

SLV-SE220/SE420/SE620/SE720/ SE727/SE820/SX720/SX727 RMT-V405/V405A/V406/V406A/V406B/V407A/V407B/V407C

SERVICE MANUAL



Hi-Fi

SHOWVIEW®



(for UK model)



Photo : SLV-SE620D
RMT-V406

AEP Model

SLV-SE220/SE620/SE720/SE727/
SE820/SX720/SX727

UK Model

SLV-SE220G/SE720G/SE820

Russian Model

SLV-SE420K/SE620N/SE720N/
SE820N/SX720N

TS-10 MECHANISM

Refer to the **SERVICE MANUAL of VHS MECHANICAL ADJUSTMENT MANUAL VII** for **MECHANICAL ADJUSTMENTS. (9-921-790-11)**

The abbreviations of SLV-SE220/SE420/SE620/SE720/SE727/SE820/SX720/SX727 contained in this service manual are indicated when these models are common to all their corresponding models as given below.

Abbreviated models name	SE220	SE420	SE620	SE720	SE727	SE820	SX720	SX727
AEP models SLV-	SE220B SE220D SE220I	—	SE620B SE620D SE620E	SE720B SE720D SE720E SE720I	SE727E	SE820B SE820D SE820E	SX720D SX720E	SX727D
UK models SLV-	SE220G	—	—	SE720G	—	SE820G	—	—
Russian models SLV-	—	SE420K	SE620N	SE720N	—	SE820N	SX720N	—

The SLV-SE220D/SE620D/SE720D/SX720D/SX727D/SE820D model and SLV-SE420K/SE620N/SE720N/SX720N/SE820N model that have destination of Germany, Hungary and Austria are repaired only at the centralized service centers. Send these model to the centralized service centers for repair.

SPECIFICATIONS

System

Channel coverage
PAL (B/G, D/K)
VHF E2–E12, R1–R12
UHF E21–E69, R21–R69
CATV S1–S41, S01–S05
RF output signal
UHF channels 21–69
Aerial out
75-ohm asymmetrical aerial socket
Tape speed

SP: PAL/MESECAM*

23.39 mm/s
(recording/playback)

NTSC 33.35 mm/s
(playback only)

LP: PAL/MESECAM*

11.70 mm/s
(recording/playback)

NTSC 16.67 mm/s
(playback only)

EP: NTSC 11.12 mm/s
(playback only)

***MESECAM: for B model**

Maximum recording/playback time
10 hrs. in LP mode (with E300 tape)

Rewind time

Approx. 1 min. (with E180 tape)

Inputs and outputs

LINE-1 (EURO AV)

21-pin

Video input: pin 20

Audio input: pins 2 and 6

Video output: pin 19

Audio output: pins 1 and 3

— Continued on next page —

VIDEO CASSETTE RECORDER

SONY®

LINE-2 (DEC/EXT)/LINE-3 (DEC/EXT)*¹

21-pin

Video input: pin 20

Audio input: pins 2 and 6

⊖ LINE-2 L ⊖ R*²

VIDEO IN, phono jack (1)

Input signal: 1 V_{p-p}, 75 ohms,
unbalanced, sync negative

AUDIO IN, phono jack (2)

Input level: 327 mV_{rms}

Input impedance: more than 47 kilohms

AUDIO (OUT/SORTIE) R/D L/G*³

Phono jack (2)

Rated output level: 327 mV_{rms}

Load impedance: 47 kilohms

Output impedance: less than 10 kilohms

*¹ not available on SLV-SE620N

*² SLV-SE820N only

*³ not available on SLV-SE620N and
SE420K

General

Power requirements

220 – 240 V AC, 50 Hz

Power consumption

15 W (SLV-SE420K)

17 W (SLV-SE820N, SE720N, SX720N
and SE620N)

3 W (POWER SAVE is set to ON,
minimum)

Operating temperature

5°C to 40°C

Storage temperature

–20°C to 60°C

Dimensions including projecting parts and controls (w/h/d)

Approx. 360 × 95 × 243 mm
(SLV-SE420K)

Approx. 430 × 96 × 242 mm
(SLV-SE720N, SX720N and SE620N)

Approx. 430 × 96 × 251 mm
(SLV-SE820N)

Mass

Approx. 2.8 kg (SLV-SE420K)

Approx. 3.1 kg (SLV-SE820N, SE720N,
SX720N and SE620N)

Supplied accessories

Remote commander (1)

R6 (size AA) batteries (2)

Aerial cable (1)

Design and specifications are subject to
change without notice.

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.

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, through functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.
6. Flexible Circuit Board Repairing
 - Keep the temperature of the 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.

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IMPORTANT SERVICE GUIDE

◆ MODE SWITCH (PROGRAM SWITCH) ASSEMBLY POINT

- 1) When installing the ass'y deck on the Main PCB, be sure to align the assembly point of mode switch.

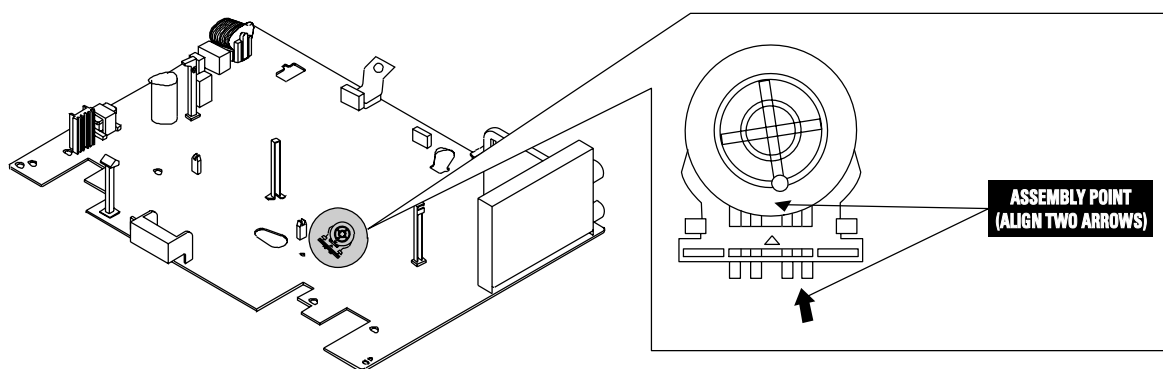


Fig. 1

◆ HOW TO EJECT THE CASSETTE TAPE

(If the unit does not operate on condition that tape is inserted into housing ass'y)

- 1) Turn the Gear Worm ❶ clockwise in the direction of arrow with screw driver. (See Fig. 2)
(Other method ; Remove the screw of Motor Load Ass'y, Separate the Motor Load Ass'y)
- 2) When Slider S, T are approached in the position of unloading, rotate holder Clutch counterclockwise after inserting screw driver in the hole of frame's bottom in order to wind the unwinded tape. (Refer to Fig. 3)
(If you rotate Gear Worm ❶ continuously when tape is in state of unwinding, you may cause a tape contamination by grease and tape damage. Be sure to wind the unwinded tape in the state of set horizontally.)
- 3) Rotate Gear Worm ❶ clockwise using screw driver again up to the state of eject mode and then pick out the tape. (Refer to Fig. 2)

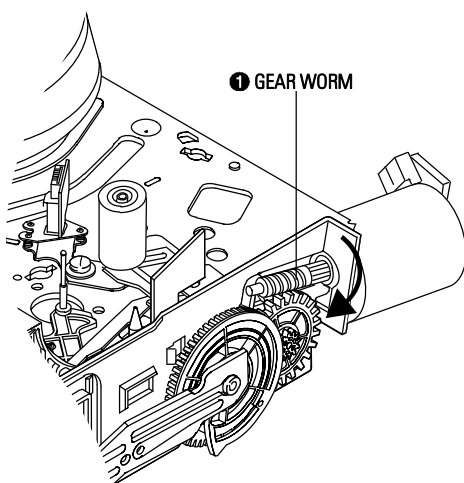


Fig. 2

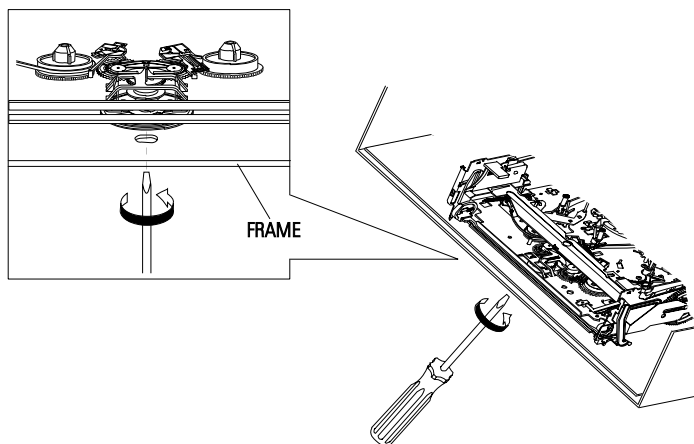


Fig. 3

1. General

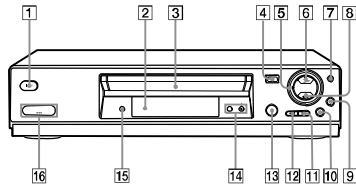
Getting Started

Index to parts and controls

Refer to the pages indicated in parentheses () for details.

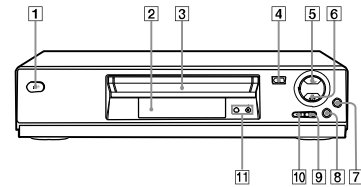
Front panel

For SLV-SE820N



- | | |
|--|--|
| 1 I/⏻ (on/standby) switch | 12 ◀◀ (rewind) button (39) (58) |
| 2 Remote sensor (12) | 13 ⌚ DIAL TIMER (46) |
| 3 Tape compartment | 14 PROGRAM +/- buttons* (47) (59) (68) |
| 4 ⏮ (eject) button (39) | 15 AUDIO DUB button (75) |
| 5 Shuttle ring (58) | 16 ⏮ LINE-2 L (left) ⏮ R (right) jacks (covered)* (72) (73) (75) |
| 6 ▷ (play) button* (39) (58) | |
| 7 JOG button (58) | |
| 8 ■ (stop) button* (22) (39) (74) (75) | |
| 9 REC ● (record) button (43) (60) (74) | |
| 10 (pause) button (39) (50) (74) (75) | |
| 11 ▶▶ (fast-forward) button (39) (58) | |
- How to open the jack cover**
 1 Press the bottom of the cover.
 2 Hook your finger on the top edge of the cover and pull it open.
- * The ▷ (play), ■ (stop) and PROGRAM +/- buttons and jack cover have a tactile dot.

For SLV-SE720N, SX720N and SE620N

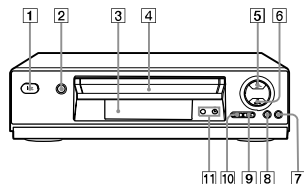


- | | |
|--|--|
| 1 I/⏻ (on/standby) switch | 7 REC ● (record) button (43) (60) (74) |
| 2 Remote sensor (12) | 8 (pause) button (39) (74) (75) |
| 3 Tape compartment | 9 ▶▶ (fast-forward) button (39) (58) |
| 4 ⏮ (eject) button (39) | 10 ◀◀ (rewind) button (39) (58) |
| 5 ▷ (play) button* (39) (58) | 11 PROGRAM +/- buttons* (59) (68) |
| 6 ■ (stop) button* (22) (39) (74) (75) | |
- * The ▷ (play), ■ (stop) and PROGRAM +/- buttons have a tactile dot.

Getting Started

4 | Index to parts and controls

For SLV-SE420K



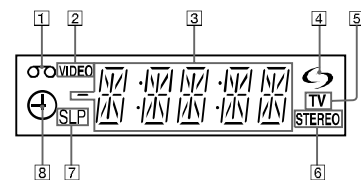
- | | |
|--|--|
| 1 I/⏻ (on/standby) switch | 7 REC ● (record) button (43) (60) (74) |
| 2 ⏮ (eject) button (39) | 8 (pause) button (39) (74) (75) |
| 3 Remote sensor (12) | 9 ▶▶ (fast-forward) button (39) (58) |
| 4 Tape compartment | 10 ◀◀ (rewind) button (39) (58) |
| 5 ▷ (play) button* (39) (58) | 11 PROGRAM +/- buttons* (59) (68) |
| 6 ■ (stop) button* (22) (39) (74) (75) | |
- * The ▷ (play), ■ (stop) and PROGRAM +/- buttons have a tactile dot.

continued

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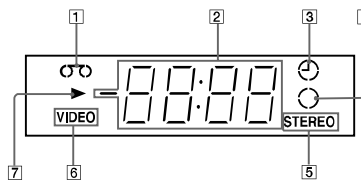
Display window

For SLV-SE820N, SE720N and SX720N



- | | |
|---|---|
| 1 Tape indicator | 5 TV indicator (45) |
| 2 VIDEO indicator (17) (43) | 6 STEREO indicator (63) |
| 3 Time counter/clock/line/programme position indicator (40) (42) (74) | 7 Tape speed indicators (42) |
| 4 ⏮ (smartlink) indicator (18) | 8 Timer/recording indicator (43) (48) (53) (56) |

For SLV-SE620N and SE420K



- | | |
|---|-----------------------------|
| 1 Tape indicator | 5 STEREO indicator* (63) |
| 2 Time counter/clock/line/programme position indicator (40) (42) (74) | 6 VIDEO indicator (17) (43) |
| 3 Timer indicator (48) (53) (56) | 7 Playback indicator |
| 4 Recording indicator (43) | |
- * not available on SLV-SE420K

Getting Started

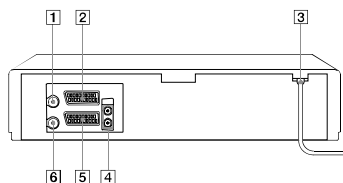
6 | Index to parts and controls

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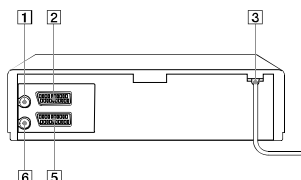
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Rear panel

For SLV-SE820N, SE720N, SX720N and SE620N



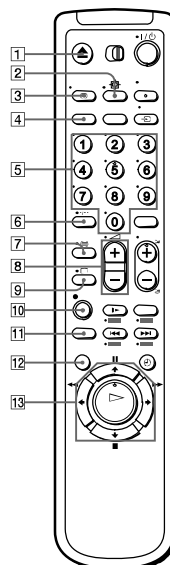
For SLV-SE420K



- 1 1" (in from antenna) connector (16) (17)
- 2 LINE-3 (DEC/EXT) connector*1
LINE-2 (DEC/EXT) connector*2
(19) (36) (73)
- 3 Mains lead (16) (17)
- 4 AUDIO (OUT/SORTIE) R/D (right)
L/G (left) jacks*3 (19)
- 5 LINE-1 (EURO AV) connector (17)
(36) (72)
- 6 6V (out to tv) connector (16) (17)

*1 SLV-SE820N only
*2 SLV-SE720N, SX720N and SE420K only
*3 not available on SLV-SE620N

Remote commander

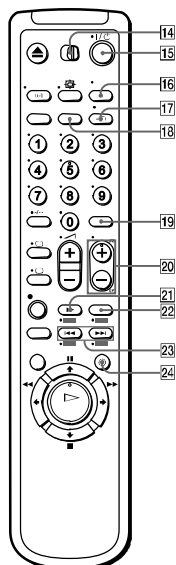


- 1 (eject) button (39)
- 2 (wide) button (for TV) (14) (15)
- 3 DISPLAY button (14) (40) (43)
- 4 COUNTER/REMAIN button (43)
- 5 Programme number buttons*1 (13) (44)
- 6 -.- (ten's digit) button (13) (44)
- 7 (Teletext) button (for TV)*2 (14)
- 8 (volume) +/- buttons (for TV) (13)
- 9 TV power on/TV mode select button (for TV)*2 (13)
- 10 REC (record) button (43) (60)
- 11 SP (Standard Play)/LP (Long Play) button (42)
- 12 MENU button (24) (61)
- 13 (pause) button (24) (39)
(stop) button (24) (39)
(rewind) button (24) (39) (58)
(fast-forward) button (24) (39) (58)
(play)/OK button*1 (24) (39) (58)

*1 The (play), AUDIO MONITOR, number 5 and PROG + buttons have a tactile dot.

*2 SLV-SE820N only

Getting Started



- 14 TV / VIDEO remote control switch (12)
- 15 (on/standby) switch (13) (14) (53)
- 16 AUDIO MONITOR button*1*3 (14) (64)
- 17 TV/VIDEO button (13) (17) (43)
- 18 CLEAR button (40) (52) (61)
- 19 INPUT SELECT button (42) (56) (74)
- 20 PROG (programme) +/- buttons*1 (13) (42)
- 21 Teletext page access buttons (for TV)*2 (14)
- 22 SLOW button*4 (58)
- 23 2 button*4 (58)
- 24 (index search) buttons*3*4 (66)
- 25 TIMER button (51) (55)

*1 The (play), AUDIO MONITOR, number 5 and PROG + buttons have a tactile dot.

*2 SLV-SE820N only

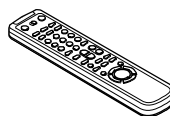
*3 not available on SLV-SE420K

*4 FASTEXT buttons (for TV) (SLV-SE820N only)

Step 1 : Unpacking

Check that you have received the following items with the VCR:

- Remote commander



- R6 (size AA) batteries



- Aerial cable



Getting Started

Check your model name

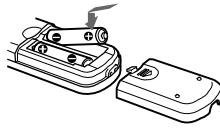
The instructions in this manual are for the 5 models: SLV-SE820N, SE720N, SX720N, SE620N and SE420K. Check your model name by looking at the rear panel of your VCR. SLV-SE820N is the model used for illustration purposes. Any difference in operation is clearly indicated in the text, for example, "SLV-SE820N only."

Step 2 : Setting up the remote commander


Inserting the batteries

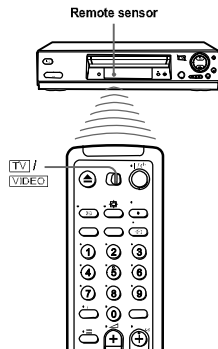
Insert two R6 (size AA) batteries by matching the + and - on the batteries to the diagram inside the battery compartment.

Insert the negative (-) end first, then push in and down until the positive (+) end clicks into position.

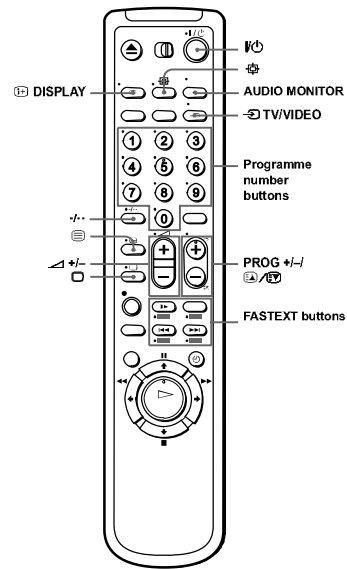


Using the remote commander





You can use this remote commander to operate this VCR and a Sony TV. Buttons on the remote commander marked with a dot (•) can be used to operate your Sony TV. If the TV does not have the  symbol near the remote sensor, this remote commander will not operate the TV.



To operate	Set [TV] / [VIDEO] to
the VCR	[VIDEO] and point at the remote sensor at the VCR
a Sony TV	[TV] and point at the remote sensor at the TV







TV control buttons

To	Press
Set the TV to standby mode	
Select an input source: aerial in or line in	
Select the TV's programme position	Programme number buttons, +/-, PROG +/-
Adjust the volume of the TV	
Switch to TV (Teletext off)*1	 (TV)

continued

12 | Setting up the remote commander

Setting up the remote commander | 13

To	Press
Switch to Teletext*1	 (Teletext)
Select the sound*2	AUDIO MONITOR
Use FASTTEXT*1	FASTTEXT buttons
Call up the on-screen display	
Change the Teletext page*1	
Switch to/from wide mode of a Sony wide TV (For other manufacturers' wide TVs, see "Controlling other TVs with the remote commander (SLV-SE820N only)" below.)	 (wide)

Notes

- With normal use, the batteries should last about three to six months.
- If you do not use the remote commander for an extended period of time, remove the batteries to avoid possible damage from battery leakage.
- Do not use a new battery together with an old one.
- Do not use different types of batteries together.
- Some buttons may not work with certain Sony TVs.



*1SLV-SE820N only

*2not available on SLV-SE420K








Controlling other TVs with the remote commander (SLV-SE820N only)

The remote commander is preprogrammed to control non-Sony TVs. If your TV is listed in the following table, set the appropriate manufacturer's code number.

1 Set [TV] / [VIDEO] at the top of the remote commander to [TV].

2 Hold down , and enter your TV's code number using the programme number buttons. Then release .

Now you can use the following TV control buttons to control your TV:

, , programme number buttons, +/- (ten's digit), PROG +/-, ,  (TV),  (Teletext), FASTTEXT buttons,  (wide)*, MENU*, , and OK*.


* These buttons may not work with all TVs.



Code numbers of controllable TVs



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

To switch to wide mode, see the footnotes below this table for the applicable code numbers.

Manufacturer	Code number	Manufacturer	Code number
Sony	01*1, 02	Panasonic	17*1, 49
Akai	68	Philips	06*1, 07*1, 08*1
Ferguson	52	Saba	12, 13
Grundig	10*1, 11*1	Samsung	22, 23
Hitachi	24	Sanyo	25
JVC	33	Sharp	29
Loewe	45	Telefunken	36
Mivar	09, 70	Thomson	43*2
NEC	66	Toshiba	38
Nokia	15, 16, 69*3		

*1Press  (wide) to switch the wide picture mode on or off.

*2Press  (wide), then press  to select the wide picture mode you want.

*3Press  (wide). The menu appears on the TV screen. Then, press  to select the wide picture you want and press OK.

Tip

- When you set your TV's code number correctly while the TV is turned on, the TV turns off automatically.

Notes

- If you enter a new code number, the code number previously entered will be erased.
- If the TV uses a different remote control system from the one programmed to work with the VCR, you cannot control your TV with the remote commander.
- When you replace the batteries of the remote commander, the code number may change. Set the appropriate code number every time you replace the batteries.

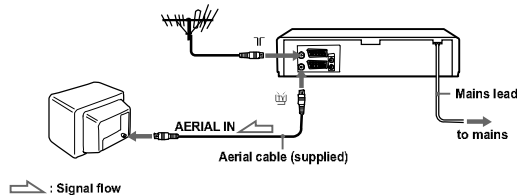
14 | Setting up the remote commander

Setting up the remote commander | 15

Step 3 : Connecting the VCR

If your TV has a Scart (EURO-AV) connector, see page 17.

If your TV does not have a Scart (EURO-AV) connector

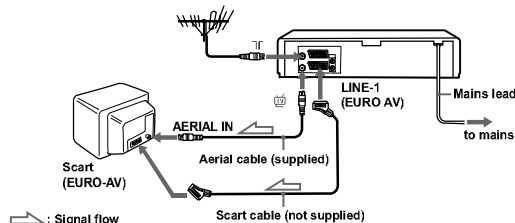


- 1 Disconnect the aerial cable from your TV and connect it to π on the rear panel of the VCR.
- 2 Connect III of the VCR and the aerial input of your TV using the supplied aerial cable.
- 3 Connect the mains lead to the mains.

Note

- When you connect the VCR and your TV only with an aerial cable, you have to tune your TV to the VCR (see page 20).

If your TV has a Scart (EURO-AV) connector



- 1 Disconnect the aerial cable from your TV and connect it to π on the rear panel of the VCR.
- 2 Connect III of the VCR and the aerial input of your TV using the supplied aerial cable.
- 3 Connect LINE-1 (EURO AV) on the VCR and the Scart (EURO-AV) connector on the TV with the optional Scart cable.
- 4 Connect the mains lead to the mains.

This connection improves picture and sound quality. Whenever you want to watch the VCR picture, press TV/VIDEO to display the VIDEO indicator in the display window.

Getting Started

About the SMARTLINK features (not available on SLV-SE620N and SE420K)

If the connected TV complies with SMARTLINK, MEGALOGIC*, EASYLINK*, Q-Link*, EURO VIEW LINK*, or T-V LINK*, this VCR automatically runs the SMARTLINK function after you complete the steps on the previous page (the TV/VIDEO indicator appears in the VCR's display window when you turn on the TV). You can enjoy the following SMARTLINK features.

- **TV Direct Rec**
You can easily record what you are watching on the TV when the VCR is turned on. For details, see "Recording what you are watching on the TV (TV Direct Rec) (not available on SLV-SE620N and SE420K)" on page 45.
- **One Touch Play**
With One Touch Play, you can start playback automatically without turning on the TV. For details, see "Starting playback automatically with one button (One Touch Play) (not available on SLV-SE620N and SE420K)" on page 41.
- **One Touch Menu**
When the VCR is turned on, you can turn on the TV, set the TV to the video channel, and display the VCR's on-screen display automatically by pressing MENU on the remote commander.
- **One Touch Timer**
When the VCR is turned on, you can turn on the TV, set the TV to the video channel, and display the timer recording menu (the TIMER PROGRAMMING menu or the SHOWVIEW menu) automatically by pressing TIMER on the remote commander. You can set which timer recording menu is displayed using TIMER METHOD in the EASY OPERATION menu (see page 71).
- **NexTVView Download**
You can easily set the timer by using the NexTVView Download function on your TV. Please refer to your TV's instruction manual.

*1-"MEGALOGIC" is a registered trademark of Grundig Corporation.

*2-"EASYLINK" is a trademark of Philips Corporation.

*3-"Q-Link" is a trademark of Panasonic Corporation.

*4-"EURO VIEW LINK" is a trademark of Toshiba Corporation.

*5-"T-V LINK" is a trademark of JVC Corporation.

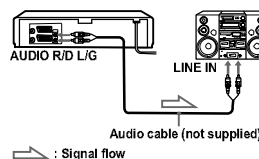
Note

- Not all TVs respond to the functions above.

Additional connections

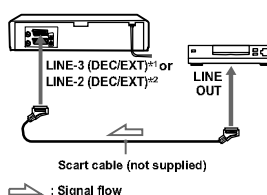
To a stereo system (not available on SLV-SE620N and SE420K)

You can improve sound quality by connecting a stereo system to the AUDIO R/D L/G jacks as shown on the right.



To a satellite or digital tuner with Line Through (not available on SLV-SE620N)

Using the Line Through function, you can watch programmes from a satellite or digital tuner connected to this VCR on the TV even when the VCR is turned off. When you turn on the satellite or digital tuner, this VCR automatically sends the signal from the satellite or digital tuner to the TV without turning itself on.



- 1 Connect the satellite or digital tuner to the LINE-3 (DEC/EXT)*1 or LINE-2 (DEC/EXT)*2 connector as shown above.
- 2 Turn off the VCR.

To watch a programme, turn on the satellite or digital tuner and the TV.

Notes

- The Line Through function will not operate properly if POWER SAVE in the USER SET menu is set to ON. Set POWER SAVE to OFF to ensure proper operation (see page 69).
- You cannot watch programmes on the TV while recording unless you are recording a satellite or digital programme.
- This function may not work with some types of satellite or digital tuners.
- When the VCR is turned off, set the TV to the video channel.

*1-SLV-SE820N only

*2-SLV-SE720N, SX720N and SE420K only

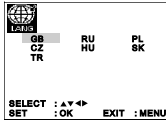
Getting Started

Step 4 : Setting up the VCR with the Auto Set Up function

Before using the VCR for the first time, set up the VCR using the Auto Set Up function. With this function, you can set the language for the on-screen display, TV channels, guide channels for the ShowView system*, and VCR clock* automatically.

- 1 Turn on your TV and set it to the video channel.
If your TV does not have a Scart (EURO-AV) connector, tune the TV to channel 32 (the initial RF channel for this VCR). Refer to your TV manual for TV tuning instructions. If the picture does not appear clearly, see "To change the RF channel" on page 22.

- 2 Connect the mains lead to the mains.
The VCR automatically turns on, and the language abbreviations appear on the TV screen.



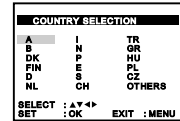
The abbreviations of the languages are as follows:

Abbreviation	Country	Language
CZ	Czech	Czech
HU	Hungary	Hungarian
PL	Poland	Polish
SK	Slovakia	Slovak
TR	Turkey	Turkish
RU	Russia	Russian

- 3 Press $\uparrow/\downarrow/\leftarrow/\rightarrow$ to select the language abbreviation from the table in step 2, then press OK.
The message for the Auto Set Up function appears.



- 4 Press OK.
The COUNTRY SELECTION menu* appears.



The abbreviations of the countries are as follows:

Abbreviation	Country	Abbreviation	Country
A	Austria	E	Spain
B	Belgium	S	Sweden
DK	Denmark	CH	Switzerland
FIN	Finland	TR	Turkey
D	Germany	GR	Greece
NL	Netherlands	HU	Hungary
I	Italy	PL	Poland
N	Norway	CZ	Czech
P	Portugal	OTHERS	other countries

- 5 For SLV-SE820N, SE720N and SX720N

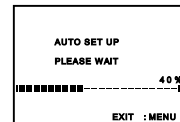


Press $\uparrow/\downarrow/\leftarrow/\rightarrow$ to select the abbreviation of your country from the table in step 4, then press OK.
If your country does not appear, select OTHERS.

The VCR starts searching for all of the receivable channels and presets them (in the appropriate order for your local area).

If you want to change the order of the channels or disable unwanted programme positions, see "Changing/disabling programme positions" on page 31.

After the search or download is complete, the current time appears for any stations that transmit a time signal. If the time does not appear, set the clock manually. See "Setting the clock" on page 24.



For SLV-SE620N and SE420K

The clock setting menu appears. See "Setting the clock" on page 24.

To cancel the Auto Set Up function

Press MENU.

To change the RF channel

If the picture does not appear clearly on the TV, change the RF channel on the VCR and TV. Select INSTALLATION from the menu, then press \uparrow/\downarrow to highlight VCR OUTPUT CH and press \rightarrow . Select the RF channel by pressing the \uparrow/\downarrow buttons. Then, tune the TV to the new RF channel so that a clear picture appears.

Tip

- If you want to change the language for the on-screen display from the one preset in the Auto Set Up function, see page 27.

Notes

- Whenever you operate the Auto Set Up function, some of the settings (ShowView*, timer, etc.) will be reset. If this happens, you have to set them again.
- Auto preset starts automatically only when you plug in the mains lead for the first time after you purchase the VCR.
- After using the Auto Set Up function, the language abbreviations do not appear automatically when you connect the mains lead again. If you want to use the Auto Set Up function again, press MENU, then press $\uparrow/\downarrow/\leftarrow/\rightarrow$ to highlight INSTALLATION and press OK. Press \uparrow/\downarrow to highlight AUTO SET UP, then repeat all procedures from step 4.
- Auto preset can be performed by pressing \blacksquare (stop) on the VCR continuously for 5 seconds or more with no tape inserted.

* not available on SLV-SE620N and SE420K

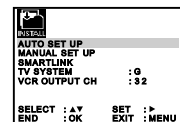
Step 5 : Selecting the TV system

You must select the appropriate TV system for your area.

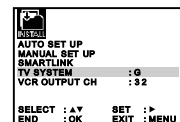
Before you start...

- Turn on the VCR and the TV.
- Set the TV to the video channel.
- Refer to "Index to parts and controls" for button locations.

- 1 Press MENU, then press $\uparrow/\downarrow/\leftarrow/\rightarrow$ to highlight INSTALLATION and press OK.



- 2 Press \uparrow/\downarrow to highlight TV SYSTEM, then press \rightarrow .



- 3 Press \rightarrow to select the appropriate TV system. Select "G" for the B/G TV system, or "K" for the D/K TV system.



- 4 Press MENU to exit the menu.





Setting the clock

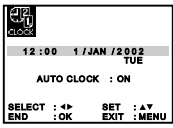

You must set the time and date on the VCR to use the timer features properly. The Auto Clock Set function* works only if a station in your area is broadcasting a time signal.


Before you start...

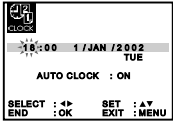

- Turn on the VCR and the TV.
- Set the TV to the video channel.
- Refer to "Index to parts and controls" for button locations.



- 

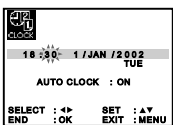
Press MENU, then press  to highlight CLOCK SET and press OK.



- 




Press  to set the hour.

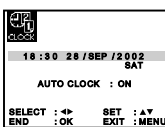


- 


Press  to select the minutes and set the minutes by pressing .



- 

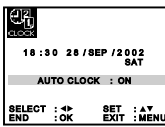

Set the day, month, and year in sequence by pressing  to select the item to be set, and press  to select the digits, then press . The day of the week is set automatically.


- 

Press  to select ON for the setting of the Auto Clock Set function*.



The VCR automatically sets the clock according to the time signal broadcast between the channels PR 1 to PR 5.

If you do not need the Auto Clock Set function, select OFF.


- 

Press MENU to exit the menu.

Tips

- If you set AUTO CLOCK* to ON, the Auto Clock Set function is activated whenever the VCR is turned off. The time is adjusted automatically by making reference to the time signal from the station.
- To change the digits while setting, press  to return to the item to be changed, and select the digits by pressing .

* not available on SLV-SE620N and SE420K


Getting Started


Downloading the TV tuner's preset data (SLV-SE820N, SE720N and SX720N only)

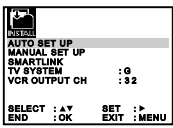

You can download your TV tuner's preset data to the VCR and tune the VCR according to that data using the SMARTLINK connection.



Before you start...

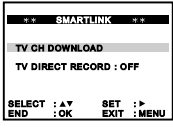

- Turn on the VCR and the TV.
- Set the TV to the video channel.
- Refer to "Index to parts and controls" for button locations.



- 

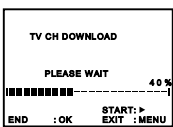
Press MENU, then press  to highlight INSTALLATION and press OK.


- 

Press  to highlight SMARTLINK, then press .


- 

Press  to highlight TV CH DOWNLOAD, then press . The Preset Download function starts and the <> indicator flashes in the display window during download.





Selecting a language

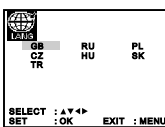

You can change the on-screen display language from the one you selected with the Auto Set Up function.


Before you start...

- Turn on the VCR and the TV.
- Set the TV to the video channel.
- Refer to "Index to parts and controls" for button locations.

- 

Press MENU, then press  to highlight LANGUAGE SET and press OK.


- 

Press  to highlight the abbreviation of the desired language from the table on page 20, then press OK.

Getting Started

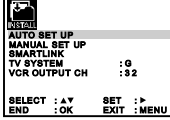
Presetting channels

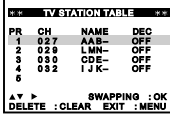
If some channels could not be preset using the Auto Set Up function, you can preset them manually.

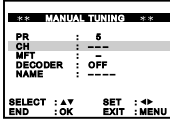
Before you start...

- Turn on the VCR and the TV.
- Set the TV to the video channel.
- Refer to "Index to parts and controls" for button locations.

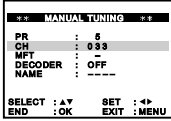
- Press MENU, then press $\uparrow/\downarrow/\leftarrow/\rightarrow$ to highlight INSTALLATION and press OK.

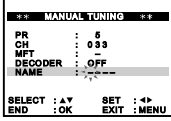

- Press \uparrow/\downarrow to highlight MANUAL SET UP, then press \rightarrow .

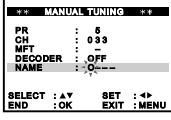

- Press \uparrow/\downarrow to highlight the row which you want to preset, then press \rightarrow .
To display other pages for programme positions 6 to 80, press \uparrow/\downarrow repeatedly.





- Press \leftarrow/\rightarrow repeatedly until the channel you want is displayed.


- Press \uparrow/\downarrow to highlight NAME, then press \rightarrow .


- Enter the station name.
1 Press \uparrow/\downarrow to select a character. Each time you press \uparrow , the character changes as shown below.
A \rightarrow B \rightarrow ... \rightarrow Z \rightarrow 0 \rightarrow 1 \rightarrow ... \rightarrow 9 \rightarrow A
2 Press \rightarrow to set the next character. The next space is flashed. To correct a character, press \leftarrow/\rightarrow until the character you want to correct is flashed, then reset it. You can set up to 4 characters for the station name.


- Press OK to confirm the station name.


- Press MENU to exit the menu.



Getting Started

If the picture is not clear

If the picture is not clear, you may use the Manual Fine Tuning (MFT) function. After step 4, press \uparrow/\downarrow to select MFT. Press \leftarrow/\rightarrow to get a clear picture, then press MENU to exit the menu.

Tips

- To set the programme position for the decoder, see "Setting the Canal Plus decoder (not available on SLV-SE620N)" on page 36.
- The VCR must receive channel information for station names to appear automatically.

Notes

- If the TV sound is distorted or noisy, select the appropriate TV system ("G" or "K") for your area (see page 23).
- When adjusting MFT, the menu may become difficult to read due to interference from the picture being received.

Changing/disabling programme positions

After setting the channels, you can change the programme positions as you like. If any programme positions are unused or contain unwanted channels, you can disable them.


You can also change the station names. If the station names are not displayed, you can enter them manually.


Changing programme positions


Before you start...

- Turn on the VCR and the TV.
- Set the TV to the video channel.
- Refer to "Index to parts and controls" for button locations.




- Press MENU, then press $\uparrow/\downarrow/\leftarrow/\rightarrow$ to highlight INSTALLATION and press OK.


- Press \uparrow/\downarrow to highlight MANUAL SET UP, then press \rightarrow .


- Press \uparrow/\downarrow to highlight the row containing the programme position you want to change.
To display other pages for programme positions 6 to 80, press \uparrow/\downarrow repeatedly.



Getting Started


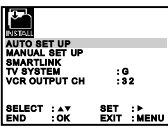
- 4**  Press OK, then press \uparrow/\downarrow to move to the desired programme position.
- 5**  Press OK to confirm the setting.
- 6** To change the programme position of another station, repeat steps 3 through 5.
- 7**  Press MENU to exit the menu.





Disabling unwanted programme positions

After presetting channels, you can disable unused programme positions. The disabled positions will be skipped later when you press the PROG +/- buttons.

Before you start...

- Turn on the VCR and the TV.
- Set the TV to the video channel.
- Refer to "Index to parts and controls" for button locations.

- 1**  Press MENU, then press $\uparrow/\downarrow/\leftarrow/\rightarrow$ to highlight INSTALLATION, and press OK.
- 

- 2**  Press \uparrow/\downarrow to highlight MANUAL SET UP, then press \rightarrow .
- 3**  Press \uparrow/\downarrow to highlight the row which you want to disable. To display other pages for programme positions 6 to 80, press \uparrow/\downarrow repeatedly.
- 4**  Press CLEAR. The selected row will be cleared as shown on the right.
- 5** Repeat steps 3 and 4 for any other programme positions you want to disable.
- 6**  Press MENU to exit the menu.

Note

- Be sure to select the programme position you want to disable correctly. If you disable a programme position by mistake, you need to reset that channel manually.





Getting Started




Changing the station names (not available on SLV-SE620N and SE420K)

You can change or enter the station names (up to 4 characters). The VCR must receive channel information for station names to appear automatically.

Before you start...

- Turn on the VCR and the TV.
- Set the TV to the video channel.
- Refer to "Index to parts and controls" for button locations.

- 1**  Press MENU, then press $\uparrow/\downarrow/\leftarrow/\rightarrow$ to highlight INSTALLATION and press OK.
- 2**  Press \uparrow/\downarrow to highlight MANUAL SET UP, then press \rightarrow .
- 3**  Press \uparrow/\downarrow to highlight the row which you want to change or enter the station name, then press \rightarrow . To display other pages for programme positions 6 to 80, press \uparrow/\downarrow repeatedly.
- 4**  Press \uparrow/\downarrow to highlight NAME, then press \rightarrow .

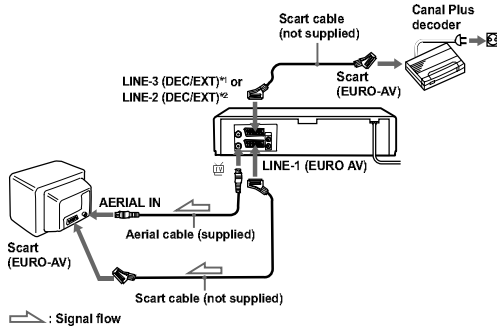
- 5**  Enter the station name.
- 1** Press \uparrow/\downarrow to select a character. Each time you press \uparrow/\downarrow , the character changes as shown below.
- A \rightarrow B \rightarrow ... \rightarrow Z \rightarrow 0 \rightarrow 1 \rightarrow ... \rightarrow 9 \rightarrow A
- 2** Press \rightarrow to set the next character. The next space flashes. To correct a character, press \leftarrow/\rightarrow until the character you want to correct flashes, then reset it. You can set up to 4 characters for the station name.
- 6**  Press OK to confirm the new name.
- 7**  Press MENU to exit the menu.

Getting Started

Setting the Canal Plus decoder (not available on SLV-SE620N)

You can watch or record Canal Plus programmes if you connect a decoder (not supplied) to the VCR.

Connecting a decoder



Setting Canal Plus channels

To watch or record Canal Plus programmes, set your VCR to receive the channels using the on-screen display.

In order to set the channels correctly, be sure to follow all of the steps below.

Before you start...

- Turn on the VCR, the TV, and the decoder.
- Set the TV to the video channel.
- Refer to "Index to parts and controls" for button locations.

- 6 Press MENU to exit the menu.

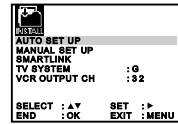
Notes

- To superimpose subtitles while watching Canal Plus programmes, make both decoder-VCR and VCR-TV connections using 21-pin Scart cables that are compatible with the RGB signals. You cannot record subtitles on the VCR.
- When you watch Canal Plus programmes through the RFU input of the TV, press so that the VIDEO indicator appears in the display window.

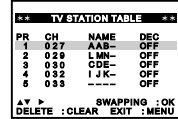
*1SLV-SE820N only

*2SLV-SE720N, SX720N and SE420K only

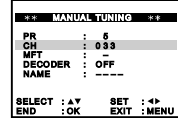
- 1 Press MENU, then press to highlight INSTALLATION and press OK.



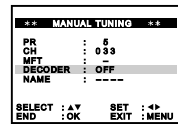
- 2 Press to highlight MANUAL SET UP, then press .



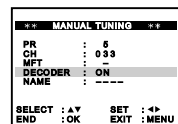
- 3 Press to highlight the row which you want to set for the decoder, then press . To display positions 6 to 80, press repeatedly.



- 4 Press to highlight DECODER.



- 5 Press to set DECODER to ON, then press OK.



Getting Started

36 | Setting the Canal Plus decoder (not available on SLV-SE620N)

continued
Setting the Canal Plus decoder (not available on SLV-SE620N) | 37

Basic Operations

Playing a tape

Before you start...

- Refer to "Index to parts and controls" for button locations.

- 1 Turn on your TV and set it to the video channel.

- 2 Insert a tape.
The VCR turns on and starts playing automatically if you insert a tape with its safety tab removed.



- 3 Press (play).
When the tape reaches the end, it will rewind automatically.



Additional tasks

To	Press
Stop play	(stop)
Pause play	(pause)
Resume play after pause	(pause) or (play)
Fast-forward the tape	(fast-forward) during stop
Rewind the tape	(rewind) during stop
Eject the tape	(eject)

Basic Operations

38 | Setting the Canal Plus decoder (not available on SLV-SE620N)

continued
Playing a tape | 39

To set the colour system

If the playback picture has no colour, or streaks appear during playback, set COLOUR SYSTEM in the USER SET menu to conform to the system that the tape was recorded in (see page 70). (Normally set the option to AUTO.)

To use the time counter

Press CLEAR at the point on the tape that you want to find later. The counter in the display window resets to "0:00:00" or "00:00." Search for the point afterwards by referring to the counter.



To display the counter on the TV screen, press **DISP** DISPLAY.

Notes

- The counter resets to "0:00:00" or "00:00" whenever a tape is reinserted.
- The counter stops counting when it comes to a portion with no recording.
- Depending on your TV, the following may occur while playing an NTSC-recorded tape:
 - The picture becomes black and white.
 - The picture shakes.
 - No picture appears on the TV screen.
 - Black streaks appear horizontally on the TV screen.
 - The colour density increases or decreases.
- While setting the menu on the TV screen, buttons for playback on the remote commander do not function.

Starting playback automatically with one button (One Touch Play) (not available on SLV-SE620N and SE420K)

If you use the SMARTLINK connection, you can turn on the TV, set the TV to the video channel, and start playback automatically with one button.

1 Insert a tape.

The VCR automatically turns on.

If you insert a tape with its safety tab removed, the TV turns on and switches to the video channel. Playback starts automatically.

2 Press **▶** (play).

The TV turns on and switches to the video channel automatically. Playback starts.

Tip

- When there already is a tape in the VCR, press **⏻** to turn on the VCR first. When you press **▶** (play), the TV turns on, the TV is set to the video channel, and playback starts automatically in one sequence.

Note

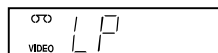
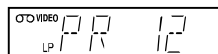
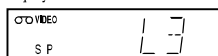
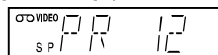
- When you use the One Touch Play function, leave the TV on or in the standby mode.

Recording TV programmes

Before you start...

- Refer to "Index to parts and controls" for button locations.

- Turn on your TV and set it to the video channel.
To record from a decoder, turn it on.
- Insert a tape with its safety tab in place.
- To record a normal channel, press **PROG** +/- until the programme position number you want appears in the display window.
 - To record from a decoder or other source connected to one or more of the LINE inputs, press **INPUT SELECT** until the connected line appears in the display window.
- Press **SP/LP** to select the tape speed, SP or LP.



5



Press **REC** to start recording.

The recording indicator lights up red in the display window.



Recording indicator

To stop recording

Press **■** (stop).

To check the remaining time

Press **DISP** twice. With the display on, press **COUNTER/REMAIN** to check the remaining time. Each time you press **COUNTER/REMAIN**, the time counter and the remaining time appear alternately.



Time counter



Remaining time

In order to get an accurate remaining time indication, be sure TAPE SELECT in the USER SET menu is set according to the tape type you use (see page 70).

To watch another TV programme while recording

- Press **TV/VIDEO** to turn off the VIDEO indicator in the display window.
- Select another programme position on the TV.

To save a recording

To prevent accidental erasure, break off the safety tab as illustrated. To record on the same tape again, cover the tab hole with adhesive tape.



Safety tab

Tips

- To select a programme position, you can use the programme number buttons on the remote commander. For two-digit numbers, for example, press 2 and 3 to select "PR 23."
- If you connect additional equipment to a LINE connector or jack, you can select the input signal using the INPUT SELECT or PROG +/- buttons.
- The DISPLAY information appears on the TV screen indicating information about the tape, but the information will not be recorded on the tape.
- If you do not want to watch TV while recording, you can turn off the TV. When using a decoder, make sure to leave it on.

Notes

- The DISPLAY information does not appear during still (pause) mode or slow-motion playback.
- If a tape has portions recorded in both PAL (MESECAM) and NTSC systems, the time counter reading will not be correct. This discrepancy is due to the difference between the counting cycles of the two video systems.
- You cannot watch a Canal Plus programme while recording another Canal Plus programme.*
- When you insert a non-standard commercially available tape, the remaining time may not be correct.
- The remaining time is intended for rough measurement only.
- About 30 seconds after the tape begins playback, the tape remaining time will be displayed.

* not available on SLV-SE620N

Recording what you are watching on the TV (TV Direct Rec) (not available on SLV-SE620N and SE420K)

If you use the SMARTLINK connection, you can easily record what you are watching on the TV (other than tapes being played on the VCR).

- Press to turn on the VCR.
- Insert a tape with its safety tab in place.
- Press REC while you are watching a TV programme or external source.

The TV indicator lights up and the VCR starts recording what you are watching on the TV.

Tip

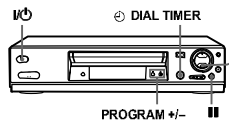
- The TV indicator appears in the display window after you press REC in some situations such as:
when you are watching a source connected to the TV's line input, or
when the TV tuner preset data for the programme position is different from the data in the VCR tuner preset.

Notes

- You cannot record what you are watching using this method when the VCR is in the following modes; pause, timer standby, tuner preset, Auto Set Up, and recording.
- When the TV indicator is lit in the display window, do not turn off the TV nor change the TV programme position. When the TV indicator is not lit, the VCR continues recording the programme even if you change the TV programme position on the TV.
- To use the TV Direct Rec function, select SMARTLINK in the INSTALLATION menu, then set TV DIRECT RECORD to ON.

Recording TV programmes using the Dial Timer (SLV-SE820N only)

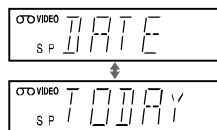
The Dial Timer function allows you to make timer recordings of programmes without turning on your TV. Set the recording timer to record up to eight programmes, including settings made with other timer methods, that will be broadcast within the next month. The recording start time and recording stop time can be set at one minute intervals.



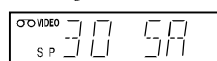
Before you start...

- Insert a tape with its safety tab in place. Make sure the tape is longer than the total recording time.
- To record from a decoder, turn it on.
- Refer to "Index to parts and controls" for button locations.

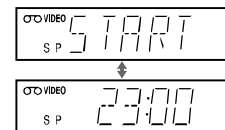
- Press DIAL TIMER.
"DATE" and "TODAY" appear alternately in the display window.
If the date and time are not set, "DAY" will appear. See step 2 in the following section, "To set the clock" to set the date and time.



- Turn DIAL TIMER to set the recording date.



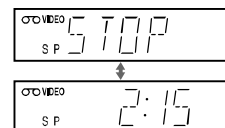
- Press DIAL TIMER.
"START" and the current time appear alternately in the display window.



- Turn DIAL TIMER to set the recording start time.
You can set the recording start time in 15 minute intervals or adjust the time in one minute intervals by pressing the PROGRAM +/- buttons.












- Press DIAL TIMER.
"STOP" and the recording stop time alternately appear in the display window.



- Turn DIAL TIMER to set the recording stop time.
You can set the recording stop time in 15 minute intervals or adjust the time in one minute intervals by pressing the PROGRAM +/- buttons.




- 7**  Press  DIAL TIMER.
The programme position or LINE input appears in the display window.
- 8**  Turn  DIAL TIMER to set the programme position.
-  To record from a decoder or other source connected to one or more of the LINE inputs, turn  DIAL TIMER or press INPUT SELECT to display the connected line in the display window.
- 9**  Press  DIAL TIMER to complete the setting.
“OK” appears in the display window for about five seconds.
The  indicator appears in the display window and the VCR stands by for recording.
To record from a decoder or other source, leave the connected equipment switched on.




To return to the previous step

To return to the previous step, press the PROGRAM + and – buttons on the VCR at the same time during any of the Dial Timer settings.

To stop recording

To stop the VCR while recording, press  (stop).







To use the VCR after setting the timer

To use the VCR before a recording begins, just press . The  indicator turns off and the VCR switches on. Remember to press  to reset the VCR to recording standby after using the VCR.


You can also do the following tasks while the VCR is recording:

- Reset the counter (page 40).
- Display tape information on the TV screen (page 43).
- Check the timer settings (page 61).
- Watch another TV programme (page 43).


To set the clock

- 1 Hold down  DIAL TIMER so that “DAY” appears in the display window. However, if the clock has already been set, the current setting appears.
- 2 Turn  DIAL TIMER to set the day.
- 3 Press  DIAL TIMER.
“MONTH” appears in the display window.
- 4 Turn and press  DIAL TIMER to set the month, and then the year.
After you set the year, “CLOCK” appears in the display window again.
- 5 Turn and press  DIAL TIMER to set the hour and minute.
- 6 When you have finished setting the time, press  DIAL TIMER to start the clock.

Tips

- To cancel a Dial Timer setting, press  (stop) on the VCR while you are making the setting.
- The programme is recorded in the current tape speed mode. To change the tape speed, press SP/LP before you complete the setting in step 9.
- To check, change, or cancel the programme setting, see “Checking/changing/cancelling timer settings” on page 61.



Notes

- If eight programmes have already been set using the ShowView system or the TIMER PROGRAMMING menu, “FULL” appears in the display window for about five seconds.
- The  indicator flashes in the display window when you complete the setting in step 9 with no tape inserted.
- If you set the clock using the Auto Clock Set function and AUTO CLOCK is set to ON, the clock will adjust itself to the incoming time signal regardless of adjustments made with the Dial Timer. Be sure you have set the Auto Clock Set correctly.
- When the time is set incorrectly, “ERROR” appears in the display window in step 9. Set the timer again from step 1.
- You cannot set the tape speed to AUTO using the Dial Timer. To select AUTO, set the tape speed in the TIMER PROGRAMMING menu (see page 61).

About the Demonstration Mode

The Dial Timer function has a Demonstration Mode that allows the user, such as a salesperson, to enter more than eight examples of timer settings when demonstrating the use of the Dial Timer. It cancels the “FULL” notice which appears if eight programmes have already been set. Do not use the Demonstration Mode for making timer recordings. Doing so may cause the settings to be inaccurate.

To activate the Demonstration Mode

Press  (pause) on the VCR while turning the  DIAL TIMER. “DEMO” appears in the display window for a few seconds.

To cancel the Demonstration Mode





Turn the power off and unplug the mains lead. Although the Demonstration Mode is cancelled, the timer settings entered while using the Demonstration Mode will remain. Be sure to manually cancel the timer settings before you use the Dial Timer or any other timer method after reconnecting the mains lead (see page 61).

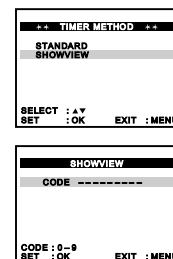
Recording TV programmes using the ShowView® system (SLV-SE820N, SE720N and SX720N only)


The ShowView system is the feature that simplifies programming the VCR to make timer recordings. Just enter the ShowView number listed in the TV programme guide. The date, times, and programme position of that programme are set automatically. You can preset a total of eight programmes, including settings made with other timer methods.


Before you start...




- Check that the VCR clock is set to the correct time and date.
- Insert a tape with its safety tab in place. Make sure the tape is longer than the total recording time.
- To record from a decoder, turn it on.
- Turn on your TV and set it to the video channel.
- Set TIMER METHOD to SHOWVIEW or VARIABLE in the EASY OPERATION menu (see page 71).
- Refer to “Index to parts and controls” for button locations.


- 1  Press  TIMER.
 - When you set TIMER METHOD to VARIABLE:
The TIMER METHOD menu appears on the TV screen. Press   to select SHOWVIEW, then press OK.
 - When you set TIMER METHOD to SHOWVIEW:
The SHOWVIEW menu appears on the TV screen.






2  Press the programme number buttons to enter the ShowView number.
If you make a mistake, press CLEAR and re-enter the correct number.


3  Press OK.
The date, start and stop times, programme position, tape speed and VPS/PDC setting appear on the TV screen.

4  If you want to change the date, tape speed and the VPS/PDC setting:
1 Press  to select the item you want to change.
2 Press  to reset it.
• To record the same programme every day or the same day every week, see "Daily/weekly recording" on page 53.
• To use the VPS/PDC function, set V/P to ON. For details about the VPS/PDC function, see "Timer recording with VPS/PDC signals" on page 53.




5  Press MENU to exit the menu.

6  Press  to turn off the VCR.
The  indicator appears in the display window and the VCR stands by for recording.
To record from a decoder or other source, leave the connected equipment switched on.

To stop recording

To stop the VCR while recording, press  (stop).

Daily/weekly recording

In step 4 above, press  to select the recording pattern. Each time you press , the indication changes as shown below. Press  to change the indication in reverse order.




today → DLY (Monday to Sunday) → W-SA (every Saturday) → W-SU (every Sunday) → 1 month later → (dates count down) → today

Timer recording with VPS/PDC signals

Some broadcast systems transmit VPS (Video Programme System) or PDC (Programme Delivery Control) signals with their TV programmes. These signals ensure that your timer recordings are made regardless of broadcast delays, early starts, or broadcast interruptions.

To use the VPS/PDC function, set V/P to ON in step 4 above. You can also use the VPS/PDC function for a source connected to one or more of the LINE inputs.

To use the VCR after setting the timer

To use the VCR before a recording begins, just press . The  indicator turns off and the VCR switches on. Remember to press  to reset the VCR to recording standby after using the VCR.


You can also do the following tasks while the VCR is recording:

- Reset the counter (page 40).
- Display tape information on the TV screen (page 43).
- Check the timer settings (page 61).
- Watch another TV programme (page 43).

52 | Recording TV programmes using the ShowView® system (SLV-SE820N, SE720N and SX720N only)

Recording TV programmes using the ShowView® system (SLV-SE820N, SE720N and SX720N only) 53




To use the Auto Tape Speed function

In step 4 above, press  to select AUTO. When you are recording a programme in the SP mode and the remaining tape length becomes shorter than the recording time, the recording tape speed is automatically changed to the LP mode. Note that some noise will appear on the picture when the tape speed is changed. To operate this function correctly, the "TAPE SELECT" setting in the USER SET menu must be accurate (see page 70).

Tips

- To set the line input video source, you can also use the INPUT SELECT button.
- You can set the extended time for the ShowView setting by 10, 20, 30, 40, 50, or 60 minutes. Set SHOWVIEW EXTEND in the EASY OPERATION menu to the desired extended time on page 71.
- To check, change, or cancel the programme setting, see "Checking/changing/cancelling timer settings" on page 61.

Notes



- If the VPS/PDC signal is too weak or the broadcasting station failed to transmit VPS/PDC signals, the VCR will start recording at the set time without using the VPS/PDC function.
- The  and  indicators flash in the display window when you press  with no tape inserted.
- When you set TIMER METHOD to STANDARD in the EASY OPERATION menu, the SHOWVIEW menu does not appear on the TV screen. Select SHOWVIEW or VARIABLE.

Recording TV programmes using the timer


You can preset a total of eight programmes, including settings made with other timer methods.

Before you start...

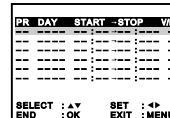
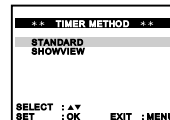
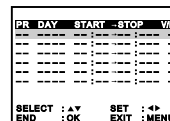
- Check that the VCR clock is set to the correct time and date.
- Insert a tape with its safety tab in place. Make sure the tape is longer than the total recording time.
- To record from a decoder, turn it on.
- Turn on your TV and set it to the video channel.
- Set TIMER METHOD* to STANDARD or VARIABLE in the EASY OPERATION menu (see page 71).
- Refer to "Index to parts and controls" for button locations.

1  Press  TIMER.
For SLV-SE620N and SE420K
The TIMER PROGRAMMING menu appears on the TV screen.

For SLV-SE820N, SE720N and SX720N








- When you set TIMER METHOD to VARIABLE:
The TIMER METHOD menu appears on the TV screen. Press  to select STANDARD, then press OK.

- When you set TIMER METHOD to STANDARD:
The TIMER PROGRAMMING menu appears on the TV screen.




54 | Recording TV programmes using the ShowView® system (SLV-SE820N, SE720N and SX720N only)




Recording TV programmes using the timer 55

- 2**  Set the date, start and stop times, programme position, tape speed and VPS/PDC function*:
- 1 Press  to select each item in turn.
 - 2 Press  to set each item. To correct a setting, press  to return to that setting and reset.
- To record the same programme every day or the same day every week, see "Daily/weekly recording" on page 56.
 - To use the VPS/PDC function*, set V/P to ON. For details about the VPS/PDC function, see "Timer recording with VPS/PDC signals" on page 53.
 - To record from a decoder or other source connected to one or more of the LINE inputs, press INPUT SELECT to display the connected line in the "PR" position.
- 3**  Press MENU to exit the menu.
- 4**  Press I/C to turn off the VCR. The  indicator appears in the display window and the VCR stands by for recording. To record from a decoder or other source, leave the connected equipment switched on.

To stop recording


To stop the VCR while recording, press  (stop).

Daily/weekly recording

In step 2 above, press  to select the recording pattern. Each time you press , the indication changes as shown below. Press  to change the indication in reverse order.

today → DLY (Monday to Sunday) → W-SA (every Saturday) → W-SU (every Sunday) → 1 month later → (dates count down) → today


To use the VCR after setting the timer

To use the VCR before a recording begins, just press I/C. The  indicator turns off and the VCR switches on. Remember to press I/C to reset the VCR to recording standby after using the VCR.

You can also do the following tasks while the VCR is recording:

- Reset the counter (page 40).
- Display tape information on the TV screen (page 43).
- Check the timer settings (page 61).
- Watch another TV programme (page 43).



To use the Auto Tape Speed function

In step 2 above, press  to select AUTO. When you are recording a programme in the SP mode and the remaining tape length becomes shorter than the recording time, the recording tape speed is automatically changed to the LP mode. Note that some noise will appear on the picture when the tape speed is changed. To operate this function correctly, the "TAPE SELECT" setting in the USER SET menu must be accurate (see page 70).

Tips

- To set the line input video source, you can also use the INPUT SELECT button.
- Even if you set TIMER METHOD* to SHOWVIEW in the EASY OPERATION menu, you can set the timer manually. Press MENU to select TIMER PROGRAMMING, then go to step 2.
- To check, change, or cancel the programme setting, see "Checking/changing/cancelling timer settings" on page 61.

Notes

- When setting the timer with VPS/PDC* signals, enter the start and stop times exactly as indicated in the TV programme guide. Otherwise, the VPS/PDC function will not work.
- If the VPS/PDC* signal is too weak or the broadcasting station failed to transmit VPS/PDC signals, the VCR will start recording at the set time without using the VPS/PDC function.
- The  and  indicators flash in the display window when you press I/C with no tape inserted.
- The VPS/PDC function* is automatically set to off for the timer recording of a satellite programme.











* not available on SLV-SE620N and SE420K

Additional Operations

Playing/searching at various speeds

Before you start...

- Refer to "Index to parts and controls" for button locations.

Playback options	Operation
View the picture during fast-forward or rewind	During fast-forward, hold down  (fast-forward). During rewind, hold down  (rewind).
Play at high speed	<ul style="list-style-type: none"> During playback, press  (fast-forward) or  (rewind) on the remote commander. During playback, hold down  (fast-forward) or  (rewind). When you release the button, normal playback resumes.
Play at twice the normal speed	During playback, press  x2.
Play in slow motion	During playback, press  SLOW.
Play frame by frame	During pause, press  (fast-forward) or  (rewind)* on the remote commander.

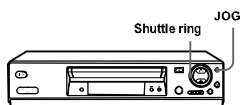
* SLV-SE820N only

To resume normal playback

Press  (play).

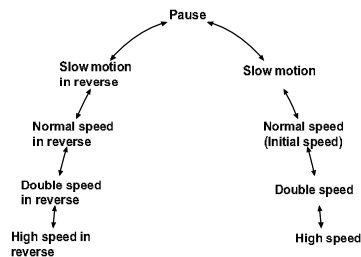
Using the shuttle ring (SLV-SE820N only)

With the shuttle ring, you can operate a variety of playback options. There are two ways for using the shuttle ring, normal mode and jog mode.



To use the shuttle ring in normal mode

During playback or pause, turn the shuttle ring clockwise or anticlockwise. Each change in the shuttle ring position changes the playback mode in the following way.



To use the shuttle ring in jog mode

Use this mode for frame-by-frame playback.


Press JOG to enter the jog mode. The JOG button lights up. If you change to the jog mode during any playback mode, playback pauses so you can see a still picture. Each change in the shuttle ring position shifts the picture one frame. To shift frames in reverse, turn the shuttle ring anticlockwise. The frame shift speed depends on the speed you turn the shuttle ring.

To resume normal mode, press JOG again. The JOG button turns off.

Tip

- Adjust the picture using the PROGRAM +/- buttons on the VCR if:
 - Streaks appear while playing in slow motion.
 - Bands appear at the top or bottom while pausing.
 - The picture shakes while pausing.
- To set tracking to the centre position, press both buttons (+/-) at the same time.

Notes

- The sound is muted during these operations.
- In the LP mode, noise may appear or there may be no colour.
- If the playback mode mark does not appear on the TV screen, press  DISPLAY.
- The picture may show noise when playing at high speed in reverse.
- The picture returns to normal playback from slow motion in reverse in 30 seconds.

In the NICAM system

This VCR receives and records stereo and bilingual programmes based on the NICAM system (NICAM appears on the TV screen). When a stereo or bilingual programme is received, the STEREO indicator appears in the display window.

To record a NICAM programme, NICAM in the USER SET menu should be set to ON (initial setting). To check the menu setting, see page 71 for details.

To select the sound while recording

Press AUDIO MONITOR to select the sound you want.

Stereo programmes

To listen to	On-screen display	Display window
Stereo	NICAM, STEREO	STEREO
Left channel	NICAM, LCH	STEREO
Right channel	NICAM, RCH	STEREO
Left and right channels*	NICAM, LCH + RCH	STEREO

* Usually the mixed sound of left and right channels

Bilingual programmes

To listen to	On-screen display	Display window
Main	NICAM, MAIN	STEREO
Sub	NICAM, SUB	STEREO
Main and sub	NICAM, MAIN/SUB	STEREO
Standard sound*	NICAM, MONO	STEREO

* Usually the main sound (monaural)

Selecting the sound during Hi-fi playback

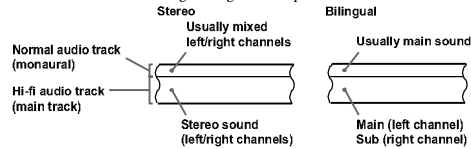
Press AUDIO MONITOR to select the sound you want.

To listen to	On-screen display	Display window
Stereo	STEREO	STEREO
Left channel	LCH	STEREO
Right channel	RCH	STEREO
Mix sound*	MIX	STEREO
Mono sound	MONO	No indicator

* The mixed sound of left and right channels, and the normal mono audio track

How sound is recorded on a video tape

The VCR records sound onto two separate tracks. Hi-fi audio is recorded onto the main track along with the picture. Monaural sound is recorded onto the normal audio track along the edge of the tape.



Notes

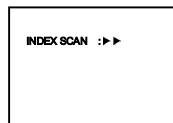
- To listen to playback sounds in stereo, you must use the Scart or AUDIO OUT connections.
- When you play a tape recorded in monaural, the sound is heard in monaural regardless of the AUDIO MONITOR setting.

Searching using the index function (not available on SLV-SE420K)

The VCR automatically marks the tape with an index signal at the point where each recording begins. Use these signals as references to find a specific recording.

To find a specific recording by scanning (Index scan)

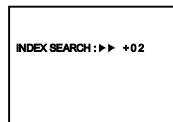
- 1 Insert an indexed tape into the VCR.
- 2 Press **⏮/⏭** (index search). The VCR starts scanning each recording for five seconds in the corresponding direction.



- 3 Press **▶** (play) to start playback when you find the desired point.

To search a specific recording (Index search)

- 1 Insert an indexed tape into the VCR.
- 2 Press **⏮/⏭** (index search) twice.
 - To search ahead, press **⏭** (index search) twice.
 - To search backwards, press **⏮** (index search) twice.



- 3 Press **⏮/⏭** (index search) depending on the direction where your desired programme is located. Each time you press the button, the number increases or decreases up to ± 20 , respectively.
- 4 The VCR starts searching, and playback starts automatically from that point.

To stop searching

Press **■** (stop).

Notes

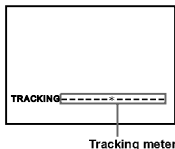
- No index signal will be added when recording starts from recording pause. However, an index signal will be marked if you change the programme position during recording pause.
- When you press **⏮** (index search), if there is nothing recorded before the selected index signal, playback may not start exactly at the index signal.

Adjusting the picture

Adjusting the tracking

Although the VCR automatically adjusts the tracking when playing a tape, distortion may occur if the recording is in poor condition. In this case, manually adjust the tracking.

During playback, press PROGRAM +/- on the VCR to display the tracking meter. The distortion should disappear as you press one of the two buttons. To resume automatic tracking adjustments, eject the tape and re-insert it.

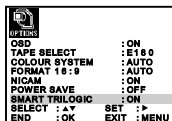


Tracking meter

Adjusting the picture sharpness (Smart trilogic)

You can automatically adjust the sharpness of the picture.

- 1 During playback, press MENU, then press $\uparrow/\downarrow/\leftarrow/\rightarrow$ to highlight USER SET and press OK.
- 2 Press \uparrow/\downarrow to highlight SMART TRILOGIC, then press \rightarrow .



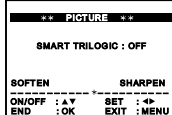
- 3 Press \uparrow/\downarrow to set SMART TRILOGIC to ON or OFF.

- ON: Picture sharpness is automatically adjusted.
- OFF: Adjust the picture sharpness manually.

To soften the picture, press \leftarrow .

To sharpen the picture, press \rightarrow .

- 4 Press MENU to return to the original screen.

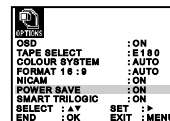


Reducing the VCR's power consumption

You can turn off the indicators in the display window when the VCR is off (standby mode) to reduce the VCR's power consumption.

- 1 Press MENU, then press $\uparrow/\downarrow/\leftarrow/\rightarrow$ to highlight USER SET and press OK.
- 2 Press \uparrow/\downarrow to highlight POWER SAVE.
- 3 Press \rightarrow to set to ON, then press OK.

The power consumption is reduced to a minimum.



To turn on the indicators in the display window

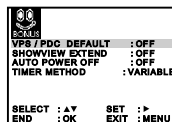
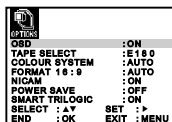
Set POWER SAVE to OFF in step 3.

Notes

- When the VCR stands by for recording, the \odot indicator in the display window remain lit even when POWER SAVE is set to ON.
- The Line Through function will not operate properly if POWER SAVE is set to ON. Set POWER SAVE to OFF to ensure proper operation.

Changing menu options

- 1 Press MENU, then select USER SET or EASY OPERATION and press OK.



- 2 Press \uparrow/\downarrow to select the option.
- 3 Press \rightarrow to change the setting, then press OK.

Menu choices

Initial settings are indicated in bold print.

USER SET

Menu option	Set this option to
OSD	<ul style="list-style-type: none"> • ON to display the menu on the TV screen. • OFF to disappear the menu from the TV screen.
TAPE SELECT	<ul style="list-style-type: none"> • E180 to use an E-180 or shorter type tape. • E240 to use an E-240 type tape. • E260 to use an E-260 type tape. • E300 to use an E-300 type tape.
COLOUR SYSTEM	<ul style="list-style-type: none"> • AUTO to set the colour system automatically. • PAL to play back a tape recorded in the PAL colour system. • MESECAM to play back a tape recorded in the MESECAM colour system. <p>If you press \triangle (eject) or turn the VCR off, COLOUR SYSTEM will be reset to AUTO.</p>
FORMAT 16:9 ^{*1}	<ul style="list-style-type: none"> • AUTO when you use a wide screen TV. The VCR automatically detects if programmes being played back or recorded are in normal or wide screen format. • ON if the VCR cannot detect wide screen TV programmes with AUTO. The VCR always plays back and records in wide screen format. • OFF if you are not using a wide screen TV.

Menu option	Set this option to
NICAM ^{*2}	<ul style="list-style-type: none"> • ON to record NICAM broadcasts on the hi-fi audio track. • OFF to record standard sound on the hi-fi audio track. <p>For details, see page 63.</p>
POWER SAVE	<ul style="list-style-type: none"> • ON to turn off the indicators in the display window to conserve the VCR's power. • OFF to turn on the indicators in the display window while the VCR is standing by.
SMART TRILOGIC	<ul style="list-style-type: none"> • ON to automatically adjust the sharpness of the picture. • OFF to manually adjust the sharpness of the picture.

EASY OPERATION

Menu option	Set this option to
VPS/PDC DEFAULT ^{*3}	<ul style="list-style-type: none"> • OFF to deactivate the VPS/PDC function. • ON to activate it.
SHOWVIEW EXTEND ^{*3}	<ul style="list-style-type: none"> • OFF to deactivate the ShowView Extend function. • 10/20/30/.../60 (minutes) to extend the time of the ShowView setting by the selected amount of time.
AUTO POWER OFF	<ul style="list-style-type: none"> • OFF to deactivate the Auto Power Off function. • 2HOUR/3HOUR to turn the VCR off automatically if no signal is received and you do not press any of the buttons during this time.
TIMER METHOD ^{*3}	<ul style="list-style-type: none"> • VARIABLE to display the TIMER METHOD menu for selecting STANDARD or SHOWVIEW when pressing the \odot TIMER button. • STANDARD to display the TIMER PROGRAMMING menu when pressing the \odot TIMER button. • SHOWVIEW to display the SHOWVIEW menu when pressing the \odot TIMER button. <p>For details, see pages 51 and 55.</p>

^{*1}not available on SLV-SE620N

^{*2}not available on SLV-SE420K

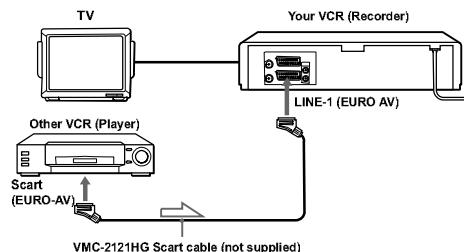
^{*3}not available on SLV-SE620N and SE420K

Connecting to a VCR or stereo system

How to connect to record on this VCR

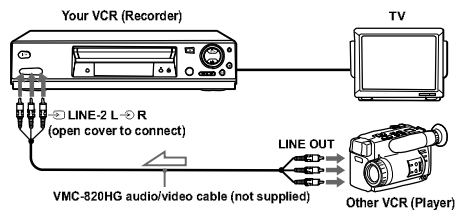
Connect the line outputs of the other VCR to the input connector of this VCR. Refer to the examples A through C and choose the connection that best suits your VCR.

Example A



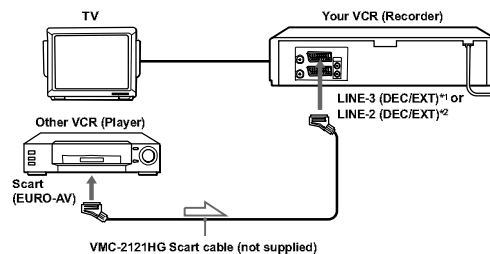
Signal flow

Example B (SLV-SE820N only)



Signal flow

Example C



Signal flow

How to connect to a stereo system (SLV-SE820N only)

Connect the LINE-2 L-R jacks on this VCR to the audio output jacks on the stereo system, using the RK-C510HG audio cable (not supplied).

Notes

- Make sure you connect the plugs to jacks of the same colour.
- If the other VCR is a monaural type, leave the red plugs unconnected.
- If you connect this VCR to both the LINE IN and LINE OUT jacks of the other VCR, select the input correctly to prevent a humming noise.
- If the other VCR does not have a Scart (EURO-AV) connector, use the VMC-2106HG cable instead and connect the cable to the line out jacks of the other VCR.
- When you connect another VCR to the LINE-3 (DEC/EXT)*1 or LINE-2 (DEC/EXT)*2 connector, press INPUT SELECT to display "L3"*1 or "L2"*2 in the display window.

*1 SLV-SE820N only

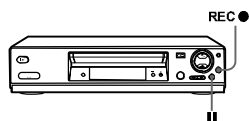
*2 SLV-SE720N, SX720N and SE420K only

Basic editing

When recording on this VCR

Before you start editing

- Turn on your TV and set it to the video channel.
- Press INPUT SELECT to display the connected line in the display window.
- Press SP/LP to select the tape speed, SP or LP.



- 1 Insert a source tape with its safety tab removed into the other (playback) VCR. Search for the point to start playback and set it to playback pause.
- 2 Insert a tape with its safety tab in place into this (recording) VCR. Search for the point to start recording and press II (pause) to set it to playback pause.
- 3 Press REC on this VCR to set it to recording pause.
- 4 To start editing, press the II (pause) buttons on both VCRs at the same time.

To stop editing

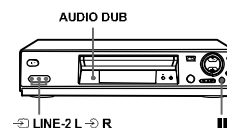
Press the ■ (stop) buttons on both VCRs.

Tip

- To cut out unwanted scenes while editing, press II (pause) on this VCR when an unwanted scene begins. When it ends, press II (pause) again to resume recording.

Audio dubbing (SLV-SE820N only)

This feature lets you record over the normal audio track. The monaural sound previously recorded is replaced while the original hi-fi sound remains unchanged. Use this feature to add commentary to a tape that you have recorded with a camcorder.



Before you start...

- Open the LINE-2 L-R jacks cover on the front panel and connect a playback source.
- Turn on the TV and set it to the video channel.

- 1 Insert a source tape into your stereo system (or the playback VCR). Search for the point to start playback and set it to playback pause.
- 2 Insert a prerecorded tape with its safety tab in place into this (recording) VCR. Search for the start of the section to be replaced and press II (pause). The VCR enters pause mode.
- 3 Press AUDIO DUB. "A_DUB" and the O indicator appears in the display window.
- 4 To start editing, press the II (pause) buttons on this VCR and the stereo system (or other VCR) at the same time. After you use this feature, the audio in playback mode is automatically set to monaural.

To stop editing

Press ■ (stop) on this VCR and the stereo system (or other VCR).

Additional Information

Troubleshooting

If you have any questions or problems not covered below, please consult your nearest Sony service facility.

Symptom	Remedy
Power	
The I ^{ON} (on/standby) switch does not function.	• Connect the mains lead to the mains securely.
The power is turned on but the VCR does not operate.	• Moisture condensation has occurred. Turn the power off, unplug the mains lead and leave the VCR to dry for over three hours.
The VCR is plugged in but the display window remains dark.	• Set POWER SAVE in the USER SET menu to OFF (see page 69).
Clock	
The clock has stopped and " : " appears in the display window.	• The clock stops if the VCR is disconnected from the mains. Reset the clock (and timer).
Playback	
The playback picture does not appear on the TV screen.	• Make sure the TV is set to the video channel. If you are using a monitor, set it to video input. • If the VCR is connected to the TV with the Scart cable, make sure the VIDEO indicator is lit in the display window. Use the TV/VIDEO button on the remote commander to light up the VIDEO indicator.
The picture is not clear.	• Existing broadcasts may interfere with the VCR. Reset the RF channel output of your VCR (see page 22). • Adjust the tracking with the PROGRAM +/- buttons <u>on the VCR</u> . • The video heads are dirty (see the last page of Troubleshooting). Clean the video heads using the Sony T-25CLD, E-25CLDR, or T-25CLW video head cleaning cassette. If these cleaning cassettes are not available in your area, have the heads cleaned at your nearest Sony service facility (a standard service charge will be required). Do not use a commercially available liquid type cleaning cassette other than Sony's, as it may damage the video heads. • The video heads may have to be replaced. Consult your local Sony service facility for more information.
The picture has no colour.	• The COLOUR SYSTEM option in the USER SET menu is set to the wrong position. Set the option to conform to the system that the tape was recorded in.
The picture rolls vertically during picture search.	• Adjust the vertical hold control on the TV or monitor.

76 Troubleshooting

Symptom	Remedy
Playback	
The picture has no sound.	• The tape is defective. • If you made A/V connections, check the audio cable connection.
The sound from a tape recorded with the VCR is not in stereo or the STEREO indicator in the display window is flashing.	• Adjust the tracking. • The video heads are dirty. Clean the video heads using the Sony T-25CLD, E-25CLDR, or T-25CLW video head cleaning cassette as explained above.
No TV programme appears on the TV screen.	• Make sure the TV is set to the video channel. If you are using a monitor, set it to video input. • Existing broadcasts may interfere with the VCR. Reset the RF channel output of your VCR (see page 22). • Select the correct source with the INPUT SELECT button. Select a programme position when recording TV programmes; select a line input when recording from other equipment.
Recording	
TV reception is poor.	• Make sure the aerial cable is connected securely. • Adjust the TV aerial. • Make sure the TV system is correctly set for your TV. • Make sure TV SYSTEM (B/G or D/K) in the INSTALLATION menu is set to the same system in your local area.
The tape starts playing as soon as it is inserted.	• The safety tab has been removed. To record on this tape, cover the tab hole (see page 44).
The tape is ejected when you press REC.	• The safety tab has been removed. To record on this tape, cover the tab hole (see page 44).
Nothing happens when you press REC.	• Make sure the tape is not at its end.
Timer recording	
The timer does not operate.	• Check that the clock is set. • Make sure a tape has been inserted. • Check that the safety tab has not been removed. • Make sure the tape is not at its end. • Make sure a programme has been set for timer recording. • Make sure your timer settings are past the current time. • Check that the decoder is turned on. • Check that the satellite tuner is turned on. • The clock stops if the VCR is disconnected from the mains. Reset the clock and timer. • Turn the power off and unplug the mains lead.

Additional Information

continued
Troubleshooting 77

Symptom	Remedy
Timer recording	
The SHOWVIEW menu or the TIMER PROGRAMMING menu does not appear.	• Check that TIMER METHOD in the EASY OPERATION menu is set correctly (see page 71).
The VPS/PDC function does not operate properly.	• Check that the clock and the date are set correctly. • Check that the VPS/PDC time you set is the correct one (there might be a mistake in the TV programme guide). If the broadcast you wanted to record did not send the good VPS/PDC information, the VCR will not start recording. • If the reception is poor, the VPS/PDC signal might be altered and the VCR might not start recording.
Canal Plus	
You cannot watch Canal Plus programmes when the VCR is in standby mode.	• Check that DEC is set to ON for this channel in the TV STATION TABLE menu. • Make sure the Canal Plus Scart cable is plugged securely.
A Canal Plus programme is always recorded scrambled.	• Make sure the Canal Plus Scart cable is plugged securely. • Check that DEC is set to ON for this channel in the TV STATION TABLE menu.
Others	
A tape cannot be inserted.	• Check that a tape is not already in the tape compartment.
The remote commander does not function.	• Make sure you are pointing the remote commander at the remote sensor on the VCR. • Replace all the batteries in the remote commander with new ones if they are weak. • Make sure the / remote control switch is set correctly.
The selected input line connector number does not appear in the display window.	• Press INPUT SELECT to display the connected line.
The tracking meter does not appear on the TV screen.	• The recording condition of the tape is very poor and tracking cannot be adjusted.
You cannot control other TVs.	• Set your TV's code number. The code number may change when you replace the batteries of the remote commander.
The display window becomes dim.	• The display window automatically becomes dim when the VCR is in standby or timer recording mode.
The VCR needs to be cleaned.	• Clean the cabinet, panel and controls with a dry, soft cloth, or a soft cloth slightly moistened with a mild detergent solution. Do not use any type of solvent, such as alcohol or benzene.

78 Troubleshooting

Symptom	Remedy
Others	
The Line Through function does not operate.	• Set POWER SAVE in the USER SET menu to OFF (see page 69).

Symptoms caused by contaminated video heads

Normal picture	Rough picture	Unclear picture	No picture (or black & white screen appears)
	initial contamination		terminal

Additional Information

Troubleshooting 79

2. Disassembly

2-1 Mono Models

2-1-1 Cabinet Top

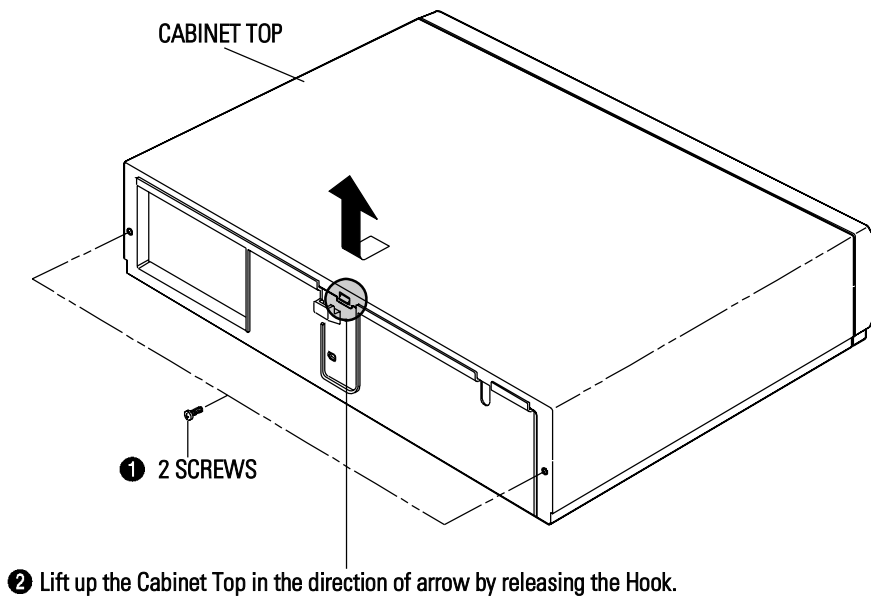


Fig. 2-1 Cabinet Top

2-1-2 Cover Bottom

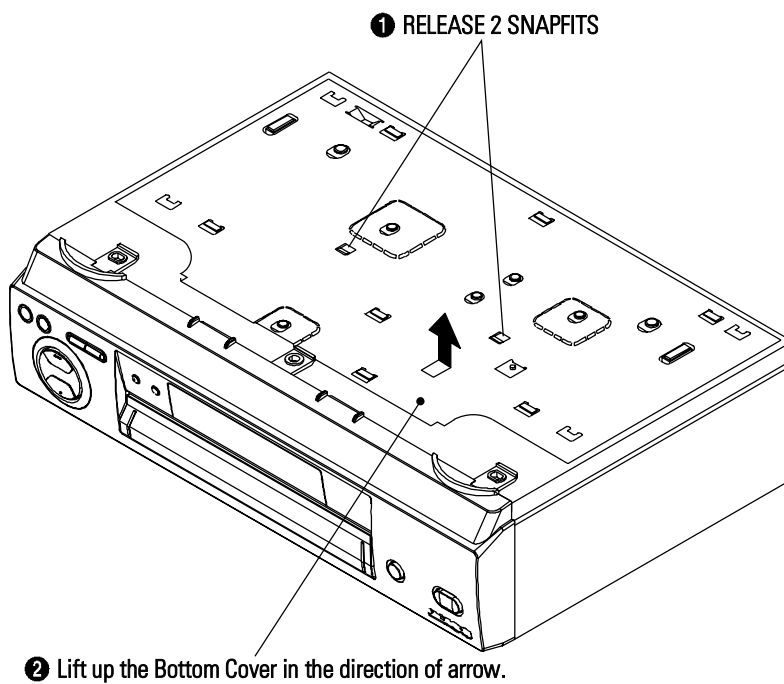


Fig. 2-2 Cover Bottom

2-1-3 Ass'y-Panel Front

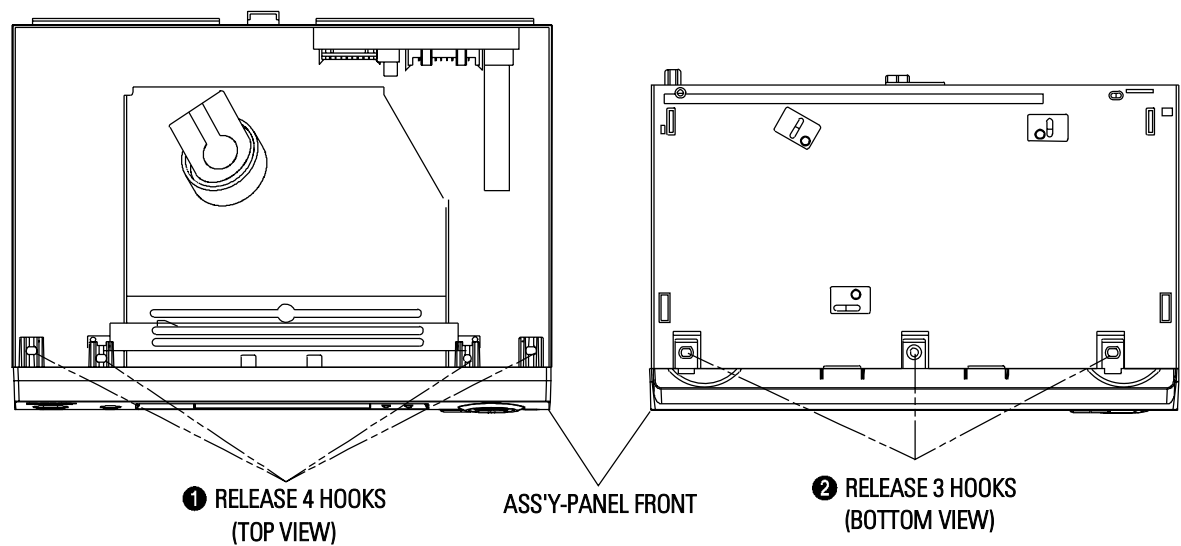


Fig. 2-3 Ass'y-Panel Front

2-1-4 Ass'y MAIN-PCB, DECK

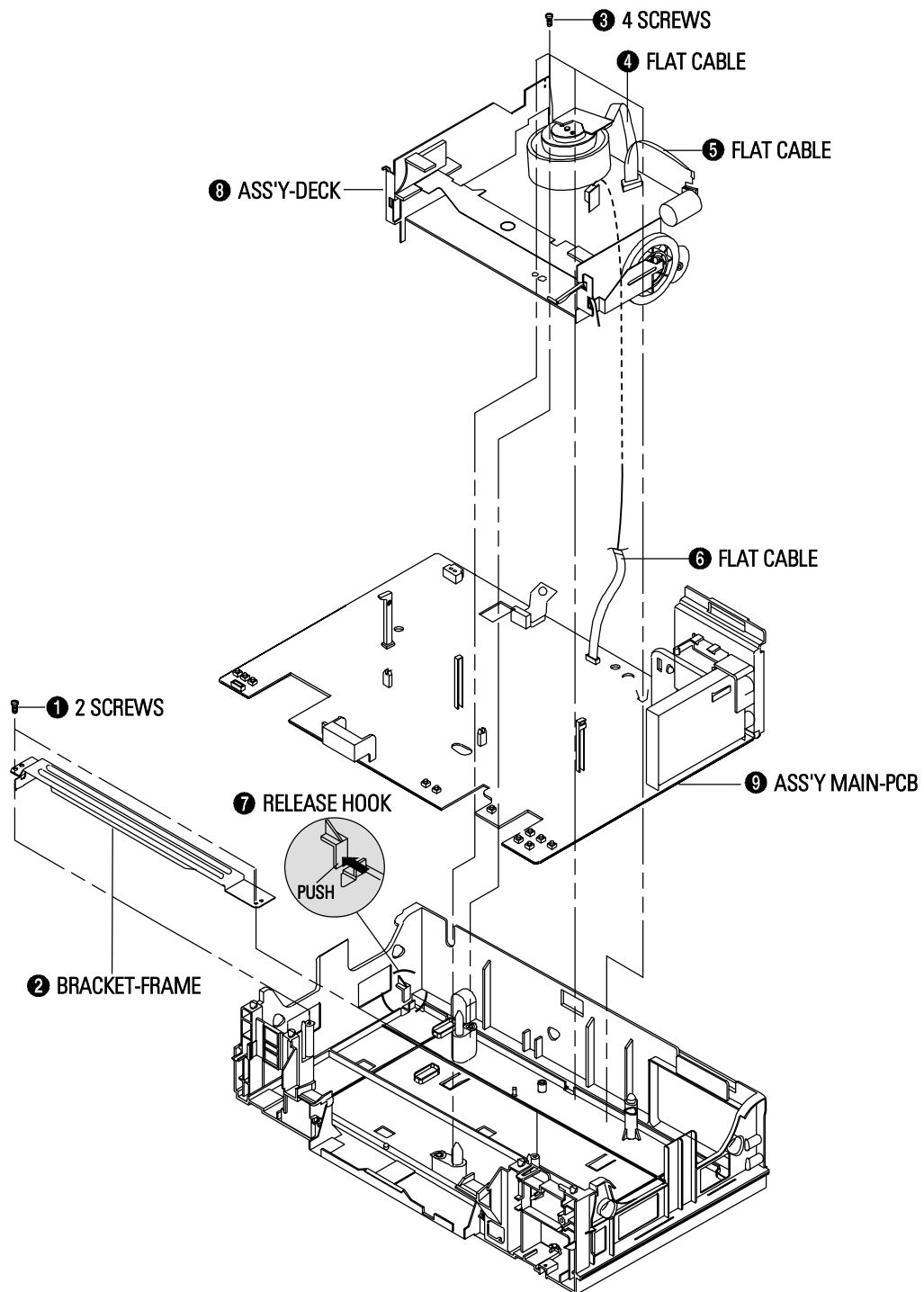


Fig. 2-4 Ass'y Main-PCB, Deck

2-2 Hi-Fi Models

2-2-1 Cabinet Top

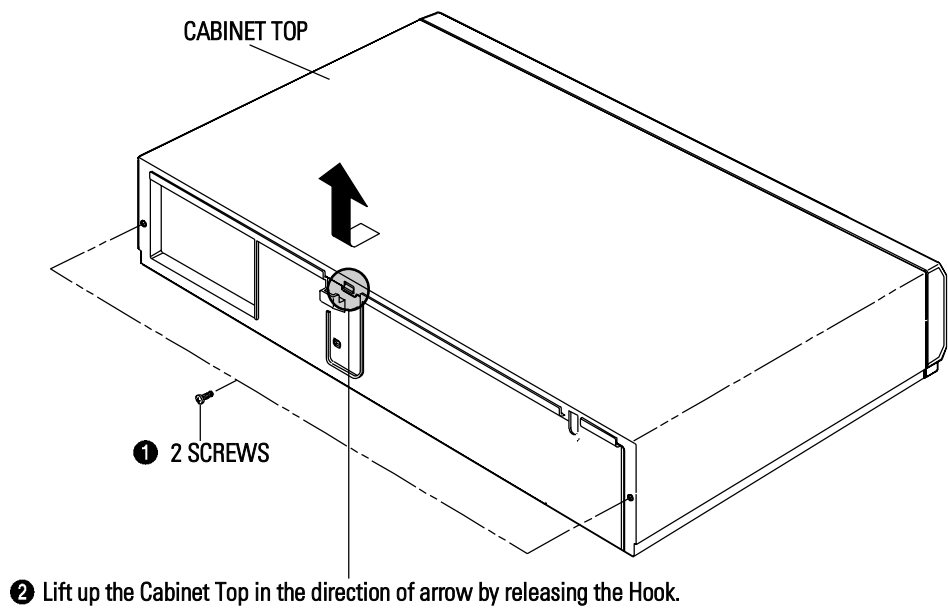


Fig. 2-5 Cabinet Top

2-2-2 Cover Bottom

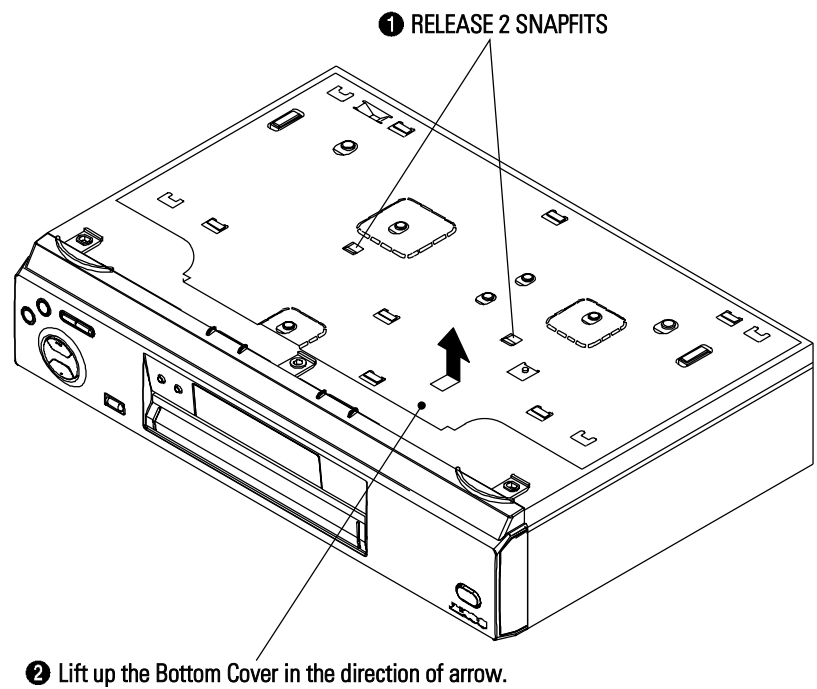


Fig. 2-6 Cover Bottom

2-2-3 Ass'y-Panel Front

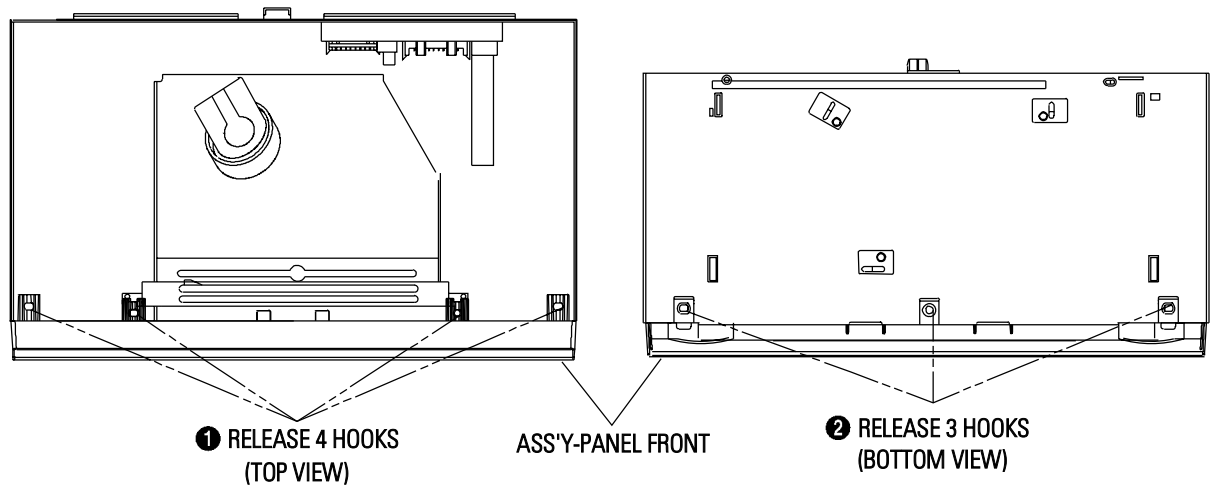


Fig. 2-7 Ass'y-Panel Front

2-2-4 Ass'y Jack PCB

Disconnect the CN701 from the Ass'y PCB-Main and then lift the Ass'y PCB-Jack up.

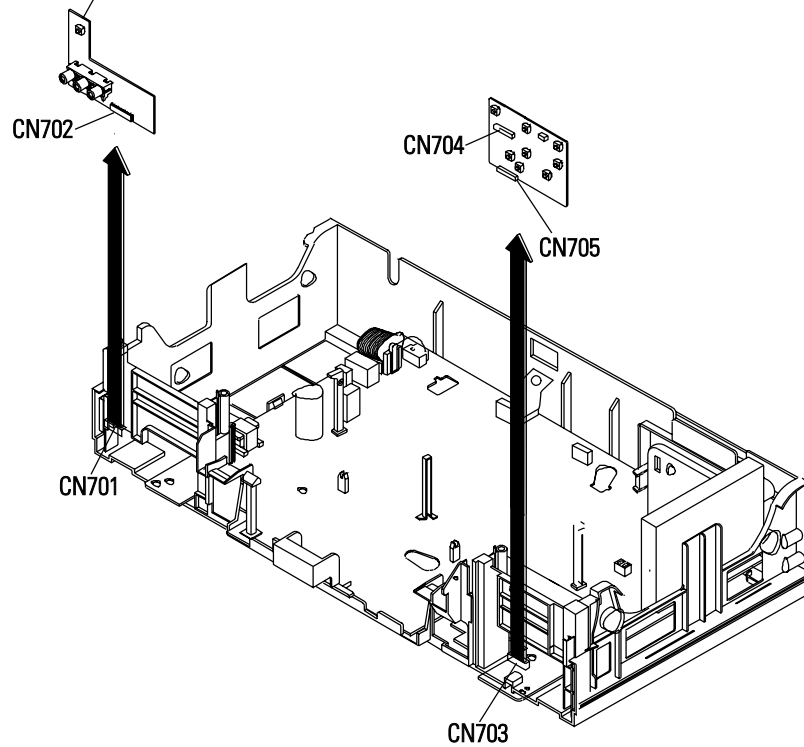


Fig. 2-8 Ass'y Jack-PCB

2-2-5 Ass'y MAIN-PCB, DECK

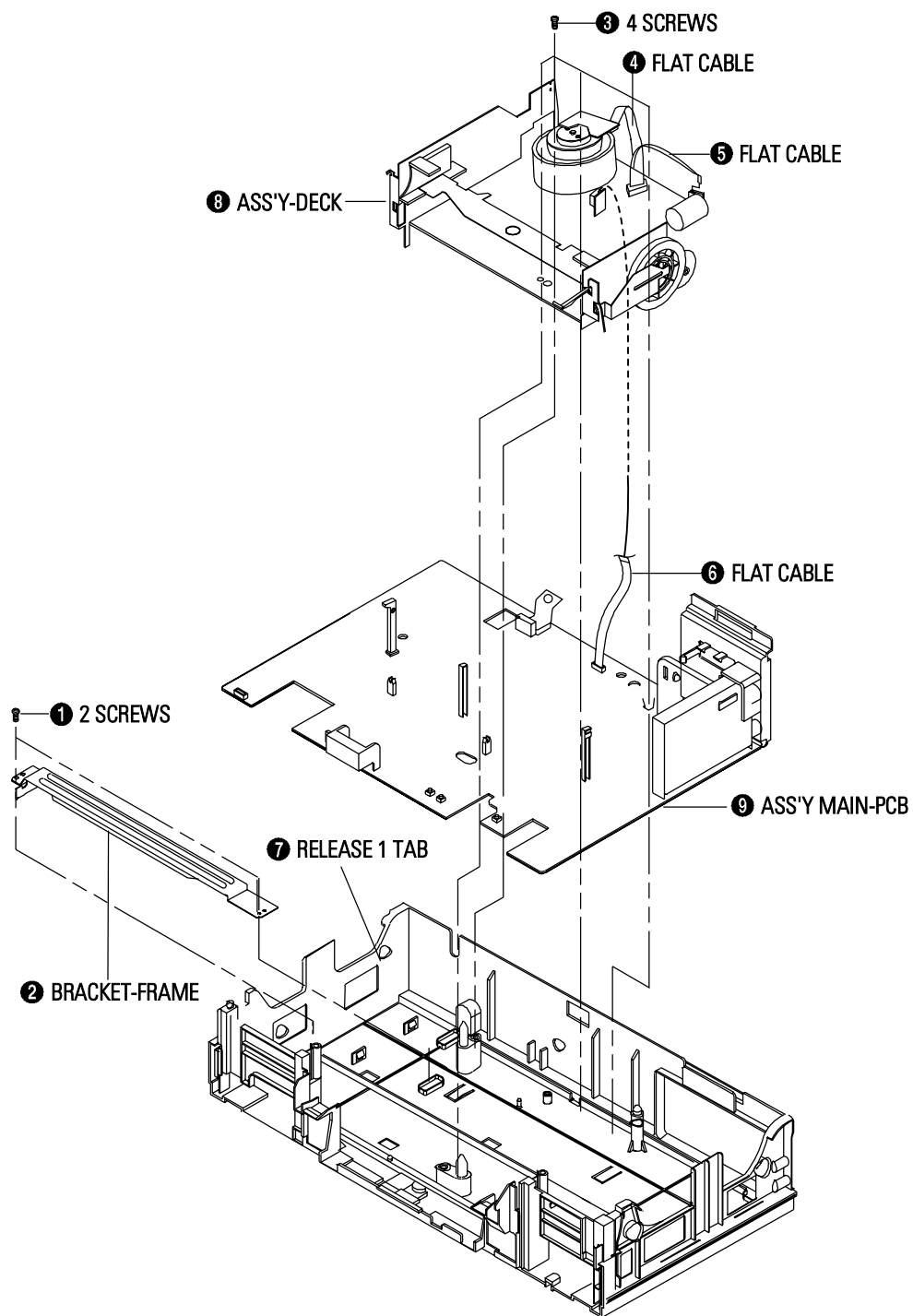


Fig. 2-9 Ass'y Main-PCB, Deck

3. P.C.Board

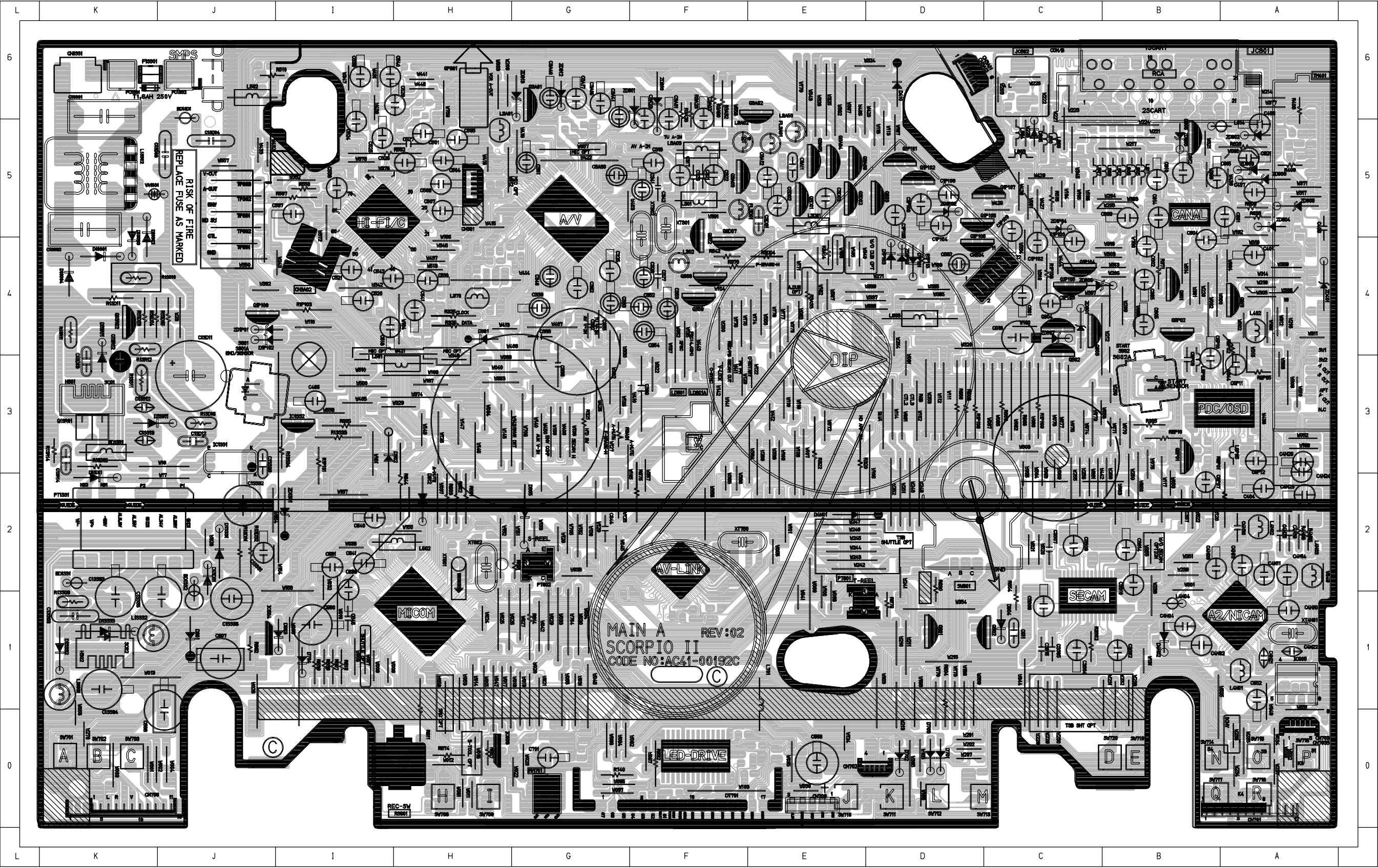
3-1 Main PCB ----- 3-3
(SLV-SE220D/SE220I/SE220G/SE220B/SE420K/SE620D/SE620E/SE620B/SE620N)

3-2 Main PCB ----- 3-7
(SLV-SE720D/SX720D/SE720E/SX720E/SE720G/SE720I/SE720B/SX727D/SE727E/SE720N/
SX720N/SE820D/SE820E/SE820G/SE820B/SE820N)

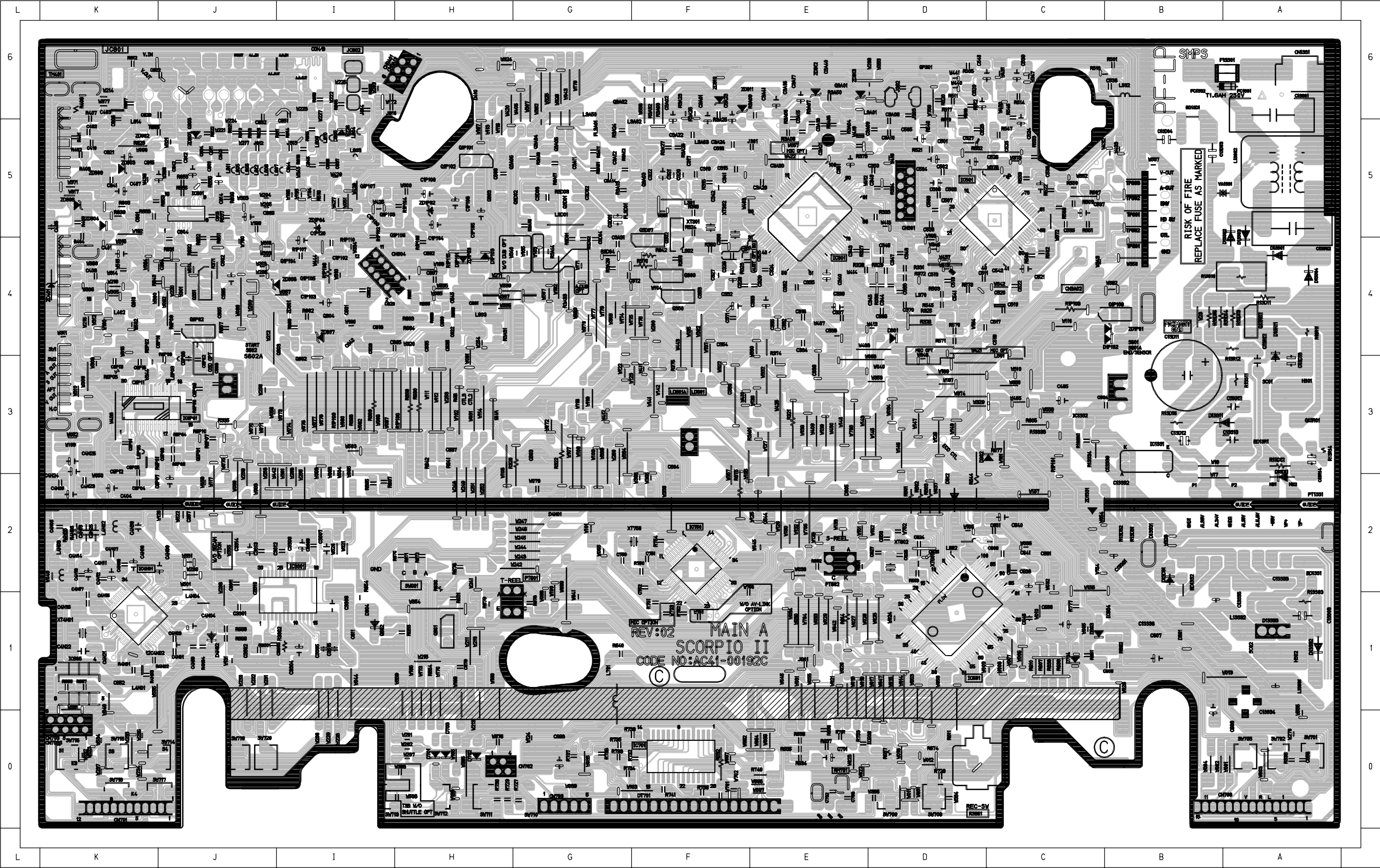
3-3 Function PCB ----- 3-11
(SLV- SE620D/SE620E/SE620B/SE620N/SE720D/SX720D/SE720E/SX720E/SE720G/SE720I/
SE720B/SX727D/SE727E/SE720N/SX720N/SE820D/SE820E/SE820G/SE820B/SE820N)

3-1 Main PCB (SLV-SE220D/SE220I/SE220G/SE220B/SE420K/SE620D/SE620E/SE620B/SE620N)

COMPONENT SIDE

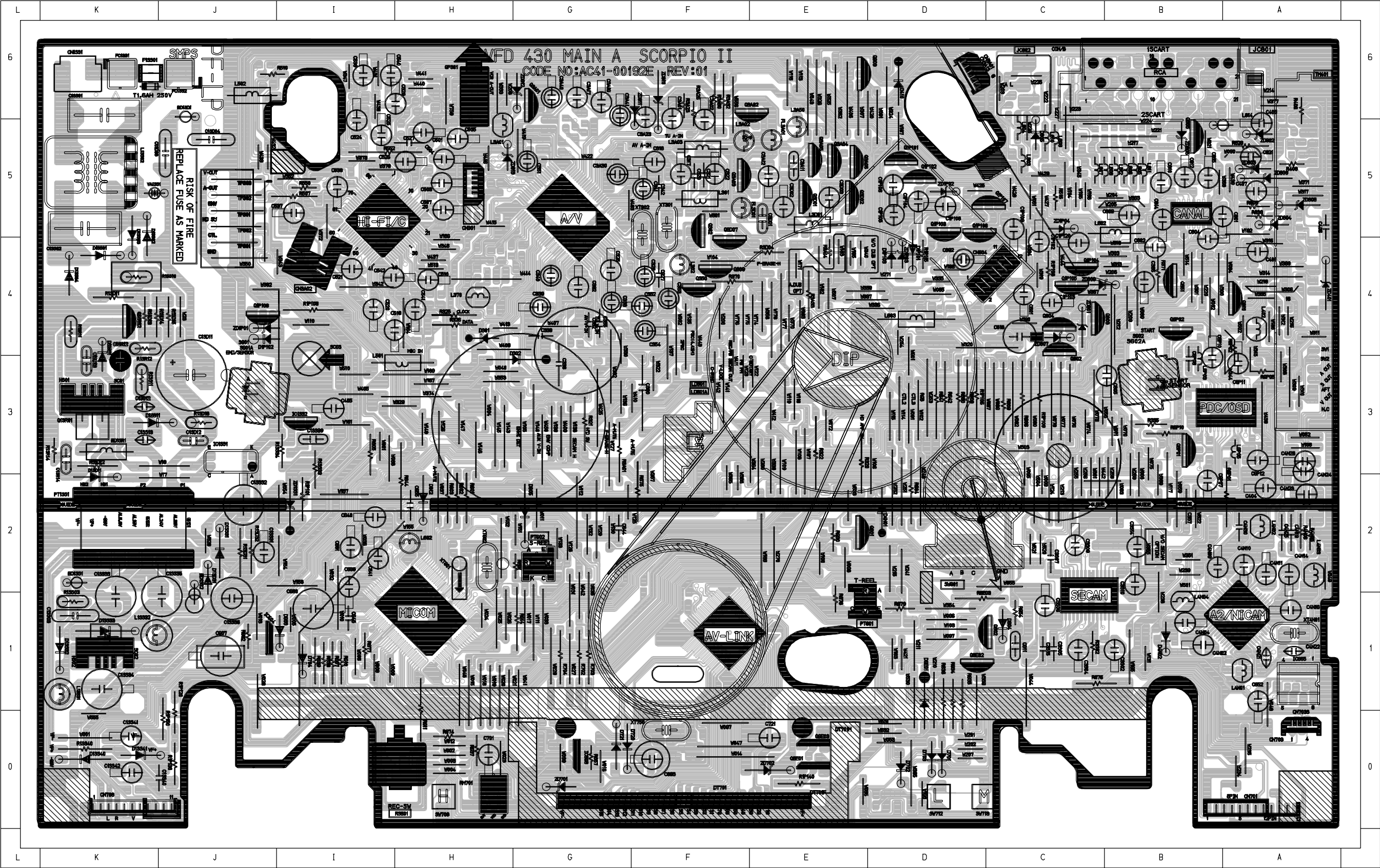


CONDUCTOR SIDE

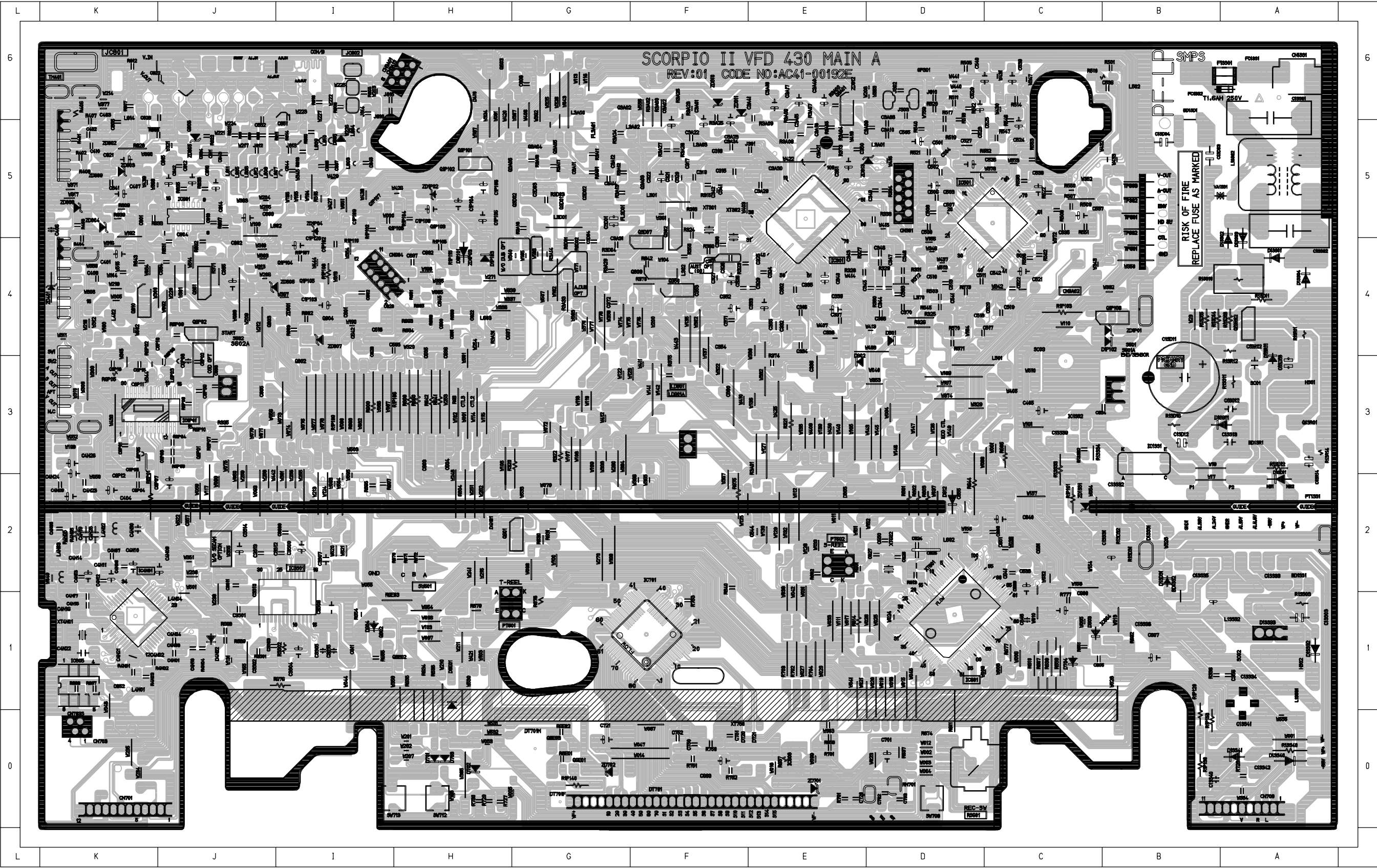


3-2 Main PCB (SLV-SE720D/SX720D/SE720E/SX720E/SE720G/SE720I/SE720B/SX727D/SE727E/SE720N/SX720N/SE820D/SE820E/SE820G/SE820B/SE820N)

COMPONENT SIDE

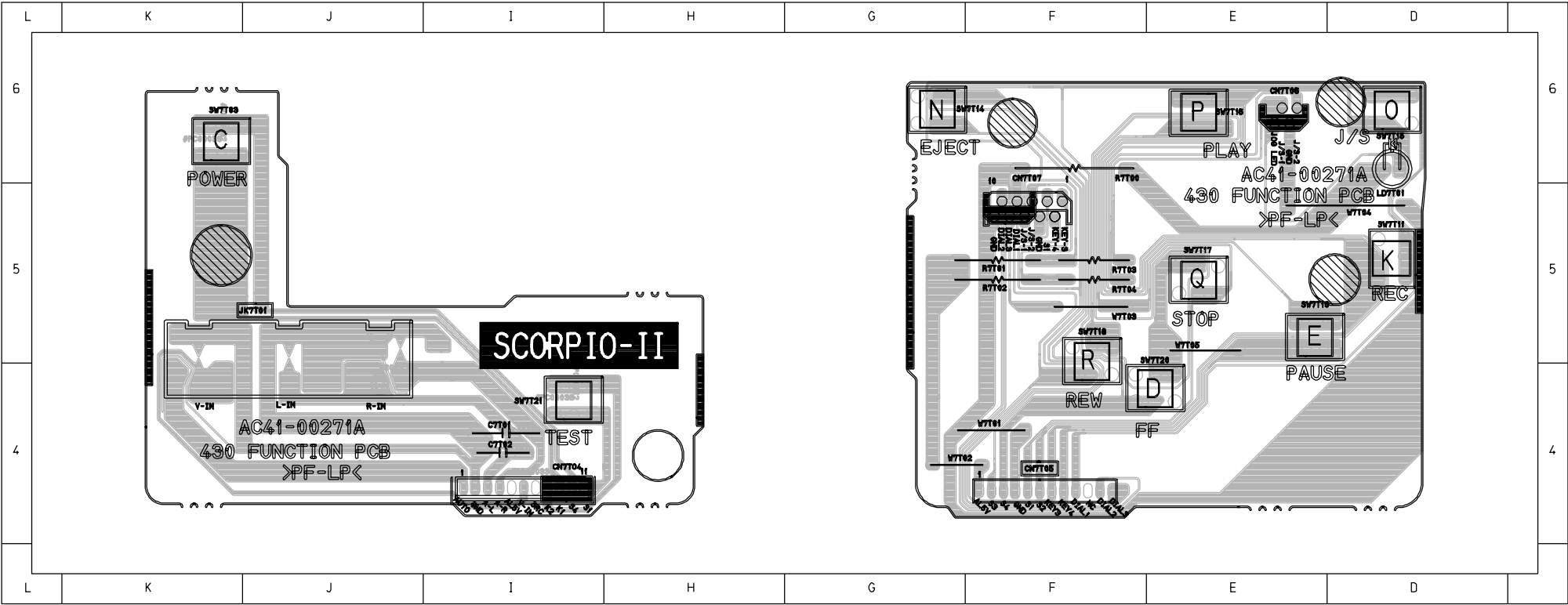


CONDUCTOR SIDE

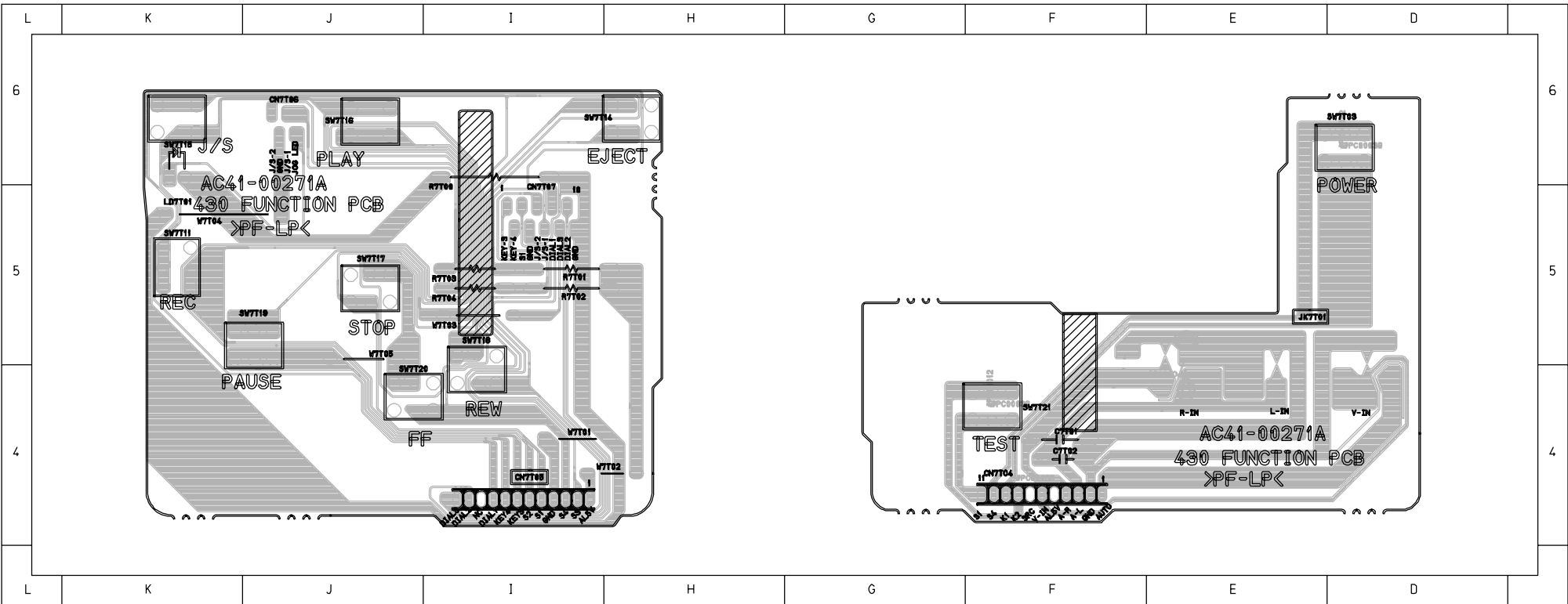


3-3 Function PCB (SLV-SE620D/SE620E/SE620B/SE620N/SE720D/SX720D/SE720E/SX720E/SE720G/SE720I/SE720B/SX727D/SE727E/SE720N/SX720N/SE820D/SE820E/SE820G/SE820B/SE820N)

COMPONENT SIDE



CONDUCTOR SIDE



4. Schematic Diagrams

◆ Block Identification of Main PCB ----- 4-3

4-1 S.M.P.S. (A) (SLV-SE220/SE420/SE620) ----- 4-5

4-2 S.M.P.S. (B) (SLV-SE720/SE727/SE820/SX720/SX727) ----- 4-7

4-3 Power (A) (SLV-SE220/SE420/SE620) ----- 4-9

4-4 Power (B) (SLV-SE720/SE727/SE820/SX720/SX727) ----- 4-11

4-5 System Control/Servo (A) (SLV-SE220/SE420/SE620) ----- 4-13

4-6 System Control/Servo (B) (SLV-SE720/SE727/SE820/SX720/SX727) ----- 4-15

4-7 Audio/Video ----- 4-17

4-8 Hi-Fi (Option) (SLV-SE620/SE720/SE727/SE820/SX720/SX727) ----- 4-19

4-9 TM-Block ----- 4-21

4-10 OSD/VPS/PDC (A) ----- 4-23

4-11 OSD/VPS/PDC (B) (SLV-SE620/SE720/SE727/SE820/SX720/SX727) ----- 4-25

4-12 SECAM; SLV-SE220B/SE620B/SE720B/SE820B Only ----- 4-27

4-13 A2/NICAM; Hi-Fi Models Only ----- 4-29

4-14 Input-Output (2 Scart Jack) ----- 4-31

4-15 Input-Output (1 Scart Jack); SLV-SE620D/SE620N Only ----- 4-33

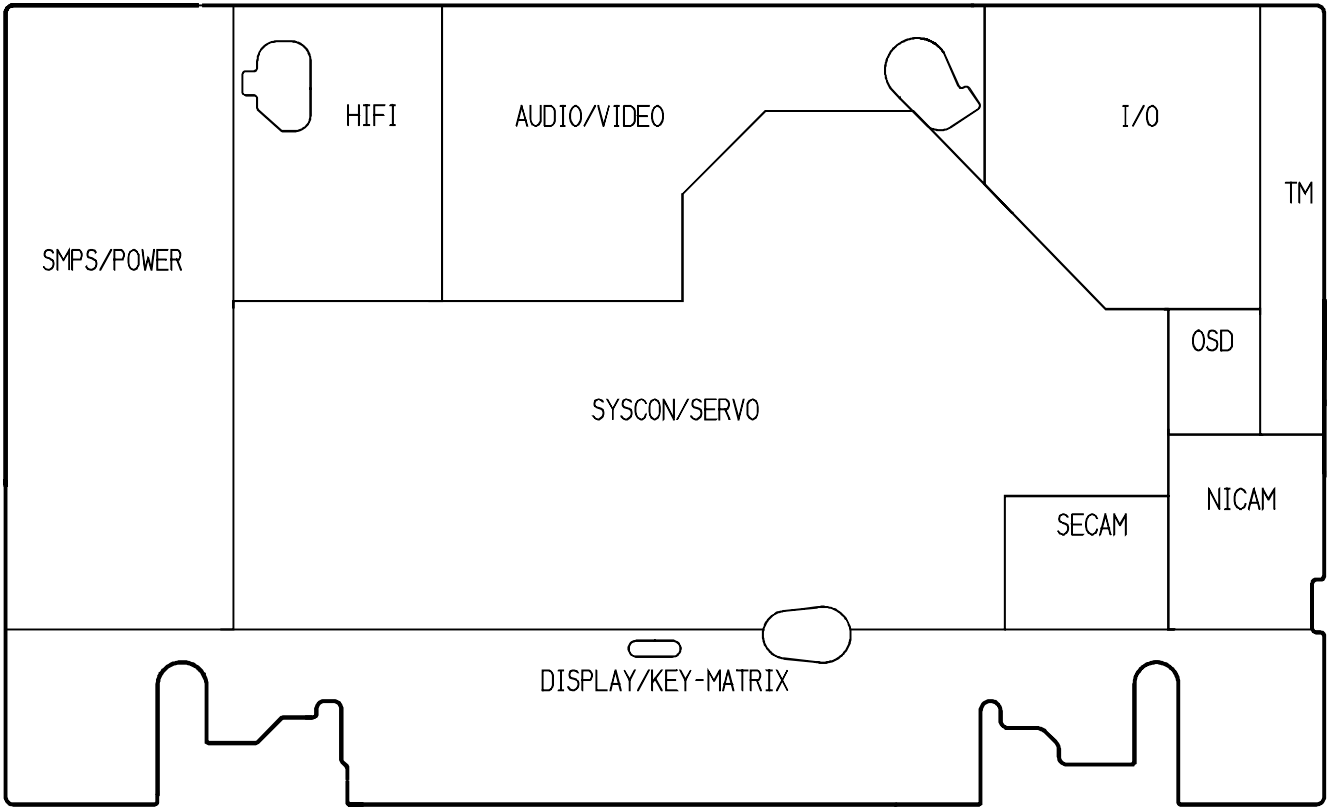
4-16 Sub ----- 4-35

◆ Waveform ----- 4-37

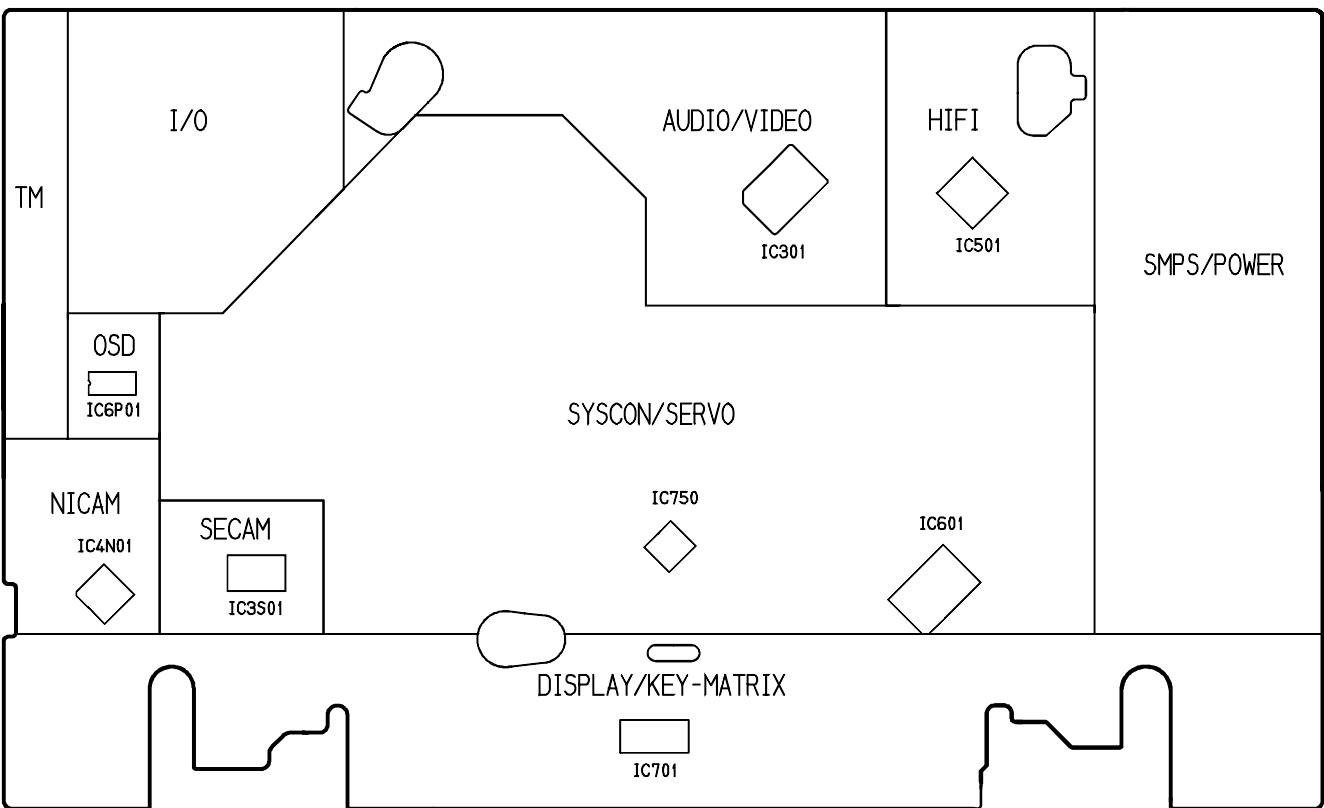
◆ Voltage Table ----- 4-39

- ◆ A Models
SLV-SE220D/SE220I/SE220G/SE220B/SE420K/SE620D/SE620E/SE620B/SE620N
- ◆ B Models
SLV-SE720D/SX720D/SE720E/SX720E/SE720G/SE720I/SE720B/SX727D/SE727E/SE720N/
SX720N/SE820D/SE820E/SE820G/SE820B/SE820N)

◆ Block Identification of Main PCB

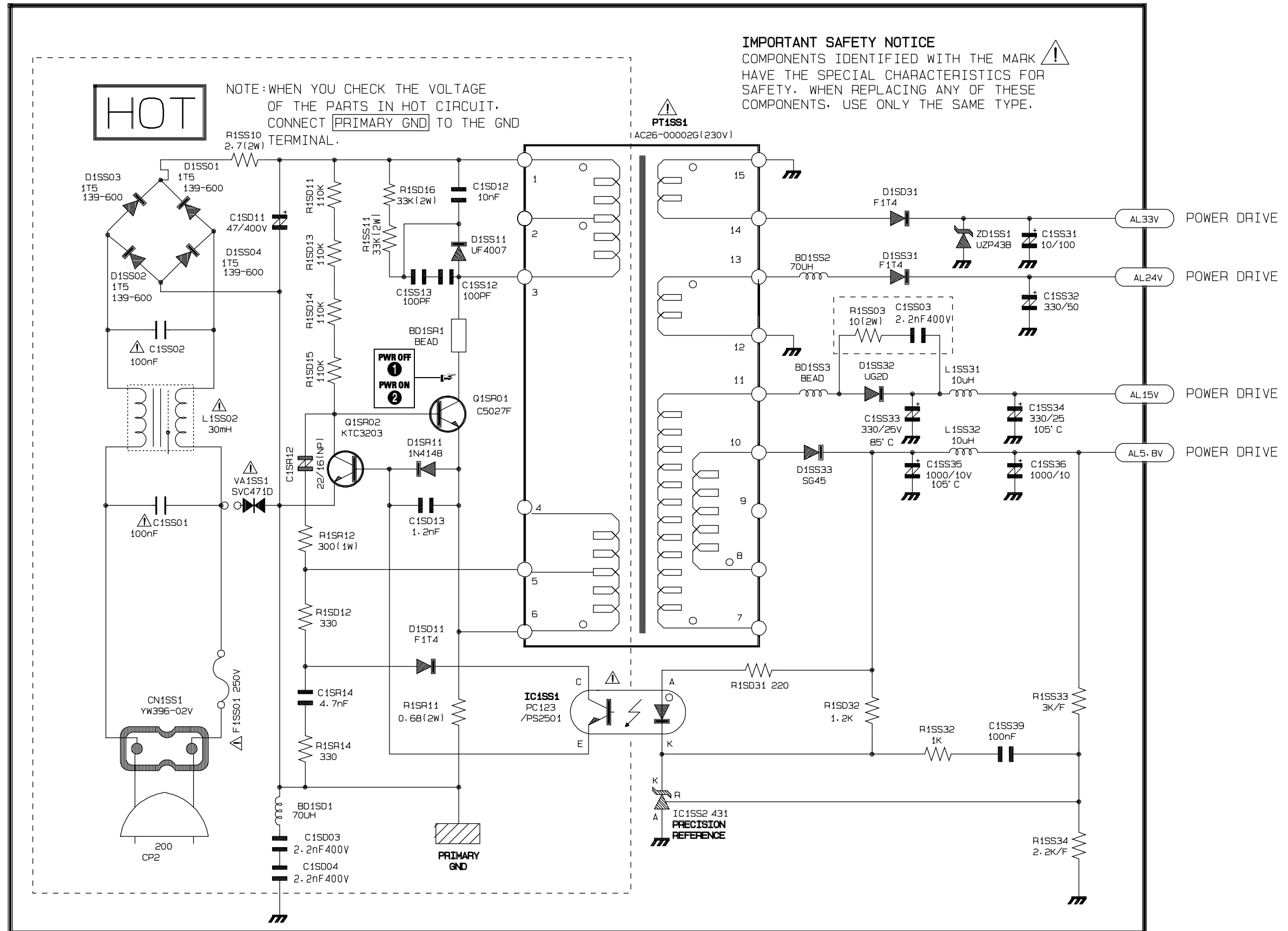


Component Side

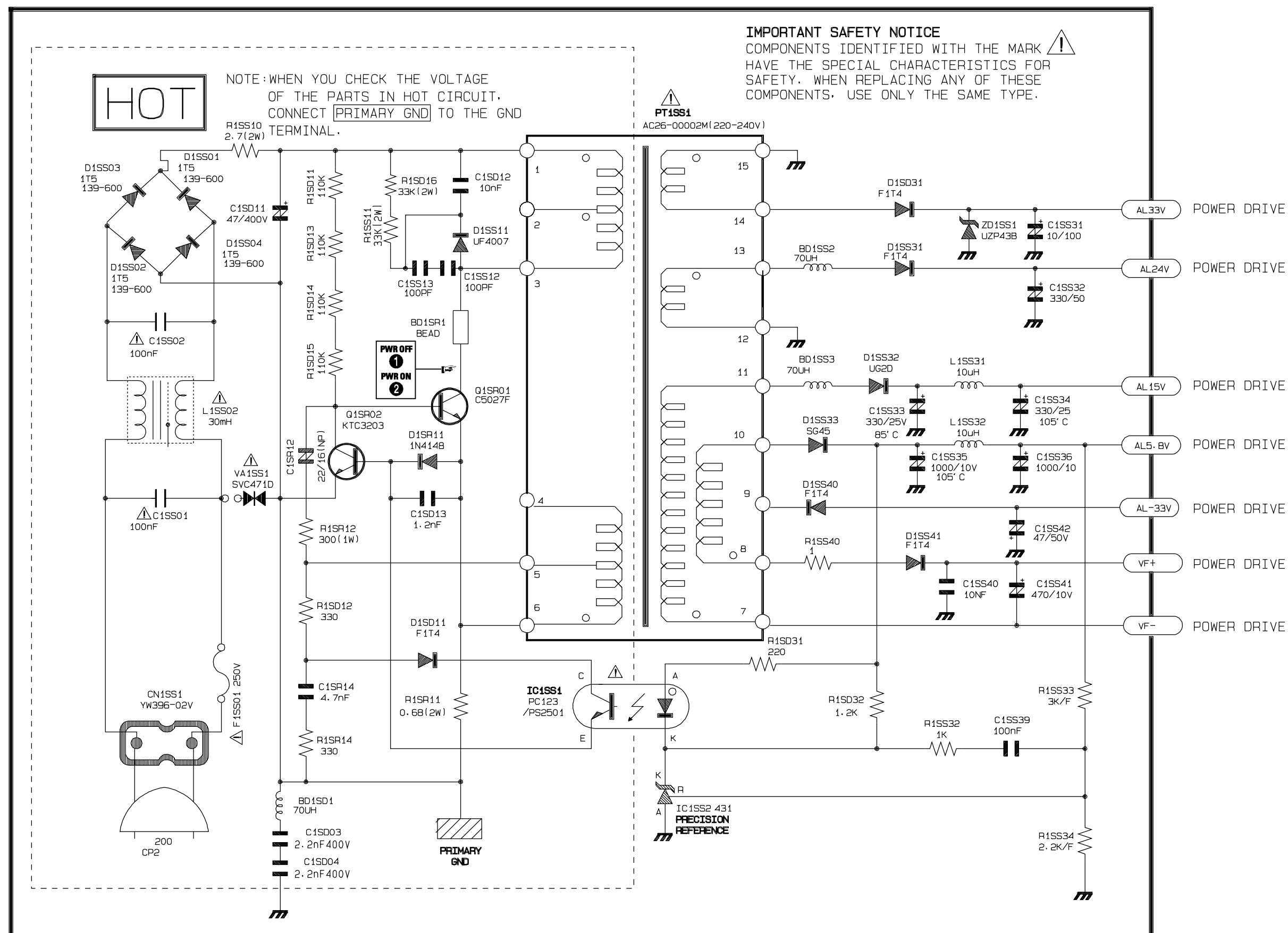


Conductor Side

4-1 S.M.P.S. (A) (SLV-SE220/SE420/SE620)

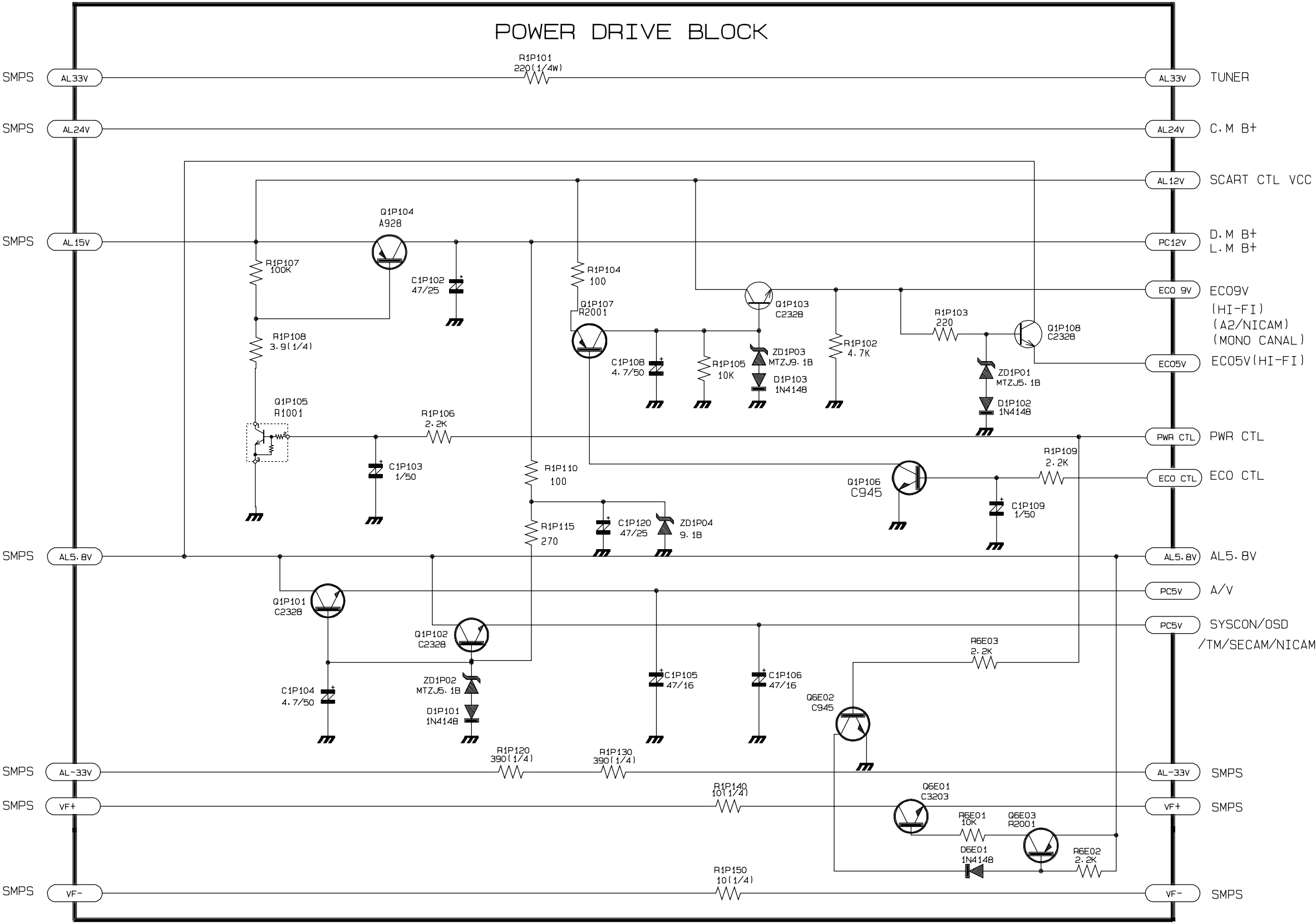


4-2 S.M.P.S. (B) (SLV-SE720/SE727/SE820/SX720/SX727)

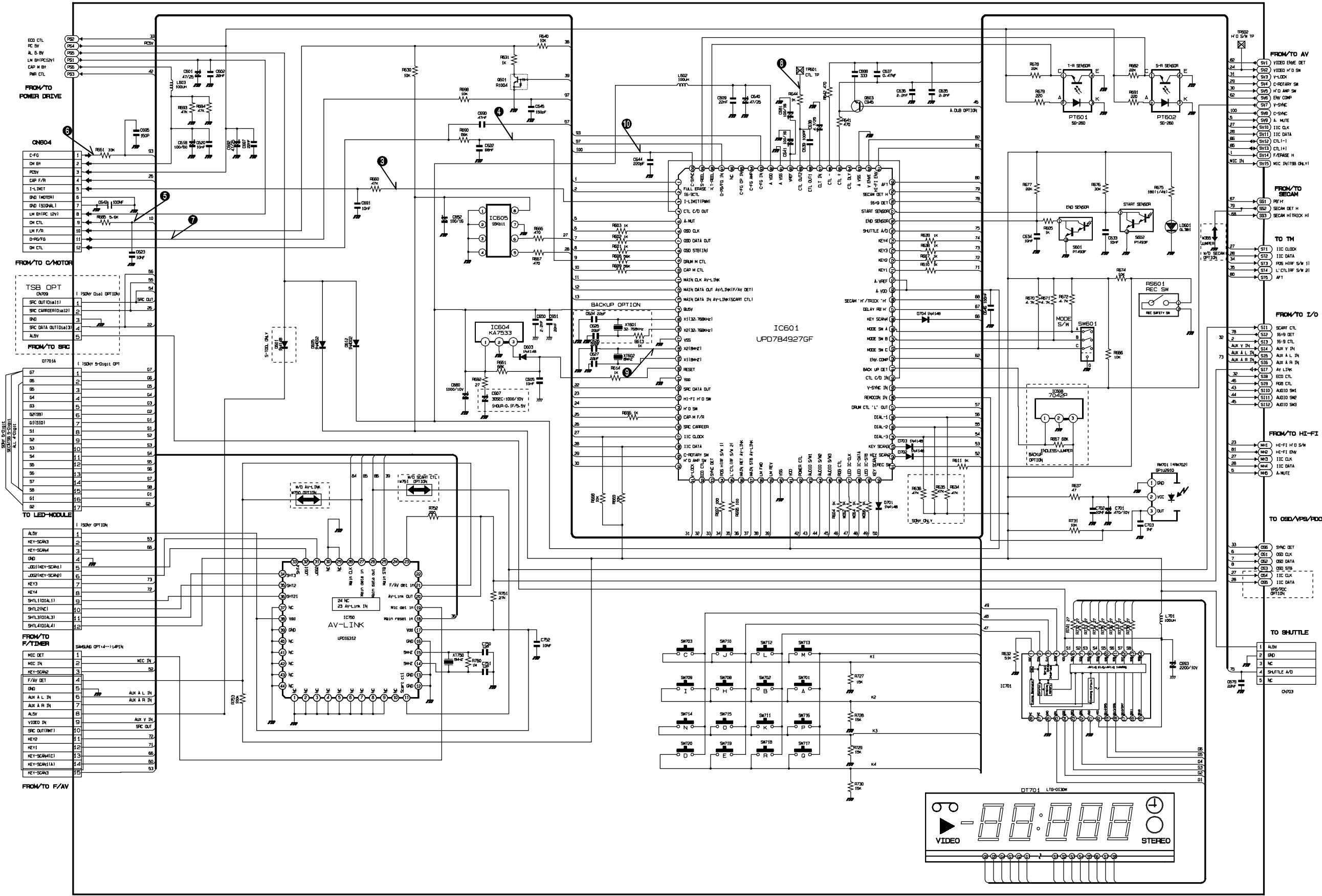




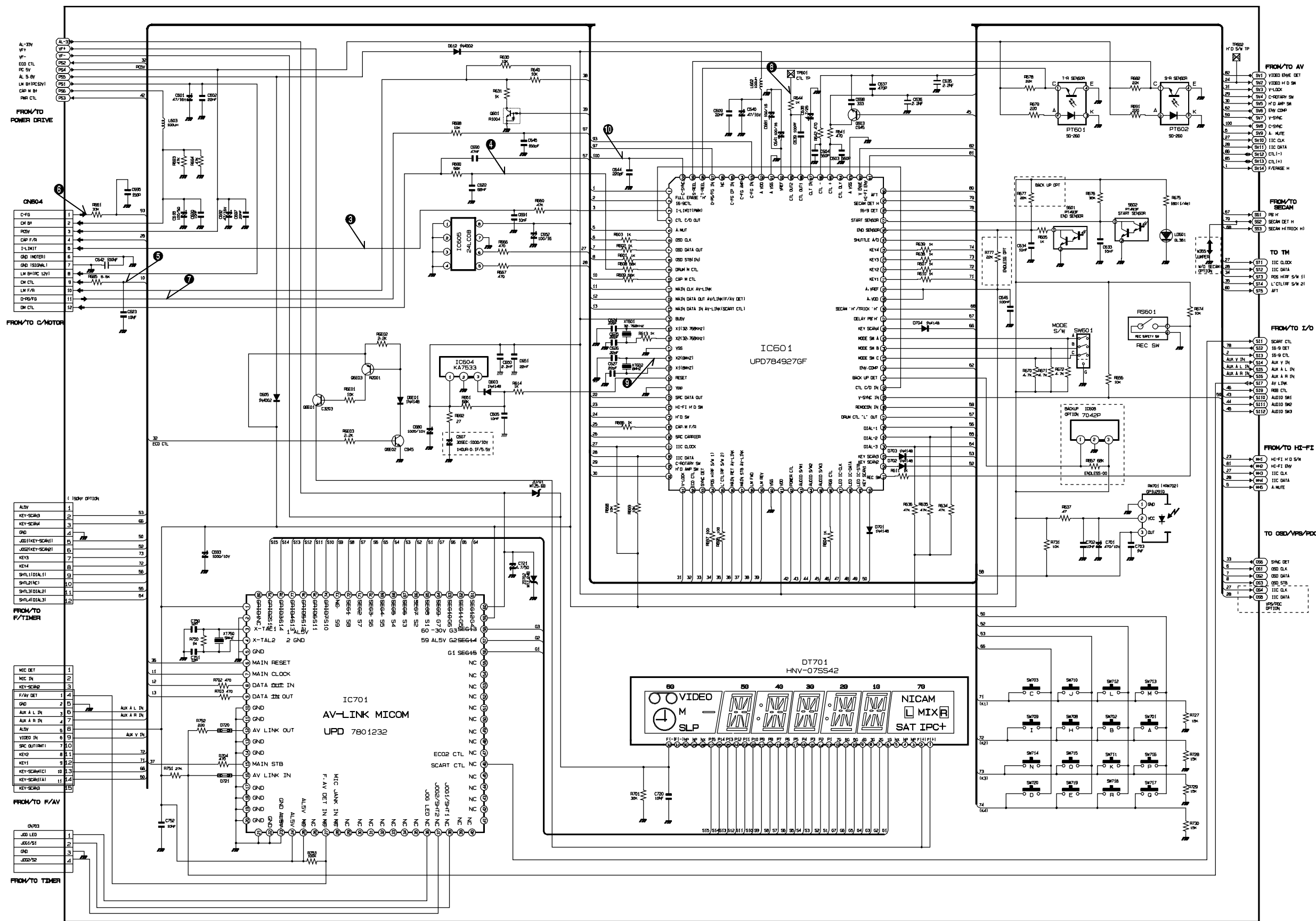
4-4 Power (B) (SLV-SE720/SE727/SE820/SX720/SX727)



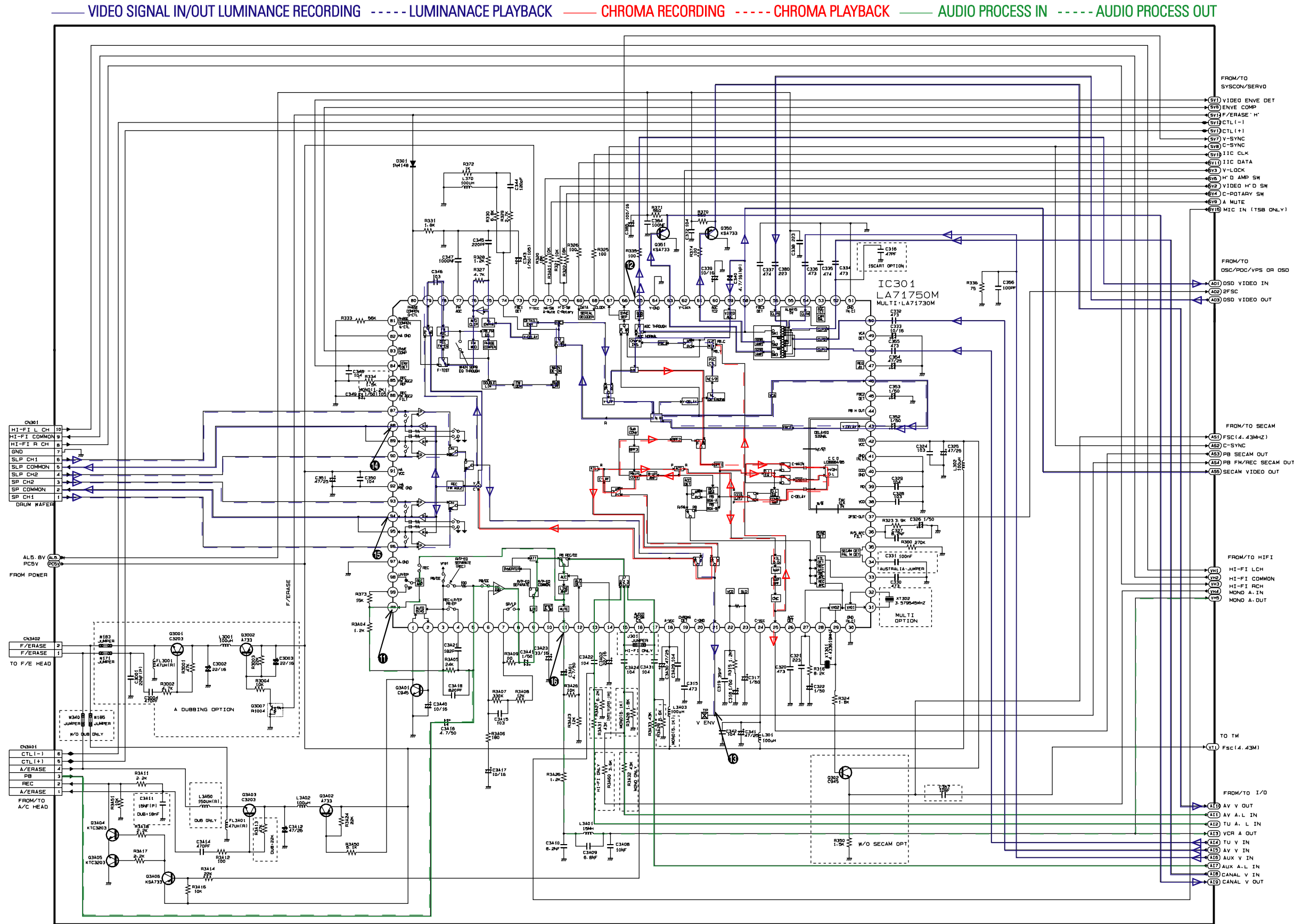
4-5 System Control/Servo (A) (SLV-SE220/SE420/SE620)



4-6 System Control/Servo (B) (SLV-SE720/SE727/SE820/SX720/SX727)

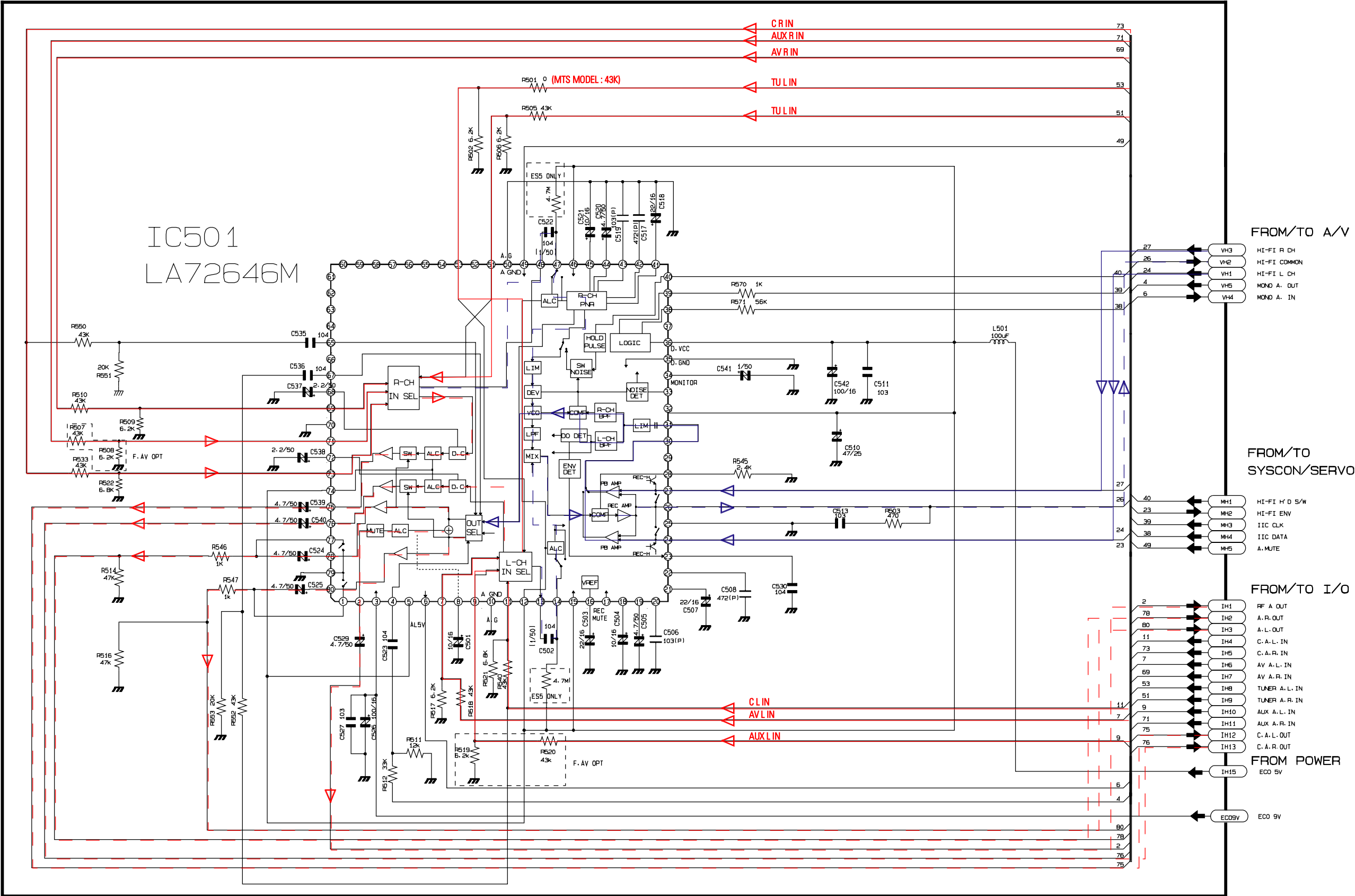


4-7 Audio/Video

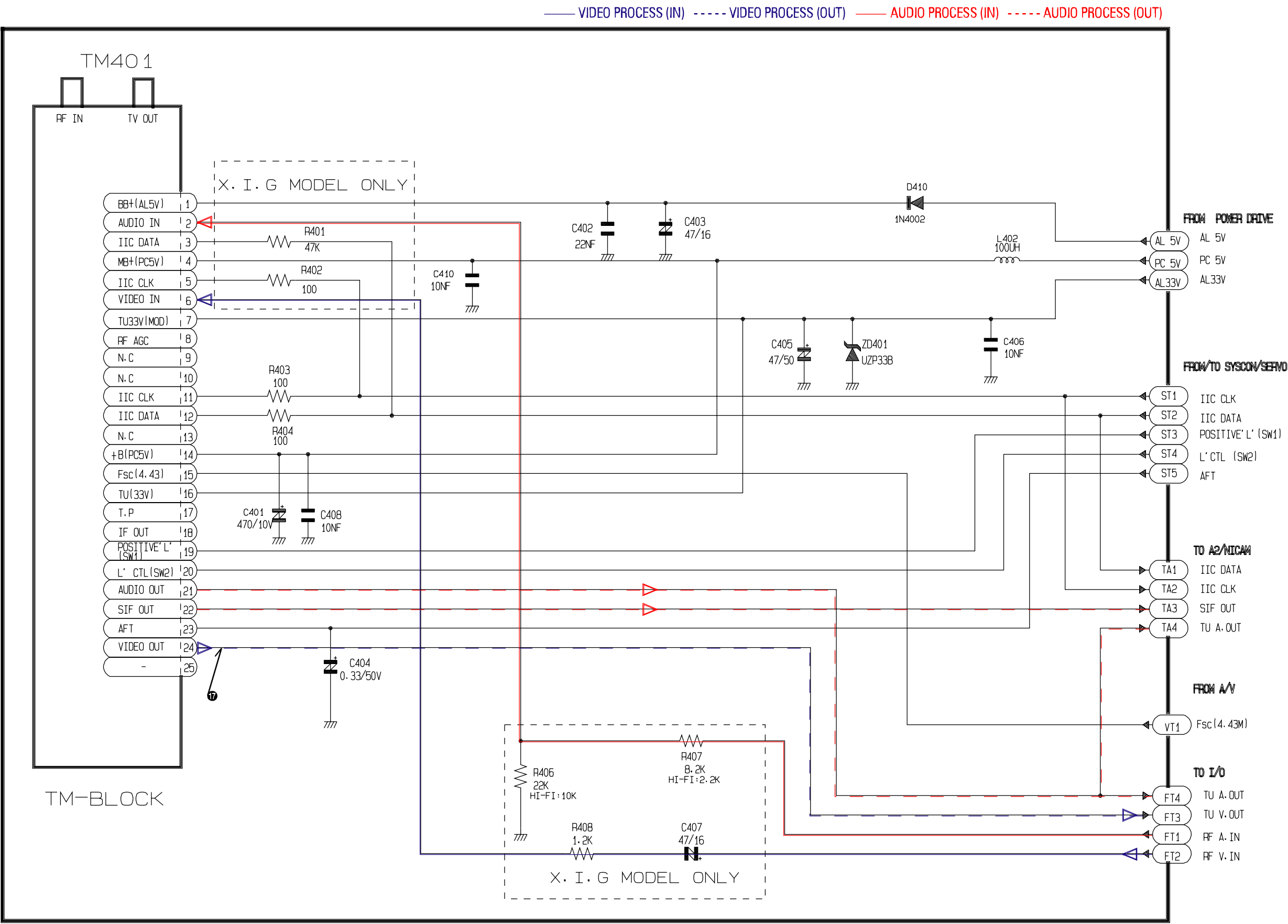


4-8 Hi-Fi (Option) (SLV-SE620/SE720/SE727/SE820/SX720/SX727)

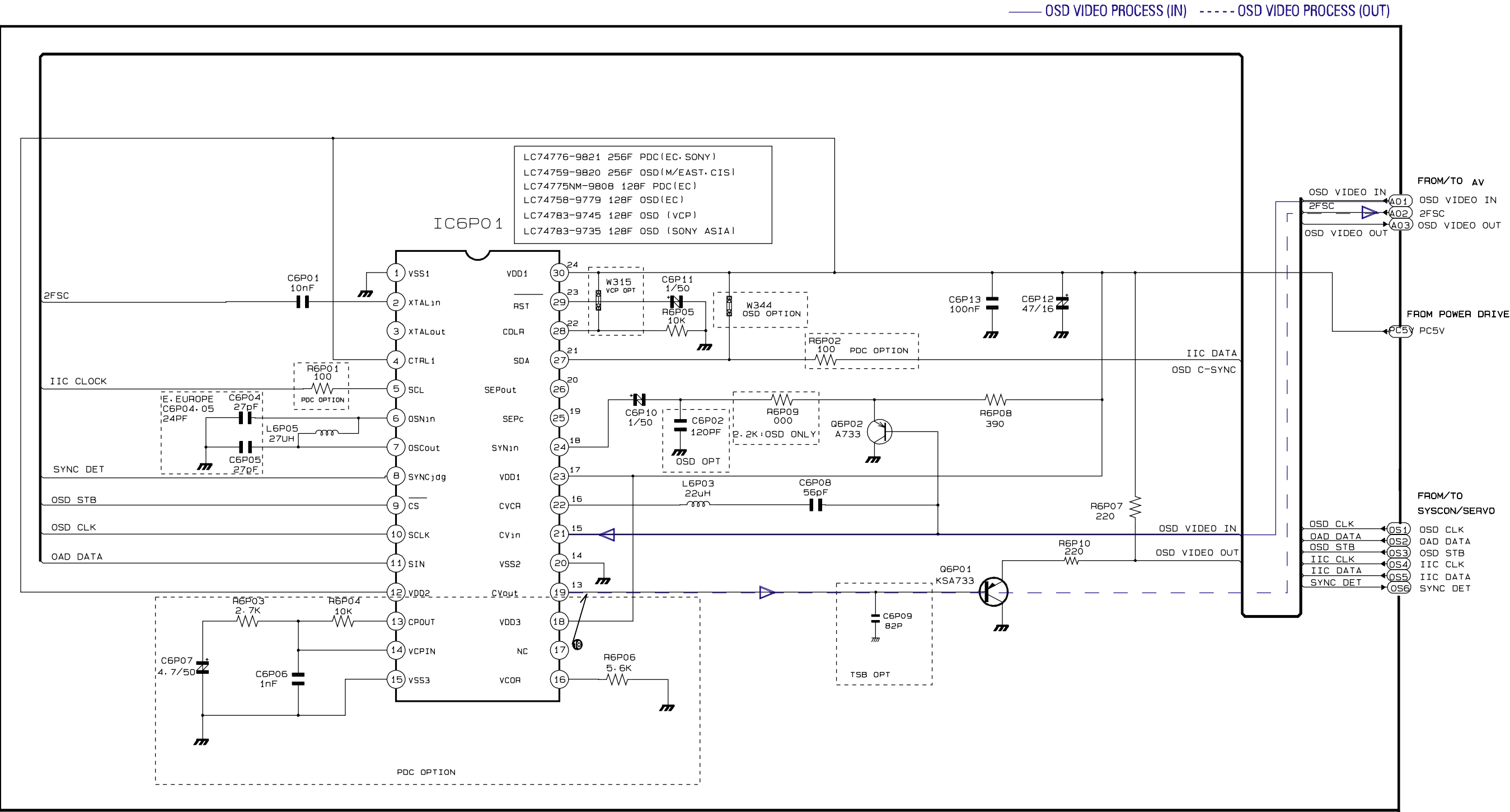
— AUDIO PB PROCESS ——— AUDIO REC PROCESS — AUDIO PROCESS (IN) ——— AUDIO PROCESS (OUT)



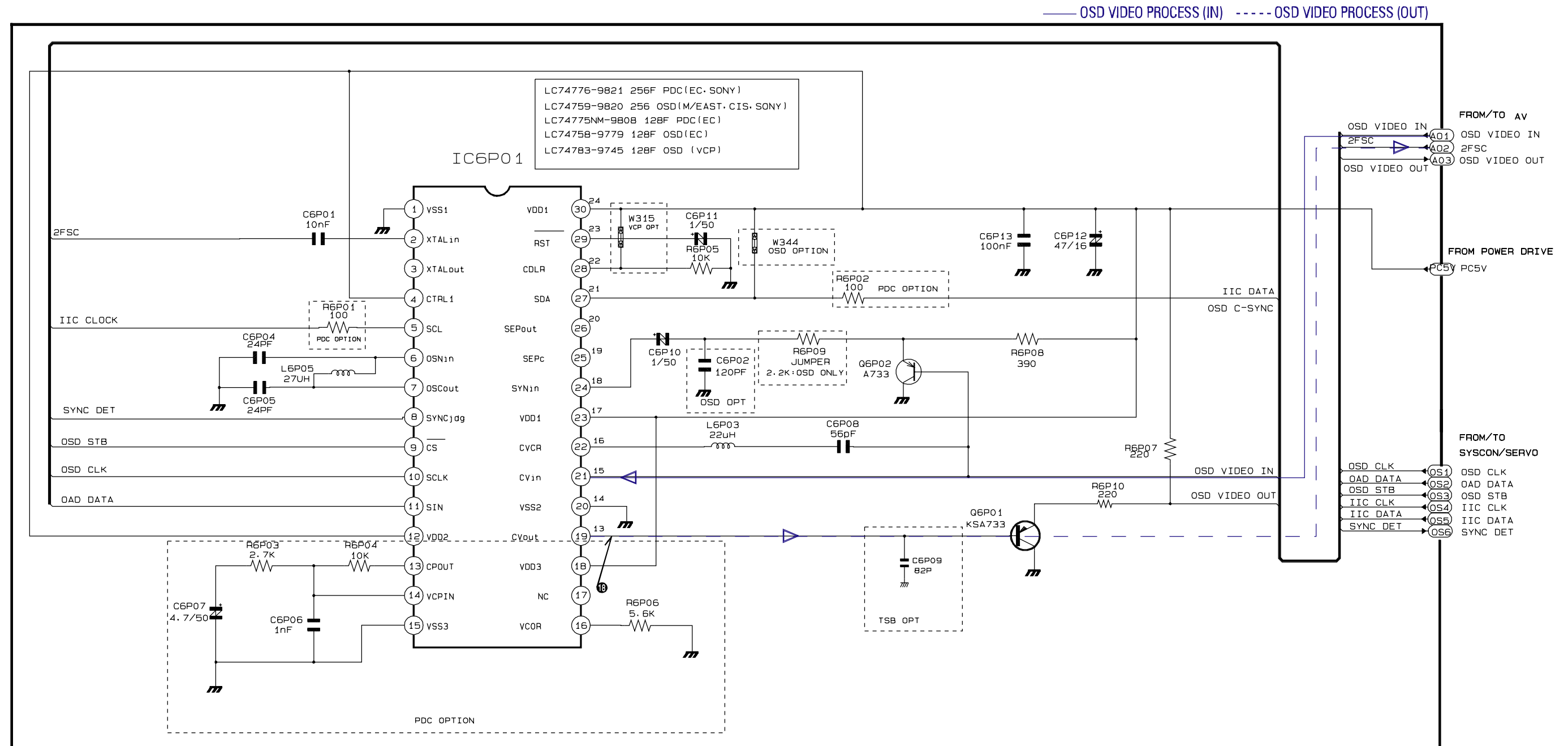
4-9 TM-Block



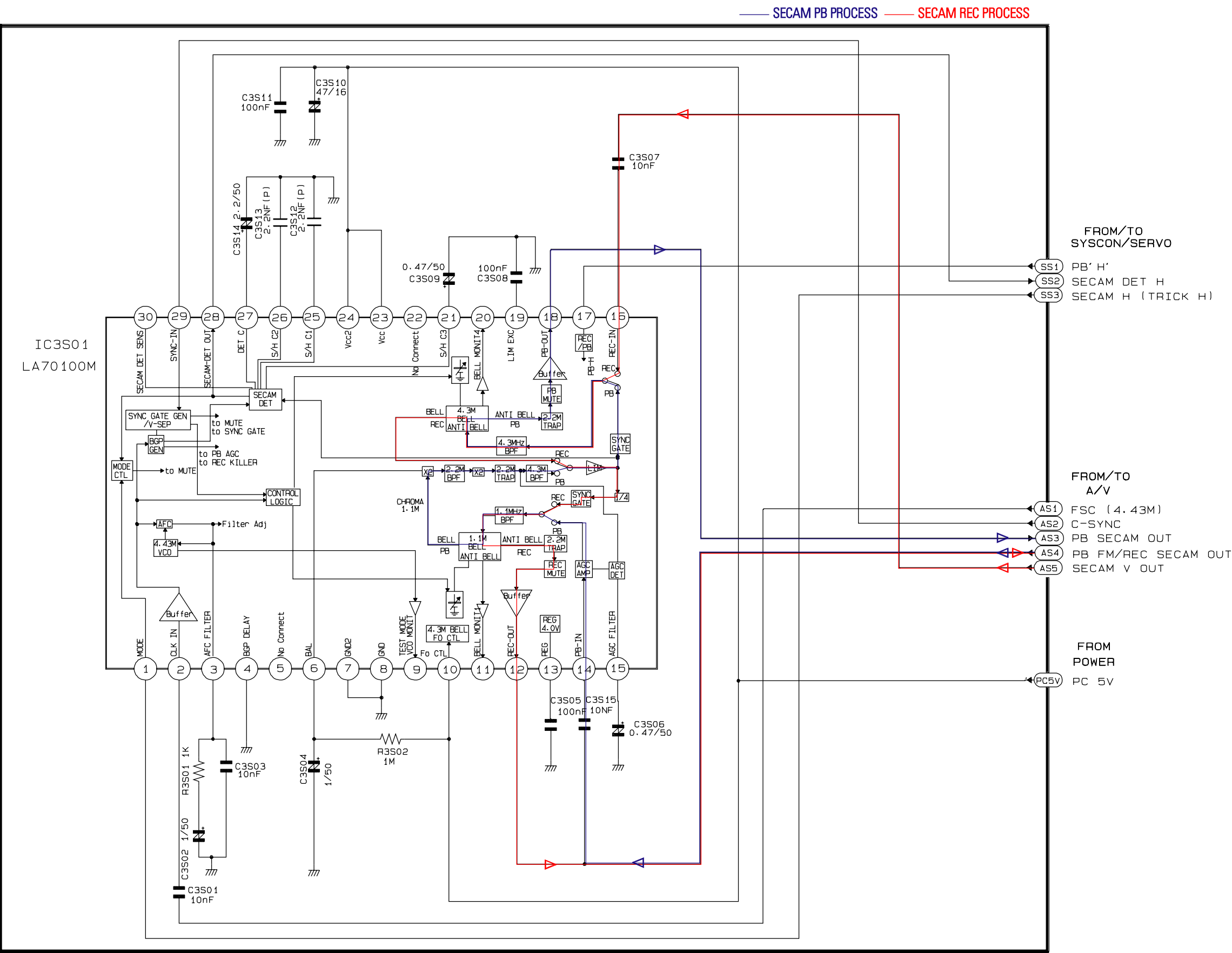
4-10 OSD/VPS/PDC



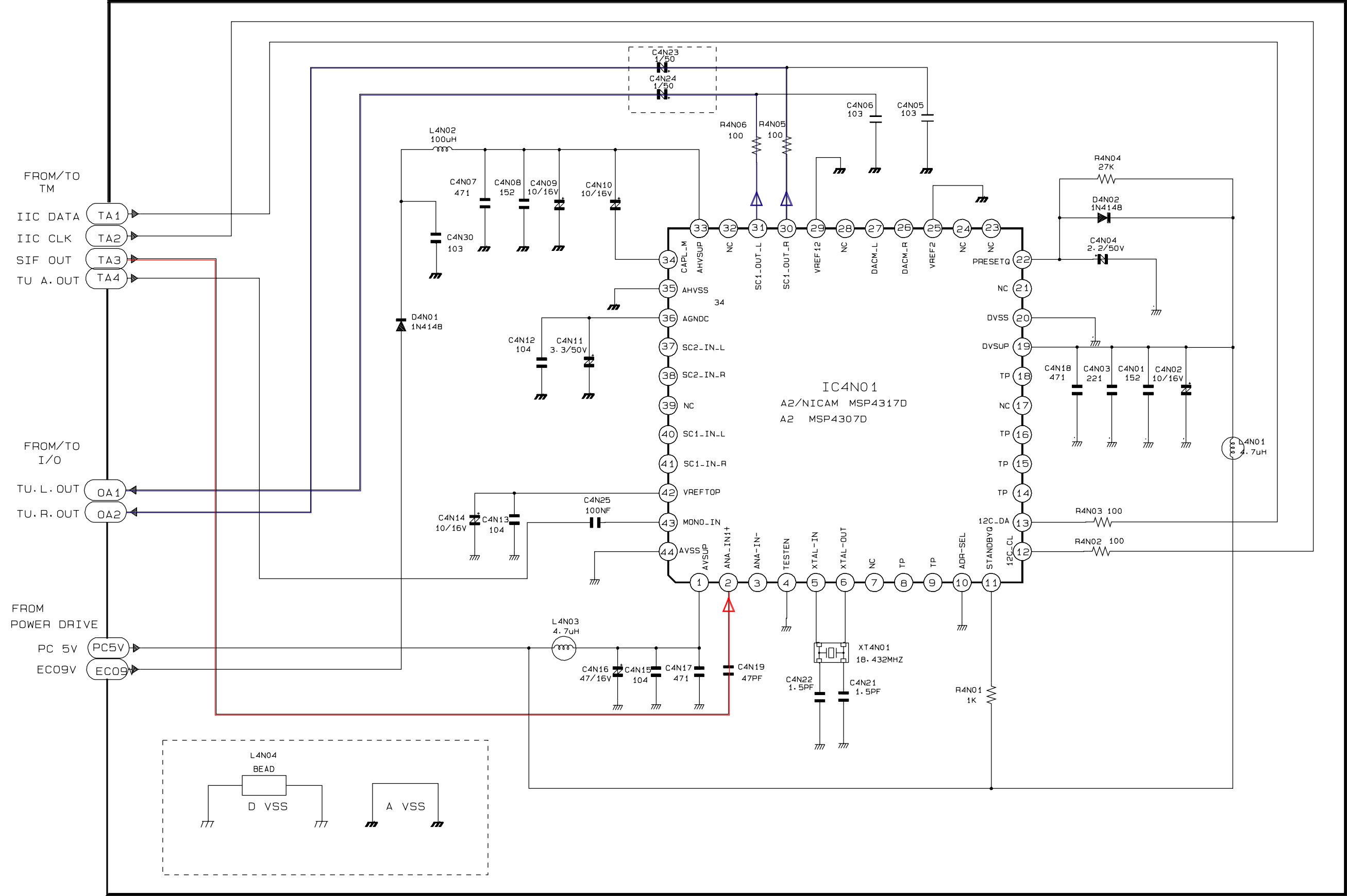
4-11 OSD/VPS/PDC (B) (SLV-SE620/SE720/SE727/SE820/SX720/SX727)



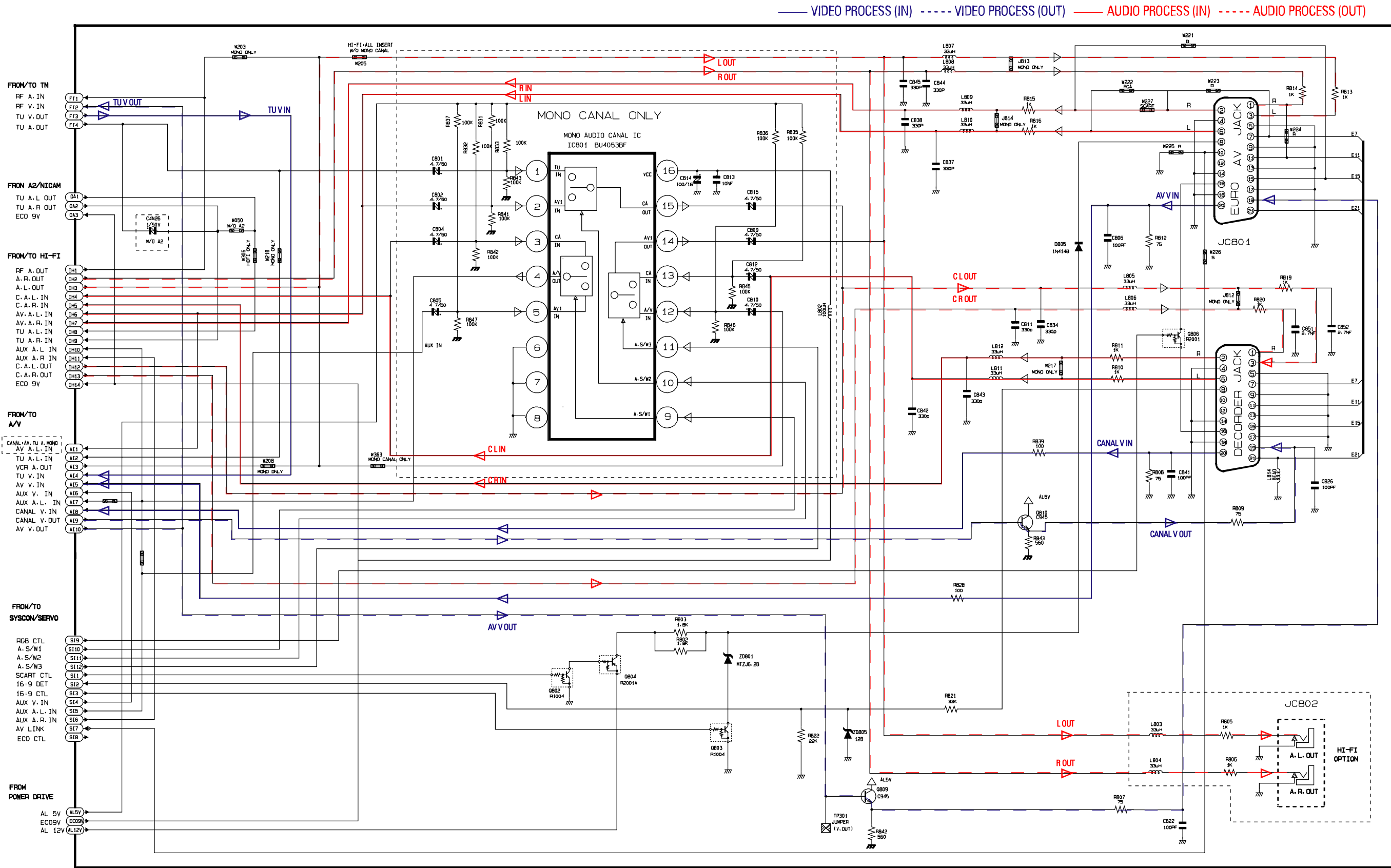
4-12 SECAM; SLV-SE220B/SE620B/SE720B/SE820B Only



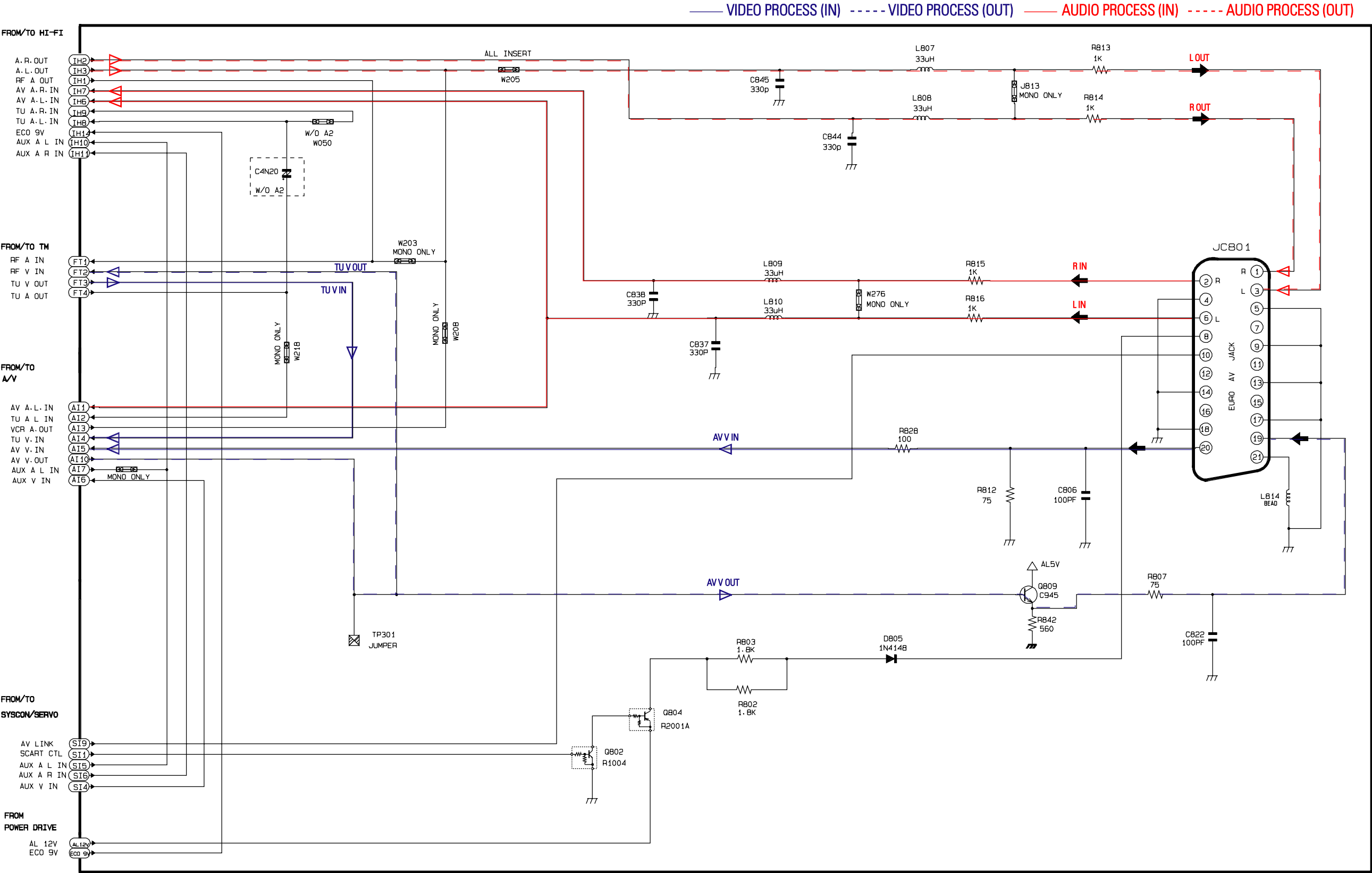
4-13 A2/NICAM; Hi-Fi Models Only



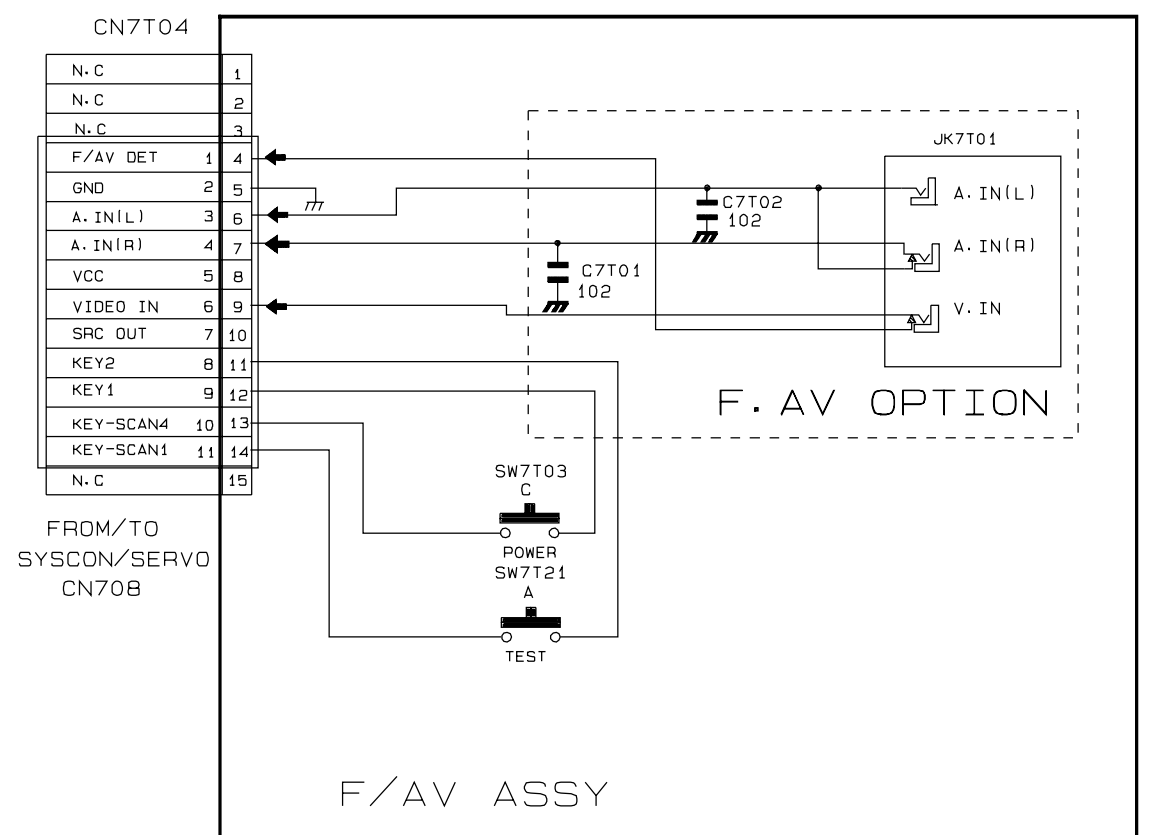
4-14 Input-Output (2 Scart Jack)



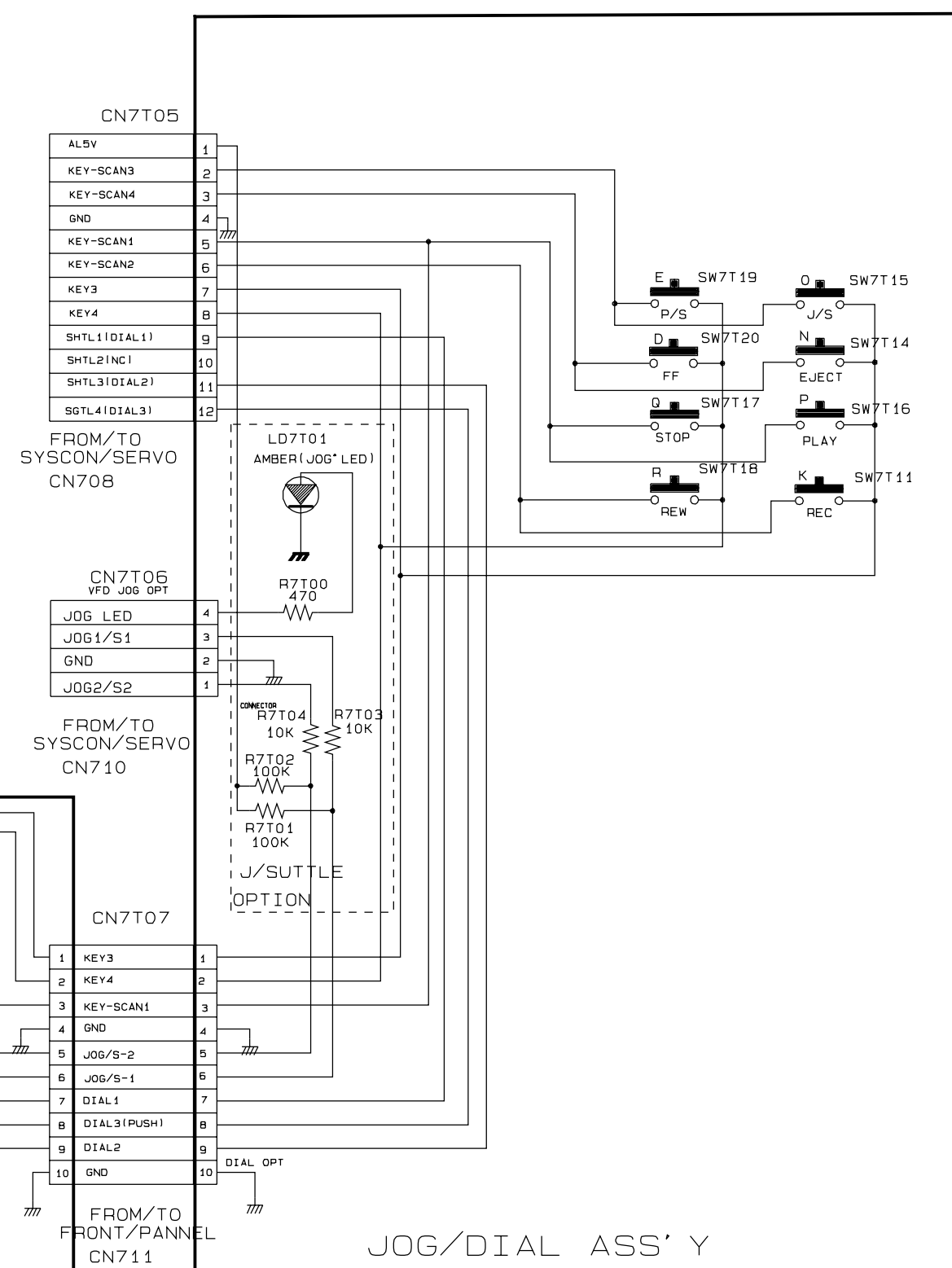
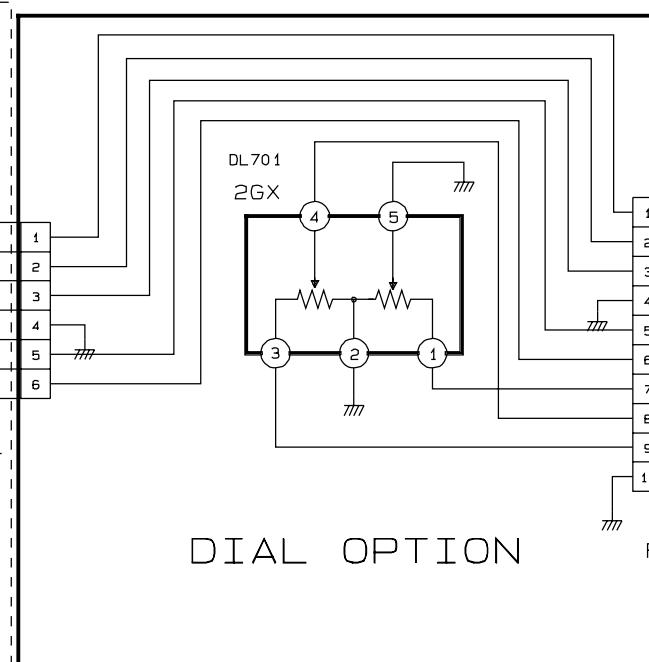
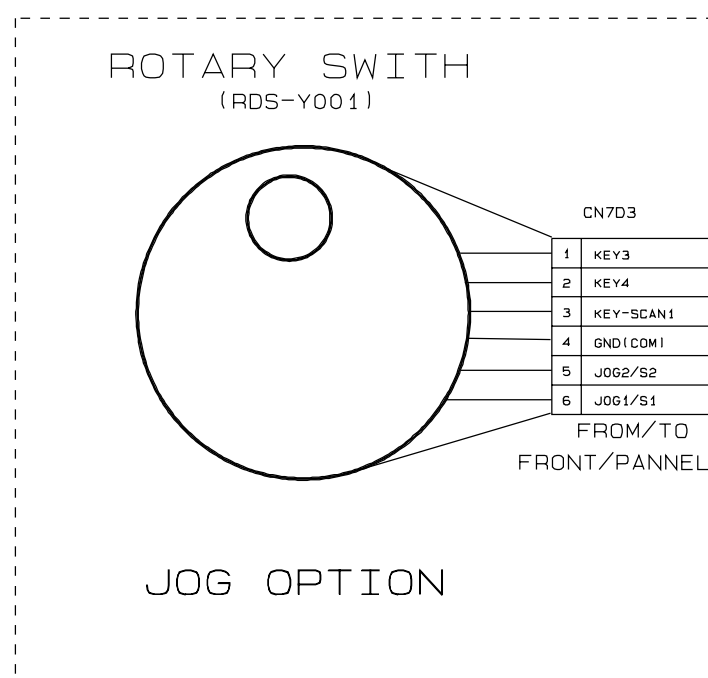
4-15 Input-Output (1 Scart Jack) ;SLV-SE620D/SE620N Only



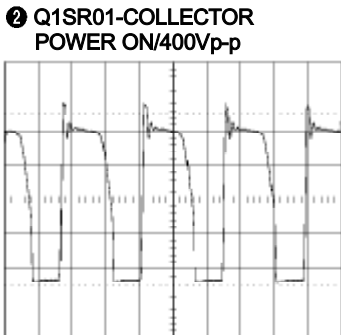
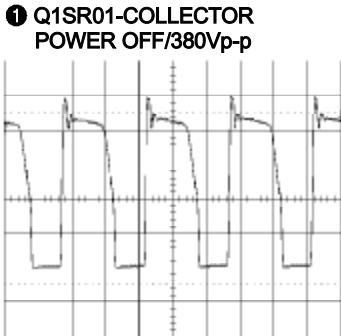
4-16 Sub



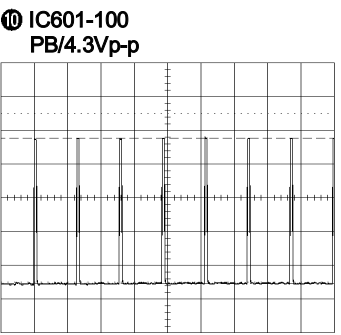
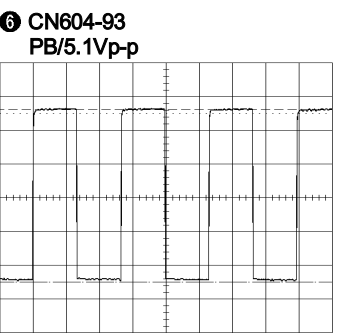
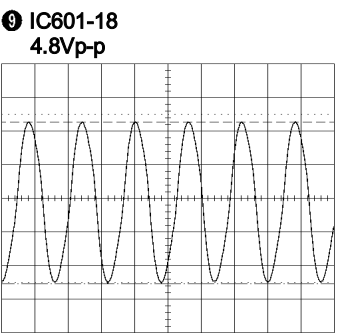
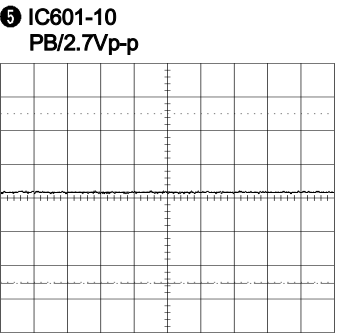
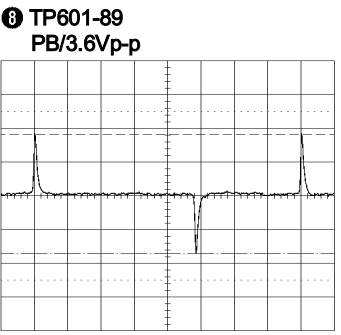
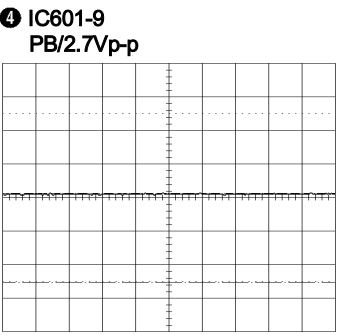
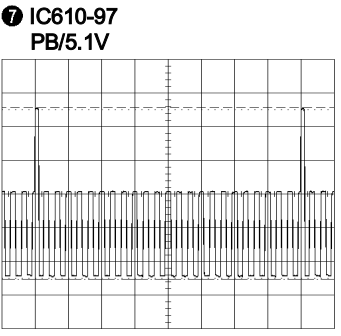
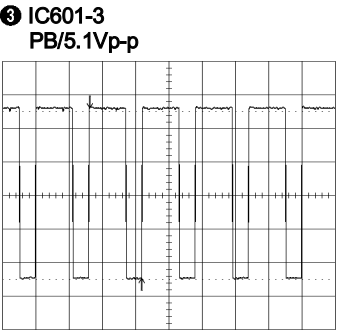
TO FRONT PANNEL



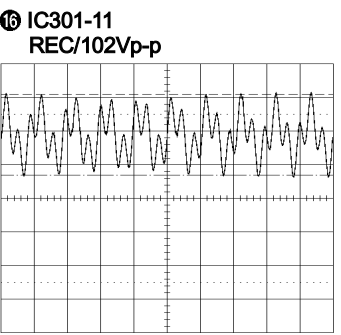
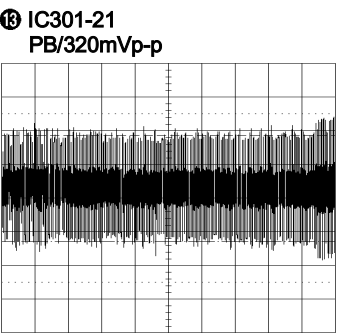
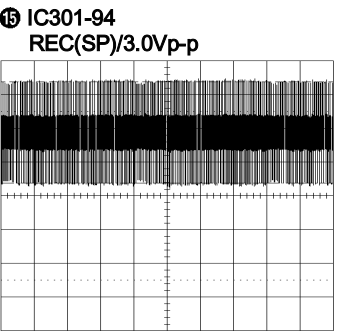
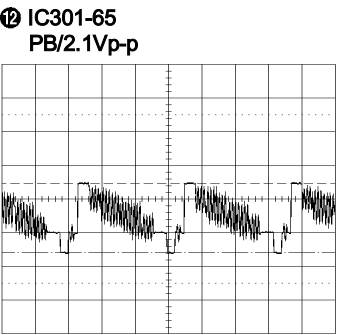
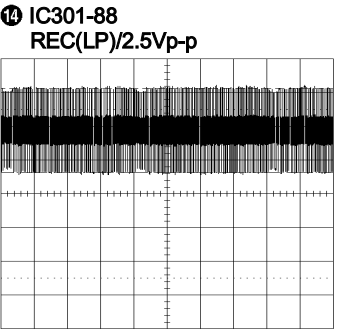
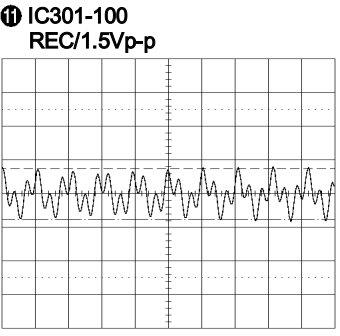
S.M.P.S. BLOCK



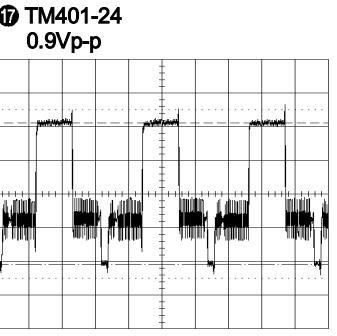
SYSTEM CONTROL/SERVO BLOCK



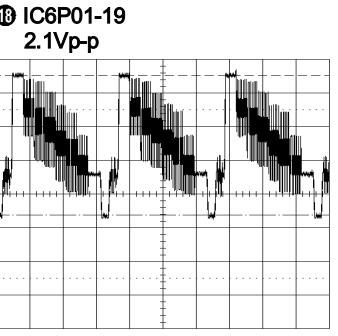
AUDIO/VIDEO BLOCK



TM BLOCK



O. S. D. BLOCK



LOGIC BLOCK											
PIN MODE	PLAY	STOP	REC	PIN MODE	PLAY	STOP	REC	PIN MODE	PLAY	STOP	REC
IC601	UPD784927GF			IC601	UPD784927GF			IC605	24LCXX		
1	0.0	0.0	4.8	51	0.0	0.0	0.0	1	0.0	0.0	0.0
2	0.0	0.0	0.0	52	0.0	0.1	0.1	2	0.0	0.0	0.0
3	3.6	0.0	3.6	53	5.2	0.1	0.2	3	0.0	0.0	0.0
4	3.1	5.2	0.0	54	5.2	5.2	5.2	4	0.0	0.0	0.0
5	0.0	5.2	5.1	55	5.2	5.2	5.2	5	5.2	5.2	5.2
6	5.1	5.2	5.1	56	5.2	5.2	5.2	6	0.0	0.0	0.0
7	5.2	5.2	5.1	57	0.0	0.0	0.0	7	4.6	4.7	4.7
8	4.2	4.1	4.1	58	5.2	5.2	5.2	8	4.7	4.6	4.6
9	2.6	2.6	2.6	59	5.1	5.2	5.2				
10	2.7	5.2	2.7	60	3.3	5.2	5.2	IC604	KA7533		
11	5.2	5.2	5.2	61	5.2	5.2	5.2	1	5.2	5.2	5.2
12	2.1	0.3	2.3	62	1.2	2.5	1.5	2	0.0	0.0	0.0
13	2.3	2.1	2.2	63	0.0	0.0	0.0	3	5.0	5.1	5.0
14	5.2	5.2	5.2	64	5.2	0.0	5.2				
15	2.1	2.2	2.1	65	0.0	0.0	0.0				
16	2.5	2.5	2.4	66	4.7	4.8	4.7				
17	0.0	0.0	0.0	67	5.2	0.0	0.0				
18	2.4	2.4	2.4	68	0.0	0.0	0.0				
19	2.2	2.2	2.8	69	5.2	0.0	5.2				
20	5.2	5.2	5.2	70	5.2	1.4	5.2				
21	0.0	0.0	0.0	71	0.0	0.0	0.0				
22	0.0	0.0	0.0	72	0.0	0.0	0.0				
23	2.3	2.7	0.0	73	0.0	0.0	0.0				
24	2.7	2.3	2.8	74	0.0	0.0	0.0				
25	0.0	0.0	0.0	75	1.6	1.2	1.5				
26	0.0	0.0	0.0	76	5.2	5.2	5.2				
27	4.6	4.6	4.6	77	5.1	5.2	5.1				
28	4.6	4.6	4.5	78	0.0	0.0	0.0				
29	2.4	2.8	2.8	79	0.0	0.4	0.4				
30	0.0	5.2	0.0	80	3.7	3.7	3.7				
31	0.0	0.0	0.0	81	0.1	0.2	0.2				
32	4.7	4.7	4.7	82	2.3	0.6	0.0				
33	5.1	0.0	0.0	83	1.3	0.0	0.0				
34	1.2	1.4	0.7	84	1.4	1.8	0.0				
35	0.0	0.0	0.0	85	2.6	2.6	2.8				
36	5.2	5.2	5.2	86	2.6	2.6	2.2				
37	1.4	1.3	0.7	87	2.6	2.6	2.6				
38	0.0	0.0	5.1	88	2.6	2.6	2.6				
39	0.0	0.0	0.0	89	2.6	2.6	0.0				
40	0.0	0.0	0.0	90	2.6	2.6	2.6				
41	5.2	5.2	5.2	91	0.0	0.0	0.0				
42	5.2	5.1	5.1	92	5.2	5.2	5.2				
43	0.0	0.0	5.1	93	2.6	5.1	2.6				
44	0.0	0.0	0.0	94	1.4	1.7	1.4				
45	0.0	0.0	0.0	95	1.3	1.5	1.3				
46	5.2	5.1	5.1	96	1.4	1.7	1.3				
47	5.2	5.2	5.2	97	1.3	0.1	1.3				
48	5.2	5.2	5.2	98	0.1	0.1	0.1				
49	5.2	5.2	5.2	99	0.1	0.1	0.3				
50	0.1	0.1	5.2	100	0.2	0.2	0.2				

LOGIC BLOCK (*B* MODELS ONLY)											
PIN MODE	PLAY	STOP	REC	PIN MODE	PLAY	STOP	REC	PIN MODE	PLAY	STOP	REC
IC701	UPD7801232			IC701	UPD780123						
1	5.18	5.18	5.17	51	0.12	0.0	0.0				
2	0.0	0.0	0.0	52	0.21	0.0	0.0				
3	2.78	2.82	2.8	53	0.2	0.0	0.0				
4	0.0	3.03	3.03	54	0.06	0.0	0.0				
5	0.0	0.0	0.0	55	0.0	0.0	0.0				
6	5.19	5.19	5.15	56	0.0	0.0	0.0				
7	5.18	5.19	5.14	57	0.0	0.0	0.0				
8	2.12	0.075	0.0	58	0.0	0.0	0.0				
9	2.24	2.23	2.28	59	5.17	5.18	5.17				
10	0.0	0.0	0.0	60	0.0	0.0	0.0				
11	0.0	0.0	0.0	61	0.0	0.0	0.0				
12	0.0009	0.0008	0.001	62	0.0	0.0	0.0				
13	0.0	0.0	0.0	63	0.0	0.0	0.0				
14	0.0	0.0	0.0	64	0.0	0.0	0.0				
15	1.58	1.44	1.45	65	0.0	0.0	0.0				
16	0.0009	0.0009	0.001	66	0.0	0.0	0.0				
17	0.0	0.0	0.0	67	0.0	0.0	0.0				
18	0.0	0.0	0.0	68	0.0	0.0	0.0				
19	0.0	0.0	0.0	69	0.0	0.0	0.0				
20	0.0	0.0	0.0	70	0.0	0.0	0.0				
21	0.0	0.0	0.0	71	0.0	0.0	0.0				
22	0.0	0.0	0.0	72	0.0	0.0	0.0				
23	0.0	0.0	0.0	73	0.0	0.0	0.0				
24	5.18	5.18	5.18	74	0.0	0.0	0.0				
25	5.18	5.18	5.18	75	0.0	0.0	0.0				
26	0.0	0.0	0.0	76	0.0	0.0	0.0				
27	0.0	0.0	0.0	77	0.0	0.0	0.0				
28	0.0	0.0	0.0	78	0.0	0.0	0.0				
29	0.0	0.0	0.0	79	0.0	0.0	0.0				
30	0.0	0.0	0.0	80	0.0	0.0	0.0				
31	0.0	0.0	0.0								
32	0.021	0.0	0.0								
33	0.0	0.0	0.0								
34	0.0	0.0	0.0								
35	0.0	0.0	0.0								
36	0.0	0.0	0.0								
37	0.0	0.0	0.0								
38	0.0	0.0	0.0								
39	0.0	0.0	0.0								
40	0.0	0.0	0.0								
41	0.24	0.0	0.0								
42	0.01	0.0	0.0								
43	0.03	0.0	0.0								
44	0.0002	0.0	0.0								
45	0.0004	0.0	0.0								
46	5.17	5.16	5.17								
47	5.18	0.0	5.17								
48	0.0002	0.0	0.0								
49	0.0002	0.0	0.0								
50	0.0002	0.0	0.0								

AV BLOCK							
PIN MODE	PLAY	STOP	REC	PIN MODE	PLAY	STOP	REC
IC301	LA71750M			IC301	LA71750M		
1	5.2	5.2	0.7	51	0.0	0.0	0.0
2	0.0	0.0	0.6	52	1.9	1.9	1.9
3	2.3	2.3	2.4	53	2.4	2.4	2.4
4	0.3	0.4	0.8	54	1.9	1.9	1.9
5	2.3	2.3	2.3	55	5.2	5.2	5.2
6	2.3	2.3	2.2	56	2.2	2.3	2.3
7	2.3	2.3	2.2	57	2.2	2.0	2.0
8	2.3	2.3	2.2	58	2.8	3.1	3.1
9	2.2	2.2	2.2	59	3.0	2.9	2.9
10	2.3	2.2	2.3	60	1.6	1.5	1.5
11	2.4	2.3	2.3	61	1.7	19.0	1.9
12	0.0	0.0	0.0	62	0.0	0.0	0.0
13	2.2	2.2	2.2	63	1.2	1.2	1.2
14	0.0	0.0	0.0	64	0.0	0.0	0.0
15	2.3	2.3	2.2	65	1.5	1.8	1.8
16	0.2	5.2	5.1	66	5.2	5.2	5.2
17	2.3	2.3	2.2	67	0.2	0.2	0.2
18	5.2	5.2	5.1	68	4.7	4.7	4.7
19	4.1	4.1	4.0	69	4.5	4.7	4.5
20	0.0	0.0	0.0	70	2.8	5.2	2.8
21	1.9	3.2	3.2	71	0.0	3.3	3.3
22	2.6	2.6	2.6	72	5.0	5.0	5.0
23	2.6	2.6	2.6	73	1.9	2.2	2.2
24	5.0	5.0	5.0	74	2.6	2.5	2.5
25	3.5	0.1	0.1	75	0.7	2.4	2.4
26	1.3	1.5	1.5	76	0.8	2.4	2.4
27	2.1	2.1	2.1	77	1.6	1.5	1.5
28	4.0	4.1	4.0	78	3.4	2.6	2.5
29	2.6	2.6	2.7	79	1.9	1.9	2.5
30	0.4	0.0	0.0	80	0.9	0.9	4.2
31	1.4	1.3	1.2	81	1.1	1.1	1.1
32	4.7	4.7	4.7	82	0.0	0.0	0.0
33	2.9	3.0	2.9	83	2.6	0.7	0.0
34	0.0	0.0	0.0	84	2.7	0.6	0.0
35	2.0	2.0	2.0	85	0.0	0.0	1.0
36	3.0	3.0	3.0	86	0.4	0.4	0.0
37	1.9	2.0	1.9	87	0.7	1.9	2.5
38	2.1	2.1	2.0	88	0.7	1.9	0.7
39	9.5	9.5	9.4	89	0.7	1.9	0.7
40	0.0	0.0	0.0	90	0.7	1.9	0.7
41	0.0	0.0	0.0	91	5.2	5.2	4.1
42	5.1	5.2	5.1	92	0.0	0.0	0.0
43	2.4	2.4	2.4	93	1.9	1.9	4.3
44	4.1	0.0	0.0	94	1.9	1.9	4.3
45	2.5	2.5	2.5	95	1.9	1.9	4.3
46	2.6	2.7	4.6	96	1.9	1.9	4.4
47	4.2	4.2	4.2	97	0.0	0.0	0.0
48	2.9	3.0	3.0	98	2.3	2.3	2.3
49	3.8	3.0	3.0	99	2.3	2.3	2.3
50	1.9	1.9	1.9	100	2.3	2.3	2.4

HI-FI BLOCK			
PIN MODE	PLAY	STOP	REC
IC501	LA72646M		
1	0.0	0.0	0.0
2	2.5	2.5	2.5
3	9.5	9.5	9.5
4	2.5	2.5	2.5
5	4.9	4.9	4.8
6	2.0	1.9	1.9
7	0.0	0.0	0.0
8	0.0	0.0	0.0
9	0.0	0.0	0.0
10	0.0	0.0	0.0
11	0.0	0.0	0.0
12	4.8	4.8	4.8
13	2.6	2.0	2.0
14	2.5	2.5	2.5
15	4.8	4.9	4.8
16	2.5	2.5	2.5
17	0.0	0.3	0.3
18	1.3	0.0	0.0
19	2.6	2.5	2.5
20	2.2	2.5	2.5
21	2.6	2.5	2.5
22	2.6	2.5	2.5
23	4.2	0.0	0.0
24	1.9	0.1	3.9
25	0.0	0.0	0.0
26	1.9	0.1	3.9
27	1.9	0.1	3.9
28	0.0	0.5	2.1
29	0.0	0.0	0.0
30	2.1	4.1	3.9
31	2.3	4.1	3.9
32	4.8	4.4	4.8
33	2.2	0.4	0.0
34	3.5	2.5	2.5
35	2.5	0.0	0.0
36	2.7	4.9	4.8
37	0.0	0.4	0.0
38	4.4	4.6	4.5
39	4.5	4.6	4.5
40	2.8	0.0	2.3
41	2.6	2.5	2.5
42	2.5	2.5	2.5
43	2.6	2.5	2.5
44	2.6	2.5	2.5
45	0.2	0.0	0.0
46	4.8	4.9	0.4
47	2.5	2.5	5.0
48	2.6	2.0	2.0
49	0.0	0.0	0.0
50	0.0	0.0	0.0

AV-LINK BLOCK			
PIN MODE	PLAY	STOP	REC
IC750			
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0
5	0.0	0.0	0.0
6	0.0	0.0	0.0
7	0.0	0.0	0.0
8	0.0	0.0	0.0
9	0.0	0.0	0.0
10	5.1	5.1	5.1
11	5.1	0.0	0.0
12	0.0	0.0	0.0
13	0.0	0.0	0.0
14	3.0	3.0	3.1
15	2.7	2.7	2.8
16	0.0	0.0	0.0
17	5.1	5.1	5.1
18	5.1	5.1	5.1
19	0.0	0.0	0.0
20	5.1	5.1	5.1
21	0.0	0.0	0.0
22	0.9	0.7	0.3
23	5.1	5.1	5.1
24	5.0	5.1	5.0
25	1.4	1.3	1.6
26	2.3	2.3	2.5
27	2.3	2.1	5.1
28	5.1	5.1	5.1
29	0.0	0.0	0.0
30	0.0	0.0	0.0
31	0.0	0.0	0.0
32	5.0	5.1	5.0
33	0.0	0.0	0.2
34	0.0	0.0	0.0
35	0.0	0.0	0.0
36	0.0	0.0	0.0
37	0.0	0.0	0.0
38	5.1	5.1	5.1
39	0.0	0.0	0.0
40	0.0	0.0	0.0
41	0.0	0.0	0.0
42	0.0	0.0	0.0
43	0.0	0.0	0.0
44	0.0	0.0	0.0

A2-NICAM BLOCK			
PIN MODE	PLAY	STOP	REC
IC701	MSP4317D		
1	5.1	5.1	5.1
2	1.5	1.5	1.5
3	1.5	0.0	1.5
4	0.0	0.0	0.0
5	2.4	2.4	2.4
6	2.3	2.3	2.2
7	1.5	1.5	0.8
8	0.0	0.0	0.0
9	0.0	0.0	0.0
10	0.0	0.0	0.0
11	5.1	5.1	5.1
12	4.7	4.8	4.5
13	4.7	4.6	4.5
14	2.5	2.5	2.5
15	2.5	2.5	2.5
16	0.0	5.0	5.0
17	0.8	3.2	0.2
18	1.6	3.2	0.3
19	5.1	5.1	5.1
20	0.0	0.0	0.0
21	1.0	3.1	0.2
22	5.1	5.1	5.1
23	0.0	0.0	0.0
24	0.0	0.0	0.0
25	0.0	0.0	0.0
26	0.1	0.1	0.1
27	0.1	0.1	0.1
28	0.1	0.1	0.1
29	0.0	0.0	0.0
30	3.8	3.8	0.4
31	3.8	3.8	0.0
32	0.0	0.0	0.0
33	8.7	8.8	8.8
34	7.8	7.8	7.8
35	0.0	0.0	0.0
36	3.8	3.8	3.8
37	0.1	0.0	0.0
38	0.0	0.4	0.0
39	0.0	0.0	0.0
40	3.8	3.8	3.8
41	3.8	3.8	3.8
42	2.6	2.6	2.6
43	3.8	3.8	3.8
44	0.0	0.0	0.0

SECAM BLOCK			
PIN MODE	PLAY	STOP	REC
IC3S01	LA70100M		
1	0.0	0.0	0.0
2	2.4	0.1	2.4
3	3.4	0.4	3.4
4	0.0	0.0	0.0
5	0.0	0.0	0.0
6	3.7	0.1	4.7
7	0.0	0.0	0.0
8	0.0	0.0	0.0
9	3.1	0.0	3.1
10	5.1	0.1	5.1
11	2.5	0.1	2.2
12	2.0	0.0	3.2
13	4.0	0.0	4.0
14	2.6	0.0	2.6
15	2.0	0.3	3.1
16	3.2	0.3	3.2
17	5.2	0.0	0.0
18	3.4	0.0	0.1
19	2.2	0.1	2.2
20	2.3	0.0	0.0
21	2.0	0.3	2.0
22	0.0	0.0	0.0
23	5.1	0.1	5.1
24	5.1	0.1	5.1
25	3.0	0.0	3.2
26	2.9	0.0	3.2
27	2.1	0.0	2.1
28	0.1	0.1	0.2
29	1.6	0.0	0.1
30	2.1	0.0	2.1

VPS/PDC BLOCK			
PIN MODE	PLAY	STOP	REC
IC6P01	LC747XX		
1	0.0	0.0	0.0
2	2.7	2.7	2.7
3	5.1	5.1	5.1
4	5.1	5.1	5.1
5	4.6	4.7	4.5
6	2.5	2.5	2.5
7	2.6	2.6	2.8
8	5.1	0.0	0.0
9	4.1	4.4	0.0
10	5.1	5.1	5.1
11	5.2	5.2	5.1
12	5.1	5.1	5.1
13	2.2	2.3	2.3
14	2.2	2.3	2.3
15	0.0	0.0	0.0
16	0.9	1.0	1.0
17	0.0	0.0	0.0
18	5.1	5.1	5.1
19	1.9	1.7	1.7
20	0.0	0.0	0.0
21	1.9	1.8	1.8
22	0.6	1.0	1.1
23	5.1	5.1	5.1
24	3.0	3.1	3.1
25	2.5	2.5	2.5
26	4.6	5.0	5.0
27	4.6	4.6	4.7
28	3.7	3.7	3.7
29	5.1	5.1	5.1
30	5.1	5.1	5.1

5. Alignment and Adjustment

5-1 Reference

- 1) X-Point (Tracking center) adjustment, "Head switching adjustment" and "NVRAM option setting" can be adjusted with remote control.
- 2) When replacing the Micom (IC601) and NVRAM (IC605 ; EEPROM) be sure to adjust the "Head switching adjustment" and "NVRAM option setting".
- 3) When replacing the cylinder ass'y, be sure to adjust the "X-Point" and "Head switching adjustment".
- 4) How to adjustment.
 - Press the "TEST" button on Main PCB/Function PCB to set the adjustment mode.
 - If the corresponding adjustment button is pressed, the adjustment is performed automatically.
 - If the adjustment is completed, be sure to turn the power off.

5-1-1 Location of adjustment button of remote control

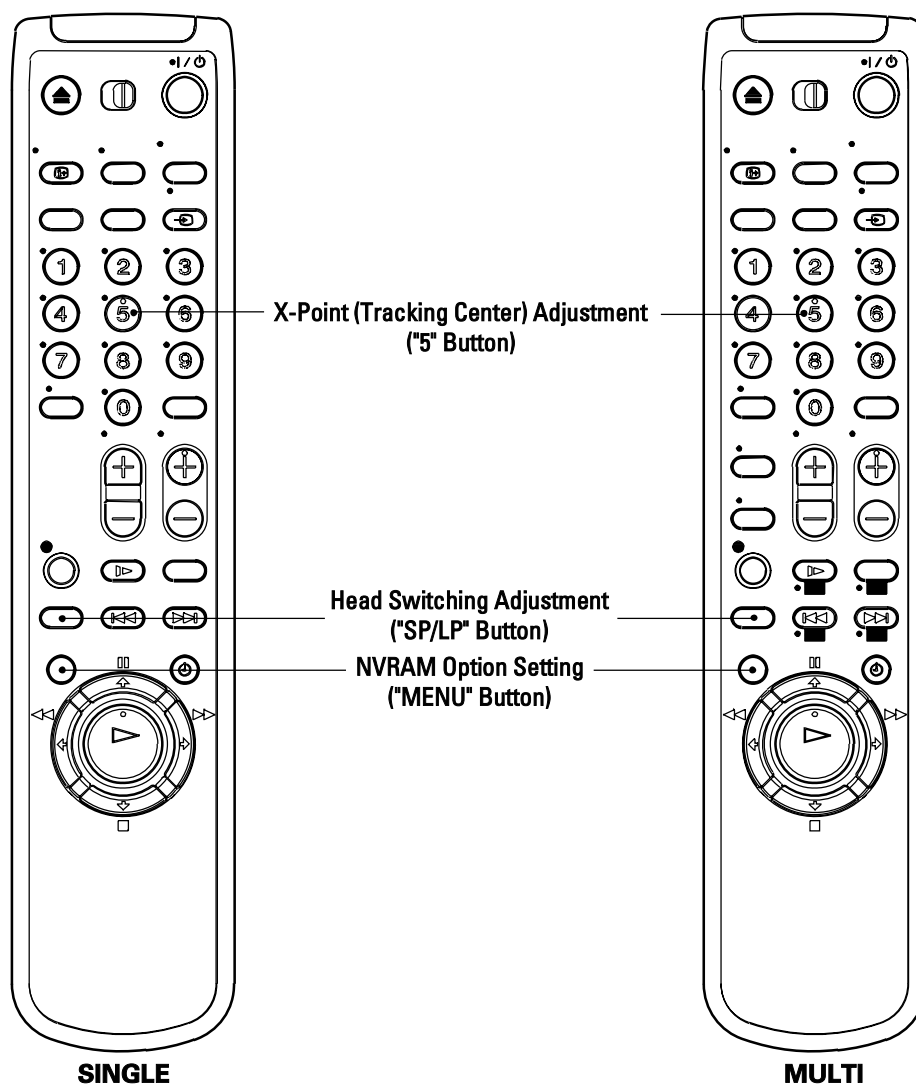


Fig. 5-1

5-1-2 Test point location for adjustment mode setting
(SLV-SE220D/SE220I/SE220G/SE220B/SE420K)

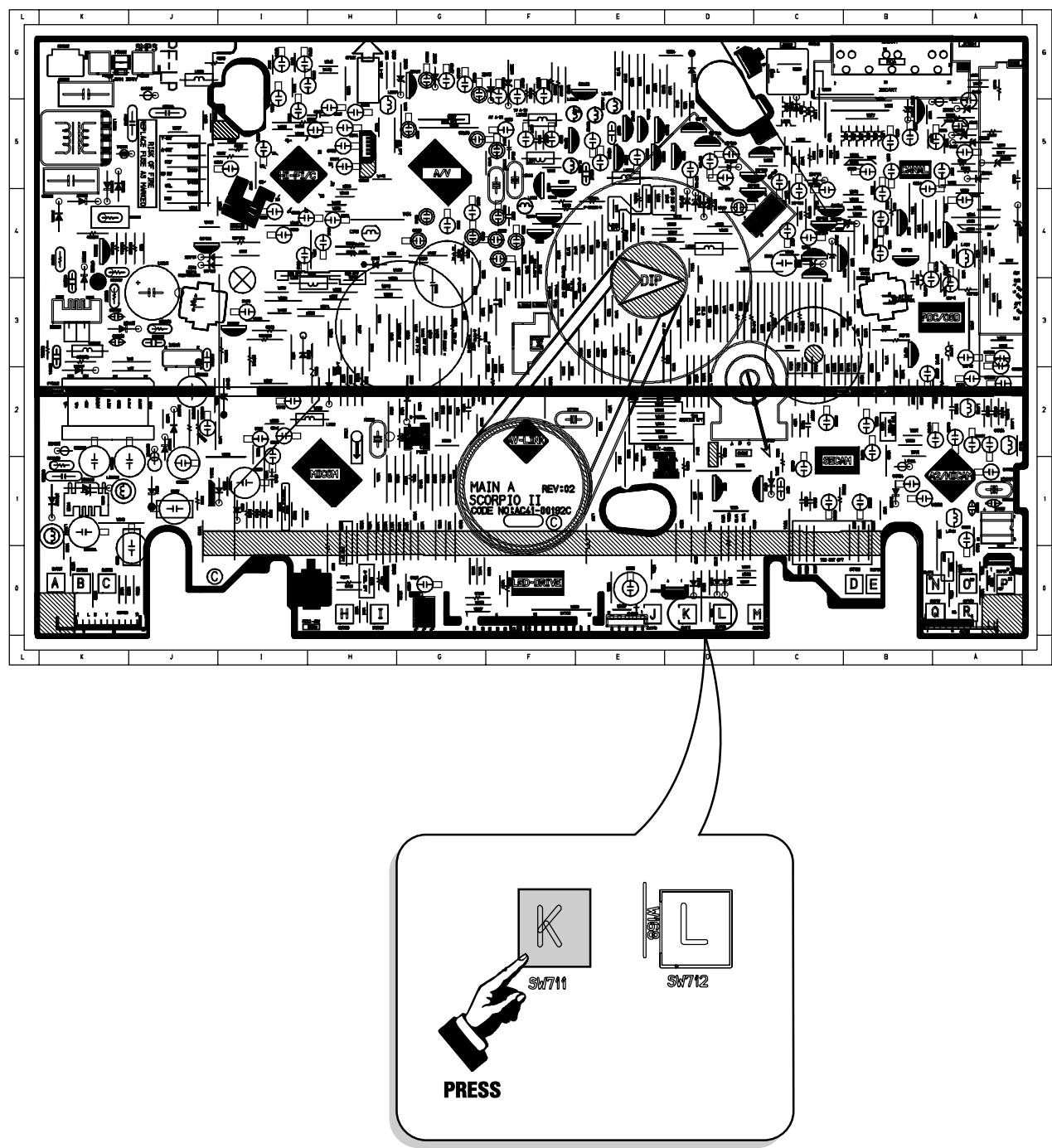


Fig. 5-2 Main PCB (Top View)

5-1-3 SW7T21 (TEST) location for adjustment mode setting
**(SLV-SE620D/SE620E/SE620B/SE620N/SE720D/SX720D/SE720E/SX720E/SE720G/SE720I/SE720B/SX727D/SE727E/SE720N/
 SX720N/SE820D/SE820E/SE820G/SE820B/SE820N)**

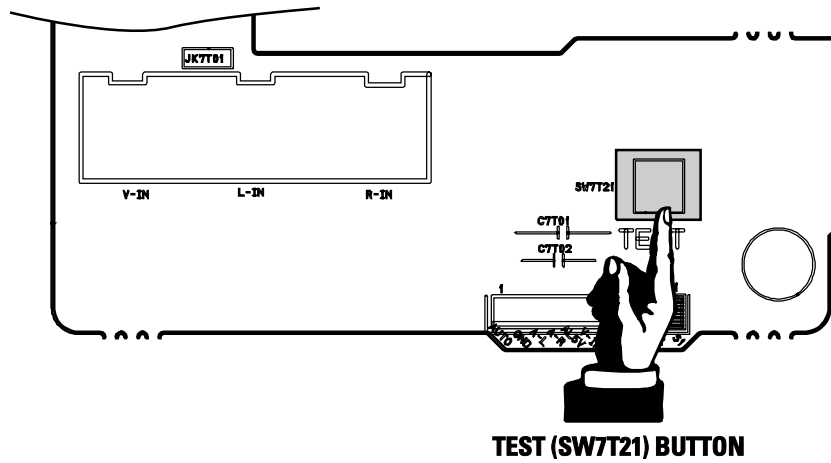


Fig. 5-3 Function PCB (Top View)

5-2 Mechanical Adjustment

Note : Refer to the Mechanical Manual for the adjustment and confirmation of Ass'y deck.

5-2-1 The number and position of test point

Test point : TP602 (H'D S/W -Trigger)
TP301 (Envelope)
TP302 (Audio output)

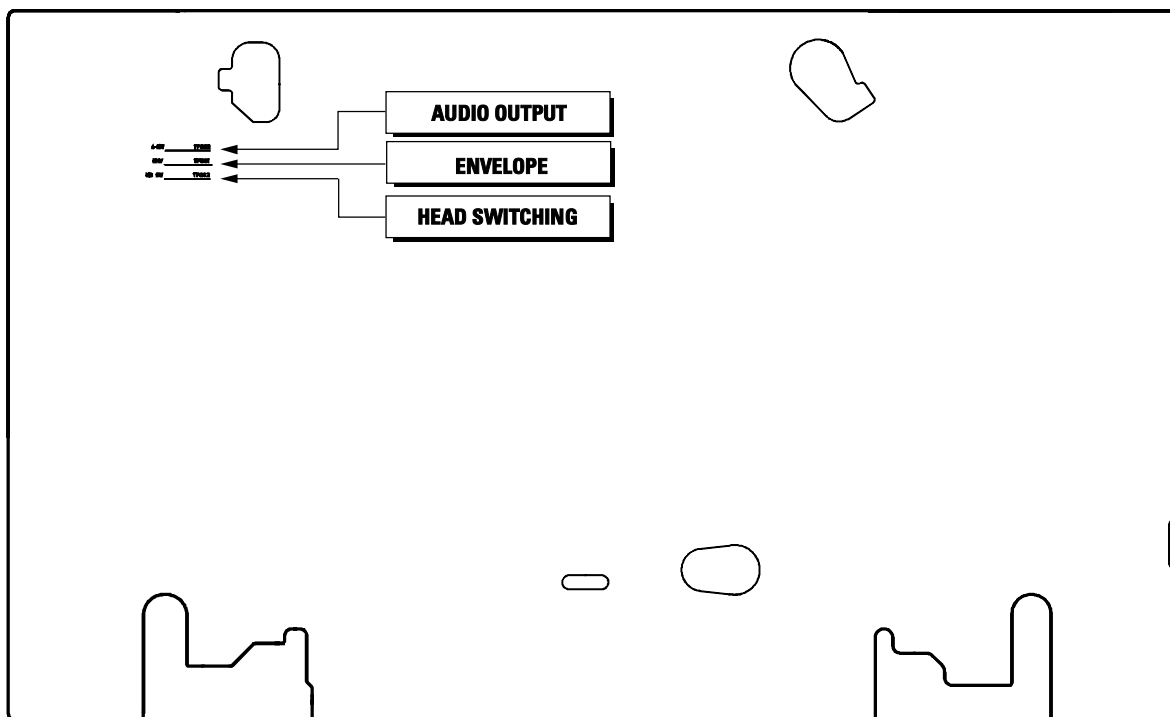


Fig. 5-4 Location of Test point (Main PCB-Top View)

5-2-2 ACE Head Position (X-Point) Adjustment (See the 5-2-1(d) ACE Head Position (X-Point) Adjustment on page 5-2 of the Mechanical Manual)

- 1) Playback the alignment tape (Color bar).
- 2) Press the "TEST" button on Main PCB/Function PCB to set the adjustment mode.
(See Fig. 5-2 and 5-3)
- 3) Press the "5" button of remote control then adjustment is operated automatically. (See Fig. 5-1)
- 4) Connect the CH-1 probe to TP301 (Envelope) the CH-2 probe to TP602 (H'D switching pulse) and then trigger to CH-1.
- 5) Insert the (-) driver into the X-Point adjustment hole and adjust it so that envelope waveform is maximum.
- 6) Turn the Power off.

5-3 Head Switching Point Adjustment

- 1) Playback the alignment tape.
- 2) Press the "TEST" button on Main PCB/Function PCB to set the adjustment mode. (See Fig. 5-2 and 5-3)
- 3) Press the "SP/LP" button of remote control then adjustment is operated automatically. (See Fig. 5-1)
- 4) Turn the Power off.

5-4 NVRAM Option Setting

- 1) NVRAM Option is adjusted at production line basically.
 - 2) In case Micom (IC601) and NVRAM (IC605 ; EEPROM) is replaced, be sure to set the corresponding option number of the required model.
(If the option is not set, the unit is not operated.)
- 1) Press the "TEST" button on Main PCB/Function PCB to set the adjustment mode. (See Fig. 5-2 and 5-3)
 - 2) Press the "MENU" button on the remote control about 5 seconds then option setting display is appeared.
(See Fig. 5-5 and 5-6)
 - 3) Select the option number (See Table 5-1) of corresponding model with "FF/REW/STOP/PAUSE" button on the remote control.
 - 4) If selecting the option number is completed, press the "OK (PLAY)" button of remote control.
(If "OK (PLAY)" button is pressed, the selected number is changes reversed color. ; See Fig. 5-5)
 - 5) Press the "MENU" button of remote control again to store the option number.
("PLEASE WAIT" is displayed for a second as shown Fig. 5-6 and this setting is completed.)
 - 6) Turn the Power off.

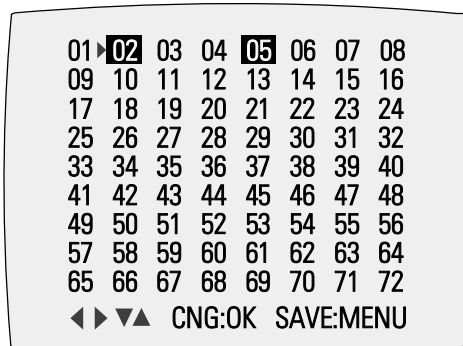


Fig. 5-5

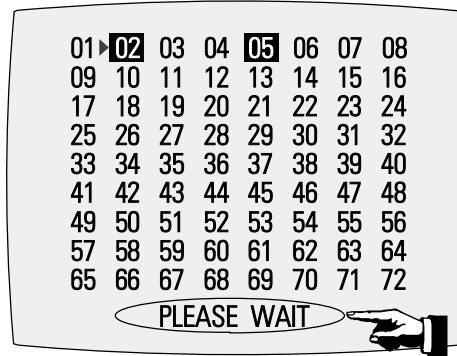


Fig. 5-6

<Table 5-1>

MODELS	OPTION NUMBER
SLV-SE220D	2, 4, 5, 11, 13, 14, 34, 35, 38, 40, 42, 45, 47, 49, 60, 61, 63, 69, 72
SLV-SE220I	3, 4, 5, 10, 11, 13, 14, 25, 26, 33, 34, 35, 38, 40, 43, 45, 47, 49, 60, 61, 63, 69, 72
SLV-SE220G	3, 4, 5, 10, 11, 13, 14, 27, 33, 34, 35, 38, 40, 41, 45, 47, 49, 60, 61, 63, 69, 72
SLV-SE220B	2, 4, 5, 11, 13, 14, 20, 21, 26, 33, 34, 35, 36, 38, 40, 45, 47, 49, 60, 61, 63, 69, 72
SLV-SE420K	9, 10, 11, 13, 14, 20, 36, 38, 42, 45, 47, 49, 54, 60, 61, 63, 69, 72
SLV-SE620D	6, 7, 9, 10, 12, 13, 34, 35, 38, 42, 45, 47, 49, 51, 60, 61, 63, 69, 72
SLV-SE620D	6, 7, 8, 9, 10, 11, 12, 13, 14, 34, 35, 38, 42, 45, 47, 49, 51, 60, 61, 63, 69, 72
SLV-SE620B	6, 7, 8, 9, 10, 11, 12, 13, 14, 20, 21, 26, 33, 34, 35, 36, 38, 45, 47, 49, 51, 60, 61, 63, 69, 72
SLV-SE620N	6, 7, 8, 9, 10, 12, 13, 20, 36, 38, 42, 45, 47, 49, 51, 54, 60, 61, 63, 69, 72
SLV-SE720D/SX720D	2, 4, 6, 7, 9, 10, 11, 12, 13, 14, 19, 34, 35, 40, 42, 45, 47, 51, 60, 61, 63, 66, 69, 72
SLV-SE720E/SX720E	2, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 19, 34, 35, 40, 42, 45, 47, 51, 60, 61, 63, 66, 69, 72
SLV-SE720G	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 19, 27, 33, 34, 35, 40, 41, 45, 47, 51, 60, 61, 63, 66, 69, 72
SLV-SE720I	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 19, 25, 26, 33, 34, 35, 40, 43, 45, 47, 51, 60, 61, 63, 66, 69, 72
SLV-SE720B	2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 19, 20, 21, 26, 33, 34, 35, 36, 40, 45, 47, 51, 60, 61, 63, 66, 69, 72
SLV-SX727D	2, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 19, 32, 34, 35, 40, 42, 45, 47, 51, 60, 61, 63, 66, 69, 72
SLV-SE727E	2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 19, 32, 34, 35, 40, 42, 45, 47, 51, 60, 61, 63, 66, 69, 72
SLV-SE720N/SX720N	2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 19, 20, 36, 42, 45, 47, 51, 54, 60, 61, 63, 66, 69, 72
SLV-SE820D	2, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 19, 23, 29, 32, 34, 35, 40, 42, 45, 47, 48, 49, 50, 60, 61, 63, 64, 66, 69, 72
SLV-SE820E	2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 19, 23, 29, 32, 34, 35, 40, 42, 45, 47, 48, 49, 50, 60, 61, 63, 64, 66, 69, 72
SLV-SE820G	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 19, 23, 27, 29, 32, 33, 34, 35, 40, 41, 45, 47, 48, 49, 50, 60, 61, 63, 64, 66, 69, 72
SLV-SE820B	2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 19, 20, 21, 23, 26, 29, 32, 33, 34, 35, 36, 40, 45, 47, 48, 49, 50, 60, 61, 63, 64, 66, 69, 72
SLV-SE820N	2, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 19, 20, 23, 29, 32, 36, 42, 45, 47, 48, 49, 50, 54, 60, 61, 63, 64, 66, 69, 72



6. Repair Parts List

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6-1-2 Instrument Assembly (Hi-Fi Models) - - - - -	6-3
6-1-3 Mechanical Parts (Top Side) - - - - -	6-4
6-1-4 Mechanical Parts (Bottom Side) - - - - -	6-5
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6-1 Exploded Views

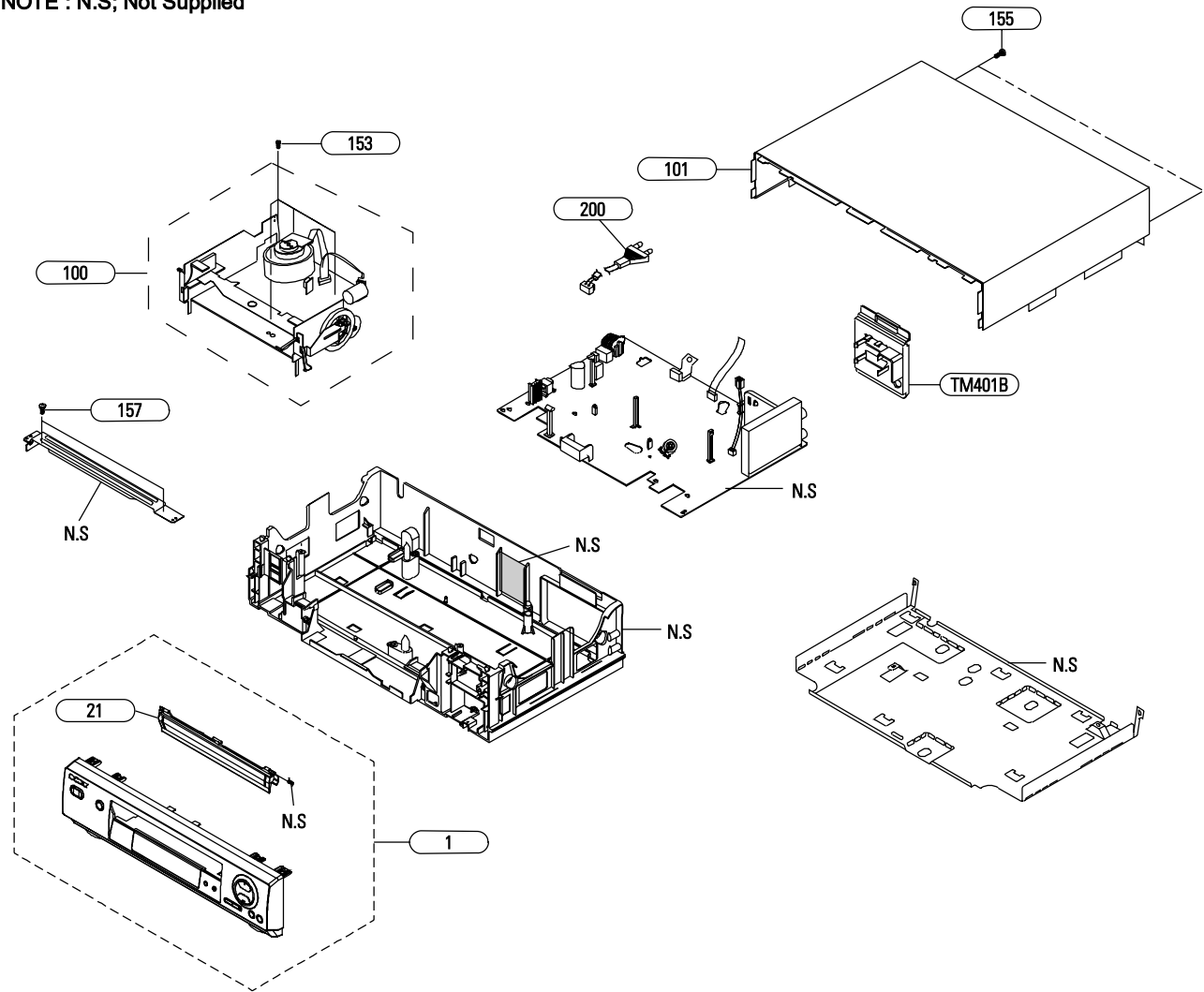
NOTE:



- XX, -X mean standardized parts, so they may have some differences 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.
- The mechanical parts with no reference number in the exploded views are not supplied.

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

6-1-1 Instrument Assembly (Mono Models)(SE220/SE420)

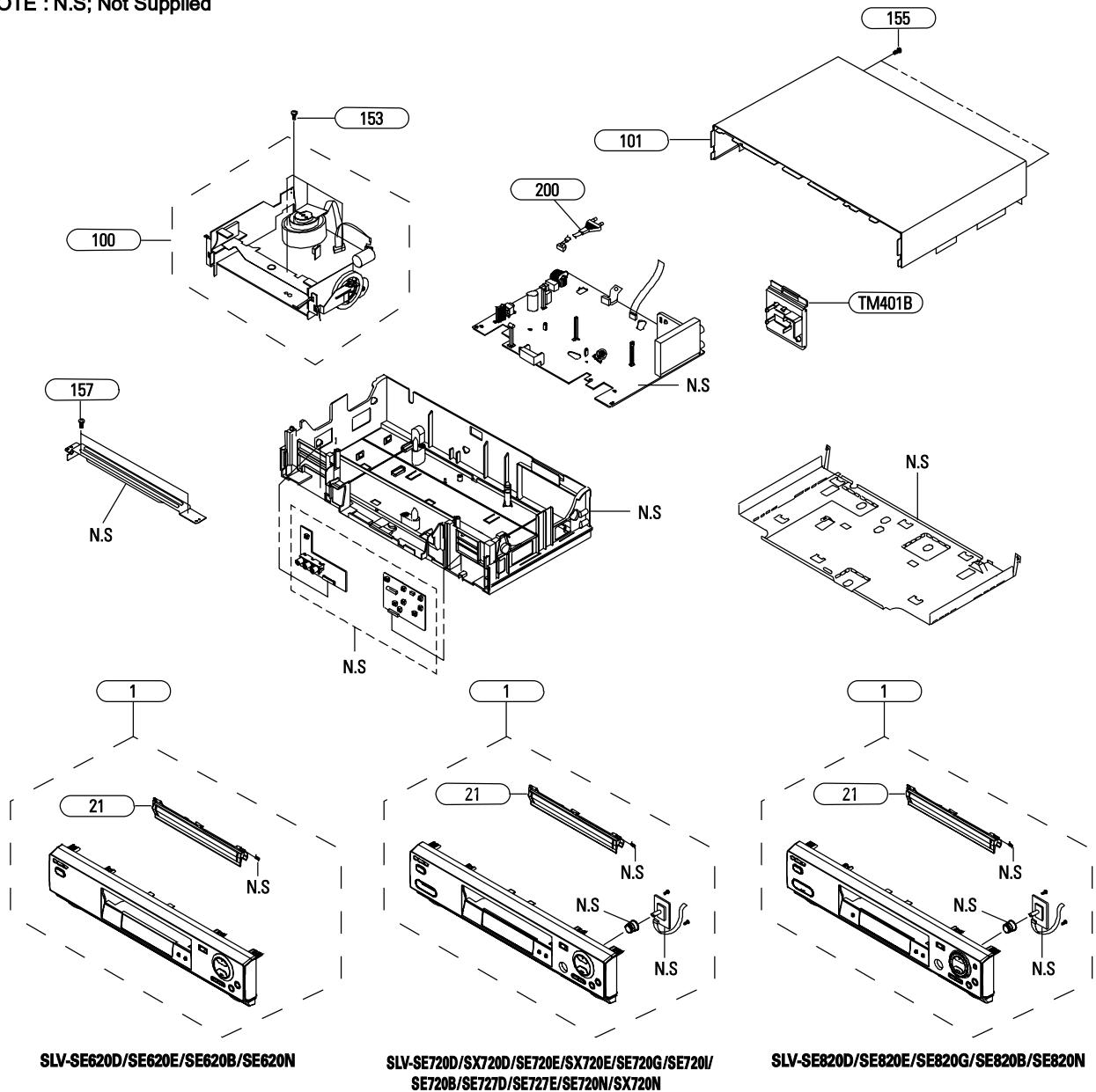
NOTE : N.S; Not Supplied



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	3-075-060-01	ASSY PANEL FRONT (SE420)		155	7-685-646-11	SCREW-TAPTITE	
1	3-075-061-01	ASSY PANEL FRONT (SE220:G,I)		157	7-685-548-19	SCREW-TAPTITE	
1	3-075-062-01	ASSY PANEL FRONT (SE220:B)		 200	1-823-023-11	POWER CORD (SE220:B,D/SE420)	
1	3-075-063-01	ASSY PANEL FRONT (SE220:D)		 200	1-823-025-11	POWER CORD (SE220:G,I)	
21	3-075-705-01	DOOR-CASSETTE (SE220/SE420)		TM401B	1-693-553-11	TM BLOCK (SE220:B)	
100	3-709-670-01	ASSY-DECK		TM401B	1-693-584-11	TM BLOCK (SE220:D)	
101	3-075-020-01	CABINET-TOP (SE220/SE420)		TM401B	1-693-585-11	TM BLOCK (SE220:G)	
153	7-685-661-11	SCREW-BH		TM401B	1-693-589-11	TM BLOCK (SE220:I/SE420)	

6-1-2 Instrument Assembly (Hi-Fi Models)

NOTE : N.S; Not Supplied

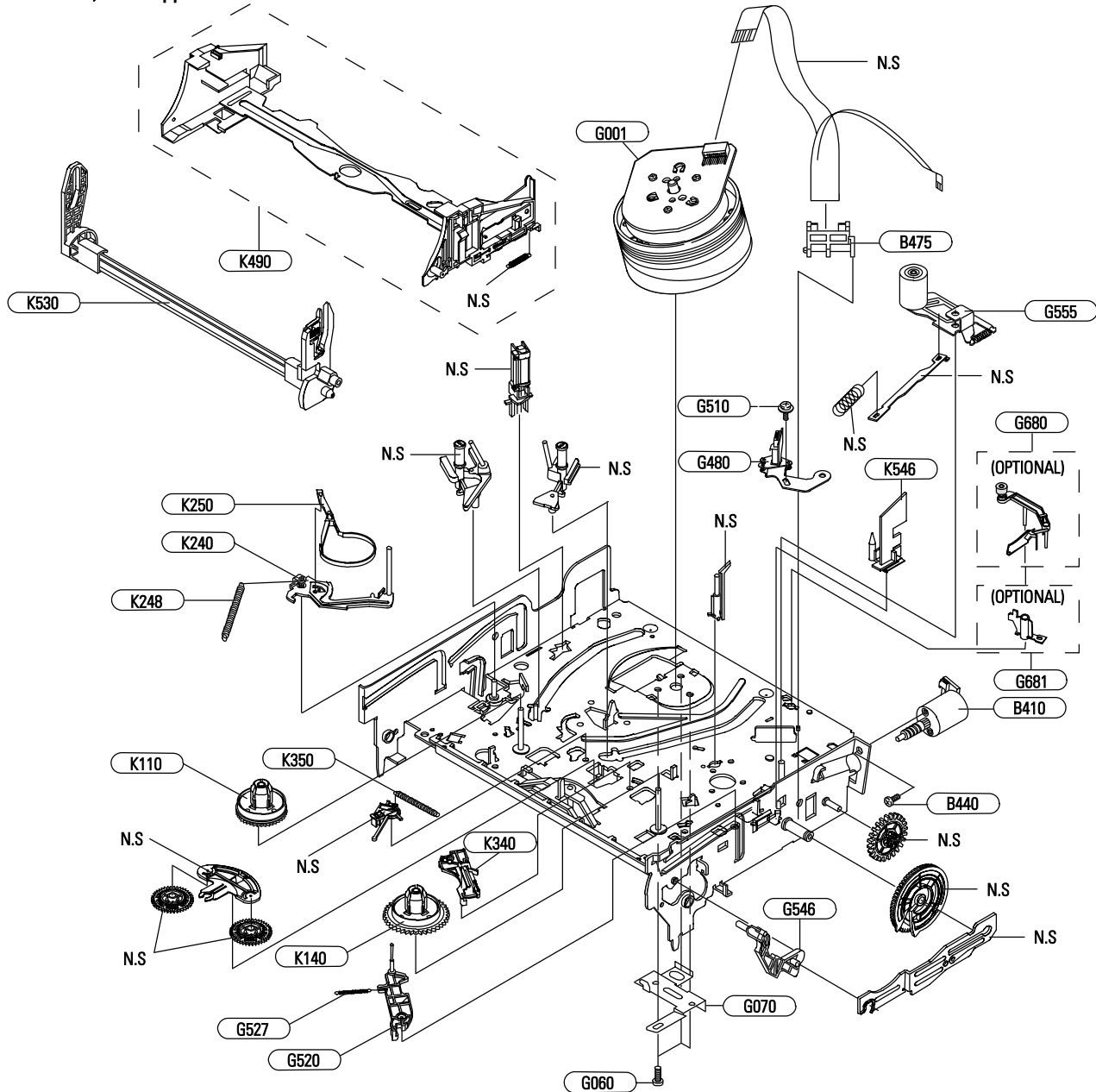


Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	3-075-049-01	ASSY-PANEL FRONT (SE820:G)		100	3-709-670-01	ASSY-DECK	
1	3-075-050-01	ASSY-PANEL FRONT (SE820:B)		101	3-075-019-01	CABINET-TOP (SE620/SE720/SE727/SE820)	
1	3-075-051-01	ASSY-PANEL FRONT (SE820:D,E,N)		101	3-075-019-11	CABINET-TOP (SX720/SX727)	
1	3-075-052-01	ASSY-PANEL FRONT (SE720:G,I,B)		153	7-685-661-11	SCREW-BH	
1	3-075-054-01	ASSY-PANEL FRONT (SE720:D,E,N)		155	7-685-646-11	SCREW-TAPTITE	
1	3-075-055-01	ASSY-PANEL FRONT (SE727)		157	7-685-548-19	SCREW-TAPTITE	
1	3-075-056-01	ASSY-PANEL FRONT (SX727)		△200	1-823-023-11	POWER CORD	
1	3-075-057-01	ASSY-PANEL FRONT (SX720)				(SE620/SE720:B,D,E,N/SE727/SE820:B,D,E,N/SX720/SX727)	
1	3-075-058-01	ASSY-PANEL FRONT (SE620:B)		△200	1-823-025-11	POWER CORD (SE720:G,I/SE820:G)	
1	3-075-059-01	ASSY-PANEL FRONT (SE620:D,E,N)		TM401B	1-693-553-11	TM BLOCK (SE620:B/SE720:B/SE820:B)	
21	3-075-918-01	DOOR-CASSETTE		TM401B	1-693-585-11	TM BLOCK (SE720:G/SE820:G)	
		(SE620/SE720:B,D,E,N/SE727/SE820/SX720/SX727)		TM401B	1-693-589-11	TM BLOCK	
21	3-075-919-01	DOOR-CASSETTE (SE720:G,I)				(SE620:D,E,N/SE720:D,E,I,N/SE727/SE820:D,E,N/SX720/SX727)	

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

6-1-3 Mechanical Parts (Top Side)

NOTE : N.S.; Not Supplied

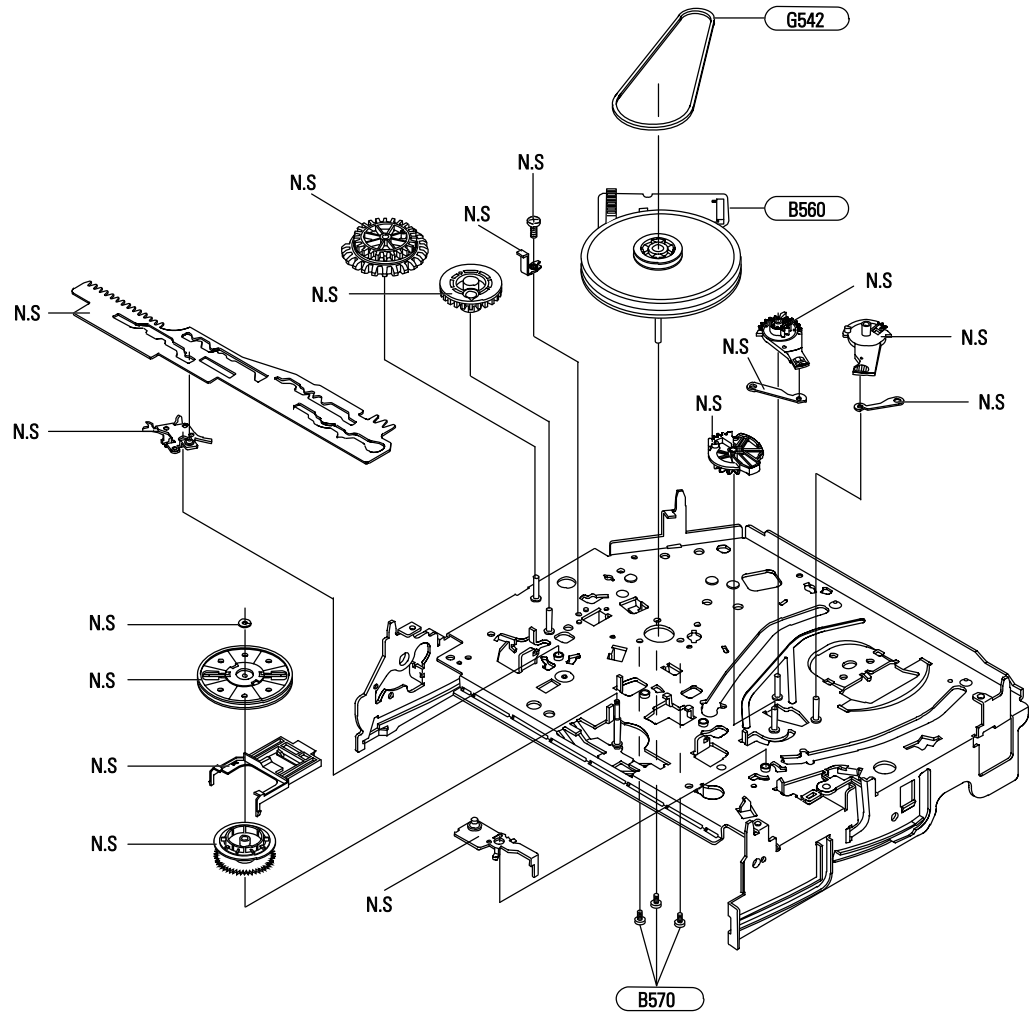


Ref. No.	Part No.	Description	Remarks
B410	1-796-434-11	MOTOR-LOADING ASSY	
B440	7-682-144-01	SCREW, MACHINE	
B475	1-796-433-11	DAMPER-CAPSTAN	
G001	1-804-707-11	ASSY CYLINDER (SE220:B,D)	
G001	1-804-708-11	ASSY CYLINDER (SE220:G,I)	
G001	1-804-709-11	ASSY CYLINDER (SE420)	
G001	1-804-710-11	ASSY CYLINDER (SE620:D,E,N/SE720:D,E,G,I/SE727/SE820:D,E,G,N/SX720/SX727)	
G001	1-804-711-11	ASSY CYLINDER (SE620:B/SE720:B/SE820:B)	
G060	7-682-647-01	SCREW-ASS'Y MACH (+M3X6)	
G070	3-067-796-01	PLATE-GROUND DECK	
G480	3-709-671-01	ASSY-HEAD ACE	
G510	7-621-759-35	SCREW-ASS'Y TAPT	
G520	3-067-779-01	LEVER-#9 GUIDE ASS'Y	
G527	3-067-780-01	SPRING ETC-GUIDE 9	

Ref. No.	Part No.	Description	Remarks
G546	3-075-704-01	LEVER-FL. DOOR	
G555	3-067-784-01	LEVER-UNIT PINCH ASS'Y	
G680	3-075-021-01	LEVER-HEAD CLEANER ASS'Y	(EXCEPT SE220/SE420)
G681	3-075-022-01	SLEEVE-HEAD CLEANER	(EXCEPT SE220/SE420)
K110	3-075-046-01	REEL-DISK S	
K140	3-075-047-01	REEL-DISK T	
K240	3-067-781-01	LEVER-TENSION ASS'Y	
K248	3-067-782-01	SPRING ETC-TENSION LEVER	
K250	3-067-783-01	BAND-BRAKE ASS'Y	
K340	3-067-785-01	LEVER-T. BRAKE ASS'Y	
K350	3-067-786-01	SPRING ETC-BRAKE	
K490	3-067-788-01	HOLDER-FL. CASS.	
K546	3-067-789-01	GUIDE-CASS. DOOR	

6-1-4 Mechanical Parts (Bottom Side)

NOTE : N.S; Not Supplied



Ref. No.	Part No.	Description	Remarks
B560	1-796-432-11	MOTOR-CAPSTAN	
B570	7-685-133-11	SCREW-CAPSTAN	
G542	3-067-790-01	BELT-PULLEY	

MAIN

6-2 Electrical Parts List

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -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.
- CAPACITORS:
uF: μ F

- COILS
uH: μ H
- 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...

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

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

Ref. No.	Part No.	Description	Remarks			
		< FERRITE BEAD >				
BD1SD1	1-400-085-11	INDUCTOR				
BD1SR1	1-400-086-11	CORE-FERRITE BEAD				
BD1SS1	1-400-085-11	INDUCTOR				
BD1SS2	1-400-085-11	INDUCTOR				
		< CAPACITOR >				
C1P102	1-126-437-11	C-AL	47uF	20%	25V	
C1P103	1-126-458-61	C-AL	1uF	20%	50V	
C1P105	1-126-437-11	C-AL	47uF	20%	25V	
C1P106	1-126-437-11	C-AL	47uF	20%	25V	
C1P109	1-126-458-61	C-AL	1uF	20%	50V	
		(EXCEPT SE220/SE420K)				
C1P120	1-126-437-11	C-AL	47uF	20%	25V	
C1SD03	1-165-557-11	C-CERAMIC	2.2nF	20%	400V	
C1SD04	1-165-557-11	C-CERAMIC	2.2nF	20%	400V	
C1SD11	1-165-577-11	C-AL	47uF	20%	400V	
C1SD12	1-165-574-11	C-FILM, MPEF	10nF	10%	630V	
C1SD13	1-165-567-11	C-FILM, PEF	1.2nF	10%	50V	
C1SR14	1-165-571-11	C-FILM, PEF	4.7nF	5%	50V	
C1SS01	1-165-573-11	C-FILM, MPEF	100nF	20%	275V	
C1SS02	1-165-573-11	C-FILM, MPEF	100nF	20%	275V	
C1SS03	1-165-557-11	C-CERAMIC	2.2nF	20%	400V	
		(SE220/SE420K)				
C1SS32	1-126-970-11	C-AL	330UF	20%	50V	
C1SS33	1-126-940-11	C-AL	330UF	20%	25V	
C1SS34	1-126-940-11	C-AL	330UF	20%	25V	
C1SS35	1-126-926-11	C-AL	1000UF	20%	10V	
C1SS36	1-126-926-11	C-AL	1000uF	20%	10V	
C1SS39	1-136-497-11	C-FILM, PEF	100nF	5%	50V	
C1SS41	1-126-925-11	C-AL	470uF	20%	10V	
		(SE720/SE727E/SX720/SX727D/SE820)				
C317	1-126-458-61	C-AL	1uF	20%	50V	
C318	1-126-458-61	C-AL	1uF	20%	50V	
C321	1-161-494-11	C-CERAMIC	22nF	+80-20%	25V	
C322	1-126-458-61	C-AL	1uF	20%	50V	
C325	1-126-437-11	C-AL	47uF	20%	25V	
C326	1-126-458-61	C-AL	1uF	20%	50V	
C331	1-216-295-11	R-CHIP	0	5%	1/10W	
		(SE220D,G,I/SE620D,E/SE720D,E,G,I/SX720D,E/SX727D/SE727E/SE820D,E,G)				
C333	1-126-109-11	C-AL	10uF	20%	16V	

Ref. No.	Part No.	Description	Remarks			
C338	1-161-494-11	C-CERAMIC	22nF	+80-20%	25V	
C339	1-126-109-11	C-AL	10uF	20%	16V	
C341	1-126-437-11	C-AL	47uF	20%	25V	
C343	1-165-319-11	C-CERAMIC, CHIP	1000nF	+80-20%	16V	
C347	1-165-319-11	C-CERAMIC, CHIP	1000nF	+80-20%	16V	
C349	1-165-319-11	C-CERAMIC, CHIP	1000nF	+80-20%	16V	
C351	1-126-437-11	C-AL	47uF	20%	25V	
C352	1-126-458-61	C-AL	1uF	20%	50V	
C353	1-126-458-61	C-AL	1uF	20%	50V	
C354	1-126-437-11	C-AL	47uF	20%	25V	
C356	1-163-251-11	C-CERAMIC, CHIP	0.1nF	5%	50V	(SE820)
C380	1-161-494-11	C-CERAMIC	22nF	+80-20%	25V	
C384	1-115-339-11	C-CERAMIC, CHIP	100nF	+80-20%	50V	
		(SE720/SE727E/SX720/SX727D/SE820)				
C3A02	1-126-435-71	C-AL	22uF	20%	16V	
		(SE720/SE727E/SX720/SX727D/SE820)				
C3A12	1-126-437-11	C-AL	47uF	20%	25V	
C3A14	1-163-267-11	C-CERAMIC, CHIP	0.47nF	5%	50V	
C3A17	1-126-109-11	C-AL	10uF	20%	16V	
C3A30	1-126-437-11	C-AL	47uF	20%	25V	
C3A40	1-126-109-11	C-AL	10uF	20%	16V	
C3A41	1-126-458-61	C-AL	1uF	20%	50V	
C3D04	1-163-267-11	C-CERAMIC, CHIP	0.47nF	5%	50V	(SE820)
C3S02	1-126-458-61	C-AL	1uF	20%	50V	(SE220B/SE620B/SE720B/SE820B)
C3S04	1-126-458-61	C-AL	1uF	20%	50V	(SE220B/SE620B/SE720B/SE820B)
C3S06	1-126-456-61	C-AL	470nF	20%	50V	(SE220B/SE620B/SE720B/SE820B)
C3S09	1-126-456-61	C-AL	470nF	20%	50V	(SE220B/SE620B/SE720B/SE820B)
C3S10	1-126-437-11	C-AL	47uF	20%	25V	(SE220B/SE620B/SE720B/SE820B)
C401	1-126-925-11	C-AL	470uF	20%	10V	
C402	1-163-033-11	C-CERAMIC, CHIP	22nF	10%	50V	
C403	1-104-660-11	C-AL	47uF	20%	16V	(SE720/SE727E/SX720/SX727D/SE820)
C407	1-104-660-11	C-AL	47uF	20%	16V	(SE720/SE727E/SX720/SX727D/SE820D,E,G,N)

Ref. No.	Part No.	Description	Remarks
C4N02	1-126-109-11	C-AL 10uF 20% 16V (EXCEPT SE220/SE420K)	
C4N07	1-163-267-11	C-CERAMIC, CHIP 0.47nF 5% 50V (EXCEPT SE220/SE420K)	
C4N09	1-126-109-11	C-AL 10uF 20% 16V (EXCEPT SE220/SE420K)	
C4N10	1-126-109-11	C-AL 10uF 20% 16V (EXCEPT SE220/SE420K)	
C4N11	1-126-461-61	C-AL 3.3uF 20% 50V (EXCEPT SE220/SE420K)	
C4N14	1-126-109-11	C-AL 10uF 20% 16V (EXCEPT SE220/SE420K)	
C4N16	1-104-660-11	C-AL 47uF 20% 16V (SE720/SE727E/SX720/SX727D/SE820)	
C4N17	1-163-267-11	C-CERAMIC, CHIP 0.47nF 5% 50V (EXCEPT SE220/SE420K)	
C4N18	1-163-267-11	C-CERAMIC, CHIP 0.47nF 5% 50V (EXCEPT SE220/SE420K)	
C4N23	1-126-458-61	C-AL 1uF 20% 50V (EXCEPT SE220/SE420K)	
C4N24	1-126-458-61	C-AL 1uF 20% 50V (EXCEPT SE220/SE420K)	
C501	1-126-109-11	C-AL 10uF 20% 16V (EXCEPT SE220/SE420K)	
C503	1-126-435-71	C-AL 22uF 20% 16V (SE720/SE727E/SX720/SX727D/SE820)	
C504	1-126-109-11	C-AL 10uF 20% 16V (EXCEPT SE220/SE420K)	
C507	1-126-435-71	C-AL 22uF 20% 16V (SE720/SE727E/SX720/SX727D/SE820)	
C508	1-163-017-11	C-CERAMIC, CHIP 4.7nF 10% 50V (EXCEPT SE220/SE420K)	
C510	1-126-437-11	C-AL 47uF 20% 25V (EXCEPT SE220/SE420K)	
C517	1-163-017-11	C-CERAMIC, CHIP 4.7nF 10% 50V (EXCEPT SE220/SE420K)	
C518	1-126-435-71	C-AL 22uF 20% 16V (SE720/SE727E/SX720/SX727D/SE820)	
C521	1-126-109-11	C-AL 10uF 20% 16V (EXCEPT SE220/SE420K)	
C541	1-126-458-61	C-AL 1uF 20% 50V (EXCEPT SE220/SE420K)	
C601	1-126-437-11	C-AL 47uF 20% 25V	
C602	1-163-033-11	C-CERAMIC, CHIP 22nF 10% 50V	
C609	1-163-033-11	C-CERAMIC, CHIP 22nF 10% 50V	
C618	1-126-968-11	C-AL 100uF 20% 50V	
C624	1-161-283-51	C-CERAMIC, CHIP 0.022nF 5% 50V (SE420K/SE620/SE720N/SX720N/SE820N)	
C625	1-161-283-51	C-CERAMIC, CHIP 0.022nF 5% 50V (SE420K/SE620/SE720N/SX720N/SE820N)	
C626	1-161-283-51	C-CERAMIC, CHIP 0.022nF 5% 50V	
C627	1-161-283-51	C-CERAMIC, CHIP 0.022nF 5% 50V	
C637	1-163-267-11	C-CERAMIC, CHIP 0.47nF 5% 50V	
C639	1-163-251-11	C-CERAMIC, CHIP 0.1nF 5% 50V	
C640	1-126-437-11	C-AL 47uF 20% 25V	
C645	1-163-121-11	C-CERAMIC, CHIP 0.15nF 5% 50V (SE720/SE727E/SX720/SX727D/SE820)	
C651	1-163-033-11	C-CERAMIC, CHIP 22nF 10% 50V	
C655	1-163-121-11	C-CERAMIC, CHIP 0.15nF 5% 50V (SE220/SE420K/SE620)	

Ref. No.	Part No.	Description	Remarks
C679	1-163-033-11	C-CERAMIC, CHIP 22nF 10% 50V (SE220/SE420K/SE620)	
C680	1-126-926-11	C-AL 1000uF 20% 10V	
C692	1-126-437-11	C-AL 47uF 20% 25V	
C693	1-126-926-11	C-AL 1000uF 20% 10V (SE720/SE727E/SX720/SX727D/SE820)	
C695	1-163-121-11	C-CERAMIC, CHIP 0.15nF 5% 50V	
C697	1-163-033-11	C-CERAMIC CHIP 22nF 10% 50V	
C6P06	1-163-275-11	C-CERAMIC, CHIP 1nF 10% 50V (SE220/SE720/SE727E/SX720/SX727D/SE820)	
C6P10	1-126-458-61	C-AL 1uF 20% 50V	
C6P11	1-126-458-61	C-AL 1uF 20% 50V	
C6P12	1-104-660-11	C-AL 47uF 20% 16V (SE720/SE727E/SX720/SX727D/SE820)	
C701	1-126-925-11	C-AL 470uF 20% 10V	
C703	1-163-275-11	C-CERAMIC, CHIP 1nF 10% 50V	
C7T01	1-161-323-11	C-CERAMIC 1nF 10% 50V (SE820)	
C7T02	1-161-323-11	C-CERAMIC 1nF 10% 50V (SE820)	
C806	1-163-251-11	C-CERAMIC, CHIP 0.1nF 5% 50V	
C822	1-163-251-11	C-CERAMIC, CHIP 0.1nF 5% 50V	
C826	1-163-251-11	C-CERAMIC, CHIP 0.1nF 5% 50V (EXCEPT SE620D,N)	
C841	1-163-251-11	C-CERAMIC, CHIP 0.1nF 5% 50V (EXCEPT SE620D,N)	
CT02	1-115-339-11	C-CERAMIC, CHIP 100nF +80-20% 50V (SX727D/SE727E/SE820)	
CT04	1-115-339-11	C-CERAMIC, CHIP 100nF +80-20% 50V (SE220/SE420K/SE620/SE720/SE727E/SX720/SX727D)	
< CONNECTOR >			
CN701	1-816-509-11	CONNECTOR-HEADER 3WALL 12P (EXCEPT SE220/SE420K)	
< DIODE >			
D1P101	1-804-407-11	DIODE-SWITCHING1N4148	
D1P102	1-804-407-11	DIODE-SWITCHING1N4148 (EXCEPT SE220/SE420K)	
D1P103	1-804-407-11	DIODE-SWITCHING1N4148 (EXCEPT SE220/SE420K)	
D1SD11	1-804-412-11	DIODE-RECTIFIER F1T4	
D1SD31	1-804-412-11	DIODE-RECTIFIER F1T4	
D1SR11	1-804-407-11	DIODE-SWITCHING1N4148	
D1SS01	1-804-413-11	DIODE-RECTIFIER 1T5	
D1SS02	1-804-413-11	DIODE-RECTIFIER 1T5	
D1SS03	1-804-413-11	DIODE-RECTIFIER 1T5	
D1SS04	1-804-413-11	DIODE-RECTIFIER 1T5	
D1SS11	1-804-408-11	DIODE-RECTIFIER UF4007	
D1SS31	1-804-412-11	DIODE-RECTIFIER F1T4	
D1SS32	1-804-411-11	DIODE-RECTIFIER UG2D	
D1SS33	1-804-782-11	DIODE-SCHOTTKY SG45	
D1SS40	1-804-412-11	DIODE-RECTIFIER F1T4 (SE720/SE727E/SX720/SX727D/SE820)	

MAIN

Ref. No.	Part No.	Description	Remarks
D1SS41	1-804-412-11	DIODE-RECTIFIER F1T4 (SE720/SE727E/SX720/SX727D/SE820)	
D301	1-804-407-11	DIODE-SWITCHING1N4148	
D4N01	1-804-407-11	DIODE-SWITCHING1N4148 (EXCEPT SE220/SE420K)	
D4N02	1-804-407-11	DIODE-SWITCHING1N4148 (EXCEPT SE220/SE420K)	
D603	1-804-407-11	DIODE-SWITCHING1N4148	
D6E01	1-804-407-11	DIODE-SWITCHING1N4148 (SE720/SE727E/SX720/SX727D/SE820)	
D701	1-804-407-11	DIODE-SWITCHING1N4148	
D702	1-804-407-11	DIODE-SWITCHING1N4148	
D703	1-804-407-11	DIODE-SWITCHING1N4148	
D704	1-804-407-11	DIODE-SWITCHING1N4148	
D805	1-804-407-11	DIODE-SWITCHING1N4148	
< TIMER >			
DL701	1-786-352-11	DIAL-TIMER (SE820)	
< DISPLAY >			
DT701	1-804-699-11	LED DISPLAY LTG-0129M (SE220/SE420K/SE620)	
DT701	1-518-816-11	VFD DISPLAY (SE720/SE727E/SX720/SX727D/SE820)	
< FUSE >			
△F1SS01	1-576-526-11	FUSE-CARTRIDGE 250V 1.6A	
FC1SS1	1-576-527-11	FUSE-CLIP	
FC1SS2	1-576-527-11	FUSE-CLIP	
< IC >			
IC1SS1	1-804-784-11	PHOTO-COUPLER	
IC1SS2	1-804-445-11	IC KA431Z	
IC301	1-804-702-11	IC-VIDEO PROCESS LA71750M	
IC3S01	1-804-701-11	IC-CHROMA LA70100M (SE220B/SE620B/SE720B/SE820B)	
IC4N01	1-804-795-11	IC-AUDIO PROCESSOR MSP3417D(PQFP) (SE620B,E,N/SE720E,G,I,B,N/SX720N,E/SE727E/SE820B,E,G,N)	
IC501	1-804-703-11	IC-AUDIO PROCESSOR LA72646M (EXCEPT SE220/SE420K)	
IC601	1-804-696-11	IC MICOM N120-A69-3BA (SE220/SE620B,D,E/SE720D,E,G,I,B/SX720D,E/ SX727D/SE727E/SE820B,D,E,G)	
IC601	1-804-697-11	IC MICOM N120-A70-3BA (SE420K/SE620N/SE720N/SX720N/SE820N)	
IC604	1-804-444-11	IC KA7533	
IC605	1-804-432-11	IC-EEPROM 524C80D81	
IC608	1-804-480-11	IC-VOL. DETECTOR 7042 (SE420K/SE620N/SE720N/SX720N/SE820N)	
IC6P01	1-804-454-11	IC-OSD PROCESSOR LC74759JM-9820 (SE420K/SE620)	
IC6P01	1-804-453-11	IC-OSD PROCESSOR LC74776NM-9821 (SE220/SE720/SE727E/SX720/SX727D/SE820)	
IC701	1-804-698-11	IC MICOM UPD780232GC (SE720/SE727E/SX720/SX727D/SE820)	
IC701	1-804-706-11	IC-LED DRIVER PT6959 (SE220/SE420K/SE620)	

Ref. No.	Part No.	Description	Remarks
IC801	1-804-700-11	IC-FP BU4053BCF (SE220/SE420K)	
< JUMPER >			
J301	1-216-295-11	R-CHIP 0 5% 1/10W (EXCEPT SE220/SE420K)	
J812	1-216-295-11	R-CHIP 0 5% 1/10W (SE220/SE420K)	
J813	1-216-295-11	R-CHIP 0 5% 1/10W (SE220/SE420K)	
J814	1-216-295-11	R-CHIP 0 5% 1/10W (SE220/SE420K)	
J815	1-216-295-11	R-CHIP 0 5% 1/10W (SE720/SE727E/SX720/SX727D/SE820)	
J816	1-216-295-11	R-CHIP 0 5% 1/10W (SE720/SE727E/SX720/SX727D/SE820)	
< LINE FILTER >			
L1SS02	1-424-830-11	FILTER LINE NOISE 30mH	
< COIL >			
L1SS31	1-424-828-11	COIL-CHOKE 10UH	
L1SS32	1-424-828-11	COIL-CHOKE 10UH	
L4N04	1-400-085-11	INDUCTOR (EXCEPT SE220/SE420K)	
L502	1-400-086-11	CORE-FERRITE BEAD	
L814	1-400-085-11	INDUCTOR	
< LED >			
LD601	1-804-438-11	LED-IR	
< TRANS >			
PT1SS1	1-437-395-11	TRANS SWITCHING EE2621 (SE220/SE420K/SE620)	
PT1SS1	1-437-758-11	TRANS SWITCHING EE2621 (SE720/SE727E/SX720/SX727D/SE820)	
< TRANSISTOR >			
Q1P101	1-804-424-11	TR-SMALL SIGNAL KSC2328A-Y	
Q1P102	1-804-424-11	TR-SMALL SIGNAL KSC2328A-Y	
Q1P103	1-804-424-11	TR-SMALL SIGNAL KSC2328A-Y (EXCEPT SE220/SE420K)	
Q1P104	1-804-423-11	TR-SMALL SIGNAL KSA928A-Y	
Q1P105	1-804-427-11	TR-DIGITAL KSR1001	
Q1P106	1-804-421-11	TR-SMALL SIGNAL KSC945 (EXCEPT SE220/SE420K)	
Q1P107	1-804-429-11	TR-DIGITAL KSR2001 (EXCEPT SE220/SE420K)	
Q1P108	1-804-424-11	TR-SMALL SIGNAL KSC2328A-Y (EXCEPT SE220/SE420K)	
Q1SR01	1-804-783-11	TR-POWER	
Q1SR02	1-804-422-11	TR-SMALL SIGNAL KTC3203-Y	
Q302	1-804-421-11	TR-SMALL SIGNAL KSC945 (SE220B/SE620B/SE720B/SE820B)	
Q350	1-804-420-11	TR-SMALL SIGNAL KSA733	
Q351	1-804-420-11	TR-SMALL SIGNAL KSA733 (EXCEPT SE620D,N)	
Q3A01	1-804-421-11	TR-SMALL SIGNAL KSC945	
Q3A02	1-804-420-11	TR-SMALL SIGNAL KSA733	

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

Ref. No.	Part No.	Description	Remarks
Q3A03	1-804-422-11	TR-SMALL SIGNALKTC3203-Y	
Q3A04	1-804-422-11	TR-SMALL SIGNALKTC3203-Y	
Q3A05	1-804-422-11	TR-SMALL SIGNALKTC3203-Y	
Q3A06	1-804-420-11	TR-SMALL SIGNALKSA733	
Q3D01	1-804-422-11	TR-SMALL SIGNALKTC3203-Y (SE820)	
Q3D02	1-804-420-11	TR-SMALL SIGNALKSA733 (SE820)	
Q603	1-804-421-11	TR-SMALL SIGNALKSC945 (SE820)	
Q6E01	1-804-422-11	TR-SMALL SIGNALKTC3203-Y (SE620/SE720/SE727E/SX720/SX727D/SE820)	
Q6E02	1-804-421-11	TR-SMALL SIGNALKSC945 (SE620/SE720/SE727E/SX720/SX727D/SE820)	
Q6E03	1-804-429-11	TR-DIGITAL KSR2001 (SE620/SE720/SE727E/SX720/SX727D/SE820)	
Q6P01	1-804-420-11	TR-SMALL SIGNALKSA733	
Q6P02	1-804-420-11	TR-SMALL SIGNALKSA733	
Q804	1-804-429-11	TR-DIGITAL KSR2001	
Q806	1-804-429-11	TR-DIGITAL KSR2001(EXCEPT SE620D,N)	
Q809	1-804-421-11	TR-SMALL SIGNALKSC945	
Q810	1-804-421-11	TR-SMALL SIGNALKSC945 (EXCEPT SE620D,N)	
< RESISTOR >			
R1P102	1-216-667-11	R-CHIP 4.7K 5% 1/10W (EXCEPT SE220/SE420K)	
R1P103	1-247-815-11	R-CARBON 220 5% 1/8W (EXCEPT SE220/SE420K)	
R1P104	1-216-627-11	R-CHIP 100 5% 1/10W (EXCEPT SE220/SE420K)	
R1P105	1-216-675-11	R-CHIP 10K 5% 1/10W (EXCEPT SE220/SE420K)	
R1P108	1-247-845-11	R-CARBON 3.9K 5% 1/4W	
R1P110	1-216-627-11	R-CHIP 100 5% 1/10W	
R1SD11	1-247-880-11	R-CARBON 110K 5% 1/8W	
R1SD13	1-247-880-11	R-CARBON 110K 5% 1/8W	
R1SD14	1-247-880-11	R-CARBON 110K 5% 1/8W	
R1SD15	1-247-880-11	R-CARBON 110K 5% 1/8W	
R1SD16	1-215-901-11	R-METAL OXIDE(S) 33K 5% 2W	
R1SD31	1-247-815-11	R-CARBON 220 5% 1/8W	
R1SD32	1-247-833-11	R-CARBON 1.2K 5% 1/8W	
R1SR11	1-216-367-11	R-METAL OXIDE 0.68 5% 2W	
R1SR12	1-244-369-11	R-METAL OXIDE 300 5% 1W	
R1SS03	1-245-346-11	R-FUSIBLE(S) 10 5% 2W (SE220/SE420K)	
R1SS10	1-244-373-11	R-CEMENT 2.7 10% 2W	
R1SS11	1-215-901-11	R-METAL OXIDE(S) 33K 5% 2W	
R1SS32	1-216-651-11	R-CHIP 1K 5% 1/10W	
R1SS33	1-244-372-11	R-METAL 3K 1% 1/8W	
R1SS34	1-244-371-11	R-METAL 2.2K 1% 1/8W	
R316	1-216-673-11	R-CHIP 8.2K 5% 1/10W	
R323	1-216-665-11	R-CHIP 3.9K 5% 1/10W	
R327	1-216-667-11	R-CHIP 4.7K 5% 1/10W	
R329	1-216-661-11	R-CHIP 2.7K 5% 1/10W	
R333	1-216-693-11	R-CHIP 56K 5% 1/10W	
R334	1-216-655-11	R-CHIP 1.5K 5% 1/10W (EXCEPT SE220/SE420K)	
R350	1-216-655-11	R-CHIP 1.5K 5% 1/10W (SE220B/SE620B/SE720B/SE820B)	
R372	1-216-651-11	R-CHIP 1K 5% 1/10W	
R374	1-216-627-11	R-CHIP 100 5% 1/10W	

Ref. No.	Part No.	Description	Remarks
R3A09	1-216-295-11	R-CHIP 0 5% 1/10W	
R3A11	1-216-659-11	R-CHIP 2.2K 5% 1/10W	
R3A12	1-216-627-11	R-CHIP 100 5% 1/10W	
R3A13	1-216-683-11	R-CHIP 22K 5% 1/10W (SE820)	
R3A13	1-216-691-11	R-CHIP 47K 5% 1/10W (SE220/SE420K/SE620)	
R3A16	1-216-675-11	R-CHIP 10K 5% 1/10W	
R3A17	1-216-659-11	R-CHIP 2.2K 5% 1/10W	
R3A18	1-216-659-11	R-CHIP 2.2K 5% 1/10W	
R3A24	1-216-683-11	R-CHIP 22K 5% 1/10W	
R3A31	1-216-295-11	R-CHIP 0M 5% 1/10W	
R3A51	1-216-675-11	R-CHIP 10K 5% 1/10W	
R3D01	1-216-691-11	R-CHIP 47K 5% 1/10W (SE820)	
R3D02	1-216-667-11	R-CHIP 4.7K 5% 1/10W (SE820)	
R3D03	1-216-683-11	R-CHIP 22K 5% 1/10W (SE820)	
R3S01	1-216-651-11	R-CHIP 1K 5% 1/10W (SE220B/SE620B/SE720B/SE820B)	
R401	1-216-691-11	R-CHIP 47K 5% 1/10W (EXCEPT SE220B/SE620B/SE720B/SE820B)	
R402	1-216-627-11	R-CHIP 100 5% 1/10W (EXCEPT SE220B/SE620B/SE720B/SE820B)	
R403	1-216-627-11	R-CHIP 100 5% 1/10W	
R404	1-216-627-11	R-CHIP 100 5% 1/10W	
R407	1-216-659-11	R-CHIP 2.2K 5% 1/10W (EXCEPT SE220/SE420K/SE620B/SE720B/SE820B)	
R407	1-216-673-11	R-CHIP 8.2K 5% 1/10W (SE220D,G,I/SE420K)	
R408	1-247-833-11	R-CARBON 1.2K 5% 1/8W (EXCEPT SE220B/SE620B/SE720B/SE820B)	
R4N01	1-216-651-11	R-CHIP 1K 5% 1/10W (EXCEPT SE220/SE420K)	
R4N02	1-216-627-11	R-CHIP 100 5% 1/10W (EXCEPT SE220/SE420K)	
R4N03	1-216-627-11	R-CHIP 100 5% 1/10W (EXCEPT SE220/SE420K)	
R4N04	1-216-661-11	R-CHIP 27K 5% 1/10W (EXCEPT SE220/SE420K)	
R503	1-216-643-11	R-CHIP 470 5% 1/10W (EXCEPT SE220/SE420K)	
R512	1-216-687-11	R-CHIP 33K 5% 1/10W (EXCEPT SE220/SE420K)	
R514	1-216-691-11	R-CHIP 47K 5% 1/10W (EXCEPT SE220/SE420K)	
R546	1-216-651-11	R-CHIP 1K 5% 1/10W (EXCEPT SE220/SE420K)	
R547	1-216-651-11	R-CHIP 1K 5% 1/10W (EXCEPT SE220/SE420K)	
R570	1-216-651-11	R-CHIP 1K 5% 1/10W (EXCEPT SE220/SE420K)	
R571	1-216-693-11	R-CHIP 56K 5% 1/10W (EXCEPT SE220/SE420K)	
R601	1-247-831-11	R-CARBON 1K 5% 1/8W	
R602	1-247-831-11	R-CARBON 1K 5% 1/8W	

MAIN

Ref. No.	Part No.	Description	Remarks
R603	1-247-831-11	R-CARBON	1K 5% 1/8W
R604	1-247-831-11	R-CARBON	1K 5% 1/8W
R605	1-247-831-11	R-CARBON	1K 5% 1/8W
R607	1-247-831-11	R-CARBON	1K 5% 1/8W
R608	1-247-873-11	R-CARBON	56K 5% 1/8W
R609	1-247-873-11	R-CARBON	56K 5% 1/8W
R610	1-247-831-11	R-CARBON	1K 5% 1/8W
R611	1-247-831-11	R-CARBON	1K 5% 1/8W
R613	1-216-651-11	R-CHIP	1K 5% 1/10W (SE420K/SE620/SE720N/SX720N/SE820N)
R614	1-247-831-11	R-CARBON	1K 5% 1/8W
R631	1-216-651-11	R-CHIP	1K 5% 1/10W
R638	1-247-831-11	R-CARBON	1K 5% 1/8W
R639	1-247-831-11	R-CARBON	1K 5% 1/8W
R640	1-216-675-11	R-CHIP	10K 5% 1/10W
R641	1-216-643-11	R-CHIP	470 5% 1/10W (SE220/SE420K/SE620)
R642	1-216-643-11	R-CHIP	470 5% 1/10W (SE220/SE420K/SE620)
R644	1-247-831-11	R-CARBON	1K 5% 1/8W
R656	1-216-675-11	R-CHIP	10K 5% 1/10W
R657	1-247-875-11	R-CARBON	68K 5% 1/8W (SE420K/SE620/SE720N/SX720N/SE820N)
R661	1-216-687-11	R-CHIP	33K 5% 1/10W
R666	1-216-643-11	R-CHIP	470 5% 1/10W
R667	1-216-643-11	R-CHIP	470 5% 1/10W
R668	1-216-675-11	R-CHIP	10K 5% 1/10W
R669	1-216-675-11	R-CHIP	10K 5% 1/10W
R670	1-216-667-11	R-CHIP	4.7K 5% 1/10W
R671	1-216-667-11	R-CHIP	4.7K 5% 1/10W
R672	1-216-667-11	R-CHIP	4.7K 5% 1/10W
R675	1-247-837-11	R-CARBON	180 5% 1/4W
R676	1-216-686-11	R-CHIP	30K 5% 1/10W (SE220/SE420K/SE620)
R678	1-216-683-11	R-CHIP	22K 5% 1/10W (SE220/SE420K/SE620)
R679	1-247-815-11	R-CARBON	220 5% 1/8W
R682	1-216-683-11	R-CHIP	22K 5% 1/10W
R690	1-216-693-11	R-CHIP	56K 5% 1/10W
R691	1-247-815-11	R-CARBON	220 5% 1/8W
R693	1-216-691-11	R-CHIP	47K 5% 1/10W
R694	1-216-691-11	R-CHIP	47K 5% 1/10W
R695	1-216-627-11	R-CHIP	100 5% 1/10W (SE220B/SE620B/SE720B/SE820B)
R696	1-247-831-11	R-CARBON	1K 5% 1/8W
R697	1-216-627-11	R-CHIP	100 5% 1/10W (SE220B,I/SE620B/SE720B/SE820B)
R698	1-216-675-11	R-CHIP	10K 5% 1/10W
R6E01	1-216-675-11	R-CHIP	10K 5% 1/10W (SE720/SE727E/SX720/SX727D/SE820)
R6E02	1-216-659-11	R-CHIP	2.2K 5% 1/10W (SE720/SE727E/SX720/SX727D/SE820)
R6P03	1-216-661-11	R-CHIP	2.7K 5% 1/10W (SE220/SE720/SE727E/SX720/SX727D/SE820)
R6P04	1-216-675-11	R-CHIP	10K 5% 1/10W (SE220/SE720/SX720/SX727D/SE820)
R6P07	1-216-635-11	R-CHIP	220 5% 1/10W

Ref. No.	Part No.	Description	Remarks
R6P09	1-216-295-11	R-CHIP	0 5% 1/10W (EXCEPT SE420K/SE620)
R6P09	1-216-659-11	R-CHIP	2.2K 5% 1/10W (SE420K/SE620)
R6P10	1-247-815-11	R-CARBON	220 5% 1/8W
R701	1-216-686-11	R-CHIP	30K 5% 1/10W (SE720/SE727E/SX720/SX727D/SE820)
R731	1-216-675-11	R-CHIP	10K 5% 1/10W
R751	1-216-661-11	R-CHIP	27K 5% 1/10W (SE720/SE727E/SX720/SX727D/SE820)
R752	1-216-635-11	R-CHIP	220 5% 1/10W (SE720/SE727E/SX720/SX727D/SE820)
R777	1-216-683-11	R-CHIP	22K 5% 1/10W (SE220/SE720D,E,G,I,B/SX720D,E/ SE727E/SX727D/SE820B,D,E,G)
R805	1-216-651-11	R-CHIP	1K 5% 1/10W (SE720/SE727E/SX720/SX727D/SE820)
R806	1-216-651-11	R-CHIP	1K 5% 1/10W (SE720/SE727E/SX720/SX727D/SE820)
R809	1-247-828-11	R-CARBON	75 5% 1/8W (EXCEPT SE620D,N)
R810	1-216-651-11	R-CHIP	1K 5% 1/10W (EXCEPT SE620D,N)
R811	1-216-651-11	R-CHIP	1K 5% 1/10W (EXCEPT SE620D,N)
R813	1-216-651-11	R-CHIP	1K 5% 1/10W
R814	1-216-651-11	R-CHIP	1K 5% 1/10W
R815	1-216-651-11	R-CHIP	1K 5% 1/10W
R816	1-216-651-11	R-CHIP	1K 5% 1/10W
R819	1-216-651-11	R-CHIP	1K 5% 1/10W (EXCEPT SE620D,N)
R820	1-216-651-11	R-CHIP	1K 5% 1/10W (EXCEPT SE620D,N)
R821	1-216-687-11	R-CHIP	33K 5% 1/10W (EXCEPT SE620D,N)
R822	1-216-683-11	R-CHIP	22K 5% 1/10W (EXCEPT SE620D,N)
< PHOTO TRANSISTOR >			
S601	1-804-439-11	PHOTO TR	
S602	1-804-439-11	PHOTO TR	
< SWITCH >			
SW601	1-786-198-11	SWITCH-MODE	
< TM BLOCK >			
TM401	1-693-553-11	TM BLOCK	TCPL0601PD11A (SE220B/SE620B/SE720B/SE820B)
TM401	1-693-584-11	TM BLOCK	TCMB0600PD13A (SE220D)
TM401	1-693-585-11	TM BLOCK	TCMI0610PD13A (SE220G/SE720G/SE820G)
TM401	1-693-589-11	TM BLOCK	TCMK0601PD13A (SE220I/SE420K/SE620D,E,N/SE720D,E,I,N/ SX720/SX727D/SE727E/SE820D,E,N)
< VARISTOR >			
VA1SS1	1-804-437-11	VARISTOR	

Ref. No.	Part No.	Description	Remarks
< RESISTOR >			
W079	1-216-295-11	R-CHIP	0 5% 1/10W (SE220/SE420K)
W172	1-216-295-11	R-CHIP	0 5% 1/10W (SE220/SE420K/SE620)
W199	1-216-295-11	R-CHIP	0 5% 1/10W
W376	1-216-295-11	R-CHIP	0 5% 1/10W (SE220/SE420K/SE620)
W383	1-216-295-11	R-CHIP	0 5% 1/10W (SE220/SE420K/SE620)
W384	1-216-295-11	R-CHIP	0 5% 1/10W
W386	1-216-295-11	R-CHIP	0 5% 1/10W (SE220/SE420K/SE620)
W506	1-216-295-11	R-CHIP	0 5% 1/10W (SE220/SE420K/SE620)
W515	1-216-295-11	R-CHIP	0 5% 1/10W
W701	1-216-295-11	R-CHIP	0 5% 1/10W (SE220/SE420K/SE620)
W702	1-216-295-11	R-CHIP	0 5% 1/10W (SE220/SE420K/SE620)
W750	1-216-295-11	R-CHIP	0 5% 1/10W (SE220/SE420K/SE620)
W751	1-216-295-11	R-CHIP	0 5% 1/10W (SE220/SE420K/SE620)
W752	1-216-295-11	R-CHIP	0 5% 1/10W (SE220/SE420K/SE620)
< VIBRATOR >			
XT01	1-795-616-11	RESONATOR-CERAMIC	3.84MHz (EXCEPT SE727E/SX727D/SE820)
XT301	1-795-330-11	CRYSTAL-UNIT	4.433619MHz
XT4N01	1-795-615-11	CRYSTAL-UNIT	18.432MHz (EXCEPT SE220/SE420K)
XT601	1-795-332-11	CRYSTAL-UNIT	32.768KHz (SE420K/SE620/SE720N/SX720N/SE820N)
XT602	1-795-331-11	CRYSTAL-UNIT	8MHz
XT750	1-795-625-11	CRYSTAL-UNIT	5MHz (SE720/SE727E/SX720/SX727D/SE820)
< DIODE >			
ZD1P01	1-804-416-11	DIODE-ZENER	MTZJ5.1B (EXCEPT SE220/SE420K)
ZD1P02	1-804-416-11	DIODE-ZENER	MTZJ5.1B
ZD1P03	1-804-417-11	DIODE-ZENER	MTZJ9.1B (EXCEPT SE220/SE420K)
ZD1P04	1-804-417-11	DIODE-ZENER	MTZJ9.1B
ZD1SS1	1-804-415-11	DIODE-ZENER	UZP43B

Ref. No.	Part No.	Description	Remarks
ACCESSORIES *****			
1-477-269-11		REMOCON-ASSY (RMT-V405)	(SE220D,I,G/SE420K)
1-477-270-11		REMOCON-ASSY (RMT-V405A)(SE220B)	
1-477-271-11		REMOCON-ASSY (RMT-V406)	(SE620D,E,N/SE720D,E,I,G,N)
1-477-272-11		REMOCON-ASSY (RMT-V406A)(SE620B/SE720B)	
1-477-273-11		REMOCON-ASSY (RMT-V407A)	(SE727E/SE820D,E,G,N)
1-477-274-11		REMOCON-ASSY (RMT-V407B)(SE820B)	
1-477-275-11		REMOCON-ASSY (RMT-V407C)(SX727D)	
1-477-276-11		REMOCON-ASSY (RMT-V406B)(SX720)	
3-075-088-01		DOOR-BATTERY REMOCON	(SE220/SE420K/SE620/SE720/SE727E/SE820)
3-075-089-01		DOOR-BATTERY REMOCON (Black)	(SX720/SX727D)
3-073-151-11		MANUAL USERS	(SE220D/SE620E/SE720D,E/SX720D,E/SE820D,E)
3-073-151-21		MANUAL USERS (SE620E/SE720E/SE820E)	
3-073-151-31		MANUAL USERS	(SE220D/SE720D/SX720D/SE820D/SX727D)
3-073-151-41		MANUAL USERS	(SE220D/SE620D/SE720D/SX720D/SE820D)
3-073-151-51		MANUAL USERS	(SE220D/SE620D,E/SE720D,E/SX720D,E/SE820D,E)
3-073-151-61		MANUAL USERS	(SE620E/SE720E/SX720E/SE820E)
3-073-151-71		MANUAL USERS	(SE620E/SE720E/SX720E/SE820E)
3-073-152-11		MANUAL USERS (SE727E)	
3-073-152-21		MANUAL USERS (SE727E)	
3-073-152-31		MANUAL USERS (SE727E)	
3-073-153-11		MANUAL USERS (SE220G,I/SE720G,I/SE820G)	
3-073-154-11		MANUAL USERS	(SE220B/SE620B/SE720B/SE820B)
3-073-155-11		MANUAL USERS	(SE420K/SE620N/SE720N/SX720N/SE820N)
3-073-155-21		MANUAL USERS (SE420K/SE620N/SE820N)	
3-073-155-31		MANUAL USERS	(SE420K/SE620N/SE720N/SE820N/SX720N)
3-073-155-41		MANUAL USERS	(SE420K/SE620N/SE720N/SE820N/SX720N)
3-073-155-51		MANUAL USERS	(SE420K/SE620N/SE720N/SE820N/SX720N)

SLV-SE220/SE420/SE620/SE720/SE727/SE820/SX720/SX727