE2 N-S	
< CAPACITOR >			
C101	1-126-959-11	ELECT 0.47uF 20% 50V	
C102	1-126-940-11	ELECT 330uF 20% 25V	
C103	1-136-846-11	MYLAR 1.5uF 5% 50V	
C104	1-136-846-11	MYLAR 1.5uF 5% 50V	
C105	1-136-173-91	MYLAR 0.47uF 5% 50V	
C111	1-163-019-00	CAP, CHIP CERAMIC 6800PF 10% 50V	
C112	1-163-019-00	CAP, CHIP CERAMIC 6800PF 10% 50V	
C113	1-163-251-11	CAP, CHIP CERAMIC 100PF 5% 50V	
C114	1-163-251-11	CAP, CHIP CERAMIC 100PF 5% 50V	
C131	1-126-959-11	ELECT 0.47uF 20% 50V	

Ref. No.	Part No.	Description	Remark
C132	1-126-940-11	ELECT 330uF 20% 25V	
C133	1-136-846-11	MYLAR 1.5uF 5% 50V	
C134	1-136-846-11	MYLAR 1.5uF 5% 50V	
C135	1-136-173-91	MYLAR 0.47uF 5% 50V	
C142	1-163-019-00	CAP, CHIP CERAMIC 6800PF 10% 50V	
C143	1-163-251-11	CAP, CHIP CERAMIC 100PF 5% 50V	
C144	1-163-251-11	CAP, CHIP CERAMIC 100PF 5% 50V	
C161	1-126-959-11	ELECT 0.47uF 20% 50V	
C162	1-126-940-11	ELECT 330uF 20% 25V	
C163	1-136-846-11	MYLAR 1.5uF 5% 50V	
C164	1-136-846-11	MYLAR 1.5uF 5% 50V	
C165	1-136-173-91	MYLAR 0.47uF 5% 50V	
C173	1-163-251-11	CAP, CHIP CERAMIC 100PF 5% 50V	
C174	1-163-251-11	CAP, CHIP CERAMIC 100PF 5% 50V	
C201	1-126-959-11	ELECT 0.47uF 20% 50V	
C202	1-126-940-11	ELECT 330uF 20% 25V	
C203	1-136-846-11	MYLAR 1.5uF 5% 50V	
C204	1-136-846-11	MYLAR 1.5uF 5% 50V	
C205	1-136-173-91	MYLAR 0.47uF 5% 50V	
C211	1-163-019-00	CAP, CHIP CERAMIC 6800PF 10% 50V	
C212	1-162-305-11	CAP, CHIP CERAMIC 6800PF 20% 16V	
C213	1-163-251-11	CAP, CHIP CERAMIC 100PF 5% 50V	
C214	1-163-251-11	CAP, CHIP CERAMIC 100PF 5% 50V	
C231	1-126-964-11	ELECT 10uF 20% 50V	
C232	1-126-940-11	ELECT 330uF 20% 25V	
C233	1-136-846-11	MYLAR 1.5uF 5% 50V	
C234	1-136-846-11	MYLAR 1.5uF 5% 50V	
C235	1-136-173-91	MYLAR 0.47uF 5% 50V	
C243	1-163-251-11	CAP, CHIP CERAMIC 100PF 5% 50V	
C261	1-126-959-11	ELECT 0.47uF 20% 50V	
C262	1-126-940-11	ELECT 330uF 20% 25V	
C263	1-136-846-11	MYLAR 1.5uF 5% 50V	
C264	1-136-846-11	MYLAR 1.5uF 5% 50V	
C265	1-136-173-91	MYLAR 0.47uF 5% 50V	
C271	1-162-305-11	CAP, CHIP CERAMIC 6800PF 20% 16V	
C272	1-163-019-00	CAP, CHIP CERAMIC 6800PF 10% 50V	
C273	1-163-251-11	CAP, CHIP CERAMIC 100PF 5% 50V	
C274	1-163-251-11	CAP, CHIP CERAMIC 100PF 5% 50V	
C301	1-126-934-11	ELECT 220uF 20% 10V	
C302	1-126-942-61	ELECT 1000uF 20% 25V	
C303	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	
C304	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	
C305	1-126-960-11	ELECT 1uF 20% 50V	
C306	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	
C307	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	
C308	1-126-960-11	ELECT 1uF 20% 50V	
C309	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	
C310	1-136-165-00	MYLAR 0.1uF 5% 50V	
C311	1-126-940-11	ELECT 330uF 20% 25V	
C312	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	
C313	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	
C331	1-126-934-11	ELECT 220uF 20% 10V	
C332	1-126-942-61	ELECT 1000uF 20% 25V	
C333	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	
C334	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	
C335	1-126-960-11	ELECT 1uF 20% 50V	
C336	1-115-339-11	CERAMIC CHIP 0.1uF 10% 50V	

POWER

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C337	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	C925	1-104-665-11	ELECT	100uF	20%	10V
C338	1-126-960-11	ELECT	1uF	20%	50V	C926	1-164-159-21	CERAMIC	0.1uF		50V
					(US,CND,AEP,UK,SP,HK,AUS)	C927	1-126-942-61	ELECT	1000uF	20%	25V
C339	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V						
C340	1-136-165-00	MYLAR	0.1uF	5%	50V	C928	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C341	1-126-940-11	ELECT	330uF	20%	25V	C929	1-104-665-11	ELECT	100uF	20%	10V
C342	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	C930	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C343	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	C931	1-104-665-11	ELECT	100uF	20%	10V
C361	1-126-934-11	ELECT	220uF	20%	10V	C932	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C362	1-126-942-61	ELECT	1000uF	20%	25V	C933	1-126-916-11	ELECT	1000uF	20%	6.3V
C363	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	C934	1-163-017-91	CERAMIC CHIP	4700PF	5%	25V
C364	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	C935	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V
C365	1-126-960-11	ELECT	1uF	20%	50V						(AEP,UK,SP,HK,E32,AUS)
C366	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	△C937	1-113-920-11	CERAMIC	0.0022uF	20%	250V
C367	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	C938	1-164-159-21	CERAMIC	0.1uF		50V
C368	1-126-960-11	ELECT	1uF	20%	50V						(AEP,UK,SP,HK,E32,AUS)
C369	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	C939	1-135-931-11	CAP, CERAMIC	0.047uF		630V
C370	1-136-165-00	MYLAR	0.1uF	5%	50V						(AEP,UK,SP,HK,E32,AUS)
C371	1-126-940-11	ELECT	330uF	20%	25V	C941	1-107-426-91	CAP, CERAMIC	680PF	10%	1000V
											(US,CND)
C372	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	C941	1-135-932-11	CAP, CERAMIC	0.015uF		630V
C373	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V						(AEP,UK,SP,HK,E32,AUS)
C402	1-126-944-11	ELECT	3300uF	20%	25V	C942	1-107-426-91	CAP, CERAMIC	680PF	10%	1000V
C403	1-119-774-91	ELECT	100uF	20%	16V						(US,CND)
					(AEP,UK,SP,HK,E32,AUS)	C945	1-117-703-51	CERAMIC	0.0047uF	99%	250V
C404	1-119-774-91	ELECT	100uF	20%	16V						
					(AEP,UK,SP,HK,E32,AUS)						
C405	1-119-774-91	ELECT	100uF	20%	16V						< CONNECTOR >
					(AEP,UK,SP,HK,E32,AUS)	CN401	1-785-951-11	CONNECTOR, FFC/FPC (ZIF) 18P			
△C901	1-115-165-11	CAP, FILM	0.1uF	20%	275V	CN402	1-573-846-11	CONNECTOR, BOARD TO BOARD 14P			
△C902	1-115-165-11	CAP, FILM	0.1uF	20%	275V						(US,CND,AEP,UK,SP,HK,AUS)
C903	1-107-423-91	CAP, METALIZED PE FILM	220PF		1000V	CN901	1-564-321-00	PIN, CONNECTOR 2P			
					(AEP,UK,SP,HK,E32,AUS)						< DIODE >
C903	1-135-839-31	CAP, METALIZED PE FILM	4700PF		(US,CND)	D101	8-719-210-21	DIODE 11EQS04-TA1B			
						D102	8-719-210-21	DIODE 11EQS04-TA1B			
C904	1-162-290-31	CERAMIC	470PF	10%	50V	D131	8-719-210-21	DIODE 11EQS04-TA1B			
△C905	1-113-920-11	CERAMIC	0.0022uF	20%	250V	D132	8-719-210-21	DIODE 11EQS04-TA1B			
△C906	1-113-920-11	CERAMIC	0.0022uF	20%	250V	D161	8-719-210-21	DIODE 11EQS04-TA1B			
△C907	1-135-591-11	CAP, ELECT	680uF	20%	200V						
					(US,CND)	D162	8-719-210-21	DIODE 11EQS04-TA1B			
△C907	1-135-921-11	CAP, ELECT	220uF	20%	400V	D201	8-719-210-21	DIODE 11EQS04-TA1B			
					(AEP,UK,SP,HK,E32,AUS)	D202	8-719-210-21	DIODE 11EQS04-TA1B			
C908	1-128-576-11	ELECT	100uF	20%	63V	D220	8-719-210-21	DIODE 11EQS04-TA1B			
C909	1-162-302-21	CAP, CERAMIC	2200PF	20%	16V	D231	8-719-210-21	DIODE 11EQS04-TA1B			
					(US,CND)	D232	8-719-210-21	DIODE 11EQS04-TA1B			
C909	1-162-294-31	CERAMIC	0.001uF	10%	50V						
					(AEP,UK,SP,HK,E32,AUS)	D261	8-719-210-21	DIODE 11EQS04-TA1B			
△C910	1-117-701-51	CERAMIC	0.0022uF	99%	250V	D262	8-719-210-21	DIODE 11EQS04-TA1B			
C911	1-124-755-51	ELECT	3300uF	20%	16V	D301	8-719-073-01	DIODE MA111-(K8).SO			
						D302	8-719-404-50	DIODE MA111-TX			
C912	1-115-789-11	ELECT	1000uF	20%	25V	D304	8-719-404-50	DIODE MA111-TX			
C913	1-111-070-51	ELECT	2200uF	20%	25V						
C914	1-111-070-51	ELECT	2200uF	20%	25V	D331	8-719-404-50	DIODE MA111-TX			
C915	1-111-070-51	ELECT	2200uF	20%	25V	D332	8-719-404-50	DIODE MA111-TX			
C916	1-163-021-91	CERAMIC CHIP	0.01uF	10%	50V	D334	8-719-404-50	DIODE MA111-TX			
						D361	8-719-404-50	DIODE MA111-TX			
C917	1-126-942-61	ELECT	1000uF	20%	25V	D362	8-719-404-50	DIODE MA111-TX			
C918	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V						
C919	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	D364	8-719-404-50	DIODE MA111-TX			
C920	1-115-339-11	CERAMIC CHIP	0.1uF	10%	50V	D409	8-719-404-50	DIODE MA111-TX			
C921	1-126-933-11	ELECT	100uF	20%	16V	D901	8-719-022-92	DIODE RBV-604 (US,CND)			
						D901	8-719-312-05	DIODE RBV-606 (AEP,UK,SP,HK,E32,AUS)			
C922	1-126-964-11	ELECT	10uF	20%	50V						
C924	1-126-933-11	ELECT	100uF	20%	16V						

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POWER

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
D902	8-719-991-33	DIODE 1SS133T-77				< COIL >	
D903	8-719-200-92	DIODE 11EQS10-TA1		L101	1-419-281-11	INDUCTOR 10uH	
D904	8-719-200-92	DIODE 11EQS10-TA1		L102	1-419-281-11	INDUCTOR 10uH	
D905	8-719-200-92	DIODE 11EQS10-TA1		L131	1-419-281-11	INDUCTOR 10uH	
D906	8-719-079-46	DIODE FMB-G14L		L132	1-419-281-11	INDUCTOR 10uH	
D907	8-719-079-67	DIODE FME-24H (US,CND)		L161	1-419-281-11	INDUCTOR 10uH	
D907	8-719-080-05	DIODE FMB-26L (AEP,UK,SP,HK,E32,AUS)		L162	1-419-281-11	INDUCTOR 10uH	
D908	8-719-080-53	DIODE RK36LF-B3(US,CND)		L201	1-419-281-11	INDUCTOR 10uH	
D908	8-719-080-06	DIODE RK39LF-A4 (AEP,UK,SP,HK,E32,AUS)		L202	1-419-281-11	INDUCTOR 10uH	
D909	8-719-404-50	DIODE MA111-TX		L231	1-419-281-11	INDUCTOR 10uH	
D910	8-719-210-21	DIODE 11EQS04-TA1B		L232	1-419-281-11	INDUCTOR 10uH	
D911	8-719-200-82	DIODE 11ES2		L261	1-419-281-11	INDUCTOR 10uH	
D912	8-719-069-54	DIODE UDZS-TE17-5.1B (US)		L262	1-419-281-11	INDUCTOR 10uH	
D913	8-719-053-18	DIODE 1SR154-400TE-25		△L901	1-419-612-11	COIL, LINE FILTER	
D914	8-719-200-82	DIODE 11ES2-NTA1B		L902	1-419-505-11	COIL, CHOKE	
D915	8-719-200-82	DIODE 11ES2		L903	1-419-506-11	COIL, CHOKE	
D916	8-719-404-50	DIODE MA111-TX		L904	1-414-398-11	INDUCTOR 10uH	
D917	8-719-404-50	DIODE MA111-TX		L905	1-414-398-11	INDUCTOR 10uH	
D918	8-719-056-74	DIODE UDZS-TE-17-3.0B		L906	1-414-398-11	INDUCTOR 10uH	
D919	8-719-404-50	DIODE MA111-TX		L907	1-414-398-11	INDUCTOR 10uH	
D920	8-719-404-50	DIODE MA111-TX		L908	1-414-398-11	INDUCTOR 10uH	
D921	8-719-982-33	DIODE MTZJ-T-77-36D		L909	1-414-398-11	INDUCTOR 10uH	
D922	8-719-110-49	DIODE MTZJ-T-77-18B		L910	1-414-398-11	INDUCTOR 10uH	
D923	8-719-080-26	DIODE SARSO1 (AEP,UK,SP,HK,E32,AUS)		L911	1-414-398-11	INDUCTOR 10uH	
D924	8-719-200-82	DIODE 11ES2		L912	1-414-398-11	INDUCTOR 10uH	
		< GROUND TERMINAL >		L913	1-414-398-11	INDUCTOR 10uH	
EB901	1-537-770-21	TERMINAL BOARD, GROUND		L914	1-414-398-11	INDUCTOR 10uH	
EB902	1-537-770-21	TERMINAL BOARD, GROUND				< PHOTO COUPLER >	
		< FERRITE BEAD >		PC901	8-719-801-22	PHOTO COUPLER TLP621	
FB901	1-412-473-21	INDUCTOR 0UH				< TRANSISTOR >	
		< FUSE HOLDER >		Q405	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
FH901	1-533-313-	HOLDER, FUSE		Q902	8-729-209-15	TRANSISTOR 2SD2012	
FH902	1-533-313-	HOLDER, FUSE		Q903	8-729-111-29	TRANSISTOR 2SD1616A-TP-LK	
		< IC >		Q904	8-729-027-23	TRANSISTOR DTA114EKA-T146	
IC301	8-759-638-11	IC TA2020-020		Q905	8-729-141-83	TRANSISTOR 2SB1375	
IC331	8-759-638-11	IC TA2020-020		Q906	8-729-027-49	TRANSISTOR DTC123EKA-T146	
IC332	8-759-909-71	IC BA4558F-E2		Q907	8-729-141-83	TRANSISTOR 2SB1375	
IC361	8-759-638-11	IC TA2020-020		Q909	8-729-027-49	TRANSISTOR DTC123EKA-T146	
IC362	8-759-909-71	IC BA4558F-E2		Q910	8-729-900-53	TRANSISTOR DTC114EKA-T146	
IC901	8-749-014-48	IC STR-F6656 (US,CND)		Q911	8-729-900-53	TRANSISTOR DTC114EKA-T146	
IC901	8-749-017-79	IC STR-F6676 (AEP, UK,SP,HK,E32,AUS)		Q912	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
IC902	8-759-644-34	IC SE013E		Q913	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
IC903	8-759-604-50	IC M5F7910L		Q914	8-729-024-91	TRANSISTOR 2SC2712-GL-TE85L	
IC904	8-759-604-32	IC M5F7810L		Q915	8-729-900-53	TRANSISTOR DTC114EKA-T146	
IC905	8-759-450-47	IC BA05T				< RESISTOR >	
IC906	8-759-471-81	IC PQ05RD11		R101	1-216-073-00	METAL CHIP 10K 5% 1/10W	
IC907	8-759-471-81	IC PQ05RD11		R102	1-216-081-00	METAL CHIP 22K 5% 1/10W	
IC908	8-759-659-28	IC SI-8033S		R103	1-260-076-11	CARBON 10 5% 1/2W	
		< JACK >		R111	1-216-097-11	RES. CHIP 100K 5% 1/10W	
J401	1-694-656-11	TERMINAL BOARD		R131	1-216-073-00	METAL CHIP 10K 5% 1/10W	
				R132	1-216-081-00	METAL CHIP 22K 5% 1/10W	
				R133	1-260-076-11	CARBON 10 5% 1/2W	

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POWER	PROTECT
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Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R141	1-216-097-11	RES. CHIP	100K 5% 1/10W	R927	1-216-073-00	METAL CHIP	10K 5% 1/10W
R161	1-216-073-00	METAL CHIP	10K 5% 1/10W	△R928	1-202-725-00	SOLID	3.3M 10% 1/2W (US,CND)
R162	1-216-081-00	METAL CHIP	22K 5% 1/10W	R929	1-216-079-00	METAL CHIP	18K 5% 1/10W
R163	1-260-076-11	CARBON	10 5% 1/2W	R931	1-216-079-91	RES. CHIP	18K 5% 1/10W (AEP,UK,SP,HK,E32,AUS)
R171	1-216-097-11	RES. CHIP	100K 5% 1/10W	R931	1-216-089-11	RES. CHIP	47K 5% 1/10W (US,CND)
R201	1-216-073-00	METAL CHIP	10K 5% 1/10W	R932	1-216-101-91	RES. CHIP	150K 5% 1/10W (AEP,UK,SP,HK,E32,AUS)
R202	1-216-081-00	METAL CHIP	22K 5% 1/10W	R932	1-216-113-00	RES. CHIP	470K 5% 1/10W (US,CND)
R203	1-260-076-11	CARBON	10 5% 1/2W	R933	1-216-067-00	METAL CHIP	5.6K 5% 1/10W
R211	1-216-097-11	RES. CHIP	100K 5% 1/10W	R934	1-216-059-91	RES. CHIP	2.7K 5% 1/10W (AEP,UK,SP,HK,E32,AUS)
R231	1-216-061-00	METAL CHIP	3.3K 5% 1/10W	R934	1-216-067-00	RES. CHIP	5.6K 5% 1/10W (US,CND)
R232	1-216-081-00	METAL CHIP	22K 5% 1/10W	R935	1-247-843-11	CARBON	3.3K 5% 1/4W
R233	1-260-076-11	CARBON	10 5% 1/2W	R936	1-247-899-91	RES. CARBON	680K 5% 1/4W (AEP,UK,SP,HK,E32,AUS)
R261	1-216-073-00	METAL CHIP	10K 5% 1/10W	R937	1-247-903-00	CARBON	1M 5% 1/4W
R262	1-216-081-00	METAL CHIP	22K 5% 1/10W	R938	1-215-884-91	RES. METAL OXIDE FILM	47 5% 2W (AEP,UK,SP,HK,E32,AUS)
R263	1-260-076-11	CARBON	10 5% 1/2W	< RELAY >			
R271	1-216-097-11	RES. CHIP	100K 5% 1/10W	RY301	1-515-921-11	RELAY (12V)	
R301	1-216-071-00	METAL CHIP	8.2K 5% 1/10W	RY331	1-515-921-11	RELAY (12V)	
R331	1-216-071-00	METAL CHIP	8.2K 5% 1/10W	RY361	1-515-921-11	RELAY (12V)	
R361	1-216-071-00	METAL CHIP	8.2K 5% 1/10W	< TRANSFORMER >			
R411	1-216-073-00	METAL CHIP	10K 5% 1/10W	△T901	1-435-348-11	TRANSFORMER, POWER	(US,CND)
R412	1-216-081-00	METAL CHIP	22K 5% 1/10W	< THERMISTOR >			
R414	1-216-073-00	METAL CHIP	10K 5% 1/10W	TH901	1-803-916-11	THERMISTOR, NTC	
R900	1-202-725-51	RES-CHIP	3.3M 5% 1/10W (AEP,UK,SP,HK,E32,AUS)	*****			
R901	1-247-843-91	RES. CARBON	3.3K 5% 1/4W (AEP,UK,SP,HK,E32,AUS)	A-4428-329-A	PROTECT BOARD, COMPLETE	(EXCEPT CH)	
R901	1-249-426-11	RES. CARBON	5.6K 5% 1/4W (US,CND)	A-4726-264-A	PROTECT BOARD, COMPLETE	(CH)	
R902	1-217-151-51	RES. CARBON	0.22 5% 2W (AEP,UK,SP,HK,E32,AUS)	*****			
R902	1-249-472-11	RES. CARBON	0.68 5% 1/2W (US,CND)	< CAPACITOR >			
R903	1-249-415-11	CARBON	680 5% 1/4W F	C109	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V
R904	1-217-153-51	RES, METAL PLATE	0.47 5% 2W (AEP,UK,SP,HK,E32,AUS)	C110	1-127-573-91	CERAMIC CHIP	1uF 10% 16V
R904	1-217-611-00	RES, METAL PLATE	0.1 5% 1/2W (US,CND)	C139	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V
R905	1-215-877-81	RES. METAL OXIDE FILM	22K 5% 1W (US,CND)	C140	1-127-573-91	CERAMIC CHIP	1uF 10% 16V
R905	1-215-903-91	RES. METAL OXIDE FILM	68K 5% 2W (AEP,UK,SP,HK,E32,AUS)	C169	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V
R906	1-216-296-11	CONDUCTOR CHIP	0 (US,CND)	C170	1-127-573-91	CERAMIC CHIP	1uF 10% 16V
R907	1-249-421-11	CARBON	2.2K 5% 1/4W F	C209	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V
R907	1-247-843-11	CARBON	3.3K 5% 1/4W	C210	1-127-573-91	CERAMIC CHIP	1uF 10% 16V
R908	1-216-049-91	RES-CHIP	1K 5% 1/10W	C239	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V
R909	1-249-415-11	CARBON	680 5% 1/4W F	C240	1-127-573-91	CERAMIC CHIP	1uF 10% 16V
R910	1-247-807-31	CARBON	100 5% 1/4W	C269	1-115-339-11	CERAMIC CHIP	0.1uF 10% 50V
R911	1-247-783-91	RES. CARBON	10 5% 1/4W (AEP,UK,SP,HK,E32,AUS)	C270	1-127-573-91	CERAMIC CHIP	1uF 10% 16V
R912	1-216-057-00	METAL CHIP	2.2K 5% 1/10W	C403	1-125-972-91	ELECT	100uF 20% 16V
R914	1-249-417-11	CARBON	1K 5% 1/4W F	C404	1-125-972-91	ELECT	100uF 20% 16V
R917	1-216-057-00	METAL CHIP	2.2K 5% 1/10W	C405	1-125-972-91	ELECT	100uF 20% 16V
R918	1-249-417-11	CARBON	1K 5% 1/4W F				
R919	1-216-057-00	METAL CHIP	2.2K 5% 1/10W				
R921	1-249-417-11	CARBON	1K 5% 1/4W F				
R923	1-216-025-91	RES-CHIP	100 5% 1/10W				
R925	1-216-025-91	RES-CHIP	100 5% 1/10W				
R926	1-216-041-00	METAL CHIP	470 5% 1/10W				

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PROTECT

PW-932

SW-932

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
* CN403	1-573-828-11	CONNECTOR, BOARD TO BOARD 14P	
		< DIODE >	
D103	8-719-404-50	DIODE MA111-TX	
D104	8-719-404-50	DIODE MA111-TX	
D133	8-719-404-50	DIODE MA111-TX	
D134	8-719-404-50	DIODE MA111-TX	
D163	8-719-404-50	DIODE MA111-TX	
D164	8-719-404-50	DIODE MA111-TX	
D203	8-719-404-50	DIODE MA111-TX	
D204	8-719-404-50	DIODE MA111-TX	
D233	8-719-404-50	DIODE MA111-TX	
D234	8-719-404-50	DIODE MA111-TX	
D263	8-719-404-50	DIODE MA111-TX	
D264	8-719-404-50	DIODE MA111-TX	
D402	8-719-200-82	DIODE 11ES2-NTA1B	
D404	8-719-109-93	DIODE MTZJ-T-77-6.2B	
D405	8-719-404-50	DIODE MA111-TX	
D406	8-719-404-50	DIODE MA111-TX	
D407	8-719-404-50	DIODE MA111-TX	
D408	8-719-404-50	DIODE MA111-TX	
		< IC >	
IC401	8-759-932-92	IC MC14069UBF-T2	
IC402	8-759-009-82	IC MC14011BF-T2	
IC403	8-759-932-92	IC MC14069UBF-T2	
		< TRANSISTOR >	
Q401	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q402	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q403	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q404	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
Q406	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
		< RESISTOR >	
R108	1-216-049-91	RES-CHIP 1K 5%	1/10W
R109	1-216-085-00	METAL CHIP 33K 5%	1/10W
R110	1-216-097-91	RES-CHIP 100K 5%	1/10W
R138	1-216-049-91	RES-CHIP 1K 5%	1/10W
R139	1-216-085-00	METAL CHIP 33K 5%	1/10W
R140	1-216-097-91	RES-CHIP 100K 5%	1/10W
R168	1-216-049-91	RES-CHIP 1K 5%	1/10W
R169	1-216-085-00	METAL CHIP 33K 5%	1/10W
R170	1-216-097-91	RES-CHIP 100K 5%	1/10W
R208	1-216-049-91	RES-CHIP 1K 5%	1/10W
R209	1-216-085-00	METAL CHIP 33K 5%	1/10W
R210	1-216-097-91	RES-CHIP 100K 5%	1/10W
R238	1-216-049-91	RES-CHIP 1K 5%	1/10W
R239	1-216-085-00	METAL CHIP 33K 5%	1/10W
R240	1-216-097-91	RES-CHIP 100K 5%	1/10W
R268	1-216-049-91	RES-CHIP 1K 5%	1/10W
R269	1-216-085-00	METAL CHIP 33K 5%	1/10W
R270	1-216-097-91	RES-CHIP 100K 5%	1/10W
R401	1-216-073-00	METAL CHIP 10K 5%	1/10W
R402	1-216-073-00	METAL CHIP 10K 5%	1/10W
R403	1-216-113-00	METAL CHIP 470K 5%	1/10W

Ref. No.	Part No.	Description	Remark
R404	1-216-089-91	RES-CHIP 47K 5%	1/10W
R405	1-216-121-91	RES-CHIP 1M 5%	1/10W
R406	1-216-073-00	METAL CHIP 10K 5%	1/10W
R407	1-216-073-00	METAL CHIP 10K 5%	1/10W
R408	1-216-089-91	RES-CHIP 47K 5%	1/10W
R409	1-216-081-00	METAL CHIP 22K 5%	1/10W
R410	1-216-073-00	METAL CHIP 10K 5%	1/10W
R413	1-216-089-91	RES-CHIP 47K 5%	1/10W

	A-4428-321-A	PW-932 BOARD, COMPLETE (EXCEPT CH)	
	A-4726-260-A	PW-932 BOARD, COMPLETE (CH)	

		< CONNECTOR >	
* CN400	1-568-942-11	PIN, CONNECTOR 4P	
		< DIODE >	
D400	8-719-079-48	DIODE SMLS72423C-TP15 (POWER STANDBY)	
		< TRANSISTOR >	
Q400	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q401	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q402	8-729-900-53	TRANSISTOR DTC114EKA-T146	
		< RESISTOR >	
R400	1-216-025-91	RES-CHIP 100 5%	1/10W
R401	1-216-049-91	METAL CHIP 1K 5%	1/10W
		< SWITCH >	
S400	1-571-760-11	SWITCH, KEY BOARD (I/O)	

	A-4428-320-A	SW-932 BOARD, COMPLETE (EXCEPT CH)	
	A-4726-259-A	SW-932 BOARD, COMPLETE (CH)	

	4-226-334-01	KNOB (CURSOR)	
	4-931-757-31	SCREW (DIA.2.6X8) (IT3B), TAPPING	
		< JUMPER RESISTOR >	
JW200	1-216-296-91	SHORT 0	
JW201	1-216-296-91	SHORT 0	
JW202	1-216-296-91	SHORT 0	
		< RESISTOR >	
R200	1-216-089-91	RES-CHIP 47K 5%	1/10W
R201	1-216-059-00	METAL CHIP 2.7K 5%	1/10W
R202	1-216-077-91	RES-CHIP 15K 5%	1/10W
R203	1-216-059-00	METAL CHIP 2.7K 5%	1/10W
R204	1-216-077-91	RES-CHIP 15K 5%	1/10W
R205	1-216-055-00	METAL CHIP 1.8K 5%	1/10W
R206	1-216-071-00	METAL CHIP 8.2K 5%	1/10W
R207	1-216-055-00	METAL CHIP 1.8K 5%	1/10W
R208	1-216-053-00	METAL CHIP 1.5K 5%	1/10W
R209	1-216-065-91	RES-CHIP 4.7K 5%	1/10W
R210	1-216-053-00	METAL CHIP 1.5K 5%	1/10W

Ref. No.	Part No.	Description	Remark
R211	1-216-071-00	METAL CHIP 8.2K 5%	1/10W
R212	1-216-065-91	RES-CHIP 4.7K 5%	1/10W
R213	1-216-049-91	RES-CHIP 1K 5%	1/10W
R214	1-216-049-91	RES-CHIP 1K 5%	1/10W
R215	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R216	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
R217	1-216-089-91	RES-CHIP 47K 5%	1/10W
< SWITCH >			
S201	1-571-760-11	SWITCH, KEY BOARD (■)	
S202	1-571-760-11	SWITCH, KEY BOARD (▶▶▶)	
S203	1-571-760-11	SWITCH, KEY BOARD (BAND)	
S205	1-571-760-11	SWITCH, KEY BOARD (■■)	
S206	1-571-760-11	SWITCH, KEY BOARD (◀◀◀)	
S207	1-571-760-11	SWITCH, KEY BOARD (SOUND FIELD)	
S209	1-571-760-11	SWITCH, KEY BOARD (▷▷)	
S210	1-571-760-11	SWITCH, KEY BOARD (FUNCTION)	
S211	1-571-760-11	SWITCH, KEY BOARD (MUTE)	
S213	1-571-760-11	SWITCH, KEY BOARD (DVD MUTE)	
S214	1-571-760-11	SWITCH, KEY BOARD (≡)	
S215	1-571-760-11	SWITCH, KEY BOARD (TITLE)	
S216	1-771-879-11	SWITCH, TACTILE (◀ ▶ ▶ ▶ PUSH ENTER)	
S217	1-571-760-11	SWITCH, KEY BOARD (RETURN)	
S218	1-571-760-11	SWITCH, KEY BOARD (DISPLAY)	

A-4724-996-A TK BOARD, COMPLETE

< CAPACITOR >

C004	1-107-826-91	CERAMIC CHIP 0.1uF 10%	16V
C005	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C006	1-124-779-00	ELECT CHIP 10uF 20%	16V
C007	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C008	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C009	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C010	1-107-826-91	CERAMIC CHIP 0.1uF 10%	16V
C011	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
C012	1-124-779-00	ELECT CHIP 10uF 20%	16V
C013	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
C014	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
C015	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
C016	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C017	1-164-172-11	CERAMIC CHIP 0.0056uF 10%	25V
C018	1-164-739-11	CERAMIC CHIP 560PF 5%	50V
C019	1-164-172-11	CERAMIC CHIP 0.0056uF 10%	25V
C020	1-107-826-91	CERAMIC CHIP 0.1uF 10%	16V
C021	1-107-826-91	CERAMIC CHIP 0.1uF 10%	16V
C022	1-107-826-91	CERAMIC CHIP 0.1uF 10%	16V
C023	1-165-176-11	CERAMIC CHIP 0.047uF 10%	16V
C024	1-164-730-11	CERAMIC CHIP 0.0012uF 10%	50V
C025	1-165-176-11	CERAMIC CHIP 0.047uF 10%	16V
C026	1-162-964-11	CERAMIC CHIP 0.001uF 10%	50V
C027	1-164-217-11	CERAMIC CHIP 150PF 5%	50V
C028	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C029	1-107-826-91	CERAMIC CHIP 0.1uF 10%	16V
C030	1-107-826-91	CERAMIC CHIP 0.1uF 10%	16V

Ref. No.	Part No.	Description	Remark
C031	1-124-779-00	ELECT CHIP 10uF 20%	16V
C032	1-107-826-91	CERAMIC CHIP 0.1uF 10%	16V
C033	1-107-826-91	CERAMIC CHIP 0.1uF 10%	16V
C034	1-107-826-91	CERAMIC CHIP 0.1uF 10%	16V
C035	1-107-826-91	CERAMIC CHIP 0.1uF 10%	16V
C036	1-165-176-11	CERAMIC CHIP 0.047uF 10%	16V
C037	1-164-739-11	CERAMIC CHIP 560PF 5%	50V
C038	1-107-826-91	CERAMIC CHIP 0.1uF 10%	16V
C039	1-107-826-91	CERAMIC CHIP 0.1uF 10%	16V
C040	1-162-969-11	CERAMIC CHIP 0.0068uF 10%	25V
C041	1-162-966-11	CERAMIC CHIP 0.0022uF 10%	50V
C043	1-164-789-11	CERAMIC CHIP 0.22uF 10%	50V

< CONNECTOR >

CN001	1-573-363-21	CONNECTOR, FFC/FPC 23P	
CN002	1-566-529-11	CONNECTOR, FPC (ZIF) 13P	
CN003	1-784-870-21	CONNECTOR, FFC (LIF(NON-ZIF)) 18P	
CN004	1-784-870-21	CONNECTOR, FFC (LIF(NON-ZIF)) 18P	

< DIODE >

D003	8-719-073-01	DIODE MA111-(K8).S0	
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< IC >

IC001	8-759-567-24	IC SSI33P3722	
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< COIL >

L001	1-412-031-11	INDUCTOR CHIP 47uH	
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< TRANSISTOR >

Q001	8-729-903-46	TRANSISTOR 2SB1132-T100-QR	
Q002	8-729-015-76	TRANSISTOR UN5211-TX	

< RESISTOR >

R001	1-216-815-11	METAL CHIP 330 5%	1/16W
R002	1-216-809-11	METAL CHIP 100 5%	1/16W
R003	1-216-809-11	METAL CHIP 100 5%	1/16W
R004	1-216-837-11	METAL CHIP 22K 5%	1/16W
R005	1-216-013-00	METAL CHIP 33 5%	1/10W
R006	1-216-013-00	METAL CHIP 33 5%	1/10W
R007	1-216-841-11	METAL CHIP 47K 5%	1/16W
R008	1-216-797-11	METAL CHIP 10 5%	1/16W
R009	1-216-834-11	METAL CHIP 12K 5%	1/16W
R010	1-216-833-91	RES-CHIP 10K 5%	1/16W
R012	1-216-864-11	METAL CHIP 0 5%	1/16W
R014	1-216-864-11	METAL CHIP 0 5%	1/16W
R015	1-216-833-91	RES-CHIP 10K 5%	1/16W
R016	1-216-833-91	RES-CHIP 10K 5%	1/16W
R017	1-216-829-11	METAL CHIP 4.7K 5%	1/16W
R018	1-216-833-91	RES-CHIP 10K 5%	1/16W
R022	1-216-811-11	METAL CHIP 150 5%	1/16W
R023	1-216-820-11	METAL CHIP 820 5%	1/16W
R025	1-216-813-11	METAL CHIP 220 5%	1/16W
R026	1-216-864-11	METAL CHIP 0 5%	1/16W
R029	1-216-861-11	METAL CHIP 2.2M 5%	1/16W

TUNER **VIDEO** **VL-932**

Ref. No.	Part No.	Description	Remark
A-4424-428-A		TUNER BOARD, COMPLETE (CND,US)	
A-4424-647-A		TUNER BOARD, COMPLETE (AEP,CEN,CEU,CH,KR,TW,UK)	
A-4424-650-A		TUNER BOARD, COMPLETE (AUS,E12,E32,EA3,HK,MX,RU,SP)	

A-4428-332-A		VIDEO BOARD, COMPLETE (EXCEPT CH)	
A-4726-267-A		VIDEO BOARD, COMPLETE (CH)	

< CAPACITOR >			
C700	1-126-964-11	ELECT	10uF 20% 50V
C701	1-126-933-11	ELECT	100uF 20% 16V
C702	1-126-964-11	ELECT	10uF 20% 50V
C704	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C705	1-126-964-11	ELECT	10uF 20% 50V
C706	1-126-964-11	ELECT	10uF 20% 50V
C707	1-126-964-11	ELECT	10uF 20% 50V
C708	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C709	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C710	1-126-933-11	ELECT	100uF 20% 16V
C711	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C712	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C713	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C714	1-126-964-11	ELECT	10uF 20% 50V
C715	1-126-964-11	ELECT	10uF 20% 50V
C716	1-126-933-11	ELECT	100uF 20% 16V
C717	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C718	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C719	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C720	1-216-295-91	SHORT	0
C721	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C722	1-126-964-11	ELECT	10uF 20% 50V
C723	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
< CONNECTOR >			
CN700	1-784-455-11	CONNECTOR, FFC/FPC 13P	
< IC >			
IC700	8-759-696-10	IC NJM2235V (TE2)	
IC701	8-759-663-94	IC LA7106M-TLM	
IC702	8-759-284-49	IC NJM2285V	
< JACK >			
J700	1-794-035-11	JACK, PIN (WITH 4P S TERMINAL)	
< COIL >			
L700	1-469-525-91	INDUCTOR	10uH
L701	1-469-525-91	INDUCTOR	10uH
L702	1-469-525-91	INDUCTOR	10uH
< TRANSISTOR >			
Q700	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R
Q701	8-729-027-23	TRANSISTOR	DTA114EKA-T146
Q702	1-801-806-11	TRANSISTOR	DTC144EKA-T146
Q703	8-729-024-91	TRANSISTOR	2SC2712-GL-TE85L
Q704	8-729-024-91	TRANSISTOR	2SC2712-GL-TE85L

Ref. No.	Part No.	Description	Remark
< RESISTOR >			
R700	1-216-037-00	METAL CHIP	330 5% 1/10W
R701	1-216-037-00	METAL CHIP	330 5% 1/10W
R702	1-216-037-00	METAL CHIP	330 5% 1/10W
R703	1-216-022-00	METAL CHIP	75 5% 1/10W
R704	1-216-022-00	METAL CHIP	75 5% 1/10W
R705	1-216-022-00	METAL CHIP	75 5% 1/10W
R706	1-216-022-00	METAL CHIP	75 5% 1/10W
R707	1-216-073-00	METAL CHIP	10K 5% 1/10W
R708	1-216-073-00	METAL CHIP	10K 5% 1/10W
R709	1-216-073-00	METAL CHIP	10K 5% 1/10W
R710	1-216-022-00	METAL CHIP	75 5% 1/10W
R711	1-216-073-00	METAL CHIP	10K 5% 1/10W
R712	1-216-073-00	METAL CHIP	10K 5% 1/10W
R713	1-216-045-00	METAL CHIP	680 5% 1/10W
R714	1-216-022-00	METAL CHIP	75 5% 1/10W
R716	1-216-073-00	METAL CHIP	10K 5% 1/10W
R718	1-216-073-00	METAL CHIP	10K 5% 1/10W
R719	1-216-073-00	METAL CHIP	10K 5% 1/10W
R720	1-216-081-00	METAL CHIP	22K 5% 1/10W
R721	1-216-057-00	METAL CHIP	2.2K 5% 1/10W
R722	1-216-049-91	RES-CHIP	1K 5% 1/10W
R723	1-216-045-00	METAL CHIP	680 5% 1/10W
R724	1-216-049-91	RES-CHIP	1K 5% 1/10W
R725	1-216-073-00	METAL CHIP	10K 5% 1/10W
R726	1-216-081-00	METAL CHIP	22K 5% 1/10W

A-4428-324-A		VL-932 BOARD, COMPLETE (EXCEPT CH)	
A-4726-263-A		VL-932 BOARD, COMPLETE (CH)	

< CAPACITOR >			
C500	1-163-021-91	CERAMIC CHIP	0.01uF 10.00% 50V
C501	1-163-021-91	CERAMIC CHIP	0.01uF 10.00% 50V
< SWITCH >			
S500	1-473-392-11	ENCODER, ROTARY (VOLUME)	

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS *****	
13	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK,HK)	
14	1-792-403-11	CABLE, FLAT (14 core)	
15	1-792-404-11	CABLE, FLAT (5 core)	
17	1-792-406-11	CABLE, FLAT (13 core)	
18	1-792-399-11	CABLE, FLAT (18 core)	
19	1-792-400-11	CABLE, FLAT (18core)	
20	1-792-401-11	CABLE, FLAT (7 core)	
21	1-792-402-11	CABLE, FLAT (27 core)	
112	A-4672-891-A	MOTOR (LD) ASSY	
△117	8-820-081-09	OPTICAL PICK-UP KHM220AAA/J1N1	
△CNP901	1-690-608-11	CORD, POWER (AUS)	
△CNP901	1-696-169-22	CORD, POWER (AEP,UK,CEN,CEU,RU,EA,E12,E32,SP,HK,TW)	
△CNP901	1-769-079-22	CORD, POWER (KR)	
△CNP901	1-775-789-91	CORD, POWER (MX)	
△CNP901	1-782-464-21	CORD, POWER (CH)	
△CNP901	1-783-531-61	CORD, POWER (US,CND)	
△F901	1-533-470-11	FUSE GLASS (T3.15A/250V)(EXCEPT US,CND)	
△F901	1-576-375-11	FUSE GLASS (3.15A/125V)(US,CND)	
LCD100	1-803-910-11	DISPLAY PANEL, LIQUID CRYSTAL	

HARDWARE LIST

#1	7-685-246-14	SCREW +KTP 3X8 TYPE2 N-S
#2	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S
#3	7-685-546-14	SCREW +BTP 3X8 TYPE2 N-S

以阴影和 △ 标志来识别的零
部件，在安全方面具有关键
性。因此只能以规定号码的
零部件来更换。

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.

